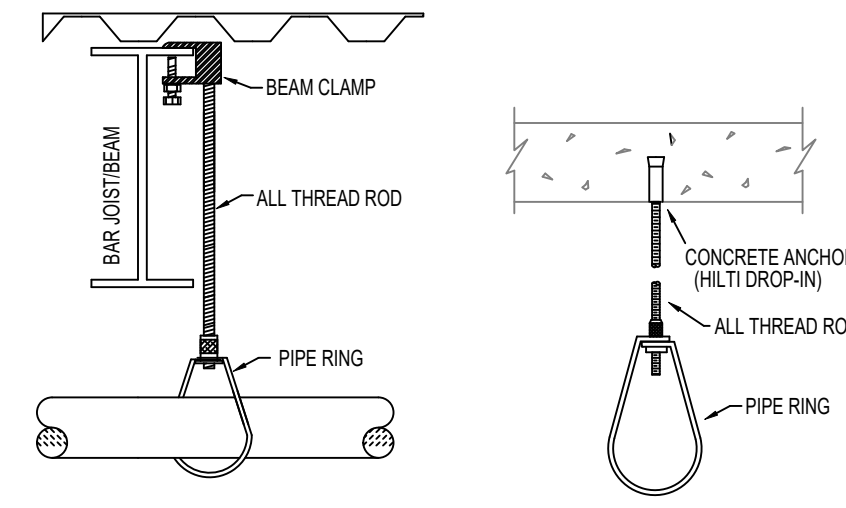


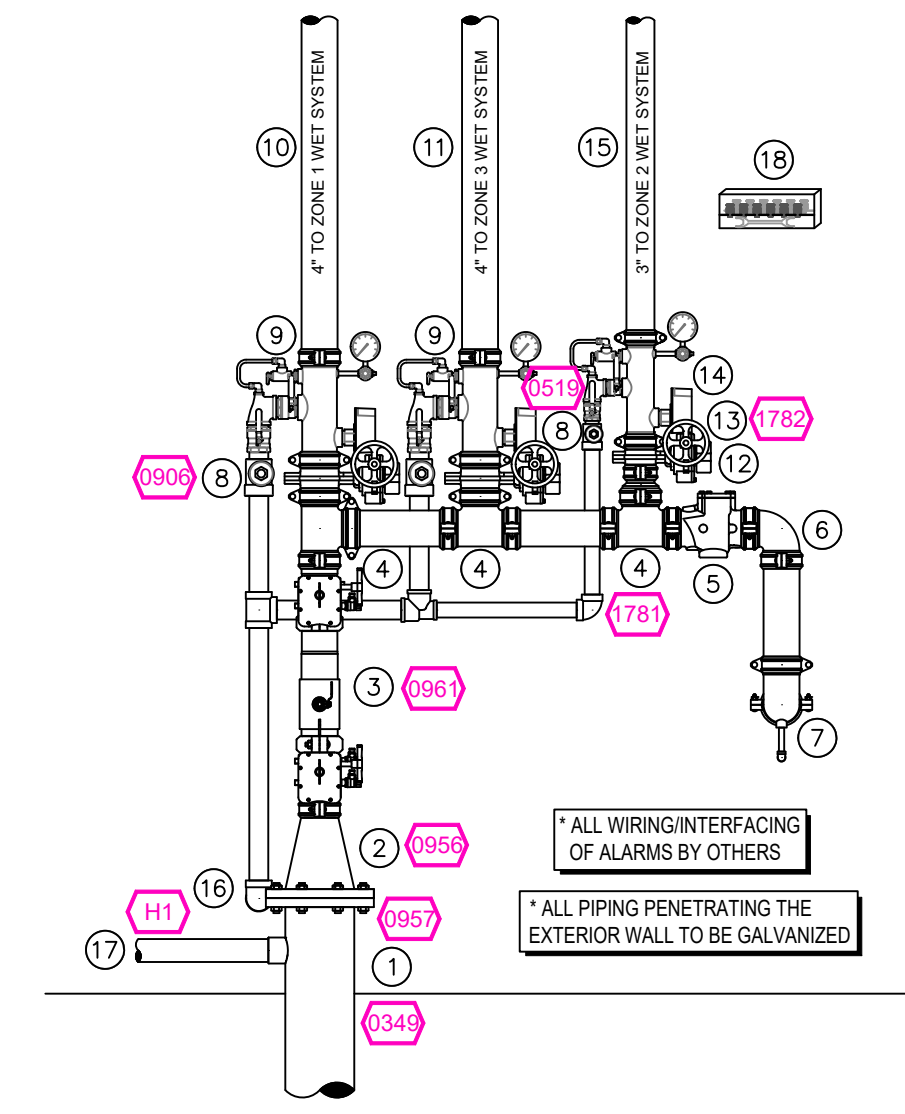
GENERAL NOTES

1. MINNESOTA BUILDING CODE (2020)
  - 1.1. OCCUPANCY: GROUP (E) EDUCATIONAL
  - 1.2. TYPE OF CONSTRUCTION: IIB
  - 1.3. SPRINKLERED AREAS (APPROXIMATE - SEE ARCHITECTURAL PLANS FOR ACTUAL)
    - ZONE 1 AUDITORIUM = 33,415 S.F.
    - ZONE 2 GYM & WRESTLING = 32,083 S.F.
    - ZONE 3 1ST FLOOR = 28,922 S.F.
    - ZONE 3 2ND FLOOR = 27,454 S.F.
    - TOTAL = 121,877 S.F.
- 1.4. INSTALLATION STANDARDS: SPRINKLER SYSTEM DESIGNED AND INSTALLED PER NFPA-13 (2016)
2. SPRINKLER PIPE TYPES:
  - 2.1. 1" BRANCH LINES TO BE BLK SCHEDULE 40 PIPING WITH THREADED FITTINGS
  - 2.2. 1-1/2" THROUGH 2" BRANCH LINES TO BE BLK MEGA-FLOW PIPING WITH GROOVED FITTINGS
  - 2.3. 2-1/2" THROUGH 4" MAIN & BRANCH LINES TO BE BLK MEGA-FLOW PIPING WITH GROOVED FITTINGS
3. DESIGN CRITERIA
  - 3.1. OFFICES, CORRIDORS, LOBBYS, AND SIMILAR AREAS DESIGNED TO LIGHT HAZARD
  - 3.2. MECH ROOMS, STORAGE ROOMS, AND SIMILAR AREAS DESIGNED TO ORDINARY HAZARD GROUP 1
  - 3.3. SCIENCE ROOMS, STAGE, AND WRESTLING AREAS DESIGNED TO ORDINARY HAZARD GROUP 2
- NOTES:
  - 3.4. ALL MATERIAL TO BE NEW AND MEET U.L. STANDARDS
  - 3.5. HANGERS TO BE INSTALLED IN ACCORDANCE WITH NFPA-13 (2016) - SEE PLAN FOR HANGING REQUIREMENTS
4. SYMBOLS USED ON DRAWINGS:
  - 10' PIPE ELEVATION A.F.F
  - 12' PIPE ELEVATION BELOW B.O.D
  - ROOM HAZARD CLASSIFICATION (ALL ROOMS ARE CONSIDERED LIGHT HAZARD UNLESS NOTED)
  - HYDRAULIC CALCULATION JUNCTION POINT
  - CEILING HEIGHT
5. SCOPE OF WORK:
  - 5.1. TO INSTALL A NEW WET SPRINKLER SYSTEM THAT WILL CONSIST OF 3 ZONES. ZONE 1 WILL COVER THE AUDITORIUM WING, ZONE 2 WILL COVER THE GYM & CLASSROOM WING, AND ZONE 3 WILL COVER THE 2-STORY CLASSROOM WING.
  - 5.2. FDC WILL BE LOCATED AT THE NORTH SIDE OF THE BUILDING, JUST OUTSIDE MECHANICAL 106.
  - 5.3. ALL AREAS OF THE BUILDING TO BE INSTALLED AND COVERED IN ACCORDANCE WITH THE LOCAL AUTHORITY HAVING JURISDICTION AND PER NFPA-13 (2016)



HANGER DETAILS

NFPA 13 STEEL PIPE HANGER SPACING	
(EXCEPT LIGHT WALL THRD PIPING)	
NOMINAL SIZE inches	MAX SPACING feet
1"	12'-0"
1-1/4"	12'-0"
1-1/2"	15'-0"
2"	15'-0"
2-1/2"	15'-0"
3"	15'-0"
4" & LARGER	15'-0"

