CALC STICKER #2

HYD. DESIGN CRITERIA
(NFPA 13D 2010 ed. - WET)

LOCATION= BED RM.
HAZARD CLASSIFICATION: LIGHT
DENSITY= .05 GPM/SQ.FT.
AREA OF OPERATION= 296 SQ. FT.
HOSE DEMAND: 0 GPM
NO. OF SPRINKLERS= 2 MOST DEMANDING

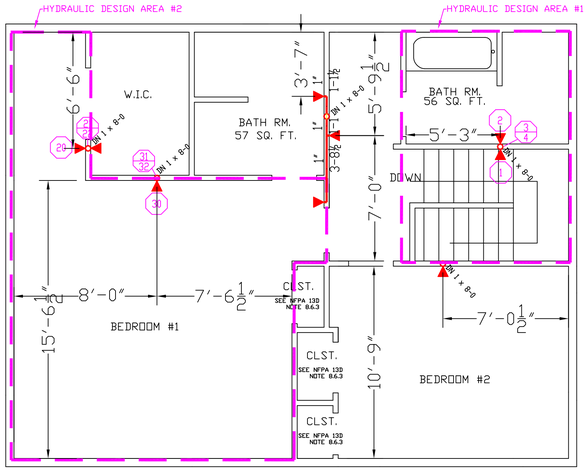
SYSTEM DEMAND (INCLUDING HOSE) @
BASE OF RISER= 37-GPM 48-PSI
SAFETY MARGIN= 5.17-PSI

CALC STICKER #1

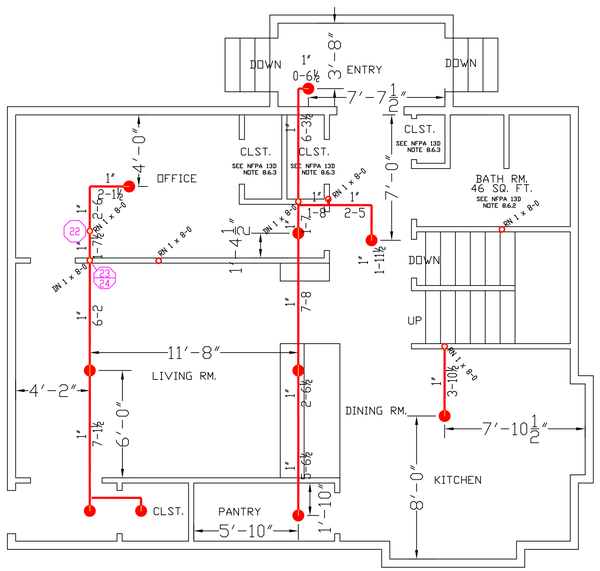
HYD. DESIGN CRITERIA
(NFPA 13D 2010 ed. - WET)

LOCATION= BATH / STAIRWAY
HAZARD CLASSIFICATION: LIGHT
DENSITY= .05 GPM/SQ.FT.
AREA OF OPERATION= 122 SQ. FT.
HOSE DEMAND: 0 GPM
NO. OF SPRINKLERS= 2 MOST DEMANDING

SYSTEM DEMAND (INCLUDING HOSE) @
BASE OF RISER= 29-GPM 41-PSI
SAFETY MARGIN= 12.9-PSI



2ND FLOOR PLAN
SCALE: 1/4" = 1'-0"
AREA: 787 SQ. FT.



1ST FLOOR PLAN
SCALE: 1/4" = 1'-0"
AREA: 841 SQ. FT.

NOTES FOR AN NFPA 13D SYSTEM

(13D) 8.6.2 BATHROOMS
SPRINKLERS SHALL NOT BE REQUIRED IN BATHROOMS OF 55 SQ. FT. AND LESS.

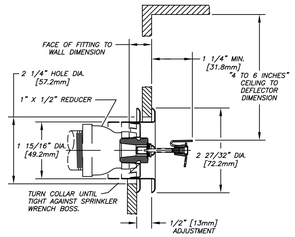
(13D) 8.6.3 CLOSETS
SPRINKLERS SHALL NOT BE REQUIRED IN CLOTHES CLOSETS, LINEN CLOSETS, AND PANTRIES THAT MEET ALL OF THE FOLLOWING CONDITIONS:
(1) THE AREA OF THE SPACE DOES NOT EXCEED 24 SQ. FT.
(2) THE LEAST DIMENSION DOES NOT EXCEED 3 FT.
(3) THE WALLS AND CEILINGS ARE SURFACED WITH NON-COMBUSTIBLE OR LIMITED-COMBUSTIBLE MATERIALS.

(13D) 8.6.4 GARAGES / PORCHES
SPRINKLERS SHALL NOT BE REQUIRED IN GARAGES, OPEN ATTACHED PORCHES, CARPORTS, AND SIMILAR STRUCTURES.

