

DISPLAY THIS CARD ON PRINCIPAL FRONTAGE OF WORK



CITY OF PORTLAND BUILDING PERMIT



This is to certify that

PORTLAND HOUSING AUTHORITY/Sprinkler System,
Inc

PERMIT ID: 2013-00014

Located at
21 POPHAM STREET
CBL: 274 H001001

has permission to **install sprinkler system.**

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 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 procured prior to occupancy.

58

Blanchard
Fire Prevention Officer

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

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

Permit No: 2013-00014	Issue Date:	CB#: 274 H001001
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Location of Construction: 21 POPHAM STREET	Owner Name: PORTLAND HOUSING AUTHORITY	Owner Address: 14 BAXTER BLVD PORTLAND, ME 04101	Phone: (207) 775-1521
Business Name: Sagamore Village PRUD Dev	Contractor Name: Sprinkler System, Inc	Contractor Address: P.O. Box 1285 Lewiston ME 04243	Phone: (207) 782-0104
Lessee/Buyer's Name Boy's & Girl's Club	Phone:	Permit Type: Fire Suppression Water Based	Zone: R5 PRUD
Past Use: Sagamore Village Community Center	Proposed Use: Same: Sagamore Village Community Center	Permit Fee: \$200.00	Cost of Work: \$15,000.00
		FIRE DEPT: <input checked="" type="checkbox"/> Approved <input type="checkbox"/> Denied <input type="checkbox"/> N/A	INSPECTION: Use Group: Type:

Proposed Project Description: Install Fire Suppression, WB		Signature: <i>[Signature]</i> PEDESTRIAN ACTIVITIES DISTRICT (P.A.D.)	Signature:
Permit Taken By: bjs	Date Applied For: 01/03/2013	Action: <input type="checkbox"/> Approved <input type="checkbox"/> Approved w/Conditions <input type="checkbox"/> Denied	Date:

Zoning Approval

Special Zone or Reviews	Zoning Appeal	Historic Preservation
<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 checked="" type="checkbox"/>	<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	<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>01/14/13</i>	Date:	Date: <i>[Signature]</i>

SCANNED

- 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.

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 _____

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: 2013-00014	Date Applied For: 01/03/2013	CBL: 274 H001001
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Business Name: Sagamore Village PRUD Dev	Contractor Name: Sprinkler System, Inc	Contractor Address: P.O. Box 1285 Lewiston	Phone (207) 782-0104
Lessee/Buyer's Name Boy's & Girl's Club	Phone:	Permit Type: Fire Suppression Water Based	

Proposed Use:
Same: Sagamore Village Community Center

Proposed Project Description:
install sprinkler system.

Dept: Zoning **Status:** Approved **Reviewer:** Marge Schmuckal **Approval Date:** 01/04/2013
Note: **Ok to Issue:**

Dept: Fire **Status:** Approved w/Conditions **Reviewer:** Ben Wallace Jr **Approval Date:** 01/14/2013
Note: **Ok to Issue:**

- 1) Sprinkler supervision shall be provided in accordance with NFPA 101, Life Safety Code, and NFPA 72, National Fire Alarm and Signaling Code.
- 2) The entire sprinkler system shall be maintained in accordance with NFPA 25, Standard for Inspection, Testing and Maintenance of Water-Based Fire Protection Systems, 2008 edition.
- 3) Fire walls, fire barriers, fire partitions, smoke barriers and smoke partitions or any other wall required to have protected openings or penetrations shall be effectively and permanently identified with signs or stenciling in accessible concealed floor, floor-ceiling or attic spaces at intervals not exceeding 30 feet with lettering not less than 0.5 inches in height.
- 4) Installation shall be in accordance with the City of Portland Fire Department Regulations and NFPA 13 as published. A copy of the State Sprinkler permit with RMS date and signature and the Contractor's Material and Test Certificate for Aboveground Piping (NFPA 13 figure 24.1) shall be provided prior to scheduling of the final inspection.
- 5) A Knox Box is required.
- 6) 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. A separate fire alarm permit is required from a certified fire alarm company.
- 7) System acceptance and commissioning must be coordinated with alarm and suppression system contractors and the Fire Department. Call 874-8703 to schedule.



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: 15 Bosslyn St CBL: 274 R001

Exact location: (within structure) Sagamore Village Comm. Bldg.

Type of occupancy(s) (NFPA & ICC): Social Club/Offices - Light Hazard & Ordinary Hazard Gp 2

Building owner: Portland Housing Authority, 14 Baxter Blvd., Portland, ME 04101

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 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.

<p>RECEIVED</p> <p>DEC 03 2013</p> <p>Dept of Building Inspections City of Portland Maine</p>

COST OF WORK: \$15,000.00
PERMIT FEE: \$170.00
(\$10 PER \$1,000 + \$30 FOR THE FIRST \$1,000)

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: 1-2-2013

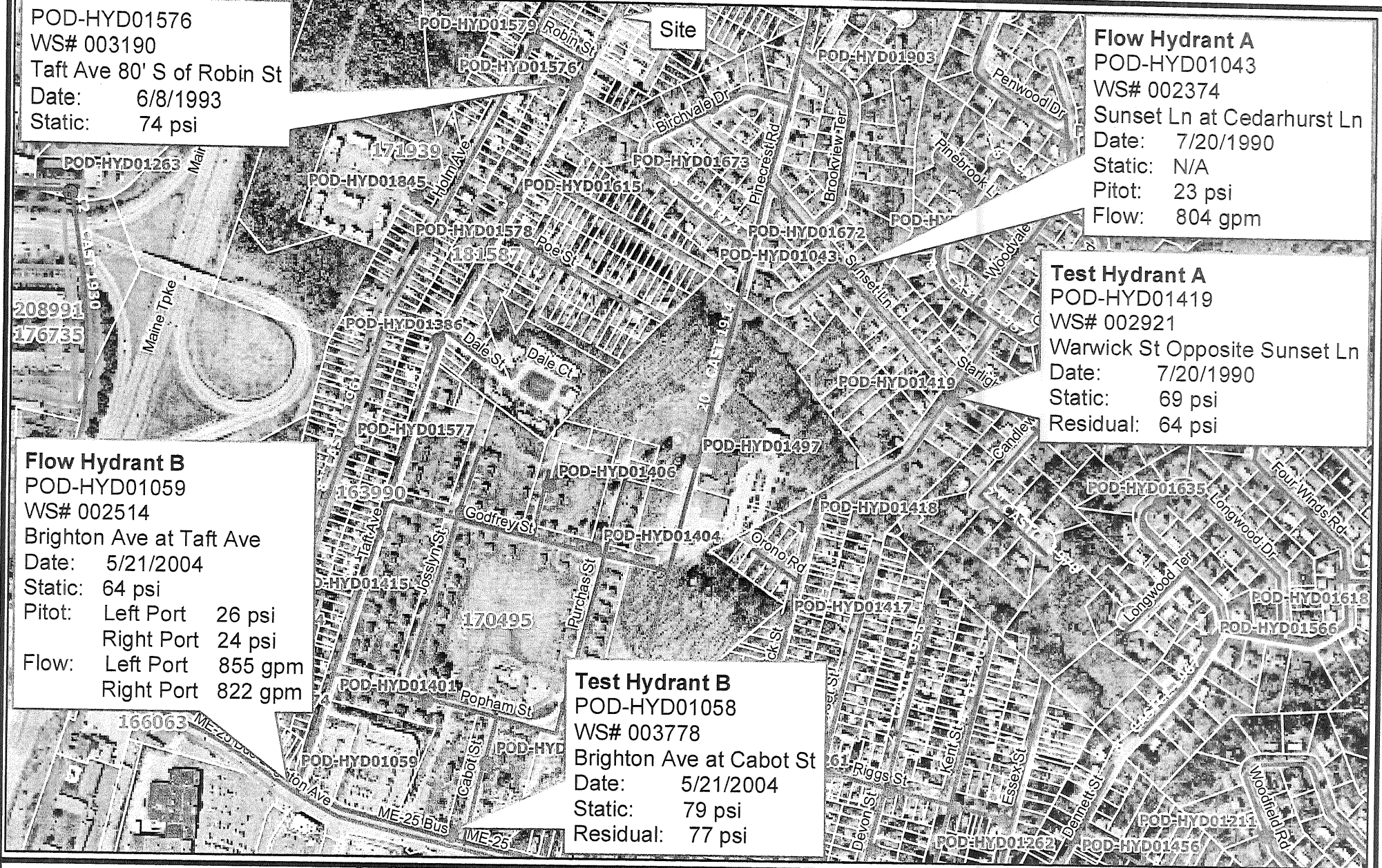
POD-HYD01576
 WS# 003190
 Taft Ave 80' S of Robin St
 Date: 6/8/1993
 Static: 74 psi

Flow Hydrant A
 POD-HYD01043
 WS# 002374
 Sunset Ln at Cedarhurst Ln
 Date: 7/20/1990
 Static: N/A
 Pitot: 23 psi
 Flow: 804 gpm

Test Hydrant A
 POD-HYD01419
 WS# 002921
 Warwick St Opposite Sunset Ln
 Date: 7/20/1990
 Static: 69 psi
 Residual: 64 psi

Flow Hydrant B
 POD-HYD01059
 WS# 002514
 Brighton Ave at Taft Ave
 Date: 5/21/2004
 Static: 64 psi
 Pitot: Left Port 26 psi
 Right Port 24 psi
 Flow: Left Port 855 gpm
 Right Port 822 gpm

Test Hydrant B
 POD-HYD01058
 WS# 003778
 Brighton Ave at Cabot St
 Date: 5/21/2004
 Static: 79 psi
 Residual: 77 psi



265~ Taft Avenue

Portland

PORTLAND WATER DISTRICT
 225 Douglass Street
 Portland, ME 04104

Scale 0 500 Feet
 1 inch = 500 feet

Legend

- | | | | | | | | |
|---|--------------|---|-----------------|---|-----------------|---|----------|
| ⊙ | Blow Off | ⊙ | Fire Service | ⊙ | Air Valve | ⊙ | Sleeve |
| ⊙ | By Pass | ⊙ | Hydrant Control | ⊙ | Date Change | ⊙ | Tee |
| ⊙ | Distribution | ⊙ | Service | ⊙ | Material Change | ⊙ | Hydrants |
| ⊙ | End of Main | ⊙ | Transmission | ▲ | Reducer | | |



Disclaimer: This map is suitable for preliminary study and analysis and is based on PWD record information. PWD is not liable for any damages whatsoever resulting from inaccurate data or from errors made in the location and marking of its infrastructure.

