m # P 04

DISPLAY THIS CARD ON PRINCIPAL FRONTAGE OF WORK

CITY OF PORTLAND

B[illegible]CTION

PERMIT

Please Read Application And Notes, If Any, Attached

PERMIT ISSUED

Permit Number: 050577

JUL 18 2005

CITY OF PORTLAND

This is to certify that Fresh Fish Llc/Ron Spinella

has permission to

25 Tyng St 044 C006001

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

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

Notification of inspection must be given and written permission procured before this building or part thereof is lathed or closed-in. HOUR NOTICE IS REQUIRED.

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

OTHER REQUIRED APPROVALS

Fire Dept. Jay Kelley P.F.D. 5-25-05

Health Dept.

Appeal Board

Other

Department Name

7/15/05

Director - Building & Inspection Services

PENALTY FOR REMOVING THIS CARD

CITY OF PORTLAND, MAINE
Department of Building Inspection

Certificate of Occupancy

LOCATION 25 Tyng St **CBL** 044 C006001

Issued to Fresh Fish Llc/Ron Spinella **Date of Issue** 08/14/2007

This is to certify that the building, premises, or part thereof, at the above location, built — altered — changed as to use under Building Permit No. 05-0577 , has had final inspection, has been found to conform substantially to requirements of Zoning Ordinance and Building Code of the City, and is hereby approved for occupancy or use, limited or otherwise, as indicated below.

PORTION OF BUILDING OR PREMISES	APPROVED OCCUPANCY
UNIT #27	Residential Condominium Use Group R2 Type 5B IBC 2003

Limiting Conditions:

none

This certificate supersedes certificate issued

Approved:

(Date) *Inspector* *Inspector of Buildings*

Notice: This certificate identifies lawful use of building or premises, and ought to be transferred from owner to owner when property changes hands. Copy will be furnished to owner or lessee for one dollar.

CITY OF PORTLAND, MAINE
Department of Building Inspection

Certificate of Occupancy

LOCATION 25 Tyng St **CBL** 044 C006001

Issued to Fresh Fish Llc/Ron Spinella **Date of Issue** 08/14/2007

This is to certify that the building, premises, or part thereof, at the above location, built — altered — changed as to use under Building Permit No. 05-0577 , has had final inspection, has been found to conform substantially to requirements of Zoning Ordinance and Building Code of the City, and is hereby approved for occupancy or use, limited or otherwise, as indicated below.

PORTION OF BUILDING OR PREMISES	APPROVED OCCUPANCY
UNIT #25	Residential Condominiums Use Group R2 Type 5B IBC 2003

Limiting Conditions:

none

This certificate supersedes certificate issued

Approved:

(Date) *Inspector* *Inspector of Buildings*

Notice: This certificate identifies lawful use of building or premises, and ought to be transferred from owner to owner when property changes hands. Copy will be furnished to owner or lessee for one dollar.

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

Permit No: 05-0577	**Issue Date:** PERMIT ISSUED JUL 1 8 2005 CITY OF PORTLAND	**CBL:** 044 C006001	
Location of Construction: 25 Tyng St	**Owner Name:** Fresh Fish Llc	**Owner Address:** 377 Cumberland Ave	**Phone:**
Business Name:	**Contractor Name:** Ron Spinella	**Contractor Address:** 377 Cumberland Ave Portland	**Phone:** 2077734773
Lessee/Buyer's Name	**Phone:**	**Permit Type:** Multi Family	**Zone:** R-6
Past Use: Vacant Lot	**Proposed Use:** To construct 3 residential condominium dwelling units	**Permit Fee:** $5,946.00 / **Cost of Work:** $650,000.00 / **CEO District:** 2	using small lot in-fill standards

FIRE DEPT: ☑ Approved ☐ Denied
Signature: Jay Kelley P.F.D. 5-25-05

INSPECTION: Use Group R-3 Type 5B
IRC 2003
Signature:

Proposed Project Description:
To construct **3** residential condominium dwelling units

PEDESTRIAN ACTIVITIES DISTRICT (P.A.D.)
Action: ☐ Approved ☐ Approved w/Conditions ☐ Denied
Signature: Date:

Permit Taken By:	**Date Applied For:**
ldobson	0511112005

1. This permit application does not preclude the Applicant(s) from meeting applicable State and Federal Rules.
2. Building permits do not include plumbing, septic or electrical work.
3. Building permits are void if work is not started within six (6) months of the date of issuance. False information may invalidate a building permit and stop all work..

Zoning Approval

Special Zone or Reviews	Zoning Appeal	Historic Preservation
☐ Shoreland N/A	☐ Variance	☑ Not in District or Landmark
☐ Wetland	☐ Miscellaneous	☐ Does Not Require Review
☐ Flood Zone Panel 13 Zone C	☐ Conditional Use	☐ Requires Review
☒ Subdivision	☐ Interpretation	☐ Approved
☒ Site Plan #2004-0048	☐ Approved	☐ Approved w/Conditions
Maj ☒ Minor ☐ MM ☐ OK - with conditions	☐ Denied	☐ Denied
Date: 5/24/05	Date:	Date:

CERTIFICATION

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

SIGNATURE OF APPLICANT	ADDRESS	DATE	PHONE

RESPONSIBLE PERSON IN CHARGE OF WORK, TITLE	DATE	PHONE

8-9-05 [illegible] & Hashell to set pins & send a letter to verify setbacks [illegible] for footing pour

28 OCT 05 - WENT TO SITE TO DISCUSS CODE ISSUES. WILL BE GETTING INFO FROM DESIGNER TO ANSWER ISSUES. HEADERS ON 2ND STORY WINDOWS REDUCED + STUD ADDED IN BETWEEN, FIRE BLOCKING ISSUES. PARTITION WALL ISSUES AND C AND H CLIPS RUN 2 HOUR DRY WALL.

4/12/06 Inspected Sona Footings for decks on right side of bldg - all 4+ deep & per zoning specs. JMB

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:
05-0577	05/11/2005	044 C006001

Location of Construction:	Owner Name:	Owner Address:	Phone:
25 Tyng St	Fresh Fish Llc	377 Cumberland Ave	
Business Name:	**Contractor Name:**	**Contractor Address:**	**Phone**
	Ron Spinella	377 Cumberland Ave Portland	(207) 773-4773
Lessee/Buyer's Name	**Phone:**	**Permit Type:**	
		Multi Family	

Proposed Use:	Proposed Project Description:
To construct 3 residential condominium dwelling units	To construct 3 residential condominium dwelling units

Dept: Zoning **Status:** Approved with Conditions **Reviewer:** Marge Schmuckal **Approval Date:** 05/24/2005

Note: used R-6 in-fill standards **Ok to Issue:** ☑

1) This permit is being approved on the basis of plans submitted. Any deviations shall require a separate approval before starting that work.
2) This property shall remain a three (3) family residenital condominium dwelling. Any change of use shall require a separate permit application for review and approval.
3) Separate permits shall be required for future decks, sheds, pools, and/or garages.

Dept: Building **Status:** Approved with Conditions **Reviewer:** Tammy Munson **Approval Date:** 07/15/2005

Note: **Ok to Issue:** ☑

1) Permit approved based on the plans submitted and reviewed w/owner/contractor, with additional information as agreed on and as noted on plans.
2) As discussed, hardwired interconnected battery backup smoke detectors shall be installed in all bedrooms, on every level, and in a common area.
3) Application approval based upon information provided by applicant. Any deviation from approved plans requires separate review and approrval prior to work.
4) Separate permits are required for any electrical, plumbing, or heating.

Dept: Fire **Status:** Approved with Conditions **Reviewer:** Jay Kelley **Approval Date:** 05/25/2005

Note: **Ok to Issue:** ☑

1) Smoke alarms shall be installed according to NFPA 1 uniform fire code 13.7.2.14.1
2) Structure is to be built to NFPA101 life safety standards

Dept: Engineering **Status:** Open **Reviewer:** Tony **Approval Date:**

Note: PUBLIC WORKS REVIEW...4/26/04 **Ok to Issue:** ☐

I have reviewed the submittal dated 3/16/04 and offer the following comments:

1. The applicant needs to specify the proposed utlitiy services for each of the planned buildings. The Tyng Street impacts or excavations required must be specified on the plans.
2. Any construction impacts to the existing sidewalks must also be specified.

Dept: Fire **Status:** Approved **Reviewer:** Lt. MacDougal **Approval Date:** 03/23/2004

Note: **Ok to Issue:** ☑

Location of Construction:	Owner Name:	Owner Address:	Phone:
25 Tyng St	Fresh Fish Llc	377 Cumberland Ave	
Business Name:	**Contractor Name:**	**Contractor Address:**	**Phone**
	Ron Spinella	377 Cumberland Ave Portland	(207) 773-4773
Lessee/Buyer's Name	**Phone:**	**Permit Type:**	
		Multi Family	

Note: **Ok to Issue:** ☑

Dept: Planning **Status:** Approved with Conditions **Reviewer:** Rick Knowland **Approval Date:** 06/22/2004

Note: **OktoIssue:** ☑

1) 1. Applicant shall revise plan for conformance with the comments of James Seymour, Development Review Coordinator.
2. Applicant shall revise plan for conformance with comments of Jeff Tarling, City Arborist.
3. Applicant shall submit homeowners association documents and a common driveway easement for review and approval by Corporation Counsel.
4. Applicant shall submit a revised subdivision recording plat for Planning Staff review and approval.

All Purpose 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: 25-29 Tyng St

Total Square Footage of Proposed Structure	Square Footage of Lot	
5040	5157	
Chart# 44 Block# C Lot# 6	Owner: R Fresh Fish LLC	Telephone: 773-4773 671-9902
Lessee/Buyer's Name (If Applicable) N/A	Applicant name, address & telephone: Ron Spinella 377 Cumberland Ave 773-4773	Cost Of Work: $ 650,000 Fee: $ 5871

Current use: Vacant lot

If the location is currently vacant, what was prior use: ~ dental

Approximately how long has it been vacant: 30 YRS

Proposed use: Residential

Project description: 3 town houses

5871 + 2 C of O

DEPT. OF BUILDING INSPECTION CITY OF PORTLAND, ME
MAY 11 2005
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Contractor's name, address & telephone: Ron Spinella

Who should we contact when the permit is ready: Ron Spinella

Mailing address: 377 Cumberland Ave Portland, Me. 04101

We will contact you by phone when the permit is ready. You must come in and pick up the permit and review the requirements before starting any work, with a Plan Reviewer. A stop work order will be issued and a $100.00 fee if any work starts before the permit is picked up. PHONE: 773-4773

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

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

Signature of applicant: [signature]	Date: 5/9/05

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

City of Portland Site Plan Application

If you or the property owner owe real estate taxes, personal property taxes or user charges on any property within the City of Portland, payment arrangements must be made before permit applications can be received by the Inspections Division.

2 9

Total Square Footage of Proposed Structure:	Square Footage of Lot:
5304 SF GROSS, INC DECK/STAIRS 6021 SF	5,157

Tax Assessor's Chart, Block & Lot:	Property owner's mailing address:	Telephone #:
Chart# 44 Block# C Lot# 6	377 Cumberland Ave Portland, Me 04101	671-9902 773-4773

Consultant/Agent, mailing address, phone # & contact person:	Applicant's name, mailing address, telephone #/Fax#/Pager#:	Project name:
Holt & Lachman Architects 165 State St. Portland, 04101 Denis Lachman	Ron & Christine Spinella 377 Cumberland Ave Portland, Me 04101	Mariners Row

Proposed Development (check all that apply)

X New Building — Building Addition — Change of Use X Residential — Office — Retail
— Manufacturing — Warehouse/Distribution — Parking lot
X Subdivision ($500.00) + amount of lots 3 ($25.00 per lot) $ 575 (3 Town houses)
— Site Location of Development ($3,000.00)
(except for residential projects which shall be $200.00 per lot _____)
Traffic Movement ($1,000.00) — Stormwater Quality ($250.00)
— Section 14-403 Review ($400.00 + $25.00 per lot)
— Other _____

Major Development (more than 10,000 sq. ft.)

X Under 50,000 sq. ft. ($500.00)
— 50,000 - 100,000 sq. ft. ($1,000.00)
— Parking Lots over 100 spaces ($1,000.00)
— 100,000 - 200,000 sq. ft. ($2,000.00)
— 200,000 - 300,000 sq. ft. ($3,000.00)
— Over 300,000 sq. ft. ($5,000.00)
— After-the-fact Review ($1,000.00 + applicable application fee)

Minor Site Plan Review

— Less than 10,000 sq. ft. ($400.00)
— After-the-fact Review ($1,000.00 + applicable application fee)

Plan Amendments

— Planning Staff Review ($250.00)
— Planning Board Review ($500.00)

- Please see next page -

Applicant: Ron Spinella *Date:* 5/24/05

Address: 25-29 York St *C-B-L:* 044-C-006 → only separate from 4 & 5

CHECK-LIST AGAINST ZONING ORDINANCE #05-0577

Date - Vacant lot

Zone Location - R-6 (small lot in-fill) called Marinas Row

Interior or corner lot - corner of York St

Proposed Use/Work - to construct 3 residential Townhouse Dwelling units

Sewage Disposal - City

Lot Street Frontage -

Front Yard - No more than 10' – 4' scaled

Rear Yard - None except 10' or Average of heights ÷ 5 between bldgs 42'+29.5'=71.5÷5= 14.3' min 57' shown
No closer than 4' to property line

Side Yard - None except 10' or Average of heights ÷ 5 between bldgs 38+26=64÷5 =12.8 ft. as scaled
No closer than 4' to property line

Projections - Decks on rear & front bay windows

Width of Lot - None req

Height - 45' max & 2 stories of Living space above grade – ≈42' to lowest grade ... to average grade would be less

Lot Area - no min lot size; max 10,000 sf – 5,157 sf given ok

Lot Coverage/ Impervious Surface - N/A

Area per Family - 725 sf per D.U = 2175 sf max

Off-street Parking - 1 pkg space per D.U – 6 shown

Loading Bays - N/A

Site Plan - #2004-0049

Shoreland Zoning/ Stream Protection - N/A

Flood Plains - panel 13 – Zone C

open space req – requires 4' deck for each → has ok

CITY OF PORTLAND, MAINE
DEVELOPMENT REVIEW APPLICATION
PLANNING DEPARTMENT PROCESSING FORM
Zoning Copy

2004-0048
Application I. D. Number

3/16/04
Application Date

Mariners Row
Project Name/Description

Ron Spinella
Applicant

377 Cumberland Avenue, Portland, ME 04101
Applicant's Mailing Address

consultant/Agent

Applicant Ph: **(207) 671-9902** **Agent Fax:**
Applicant **or Agent** Daytime Telephone, Fax

25 - 25 Tyng **St, Portland, Maine**
Address of Proposed **Site**

044 C006001
Assessor's Reference: Chat-Block-Lot

Proposed Development (check all that apply) ☑ New Building ☐ Building Addition ☐ Change Of Use ☑ Residential ☐ Office ☐ Retail ☐ Manufacturing ☐ Warehouse/Distribution ☐ Parking Lot ☐ Other (specify)

5,304 s.f.		**R6**
Proposed Building square Feet or # of Units	Acreage of Site	Zoning

Check Review Required:

☑ Site Plan (major/minor)	☑ Subdivision **# of lots 3**	☐ PAD Review	☐ 14-403 **Streets** Review
☐ Flood Hazard	☐ Shoreland	☐ Historic Preservation	☐ DEP **Local** Certification
☐ Zoning Conditional Use (ZBA/PB)	☐ Zoning Variance		☐ other

Fees Paid: Site Plan **$500.00** Subdivision _____ Engineer Review _____ Date: **3/17/04**

Zoning Approval Status:

Reviewer _____

☐ **Approved** ☐ **Approved w/Conditions** See Attached ☐ **Denied**

Approval Date _____ Approval Expiration _____ Extension to _____ ☐ **Additional Sheets** Attached

☐ I Condition Compliance _____
signature date

Performance Guarantee ☐ **Required'** ☐ **Not Required**

* No building permit may be issued until a performance guarantee has been submitted as indicated below

☐ Performance Guarantee Accepted	date	amount	expiratii date
☐ Inspection Fee Paid	date	amount	
☐ Building Permit **Issued**	date		
☐ Performance Guarantee Reduced	**date**	remaining balance	signature
☐ Temporary Certificate of Occupancy	date	☐ Conditions (See Attached)	expiration date
☐ Final Inspection	date	signature	
☐ Certificate Of Occupancy	date		
☐ Performance Guarantee Released	date	signature	
☐ Defect Guarantee Submitted	submitted date	amount	expiration date

BUILDING ~~PERMIT INSPECTION~~ PROCEDURES

Please call 874-8703 or 874-8693 to schedule your ~~inspections as agreed upon~~

Permits expire in 6 months, if the project is not started or ceases for 6 months.

The Owner or their designee is required to notify the inspections ~~office for the~~ following ~~inspections and provide adequate notice. Notice must be called~~ in 48-72 hours in advance in order to schedule an inspection:

By initializing at each inspection time, you are agreeing that you understand the inspection procedure and additional fees from a "Stop Work Order" and "Stop Work Order Release" will be incurred if the procedure is not followed as stated below.

A Pre-~~construction~~ Meeting will take place upon receipt of your building permit.

___	**Footing/Building Location Inspection:**	Prior to pouring concrete
___	**Re-Bar Schedule Inspection:**	Prior to pouring concrete
___	**Foundation Inspection:**	Prior to placing ANY backfill Cloth MAT'L - DAMP PROOF (TAR
___	**~~Framing/Rough~~ Plumbing/Electrical:**	Prior to any insulating or drywalling Coord Collins can do all
___	**Final/Certificate of Occupancy:**	Prior to any occupancy of the ~~structure or~~ use. NOTE: There is a $75.00 fee ~~per~~ inspection at this point.

Certificate of Occupancy is not required for certain projects. Your inspector can advise you if your project requires a Certificate of Occupancy. All projects DO require a final inspection

___ **If any of the inspections do not occur, the project cannot go on to the next phase, REGARDLESS OF THE NOTICE OR CIRCUMSTANCES.**

___ **CERIFICATE OF OCCUPANICES MUST BE ISSUED AND PAID FOR, BEFORE THE SPACE MAY BE OCCUPIED**

[signature] 7/19/05

Signature of ~~Applicant~~/Designee Date

[signature] 7/19/05

Signature of Inspections Official Date

CBL: 044 006 Building Permit #: 050577

FILL IN AND SIGN WITH INK

APPLICATION FOR PERMIT
HEATING OR POWER EQUIPMENT

To the INSPECTOR OF BUILDINGS, PORTLAND, ME.

The undersigned hereby applies for a permit to install the following heating, cooking or power equipment in accordance with the Laws of Maine, the Building Code of the City of Portland, and the following specifications:

Location / CBL 25 Tyng St. 27, 29 Use of Building Residential Date 9/19/05

Name and address of owner of appliance Ron Spinella, 377 Cumberland Ave Portland ME 04101 (Condos and two houses)

Installer's name and address Multi Spec Inc 230 Saco rd. Nollis ME Telephone 207-727-5111

Location of appliance:

- ☒ Basement
- ☐ Floor
- ☒ Attic
- ☐ Roof

Type of Fuel:

- ☒ Gas
- ☐ Oil
- ☐ Solid

Appliance Name: ____

U.L. Approved ☒ Yes ☐ No

Will appliance be installed in accordance with the manufacture's installation instructions? ☒ Yes ☐ No

IF NO Explain: ____

The Type of License of Installer:

- ☐ Master Plumber # ____
- ☐ Solid Fuel # ____
- ☐ Oil # ____
- ☒ Gas # NPTS
- ☐ Other ____

Type of Chimney:

- ☐ Masonry Lined
  Factory built ____
- ☐ Metal
  Factory Built U.L. Listing # ____
- ☒ Direct Vent
  Type Safty Vent UL# 0101129755

Type of Fuel Tank

- ☐ Oil
- ☒ Gas

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CITY OF PORTLAND, ME
SEP 19 2005
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Size of Tank ____

Number of Tanks ____

Distance from Tank to Center of Flame ____ **feet.**

Cost of Work: $ 62,000

Permit Fee: $ ____

Approved

Fire: ____

Ele.: ____

Bldg.: ____

Approved with Conditions

☐ See attached letter or requirement

Inspector's Signature ____ Date Approved ____

Signature of Installer ____

White - Inspection Yellow - File Pink - Applicant's Gold - Assessor's Copy

Attic or additional Floor Joist Species Dimensions and Spacing (Table R802.4(1) and R802.4(2))	OK	
Pitch, Span, Spacing& Dimension (Table R802.5.1(1) - R 802.5.1(8)) Roof Rafter; Framing & Connections (Section R802.3 & R802.3.1)	OK	
Sheathing; Floor, Wall and roof (Table R503.2.1.1(1)	OK	
Fastener Schedule (Table R602.3(1) & (2))	OK	
Private Garage (Section R309) Living Space ? (Above or beside) YES Fire separation (Section R309.2)	OK shows 5/8 walls + ceilings	
Opening Protection (Section R309.1)	Fire rated door - OK	
Emergency Escape and Rescue Openings (Section R310)	Shows egress - OK	
/Roof Covering (Chapter 9)	Asphalt	
Safety Glazing (Section R308)	Need in stairway	OK
Attic Access (Section R807)	Need if over 30"	OK
Chimney Clearances/Fire blocking (Chapter 10)	Shows 2"	

ONE AND TWO FAMILY	PLAN REVIEW	CHECKLIST
Soil type/Presumptive Load Value (Table R401.4.1) _____		
Component	**Plan Reviewer**	**Inspection/Date/Findings**
STRUCTURAL **Footing Dimensions/Depth (Table R403.1 & R403.1(1), (Section R403.1 & R403.1.4.1)**	10" x 20" – OK	
Foundation Drainage Damp proofing (Section R405 & R406)	OK	
Ventilation/Access (Section R408.1 & R408.3) Crawls Space ONLY	N/A	
Anchor Bolts/Straps (Section R403.1.6)	½"	
Lally Column Type (Section R407) **Girder & Header Spans (Table R 502.5(2))**	OK	
Built-Up Wood Center Girder Sill/Band Joist Type & Dimensions	5¼ x 14" LVL	
Sills/Band Joist Species & Dimensions	OK	
First Floor Joist Spacing (Table R502.3.1(2))	14" TJI's	
(Table R502.3.1(1) & Table R502.3.1(2))		
Second Floor Joist Species Dimensions and Spacing (Table R502.3.1(1) & Table R502.3.1(2))	11 11	

Closest building - 14'

3 **Energy Efficiency (N1101.2.1)**	Walls R-19 Attic - R-38 Sills - R-19 Go over options →	R-21 floors or R-11 walls in Bsmnt
Type of Heating System		OK
Means of Egress (Sec R311 & R312) **Basement**		
Number of Stairways 9		
Interior 3		
Exterior 6		
5 **Treads and Risers** (Section R311.5.3) Int - OK -	~~Exterior need~~ ~~7" 10" 11" need~~	
Width (Section R311.5.1) OK		
Headroom (Section R311.5.2) shows 6'8"		
Guardrails and Handrails (Section R312 & R311.5.6 – R311.5.6.3)	→ Need 42" on all exterior guards	
6 **Smoke Detectors (Section R313) Location and type/Interconnected**	Not shown?	OK
4 **Dwelling Unit Separation (Section R317) and IBC – 2003 (Section 1207)**	Need UL Listing #	OK
Deck Construction (Section R502.2.1)	OK	

See Chimney Summary Checklist

Permit Number

Checked By/Date

Generated by REScheck Package Generator

Compliance Certificate

Project Title: Tyng Street

Energy Code: **2003 IECC**
Location: **Portland, Maine**
Construction Type: **Multifamily**
Window-to-Wall Ratio: **0.15**
Heating Degree Days: **7378**

Report Date:

Date **of** Plans:

Project Information:

Builder Information:

Project Notes:

Compliance: **Passes**

Assembly	Cavity R-Value	Cont. R-Value	Glazing or Door U-Factor
Ceiling:	38.0	0.0	
Wall:	**19.0**	0.0	
Window:			0.350
Door:			**0.350**
Floor:	21.0	0.0	
Furnace: : 80 AFUE			

*Statement **of*** Compliance: The proposed building design described here is consistent with the building plans, specifications. and other calculations submitted with the permit application. The proposed building has been designed ***to*** meet the 2003 IECC requirements in the RES*check* Package Generator and to comply with the mandatory requirements listed in the RES*check* Inspection Checklist.

Builder/Designer | Company Name | Date

Generated by REScheck Package Generator

REScheck Inspection Checklist

Project Title: Tyng Street

Ceilings:

- ☐ Ceiling: , R-38.0 cavity insulation

  Comments: _____

Above-Grade Walls:

- ☐ Wall: , R-19.0 cavity insulation

  Comments: _____

Windows:

- ☐ Window: , U-factor: 0.350

  For windows without labeled U-factors. describe features:

  #Panes ____ Frame Type _____ Thermal Break? ____ Yes ____ No

  Comments: _____

Doors:

- ☐ Door: , U-factor: 0.350

  Comments: Front door exempt

Floors:

- ☐ Floor: , R-21.0 cavity insulation

  Comments: _____

Heating and Cooling Equipment:

- ☐ Furnace: : 80 AFUE or higher

  Make and Model Number: _____

Air Leakage:

- ☐ Joints, penetrations, and all other such openings in the building envelope that are sources of air leakage must be sealed.
- ☐ Recessed lights must be 1) Type IC rated, or 2) installed inside an appropriate air-tight assembly with a 0.5" clearance from combustible materials. If non-IC rated, the fixture must be installed with a 3 clearance from insulation.

Skylights:

- ☐ Minimum insulation requirement for skylight shafts equal to or greater than 12 inches is R-19.

Vapor Retarder:

- ☐ Required on the warm-in-winter side of all non-vented framed ceilings, walls, and floors

Materials Identification:

- ☐ Materials and equipment must be installed \plain\f2\fs20 in accordance with the manufacturer's installation instructions.
- ☐ Materials and equipment must be identified so that compliance can be determined.
- ☐ Manufacturer manuals for all installed heating and cooling equipment and service water heating equipment must be provided.
- ☐ Insulation R-values, glazing U-factors, and heating equipment efficiency must be clearly marked on the building plans or specifications.

Duct Insulation:

- ☐ Supply ducts in unconditioned attics or outside the building must be insulated to R-8.

- ❑ Return ducts in unconditioned attics or outside the building must be insulated to R-4.
- ❑ Supply ducts in unconditioned spaces must be insulated to R-8.
- ❑ Return ducts in unconditioned spaces (except basements) must be insulated to R-2.
- ❑ Where exterior walls are used as plenums, the wall must be insulated to R-8.
- ❑ Insulation is not required on return ducts in basements.

