DISPLAY THIS CARD ON PRINCIPAL FRONTAGE OF WORK

CITY OF PORTLAND

BUILDING PERMIT

This is to certify that
DEAN & ALLYN, INC.
PO BOX 709 - 116 LEWISTON RD
GRAY, ME 04039

For installation at
4 ST LAWRENCE ST
TWO-FAMILY

Job ID: 2012-08-4603-FAFS

CBL: 016- J-012-001

has permission to install NFPA 13D sprinkler system
provided that the person or persons, firm or corporation accepting this permit shall comply with all of the provisions of the Statues of Maine and of the Ordinances of the City of Portland regulating the construction, maintenance and use of the buildings and structures, and of the application on file in the department.

Notification of inspection and written permission procured before this building or part thereof is lathed or otherwise closed-in. 48 HOUR NOTICE IS REQUIRED.	A final inspection must be completed by owner before this building or part thereof is occupied. If a certificate of occupancy is required, it must be

BJ Walls (58)

Fire Prevention Officer **Code Enforcement Officer / Plan Reviewer**

THIS CARD MUST BE POSTED ON THE STREET SIDE OF THE PROPERTY
PENALTY FOR REMOVING THIS CARD

BUILDING PERMIT INSPECTION PROCEDURES

Please call 874-8703 or 874-8693 (ONLY)

or email: buildinginspections@portlandmaine.gov

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

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

Final Fire

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

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

PORTLAND MAINE

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

Director of Planning and Urban Development
Jeff Levine

Job ID: 2012-08-4603-FAFS
install NFPA 13D sprinkler system

For installation at:
4 ST LAWRENCE ST
TWO-FAMILY

CBL: 016- J-012-001

Conditions of Approval:

Fire

1. The sprinkler system shall be installed in accordance with NFPA 13D. A compliance letter is required.
2. All control valves shall be supervised in accordance with NFPA 13D. Pad locks shall only be installed on valves designed to be secured in the open position by pad lock.
3. Application requires State Fire Marshal approval.

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

Job No:	Date Applied:	CBL:	
2012-08-4603-FAFS	**8/1/2012**	**016- J-012-001**	
Location of Construction: **4 ST LAWRENCE ST**	Owner Name: **PETER & MARGARET MACOMBER**	Owner Address: **88 FESSENDEN ST PORTLAND, ME 04103**	Phone:
Business Name:	Contractor Name: **Dean& Allyn – Harry King**	Contractor Address: **P.O. BOX 709 GRAY MAINE 04039**	Phone: **(207) 657-5646**
Lessee/Buyer's Name:	Phone:	Permit Type: **FIRE SUPPRESSION SYSTEM**	Zone: **R-6**
Past Use: **Two Family**	Proposed Use: **Same: Two Family – to install fire suppression system**	Cost of Work: **$15,000.00**	CEO District:
		Fire Dept: 8/8/12 ↓ Approved w/ conditions ___ Denied ___ N/A Signature: Bjackley (58)	Inspection: Use Group: Type: Signature:
Proposed Project Description: **Fire Suppression for residential**		Pedestrian Activities District (P.A.D.)	
Permit Taken By: Brad		**Zoning Approval**	

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 electrial work.
3. Building permits are void if work is not started within six (6) months of the date of issuance. False informatin may invalidate a building permit and stop all work.

Special Zone or Reviews	Zoning Appeal	Historic Preservation
___ Shoreland	___ Variance	✓ Not in Dist or Landmark
___ Wetlands	___ Miscellaneous	___ Does not Require Review
___ Flood Zone	___ Conditional Use	___ Requires Review
___ Subdivision	___ Interpretation	___ Approved
___ Site Plan	___ Approved	___ Approved w/Conditions
___ Maj ___ Min ___ MM	___ Denied	___ Denied
Date: OK - 8/3/12	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 appication 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

R-4 Extend 8/2/12

Fire Suppression System Permit

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

By mail

2012-08-4603-FAFS

Installation address: 4 St. Lawrence St CBL: 016 J012

Exact location: (within structure) complete Guildings

Type of occupancy(s) (NFPA or IBCC):

Building owner: Peter & Mary Macomber 88 Fessenden 04103

Managing Supervisor: DANA Stewart License No: NICET IV 064544

Supervisor phone: E-mail:

Installing contractor: License No:

Contractor phone: 233 9105 E-mail: hking@Maine.rr.com

The suppression work to be done will be: New: X Renovation: ☐ Addition to existing system: ☐

This is an amendment to an existing permit: Yes: ☐ NO ☐ Permit no:

NFPA Standard will this system is designed to: 13D Edition: 2010

*Non-NFPA systems are not approved for use within the City of Portland.

