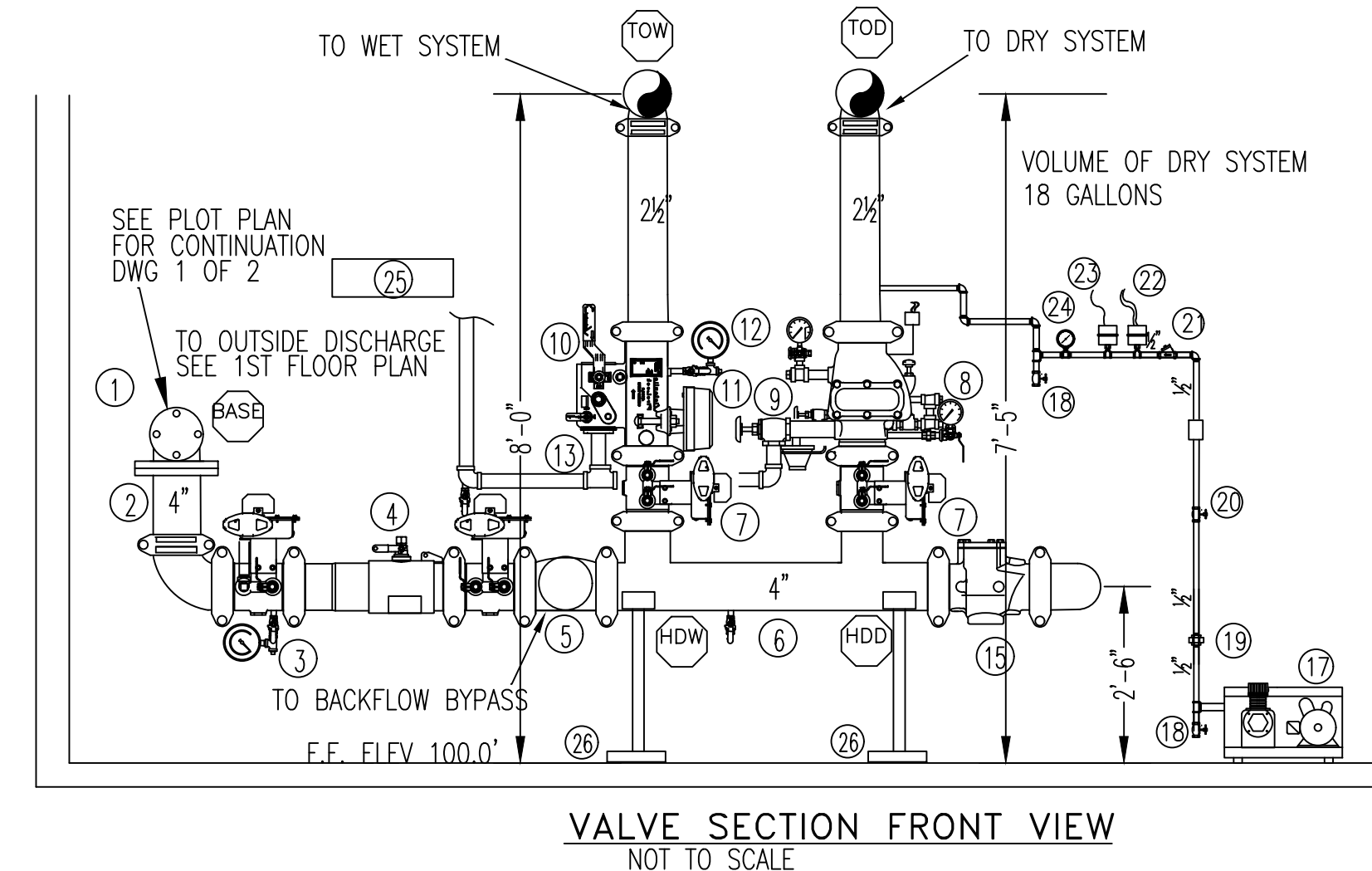


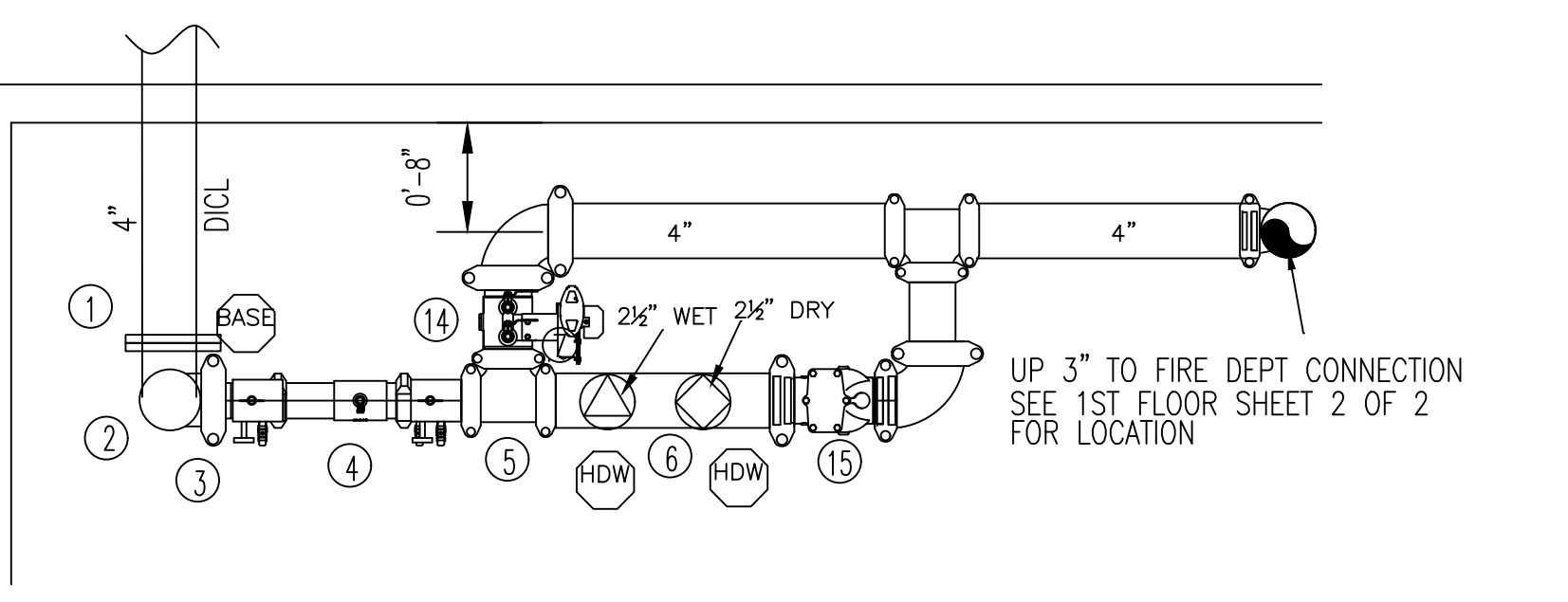
FIRE SPRINKLER PLAN - BASEMENT
 SCALE: 1/8"=1'-0"
 AREA PROTECTED: 1530 SQ.FT.
 FINISH FLOOR ELEVATION : 90'-8"
 COLOR CODE:

BASEMENT Sprinkler Head Schedule					
Symbol	Count	Thread	K-Factor	Description	Note
●	21	1/2"	5.6	RELIABLE F1FR56 WHITE QR RECESSED PENDENT SIN#RA1414 200"	on Drop
○	4	1/2"	5.6	RELIABLE F1FR56 BRASS QR UPRIGHT SIN# RA1425 200"	on Line

