

DISPLAY THIS CARD ON PRINCIPAL FRONTAGE OF WORK



CITY OF PORTLAND BUILDING PERMIT



This is to certify that

HARBORVIEW DEVELOPMENT LLC /Sprinkler System,
Inc

PERMIT ID: 2012-65579

Located at

127 YORK ST

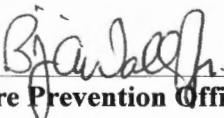
CBL: 044 A005001

has permission to **install NFPA 13R supervised 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 closoed-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 procured prior to occupancy.


Fire Prevention Officer

(58)

Code Enforcement Officer / Plan Reviewer

**THIS CARD MUST BE POSTED ON THE STREET SIDE OF THE PROPERTY
THERE IS A PENALTY FOR REMOVING THIS CARD**

BUILDING PERMIT INSPECTION PROCEDURES
Please call 874-8703 (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.**

REQUIRED INSPECTIONS:

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.

City of Portland, Maine - Building or Use Permit

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

Permit No: 201265579	Date Applied For: 12/11/2012	CBL: 044 A005001
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Location of Construction: 127 YORK ST	Owner Name: HARBORVIEW DEVELOPMENT	Owner Address: PO BOX 8816	Phone:
Business Name:	Contractor Name: Sprinkler System, Inc	Contractor Address: P.O. Box 1285 Lewiston	Phone (207) 782-0104
Lessee/Buyer's Name	Phone:	Permit Type: Fire Alarm / Suppression	

Proposed Use: Same: Bldg #1 = 12 res. Condos; Bldg #2 = 7 res. Condos	Proposed Project Description: install NFPA 13R supervised sprinkler system.
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Dept: Zoning **Status:** Approved **Reviewer:** Marge Schmuckal **Approval Date:** 12/13/2012
Note: **Ok to Issue:**

Dept: Fire **Status:** Approved w/Conditions **Reviewer:** Ben Wallace Jr **Approval Date:** 12/24/2012
Note: **Ok to Issue:**

- 1) A separate Fire Alarm Permit is required. This review does not include approval of fire alarm system design or installation.
- 2) A sprinkler supervisory system shall be provided in accordance with NFPA 101, Life Safety Code, and NFPA 72, National Fire Alarm and Signaling Code. Sprinkler supervisory systems shall monitor for water flow and sprinkler supervisory signals via an approved fire alarm panel to central station. One smoke detector shall be located over the panel, a manual pull station located at the front door, and an audible water flow alarm provided.
- 3) The sprinkler system shall be installed in accordance with NFPA 13R. The FDC shall be located adjacent to the York Street curb, protected as appropriate from vehicular damage, and clearly marked with permanent signage as to the structure it serves. A Knox Locking cap is not required.
- 4) Installation of a sprinkler or fire alarm system requires a Knox Box to be installed per city ordinance.
- 5) Fire protection systems shall be maintained. If system is to be off line over 4 hours a fire watch shall be in place. Dispatch notification required 874-8576.

City of Portland, Maine - Building or Use Permit Application

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

Permit No: 2012-65579	Issue Date:	CBL: 044 A005001
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Location of Construction: 127 YORK ST	Owner Name: HARBORVIEW DEVELOPMENT	Owner Address: PO BOX 8816	Phone:
Business Name:	Contractor Name: Sprinkler System, Inc	Contractor Address: P.O. Box 1285 Lewiston	Phone: (207) 782-0104
Lessee/Buyer's Name	Phone:	Permit Type: Fire Alarm / Suppression	Zone: R6
Past Use: 2 buildings on lot: bldg #1= 12 residential condos; Bldg #2 = 7 residential condos under construction	Proposed Use: Same: Bldg #1 = 12 res. Condos; Bldg #2 = 7 res. Condos	Permit Fee: \$140.00	Cost of Work: \$12,000.00
Proposed Project Description: Install fire suppression system for entire new building		FIRE DEPT: <input checked="" type="checkbox"/> Approved <input type="checkbox"/> Denied <input type="checkbox"/> N/A <i>12/24/12</i>	INSPECTION: Use Group: Type:
		Signature: <i>[Signature]</i> Signature:	
PEDESTRIAN ACTIVITIES DISTRICT (P.A.D.)			
Action: <input type="checkbox"/> Approved <input type="checkbox"/> Approved w/Conditions <input type="checkbox"/> Denied			
Signature: Date:			

Permit Taken By: Idobson	Date Applied For: 12/11/2012	Zoning Approval			
<ol style="list-style-type: none"> This permit application does not preclude the Applicant(s) from meeting applicable State and Federal Rules. Building permits do not include plumbing, septic or electrical work. 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.. 	Special Zone or Reviews <input type="checkbox"/> Shoreland <input type="checkbox"/> Wetland <input type="checkbox"/> Flood Zone <input type="checkbox"/> Subdivision <input type="checkbox"/> Site Plan Maj <input type="checkbox"/> Minor <input type="checkbox"/> MM <input type="checkbox"/>	Zoning Appeal <input type="checkbox"/> Variance <input type="checkbox"/> Miscellaneous <input type="checkbox"/> Conditional Use <input type="checkbox"/> Interpretation <input type="checkbox"/> Approved <input type="checkbox"/> Denied	Historic Preservation <input checked="" type="checkbox"/> Not in District or Landmark <input type="checkbox"/> Does Not Require Review <input type="checkbox"/> Requires Review <input type="checkbox"/> Approved <input type="checkbox"/> Approved w/Conditions <input type="checkbox"/> Denied	Date: <i>12/13/12</i>	Date: <i>[Signature]</i>

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



2012-6-5579

Water-Based 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.

Installation address: 121 York Street CBL: 44-A-5

Exact location: (within structure) Harborview TownHomes

Type of occupancy(s) (NFPA & ICC): Residential - 7 Unit Condominium

Building owner: Redfern Properties, P. O. Box 8816, Portland, ME 04104

Managing Supervisor (RMS): Scott E. Garland License No: 278

Supervisor phone: 207-775-1521 E-mail: scottg@sprinklersystemsinc.com

Installing contractor: Sprinkler Systems Inc. License No: 093

Contractor phone: 207-782-0104 E-mail: _____

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

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

NFPA Standard this system is designed to: NFPA #13-R Edition: 2010

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

Download a new copy of this document from www.portlandmaine.gov/fire for every submittal. Attach all working documents and complete approved submittals as may be required by the State Fire Marshal's Office on electronic PDF's in addition to full sized plans.

