

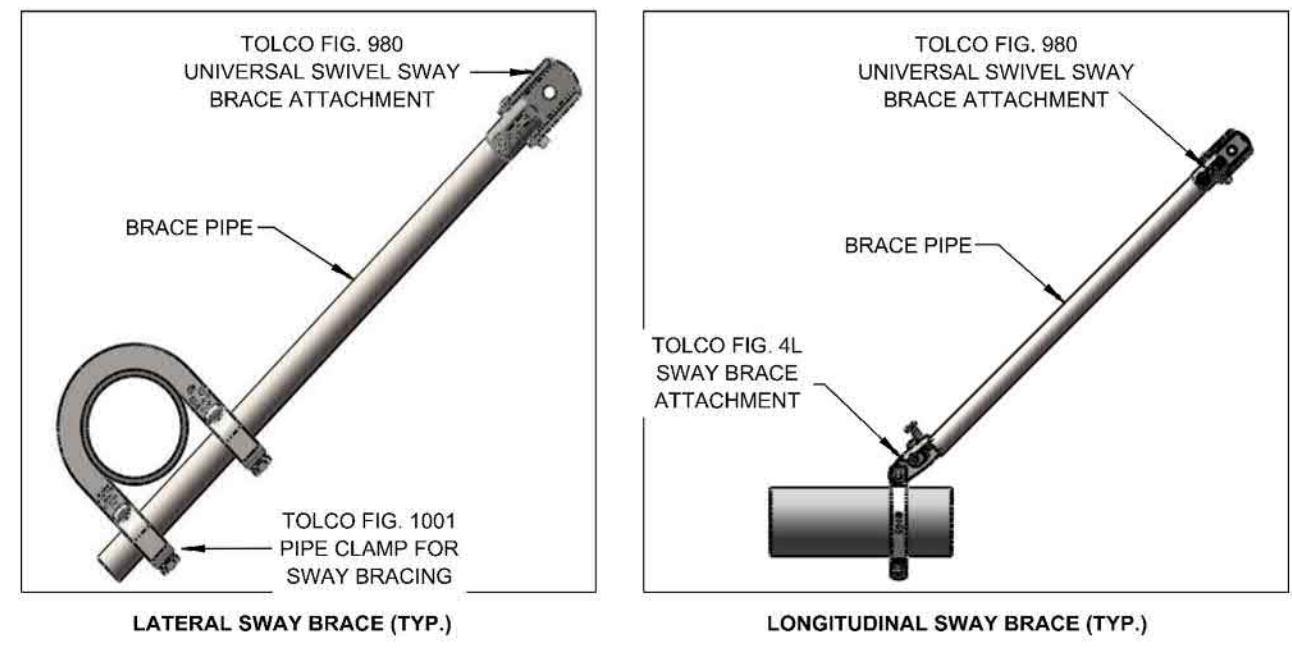
GENERAL INFORMATION

1. INTERNATIONAL BUILDING CODE (2021)
- 1.1 OCCUPANCY: TYPE B, R-2, S-2
- 1.2 TYPE OF CONSTRUCTION: V-B
- 1.3 SPRINKLERED AREAS (APPROXIMATE - SEE ARCHITECTURAL PLANS FOR ACTUAL)
- WET = 10,250 S.F.
- DRY = 350 S.F.
- 1.4 DESIGN & INSTALLATION STANDARDS: NFPA-13 (2022)
2. SPRINKLER PIPE TYPES:
- WET-
- 2.1 1" PIPE TO BE SCHEDULE 40 BLACK STEEL w/ THREADED FITTINGS
- 2.2 1-1/2" THROUGH 4" MAINS & BRANCH LINES TO BE BLK SCHEDULE 10 w/ GROOVED FITTINGS
- 2.3 MAINS & BRANCH LINES TO BE ROLL-GROOVED BLK SCHEDULE 10
- 2.4 2" AND LARGER TO USE GROOVED SHORT RADIUS FITTINGS
- DRY-
- 2.5 1" PIPE TO BE SCHEDULE 40 BLACK STEEL w/ THREADED FITTINGS
- 2.6 1-1/2" MAINS & BRANCH LINES TO BE BLK SCHEDULE 10 w/ GROOVED FITTINGS
- 2.7 MAINS & BRANCH LINES TO BE ROLL-GROOVED BLK SCHEDULE 10
3. DESIGN CRITERIA:
- 3.1 LIGHT HAZARD AREAS INCLUDE OFFICE/ADMINISTRATIVE, RESTROOMS, DORMS, KITCHEN
- 3.2 ORDINARY HAZARD GROUP I AREAS INCLUDE MECHANICAL, ELECTRICAL, AND SMALL STORAGE
- 3.3 ORDINARY HAZARD GROUP II AREAS INCLUDE APPARATUS BAYS AND LARGE STORAGE AREAS
- 3.4 REMOTE AREA REDUCTIONS HAVE BEEN TAKEN WHERE APPLICABLE PER NFPA 13 SEC. 19.2.3.2.3
- 3.5 REMOTE AREA INCREASED BY 30% FOR SLOPED CEILINGS PER NFPA 13 SEC. 19.2.3.2.4
4. NOTES:
- 4.1 ALL MATERIAL TO BE NEW AND MEET U.L. STANDARDS
- 4.2 HANGERS TO BE INSTALLED IN ACCORDANCE WITH NFPA 13 - SEE PLAN FOR HANGING REQUIREMENTS
- 4.3 DRY SYSTEM REQUIREMENTS:
- DRY SYSTEM PIPE SLOPE INSTALLATION
- SPRINKLER MAINS TO BE 1/4" PER 10'-0" (UNREFRIGERATED AREAS)
- SPRINKLER BRANCH LINES TO BE 1/2" PER 10'-0"
- DRY SYSTEM CAPACITY
- 8 GALLONS
5. SYMBOLS USED ON DRAWINGS:
- ★Xx FF PIPE ELEVATION ABOVE FINISH FLOOR
- ★Xx BD PIPE ELEVATION BELOW BOTTOM OF DECK
- OH1 ROOM HAZARD CLASSIFICATION (ALL ROOMS ARE CONSIDERED LIGHT HAZARD U.N.O.)
- SM RM ROOM HAZARD CLASSIFICATION (ALL ROOMS ARE CONSIDERED LIGHT HAZARD U.N.O.)
- HYDRAULIC CALCULATION JUNCTION POINT
- 9'-0" CEILING HEIGHT
- FIRE RATED WALL
- WET BLACK STEEL PIPE
- DRY BLACK STEEL PIPE
6. SCOPE OF WORK:
- 6.1 INSTALL A COMPLETE SINGLE WET ZONE AND SINGLE DRY ZONE FIRE SRPKLER SYSTEM TO COVER ALL AREAS OF BUILDING INCLUDING EXTERIOR PROJECTIONS
- 6.2 ALL AREAS OF THE BUILDING TO BE INSTALLED AND COVERED IN ACCORDANCE WITH THE LOCAL AUTHORITY HAVING JURISDICTION AND PER NFPA 13



