

LINK FIRE SPRINKLER PLAN
SCALE: 1/8" = 1'-0"

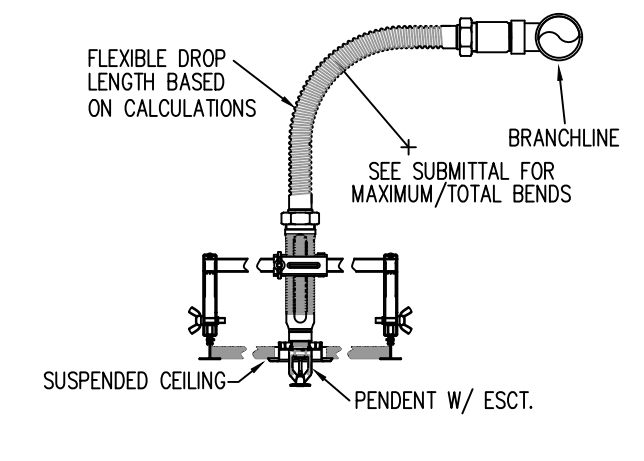
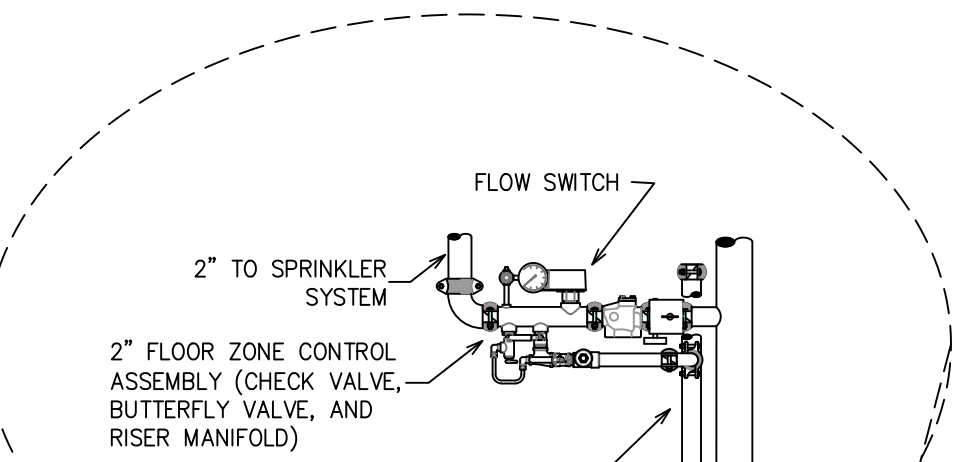
- GENERAL NOTES**
- INTERNATIONAL BUILDING CODE (2015)
 - OCCUPANCY: ASSEMBLY TYPE R-2, RESIDENTIAL APARTMENTS; BUSINESS TYPE B; LOW HAZARD STORAGE S-2;
 - TYPE OF CONSTRUCTION: I-A & V-A
 - SPRINKLERED AREAS (APPROXIMATE - SEE ARCHITECTURAL PLANS FOR ACTUAL)
 - LOWER LEVEL = 16,119 S.F.
 - 1ST FLOOR = 13,441 S.F.
 - 2ND FLOOR = 16,034 S.F. + 2,303 S.F. DRIVE THRU
 - 3RD FLOOR = 13,392 S.F.
 - 4TH FLOOR = 13,392 S.F.
 - 5TH FLOOR = 13,392 S.F.
 - 6TH FLOOR = 13,392 S.F.
 - TOTAL = 101,464 S.F.
 - INSTALLATION STANDARDS: SPRINKLER SYSTEM DESIGNED AND INSTALLED PER NFPA-13 (2019)
 - SPRINKLER PIPE TYPES:
 - 1" BRANCH LINES TO BE BLACK SCHEDULE 30 PIPING WITH THREADED FITTINGS
 - 2" 1/2" THROUGH 4" MAIN & BRANCH LINES TO BE BLACK SCHEDULE 7 PIPING WITH GROOVED FITTINGS
 - MAINS & BRANCH LINES TO BE ROLL-GROOVED BLACK SCHEDULE 7
 - 1" THROUGH 3" CONCEALED PIPING TO BE BLAZEMASTER CPVC
 - DESIGN CRITERIA
 - PARKING GARAGE DESIGNED TO ORDINARY GROUP I
 - FIRST & SECOND FLOOR SHELL SPACE DESIGNED TO ORDINARY GROUP II; FINISHED AREAS TO LIGHT HAZARD
 - DRIVE THRU CANOPY TO BE LIGHT HAZARD
 - 4TH FLOOR THROUGH 6TH FLOOR TO BE DESIGNED TO LIGHT HAZARD PER NFPA 13
 - NOTES:
 - ALL MATERIAL TO BE NEW AND MEET U.L. STANDARDS
 - 4TH FLOOR THROUGH 6TH FLOOR TO BE DESIGNED TO LIGHT HAZARD PER NFPA 13
 - HANGERS TO BE INSTALLED IN ACCORDANCE WITH NFPA 13 (2019) - SEE PLAN FOR HANGING REQUIREMENTS
 - SYMBOLS USED ON DRAWINGS:
 - PIPE ELEVATION A.F.F.
 - ROOM HAZARD CLASSIFICATION (ALL ROOMS ARE CONSIDERED LIGHT HAZARD UNLESS NOTED)
 - HYDRAULIC CALCULATION JUNCTION POINT
 - SCOPE OF WORK:
 - PARKING GARAGE DESIGNED TO INSTALL A NEW FIRE SUPPRESSION SYSTEM CONSISTING OF 8 NET ZONES AND 1 REMOTE DRY ZONE. ZONE 1 WILL COVER THE PARKING GARAGE, ZONE 2 WILL PROTECT THE FIRST FLOOR SHELL SPACE, ZONE 3 WILL PROTECT THE 2ND FLOOR SHELL SPACE, ZONE 4 WILL PROTECT THE 3RD AND 4TH RESIDENTIAL FLOORS, ZONE 5 WILL PROTECT THE 5TH AND 6TH RESIDENTIAL FLOORS AND THE REMOTE DRY ZONE WILL PROTECT THE DRIVE THRU CANOPY.
 - ALL AREAS OF THE BUILDING TO BE INSTALLED AND COVERED IN ACCORDANCE WITH THE LOCAL AUTHORITY HAVING JURISDICTION AND PER NFPA 13 (2019)
 - MANUAL WET STANDPIPES WILL BE INSTALLED IN BOTH STAIR TOWERS PER NFPA 14