Drawn By: GJH

Prepared for: Sprinkler Systems, Inc

Scale: As Noted

Date: 1/20/2011

Sprinkler Systems, Inc.

P.O. Box 1285

Lewiston, ME 04243-1285

TO: CITY OF PORTLAND
RM 315, CITY HALL
339 CONGRESS STREET
PORTLAND, ME 04101

Letter of Transmittal

DATE 12-6-12	JOB # 12074
ATTENTION: INSPECTIONS, RM 315	
RE: SAGAMORE VILLAGE COMM. BLDG 21 POPHAM STREET PORTLAND, ME 04102	

WE ARE SENDING YOU:

- Attached Under separate cover via _____ the following items:
- Shop drawings Prints Plans Samples Specifications Wavier or Liens
- Copy of letter Change order Signed Contracts HYD CALCS, ST. PERMIT, PTD PERMIT APPL, ETC.

COPIES	DATE	NO.	DESCRIPTION
1 c	11-30-12	13053	SPRINKLER SHOP DRAWINGS 12074
1 c	11-30-12	1001	SPRINKLER SHOP DRAWING 10052
1 c	11-30-12	13065	HYDRAULIC CALCULATIONS PACKAGE
1 c	12-7-12	10380	STATE OF MAINE SPRINKLER PERMIT
1 c	1-2-13	-	PORTLAND SPRINKLER PERMIT APPL.
1 c	1-20-11	-	PORTLAND WATER DISTRICT FLOW TEST MAP
1 c	11-30-12	13053	SPRINKLER SHOP DRAWINGS (4 TOTAL) 11x17
1 c	12-20-12	29086	\$170.00 PERMIT CHECK (\$15K JOB LOST)

THESE ARE TRANSMITTED as checked below:

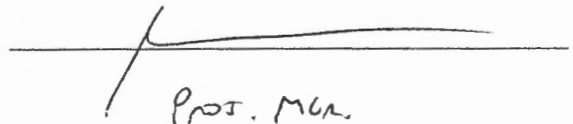
- For your approval Approved as submitted Resubmit _____ copies for approval
- For your use Approved as noted Submit _____ copies for distribution

REMARKS:

PLEASE RETURN 1 PERMIT

THANK YOU,
SCOTT E. GALLAND, SGT, RMS

SIGNED:


PROJ. MGR.



State of Maine
Department of Public Safety
Fire Sprinkler System Permit



10380

Sagamore Village Comm. Building

Located at: 21 Popham Street
 In the Town of: Portland
 Occupancy/Use: Offices
 Type of System: NFPA 13

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 # **2121555**, 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 **12/7/2012** for a fee paid of **\$145.00**

*This permit will expire at midnight on **Wednesday, June 05, 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 do 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 : SAGAMORE VILLAGE COMMUNITY BUILDING
Building :
Location : 21 POPHAM STREET, PORTLAND, MAINE 04102
System : 1 OF 1
Contract : 12074
Data File : 12074SAGAMOREVILLCOMMBLDG.WXF

Hydraulic Design Information Sheet

Name - SAGAMORE VILLAGE COMMUNITY BUILDING Date - 11-30-2012
 Location - 21 POPHAM STREET, PORTLAND, MAINE 04102
 Building - System No. - 1 OF 1
 Contractor - JARR MANAGEMENT Contract No. - 12074
 Calculated By - SCOTT E. GARLAND Drawing No. - 1-3 OF 3
 Construction: (X) Combustible () Non-Combustible Ceiling Height - VARIES
 Occupancy - ROOF SPACE - LIGHT HAZARD

S (X) NFPA 13 (X) Lt. Haz. Ord.Haz.Gp. () 1 () 2 () 3 () Ex.Haz.
 Y () NFPA 231 () NFPA 231C () Figure Curve

S Other

T Specific Ruling Made By Date

E
 M Area of Sprinkler Operation - 7 HD CALC System Type Sprinkler/Nozzle
 Density - .10 () Wet Make TYCO
 D Area Per Sprinkler - 250 (X) Dry Model BB1 TY3180
 E Elevation at Highest Outlet - 122.0 () Deluge Size 1/2 X 1/2
 S Hose Allowance - Inside - () Preaction K-Factor 5.6
 I Rack Sprinkler Allowance - () Other Temp.Rat.212 DEG
 G Hose Allowance - Outside - 100

N

Note DESIGN AREA #1 - FAR ROOF

Calculation Flow Required - 180.337 Press Required - 65.303 AT BASE OF RISER
 Summary C-Factor Used: 100 Overhead 140 Underground

W Water Flow Test: Pump Data: Tank or Reservoir:
 A Date of Test - 5-21-2004 Cap. -
 T Time of Test - Rated Cap.- Elev.-
 E Static Press - 79 @ Press -
 R Residual Press - 77 Elev. - Well
 Flow - 1677 Proof Flow
 S Elevation - 94.5

U

P Location - ON BRIGHTON AVENUE AT CABOT STREET, 340'-0" AWAY FROM THE BUILDING

P

L Source of Information - PORTLAND WATER DISTRICT

Y

C Commodity Class Location
 O Storage Ht. Area Aisle W.
 M Storage Method: Solid Piled % Palletized % Rack
 M
 () Single Row () Conven. Pallet () Auto. Storage () Encap.
 S R () Double Row () Slave Pallet () Solid Shelf () Non
 T A () Mult. Row () Open Shelf

O

R K Flue Spacing Clearance:Storage to Ceiling
 A Longitudinal Transverse

G

E Horizontal Barriers Provided:

Fittings Used Summary

Sprinkler Systems Inc.
SAGAMORE VILLAGE COMMUNITY BUILDING

Page 3
Date 11-30-2012

Fitting Legend

Abbrev.	Name	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	
D	Dry Rel D											28	47									
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 Valve	4	5	5	7	9	11	14	16	19	22	27	32	45	55	65	76	87	98	109	130	
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.
SAGAMORE VILLAGE COMMUNITY BUILDING

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Date 11-30-2012

Node No.	Elevation	K-Fact	Pt Actual	Pn	Flow Actual	Density	Area	Press Req.
1	122.0	5.6	21.02	na	25.67	0.1	250	20.0
2	121.0	5.6	20.0	na	25.04	0.1	250	20.0
3	121.0	5.6	20.05	na	25.08	0.1	250	20.0
4	121.0	5.6	20.23	na	25.19	0.1	250	20.0
P	122.0		21.07	na				
5	122.0	5.6	21.18	na	25.77	0.1	250	20.0
6	122.0	5.6	22.18	na	26.38	0.1	250	20.0
7	122.0	5.6	23.6	na	27.21	0.1	250	20.0
QQ	121.958		30.27	na				
Q	121.875		33.64	na				
G	117.917		38.89	na				
F	117.958		39.63	na				
H	118.0		41.5	na				
J	119.75		47.85	na				
JK	118.667		50.73	na				
K	118.625		51.02	na				
L	118.542		53.72	na				
M	118.417		55.65	na				
N	118.417		55.91	na				
DD	117.083		56.63	na				
Z	106.75		61.84	na				
TDV	105.667		62.69	na				
RB	101.292		65.3	na				
X1	94.5		68.36	na	100.0			
TEST	94.5		68.4	na				

The maximum velocity is 15.88 and it occurs in the pipe between nodes 7 and QQ

Final Calculations - Hazen-Williams

Sprinkler Systems Inc.
SAGAMORE VILLAGE COMMUNITY BUILDING

Page 5
Date 11-30-2012

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	25.67	2.154		6.000	21.019			K Factor = 5.60	
to		100.0	0.0	0.0	0.0				
P	25.67	0.0088	0.0	6.000	0.053			Vel = 2.26	
	0.0								
	25.67				21.072			K Factor = 5.59	
2	25.04	2.154		6.000	20.000			K Factor = 5.60	
to		100.0	0.0	0.0	0.0				
3	25.04	0.0083	0.0	6.000	0.050			Vel = 2.20	
3	25.08	2.154		6.000	20.050			K Factor = 5.60	
to		100.0	0.0	0.0	0.0				
4	50.12	0.0300	0.0	6.000	0.180			Vel = 4.41	
4	25.19	2.154	1E	4.362	6.917	20.230		K Factor = 5.60	
to		100.0	1T	8.724	13.085	-0.433			
P	75.31	0.0637	0.0	20.002	1.275			Vel = 6.63	
	0.0								
	75.31				21.072			K Factor = 16.41	
P	100.98	2.154		1.000	21.072				
to		100.0	0.0	0.0	0.0				
5	100.98	0.1090	0.0	1.000	0.109			Vel = 8.89	
5	25.77	2.154		6.000	21.181			K Factor = 5.60	
to		100.0	0.0	0.0	0.0				
6	126.75	0.1670	0.0	6.000	1.002			Vel = 11.16	
6	26.38	2.154		6.000	22.183			K Factor = 5.60	
to		100.0	0.0	0.0	0.0				
7	153.13	0.2370	0.0	6.000	1.422			Vel = 13.48	
7	27.21	2.154	1T	8.724	12.000	23.605		K Factor = 5.60	
to		100.0		0.0	8.724	0.018			
QQ	180.34	0.3206	0.0	20.724	6.645			Vel = 15.88	
QQ	0.0	2.635	1T	11.758	16.000	30.268			
to		100.0		0.0	11.757	0.036			
Q	180.34	0.1201	0.0	27.757	3.334			Vel = 10.61	
Q	0.0	2.635	2E	11.758	5.958	33.638			
to		100.0	1T	11.758	23.514	1.714			
G	180.34	0.1201	0.0	29.472	3.541			Vel = 10.61	
G	0.0	2.635		6.250	38.893				
to		100.0	0.0	0.0	-0.018				
F	180.34	0.1202	0.0	6.250	0.751			Vel = 10.61	
F	0.0	2.635		15.750	39.626				
to		100.0	0.0	0.0	-0.018				
H	180.34	0.1201	0.0	15.750	1.892			Vel = 10.61	
H	0.0	2.635	3E	17.636	29.750	41.500			
to		100.0	1T	11.758	29.394	-0.758			
J	180.34	0.1201	0.0	59.144	7.106			Vel = 10.61	
J	0.0	3.26	3E	20.143	36.583	47.848			
to		100.0		0.0	20.143	0.469			
JK	180.34	0.0426	0.0	56.726	2.417			Vel = 6.93	
JK	0.0	3.26		6.167	50.734				
to		100.0	0.0	0.0	0.018				
K	180.34	0.0426	0.0	6.167	0.263			Vel = 6.93	

