

DISPLAY THIS CARD ON PRINCIPAL FRONTAGE OF WORK

CITY OF PORTLAND

Please Read
Application And
Notes, If Any,
Attached

BUILDING DIVISION

PERMIT**PERMIT ISSUED**

Permit Number: 100867

is to certify that 50 INDUSTRIAL WAY LLC / Gofford & Co SEP 28 2010s permission to 40' x 130' Addition FOUNDATION ONLY50 INDUSTRIAL WAY CR 326 B009001 City of Portland

rovided that the person or persons, firm or corporation accounting this permit shall comply with all
f the provisions of the Statutes of Maine and of the Ordinances of the City of Portland regulating
re construction, maintenance and use of buildings and structures, and of the application on file in
his department.

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

Notification of inspection must be
given and written permission procured
before this building or part thereof is
lath or other covered-in. 24
HOURS NOTICE IS REQUIRED.

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

OTHER REQUIRED APPROVALSre Dept. CAPT. K. Lanthier

ealth Dept. _____

ppeal Board _____

ther _____

Department Name

Amel Boule 9/28/10
Director - Building & Inspection Services

PENALTY FOR REMOVING THIS CARD


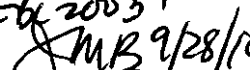
City of Portland, Maine - Building or Use Permit Application

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

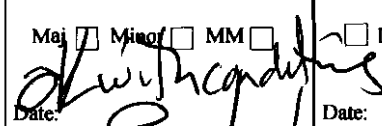

Permit No: 10-0867	Issue Date:	CBL: 326 B009001
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Location of Construction: 50 INDUSTRIAL WAY	Owner Name: 50 INDUSTRIAL WAY LLC	Owner Address: 50 INDUSTRIAL WAY	Phone:
Business Name:	Contractor Name: Langford & Low, Inc.	Contractor Address: PO Box 662 Portland	Phone: 2077975141
Lessee/Buyer's Name	Phone:	Permit Type: Foundation Only/Commercial	Zone: I-M

Past Use: Commercial "Allagash Brewery"	Proposed Use: Commercial "Allagash Brewery" - 40' x 130' Addition FOUNDATION ONLY	Permit Fee: \$340.00	Cost of Work: \$32,000.00	CEO District: 5
		FIRE DEPT: <input checked="" type="checkbox"/> Approved <input type="checkbox"/> Denied * See Conditions	INSPECTION: Use Group: F-2 Type: N/A Foundation Only It 2003 JMB 9/28/10	

Proposed Project Description: 40' x 130' Addition FOUNDATION ONLY	Signature: 	Signature: 
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: 07/21/2010	Zoning Approval
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<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>Date:  9/23/10</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 type="checkbox"/> Denied</p> <p>Date:</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: </p>
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PERMIT ISSUED

SEP 28 2010

City of Portland

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
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15-20-10

#4 Hore.1

#5 Uprights

#6 uprights

48' x 130' 10" wall
step

11' 10 1/2" wall height

Setbacks ~~are~~ are fine

Sw. Cole special inspect

11-10-10

OK to build

LCA

Still need spec Insp

And final Insp

BUILDING PERMIT INSPECTION PROCEDURES

**Please call 874-8703 or 874-8693 (ONLY)
or email: buildinginspections@portlandmaine.gov**

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

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

 X **Footing/Building Location Inspection: Prior to pouring concrete or setting precast piers**

 X **Re-Bar Schedule Inspection: Prior to pouring concrete**

 X **Underground electrical or plumbing inspection prior to pouring concrete**

 X **The final report of Special Inspections shall be submitted prior to the final inspection or the issuance of the Certificate of Occupancy**

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

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

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:
10-0867	07/21/2010	326 B009001

Location of Construction: 50 INDUSTRIAL WAY	Owner Name: 50 INDUSTRIAL WAY LLC	Owner Address: 50 INDUSTRIAL WAY	Phone:
Business Name:	Contractor Name: Langford & Low, Inc.	Contractor Address: PO Box 662 Portland	Phone (207) 797-5141
Lessee/Buyer's Name	Phone:	Permit Type: Foundation Only/Commercial	

Proposed Use: Commercial "Allagash Brewery" - 40' x 130' Addition FOUNDATION ONLY	Proposed Project Description: 40' x 130' Addition FOUNDATION ONLY
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Dept: Zoning **Status:** Approved with Conditions **Reviewer:** Marge Schmuckal **Approval Date:** 07/23/2010
Note: **Ok to Issue:** ☒

- 1) Separate permits shall be required for any new signage.
- 2) 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:** Jeanine Bourke **Approval Date:**
Note: **Ok to Issue:** ☐

- 1) This is approval for foundation work only, separate review and approval is required for the building construction.

Dept: Fire **Status:** Approved **Reviewer:** Capt Keith Gautreau **Approval Date:** 07/29/2010
Note: **Ok to Issue:** ☒

Comments:

7/23/2010-mes: WAIT FOR PLANNING SIGN OFF BEFORE ISSUING

9/10/2010-jmb: Left vcmmsg for Gabby at L & L for geotech report and statement of special inspections. Received email with the geotech report and complete special inspections report for the whole project. Ok to issue pending planning/drc approval.

9/28/2010-jmb: Received email from Phil D. For approval, ok to issue

Jeanie Bourke - 100 Industrial Way, Allagash Brewing - Building Permit

From: Philip DiPierro
To: Code Enforcement & Inspections
Date: 9/27/2010 4:34 PM
Subject: 100 Industrial Way, Allagash Brewing - Building Permit
CC: Giles, Eric

Hi all, this project meets minimum DRC site plan requirements for the issuance of the building permit. Please see HTE for sign off.

Thanks.

Phil

Marge Schmuckal - 50 Industrial Way - Allagash Brewing

From: Marge Schmuckal
To: Eric Giles; Philip DiPierro
Date: 7/23/2010 11:51 AM
Subject: 50 Industrial Way - Allagash Brewing

We have received a permit application to begin work on the new foundation - can a permit be issued?
Marge



General Building Permit Application

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

Location/Address of Construction: <u>50 Industrial way, Portland</u>			
Total Square Footage of Proposed Structure/Area <u>5200 ft²</u>		Square Footage of Lot	
Tax Assessor's Chart, Block & Lot Chart# <u>326</u> Block# <u>B</u> Lot# <u>9</u>		Applicant * <u>must</u> be owner, Lessee or Buyer* Name <u>Rob Tso</u> Address <u>50 Industrial Way</u> City, State & Zip <u>Portland, Me</u>	
Telephone: <u>207-878-5385</u>			
Lessee/DBA (If Applicable)		Owner (if different from Applicant) Name <u>Rob Tso</u> Address <u>(SEE ABOVE)</u> City, State & Zip	
		Cost Of <u>32,000</u> <u>DPL</u> Work: \$ <u>100,000</u> C of O Fee: \$ Total Fee: \$ <u>340</u>	
Current legal use (i.e. single family) <u>Brewery</u>			
If vacant, what was the previous use?			
Proposed Specific use: <u>Brewery</u>			
Is property part of a subdivision? If yes, please name			
Project description: <u>Brewery addition that is 40ft by 130ft. 1 level and is similar to existing building. (Foundation only) DPL</u>			
Contractor's name: <u>Langford and Low</u>			
Address: <u>248 Warren Avenue</u>			
City, State & Zip <u>Portland, ME 04103</u> Telephone: <u>207-797-5141</u>			
Who should we contact when the permit is ready: <u>Gabrielle Russell</u> Telephone: <u>207-797-5141</u>			
Mailing address: <u>P.O. Box 662 Portland ME, 04103</u>			

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

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

I hereby certify that I am the Owner of record of the named property, or that the owner of record authorizes the proposed work and that I have been authorized by the owner to make this application as his/her authorized representative. I understand that all applicable laws of this jurisdiction. In addition, if a permit for work described in this application is issued, the City of Portland, Maine 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: [Signature]

Date: 7/19/10

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

RECEIVED

JUL 21 2010

Dept. of Building Inspections
City of Portland, Maine

With BABAFA

Applicant: Allagash Brewing

Date: 6/8/10

Address: 50 Industrial Way C-B-L: 326-B9

CHECK-LIST AGAINST ZONING ORDINANCE

Date -

#10-0865 Expired site plan 2009

Zone Location - I-M

Interior or corner lot -

Proposed Use/Work - addition for 5,200 sq ft Brewery addition for Warehouse storage

Sewage Disposal - City

40' x 130' use of

Lot Street Frontage - 60' min - 60' + shown

Front Yard - 1' for every 1' of Bldg height - 36' min - 107' scaled

Rear Yard - 25' min - 95' scaled

Side Yard - 25' min - 31.5' & 33' scaled

Projections -

Width of Lot -

Height - 75' max - 2 story shown - 36' from lowest to highest

Lot Area - 73,073 sq ft given
73,100 sq ft assessors - No min lot size req

Lot Coverage/Impervious Surface - 75% max $73073 \times 75\% = 54,804.75$ sq ft
8,268.2 sq ft impervious - showing at least 35,220 sq ft

Area per Family - N/A

Off-street Parking - $4900 \div 400 = 12.25$ pkgs spaces
 $156000 \div 1,000 = 156$ pg spaces } 21 pkgs spaces req - 22 pkgs shown

Loading Bays - 1 Loading Dock - 14' x 50' - 1 loading Dock shown

Site Plan - #10-79900008 (previous approval lapsed)

Shoreland Zoning/Stream Protection - N/A

Flood Plains - Panel 1 - Zone C

10' pavement setback req - is meeting

**STATEMENT OF SPECIAL
CONSTRUCTION MONITORING**

PROJECT: ALLAGASH BREWERY ADDITION
50 Industrial Way, Portland, Maine

PERMIT APPLICANT: Langford and Low Inc
APPLICANT'S ADDRESS: 248 Warren Ave, Portland, ME

STRUCTURAL ENGINEER OF RECORD

Associated Design Partners, Inc
80 Leighton Rd, Falmouth ME 04105

CONTRACTOR: Langford and Low Inc

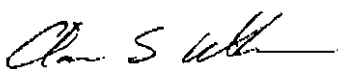
This Statement of Special Construction Monitoring is submitted as a condition for building permit issuance in accordance with Section 1704.0 of the 2003 International Building Code. It includes the Schedule of Special Construction Monitoring and Testing as applicable to this project. Also included is 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)



Signature

9-10-10

Date

Owner's Authorization:

Building Official's Acceptance:



SPECIAL CONSTRUCTION MONITORING AGENTS

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

- | | |
|---|--|
| <input checked="" type="checkbox"/> Soils and Foundations
<input checked="" type="checkbox"/> Cast-in-Place Concrete Retaining walls
<input type="checkbox"/> Precast Concrete
<input type="checkbox"/> Masonry
<input checked="" type="checkbox"/> Structural Steel
<input checked="" type="checkbox"/> Cold-Formed Steel Framing | <input type="checkbox"/> Spray Fire Resistant Material
<input type="checkbox"/> Wood Construction
<input type="checkbox"/> Exterior Insulation and Finish System
<input type="checkbox"/> Mechanical & Electrical Systems
<input type="checkbox"/> Architectural Systems
<input type="checkbox"/> Special Cases |
|---|--|

AGENT	FIRM	CONTACT INFORMATION
1. Engineer of Record	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

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 Resisting Frames

Quality Assurance for Wind Requirements

Basic Wind Speed (3 second gust) *98MPH*

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

Description of wind force resisting system and designated wind resisting components:

Ordinary Steel Moment Resisting 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.
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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
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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 1 also.	3		
	b. Manufacturers Certificate of Compliance required.	Other	Fabricator to provide Certificate to Agent 1.	1		
2. Inspection of High – Strength Bolting	a. Bearing type connections	Periodic	Provide inspection reports to Agent 1 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.	Other	Fabricator to provide Certificate to Agent 1.	1		
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"	Periodic	Inspect Field welds only. Shop welding performed by AISC certified fabricator	3		
	b. Roof deck attachment	Periodic	Provide inspection reports to Agent 1 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 1 also.	3		
	b. Member locations	Periodic	Provide inspection reports to Agent 1 also.	3		
	c. Application of joint details at each connection.	Periodic	Provide inspection reports to Agent 1 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		1		
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.	1		
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				
	b. Type, size, and location of embedded anchors.	None				
	c. Size, grade, and type of reinforcing	None				
1704.5MASONRY CONSTRUCTION - Level 1 Special Inspection for non-essential facility – 1704.5.2						

TABLE 1 – STATEMENT OF SPECIAL INSPECTIONS, cont.

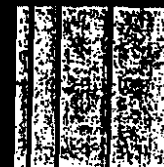
MATERIAL/ACTIVITY		EXTENT of INSPECTION (Continuous, Periodic, Other, None)	COMMENTS	AGENT #	DATE COMPLETED	REV #
2. The Inspection program shall verify the following, cont:	d. welding of reinforcing bars	None				
	e. Protection of Masonry during cold weather (temp. below 40 deg F.)	None				
	f. Application 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				
1704.6WOOD 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 construction documents.	None				

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.	None	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			
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	None				

	accordance with ASTM E 605.					
	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 EIFS installation with manufacturers and design specifications.	None	No EIFS on building.			
1704.13 SPECIAL CASES COLD FORMED METAL FRAMING						
1. Framing	Verify member size, thickness, material, and spacing is in accordance with design specifications and drawings.	None				
2. Framing Connections	Verify that member connections are in accordance with design specifications and drawings.	None				
3. Welding	Verify welding of cold formed members is in accordance with design specifications and AWS standards.	None				
4. 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 1-03 guidelines.	None				
1704.10 SMOKE CONTROL						
	a. Test ductwork for leakage and re-code 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				

SebagoTechnics

Engineering, Construction, and Foundation



sebagotechnics.com

One Chebot Street
P.O. Box 1339
Westbrook, Maine
04098-1339
Ph. 207-856-0277
Fax 856-2208

March 15, 2006
02249

Mr. Rob Tod
Allagash Brewing
100 Industrial Way
Portland, ME 04103

RECEIVED
SEP 10 2010
Dept. of Building Inspections
City of Portland Maine

Report on Subsurface and Foundation Investigation
Proposed Office and Production /Warehouse Facility, Portland, Maine

Dear Rob:

This report presents the results of our subsurface and foundation investigation for your proposed Office and Production/Warehouse Facility in Portland, Maine. These services were provided in accordance with our proposal dated January 19, 2006.

In summary, it is our opinion that the facility may be supported on spread and continuous footings bearing on the undisturbed, naturally deposited clay, or on compacted structural fill placed after removal of unsuitable soils or for raises-in-grade. In addition, an earth-supported slab-on-grade may be used for the ground floor. Specific recommendations regarding foundation design and construction considerations are presented below.

Introduction

The site is located immediately west of your existing facility on Industrial Way in Portland. The site is presently moderately wooded, and ground surface elevations within the limits of the building vary from approximately El. 76 to El. 82. The proposed facility will consist of an approximately 17,000-square foot building consisting of offices and production and warehouse space. Ground (lowest) floor will be at El. 83.5. The production and warehouse area will be single-story with high ceiling, and the office area will be two stories. We understand that floor loads resulting from equipment and product weights within the facility vary from approximately 27 pounds per square foot (psf) to 377 psf. A raise-in-grade of up to 6 feet will be required in the northeast corner.

Subsurface Explorations

On February 9 and 10, 2006, Maine Test Borings, Inc. (MTB) of Brewer, Maine drilled four borings, B1 to B4, at the site at locations shown on Sheet 1, Subsurface Exploration Plan. MTB drilled the borings to depths below ground surface varying from 22.0 feet to 32.0 feet. Sebago Technics, Inc. monitored the borings and prepared the logs included in Appendix A. Table I summarizes the results of borings. MTB backfilled the borings with the drilled material.

Borings were drilled using 2.5-inch inside diameter hollow stem auger borings. Samples were recovered at 5 foot intervals. Standard Penetration Resistance (N) was measured at each sample interval in accordance with ASTM Test D1586.

Sebago Technics, Inc. determined the locations of borings by survey methods. We determined the ground surface elevations at borings by linear interpolation between ground surface contours at the plotted locations.

The boring logs and related information depict the subsurface conditions and water levels encountered at the locations and during the times indicated on the logs. Subsurface conditions at other locations may differ from those encountered in the test borings. The passage of time may result in a change in groundwater conditions at the exploration.

Subsurface Conditions

The borings encountered three principal soil units at the site: topsoil, marine clay and marine sand. Encountered thickness and generalized descriptions of the strata encountered are presented below in order of increasing depth below ground surface. Due to the complexity of the deposition process, strata thickness will vary and may be absent at specific locations.

Topsoil - Topsoil consists of very soft, dark brown to brown sandy SILT (ML) with roots. Encountered thickness varies from 0.5 foot to 1.0 foot.

Marine Clay - Marine clay consists of medium stiff to very stiff, olive brown to gray lean CLAY (CL) with frequent sand partings. Encountered thickness varies from 9.4 feet to 19.6 feet.

Marine Sand - Marine sand consists of loose to medium dense, brown to tan poorly-graded SAND (SP). Borings penetrated up to 16.9 feet into the marine sand.

