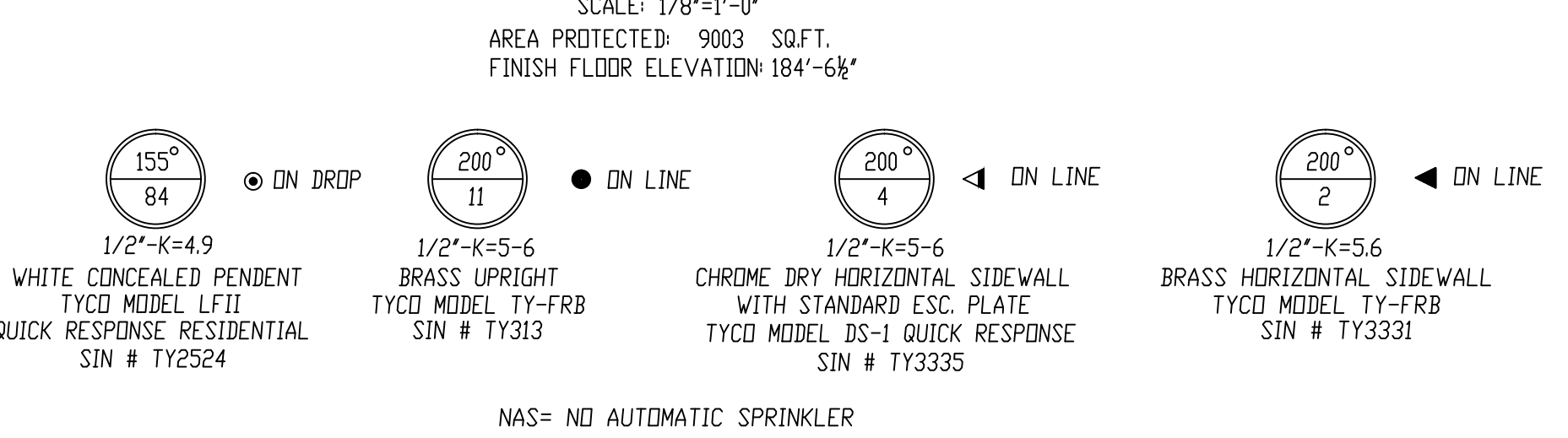


FOURTH FLOOR HYDRAULICALLY MOST REMOTE AREA
 (4 HEAD CALCULATION @ 7PSI E.H.P.)
 (ELEVATION HIGHEST SPRINKLER = 194'-7")

4" CLASS I MANUAL WET STANDPIPE RISER
 INSTALL 2" HOSE VALVE 4'-0" A.F.F.

FIRE SPRINKLER PLAN - FOURTH FLOOR PIPING



NOTE: ALL FOURTH FLOOR GYPSUM CEILINGS @ 10'-1" A.F.F. U.N.D.
 ALL FOURTH FLOOR BATH/PANTRY/CLOSET GYP CLGS @ 8'-0" A.F.F.
 ALL FOURTH FLOOR KITCHEN GYPSUM @ 9'-0" A.F.F.