Final Calculations - Hazen-Williams

Sprinkler Systems Inc.
SAGAMORE VILLAGE COMMUNITY BUILDING

Page 6
Date 11-30-2012

Hyd. Ref. Point	Qa Qt	Dia. "C" Pf/Ft	Fitting or Eqv. Ln.	Pipe Ftng's Total	Pt Pe Pf	Pt Pv Pn	*****	Notes	*****
K to L	0.0 180.34	3.26 100.0 0.0426	2E 0.0 0.0	13.428 0.0 62.679	49.250 13.429 62.679	51.015 0.036 2.671		Vel = 6.93	
L to M	0.0 180.34	3.26 100.0 0.0426	2E 0.0 0.0	13.428 0.0 43.929	30.500 13.429 43.929	53.722 0.054 1.872		Vel = 6.93	
M to N	0.0 180.34	4.26 100.0 0.0116	1T 0.0 0.0	18.795 0.0 22.462	3.667 18.795 22.462	55.648 0.0 0.260		Vel = 4.06	
N to DD	0.0 180.34	4.26 100.0 0.0116	1E 0.0 0.0	9.397 0.0 12.230	2.833 9.397 12.230	55.908 0.578 0.142		Vel = 4.06	
DD to Z	0.0 180.34	4.26 100.0 0.0116	2E 1T 0.0	18.795 18.795 0.0	26.167 37.590 63.757	56.628 4.475 0.738		Vel = 4.06	
Z to TDV	0.0 180.34	4.26 100.0 0.0116	2E 0.0 0.0	18.795 0.0 32.545	13.750 18.795 32.545	61.841 0.469 0.377		Vel = 4.06	
TDV to RB	0.0 180.34	4.26 120.0 0.0083	1D 1G 1E 1S	36.868 2.633 13.167 28.968	5.667 81.636 87.303	62.687 1.895 0.721		Vel = 4.06	
RB to X1	0.0 180.34	6.16 140.0 0.0010	1T 1G 0.0	43.037 4.304 0.0	65.000 47.341 112.341	65.303 2.942 0.116		Vel = 1.94	
X1 to TEST	100.00 280.34	12.34 140.0 0.0001	2T 0.0 0.0	187.534 0.0 462.534	275.000 187.534 462.534	68.361 0.0 0.036		Qa = 100 Vel = 0.75	
	0.0 280.34					68.397		K Factor = 33.90	

Water Supply Curve (C)

Sprinkler Systems Inc.
SAGAMORE VILLAGE COMMUNITY BUILDING

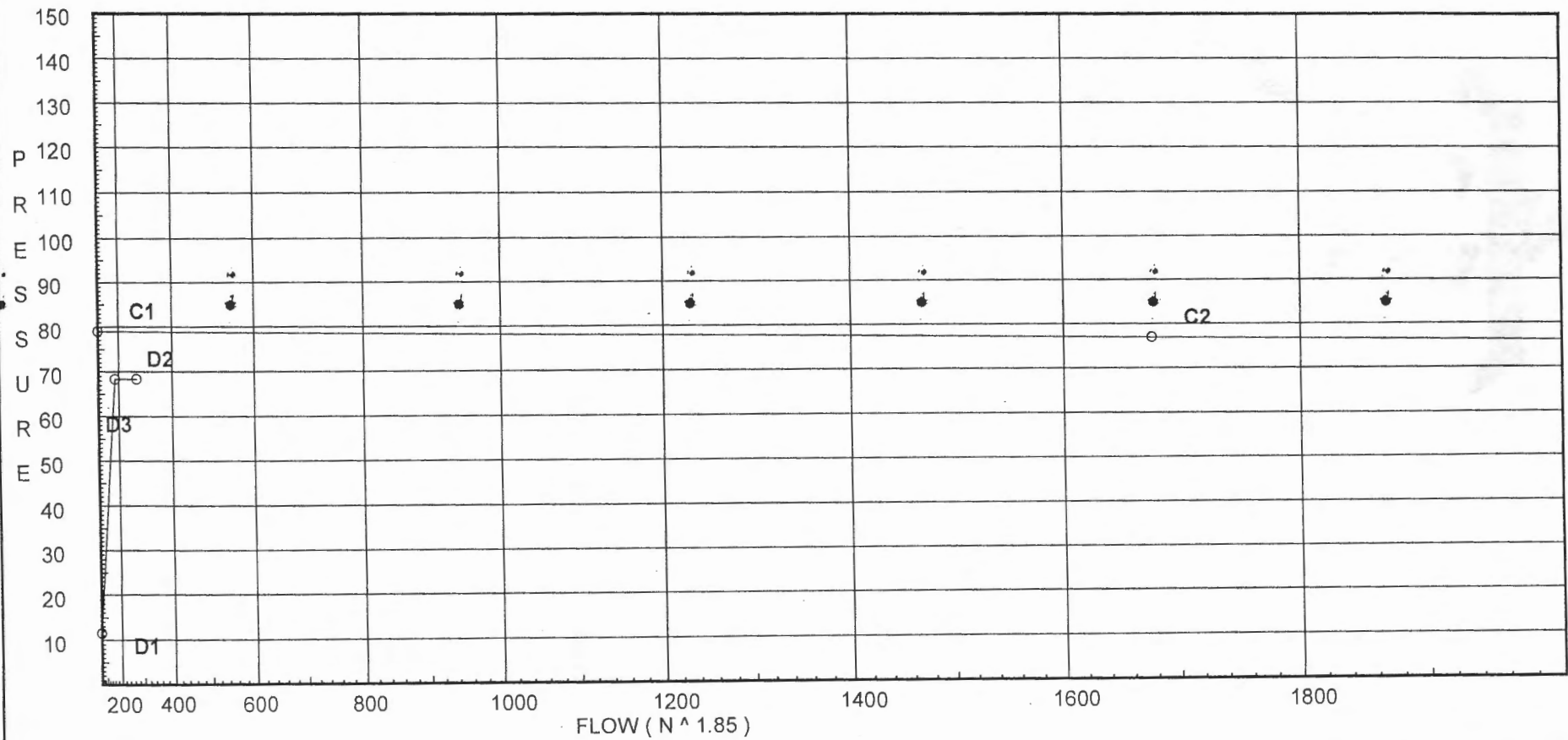
Page 7
Date 11-30-2012

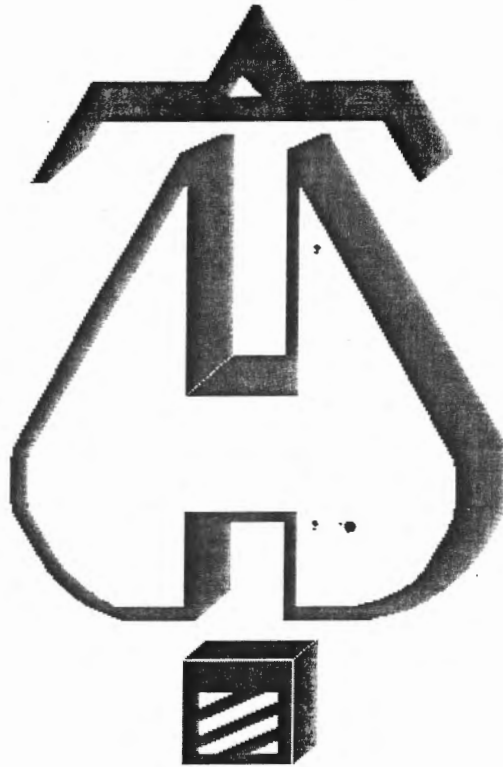
City Water Supply:

C1 - Static Pressure : 79
C2 - Residual Pressure: 77
C2 - Residual Flow : 1677

Demand:

D1 - Elevation : 11.477
D2 - System Flow : 180.337
D2 - System Pressure : 68.397
Hose (Adj City) : _____
Hose (Demand) : 100
D3 - System Demand : 280.337
Safety Margin : 10.530





... Fire Protection by Computer Design

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

Job Name : SAGAMORE VILLAGE COMMUNITY BUILDING
Building :
Location : 21 POPHAM STREET, PORTLAND, MAINE 04102
System : 1 OF 1
Contract : 12074
Data File : 12074SAGAMOREVILLCOMMBLDGA2.WXF

Hydraulic Design Information Sheet

Name - SAGAMORE VILLAGE COMMUNITY BUILDING Date - 11-30-2012
 Location - 21 POPHAM STREET, PORTLAND, MAINE 04102
 Building - System No. - 1 OF 1
 Contractor - JARR MANAGEMENT Contract No. - 12074
 Calculated By - SCOTT E. GARLAND Drawing No. - 1-3 OF 3
 Construction: (X) Combustible () Non-Combustible Ceiling Height - VARIES
 Occupancy - ROOF SPACE - LIGHT HAZARD

S (X) NFPA 13 (X) Lt. Haz. Ord.Haz.Gp. () 1 () 2 () 3 () Ex.Haz.
 Y () NFPA 231 () NFPA 231C () Figure Curve