LOWER LEVEL FIRE SPRINKLER PLAN
SCALE: 1/8" = 1'-0"

Design Area #1 HAZARD: ORD I
Zone 1 System Type: WET
Location: PARKING GARAGE

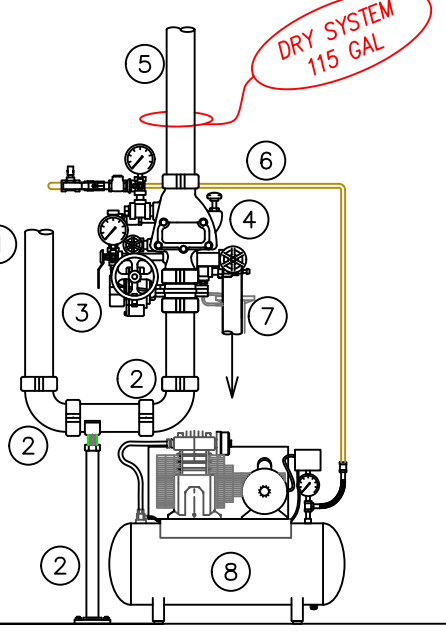
Flowing Outlets: 9
Density: 0.15
Flow: 408 gpm @ 28.2 psi
Calculation Safety: 26.9 psi
Includes 250 gpm Hose allowance

SYM	QTY	POSITION	FINISH	TEMP	K	NPT	SN	MFG.	MODEL#	ESCUTCHEON	HEAD BOX (2 min)
1	132	UPR	BRASS	200	5.60	1/2"	VK300	WIKING	MICROFA	N/A	2
2	2	SIDE	WHITE	165	5.60	1/2"	VK308	WIKING	MICROFA	CLIP & SKIRT	2
3	223	UPR	BRASS	200	8.00	3/4"	VK350	WIKING	MICROFA	N/A	0
4	1	PEND	CHROME	205	5.60	1"	VK176	WIKING	VK-DRY	N/A	2
5	40	PEND	WHITE	155	5.60	1/2"	VK302	WIKING	MICROFA	CLIP & SKIRT	0
6	148	PEND	WHITE	155	4.90	1/2"	VK468	WIKING	FREEDOM	CLIP & SKIRT	2
7	148	SIDE	WHITE	155	4.00	1/2"	VK486	WIKING	FREEDOM	CLIP & SKIRT	2
8	16	SIDE	CHROME	200	5.60	1"	VK188	WIKING	VK-DRY	CLIP & SKIRT	2
9	2	SIDE	WHITE	155	8.00	3/4"	TY4332	Tyco	TY-FRB	CLIP & SKIRT	0
10	10	UPR	BRASS	200	11.20	3/4"	VK532	WIKING	EC-11	N/A	2
11	930	TOTAL									