HYDRAULIC-SYSTEM
 THIS BUILDING IS PROTECTED BY A HYDRAULICALLY DESIGNED AUTOMATIC SPRINKLER SYSTEM

LOCATION: MOST-REMOTE-4-HEADS
 FOURTH FLOOR
 NFPA # 13R

BASIS OF DESIGN:
 1. GPM PER HEAD 13-GPM
 2. NUMBER OF HEADS 4-HEADS
 3. GPM EACH ADDITIONAL RISER 250 GPM

SYSTEM DEMAND:
 1. WATER FLOW RATE (GPM) 55-GPM
 2. RESIDUAL PRESSURE AT THE BASE OF THE RISER 44-PSI

HYDRAULIC-SYSTEM
 THIS BUILDING IS PROTECTED BY A HYDRAULICALLY DESIGNED MANUAL WET STANDPIPE SYSTEM AS PER NFPA # 14

LOCATION: FOURTH FLOOR

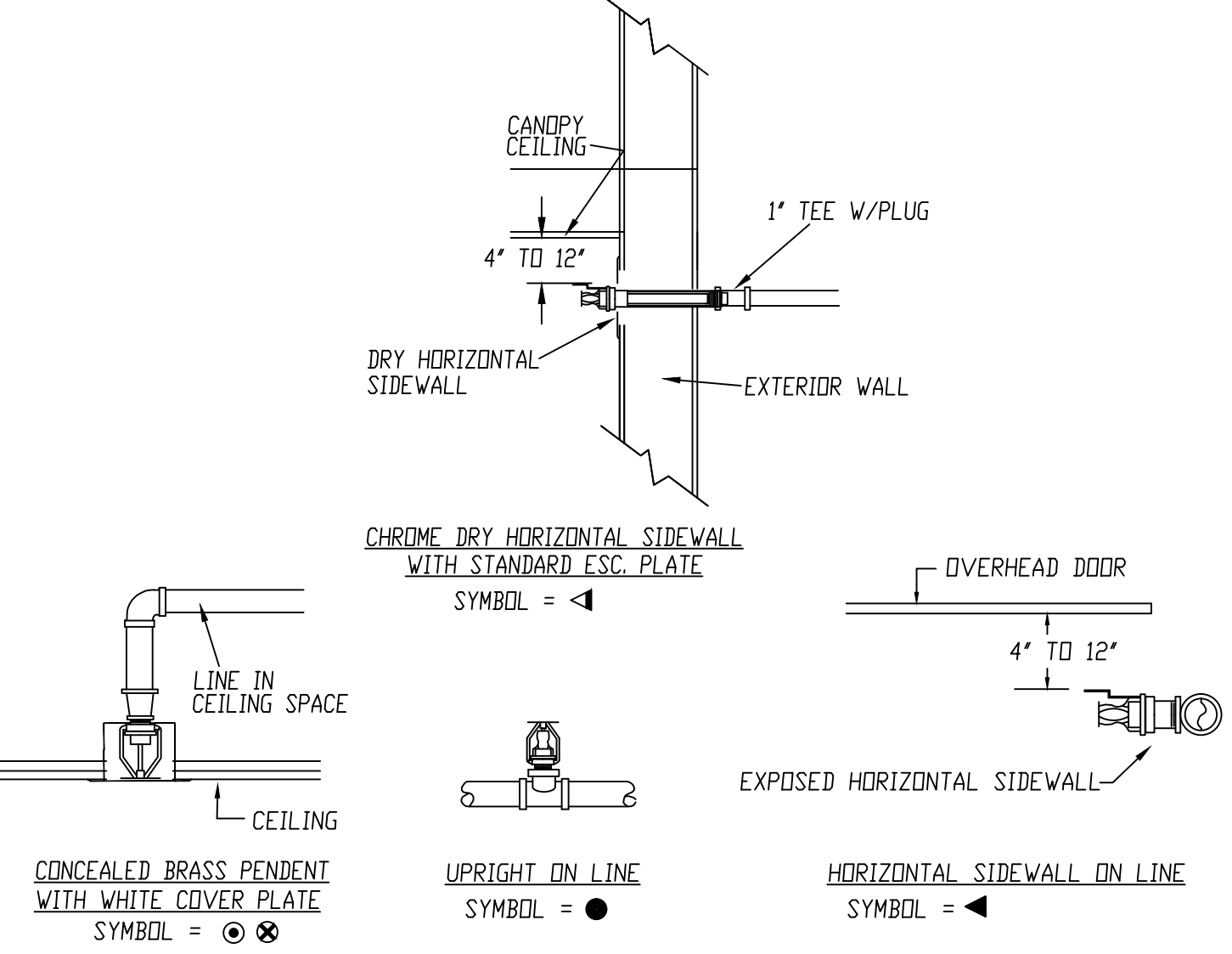
BASIS OF DESIGN:
 1. NUMBER OF SP RISERS 2
 2. GPM AT FIRST RISER 500 GPM
 3. GPM EACH ADDITIONAL RISER 250 GPM

SYSTEM DEMAND:
 1. WATER FLOW RATE (GPM) 750
 2. REQUIRED PRESSURE AT FIRE DEPT CONNECTION (PSI) 153

HYDRAULIC DATA NAMEPLATE
 TO BE MOUNTED AT SYSTEM RISER

○ = HYDRAULIC REFERENCE POINT

HYDRAULIC DATA NAMEPLATE
 TO BE MOUNTED AT SYSTEM RISER



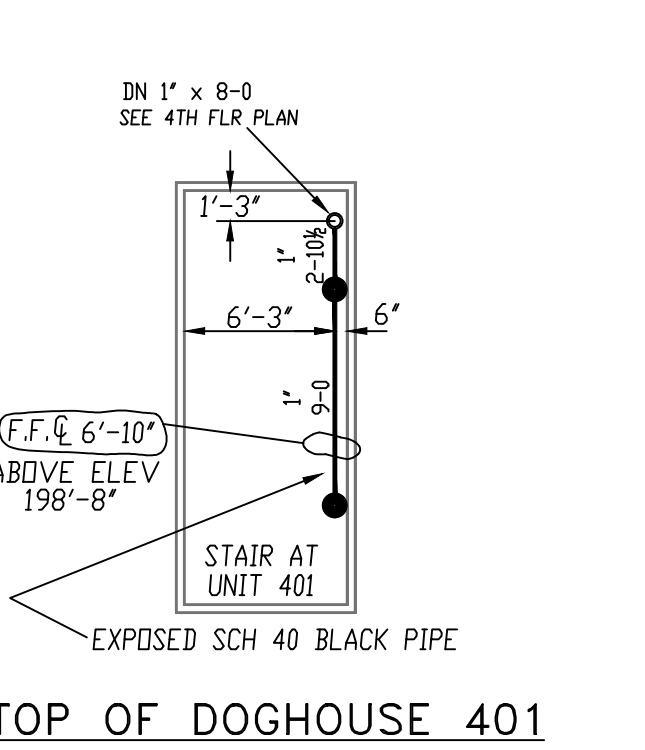
SPRINKLER HEAD DETAILS
 NOT TO SCALE

TYCO LF II
 QUICK RESPONSE RESIDENTIAL
 K-FACTOR = 4.9, 1/2" N.P.T.