S Other

T Specific Ruling Made By Date

E
 M Area of Sprinkler Operation - 9 HD CALC System Type Sprinkler/Nozzle
 Density - .10 () Wet Make TYCO
 D Area Per Sprinkler - 250 (X) Dry Model BBl TY3180
 E Elevation at Highest Outlet - 121.917 () Deluge Size 1/2 X 1/2
 S Hose Allowance - Inside - () Preaction K-Factor 5.6
 I Rack Sprinkler Allowance - () Other Temp.Rat.212 DEG
 G Hose Allowance - Outside - 100
 N

Note DESIGN AREA #2 - MIDDLE ROOF

Calculation Flow Required - 235.266 Press Required - 52.517 AT BASE OF RISER
 Summary C-Factor Used: 100 Overhead 140 Underground

W Water Flow Test: Pump Data: Tank or Reservoir:
 A Date of Test - 5-21-2004 Cap. -
 T Time of Test - Rated Cap.- Elev.-
 E Static Press - 79 @ Press -
 R Residual Press - 77 Elev. - Well
 S Flow - 1677 Proof Flow
 S Elevation - 94.5

U
 P Location - ON BRIGHTON AVENUE AT CABOT STREET, 340'-0" AWAY FROM THE BUILDING

P
 L Source of Information - PORTLAND WATER DISTRICT
 Y

C Commodity Class Location
 O Storage Ht. Area Aisle W.
 M Storage Method: Solid Piled % Palletized % Rack
 M
 () Single Row () Conven. Pallet () Auto. Storage () Encap.
 S R () Double Row () Slave Pallet () Solid Shelf () Non
 T A () Mult. Row () Open Shelf

O C
 R K Flue Spacing Clearance Storage to Ceiling
 A Longitudinal Transverse
 G

E Horizontal Barriers Provided:

Pressure / Flow Summary - STANDARD

Sprinkler Systems Inc.
SAGAMORE VILLAGE COMMUNITY BUILDING

Page 10
Date 11-30-2012

Node No.	Elevation	K-Fact	Pt Actual	Pn	Flow Actual	Density	Area	Press Req.
51	121.917	5.6	22.9	na	26.8	0.1	250	20.0
52	121.917	5.6	22.96	na	26.83	0.1	250	20.0
53	121.917	5.6	23.16	na	26.95	0.1	250	20.0
54	121.917	5.6	20.0	na	25.04	0.1	250	20.0
55	121.917	5.6	20.05	na	25.08	0.1	250	20.0
56	121.917	5.6	20.45	na	25.33	0.1	250	20.0
57	121.917	5.6	20.84	na	25.56	0.1	250	20.0
58	121.917	5.6	21.49	na	25.96	0.1	250	20.0
U	121.833		23.45	na				
59	121.833	5.6	24.49	na	27.71	0.1	250	20.0
S	121.833		29.59	na				
K	118.625		33.92	na				
L	118.542		38.32	na				
M	118.417		41.44	na				
N	118.417		41.87	na				
DD	117.083		42.67	na				
Z	106.75		48.36	na				
TDV	105.667		49.44	na				
RB	101.292		52.52	na				
X1	94.5		55.65	na	100.0			
TEST	94.5		55.7	na				

The maximum velocity is 20.71 and it occurs in the pipe between nodes 59 and S

Final Calculations - Hazen-Williams

Sprinkler Systems Inc.
SAGAMORE VILLAGE COMMUNITY BUILDING

Page 11
Date 11-30-2012

Hyd. Ref. Point	Qa Qt	Dia. "C" Pf/Ft	Fitting or Eqv.	Ln.	Pipe Ftg's Total	Pt Pe Pf	Pt Pv Pn	*****	Notes	*****
51	26.80	2.154		0.0	6.000	22.902			K Factor = 5.60	
to 52	26.8	100.0 0.0095		0.0	0.0 6.000	0.0 0.057			Vel = 2.36	
52	26.83	2.154		0.0	6.000	22.959			K Factor = 5.60	
to 53	53.63	100.0 0.0340		0.0	0.0 6.000	0.0 0.204			Vel = 4.72	
53	26.95	2.154		0.0	3.500	23.163			K Factor = 5.60	
to U	80.58	100.0 0.0723		0.0	0.0 3.500	0.036 0.253			Vel = 7.09	
	0.0									
	80.58					23.452			K Factor = 16.64	
54	25.04	2.154		0.0	6.000	20.000			K Factor = 5.60	
to 55	25.04	100.0 0.0083		0.0	0.0 6.000	0.0 0.050			Vel = 2.20	
55	25.08	2.154	2E	8.724	4.667	20.050			K Factor = 5.60	
to 56	50.12	100.0 0.0300		0.0	8.724 13.391	0.0 0.402			Vel = 4.41	
56	25.32	2.154		0.0	6.000	20.452			K Factor = 5.60	
to 57	75.44	100.0 0.0638		0.0	0.0 6.000	0.0 0.383			Vel = 6.64	
57	25.57	2.154		0.0	6.000	20.835			K Factor = 5.60	
to 58	101.01	100.0 0.1098		0.0	0.0 6.000	0.0 0.659			Vel = 8.89	
58	25.96	2.154	1T	8.724	2.750	21.494			K Factor = 5.60	
to U	126.97	100.0 0.1675		0.0	8.724 11.474	0.036 1.922			Vel = 11.18	
	0.0									
	126.97					23.452			K Factor = 26.22	
U	207.55	2.154		0.0	2.500	23.452				
to 59	207.55	100.0 0.4160		0.0	0.0 2.500	0.0 1.040			Vel = 18.27	
59	27.72	2.154	1T	8.724	1.000	24.492			K Factor = 5.60	
to S	235.27	100.0 0.5244		0.0	8.724 9.724	0.0 5.099			Vel = 20.71	
S	0.0	2.635	1T	11.758	3.209	29.591				
to K	235.27	100.0 0.1964		0.0	11.757 14.966	1.389 2.940			Vel = 13.84	
K	0.0	3.26	2E	13.428	49.250	33.920				
to L	235.27	100.0 0.0697		0.0	13.429 62.679	0.036 4.368			Vel = 9.04	
L	0.0	3.26	2E	13.428	30.500	38.324				
to M	235.27	100.0 0.0697		0.0	13.429 43.929	0.054 3.062			Vel = 9.04	
M	0.0	4.26	1T	18.795	3.667	41.440				
to N	235.27	100.0 0.0189		0.0	18.795 22.462	0.0 0.425			Vel = 5.30	
N	0.0	4.26	1E	9.397	2.833	41.865				
to DD	235.27	100.0 0.0189		0.0	9.397 12.230	0.578 0.231			Vel = 5.30	

Final Calculations - Hazen-Williams

Sprinkler Systems Inc.
SAGAMORE VILLAGE COMMUNITY BUILDING

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Date 11-30-2012

Hyd. Ref. Point	Qa Qt	Dia. "C" Pf/Ft	Fitting or Eqv. Ln.	Pipe Ftng's Total	Pt Pe Pf	Pt Pv Pn	*****	Notes	*****
DD	0.0	4.26	2E 18.795	26.167	42.674				
to		100.0	1T 18.795	37.590	4.475				
Z	235.27	0.0189	0.0	63.757	1.208		Vel = 5.30		
Z	0.0	4.26	2E 18.795	13.750	48.357				
to		100.0	0.0	18.795	0.469				
TDV	235.27	0.0189	0.0	32.545	0.616		Vel = 5.30		
TDV	0.0	4.26	1D 36.868	5.667	49.442				
to		120.0	1G 2.633	81.636	1.895				
RB	235.27	0.0135	1E 13.167	87.303	1.180		Vel = 5.30		
			1S 28.968						
RB	0.0	6.16	1T 43.037	65.000	52.517				
to		140.0	1G 4.304	47.341	2.942				
X1	235.27	0.0017	0.0	112.341	0.189		Vel = 2.53		
X1	100.00	12.34	2T 187.534	275.000	55.648		Qa = 100		
to		140.0	0.0	187.534	0.0				
TEST	335.27	0.0001	0.0	462.534	0.051		Vel = 0.90		
	0.0								
	335.27				55.699		K Factor = 44.92		

Water Supply Curve (C)