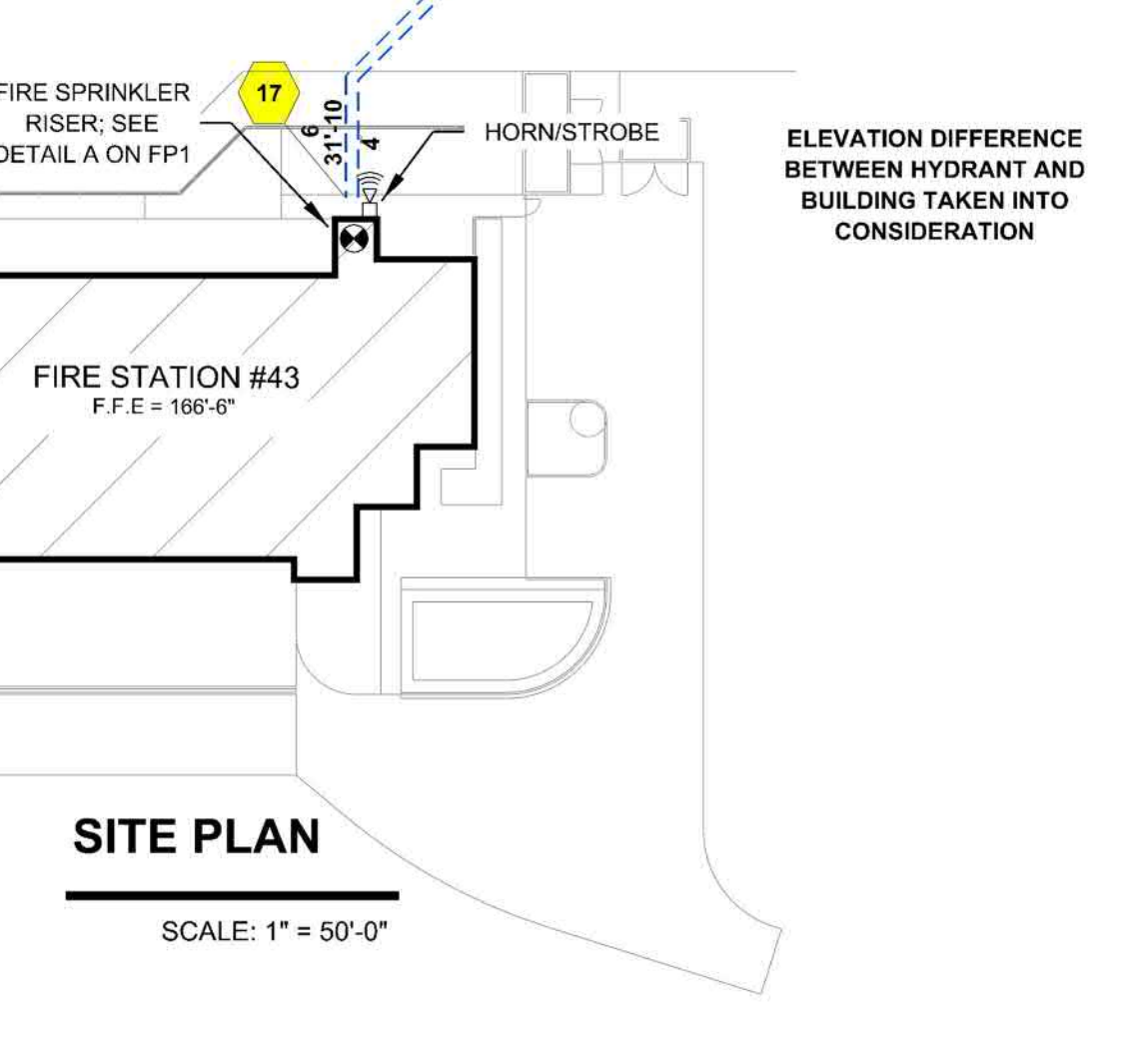
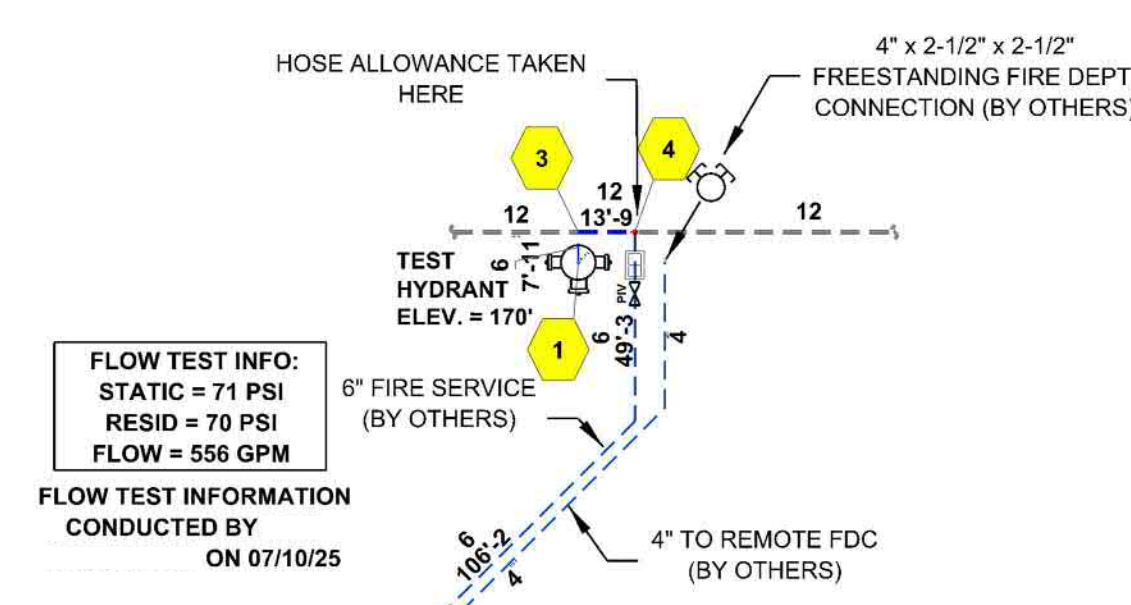
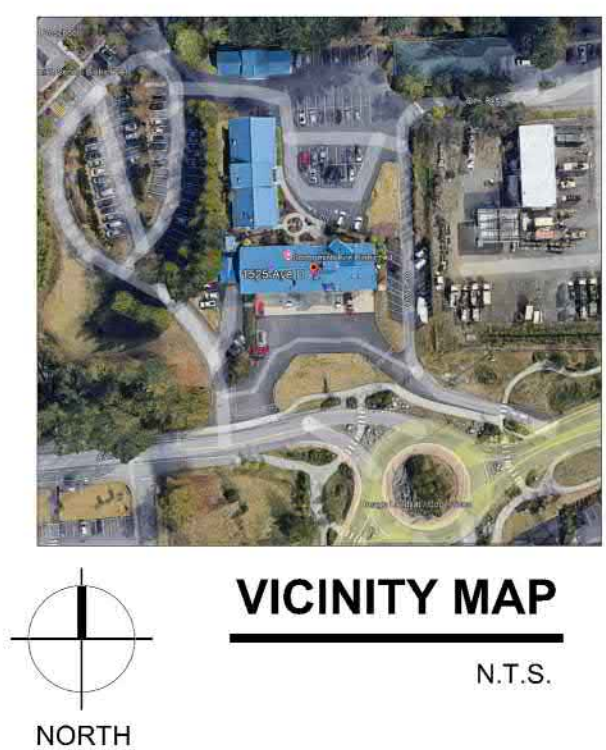
HANGER DETAILS