25 = Total Number of Heads This Floor



VALVE SECTION FRONT VIEW
NOT TO SCALE



VALVE SECTION TOP VIEW
NOT TO SCALE

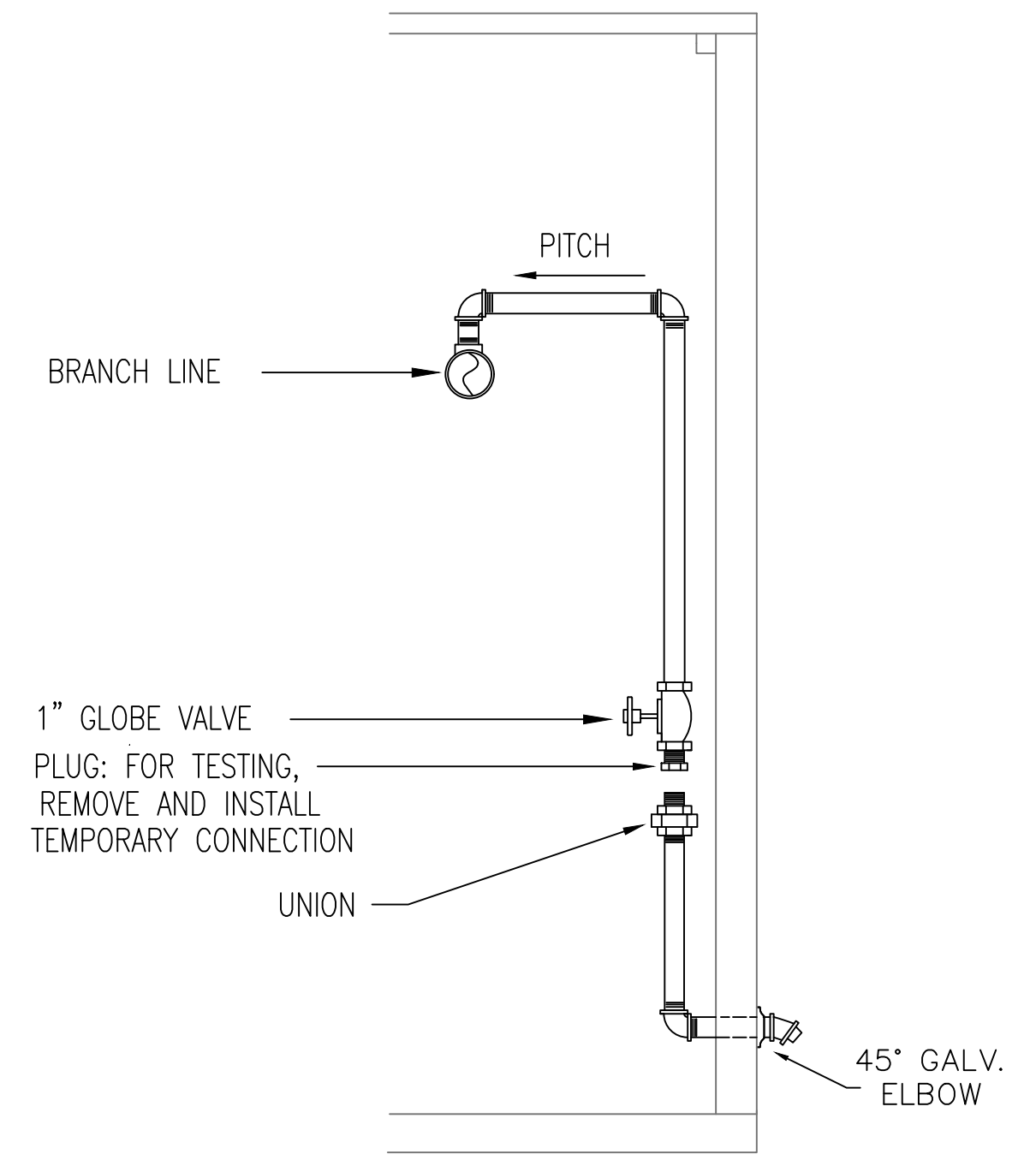
- RISER LEGEND**
- 4" UNDERGROUND BY OTHERS
 - 4"x9" FLANG X GROOVE SPOOL 1'-0"
 - WATER PRESSURE GAUGE ON 3-WAY VALVE
 - 4" DERINGER MODEL 20 BACKFLOW PREVENTOR W/ BUTTERFLY VLV AND TAMPERS
 - 4" GROOVED TEE TO FDC FORWARD FLOW BYPASS
 - 4" GROOVED HEADER
 - 2 1/2" GROOVED BUTTERFLY VALVE (N.O.) (WIRED BY OTHERS)
 - 2 1/2" TYCO DRY VALVE MODEL DPV-1 W/ TRIM
 - 1 1/4" DRY VALVE MAIN DRAIN (TO MAIN DISCHARGE OUTSIDE)
 - 2 1/2" VICTAULIC 747M RISER MANIFOLD W/ 1/2" RELIEF VALVE
 - SYSTEM SENSOR W/ FLOW SWITCH (WIRED TO ALARM PANEL BY OTHERS)
 - WATER PRESSURE GAUGE ON 3 WAY VALVE
 - 1 1/4" WET SYSTEM TEST & DRAIN W/ 1/2" RELIEF VALVE (TO MAIN DISCHARGE OUTSIDE)
 - 4" FULL FLOW TEST BUTTERFLY VALVE (N.C.) (TIE INTO FDC/WIRED BY OTHERS) SEE
 - 4" MODEL CV-1F GROOVED FDC CHECK VALVE
 - 4"x2 1/2"x2 1/2" FIRE DEPARTMENT CONNECTION (SEE FIRST FLOOR PLAN FOR LOCATION)
 - BASE MOUNTED AIR COMPRESSOR GENERAL AIR MODEL L29050A 1/2 HP, 115/208 VOLTS, SINGLE PHASE
 - DRIP LEG WITH VALVE (N.C.)
 - 1/2" UNION
 - 1/2" GLOBE VALVE FOR AIR SHUT OFF
 - 1/2" LOAD GENIE UNLOADER CHECK VALVE
 - FURNAS 69 HAU AIR COMPRESSOR SWITCH
 - POTTER PS-40-2 LOW AIR SWITCH
 - AIR PRESSURE GAUGE W/ 3-WAY VALVE
 - 6ct SPARE HEAD BOX WITH WRENCH
 - PIPE STAND
 - MAIN DRAIN DISCHARGE (SEE 1ST FLOOR PLAN FOR LOCATION)
 - AUTOMATIC BALL DRIP
 - 1" AUXILIARY DRAIN