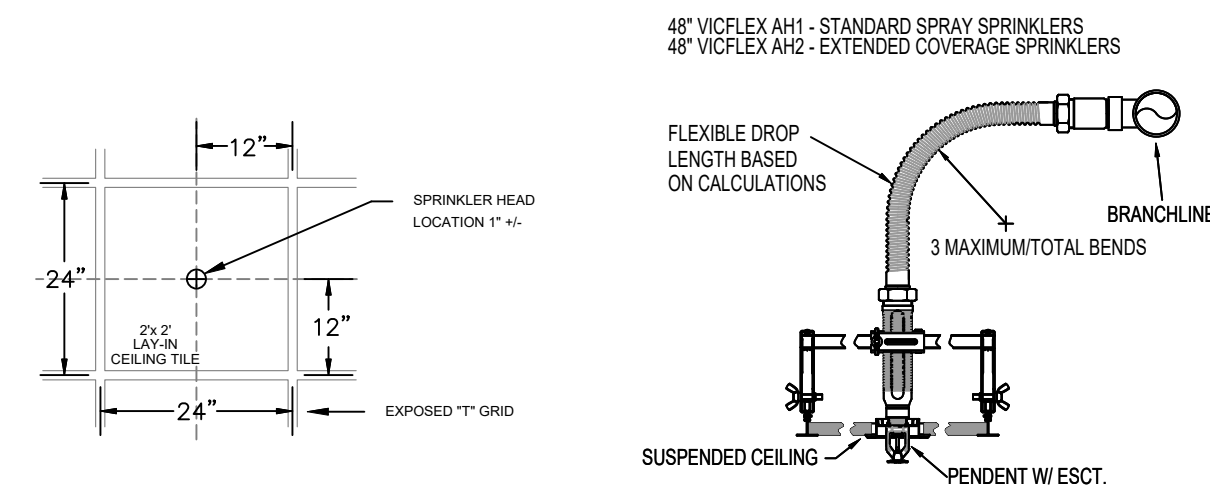


RISER LEGEND

1. 8" UNDERGROUND WATER SERVICE (BY OTHERS)
2. 4" AMES COLT C200 BACKFLOW GGG BFG W/ TAMPERS
3. 4" GRVD TEE
4. 4" GRVD TEE
5. 4" GRVD CHECK VALVE
6. 4" GRVD 90 ELBOW
7. 4" GRVD 90 W/ 1/2" BALL DRIP VALVE TO OUTSIDE (FDC)
8. 4" GRVD BUTTERFLY VALVE
9. 4" GRVD COMMERCIAL RISER MANIFOLD W/ FLOW SWITCH, PRESSURE GAUGE, & TEST AND DRAIN W/ PRV
10. 4" GRVD PIPE TO FEED ZONE 1 WET SYSTEM
11. 4" GRVD PIPE TO FEED ZONE 2 WET SYSTEM
12. 4"x3" GRVD CONCENTRIC REDUCER
13. 3" GRVD BUTTERFLY VALVE
14. 3" GRVD COMMERCIAL RISER MANIFOLD W/ FLOW SWITCH, PRESSURE GAUGE, & TEST AND DRAIN W/ PRV
15. 3" GRVD PIPE TO FEED ZONE 3 WET SYSTEM
16. 2" MAIN DRAIN PIPED TO OUTSIDE
17. 3" PIPE TO FEED DOMESTIC
18. EXTRA SPRINKLER HEADS W/ TOOLS

RISER DETAIL

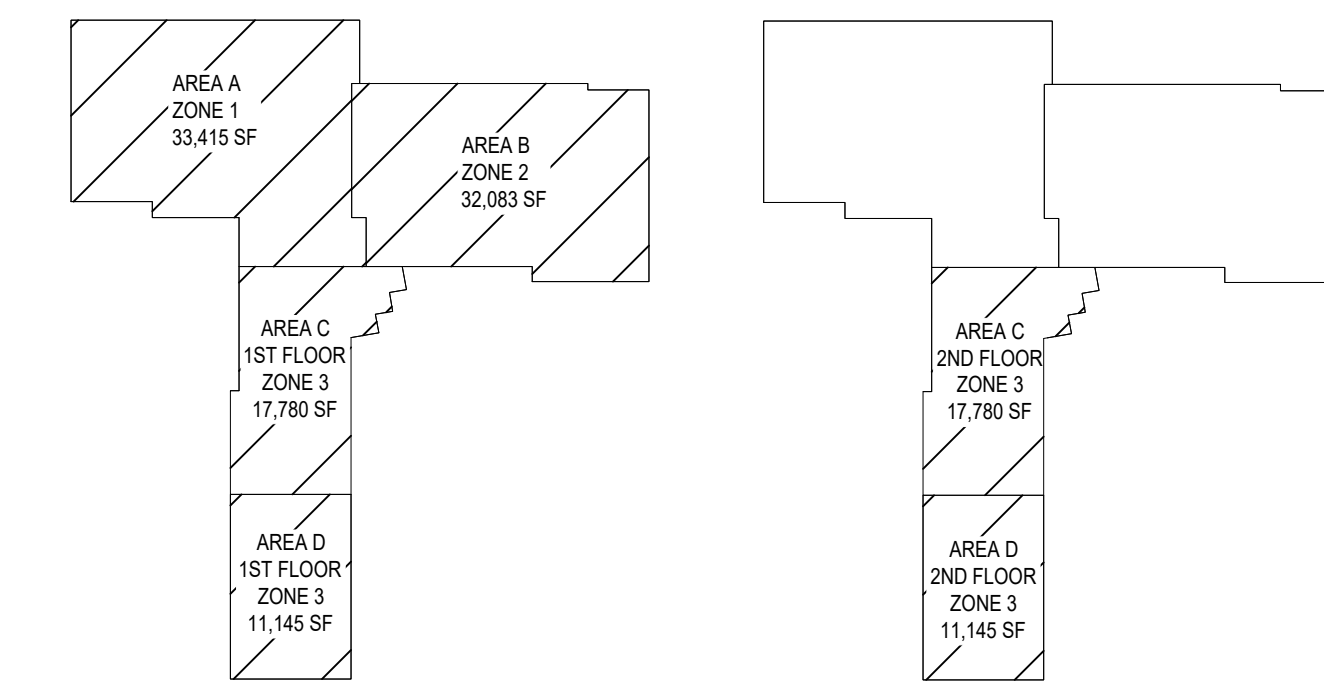
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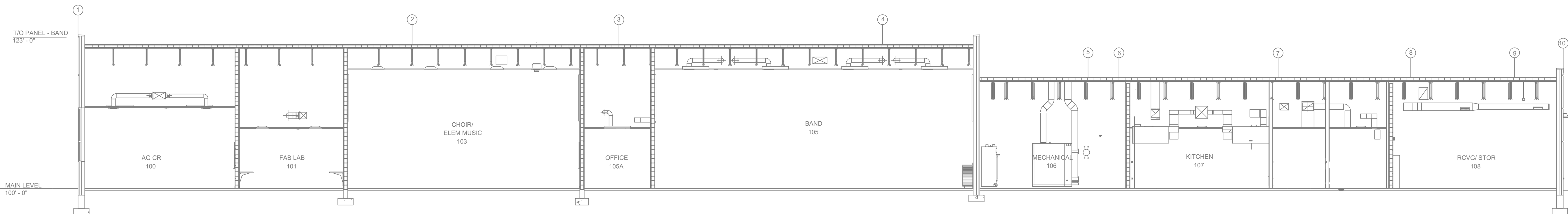
INSTALLATION DETAILS

SYM	QTY	POSITION	FINISH	TEMP	K	NPT	SN	MFG	MODEL#	ESCUTCHEON	MAX SPACING
287	1	PENDENT	WHITE	200	5.80	1/2"	TY3531	TYCO	RFI	CONCEALED	16X15 SQ. FT.
223	1	PENDENT	WHITE	212	11.20	3/4"	TY3522	TYCO	ELOC	CONCEALED	16X15 SQ. FT.
11	1	PENDENT	WHITE	212	5.80	1/2"	RA5994	RELIABLE	LTSOC	CONCEALED	28X19 SQ. FT.
248	1	UPRIGHT	BRASS	200	5.80	1/2"	TY3131	TYCO	TY-FRB	N/A	16X15 SQ. FT.
3	1	SIDEWALL	BRASS	200	5.80	1/2"	TY3331	TYCO	TY-FRB	STANDARD	16X15 SQ. FT.
12	1	PENDENT	WHITE	200	8.00	3/4"	TY4231	TYCO	TY-FRB	CONCEALED	130 SQ. FT.
3	1	DRY PENDENT	CHROME	200	5.80	1"	TY3235	TYCO	DS-1	STANDARD	16X15 SQ. FT.
12	1	PENDENT	WHITE	200	5.80	1/2"	TY3231	TYCO	TY-FRB	CONCEALED	130 SQ. FT.
5	1	UPRIGHT	BRASS	200	8.00	3/4"	TY4131	TYCO	TY-FRB	N/A	130 SQ. FT.
88	1	UPRIGHT	BRASS	200	8.00	3/4"	TY4131	TYCO	TY-FRB	N/A	130 SQ. FT.
65	1	HEAD CAGE									
2	1	H2O SHIELD									
898	1	TOTAL HEADS									

