

- LEGEND:
- RIN/DN PIPE RISER UP OR DOWN
 - AUXILIARY DRAIN
 - PROPOSED PIPE
 - ▲ SYSTEM RISER
 - PIPE PITCH 1/8" MAINS 1/4" LINES
 - SWAY BRACING
 - HYDRAULIC CALC. POINT

DESIGN & SYSTEM NOTES:

ALL SPRING 1/2" & LARGER TO BE SCHEDULE 40 STEEL WITH DUCTILE IRON FITTING.
 ALL PIPING 1" TO BE SCHEDULE 40 CPVC WITH APPROPRIATE CPVC FITTING.
 POSITION, LOCATION, SPACING, AND USE OF SPRINKLERS SHALL BE IN ACCORDANCE WITH NFPA 13D.
 POSITION, LOCATION, SPACING, AND USE OF HANGERS SHALL BE IN ACCORDANCE WITH NFPA 13D.
 HYDRAULIC CALCULATION PROCEDURES HAVE BEEN DONE IN ACCORDANCE WITH NFPA 13D. (SEE PLANS FOR LOCATION OF REMOTE AREAS, HYDRAULIC REFERENCE POINTS, AND SYSTEM DEMANDS.)
 HIGH TECH FIRE PROTECTION IS TO BEGIN WORK INSIDE OF BUILDING.
 DIMENSIONS AND LOCATIONS GIVEN FOR SPRINKLER HEADS AND PIPE MAY VARY TO ACCOMMODATE ACTUAL FIELD CONDITIONS.
 OWNER TO PROVIDE ADEQUATE HEAT THROUGHOUT BUILDING TO PROTECT WATER FILLED PIPING AND EQUIPMENT FROM FREEZING TEMPERATURES.
 OWNER IS RESPONSIBLE TO MAINTAIN THE SPRINKLER SYSTEM IN ACCORDANCE WITH THE LATEST EDITION OF NFPA 25, "INSPECTION, TESTING, & MAINTENANCE OF WATER-BASED FIRE PROTECTION SYSTEMS" AND/OR ALL APPLICABLE FEDERAL, STATE, AND/OR LOCAL LAWS, CODES AND ORDINANCES.
 ALL MECHANICAL, ELECTRICAL AND PLUMBING TRADES TO COORDINATE THEIR WORK WITH SPRINKLER CONTRACTOR.
 ALL ELECTRIC WORK IS TO BE DONE BY OTHERS.

HEAD LEGEND:

- RELIABLE MODEL RFC 49
 (32 / 165")
 K=4.9
 1/2" WHITE PENDENT CONCEALED
 16" x 16" MAX
- RELIABLE MODEL F1FR
 (10 / 155")
 K=5.8
 1/2" BRASS PENDENT
 INSTALLED IN BASEMENT

OR APPROVED EQUAL

TOTAL HEADS ON THIS SHEET: 42

SCALE: 1/4" = 1'-0"