GENERAL NOTES

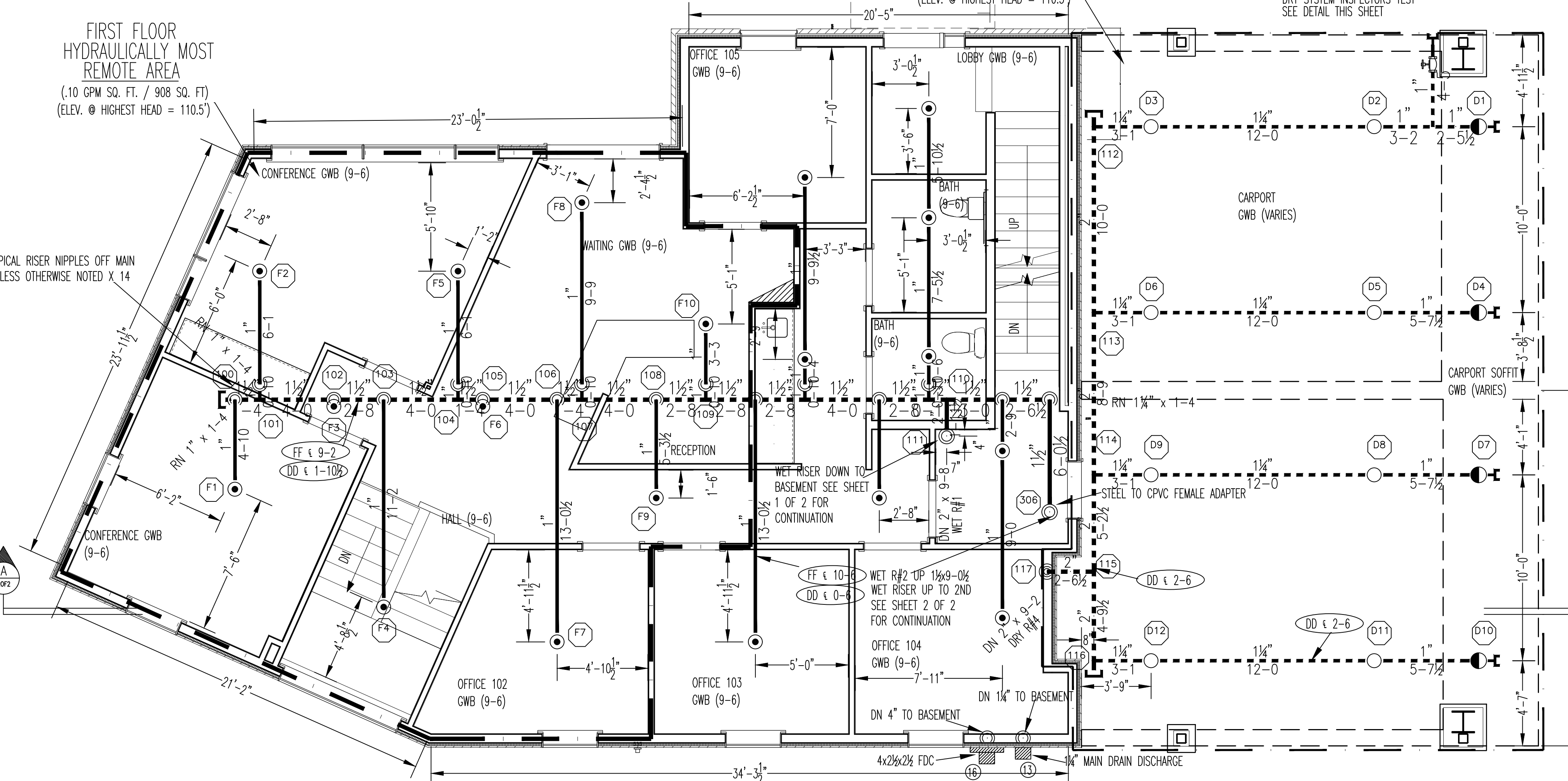
ALL DIMENSIONS ARE SHOWN FOR GENERAL LOCATION OF SPRINKLER HEADS PIPING MAY VARY TO SUIT ACTUAL FIELD CONDITIONS
 OCCUPANCY DESCRIPTION AND CLASSIFICATION:
 LIGHT HAZARD - COMMON AREAS, OFFICES AND DWELLING UNITS
 ORDINARY HAZARD - STORAGE ROOMS, MECHANICAL ROOMS, AND CARPORT
 MAXIMUM HEIGHT OF STORAGE 8'-0" A.F.F.
 THE CLEARANCE BETWEEN DEFLECTOR AND TOP OF STORAGE SHALL BE GREATER THAN 18"
 INSTALL DRY PENDENTS ON DRY SYSTEM WHERE SHOWN
 AS PER NFPA 13 (2016 EDITION) INSTALL PIPE ON DRY SYSTEM AS PER NFPA 13 (2016 EDITION) 8.16.2.3.1 DRY SYSTEM BRANCH LINES SHALL PITCH 1/4" PER 10' AND MAIN PIPING SHALL PITCH 1/4" PER 10'
 (X) INDICATES HYDRAULIC REFERENCE POINTS
 F F C X'-X" INDICATES FINISH FLOOR UP TO PIPE CENTERLINE
 D D C X'-X" INDICATES BOTTOM OF DECK DOWN TO PIPE CENTERLINE
 PIPE FOR DRY SYSTEM, BASEMENT AND FIRST FLOOR TO BE STEEL SCH 10/40 W/ CAST FITTINGS
 PIPE FOR 2ND AND 3RD FLOOR TO BE CPVC WITH PVC FITTINGS