SPRINKLER HEAD LEGEND

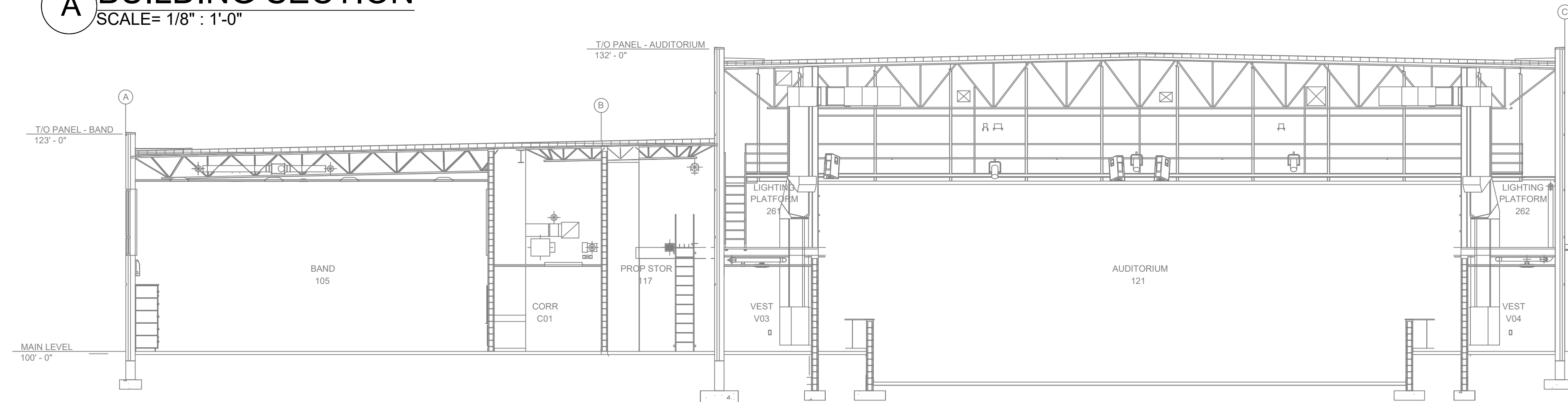


ZONE MAP



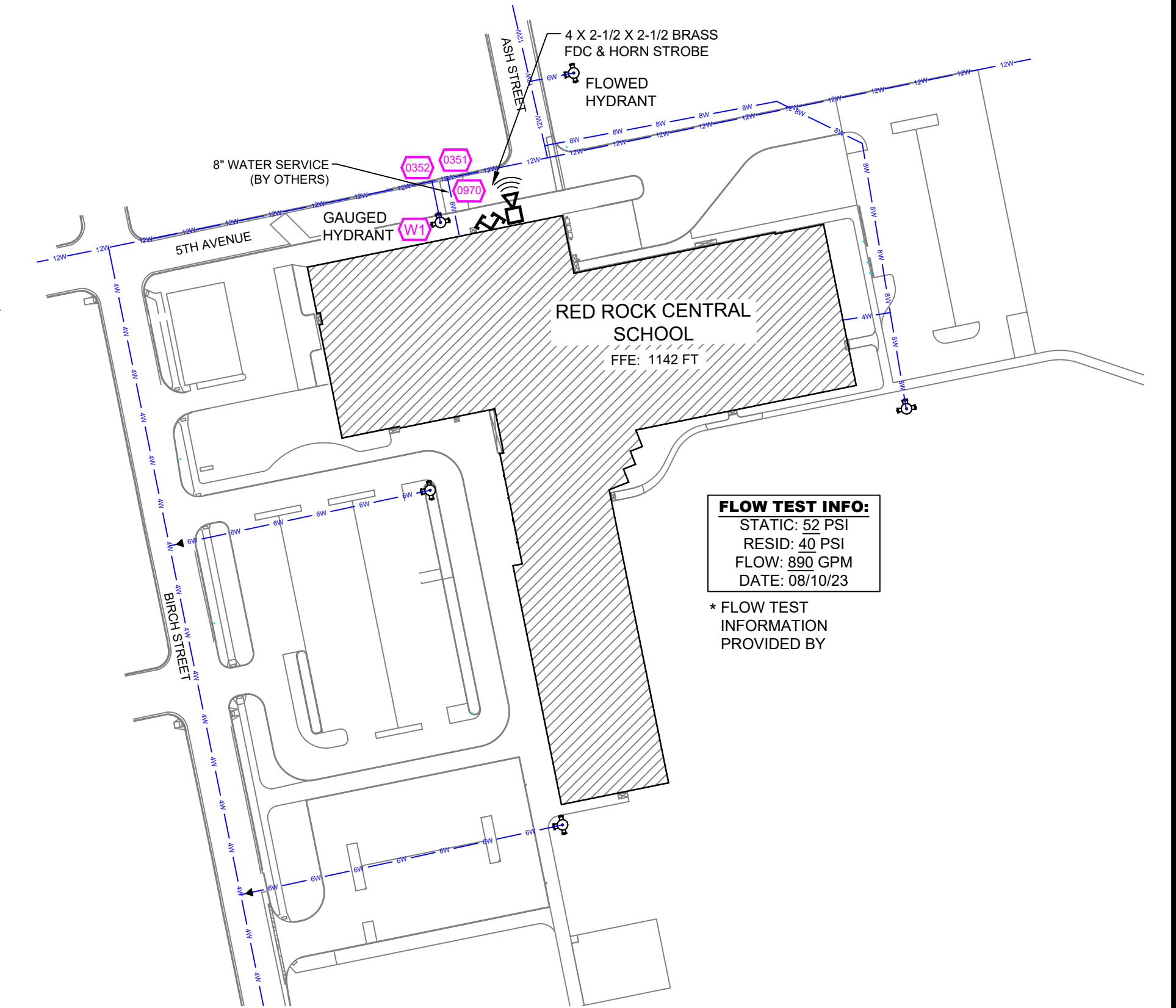
A BUILDING SECTION

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



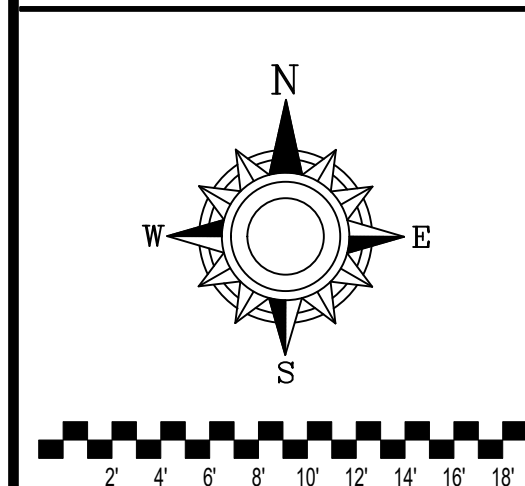
B BUILDING SECTION

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



SITE PLAN

SCALE: 1" = 100'



GENERAL NOTES

1. SYSTEM INSTALLED PER NFPA-13 (2016 EDITION) AND STATE FIRE MARSHAL
2. ALL EQUIPMENT FOR THIS SYSTEM SHALL BE U.L. LISTED
3. MINIMUM PIPE SIZE SHALL BE 1" NOMINAL PIPE
4. ALL SCH-10 & LIGHTWALL PIPING HAS WELDED OUTLETS & GROOVED SHORT RADIUS FITTINGS
5. ALL WELDING PER NFPA-54(2)
6. NO INSTALLATION OR FABRICATION TO BEGAIN WITHOUT APPROVED SHOP DRAWINGS
7. ALL PIPE LOCATIONS ARE TO BE FIELD MEASURED PRIOR TO FABRICATION AND INSTALLATION BY SPRINKLER CONTRACTOR
8. ALL DIMENSIONS SHOWN ARE CENTER TO CENTER
9. HIGH TEMPERATURE HEADS ARE TO BE FIELD LOCATED WHERE REQUIRED
10. PROVIDE ON SPINE HEAD CABINET W/ HEADS & HEAD WRENCH
11. HANGERS ARE TO BE U.L. LISTED AND I.M. APPROVED
12. ELECTRICAL WIRING, ALARM, DETECTION AND SUPERVISORY BY OWNER
13. OWNERS RESPONSIBILITY TO PROVIDE ADEQUATE HEATING TO PREVENT WET SYSTEM PIPING FROM FREEZING.

NO	REVISIONS	DATE	APPROVAL STAMPS

Drawing Title: FIRE PROTECTION PLAN

# RED ROCK CENTRAL PUBLIC SCHOOL

509 S. BIRCH STREET  
LAMBERTON, MN 56152

Contract No. C23-36  
Drawing Date: 1/24/2024  
Scale: 1/8" = 1'-0"  
Drawn By: MDK  
Approval By: STATE FIRE MARSHAL DIV.  
SHEET NO. FP 1 of 7



Design Area # 11 HAZARD:OH1  
 Zone: 1 System Type:WET  
 Location: FAB LAB 101

Flowing Outlets:10  
 Density: 0.15 Remote Area: 1054  
 Req'd @ Base of Riser  
 Flow 121.6 gpm @ 28.3 psi  
 Req'd @ Source  
 Flow 641.6 gpm @ 34.3 psi  
 Calculation Safety: 11.1 psi  
 Includes 250 gpm Hose allowance

NOTE: 1500cf NO REDUCTION DUE TO 20'-0" DECK HEIGHT PER NFPA 13 FIG. 11.2.3.2.3.1  
 INCLUDES 200 GPM DOMESTIC DEMAND

Design Area # 13 HAZARD:OH2  
 Zone: 1 System Type:WET  
 Location: WOOD SHOP 110

Flowing Outlets:14  
 Density: 0.20 Remote Area: 1519  
 Req'd @ Base of Riser  
 Flow 331.2 gpm @ 28.6 psi  
 Req'd @ Source  
 Flow 781.2 gpm @ 36.2 psi  
 Calculation Safety: 6.4 psi  
 Includes 250 gpm Hose allowance

NOTE: 1500cf NO REDUCTION DUE TO 20'-0" DECK HEIGHT PER NFPA 13 FIG. 11.2.3.2.3.1  
 INCLUDES 200 GPM DOMESTIC DEMAND

Design Area # 14 HAZARD:LH  
 Zone: 1 System Type:WET  
 Location: CORR C02

Flowing Outlets:5  
 Density: 0.10 Remote Area: 758  
 Req'd @ Base of Riser  
 Flow 167.5 gpm @ 27.8 psi  
 Req'd @ Source  
 Flow 467.5 gpm @ 33.7 psi  
 Calculation Safety: 14.7 psi  
 Includes 100 gpm Hose allowance

NOTE: 5 SPRINKLER CORRIDOR CALCULATED PER NFPA 13 SEC. 11.2.3.3.6  
 INCLUDES 200 GPM DOMESTIC DEMAND

Design Area # 16 HAZARD:OH2  
 Zone: 1 System Type:WET  
 Location: AUDITORIUM 121

Flowing Outlets:16  
 Density: 0.20 Remote Area: 1593  
 Req'd @ Base of Riser  
 Flow 337.6 gpm @ 28.5 psi  
 Req'd @ Source  
 Flow 787.6 gpm @ 36.3 psi  
 Calculation Safety: 6.1 psi  
 Includes 250 gpm Hose allowance