Water was only observed in B3 at a depth of 24.5 feet below ground surface. Observation of water was made over a relatively short period of time and may not represent the stabilized groundwater level. It is likely that water is perched on the top of the clay stratum during wet periods of the year. In addition, water levels at the site will vary with season, precipitation, temperature and construction activity in the area. Therefore, water levels during and following construction will vary from those measured in the borings.

Strength and Compressibility Characteristics of Clay Stratum

The stress history of the clay deposit, as developed from correlations with shear strength of similar clays in the area, is summarized on Figure 1. The undrained shear strength of the clay stratum was estimated from correlations with the Standard Penetration Resistance, N, measured at sample intervals. Correlations of shear strength vary from 1,000 psf to 2,500 psf. The stress history of the deposit was estimated by comparing the estimated undrained shear strength with correlations for strength and stress history of clay from other projects with similar conditions.

The stress-strain or compressibility characteristics (settlement) of clays are highly dependent upon their stress history. If clay is stressed within the limits of the maximum previous stress, σ_{vm} , the strain (settlement) will be a function of the recompression ratio (RR) of the clay. If the applied stress exceeds the maximum previous stress, the strain will be proportional to the virgin compression ratio (CR). The compression ratio is typically 10 to 15 times the recompression ratio.

The stress history and appropriate compression ratios were estimated for the clay deposit as discussed above. The correlations indicate that the deposit is significantly overconsolidated; that is, the existing overburden stress is considerably less than the maximum previous stress. The deposit likely became overconsolidated due to desiccation (drying) resulting from a lowering of the groundwater level at some time in the geologic past which created a stiff upper crust and also increased the effective overburden stress throughout the stratum.

Recommendations for Foundation Design

Recommended Foundation Type and Design Criteria

The existing topsoil is not considered suitable for support of the building or floor slab. All topsoil should be removed from within the building limits. In our opinion, the building may be supported on spread and continuous footings bearing on undisturbed, naturally-deposited clay, or on compacted structural fill placed after removal of unsuitable soil or for raises-in-grade. Interior walls may be supported on footings or thickened portions of the floor slab.

For uniformity, footings may be proportioned for an allowable bearing stress in pounds per square foot (psf) equal to 1,000 multiplied by the least lateral dimension of the footing in feet, up to 3,000 psf. All footings should be a minimum of 2.0 feet wide.

Exterior footings should be founded at least 4.5 feet below the lowest adjacent ground surface exposed to freezing. Interior footings should be founded a minimum of 1.5 feet below the ground floor slab.

Compacted structural fill supporting footings should extend laterally from the footings to at least the limits defined by 1 horizontal to 1 vertical lines sloped outward and downward from points located at least 2 feet horizontally beyond the bottom edges of the footings.

In order to consider foundations bearing above the clay stratum, we estimated the settlement of the clay resulting from the increased stress from the raise-in-grade, equipment and product weights, and building loads. We estimated the stress history of the clay stratum by correlating the undrained shear strength with that from other projects in the area. We estimate that the total settlement of the building will be on the order of 1.0 inch or less, with differential settlement less than 0.5 inch in 40 feet. We estimate that approximately 20 percent of this settlement will occur during the construction period and the remainder will be long-term settlement occurring over 10 years. We anticipate that settlement of this magnitude is acceptable. However, the structural engineer should determine final acceptability of settlement.

Ground Floor Slab

We recommend that the lowest level floor slab for the building be designed as an earth-supported, slab-on-grade bearing on a minimum 6 inches of compacted structural fill. All topsoil should be removed from within the building limits prior to placing fill. All fill placed below the floor slab for raises-in-grade should consist of compacted structural fill. Normal dampproofing and vapor barriers should be provided below the slab.

We recommend a modulus of subgrade reaction of 250 pounds per cubic inch for slab design.

Seismic Design Considerations

We recommend that the building be designed in accordance with the seismic requirements of the latest edition of the International Building Code, the site classification is Class D; the site response coefficient F_a is 1.5 for a short period spectral response acceleration S_s of 0.37g; the site response coefficient F_v is 2.4 for the 1-second period spectral response acceleration S_1 of 0.10g. The subgrade soils are not considered liquefaction susceptible.

Lateral Foundation Loads

We recommend that lateral loads be resisted by bottom friction on footings and that a coefficient of friction equal to 0.35 be used for footings. If this does not provide sufficient lateral resistance, we will consider the problem in more detail to take into account other factors.

Backfill Materials

Structural fill used below foundations and floor slabs and for backfill adjacent to walls should consist of sandy gravel to gravelly sand. It should be free of organic material, loam, trash, snow, ice, frozen soil and other objectionable material, and should conform to the following gradation:

<u>Sieve Size</u>	<u>Percent Finer by Weight</u>
6 inches	00
No. 4	30 to 90
No. 40	10 to 50
No. 200	to 8

Compacted structural fill should be placed in layers not exceeding eight inches in loose measure and compacted by self-propelled vibratory equipment at the approximate optimum moisture content to a dry density of at least 95 percent of the maximum dry density, as determined in accordance with ASTM Test Designation D1557. In confined areas, the maximum particle size should be reduced to 3 inches and the loose layer thickness should be reduced to 6 inches and compaction performed by hand-guided vibratory equipment.

Compacted structural fill on the outside of the foundation walls should extend laterally a minimum of 2 feet from the wall. Backfill beyond this limit may consist of common fill. The top 12 inches of fill on the exterior of the building should consist of low permeability material or bituminous concrete pavement to minimize water infiltration next to the building. Grading should provide for runoff away from the building.

Common fill may consist of inorganic mineral soil that can be placed in layers and compacted. Common fill should be placed and spread in layers not exceeding 12 inches in thickness and compacted with a minimum of two systematic passes of the equipment placing the fill.

Pavement Section

We recommend the following pavement sections for roads and parking areas:

Roads and Automobile Parking Areas

- 3 in. bituminous concrete, placed in two layers
- 3 in. screened or crushed gravel base course
- 12 in. sand or gravel subbase course

Base and subbase course materials should conform to the following gradations:

Base Course

Screened or Crushed Gravel (Maine DOT Standard Specification, Highways and Bridges; Section 703.06a, Type A)

<u>Sieve Size</u>	<u>Percent Finer by Weight</u>
2 inches	100
1/2 inch	45 to 70
1/4 inch	30 to 55
No. 40	0 to 20
No. 200	0 to 5

Subbase Course

Sand or Gravel (Maine DOT, Section 703.06b, Type D)

<u>Sieve Size</u>	<u>Percent Finer by Weight</u>
4 inches	100
1/4 inch	25 to 70
No. 40	0 to 30
No. 200	0 to 7

(Note: Type D aggregate should be modified to a maximum 4 inch size. Compacted structural fill may be substituted for gravel subbase course, but the maximum particle size should be reduced to 4 inches.)

All topsoil should be removed from within the limits of pavement.

Subbase course material should be placed in maximum 8-inch thick loose lifts and compacted at approximately optimum moisture content to a dry density of at least 95 percent of maximum dry density, as determined in accordance with ASTM Test Designation D1557. Base course material should be placed in one lift and compacted with a minimum of two coverages with self-propelled vibratory compaction equipment.

It should be noted that the subgrade soils may be frost-susceptible. Therefore, pavement roughness due to non-uniform frost movement may occur. To eliminate such non-uniform frost movement would require approximately 4.5 feet of structural fill subbase. However, it is common practice to tolerate seasonal movement to avoid the high cost of the added thickness of subbase.

Construction Considerations

General

The primary purpose of this section of the report is to comment on items related to excavation, earthwork, and related geotechnical aspects of proposed construction. It is written primarily for the engineer having responsibility for preparation of plans and specifications. Since it identifies potential construction problems related to foundations and earthwork, it will also aid personnel who monitor the construction activity. Contractors for this project must evaluate the construction problems on the basis of their own knowledge and experience in the Portland, Maine area and on the basis of similar projects in other localities, taking into account their proposed construction methods, procedures, equipment and personnel.

Excavation, Lateral Support and Control of Water

We anticipate that foundation excavation can be accomplished with sloped open excavation through the overburden soils provided safe side slopes can be maintained. Some sloughing and raveling should be anticipated in temporary slopes. Temporary excavations should be made in accordance with all OSHA and other applicable regulatory agency requirements.

We anticipate that groundwater may be encountered at proposed subgrade level or bearing level of footings. Open pumping from sumps can likely control groundwater. In general, the contractor should control groundwater and water from runoff and other sources by methods which prevent disturbance of bearing surfaces or adjacent soils and allow construction in-the-dry.

Subgrade Preparation

The subgrade soil is susceptible to disturbance from construction traffic. Equipment and personnel should not be permitted to travel across exposed footing bearing surfaces or exposed slab subgrades. Any subgrade areas that are disturbed should be recompacted or excavated and replaced with compacted structural fill prior to placing concrete. Subgrades should be protected against freezing temperatures if exposed during construction. Final excavation to subgrade should be performed using equipment with smooth-edge buckets.

Mr. Tod

-7-

March 15, 2006

Construction Monitoring

The foundation recommendations contained herein are based on the known and predictable behavior of a properly engineered and constructed foundation. Monitoring of the foundation construction is required to enable the geotechnical engineer to keep in contact with procedures and techniques used in construction. Therefore, we recommend that a person qualified by training and experience be present to provide monitoring at the site during preparation of foundation bearing surfaces and placement of compacted structural fill.

Limitations of Recommendations

This report has been prepared for specific application to the subject project in accordance with generally accepted geotechnical engineering practices. In the event that any changes in the nature, design or location of the building are planned, the conclusions and recommendations contained in this report should not be considered valid unless the changes are reviewed and the conclusions of this report modified or verified in writing.

The recommendations presented herein are based in part on the data obtained from the referenced test borings. The nature and extent of variations between the explorations may not become evident until construction. If variations then appear evident, it will be necessary to re-evaluate the recommendations of this report.

We request that we be provided the opportunity for a general review of final design and specifications in order to determine that our earthwork and foundation recommendations have been interpreted and implemented in the design and specifications as they were intended.

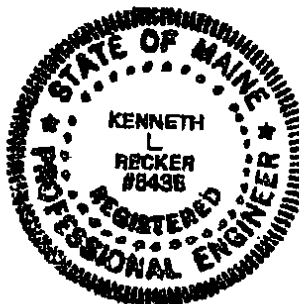
It has been a pleasure to work with you on this project. Please do not hesitate to contact us if you have any questions or need additional information.

Sincerely,

SEBAGO TECHNICS, INC.



Kenneth L. Recker, P.E.
Geotechnical Engineering Manager



KLR:klr/jc

Enclosures:

- Table I - Summary of Test Borings
- Sheet 1 - Subsurface Exploration Plan
- Appendix A - Logs of Test Borings

**ZONING ADMINISTRATOR
MARGE SCHMUCKAL**

June 16, 2010

I have reviewed the addition for a warehouse for Allagash Brewing. The property is located within an I-M Industrial Zone which allows the uses proposed and existing.

All the I-M Zone requirements are being met, including setbacks, building height, parking and maximum impervious surface requirements.

Separate permits are required for building permits and any new signage.



Certificate of Design Application

From Designer:

ASSOCIATED DESIGN PARTNERS INC

Date:

7/16/10

Job Name:

ALLAGASH BREWERY ADDITION

Address of Construction:

2003 International Building Code

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

Building Code & Year IBC 2006 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 or non separated (section 302.3) _____

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

Structural Design Calculations

_____ Submitted for all structural members (106.1 – 106.11)

Design Loads on Construction Documents (1603)

Uniformly distributed floor live loads (7603.11, 1807)

Floor Area Use	Loads Shown
<u>WAREHOUSE</u>	<u>125PSF</u>
_____	_____
_____	_____
_____	_____
_____	_____

Wind loads (1603.1.4, 1609)

<u>ASCE METH 1</u>	Design option utilized (1609.1.1, 1609.6)
<u>98</u>	Basic wind speed (1809.3)
<u>10</u>	Building category and wind importance Factor, I_w table 1604.5, 1609.5)
<u>B</u>	Wind exposure category (1609.4)
<u>N.A.</u>	Internal pressure coefficient (ASCE 7)
<u>+/- 20</u>	Component and cladding pressures (1609.1.1, 1609.6.2.2)
<u>+/- 20</u>	Main force wind pressures (7603.1.1, 1609.6.2.1)

Earth design data (1603.1.5, 1614-1623)

<u>E.L.F.</u>	Design option utilized (1614.1)
<u>II</u>	Seismic use group ("Category")
<u>0.3/4 / 0.19</u>	Spectral response coefficients, S_D s & S_{D1} (1615.1)
<u>D</u>	Site class (1615.1.5)

<u>NA</u>	Live load reduction
<u>20PSF</u>	Roof live loads (1603.1.2, 1607.11)
<u>42PSF</u>	Roof snow loads (1603.7.3, 1608)
<u>60PSF</u>	Ground snow load, P_g (1608.2)
<u>42PSF</u>	If $P_g > 10$ psf, flat-roof snow load P_f
<u>1.0</u>	If $P_g > 10$ psf, snow exposure factor, C_e
<u>1.0</u>	If $P_g > 10$ psf, snow load importance factor, I_s
<u>1.0</u>	Roof thermal factor, C_t (1608.4)
<u>NA</u>	Sloped roof snowload, P_s (1608.4)
<u>B</u>	Seismic design category (1616.3)
<u>O.S.M.R.F.</u>	Basic seismic force resisting system (1617.6.2)
<u>3.5</u>	Response modification coefficient, R , and deflection amplification factor, C_d (1617.6.2)
<u>E.L.F.</u>	Analysis procedure (1616.6, 1617.5)
<u>23.5K</u>	Design base shear (1617.4, 1617.5.1)

Flood loads (1803.1.6, 1612)

<u>NA</u>	Flood Hazard area (1612.3)
<u>83.5 FT</u>	Elevation of structure

Other loads

<u>NA</u>	Concentrated loads (1607.4)
<u>NA</u>	Partition loads (1607.5)
<u>NA</u>	Misc. loads (Table 1607.8, 1607.6.1, 1607.7, 1607.12, 1607.13, 1610, 1611, 2404)



Certificate of Design

Date: 7/16/10

From: ASSOCIATED DESIGN PARTNERS INC

These plans and / or specifications covering construction work on:

ALLAGASH BREWERY ADDITION

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: A S Wilson

Title: ENGINEER

Firm: ASSOCIATED DESIGN PARTNERS INC

Address: 80 LEIGHTON RD

FALMOUTH ME 04105

Phone: 207 878 1757

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



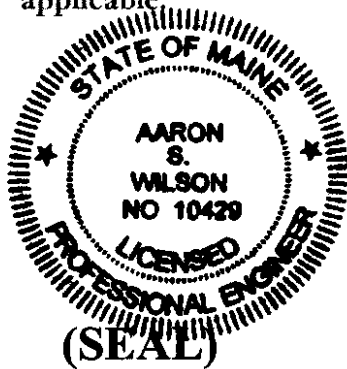
Accessibility Building Code Certificate

Designer: ASSOCIATED DESIGN PARTNERS INC

Address of Project: _____

Nature of Project: _____

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



Signature: A S Wilson

Title: ENGINEER

Firm: ASSOCIATED DESIGN PARTNERS INC

Address: 80 LEBANON RD

FALMOUTH ME 04105

Phone: 207 878 1751

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



CITY OF PORTLAND, MAINE

Department of Building Inspections

Original Receipt

7.21 2010

Received from Dan Williams / Langley

Location of Work 50 In! Way.

Cost of Construction \$ _____ Building Fee: _____

Permit Fee \$ _____ Site Fee: _____

Certificate of Occupancy Fee: _____

Total: 340

☒ Building (I1) _____ Plumbing (I5) _____ Electrical (I2) _____ Site Plan (U2) _____

Other _____

ca. 396 B-9

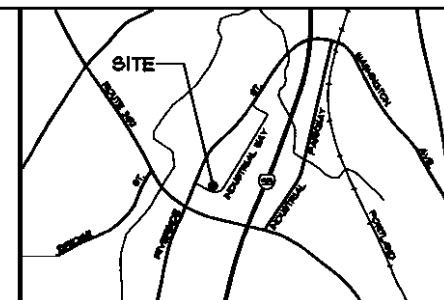
Check #: CC Total Collected \$ 340

**No work is to be started until permit issued.
Please keep original receipt for your records.**

Taken by: S. J.

WHITE - Applicant's Copy
YELLOW - Office Copy
PINK - Permit Copy

PROPERTY LINE CURVE DATA				
CURVE	LENGTH	RADIUS	ORD. BEARING	ORD. DIST.
C1	114.32'	355.00'	S68°17'27"E	113.63'



LOCATION MAP

N.T.A.