Sprinkler Systems Inc.
SAGAMORE VILLAGE COMMUNITY BUILDING

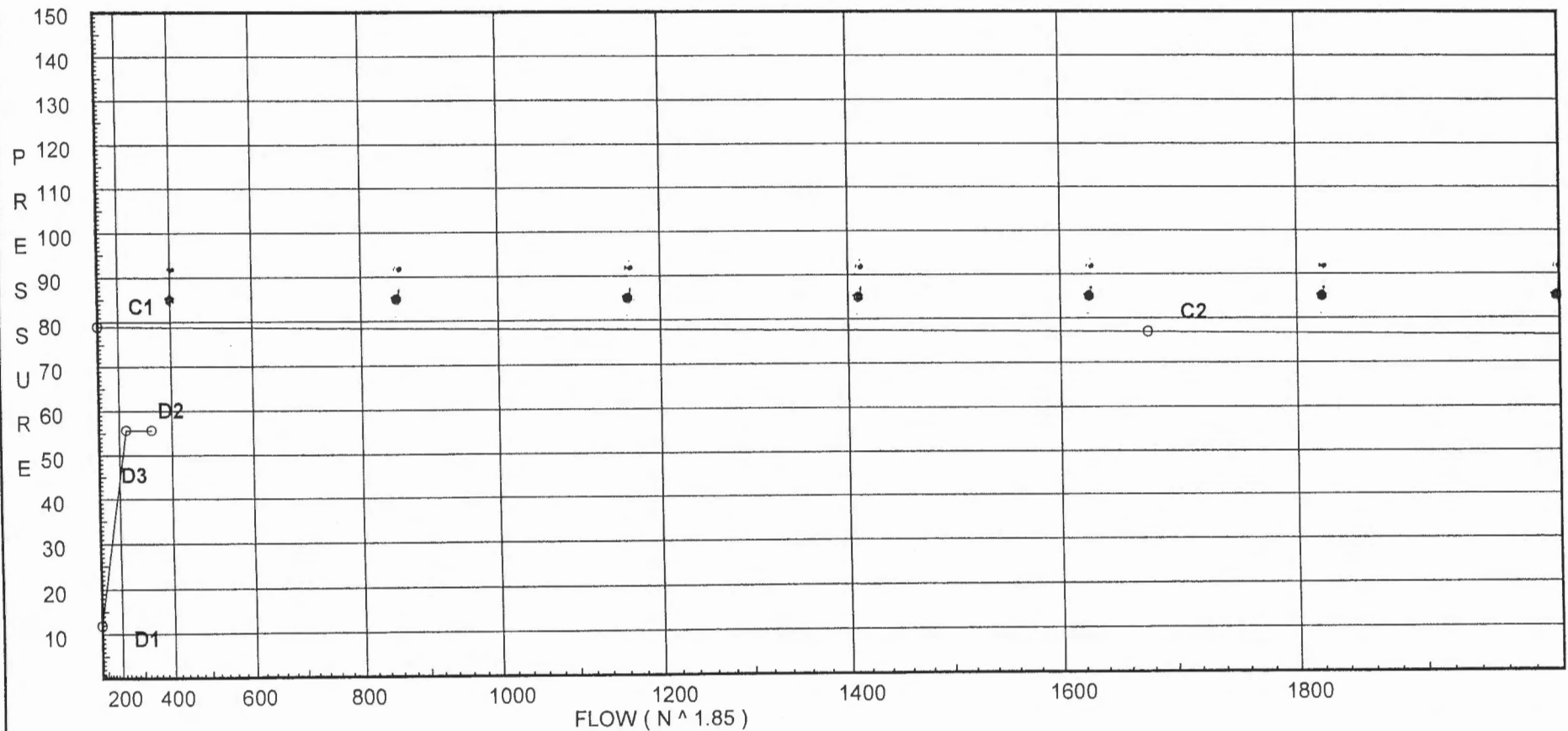
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Date 11-30-2012

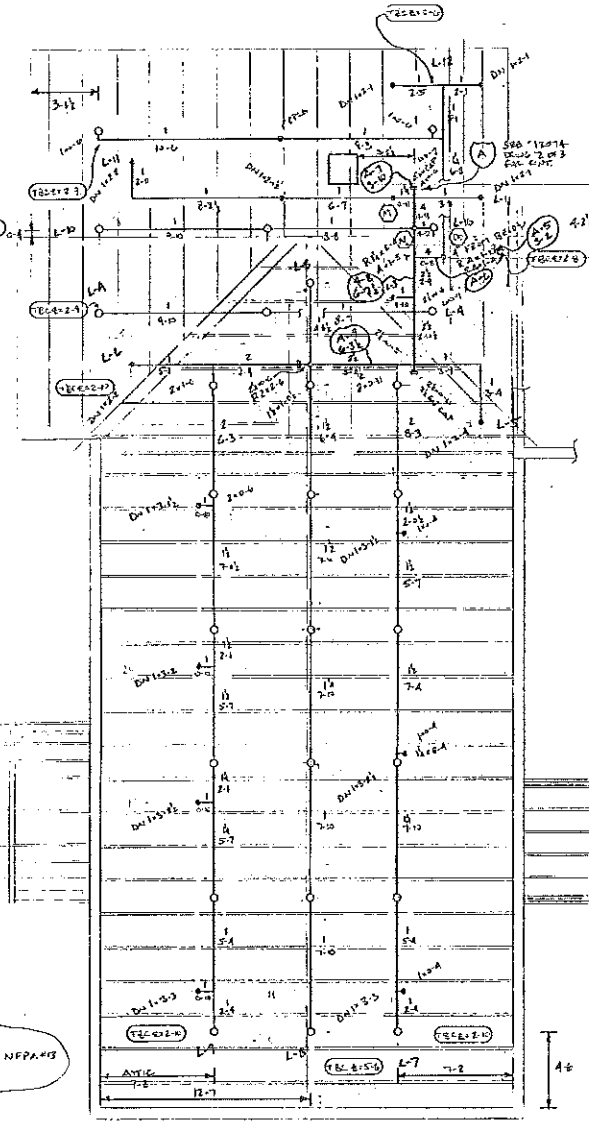
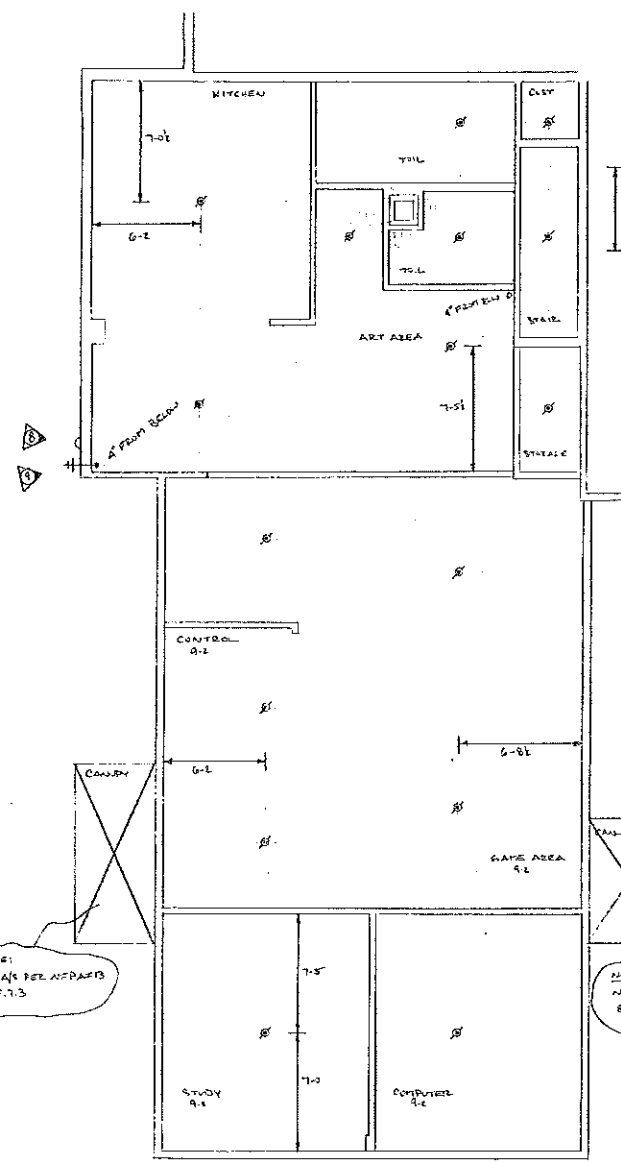
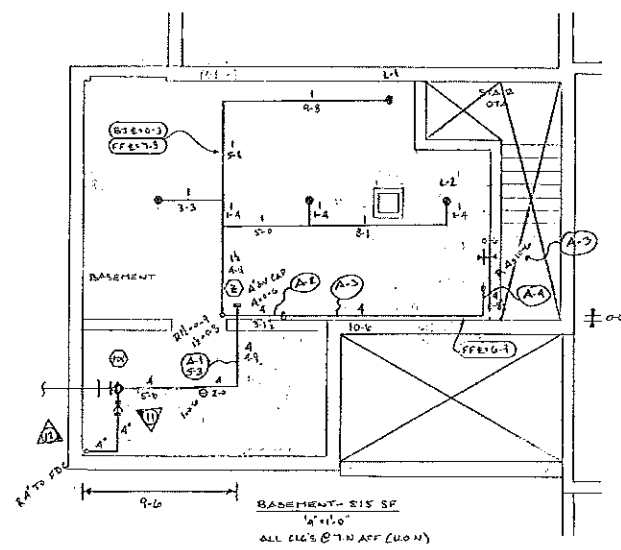
City Water Supply:

C1 - Static Pressure : 79
C2 - Residual Pressure: 77
C2 - Residual Flow : 1677

Demand:

D1 - Elevation : 11.874
D2 - System Flow : 235.266
D2 - System Pressure : 55.699
Hose (Adj City) :
Hose (Demand) : 100
D3 - System Demand : 335.266
Safety Margin : 23.199



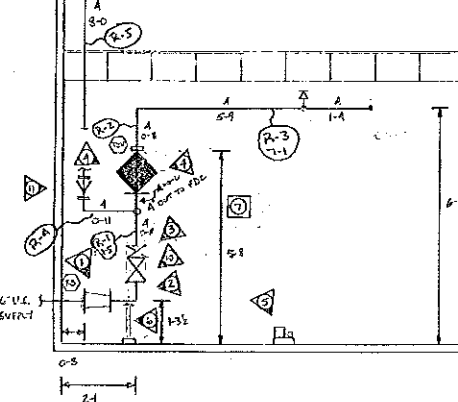
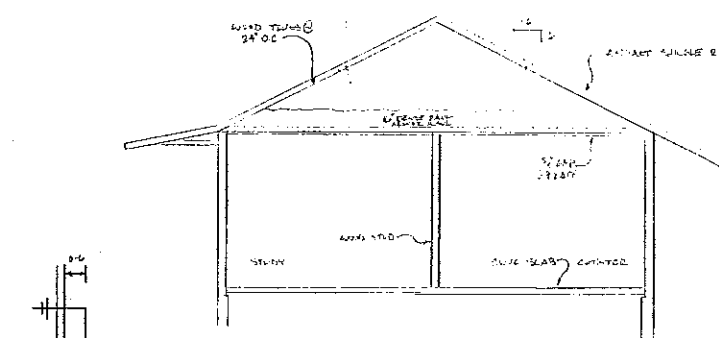