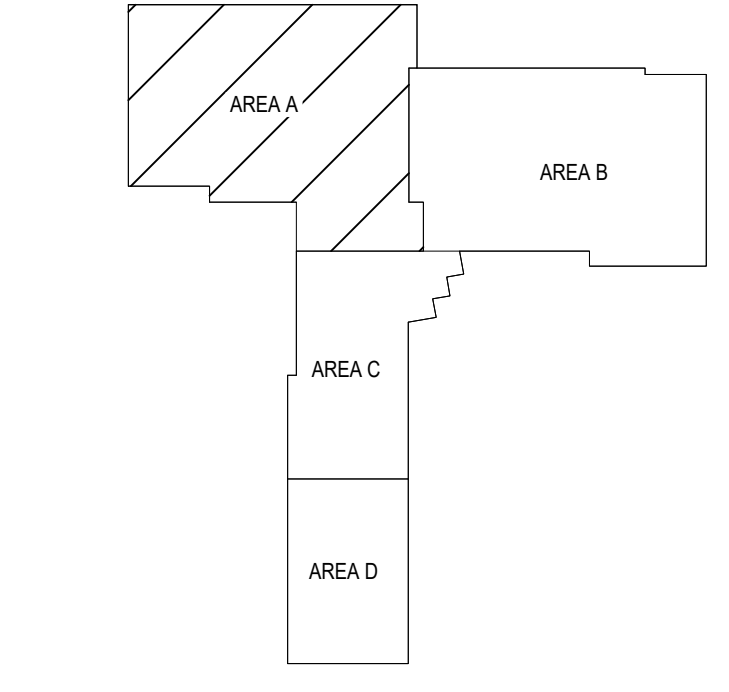
NOTE: 1500cf NO REDUCTION DUE TO 24' CLOUD CEILING HEIGHT PER NFPA 13 FIG. 11.2.3.2.3.1  
 INCLUDES 200 GPM DOMESTIC DEMAND

Design Area # 17 HAZARD:LH  
 Zone: 1 System Type:WET  
 Location: LOBBY C03

Flowing Outlets:7  
 Density: 0.10 Remote Area: 1644  
 Req'd @ Base of Riser  
 Flow 233.7 gpm @ 34.5 psi  
 Req'd @ Source  
 Flow 533.7 gpm @ 40.7 psi  
 Calculation Safety: 6.7 psi  
 Includes 100 gpm Hose allowance

NOTE: 1500cf NO REDUCTION DUE TO 24' CLOUD CEILING HEIGHT PER NFPA 13 FIG. 11.2.3.2.3.1  
 INCLUDES 200 GPM DOMESTIC DEMAND

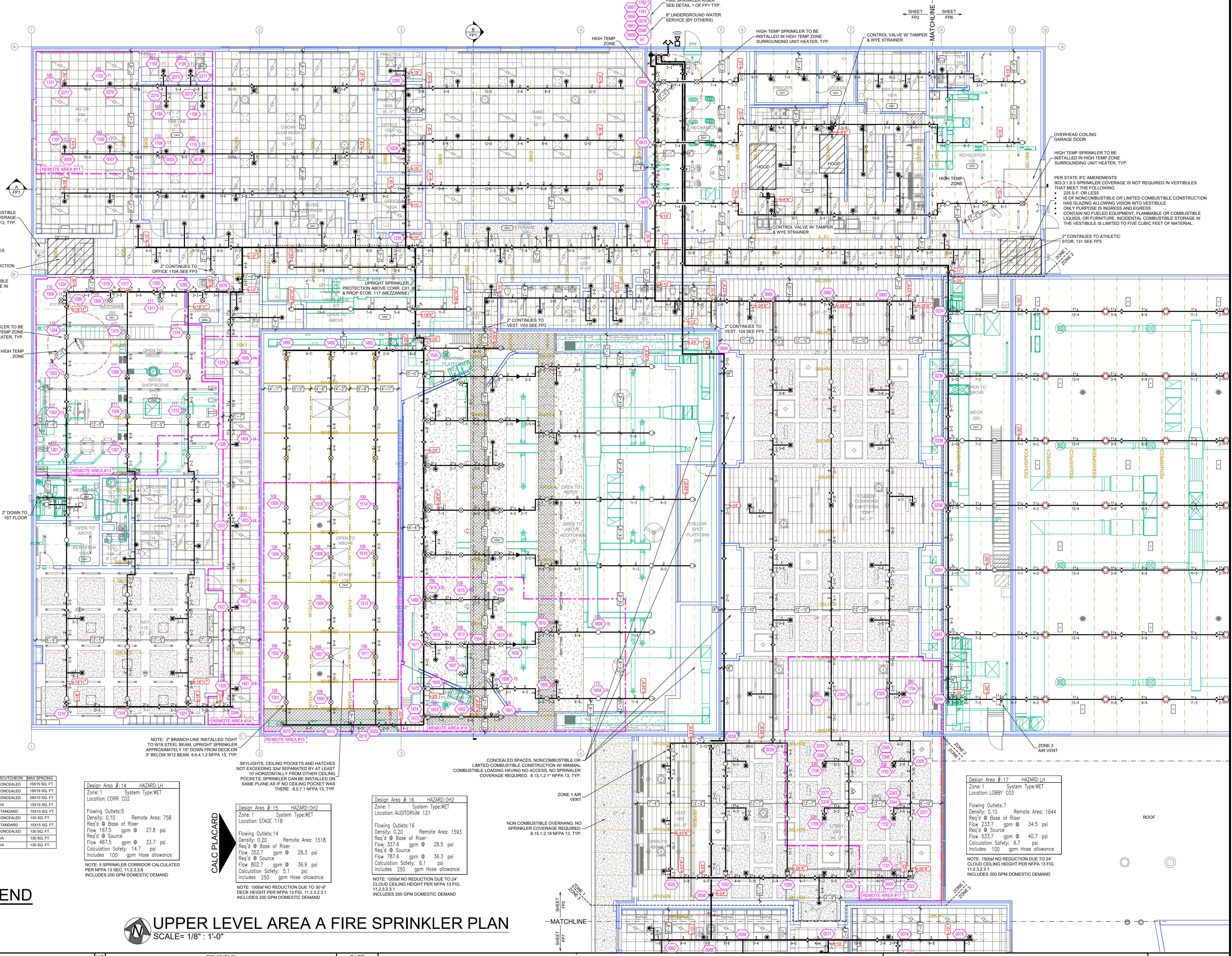
**KEY PLAN**



SYM	QTY	POSITION	FINISH	TEMP	K	NPT	SN	MFG.	MODEL#	ESCUTCHEON	MAX SPACING
207	PENDENT	WHITE	200	5.60	1/2"	TY3331	TYCO	FRB	CONCEALED	15X15 SQ. FT.	
223	PENDENT	WHITE	212	11.20	3/4"	TY5522	TYCO	ELOC	CONCEALED	18X18 SQ. FT.	
11	PENDENT	WHITE	212	8.00	1/2"	RA9894	RELIABLE	LT96C	CONCEALED	28X18 SQ. FT.	
249	UPRIGHT	BRASS	200	5.60	1/2"	TY3131	TYCO	TY-FRB	N/A	15X15 SQ. FT.	
3	BIWALL	BRASS	200	5.60	1/2"	TY3331	TYCO	TY-FRB	STANDARD	15X15 SQ. FT.	
13	PENDENT	WHITE	200	8.00	3/4"	TY4231	TYCO	TY-FRB	CONCEALED	130 SQ. FT.	
3	DRY PENDENT	CHROME	200	5.60	1"	TY3235	TYCO	DS-1	STANDARD	15X15 SQ. FT.	
12	PENDENT	WHITE	200	5.60	1/2"	TY3231	TYCO	TY-FRB	CONCEALED	130 SQ. FT.	
5	UPRIGHT	BRASS	200	8.00	3/4"	TY4131	TYCO	TY-FRB	N/A	130 SQ. FT.	
88	UPRIGHT	BRASS	200	8.00	3/4"	TY4131	TYCO	TY-FRB	N/A	130 SQ. FT.	
95	HEAD CAGE										
2	H2O SHIELD										
896	TOTAL HEADS										

**SPRINKLER HEAD LEGEND**

**UPPER LEVEL AREA A FIRE SPRINKLER PLAN**  
 SCALE= 1/8" = 1'-0"



GENERAL NOTES

- SYSTEM INSTALLED PER NFPA 13 (2016 EDITION) AND STATE FIRE MARSHAL
- ALL EQUIPMENT FOR THIS SYSTEM SHALL BE U.L. LISTED
- MINIMUM PIPE SIZE SHALL BE 1" NOMINAL PIPE
- ALL SCH-40 & LIGHTWALL PIPING HAS WELDED OUTLETS & GROOVED SHORT RADIUS FITTINGS
- ALL WELDING PER NFPA 514(2)
- NO INSTALLATION OR FABRICATION TO BEGIN WITHOUT APPROVED SHOP DRAWINGS
- ALL WIRE LOCATIONS ARE TO BE FIELD MEASURED PRIOR TO FABRICATION AND INSTALLATION BY SPRINKLER CONTRACTOR
- ALL DIMENSIONS SHOWN ARE CENTER TO CENTER
- HIGH TEMPERATURE HEADS ARE TO BE FIELD LOCATED WHERE REQUIRED
- PROVIDE ON SPRINKLER HEAD CABINET WITH HEADS & HEAD WRENCH
- MARKERS ARE TO BE U.L. LISTED AND I.M. APPROVED
- ELECTRICAL WIRING, ALARM, DETECTION AND SUPERVISORY BY OWNER
- OWNER'S RESPONSIBILITY TO PROVIDE ADEQUATE HEATING TO PREVENT WET SYSTEM PIPING FROM FREEZING.