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

COST OF WORK: <u>\$12,000.00</u>
PERMIT FEE: <u>\$140.00</u>
(<small>\$10 PER \$1,000 + \$30 FOR THE FIRST \$1,000</small>)
RECEIVED DEC 11 2012 Dept. of Building Inspections City of Portland Maine

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: _____ Date: 12-7-2012



State of Maine
Department of Public Safety
Fire Sprinkler System Permit



10298

Harborview Town Homes

Located at: 121 York Street
 In the Town of: Portland
 Occupancy/Use: Residential - Townhouses
 Type of System: NFPA 13R

Permission is hereby given to:

Sprinkler Systems, Inc.
 PO Box 1285
 Lewiston, ME 042431285
 Contractor License # 93

to begin installation according to plans submittal approved by the Office of State Fire Marshal. The submittal is filed under log # 2121486 , and no departure from the application submittal shall be made without prior approval in writing. This permit is issued under the provisions of Title 32, Chapter 20, Section 12004-I. Nothing herein shall excuse the holder of this permit from failure to comply with local ordinances, zoning laws, or other pertinent legal restrictions. This permit shall be displayed at the construction site or be made readily available.

This permit was issued on 10/20/2012 for a fee paid of \$131.00

This permit will expire at midnight on Thursday, April 18, 2013

The expiration date applies only if the installation has not begun by that date and no permission has been granted to extend the date. Once installation begins, then the permit is valid for however long it takes to complete the installation, assuming that the work is fairly continuous.

John E. Morris
 Commissioner

The type of Fire Department Connection and its location is to be according to the Local Fire Department

Within 30 days of the completion of a new fire sprinkler system or an addition to an existing fire sprinkler system, a fire sprinkler system contractor shall provide to the Office of State Fire Marshal a copy of this permit signed and dated by the certified Responsible Managing Supervisor representing that the fire sprinkler system has been installed according to specifications of the approved plan to the best of the supervisor's knowledge, information, and belief. This requirement is part of the sprinkler law, and neglect of this duty is grounds to not renew the contractor's license to work in the State of Maine. All renewed sprinkler licenses are good for two years and expire on a June 30th.

Job completed, tested and verified by date of _____

RMS for this job: Garland Scott E.

RMS Signature: _____



... Fire Protection by Computer Design

Sprinkler Systems Inc.
2-4 Avon Street
P O Box 1285
Lewiston, Maine 04240
207-782-0104

Job Name : HARBORVIEW TOWNHOMES
Building :
Location : 121 YORK STREET, PORTLAND, MAINE 04102
System : 1 OF 1
Contract : 12070
Data File : 12070HARBORVIEWTOWNHOMES1.WXF

HYDRAULIC DESIGN INFORMATION SHEET

Name - HARBORVIEW TOWNHOMES Date - 10-16-2012
Location - 121 YORK STREET, PORTLAND, MAINE 04102
Building - System No. - 1 OF 1
Contractor - REDFERN PROPERTIES Contract No. - 12070
Calculated By - SCOTT E. GARLAND Drawing No. - 1,2 OF 2
Construction: (X) Combustible () Non-Combustible Ceiling Height 12-6
OCCUPANCY - RESIDENTIAL - TOWNHOME

S Type of Calculation: () NFPA 13 Residential (X) NFPA 13R () NFPA 13D
Y Number of Sprinklers Flowing: () 1 () 2 (X) 4 ()
S () Other
T () Specific Ruling Made by Date
E
M Listed Flow at Start Point - 16.0 Gpm System Type
Listed Pres. at Start Point - 13.3 Psi (X) Wet () Dry
D MAXIMUM LISTED SPACING 16 x 16 () Deluge () PreAction
E Domestic Flow Added - Gpm Sprinkler or Nozzle
S Additional Flow Added - Gpm Make RELIABLE Model F1RES44
I Elevation at Highest Outlet - 89.458 Feet Size 1/2 X 1/2 K-Factor 4.4
G Note: Temperature Rating 155 DEG
N DESIGN AREA #1 - THIRD FLOOR UNIT

Calculation Gpm Required 70.891 Psi Required 60.647 AT BASE
Summary C-Factor Used: Overhead 150 Underground 140

W Water Flow Test: Pump Data: Tank or Reservoir:
A Date of Test - 5-31-2002 Rated Cap. Cap.
T Time of Test - @ Psi Elev.
E Static (Psi) - 76 Elev.
R Residual (Psi) - 74 Other Well
Flow (Gpm) - 963 Proof Flow Gpm
S Elevation - 70.417

P Location: ON DANFORTH STREET AT PARK STREET, 650'-0" +/- FROM THE BUILDING

P Source of Information: PORTLAND WATER DISTRICT
L
Y

Fittings Used Summary

Sprinkler Systems Inc.
HARBORVIEW TOWNHOMES

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Date 10-16-12

Fitting Legend		1/2	3/4	1	1 1/4	1 1/2	2	2 1/2	3	3 1/2	4	5	6	8	10	12	14	16	18	20	24	
Abbrev.	Name																					
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	
F	NFPA 13 45' Elbow	1	1	1	1	2	2	3	3	3	4	5	7	9	11	13	17	19	21	24	28	
Fsp	Flow Switch Potter VSR	Fitting generates a Fixed Loss Based on Flow																				
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	
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

Pressure / Flow Summary - STANDARD

Sprinkler Systems Inc.
HARBORVIEW TOWNHOMES

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Date 10-16-12

Node No.	Elevation	K-Fact	Pt Actual	Pn	Flow Actual	Density	Area	Press Req.
1	89.458	4.4	13.3	na	16.05	0.05	320	13.3
2	89.458	4.4	13.3	na	16.05	0.05	320	13.3
A	79.792		22.27	na				
6	79.792		24.04	na				
BB	79.792		25.92	na				
3	89.548	4.4	18.77	na	19.06	0.05	320	13.3
C	79.792		24.76	na				
7	79.792		24.88	na				
8	79.792		25.72	na				
B	79.792		26.44	na				
4	89.458	4.4	20.08	na	19.72	0.05	320	13.3
FT	89.458		20.74	na				
F	76.792		28.23	na				
E	76.792		28.94	na				
D	76.792		34.09	na				
G	74.292		36.84	na				
H	68.667		41.38	na				
J	62.417		44.33	na				
K	57.417		47.11	na				
L	57.417		47.91	na				
RT	57.417		48.58	na				
TV	51.75		54.31	na				
RB	49.0		60.64	na				
X3	33.0		77.35	na				
X1	33.0		77.35	na				
X2	33.0		77.35	na				
TEST	70.417		61.18	na				

