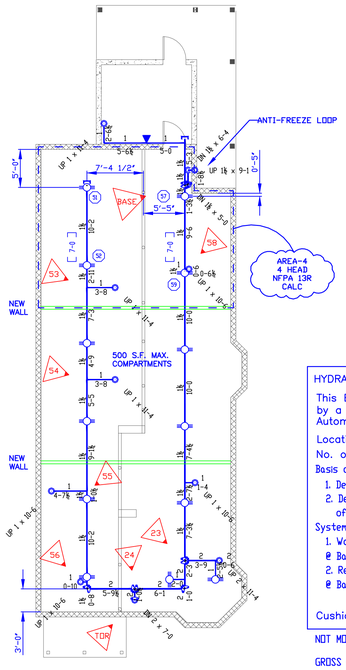
Reviewed for Code Compliance
Inspections Division
Approved with Conditions

Date: 01/28/16



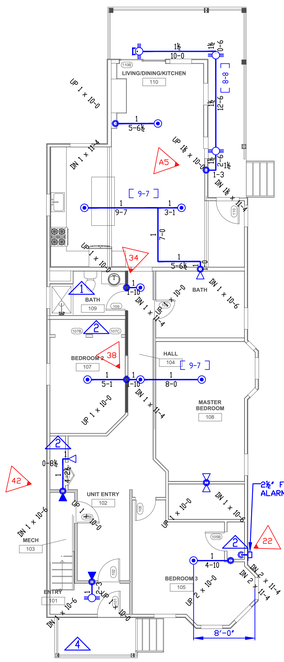
HYDRAULIC DATA NAMEPLATE
This Building is protected by a hydraulically designed Automatic Sprinkler System
Location AREA-4
No. of Sprinkler 4
Basis of design
1. Density 0.15GPM/ft²
2. Design area of discharge 4 HEADS
System Demand
1. Water Flow Rate @ Base 78.76 GPM
2. Residual Pressure @ Base 32.435 PSI
Cushion: 30.29 PSI

NOT MOST REMOTE AREA

GROSS AREA SQ.FT. 7,900

BASEMENT FLOOR PLAN

ELEVATION = 91'-6"
SCALE: 1/8"=1'-0"

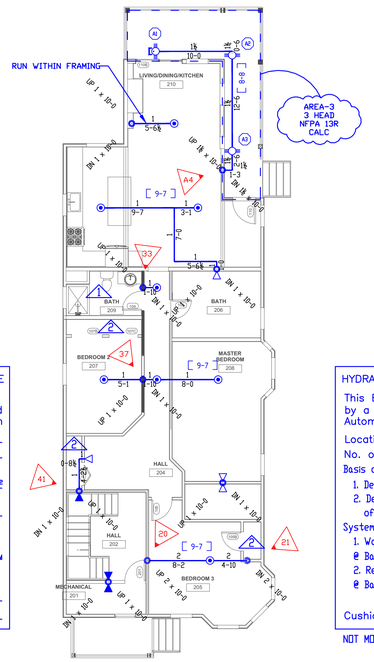


HYDRAULIC DATA NAMEPLATE
This Building is protected by a hydraulically designed Automatic Sprinkler System
Location AREA-3
No. of Sprinkler 3
Basis of design
1. Density .10 GPM/ft²
2. Design area of discharge 3 HEADS
System Demand
1. Water Flow Rate @ Base 51.06 GPM
2. Residual Pressure @ Base 47.018 PSI
Cushion: 18.61 PSI

NOT MOST REMOTE AREA

FIRST FLOOR PLAN

ELEVATION = 100'-0"
SCALE: 1/8"=1'-0"