GENERAL NOTES:

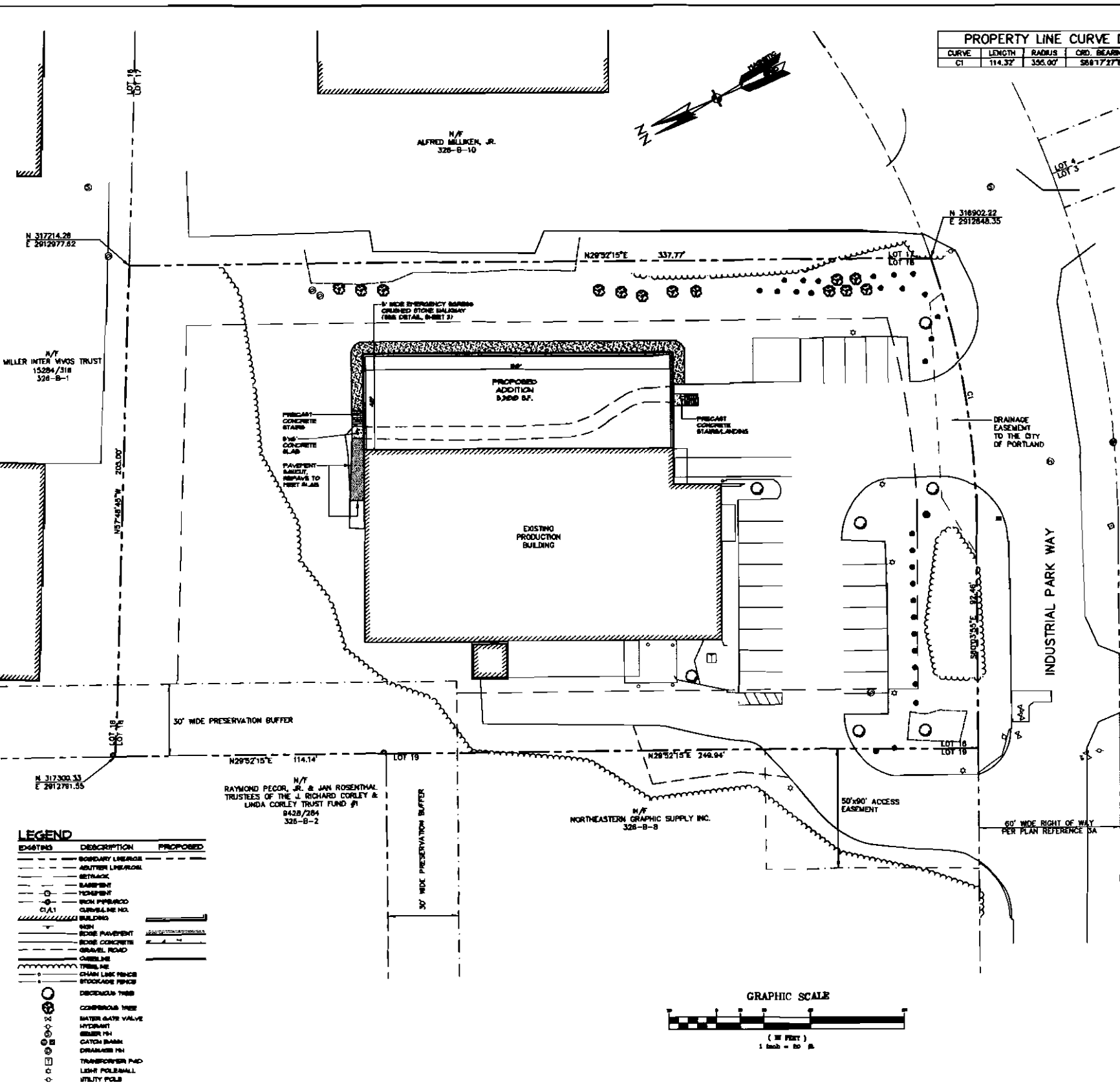
1. THE APPLICANT IS ALLAGASH BREWING COMPANY.
2. THE RECORD OWNER OF THE PROPERTY IS THE INDUSTRIAL PARK, INC. BY DEED RECORDED IN THE OFFICIAL RECORDS OF THE CITY OF PORTLAND, MAINE, BOOK 1005 PAGE 245.
3. THE PROPERTY IS LOCATED ON THE CITY OF PORTLAND TAX MAPS, MAP 1005 BLOCK 10 LOT 1.
4. PLAN REFERENCE: A SET OF SITE DESIGN PLANS FOR THE INDUSTRIAL PARK, INC. ALLAGASH BREWING COMPANY, DATED JANUARY 24, 2001, AND LAST REVISED ON SEPTEMBER 14, 2001.
5. RECORDING PLAN OF THE INDUSTRIAL PARK, BY LAND USE COMMISSION, DATED MARCH 28, 1996, AND LAST REVISED SEPTEMBER 14, 2001, BEING RECORDED IN THE CITY OF PORTLAND, MAINE, BOOK 1005 PAGE 245.
6. THE TOTAL AREA OF THE PROPERTY IS 10.475 ACRES (454,000 SQ. FT.).
7. THE PROPERTY IS LOCATED IN THE CITY OF PORTLAND, MAINE.
8. THE PROPOSED USE IS A BREWERY.
9. SPACE AND EXISTING CRITERIA:
 - THE STREET FRONTAGE: 60' FEET
 - THE FRONT YARD: 1 FOOT/FOOT OF BUILDING HEIGHT
 - THE SIDE YARD: 25 FT. 1 FOOT/FOOT OF BUILDING HEIGHT
 - THE REAR YARD: 10 FT. 1 FOOT/FOOT OF BUILDING HEIGHT
 - THE BUILDING HEIGHT: 15 FT. 1 FOOT/FOOT OF BUILDING HEIGHT
 - PAVEMENT SETBACK FROM LOT BOUNDARIES: 10' FEET
10. THE BUILDING IS COMPOSED OF: 10,000 SQ. FT. PRODUCTION, 10,000 SQ. FT. WAREHOUSE, 10,000 SQ. FT. OFFICE (1ST FLOOR) AND 10,000 SQ. FT. OFFICE (2ND FLOOR).
11. PARKING SPACE REQUIREMENTS:
 - 1 SPACE PER 100 SQ. FT. OF OFFICE (2ND FLOOR): 10 SPACES
 - 1 SPACE PER 100 SQ. FT. OF WAREHOUSE: 10 SPACES
 - 1 SPACE PER 100 SQ. FT. OF PRODUCTION: 10 SPACES
 - TOTAL SPACES REQUIRED: 30 SPACES
 - TOTAL SPACES PROVIDED: 30 SPACES (INCLUDING 1 NO. SPACE)
12. THE TOPOGRAPHIC INFORMATION SHOWN HEREIN IS BASED UPON AN AS-BUILT SURVEY PERFORMED BY SEBAGO TECHNICAL, INC. IN DISCREPANCY OF 0.01%.
13. BOUNDARY INFORMATION SHOWN HEREIN IS BASED UPON PLAN REFERENCE 10.
14. THE FACILITY IS SERVED BY CITY WATER, SEWER, GAS, UNDERGROUND ELECTRIC TELEPHONE AND CABLE.
15. METHODS AND MATERIALS USED IN THE CONSTRUCTION OF THE IMPROVEMENTS HEREIN SHALL CONFORM TO THE CURRENT CITY CONSTRUCTION STANDARDS AND SPECIFICATIONS AND/OR CURRENT FDOT, STATEMENTS AND SPECIFICATIONS.
16. THE CONTRACTOR OR DEVELOPER IS REQUIRED TO NOTIFY THE CITY OF PORTLAND PUBLIC WORKS DEPARTMENT INSPECTION SERVICES DIVISION IN WRITING (30 DAYS PRIOR TO THE BEGINNING OF CONSTRUCTION) THAT THE CITY OF PORTLAND PUBLIC WORKS DEPARTMENT INSPECTION SERVICES DIVISION SHALL BE ADVISED OF ANY SIGNIFICANT CONCERN OR IN A SIGNIFICANT AREA, A PRE-CONSTRUCTION MEETING MAY BE REQUIRED AT THE DISCRETION OF THE PUBLIC WORKS DEPARTMENT.
17. AN APPROVED SET OF PLANS AND ALL APPLICABLE PERMITS MUST BE AVAILABLE AT THE CONSTRUCTION SITE. THE DEVELOPER OR AN AUTHORIZED AGENT MUST BE AVAILABLE AT ALL TIMES DURING CONSTRUCTION.
18. SIGNING SIGNS, MARKERS, BARRICADES OR FLASHING APPROPRIATE FOR THE TYPE OF CONSTRUCTION MUST BE EMPLOYED TO REGULATE TRAFFIC.
19. CONSTRUCTION DEBRIS SHALL BE CONTAINED AND DISPOSED OF IN ACCORDANCE WITH CITY OF PORTLAND'S SOLID WASTE ORDINANCE CHAPTER 10.
20. ANY DEBRIS TO PUBLIC OR PRIVATE PROPERTY RESULTING FROM CONSTRUCTION ACTIVITIES SHALL BE REPAIRED BY THE DEVELOPER/CONTRACTOR AT ALL TIMES DURING CONSTRUCTION.
21. PROPERTY MARKERS AND STREET LINE POSITIONS SHALL BE PROTECTED, PROVIDED AT ALL TIMES DURING CONSTRUCTION TO MAINTAIN THEIR INTEGRITY. IF DAMAGED THEY SHALL BE REPLACED BY A SURVEYOR REGISTERED IN THE STATE OF MAINE AT THE CONSTRUCTION DEVELOPER'S EXPENSE.
22. ALL UTILITY SERVICES AND APPROPRIATE SHALL BE CONSTRUCTED IN ACCORDANCE WITH THE CURRENT STANDARDS AND SPECIFICATIONS OF THE CITY OF PORTLAND PUBLIC WORKS DEPARTMENT.
23. ALL NEW CONNECTIONS, RECONNECTIONS, ETC. TO SANITARY OR STORM SEWERS SHALL REQUIRE A CONNECTION PERMIT PRIOR TO BEGINNING ANY WORK. THE CITY OF PORTLAND PUBLIC WORKS DEPARTMENT MUST BE NOTIFIED AT LEAST 24 HOURS PRIOR TO CONSTRUCTION TO ALLOW FOR INSPECTION.
24. A PERMIT MUST BE OBTAINED FROM THE CITY OF PORTLAND PUBLIC WORKS DEPARTMENT PRIOR TO BEGINNING ANY WORK WITHIN THE CITY RIGHT-OF-WAY.
25. THE ENTIRE SITE SHALL BE DEVELOPED AND/OR MAINTAINED AS DEPICTED ON THE SITE PLAN. APPROVAL OF THE PLANNING AUTHORITY OR PLANNING BOARD SHALL BE REQUIRED FOR ANY ALTERATIONS TO OR DEVIATIONS FROM THE APPROVED SITE PLAN, INCLUDING, WITHOUT LIMITATION, TOPOGRAPHY, DRAINAGE, LANDSCAPE, RETENTION OF EXISTING OR NEW AREAS, ACCESS, SIDE, LOCATION AND SURVIVAL OF PLANTING AREAS, AND LOCATION AND SIZE OF BUILDINGS.
26. THESE PLANS RELY UPON THE SITE PLAN, THE LIST OF THE LIST OF CONSTRUCTION PERMITS, THE STORAGE OR MATERIALS OR EQUIPMENT BEYOND THE TRAILER SPACE.

Sebago Technics		PROJECT NO. 00249	
DATE: 12-3-04	SCALE: 1"=20'	DATE: 12-3-04	SCALE: 1"=20'
SHEET 1 OF 2		SHEET 1 OF 2	

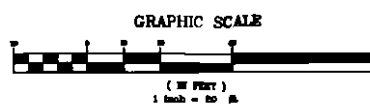
SITE PLAN		DATE: 12-3-04	
OF: ALLAGASH BREWING COMPANY		SCALE: 1"=20'	
30 INDUSTRIAL PARK WAY		DATE: 12-3-04	
PORTLAND, MAINE		SCALE: 1"=20'	
FOR: ALLAGASH BREWING COMPANY		DATE: 12-3-04	
30 INDUSTRIAL PARK WAY		SCALE: 1"=20'	
PORTLAND, MAINE 04103		DATE: 12-3-04	

027145-2009.dwg, TAE SITE

RECEIVED
SEP 10 2004
Dept. of R
Portland Maine



DESCRIPTION	PROPOSED
BOUNDARY LINE/LOC	
ADJUTER LINE/LOC	
SETBACK	
BARBET	
TOBET	
IRON PIPE/ROD	
CURB/RAIL NO.	
BUILDING	
WIDE	
EDGE PAVEMENT	
EDGE CONCRETE	
GRAVEL ROAD	
CHUNKLINE	
TRAIL LINE	
CHAIN LINK FENCE	
STOCKADE FENCE	
DISCRETE FENCE	
CONCRETE TREE	
WATER GATE VALVE	
HYDRANT	
SEWER IN	
CATCH BASIN	
DRAINAGE IN	
TRANSFORMER PAD	
LIGHT POLE/SMALL	
UTILITY POLE	



Comments
Submitted

City of Portland
Development Review Application
Planning Division Transmittal form

6/9/10

Application Number: 10-79900008 **Application Date:** June 8, 2010

Project Name: BUILDING ADDITION

Address: 50 Industrial Way **CBL:** 326 - B-009-001

Project Description: Industrial Way - 50; Building Addition; Allagash Brewing

Zoning: IM

Other Reviews Required:

Review Type: MINOR SITE PLAN

Applicant:

Rob Tod
50 Industrial Way
Portland Me 04103

Agent/Representative:

Paul Ureneck
1 Canal Plaza
Portland Me 04101

Distribution List:

<input type="checkbox"/> Planner	Eric Giles, Aicp	<input type="checkbox"/> Parking	John Peverada
<input checked="" type="checkbox"/> Zoning Administrator	Marge Schmuckal	<input type="checkbox"/> Design Review	Alex Jaegerman
<input type="checkbox"/> Traffic	Tom Errico	<input type="checkbox"/> Corporation Counsel	Danielle West-Chuhta
<input type="checkbox"/> Stormwater	Dan Goyette	<input type="checkbox"/> Sanitary Sewer	John Emerson
<input type="checkbox"/> Fire Department	Keith Gautreau	<input type="checkbox"/> Inspections	Tammy Munson
<input type="checkbox"/> City Arborist	Jeff Tarling	<input type="checkbox"/> Historic Preservation	Deb Andrews
<input type="checkbox"/> Engineering	David Margolis-Pineo	<input type="checkbox"/> Outside Agency	
		<input type="checkbox"/> DRC Coordinator	Phil DiPierro

Preliminary Comments needed by: Wednesday, June 16, 2010

Final Comments needed by: Wednesday, June 23, 2010

One Canal Plaza, Suite 500
Portland, ME 04101

T 207.871.1290
F 207.772.2647

www.boulos.com

June 3, 2010

Barbara Barhydt
Development Review Services Manager
City of Portland
Planning Department
389 Congress St
Portland, Me. 04101

RE: Minor Site Plan Review Application, Allagash Brewing Company

Dear Barbara:

On behalf of Allagash Brewing Company I am pleased to submit 7 copies on the enclosed plans, associated information for a minor site plan review and the application fee of \$400.00. For your reference, a site plan application of the existing building was submitted in November of 2005, approval was received in 2006, and construction was completed in 2007. Subsequent to that approval an approval to build the 5,200 square foot addition was received in February of 2009. That approval, however, expired in February of 2010, hence, our submission for re approval. Based on Allagash's continued growth the building addition continues to be necessary. The proposed use of the addition remains that of a commercial brewery for the production and distribution of beer.

Utilities including water, sewer, telephone, electric and gas are currently serving the site via Industrial Way. No additional utility services are required for the expansion. Storm water runoff generated by the site will be directed to and collected by the existing detention basin, which was designed to accommodate all runoff from the proposed development. The detention basin released the storm water through an outlet control structure, which ensures that the post development peak discharge rates are below pre development rates.

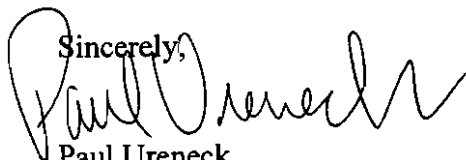
The proposed expansion will not require alteration of existing wetlands. Additionally, the scope of this project does not require a storm water permit form the Maine Department of Environmental Protection.

Attached for your review are the requirement documents that were submitted with the formerly approved application. I have included an updated financial capacity letter from Bath Savings Bank and also the City of Portland Wastewater Capacity Application which is part of the new application process.

Should you have any questions or comments please do not hesitate to contact me.

Thank you.