Duct Construction:

- ❑ Duct connections to flanges of air distribution system equipment must be sealed and mechanically fastened.
- ❑ All joints, seams, and connections must be securely fastened with welds, gaskets, mastics (adhesives), mastic-plus-embedded-fabric,or tapes. Tapes and mastics must be rated UL 181A or UL 181B.
  Exception: Continuously welded and locking-type longitudinaljoints and seams on ducts operating at less than 2 in. w.g. (500 Pa).
- ❑ The HVAC system must provide a means for balancing air and water systems.

Temperature Controls:

- ❑ Thermostats are required for each dwelling unit (non-dwelling areas must have one thermostat for each system or zone). A manual or automatic means to partially restrict or shut off the heating and/or cooling input to each room shall be provided.

Electric Systems:

- ❑ Separate electric meters are required for each dwelling unit.

Service Water Heating:

- ❑ Water heaters with vertical pipe risers must have a heat trap on both the inlet and outlet unless the water heater has an integral heat trap or is part of a circulating system.
- ❑ Insulate circulating hot water pipes to the levels in Table 1.

Circulating Hot Water Systems:

- ❑ Insulate circulating hot water pipes to the levels in Table 1

Swimming Pools:

- ❑ All heated swimming pools must have an on/off heater switch and require a cover unless over 20% of the heating energy is from non-depletable sources. Pool pumps require a time clock.

Heating and Cooling Piping Insulation:

- ❑ HVAC piping conveying fluids above 105°F or chilled fluids below 55°F must be insulated to the levels in Table 2.

Table 1: Minimum Insulation Thickness for Circulating Hot Water Pipes

Heated Water Temperature (°F)	Insulation Thickness in Inches by Pipe Sizes			
	Non-Circulating Runouts		Circulating Mains and Runouts	
	up to 1"	Up to 1.25"	1.5" to 2.0"	Over 2"
170-180	0.5	1.0	1.5	2.0
140-169	0.5	0.5	1.0	1.5
100-139	0.5	0.5	0.5	1.0

Table 2 Minimum Insulation Thickness for HVAC Pipes. Hot Water Pipes

Piping System Types	Fluid Temp. Range("F)	Insulation Thickness in Inches by Pipe Sizes			
		2" Runouts	1" and Less	1.25" to 2.0"	2.5" to 4"
Heating Systems					
Low Pressure/Temperature	201-250	1.0	1.5	1.5	2.0
Low Temperature	106-200	0.5	1.0	1.0	1.5
Steam Condensate (for feed water)	Any	1.0	1.0	1.5	2.0
Cooling Systems					
Chilled Water, Refrigerant and Brine	40-55	0.5	0.5	0.75	1.0
	Below 40	1.0	1.0	1.5	1.5

NOTES TO FIELD: (Building Department Use Only)

Permit Number
Checked By/Date

Generated by REScheck Package Generator

Compliance Certificate

Project Title: Tyng Street

Energy Code:	**2003 IECC**
Location:	**Portland, Maine**
Construction Type:	**Multifamily**
Window-to-Wall Ratio:	**0.15**
Heating Degree Days:	**7378**

Report Date:

Date of Plans:

Project Information:

Builder Information:

Project Notes:

Compliance: **Passes**

Assembly	Cavity R-Value	Cont. R-Value	Glazing or Door U-Factor
Ceiling:	38.0	0.0	
Wall:	19.0	0.0	
Basement:	11.0	0.0	
Window:			**0.350**
Door:			**0.350**
Furnace: : 80 AFUE			

Statement ***of*** Compliance: The proposed building design described here is consistent with the building plans, specifications, and other calculations submitted with the permit application. The proposed building has been designed to meet the 2003 IECC requirements in the REScheck Package Generator and to comply with the mandatory requirements listed in the REScheck Inspection Checklist.

Builder/Designer	Company Name	Date

Generated by *REScheck* Package Generator

REScheck Inspection Checklist

Project Title: Tyng Street

Ceilings:

☐ Ceiling: , R-38.0 cavity insulation
Comments: _____

Above-Grade Walls:

☐ Wall: , R-19.0 cavity insulation
Comments: _____

Basement Walls:

☐ Basement: , 8.0' ht/5.0' bg/8.0' insul, R-11.0 cavity insulation
Comments: _____

Windows:

☐ Window: , U-factor: **0.350**
For windows without labeled U-factors, describe features:
#Panes ____ Frame Type _____ Thermal Break? ____ Yes ____ No
Comments: _____

Doors:

☐ Door: , U-factor: **0.350**
Comments: Front door exempt

Heating and Cooling Equipment:

☐ Furnace: : **80** AFUE or higher
Make and Model Number: _____

Air Leakage:

☐ Joints, penetrations, and all other such openings in the building envelope that are sources of air leakage must be sealed.
☐ Recessed lights must be 1) Type IC rated, or 2) installed inside an appropriate air-tight assembly with a **0.5**"clearance from combustible materials. If non-IC rated, the fixture must be installed with a 3" clearance from insulation.

Skylights:

☐ Minimum insulation requirement for skylight shafts equal to or greater than 12 inches is R-19

Vapor Retarder:

☐ Required on the warm-in-winter side of all non-vented framed ceilings, walls, and floors.

Materials Identification:

☐ Materials and equipment must be installed \plain\f2\fs20 in accordance with the manufacturer's installation instructions.
☐ Materials and equipment must be identified **so** that compliance can be determined.
☐ Manufacturer manuals for all installed heating and cooling equipment and service water heating equipment must be provided.
☐ Insulation R-values, glazing U-factors, and heating equipment efficiency must be clearly marked on the building plans or specifications.

Duct Insulation:

☐ Supply ducts in unconditioned attics or outside the building must be insulated to R-8.

- ❑ Return ducts in unconditioned attics or outside the building must be insulated to R-4.
- ❑ Supply ducts in unconditioned spaces must be insulated to R-8.
- ❑ Return ducts in unconditioned spaces (except basements) must be insulated to R-2.
- ❑ Where exterior walls are used as plenums, the wall must be insulated to R-8.
- ❑ Insulation is not required on return ducts in basements.

Duct Construction:

- ❑ Duct connections to flanges of air distribution system equipment must be sealed and mechanically fastened.
- ❑ All joints, seams, and connections must be securely fastened with welds, gaskets, mastics (adhesives), mastic-plus-embedded-fabric,or tapes. Tapes and mastics must be rated UL 181A or UL 181B.
  Exception: Continuously welded and locking-type longitudinaljoints and seams on ducts operating at less than 2 in. w.g. (500 Pa).
- ❑ The HVAC system must provide a means for balancing air and water systems.

Temperature Controls:

- ❑ Thermostats are required for each dwelling unit (non-dwellingareas must have one thermostat for each system or zone). A manual or automatic means to partially restrict or shut off the heating and/or cooling input to each room shall be provided.

Electric Systems:

- ❑ Separate electric meters are required for each dwelling unit.

Service Water Heating:

- ❑ Water heaters with vertical pipe risers must have a heat trap on both the inlet and outlet unless the water heater has an integral heat trap or is part of a circulating system.
- ❑ Insulate circulating hot water pipes to the levels in Table 1.

Circulating Hot Water Systems:

- ❑ Insulate circulating hot water pipes to the levels in Table 1

Swimming Pools:

- ❑ All heated swimming pools must have an on/off heater switch and require a cover unless over 20% of the heating energy is from non-depletable sources. Pool pumps require a time clock.

Heating and Cooling Piping Insulation:

- ❑ HVAC piping conveying fluids above 105°F or chilled fluids below 55°F must be insulated to the levels in Table 2.

Table *1: **Minimum Insulation Thickness for Circulating Hot Water Pipes***

Heated Water Temperature (°F)	Insulation Thickness in Inches by Pipe Sizes			
	Non-Circulating Runouts		Circulating Mains and Runouts	
	up to 1"	Up to 1.25"	1.5 to 2.0	Over 2"
170-180	0.5	1.0	1.5	2.0
140-169	0.5	0.5	1.0	1.5
100-139	0.5	0.5	0.5	1.0

Table *2: **Minimum Insulation Thickness for HVAC Pipes. Hot Water Pipes***

Piping System Types	Fluid Temp. Range (°F)	Insulation Thickness in Inches by Pipe Sizes			
		2" Runouts	1" and Less	1.25" to 2.0	2.5" to 4"
Heating Systems					
Low Pressure/Temperature	201-250	1.0	1.5	1.5	2.0
Low Temperature	106-200	0.5	1.0	1.0	1.5
Steam Condensate (for feed water)	Any	1.0	1.0	1.5	2.0
Cooling Systems					
Chilled Water, Refrigerant and	40-55	0.5	0.5	0.75	1.0
Brine	Below 40	1.0	1.0	1.5	1.5

NOTES TO FIELD: (Building Department **Use** Only)

CITY OF PORTLAND
BUILDING CODE CERTFICATE
389 Congress St., Room 315
Portland, Maine 04 101

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

FROM: RONALD T BEAUCHESNE, P.E.

RE: Certificate of Design

DATE: 5/5/05

These plans and / or specifications covering construction work on:

MARINERS ROW TOWNHOUSES

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

STATE OF MAINE
RONALD T. BEAUCHESNE
NO. 4098
REGISTERED PROFESSIONAL ENGINEER
(SEAL)

As per Maine State Law:

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

Signature:

Title: PROFESSIONAL ENGINEER

Firm: NORTHEAST BASIC DRAFTING

Address: 55 SUMAC ST PORTLAND
(207) 797-7774

From: "Michael Lane" <mlane@northeastdesigndrafting.com>
To: "Tammy Munson" <TMM@portlandmaine.gov>
Date: Thu, Jul 14, 2005 5:40 PM
Subject: RE: Tyng Street

Dear Tammy Munson:
Thank you for the below listed comments.
I will address each comment in the order which you have submitted them.
I have also attached documentation in those areas where required and have indicated so in the relevant areas.

1.) Safety Glazing.
Safety glazing has been incorporated in all areas required.
The glazing in the stairwell of 29 Tyng Street is 61" above the finish landing.

2.) Attic Access
Attic access has been provided in each of the third floor bathrooms.

3.) Energy Compliance
Attached please find the energy compliant form from ResCheck.
Please amend your documents to include R19 Insulation in the floor systems.

4.) "U" Value of the Windows
Please amend your documents to state that all windows are to be High Performance (HP) as manufactured by Andersen or equal.
"U" value to be 0.32 or better.

5.) Smoke Detectors
Electrical drawings are not included with this package, however, please amend your documents to read that Smoke Detectors are to be installed in accordance with the National Electrical Code and NFPA101

6.) UL Listing of the Fire Separation Wall
Attached please find the PDF file for the USG Fire/Party wall being specified. The UL rating is for the **2** hour rated construction and bears a UL listing of UL Des U336 with an STC of 60 Test No. TL-88-350.
Note: The 7/16" OSB between Units 25 and 27 Tyng Street completes the shear wall construction for this project.

7.) I have also included documentation for the hold downs specified on the drawings.

I trust that the above information and the attached documentation will meet the permitting requirements.

This document is being forwarded to Ron Spinella (Owner) and is being made a part **of** the construction package.

Again thank you for your comments.

Mike Lane

Michael Lane

Northeast Design Drafting
Innovative Industrial Engineering & Drafting Services
55 Sumac Street
Portland, ME 04103
(207)797.7776
mlane@northeastdesigndrafting.com

-----Original Message-----
From: Tammy Munson [mailto:TMM@portlandmaine.gov]
Sent: Wednesday, July 13, 2005 3:57 PM
To: mlane@northeastdesigndrafting.com
Subject: Tyng Street

Hi Mike. There are a few outstanding issues w/the plans for Tyng Street. =
Some of these are new requirements under the IRC 2003 and the new energy =
code (iecc 2003...which is not a lot of fun)....

1. Safety glazing is required in all windows in stairways and at landings =
if less than 60"above the floor. Refer to section 308.4.10 and 11.=20
2. Attic accesses are required if the ceiling height is over 30" high.
3. There is now an energy efficiency standard. I spoke w/Ron about this. =
Basically, you have to insulate your floor system or insulate your =
basement walls, providing R-21 in the first floor or R-11 for basement =
walls. There are other options if you decide to raise the r-values of the =
roof or walls. We can talk about this one.=20
4. What is the U-value of the windows?
5. I did not see anything regarding smoke detectors.
6. What is the UL listing on the fire separating walls? Ron said he had =
paper work on this but it is not w/the permit package.

I am going to try and attach a link to a webpage that is a compliance =
program for our new energy standard. You'll see that if you change =
different values there are a number of ways to achieve compliance. For the =
efficiency percentage for heating appliances use 85%.

The above items can be addressed in an addendum and you can email it back =
to me. Give me a call if you have any questions at 874-8706.

p.s. R403.1.4.1 exception #1 talks about 400 sf for frost protection.

URL attachment type blocked
This message contained attachments that have been blocked by Guinevere. Please see your system administrator for more details

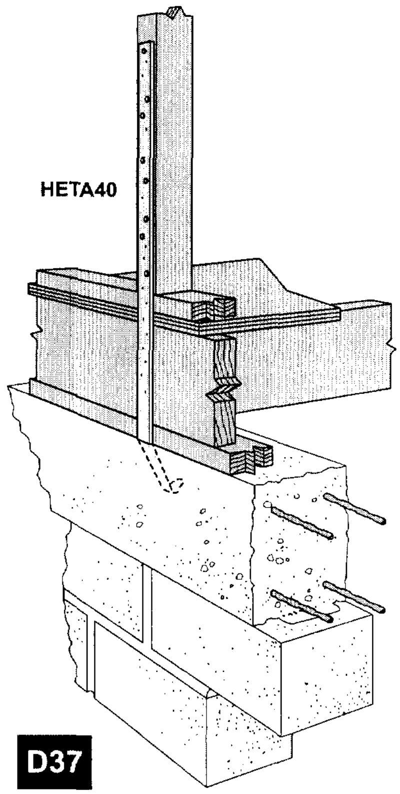
cc: "Ron Beauchesne" <rtbmcb@aol.com>, <spinella@maine...

Floor to Masonry/Concrete

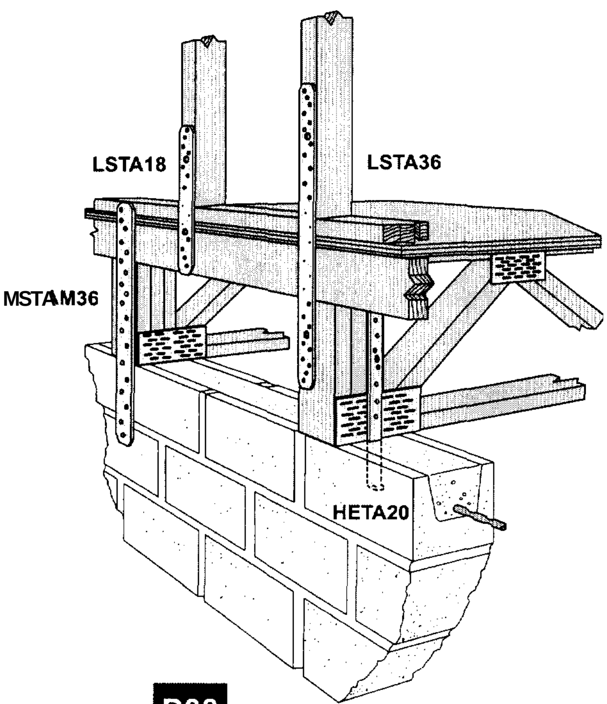
Model No.	Qty Reqd	Fasteners To Block/ Concrete	DF/SP Allowable Loads			SPF Allowable Loads		
			Fasteners To Wood Framing	Uplift		Fasteners To Wood Framing	Uplift	
				(133)	(160)		(133)	(160)
HETA40	1	Embedded	8-10dx1½	990	1190	8-10dx1½	855	1025
MSTAM24[3]	1	5-¼x2¼ Titen	9-10d	1370	1545	9-10d	1175	1410
	1	5-¼x2¼ Titen	7-10d	1065	1245	8-10d	1045	1245
HETA20	1	Embedded	16-10dx1½	1890	1890	16-10dx1½	1705	1890
	1	Embedded	11-10dx1½	1365	1515	12-10dx1½	1280	1515
MSTAM36[3]	1	8-¼x2¼ Titen	13-10d	1915	1915	13-10d	1715	1915
	1	8-¼x2¼ Titen	9-10d	1380	1565	10-10d	1320	1565
HD2A	1	⅝" ATR	2-⅝" MB	2775	2775	2-⅝" MB	1920	1565
PHD2-SDS3	1	⅝" ATR	10-SDS¼x3	3610	3610	10-SDS¼x3	3240	3240
HD5A	1	⅝" ATR or ¾" ATR	2-¾" MB	3705	3705	2-¾" MB	3130	3130
MSTCM40[4]	1	14-¼x2¼ Titen	26-16d sinkers	3985	4340	26-16d sinkers	3430	4120
	1	14-¼x2¼ Titen	20-16d sinkers	3065	3555	23-16d sinkers	3035	3555
HD6A	1	⅞" ATR	2-⅞" MB	4405	4405	2-⅞" MB	3680	3680
PHD5-SDS3	1	⅝" ATR	14-SDS¼x3	4685	4685	14-SDS¼x3	4205	4205
HTT22	1	⅝" ATR	32-16d sinkers	5250	5260	32-16d sinkers	4565	5260
HD8A	1	⅞" ATR	3-⅞" MB	6465	6465	3-⅞" MB	5480	5480
HD10A	1	⅞" ATR	4-⅞" MB	8310	8310	4-⅞" MB	7045	7045

1 Holdown load values are based on a 3" wide vertical member See Simpson "*Wood Construction Connectors*' catalog for load based on different wood widths
2 HETA40 will require a 30" bend and a 4" minimum embedment depth
3 MSTAM24, 36 and MSTCM40 use Titen masonry screws to attach to grouted cells or concrete bond ***beams***
4 MSTCM requires attachment to a minimum 3" wide member
5 Nailing over structural wood panel sheathing is acceptable as long as minimum nail penetration into the framing is maintained

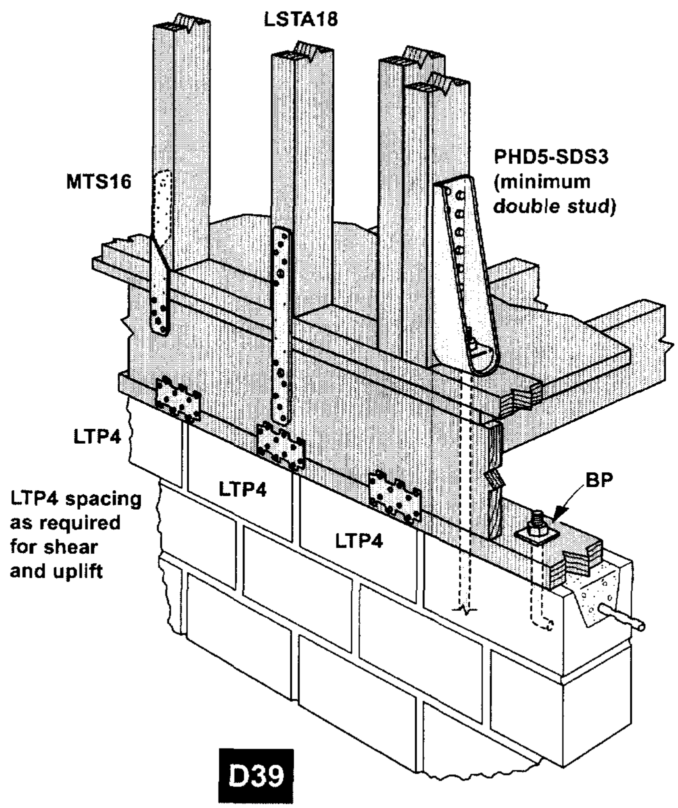
The values highlighted in orange represent loads which do not include a 1/3 stress increase on the steel calculations. (Refer to page 4 and 5)



D37



D38



D39

LEGACY REPORT

ER-5328

Reissued March 1, 2004

ICC Evaluation Service, Inc.
www.icc-es.org

Business/Regional Office ■ 5360 Workman Mill Road. Whittier, California 90601 ■ (562)699-0543
Regional Office ■ 900 Montdair Road. Suite A, Birmingham. Alabama 35213 ■ *(205)* 599-9800
Regional Office ■ 4051 West Flossmoor Road, Country Club Hills, Illinois 60478 ■ (708) 799-2305

Legacy* report on *the* 1997 *Uniform Building Code™, the 2000 International Building Code@,the 2000 International Residential Code@the* BOCA® *National Building Codell* 999 *and the* 1999 *Standard Building Code@

DIVISION: 06—WOOD AND PLASTICS
Section: 06090—Wood and Plastic Fastenings

PHD HOLDDOWN ANCHORS

SIMPSON STRONG-TIE CO., INC.
4120 DUBLIN BOULEVARD, SUITE 400
DUBLIN, CALIFORNIA 94568

1.0 SUBJECT

PHD Holddown Anchors.

2.0 DESCRIPTION

2.1 General:

The PHD hold-down anchors described in this evaluation report are an alternative method of construction to that specified in Section 2304.3 of the 1997 Uniform Building *Code*™ (UBC), Section 1715.1 of the 2000 Infernational Building Code" (IBC), Table R602.3(1) of the 2000 International Residential Code" (IRC), Section 2312.0 of the BOCA® National Building Codell 999 (BNBC) and Section 1707.3.1 of the 1999 Standard Building *Code*© (SBC).

The PHD holddowns may be used to anchor wood members to foundations, as floor-to-floor ties, and as horizontal wall anchors and continuity ties. Each holddown consists of two parts: an anchor body and a base plate. The PHD 2 base plate is used with the PHD 2 and PHD *5* anchor bodies. The PHD 6 base plate is used with the PHD 6 and PHD 8 anchor bodies. Holddown anchor fastener schedule, dimensions and allowable loads are shown in Table 1. See Figure 1 for additional details of holddown anchors.

2.2 Materials:

2.2.1 Holddowns: The PHD base plates are formed from No. 3 gage electro-galvanized steel with a 0.2405-inch (6.1 1 mm) base metal thickness. The steel complies with ASTM A 570 Grade 33, with minimum yield and tensile strengths of 33 and 52 ksi (228 Mpa and 359 MPa), respectively.

The PHD anchor bodies are formed from galvanized steel complying with ASTM A 653 Structural Quality Grade 40, except the minimum yield and tensile strengths are 42 and 56 ksi (290 and 386 MPa), respectively. The galvanized coating complies with the G60 requirements of ASTM A 653. The base metal thicknesses of the steel, which do not include galvanization thickness, are 0.0721, 0.0721, 0.1026 and 0.1342 inch (1.83, 1.83, 2.61 and 3.41 mm) for the anchor bodies of the PHD 2, PHD *5,* PHD 6 and PHD 8 holddown anchors, respectively.

2.2.2 Wood: Lumber must be solid-sawn lumber with a minimum specific gravity of 0.50, such as Douglas fir-larch.

2.2.3 Fasteners: The fasteners attaching the holddowns to the wood must be Simpson Strong-Tie Co., Inc., SDS $^1/_4$ × 3 Strong-Drive S-Series wood screws recognized in ICC-ES evaluation report ER-5268.

2.3 Design:

The connected wood member, grade of anchor bolt and anchor bolt embedment must be designed for each project. The allowable values for the holddown anchors described in this report are for anchors attached to wood seasoned to a moisture content of 19 percent or less, and used under continuously dry conditions. For connection to wood that is unseasoned or partially seasoned, or when holddowns are exposed to wet-service conditions in use, the allowable loads in this report must be adjusted in accordance with the code.

In designing the wood members, the following must be considered:

The wood member must be checked for its design capacity at the critical net section, for combined bending due to eccentricity, and for tensile stresses in accordance with Section 3.9 of the National Design Specification for Wood Construction (NDS), 1991 or 1997 edition, where applicable.

In conjunction with the consideration for eccentricity, the manufacturer has performed cyclic (reversed) racking shear tests of wood panel sheathed, shear wall assemblies utilizing single shear hold-downs connected to wood posts. Results of these tests are available to the structural design professional to aid in assessment of the increased post capacity attributed to sheathing and fastening. (A copy of the report is available by contacting the manufacturer.)

Wood members must be checked for their design capacity for compression parallel and perpendicular to grain.

Allowable stresses and other adjustment factors, as applicable, from the NDS must be used to check the design capacity of the wood member. Design capacities may also be adjusted by a load duration factor (C_D) as specified in the applicable code.

2.4 Installation:

The holddowns shall be attached to the wood member with the number of screws specified in Table 1. The wood screws

must be fully embedded in the connected wood member and installed in accordance with ER-5268. See Figure 2 for typical installations.

2.5 Identification:

PHD anchor bodies and base plates are identified by the Simpson Strong-Tie Company, Inc., company name and the model number, which are stamped on each part. Simpson Strong-Drive S-Series wood screws are identified as described in ER-5268.

3.0 EVIDENCE SUBMITTED

Reports of structural load tests and calculations in accordance with the ICC-ES Acceptance Criteria for Joist Hangers and Similar Devices (AC13), dated September 2003.

4.0 FINDINGS

That the PHD holddown anchors described in this report comply with the 1997 Uniform Building Code™, the **2000** *International* Building *Code®*, the **2000** *International* Residential Code@, the BOCA® National Building Codell999 and the 1999 Standard Building*Code®*, subject to the following conditions:

4.1 The connectors are manufactured, identified and installed in accordance with this report and the manufacturer's instructions.

4.2 Maximum allowable loads comply with this report and shall not exceed the capacity of the members to which the anchors are fastened.

4.3 Lumber has a specific gravity noted in Section **2.2.2** of this report, with a moisture content of 19 percent or less, and is used in dry conditions.

4.4 Use of connectors is limited to lumber that has not been treated with wood preservatives or fire-retardant chemicals.

This report is subject to re-examination in two years.

TABLE 1—PHD HOLDDOWN ANCHORS[1,2,3,4]

HOLDDOWN DESIGNATION	MATERIAL THICKNESS (gage)		DIMENSIONS (inches)			ANCHOR BOLT DIAMETER (inch)	NO. OF SDS $^1/_4 \times 3$ SCREWS	ALLOWABLE UPLIFT (lbf)
	Anchor Body	Base Plate	Width (W)	Height (H)	CL			
PHD2	14	3	2.875	9.3125	1.375	$^5/_8$	10	3,610
PHD5	14	3	2.875	11.5625	1.375	$^5/_8$	14	4,685
PHD6	12	3	2.9375	13.8125	1.375	$^7/_8$	18	5,860
PHD8	10	3	3.000	17.1875	1.375	$^7/_8$	24	6,730

For **SI:** 1 inch = 25.4 mm, 1 lbf = 4.45 N.

'Refer to Figure 1 for holddown dimensions.

[2]Allowable uplift load is based on the lowest of (a) the screw values in accordance with ICBO ES Evaluation Report ER-5268, (b) ultimate **test** loads divided by **3.0** or (c) the test load associated with a 0.125-inch deflection.