The maximum velocity is 14.9 and it occurs in the pipe between nodes E and D

Final Calculations - Hazen-Williams

Sprinkler Systems Inc.
HARBORVIEW TOWNHOMES

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Date 10-16-12

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 to 2	16.05	1.101 150.0		0.0	0.001	13.300 0.0			K Factor = 4.40	
2 to A	16.05	0.0		0.0	0.001	0.0			Vel = 5.41	
2 to A	16.04	1.101 150.0	1E 1T	3.825 9.563	15.917 13.387	13.300 4.186			K Factor = 4.40	
A to 6	32.09	0.1632		0.0	29.304	4.783			Vel = 10.81	
A to 6	0.0	1.101 150.0		0.0	10.833	22.269 0.0				
6 to BB	32.09	0.1632		0.0	10.833	1.768			Vel = 10.81	
6 to BB	0.0	1.101 150.0	1T	9.563	2.000	24.037 0.0				
BB to B	32.09	0.1632		0.0	11.562	1.887			Vel = 10.81	
BB to B	0.0	1.394 150.0		0.0	10.000	25.924 0.0				
B	32.09	0.0517		0.0	10.000	0.517			Vel = 6.75	
	0.0									
	32.09					26.441			K Factor = 6.24	
3 to C	19.06	1.101 150.0	1E 1T	3.825 9.563	14.917 13.387	18.773 4.225			K Factor = 4.40	
C to 7	19.06	0.0623		0.0	28.304	1.763			Vel = 6.42	
C to 7	0.0	1.101 150.0		0.0	1.917	24.761 0.0				
7 to 8	19.06	0.0621		0.0	1.917	0.119			Vel = 6.42	
7 to 8	0.0	1.101 150.0		0.0	13.500	24.880 0.0				
8 to B	19.06	0.0623		0.0	13.500	0.841			Vel = 6.42	
8 to B	0.0	1.101 150.0	1T	9.563	2.000	25.721 0.0				
B	19.06	0.0623		0.0	11.562	0.720			Vel = 6.42	
	0.0									
	19.06					26.441			K Factor = 3.71	
B to E	51.16	1.394 150.0		0.0	9.750	26.441 1.299				
E	51.16	0.1226		0.0	9.750	1.195			Vel = 10.75	
	0.0									
	51.16					28.935			K Factor = 9.51	
4 to FT	19.72	1.101 150.0	1T	9.563	0.333	20.080 0.0			K Factor = 4.40	
FT to F	19.72	0.0663		0.0	9.895	0.656			Vel = 6.65	
FT to F	0.0	1.101 150.0	1E 1T	3.825 9.563	16.917 13.387	20.736 5.486				
F to E	19.72	0.0663		0.0	30.304	2.008			Vel = 6.65	
F to E	0.0	1.101 150.0	1T	9.563	1.083	28.230 0.0				
E	19.72	0.0662		0.0	10.645	0.705			Vel = 6.65	
	0.0									
	19.72					28.935			K Factor = 3.67	
E to D	70.87	1.394 150.0	1T	9.523	13.500	28.935 0.0				
D	70.87	0.2240		0.0	23.023	5.157			Vel = 14.90	

Final Calculations - Hazen-Williams

Sprinkler Systems Inc.
HARBORVIEW TOWNHOMES

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Date 10-16-12

Hyd. Ref. Point	Qa Qt	Dia. "C" Pf/Ft	Fitting or Eqv. Ln.	Pipe Ftng's Total	Pt Pe Pf	Pt Pv Pn	*****	Notes	*****
D to G	0.0 70.87	2.003 150.0 0.0383	2E	12.965 0.0 0.0	30.500 12.965 43.465	34.092 1.083 1.666		Vel = 7.22	
G to H	0.0 70.87	2.003 150.0 0.0383	1E	6.482 0.0 0.0	48.458 6.482 54.940	36.841 2.436 2.106		Vel = 7.22	
H to J	0.0 70.87	2.003 150.0 0.0382		0.0 0.0 0.0	6.250 0.0 6.250	41.383 2.707 0.239		Vel = 7.22	
J to K	0.0 70.87	2.003 150.0 0.0383	1E	6.482 0.0 0.0	9.667 6.482 16.149	44.329 2.166 0.619		Vel = 7.22	
K to L	0.0 70.87	2.003 150.0 0.0383		0.0 0.0 0.0	20.667 0.0 20.667	47.114 0.0 0.792		Vel = 7.22	
L to RT	0.0 70.87	2.067 120.0 0.0497	1T	10.0 0.0 0.0	3.500 10.000 13.500	47.906 0.0 0.671		Vel = 6.78	
RT to TV	0.0 70.87	2.067 120.0 0.0498	1Fsp	0.0 0.0 0.0	5.667 0.0 5.667	48.577 5.454 0.282		* Fixed loss = 3 Vel = 6.78	
TV to RB	0.0 70.87	2.067 120.0 0.0498		0.0 0.0 0.0	2.750 0.0 2.750	54.313 6.191 0.137		* Fixed loss = 5 Vel = 6.78	
RB to X3	0.0 70.87	1.917 150.0 0.0475	1E 2F 1G 1T	5.235 4.188 1.047 10.47	185.000 20.940 205.940	60.641 6.930 9.775		Vel = 7.88	
X3 to X1	0.0 70.87	12.34 140.0 0.0		0.0 0.0 0.0	75.000 0.0 75.000	77.346 0.0 0.0		Vel = 0.19	
X1 to X2	0.0 70.87	12.34 140.0 0.0	1T	93.767 0.0 0.0	170.000 93.767 263.767	77.346 0.0 0.002		Vel = 0.19	
X2 to TEST	0.0 70.87	8.27 140.0 0.0	6F 1T	85.404 55.354 0.0	650.000 140.758 790.758	77.348 -16.205 0.034		Vel = 0.42	
	0.0 70.87					61.177		K Factor = 9.06	