MAXIMUM DISTANCE BETWEEN HANGERS (FT.-IN.)									
	3/4"	1"	1 1/4"	1 1/2"	2"	2 1/2"	3"	4"	6"
STEEL PIPE EXCEPT THREADED LIGHTWALL	NA	12-0	12-0	15-0	15-0	15-0	15-0	15-0	15-0

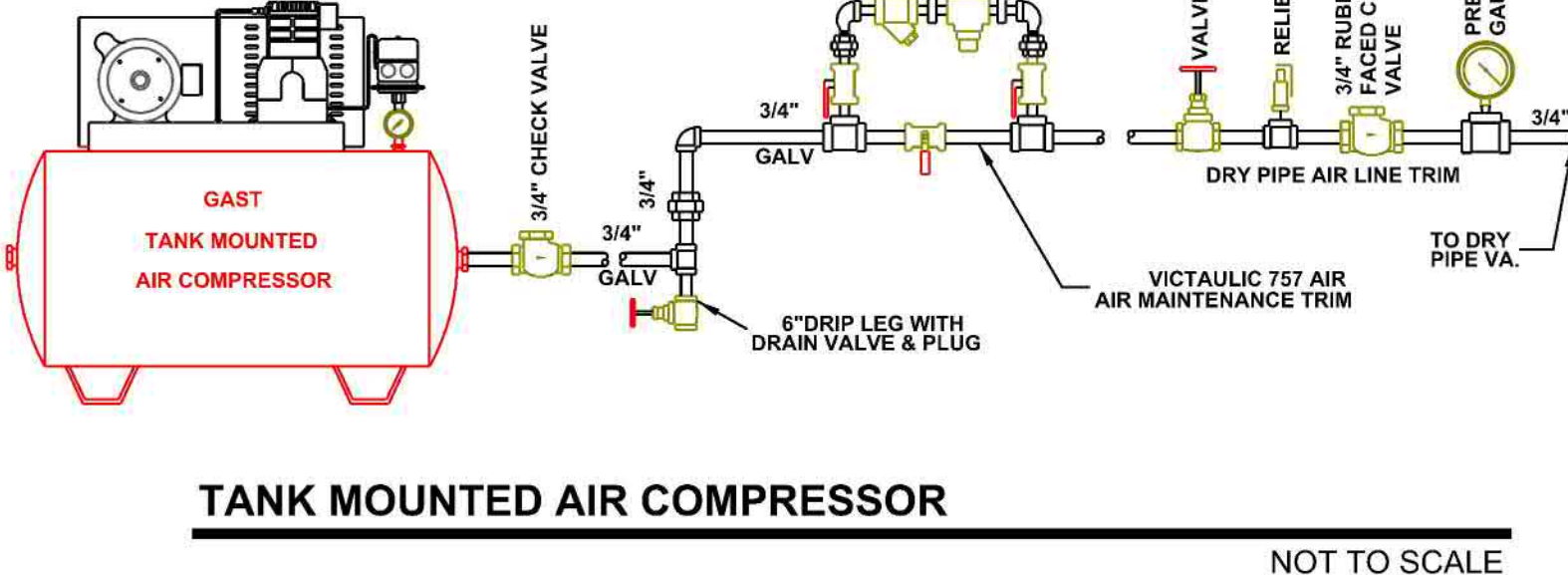
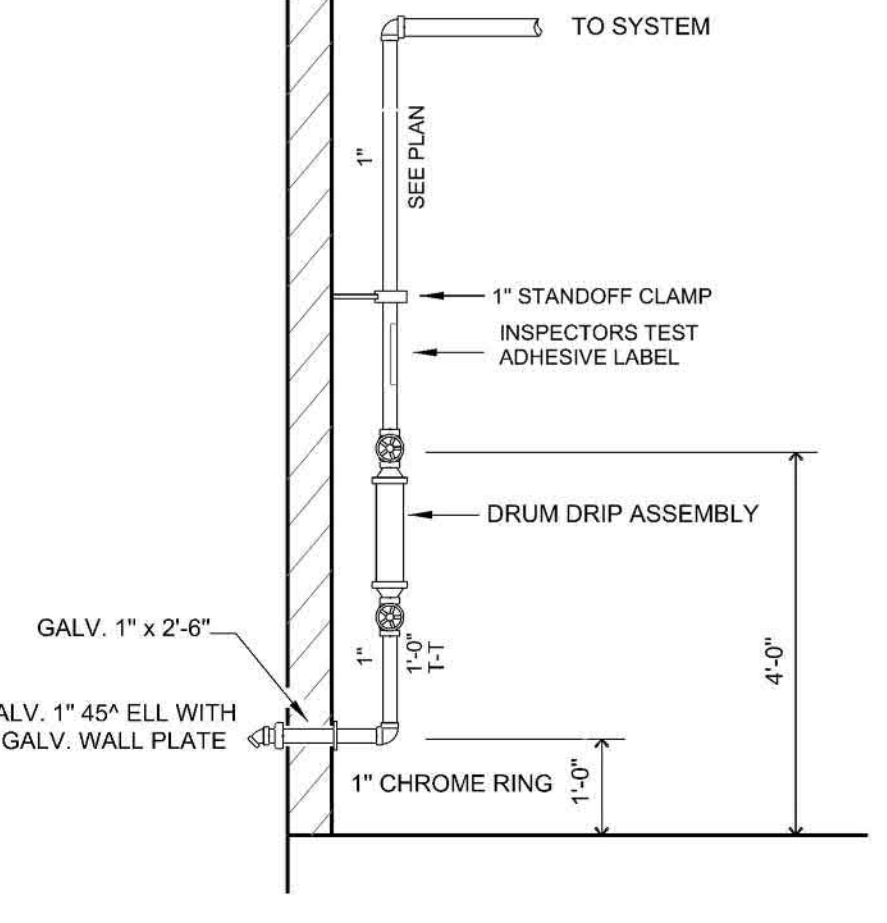
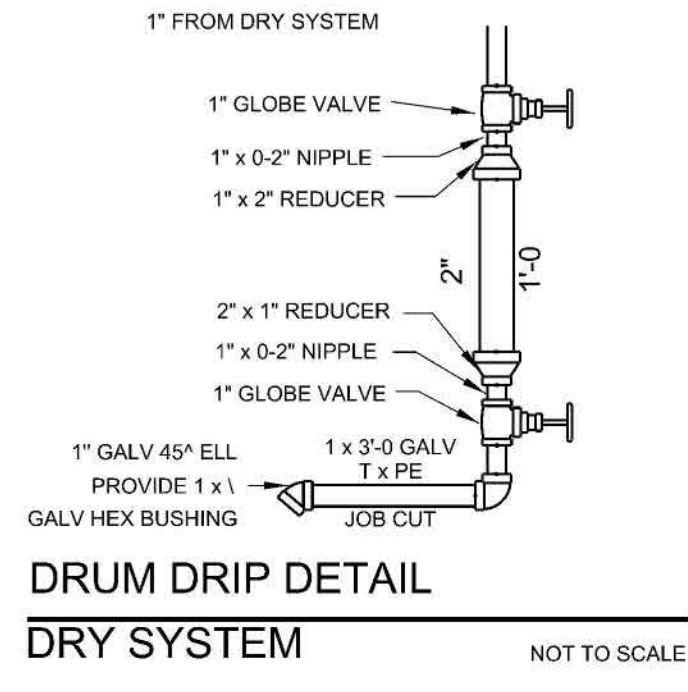
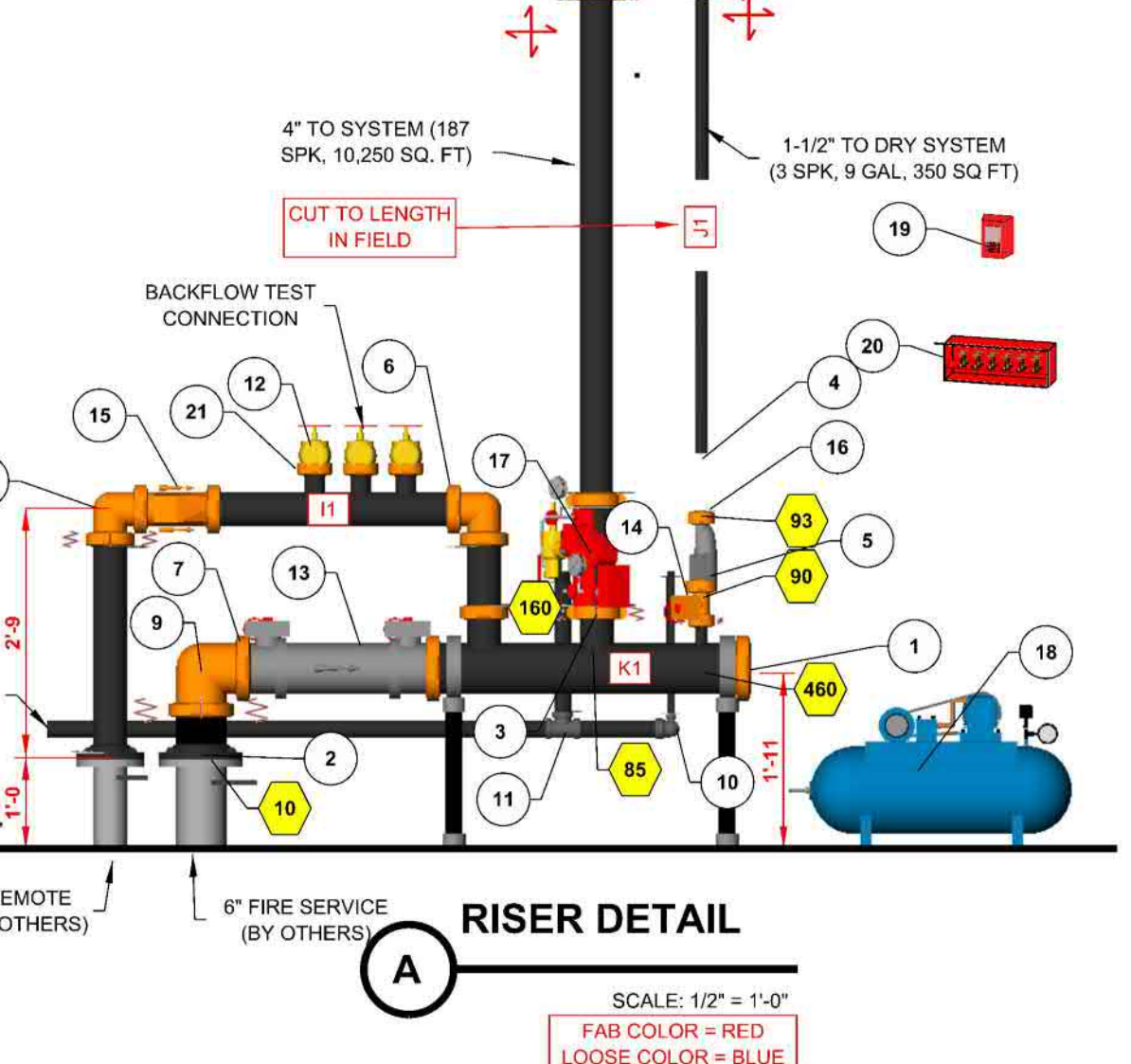