Sincerely,



Paul Ureneck
Vice President
Project Management

Cc: Rob Tod, Allagash Brewing Company



Development Review Application PORTLAND, MAINE

Department of Planning and Urban Development,
Planning Division and Planning Board

PROJECT NAME: Allagash Brewing

PROPOSED DEVELOPMENT ADDRESS:

50 Industrial Way Portland Me

PROJECT DESCRIPTION:

5200 sf building addition

CHART/BLOCK/LOT: 326/B/9

CONTACT INFORMATION:

APPLICANT

Name: Rob Tod

Address: 50 Industrial Way

Portland Me

Zip Code: 04103

Work #: 878 5385

Cell #: 450 4274

Fax #: _____

Home: _____

E-mail: robtod@allagash.com

PROPERTY OWNER

Name: Same

Address: _____

Zip Code: _____

Work #: _____

Cell #: _____

Fax #: _____

Home: _____

E-mail: _____

BILLING ADDRESS

Name: Same

Address: _____

Zip: _____

Work #: _____

Cell #: _____

Fax #: _____

Home: _____

E-mail: _____

~As applicable, please include additional contact information on the next page~

AGENT/REPRESENTATIVE

Name: Paul Ureneck
Address: CBRE The Boulos Co
1 Canal Plaza Portland
Zip Code: 04101
Work #: 871 1290
Cell #: 233 1172
Fax #: 772 2647
Home: _____
E-mail: pureneck@boulos.com

ARCHITECT

Name: n/a
Address: _____
Zip Code: _____
Work #: _____
Cell #: _____
Fax #: _____
Home: _____
E-mail: _____

SURVEYOR

Name: Sebago Technics Inc
Address: See Engineer section
Zip Code: _____
Work #: _____
Cell #: _____
Fax #: _____
Home: _____
E-mail: _____

ENGINEER

Name: Sebago Technics, Inc
Address: PO Box 1339
Westbrook, Me. 04098
Zip Code: _____
Work #: 856 0277
Cell #: _____
Fax #: 856 2206
Home: _____
E-mail: rmeek@sebagotechnics.com

Richard Meek

CONSULTANT

Name: Associated Design Partners Inc
Address: 80 Leighton Rd
Falmouth Me
Zip Code: 04105
Work #: 878 1751
Cell #: _____
Fax #: 878 1788
Home: _____
E-mail: adp@adpengineering.com

ATTORNEY

Name: Rob Ruesch
Address: Verrill Dana
1Portland Square
Portland Me 04101
Zip Code: 774 4000
Work #: _____
Cell #: _____
Fax #: 774 7499
Home: _____
E-mail: rreusch@verrilldana.com

PROJECT DATA

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

Total Site Area 73073 sq. ft.
Proposed Total Disturbed Area of the Site 7000 sq. ft.
(If the proposed disturbance is greater than one acre, then the applicant shall apply for a Maine Construction General Permit (MCGP) with DEP and a Stormwater Management Permit, Chapter 500, with the City of Portland)

IMPERVIOUS SURFACE AREA

Proposed Total Paved Area _____ sq. ft.
Existing Total Impervious Area _____ sq. ft.
Proposed Total Impervious Area _____ sq. ft.
Proposed Impervious Net Change _____ sq. ft.

BUILDING AREA

Existing Building Footprint 11700 sq. ft.
Proposed Building Footprint 16900 sq. ft.
Proposed Building Footprint Net change 5200 sq. ft.
Existing Total Building Floor Area 11700 sq. ft.
Proposed Total Building Floor Area 16900 sq. ft.
Proposed Building Floor Area Net Change 5200 sq. ft.
New Building yes (addition) (yes or no)

ZONING

Existing IM
Proposed, if applicable Same

LAND USE

Existing _____
Proposed _____

RESIDENTIAL, IF APPLICABLE

Proposed Number of Affordable Housing Units N/A
Proposed Number of Residential Units to be Demolished _____
Existing Number of Residential Units _____
Proposed Number of Residential Units _____
Subdivision, Proposed Number of Lots _____

PARKING SPACES

Existing Number of Parking Spaces 22
Proposed Number of Parking Spaces 22
Number of Handicapped Parking Spaces 1
Proposed Total Parking Spaces 22

BICYCLE PARKING SPACES

Existing Number of Bicycle Parking Spaces 0
Proposed Number of Bicycle Parking Spaces 0
Total Bicycle Parking Spaces 0

ESTIMATED COST OF PROJECT

\$650,000.00

Please answer the following with a Yes/No response on all that apply to the proposed development

Institutional	<u>n</u>	Change of Use	<u>n</u>
Parking Lot	<u>y</u>	Design Review	<u>n</u>
Manufacturing	<u>y</u>	Flood Plain Review	<u>n</u>
Office	<u>n</u>	Historic Preservation	<u>n</u>
Residential	<u>n</u>	Housing Replacement	<u>n</u>
Retail/Business	<u>n</u>	14-403 Street Review	<u>n</u>
Warehouse	<u>y</u>	Shoreland	<u>n</u>
Single Family Dwelling	<u>n</u>	Site Location	<u>n</u>
2 Family Dwelling	<u>n</u>	Stormwater Quality	<u>y</u>
Multi-Family Dwelling	<u>n</u>	Traffic Movement	<u>n</u>
B-3 Ped Activity Review	<u>n</u>	Zoning Variance	<u>n</u> (or date)
Change of Use	<u>n</u>	Historic Dist./Landmark	<u>n</u>
		Off Site Parking	<u>n</u>

Site Plan Checklist

Portland, Maine

Department of Planning and Urban Development, Planning Division and Planning Board

Allagash Brewing Bldg Addition 50 Industrial Way Portland

Project Name, Address of Project

Application Number

(The form is to be completed by the Applicant or Designated Representative)

Check Submitted		Required Information	Section 14-525 (b,c)
Applicant	Staff		
referenced in plan			
<u>X</u>	<u> </u>	Standard boundary survey (stamped by a registered surveyor, at a scale of not less than 1 inch to 100 feet and including:	1
<u>X</u>	<u> </u>	Name and address of applicant and name of proposed development	a
<u>X</u>	<u> </u>	* Scale and north points	b
<u>X</u>	<u> </u>	* Boundaries of the site	c
<u>X</u>	<u> </u>	* Total land area of site	d
<u>X</u>	<u> </u>	* Topography - existing and proposed (2 feet intervals or less)	e
<u>n/a</u>	<u> </u>	Plans based on the boundary survey including:	2
<u>n/a</u>	<u> </u>	* Existing soil conditions	a
<u>n/a</u>	<u> </u>	* Location of water courses, wetlands, marshes, rock outcroppings and wooded areas	b
<u>X</u>	<u> </u>	* Location, ground floor area and grade elevations of building and other structures existing and proposed, elevation drawings of exterior facades, and materials to be used	c
<u>X</u>	<u> </u>	* Approx location of buildings or other structures on parcels abutting the site and a zoning summary of applicable dimensional standards (example page 11 of packet)	d
<u>X</u>	<u> </u>	* Location of on-site waste receptacles	e
<u>X</u>	<u> </u>	* Public utilities	
<u>X</u>	<u> </u>	* Water and sewer mains	e
<u>X</u>	<u> </u>	* Culverts, drains, existing and proposed, showing size and directions of flows	e
<u>X</u>	<u> </u>	* Location and dimensions, and ownership of easements, public or private rights-of-way, both existing and proposed	f
<u>X</u>	<u> </u>	* Location and dimensions of on-site pedestrian and vehicular access ways	g
<u>X</u>	<u> </u>	* Parking areas	
<u>X</u>	<u> </u>	* Loading facilities	g
<u>X</u>	<u> </u>	* Design of ingress and egress of vehicles to and from the site onto public streets	g
<u>X</u>	<u> </u>	* Curb and sidewalks	g
<u>n/a</u>	<u> </u>	Landscape plan showing:	h
<u>X</u>	<u> </u>	* Location of existing vegetation and proposed vegetation	h
<u>n/a</u>	<u> </u>	* Type of vegetation	h
<u>"</u>	<u> </u>	* Quantity of plantings	h
<u>"</u>	<u> </u>	* Size of proposed landscaping	h
<u>"</u>	<u> </u>	* Existing areas to be preserved	h
<u>"</u>	<u> </u>	* Preservation measures to be employed	h
<u>"</u>	<u> </u>	* Details of planting and preservation specifications	h
<u>"</u>	<u> </u>	* Location and dimensions of all fencing and screening	i
<u>"</u>	<u> </u>	Location and intensity of outdoor lighting system	j
<u>X</u>	<u> </u>	Location of fire hydrants, existing and proposed (refer to Fire Department checklist - page 11)	k
<u>X</u>	<u> </u>	Written statements to include:	c
<u>X</u>	<u> </u>	* Description of proposed uses to be located on site	d
<u>X</u>	<u> </u>	* Quantity and type of residential, if any	cl
<u>X</u>	<u> </u>	* Total land area of the site	c2
<u>X</u>	<u> </u>	* Total floor area, total disturbed area and ground coverage of each proposed Building and structure	c2
<u>X</u>	<u> </u>	* General summary of existing and proposed easements or other burdens	c3
<u>X</u>	<u> </u>	* Type, quantity and method of handling solid waste disposal	c4
<u>X</u>	<u> </u>	* Applicant's evaluation or evidence of availability of off-site public facilities, including sewer, water and streets (refer to the wastewater capacity application - page 12)	c5
<u>X</u>	<u> </u>	* Description of existing surface drainage and a proposed stormwater management plan or description of measures to control surface runoff.	c6

X _____
 X _____

* An estimate of the time period required for completion of the development 7

* A list of all state and federal regulatory approvals to which the development may be subject to, the status of any pending applications, anticipated timeframe for obtaining such permits, or letters of non-jurisdiction. 8

 X _____

* Evidence of financial and technical capability to undertake and complete the development including a letter from a responsible financial institution stating that it has reviewed the planned development and would seriously consider financing it when approved.

 X _____

* Evidence of applicant's right title or interest, including deeds, leases, purchase options or other documentation.

 X _____

* A description of any unusual natural areas, wildlife and fisheries habitats, or archaeological sites located on or near the site.

 UPON REQUEST

A jpeg or pdf of the proposed site plan, if available.

 UPON REQUEST

Final sets of the approved plans shall be submitted digitally to the Planning Division, on a CD or DVD, in AutoCAD format (*.dwg), release AutoCAD 2005 or greater.

Note: Depending on the size and scope of the proposed development, the Planning Board or Planning Authority may request additional information, including (but not limited to):

- | | |
|---|---|
| - drainage patterns and facilities | - an environmental impact study |
| - erosion and sedimentation controls to be used during construction | - a sun shadow study |
| - a parking and/or traffic study | - a study of particulates and any other noxious |
| emissions | - a noise study |
| - a wind impact analysis | |

SITE PLAN CHECKLIST REQUIREMENTS

SECTION 14-525(B) CONTENTS:

1. A standard boundary survey has been prepared and is included within this submittal showing all pertinent information as requested in Subsections a. through e. The plans are provided at a scale of 1" = 20'.
2. A plan set has been prepared and is included within this submittal showing all pertinent information as requested in Subsections a. through o. The set includes a site plan, grading and utility plan, landscape plan, and detail sheet. A site location map has been included as Exhibit 3.

SECTION 14-525(C) WRITTEN STATEMENTS:

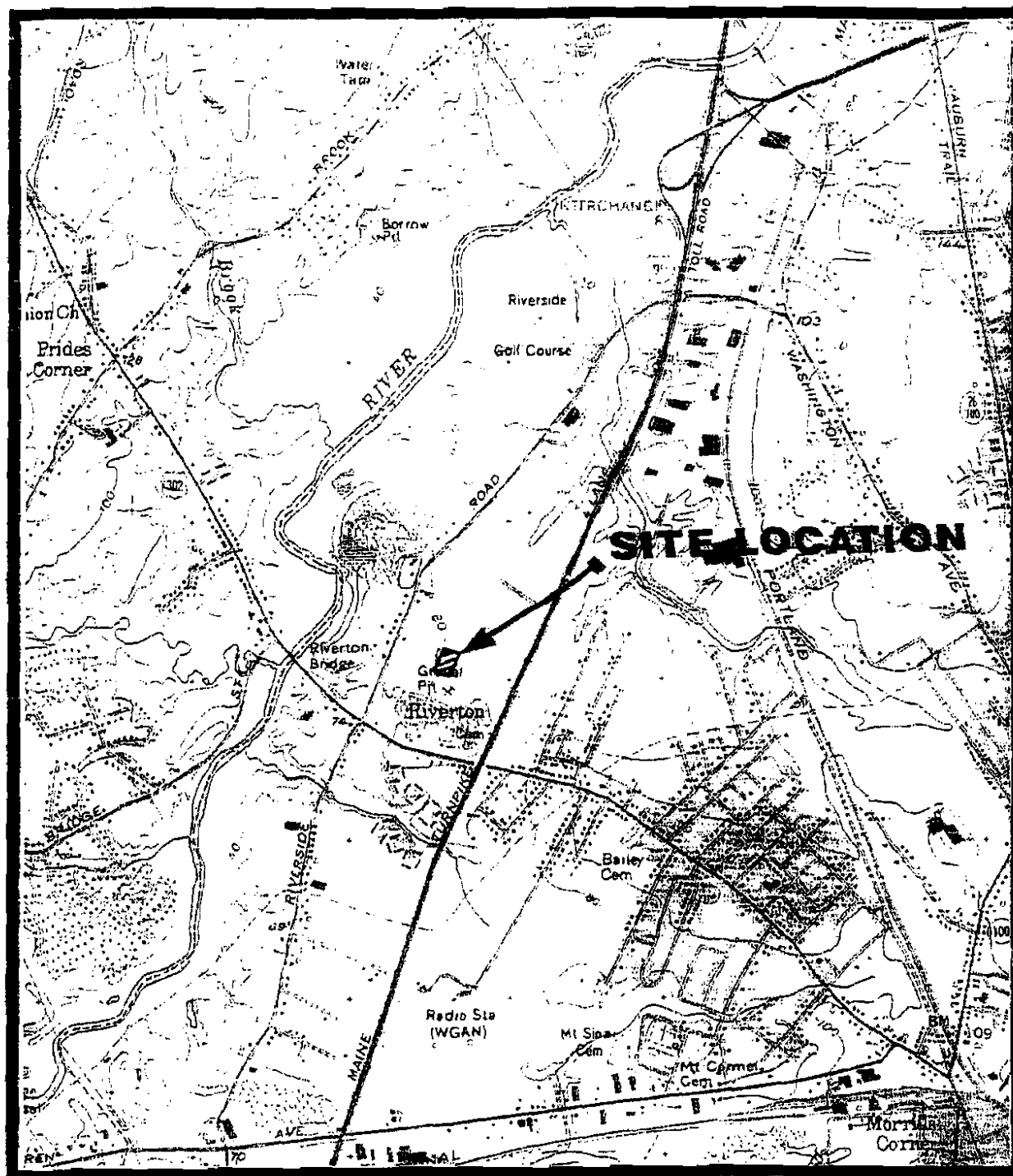
The record owner of the property is Allagash Brewing Company located at 50 Industrial Way, Portland, ME.

1. The proposed development will include a 5,200 square foot addition to the existing building. The addition will be used as warehouse space for storing product produced in the existing facility. The proposal does not deviate from the originally approved site plan, which depicts the addition described above.
2. The existing parcel includes approximately 73,073 square feet (1.68 acres). The floor area of the proposed building is 16,900 square feet.
3. Drainage easements were originally proposed along Industrial Way to allow for placement and access to a driveway culvert. There is also an access easement on the abutting westerly property.
4. Solid waste quantities generated by the project will not significantly increase as a result of the proposed addition. Solid waste and recyclables are currently contained on site inside a screened dumpster enclosure. Solid waste and recyclables are currently disposed of by a licensed waste management and recycling company under contract with the owner.
5. The site is currently serviced by city public water and sewer, natural gas, electric, phone and cable utilities. No significant increase in demand to any of the available utilities is anticipated as a result of the proposed addition. The original letters of capacity from the Portland Water District and Portland Public Works are included for reference.
6. The Stormwater Management Plan will not be significantly altered from the original design. A copy of the original narrative and calculations is included for reference.

SUMMER 2010

7. We anticipate an approximately 3-month construction schedule commencing upon project approvals in the ~~early spring of 2009~~. The anticipated construction schedule is dependent on approval of the final design plans for the project.
8. The project site is fully developed and less than three acres in size and will have less than an acre of impervious area. As such, the site will not require an MDEP Site Location of Development, Stormwater permit, nor a Maine Construction General Permit since it is expected that the area of disturbance will be less than one acre. We do not anticipate that the project is subject to any additional state or federal approvals and we are unaware of any pending applications related to the project site.
9. A letter of financial capacity and intent to finance is included for reference. The applicant is currently engaged in the brewing industry and will bring expertise to the proposed facility. Sebago Technics, Inc. is providing civil design documents. CBRE/Boulos Property Management is providing construction management services. Langford and Low is providing Architectural design documents and general contracting services.
10. The property is owned by the applicant, Allagash Brewing Company. A copy of the property deed is attached, for reference.
11. We have found no evidence at the project site to indicate that there are unusual natural areas, wildlife or fisheries habitat, or archeological sites on or near the project site.
12. We plan to submit the final approved drawings to the City in the desired electronic format(s).
13. A narrative description addressing the particulars of recyclable material generated by the site is included, for reference.