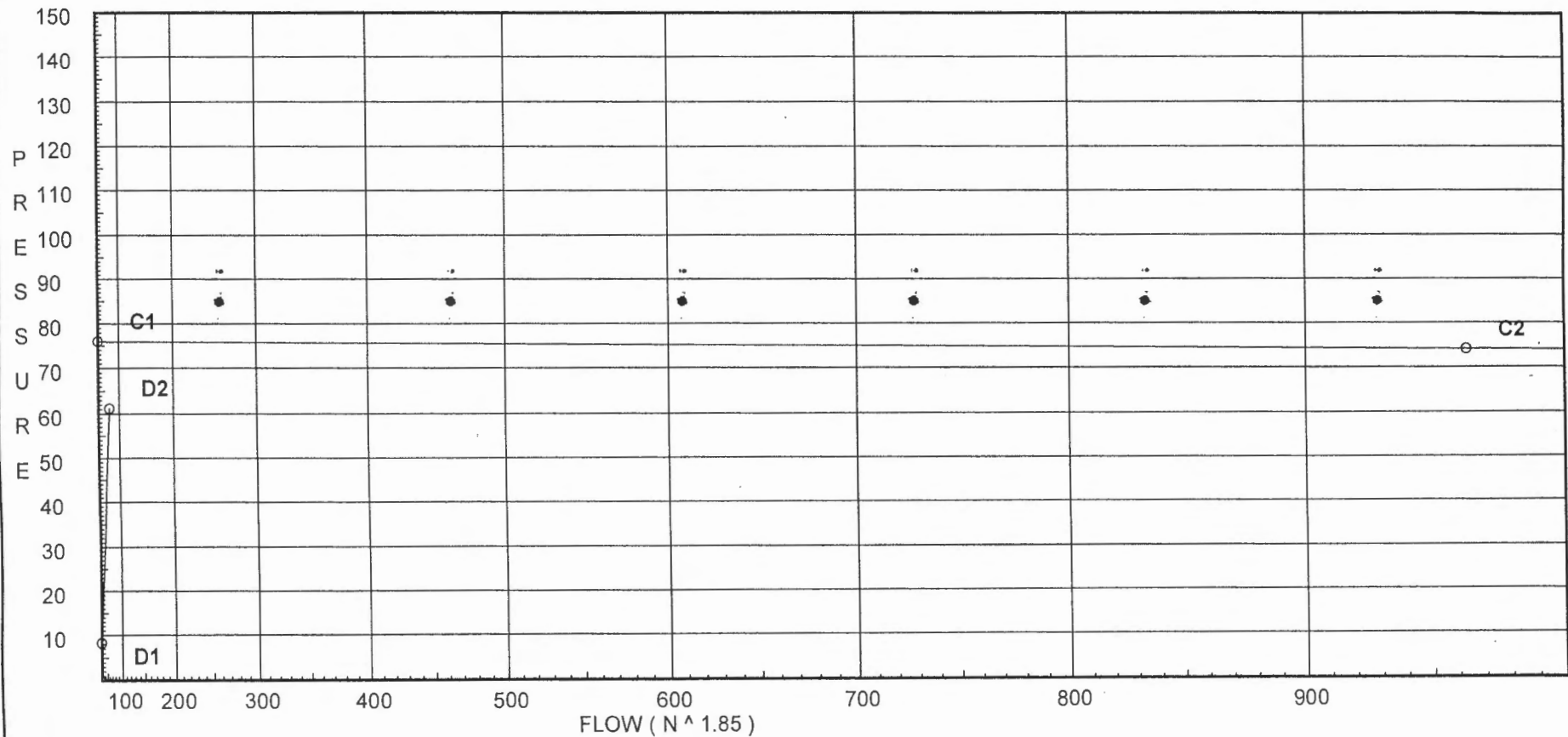
Water Supply Curve (C)

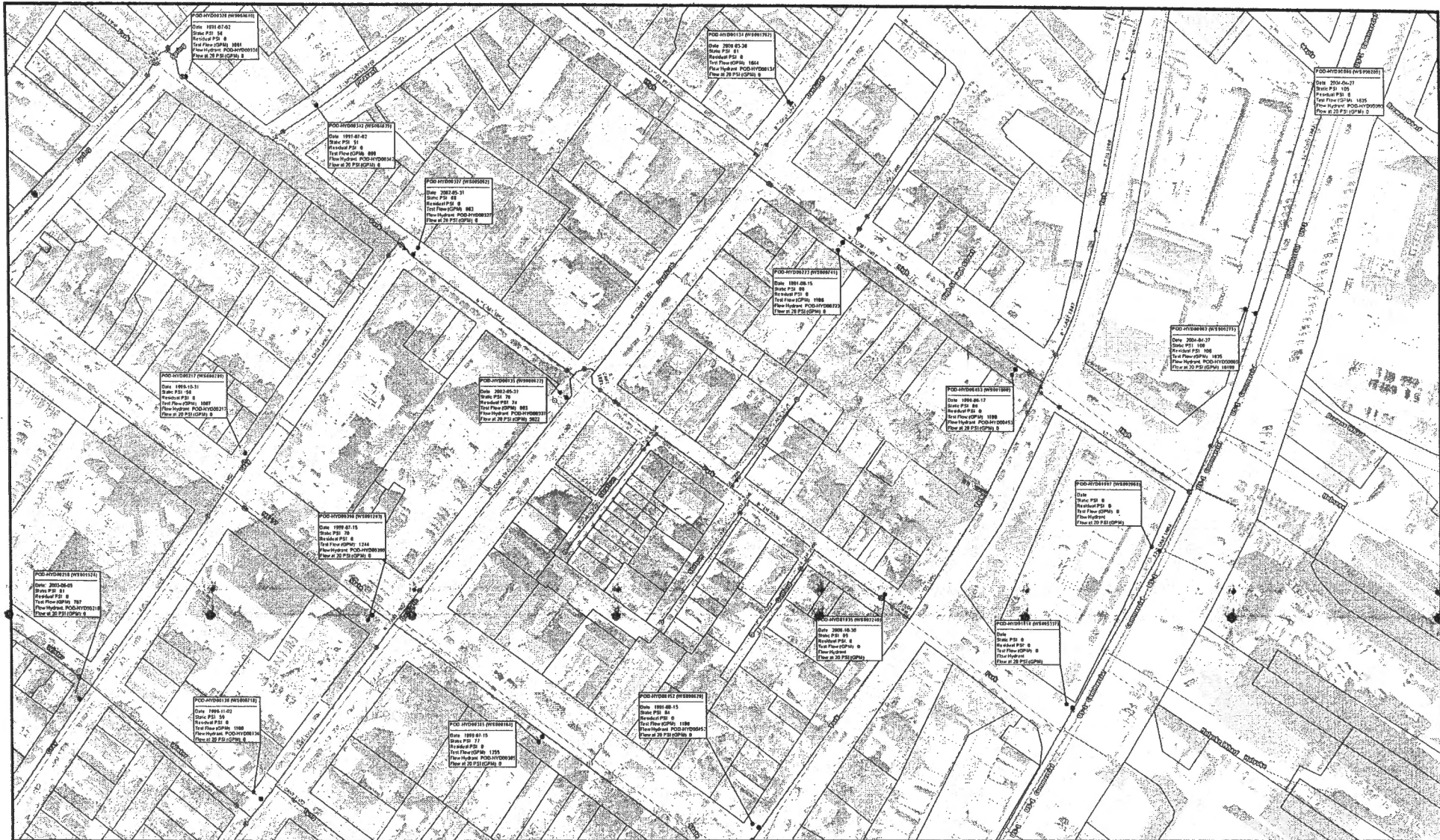
Sprinkler Systems Inc.
HARBORVIEW TOWNHOMES