NO	REVISIONS	DATE

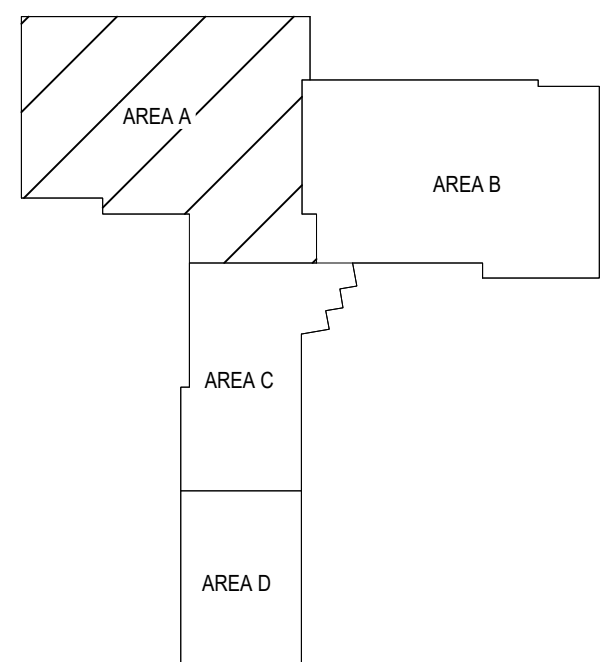
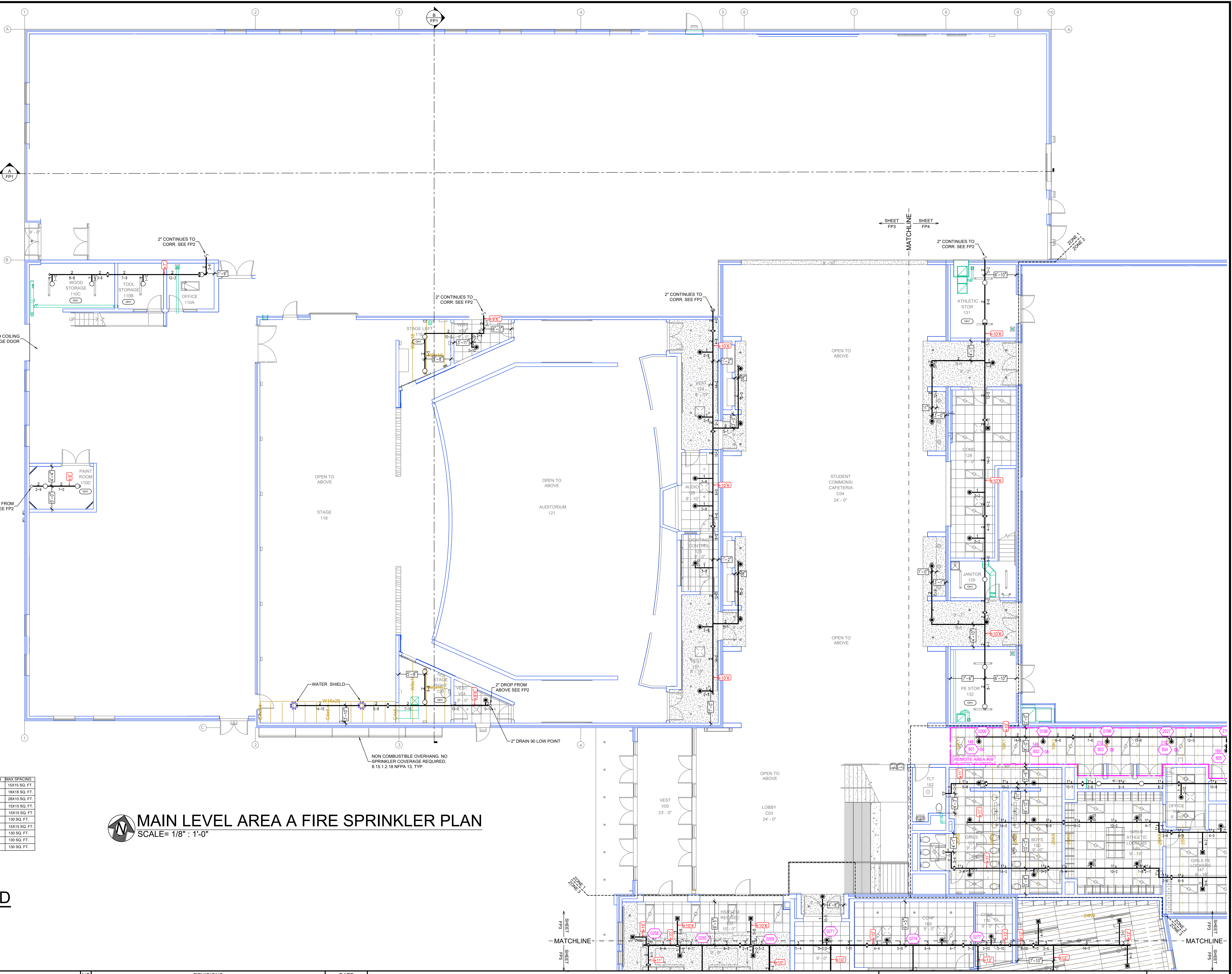
Drawing Title: FIRE PROTECTION PLAN

**RED ROCK CENTRAL PUBLIC SCHOOL**

509 S. BIRCH STREET  
 LAMBERTON, MN 56152

Contract No: C23-36  
 Drawing Date: 1/24/2024  
 Scale: 1/8" = 1'-0"  
 Drawn By: MDK  
 Approval By: STATE FIRE MARSHAL DIV.  
 SHEET NO: FP 2 of 7



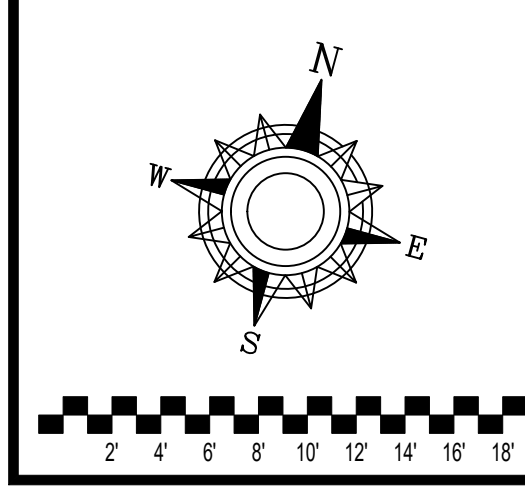


**KEY PLAN**

**MAIN LEVEL AREA A FIRE SPRINKLER PLAN**  
SCALE = 1/8" = 1'-0"

SYM	CNT	POSITION	FINISH	TEMP	K	NPT	SN	MPGL	MODEL#	ESCUTCHEON	MAX SPACING
●	227	PENDENT	WHITE	200	5.60	1/2"	TY3231	TYCO	RFB	CONCEALED	15X15 SQ. FT.
●	223	PENDENT	WHITE	212	11.20	3/4"	TY5223	TYCO	ELCC	CONCEALED	18X18 SQ. FT.
▲	11	PENDENT	WHITE	212	5.60	1/2"	RA5994	RELIABLE	LT96C	CONCEALED	28X10 SQ. FT.
○	249	UPRIGHT	BRASS	200	5.60	1/2"	TY3131	TYCO	TY-FRB	N/A	15X15 SQ. FT.
◁	3	SIDEWALL	BRASS	200	5.60	1/2"	TY3331	TYCO	STANDARD	CONCEALED	15X15 SQ. FT.
●	12	PENDENT	WHITE	200	8.00	3/4"	TY4231	TYCO	TY-FRB	CONCEALED	130 SQ. FT.
●	13	DRY PENDENT	CHROME	200	5.60	1"	TY3230	TYCO	DS-1	STANDARD	15X15 SQ. FT.
●	12	PENDENT	WHITE	200	5.60	1/2"	TY3231	TYCO	TY-FRB	CONCEALED	130 SQ. FT.
●	5	UPRIGHT	BRASS	200	8.00	3/4"	TY4131	TYCO	TY-FRB	N/A	130 SQ. FT.
●	88	UPRIGHT	BRASS	200	8.00	3/4"	TY4131	TYCO	TY-FRB	N/A	130 SQ. FT.
□	95	HEAD CAGE									
○	2	H2O SHIELD									
●	896	TOTAL HEADS									