FIGURE 1



SITE LOCATION MAP
 USGS TOPOGRAPHIC
 7.5 MIN. QUADRANGLE
 PORTLAND WEST
 SCALE: 1"=2,000'

Doc#: 93526 Bkt18385 Pg: 348

QUITCLAIM DEED WITH COVENANT

NORTHEASTERN GRAPHIC SUPPLY, INC., a Maine corporation, for consideration paid, grants to 50 INDUSTRIAL WAY LLC, a Maine limited liability company with an address of 100 Industrial Way, Portland, Maine, 04103, with Quitclaim Covenant, the following described real property:

A certain lot or parcel of land, with any buildings and improvements thereon, situated in on the northerly side of Industrial Way, so-called, in the City of Portland, County of Cumberland and State of Maine, bounded and described as follows:

Lot 18 as shown on a Plan entitled Turnpike Industrial Park-Riverside Street, Portland Maine, Recording Plat, made for Portland Venture Partners, 100 Silver Street, Portland, Maine, by Land Use Consultants, dated March 25, 1986, revised through September 9, 1986 and recorded in the Cumberland County Registry of Deeds, in Plan Book 157, Page 61 ("the Subdivision Plan"), to which Subdivision Plan reference is hereby made for a more particular description.

Meaning and intending to convey and hereby conveying the same premises as conveyed to Northeastern Graphic Supply by deed of Alfred H. Milliken, Jr., et als, dated June 2, 1988 and recorded in the Cumberland County Registry of Deeds in Book 8317, Page 51.

Together with an easement to benefit the above described Lot 18, over the parcel of land described hereinafter (the "Easement Area") for ingress and egress by foot and by vehicle, together with the right to construct, improve, maintain, repair, grade, excavate, fill and pave a driveway within the Easement Area for access to Lot 18, and together with the right to install within the Easement Area, both above and below ground, utility services to include, without limitation, facilities necessary or convenient for the transmission of electricity, gas, telephone communications, cable television, computer communications, sewerage and water.

The Easement Area is a fifty (50) foot wide parcel of land, being a portion of Lot 19 as shown on the Subdivision Plan, bound and described as follows:

Beginning on the northerly side of Industrial Park Way, also known as Industrial Way, at the southwesterly corner of Lot 18 as shown on the Subdivision Plan, said point also being the most southerly corner of Lot 19 as shown on the Subdivision Plan;

Thence N 29° 52' 15" E along the westerly sideline of Lot 18 and the easterly sideline of Lot 19 a distance of 90.00 feet,

MAINE REAL ESTATE TAX PAID

Doc#: 93526 Bk:18385 Pg: 349

Received
Recorded Register of Deeds
Nov 15/2002 10:01:56A
Cumberland County
Maine

Thence N 60° 03' 55" W through land of Northeastern Graphic Supply, Inc., being Lot 19 as aforesaid, a distance of 50.00 feet;

Thence S 29° 52' 15" W through land of Northeastern Graphic Supply, Inc., being Lot 19 as aforesaid, a distance of 90.00 feet to the northerly sideline of Industrial Way;

Thence S 60° 03' 55" E along the northerly sideline of Industrial Way a distance of 50.00 feet to the point of beginning.

The Easement Area consists of approximately 4,500 square feet.

The Grantor herein reserves for itself, its successors and assigns, the right to use the Easement Area in common with the Grantee for all purposes, including but not limited to, ingress and egress by foot and vehicle and the right to install and/or connect to all utilities located within the Easement Area, all of which reserved rights shall benefit the Grantor's adjoining property.

IN WITNESS WHEREOF, Northeastern Graphic Supply, Inc. has caused this instrument to be executed by Brian Kroot, its President this 14th day of November, 2002.

WITNESS

NORTHEASTERN GRAPHIC
SUPPLY, INC.

Catherine E. Decker

By: [Signature]
Brian Kroot
Its: President

State of Maine
County of Cumberland

November 14, 2002

Personally appeared before me the above named Brian Kroot, President of Northeastern Graphic Supply, Inc. and acknowledged the foregoing instrument to be his/her free act and deed in said capacity and the free act and deed of Northeastern Graphic Supply, Inc.

Catherine E. Decker
Notary Public/Attorney at Law

Print Name CATHERINE E. DECKER

My Commission Expires N/A



Portland Water District

225 Douglass St. • P.O. Box 3553 • Portland, ME 04104-3553

(207) 774-5961

FAX (207) 761-8307

www.pwd.org

September 16, 2002

Mr. Richard L. Meek
Sebago Technics, Inc.
One Chabot Street
Westbrook, Maine 04098-1339

Re: Allagash Brewing, Industrial Way; Portland

Dear Sir:

The Portland Water District has a 12" water main in Industrial Way, Portland, near the proposed site. A test on a nearby hydrant produced the following results: static pressure 68 psi; pito pressure 55 psi; with a flow of 1244 gpm. With these results in mind, the District feels we have sufficient capacity available to serve this proposed project and meet all normal fire protection and domestic water service demands. **Please notify your plumber of these results so that they can design your system to best fit the available pressure.**

With certification by the developer that all required permits have been received, we look forward to serving this project.

Sincerely,

PORTLAND WATER DISTRICT

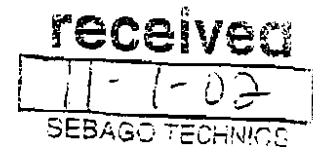
David W. Coffin, PLS
Engineering Supervisor



CITY OF PORTLAND

29 October 2002

William J. Bray
Director



Mr. Richard L. Meek,
Sebago Technics,
P.O. Box 1339,
Westbrook, Maine 04098-1339.

**RE: The Capacity to Handle Wastewater Flows, from The Site of the
Proposed Allagash Brewing Development, 48-64 Industrial Way (326-B-9).**

Dear Mr. Meek:

The **design flow** is calculated by dividing the highest monthly flow over the period of at least one year of water meter records by the number of days the facility was in use during the month with the highest flow. Then multiplying this resulting quotient by a "multiplying factor" of 1.5. Then, multiplying this new number by the number of gallons in a hundred cubic feet (HCF). Finally, this number is multiplied by five, to account for maximum growth of the proposed facility, to arrive at the design flow, in gallons per day. Thus, 76 (HCF) divided by 22 (work days) times 1.5 (a multiplying factor) times 748 (gallons) times 5 (a growth factor) = **19,373 GPD**

For a more detailed explanation, please see Section 903.2.3, Chapter Nine, Design Flows, in the Handbook of Subsurface Wastewater Disposal in Maine.

The existing ten-inch diameter polyvinyl chloride sewer pipe located in Industrial Way has adequate capacity to **transport**, while The Portland Water District sewage treatment facilities, located off Marginal Way, have adequate capacity to **treat** the total anticipated wastewater flows of **19,373 GPD**, from the proposed project.

The City combined sewer overflow (C.S.O.) abatement consent agreement, with the U.S. E.P.A. and The Maine D.E.P. requires C.S.O. abatement, as well as Stormwater mitigation, from all projects, in order to offset any increase in sanitary flows.

The City expects an Industrial Pretreatment Permit application from Allagash Brewing re their industrial process wastewaters.

If I can be of further help, please call me at 874-8832.

Sincerely,

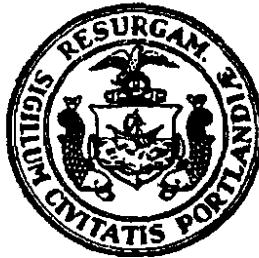
CITY OF PORTLAND

Frank Brancely

Frank J. Brancely, B.A., and M.A.
Senior Engineering Technician

CITY OF PORTLAND WASTEWATER CAPACITY APPLICATION

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



Mr. Frank J. Brancely,
Senior Engineering Technician,
Phone #: (207) 874-8832,
Fax #: (207) 874-8852,
E-mail: fjb@portlandmaine.gov

Date: 5/28/10

1. Please, Submit Utility, Site, and Locust Plans.

Site Address: 50 Industrial Way Portland Me

(Regarding addressing, please contact Leslie Kaynor, either at 756-8346, or at LMK@portlandmaine.gov)

Chart Block Lot Number: 326/B /9

Proposed Use: Brewery

Previous Use: Brewery

Existing Sanitary Flows: 25 employees=375 GPD

Existing Process Flows: 9000 GPD

Description and location of City sewer, at proposed building sewer lateral connection:

10" diameter pipe unknown material located approx in middle of Industrial Way

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

Site Category

Commercial

Industrial (complete part 4 below)

Governmental

Residential

Other (specify)

x

2. Please, Submit Domestic Wastewater Design Flow Calculations.

Estimated Domestic Wastewater Flow Generated: 20% growth 450 GPD

Peaking Factor/ Peak Times: Monday - Friday 5am 11pm

Specify the source of design guidelines: (i.e. x "Handbook of Subsurface Wastewater Disposal in Maine," Plumbers and Pipe Fitters Calculation Manual, Portland Water District Records, Other (specify)

15gpd per employee = 30 employees x 15 gpd = 450 gpd

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

3. Please, Submit Contact Information.

Owner/Developer Name:

Allagash Brewing

Owner/Developer Address:

50 Industrial Way Portland Me

Phone: 878 5385

Fax:

E-mail: robtod@allagash.com

Engineering Consultant Name:

Richard Meek PE c/o Sebago Technics, Inc

Engineering Consultant Address:

PO Box 1339 Westbrook, Me 04098

Phone: 856 0277 x269

Fax:

856 2206

E-mail: rmeek@sebagotechnics.com

City Planner's Name:

Phone: 874 8728

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

4. Please, Submit Industrial Process Wastewater Flow Calculations

Estimated Industrial Process Wastewater Flows Generated: 30% growth 11,700 GPD

Do you currently hold Federal or State discharge permits?

Yes x No

Is the process wastewater termed categorical under CFR 40?

Yes No x

OSHA Standard Industrial Code (SIC): 2082

(<http://www.osha.gov/oshstats/sicser.html>)

Peaking Factor/Peak Process Times: Monday Friday 5am 11pm



Bath Savings Institution
Since 1852

May 24, 2010

City of Portland
Planning Division
389 Congress Street
Portland ME 04101

Re: Allagash Brewing/50 Industrial Way, LLC

To Whom it May Concern:

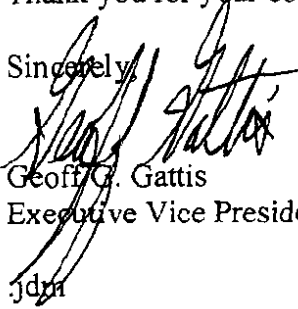
Allagash Brewing has been a customer of Bath Savings Institution since June 2006. We assisted with financing the construction of current Allagash Brewing facility at 50 Industrial Way in Portland. This letter is to underscore that Bath Savings Institution believes that 50 Industrial Way, LLC has the financial capacity to finance the expansion of the existing building at 50 Industrial Way.

We look forward to assisting them as this growing business continues to expand and create jobs in the Portland market.

If you have any questions regarding the financial capacity of 50 Industrial Way, LLC, to undertake the expansion of their current building please do not hesitate to give me call.

Thank you for your consideration.

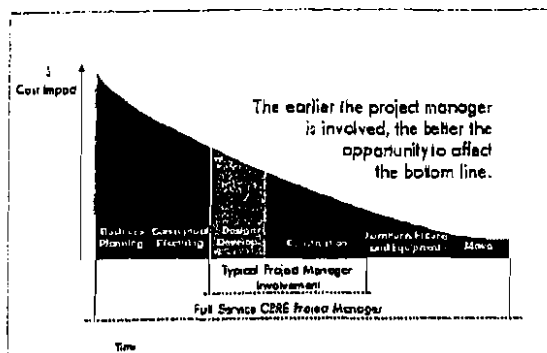
Sincerely,


Geoff G. Gattis
Executive Vice President & CCO

jdm

cc: Allagash Brewing
Paul Ureneck

PROJECT SERVICES



MANAGING YOUR PROJECT

With any project, regardless of size or complexity, the biggest challenge is knowing who is needed when, and what it should cost. Having someone on your team from the beginning with the knowledge and experience to guide the process can accelerate schedules and increase cost effectiveness. The result is time and money saved, without sacrificing the quality of the project.

DON'T KNOW WHERE TO START?

We are our clients' advocates. Our Project Management Division provides a single source of expertise to oversee any or all tasks necessary to renovate space, construct new buildings, or help with other real estate-related tasks. We offer an integrated package of services, available together or separately, to smoothly manage all aspects of your project. This single source management technique provides direct accountability and has been the key to our success for 30 years.

Our project management team uses both in-house resources and our relationships with specialized consultants to assist our clients. The process can be complex, involving architects, engineers, environmental consultants, lawyers, and contractors. The entire process, from the initial idea to completion, runs smoothly. Our track record speaks for itself.

CBRE/Boulos can assist with any of these items as part of our menu of services:

- ✓ Tenant Improvements
- ✓ Capital Improvements
- ✓ Program Development
- ✓ Facility Assessment
- ✓ Site Selection
- ✓ Due Diligence
- ✓ Permitting & Government Relations
- ✓ Project Team Selection
- ✓ Communications
- ✓ Scheduling
- ✓ Budget Management
- ✓ Construction Oversight
- ✓ Systems Commissioning
- ✓ Furniture & Equipment Selection
- ✓ Move Management

WHO TO CALL

Paul Ureneck
Vice President of Project Management
pureneck@boulos.com

Kim Farrar
Project Manager
kfarrar@boulos.com

CBRE/Boulos Property Management
One Canal Plaza
Portland, ME 04101
(207) 871-1290

EXPERIENCE

VALUE

EXCELLENCE

PROJECT SERVICES

SAMPLE PROJECTS MANAGED BY CBRE/BOULOS

First Park, Oakland – Spec building to be developed by the local development authority (Owner's Rep., Project Team Selection, Scheduling, Budget Management)

25 Thomas Dr., Westbrook – 16,000+/- SF Flex Building Shell (Owner's Rep., Permitting/Government Relations, Project Team Selection, Communications, Scheduling, Budget Management, Construction Oversight)

8 Thomas Dr., Westbrook – 15,000+/- SF Flex Building (Owner's Rep., Permitting/Government Relations, Project Team Selection, Communications, Scheduling, Budget Management, Construction Oversight, Systems Commissioning)

4 Thomas Dr., Westbrook – 38,400+/- SF Flex Building (Owner's Rep., Permitting/Government Relations, Project Team Selection, Communications, Scheduling, Budget Management, Construction Oversight, Systems Commissioning)

41 Donald B. Dean Dr., South Portland – 18,200+/- SF Class A Office Building (Owner's Rep., Permitting/Government Relations, Project Team Selection, Communications, Scheduling, Budget Management, Construction Oversight, Systems Commissioning)

Saco Valley Shopping Center, Saco – Retail Shopping Center Renovation/Expansion, including tenant relocations (Owner's Rep., Permitting/Government Relations, Communications, Scheduling, Budget Management, Construction Oversight, Systems Commissioning, Move Management)

Pineland, New Gloucester – 356,000+/- SF Business Campus renovated from previous use as a state facility; included complete rehabilitation of various aged buildings, construction of new buildings, and complete site & infrastructure redevelopment (Owner's Rep., Facility Assessment, Due Diligence, Permitting/Government Relations, Project Team Selection, Communications, Scheduling, Budget Management, Construction Oversight, Systems Commissioning, Furniture & Equipment Selection)

52 & 70 Farm View Dr., New Gloucester – 60,000+/- SF shell office space fit up for new tenant (Owner's Rep., Program Development, Permitting & Government Relations, Project Team Selection, Communications, Scheduling, Budget Management, Construction Oversight, Systems Commissioning)

2325 West Broadway, South Portland – 21,000+/- SF Warehouse/Distribution Building (Owner's Rep., Permitting/Government Relations, Project Team Selection, Budget Management)

Fore Street Garage, Portland – Capital improvements/repairs performed on a 400+/- space multi-story parking garage (Owner's Rep., Facility Assessment, Project Team Selection, Communications, Scheduling, Budget Management, Construction Oversight)

Olivia's Garden Greenhouses, New Gloucester – state-of-the-art hydroponic greenhouse designed & constructed (Owner's Rep., Permitting & Government Relations, Project Team Selection, Communications, Scheduling, Budget Management, Construction Oversight, Systems Commissioning)

PROJECT SERVICES

THE PROJECT MANAGEMENT TEAM



Paul Ureneck
Vice President

Paul Ureneck joined CBRE/Boulos Property Management in 1985. Prior to joining the CBRE/Boulos team, Mr. Ureneck served in various supervisory capacities for large commercial construction companies throughout Northern New England. He has over thirty years of experience in the permitting, design and construction of commercial office, industrial and retail buildings.

Mr. Ureneck's responsibilities include the oversight of all CB Richard Ellis/Boulos Property Management and third party development from the initial conceptual design through ultimate occupancy by coordinating all design, contracting, and regulatory approval tasks. Mr. Ureneck also oversees all tenant improvement work in a multi-building portfolio totaling approximately 3,000,000 square feet.



Kim Farrar
Project Manager

Maine Real Estate Lic. #BA902461

Kim Farrar is Project Manager for CBRE/Boulos Property Management. As Project Manager, she works with contractors, vendors, governmental agencies, tenants, owners, and staff on all aspects of development projects. Since joining the company in 1988, she has served in several capacities, including General Manager for the brokerage company, Development Coordinator, and Property Manager. Active in the real estate field since 1985, Ms. Farrar has been involved with both high-end residential/investment and commercial real estate.