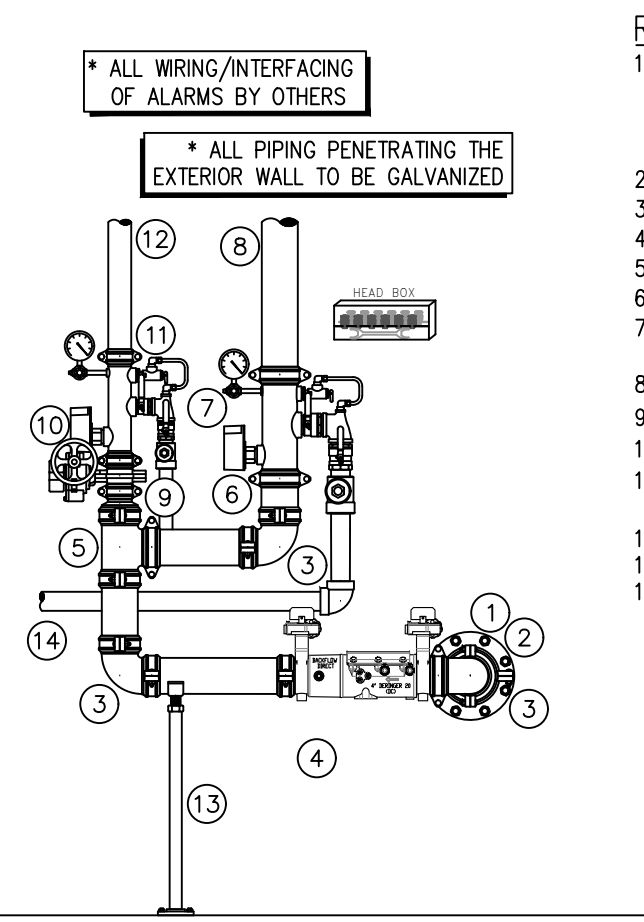


MANUAL WET STANDPIPE
LOCATION: 6TH FLOOR STAIR E&W
REQUIRED FLOW: 750GPM
OUTLET PSI: 100
REQUIRED INLET PSI: 156.5

- RISER LEGEND**
- FROM 4" WET SYSTEM MAIN IN 1ST FLOOR SHELL SPACE
 - 4" GROOVED 90 ELBOW
 - 4" GROOVED BUTTERFLY VALVE W/ TAMPER
 - 4" GROOVED WIKING F-2 DRY VALVE W/ GALV TRIM
 - TO NEW DRY SYSTEM IN DRIVE THRU CANOPY
 - 2" COPPER AIR LINE TO DRY VALVE
 - 2" MAIN DRAIN TO BE PIPED TO FLOOR DRAIN/ OUTSIDE. COORDINATE ON SITE.
 - AIR COMPRESSOR
 - PIPE STAND

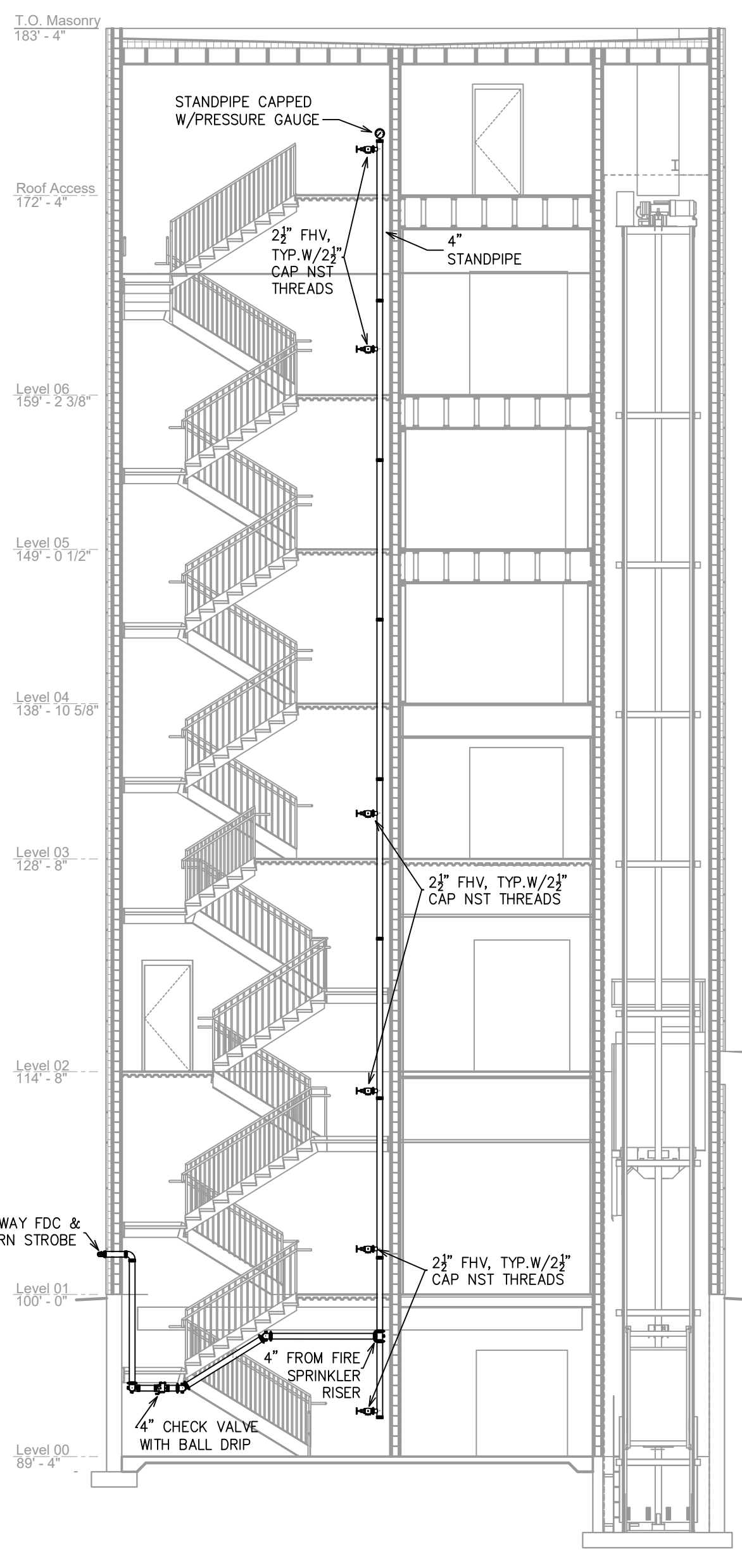


REMOVAL DRY VALVE DETAIL
SCALE: 1/2" = 1'-0"