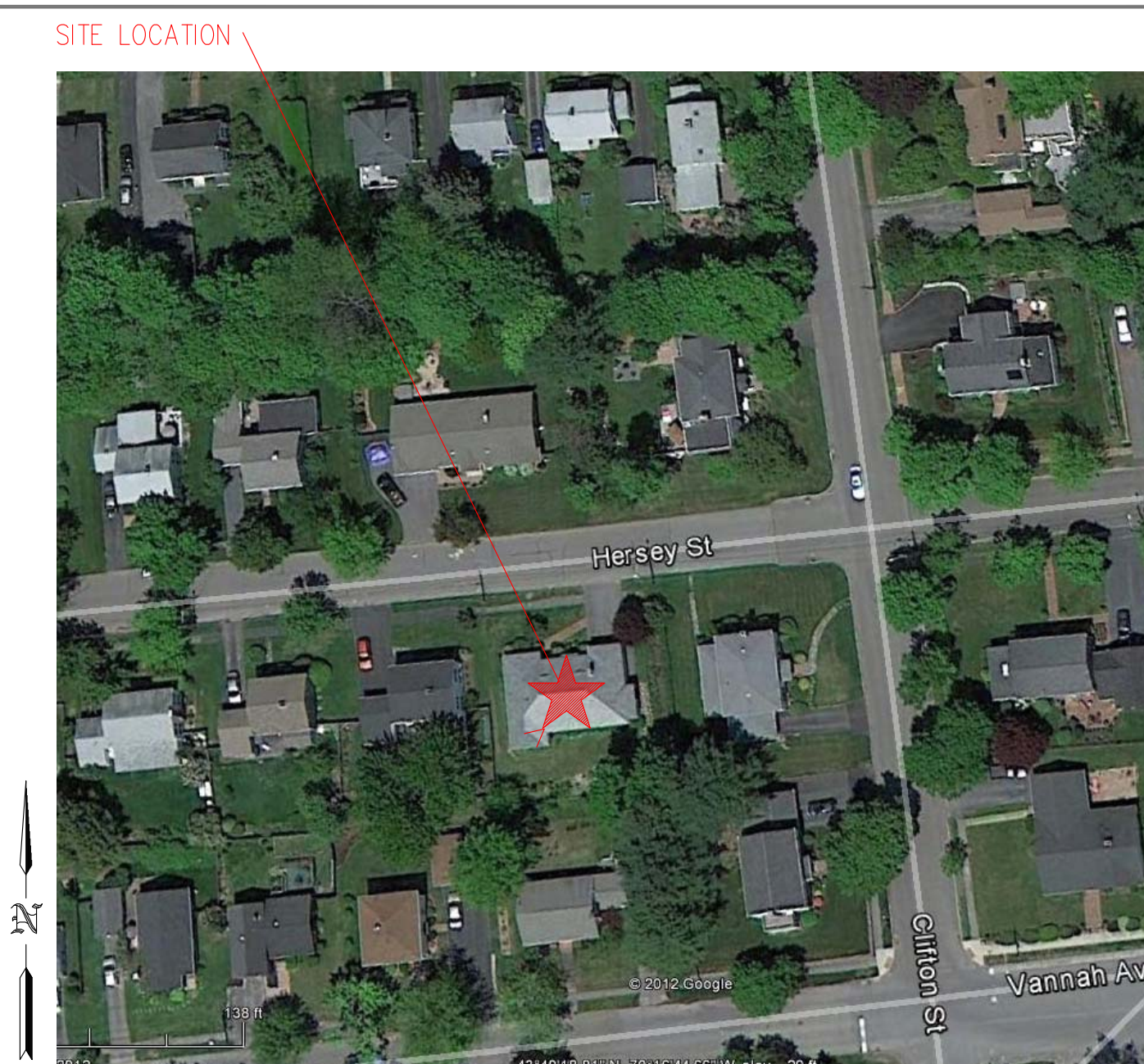
DATE: NOV 12, 2012

DESIGNER: TIM FORTIN RMS # 866
 NICET LEVEL: III CERT # 122193
 CHECKED BY: E. POULIN / J. FOSS

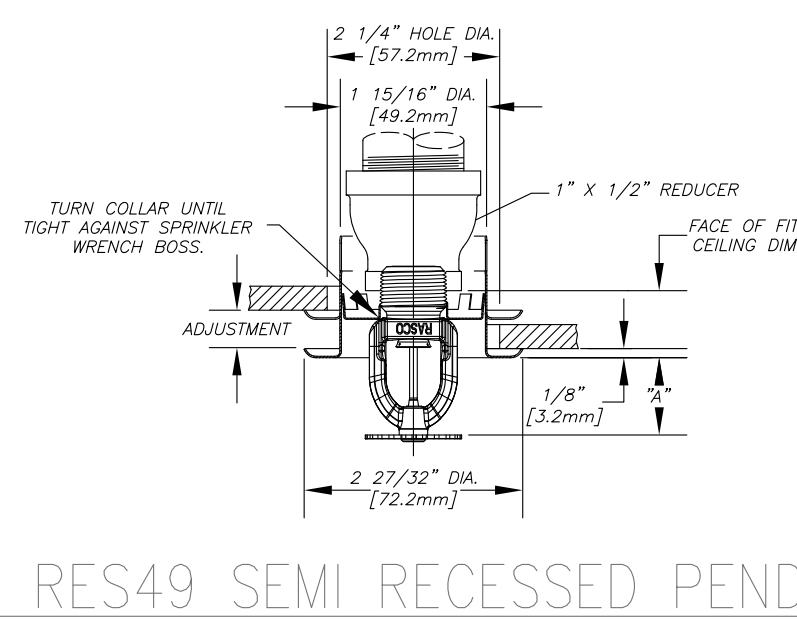
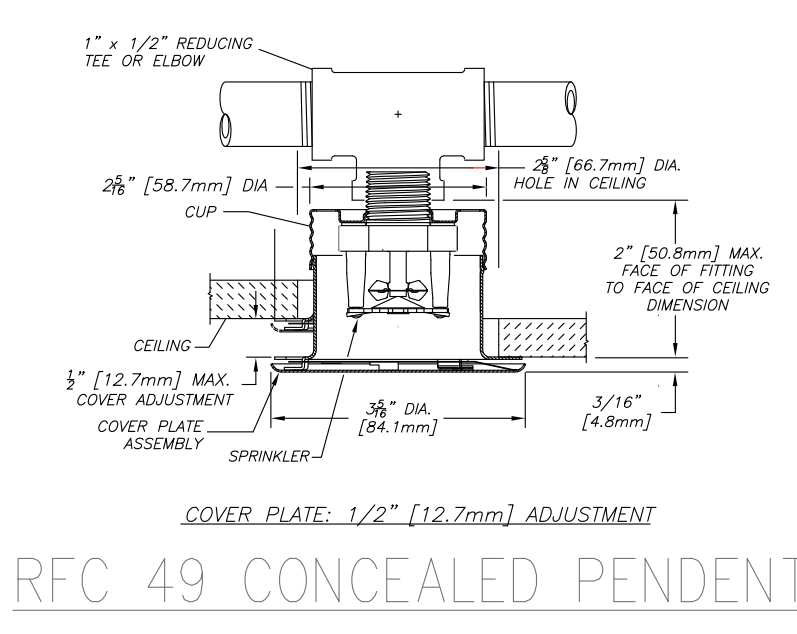
LOCATION:
 107 HERSEY ST
 PORTLAND, ME

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

DRAWING NO.:
 FP-01



1.0 SITE LOCATION
 SCALE: N.T.S.



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 SEPARATED 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.