Attach all design information and complete approved submittals as may be required by the State Fire Marshal's Office.

Contractor shall verify location and type of all FDCs shall be approved in writing by the Fire Prevention Bureau.

$ S. Residential

COST OF WORK: 15,000

PERMIT FEE: ~~$170.00~~

($10 PER $1,000 + $30 FOR THE FIRST $1,000)

RECEIVED

AUG 01 2012

Dept. of Building Inspections
City of Portland Maine

Download a new copy of this document from www.portlandmaine.gov for every submittal. Submit all information to the Building Inspections Department, 389 Congress Street, Room 315, Portland, Maine 04101.

Prior to acceptance of any fire protection system, a complete commissioning and acceptance test must be coordinated with all fire system contractors and the Fire Department, and proper documentation of such test(s) provided.

All installation(s) must comply with NFPA and the Fire Department Technical Standard(s).

Applicant signature: Harry King Date: 7-31-12

Harry King
Dean and Allyn INC
PO Box 709
GRAY Maine

. . . Fire Protection by Computer Design

DEAN & ALLYN, INC.
PO BOX 709
116 LEWISTON ROAD
GRAY, MAINE 04039
207-657-5646

Job Name	:	4 ST LAWRENCE ST
Building	:	
Location	:	4 ST LAWRENCE STREET PORTLAND MAINE
System	:	
Contract	:	121094
Data File	:	ST LAWRENCE ST.WXF

HYDRAULIC DESIGN INFORMATION SHEET

Name - 4 ST LAWRENCE STREET Date - 7-21-12
Location - 4 ST LAWRENCE STREET PORTLAND MAINE
Building - System No. -
Contractor - DEAN AND ALLYN INC Contract No. - 121094
Calculated By - H KING Drawing No. - 1 OF 1
Construction: (X) Combustible ( ) Non-Combustible Ceiling Height VARIES
OCCUPANCY - RESIDENTIAL

SYSTEM DESIGN

Type of Calculation: ( )NFPA 13 Residential ( )NFPA 13R (X)NFPA 13D
Number of Sprinklers Flowing: ( )1 (X)2 ( )4 ( )
( )Other
( )Specific Ruling Made by Date

Listed Flow at Start Point - 13 Gpm System Type
Listed Pres. at Start Point - 10.6 Psi (X) Wet ( ) Dry
MAXIMUM LISTED SPACING 16 x 16 ( ) Deluge ( ) PreAction
Domestic Flow Added - 5 Gpm Sprinkler or Nozzle
Additional Flow Added - Gpm Make VIKING Model FREEDOM
Elevation at Highest Outlet - 33' Feet Size 1/2" K-Factor 4.0
Note:CUSHION: 13.24 PSI Temperature Rating 155

Calculation Summary Gpm Required 31.3 Psi Required 69.7 At Test
C-Factor Used: Overhead 120 Underground 120

WATER SUPPLY

Water Flow Test:
Date of Test - 8-9-11
Time of Test -
Static (Psi) - 83
Residual (Psi) - 20
Flow (Gpm) - 1233
Elevation - 0

Pump Data:
Rated Cap.
@ Psi
Elev.
Other

Tank or Reservoir:
Cap.
Elev.

Well
Proof Flow Gpm

Location: FEDERAL STREET

Source of Information: PWD

Fitting Legend

Abbrev.	Name	½	¾	1	1¼	1½	2	2½	3	3½	4	5	6	8	10	12	14	16	18	20	24
E	NFPA 13 90' Standard Elbow	1	2	2	3	4	5	6	7	8	10	12	14	18	22	27	35	40	45	50	61
G	NFPA 13 Gate Valve	0	0	0	0	0	1	1	1	1	2	2	3	4	5	6	7	8	10	11	13
S	NFPA 13 Swing Check	0	0	5	7	9	11	14	16	19	22	27	32	45	55	65					
T	NFPA 13 90' Flow thru Tee	3	4	5	6	8	10	12	15	17	20	25	30	35	50	60	71	81	91	101	121

Units Summary

Diameter Units	Inches
Length Units	Feet
Flow Units	US Gallons per Minute
Pressure Units	Pounds per Square Inch

Note: Fitting Legend provides equivalent pipe lengths for fittings types of various diameters. Equivalent lengths shown are standard for actual diameters of Sched 40 pipe and CFactors of 120 except as noted with *. The fittings marked with a * show equivalent lengths values supplied by manufacturers based on specific pipe diameters and CFactors and they require no adjustment. All values for fittings not marked with a * will be adjusted in the calculation for CFactors of other than 120 and diameters other than Sched 40 per NFPA.