- FLEXIBLE COUPLINGS SHALL BE INSTALLED AS FOLLOWS:
- (1) WITHIN 24" OF TOP AND BOTTOM OF ALL RISERS
- (a) FLEXIBLE COUPLINGS MAY BE OMITTED ON RISERS LESS THAN 3'-0" IN LENGTH
- (b) ONLY ONE FLEXIBLE COUPLING ON RISERS 3'-0" TO 7'-0" IN LENGTH
- (2) WITHIN 12" ABOVE AND WITHIN 24" BELOW THE FLOOR IN MULTISTORY BUILDINGS
- (a) RISERS UP TO 7'-0" IN LENGTH TERMINATING ABOVE A ROOF ASSEMBLY OR TOP LANDING MAY OMIT FLEXIBLE COUPLING ABOVE LANDING OR ROOF
- (3) ON BOTH SIDES OF CONCRETE OR MASONRY WALLS WITHIN 1'-0" OF THE WALL SURFACE, UNLESS CLEARANCE IS PROVIDED
- (4) WITHIN 2'-0" OF BUILDING EXPANSION JOINTS (MORE FLEXIBILITY IS REQUIRED FOR SEISMIC JOINTS)
- (5) WITHIN 24" OF THE TOP OF DROPS EXCEEDING 15'-0" IN LENGTH TO PORTIONS OF SYSTEMS SUPPLYING MORE THAN ONE SPRINKLER, REGARDLESS OF PIPE SIZE
- (6) WITHIN 24" ABOVE AND 24" BELOW ANY INTERMEDIATE POINTS OF SUPPORT FOR A RISER OR OTHER VERTICAL PIPE
- SEISMIC BRANCH LINE RESTRAINT (CIP=0.58):
- 1" PIPE = 28'-0" MAX SPACING
- 1-1/2" PIPE = 32'-0" MAX SPACING
- SEISMIC BRACE SPACING:
- SB-1 = 24'-0" MAX SPACING
- SB-2 = 55'-0" MAX SPACING
- SB-3 = 35'-0" MAX SPACING
- SB-4 = 75'-0" MAX SPACING
- SB-5 = 80'-0" MAX SPACING
- SB-6 = 40'-0" MAX SPACING
- SB-7 = 80'-0" MAX SPACING
- SB-8 = 30'-0" MAX SPACING
- SEISMIC KEY:
- LATERAL BRACE
- LONGITUDINAL BRACE
- BRANCH LINE RESTRAINT
- 4-WAY BRACE