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Date 10-16-12

City Water Supply:
C1 - Static Pressure : 76
C2 - Residual Pressure: 74
C2 - Residual Flow : 963

Demand:
D1 - Elevation : 8.247
D2 - System Flow : 70.8739
D2 - System Pressure : 61.177
Hose (Adj City) : _____
Hose (Demand) : _____
D3 - System Demand : 70.8739
Safety Margin : 14.807





0 45 90 180 270 360 Feet 1 inch = 60 feet



PORTLAND WATER DISTRICT
225 Douglass Street
Portland, ME 04104
Asset Management and Planning Dept.

Legend			
● Air Valve	● Connection	○ Combined Service	● Manhole
⊖ Blow Off	● Attribute Change	○ Domestic Service	● CSO
⊕ By Pass	▲ Reducer	○ Fire Service	→ Gravity
⊗ Distribution	● Hydrant	● Private Hydrants	→ Force
⊗ Transmission	● Hydrant Control	⊗ Meter Pits	

Hydrant Flow Testing Data
121 York Street
Portland

North Arrow
 Drawn By: TAW
 Scale: As Noted

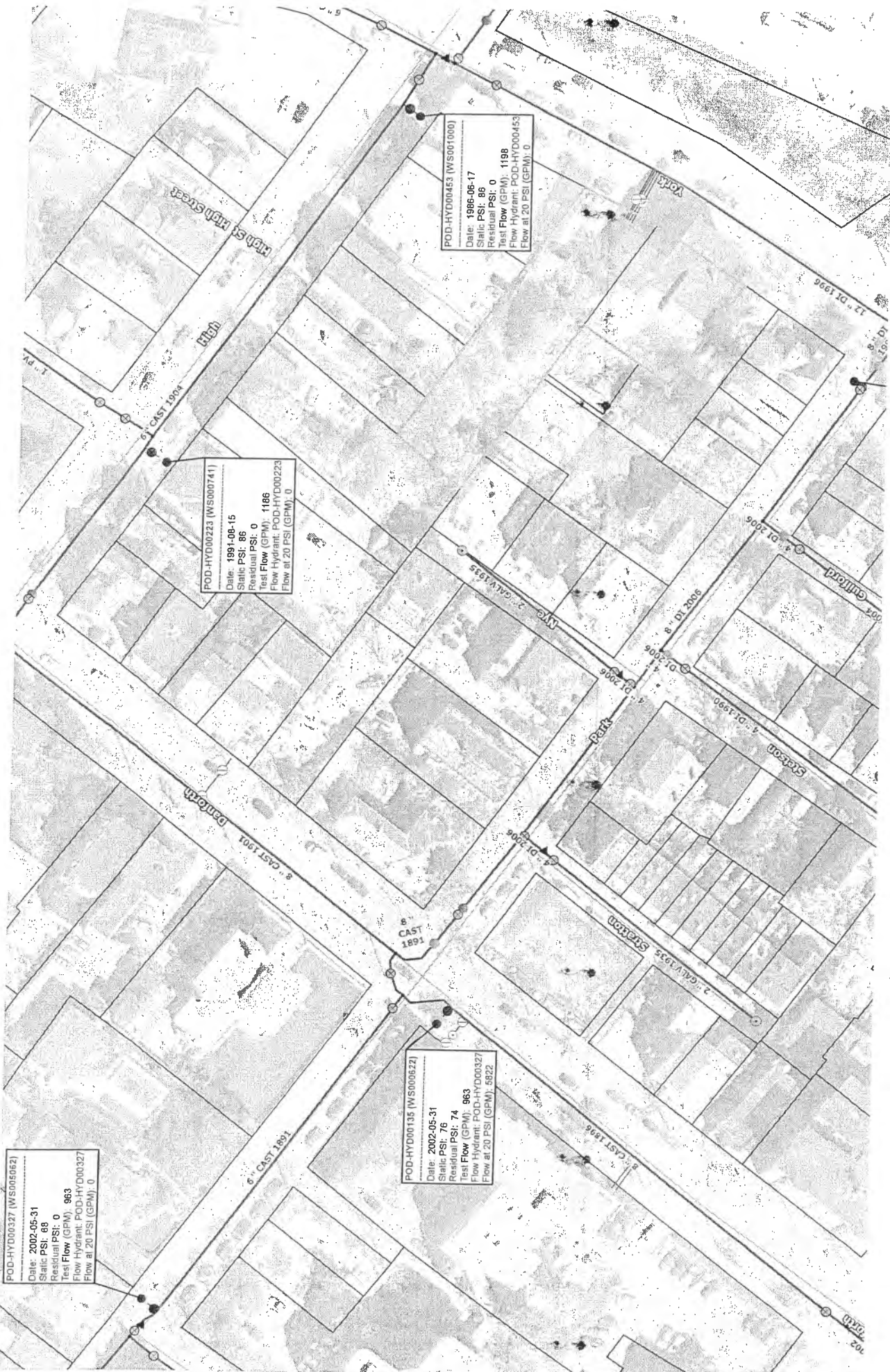
This map depicts flow testing data for the selected hydrants from PWD's asset management system. Note: a static pressure with a zero residual pressure and a flow hydrant that is the same as the test hydrant depicts a single-hydrant static pressure-only test.
 Prepared For: Sprinkler Systems Inc.
 Date: 10/25/2012

POD-HYD000327 (WS005082)
Date: 2002-05-31
Static PSI: 88
Residual PSI: 0
Test Flow (GPM): 963
Flow Hydrant: POD-HYD000327
Flow at 20 PSI (GPM): 0

POD-HYD00135 (WS0000522)
Date: 2002-05-31
Static PSI: 76
Residual PSI: 74
Test Flow (GPM): 963
Flow Hydrant: POD-HYD000327
Flow at 20 PSI (GPM): 5822

POD-HYD000223 (WS0000741)
Date: 1991-08-15
Static PSI: 86
Residual PSI: 0
Test Flow (GPM): 1186
Flow Hydrant: POD-HYD000223
Flow at 20 PSI (GPM): 0