[3]Allowable loads have been increased $33^1/_3$ percent for wind or earthquake loading in accordance with the code. No further increase **is** allowed; reduce loads by 25 percent for normal loading conditions,

[4]The holddowns shall be attached to approved anchor bolts of the diameter specified in this table with a capacity equal to or greater than the allowable holddown capacity. Concrete strength, side cover and embedment depth requirements shall be in accordance with the approved anchor bolt requirements.

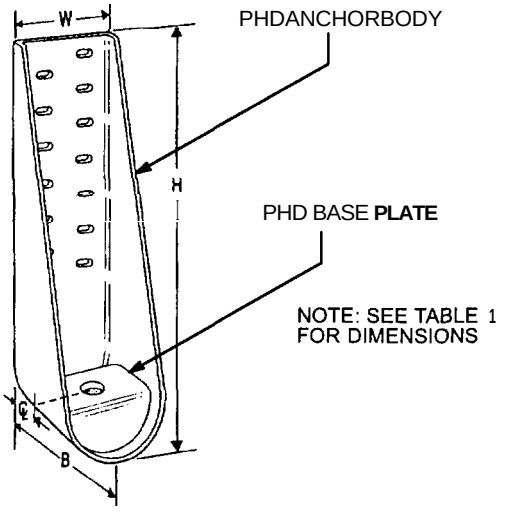
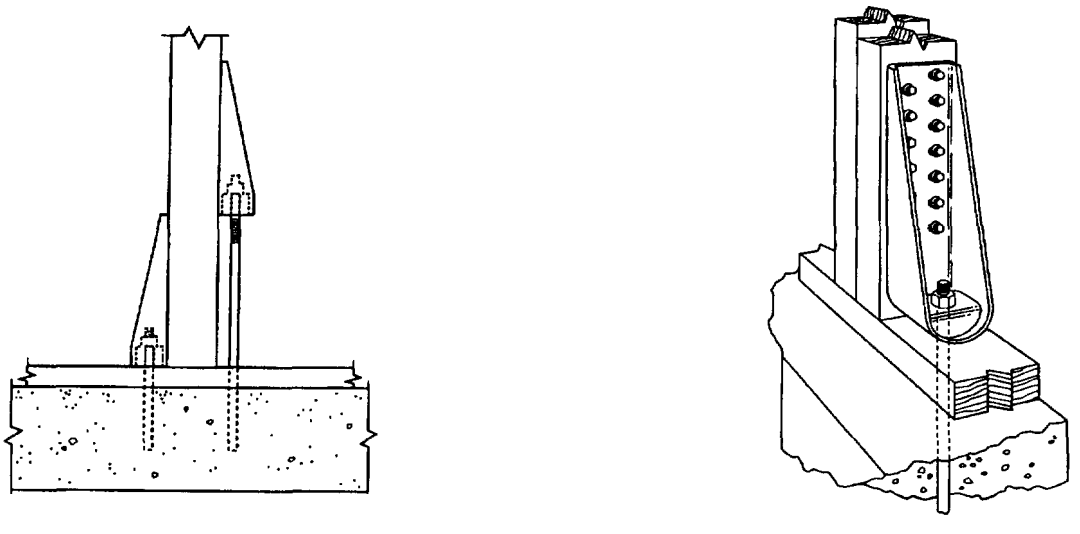


FIGURE 1—TYPICAL PHD HOLDDOWN



'or **SI:** 1 inch = 25.4 mm

FIGURE 2—TYPICAL INSTALLATION DETAIL

Permit Number
Checked By/Date

Generated by REScheck Package Generator

Compliance Certificate

Project Title: Mariners Row Town Houses

Energy Code: **2003 IECC**
Location: **Portland, Maine**
Construction Type: **Multifamily**
Window-to-Wall Ratio: **0.14**
Heating Degree Days: **7378**

Report Date:

Date of Plans:

Project Information:

Builder Information:

Project Notes:

Assembly	Cavity R-Value	Cont. R-Value	Glazing or Door U-Factor
Ceiling:	38.0	0.0	
Wall:	19.0	0.0	
Window:			0.320
Door:			**0.350**
Floor:	19.0	0.0	
Furnace: : ***85*** AFUE			

Statement of Compliance: The proposed building design described here is consistent with the building plans, specifications, and other calculations submitted with the permit application. The proposed building has been designed to meet the 2003 IECC requirements in the REScheck Package Generator and to comply with the mandatory requirements listed in the REScheck Inspection Checklist.

Builder/Designer | Company Name | Date

Generated by REScheck Package Generator

REScheck Inspection Checklist

Project Title: Mariners Row Town Houses

Ceilings:

- ❑ Ceiling: , R-38.0 cavity insulation
  Comments: Fiberglass

Above-Grade Walls:

- ❑ Wall: , R-19.0 cavity insulation
  Comments: Fiberglass

Windows:

- ❑ Window: , U-factor: 0.320
  For windows without labeled U-factors, describe features:
  #Panes ____ Frame Type _____ Thermal Break? ____ Yes ____ No
  Comments: Andersen High Performance Windows

Doors:

- ❑ Door: , U-factor: 0.350
  Comments: Front door exempt

Floors:

- ❑ Floor: , R-19.0 cavity insulation
  Comments: Fiberglass

Heating and Cooling Equipment:

- ❑ Furnace: : 85 AFUE or higher
  Make and Model Number: _____

Air Leakage:

- ❑ Joints, penetrations, and all other such openings in the building envelope that are sources of air leakage must be sealed.
- ❑ Recessed lights must be 1) Type IC rated, or 2) installed inside an appropriate air-tight assembly with a 0.5" clearance from combustible materials. If non-IC rated, the fixture must be installed with a 3" clearance from insulation.

Skylights:

- ❑ Minimum insulation requirement for skylight shafts equal to or greater than 12 inches is R-19.

Vapor Retarder:

- ❑ Required on the warm-in-winter side of all non-vented framed ceilings, walls, and floors.

Materials Identification:

- ❑ Materials and equipment must be installed \plain\f2\fs20 in accordance with the manufacturer's installation instructions.
- ❑ Materials and equipment must be identified *so* that compliance can be determined.
- ❑ Manufacturer manuals for all installed heating and cooling equipment and service water heating equipment must be provided
- ❑ Insulation R-values, glazing U-factors, and heating equipment efficiency must be clearly marked on the building plans or specifications.

Duct Insulation:

- ❑ Supply ducts in unconditioned attics or outside the building must be insulated to R-8.

- ❑ Return ducts in unconditioned attics or outside the building must be insulated to R-4.
- ❑ Supply ducts in unconditioned spaces must be insulated to R-8.
- ❑ Return ducts in unconditioned spaces (except basements) must be insulated to R-2.
- ❑ Where exterior walls are used as plenums, the wall must be insulated to R-8.
- ❑ Insulation is not required on return ducts in basements.

Duct Construction:

- ❑ Duct connections to flanges of air distribution system equipment must be sealed and mechanically fastened.
- ❑ All joints, seams, and connections must be securely fastened with welds, gaskets, mastics (adhesives), mastic-plus-embedded-fabric, or tapes. Tapes and mastics must be rated UL 181A or UL 181B.
  Exception: Continuously welded and locking-type longitudinal joints and seams on ducts operating at less than 2 in. w.g. (500 Pa).
- ❑ The HVAC system must provide a means for balancing air and water systems.

Temperature Controls:

- ❑ Thermostats are required for each dwelling unit (non-dwelling areas must have one thermostat for each system or zone). A manual or automatic means to partially restrict or shut off the heating and/or cooling input to each room shall be provided.

Electric Systems:

- ❑ Separate electric meters are required for each dwelling unit.

Service Water Heating:

- ❑ Water heaters with vertical pipe risers must have a heat trap on both the inlet and outlet unless the water heater has an integral heat trap or is part of a circulating system.
- ❑ Insulate circulating hot water pipes to the levels in Table 1.

Circulating Hot Water Systems:

- ❑ Insulate circulating hot water pipes to the levels in Table 1.

Swimming Pools:

- ❑ All heated swimming pools must have an on/off heater switch and require a cover unless over 20% of the heating energy is from non-depletable sources. Pool pumps require a time clock.

Heating and Cooling Piping Insulation:

- ❑ HVAC piping conveying fluids above 105°F or chilled fluids below 55°F must be insulated to the levels in Table 2.

Table *1:* **Minimum Insulation Thickness for Circulating Hot Water Pipes**

Heated Water Temperature (°F)	Insulation Thickness in Inches by Pipe Sizes			
	Non-Circulating Runouts		Circulating Mains and Runouts	
	up to 1"	up to 1.25	1.5 to 2.0	Over 2"
170-180	0.5	1.0	1.5	2.0
140-169	0.5	0.5	1.0	1.5
100-139	0.5	0.5	0.5	1.0

Table 2: **Minimum Insulation Thickness for HVAC Pipes. Hot Water Pipes**

Piping System Types	Fluid Temp. Range (°F)	Insulation Thickness in Inches by Pipe Sizes			
		2" Runouts	1" and Less	1.25" to 2.0"	2.5 **to 4"**
Heating Systems					
Low Pressure/Temperature	201-250	1.0	1.5	1.5	2.0
Low Temperature	106-200	0.5	1.0	1.0	1.5
Steam Condensate (for feed water)	Any	1.0	1.0	1.5	2.0
Cooling Systems					
Chilled Water, Refrigerant and	40-55	0.5	0.5	0.75	1.0
Brine	Below 40	1.0	1.0	1.5	1.5

NOTES TO FIELD: (Building Department Use Only)

SA925 09250

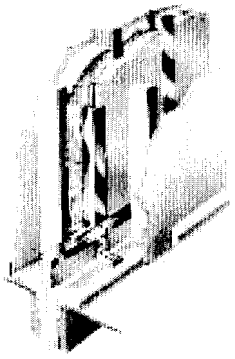
Fire Wall/Party Wall

USG

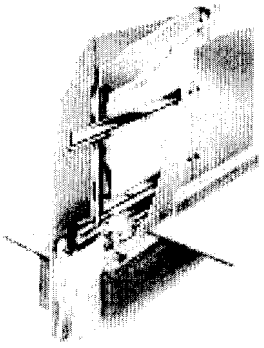
area separation wall systems

USG Area Separation Fire Wall/Party Wall Systems

Description

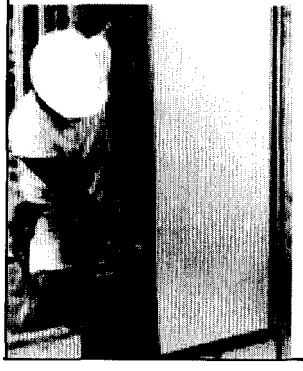


Solid-type



Cavity-type

USG STEEL H-stud slides in place over SHEETROCK Brand Gypsum Liner Panels.



USG Steel C-Runner fits over studs and panels. Second C-runner is then screw-attached back-to-back to lower runner to hold next level of studs and liner panels.

USG Aluminum Breakaway Clip is screw-attached to studs and framing. Under fire exposure, clip breaks away, permits fire damaged wall to fail, leaving separation wall intact

USG Area Separation Fire Wall/Party Wall Systems

Features

These systems may be used in buildings up to four stories high (44') and with all common floor-ceiling heights[1] found in multi-family housing. Both cavity and solid types are suitable for exterior walls with appropriate weather-resistant cladding when building offsets are desired.

Fire Resistance: Both types of Separation Walls offer 2 hr. and 3 hr. fire ratings.

Sound Isolation: STC ratings up to 60 with the solid system and 57 with the cavity system are available.

Lightweight These drywall assemblies weigh at least 50% less than masonry walls, allowing rapid installation.

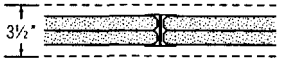
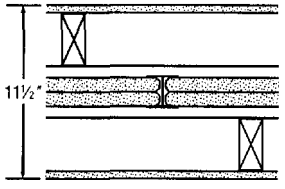
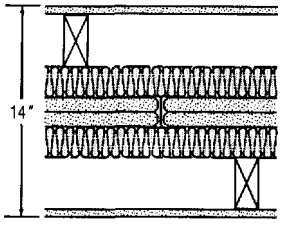
Space-Saving: Use of these assemblies gains valuable floor space. Thickness is 3-1/2" to 4" for Cavity Type Walls, compared to 8" to 12" for a masonry wall without interior finish.

Weather Resistance: Moisture-resistant components permit temporary exposure to inclement weather during construction.

Code Compliance: In compliance with fire resistance requirements under evaluation reports of BOCA Report No. 89-13 and SBCCI PST ES Report No. 9834.

Limitations

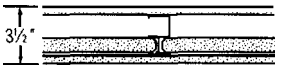
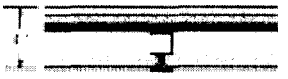
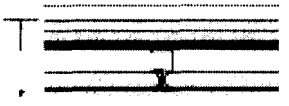
Non-load-bearing; max. frame spacing: 24"; not to be used for shear walls; max. wall height: 44'.

Test Data—Solid Walls	Fire-rated Construction			Acoustical Performance		
	Fire Rating	Detail & Physical Data	Description & Test No.	STC	Description & Test No.	System Reference
	2 hr.*		Solid Area Separation Wall—two 1" SHEETROCK Brand Gypsum Liner Panels set betw USG H-Studs 24" o.c.—min. 3/4" air space both sides separating liner panels from adjacent framing 41 Des **U336**	N/A		A
	2 hr.*		Solid Area Separation Wall—two 1" SHEETROCK Brand Gypsum Liner panels set in USG H-Studs 24" o.c. 2 X 4 wd studs 16" o.c. each side on 2 X 4 plates min. 3/4" from liner panels—optional 1/2" SHEETROCK Brand Gypsum Panels 41 Des **U336**	46 54 58 57 60 45 54 **57**	**TL-88-353** Eased on 2" THERMAFIBER on one side—**TL-88-348** Based on 2 X 4s and 2" SAFB on both sides—**TL-88-347** Based on 2 X 4s and 3" SAFB on one side —**TL-88-351** Based on 2 X 4s and 3" SAFE both sides —**TL-88-350** Based on 2 X 3s, 5/8" gypsum panels, no SAFB—**BBN-730104** Based on 2 x 3s, 5/8" gypsum panels, 2" SAFB one side —**BBN-730103** Based on 2 X 3s. 518" gypsum panels, 2" SAFB both sides —**BBN-730102**	E
	3 **hr*.**		Solid Area Separation Wall—two **1" SHEETROCK** Brand Gypsum Liner Panels set in USG H-Studs 24" o c —2" THERMAFIBER SAFB both sides-bikts appl horiz with Joints stag and staple-att to liner panels—**WHI-495-0393/0394**		N/A	C

[1]These systems do not provide a fire rating for adjacent wood-stud wall construction.

USG Area Separation Fire Wall/Party Wall Systems

Test Data—Cavity Walls

Fire-rated Construction				Acoustical Performance		
Fire Rating	Detail & Physical Data	Description & Test No.	STC	Description & Test No.	System Referen
2 hr.		Cavity Area Separation Wall—1/2" SHEETROCK Brand Gypsum Panels, FIRECODE C core, both sides—1" SHEETROCK Brand Gypsum Liner Panels in USG 25 ga C-H Studs 24" o c —single layer panels ea side appl vert & screw at—joints of gypsum panels stag on opp sides & fin—penm caulked 41 Des U415 wt 9 width 3 1/2"	47	Based on 1" SAFB in cavity—BBN-750704	A
2 hr.		Cavity Area Separabon Wall—1/2" SHEETROCK Brand Gypsum Panels, FIRECODE C core – 1" SHEETROCK Brand Gypsum Liner Panels set in USG 25 ga C H Studs 24" o c —RC 1 chan or equivalent 24" o c screw att to side opp liner panels—1 112" THERMAFIBER SAFB optional for fire rating —single layer panels ea side appl vert & screw att—joints stag on opp sides & fin – prim caulked— UL Des U415 wt 10 width 4"	50	Based on 1-1/2" SAFE in cavity	B
3 hr.		Cavity Area Separation Wall—5/8" SHEETROCK Brand Gypsum Panels, FIRECODE C core—1" SHEETROCK Brand Gypsum Liner Panels in USG 25 ga C-H Studs 24" o c one side—1 1/2" THERMAFIBER SAFE optional for fire rating —RC 1 chan 24" o c screw att to side opp liner panels— 2 layers of 5/8" SHEETROCK Brand Gypsum Panels, FIRECODE C Core, screw att to RC-1 chan—joints fin—perim caulked— UL DES U415 wt 14 width 4 718"	57	Based on 1 1/2" SAFE in cavity BBN 730622	C

Where RC 1 Resilient Channel is indicated, RC-1 or an equivalent may be used. Where insulation is shown in assembly drawings, the specific product is required in the assembly to achieve the stated fire rating. Glass fiber insulation cannot be substituted for THERMAFIBER Insulation.

Sound Transmission Loss

Solid Wall Sound Transmission Loss—db

		Band center frequency—Hz																
Test no.	Method	125	160	200	250	315	400	500	630	800	1000	1250	1600	2000	2500	3150	4000	ST
TL-88-350	Lab	40	45	50	49	53	53	55	57	62	65	67	69	72	70	68	71	6(
TL-88-347	Lab	34	40	48	48	50	52	55	56	61	64	66	69	72	70	69	73	5(
BBN-730102	Lab	36	38	46	52	53	56	57	56	59	59	59	60	59	57	58	66	5
TL-88-351	Lab	36	36	45	47	51	52	54	56	61	64	66	69	72	71	69	73	5
BBN-730103	Lab	34	33	43	51	52	54	57	56	60	60	58	60	60	57	58	66	5
TL-88-348	Lab	31	33	42	45	48	49	52	54	59	63	65	68	70	68	67	71	5
TL-88-346	Lab	29	32	44	45	49	49	50	51	57	62	65	68	71	69	67	69	5
TL-88-344	Lab	29	29	37	43	46	44	47	49	55	61	64	66	70	70	69	71	5(
TL-88-234	Lab	31	28	31	34	38	42	44	49	52	55	58	60	61	62	61	63	4
TL-88-353	Lab	26	25	29	35	39	45	47	52	58	61	65	69	71	67	67	70	4(
BBN-730104	Lab	28	24	28	37	40	46	50	53	58	60	59	60	58	57	59	66	4

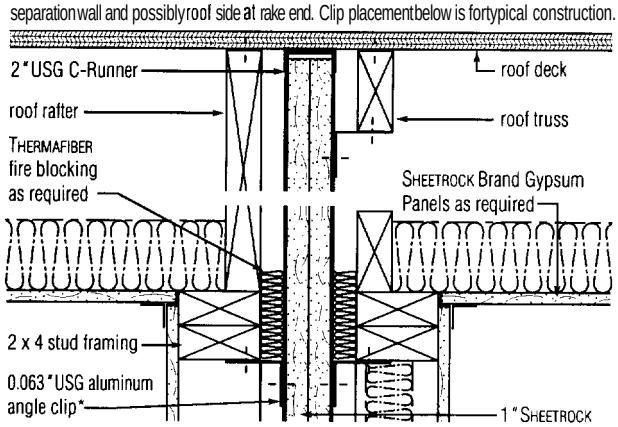
Cavity Wall Sound Transmission Loss—db

		Band center frequency—Hz																
Test no.	Method	125	160	200	250	315	400	500	630	800	1000	1250	1600	2000	2500	3150	4000	ST
BEN-730622	Lab	35	38	44	50	51	55	56	55	61	63	62	65	65	60	57	64	5
BBN-750411	Lab	26	32	42	44	48	51	53	54	58	60	59	61	61	57	56	60	5(
BBN-750704	Lab	23	26	35	39	43	48	49	51	54	58	58	60	60	55	51	53	4

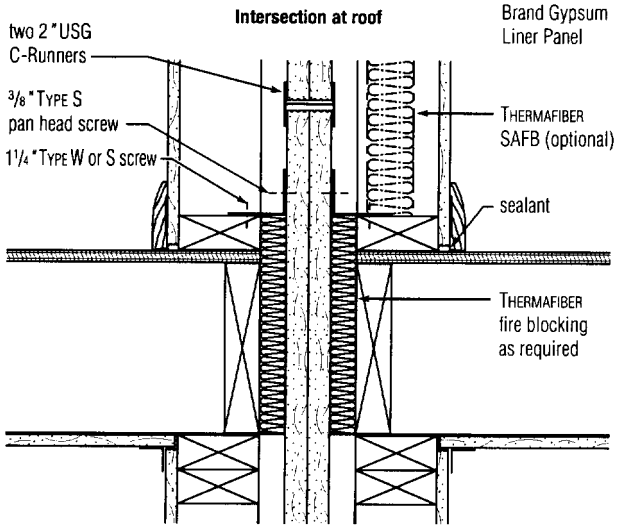
USG Area Separation Fire Wall/Party Wall Systems

Solid System

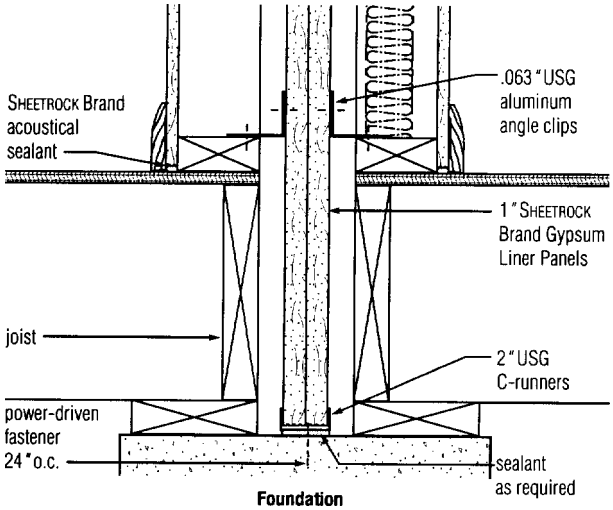
Note: As required by code, 5/8" SHEETROCK Brand gypsum panels, FIRECODE core, may be used as underlayment to untreated roof sheathing with panels extending 4' on both sides of area separation wall and possibly roof side at rake end. Clip placement below is for typical construction.



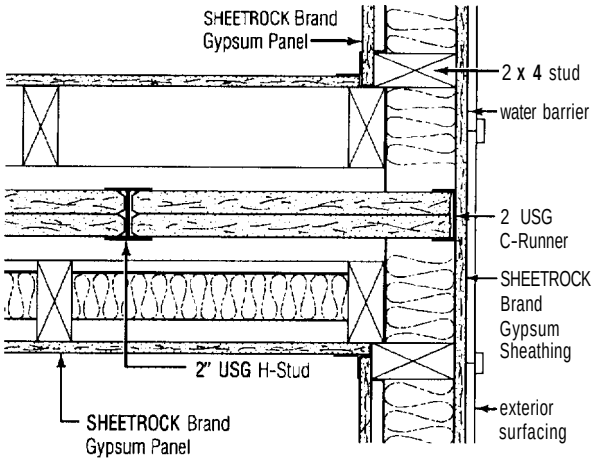
Intersection at roof



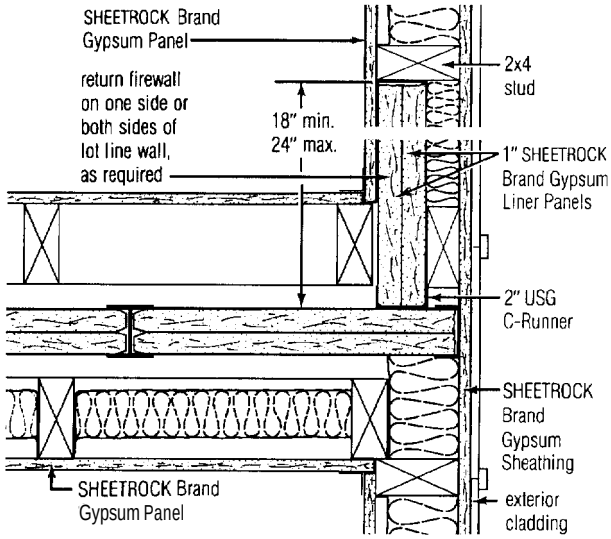
Intermediate floor



Foundation



Exterior wall intersection (as required)

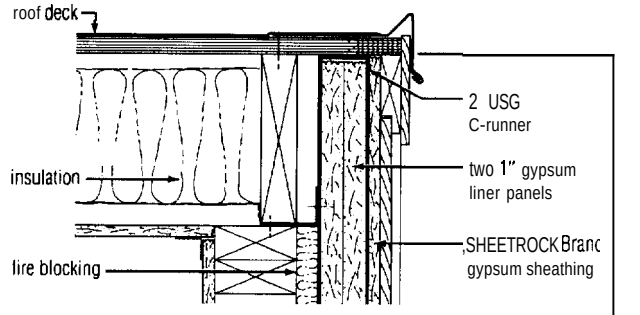


Exterior wall intersection (as required)

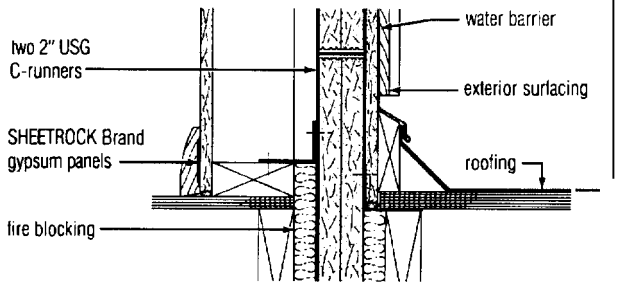
*Note: See illustration on p. 8 for clip spacing requirements

USG Area Separation Fire Wall/Party Wall Systems

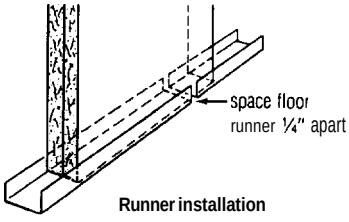
Solid System



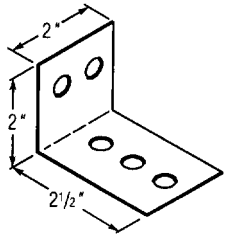
Roof at rake end



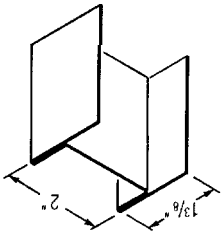
Intermediate floor pitched or flat roof



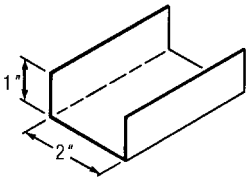
Runner installation



.063" USG Aluminum Breakaway Clip

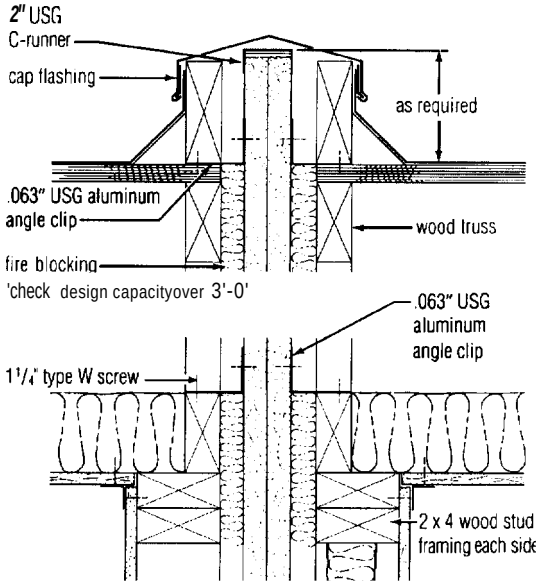


USG Steel H-Stud (HS)