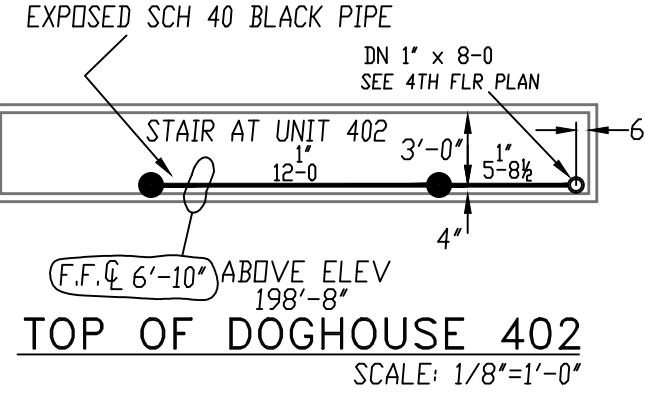
RESIDENTIAL PENDENT/CONCEALED SPRINKLER DESIGN REQUIREMENTS
 MINIMUM DESIGN FLOW AND RESIDUAL PRESSURE

MODEL	WIDTH FT. x FT.	MAXIMUM SPACING FT. (Ø)	FOR HORIZONTAL CEILING MAX 8" RISE FOR 12" RUN
LF II	12 x 12	12"	13GPM(7.0psi)
PENDENT/CONCEALED	14 x 14	14"	13GPM(7.0psi)
	16 x 16	16"	13GPM(7.0psi)
	18 x 18	18"	17GPM(12.0psi)
	20 x 20	20"	20GPM(16.7psi)

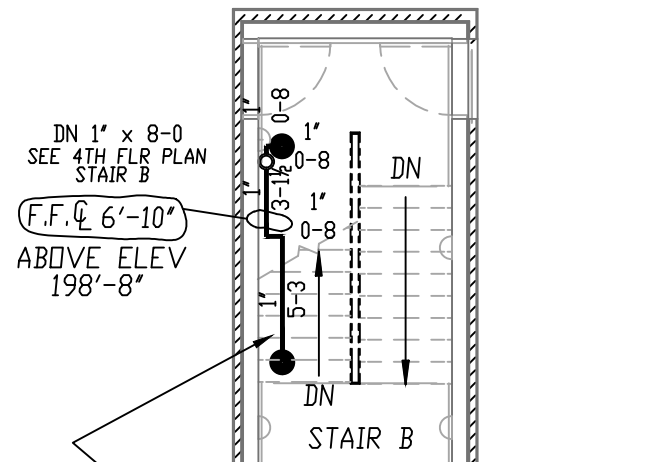
MAXIMUM HEAD SPACING 8'-0" FROM ANY WALL;
 MAXIMUM 16'-0" BETWEEN HEADS;
 MINIMUM SPACING 8'-0" BETWEEN HEADS



TOP OF DOGHOUSE 401
 SCALE: 1/8"=1'-0"



TOP OF DOGHOUSE 402
 SCALE: 1/8"=1'-0"