Sebago Technics, Inc. Technical Ability

Sebago Technics, Inc. has been retained to perform the civil engineering, stormwater management, and sediment and erosion control design for the proposed project. In addition, we have prepared the Maine Department of Environmental Protection Site Location Application. The technical phase of this project includes the preparation of a detailed grading design, taking into account hydrogeological considerations and stormwater management. The permitting phase of this project consists of the preparation of all State and local application packages and coordination throughout the entire review process from initial submission to final approval.

Company Background

Sebago Technics, Inc. was established in 1981. The company, as a whole, has grown to approximately 95 professionals. The company consists of civil/site engineers, surveyors, landscape architects, soil scientist, and other professionals. In 1986, a computer-aided design drafting (CADD) division was established to further enhance our scope of available services. Sebago Technics, Inc. provides full-range technical assistance to developers, contractors, and municipalities in the areas of commercial, residential, and industrial developments.

Key Personnel

Walter P. Stinson, P.E.

President and founder of Sebago Technics, is a Registered Professional Engineer with a background that includes experience with the Department of Agriculture, Soil Conservation Service. He has a strong interest in land management, experience in grading and drainage practices, and maintains a strong involvement in all significant projects of the firm.

Charles L. Brown, P.L.S.

A Registered Land Surveyor, he joined the firm in 1984. His expertise in boundary and topographic surveying provides comprehensive land planning and design services to clients.

Shawn M. Frank, P.E.

A Registered Professional Engineer, he joined the firm in 1985 as a design engineer. His 23 years of practice in consulting engineering firms provides the required experience to allow for effective project management.

**STORMWATER MANAGEMENT
Allagash Brewing
Lot 18, Turnpike Industrial Park
Portland, Maine**

General

This Stormwater Management Plan has been prepared to evaluate the pre and post-development condition associated with the proposed development on Lot 18 of the Turnpike Industrial Park in Portland, Maine. This project is being proposed by the applicant Allagash Brewing, and includes approximately 1.68 acres.

The site is located within an industrial park. The proposed development will consist of a 18,200 square foot building; 1,050 square feet of concrete pads for storage silo; associated parking and maneuvering areas; landscaping and associated grading. A detention pond is proposed to mitigate the increased runoff generated by this development.

Pre-Development Site Conditions

The proposed project site is presently undeveloped. Ground cover consists primarily of woodland. The topography throughout the site consists of flat slopes with approximately 18,300 square feet of wetland area. Based upon the available topographic information the entire site is included in one subcatchment. Stormwater is conveyed generally north and east via sheet flow and shallow concentrated flow and eventually exits the site at the easterly property line. Observation of the site indicates that the proposed parcel of land is presently stable with no areas of erosion.

Soils

Soils information used for the stormwater evaluation was obtained via the Medium Intensity Soil Survey. The soil survey maps one (1) soil type on the site, which is Scantic. It is classified with a Hydrologic Soil Group D.

Methodology

The stormwater runoff analysis was developed using the "HydroCAD" computer modeling software, which incorporates the TR-55 and TR-20 methodologies as provided by the Soil Conservation Service of the U.S. Department of Agriculture. The 2-year, 10-year, and 25-year, Type III, 24-hour storm events were used for the analysis. The 24-hour rainfall values utilized in the hydrologic model are as follows.

Storm Frequency Precipitation (in./24 hr)	
2-year	3.0
10-year	4.7
25-year	5.5

Post-Development Site Conditions

Drainage for the post-development conditions includes three subcatchments. The ground cover has changed from woodland to impervious and grass cover.

Watershed 1 is comprised of mostly wooded area, with a small portion of impervious from the parking and silo storage area. Runoff is conveyed via sheet flow and shallow concentrated flow to the Study Point, located at the easterly property line.

Watershed 2 consists of the building, paved areas, and lawn areas. Runoff is directed via sheet flow, shallow concentrated flow and pipe flow to the detention pond, located on the eastern side of the property. The detention pond utilizes an outlet control structure to direct stormwater to the Study Point.

Watershed 3 consists of the immediate runoff associated with the roadside ditches. Culverts are being added under driveway entrances in order to maintain drainage patterns through the existing ditches. Flow continues in existing ditches to the Study Point along the eastern property line.

Stormwater Management

The following table summarizes the results of stormwater calculations for the design storm events for the project area. Calculations and computer modeling data sheets are provided with this report.

Stormwater Peak Discharge Summary Table									
Study Point	2-Year Storm				10-Year Storm		25-Year Storm		
	Pre (cfs)	Post (cfs)	Diff (cfs)	Pre (cfs)	Post (cfs)	Diff (cfs)	Pre (cfs)	Post (cfs)	Diff (cfs)
SP1	1.32	1.25	-0.07	2.97	2.48	-0.49	3.80	3.54	-0.26

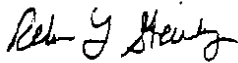
Summary

The proposed development will include a detention pond to which runoff from impervious areas will be directed. The runoff will subsequently be released to the existing woodlands at the rear and to the east of the property via a multi-stage discharge control structure. The pond is designed to hold post-developed peak discharge rates at or below pre-developed peak discharge rates for the 2, 10, and 25-year storm events

Other drainage provisions will include specific grading plan and erosion and sedimentation control measures that will be implemented throughout the construction sequence. Incorporation of the above mentioned drainage provisions and infrastructure for the proposed development would adequately address stormwater runoff such that no significant impacts to downstream properties are anticipated.

Prepared by

SEBAGO TECHNICS, INC.

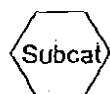
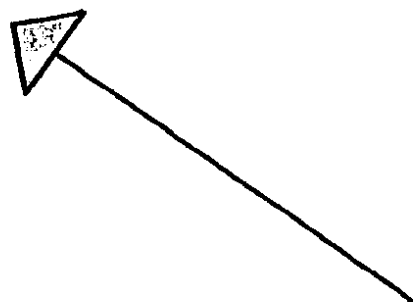
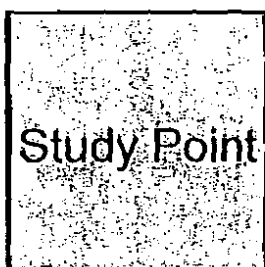


Rebecca L. Steinberg
Design Engineer



Richard L. Meek, P.E.
Project Engineer

RLS/RLM:rls/dlf
November 15, 2005



Drainage Diagram for 02249 ALLAGASH BREWING pre
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02249 ALLAGASH BREWING pre

Type III 24-hr Rainfall=3.00" (2-Year Storm)

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Time span=5.00-20.00 hrs, dt=0.05 hrs, 301 points

Runoff by SCS TR-20 method, UH=SCS, Type III 24-hr Rainfall=3.00"

Reach routing by Stor-Ind+Trans method - Pond routing by Stor-Ind method

Subcatchment WS-1: (new node)

Tc=35.7 min CN=78 Area=1.980 ac Runoff= 1.32 cfs 0.169 af

Reach Study Point: (new node)

Inflow= 1.32 cfs 0.169 af

Outflow= 1.32 cfs 0.169 af

Runoff Area = 1.980 ac Volume = 0.169 af Average Depth = 1.02"

02249 ALLAGASH BREWING pre

Type III 24-hr Rainfall=3.00" (2-Year Storm)

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Subcatchment WS-1: (new node)

Runoff = 1.32 cfs @ 12.52 hrs, Volume= 0.169 af

Runoff by SCS TR-20 method, UH=SCS, Time Span= 5.00-20.00 hrs, dt= 0.05 hrs
Type III 24-hr Rainfall=3.00"

Area (ac)	CN	Description
1.900	77	Woods, Good, HSG D
0.080	98	Paved parking & roofs
1.980	78	Weighted Average

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
30.7	150	0.0200	0.1		Sheet Flow, A to B
					Woods: Light underbrush n= 0.400 P2= 3.00"
5.0	250	0.0280	0.8		Shallow Concentrated Flow, B to C
					Woodland Kv= 5.0 fps
35.7	400	Total			

Reach Study Point: (new node)

Inflow = 1.32 cfs @ 12.52 hrs, Volume= 0.169 af

Outflow = 1.32 cfs @ 12.52 hrs, Volume= 0.169 af, Atten= 0%, Lag= 0.0 min

Routing by Stor-Ind+Trans method, Time Span= 5.00-20.00 hrs, dt= 0.05 hrs

02249 ALLAGASH BREWING pre

Type III 24-hr Rainfall=4.70" (10-Year Storm)

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Time span=5.00-20.00 hrs, dt=0.05 hrs, 301 points

Runoff by SCS TR-20 method, UH=SCS, Type III 24-hr Rainfall=4.70"

Reach routing by Stor-Ind+Trans method - Pond routing by Stor-Ind method

Subcatchment WS-1: (new node)

Tc=35.7 min CN=78 Area=1.980 ac Runoff= 2.97 cfs 0.373 af

Reach Study Point: (new node)

Inflow= 2.97 cfs 0.373 af

Outflow= 2.97 cfs 0.373 af

Runoff Area = 1.980 ac Volume = 0.373 af Average Depth = 2.26"

02249 ALLAGASH BREWING pre

Type III 24-hr Rainfall=4.70" (10-Year Storm)

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Subcatchment WS-1: (new node)

Runoff = 2.97 cfs @ 12.50 hrs, Volume= 0.373 af

Runoff by SCS TR-20 method, UH=SCS, Time Span= 5.00-20.00 hrs, dt= 0.05 hrs

Type III 24-hr Rainfall=4.70"

Area (ac)	CN	Description
1.900	77	Woods, Good, HSG D
0.080	98	Paved parking & roofs
1.980	78	Weighted Average

To (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
30.7	150	0.0200	0.1		Sheet Flow, A to B
					Woods: Light underbrush n= 0.400 P2= 3.00"
5.0	250	0.0280	0.8		Shallow Concentrated Flow, B to C
					Woodland Kv= 5.0 fps
35.7	400	Total			

Reach Study Point: (new node)

Inflow = 2.97 cfs @ 12.50 hrs, Volume= 0.373 af

Outflow = 2.97 cfs @ 12.50 hrs, Volume= 0.373 af, Atten= 0%, Lag= 0.0 min

Routing by Stor-Ind+Trans method, Time Span= 5.00-20.00 hrs, dt= 0.05 hrs

02249 ALLAGASH BREWING pre

Type III 24-hr Rainfall=5.50" (25-Year Storm)

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Time span=5.00-20.00 hrs, dt=0.05 hrs, 301 points

Runoff by SCS TR-20 method, UH=SCS, Type III 24-hr Rainfall=5.50"

Reach routing by Stor-Ind+Trans method - Pond routing by Stor-Ind method

Subcatchment WS-1: (new node)

Tc=35.7 min CN=78 Area=1.980 ac Runoff= 3.80 cfs 0.479 af

Reach Study Point: (new node)

Inflow= 3.80 cfs 0.479 af

Outflow= 3.80 cfs 0.479 af

Runoff Area = 1.980 ac Volume = 0.479 af Average Depth = 2.90"

02249 ALLAGASH BREWING pre

Type III 24-hr Rainfall=5.50" (25-Year Storm)

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Subcatchment WS-1: (new node)

Runoff = 3.80 cfs @ 12.50 hrs, Volume= 0.479 af

Runoff by SCS TR-20 method, UH=SCS, Time Span= 5.00-20.00 hrs, dt= 0.05 hrs
Type III 24-hr Rainfall=5.50"

Area (ac)	CN	Description
1.900	77	Woods, Good, HSG D
0.080	98	Paved parking & roofs
1.980	78	Weighted Average

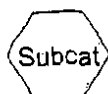
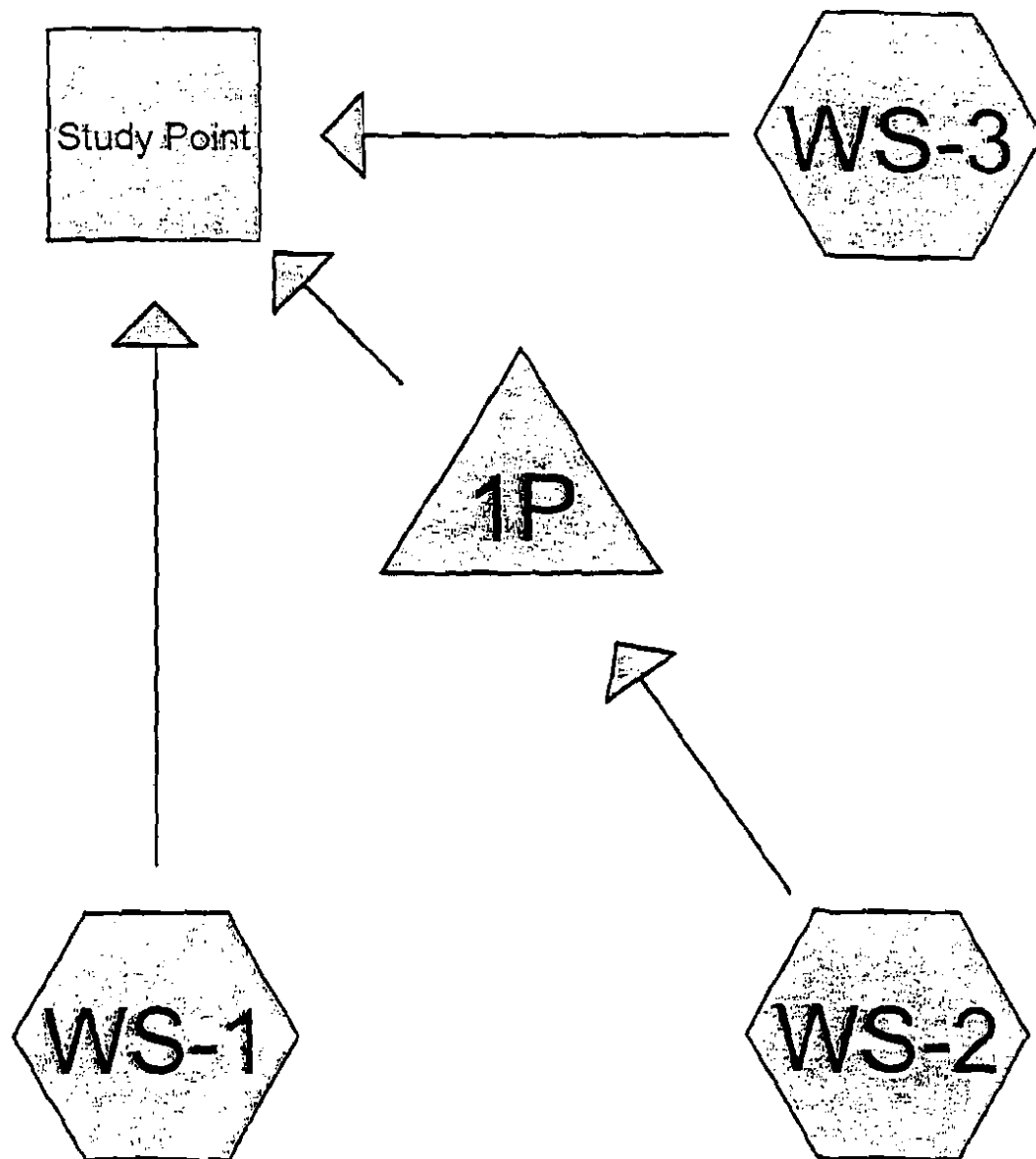
Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
30.7	150	0.0200	0.1		Sheet Flow, A to B
					Woods: Light underbrush n= 0.400 P2= 3.00"
5.0	250	0.0280	0.8		Shallow Concentrated Flow, B to C
					Woodland Kv= 5.0 fps
35.7	400	Total			

Reach Study Point: (new node)

Inflow = 3.80 cfs @ 12.50 hrs, Volume= 0.479 af

Outflow = 3.80 cfs @ 12.50 hrs, Volume= 0.479 af, Atten= 0%, Lag= 0.0 min

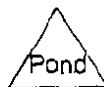
Routing by Stor-Ind+Trans method, Time Span= 5.00-20.00 hrs, dt= 0.05 hrs



Subcat



Reach



Pond



Link

Drainage Diagram for 02249 ALLAGASH BREWING post
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02249 ALLAGASH BREWING post

Type III 24-hr Rainfall=3.00" (2-Year Storm)

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Time span=5.00-20.00 hrs, dt=0.05 hrs, 301 points

Runoff by SCS TR-20 method, UH=SCS, Type III 24-hr Rainfall=3.00"

Reach routing by Stor-Ind+Trans method - Pond routing by Stor-Ind method

Subcatchment WS-1: (new node)

Tc=37.4 min CN=80 Area=0.660 ac Runoff= 0.48 cfs 0.063 af

Subcatchment WS-2: (new node)

Tc=4.0 min CN=95 Area=1.070 ac Runoff= 3.06 cfs 0.206 af

Subcatchment WS-3: (new node)

Tc=2.1 min CN=92 Area=0.250 ac Runoff= 0.68 cfs 0.042 af

Reach Study Point: (new node)

Inflow= 1.25 cfs 0.309 af

Outflow= 1.25 cfs 0.309 af

Pond 1P: (new node)