- GENERAL NOTES**
- OCCUPANCY: SOCIAL CLUB/OFFICES - LIGHT HAZARD, 100 SF
 - DESIGN BASIS: NFPA 72 BY PIPE SCHEDULE SPRINKLER HEADS
 - ALL PIPING 2" AND SMALLER TO BE BLACK STEEL SCH 40
 - ALL PIPE 2" AND LARGER TO BE BLACK STEEL THINWALL
 - ALL PIPE AND HANGER DIMENSIONS ARE CUT LENGTHS FOR FABRICATION AND INSTALLATION
 - TTL DENOTES TOP OF WOOD TRUSS TO CENTERLINE OF PIPE
 - BSE DENOTES BOTTOM OF WOOD JOIST TO CENTERLINE OF PIPE
 - TBE DENOTES TOP OF BITUM CHORD TRUSS TO CENTERLINE OF PIPE
 - FFE DENOTES FINISHED FLOOR TO CENTERLINE OF PIPE
 - OWNER TO PROVIDE SUFFICIENT HEAT (MAY ASY) TO PREVENT CONTROL VALVE FROM FREEZING
 - OWNER: PORTLAND HOUSING AUTHORITY
 - ARCHITECT: GFA 2 ARCHITECTS
 - SPRINKLER HEADS TO BE LOCATED IN EXACT CENTER OF ALL TILES

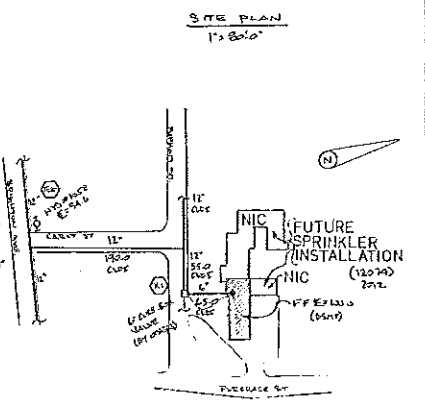
WATER SUPPLY

FLOW TEST BY PORTLAND WATER DISTRICT 5-11-2004
 WATER WAS FLOWED FROM HYD 1059 ON BRIGHTON AVE FROM A 1/2" CURT CURT MAIN TEST HEADRANT LOSS ON BUDGET.
 STATIC: 78.7 PSI
 RESIDUAL: 71 PSI @ 1077 GPM FLOW @ 84.4'

- LEGEND**
- GROUP OF SPRINKLER COUNING
 - HYDRAULIC DEFERRER POINT
 - EXISTING PIPING TO REMAIN
 - 200' BRASS UPRIGHT SPRINKLER WITH SPKS



- SYSTEM RISER DETAIL**
- 6" x 4" FIBERGLASS
 - 1" NPT BALL
 - 1" NPT CHECK VALVE
 - 1" FLANGY DRY PIPE VALVE w/ LOW AIR AND LOW PRESSURE ALARMS w/ TRIP
 - 1/2" HP AIR COMPRESSOR - SYSTEM CAPACITY = 64 GALS
 - 2" PIPE STAND
 - 6" HEAD SPRINKLER CABINET
 - 1" ELEC BALL
 - 3" STUCCO FDC w/ PLATE AND LOCKING CAP
 - 2" FIBERGLASS DATE VALVE w/ TAMPER
 - 4" w/ SHOCK CHECK VALVE



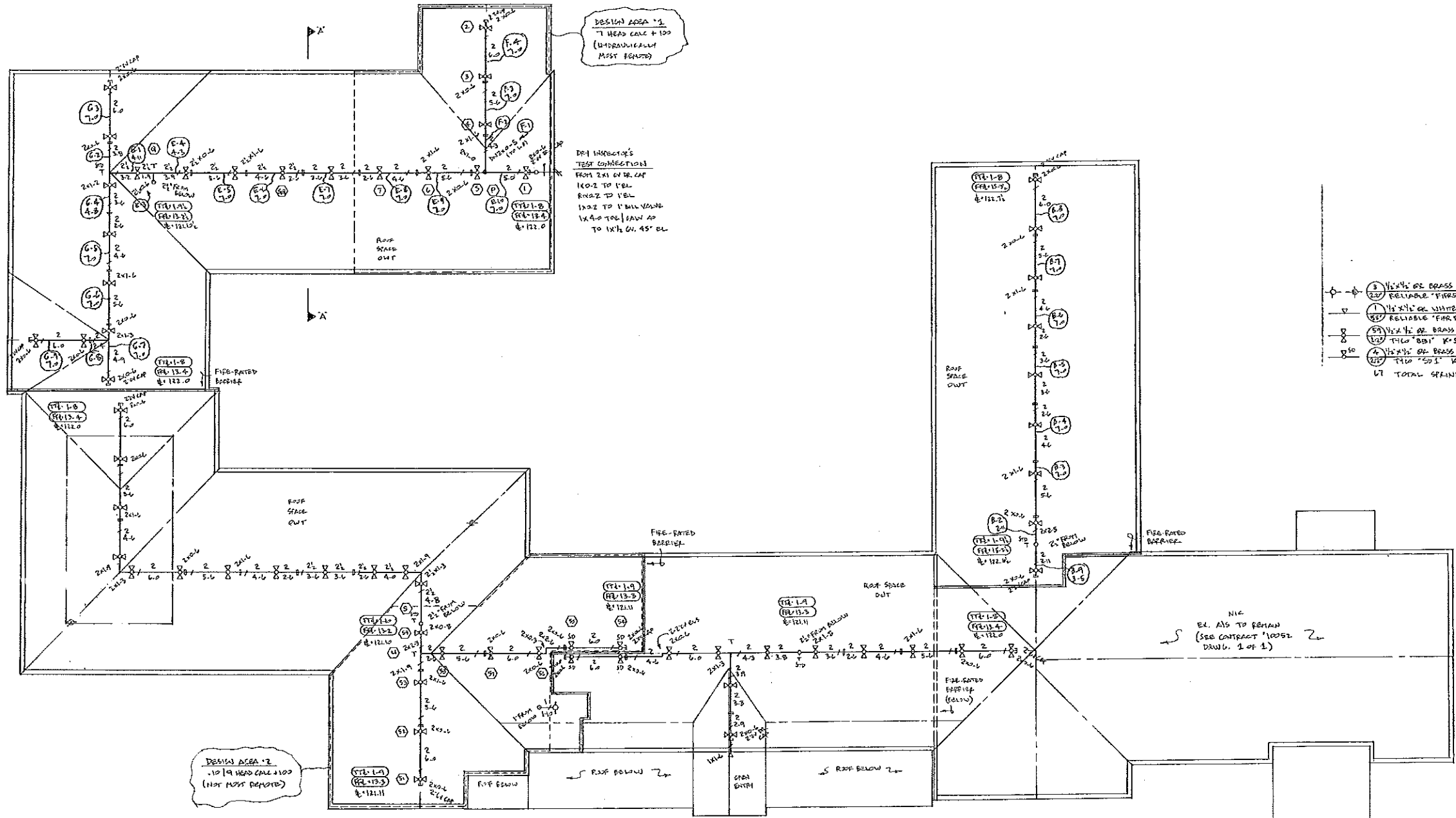
ALL UNDERGROUND PIPING MINIMUM 6\"/>

PLEASE SEE CONTRACT #12074, DRAWING 1-5 OF 5 FOR REMAINING OF SPRINKLER DESIGN

HYDRAULIC DESIGN CRITERIA Design: [] Remote Area: [] K Factor: [] Water Allowance: [] Water Supply: 5-21-2004 Static: 78.7 PSI Residual: 71 PSI Water Flowing: 1077 GPM Size of Supply: 12" CLASS	CIRCLE HANGER TYPE TO BE USED 	HANGERS <table border="1"> <tr><th>Symbol</th><th>Description</th></tr> <tr><td>○</td><td>1/2" GALVANIZED STEEL</td></tr> <tr><td>○</td><td>1/2" ANCHOR</td></tr> <tr><td>○</td><td>PIPE BRACE</td></tr> </table>	Symbol	Description	○	1/2" GALVANIZED STEEL	○	1/2" ANCHOR	○	PIPE BRACE	SPRINKLER HEAD LEGEND <table border="1"> <thead> <tr> <th>SYMBOL</th> <th>MAKE</th> <th>MODEL</th> <th>FINISH</th> <th>TEMP.</th> <th>N.P.T.</th> <th>ORIFICE</th> <th>K-FACTOR</th> <th>TOTAL</th> </tr> </thead> <tbody> <tr> <td>○</td> <td>REINOLD</td> <td>FSK</td> <td>UNT</td> <td>155°F</td> <td>1/2"</td> <td>1/2"</td> <td>5.0</td> <td>10</td> </tr> <tr> <td>○</td> <td>REINOLD</td> <td>RTF</td> <td>DEL</td> <td>155°F</td> <td>1/2"</td> <td>1/2"</td> <td>5.0</td> <td>88</td> </tr> <tr> <td>○</td> <td>REINOLD</td> <td>RTF</td> <td>DEL</td> <td>155°F</td> <td>1/2"</td> <td>1/2"</td> <td>5.0</td> <td>4</td> </tr> <tr> <td colspan="8"></td> <td>TOTAL: 102</td> </tr> </tbody> </table>	SYMBOL	MAKE	MODEL	FINISH	TEMP.	N.P.T.	ORIFICE	K-FACTOR	TOTAL	○	REINOLD	FSK	UNT	155°F	1/2"	1/2"	5.0	10	○	REINOLD	RTF	DEL	155°F	1/2"	1/2"	5.0	88	○	REINOLD	RTF	DEL	155°F	1/2"	1/2"	5.0	4									TOTAL: 102	SUBMITTALS <table border="1"> <thead> <tr> <th>DATE SENT</th> <th>DATE RECEIVED</th> </tr> </thead> <tbody> <tr><td>ISO</td><td><input type="checkbox"/></td></tr> <tr><td>FM</td><td><input type="checkbox"/></td></tr> <tr><td>EM</td><td><input type="checkbox"/></td></tr> <tr><td>IRI</td><td><input type="checkbox"/></td></tr> <tr><td>LA</td><td><input type="checkbox"/></td></tr> <tr><td>STATE FIRE</td><td><input type="checkbox"/></td></tr> <tr><td>LOCAL FIRE</td><td><input type="checkbox"/></td></tr> <tr><td>LOCAL WATER</td><td><input type="checkbox"/></td></tr> <tr><td>GENERAL</td><td><input type="checkbox"/></td></tr> </tbody> </table>	DATE SENT	DATE RECEIVED	ISO	<input type="checkbox"/>	FM	<input type="checkbox"/>	EM	<input type="checkbox"/>	IRI	<input type="checkbox"/>	LA	<input type="checkbox"/>	STATE FIRE	<input type="checkbox"/>	LOCAL FIRE	<input type="checkbox"/>	LOCAL WATER	<input type="checkbox"/>	GENERAL	<input type="checkbox"/>	BOYS & GIRLS CLUB 21 POPHAM ST PORTLAND ME 04102 CONTRACT WITH JARR MANAGEMENT SYSTEM TYPE: [] WET: [] NO. [] DATE: [] DRY: [] NO. [] DATE: [] DELUGE: [] NO. [] DATE: [] PREACTION: [] NO. [] DATE: [] ME LIFE: [] NO. [] DATE: []	SPRINKLER SYSTEMS INC. P.O. BOX 1255 LEWISTON MAINE 04240	SCALE: 1/4" = 1'-0" DRAWN BY: KJF CHECKED BY: SEG DATE: 8-12-10 TOTAL SPKRS ON JOB: 48 SHEET #1 OF 1 JOB # 110052 & 12074
			Symbol	Description																																																																												
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GENERAL	<input type="checkbox"/>																																																																															
HYDRAULIC DESIGN CRITERIA (continued)	SPRINKLER HEAD LEGEND (continued)	SPRINKLER SYSTEMS INC. (continued)																																																																														