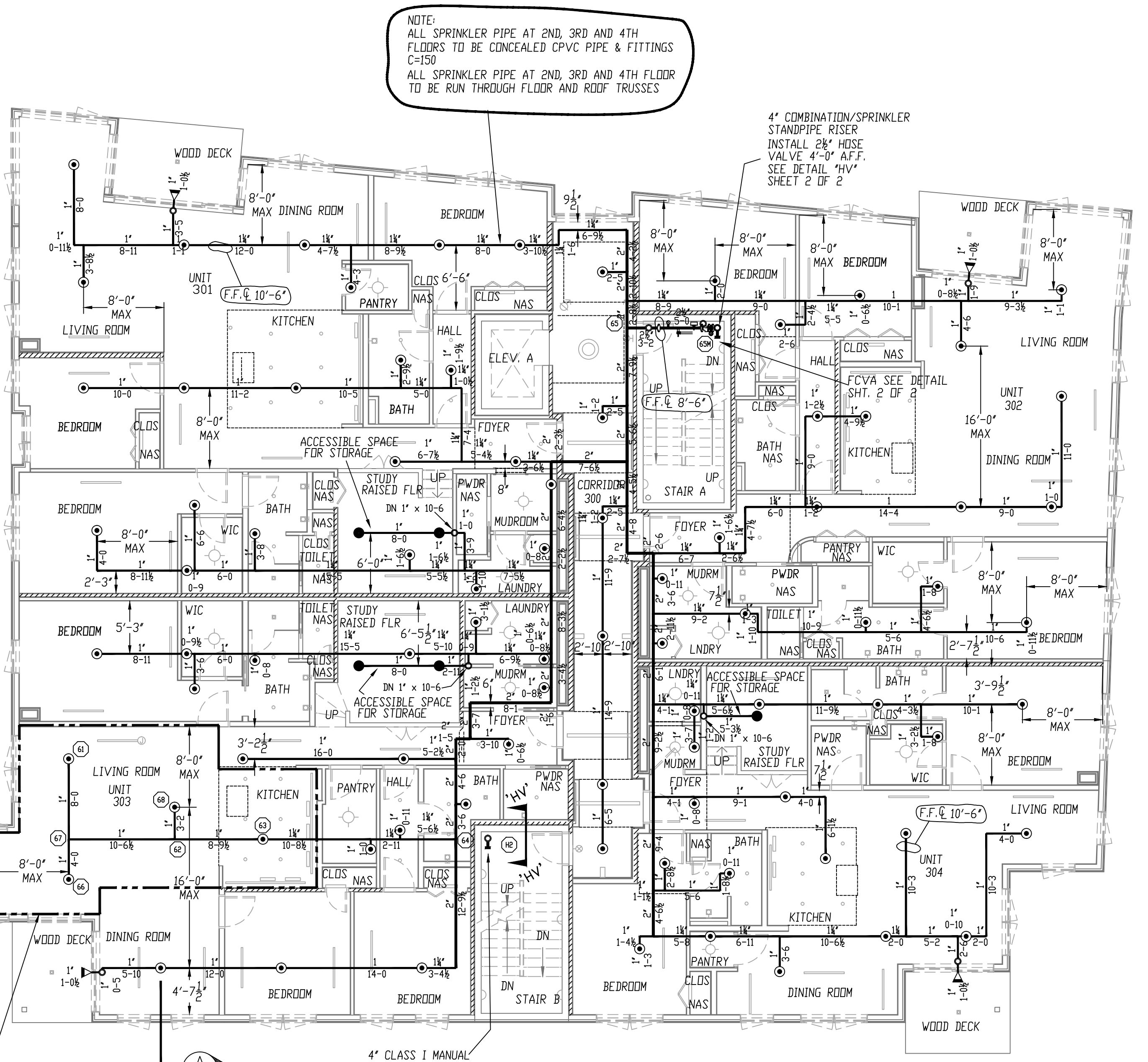


TOP OF STAIR "B" ROOF ACCESS
 SCALE: 1/8"=1'-0"

NOTE: ALL SPRINKLER PIPE AT 2ND, 3RD AND 4TH FLOORS TO BE CONCEALED CPVC PIPE & FITTINGS C-150
 ALL SPRINKLER PIPE AT 2ND, 3RD AND 4TH FLOOR TO BE RUN THROUGH FLOOR AND ROOF TRUSSES

NOTE: ALL CEILINGS ARE GYPSUM ATTACHED TO WOOD TRUSSES UNLESS TYPICAL AT 2ND, 3RD AND 4TH FLOORS

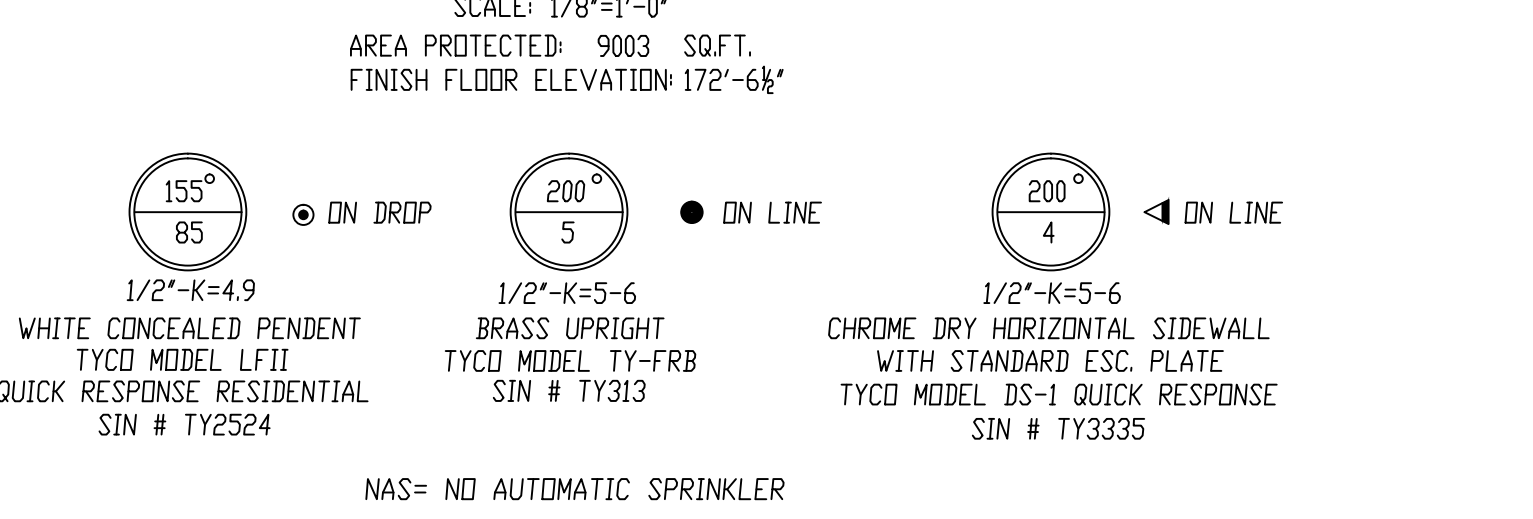
NOTE: ALL PIPE CUTS SHOWN ARE FROM CENTER TO CENTER OF FITTINGS