SCOPE OF WORK

INSTALLATION OF NEW WET & DRY FIRE SPRINKLER SYSTEM THROUGHOUT THE NEW MIXED USE BUILDING AT 23 OCEAN AVE IN PORTLAND, ME. ALL SPRINKLER DESIGN, MATERIALS, FABRICATION, INSTALLATION, AND TESTING TO BE IN ACCORDANCE WITH NFPA 13, 2016.
 NOT INCLUDED:
 -INSTALLATION OF UNDERGROUND SPRINKLER WATER ENTRANCE (BY OTHERS)
 -PAINTING OF PIPING MATERIALS.
 -GALVANIZED PIPE OR FITTINGS.
 -SEISMIC PROTECTION OF SPRINKLER PIPING AND COMPONENTS.
 -ANY SOFFITS OR CHASES REQUIRED TO CONCEAL SPRINKLER PIPE.
 -WIRING OF SPRINKLER COMPONENTS (BY OTHERS)
 -CUTTING AND PATCHING OF GWB CEILING TO ACCESS PIPE FOR BOX CONNECTIONS
 OWNER TO PROVIDE SUFFICIENT HEAT (MIN 40' F) IN ALL AREAS WHERE WATER FILLED PIPING IS INSTALLED.
 = CONCEALED PIPE
 = EXPOSED PIPE