DESIGN AREA "1"
 HYDRAULIC DATA SUMMARY
 THIS DESIGN IS BASED ON A 1.0 GPM PER SQUARED FOOT WATER DEMAND.
 WATER SOURCE: CITY WATER
 WATER PRESSURE: 100 PSI
 DESIGN FLOW: 1.0 GPM
 DESIGN HEAD: 100 FT
 SYSTEM DESIGN: 1.0 GPM PER SQUARED FOOT
 1. DESIGN FLOW: 1.0 GPM
 2. DESIGN HEAD: 100 FT
 (HYDRAULICALLY TESTED)

DESIGN AREA "2"
 HYDRAULIC DATA SUMMARY
 THIS DESIGN IS BASED ON A 1.0 GPM PER SQUARED FOOT WATER DEMAND.
 WATER SOURCE: CITY WATER
 WATER PRESSURE: 100 PSI
 DESIGN FLOW: 1.0 GPM
 DESIGN HEAD: 100 FT
 SYSTEM DESIGN: 1.0 GPM PER SQUARED FOOT
 1. DESIGN FLOW: 1.0 GPM
 2. DESIGN HEAD: 100 FT
 (NOT TESTED)



DESIGN AREA "1"
 7 HEAD CALL + 100
 (HYDRAULICALLY TESTED)

DRY INDUCTOR'S
 TEST CONNECTIONS
 FROM 2 1/2" OR 3" CAT
 RING TO 1" EL
 RING TO 1" EL
 1/4" TO 1" BOLL NUTS
 1/4" TO 1" BOLL NUTS
 TO 1/4" OR 3/8" EL

- 3 1/2" x 1/2" BRASS VALVE
- RELIABLE "FERRIS" K-5L RA1425
- 1 1/2" x 1/2" WHITE PRESSED IRON BALL VALVE
- RELIABLE "FERRIS" K-5L RA1435
- 1/2" x 1/2" BRASS ATTACH BACK TO BALL
- 1/2" x 1/2" TYP. T-3180
- 1/2" x 1/2" BRASS ATTACH SINGLE DIRECTIONAL
- TYP. T-3183
- WT TOTAL SPRINKLERS 2806.3

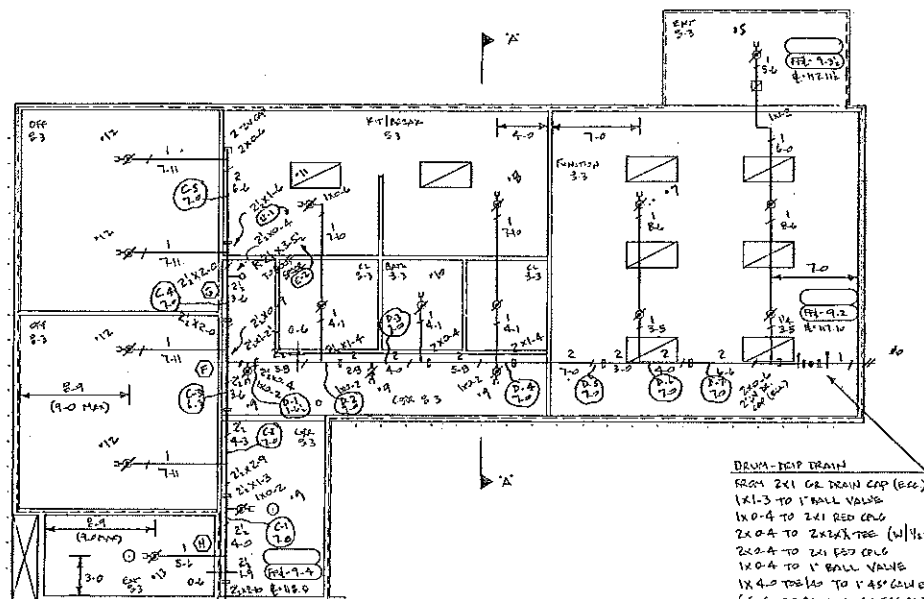
DESIGN AREA "2"
 10 HEAD CALL + 100
 (NOT TESTED)

ROOF SPACE - 1,822 SF
 2 1/2" x 10"

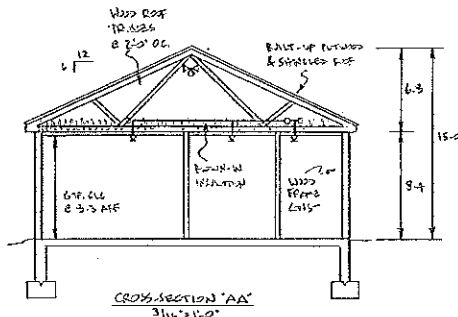
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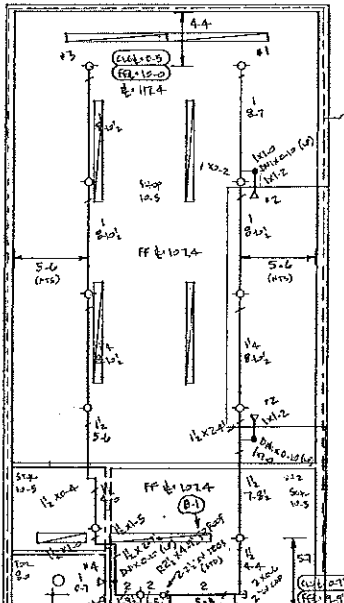
SAGAMORE VILLAGE COMM. BLDG. 21 POPHAM STREET PORTLAND, MAINE 04102		SCALE 3/16" = 1'-0"
CONTRACT WITH JARR MGMT.		DATE 11-30-12
SYSTEM TYPE	REVISIONS	TOTAL SPKRS ON JOB
WET <input type="checkbox"/>	NO. DATE DESCRIPTION	145
DRY <input type="checkbox"/>		SHEET # 3 OF 3
DELUGE <input type="checkbox"/>		JOB # 12074
PREACTION <input type="checkbox"/>		
W. LIFE <input type="checkbox"/>		



DEWATER DRAIN
 FROM 2x11 GR. DOWN CAP (SEE)
 1x1.3 TO 1" BALL VALVE
 1x0.4 TO 2x1 RED CUP
 2x0.4 TO 2x1/2" TEE (W/ 1/2" X 1/2" X 1/2")
 2x0.4 TO 2x1/2" TEE
 1x0.4 TO 1" BALL VALVE
 1x4.0 TO 1" x 1/2" COUL
 (O.G. TO PROVIDE ACCESS PATH)



- ① 1/2" x 1/2" BRASS W/ WHITE PBR
- ② 1/2" x 1/2" BRASS W/ WHITE PBR
- ③ 1/2" x 1/2" BRASS W/ WHITE PBR
- ④ 1/2" x 1/2" BRASS W/ WHITE PBR
- ⑤ 1/2" x 1/2" BRASS W/ WHITE PBR
- ⑥ 1/2" x 1/2" BRASS W/ WHITE PBR
- ⑦ 1/2" x 1/2" BRASS W/ WHITE PBR
- ⑧ 1/2" x 1/2" BRASS W/ WHITE PBR
- ⑨ 1/2" x 1/2" BRASS W/ WHITE PBR
- ⑩ 1/2" x 1/2" BRASS W/ WHITE PBR
- ⑪ 1/2" x 1/2" BRASS W/ WHITE PBR
- ⑫ 1/2" x 1/2" BRASS W/ WHITE PBR
- ⑬ 1/2" x 1/2" BRASS W/ WHITE PBR
- ⑭ 1/2" x 1/2" BRASS W/ WHITE PBR
- ⑮ 1/2" x 1/2" BRASS W/ WHITE PBR
- ⑯ 1/2" x 1/2" BRASS W/ WHITE PBR
- ⑰ 1/2" x 1/2" BRASS W/ WHITE PBR
- ⑱ 1/2" x 1/2" BRASS W/ WHITE PBR
- ⑲ 1/2" x 1/2" BRASS W/ WHITE PBR
- ⑳ 1/2" x 1/2" BRASS W/ WHITE PBR
- ㉑ 1/2" x 1/2" BRASS W/ WHITE PBR
- ㉒ 1/2" x 1/2" BRASS W/ WHITE PBR
- ㉓ 1/2" x 1/2" BRASS W/ WHITE PBR
- ㉔ 1/2" x 1/2" BRASS W/ WHITE PBR
- ㉕ 1/2" x 1/2" BRASS W/ WHITE PBR
- ㉖ 1/2" x 1/2" BRASS W/ WHITE PBR
- ㉗ 1/2" x 1/2" BRASS W/ WHITE PBR
- ㉘ 1/2" x 1/2" BRASS W/ WHITE PBR
- ㉙ 1/2" x 1/2" BRASS W/ WHITE PBR
- ㉚ 1/2" x 1/2" BRASS W/ WHITE PBR
- ㉛ 1/2" x 1/2" BRASS W/ WHITE PBR
- ㉜ 1/2" x 1/2" BRASS W/ WHITE PBR
- ㉝ 1/2" x 1/2" BRASS W/ WHITE PBR
- ㉞ 1/2" x 1/2" BRASS W/ WHITE PBR
- ㉟ 1/2" x 1/2" BRASS W/ WHITE PBR
- ㊱ 1/2" x 1/2" BRASS W/ WHITE PBR
- ㊲ 1/2" x 1/2" BRASS W/ WHITE PBR
- ㊳ 1/2" x 1/2" BRASS W/ WHITE PBR
- ㊴ 1/2" x 1/2" BRASS W/ WHITE PBR
- ㊵ 1/2" x 1/2" BRASS W/ WHITE PBR
- ㊶ 1/2" x 1/2" BRASS W/ WHITE PBR
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- ㊸ 1/2" x 1/2" BRASS W/ WHITE PBR
- ㊹ 1/2" x 1/2" BRASS W/ WHITE PBR
- ㊺ 1/2" x 1/2" BRASS W/ WHITE PBR
- ㊻ 1/2" x 1/2" BRASS W/ WHITE PBR
- ㊼ 1/2" x 1/2" BRASS W/ WHITE PBR
- ㊽ 1/2" x 1/2" BRASS W/ WHITE PBR
- ㊾ 1/2" x 1/2" BRASS W/ WHITE PBR
- ㊿ 1/2" x 1/2" BRASS W/ WHITE PBR