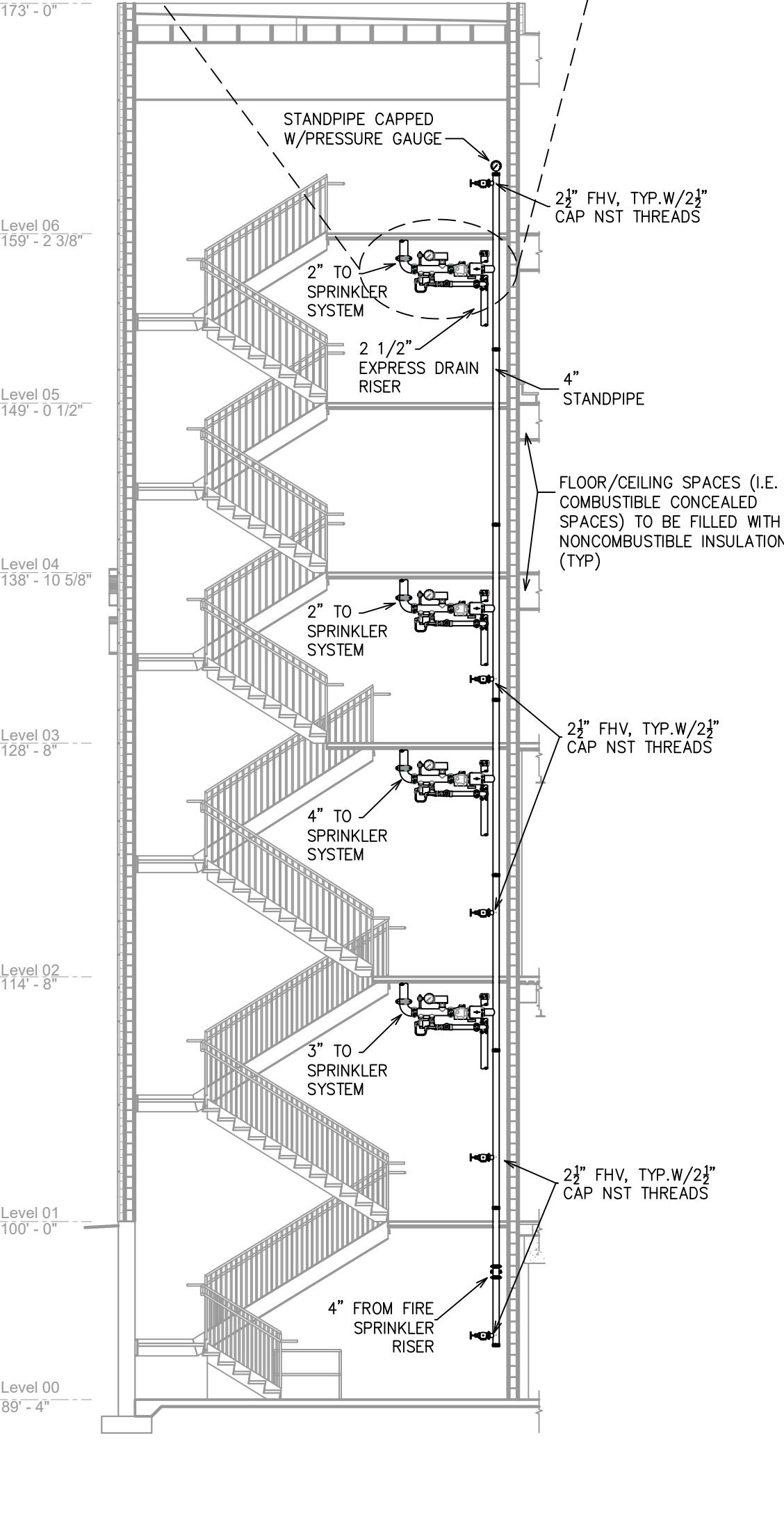


- RISER LEGEND**
- ALL WIRING/INTERFACING OF ALARMS BY OTHERS
 - ALL PIPING PENETRATING THE EXTERIOR WALL TO BE GALVANIZED
 - 6" GROOVED CONC. REDUCER
 - 4" GROOVED ELBOW
 - 4" DERINGER D20 BACKFLOW CXC W/ TAMPERS
 - 4" GROOVED TEE
 - 4" GROOVED FILLER PIECE
 - 4" GROOVED COMMERCIAL RISER MANIFOLD W/ FLOW SWITCH, PRESSURE GAUGE, & TEST AND DRAIN
 - 4" MANUAL WET STANDPIPE FEED
 - 4" 2 1/2" GROOVED CONC. REDUCER
 - 2" GROOVED BUTTERFLY VALVE W/ TAMPER
 - 2" GROOVED COMMERCIAL RISER MANIFOLD W/ FLOW SWITCH, PRESSURE GAUGE, & TEST AND DRAIN
 - 2" TO PARKING GARAGE WET SYSTEM
 - PIPE STAND
 - PIPE MAIN DRAIN TO APPROVED LOCATION, COORDINATE ON SITE