SEISMIC DETAILS



Key Note	Size	Description	Quantity
1	6	Grooved Cap, DI, Org	1
2	6	No. 741, F-Grooved Flange, DI, Blk, E Gasket	1
3	4	Flexible Coupling, Org, E Gasket	3
4	1 1/2	Rigid Coupling, Org, E Gasket	1
5	2	Rigid Coupling, Org, E Gasket	1
6	4	Rigid Coupling, Org, E Gasket	2
7	6	Rigid Coupling, Org, E Gasket	4
8	4	Grooved Short Radius, 90° Elbow, DI, Org	2
9	6	Grooved Short Radius, 90° Elbow, DI, Org	1
10	2 x 1	Threaded, 90° Reducing Elbow, DI	1
11	2	Threaded Straight Tee, DI	1
12	2 1/2	Hose Valve T-G	3
13	6	Derlinger 30, Backflow, DCDA, Butterfly, G-G, GPM Meter	1
14	1 1/2	Butterball Valve, T-T	1
15	4	716, Spring Check Valve, G-G	1
16	1 1/2	76IN NKT, Dry Pipe Valve, G-G	1
17	4	Victaulic UM (Flow Switch, gauge, pressure relief, test & drain)	1
18	N/A	TANK MOUNTED AIR COMPRESSOR - TMAC1	1
19	N/A	Horn and Strobe	1
20	N/A	Spare head cabinet	1
21	2 1/2	Rigid Coupling, Org, E Gasket	3