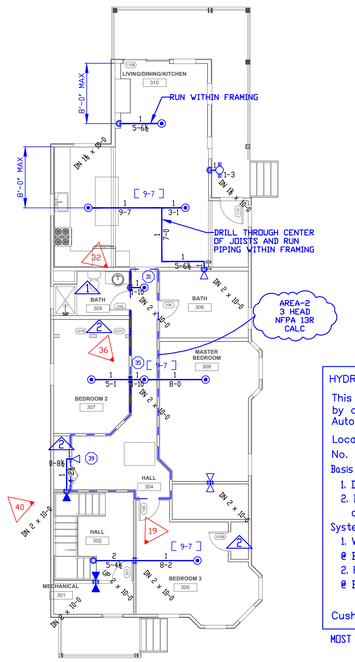


HYDRAULIC DATA NAMEPLATE
This Building is protected by a hydraulically designed Automatic Sprinkler System
Location AREA-2
No. of Sprinkler 3
Basis of design
1. Density 0.05GPM/ft²
2. Design area of discharge 3 HEADS
System Demand
1. Water Flow Rate @ Base 50.15 GPM
2. Residual Pressure @ Base 50.643 PSI
Cushion: 15.07 PSI

NOT MOST REMOTE AREA

SECOND FLOOR PLAN

ELEVATION = 110'-0"
SCALE: 1/8"=1'-0"

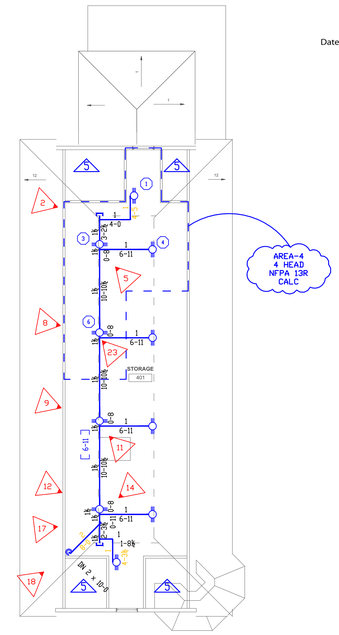


HYDRAULIC DATA NAMEPLATE
This Building is protected by a hydraulically designed Automatic Sprinkler System
Location AREA-1
No. of Sprinkler 4
Basis of design
1. Density 0.15GPM/ft²
2. Design area of discharge 4 HEADS
System Demand
1. Water Flow Rate @ Base 70.27 GPM
2. Residual Pressure @ Base 55.222 PSI
Cushion: 8.53 PSI

MOST REMOTE AREA

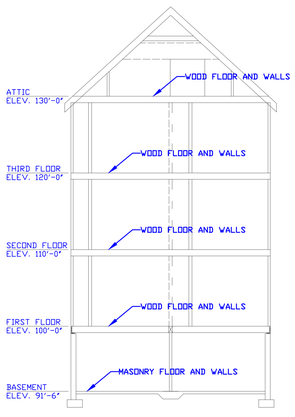
THIRD FLOOR PLAN

ELEVATION = 120'-0"
SCALE: 1/8"=1'-0"



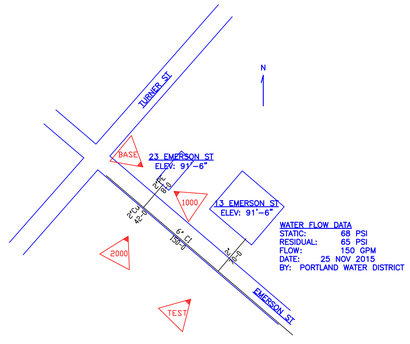
ATTIC FLOOR PLAN

ELEVATION = 130'-0"
SCALE: 1/8"=1'-0"



BUILDING SECTION

SCALE: 1/8"=1'-0"



SITE PLAN

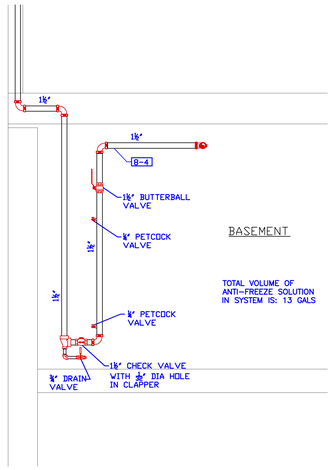
SCALE: 1"=100'-0"