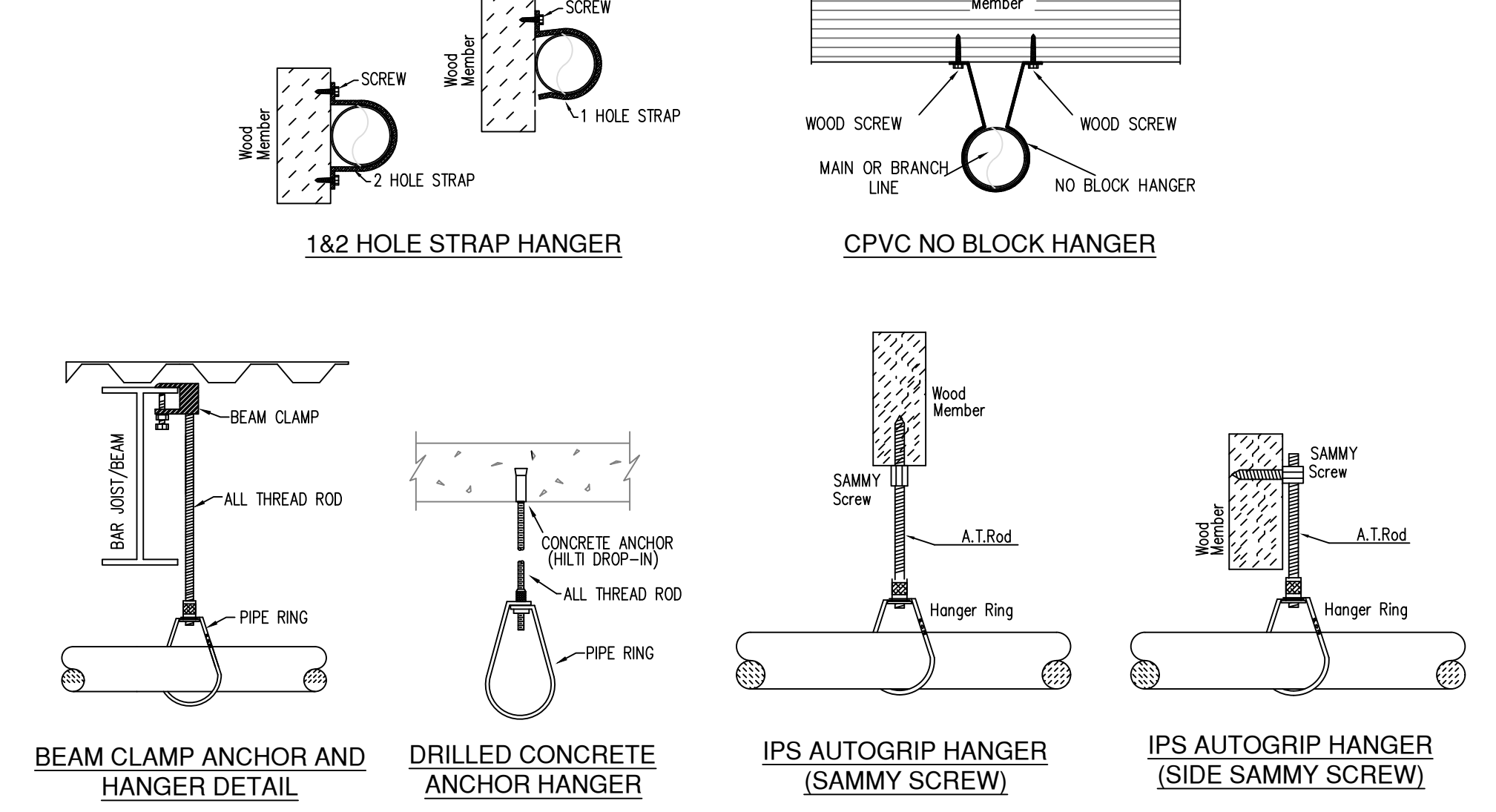
RISER DETAIL
SCALE: 1/2" = 1'-0"



STAIR SECTION A
SCALE: 1/8" = 1'-0"



STAIR SECTION B
SCALE: 1/8" = 1'-0"