POD-HYD000453 (WS001000)
Date: 1986-06-17
Static PSI: 86
Residual PSI: 0
Test Flow (GPM): 1198
Flow Hydrant: POD-HYD000453
Flow at 20 PSI (GPM): 0



NOTES

- 1) OCCUPANCY: COMMERCIAL - RESIDENTIAL, 1040
- 2) DESIGN BASIS: HYDRAULICALLY CALCULATED WITH 100 GPM WET SPRINKLER SYSTEM (SEE HYDRAULIC STUDY)
- 3) ALL SMALLER THAN 2" AND SMALLER TO BE BLACK STEEL SCHEDULE 40. ALL FITTINGS FOR STEEL PIPE TO BE CAST IRON SCHEDULE 40 EXCEPT ALL OTHER FITTINGS TO BE CPVC OR BRASS WITH PLASTIC FITTINGS.
- 4) ALL PIPE AND HANGER DIMENSIONS ARE CENTERLINE TO CENTERLINE. CUT LENGTHS TO BE LISTED FOR FABRICATION AND INSTALLATION.
- 5) TIE CLIP DETAIL TOP OF WOOD TRUSS TO CENTERLINE OF PIPE.
- 6) PIPE DETAIL FINISHED FLOOR TO CENTERLINE OF PIPE.
- 7) COVER TO PROTECT SURFACE AT HEAD (FOR W/P) TO PREVENT SPRINKLER TYPING FROM FREEZING.
- 8) OWNER: REDFERN PROPERTIES, LLC (201) 221-5716
PO BOX 880, PORTLAND, ME 04101
- 9) ARCHITECT: KARLAV THOMPSON - PORTLAND, ME

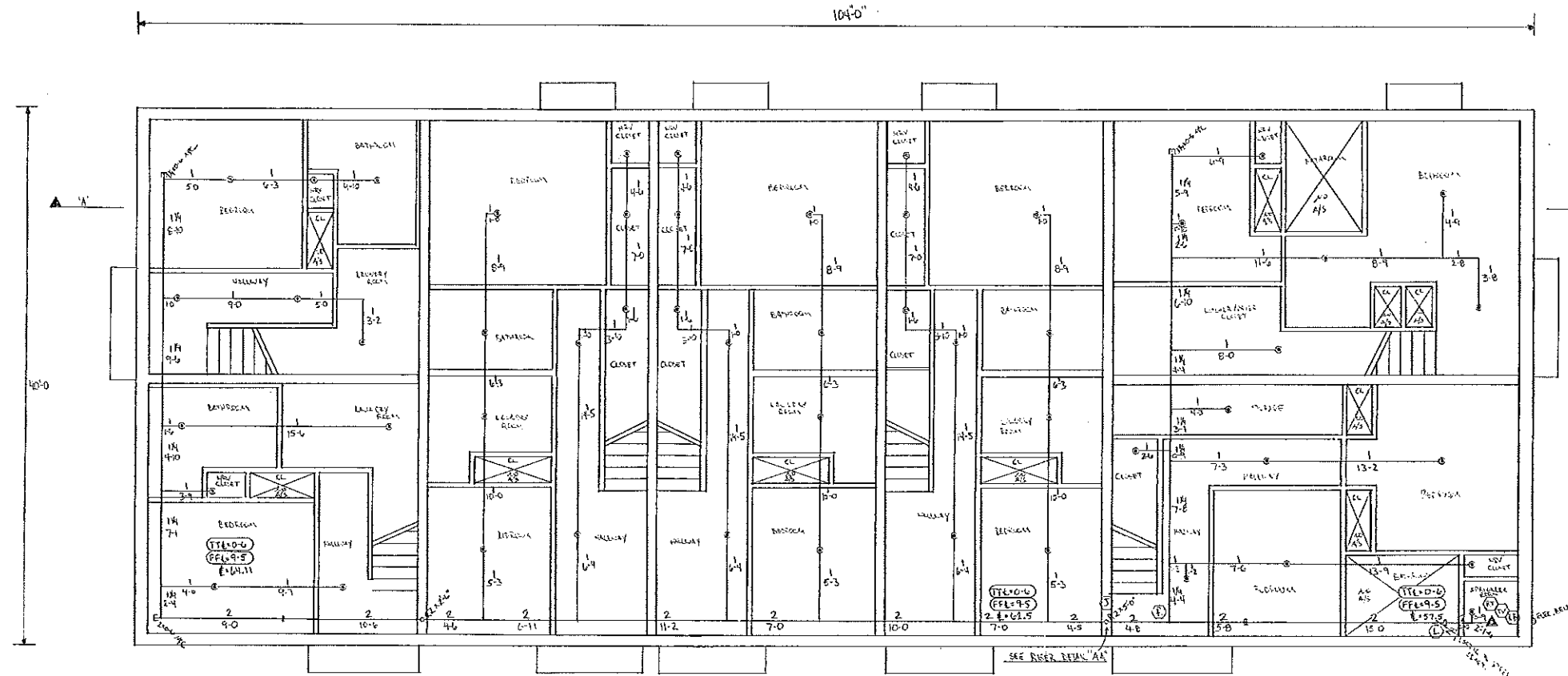
WATER SUPPLY

FLOW TEST BY PORTLAND WATER DEPT. MAY 31, 2002
WATER WAS FLOWED FROM MID #327 ON PARK ST. OFFSHORE CITY ST. FROM 8" CIRCULATING CIRC. MAIN. TEST CONDUCTED FROM MID #135 ON BROADWAY AT 20 PARK ST.

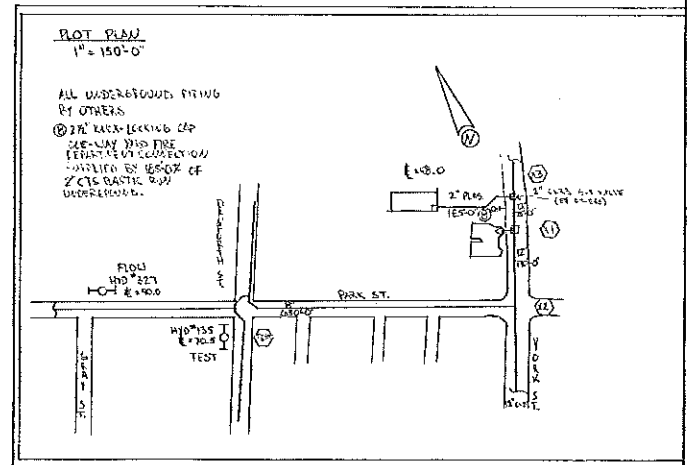
STATIC: 76 PSI
RESIDUAL: 74 PSI @ 1/163 GPM FLOW
ELEVATION: 10.5