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

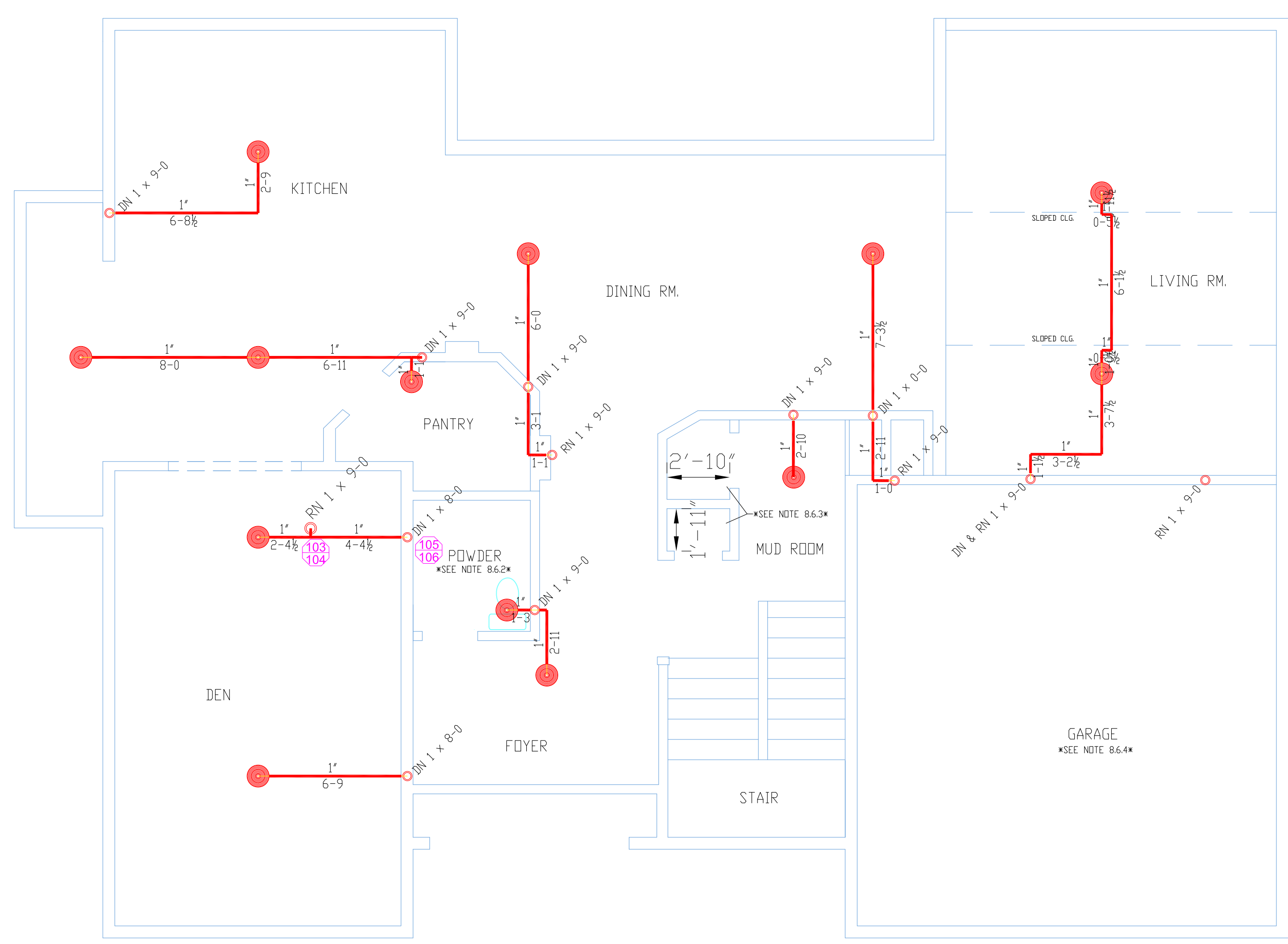
CURE TIMES WITH ONE STEP SOLVENT CEMENT
 200 PSI (MAXIMUM) TEST PRESSURE

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 HANGING NOTES
 CPVC MAXIMUM SUPPORT SPACING (FT.)

PIPE SIZE	NOMINAL PIPE SIZE				
	3/4"	1"	1-1/4"	1-1/2"	2"
HANGER SPACING	5'-1/2"	6'	6'-1/2"	7'	8'
				9'	10'