**SPRINKLER HEAD LEGEND**



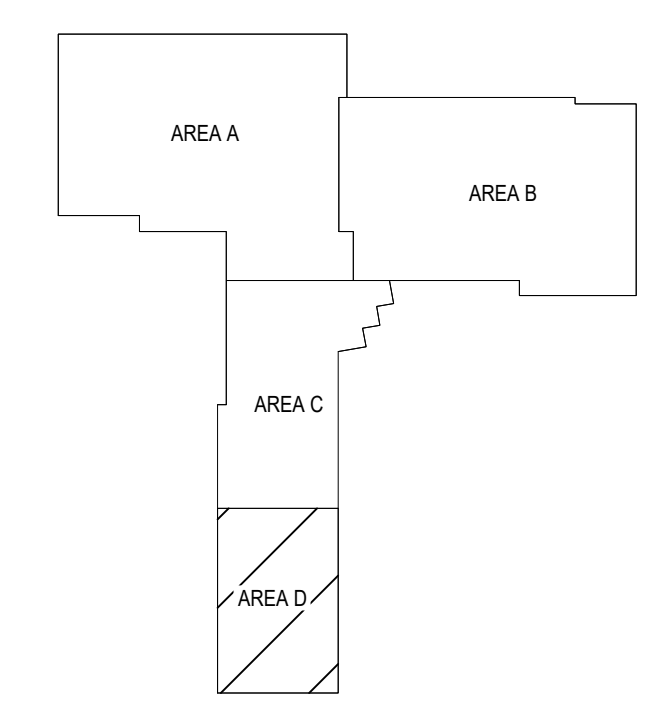
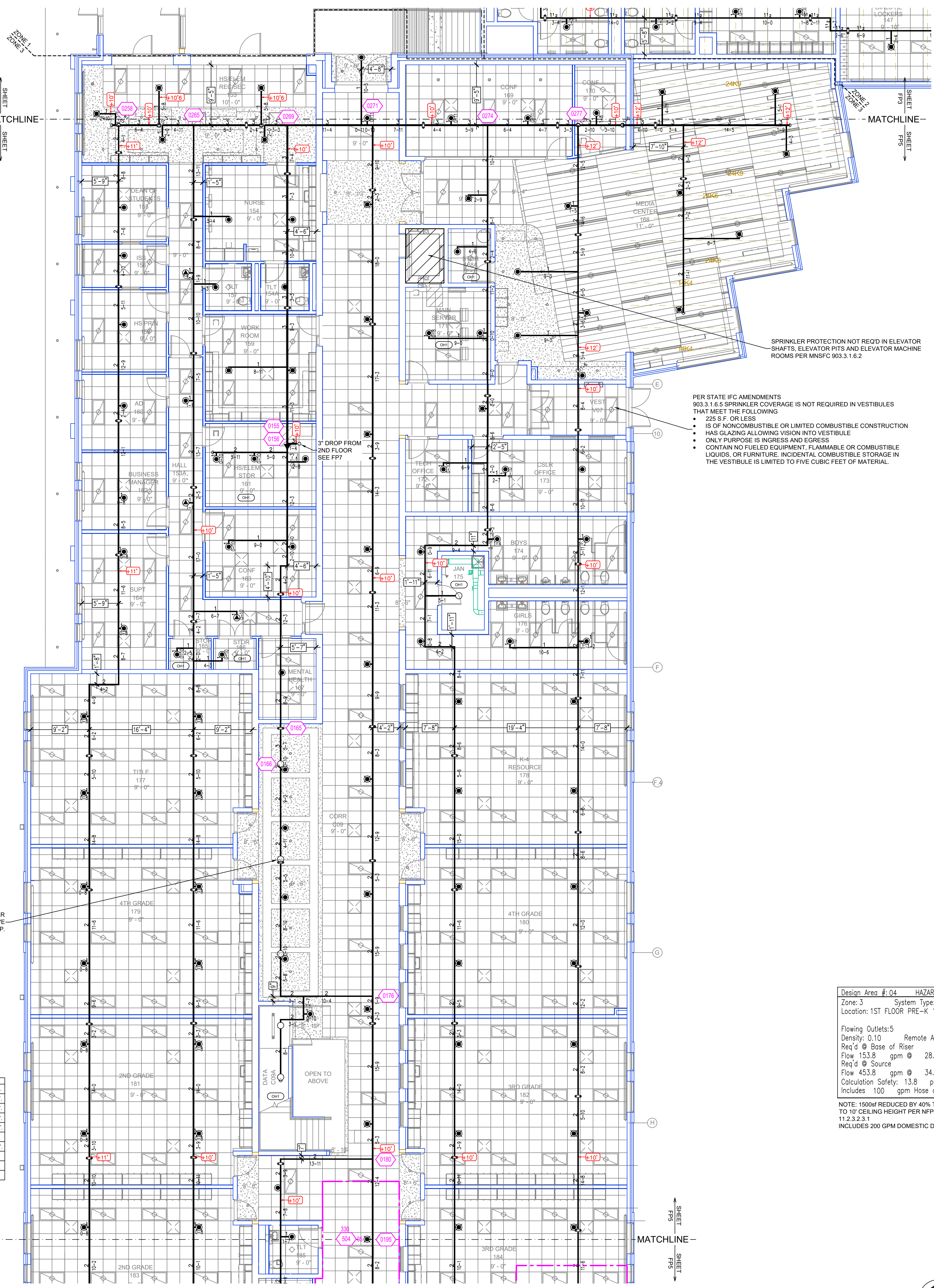
- GENERAL NOTES**
1. SYSTEM INSTALLED PER NFPA-13 (2016 EDITION) AND STATE FIRE MARSHAL
  2. ALL EQUIPMENT FOR THIS SYSTEM SHALL BE U.L. LISTED
  3. MINIMUM PIPE SIZE SHALL BE 1" NOMINAL PIPE
  4. ALL SCH-40 & LIGHTWALL PIPING HAS WELDED OUTLETS & GROOVED SHORT RADIUS FITTINGS
  5. ALL WELDING PER NFPA-514(2)
  6. NO INSTALLATION OR FABRICATION TO BEGIN WITHOUT APPROVED SHOP DRAWINGS
  7. ALL PIPE LOCATIONS ARE TO BE FIELD MEASURED PRIOR TO FABRICATION AND INSTALLATION BY SPRINKLER CONTRACTOR
  8. ALL DIMENSIONS SHOWN ARE CENTER TO CENTER
  9. HIGH TEMPERATURE HEADS ARE TO BE FIELD LOCATED WHERE REQUIRED
  10. PROVIDE ON SPARE HEAD CABINET W/ HEADS & HEAD WRENCH
  11. HANGERS ARE TO BE U.L. LISTED AND I.M. APPROVED
  12. ELECTRICAL WIRING, ALARM, DETECTION AND SUPERVISORY BY OWNER
  13. OWNER'S RESPONSIBILITY TO PROVIDE ADEQUATE HEATING TO PREVENT WET SYSTEM PIPING FROM FREEZING.

NO	REVISIONS	DATE

Contract No. **C23-36**  
 Drawing Date: 1/24/2024  
 Scale: 1/8" = 1'-0"  
 Drawn By: MDK  
 Approval By: STATE FIRE MARSHAL DIV.  
 SHEET NO. **FP 3 of 7**

**RED ROCK CENTRAL PUBLIC SCHOOL**  
 509 S. BIRCH STREET  
 LAMBERTON, MN 56152





Design Area #: 05 HAZARD: LH  
 Zone: 3 System Type: WET  
 Location: 1ST FLOOR CORR C09

Flowing Outlets: 5  
 Density: 0.10 Remote Area: 980  
 Req'd @ Base of Riser  
 Flow 151.9 gpm @ 28.2 psi  
 Req'd @ Source  
 Flow 451.9 gpm @ 34.4 psi  
 Calculation Safety: 14.2 psi  
 Includes 100 gpm Hose allowance

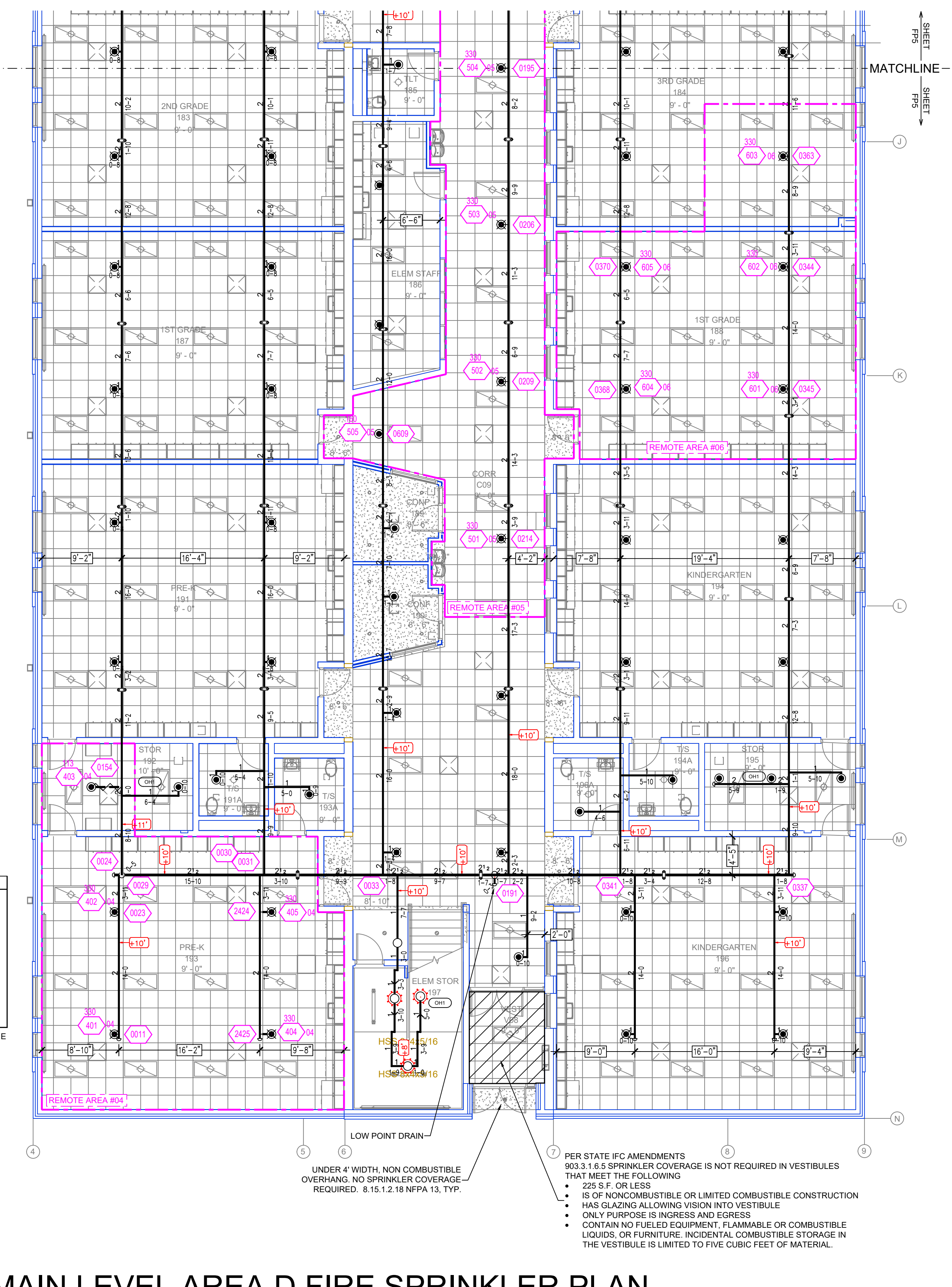
NOTE: 1500sf REDUCED BY 40% TO 900sf DUE TO 9' CEILING HEIGHT PER NFPA 13 FIG. 11.2.3.2.1  
 INCLUDES 200 GPM DOMESTIC DEMAND