THIRD FLOOR PROOF CALCULATION
 (4 HEAD CALCULATION @ 7 PSI E.H.P.)
 (ELEVATION HIGHEST SPRINKLER = 182'-5 1/2")

4" CLASS I MANUAL WET STANDPIPE RISER
 INSTALL 2" HOSE VALVE 4'-0" A.F.F.

FIRE SPRINKLER PLAN - THIRD FLOOR PIPING



NOTE: ALL THIRD FLOOR GYPSUM CEILINGS @ 10'-1" A.F.F. U.N.D.
 ALL THIRD FLOOR BATH/PANTRY/CLOSET GYP CLGS @ 8'-0" A.F.F.
 ALL THIRD FLOOR KITCHEN GYPSUM @ 9'-0" A.F.F.

HYDRAULIC-SYSTEM
 THIS BUILDING IS PROTECTED BY A HYDRAULICALLY DESIGNED AUTOMATIC SPRINKLER SYSTEM

LOCATION: MOST-REMOTE-4-HEADS
 THIRD FLOOR
 NFPA # 13R

BASIS OF DESIGN:
 1. GPM PER HEAD 13-GPM
 2. NUMBER OF HEADS 4-HEADS
 3. GPM EACH ADDITIONAL RISER 250 GPM

SYSTEM DEMAND:
 1. WATER FLOW RATE (GPM) 55-GPM
 2. RESIDUAL PRESSURE AT THE BASE OF THE RISER 44-PSI

HYDRAULIC-SYSTEM
 THIS BUILDING IS PROTECTED BY A HYDRAULICALLY DESIGNED MANUAL WET STANDPIPE SYSTEM AS PER NFPA # 14

LOCATION: THIRD FLOOR

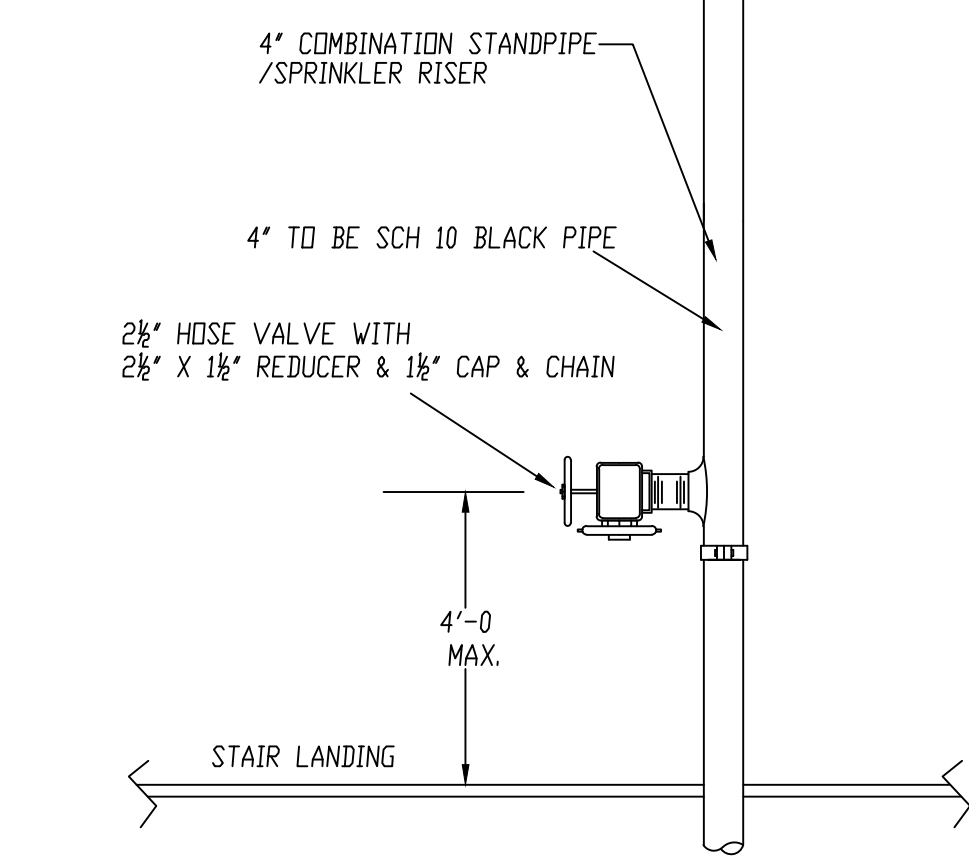
BASIS OF DESIGN:
 1. NUMBER OF SP RISERS 2
 2. GPM AT FIRST RISER 500 GPM
 3. GPM EACH ADDITIONAL RISER 250 GPM