LEGEND

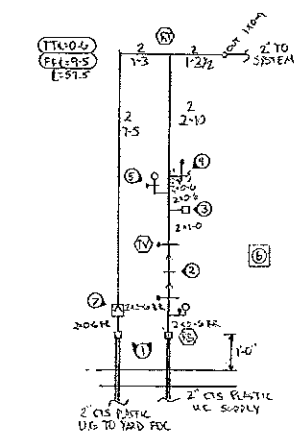
— CVFC COUPLING
○ HYDRAULIC REFERENCE POINT



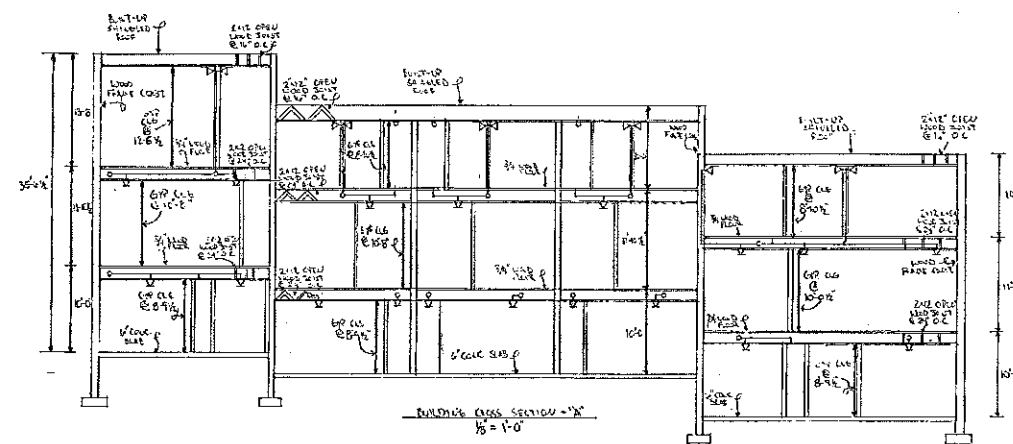
FIRST FLOOR - 1040 S.E.
SCALE 1/4" = 1'-0"



LOT PLAN
1" = 150'-0"



- WET RISER DETAIL**
SCALE 1/2" = 1'-0"
- 1) 2" FORD COUPLING - PLASTIC TO BRASS (2-RED'D)
 - 2) 2" DOUBLE CHECK BACKFLOW PREVENTER
 - 3) 1/2"-2" BALL VALVES SEALED OPEN
 - 4) 2" FLOLO DCHA
 - 5) 2" FLOLO SWITCH
 - 6) 1" TEST AND DRAIN VALVE WITH 1/2" TEST (FIELD OUTSIDE)
 - 7) 1/2" WATER PRESSURE GAUGE
 - 8) 6" HEAD SPRINKLER CABINET
 - 9) 2" SER. SWING CHECK VALVE



0 12 5 10

HYDRAULIC DESIGN CRITERIA

Density	1.37
Design Area	4,478 SQ. FT.
K Factor	4.4
Head	100 FT.
Water Supply	10/31/2002
Static	76 PSI
Residual	74 PSI
Water Flowing	91.2
Size of Supply	8"

CIRCLE HANGER TYPE TO BE USED

Symbol	Description
○	Standard
○	Special
○	Special
○	Special

HANGERS

Symbol	Description
○	Standard
○	Special
○	Special
○	Special

SPRINKLER HEAD LEGEND

SYMBOL	MAKE	MODEL	FINISH	TYPE	TEMP.	N.P.T.	ORIFICE	K-FACTOR	TOTAL
○	RELIABLE	RT-100	WHITE	REG.	155°	1/2"	7/8"	5.6	1
○	RELIABLE	RT-100	WHITE	REG.	155°	1/2"	7/8"	5.6	1
TOTALS									2

SUBMITTALS

SENT TO	DATE SENT	DATE RECEIVED
ISO		
FM		
ES		
IRI		
LA		
STATE FIRE		
LOCAL FIRE		
LOCAL WATER		
OWNER		

LICENSE # 093
R.M.S.# 278

SPRINKLER SYSTEMS INC.

P.O. BOX 1285
LEWISTON MAINE
04240

HARBORVIEW TOWNHOMES
121 YORK STREET
PORTLAND, ME 04101

SCALE 1/4" = 1'-0"

DRAWN BY: RDO
CHECKED BY: SEG

CONTRACT WITH OWNER

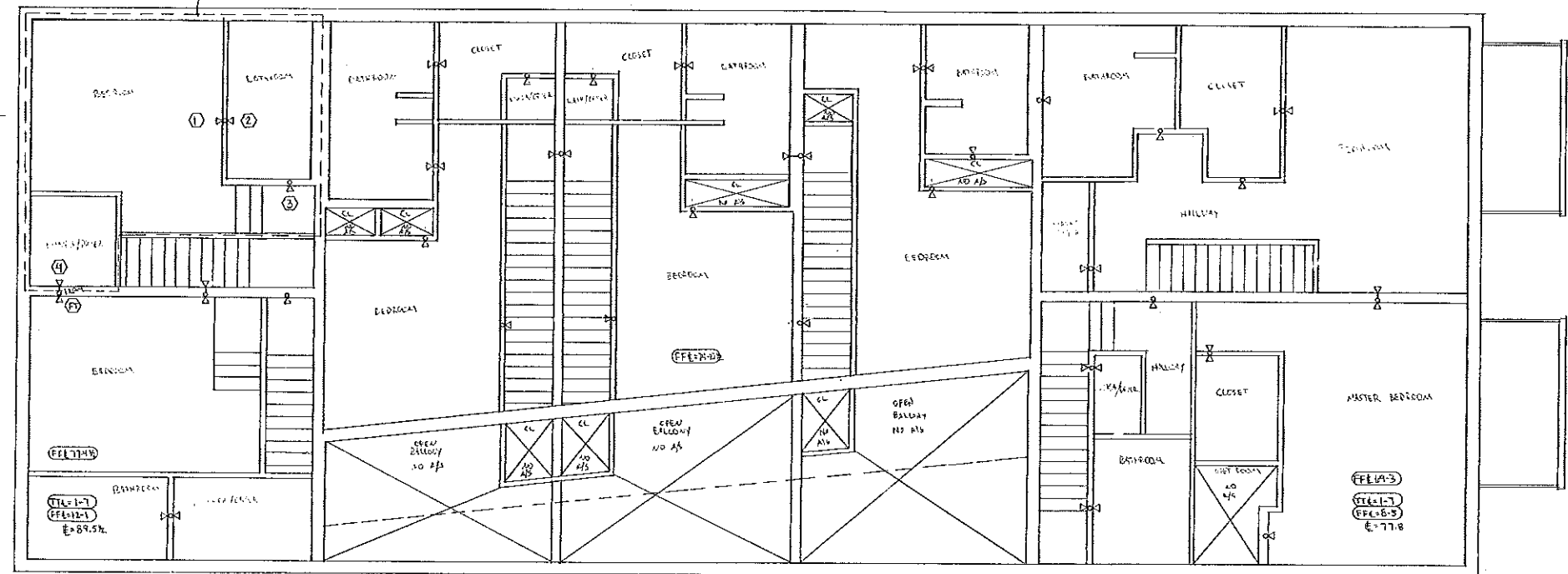
SYSTEM TYPE	NO.	DATE	REVISIONS	DESCRIPTION
WET				
DRY				
DELUGE				
PREACTION				
ME LIFE				