Design Area #: 06 HAZARD: LH  
 Zone: 3 System Type: WET  
 Location: 1ST FLOOR 1ST GRADE 188

Flowing Outlets: 5  
 Density: 0.10 Remote Area: 1134  
 Req'd @ Base of Riser  
 Flow 167 gpm @ 30.3 psi  
 Req'd @ Source  
 Flow 467 gpm @ 36.2 psi  
 Calculation Safety: 12.1 psi  
 Includes 100 gpm Hose allowance

NOTE: 1500sf REDUCED BY 40% TO 900sf DUE TO 9' CEILING HEIGHT PER NFPA 13 FIG. 11.2.3.2.1  
 INCLUDES 200 GPM DOMESTIC DEMAND

**KEY PLAN**



Design Area #: 04 HAZARD: LH  
 Zone: 3 System Type: WET  
 Location: 1ST FLOOR PRE-K 193

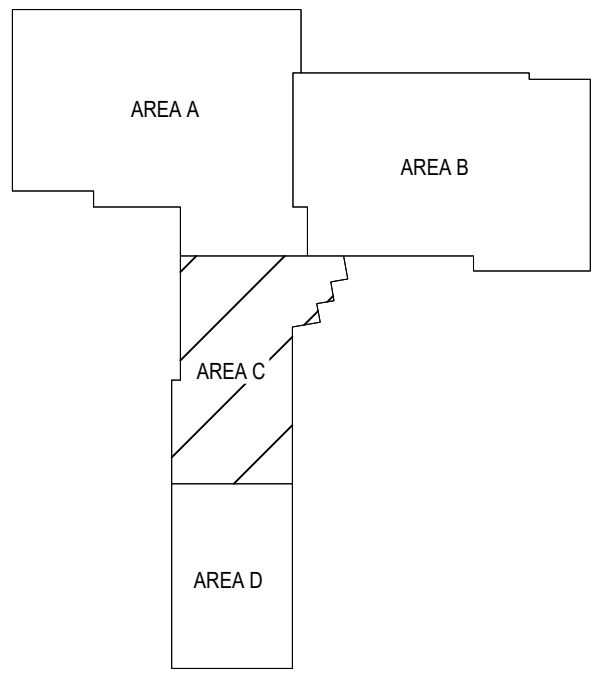
Flowing Outlets: 5  
 Density: 0.10 Remote Area: 1173  
 Req'd @ Base of Riser  
 Flow 153.8 gpm @ 28.6 psi  
 Req'd @ Source  
 Flow 453.8 gpm @ 34.8 psi  
 Calculation Safety: 13.8 psi  
 Includes 100 gpm Hose allowance

NOTE: 1500sf REDUCED BY 40% TO 900sf DUE TO 10' CEILING HEIGHT PER NFPA 13 FIG. 11.2.3.2.1  
 INCLUDES 200 GPM DOMESTIC DEMAND

PER STATE IFC AMENDMENTS 903.1.6.5 SPRINKLER COVERAGE IS NOT REQUIRED IN VESTIBULES THAT MEET THE FOLLOWING:

- 225 S.F. OR LESS
- IS OF NONCOMBUSTIBLE OR LIMITED COMBUSTIBLE CONSTRUCTION
- HAS GLAZING ALLOWING VISION INTO VESTIBULE
- ONLY PURPOSE IS INGRESS AND EGRESS
- CONTAIN NO FUELED EQUIPMENT, FLAMMABLE OR COMBUSTIBLE LIQUIDS, OR FURNITURE. INCIDENTAL COMBUSTIBLE STORAGE IN THE VESTIBULE IS LIMITED TO FIVE CUBIC FEET OF MATERIAL.

**KEY PLAN**



SYM	CNT	POSITION	FINISH	TEMP	K	RPT	SN	MFG	MODEL#	ESD/JECTION	MAX SPACING
187	PENDENT	WHITE	200	5.60	1/2"	TY3531	TYCO	FRB	CONCEALED	15X15 SQ. FT.	
223	PENDENT	WHITE	212	11.20	3/4"	TY5222	TYCO	ELOC	CONCEALED	18X18 SQ. FT.	
11	PENDENT	WHITE	212	5.60	1/2"	RA5994	RELIABLE	LT58C	CONCEALED	28X10 SQ. FT.	
249	UPRIGHT	BRASS	200	5.60	1/2"	TY3131	TYCO	TY-FRB	N/A	15X15 SQ. FT.	
1	SIDEWALL	BRASS	200	5.60	1/2"	TY3331	TYCO	TY-FRB	STANDARD	15X15 SQ. FT.	
12	PENDENT	WHITE	200	8.00	3/4"	TY4231	TYCO	TY-FRB	CONCEALED	130 SQ. FT.	
13	DRY PENDENT	CHROME	200	5.60	1"	TY2235	TYCO	DS-1	STANDARD	15X15 SQ. FT.	
12	PENDENT	WHITE	290	5.60	1/2"	TY3231	TYCO	TY-FRB	CONCEALED	130 SQ. FT.	
5	UPRIGHT	BRASS	286	8.00	3/4"	TY4131	TYCO	TY-FRB	N/A	130 SQ. FT.	
88	UPRIGHT	BRASS	200	8.00	3/4"	TY4131	TYCO	TY-FRB	N/A	130 SQ. FT.	
16	HEAD CAGE										
2	HSD SHIELD										
896	TOTAL HEADS										

**SPRINKLER HEAD LEGEND**

**MAIN LEVEL AREA C FIRE SPRINKLER PLAN**  
 SCALE= 1/8" = 1'-0"

**MAIN LEVEL AREA D FIRE SPRINKLER PLAN**  
 SCALE= 1/8" = 1'-0"

- GENERAL NOTES
1. SYSTEM INSTALLED PER NFPA-13 (2016 EDITION) AND STATE FIRE MARSHAL
  2. ALL EQUIPMENT FOR THIS SYSTEM SHALL BE U.L. LISTED
  3. MINIMUM PIPE SIZE SHALL BE 1" NOMINAL PIPE
  4. ALL SCH-40 & LIGHTWALL PIPING HAS WELDED OUTLETS & GROOVED SHORT RADIUS FITTINGS
  5. ALL WELDING PER NFPA-54(2)
  6. NO INSTALLATION OR FABRICATION TO BEGIN WITHOUT APPROVED SHOP DRAWINGS
  7. ALL PIPE LOCATIONS ARE TO BE FIELD MEASURED PRIOR TO FABRICATION AND INSTALLATION BY SPRINKLER CONTRACTOR
  8. ALL DIMENSIONS SHOWN ARE CENTER TO CENTER
  9. HIGH TEMPERATURE HEADS ARE TO BE FIELD LOCATED WHERE REQUIRED
  10. PROVIDE ON SPRINKLER HEAD CABINET WITH HEADS & HEAD WRENCH
  11. HANDERS ARE TO BE U.L. LISTED AND I.M. APPROVED
  12. ELECTRICAL WIRING, ALARM, DETECTION AND SUPERVISORY BY OWNER
  13. OWNER'S RESPONSIBILITY TO PROVIDE ADEQUATE HEATING TO PREVENT WET SYSTEM PIPING FROM FREEZING.