SYSTEM DEMAND:
 1. WATER FLOW RATE (GPM) 750
 2. REQUIRED PRESSURE AT FIRE DEPT CONNECTION (PSI) 153

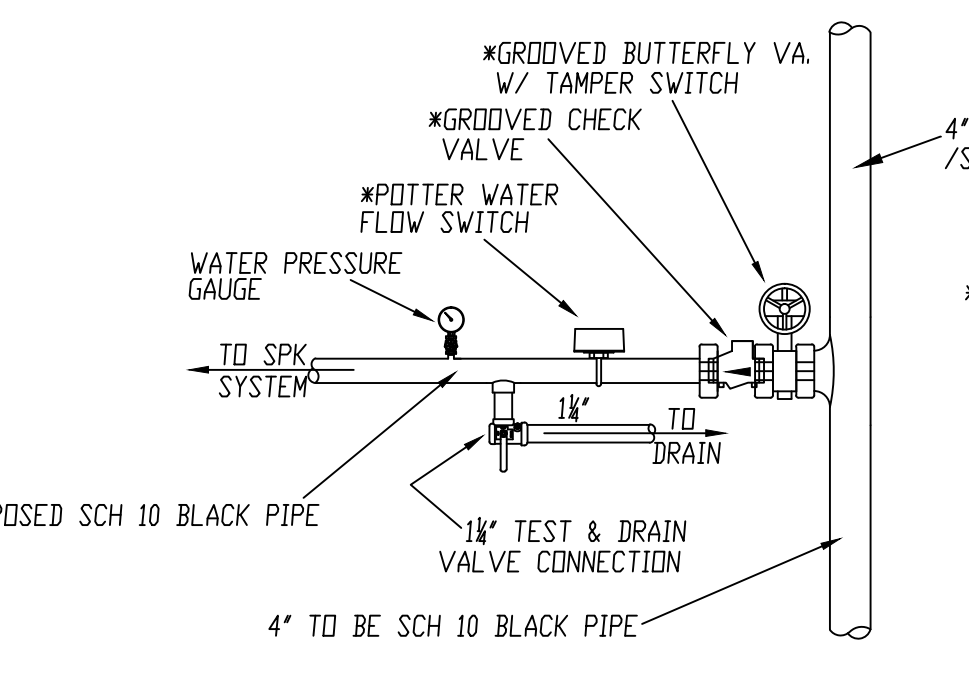
HYDRAULIC DATA NAMEPLATE
 TO BE MOUNTED AT SYSTEM RISER