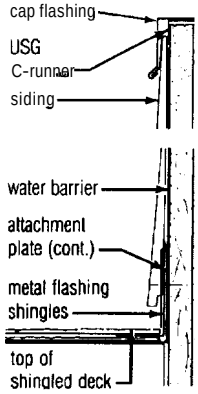


USG Steel C-Runner (CR)

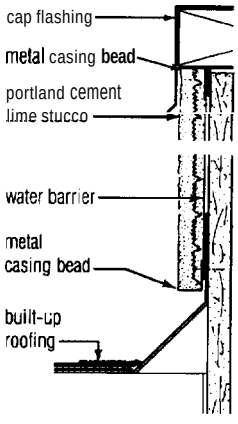
Steel components (solid wall)



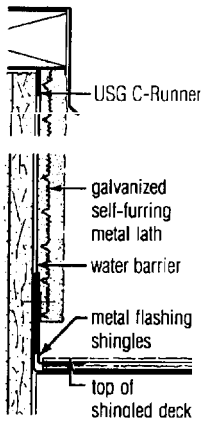
Typical roof parapets
(height as required by code)



Wood siding



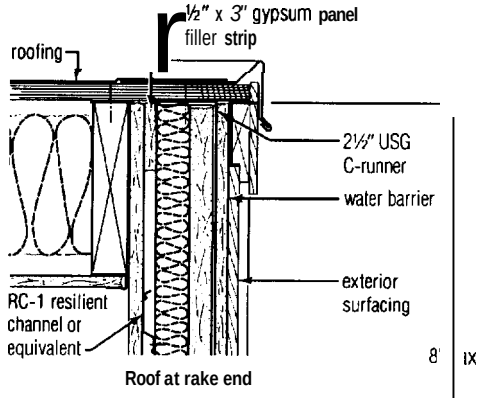
stucco



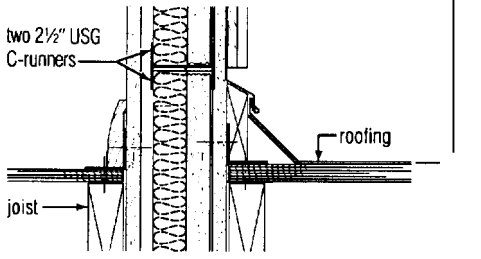
stucco

USG Area Separation Fire Wall/Party Wall Systems

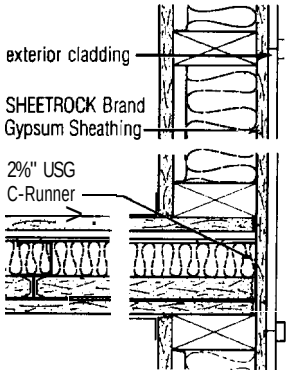
Cavity System



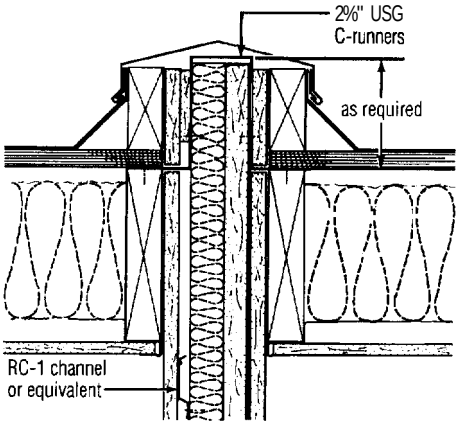
Roof at rake end



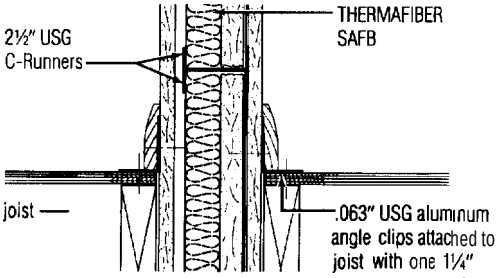
Roof offset



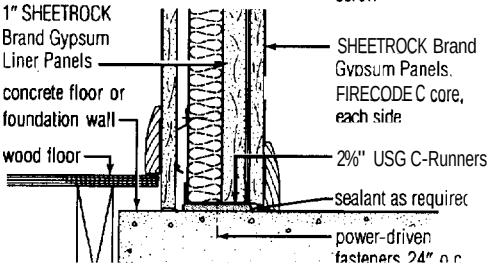
Exterior wall intersection (as required)



Roof parapet

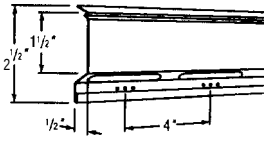


Intermediate floor

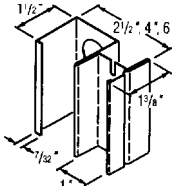


Foundation

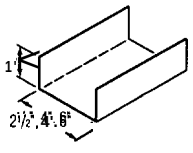
Steel Components (cavity wall)



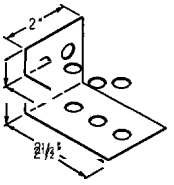
AC-1 Resilient Channel (or equivalent)



USG Steel C-H Stud (CH)

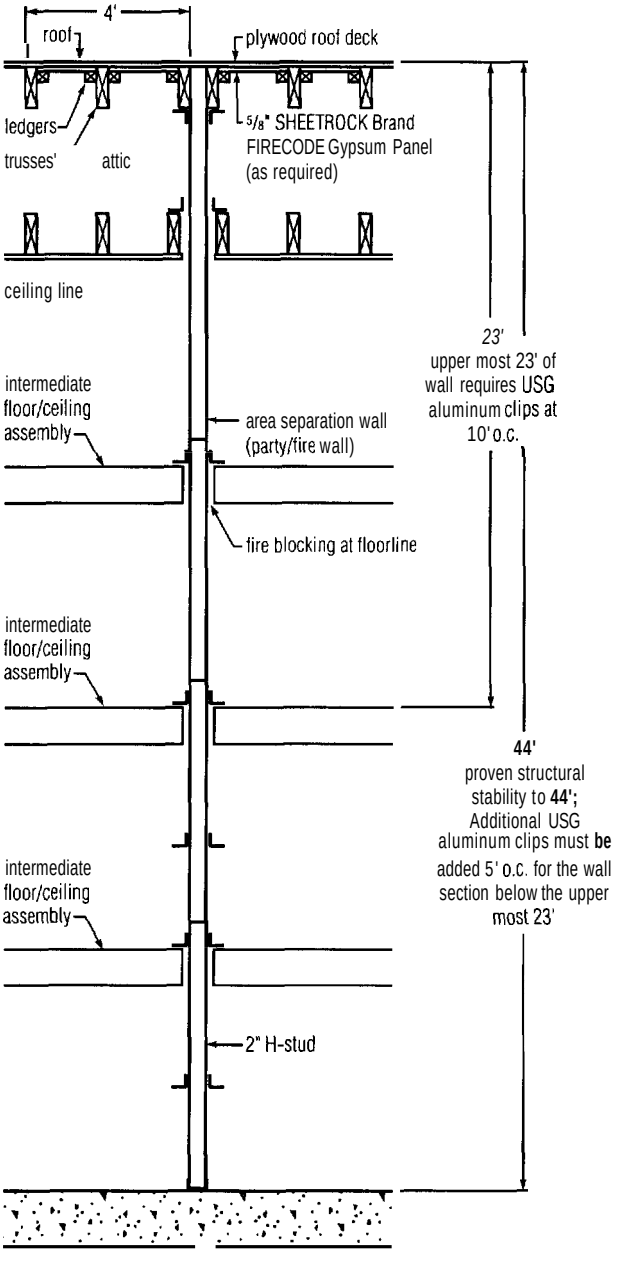


USG Steel C-Runner (CR)



.063" USG Aluminum Angle Clip

2" Solid System Clip Spacing Requirements



Good Design Practices		This section is an overview of design, application, installation and safely concerns that should be addressed when USG's products and systems are used at professional constructions sites or at home in do-it-yourself projects. This section is not intended to be a comprehensive review but instead outline some major issues. No attempt is made at completeness. We recommend that architects and contractors seek the assistance of safety professionals, especially at the professional construction site, because there are many factors to be considered that are not included here. In addition, for more detailed information and references, please refer to Chapter 13 of the USG Gypsum Construction Handbook, Centennial Edition.
Solid and Cavity Systems	**1 System Performance**	United States Gypsum Company will provide certification for published fire, sound and structural data covering systems designed and constructed according to its published specifications. Tests are conducted on USG products manufactured and assembled to meet performance requirements of established test procedures specified by various agencies. System performance following substitution of materials or compromise in assembly design cannot be certified; failure may result under critical conditions.
	2 Clip Attachment	Both solid and cavity area separation wall systems require attachment of aluminum breakaway clips to adjacent wood framing on both sides of the H-Stud or CH-Stud. Clips are attached *to* each stud and vertical C-Runners (not resilient channel) with one 3/8" TYPE S screw, and to adjacent framing with one 1-1/4" TYPE W or TYPE S screw. These systems may be stacked to a maximum height of 44', and normally require a vertical clip spacing of 10' o.c. max. However, when the solid area separation wall has a stacked height exceeding 23', clip spacing along each stud below the 23' stacked height must be reduced to 5' o.c. max. (see illustration on p. 8). When the solid or cavity area separation wall system is used as an exterior wall, with adjacent wood framing in only one side, clips must be spaced as noted in Section 3.4 of the specifications. Note, for this case, that two 3/8" TYPE S screws are required for clip attachment to the vertical steel framing members.
	3 Sound Control Construction	For maximum sound control with both the solid and cavity wall systems, seal the entire perimeter and between the horizontal, back-to-back C-Runners at the intermediate levels with a minimum 1/4" bead of SHEETROCK Brand Acoustical Sealant. Carefully seal around all gaps and cutouts for lights, cabinets, pipes, ducts, electrical boxes, etc. to minimize sound leakage. Back-to-back penetrations of the gypsum panel diaphragm and flanking paths should be eliminated.
	4 Fixture Attachment	Lightweight fixtures and trim should be installed using expandable anchors for screw attachment. Medium and heavyweight fixtures are not recommended on resilient surfaces, but, if required, they should be supported from the primary framing.
	5 Additional Information	See technical folders in this series: *Construction Selector* SA100 for fire and sound-rated systems; Gypsum *Panels and Accessories* folder SA927 for information on systems components; *Textures and Finishing Products* Folder SA933 for texturing information; *THERMAFIBER Life-Safety Fire Containment Systems* Folder SA707 for insulation specifications.
Specifications		
Part 1: General	**1.1 Scope**	Specify to meet project requirements.
	1.2 Qualifications	**A** All materials, unless otherwise indicated, shall be manufactured by United States Gypsum Company, and shall be installed in accordance with its current printed directions. **B** System must be built in accordance with applicable model code research reports.
	1.3 Delivery and Storage of Materials	All materials shall be delivered in their original unopened packages and stored in an enclosed shelter providing protection from damage and exposure to the elements. Damaged or deteriorated materials shall be removed from the premises. Installed panels should be protected from the environment and dry before enclosing the wall. **Warning:** Store all SHEETROCK Brand Gypsum Panels flat. Panels are heavy and can fall over, causing serious injury or death. Do not move unless authorized.
	1.4 Environmental Conditions	In cold weather during gypsum panel joint finishing, temperature within the building shall be maintained within the range of 55 to 70 °F (13 to 21 °C). Adequate ventilation shall be provided to carry off excess moisture.

Part 2: Products

2.1 Materials

A Gypsum Board—48" wide, (1/2") (5/8") thick (Regular) SHEETROCK Brand (Water-Resistant) (FIRECODE C) (FIRECODE) Gypsum Panels—lengths as required.

B Liner Panel—24" wide, 1" SHEETROCK Brand Gypsum Liner Panels, beveled edge, lengths as required.

C USG Steel H-Studs (200HS25), hot-dipped galvanized, lengths as required.

D USG Steel C-H Studs (212CH25) (212CH20), hot-dipped galvanized, lengths as required.

E USG Steel C-Runners (200CR25) (212CR25), hot-dipped galvanized, x 10' length.

F USG Aluminum Angle Clip—2" x 2-1/2" x 0.063" Aluminum Breakaway Clips.

G Joint Treatment—(select a United States Gypsum Company Joint System).

H Fasteners—Screws (1-1/4" Type W) (1", 1-1/4", 1-5/8" Type S) (3/8" Type S, pan head) (Galvanized staples, 9/16 crown, 1-1/2" leg).

I RC-1 Resilient Channel or equivalent.

J THERMAFIBER Sound Attenuation Fire Blankets (1") (1-1/2") (2") (3") x 16" or 24" x 48".

K SHEETROCK Brand Acoustical Sealant.

Part 3 Execution

3.1 Solid Wall

A Foundation—Position 2" C-Runner and securely attach to foundation with power-driven fasteners at both ends and spaced 24" o.c. Space adjacent runner sections 1/4" apart. When specified, caulk under runner at foundation with min. 1/4" bead of acoustical sealant.

B First Floor—Install H-studs and liner panels to a convenient height (max. 2') above the floor line. Install two thicknesses of 1" liner panels vertically in C-Runner with long edges in H-Stud. Erect H-Studs and liner panels alternately until wall is completed. Cap top of panels with horizontal C-Runner. Fasten C-Runner flanges at all corners both sides with 3/8 Type S screws.

C Intermediate **Floors** and **Bottom of** Trusses—Cap top of liner panels and H-Studs with C-Runner. Attach C-Runner for next row of panels to the C-Runner below with end joints staggered at least 12". Fasten the C-Runners together with double 3/8" screws at ends and 24" o.c. Attach all H-Studs to adjacent framing with an aluminum breakaway clip. Clips attaching H-Studs and vertical C-Runners to adjacent wood framing on both sides require attachment to the H-Stud and C-Runner with one 3/8" Type S screw. Clips attaching H-Studs and vertical C-Runners to adjacent wood framing on only one side and with exterior exposure on the other side require attachment to the H-Stud and C-Runner with two 3/8" Type S screws. Attachment to the wood framing is with one 1-1/4" Type W or Type S screw. Locate horizontal C-Runner joint within 2' of the intermediate floor. Install fire blocking between the solid wall system and adjacent framing at floor lines, bottom of truss line, and any other locations required by the applicable code.

D Roof—Continue erecting H-Studs and liner panels for succeeding stories as described. Cut the liner panels and H-Studs to roof pitch and length as necessary to follow the roof pitch. At roof, cap liner panels and H-Studs with C-Runner. Attach all H-Studs to adjacent framing with an aluminum breakaway clip. Clips attaching H-Studs and vertical C-Runners to adjacent wood framing on only one side and with exterior exposure on the other side require attachment to each vertical framing member with two 3/8" Type S screws.

E Sound Attenuation Fire Blankets—For direct attachment to 1" liner panels, install blankets with joints staggered and attach blankets with seven staples driven through each blanket. Blanket installation within cavities is friction fit between stud framing.

F Interior Finish—Apply specified gypsum panels to wood studs and joists in conventional manner.

3.2 Cavity Wall

A Foundation—Position 2-1/2" C-Runner at floor and attach to foundation with power-driven fasteners at both ends and spaced 24" o.c. When specified, caulk under runner at foundation with min. 1/4" bead of SHEETROCK Brand Acoustical Sealant.

B First **Floor**—Install 1" liner panels and steel studs to a convenient height (max. 2') above floor line. Erect liner panels vertically in C-Runner with long edges in groove of C-H stud. Install C-H Studs between panels. Cap top of panels with horizontal C-runner, and cap ends of the wall with C-Runner. Fasten C-Runner flanges at all corners on both sides with 3/8" Type S screws both sides.

C Intermediate **Floors and Bottom of Trusses**—Cap top of liner panels and CH-Studs with C-Runner and fasten CH-Studs to the C-Runner flanges on alternate sides with 3/8 Type S screws. Attach C-Runner for next row of panels to the C-Runner below with end joints staggered at least 12" o.c. Fasten the C-Runners together with double 3/8" screws at ends and 24" o.c. Attach all CH-Studs to adjacent framing with an aluminum breakaway clip. Clips attaching CH-Studs to adjacent wood framing on both sides require attachment to the CH-Stud (not the resilient channel) with one 3/8" Type S screw. Clips attaching CH-Studs and vertical C-Runners to adjacent wood framing on only one side and with exterior exposure on the other side require attachment to the CH-Stud and C-Runner (not the resilient channel) with two 3/8 Type S screws. Attachment to the wood framing is with one 1-1/4" Type W or Type S screw. Locate horizontal C-Runner joint within 2' of the intermediate floor. As required by the applicable code, install fire blocking in the wall cavity at floor lines, bottom-of-truss line, and any other required locations.

D Roof—Continue erecting CH-Studs and liner panels for succeeding stories as described. Cut the liner panels and CH-Studs to roof pitch and length as necessary to follow the roof pitch. At roof, cap liner panels and CH-Studs with C-Runner. Attach all CH-Studs and vertical C-Runners to adjacent framing with an aluminum breakaway clip. Clips attaching CH-Studs and C-Runner to adjacent wood framing on only one side and with exterior exposure on the other side require attachment to the CH-Stud and vertical C-Runner (not the resilient channel) with two 3/8" Type S screws.

E Sound Attenuation Fire Blankets—When specified, install blankets in cavity butting blankets closely and filling all voids.

F Resilient Channels—When specified, install RC-1 Resilient Channels or equivalent horizontally to face side of studs, 6" below ceiling joists and max. 24" o.c. Attach channels to C-H Studs with 3/8" Type S screws driven through holes in mounting flange. Extend channels to ends of runs and attach to C-Runners. Splice channel by nesting directly over stud; screw-attach through both flanges. Reinforce with screws at both ends of splice.

G Gypsum Panels—Apply 1/2" SHEETROCK Brand Gypsum Panels, FIRECODE C Core, vertically to both sides of C-H Studs. Stagger joints on opposite partition sides. Fasten panels with 1" Type S screws spaced 12" o.c. in field and along edges and runner flanges.

H Resilient Single-layer—Apply 1/2" SHEETROCK Brand Gypsum Panels, FIRECODE C Core vertically to resilient channels and fasten with 1-1/4" Type S screws placed 6 from C-H Studs and 12" o.c. Do not place screws directly over C-H Studs.

I Resilient Double-layer—Apply 5/8" SHEETROCK Brand Gypsum Panels, FIRECODE C Core base layer perpendicular to resilient channels with joints staggered; fasten with 1-1/4" Type S screws placed 6 away from stud and 1 2 o.c. Apply 5/8" gypsum panel face layer vertically over base layer with edge joints staggered and attach with 1-5/8" Type S screws spaced 12" o.c. and staggered from those in base layer.

3.3 Accessory Application

A **Joint System**—Finish all face panel joints and internal angles with a United States Gypsum Company Joint System installed according to manufacturer's directions. Treat exposed fasteners on face layers and finish corner bead, control joints, and trim as required.

B **Metal** Trim–Where partition or ceiling terminates against masonry or other dissimilar material, apply metal trim over drywall edge; fasten with nails or galvanized staples 9 o.c.

C Control Joints—Gap gypsum panels behind joint and back with double framing. Attach control joint on the face layer with nails, screws, or 9/16" galvanized staples spaced 6 o.c. on both flanges along entire length of joint.

3.4 Exterior Wall

Both solid and cavity systems are suitable for exterior walls with an appropriate water barrier installed over the system and under an exterior cladding. Exterior exposure is limited to 15 psf wind load and requires vertical clip spacing of 4' o.c. maximum. Exterior exposure requires attachment of the aluminum breakaway clips to each vertical steel framing member (do not attach clips to resilient channels) with two 3/8" Type S screws. Attachment of the clips to adjacent wood framing is with one 1-1/4" Type W or Type S screw. Uppermost clips should be placed as close to the roof line as practical attachment allows.

Technical Service
800 USG.4YOU

Website
www.usg.com

Samples/Literature
888 874.2450

Samples/Literature E-mail
samplit@usg.com

Samples/Literature/Fax
888 874.2348

Customer Service
800 950.3839

Metric Specifications
USG Corporation, through its operating subsidiaries, will provide metric conversions on its products and systems to help specifiers match metric design sizes. In addition, some products are available in metric dimensions from selected manufacturing plants. Refer to SA100 *Construction Selector* for additional information and a Table of Metric Equivalents.

Trademarks
The following trademarks used herein are owned by United States Gypsum or a related company USG, FIRECODE, SHEETROCK. THERMAFIBER IS a trademark of THERMAFIBER LLC.

Notice
We shall not be liable for incidental and consequential damages, directly or indirectly sustained, nor for any loss caused by application of these goods not in accordance with current printed instructions or for other than the intended use. Our liability is expressly limited to replacement of defective goods. Any claim shall be deemed waived unless made in writing to us within thirty (30) days from date it was or reasonably should have been discovered

Note
All products described here may not be available in all geographic markets. Consult your local sales office or representative for information.

Safety First!
Follow good safety and industrial hygiene practices during handling and installing all products and systems. Take necessary precautions and wear the appropriate personal protective equipment as needed. Read material safety data sheets and related literature on products before specificabon and/or installation

USG

Manufactured by
United States Gypsum Company
125 South Franklin Street
Chicago, IL 60606

SA925/rev. 3-02
Printed in U.S.A.

February 20. 2004

Fresh Fish. LLC
Ron and Christine Spinella, Partners
377 Cumberland Ave
Portland, ME 04101

Planning Department
City of Portland
389 Congress St
Portland, ME 04101

Site Plan Review Written Statement
Prepared for Proposed Project:
Mariners Row

This statement will introduce plans for an R-6 Infill development and address items on the Site Plan Checklist that are not found on other documentation provided in the packet. (Checklist Item #33)

Manners Row is envisioned as a row of three joined townhouses. The exterior design incorporates many features of the 19th and 20th century neighborhood that it will be joining. The design calls for two-story bays, two-over-two windows and front entry stairs that flow directly to the sidewalk, which is in keeping with the rhythms of the street and the architectural features of the neighborhood. Each townhouse will be two stories with a full basement and a finished dormered attic. Two parking spaces will be provided directly behind each unit The units consist of an entry foyer. living room. dining room. kitchen and bath on the first floor and two large bedrooms and large bath on the second floor. The half story, or finished attic area will be dormered on the rear side of the building and will provide an office or family room. From the parking area you can enter the unit from a first floor deck, and on *the* second floor an additional cantilevered deck is oriented to face the harbor views. (Item #34) For a fuller overview of the design, please refer to the architect's description of the project. The units will be established as a residential condominium association. (Item #35)

The project is planned for the corner *of* Tyng and York Street. The original building on this site, which after several small fires, was demolished 30 years ago. It was a three-story building with an ell and small barn. This building faced Tyng Street. Mariners Row will also be sited an Tyng Street, with the address of 25-27-29 Tyng Street. The parking area is entered from York Street. The lot is described by the City of Portland Assessors Map as Chart 44. Block C, Lot 6; and the Cumberland County Registry of Deeds as Book 194 18, Page 342. The lot meets all the set back requirements of the R-6 Infill Zone. please see the architects comments regarding zoning. The project will be built and owned by Fresh Fish, LLC, Ron and Christine Spinella, Partners. Leaping Fish. LLC, Ron and Christine Spinella, Partners, own the two abutting properties.

The site is currently vacant. The neighboring properties have used this lot for a garden and occasional visitor parking. The lot is 5,157square feet in size and has a natural gentle slope to the south and a somewhat steeper slope to the east. The north *side* of the lot is defined by two stacked stone retaining walls. The site work for the foundation for the project will include meeting the first wall and making a transition from one wall to the other. It is anticipated a slight drop-off may be created at this point and that will he fenced for safety. Each unit of Mariners Row will step down along the south slope. (Item # 30 and *36)* The lot is typical for the peninsula; there are no unusual natural features, and the site does not appear to present any drainage or topographical problems. (Item #9and 41) The civil engineers report addressing the site and current drainage patterns is in progress A report from a geo-tech will be forwarded as it arrives It is anticipated the soils are primarily fill. (Item #8)

The footprint for this project is 7413 square feet including all three houses. Utilities for this project are located along Tyng Street as shown on the survey. The Northern Utilities has confirmed the gas line is adequate for the proposed housing. An existing fire hydrant is located directly in front of the proposed project. Central Maine Power has been to the site. Their utility pole is in place in front of the last town house, 29 Tyng Street, and their opinion was that it would be a simple matter to come from that pole and bury a line to the last building. This then would feed down to the other two houses. All the meters would be located on the side of 29 Tyng. The water district has also responded in writing, confirming an adequate water supply in the street. An opinion of the sewer service is expected next week. The letters from the utilities are attached. (Item # 13 and 40)

Lighting will be typical for residential housing with front and rear exterior lights on the buildings, controlled by the residents of each unit. Disposal of waste generated by this project will be that typical of residential use and will be handled and disposed of by each resident. Private trash receptacles will be kept by each unit. (Item # 31, 12 and 39)

Landscaping will consist primarily of shrubs in the front, rear and side of 25 Tyng Street. and be used to screen the first floor from the street and in the rear to soften the impact of the parking next to the house. The area between the last unit, 29 Tyng Street and the next house will be grass. The type of shrub and a specific landscaping plan has not been selected as *yet*. The plantings will be something native to the area and typical for the neighborhood. (Item # 22 through 29)

Mariners Row will be set up as a homeowners association or condominium association with specific guidelines for shared responsibility for upkeep of public sidewalks and the shared grounds and driveway. Except for a common wall each unit will be individually owned. In order to maintain harmony, the condominium documents will specify that any changes to the exterior of a unit will have conform to the (proposed) design requirements for the R-6 Infill Zone. A tentative start date for the excavation to begin is mid-August, with completion nine to twelve months later. (Item # 38 and 42)

The driveway for this project is shared with the abutting property on York Street. Cars from both properties are able to pull in, park, and back up into the drive, to exit the site facing forward to the street. Each property will give the other permission a *to* use the driveway. Richard Abbondanza, Esq., will draw up this agreement as well as the condo documentation. The easement will not present a problem as both properties are owned by the Spinellas. (Item #20)

There are no known state or federal regulatory approvals required for completion of this project and there are no known pending applications or permits required. (Item # 43 through 46)

Respectfully submitted,

Ron Spinella

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

ACCESSIBILITY CERTIFICATE

Designer: RONALD T. BEAUCHESNE P.E.