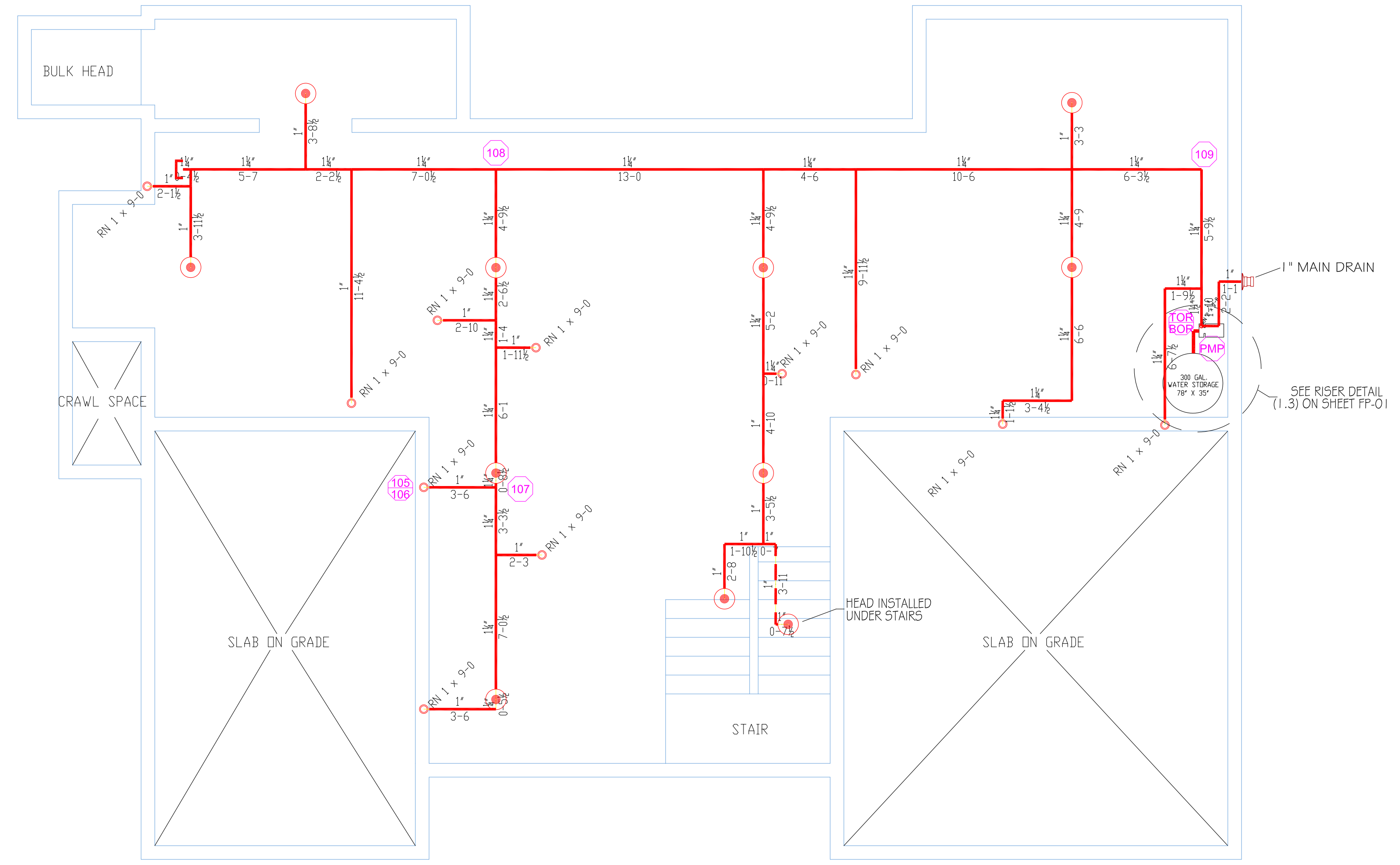
1.1 FIRST FLOOR (WET)
 TOTAL PROTECTED AREA 810 SQ.FT.
 SCALE 1/4" = 1'-0"