REV.	DATE	DESCRIPTION	ADJ.	INITIAL
1	09/20/25	RELEASED FOR FAB		
2		REVISION		
3				
4				

CUSTOMER NAME: FIRE STATION #43

ADDRESS: 1525 AVE D

CITY, STATE: SNOHOMISH, WA 98290

SYSTEM TYPE: NFPA 13 FIRE SPRINKLER SYSTEM

DWG TYPE: SUBMITTALS

SHEET DESCRIPTION: SITE PLAN AND DETAILS

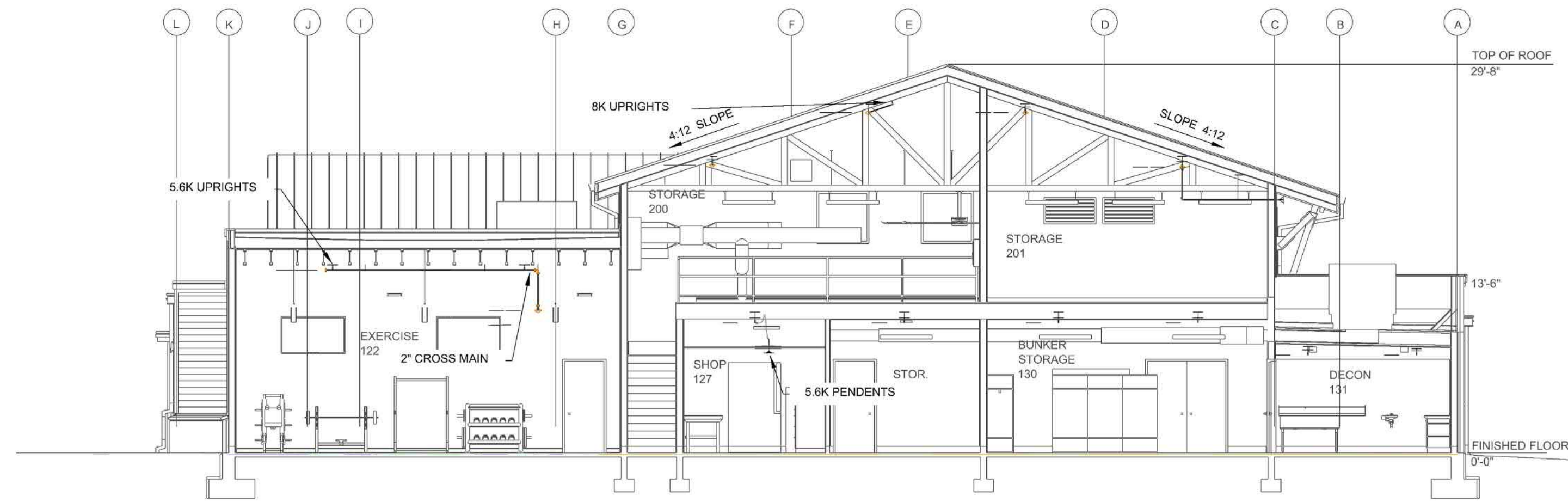
DRAWN BY: YPH

DATE: 11/6/25

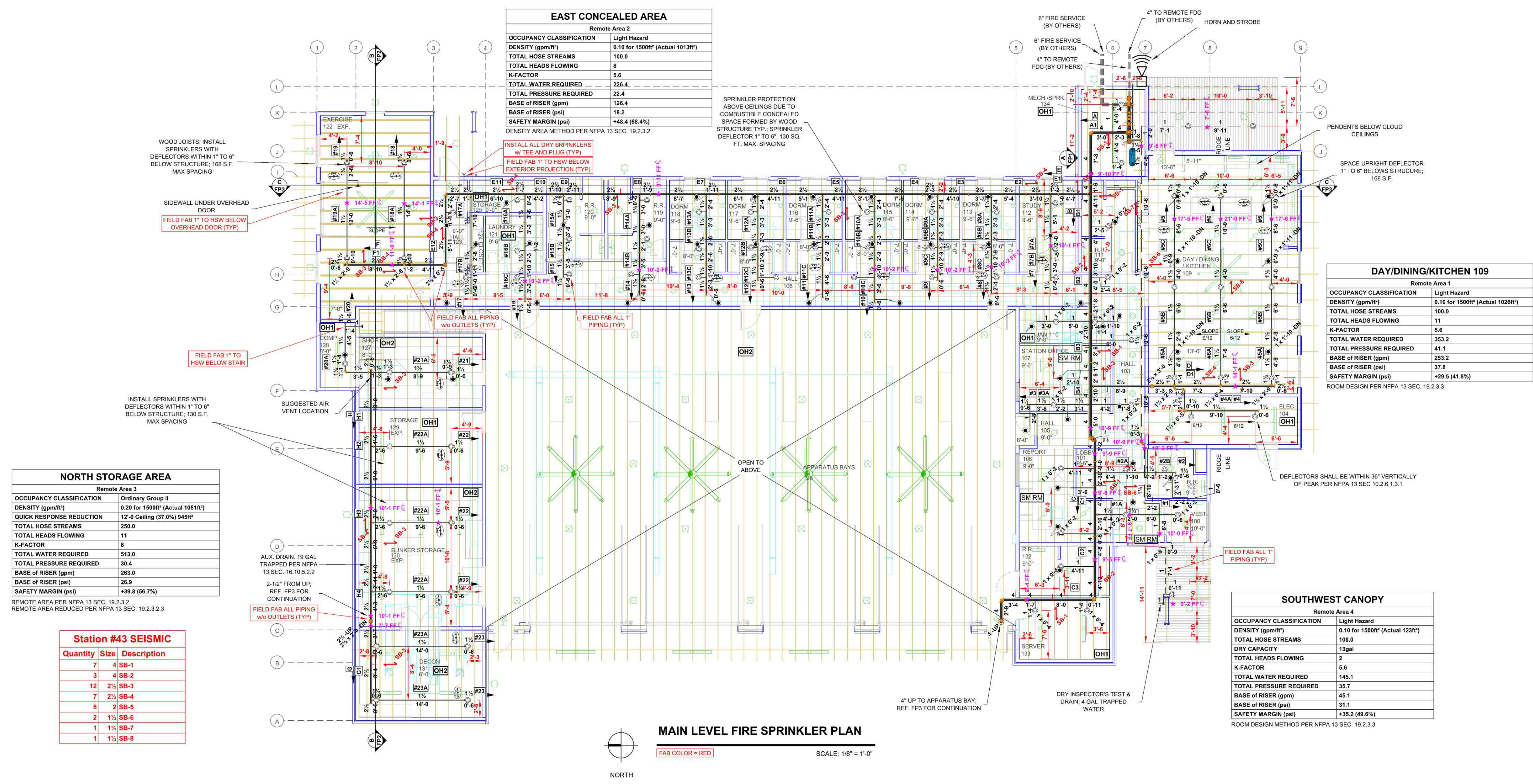
SCALE: AS SHOWN

11/14/25

FP1



BUILDING SECTION
SCALE: 1/8" = 1'-0"