Address of Project: #25 - #29 TYING STREET

Nature of Project: RESIDENTIAL

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

Signature:

Title: PROFESSIONAL ENGINEER

Firm: NORTHEAST DESIGN DRAFTING

Address: 55 SUMAC ST
PORTLAND, ME 04103

Phone: (207) 797-7776

(SEAL)
STATE OF MAINE
RONALD
T.
BEAUCHESNE
NO. 4098
REGISTERED
PROFESSIONAL ENGINEER

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

FROM DESIGNER: RONALD T. BEAUCHESNE P.E.

DATE: 5/5/05

Job Name: MARINERS ROW TOWNHOUSES

Address of Construction: #25 - #29 TYING STREET

2003 *International Building Code*

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

Building Code and Year 2003 IRC Use Group Classification(s) R

Type of Construction WOOD FRAME

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

Is the Structure mixed use? NO if yes, separated or non separated (see Section 302.3)

Supervisory alarm system? NO Geotechnical/Soils report required?(See Section 1802.2)

STRUCTURAL DESIGN CALCULATIONS

N/A Submitted for all structural members (106.1, 106.1.1)

DESIGN LOADS ON CONSTRUCTION DOCUMENTS (1603)

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

Floor Area Use	Loads Shown
1ST FLR	
ATTIC	W PSF
EXTERIOR BALCONIES	60 PSF
ROOM OTHER THAN SLEEPING	40 PSF
SLEEPING RM & STAIRS	30 PSF 40 PSF

Wind loads *(1603.1.4, 1609)*

1609.6 Design option utilized (1609.1.1, 1609.6)

100 MPH Basic wind Speed *(1809.3)*

1.0 Building category and wind Importance factor, I_w (Table *1604.5*, 1609.5)

B Wind exposure category *(1609.4)*

+.55, -.55 Internal pressure coefficient *(ASCE 7)*

16.6, -20.1 Component and cladding pressures *(1609.1.1, 1609.6.2.2)*

17.8 Main force wind pressures (7603.1.1, *1609.6.2.1*)

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

NOW Design option utilized *(1614.1)*

II Seismic use group ("Category") *(Table 1604.5, 1616.2)*

.167 Spectral response coefficients, S_{DS} & S_{D1} *(1615.1)*

E Site class *(1615.1.5)*

N/A Live load reduction *(1603.1.1, 1607.9, 1607.10)*

SNOW GOVERNS Roof *live* loads *(1603.1.2, 1607.11)*

Roof snow loads *(7603.7.3, 1608)*

50 Ground snow load, P_g (1608.2)

40 If P_g > 10 psf, flat-roof snow load, P_f *(1608.3)*

1.0 If P_g > 10 psf, snow exposure factor, C_e *(Table 1608.3.1)*

1.0 If P_g > 10 psf, snow load Importance factor, I_s *(Table 1604.5)*

1.0 Roof thermal factor, C_t *(Table 1608.3.2)*

1.0 Sloped roof snowload, P_s *(1608.4)*

B Seismic design category *(1616.3)*

L Basic seismic-force-resisting system *(Table 1617.6.2)*

2 Response modification coefficient, R_I and deflection amplification factor, C_d *(Table 1617.6.2)*

SIMPLIFIED Analysis procedure *(1616.6, (1617.5))*

151K Design base shear (1617.4, *1617.5.1*)

Flood loads *(1603.1.6, 1612)*

NA Flood hazard area (1612.3)

NA Elevation of structure

Other loads

NA Concentrated loads (1607.4)

NA Partition loads (1607.5)

NA Impact loads *(1607.8)*

NA Misc. loads (*Table 1607.6, 1607.8.1, 1607.7, 1607.12, 1607.13, 1610, 1611, 2404*)

February 70 2004

Fresh Fish, LLC
Ron and Christine Spinella, Partners
377 Cumberland Ave
Portland, ME 04101

Planning Department
City of Portland
389 Congress St.
Portland, ME 04101

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Prepared for Proposed Project:
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The footprint for this project is 7413 square feet including all three houses. Utilities for this project are located along Tyng Street as shown on the survey. The Northern Utilities has confirmed the gas line is adequate for the proposed housing. An existing fire hydrant is located directly in front of the proposed project. Central Maine Power has been to the site. Their utility pole is in place in front of the last town house, 29 Tyng Street, and their opinion was that it would be a simple matter to come from that pole and bury a line to the last building. This then would feed down to the other two houses. All the meters would be located on the side of 29 Tyng. The water district has also responded in writing, confirming an adequate water supply in the street. An opinion of the sewer service is expected next week. The letters from the utilities are attached. (Item # 13 and **40)**

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Landscaping will consist primarily of shrubs in the front, rear and side of 25 Tyng Street, and be used to screen the first floor from the street and in the rear to soften the impact of the parking next to the house. The area between the last unit, 29 Tyng Street and the next house will be grass. The type of shrub and a specific landscaping plan has not been selected as yet. The plantings will be something native to the area and typical for the neighborhood. (Item # 22 through 29)

Mariners Row will be set **rip** as a homeowners association or condominium association with specific guidelines for shared responsibility for upkeep of public sidewalks and the shared grounds and **driveway.** Except **for** a common wall each unit will be individually owned. In order to maintain harmony, the condominium documents will specify that any changes to the exterior of a unit will have conform to the (proposed) design requirements for **the** R-6 Infill Zone. A tentative start **date** for the excavation to begin is mid-August, with completion nine to twelve months later. (Item # **38** and **42)**

The driveway for **this project** is shared with the abutting property on York Street. Cars from both properties are able to **puli** in, **park,** and back **up** into the drive, *to* **exit** the site facing forward to die street. Each property will give the other permission a to use the driveway. Richard Abbondanza, Esq., will draw up this agreement as well as the condo documentation. The easement will not present a problem as both properties are owned by the Spinellas. (Item #20)

There are no known state or Federal regulatory approvals required for completion of this project and there are no known pending **applications** or permits **required** (Item # 43 through 46)

Respectfully submitted,

Ron Spinella

CITY **OF** PORTLAND, MAINE
DEVELOPMENT REVIEW APPLICATION
PLANNING DEPARTMENT PROCESSING FORM
Planning **Copy**

2004-0048
Application I D Number

03/16/2004
Application Date

Ron Spinella
Applicant

377 Cumberland Avenue, Portland, **ME 04101**
Applicant's Mailing Address

Mariners Row
Project Name/Description

Consultant/Agent

25 - 25 Tyng **St,** Portland, Maine
Address of Proposed Site

Applicant Ph: **(207) 671-9902** Agent Fax:
Applicant or Agent Daytime Telephone, Fax

044 C006001
Assessor's Reference Chart-Block-Lot

Proposed Development (check all that apply): ☑ New Building | Building Addition | Change Of Use ☑ Residential | Office | Retail | Manufacturing | Warehouse/Distribution | Parking Lot | Other (specify)

5,304 s.f.
Proposed Building square Feet or # of Units

Acreage of Site

R6
Zoning

Check Review Required:

☑ Site Plan (major/minor) | ☑ Subdivision # of lots **3** | PAD Review | **14-403** Streets Review
Flood Hazard | Shoreland | HistoricPreservation | DEP Local Certification
Zoning Conditional Use (ZBA/PB) | Zoning Variance | Other

Fees Paid: Site Plan **$500.00** Subdivision Engineer Review **$165.93** Date **09/14/2004**

Planning Approval Status:

Reviewer Rick Knowland

Approved | ☑ Approved w/Conditions See Attached | Denied

Approval Date **06/22/2004** Approval Expiration **06/22/2005** Extension to ☑ Additional Sheets Attached

☑ OK to Issue Building Permit Rick Knowland signature **09/10/2004** date

Performance Guarantee | Required* | Not Required

* **No** building permit may be issued until a performance guarantee has been submitted as indicated below

Performance Guarantee Accepted
date amount expiration date

Inspection Fee Paid
date amount

Building Permit Issue
date

Performance Guarantee Reduced
date remaining balance signature

Temporary Certificate of Occupancy
date Conditions (See Attached) expiration date

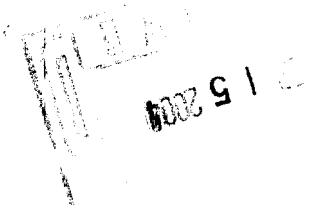
Final Inspection
date signature

Certificate Of Occupancy
date

Performance Guarantee Released
date signature

Defect Guarantee Submitted
submitted date amount expiration date

Defect Guarantee Released
date signature



CITY OF PORTLAND, MAINE
DEVELOPMENT REVIEW APPLICATION
PLANNING DEPARTMENT PROCESSING FORM
ADDENDUM

2004-0048
Application I. D. Number

03/16/2004
Application Date

Ron Spinella
Applicant
377 Cumberland Avenue, Portland, ME **04101**
Applicant's Mailing Address

Mariners **Row**
Project Name/Description

Consultant/Agent
Applicant Ph: (207) **671-9902** Agent Fax:
Applicant or Agent Daytime Telephone, Fax

25 - 25 Tyng **St,** Portland, Maine
Address of Proposed Site
044 C006001
Assessor's Reference: Chart-Block-Lot

Approval Conditions of Planning

1 1. Applicant shall revise plan for conformance with the comments of James Seymour, Development Review Coordinator.
2. Applicant shall revise plan for conformance with comments of Jeff Tarling, City Arborist.
3. Applicant shall submit homeowners association documents and a common driveway easement for review and approval by Corporation Counsel.
4. Applicant shall submit a revised subdivision recording plat for Planning Staff review and approval.

CITY OF PORTLAND, MAINE
DEVELOPMENT REVIEW APPLICATION
PLANNING DEPARTMENT PROCESSING FORM
DRC Copy

2004-0048
Application I. D. Number

03/16/2004
Application Date

Ron Spinella
Applicant

377 Cumberland Avenue, Portland, ME 04101
Applicant's Mailing Address

Mariners Row
Project Name/Description

Consultant/Agent

25 - 25 Tyng St, Portland, Maine
Address of Proposed Site

Applicant Ph: (207) 671-9902 **Agent Fax:**
Applicant or Agent Daytime Telephone, Fax

044 C006001
Assessor's Reference: Chart-Block-Lot

Proposed Development (check all that apply): ☑ New Building | Building Addition | Change Of Use ☑ Residential | Office | Retail | Manufacturing | Warehouse/Distribution | Parking Lot | Other (specify)

5,304 s.f.
Proposed Building square Feet or # of Units

Acreage of Site

R6
Zoning

Check Review Required:

☑ Site Plan (major/minor)
☑ Subdivision # of lots **3**
PAD Review
14-403 Streets Review
Flood Hazard
Shoreland
HistoricPreservation
DEP Local Certification
Zoning Conditional Use (ZBA/PB)
Zoning Variance
Other

Fees Paid: Site Plan **$500.00** Subdivision Engineer Review **$165.93** Date **09/14/2004**

DRC Approval Status:

Reviewer **Rick Knowland**

☑ **Approved**
Approved w/Conditions See Attached
Denied

Approval Date **06/22/2004** Approval Expiration **06/22/2005** Extension to Additional Sheets Attached

☑ Condition Compliance **Rick Knowland** signature **09/10/2004** date

Performance Guarantee **Required*** **Not Required**

* No building permit may be issued until a performance guarantee has been submitted as indicated below

Performance Guarantee Accepted
date amount expiration date

Inspection Fee Paid
date amount

Building Permit Issue
date

Performance Guarantee Reduced
date remaining balance signature

Temporary Certificate of Occupancy
date Conditions (See Attached) expiration date

Final Inspection
date signature

certificate Of Occupancy
date

Performance Guarantee Released
date signature

Defect Guarantee Submitted
submitted date amount expiration date

Defect Guarantee Released
date signature

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

Planning and Development Department
Lee D. Urban, Director

Planning Division
Alexander Jaegerman, Director

April 26,2005

Mr. Ron Spinella
Fresh Fish, LLC
377 Cumberland Avenue
Portland **ME** 04101

RE: Mariners Row Residential Development, 25-29 Tyng Street and 197-199 York Street
#2004-0048; CBL: 44-C-006

Dear Ron:

Thank you for your recent letter requesting an extension to your site plan approval for the Mariner's Row residential development located in the vicinity of 25-29 Tyng Street. I understand that your request is based on construction planning delays that you have experienced.

In my capacity as the Planning Division Director for the City of Portland, I am granting your request to extend your approval one year to June 22,2006.

If you have any questions, please contact Rick Knowland at 874-8725.

Sincerely,

Alexander Jaegerman
Planning Division Director

cc: Lee D. Urban, Planning and Development Department Director
Sarah Hopkins, Development Review Services Manager
Richard Knowland, Senior Planner
Jay Reynolds, Development Review Coordinator
Marge Schmuckal, Zoning Administrator
Inspections Division
Michael Bobinsky, Public Works Director
Traffic Division
Eric Labelle, City Engineer
Jeff Tarling, City Arborist
Penny Littell, Associate Corporation Counsel
Fire Prevention
Assessor's Office
Approval Letter File

DEPT. OF BUILDING INSPECTION
CITY OF PORTLAND, ME
APR 28 2005
RECEIVED

CITY OF PORTLAND, MAINE
DEVELOPMENT REVIEW APPLICATION
PLANNING DEPARTMENT PROCESSING FORM
Zoning Copy

2004-0048
Application I. D. Number

311612004
Application Date

Mariner's Row
Project Name/Description

Ron Spinella
Applicant

377 Curnberland Avenue, Portland, ME **04101**
Applicant's Mailing Address

Consultant/Agent

Applicant Ph: **(207) 671-9902** Agent Fax:
Applicant or Agent Daytime Telephone, Fax

25 - 25 Tyng **St,** Portland, Maine
Address of Proposed Site

044 C006001
Assessor's Reference: Chart-Block-Lot

Proposed Development (check all that apply): ☐ New Building ☐ Building Addition ☐ Change Of Use ☑ Residential ☐ Office ☐ Retail ☐ Manufacturing ☐ Warehouse/Distribution ☐ Parking Lot ☐ Other (specify)

5,304 s.f. | | **R6**
Proposed Building square Feet or # of Units | Acreage of Site | Zoning

Check Review Required:

☐ Site Plan (major/minor) ☑ Subdivision # of lots **3** ☐ PAD Review ☐ 14-403 Streets Review

☐ Flood Hazard ☐ Shoreland ☐ HistoricPreservation ☐ DEP Local Certification

☐ Zoning Conditional Use (ZBA/PB) ☐ Zoning Variance ☐ Other

Fees Paid: Site Pla $500.00 Subdivision Engineer Review Date **311712004**

Zoning Approval Status:

Reviewer Marge S. 3/17/04

☐ Approved ☐ Approved **w/Conditions** See Attached ☐ Denied

Approval Date Approval Expiration Extension to ☐ Additional Sheets Attached

☐ Condition Compliance
signature date

Performance Guarantee ☐ Required* ☐ Not Required

* No building permit may be issued until a performance guarantee has been submitted as indicated below

☐ Performance Guarantee Accepted	date	amount	expiration date
☐ Inspection Fee Paid	date	amount	
☐ Building Permit Issue	date		
☐ Performance Guarantee Reduced	date	remaining balance	signature
☐ Temporary Certificate of Occupancy	date	☐ Conditions (See Attached)	expiration date
☐ Final Inspection	date	signature	
☐ Certificate Of Occupancy	date		
☐ Performance Guarantee Released	date	signature	
☐ Defect Guarantee Submitted	submitted date	amount	expiration date
☐ Defect Guarantee Released	date	signature	

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

Who billing will be sent to: (Company, Contact Person, Address, Phone #)

Fresh Fish LLC
Christine Spinella
377 Cumberland Ave.
Portland, Me 04101
773-4773

Submittals shall include *(9)* separate folded packets of the following:

a. **copy of application**
b. **cover letter stating the nature of the project**
c. **site plan containing the information found in the attached sample plans check list**

Amendment to Plans: Amendment applications should include 6 separate packets of the above (a, b, & c)
ALL PLANS MUST BE FOLDED NEATLY AND IN PACKET FORM

Section 14-522 of the Zoning Ordinance outlines the process, copies are available at the counter at .50 per page (8.5x11) you may also visit the web site: ci.portland.me.us chapter 14

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

Signature of applicant: Christine Spinella | **Date:** MAR. 16, 2004

This application is for site review ONLY, a building Permit application and associated fees will be required prior to construction.

February 20, 2004

Fresh Fish, LLC
Ron and Christine Spinella, Partners
377 Cumberland Ave.
Portland, ME **04**101

Planning Department
City of Portland
389 Congress St.
Portland, **ME** 04101

Site Plan Review Written Statement
Prepared for Proposed Project:
Mariners Row

This statement will introduce plans for an **R-6** Infill development and address items on the Site Plan Checklist that are not found on other documentation provided in the packet. (Checklist Item #33)

Mariners Row is envisioned **as** a row of three joined townhouses. The exterior design incorporates many features of the 19th and 20th century neighborhood that it will be joining. The design calls for two-story bays, two-over-two windows and front entry stairs that flow directly to the sidewalk, which is in keeping with the rhythms of the street and the architectural features of the neighborhood. Each townhouse will be *two* stories with a **full** basement and a finished dormered attic. Two parking spaces will be provided directly behind each unit. The units consist of an entry foyer, living room, dining room, kitchen and bath on the first floor and two large bedrooms and large bath on the second floor. The half story, **or** finished attic area will be dormered on the rear side of the building and will provide an office or family room. From the parking area you can enter the unit from a first floor deck, and on the second floor **an** additional cantilevered deck is oriented to face the harbor views. (Item #34) For a fuller overview of the design, please refer to the architect's description of the project. The units will be established as a residential condominium association. (Item #35)

The project is planned for the comer of Tyng and York Street. The original building on this site, which after several small fires, was demolished **30** years ago. It was a three-story building with an ell and small barn. This building faced Tyng Street. Mariners Row will also be sited on Tyng Street, with the address of 25-27-29 Tyng Street. The parking area **is** entered from York Street. The lot is described by the City of Portland Assessors Map as Chart **44,** Block C, Lot ***6;*** and the Cumberland County Registry **of** Deeds as **Book** 19418, Page 342. The lot meets all the set back requirements of the R-6 Infill Zone, please see the architects comments regarding zoning. The project will be built and owned by Fresh Fish, **LLC,** Ron and Christine Spinella, Partners. Leaping Fish, **LLC,** Ron and Christine Spinella, Partners, own the two abutting properties.

The site is currently vacant. The neighboring properties have used this lot for a garden and occasional visitor parking. The lot is 5,157 square feet in size and has a natural gentle slope to the south and a somewhat steeper slope to the east. The north side of the lot **is** defined by two stacked stone retaining walls. The site work for the foundation for the project will include meeting the first wall and making a transition from one wall to the other. It is anticipated a slight drop-off may be created at this point and that will be fenced for safety. Each unit of Mariners Row will step down along the south slope. (Item # **30** and **36)** The lot is typical for the peninsula; there are no unusual natural features, and the site does not appear to present any drainage **or** topographical problems. (Item #9 and **41)** The civil engineers report addressing the site and current drainage patterns is in progress. **A** report from a geo-tech will be forwarded **as** it arrives It is anticipated the **soils** are primarily fill. (Item **#8)**

The footprint for this project is **2109** square feet including all three houses. Utilities for this project are located along Tyng Street **as** shown on the survey. The Northern Utilities has confirmed the gas line is adequate for the proposed housing. **An** existing fire hydrant is located directly in front of the proposed project. Central Maine Power has been to the site. Their utility pole is in place in front of the last town house, **29** Tyng Street, and their opinion was that it would be a simple matter to come from that pole and bury a line to the last building. This then would feed down to the other two houses. All the meters would be located on the side of **29** Tyng. The water district has also responded in writing, confirming an adequate water supply in the street. **An** opinion of the sewer service is expected next week. The letters from the utilities are attached. (Item **#** I3 and **40)**

Lighting will be typical for residential housing with front and rear exterior lights on the buildings, controlled by the residents of each unit. Disposal of waste generated by this project will be that typical of residential use and will be handled and disposed of by each resident. Private trash receptacles will be kept by each unit. (Item # 31, **12** and **39)**

Landscaping will consist primarily of shrubs in the front, rear and side of **25** Tyng Street, and be used to screen the first floor from the street and in the rear to soften the impact of the parking next to the house. The area between the last unit, 29 Tyng Street and the next house will be grass. The type of shrub and a specific landscaping plan has not been selected as yet. The plantings will be something native to the area and typical for the neighborhood. (Item **# 22** through **29)**

Mariners Row will be set up as a homeowners association or condominium association with specific guidelines for shared responsibility for up-keep of public sidewalks **and** the shared grounds **and** driveway. Except for a common wall each unit will be individually owned. In order to maintain harmony, the condominium documents will specify that any changes to the exterior of a unit will have conform to the (proposed) design requirements for the R-6 Infill Zone. A tentative start date for the excavation to begin is mid-August, with completion nine to twelve months later. (Item **#** 38 and **42)**

The driveway for this project is shared with the abutting property on York Street. Cars from both properties are able to pull in, park, and back up into the drive, to exit the site facing forward to the street. Each property will give the other permission a to use the driveway. Richard Abbondanza, Esq., will draw up this agreement **as** well **as** the condo documentation. The easement will not present a problem as both properties are owned by the Spinellas. (Item #20)

There are no known state or federal regulatory approvals required for completion of this project and there are no known pending applications or permits required. (Item # 43 through 46)

Respectfully submitted,

Ron Spinella

WARRANTY DEED

KNOW ALL MEN BY THESE PRESENTS, that **Ronald J. Spinella** and **Christine L. Spinella,** of Portland, Maine, for consideration paid, grant to **FRESH FISH, LLC,** a Maine limited liability company with a business address of **377** Cumberland Avenue, Portland, Maine 04101, with WARRANTY COVENANTS, the land in Portland, County of Cumberland and State of Maine, described in Exhibit **A,** attached hereto and incorporated herein by reference.

Also hereby conveying all rights, easements, privileges, and appurtenances, belonging to the premises hereinabove described.

IN WITNESS WHEREOF, the said Ronald J. Spinella and Christine L. Spinella have set their hands this 21st day of May, 2003.

WITNESS

Catherine Jane Galvin

Catherine Jane Galvin

Ronald J. Spinella

Christine L. Spinella

State of Maine
County **of** Cumberland,

May 21, 2003

Then personally appeared defore me Ronald **J.** Spinella and Christine L. Spinella and acknowledged the foregoing instrum nt to be their free act and deed.

Before me,

Notary Public/~~Attorney-at-Law~~

ANITA S. WEINER
NOTARY PUBLIC, MAINE
MY COMMISSION EXPIRES FEBRUARY 6, 2006

Printed name of person taking acknowledgment

EXHIBIT A

A certain lot or parcel of land with any improvements thereon, situated on the northwesterly side of York Street and the northeasterly side of Tyng Street in the City of Portland, County of Cumberland and State of Maine being bounded and described as follows:

Beginning at the intersection of the northwesterly sideline of York Street and the northeasterly sideline of Tyng Street; thence N 38" 53' 39" W along said sideline of Tyng Street a distance of eighty-four and fifty hundredths (84.50) feet to land now or formerly of Ronald J. Spinella and Christine L. Spinella, for title reference see Book 12855, Page 96 as recorded in the Cumberland County Registry of Deeds;

Thence N 50° 51' 22" E along said land of Spinella a distance of sixty-one and fifteen hundredths (61.15) feet to a point;

Thence S 38° 53' 39" E a distance of eighty-four and eighteen hundredths (84.18) feet to a point on the northwesterly sideline of York Street;

Thence S 50° 33' 21" W along said sideline a distance of sixty-one and fifteen hundredths (61.15) feet to the point of beginning, containing 5157 square feet, more or less.

Being the same premises conveyed to Christine L. Spinella by deed of John A. McIntosh, Jr. dated August 1, 1997 and recorded in said Registry of Deeds in Book 13234, Page 261.

Also being a portion of the premises conveyed to Grantors herein by deed of John A. McIntosh, Jr. and Arlene G. McIntosh dated August 1, 1997 and recorded in said Registry of Deeds in Book 13234, Page 259.

Reference is made to a plan entitled "Boundary Survey on Tyng Street and York Street, Portland, Maine made for Ronald J. and Christine L. Spinella," dated April 22,2003, by Owen Haskell, Inc.

Received
Recorded Register of Deeds
May 22,2003 09:47:07A
Cumberland County
John B. O Brian

Central Maine Power

March 10, 2004

Mr. Ronald Spinella
C/O Fresh Fish
377 Cumberland Avenue
Portland, Maine 04101

RE: Tyng Street Townhouse Project

Dear Mr. Spinella,

This letter is to advise you that Central Maine Power has sufficient single phase electrical capacity in the area to serve the subject project.

Once the project is accepted by the City of Portland, the owner will need to call our Customer Service Center at 1-800-565-3181 to sign up for a New Account and a Work Request Order so we may start a cost estimate.

To complete the cost estimate I will need the information of what voltage is required, the size of the main disconnect and the kilowatt loads required for the new facility. This information should be provided to me from the electrician or electrical engineering firm.

If you have any questions please feel free to call me at 828-2882.

Sincerely,

Paul DuPerre
Technical Advisor

162 Canco Road | Portland, ME 04103
tel (800)750-4000
www.cmpco.com

Portland
Water District

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

Customer Service Hotline (207) 76118310
(207) 774-5961
FAX (207) 879-5837

March 5, 2004

Ron Spinella
377 Cumberland Ave.
Portland, Me. 04101

Re: Tyng and York Sts.

Ron:

This letter is to confirm there should be an adequate supply of clean and healthful water to serve the needs of the proposed three row houses located at the corner of Tyng and York Sts. Checking District records, I find there is a eight inch water main on the north east side of Tyng street and a eight inch water main located on the south east side of York St.

The current data from the nearest hydrant indicates there should be adequate capacity of water to serve the needs of your proposed project.