GRAPHIC SCALE: 1/8"=1'-0"

GRAPHIC SCALE: 1"=100'-0"

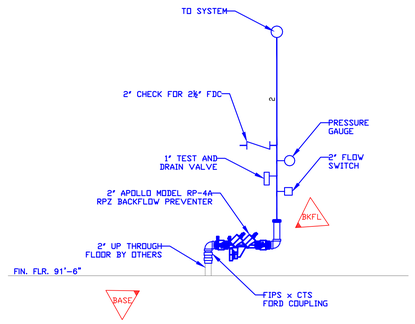
GENERAL NOTES:

- IT IS THE BUILDING OWNERS RESPONSIBILITY TO PROVIDE ADEQUATE HEAT FOR ALL AREAS IN THE BUILDING PROTECTED BY WET SPRINKLER SYSTEMS AND FOR ALL WATER FILLED SUPPLY PIPES, VALVES AND SYSTEM RISERS IN ALL DRY PIPE SPRINKLER SYSTEMS.
- ALL NEW PIPING IS TO BE HYDROSTATICALLY TESTED AT NOT LESS THAN 200 PSI FOR 2 HOURS, OR AT 50 PSI IN EXCESS OF THE MAXIMUM PRESSURE, WHEN THE MAXIMUM PRESSURE TO BE MAINTAINED IS IN EXCESS OF 150 PSI. (PER NFPA 13)
- WHETHER OR NOT INDICATED ON DRAWINGS, THE FOLLOWING ITEMS ARE TO BE PROVIDED:
  . SPARE HEAD CABINET WITH WRENCH (NFPA 13).
  . PROVISIONS FOR FLUSHING CONNECTIONS AND DRAINING OF ALL PIPE.
  . INSPECTORS TEST CONNECTION SHALL BE PROVIDED FOR EACH SYSTEM
    A) FOR WET PIPE SYSTEMS SEE NFPA 13)
    B) FOR DRY PIPE SYSTEMS SEE NFPA 13)
  . AIR PRESSURE SHALL BE MAINTAINED ON ALL DRY PIPE SYSTEMS BY AN APPROVED AUTOMATIC AIR COMPRESSOR OR PLANT AIR SYSTEM SPECIFICALLY APPROVED FOR AND CAPABLE OF AUTOMATICALLY MAINTAINING THE REQUIRED AIR PRESSURE.
  . WET PIPE SYSTEMS SHALL BE PROVIDED WITH A RELIEF VALVE NOT LESS THAN 1/2" IN SIZE. (NFPA 13).
- ALL PIPE 1" SHALL BE SCHEDULE 40 STEEL WITH MALLEABLE IRON FITTINGS.
- ALL PIPE 1¼" AND LARGER, SHALL BE SCHEDULE 10 STEEL, WITH GROOVED COUPLINGS AND VICTAULIC" MECHANICAL FITTINGS OR EQUIVALENT.
- CPVC PIPE AND FITTINGS SHALL BE USED WHEREVER THE PIPING CAN BE CONCEALED WITHIN THE RESIDENTIAL OCCUPANCIES, IN SIZES FROM 1" TO 2". ALL JOINTS SHALL BE MADE WITH SOLVENT CEMENT.
- ALL MECHANICAL TRADES ARE TO COORDINATE THEIR WORK WITH SPRINKLER WORK AS SHOWN ON THESE PLANS.
- ALL HANGERS AND LOCATIONS ARE TO BE IN ACCORDANCE WITH N.F.P.A. 13.
- ALL SPRINKLER HEADS SHALL BE LOCATED IN AN AESTHETIC, SYMMETRICAL PATTERN WHENEVER POSSIBLE.
- ALL PIPING IS TO BE PITCHED IN ACCORDANCE WITH N.F.P.A. 13.
- HYDRAULIC DATA REFERENCE POINTS: (25)
- CENTER LINE OF PIPE ABOVE FINISH FLOOR 12'-0" BELOW DECK (12")
- PROTECTIVE CAPS ARE TO REMAIN ON THE SPRINKLER HEADS UNTIL AFTER CEILINGS ARE INSTALLED.
- THE SCOPE OF WORK IS TO PROVIDE A FULL NFPA 13R SYSTEM THROUGHOUT ALL AREAS OF THE EXISTING BUILDING AND IS LIMITED TO THE WORK SHOWN ON THESE DOCUMENTS.
- GLYCERINE (ANTI-FREEZE) IS TO BE USED FOR THE EXTERIOR PORCHES.
- ANTI-FREEZE IS TO BE PRE-MIXED AND LISTED FOR USE IN SPRINKLER SYSTEMS (48% GLYCERINE.
- A PLACARD SHALL BE PLACED ON THE ANTI-FREEZE SYSTEM MAIN VALVE THAT INDICATES THE MANUFACTURER TYPE AND BRAND, THE CONCENTRATION BY VOLUME AND TOTAL GALLONS OF ANTI-FREEZE SOLUTION USED IN THE SYSTEM.
- THE FREEZING POINT OF THE ANTI-FREEZE SOLUTION IS 15°F BELOW ZERO (-15°F)
- THE OWNER IS RESPONSIBLE FOR MAINTAINING THIS LEVEL OF PROTECTION THROUGH REGULAR MAINTENANCE IN ACCORDANCE WITH THE STATE FIRE MARSHAL'S REQUIREMENTS AND NBFPA 25.