○ = HYDRAULIC REFERENCE POINT

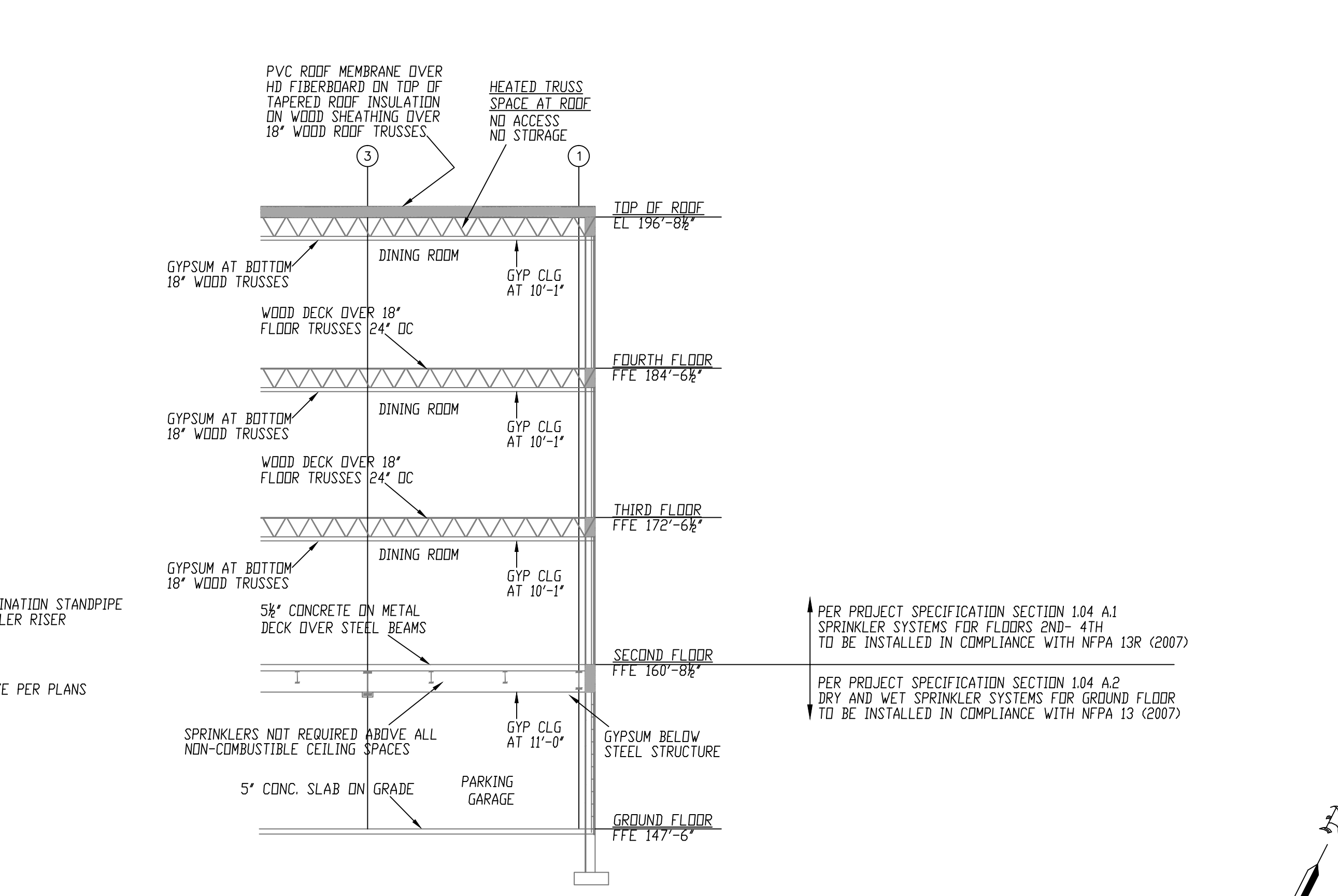
HYDRAULIC DATA NAMEPLATE
 TO BE MOUNTED AT SYSTEM RISER