Peak Storage= 3,461 cf Inflow= 3.06 cfs 0.206 af

Primary= 0.66 cfs 0.204 af Secondary= 0.00 cfs 0.000 af Outflow= 0.66 cfs 0.204 af

Runoff Area = 1.980 ac Volume = 0.312 af Average Depth = 1.89"

02249 ALLAGASH BREWING post

Type III 24-hr Rainfall=3.00" (2-Year Storm)

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Subcatchment WS-1: (new node)

Runoff = 0.48 cfs @ 12.54 hrs, Volume= 0.063 af

Runoff by SCS TR-20 method, UH=SCS, Time Span= 5.00-20.00 hrs, dt= 0.05 hrs
Type III 24-hr Rainfall=3.00"

Area (ac)	CN	Description
0.398	77	Woods, Good, HSG D
0.081	98	Paved parking & roofs
0.181	80	>75% Grass cover, Good, HSG D
0.660	80	Weighted Average

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
31.5	150	0.0187	0.1		Sheet Flow, A to B Woods: Light underbrush n= 0.400 P2= 3.00"
5.9	255	0.0210	0.7		Shallow Concentrated Flow, B to C Woodland Kv= 5.0 fps
37.4	405	Total			

Subcatchment WS-2: (new node)

Runoff = 3.06 cfs @ 12.06 hrs, Volume= 0.206 af

Runoff by SCS TR-20 method, UH=SCS, Time Span= 5.00-20.00 hrs, dt= 0.05 hrs
Type III 24-hr Rainfall=3.00"

Area (ac)	CN	Description
0.863	98	Paved parking & roofs
0.207	80	>75% Grass cover, Good, HSG D
1.070	95	Weighted Average

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
3.2	30	0.0330	0.2		Sheet Flow, A to B Grass: Short n= 0.150 P2= 3.00"
0.5	83	0.0370	2.9		Shallow Concentrated Flow, B to C Grassed Waterway Kv= 15.0 fps
0.3	75	0.0053	3.8	4.70	Circular Channel (pipe), C to D Diam= 15.0" Area= 1.2 sf Perim= 3.9' r= 0.31' n= 0.013
4.0	188	Total			

Subcatchment WS-3: (new node)

Runoff = 0.68 cfs @ 12.04 hrs, Volume= 0.042 af

Runoff by SCS TR-20 method, UH=SCS, Time Span= 5.00-20.00 hrs, dt= 0.05 hrs
Type III 24-hr Rainfall=3.00"

02249 ALLAGASH BREWING post

Type III 24-hr Rainfall=3.00" (2-Year Storm)

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Area (ac)	CN	Description
0.165	98	Paved parking & roofs
0.085	80	>75% Grass cover, Good, HSG D
0.250	92	Weighted Average

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
0.5	118	0.0430	3.6	6.07	Parabolic Channel, A to B W=5.00' D=0.50' Area=1.7 sf Perim=5.1' n= 0.040
0.4	72	0.0030	2.9	3.54	Circular Channel (pipe), B to C Diam= 15.0" Area= 1.2 sf Perim= 3.9' r= 0.31' n= 0.013
0.5	80	0.0088	2.6	17.43	Parabolic Channel, C to D W=10.00' D=1.00' Area=6.7 sf Perim=10.3' n= 0.040
0.4	110	0.0270	4.6	30.53	Parabolic Channel, D to E W=10.00' D=1.00' Area=6.7 sf Perim=10.3' n= 0.040
0.3	75	0.0200	4.0	0.79	Circular Channel (pipe), E to F Diam= 6.0" Area= 0.2 sf Perim= 1.6' r= 0.13' n= 0.013
2.1	455	Total			

Reach Study Point: (new node)

Inflow = 1.25 cfs @ 12.43 hrs, Volume= 0.309 af
 Outflow = 1.25 cfs @ 12.43 hrs, Volume= 0.309 af, Atten= 0%, Lag= 0.0 min

Routing by Stor-Ind+Trans method, Time Span= 5.00-20.00 hrs, dt= 0.05 hrs

Pond 1P: (new node)

Inflow = 3.06 cfs @ 12.06 hrs, Volume= 0.206 af
 Outflow = 0.66 cfs @ 12.46 hrs, Volume= 0.204 af, Atten= 78%, Lag= 23.8 min
 Primary = 0.66 cfs @ 12.46 hrs, Volume= 0.204 af
 Secondary = 0.00 cfs @ 5.00 hrs, Volume= 0.000 af

Routing by Stor-Ind method, Time Span= 5.00-20.00 hrs, dt= 0.05 hrs

Peak Elev= 77.57' Storage= 3,461 cf

Plug-Flow detention time= 79.6 min calculated for 0.204 af (99% of inflow)

Storage and wetted areas determined by Prismatic sections

Elevation (feet)	Surf.Area (sq-ft)	Inc.Store (cubic-feet)	Cum.Store (cubic-feet)
76.00	0	0	0
77.00	2,530	1,265	1,265
78.00	5,205	3,868	5,133
79.00	8,150	6,678	11,810

02249 ALLAGASH BREWING post

Type III 24-hr Rainfall=3.00" (2-Year Storm)

Prepared by SEBAGO TECHNICS INC.

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Primary OutFlow (Free Discharge)

- 1=Culvert
- 2=Orifice/Grate
- 3=Orifice/Grate
- 4=Sharp-Crested Rectangular Weir

Secondary OutFlow (Free Discharge)

- 5=Broad-Crested Rectangular Weir

#	Routing	Invert	Outlet Devices
1	Primary	75.90'	15.0" x 10.0' long Culvert RCP, sq.cut end projecting, Ke= 0.500 Outlet Invert= 75.85' S= 0.0050 ' n= 0.011 Cc= 0.900
2	Device 1	75.90'	3.0" Vert. Orifice/Grate C= 0.600
3	Device 1	77.05'	5.0" Vert. Orifice/Grate C= 0.600
4	Device 1	78.05'	6.0' long x 1.5' high Sharp-Crested Rectangular Weir 2 End Contraction(s)
5	Secondary	78.25'	14.0' long x 6.0' breadth Broad-Crested Rectangular Weir
Head (feet) 0.20 0.40 0.60 0.80 1.00 1.20 1.40 1.60 1.80 2.00 2.50 3.00 3.50 4			
Coef. (English) 2.37 2.51 2.70 2.68 2.68 2.67 2.65 2.65 2.65 2.65 2.66 2.66 2.6			

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Type III 24-hr Rainfall=4.70" (10-Year Storm)

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Time span=5.00-20.00 hrs, dt=0.05 hrs, 301 points
Runoff by SCS TR-20 method, UH=SCS, Type III 24-hr Rainfall=4.70"
Reach routing by Stor-Ind+Trans method - Pond routing by Stor-Ind method

Subcatchment WS-1: (new node)

Tc=37.4 min CN=80 Area=0.660 ac Runoff= 1.04 cfs 0.134 af

Subcatchment WS-2: (new node)

Tc=4.0 min CN=95 Area=1.070 ac Runoff= 5.00 cfs 0.346 af

Subcatchment WS-3: (new node)

Tc=2.1 min CN=92 Area=0.250 ac Runoff= 1.15 cfs 0.075 af

Reach Study Point: (new node)

Inflow= 2.48 cfs 0.548 af
Outflow= 2.48 cfs 0.548 af

Pond 1P: (new node)

Peak Storage= 5,873 cf Inflow= 5.00 cfs 0.346 af
Primary= 1.25 cfs 0.339 af Secondary= 0.00 cfs 0.000 af Outflow= 1.25 cfs 0.339 af

Runoff Area = 1.980 ac Volume = 0.555 af Average Depth = 3.36"

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Type III 24-hr Rainfall=4.70" (10-Year Storm)

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Subcatchment WS-1: (new node)

Runoff = 1.04 cfs @ 12.52 hrs, Volume= 0.134 af

Runoff by SCS TR-20 method, UH=SCS, Time Span= 5.00-20.00 hrs, dt= 0.05 hrs
Type III 24-hr Rainfall=4.70"

Area (ac)	CN	Description
0.398	77	Woods, Good, HSG D
0.081	98	Paved parking & roofs
0.181	80	>75% Grass cover, Good, HSG D
0.660	80	Weighted Average

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
31.5	150	0.0187	0.1		Sheet Flow, A to B Woods: Light underbrush n= 0.400 P2= 3.00"
5.9	255	0.0210	0.7		Shallow Concentrated Flow, B to C Woodland Kv= 5.0 fps
37.4	405	Total			

Subcatchment WS-2: (new node)

Runoff = 5.00 cfs @ 12.06 hrs, Volume= 0.346 af

Runoff by SCS TR-20 method, UH=SCS, Time Span= 5.00-20.00 hrs, dt= 0.05 hrs
Type III 24-hr Rainfall=4.70"

Area (ac)	CN	Description
0.863	98	Paved parking & roofs
0.207	80	>75% Grass cover, Good, HSG D
1.070	95	Weighted Average

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
3.2	30	0.0330	0.2		Sheet Flow, A to B Grass: Short n= 0.150 P2= 3.00"
0.5	83	0.0370	2.9		Shallow Concentrated Flow, B to C Grassed Waterway Kv= 15.0 fps
0.3	75	0.0053	3.8	4.70	Circular Channel (pipe), C to D Diam= 15.0" Area= 1.2 sf Perim= 3.9' r= 0.31' n= 0.013
4.0	188	Total			

Subcatchment WS-3: (new node)

Runoff = 1.15 cfs @ 12.04 hrs, Volume= 0.075 af

Runoff by SCS TR-20 method, UH=SCS, Time Span= 5.00-20.00 hrs, dt= 0.05 hrs
Type III 24-hr Rainfall=4.70"

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Type III 24-hr Rainfall=4.70" (10-Year Storm)

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Area (ac)	CN	Description
0.165	98	Paved parking & roofs
0.085	80	>75% Grass cover, Good, HSG D
0.250	92	Weighted Average

To (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
0.5	118	0.0430	3.6	6.07	Parabolic Channel, A to B W=5.00' D=0.50' Area=1.7 sf Perim=5.1' n= 0.040
0.4	72	0.0030	2.9	3.54	Circular Channel (pipe), B to C Diam= 15.0" Area= 1.2 sf Perim= 3.9' r= 0.31' n= 0.013
0.5	80	0.0088	2.6	17.43	Parabolic Channel, C to D W=10.00' D=1.00' Area=6.7 sf Perim=10.3' n= 0.040
0.4	110	0.0270	4.6	30.53	Parabolic Channel, D to E W=10.00' D=1.00' Area=6.7 sf Perim=10.3' n= 0.040
0.3	75	0.0200	4.0	0.79	Circular Channel (pipe), E to F Diam= 6.0" Area= 0.2 sf Perim= 1.6' r= 0.13' n= 0.013
2.1	455	Total			

Reach Study Point: (new node)

Inflow = 2.48 cfs @ 12.42 hrs, Volume= 0.548 af
 Outflow = 2.48 cfs @ 12.42 hrs, Volume= 0.548 af, Atten= 0%, Lag= 0.0 min

Routing by Stor-Ind+Trans method, Time Span= 5.00-20.00 hrs, dt= 0.05 hrs

Pond 1P: (new node)

Inflow = 5.00 cfs @ 12.06 hrs, Volume= 0.346 af
 Outflow = 1.25 cfs @ 12.41 hrs, Volume= 0.339 af, Atten= 75%, Lag= 21.3 min
 Primary = 1.25 cfs @ 12.41 hrs, Volume= 0.339 af
 Secondary = 0.00 cfs @ 5.00 hrs, Volume= 0.000 af

Routing by Stor-Ind method, Time Span= 5.00-20.00 hrs, dt= 0.05 hrs

Peak Elev= 78.11' Storage= 5,873 cf

Plug-Flow detention time= 84.4 min calculated for 0.338 af (98% of inflow)

Storage and wetted areas determined by Prismatic sections

Elevation (feet)	Surf.Area (sq-ft)	Inc.Store (cubic-feet)	Cum.Store (cubic-feet)
76.00	0	0	0
77.00	2,530	1,265	1,265
78.00	5,205	3,868	5,133
79.00	8,150	6,678	11,810

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Type III 24-hr Rainfall=4.70" (10-Year Storm)

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Primary OutFlow (Free Discharge)

- 1=Culvert
- 2=Orifice/Grate
- 3=Orifice/Grate
- 4=Sharp-Crested Rectangular Weir

Secondary OutFlow (Free Discharge)

- 5=Broad-Crested Rectangular Weir

#	Routing	Invert	Outlet Devices
1	Primary	75.90'	15.0" x 10.0' long Culvert RCP, sq.cut end projecting, Ke= 0.500 Outlet Invert= 75.85' S= 0.0050 '/' n= 0.011 Cc= 0.900
2	Device 1	75.90'	3.0" Vert. Orifice/Grate C= 0.600
3	Device 1	77.05'	5.0" Vert. Orifice/Grate C= 0.600
4	Device 1	78.05'	6.0' long x 1.5' high Sharp-Crested Rectangular Weir 2 End Contraction(s)
5	Secondary	78.25'	14.0' long x 6.0' breadth Broad-Crested Rectangular Weir Head (feet) 0.20 0.40 0.60 0.80 1.00 1.20 1.40 1.60 1.80 2.00 2.50 3.00 3.50 4 Coef. (English) 2.37 2.51 2.70 2.68 2.68 2.67 2.65 2.65 2.65 2.65 2.66 2.66 2.6

02249 ALLAGASH BREWING post

Type III 24-hr Rainfall=5.50" (25-Year Storm)

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Time span=5.00-20.00 hrs, dt=0.05 hrs, 301 points

Runoff by SCS TR-20 method, UH=SCS, Type III 24-hr Rainfall=5.50"

Reach routing by Stor-Ind+Trans method - Pond routing by Stor-Ind method

Subcatchment WS-1: (new node)

Tc=37.4 min CN=80 Area=0.660 ac Runoff= 1.31 cfs 0.170 af

Subcatchment WS-2: (new node)

Tc=4.0 min CN=95 Area=1.070 ac Runoff= 5.91 cfs 0.412 af

Subcatchment WS-3: (new node)

Tc=2.1 min CN=92 Area=0.250 ac Runoff= 1.38 cfs 0.090 af

Reach Study Point: (new node)

Inflow= 3.54 cfs 0.662 af

Outflow= 3.54 cfs 0.662 af

Pond 1P: (new node)

Peak Storage= 6,445 cf Inflow= 5.91 cfs 0.412 af

Primary= 2.09 cfs 0.402 af Secondary= 0.00 cfs 0.000 af Outflow= 2.09 cfs 0.402 af

Runoff Area = 1.980 ac Volume = 0.672 af Average Depth = 4.07"

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Type III 24-hr Rainfall=5.50" (25-Year Storm)

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Subcatchment WS-1: (new node)

Runoff = 1.31 cfs @ 12.51 hrs, Volume= 0.170 af

Runoff by SCS TR-20 method, UH=SCS, Time Span= 5.00-20.00 hrs, dt= 0.05 hrs
Type III 24-hr Rainfall=5.50"

Area (ac)	CN	Description
0.398	77	Woods, Good, HSG D
0.081	98	Paved parking & roofs
0.181	80	>75% Grass cover, Good, HSG D
0.660	80	Weighted Average

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
31.5	150	0.0187	0.1		Sheet Flow, A to B
					Woods: Light underbrush n= 0.400 P2= 3.00"
5.9	255	0.0210	0.7		Shallow Concentrated Flow, B to C
					Woodland Kv= 5.0 fps
37.4	405				Total

Subcatchment WS-2: (new node)

Runoff = 5.91 cfs @ 12.06 hrs, Volume= 0.412 af

Runoff by SCS TR-20 method, UH=SCS, Time Span= 5.00-20.00 hrs, dt= 0.05 hrs
Type III 24-hr Rainfall=5.50"

Area (ac)	CN	Description
0.863	98	Paved parking & roofs
0.207	80	>75% Grass cover, Good, HSG D
1.070	95	Weighted Average

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
3.2	30	0.0330	0.2		Sheet Flow, A to B
					Grass: Short n= 0.150 P2= 3.00"
0.5	83	0.0370	2.9		Shallow Concentrated Flow, B to C
					Grassed Waterway Kv= 15.0 fps
0.3	75	0.0053	3.8	4.70	Circular Channel (pipe), C to D
					Diam= 15.0" Area= 1.2 sf Perim= 3.9' r= 0.31' n= 0.013
4.0	188				Total

Subcatchment WS-3: (new node)

Runoff = 1.38 cfs @ 12.04 hrs, Volume= 0.090 af

Runoff by SCS TR-20 method, UH=SCS, Time Span= 5.00-20.00 hrs, dt= 0.05 hrs
Type III 24-hr Rainfall=5.50"

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Type III 24-hr Rainfall=5.50" (25-Year Storm)

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Area (ac)	CN	Description
0.165	98	Paved parking & roofs
0.085	80	>75% Grass cover, Good, HSG D
0.250	92	Weighted Average