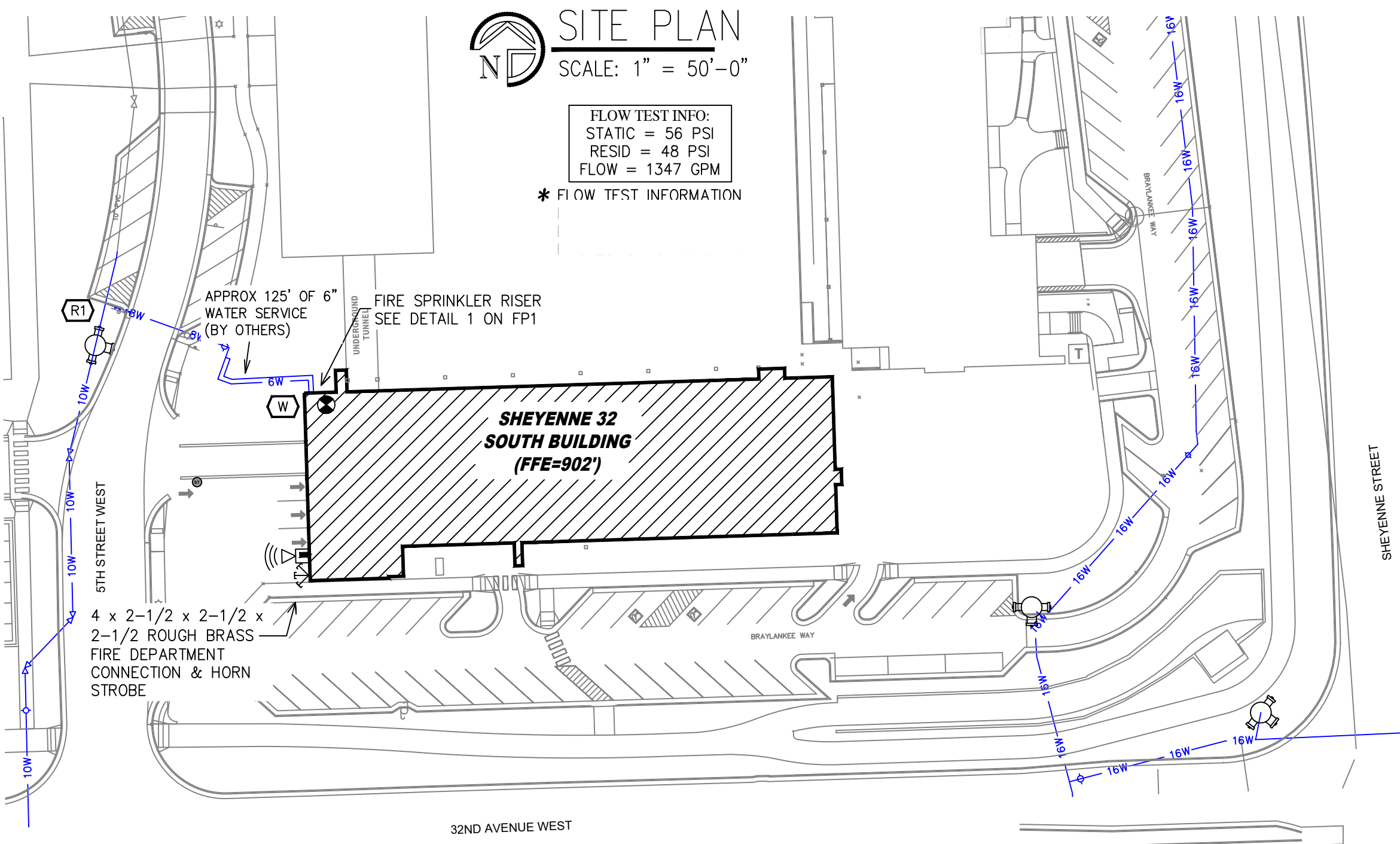


HANGER DETAILS

MAXIMUM DISTANCE BETWEEN HANGERS (FT.-IN.)

STEEL PIPE EXCEPT THREADED LIGHTWALL	NOMINAL PIPE SIZE (IN.)								
	3/4"	1"	1 1/4"	1 1/2"	2"	3"	4"	6"	8"
THREADED LIGHTWALL STEEL PIPE	NA	12-0	12-0	15-0	15-0	15-0	15-0	15-0	15-0
	NA	12-0	12-0	12-0	12-0	NA	NA	NA	NA

NFPA 13 HANGER SPACING



SITE PLAN
SCALE: 1" = 50'-0"

FLOW TEST INFO:
STATIC = 56 PSI
RESID = 48 PSI
FLOW = 1347 GPM
* FLOW TEST INFORMATION

SYMBOLS

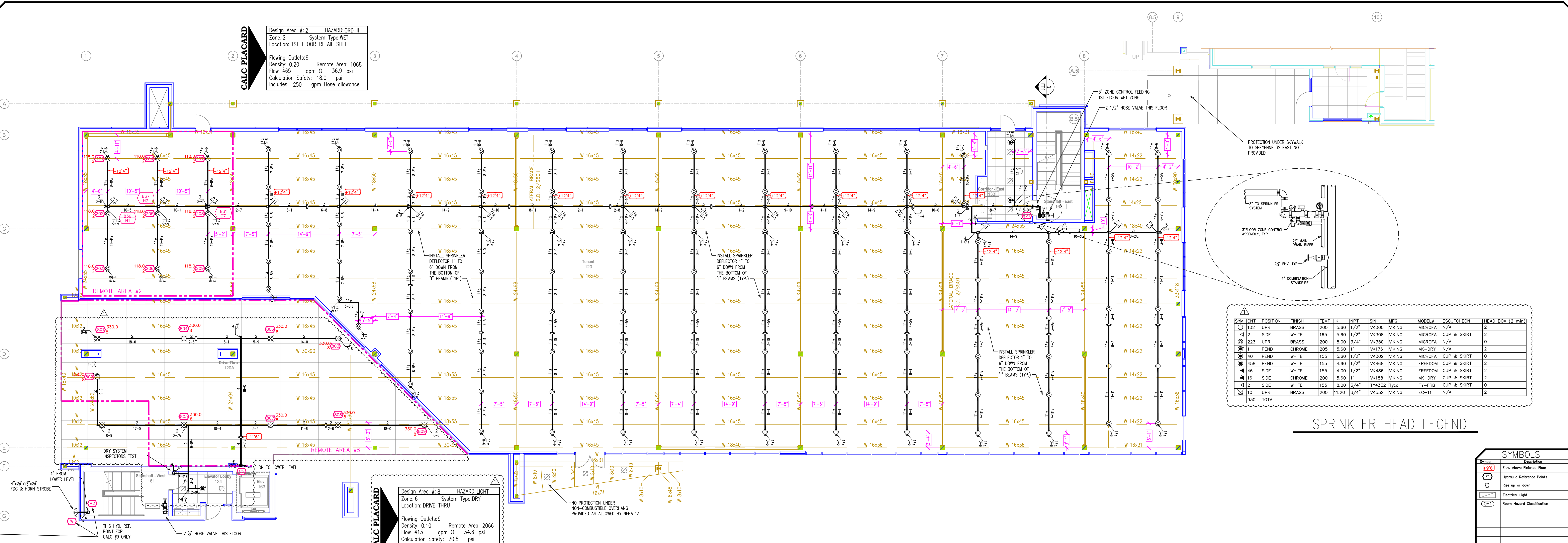
Symbol	Description
1/2"	Div. Above Finished Floor
+	Hydraulic Reference Points
C	Rise up or down
⊕	Electrical Light
⊖	Room Hazard Classification