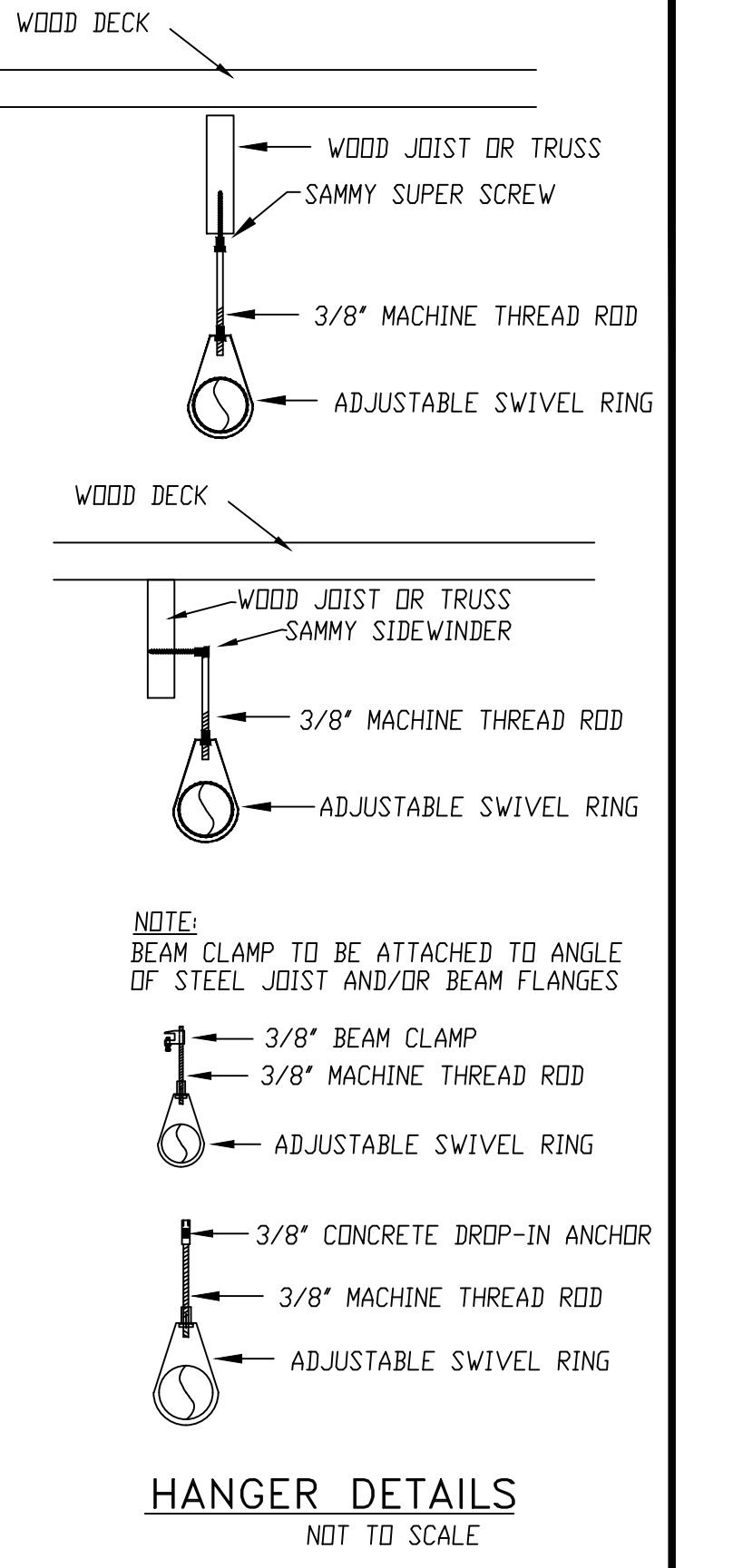
HOSE VALVE DETAIL "HV"
 NOT TO SCALE



STAIR "A" FLOOR CONTROL VALVE ASSEMBLY (FCVA)
 NOT TO SCALE



BUILDING SECTION "A"
 SCALE: NOT TO SCALE



HANGER DETAILS
 NOT TO SCALE

ALL HANGERS TO BE PROVIDED AND INSTALLED AS PER NFPA # 13, 2007
 3/8" ROD FOR 1" TO 4" PIPE

GENERAL NOTES

EXPOSED BRANCH LINE PIPING (1"-2") TO BE BLACK SCH 40 JOINED BY THREADED DUCTILE IRON FITTINGS
 ALL MAIN PIPING (3"-4") TO BE SCHEDULE # 10 BLACK WITH GROOVED ENDS & WELDED OUTLETS JOINED BY MECHANICAL COUPLINGS
 CONCEALED BRANCH LINE PIPING (1"-2") ON 2ND TO 4TH FLOORS TO BE CPVC PLASTIC PIPE (C-150) JOINED W/ SOLVENT CEMENTED CPVC FITTINGS
 GROUND FLOOR SPRINKLER SYSTEM INSTALLATION TO COMPLY WITH NFPA PAMPHLET # 13, 2007 EDITION
 2ND TO 4TH FLOOR SPRINKLER SYSTEM INSTALLATION TO COMPLY WITH NFPA PAMPHLET # 13R, 2007 EDITION
 OWNER TO PROVIDE SUFFICIENT HEAT THROUGHOUT BUILDING TO PREVENT FREEZING OF WATER FILLED SPRINKLER PIPING AND EQUIPMENT (< 40° F.) EXCEPT FOR GROUND FLOOR PARKING GARAGE WHICH WILL BE PROTECTED WITH A DRY SPRINKLER SYSTEM
 ALL DIMENSIONS ARE SHOWN FOR GENERAL LOCATION OF SPRINKLER HEADS; PIPING MAY VARY TO SUIT ACTUAL FIELD CONDITIONS.
 ○ = INDICATES HYDRAULIC REFERENCE POINTS.
 DN INDICATES VERTICAL PIPE DOWN
 UP INDICATES VERTICAL PIPE UP

REQUIRED APPROVALS

OWNER / ARCHITECT
 STATE FIRE MARSHAL
 PORTLAND FIRE DEPARTMENT

DRAWN BY WILLIAM FLYNT
 NICET LEVEL III CERT.# 095574

CHECKED BY GRD
 NICET LEVEL III CERT.# 090388

CONTRACTOR LICENSE # 101
 CONTRACTOR RMS # 368

PROJECT:

118 ON MUNJOY HILL
 118 CONGRESS STREET
 PORTLAND, MAINE 04101

FIRE SPRINKLER CONTRACTOR:

EASTERN FIRE PROTECTION
 AUBURN/LEWISTON INDUSTRIAL AIRPARK, AUBURN, MAINE 04210

CONTRACT WITH:

WRIGHT RYAN CONSTRUCTION, INC.

DWG. NO. 2 OF 2	FIRE SPRINKLER PLANS AND DETAILS
JOB NUMBER AN-5174-14	SCALE AS NOTED
	DATE 08/14/14