DRY INSPECTORS TEST DETAIL
NOT TO SCALE

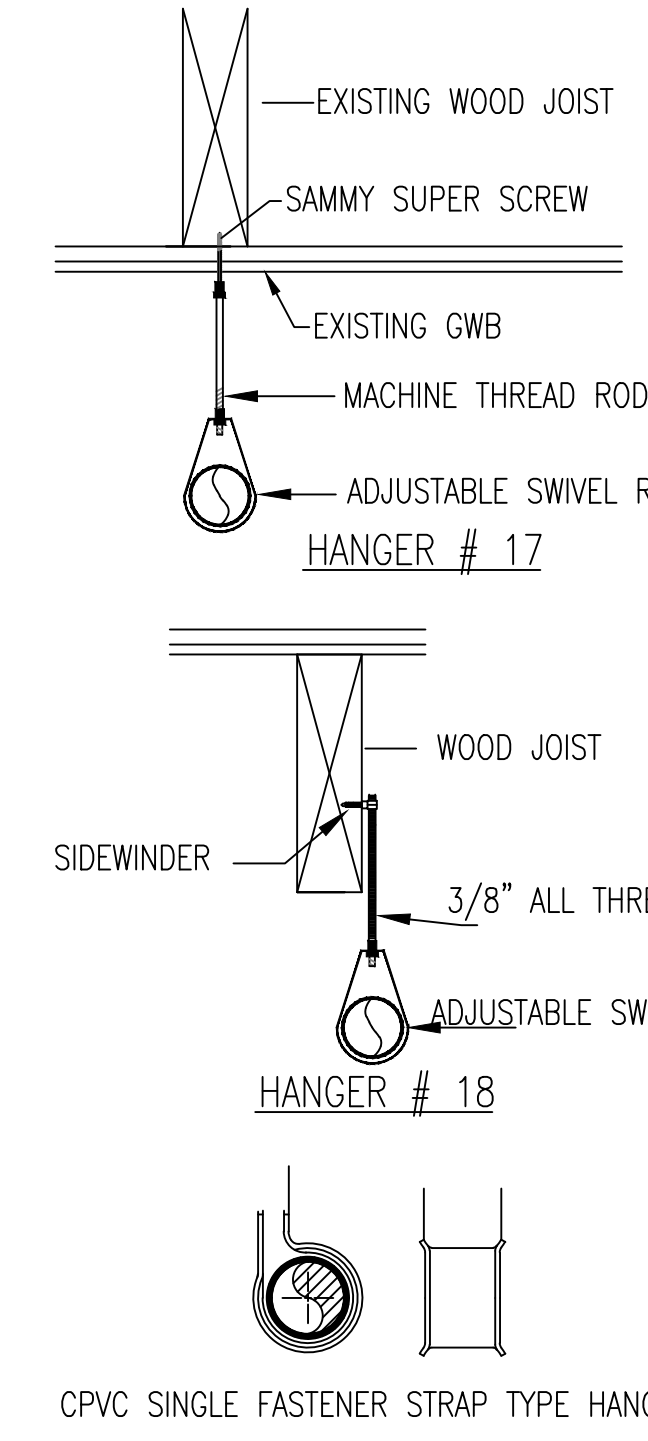


FIRE SPRINKLER PLAN - FIRST FLOOR
 SCALE: 1/8"=1'-0"
 AREA PROTECTED: 1600 SQ.FT.
 FINISH FLOOR ELEVATION : 100'-0"
 COLOR CODE:

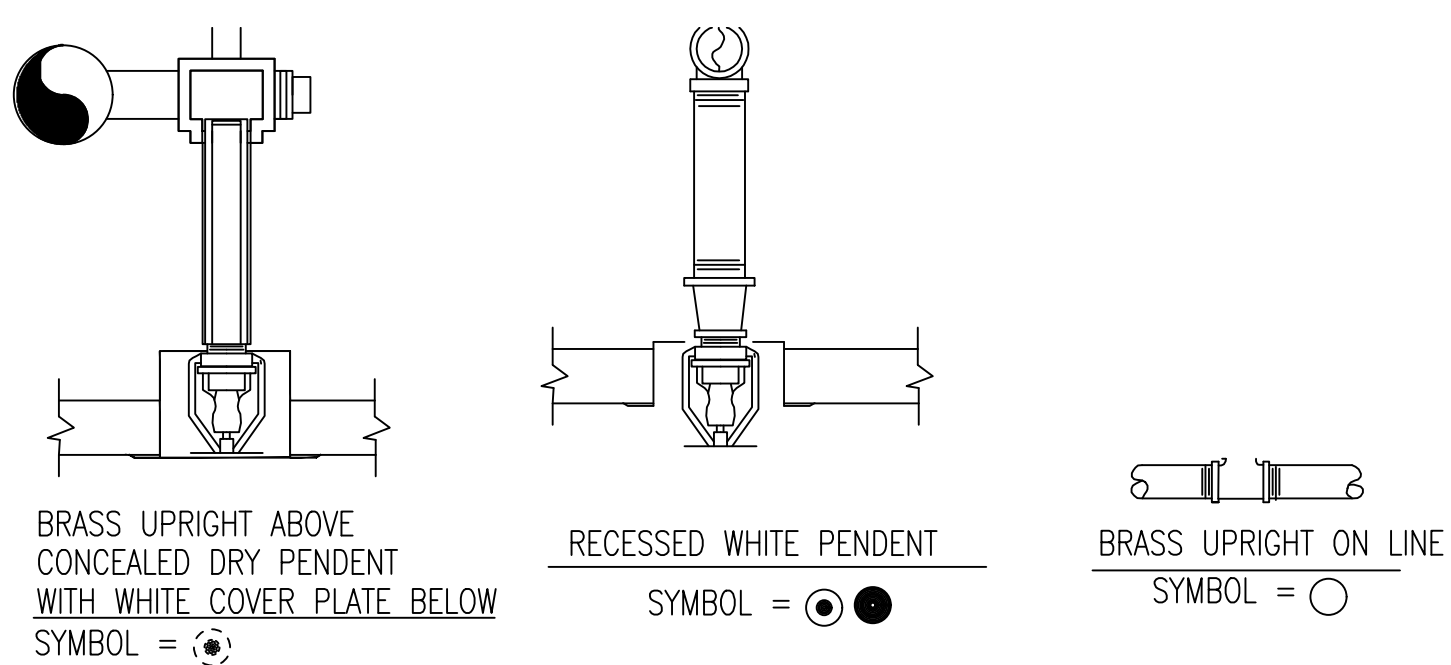
FIRST FLOOR Sprinkler Head Schedule					
Symbol	Count	Thread	K-Factor	Description	Note
●	19	1/2"	5.6	RELIABLE F1FR56 WHITE QR RECESSED PENDENT SIN#RA1414 200"	on Drop
○	8	1/2"	5.6	RELIABLE F1FR56 BRASS QR UPRIGHT SIN#RA1425 200"	on Line
●	4	1/2"	5.6	RELIABLE F3QR WHITE QR DRY RECESSED PENDENT SIN#5714 200"	on Drop
○	4	1/2"	5.6	RELIABLE KFR-CC2 BRASS UPRIGHT SIN#XXXXX 165"	on Line