ANTI-FREEZE LOOP DETAIL

SCALE: NONE



WATER ENTRANCE DETAIL

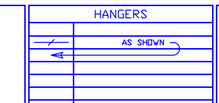
SCALE: NONE

NFPA 13R 2010 EXCLUSIONS

1. SECTION 6.6.2 Sprinklers shall not be required in bathrooms where the bathroom area does not exceed 55 ft2 (3.1 m2).
2. SECTION 6.6.3 Except where specified in 6.6.4, sprinklers shall not be required in clothes closets, linen closets, and pantries within dwelling units that meet all of the following conditions:
   (1) The area of the space does not exceed 24 ft2 (2.2 m2).
   (2) The least dimension does not exceed 3 ft (0.91 m).
   (3) The walls and ceilings are surfaced with noncombustible or limited-combustible materials as defined by NFPA 220.
3. SECTION 6.6.4 Sprinklers shall be installed in any closet used for heating and air-conditioning equipment except as permitted by 6.6.7.
4. SECTION 6.6.5 Sprinklers shall not be required in any porches, balconies, corridors, carports, and stairs that are open and attached.
5. SECTION 6.6.6 Sprinklers shall not be required in penthouse equipment rooms, elevator machine rooms, concealed spaces dedicated exclusively to and containing only dwelling unit ventilation equipment, crawl spaces, floor/ceiling spaces, noncombustible elevator shafts where the elevator cars comply with ANSI A17.1, Safety Code for Elevators and Escalators, and other concealed spaces that are not used or intended for living purposes or storage and do not contain fuel-fired equipment.
6. SECTION 6.6.6.1 When fuel-fired equipment is present, at least one quick-response intermediate temperature sprinkler shall be installed above the equipment.
7. SECTION 6.6.7 Sprinklers shall not be required in closets (regardless of size) on exterior balconies and exterior breezeways/corridors, regardless of size, as long as the closet does not have doors or unprotected penetrations directly into the dwelling unit.