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
0.5	118	0.0430	3.6	6.07	Parabolic Channel, A to B W=5.00' D=0.50' Area=1.7 sf Perim=5.1' n= 0.040
0.4	72	0.0030	2.9	3.54	Circular Channel (pipe), B to C Diam= 15.0" Area= 1.2 sf Perim= 3.9' r= 0.31' n= 0.013
0.5	80	0.0088	2.6	17.43	Parabolic Channel, C to D W=10.00' D=1.00' Area=6.7 sf Perim=10.3' n= 0.040
0.4	110	0.0270	4.6	30.53	Parabolic Channel, D to E W=10.00' D=1.00' Area=6.7 sf Perim=10.3' n= 0.040
0.3	75	0.0200	4.0	0.79	Circular Channel (pipe), E to F Diam= 6.0" Area= 0.2 sf Perim= 1.6' r= 0.13' n= 0.013
2.1	455	Total			

Reach Study Point: (new node)

Inflow = 3.54 cfs @ 12.34 hrs, Volume= 0.662 af
 Outflow = 3.54 cfs @ 12.34 hrs, Volume= 0.662 af, Atten= 0%, Lag= 0.0 min

Routing by Stor-Ind+Trans method, Time Span= 5.00-20.00 hrs, dt= 0.05 hrs

Pond 1P: (new node)

Inflow = 5.91 cfs @ 12.06 hrs, Volume= 0.412 af
 Outflow = 2.09 cfs @ 12.29 hrs, Volume= 0.402 af, Atten= 65%, Lag= 14.1 min
 Primary = 2.09 cfs @ 12.29 hrs, Volume= 0.402 af
 Secondary = 0.00 cfs @ 5.00 hrs, Volume= 0.000 af

Routing by Stor-Ind method, Time Span= 5.00-20.00 hrs, dt= 0.05 hrs

Peak Elev= 78.20' Storage= 6,445 cf

Plug-Flow detention time= 80.2 min calculated for 0.401 af (97% of inflow)

Storage and wetted areas determined by Prismatic sections

Elevation (feet)	Surf.Area (sq-ft)	Inc.Store (cubic-feet)	Cum.Store (cubic-feet)
76.00	0	0	0
77.00	2,530	1,265	1,265
78.00	5,205	3,868	5,133
79.00	8,150	6,678	11,810

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Type III 24-hr Rainfall=5.50" (25-Year Storm)

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Primary OutFlow (Free Discharge)

- 1=Culvert
- 2=Orifice/Grate
- 3=Orifice/Grate
- 4=Sharp-Crested Rectangular Weir

Secondary OutFlow (Free Discharge)

- 5=Broad-Crested Rectangular Weir

#	Routing	Invert	Outlet Devices
1	Primary	75.90'	15.0" x 10.0' long Culvert RCP, sq. cut end projecting, Ke= 0.500 Outlet Invert= 75.85' S= 0.0050 '/' n= 0.011 Cc= 0.900
2	Device 1	75.90'	3.0" Vert. Orifice/Grate C= 0.600
3	Device 1	77.05'	5.0" Vert. Orifice/Grate C= 0.600
4	Device 1	78.05'	6.0' long x 1.5' high Sharp-Crested Rectangular Weir 2 End Contraction(s)
5	Secondary	78.25'	14.0' long x 6.0' breadth Broad-Crested Rectangular Weir Head (feet) 0.20 0.40 0.60 0.80 1.00 1.20 1.40 1.60 1.80 2.00 2.50 3.00 3.50 4 Coef. (English) 2.37 2.51 2.70 2.68 2.68 2.67 2.65 2.65 2.65 2.65 2.66 2.66 2.6

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Emergency Spillway

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Pond 1P: (new node)

Inflow = 5.91 cfs @ 12.06 hrs, Volume= 0.412 af
 Outflow = 3.99 cfs @ 12.15 hrs, Volume= 0.254 af, Atten= 33%, Lag= 5.2 min
 Primary = 0.00 cfs @ 5.00 hrs, Volume= 0.000 af
 Secondary = 3.99 cfs @ 12.15 hrs, Volume= 0.254 af

Routing by Stor-Ind method, Time Span= 5.00-20.00 hrs, dt= 0.05 hrs

Peak Elev= 78.49' Storage= 8,414 cf

Plug-Flow detention time= 154.6 min calculated for 0.253 af (61% of inflow)

Storage and wetted areas determined by Prismatic sections

Elevation (feet)	Surf.Area (sq-ft)	Inc.Store (cubic-feet)	Cum.Store (cubic-feet)
76.00	0	0	0
77.00	2,530	1,265	1,265
78.00	5,205	3,868	5,133
79.00	8,150	6,678	11,810

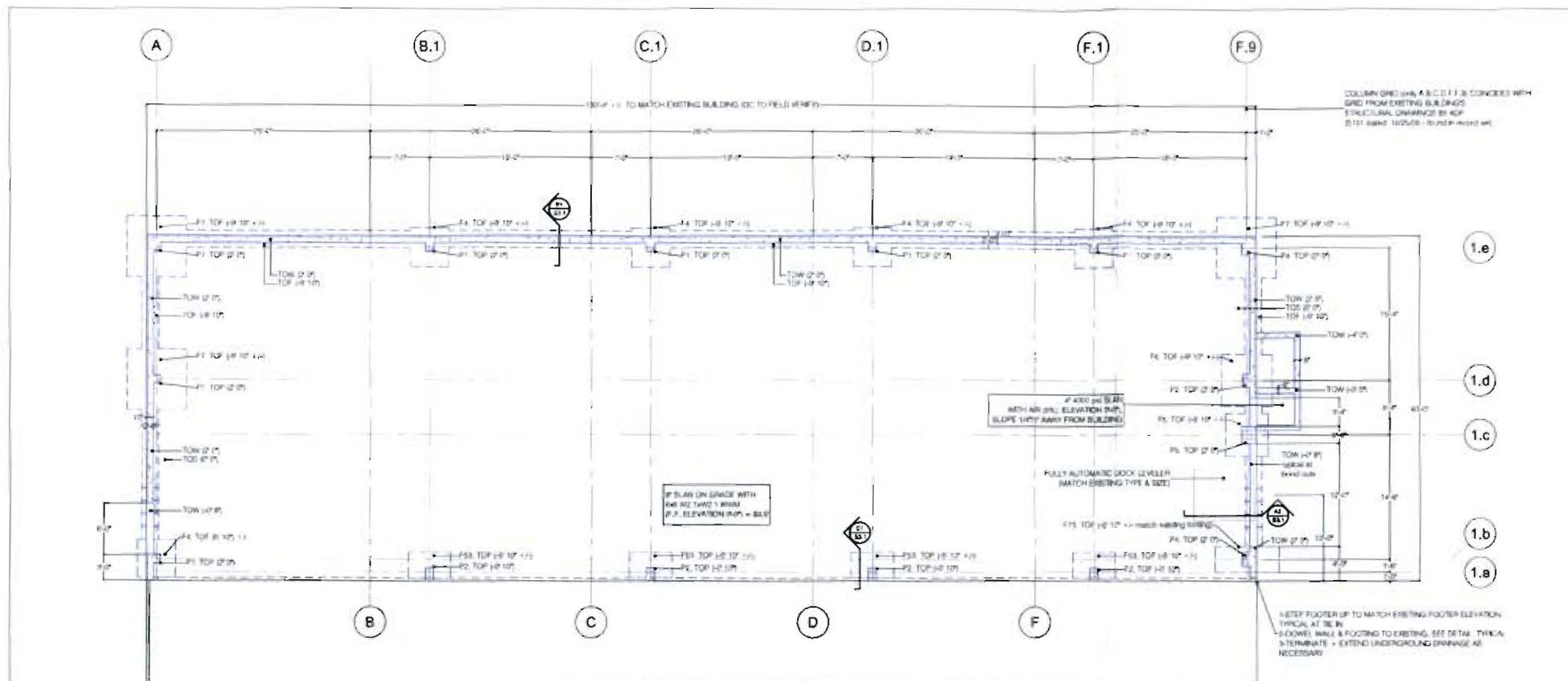
Primary OutFlow (Free Discharge)

- 1=Culvert
- 2=Orifice/Grate
- 3=Orifice/Grate
- 4=Sharp-Crested Rectangular Weir

Secondary OutFlow (Free Discharge)

- 5=Broad-Crested Rectangular Weir

#	Routing	Invert	Outlet Devices
1	Primary	75.90'	15.0" x 10.0' long Culvert X 0.00 RCP, sq.cut end projecting, Ke= 0.500 Outlet Invert= 75.85' S= 0.0050 ' /' n= 0.011 Cc= 0.900
2	Device 1	75.90'	3.0" Vert. Orifice/Grate C= 0.600
3	Device 1	77.05'	5.0" Vert. Orifice/Grate C= 0.600
4	Device 1	78.05'	6.0' long x 1.5' high Sharp-Crested Rectangular Weir 2 End Contraction(s)
5	Secondary	78.25'	14.0' long x 6.0' breadth Broad-Crested Rectangular Weir Head (feet) 0.20 0.40 0.60 0.80 1.00 1.20 1.40 1.60 1.80 2.00 2.50 3.00 3.50 4 Coef. (English) 2.37 2.51 2.70 2.68 2.68 2.67 2.65 2.65 2.65 2.65 2.65 2.66 2.66 2.6



FOOTING SCHEDULE		
IDENTIFICATION	SIZE	BOTTOM REINFORCING
F3	3'-0" x 3'-0" x 1'-0"	(4) #5's E.W.
F4	4'-6" x 4'-6" x 1'-2"	(5) #5's E.W.
F5	5'-0" x 5'-0" x 1'-2"	(6) #5's E.W.
F6	6'-0" x 6'-0" x 1'-2"	(6) #5's E.W.
F7	7'-0" x 7'-0" x 1'-2"	(10) #5's E.W.
F53	3'-0" x 5'-0" x 1'-0"	(6) #5's S.W. (4) #5's L.W.
F73	3'-0" x 7'-6"	(8) #5's S.W. (4) #5's L.W.

PIER SCHEDULE		
IDENTIFICATION	SIZE	BOTTOM REINFORCING
P1	12" x 12"	(4) #5's VERT. #3 TIES AT 12" O.C.
P2	12" x 18"	(4) #5 U BARS, #3 TIES AT 12" O.C.
P4	14" x 20"	(5) #5 U BARS, #3 TIES AT 12" O.C.
P5	16" x 24"	(6) #5 U-bars, #3 ties at 12" o.c.

NOTES:

1. TOF indicates Top of Footing
2. TOC indicates Top of Concrete
3. Top of concrete and top of footing elevations are referenced from finished floor elevation = (+ 83'-6") = 0'-0"
4. Relocate existing underdrain near line 1.a to allow for new footing installation
5. F.F. indicates finished floor
6. See S302 for general notes and specifications
7. Footings are centered on column grids, UNO
8. O.C. verify required width of all foundation wall bond-outs for door openings prior to construction
9. Extend insulation at exterior concrete pads 4' beyond edge of concrete, typical

PERFORMANCE CRITERIA

General:

Match existing equipment and fixture types

Fire Protection:

Extend existing sprinkler system into new space to meet all state and local codes

HVAC & Plumbing:

Extend existing overhead plumbing + electrical for brewery equipment
Utilize process energy and alternate energy sources where possible
Air to air heat exchanger
AWI Stainless steel 12" manufacturing floor drains (3), pitch concrete to drains, concrete to slope 1/4" per 1'
(3) 4" roof drains, Insulated
Natural gas fired hvac unit, AC capable (utilize glycol from beer making process)
(2) exterior hose bibs
Sealed engineering drawings
Mechanical permits
Plumbing permits

Electrical:

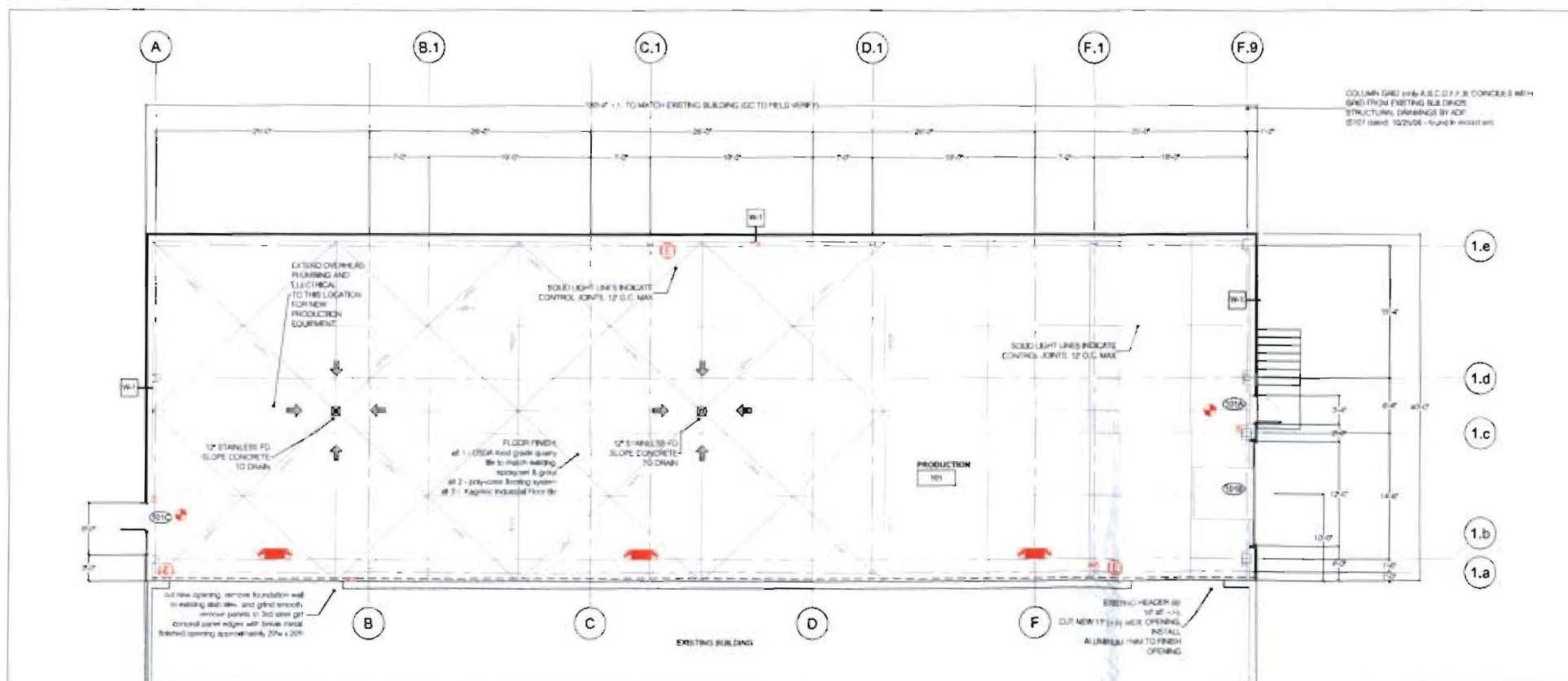
Fluorescent T5 high-bay lights (10) with daylight + occupancy sensors
Exit and emergency lighting as necessary per code
Exterior full cutoff wall packs as necessary to meet code requirements
Exterior door lights (full cutoff fixtures) at (2) exit doorways
Receptacles as necessary for convenience
Power to relocated equipment
Power at new loading dock
Fire alarm devices added or relocated as necessary
Sealed engineering drawings

Misc. Equipment:

Fully automatic dock leveler, see plan for location

1 Foundation Plan

Scale 1/8"=1'



2 1st Floor Plan

Scale 1/8"=1'

Preliminary

LANGFORD
GENERAL CONTRACTOR

DRAWN BY:

GABRIELLE RUSSELL, LEED AP
PROJECT DESIGNER / PROJECT COORDINATOR
LANGFORD AND LOW
MASTER OF ARCHITECTURE, TULANE UNIVERSITY
BACHELOR OF ARCHITECTURE, TULANE UNIVERSITY

REVIEWED BY:

JOB NUMBER

1028

DRAWING STATUS

- ☐ OFFICE REVIEW
- ☐ CLIENT REVIEW
- ☒ PERMIT SET, FOUNDATION ONLY
- ☐ BID / ESTIMATING SET
- ☐ CONTRACT DRAWINGS
- ☐ CONSTRUCTION SET

CONSULTANTS

STRUCTURAL: LANGFORD AND LOW PARTNERS
MECHANICAL: LANGFORD AND LOW PARTNERS
ELECTRICAL: LANGFORD AND LOW PARTNERS
PLUMBING: LANGFORD AND LOW PARTNERS
DESIGN: LANGFORD AND LOW

LICENSED PROFESSIONAL'S SEAL

PROJECT NAME & LOCATION

ALLAGASH BREWERY
Addition
50 INDUSTRIAL WAY
PORTLAND, MAINE

DRAWING TITLE

**Foundation & 1st
Floor Plans**

DATE

JULY 20, 2010

REVISIONS

REVISION # DATE DESCRIPTION
1 7/20/10 FOUNDATION
2 7/20/10 FOUNDATION
3 7/20/10 FOUNDATION
4 7/20/10 FOUNDATION
5 7/20/10 FOUNDATION

SCALE

AS NOTED

SHEET NUMBER

A2.1