HYDRAULIC-SYSTEM
 THIS BUILDING IS PROTECTED BY A HYDRAULICALLY DESIGNED AUTOMATIC SPRINKLER SYSTEM.
 LOCATION: CARPORT DRY SYSTEM
 NFPA #13
 BASIS OF DESIGN:
 1. GPM PER HEAD 19.5
 2. NUMBER OF HEADS CALCULATED 12
 SYSTEM DEMAND AT PUMP:
 1. WATER FLOW RATE 518.367 (GPM)
 2. RESIDUAL PRESSURE AT PUMP 72.242 (PSI)
 HYDRAULIC DATA NAMEPLATE
 TO BE MOUNTED AT SYSTEM RISER
 NOTE: HIGHEST SPRINKLER IS 108.5'
 ○ = HYDRAULIC REFERENCE POINT

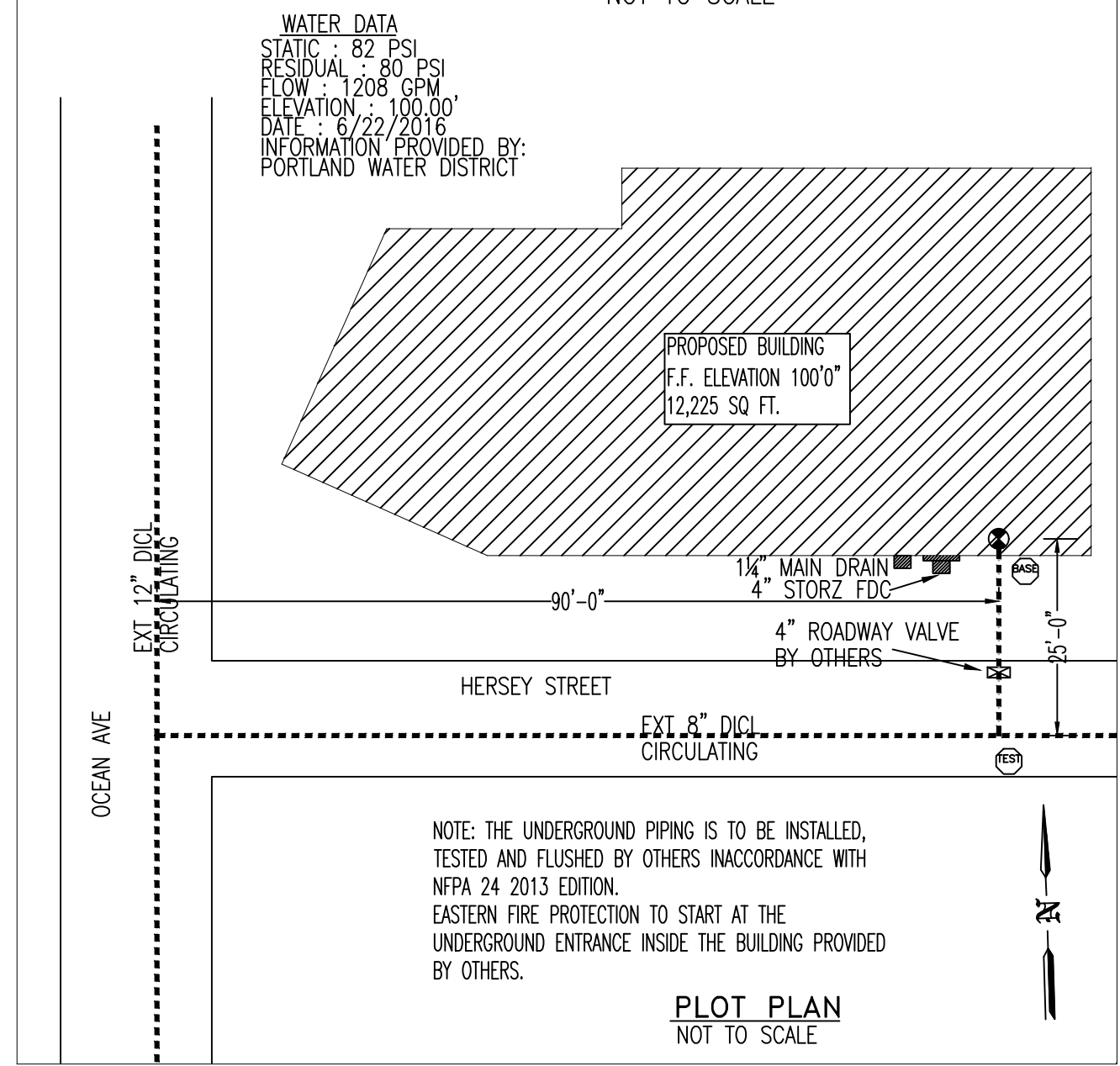
HYDRAULIC-SYSTEM
 THIS BUILDING IS PROTECTED BY A HYDRAULICALLY DESIGNED AUTOMATIC SPRINKLER SYSTEM.
 LOCATION: 1ST FLOOR WET SYSTEM
 NFPA #13
 BASIS OF DESIGN:
 1. GPM PER HEAD 19.6
 2. NUMBER OF HEADS CALCULATED 10
 SYSTEM DEMAND AT PUMP:
 1. WATER FLOW RATE 302.432 (GPM)
 2. RESIDUAL PRESSURE AT PUMP 72.302 (PSI)
 HYDRAULIC DATA NAMEPLATE
 TO BE MOUNTED AT SYSTEM RISER
 NOTE: HIGHEST SPRINKLER IS 110.5'
 ○ = HYDRAULIC REFERENCE POINT



HANGER DETAILS
NOT TO SCALE
NOTE: HANGERS TO BE PROVIDED AND INSTALLED AS PER NFPA # 13