Node No.	Elevation	K-Fact	Pt Actual	Pn	Flow Actual	Density	Area	Press Req.
1	33.0	4	10.6	na	13.02	0.05	256	10.6
2	33.0	4	11.02	na	13.28	0.05	256	10.6
10	21.0		16.92	na				
11	21.0		17.33	na				
12	21.0		17.37	na				
13	21.0		17.8	na				
14	10.0		29.69	na				
15	10.0		32.28	na				
16	10.0		34.72	na				
17	10.0		37.31	na				
18	0.0		44.56	na				
TR	0.0		50.17	na				
FF	-6.0		55.79	na	5.0			
CTY	0.0		69.69	na				

The maximum velocity is 12.17 and it occurs in the pipe between nodes FF and CTY

DEAN & ALLYN, INC.
4 ST LAWRENCE ST

Hyd. Ref. Point	Qa Qt	Dia. "C" Pf/Ft	Fitting or Eqv.	Ln.	Pipe Ftng's Total	Pt Pe Pf	Pt Pv Pn	******* Notes ******
1	13.02	1.049	1T	5.0	12.000	10.600		K Factor = 4.00
to		120.0	1E	2.0	7.000	5.197		
10	13.02	0.0588		0.0	19.000	1.118		Vel = 4.83
	0.0							
	13.02					16.915		K Factor = 3.17
2	13.28	1.049	1T	5.0	12.000	11.015		K Factor = 4.00
to		120.0	1E	2.0	7.000	5.197		
12	13.28	0.0610		0.0	19.000	1.159		Vel = 4.93
	0.0							
	13.28					17.371		K Factor = 3.19
10	13.02	1.049	1T	5.0	2.000	16.915		
to		120.0		0.0	5.000	0.0		
11	13.02	0.0589		0.0	7.000	0.412		Vel = 4.83
11	0.0	1.049		0.0	8.000	17.327		
to		120.0		0.0	0.0	0.0		
13	13.02	0.0589		0.0	8.000	0.471		Vel = 4.83
	0.0							
	13.02					17.798		K Factor = 3.09
12	13.28	1.049	1T	5.0	2.000	17.371		
to		120.0		0.0	5.000	0.0		
13	13.28	0.0610		0.0	7.000	0.427		Vel = 4.93
13	13.02	1.049	3E	6.0	17.000	17.798		
to		120.0	2T	10.0	16.000	4.764		
14	26.3	0.2159		0.0	33.000	7.126		Vel = 9.76
14	0.0	1.049	1E	2.0	10.000	29.688		
to		120.0		0.0	2.000	0.0		
15	26.3	0.2160		0.0	12.000	2.592		Vel = 9.76
15	0.0	1.049	2T	10.0	1.300	32.280		
to		120.0		0.0	10.000	0.0		
16	26.3	0.2159		0.0	11.300	2.440		Vel = 9.76
16	0.0	1.049	1T	5.0	5.000	34.720		
to		120.0	1E	2.0	7.000	0.0		
17	26.3	0.2160		0.0	12.000	2.592		Vel = 9.76
17	0.0	1.049	1E	2.0	11.500	37.312		
to		120.0		0.0	2.000	4.331		
18	26.3	0.2159		0.0	13.500	2.915		Vel = 9.76
18	0.0	1.049	2E	4.0	12.000	44.558		
to		120.0	2T	10.0	14.000	0.0		
TR	26.3	0.2160		0.0	26.000	5.615		Vel = 9.76
TR	0.0	1.049	1S	5.0	7.000	50.173		
to		120.0	1Z	0.0	5.000	2.599		
FF	26.3	0.2519		0.0	12.000	3.023		Vel = 9.76

DEAN & ALLYN, INC.
4 ST LAWRENCE ST

Hyd. Ref. Point	Qa Qt	Dia. "C" Pf/Ft	Fitting or Eqv.	Ln.	Pipe Ftng's Total	Pt Pe Pf	Pt Pv Pn	******* Notes ******
FF	5.00	1.025	2E	3.574	30.000	55.795		Qa = 5
to		120.0	1G	0.0	3.574	2.401		* Fixed loss = 5
CTY	31.3	0.3424		0.0	33.574	11.496		Vel = 12.17
	0.0							
	31.30					69.692		K Factor = 3.75

City Water Supply:
C1 - Static Pressure : 83
C2 - Residual Pressure: 20
C2 - Residual Flow : 1233

Demand:
D1 - Elevation : 14.292
D2 - System Flow : 26.299
D2 - System Pressure : 69.692
Hose (Demand) : 5
D3 - System Demand : 31.299
Safety Margin : 13.237