REVISIONS

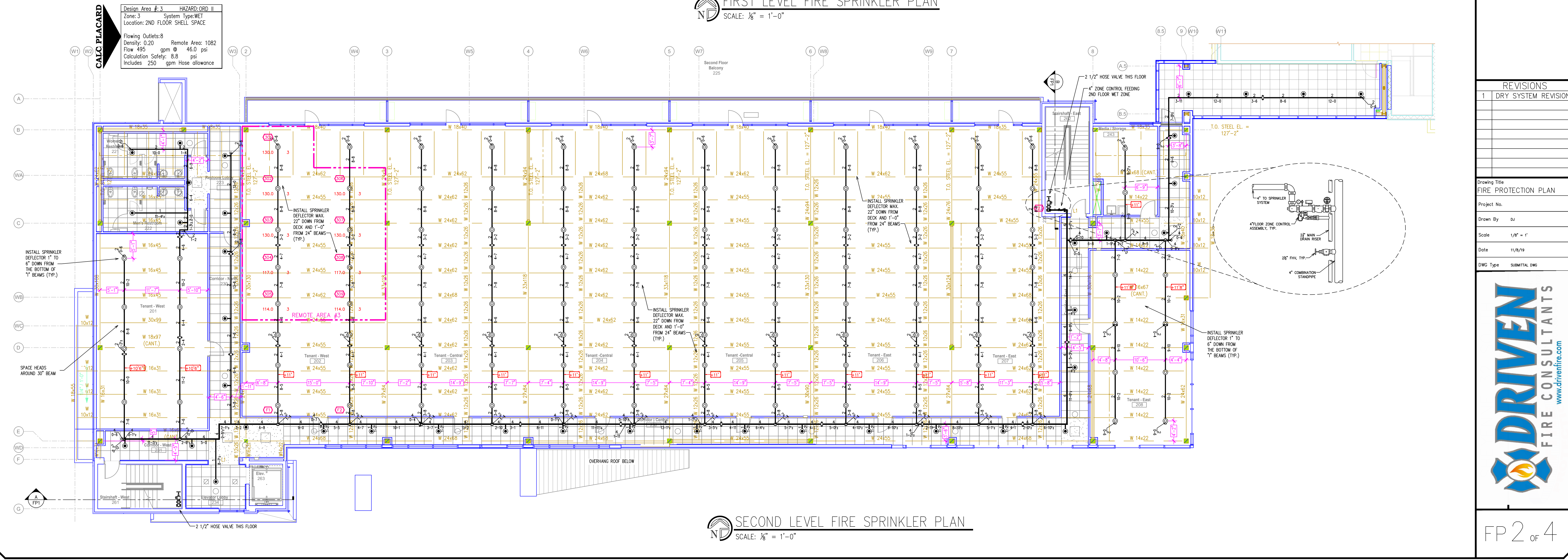
No.	Description
1	DRY SYSTEM REVISION

Drawing Title: FIRE PROTECTION PLAN
Project No.:
Drawn By: dx
Scale: 1/8" = 1'
Date: 11/8/19
DWG Type: SUBMITTAL DWG





FIRST LEVEL FIRE SPRINKLER PLAN
 SCALE: 1/8" = 1'-0"



SECOND LEVEL FIRE SPRINKLER PLAN
 SCALE: 1/8" = 1'-0"

SYMBOLS

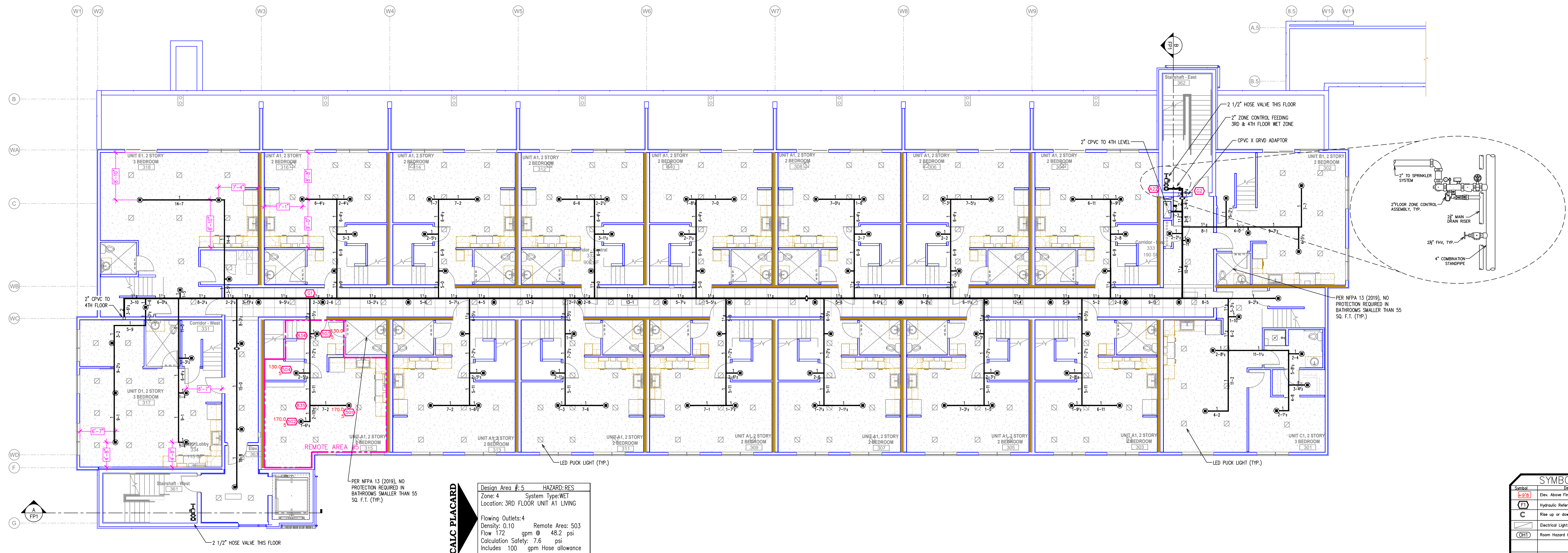
Symbol	Description
(Elev. Above Finished Floor)	Elev. Above Finished Floor
(Hydraulic Reference Points)	Hydraulic Reference Points
(Rise up or down)	Rise up or down
(Electrical Light)	Electrical Light
(Room Hazard Classification)	Room Hazard Classification