TOTAL SPRINKERS ON JOB: 131

SHEET # 1 OF 2
JOB # 12070

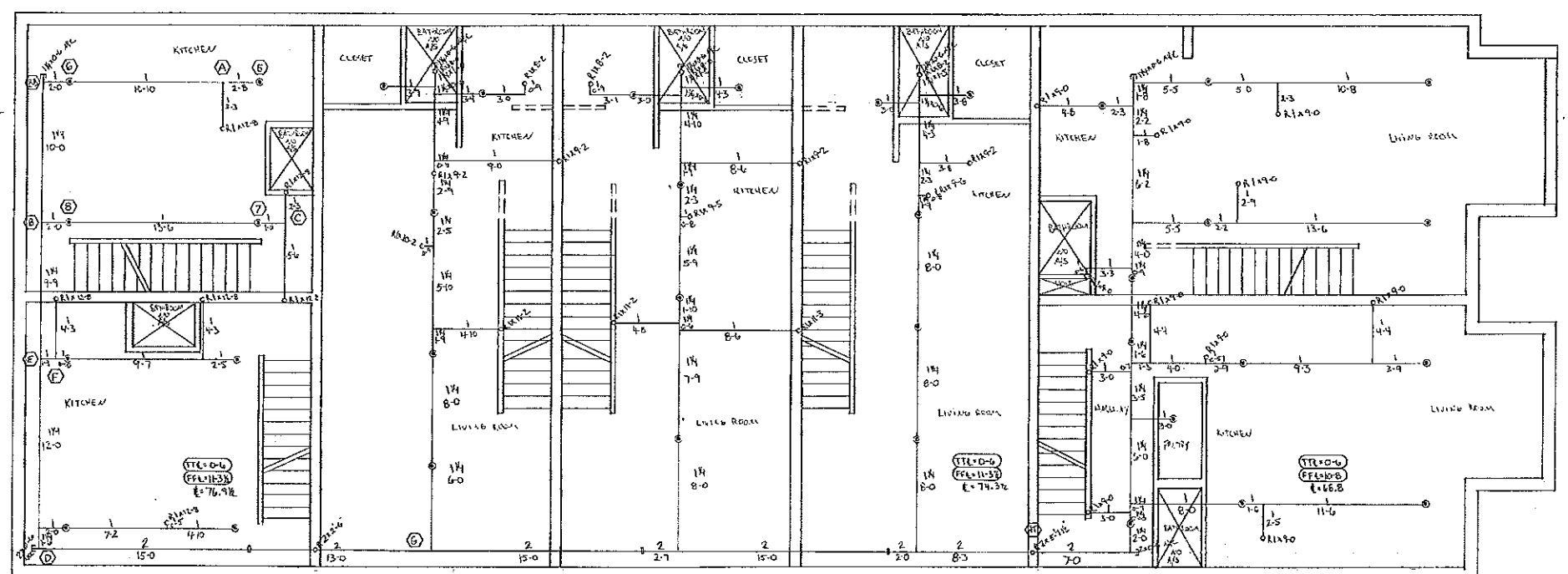
DESIGN AREA #1
 HYDRAULIC CALCULATION
 THIS DRAWING IS FOR THE
 3-1/2" x 1/2" SPRINKLER SYSTEM
 LOCATED ON 3RD FLOOR UNIT
 NO. 100-111-111
 PERMITS
 1. Date: 05/01/02
 2. Designer: [Signature]
 3. Checker: [Signature]
 4. Engineer: [Signature]
 5. Title: [Signature]
 6. Date: 05/01/02
 7. Title: [Signature]
 8. Date: 05/01/02
 9. Title: [Signature]
 (HYDRAULICALLY ADJUSTED)

DESIGN AREA #1
 100/111-111 CALC.
 (HYDRAULICALLY ADJUSTED)

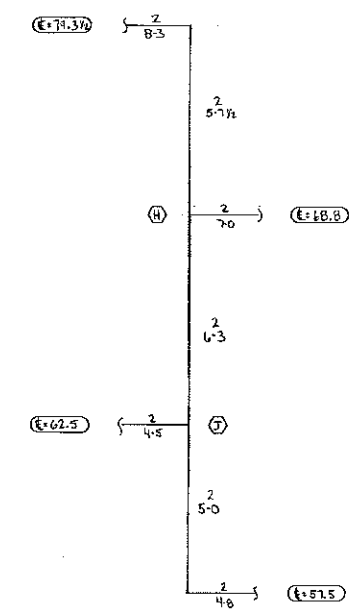


THIRD FLOOR - 3269 S.F.
 SCALE 1/4" = 1'-0"

36	1/2" x 1/2" RESIDENTIAL RATED WHITE BRASS	36	0
48	1/2" x 1/2" RESIDENTIAL RATED WHITE BRASS	0	48
84	TOTAL SPRINKLERS DRAWING #2	36	48



SECOND FLOOR - 4078 S.F.
 SCALE 1/4" = 1'-0"



RISER DETAIL 'AA'
 SCALE 1/2" = 1'-0"

SPRINKLER
SYSTEMS INC.

P.O. BOX 1285
LEWISTON MAINE
04240

HARBORVIEW TOWNHOMES
121 YORK STREET
PORTLAND, ME 04101

CONTRACT WITH CUMMER

SYSTEM TYPE	NO.	DATE	DESCRIPTION
WET			
DRY			
DELUGE			
PREACTION			
ME LIFE			

SCALE 1/4" = 1'-0"

DRAWN BY RDO

CHECKED BY SEG

DATE 10-16-12

TOTAL SPRKS ON JOB 131

SHEET # 2 OF 2

JOB # 12070