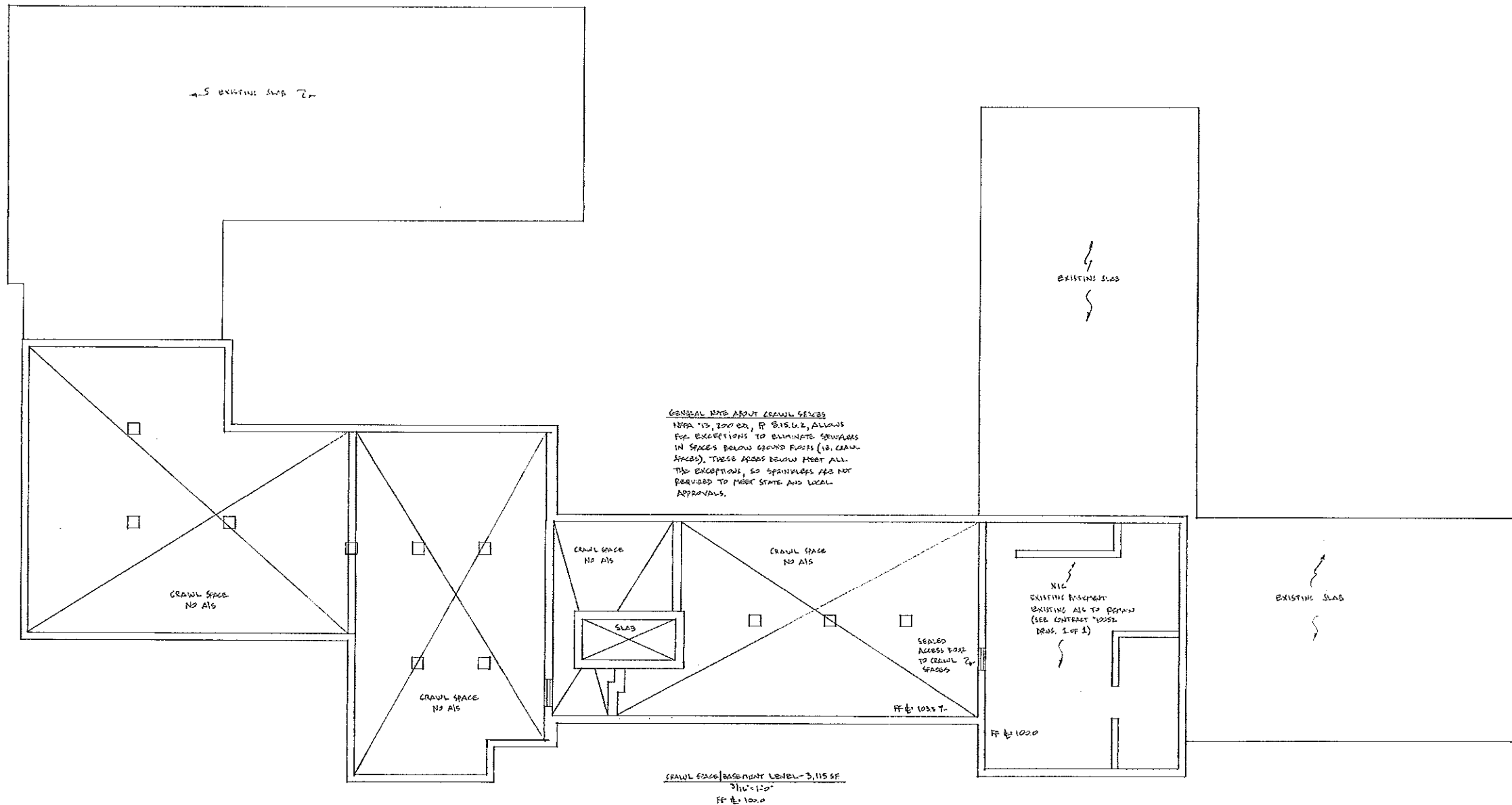
NIC - EXISTING AIS TO REMAIN (SEE CONTRACT 10052 DRAW. 2 OF 2)

MAIN LEVEL - L. 522 RF
 3'-11 1/2"
 FF @ 105.8
 ALL CEILING @ 2'-11 1/2" AFF FIN.

0 2 3.5 10

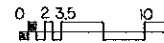
LICENSE # 093
 R.M.B. # 278
 PERMIT #
SPRINKLER SYSTEMS INC.
 P.O. BOX 1285
 LEWISTON MAINE
 04240

SAGAMORE VILLAGE COMM. BLDG. 21 POPHAM STREET PORTLAND, MAINE 04102		SCALE 3/16" = 1'-0"
CONTRACT WITH JARR MGMT.		DRAWN BY SEG
SYSTEM TYPE		CHECKED BY SEG
WET <input type="checkbox"/>	NO. DATE DESCRIPTION	DATE 11-30-12
DRY <input type="checkbox"/>		TOTAL SFKRS ON JOB 145
DELUGE <input type="checkbox"/>		SHEET # 2 OF 3
PREACTION <input type="checkbox"/>		JOB # 12074
W/LIFE <input type="checkbox"/>		
<input type="checkbox"/>		



GENERAL NOTE ABOUT CRAWL SPACES
 NFPA 13, 2002, R 8.15.6.2, ALLOWS
 FOR EXCEPTIONS TO EXHAUSTIVE SPACINGS
 IN SPACES BELOW GROUND FLOORS (I.E. CRAWL
 SPACES). THESE AREAS BELOW MEET ALL
 THE REQUIREMENTS, SO SPRINKLERS ARE NOT
 REQUIRED TO MEET STATE AND LOCAL
 APPROVALS.

PLEASE SEE CONTRACT #1002 FOR ALL
 PERTINENT NOTES, SITE PLAN, AND RISES DETAIL



SAGAMORE VILLAGE COMM. BLDG.
 21 POPHAM STREET
 PORTLAND, MAINE 04102
 CONTRACT WITH JARR MGMT

SCALE 3/16" = 1'-0"

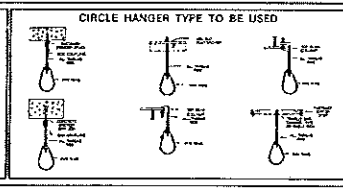
DRAWN BY SEG
 CHECKED BY SEG
 DATE 11-30-12
 TOTAL SPKRS ON JOB 145
 SHEET # 1 OF 3
 JOB # 12074

SPRINKLER SYSTEMS INC.
 LICENSE # 093
 R.M.S. # 278
 FERMIT #
 P.O. BOX 1288
 LEWISTON MAINE
 04240

SUBMITTALS	
SENT TO	DATE RECEIVED
ISO	<input type="checkbox"/>
FM	<input type="checkbox"/>
LM	<input type="checkbox"/>
IRI	<input type="checkbox"/>
LA	<input type="checkbox"/>
STATE PIPE	<input type="checkbox"/>
LOCAL WATER	<input type="checkbox"/>
GEN. CONF.	<input type="checkbox"/>

SPRINKLER HEAD LEGEND									
SYMBOL	MAKE	MODEL	FINISH	TYPE	TEMP.	N.P.T.	ORIFICE	K-FACTOR	TOTAL
	RELIABLE	FRS20	BRASS	ES, SSI	155°	1/2"	1/2"	5.67/RA145	18
	RELIABLE	FRS20	WHITE	ES, SSI	155°	1/2"	1/2"	5.67/RA145	4
	RELIABLE	FRS20	WHITE	ES, SSI	155°	1/2"	1/2"	5.67/RA145	58
	RELIABLE	FRS20	BRASS	ES, SSI	155°	1/2"	1/2"	5.67/RA145	2
	T-10	SS25	BR. BRASS	ES, SSI	155°	1/2"	1/2"	5.67/RA145	59
	T-10	SS25	BR. BRASS	ES, SSI	155°	1/2"	1/2"	5.67/RA145	4
Totals									145

HANGERS		
Symbol	Description	Notes
	1/2" GALVANNEAL STEEL	
	1/2" GALVANNEAL STEEL	
	1/2" GALVANNEAL STEEL	
	1/2" GALVANNEAL STEEL	



HYDRAULIC DESIGN CRITERIA	
Density	62.4 LB/CF
Remote Area	1.1000 CALC
K Factor	5.67
Hose Allowance	100 GPM
Water Supply	5-11-2009
Static	77.00'
Residual	77.00'
Water Flowing	15.71 GPM
Size of Supply	12" CBDS