Hydrant Location: Tyng St. @York St.
Hydrant # 455
Static pressure = 70 PSI
Flow = 581 GPM
Last Tested = 7/3/91

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

Sincerely,
Portland Water District

Jim Pandiscio
Means Coordinator

Zoning Analysis for proposed townhouse condominium project at Tyng and York Street

R-6 (Small Residential Lot Development)

Section	Provision	Required/Allowed	Proposed	Meets Requirement
14-139(2)(a) 14-139(2)(b)	Minimum Lot Size Maximum Lot Size	No minimum 10,000 SF maximum	5,157 SF	Yes
14-139(2)(c)1	Front Yard	10 feet maximum	4'-6"	Yes
14-139(2)(c)2	Rear Yard	None except €or minimum distance between buildings	60'-3" to York Street budding	Yes
14-139(2)(c)3	Side Yard	None except minimum distance be-tween buildings (Formula Requirement: 12.8')[1]	15'-10"	Yes
14-139(2)(c)3	For corner lot budding, maximum distance from street	10'	4' from Tyng 5' from York	Yes
14-139(2)(d)	Minimum Height	Two Stories of living space	Three stones of living space	Yes
14-139(2)(e)	Maximum Height	45'	30.25'2	Yes
14-139(2)(f)	Open Space	Exterior porches, decks, balconies for dwellings, or 10% Useable Open, or combination	Two exterior built spaces for each dwelling unit. (One exterior deck and One exterior balcony per dwelling unit)[3]	Yes
14-139(2)(g)	Minimum lot width	None	61'	Yes
14-139(2)(h)	Minimum land area/dwelling	725 SF/dwelling (2175 SF required)	5,157 SF	Yes
14-140(a)	Off-street parking	1 space per dwelling	2 spaces per dwelling	Yes
14-140(d)	Conform to Site Plan Standards[4]	See Attached	See Attached	Yes

[1] Formula: Sum of building heights/5. (38' building height for **31/33** Tyng. 26' building height for proposed.)

[2] Average perimeter grade to highest midpoint roof slope

[3] All decks and balconies have a minimum dimension of 6 feet. Decks vary in sue from 56 SF (corner unit @ 25 Tyng Street) to 82 SF (end unit @ 82 Tyng Street). Second floor balconies on all three units are 123 SF in area.

[4] Site Plan Standard 14-526(28) on Small Lot Development refers to the Design Manual which has not yet been adopted by the City's Planning Authority. The following pages addresses the Small Lot Development Design Guidelines now under development, and uses the draft version of the Guidelines as presented to the Portland Planning Board on February 24,2004.

Holt & Lachman Architects
165 State Street • Portland, Maine **04101** • Tel: **207-773-3833** • Fax: **207-773-3801** • info@holtandlachman.com

MARINERS' ROW Architectural Description:

Mariners' Row is designed to "complement and enhance"[1] the neighborhood's architectural character, and strengthen and "respect the existing relationship of buildings to public streets."[2] The building is based on the traditional townhouse form, found throughout the immedtate neighborhood, and is scaled to fit comfortably into the existing streetscape. The Tyng Street elevation references traditional building elements and features, such as bays, double-hung windows, entry canopies, etc. The York Street elevation is a transitional faqade that mediates between the stylistically traditional expression of the Tyng Street faqade to the more open, contemporary expression of the back elevation. All elevations harmonize with each other by utilizing a common palette of building materials, consistent detailing and articulation of faqade elements, related window choices, and overall adherence to good design principals.

The Planning Authority is currently developing Design Guidelines that have not yet been adopted. The proposed Guidelines do offer a useful outline for discussing the architecture of a proposal, and we have outlined below key elements of Mainers' Row in relation to the proposed Guideline Principals. On the following page we have matched the proposal against the proposed Design Standards Checklist.

A. *Proportion and Scale:* 'She overall scale of the building is a compatible fit into the existing neighborhood. The expression of the faqade of each dwellings on the Tyng Street elevation displays a classical 1:1 proportion, creating a strong sense of rhythm, and a 1:3proportion for this overall elevation. The York Street wall also reflects the classical 1:1 proportion. Likewise, all windows are classically proportioned and appropriately scaled to the building and neighborhood.

B. Balance: Window arrangements are organized with local symmetry on all facades. Fenestration reinforces an external reading of the building that reflects the uses taking place inside (Main rooms, circulation areas, private spaces).

C. *Articulation:* The siding materials have not been shown in the draft elevations, and some detading is still under development. The articulation of the entry, shown schematically, and the expression of window trim indicate the direction of design development. All materials and detading will be developed to strengthen and clarify the building's articulation.

D. Massing: The elements of the rowhouse form, hooded entries, a stepped, simple sloped roof and gabled dormers create a building massing that gives the building individual character while being instantly recognizable as belonging to the neighborhood.

E. Context: The building references and reinforces the best contextual elements of the neighborhood: Strong street walls, clear articulation of entries, a recognizable and traditional building form, classical proportions and arrangements of fenestration, and use of materials and trim.

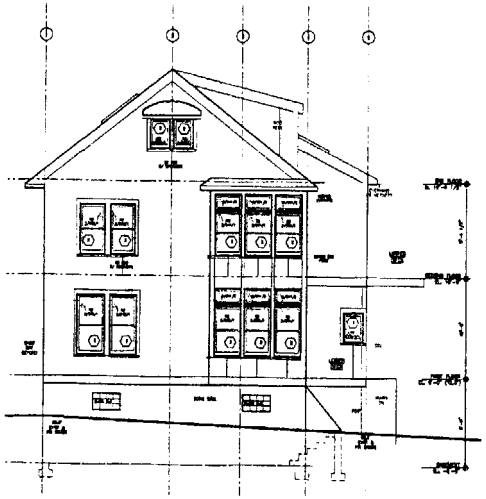
E Orientation to Street: The corner building sits slightly back from the street (4'–5') to provide a landscape buffer, creating a transition zone between the public and private realms. The entries are clearly articulated and open to the sidewalk. Back decks and balconies provide private spaces for residents while facing views and offering "eyes on the street" for sociability and neighborhood security.

G. Materials: Selection of siding materials is under development, and will be selected for compatibility to the neighborhood, durability, and aesthetic enhancement of the overall design.

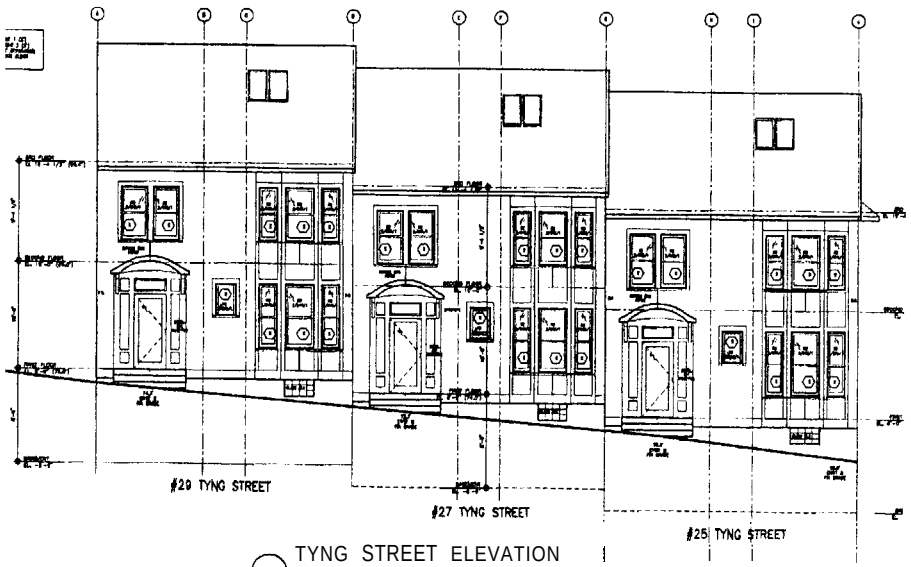
---

1 Site Plan Standard 14-526(15)(a)1

2 Site Plan Standard 14-526(15)2



YORK STREET ELEVATION
Scale: 1/4" = 1'-0"



TYNG STREET ELEVATION
Scale: 1/4" = 1'-0"

Note: **Draft Elevations** (3/16/04)
The Checklist to the right is based on the Draft Infill Development Design Standards as presented to the Portland Planning Board on February 24,2004.

Comment Key for Checklist:

1. Siding materials and some trim details are still under development, and are not fully shown in these Draft Elevations.

PRINCIPLE	STANDARD	ACCEPTABLE	NOT ACCEPTABLE	NOT APPLICABLE	COMMENTS & CONDITIONS
Proportion & Scale	A-1	X			
	A-2	X			
	A-3			X	
Balance	B-1	X			
	B-2	X			
	B-3	X			
Articulation	C-1				1
	C-2	X			
	C-3				1
	C-4				1
	C-5				1
Massing	D-1	X			
	D-2	X			
	D-3	X			
	D-4	X			
	D-5	X			
	D-6				1
	D-7			X	
Conte xt	E-1	X			
	E-2	X			
	E-3	X			
Orientation to the Street	F-1	X			
	F-2	X			
	F-3	X			
	F-4	X			
Materials	G-1				1
	G-2				1
	G-3			X	
	G-4	X			
	G-5			X	

Holt & Lachman Architects
165 State Street • Portland, Maine 04101 • Tel: 207-773-3833 • Fax: 207-773-3801 • info@holtandlachman.com

BEARING CAPACITY ASSESSMENT
PROPOSED TOWNHOUSES
TYNG AND YORK STREETS
PORTLAND, MAINE

04-0230 April 13, 2004

Prepared for:

Fresh Fish, LLC
Attn: Ron Spinella
377 Cumberland Avenue
Portland, Maine 04101

Prepared by:

S.W.COLE ENGINEERING, INC

Paul F. Kohler, P.E.
286 Portland Road
Gray, Maine 04039

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

04-0230

April 13, 2004

Fresh Fish, LLC
Attention: Ron Spinella
377 Cumberland Avenue
Portland, Maine 04101

Subject: Bearing Capacity Assessment
Proposed Townhouses
Tyng and York Streets
Portland, Maine

Dear Mr. Spinella:

In accordance with our Agreement dated April 9, 2004, we have observed test pit explorations and made a bearing capacity assessment of the subsurface soils for foundation support of the proposed townhouses at the above referenced site. This report summarizes our findings and recommendations and its contents are subject to the limitations set forth in Attachment A.

PROPOSED CONSTRUCTION

We understand that the 85 by 61+ lot is situated on the northerly side of the intersection of Tyng and York Streets. Current plans call for construction of three attached 3 ½ level townhouses along the southwest property line. We understand that the structures will be wood framed and will have full basements. All three structures together will cover an area of about 72 by 32 feet in plan dimensions. We anticipate that the entrance levels will be within a few feet of existing grades. A paved car parking area is planned on the easterly side of the lot. Exploration and engineering services for this paved area was not included in our scope of work.

The lot is currently open, and surfaced with grass. Based on the plan you provided, the westerly side of the site slopes downward to the southeast from about elevation 75 feet near an existing retaining wall down to about elevation 66 feet at York Street. The easterly side of the site is relatively flat sloping from about elevation 69 feet down to the

southwest to about elevation 65 feet at York Street. Several 2 to 5 ± foot high retaining walls exist at the site.

EXPLORATION WORK

Four test pit explorations were made at the site on April 12, 2004 by a local contractor working under contract to Fresh Fish, LLC. The test pit locations were selected by S. W. COLE ENGINEERING, INC. based on the site plan you provided as well as site conditions. The test pits were established in the field based on taped measurements from staked building corners established by Fresh Fish, LLC. The approximate test pit locations are shown on the "Exploration Location Plan" attached as Sheet 1. Logs of the test pits are attached as Sheets 2 and 3. A key to the notes and symbols used on the logs is attached as Sheet **4.**

CE CONDITIONS

Below the topsoil, the test pits generall encountered a il consisting of about 1 to 4.5 feet of brown silty sand with organics, concrete, ck and stone (rubble fill) l dense to e dens n silty sand with grav cobbles and sn boulders l till). A relic t slat reportedly from a residential e that existed in the utherly corner of the site was encountered in test pit P at a l th of **4** feet below the ground surface. The t pits were at in t ti glacial till at depths of about 7.0 feet below ie ground surface.

Groundwater seepage was not observed in the test pits at the time of exploration work; however, the soils were generally moist to wet below 2 to **4** feet. Groundwater should be expected to fluctuate seasonally and during periods of heavy precipitation or snow melt.

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

EVALUATION AND RECOMMENDATIONS

Based on the subsurface findings, the proposed construction appears feasible from a geotechnical standpoint. However, all fill and relic foundations and slabs underlying the proposed structures must be removed to expose stable, native non-organic glacial till soils. If excavation extends below basement levels, the width of overexcavation must extend one foot outward from the edge of footings for each foot of overexcavation

depth. Where needed, the overexcavated area must be backfilled with clean granular fill compacted in I-foot lifts to at least 95 percent of its maximum dry density as determined by ASTM D-1557.

Consideration should be given to using a smooth-edged bucket to reduce disturbance of the native glacial till anticipated at footing grade. We recommend that S. W. COLE ENGINEERING, INC. observe subgrades prior to the placement of backfill or foundation concrete.

For spread footings founded on properly prepared subgrades, we recommend an allowable soils bearing pressure of 3.0 ksf with a base friction factor of 0.40 for foundation design. Foundations exposed to freezing temperatures must be placed at least 4.5 feet below exterior finish grades in order to provide frost protection. We recommend a foundation underdrain be installed at the perimeter of each townhouse. Underdrain lines should be installed adjacent to each edge (inside and outside edges) of the perimeter footings. The underdrain must have a gravity outlets. It is also recommended that an 8 to 12 inch thick layer of crushed stone be considered below the basement slabs to enhance underdrainage.

As discussed, our services have been limited to an assessment of soil bearing capacity. S. W. COLE ENGINEERING, INC. is available to provide geotechnical observations and testing of soil, concrete and additional geotechnical engineering recommendations for backfill and compaction as well as asphalt materials during construction.

CLOSURE

If you have any questions or require additional assistance, please do not hesitate to contact us.

Sincerely,

S. W. COLE ENGINEERING, INC.

Paul F. Kohler, P. E.
Senior Geotechnical Engineer

STATE OF MAINE
PAUL F. KOHLER
No. 7145
REGISTERED PROFESSIONAL ENGINEER

Attachment A
Limitations

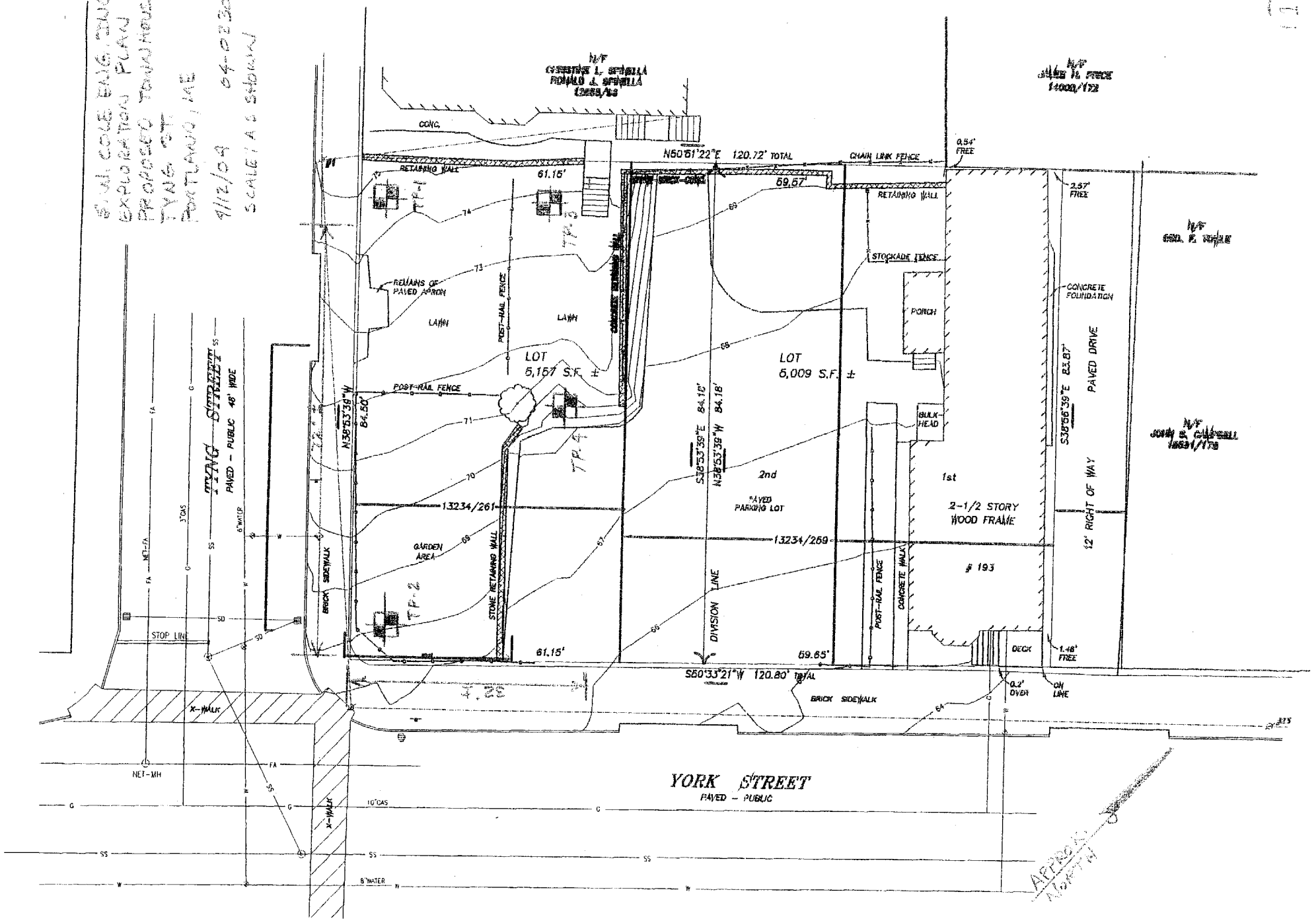
This report has been prepared for the exclusive use of Fresh Fish, LLC for specific application to the Proposed Townhouses on Tyng Street in Portland, Maine as described herein. Our services were limited by Fresh Fish, LLC to an assessment of soil bearing capacity only and a deeper soils investigation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

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

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

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

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



NOTES

1. OWNERS OF RECORD: RONALD J. AND CHRISTINE L. SPINELLA, PORTLAND, MAINE. BOOK 13234 PAGE 259 & 261.

S.W.COLE ENGINEERING, INC.

TEST PIT LOGS

PROJECT/CLIENT: PROPOSED TOWNHOUSES / FRESH FISH LLC
LOCATION: CORNER OF YORK AND TYNG STREETS, PORTLAND MAINE
PROJECT NO. 04-0230

TEST PIT TP-1

DATE: 411212004 SURFACE ELEVATION: 75' +/-

SAMPLE NO.	SAMPLE DEPTH	DEPTH (FT)	STRATUM DESCRIPTION	TEST RESULTS
		.2'	BROWN SANDY TOPSOIL (FILL)	
		1.0'	DARK BROWN SILTY SAND TRACE GRAVEL WITH ORGANICS (FILL)	
			BROWN SILTY SAND WITH SOME GRAVEL, FREQUENT COBBLES AND OCCASIONAL SMALL BOULDERS (TILL) ~DENSE TO VERY DENSE~	
S-1	6-6.5'	7.0		
			BOTTOM OF EXPLORATION AT 7.0' NOT REFUSAL	

COMPLETION DEPTH: 7.0'

SOILS MOIST BELOW 2' +/-
NO CAVING

TEST PIT TP-2

SAMPLE NO.	SAMPLE DEPTH	DEPTH (FT)	STRATUM DESCRIPTION	TEST RESULTS
		.5'	PERENNIAL GARDEN	
		4.0'	BROWN SILTY SAND SOME GRAVEL TRACE ORGANICS WITH CONCRETE/BRICK/STONE RUBBLE (FILL) ~LOOSE~	NOTE: TEST PIT REPORTEDLY IN AREA ONCE OCCUPIED BY A RESIDENTIAL STRUCTURE.
			BROWN SILTY SAND WITH SOME GRAVEL, FREQUENT COBBLES AND OCCASIONAL SMALL BOULDERS (TILL)	
S-1	6.5-7	7.0'	~DENSE TO VERY DENSE~	
			BOTTOM OF EXPLORATION AT 7.0' NOT REFUSAL	

COMPLETION DEPTH: 7.0'

NOTES: NO FREEWATER OBSERVED
SOILS MOIST BELOW 4' +/-
NO CAVING

S.W.COLE ENGINEERING, INC.

TEST PIT LOGS

PROJECT/CLIENT: Proposed Townhouses / Fresh Fish LLC

LOCATION: Corner of York **and** Tyng Streets, Portland Maine

PROJECT NO. 04-0230

TEST PIT TP-3

SAMPLE NO	SAMPLE DEPTH	DEPTH (FT)	STRATUM DESCRIPTION	TEST RESULTS
		5'	BROWN SANDY TOPSOIL (FILL)	
		2 0'	BROWN SILTY SAND SOME GRAVEL (TILL FILL) –LOOSE–	
		7 0'	BROWN SILTY SAND WITH SOME GRAVEL, FREQUENT COBBLES AND OCCASIONAL SMALL BOULDERS (TILL) –DENSE TO VERY DENSE–	
			BOTTOM OF EXPLORATION AT 7 0 NOT REFUSAL	

COMPLETION DEPTH: 7.0'

SOILS MOIST BELOW 2' +/-
NO CAVING

TEST PIT TP-4

SAMPLE NO	SAMPLE DEPTH	DEPTH (FT)	STRATUM DESCRIPTION	TEST RESULTS
		.5'	BROWN SANDY TOPSOIL (FILL)	
		4.0'	BROWN SILTY SAND SOME GRAVEL WITH CONCRETE/BRICK/STONE RUBBLE AND NUMEROUS ORGANICS/ROOTS (FILL) –LOOSE–	VOTE: SECTION OF RELIC FOUNDATION WALL OBSERVED IN SIDEWALL OF TEST PIT- APPROXIMATELY 1 TO 3-FEET IN DEPTH, I-FOOT THICK, LENGTH UNCLEAR. TEST PIT REPORTEDLY MADE IN AREA ONCE OCCUPIED BY A RESIDENTIAL STRUCTURE.
		4.3'	PROBABLE RELIC CONCRETE SLAB	
S-1	6.5-7	7.0'	BROWN SILTY SAND WITH SOME GRAVEL, FREQUENT COBBLES AND OCCASIONAL SMALL BOULDERS (TILL) ~DENSE TO VERY DENSE~	
			BOTTOM OF EXPLORATION AT 7.0' NOT REFUSAL	

COMPLETION DEPTH: 7.0'

SOILS MOIST BELOW 4' +/-
NO CAVING

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

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

Key to Symbols Used:

w		water content, percent (dry weight basis)
q_u		unconfined compressive strength, kips/sq. ft. - based on laboratory unconfined compressive test
S_v		field vane shear strength, kips/sq. ft.
L_v		lab vane shear strength, kips/sq. ft.
q_p	-	unconfined compressive strength, kips/sq. ft. based on pocket penetrometer test
O		organic content, percent (dry weight basis)
W_L		liquid limit - Atterberg test
W_P	-	plastic limit - Atterberg test
WOH	-	advance by weight of hammer
WOM	-	advance by weight of man
WOR	-	advance by weight of rods
HYD	-	advance by force of hydraulic piston on drill
RQD	-	Rock Quality Designator - an index of the quality of a rock mass. RQD is computed from recovered core samples.
γ_T		total soil weight
γ_B		buoyant soil weight
HSA	-	Hollow Stem Auger
HW	-	4" Casing
NW	-	3" Casing
SS	-	split-spoon sampler

Description of Proportions:

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

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

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

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

Dcpartmcnt of Public Works

Michael J. Bobinsky
Director

CITY OF PORTLAND

20 April 2004

Mr. Ronald Spinella,
Fresh Fish, L.L.C.,
377 Cutnberland Avenue,
Portland. Maine 04101

RE: The Capacity to Handle Wastewater Flows from 25, 27, and 29 Tyng Street, a Townhouse Development.

Dear Mr. Spinella:

The existing eight inch diameter "Truss" sewer pipe, located in Tyng Street, has **adequate capacity to transport,** while The Portland Water District sewage treatment facilities, located off Marginal Way, have **adequate capacity to treat** the anticipated increased wastewater flows of **546 GPD**, from your proposed project.

Anticipated Wastewater Flows from the Proposed Townhouses:	
2 Bedroom Townhouse (#25 Tyng St.) @ 180 GPD/Townhouse	= 180 GPD
2 Parking Spaces (#25 Tyng Street) @ 1 GPD/Parking Space	= 2 GPD
2 Bedroom Townhouse (#27 Tyng St.) @ 180 GPD/Townhouse	= 180 GPD
2 Parking Spaces (#27 Tyng Street) @ 1 GPD/Parking Space	= 2 GPD
2 Bedroom Townhouse (#29 Tyng St.) @ 180 GPD/Townhouse	= 180 GPD
2 Parking Spaces (#29 Tyng Street) @ 1 GPD/Parking Space	= 2 GPD
Total Proposed Increase in Wastewater Flows for this Project	**= 546 GPD**

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

If The City can be of further assistance, please call **874-8832.**

Sincerely,
CITY OF PORTLAND

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

FJB

cc: Alexander Q. Jaegerman, Director, Planning Division, Department **of** Planning, and Urban Development, City **of** Portland
Richard Knowland. Planner. Department of Planning. and Urban Development, City **of** Portland
Eric Labelle, P.E., City Engineer. City of Portland
Bradley **A.** Roland, P.E., Environmental Projects Engineer. **City of** Portland
Anthony W. Lombardo, P.E., Project Engineer. City of Portland
Stephen K. Harris, Assistant Engineer. **City** of Portland
Desk **file**

O:\Engshare\FJB\Capacity Letters\Tyng 25, 27, 29
C:\Frank's\Capacity Letters\ Tyng 25, 27, 29

Design Standard F-2: Keep the first floor windows on the front façade high enough to ensure the visual privacy of occupants of the dwelling, through such means as placing the window sill height at least 42" above the adjoining sidewalk, or the finished floor elevation of a residence a minimum of 18": above sidewalk elevation, to insure privacy for the occupants of the dwelling.

Design Standard – Minimum Required	**Minimum Provided in Proposal**	**Exceeds minimum**
Height of First Floor above adjacent sidewalk: **18" req.**	21"	3" at lowest point
Height of window sill above adjacent grade: **42" req.**	54"	12" at lowest point

From: Marge Schmuckal
To: RICK KNOWLAND
Date: Tue, May 24,2005 2:40 PM
Subject: 25 Tyng Street - Ron Spinella

Rick,
I have a building permit application for this small lot infill 3-unit. I do not have a stamped approved site plan from you - Is this ready to be issued? And Can I get a stamped approved site plan from you?
Thanks,
Marge

4/28/04

Date: April 27. 2004

Les Berry P.E. of BH2M is providing us the **site** plan for this project. All the **work** has been completed however both of their CAD operators are out and other staff are finishing **the** work . The completed **Site** Plan **will be finished** by Mon. May 3. His work will include: Boundary and Topographic Survey; Site Plan; Detail Sheet; Storm water Report. With regard to utilities:

- **a.** Electric: underground from power pole to north end **of** building. One connection *is* proposed with three meters.
- **b.** Gas: Underground for **Tyng** Street main to north end of building. One pipe that will be divided into three meters.
- **c.** Water: One two(2) inch service will be installed to the south end of the building. Each unit will then have its own meter.
- **d.** Sewer: One six (6) inch sewer exiting the south end of the building (low end) Stormwater: The geotechnical report recommends underdrains on both sides of the building footings with a free discharge. The only possible connection is to the existing catchbasin on York Street(invert elevation 61.6) 'The basement floor elevation is 63.25 The five utility connections will require excavating the existing road and brick sidewalk, which will need to be repaired.