PROJECT DESCRIPTION

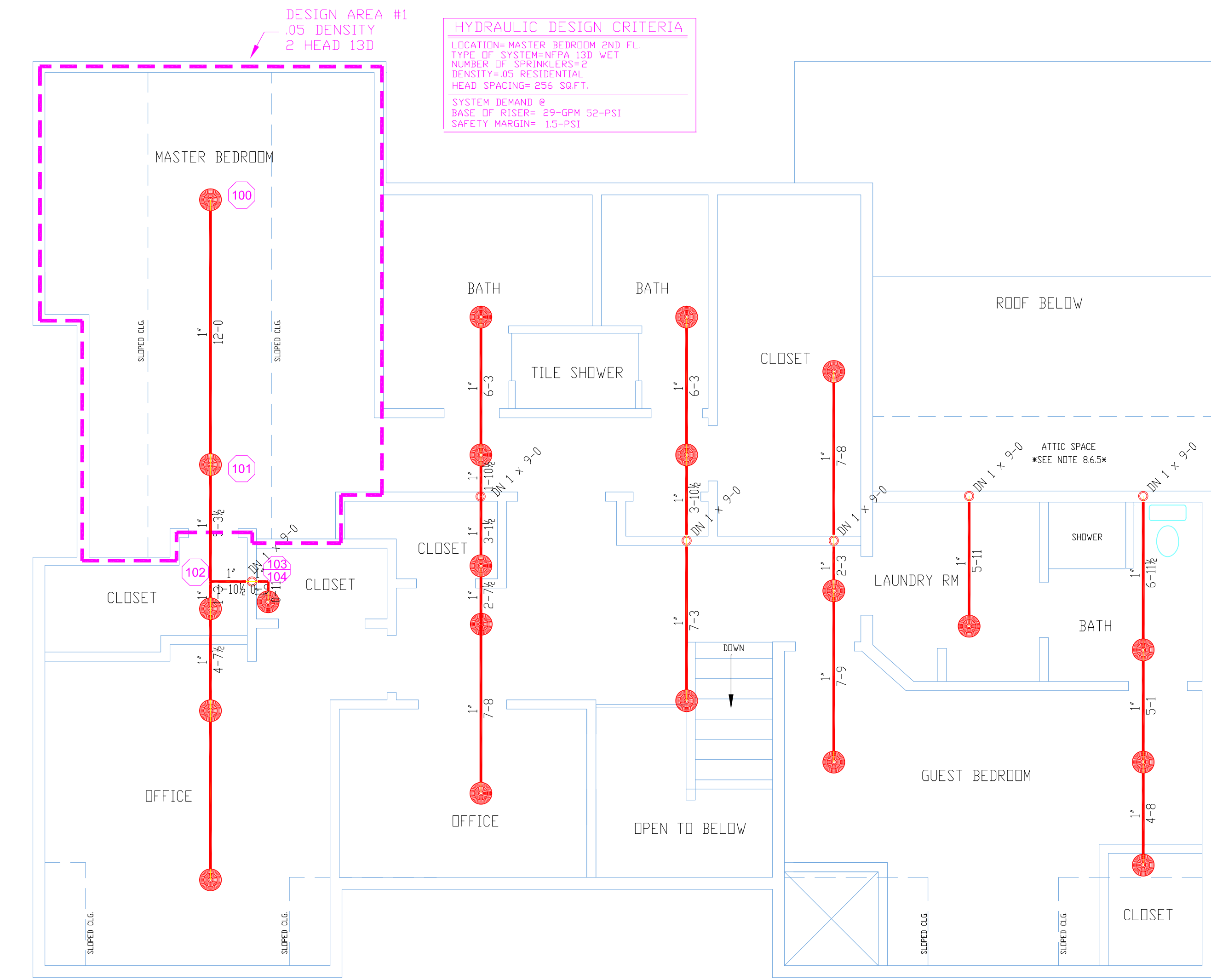
BUILDING CONST: THE BUILDING IS CONSTRUCTED OF WOOD THROUGHOUT. THE INTERIOR WALLS AND CEILINGS ARE FINISHED WITH SHEETROCK. THE ROOF STRUCTURE IS FINISHED WITH ASPHALT SHINGLES.

BUILDING OCCUP: THE BUILDING IS A SINGLE FAMILY DWELLING.

SPRINKLER DESIGN: THE SPRINKLER SYSTEM HAS BEEN DESIGNED USING A LIGHT HAZARD CLASSIFICATION FOR THE TWO OCCUPIED FLOORS AND THE BASEMENT LEVEL. THE SPRINKLER SYSTEM HAS BEEN DESIGNED TO MEET ALL APPLICABLE CODES AND STANDARDS REGARDING AN NFPA 13D 2010 ed. AUTOMATIC SPRINKLER SYSTEM.



1.0 BASEMENT (WET)
 TOTAL PROTECTED AREA 810 SQ.FT.
 SCALE 1/4" = 1'-0"



1.2 SECOND FLOOR (WET)
 TOTAL PROTECTED AREA 810 SQ.FT.
 SCALE 1/4" = 1'-0"

HYDRAULIC DESIGN CRITERIA

DESIGN AREA #1
 .05 DENSITY
 2 HEAD 13D

LOCATION: WATER DEMAND 290 GPM @ 10 MIN.
 TYPE OF SYSTEM: NFPA 13D WET
 DENSITY: .05 RESIDENTIAL
 HEAD SPACING: 20% SQ.FT.
 SYSTEM DEMAND @ BASE OF RISER: 290 GPM @ 10 MIN.
 SAFETY MARGIN: 15% (PSI)

1.3 RISER DETAIL
 SCALE: N.T.S.