NORTH

1. Type of Hazard ORD / LIGHT 2. Deflector Distance
2. Pipe Type Used 10/40 BLK 4. Sprinkler Area XX,XXX SQ FT
5. Type of Construction NON COMBUSTIBLE
6. Maximum Spacing Allowed LIGHT=225 SQ FT/HD & ORD=130 SQ FT/HD
7. PIPE SIZING METHOD: PIPE SCHEDULE ☐ HYDRAULICALLY CALCULATED ■
8. ALL HANGERS AND LOCATIONS TO BE IN ACCORDANCE WITH N.F.P.A. PAMPHLET NO. 13
9. HIGH DEGREE TEMPERATURE SPRINKLER HEADS TO BE INSTALLED IN ACCORDANCE WITH N.F.P.A. PAMPHLET NO. 13



TYPICAL HANGER — NO SCALE
1 -- SAMMYS SUPER SCREW #6GST
1 -- ALL THREAD ROD
1 -- RING

TYPICAL HANGER — NO SCALE
1 -- SAMMYS SUPER SCREW #5WG
1 -- ALL THREAD ROD
1 -- RING

HANGERS

AS SHOWN

ABBREVIATIONS

B	Bottom of Beam
D	Bottom of Deck
P	Bottom of Pipe
HV	Hose Valve
N & C	Nipple and Cap
NIC	Not In Contract
NTS	Not to Scale
OBJ	Open Bar Joists
PRV	Pressure Red Valve
RM	Roof Manifold
SP	Standpipe
TOB	Top of Beam
TOP	Top of Pipe
TOS	Top of Steel
UON	Unless Otherwise Noted
CL	Centerline
NAS	No Automatic Sprinklers
OTA	Open to Above

CONTRACT RESPONSIBILITIES

ITEM	FPC	OTHERS
STREET CONN		●
UGD MAIN		●
EXCAVATION		●
FLUSHING		●
WIRING		●
PAINTING		●
TAMPER SVITCHES	●	
FLOW SVITCHES	●	
STREET CONN		●

SPRINKLER HEAD LEGEND

SYMBOL	MAKE	MODEL	SIN	FINISH	TYPE	TEMP	NPT	ORIFICE	K-FACTOR	TOTAL
1	RELIABLE	RFC49	RA0612	WHITE	CONCEALED PENDANT	155 F	1/2"	7/16"	4.9	24
2	RELIABLE	F1RES44	R3531	WHITE	RECESSED SIDEWALL	155 F	1/2"	3/8"	4.4	12
3	RELIABLE	F1FR56	RA1425	WHITE	UPRIGHT	200 F	1/2"	1/2"	5.6	31
4	RELIABLE	F1FR-HSW	RA1435	WHITE	HORIZONTAL SIDEWALL	200 F	1/2"	1/2"	5.6	9
	TYPE 1: MAXIMUM AREA OF COVERAGE IS: 18' x 18'									
	TYPE 2: MAXIMUM AREA OF COVERAGE IS: 16' x 16'									
	TYPE 3: PROVIDE HEAD CAGES FOR ALL LOCATIONS									
								TOTAL		76

SUBMITTALS

SENT TO	DATE SENT MM/DD/YY	DATE RECEIVED
I S D		
F M		
L M		
I R I		
L A		
STATE FIRE		
LOCAL FIRE		
LOCAL WATER		
G. C.		
	●	

LICENSE# FSC93 442 R.M.S.# PERMIT # FSPXXXX

SPRINKLER SYSTEMS INC.

P.O. BOX 1285
LEWISTON MAINE
04243-1285

CONTRACT WITH VALCOURT PROPERTY MANAGEMENT

SYSTEM TYPE: WET ☐ DRY ☐ DELUGE ☐ PREACTION ☐ NC. LIFE ☐ ●

REVISIONS		
NO.	DATE	DESCRIPTION

EMERSON STREET RENOATION

23 EMERSON STREET
PORTLAND, MAINE

PLANS, DETAILS AND NOTES

SCALE	AS NOTED
DRAWN BY	ARS
CHECKED BY	CDS - NICET III #78833
DATE	30 DEC 2015
TOTAL SPKRS ON JOB	76
SHEET#	FP-1 1 OF 1
JOB#	15-157