Grading and Erosion Control will be provided on site plan ,**Utility** Connections; Extent of Pavement; Landscaping will all be included on **site** plan.

Condominium Documentation; Driveway easement and Subdivision Plat Plan are being prepared by our attorney Richard Abbondanza, Esq. and will be completed after May11.

We are sorry about the delays in these final submissions and hope that the above will be helpful in the interim and not result in **our** being moved out **ofthe** May 11 Agenda.

BH2M BERRY • HUFF • McDONALD • MILLIGAN • INC.
ENGINEERS • SURVEYORS • PLANNERS

5/5/04

LESTER S. BERRY
WILLIAM A. THOMPSON

TIMOTHY O. BROWN
ROBERT C. LIBBY, Jr.
JOHN D. KUCHINSKI
ANDREW S. MORRELL

May 4,2004

Ronald Spinella
377 Cumberland Avenue
Portland, ME 04101

RE
Mariner's Row
25-29 Tyng Street
Portland, ME

DEPT. OF BUILDING INSPECTION
MAY 5 2004
RECEIVED

Dear Ron:

As request, we have prepared a "Subdivision/Site Plan" for your proposed project on Tyng Street, Portland, Maine. Attached please find the following:

Plans: Boundary and Topographic Survey
Subdivision/Site Plan
Detail Sheet
Stormwater Report

We have also responded to review memo's written by Jim Seymour and Rick Knowland. We are not sure exactly what was previously submitted, so our response is directed toward our plans.

Jim Seymour Memo of March 31,2004

1. Stormwater Management
   The "Stormwater Management" Report is attached and is intended to address the concerns.

2. Utilities
   We have shown the existing utilities and proposed connections on the Site Plan.

   a. Electric – Underground from power pole to north end of building. One connection is proposed with three meters.
   b. Gas – Underground for Tyng Street main to north end of building. One pipe that will be divided into three meters.
   c. Water – One two (2) inch service will be installed to the south end of the building. Each unit will then have its own meter.

d. Sewer – One six (6) inch sewer exiting the south end of the building (low end).

e. Stormwater – The geotechnical report recommends underdrains on both side of the building footings with a free discharge. The only possible connection is to the existing catchbasin on York Street. (Invert elevation 61.6). The basement floor elevation is 63.25. The five utility connections will require excavating the existing road and brick sidewalk, which will need to be repaired.

3. Parking, Access & Circulation

a. Driveway/Aisle Width – The parcel of land is only 5,157 s.f. Consequently, this is an "in-fill" project or simply a replacement of an old building that was removed several years previously. If there were room for a 24-foot aisle, we would certainly provide the width. However, 21'-3" is the remaining available space. However, this is a small (3-unit), residential, low-volume use parking area only for use by the residents (no public parking). In addition, we have made the spaces 10-feet wide versus 9-foot wide required. This allows for a car backing out of a space to cut the steering wheel earlier thus it is able to manage the space. Therefore, we request that the aisle width standard be waived for this case. If necessary, we will provide pictures of similar conditions throughout the city that are satisfactorily working.

b. Parking Spaces – The in-fill standards only require one (1) parking space per unit. In this case, we are providing one 10' **x** 17' space and one 9' **x** 16.5' compact space. Therefore, we believe the compact spaces are extra spaces. We believe the 35% maximum for compact spaces is the percentage of the required spaces and not extra spaces.

c. Parking Space Size – We certainly would have provided 9' x 19' (171 s.f.) spaces but they simply do not fit. Therefore, we designed 10' **x** 17' (170 s.f.) spaces. Rich Knowland suggested in his memo that a curb (we want a landscape timber) will allow for a one-foot overhang, which effectively increases the space to 18 feet. A waiver for the parking space length is requested.

4. Grading and Erosion Control

a. Erosion and Sediment Control – Added to Site Plan.

5. General

a. Details – Detail Sheet added.

b. Financial Capacity – By others.

Rich Knowland Memo of **April** 18,2004

1. Parking Space Size – Your suggestion of a curb has been incorporated into the plan.
2. Utility Connections – Shown on Plan.
3. Extent of Pavement – Plan is now shaded.

It is assumed you will be addressing the remaining issues.

Sincerely,

Lester S. Berry, P.E.

MarinersRowResp

STORMWATER MANAGEMENT REPORT
FOR
MARINER'S ROW
25-29 TYNG STREET
PORTLAND, MAINE

8 V

RONALD SPINELLA
377 CUMBERLAND AVENUE
PORTLAND, MAINE

April 2004

Prepared By:

BH2M Engineers
Engineers Surveyors Planners
28 State Street
Gorham, ME 04038
207-839-2771
FAX 207-839-8250
bh2m@aol.com

TABLE OF CONTENTS

STORMWATER MANAGEMENT REPORT

For: Mariner's Row
Tyng Street
Portland, ME

Introduction

Ronald and Christine Spinella own a 5,157 s.f. parcel of land located at the comer of Tyng and York Streets in Portland, Maine. **A** U.S.G.S. Location Map is attached.

The parcel had an existing building and parking lot. It was reported that a building located on the site was demolished in the 1970's. Due to the size of the site, the stonnwater management does not require any Maine DEP reviews under the Stormwater or Site Laws. Therefore, this report has been prepared for review under the City of Portland Site Plan reviews.

Existing Use

The "Boundary and Topographic Plan" shows the existing conditions. The rail fence and garden area were recently created to improve the aesthetics of the comer.

Soils

According to the Cumberland County Medium Intensive Soils Mapping, it is assumed that the site is HIC – Colton sandy, gravelly soil (HSG **A).** The word "assumed" is used since it is difficult to locate the site on the soils map.

An on-site observation would indicate that the site might be better described as "urban" land. Fortunately, S.W. Cole had four test pits dug for the geotechnical designs. We were on-site to also observe the test pits. (The complete report is attached.) The soils are described as brown, silty sand with some gravel, etc. It is our opinion that the silty condition of the soils created a Hydrologic Soils Condition C, which we have used in the calculations.

Proposed Project

The purpose of the project is to create a new three (3)-unit condominium project with parking for this project and the existing 2 ½ story building.

Pre-development Drainage

The site is almost isolated due to the uphill and street drainage. **A** small portion of the uphill apartment building drains over the site to the east. Water drains primarily by sheet flow and shallow concentrated flow over the York Street sidewalk and onto York Street. York Street is sloped entirely to the east so runoff crosses the road to an existing catchbasin in a parking area on the east side of York Street.

The condition of runoff flowing over York Street seems to be less than ideal but was the chosen method when York Street was reconstructed without a crown.

Pre-development peak flow rates are as follows:

2-Year Storm = 0.54 c.f.s.
10-Year Storm = 0.96 c.f.s.
25-Year Storm = 1.16 c.f.s.

The above flows are relatively low as would be expected for a '/-acre site.

Post-development Drainage

Based upon the geotechnical design, underdrains are recommended for the building. Also, the new retaining wall should have an underdrain. It is also desirable to have root gutters connected directly to the underdrain piping. The best and only method to achieve the above is to connect directly to the catchbasin on York Street. This flow is all new flow to the catchbasin. However, due to existing grading, the catchbasin does not collect surface runoff unless the drop of water falls on the cover. No other inlet pipes are connected to the catchbasin. The outlet pipe is a 12" pipe.

By diverting runoff to the York Street catchbasin, the sheet flow crossing York Street can be reduced. Calculations are attached.

	To CB	**To York Street**	**Total**
2-Year Storm	0.26 c.f.s.	0.41 c.f.s.	0.67 c.f.s.
1O-Year Storm	0.41 c.f.s.	0.66 c.f.s.	1.05c.f.s.
25-Year Storm	0.48 c.f.s.	0.78 c.f.s.	1.26 c.f.s

The total increase is very small (too small to investigate via detention structure). **As** proposed, the flow over York Street will decrease, if the proposed underdrain connection to the York Street catchbasin is allowed.

APPENDIX A

QUALIFICATIONS

LESTER **S.** BERRY, JR.

VICE PRESIDENT
BERRY HUFF MCDONALD MILLIGAN, INC.
GORHAM, ME 04038

REGISTRATION

Professional Engineer: Maine

EDUCATION

M. S. Civil Engineering, University of Maine, 1974
B. S. Civil Engineering, University of Maine, 1970

PROFESSIONAL SOCIETIES

American Society of Civil Engineers; Maine Association of Planners
Construction Specifications Institute

PROFESSIONAL BACKGROUND

Vice President, BH2M, Gorham, Maine
February 1978 to Present

Responsibilities include management of projects ranging from conceptual studies to design to construction administration for water and sewerage systems, coastal development, roadway construction, site development projects, and other related engineering fields.

Project Engineer, Dale E. Caruthers Company, Gorham, Maine
May 1975 to February 1978

Responsibilities included design and construction administration of wastewater treatment plants, pump stations, sanitary sewers, storm drains, and roadways; specification writing; and numerous water, sewerage, and waterfront studies.

Project Engineer, O'Brien and Gere, Inc. Engineers: Charlotte, North Carolina
May 1974 to May 1975

Duties included design of major wastewater treatment plants and pump stations; 201 Facilities Plans for rural and metropolitan areas; water quality studies; and analyzing deficient treatment plants.

Engineer, State **of New** Hampshire, Concord, New Hampshire
January 1971 to September 1972

Work consisted of the design of highways and highway bridges that included roadway design and layout, reinforced concrete design, and structural steel design and detailing.

STORMWATER EDUCATION

Hydraulic and related College course.
Erosion and Sediment Control and Stormwater Management by Southern Maine Soil and Water Conservation Districts, 1987.

Phosphorus Management Seminar by Maine DEP, 1990.

Erosion Control Seminars by Maine DEP.

Hydrocad and Advanced Hydrocad Seminars.

Seminars for specific computer software programs.

Seminars on BMP's for Stormwater and Erosion Control.

STORMWATER EXPERIENCE

Over 10 years of experience of performing Stormwater Management Studies.
Numerous peer reviews of other consultants Stormwater Management Studies.

Over 25 years of designing stormwater facilities.

Experience with TR-55, TR-20, Hydrocad, Stormcad, Flow Master, Pond Pack, and numerous other hydraulic related programs.

APPENDIX B

MAPS

DELORME

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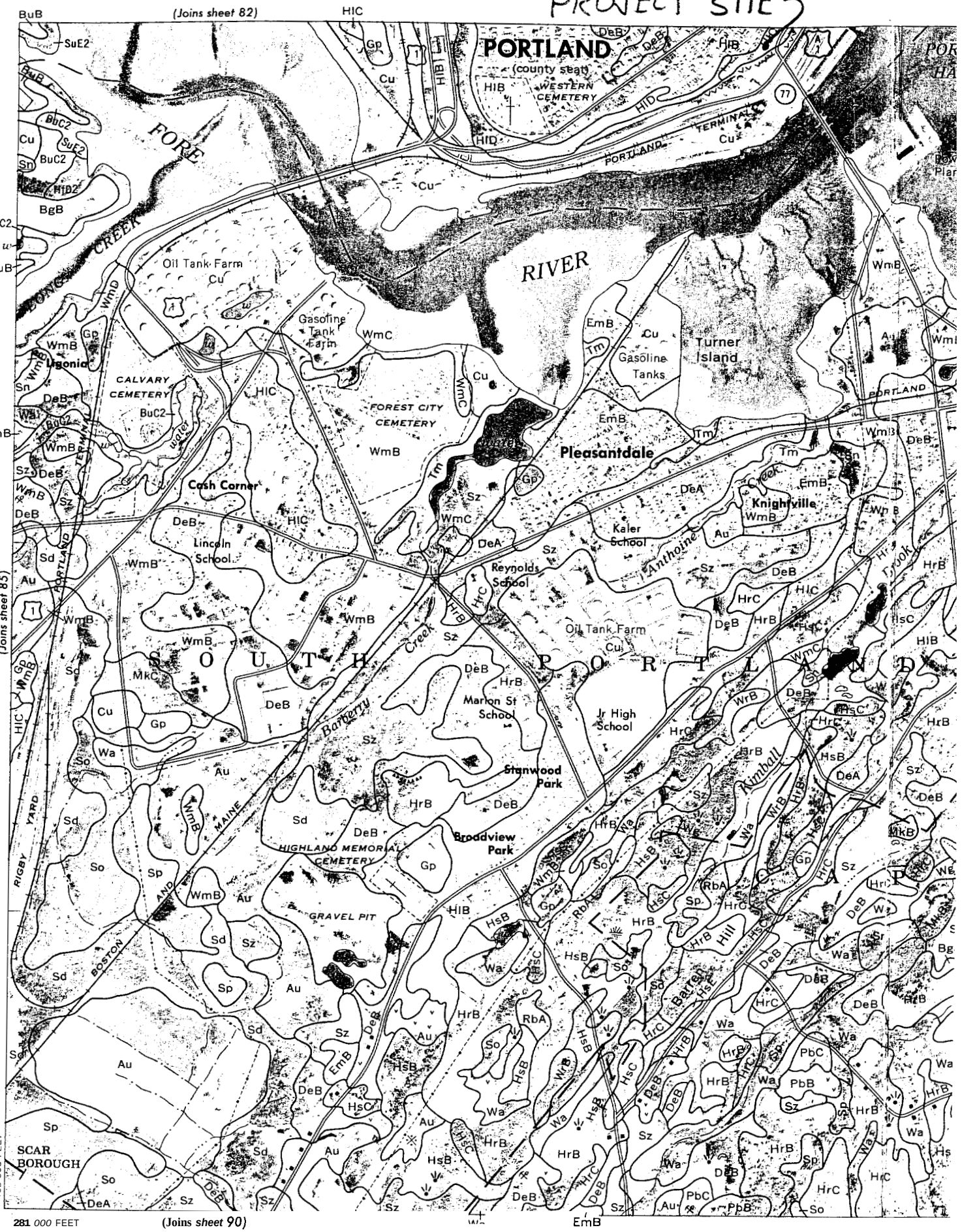
Zoom Level: 13-1 Datum: WGS84

Scale 1 : 24,000
1" = 2000 ft

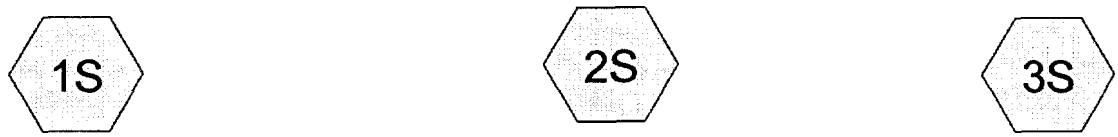
TN
MN
16.7°W

PROJECT SITE

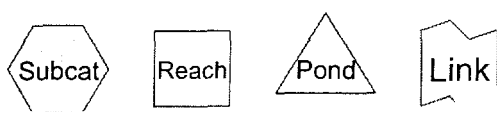


APPENDIX C

PRE & POST-DEVELOPMENT DRAINAGE



POSTDEVELOPMENT
TO CB



Drainage Diagram for MARINERSWAY
Prepared by BH2M ENGINEERS 4/26/2004

Subcatchment IS: PREDEVELOPMENT

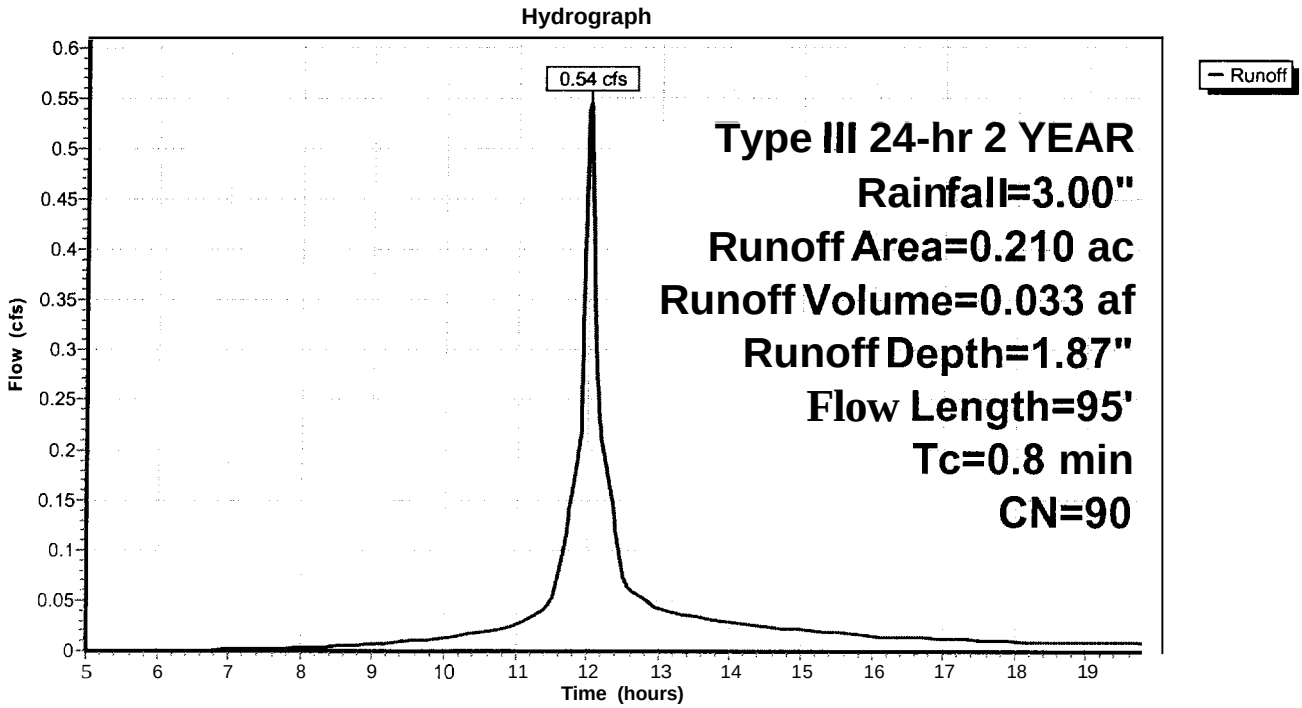
Runoff = 0.54 cfs @ 12.01 hrs, Volume= 0.033 af, Depth= 1.87"

Runoff by SCS TR-20 method, UH=SCS, Time Span= 5.00-20.00 hrs, dt= 0.05 hrs
Type III 24-hr 2 YEAR Rainfall=3.00"

Area (ac)	CN	Description
0.070	74	>75% Grass cover, Good, HSG C
0.140	98	Paved parking & roofs
0.210	90	Weighted Average

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (Wsec)	Capacity (cfs)	Description
0.4	**45**	0.0880	2.1		**Sheet Flow, PAVEMENT** Smooth surfaces n= 0.011 P2= 3.00"
0.4	50	0.1000	2.2		**Shallow Concentrated Flow, GARDEN** Short Grass Pasture Kv= 7.0 fps
0.8	95	Total			

Subcatchment 1S: PREDEVELOPMENT



Subcatchment 2S: POSTDEVELOPMENTTO CB

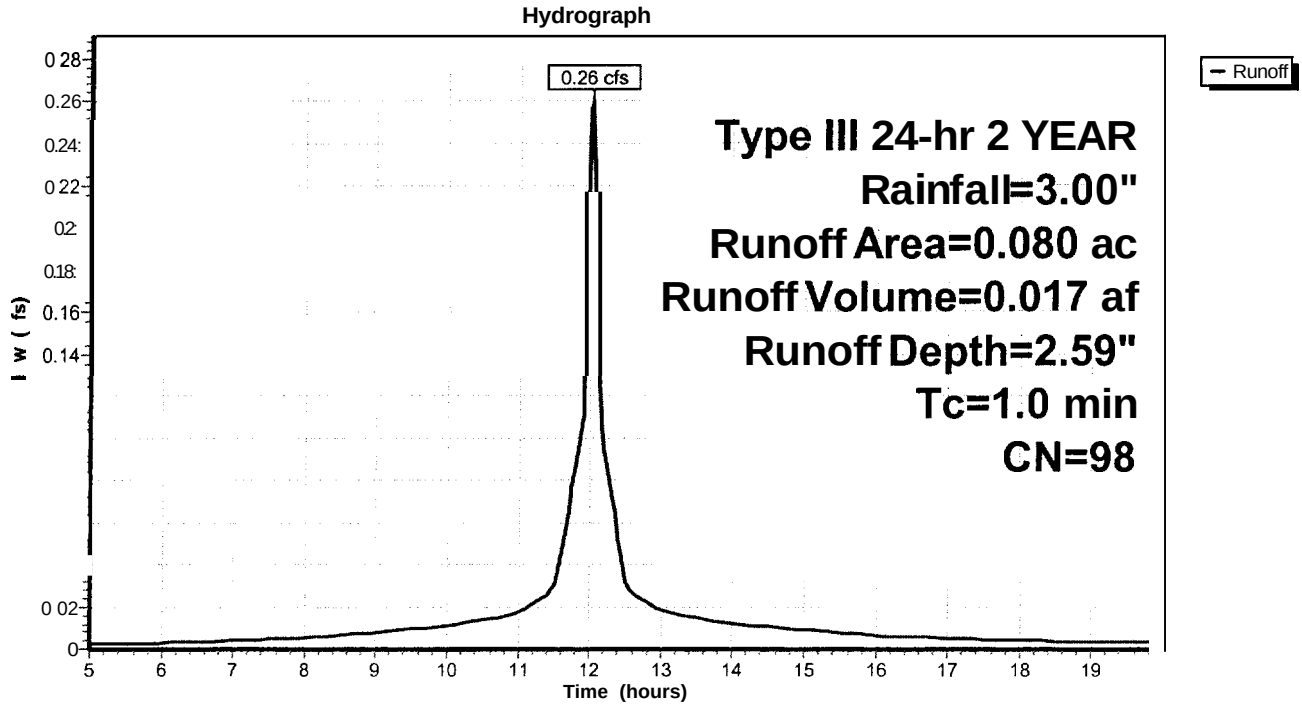
Runoff = 0.26 cfs @ 12.01 hrs, Volume= 0.017 af, Depth= 2.59"

Runoff by SCS TR-20 method, UH=SCS, Time Span= 5.00-20.00 hrs, dt= 0.05 hrs
Type III 24-hr 2 YEAR Rainfall=3.00"

Area (ac)	CN	Description
0.080	98	Paved roads w/curbs & sewers

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
1.0					**Direct Entry, ROOF DRAINS**

Subcatchment 2S: POSTDEVELOPMENTTO CB



Subcatchment 3S: POSTDEVELOPMENT TO YORK ST

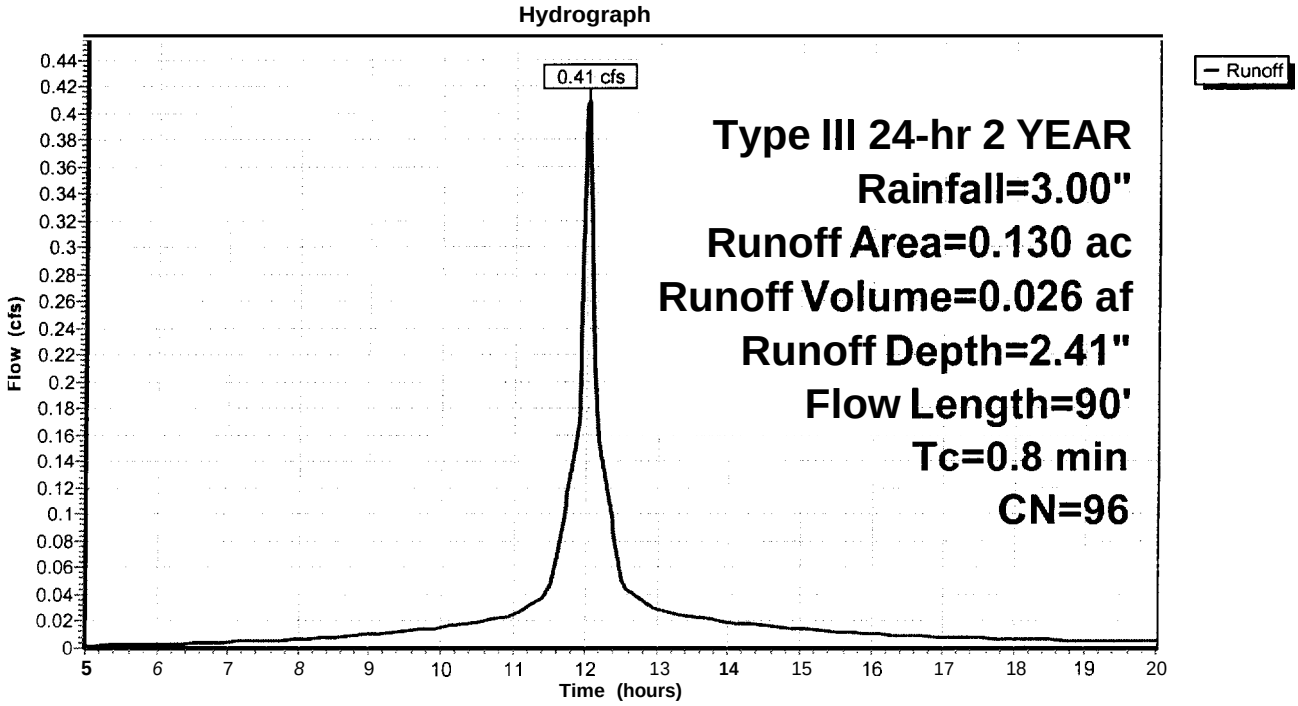
Runoff = 0.41 cfs @ 12.01 hrs, Volume= 0.026 af, Depth= 2.41"

Runoff by SCS TR-20 method, UH=SCS, Time Span= 5.00-20.00 hrs, dt= 0.05 hrs
Type III 24-hr 2 YEAR Rainfall=3.00"

Area (ac)	CN	Description
0.120	98	Paved parking & roofs
0.010	74	>75% Grass cover, Good, HSG C
0.130	96	Weighted Average

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (Wsec)	Capacity (cfs)	Description
0.8	90	0.0500	1.9		**Sheet Flow, PAVEMENT** Smooth surfaces n= 0.011 P2= 3.00"