SPRINKLER HEAD DETAILS
NOT TO SCALE



PLOT PLAN
NOT TO SCALE

GENERAL NOTES SPRINKLER SYSTEM INSTALLATION TO COMPLY WITH NFPA PAMPHLET # 13 PIPING IN CARPORT, BASEMENT AND 1ST FLOOR TO BE SCH 10/40 JOINED BY CAST FITTINGS. PIPING ON 2ND & 3RD FLOOR TO BE CPVC JOINED BY CPVC FITTINGS. ALL PIPE ON DRY SYSTEM SHALL BE PITCHED IN ACCORDANCE W/ NFPA 13 2016 EDITION. 1/4" PER 10' ON MAINS, 1/2" PER 10' ON BRANCH LINES OWNER TO PROVIDE SUFFICIENT HEAT THROUGHOUT BUILDING TO PREVENT FREEZING OF WATER FILLED SPRINKLER PIPING & EQUIPMENT. (MIN 40' F)	DATE	REVISIONS	REQUIRED APPROVALS	23 OCEAN AVE PORTLAND, MAINE CONTRACT WITH: OWNER EASTERN FIRE PROTECTION AUBURN/LEWISTON INDUSTRIAL AIRPARK, AUBURN, MAINE 04210	FIRE SPRINKLER PLANS & DETAILS DWG. NO. 1 OF 2 JOB NUMBER 1-05744-SP-17 SCALE AS NOTED DATE 1/25/2018
	OWNER / ARCHITECT STATE FIRE MARSHAL PORTLAND FIRE DEPARTMENT DRAWN BY SEC NICET LEVEL I CERT# 141357 CHECKED BY GRD NICET LEVEL III CERT# 090388 CONTRACTOR LICENSE # 101 CONTRACTOR RMS # 291				