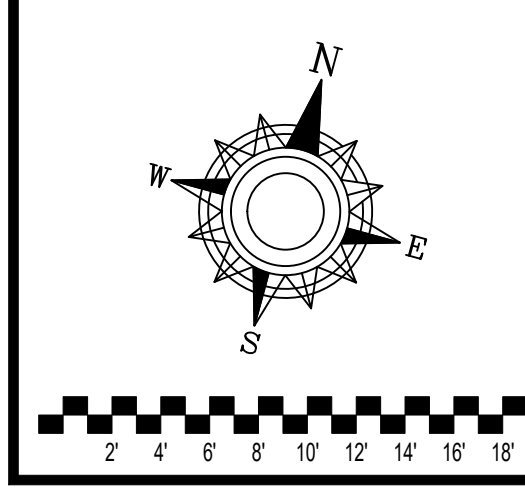
NO	REVISIONS	DATE

Drawing Title: FIRE PROTECTION PLAN

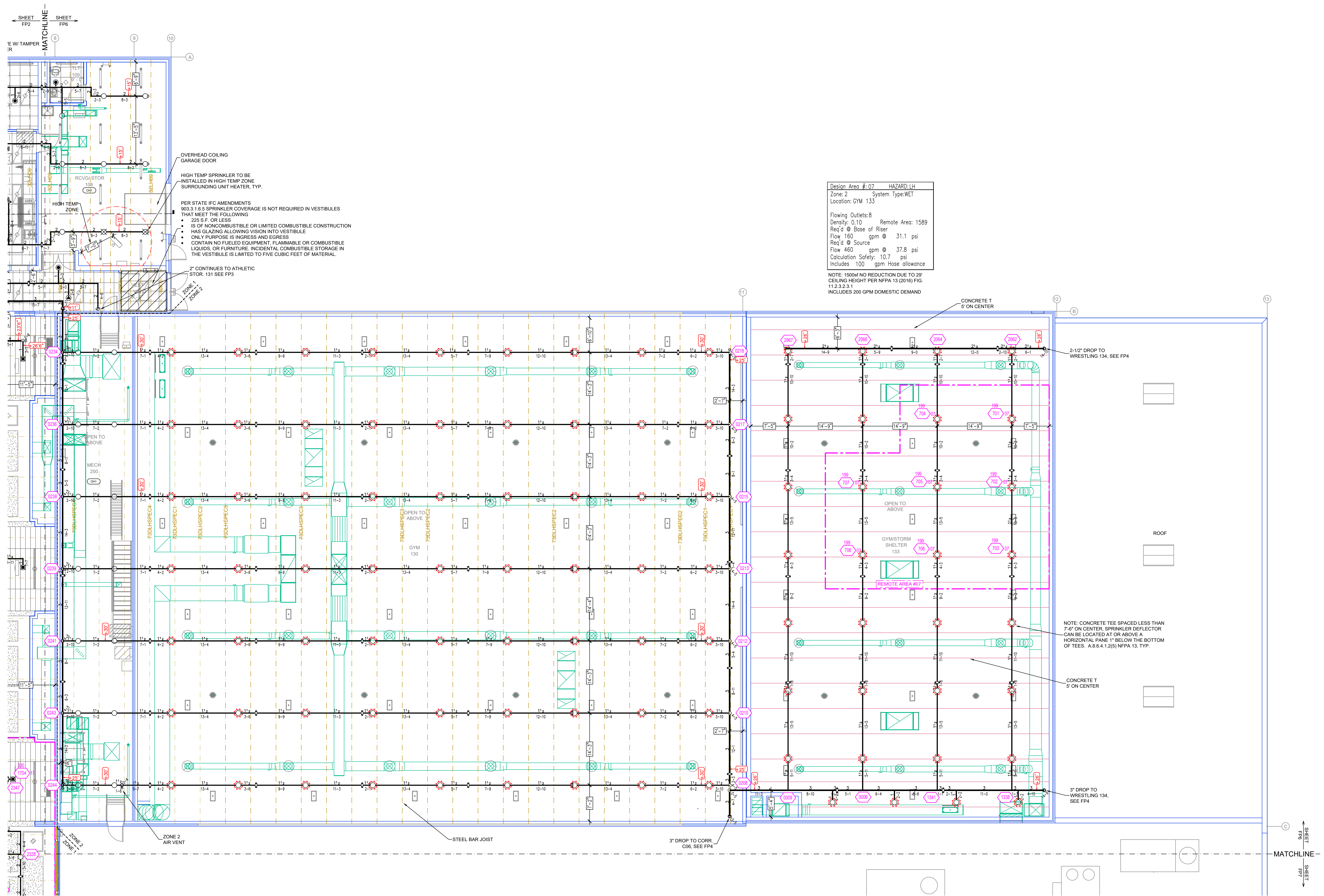
**RED ROCK CENTRAL PUBLIC SCHOOL**

509 S. BIRCH STREET  
 LAMBERTON, MN 56152

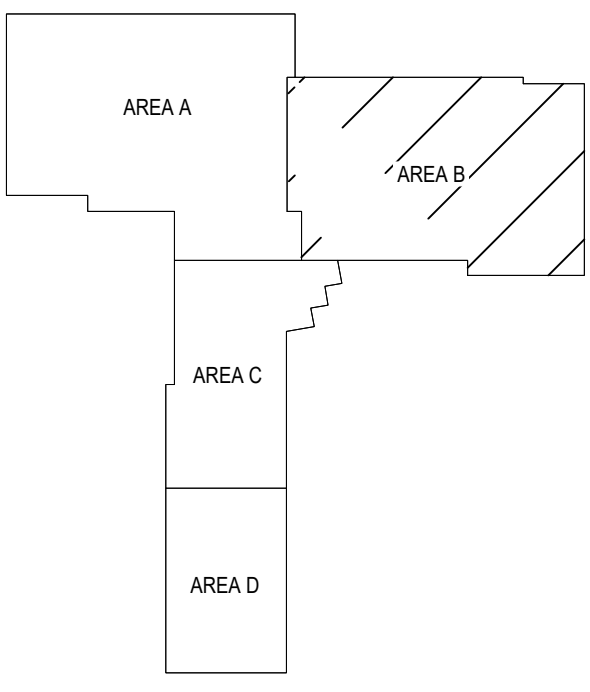
Contract No: **C23-36**  
 Drawing Date: 1/24/2024  
 Scale: 1/8" = 1'-0"  
 Drawn By: MDK  
 Approval By: STATE FIRE MARSHAL DIV.  
 SHEET NO: FP 5 of 7







Design Area #07 HAZARD: LH  
 Zone: 2 System Type: WET  
 Location: GYM 133  
 Flowing Outlets: 8  
 Density: 0.10 Remote Area: 1589  
 Req'd @ Base of Riser  
 Flow 160 gpm @ 31.1 psi  
 Req'd @ Source  
 Flow 460 gpm @ 37.8 psi  
 Calculation Safety: 10.7 psi  
 Includes 100 gpm Hose Allowance  
 NOTE: 1500cf NO REDUCTION DUE TO 28' CEILING HEIGHT PER NFPA 13 (2016) FIG. 11.2.2.2.1  
 INCLUDES 200 GPM DOMESTIC DEMAND



**KEY PLAN**

**UPPER LEVEL AREA B FIRE SPRINKLER PLAN**  
 SCALE = 1/8" = 1'-0"

SYMBOL	DESCRIPTION	FRSH	TEMP	TK	MP	SW	HRFC	MODEL#	ESCU/OTHER	MAX SPACING
●	287 PENDENT	WHITE	200	5.80	1/2"	TY3531	TYCO	RFL	CONCEALED	18X18 SQ. FT.
●	223 PENDENT	WHITE	212	11.20	3/4"	TY5522	TYCO	ELOC	CONCEALED	18X18 SQ. FT.
●	111 PENDENT	WHITE	212	5.80	1/2"	RA9894	RELIABLE	LT55C	CONCEALED	28X10 SQ. FT.
●	249 UPRIGHT	BRASS	200	5.80	1/2"	TY3131	TYCO	TY-FRB	N/A	15X15 SQ. FT.
●	3 SIDEWALL	BRASS	200	5.80	1/2"	TY3331	TYCO	TY-FRB	STANDARD	15X15 SQ. FT.
●	12 PENDENT	WHITE	200	8.00	3/4"	TY4231	TYCO	TY-FRB	CONCEALED	130 SQ. FT.
●	3 DRY PENDENT	CHROME	200	5.80	1"	TY3235	TYCO	DS-1	STANDARD	15X15 SQ. FT.
●	12 PENDENT	WHITE	286	5.80	1/2"	TY3231	TYCO	TY-FRB	CONCEALED	130 SQ. FT.
●	5 UPRIGHT	BRASS	286	8.00	3/4"	TY4131	TYCO	TY-FRB	N/A	130 SQ. FT.
●	88 UPRIGHT	BRASS	200	8.00	3/4"	TY4131	TYCO	TY-FRB	N/A	130 SQ. FT.
○	95 HEAD CAGE									
○	2 H2O SHIELD									
	898 TOTAL HEADS									

**SPRINKLER HEAD LEGEND**

- GENERAL NOTES
- SYSTEM INSTALLED PER NFPA-13 (2016 EDITION) AND STATE FIRE MARSHAL
  - ALL EQUIPMENT FOR THIS SYSTEM SHALL BE U.L. LISTED
  - MINIMUM PIPE SIZE SHALL BE 1" NOMINAL PIPE
  - ALL SCH-40 & LIGHTWALL PIPING HAS WELDED OUTLETS & GROOVED SHORT RADIUS FITTINGS
  - ALL WELDING PER NFPA-514(2)
  - NO INSTALLATION OR FABRICATION TO BEGIN WITHOUT APPROVED SHOP DRAWINGS
  - ALL PIPE LOCATIONS ARE TO BE FIELD MEASURED PRIOR TO FABRICATION AND INSTALLATION BY SPRINKLER CONTRACTOR
  - ALL DIMENSIONS SHOWN ARE CENTER TO CENTER
  - HIGH TEMPERATURE HEADS ARE TO BE FIELD LOCATED WHERE REQUIRED
  - PROVIDE ON SPRINKLER HEAD CABINET WITH HEADS & 1 HEAD WRENCH
  - HANGERS ARE TO BE U.L. LISTED AND I.M. APPROVED
  - ELECTRICAL WIRING, ALARM, DETECTION AND SUPERVISORY BY OWNER
  - OWNER'S RESPONSIBILITY TO PROVIDE ADEQUATE HEATING TO PREVENT WET SYSTEM PIPING FROM FREEZING.

NO.	REVISIONS	DATE

Contract No. **C23-36**  
 Drawing Title: **FIRE PROTECTION PLAN**  
**RED ROCK CENTRAL PUBLIC SCHOOL**  
 509 S. BIRCH STREET  
 LAMBERTON, MN 56152  
 Drawing Date: 1/24/2024  
 Scale: 1/8" = 1'-0"  
 Drawn By: MDK  
 Approval By: STATE FIRE MARSHAL DIV.  
 SHEET NO. **FP 6 of 7**