REVISIONS

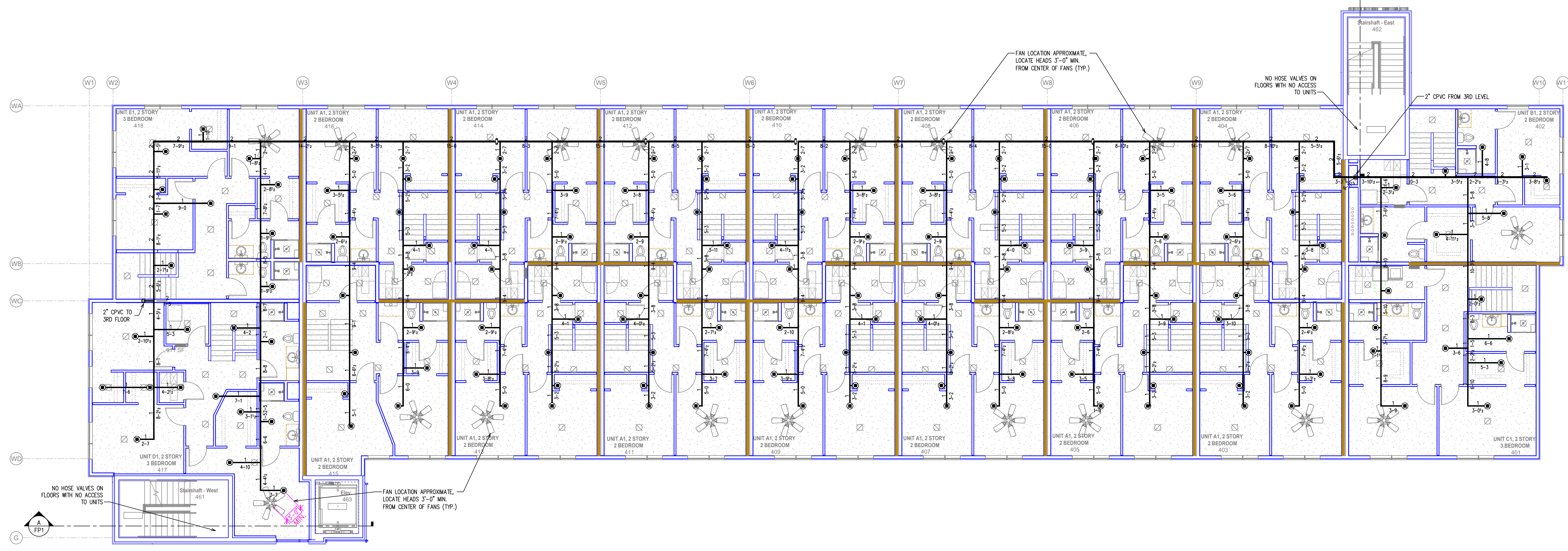
1	DRY SYSTEM REVISION
---	---------------------

Drawing Title: **FIRE PROTECTION PLAN**
 Project No.:
 Drawn By: **GW**
 Scale: **1/8" = 1'**
 Date: **11/8/19**
 DWG Type: **SUBMITAL DWG**





THIRD LEVEL FIRE SPRINKLER PLAN
 SCALE: 1/8" = 1'-0"



FOURTH LEVEL FIRE SPRINKLER PLAN
 SCALE: 1/8" = 1'-0"

SYM	CNT	POSITION	FINISH	TEMP	K	INPT	SIN	MFG.	MODEL#	ESCU/THEON	HEAD BOX (2 min)
132	UPR	BRASS	200	5.60	1/2"	WK300	WIKING	MICROFA	N/A	2	
12	SIDE	WHITE	155	5.60	1/2"	WK308	WIKING	MICROFA	CUP & SKIRT	2	
223	UPR	BRASS	200	8.00	3/4"	WK350	WIKING	MICROFA	CUP & SKIRT	0	
1	PEND	CHROME	205	5.60	1"	WK176	WIKING	WK-DRY	N/A	2	
40	PEND	WHITE	155	5.60	1/2"	WK302	WIKING	MICROFA	CUP & SKIRT	2	
453	PEND	WHITE	155	4.90	1/2"	WK468	WIKING	FREEDOM	CUP & SKIRT	2	
54	SIDE	WHITE	155	4.00	1/2"	WK496	WIKING	FREEDOM	CUP & SKIRT	2	
16	SIDE	CHROME	200	5.60	1"	WK188	WIKING	WK-DRY	CUP & SKIRT	2	
42	SIDE	WHITE	155	8.00	3/4"	TY4332	Type	TY-FRB	CUP & SKIRT	0	
10	UPR	BRASS	200	11.20	3/4"	TY5137	Type	EC-11	CUP & SKIRT	2	
930	TOTAL										

SPRINKLER HEAD LEGEND

SYMBOLS

Symbol	Description
+	Elev. Above Finished Floor
TF	Hydraulic Reference Points
C	Rise up or down
EL	Electrical Light
ORH	Room Hazard Classification

REVISIONS

1	DRY SYSTEM REVISION
---	---------------------

Drawing Title: FIRE PROTECTION PLAN
 Project No.:
 Drawn By: GJ
 Scale: 1/8" = 1'
 Date: 11/8/19
 DWG Type: SUBMITTAL DWG