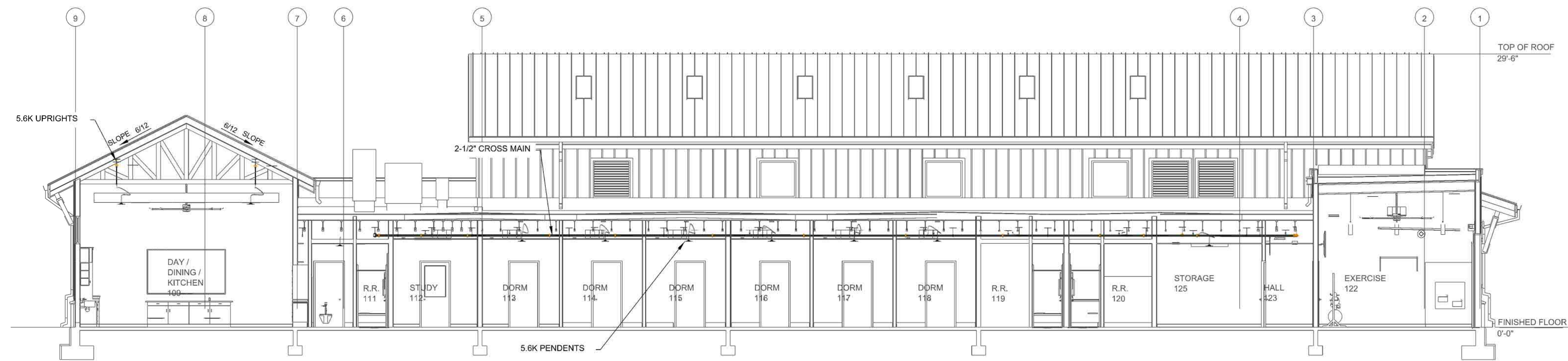


MAIN LEVEL FIRE SPRINKLER PLAN

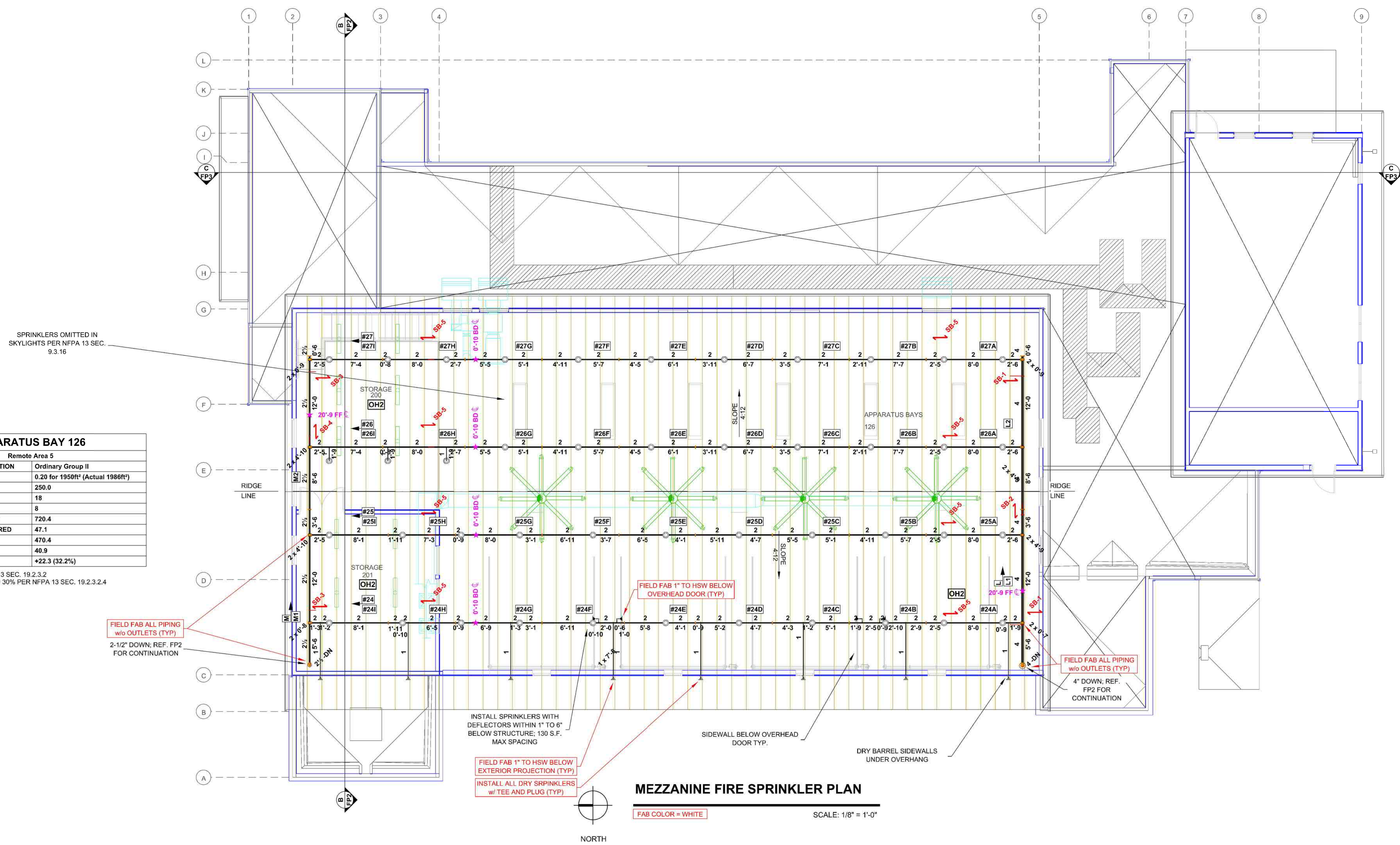
SCALE: 1/8" = 1'-0"

Sprinkler Legend										
Symbol	Manufacturer	SIN	Model	Quantity	K-Factor	Type	Size	Response	Finish	Temp
	Vitac	V2708	FL-QR	50	5.6	Pendent	1/2"	Quick	Chrome	200°F
	Vitac	V2704	FL-QR	67	5.6	Upright	1/2"	Quick	Brass	200°F
	Vitac	V3402	FL-QR	57	5.6	Upright	1/2"	Quick	Chrome	200°F
	Vitac	V2710	FL-QR/SW	7	5.6	Horizontal Sidewall	1/2"	Quick	Chrome	200°F
	Vitac	V3610	FL-QR/DRY/SW	9	5.6	Horizontal Sidewall	1"	Quick	Chrome	200°F
				Total = 190						

4	3	2	1	0	ADK	INITIAL
RELEASED FOR FAB						REVISION
9/2/20	DATE					
CUSTOMER NAME: FIRE STATION #43						
ADDRESS: 1525 AVE D						
CITY, STATE: SNOHOMISH, WA 98290						
SYSTEM TYPE: NFPA 13 FIRE SPRINKLER SYSTEM						
DWG TYPE: SUBMITTALS						
SHEET DESCRIPTION: MAIN LEVEL SPRINKLER PLANS						
DRAWN BY: YPH		CHECKED BY: NO		DATE: 11/6/22		
JOB NO:		SCALE: AS SHOWN		FLOT DATE: 11/14/25		
DWG NO:		SHEET OF: 3				
FP2						



C BUILDING SECTION
SCALE: 1/8" = 1'-0"



APPARATUS BAY 126	
Remote Area 5	
OCCUPANCY CLASSIFICATION	Ordinary Group II
DENSITY (gpm/ft²)	0.20 for 1950R (Actual 1989R)
TOTAL HOSE STREAMS	250.0
TOTAL HEADS FLOWING	18
K-FACTOR	8
TOTAL WATER REQUIRED	720.4
TOTAL PRESSURE REQUIRED	47.1
BASE OF RISER (gpm)	470.4
BASE OF RISER (psi)	40.8
SAFETY MARGIN (psi)	+22.3 (32.2%)
REMOTE AREA PER NFPA 13 SEC. 19.2.3.2	
REMOTE AREA INCREASED 30% PER NFPA 13 SEC. 19.2.3.2.4	

Sprinkler Legend											
Symbol	Manufacturer	SIN	Model	Quantity	K-Factor	Type	Size	Response	Finish	Temp	Escutcheons
●	Victaulic	V2708	FL-QR	50	5.6	Pendent	3/4"	Quick	Chrome	200°F	Recessed
○	Victaulic	V2704	FL-QR	67	5.6	Upright	3/4"	Quick	Chrome	200°F	Spring
○	Victaulic	V3402	FL-QR	57	8	Upright	3/4"	Quick	Chrome	200°F	Spring
○	Victaulic	V2710	FL-QR/SW	7	5.6	Horizontal Sidewall	3/4"	Quick	Chrome	200°F	N/A
○	Victaulic	V3610	FL-QR/DRY/SW	9	5.6	Horizontal Sidewall	1"	Quick	Chrome	200°F	N/A
				Total = 190							

CUSTOMER NAME	FIRE STATION #43
ADDRESS	1525 AVE D
CITY, STATE	SNOHOMISH, WA 98290
SYSTEM TYPE	NFPA 13 FIRE SPRINKLER SYSTEM
DWG TYPE	SUBMITTALS
SHEET DESCRIPTION	MAIN LEVEL SPRINKLER PLANS
DRAWN BY	VPN
DATE	11/6/25
SCALE	AS SHOWN
PLT DATE	11/14/25