Subcatchment 3S: POSTDEVELOPMENT TO YORK ST



Subcatchment 1S: PREDEVELOPMENT

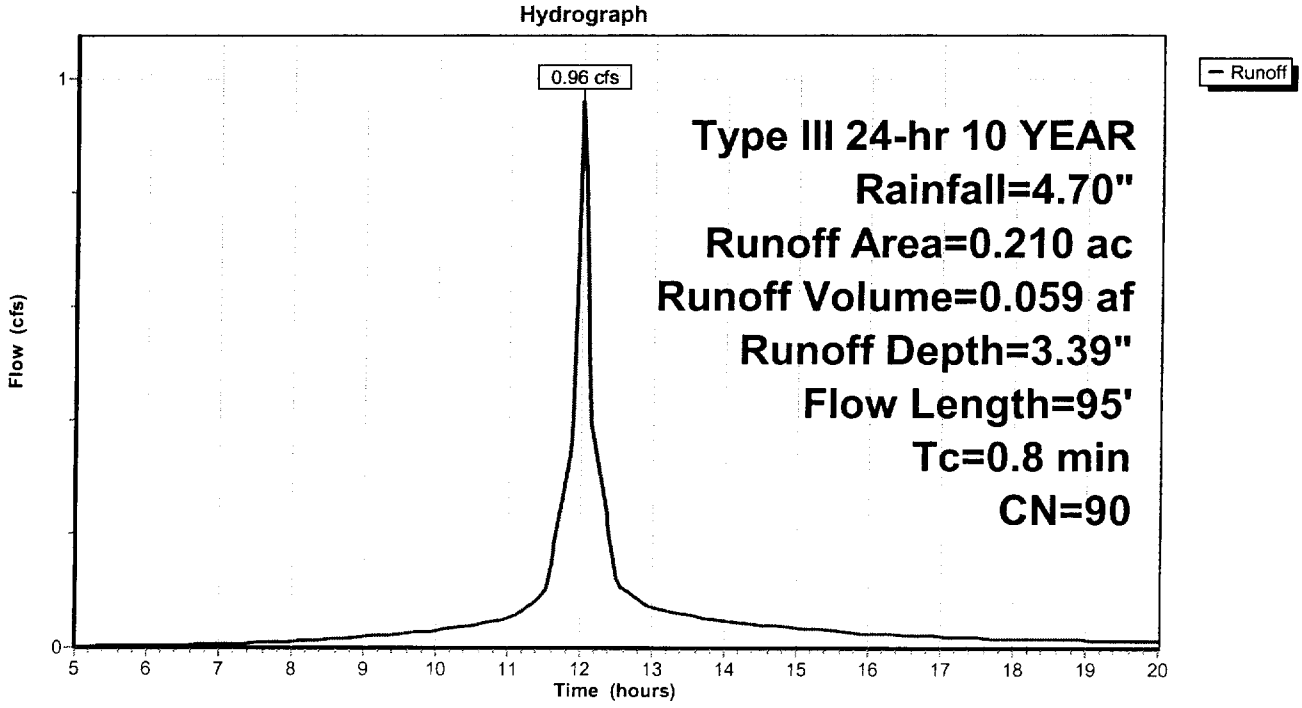
Runoff = 0.96 cfs @ 12.01 hrs, Volume= 0.059 af, Depth= 3.39"

Runoff by SCS TR-20 method, UH=SCS, Time Span= 5.00-20.00 hrs, dt= 0.05 hrs
Type III 24-hr 10 YEAR Rainfall=4.70"

Area (ac)	CN	Description
0.070	74	>75% Grass cover, Good, HSG C
0.140	98	Paved parking & roofs
0.210	90	Weighted Average

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
0.4	45	0.0880	2.1		**Sheet Flow, PAVEMENT** Smooth surfaces n= 0.011 P2= 3.00"
0.4	50	0.1000	2.2		**Shallow Concentrated Flow, GARDEN** Short Grass Pasture Kv= 7.0 fps
0.8	95	Total			

Subcatchment 1S: PREDEVELOPMENT



Subcatchment 2S: POSTDEVELOPMENT TO CB

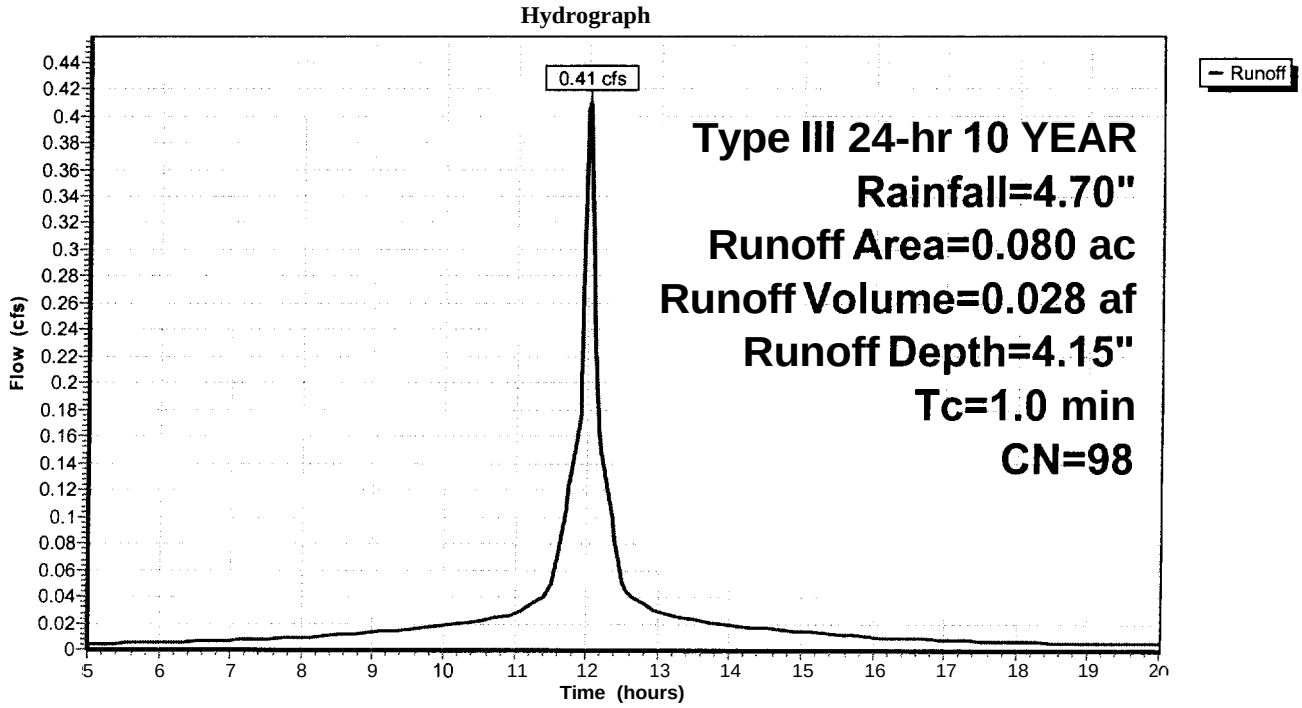
Runoff = 0.41 cfs @ 12.01 hrs, Volume= 0.028 af, Depth= 4.15"

Runoff by SCS TR-20 method, UH=SCS, Time Span= 5.00-20.00 hrs, dt= 0.05 hrs
Type III 24-hr 10 YEAR Rainfall=4.70"

Area (ac)	CN	Description
0.080	98	Paved roads w/curbs & sewers

Tc (min)	Length (feet)	Slope (Wft)	Velocity (Wsec)	Capacity (cfs)	Description
1.0					Direct Entry, ROOF DRAINS

Subcatchment 2S: POSTDEVELOPMENT TO CB



Subcatchment 3S: POSTDEVELOPMENT TO YORK ST

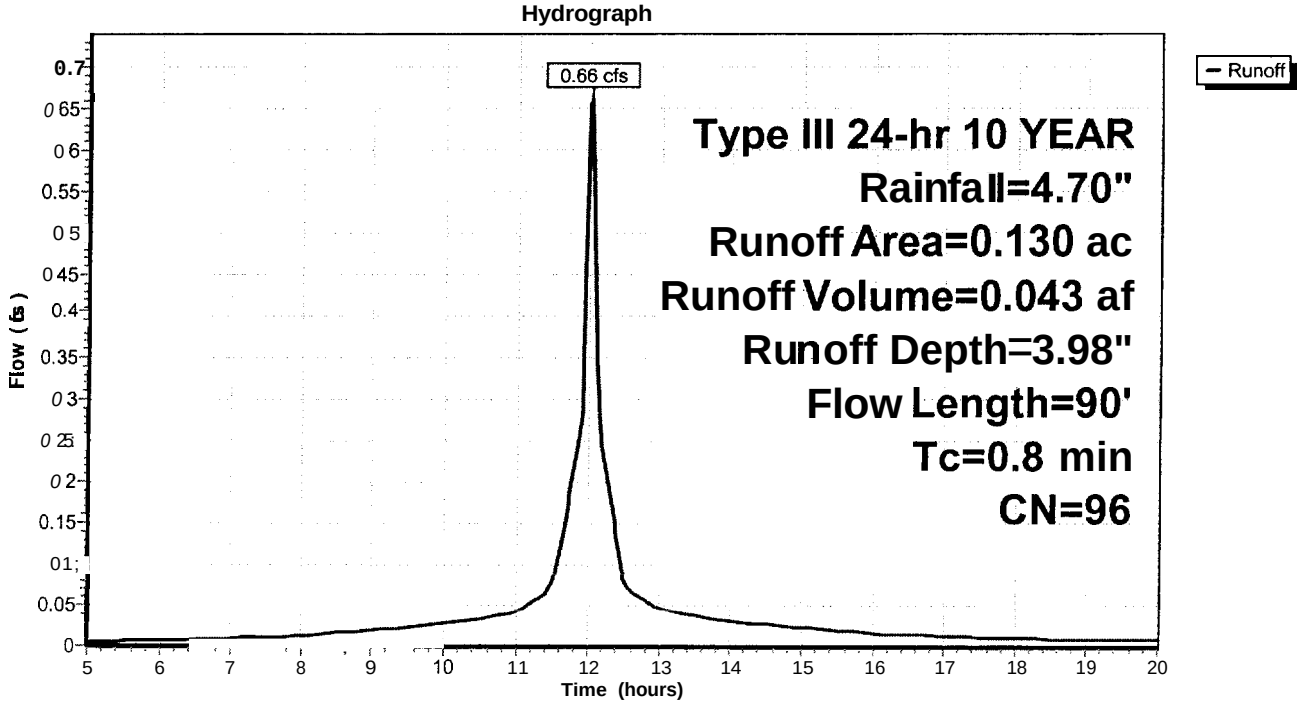
Runoff = 0.66 cfs @ 12.01 hrs, Volume= 0.043 af, Depth= 3.98"

Runoff by SCS TR-20 method, UH=SCS, Time Span= 5.00-20.00 hrs, dt= 0.05 hrs
Type III 24-hr 10 YEAR Rainfall=4.70"

Area (ac)	CN	Description
0.120	98	Paved parking & roofs
0.010	74	>75% Grass cover, Good, HSG C
0.130	96	Weighted Average

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
0.8	90	0.0500	1.9		**Sheet Flow, PAVEMENT** Smooth surfaces n= 0.011 P2= 3.00"

Subcatchment 3S: POSTDEVELOPMENT TO YORK ST



Subcatchment IS: PREDEVELOPMENT

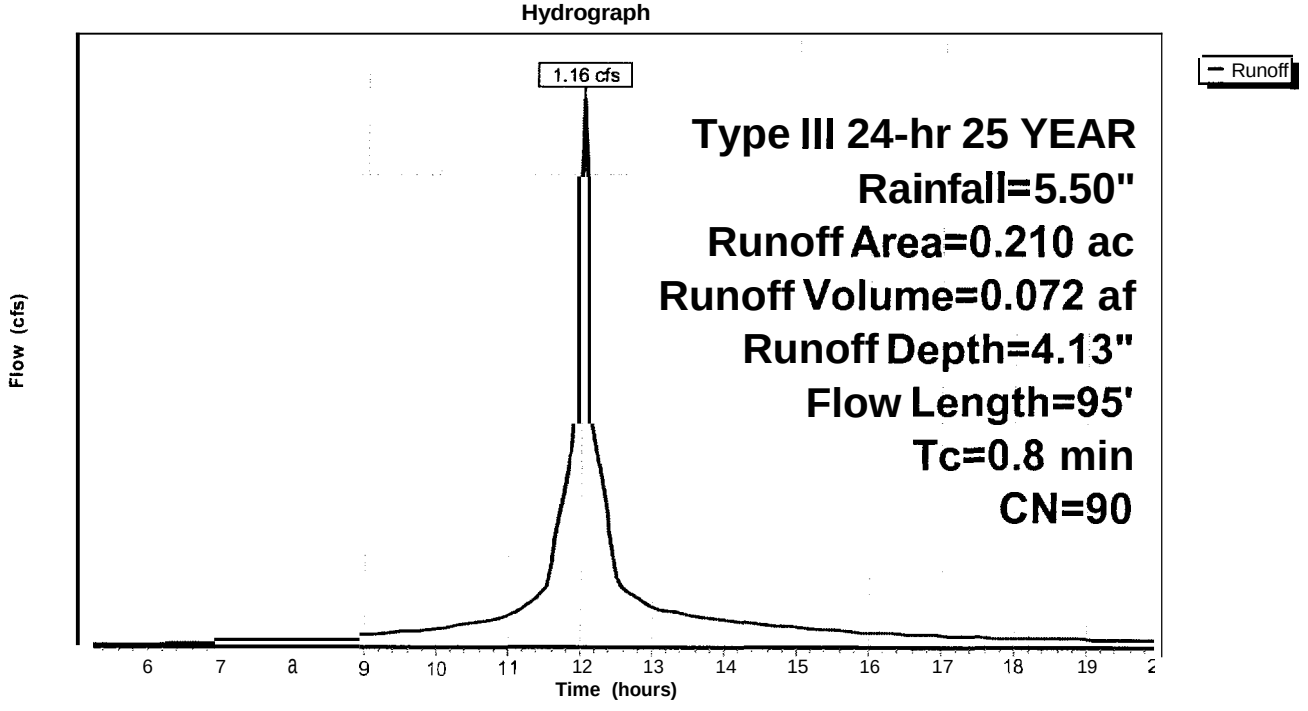
Runoff = 1.16 cfs @ 12.01 hrs, Volume= 0.072 af, Depth= 4.13"

Runoff by SCS TR-20 method, UH=SCS, Time Span= 5.00-20.00 hrs, dt= 0.05 hrs
Type III 24-hr 25 YEAR Rainfall=5.50"

Area (ac)	CN	Description
0.070	74	>75% Grass cover, Good, HSG C
0.140	98	Paved parking & roofs
0.210	90	Weighted Average

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (Wsec)	Capacity (cfs)	Description
0.4	45	0.0880	2. ▮		**Sheet Flow, PAVEMENT** Smooth surfaces n= 0.011 P2= 3.00"
0.4	50	0.1000	2.2		**Shallow Concentrated Flow, GARDEN** Short Grass Pasture Kv= 7.0 fps
0.8	95	Total			

Subcatchment IS: PREDEVELOPMENT



Subcatchment 2S: POSTDEVELOPMENT TO CB

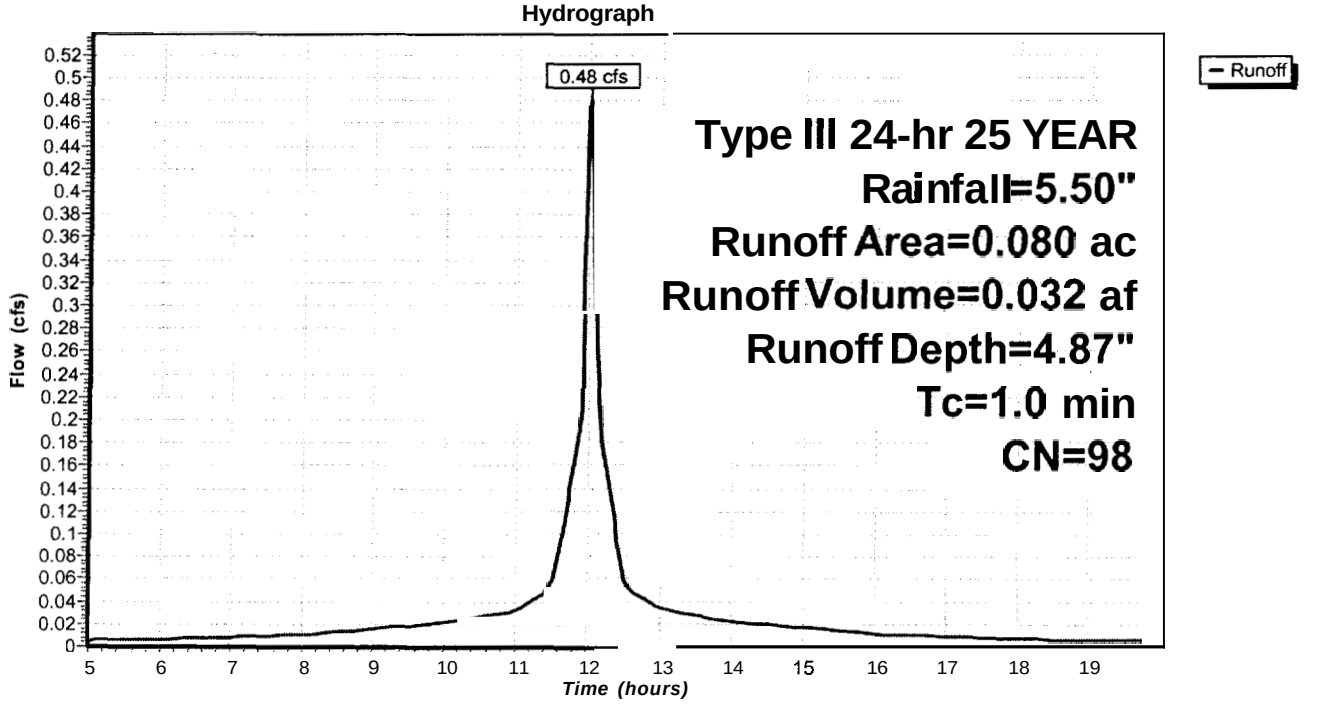
Runoff = 0.48 cfs @ 12.01 hrs, Volume= 0.032 af, Depth= 4.87"

Runoff by SCS TR-20 method, UH=SCS, Time Span= 5.00-20.00 hrs, dt= 0.05 hrs
Type III 24-hr 25 YEAR Rainfall=5.50"

Area (ac)	CN	Description
0.080	98	Paved roads w/curbs & sewers

Tc (min)	Length (feet)	Slope (Wft)	Velocity (Wsec)	Capacity (cfs)	Description
1.0					Direct Entry, ROOF DRAINS

Subcatchment 2S: POSTDEVELOPMENT TO CB



Subcatchment 3S: POSTDEVELOPMENT TO YORK ST

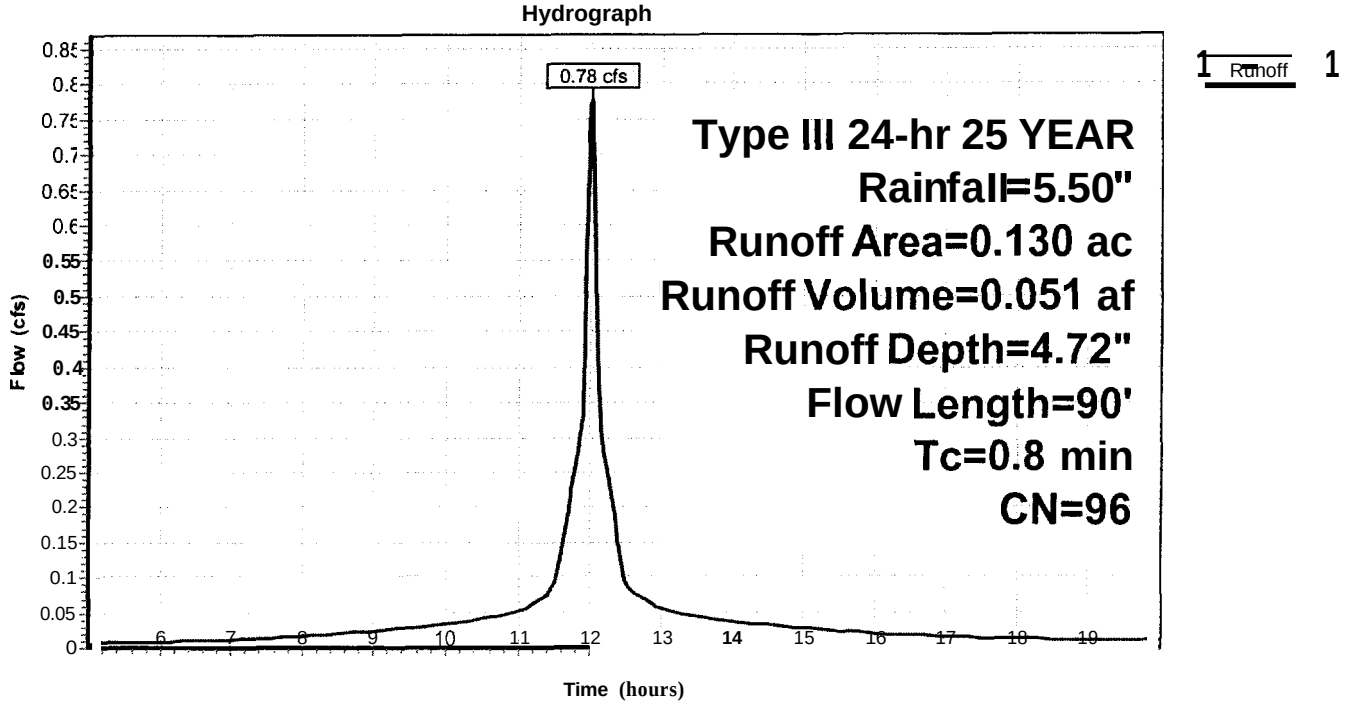
Runoff = 0.78 cfs @ 12.01 hrs, Volume= 0.051 af, Depth= 4.72"

Runoff by SCS TR-20 method, UH=SCS, Time Span= 5.00-20.00 hrs, dt= 0.05 hrs
Type III 24-hr 25 YEAR Rainfall=5.50"

Area (ac)	CN	Description
0.120	98	Paved parking & roofs
0.010	74	>75% Grass cover, Good, HSG C
0.130	96	Weighted Average

Tc (min)	Length (feet)	Slope (Wft)	Velocity (Wsec)	Capacity (cfs)	Description
0.8	90	0.0500	1.9		**Sheet Flow, PAVEMENT** Smooth surfaces n= 0.011 P2= 3.00"

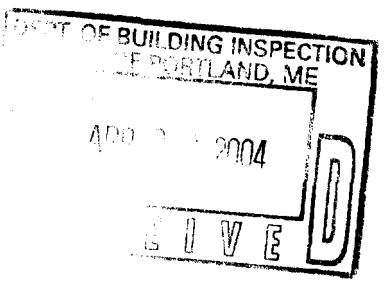
Subcatchment 3S: POSTDEVELOPMENT TO YORK ST



APPENDIX D

GEOTECHNICAL REPORT

April 23, 2004



To: Rick Knowland

From: Ron and Christine Spinella

Re: Mariners Row parking *tot* design

In response to Sebago Technics site plan review *3i3*1/04 (Number 4: Parking, Access & Circulation). Concern was noted for the driveway dimension *(2*1'3"), stall sizes (1Ox17) and percentage of compact. spaces (50%). We address these issues as follows:

1. Driveway dimension: The ordinance requires a **24'** driveway which adding the stall requirements of 19'(x2) results in total width of 62'. **'The** proposed parking **lot** total width is 55'3" with curb overhang of 2' or total width ***of*** 57'3". There are existing successful parking lots on the peninsula which do not **meet** this standard and are **the** same size: or smaller than the one we **propose** *(see* attached). These **arc** examples ***of'*** both public and private **lots.** Mercy Hospital's lot (attach. C, D) has **a** high turnovet **of'**vehicles throughout the day with driveways smaller then this proposed lot. The Park Row Association lot (attach. **A) parks** 65 cars in the same overall width.

   'Theproposed lot also has some advantages over these examples. There are 5' walkways between spaces 2 & 3, and **4** & 5 and **6** and the retaining wall. **As** well as 32' of unencumbered lot behind spaces 5 & **6.** This all should allow Lor increased maneuverability. Spaces 4 & 5 on the 193 York side also have **extra** room. Additionally the proposed new parking spaces are 2'6" (combined) wider than recommended giving even more maneuvering **space.**

2. **Stall** sizes: The ordinance calls for standard parking spaces to be 9'x19' and compact spaces to be 7.5'x15'. The proposed spaces are standard 10'x17' and compact 9'x **16'** 5". With **a** 1' overhang the standard spaces would he 10'x 18' or 1' short. The compact spaces exceeded the requirements for both width and length. On the 193 **York** side the 1' overhang results in a parking space size of 9'x18' or 1' short of the requirement.

3. Percentage of compact spaces: Sebago Technics suggests that the proposed parbing area provides too **many** compact spaces. Actually the requirements for **parking** spaces under the infill ordinance Sec14-140 is: "for small **lots** which meet and are developed under the dimensional standards of 14-139(2) above: one (1) parking space is required and **shall** be located on the same lot." The proposed parking spaces exceed the requirement.

4

Park Row Association

Width : 55 feet

parking spaces: 8' x 16'

Overhang : x 2

B

Cumberland Ave

Width: 55 feet front - 49 feet back
parking spaces: unmarked
Overhang: x1

Mercy Hospital (middle aisle)

Width; 48.4 feet

Parking spaces; 9'x17'

Over-hang; 0

D

Mercy Hospital (rear aisle)

Width: 54 feet
Parking spaces: 9'x17'
Overhang: x1

E

Federal St Post Office

Width: 57 feet

parking spaces: 8.6 x 18

Overhang: x 2

F

Carlton St. (L)

Width; 57 feet

Parking Spaces; 9 x 15.6

Overhang; X1

ε

Carlton St (R)

Width: 55 feet
parking spaces: 9 x 15.6
Overhang: 0

Danforth St VIA

Width: 54.6 feet

parking spaces: unmarked

Overhang: 0

I

Hub Furniture, Fore St.

Width: 54 feet

parking spaces 8.5 x 16.4

Overhang: x 1

CITY OF PORTLAND, MAINE

Department of Building Inspections

_____ 20 _____

Received from _____

Location of Work _____

Cost of Construction $_____

Permit Fee $_____

Building (IL) ___ Plumbing (I5) ___ Electrical (I2) ___ Site Plan (U2) ___

Other _____

CBL:_____

Check #:_____ **Total Collected $**_____

THIS IS NOT A PERMIT

No work is to be started until PERMIT CARD is actually posted upon the premises. Acceptance of fee is no guarantee that permit will be granted. PRESERVE THIS RECEIPT. In case permit cannot be granted the amount of the fee will be refunded upon return of the receipt less $10.00 or 10% whichever is greater.

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