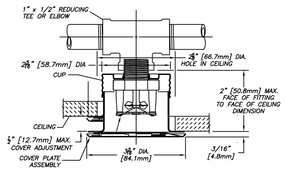
(13D) 8.6.5 ATTICS / PENTHOUSES
SPRINKLERS SHALL NOT BE REQUIRED IN ATTICS, PENTHOUSE EQUIPMENT ROOMS, ELEVATOR MACHINE ROOMS, CONCEALED SPACES DEDICATED EXCLUSIVELY TO AND CONTAINING ONLY DWELLING UNIT VENTILATION EQUIPMENT, FLOOR/CEILING SPACES, ELEVATOR SHAFTS, CRAWL SPACES, AND OTHER CONCEALED SPACES THAT ARE NOT USED OR INTENDED FOR LIVING PURPOSES AND DO NOT CONTAIN FUEL-FIRED EQUIPMENT.

(13D) 8.6.6 CANOPIES
SPRINKLERS SHALL NOT BE REQUIRED IN COVERED UNHEATED PROJECTIONS OF THE BUILDING AT ENTRANCES / EXITS AS LONG AS THERE IS ANOTHER MEANS OF EGRESS FROM THE DWELLING UNIT.

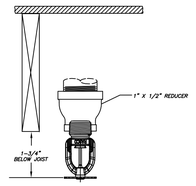
(13D) 8.6.7 CEILING POCKETS
SPRINKLERS SHALL NOT BE REQUIRED FOR CEILING POCKETS THAT MEET THE FOLLOWING CONDITIONS:
(1) THE TOTAL VOLUME OF UNPROTECTED CEILING POCKET DOES NOT EXCEED 100 CU. FT.
(2) THE ENTIRE FLOOR UNDER THE UNPROTECTED CEILING POCKET IS PROTECTED BY THE SPRINKLERS AT THE LOWER CEILING ELEVATION.
(3) EACH UNPROTECTED CEILING POCKET IS SEPERATED FROM ANY ADJACENT UNPROTECTED CEILING POCKET BY A MINIMUM OF 10 FT. HORIZONTAL DISTANCE.
(4) THE INTERIOR FINISH OF THE UNPROTECTED CEILING POCKET IS NONCOMBUSTIBLE OR LIMITED-COMBUSTIBLE MATERIAL.
(5) SKYLIGHTS NOT EXCEEDING 32 SQ. FT. SHALL BE PERMITTED TO HAVE A PLASTIC COVER.



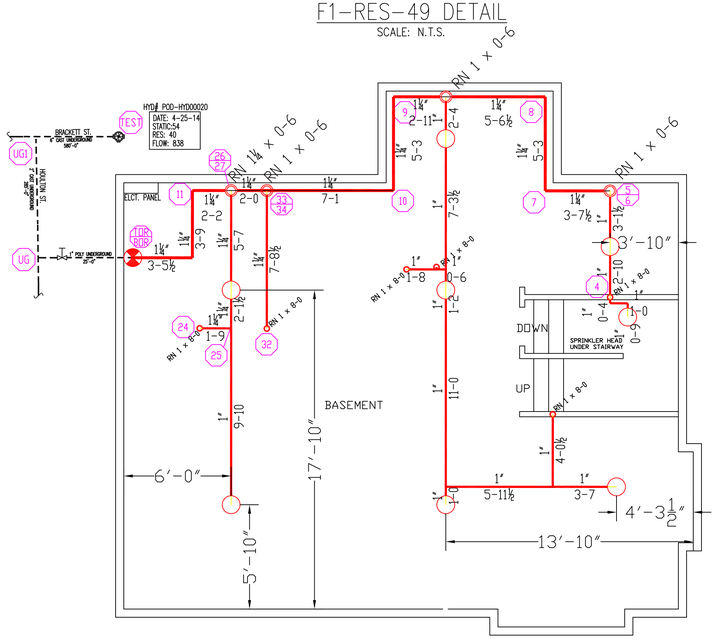
F1-RES-44 DETAIL
SCALE: N.T.S.



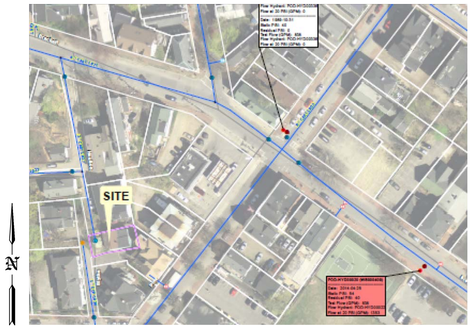
RFC-49 DETAIL
SCALE: N.T.S.



F1-RES-49 DETAIL
SCALE: N.T.S.



BASEMENT PLAN
SCALE: 1/4" = 1'-0"
AREA: 841 SQ. FT.



SITE PLAN
SCALE: N.T.S

FOR TFP-400, TFP-500 VICTAULIC #899 & FS-5

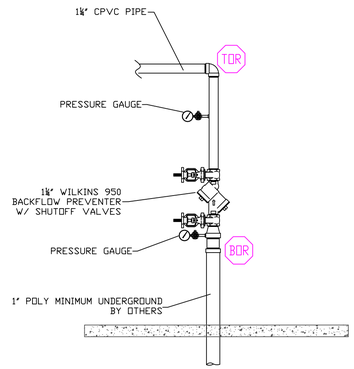
CURE TIMES WITH ONE STEP SOLVENT CEMENT
200 PSI (MAXIMUM) TEST PRESSURE

PIPE SIZE (INCHES)	AMBIENT TEMPERATURE DURING CURE PERIOD		
	60°F TO 120°F	40°F TO 59°F	0°F TO 39°F
3/4"	45 MIN.	1.5 HR.	24 HR.
1"	45 MIN.	1.5 HR.	24 HR.
1-1/4"	1.5 HR.	16 HR.	120 HR.
1-1/2"	1.5 HR.	16 HR.	120 HR.
2"	6 HR.	36 HR.	SEE NOTE 1
2-1/2"	8 HR.	72 HR.	SEE NOTE 1
3"	8 HR.	72 HR.	SEE NOTE 1

NOTE 1: FOR THESE SIZES, THE SOLVENT CEMENT CAN BE APPLIED AT TEMPERATURES BELOW 32°F, HOWEVER, THE SPRINKLER SYSTEM TEMPERATURE MUST BE RAISED TO A TEMPERATURE OF 32°F OR ABOVE AND ALLOWED TO CURE PER THE ABOVE RECOMMENDATIONS PRIOR TO PRESSURE TESTING.

CPVC CURING TIMES
SCALE: N.T.S.

CPVC MAXIMUM SUPPORT SPACING (FT.)							
	NOMINAL PIPE SIZE						
PIPE SIZE	3/4"	1"	1-1/4"	1-1/2"	2"	2-1/2"	3"
HANGER SPACING	5-1/2'	6'	6-1/2'	7'	8'	9'	10'



RISER DETAIL
SCALE: N.T.S.

FPSS
Fire Protection Sprinkler Services
278 HARRIS RD
MINOT, ME 04258
PHONE: 207-393-7422

HOWE OWNER:
JEFFREY BANKER
14 BLYTHE ST.
PORTLAND, ME 04103
PHONE: 207-331-6123

CONTRACTOR:
FIRE PROTECTION SPRINKLER SERVICES
278 HARRIS RD.
MINOT, ME 04258
PHONE: 207-393-7422

CONTRACTOR # 903

LEGEND:
- RN PIPE RISER UP
- DN PIPE RISER DOWN
- CPVC PIPE (WET)
- (A) HYDRAULIC CALC. POINT
- SYSTEM RISER
- HYDRAULIC DESIGN AREA

DESIGN NOTES:
*POSITION, LOCATION, SPACING, AND USE OF SPRINKLERS AND HANGERS SHALL BE IN ACCORDANCE WITH NFPA 13D 2010 ed.
*HYDRAULIC CALCULATION PROCEDURES HAVE BEEN DONE IN ACCORDANCE WITH NFPA 13D 2010 ed. (SEE PLANS FOR LOCATION OF REMOTE AREAS, HYDRAULIC REFERENCE POINTS, AND SYSTEM DEMANDS)
*ALL ELECTRICAL WORK TO BE DONE BY OTHERS.
*DIMENSIONS AND LOCATIONS GIVEN FOR SPRINKLER HEADS AND PIPE MAY VARY TO ACCOMODATE ACTUAL FIELD CONDITIONS.
*OWNER TO PROVIDE SUFFICIENT HEAT TO PREVENT FREEZING IN WATER FILLED SPRINKLER PIPE AND EQUIPMENT.
*OTHER TRADES TO COORDINATE THEIR WORK WITH SPRINKLER CONTRACTOR.
*REFER TO SPEARS CPVC PLASTIC PIPE INSTALLATION MANUAL FOR GLUE CURING TIME AND HANGER SPACING.

SPRINKLER HEAD DESCRIPTION:

RELIABLE RFC-49
WHITE CONCEALED PENDENT
16' X 16' SPACING MAX
8' MAX FROM HEAD TO WALL

QTY.	TEMP	K-FACT
10	165°	4.9

RELIABLE F1-RES 44
WHITE HORIZONTAL SIDEWALL
INSTALL PER SPACING ON PLAN

QTY.	TEMP	K-FACT
9	155°	4.4

RELIABLE F1-RES-49
WHITE PENDENT
12' X 12' SPACING MAX
6' MAX FROM HEAD TO WALL

QTY.	TEMP	K-FACT
8	155°	4.9

TOTAL HEADS ON SHEET: 27

SCALE: 1 1/2 0 2 4 — SCALE 1/4"=1'-0"

DATE: JUNE 18, 2014

DESIGNER: TIM FORTIN
RMS# 866
NICET LEVEL III CERT. # 122193

LOCATION:
14 BLYTHE ST.
PORTLAND, ME

DRAWING TITLE:
BANKER RESIDENCE
FIRE PROTECTION PLAN
(NFPA 13D 2010 ed.)

DRAWING NO.:
FP-1