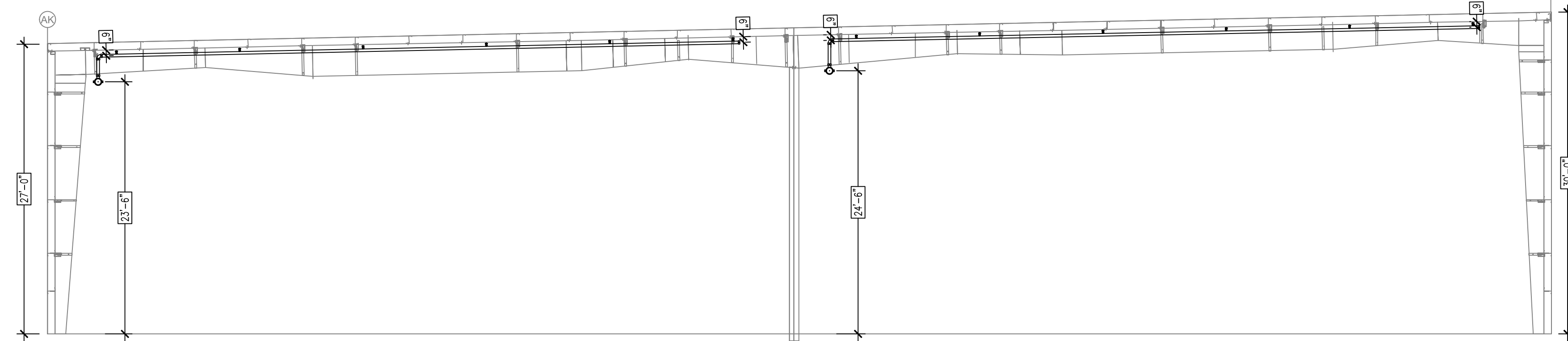


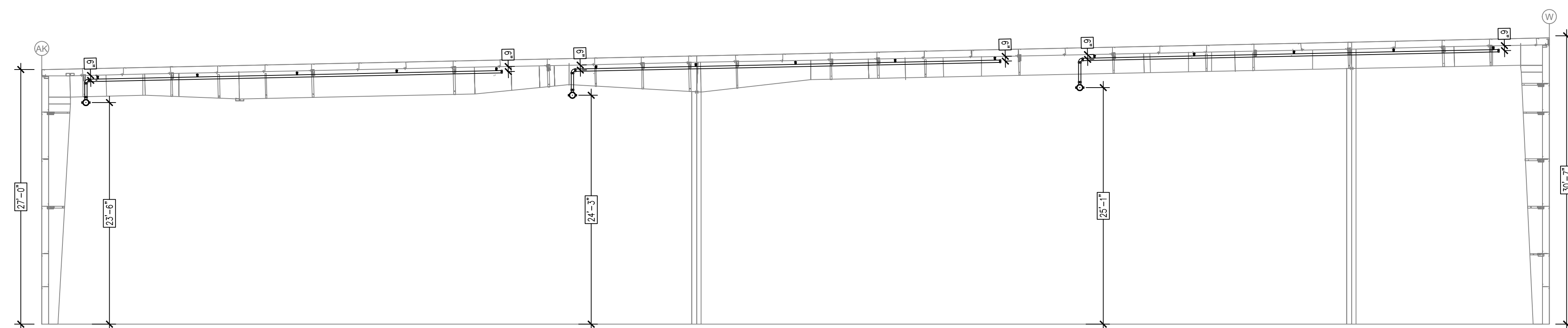
**BUILDING SECTION A**

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



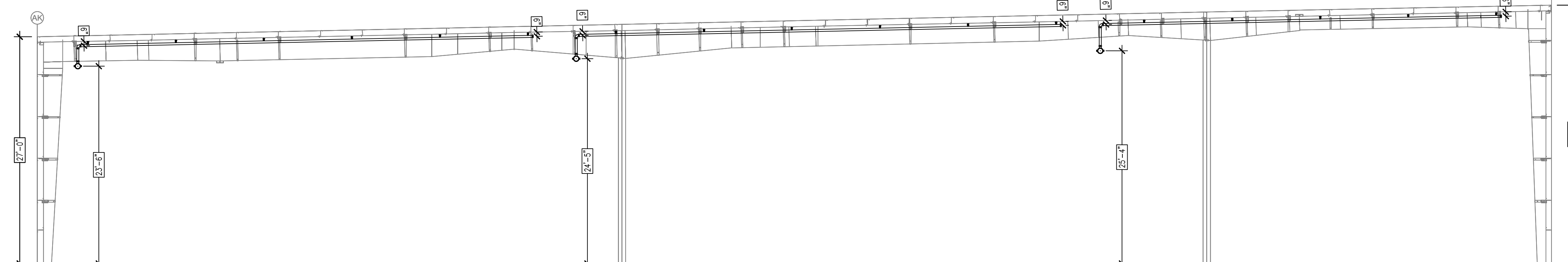
**BUILDING SECTION B**

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



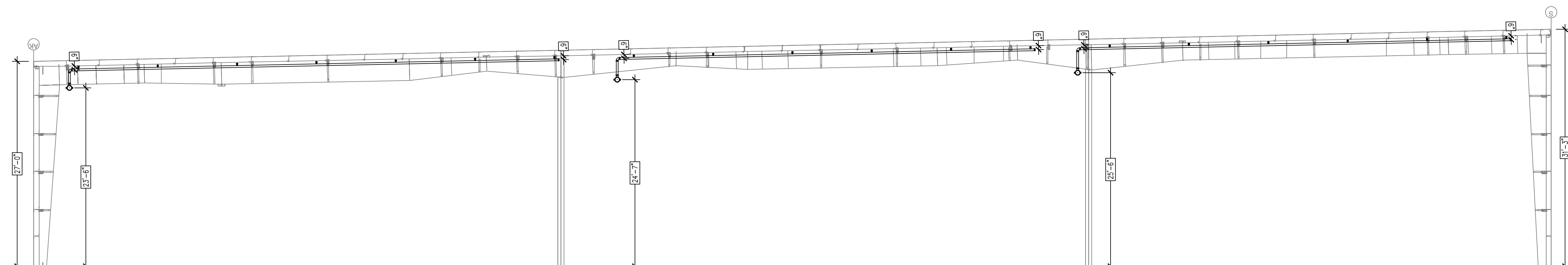
**BUILDING SECTION C**

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



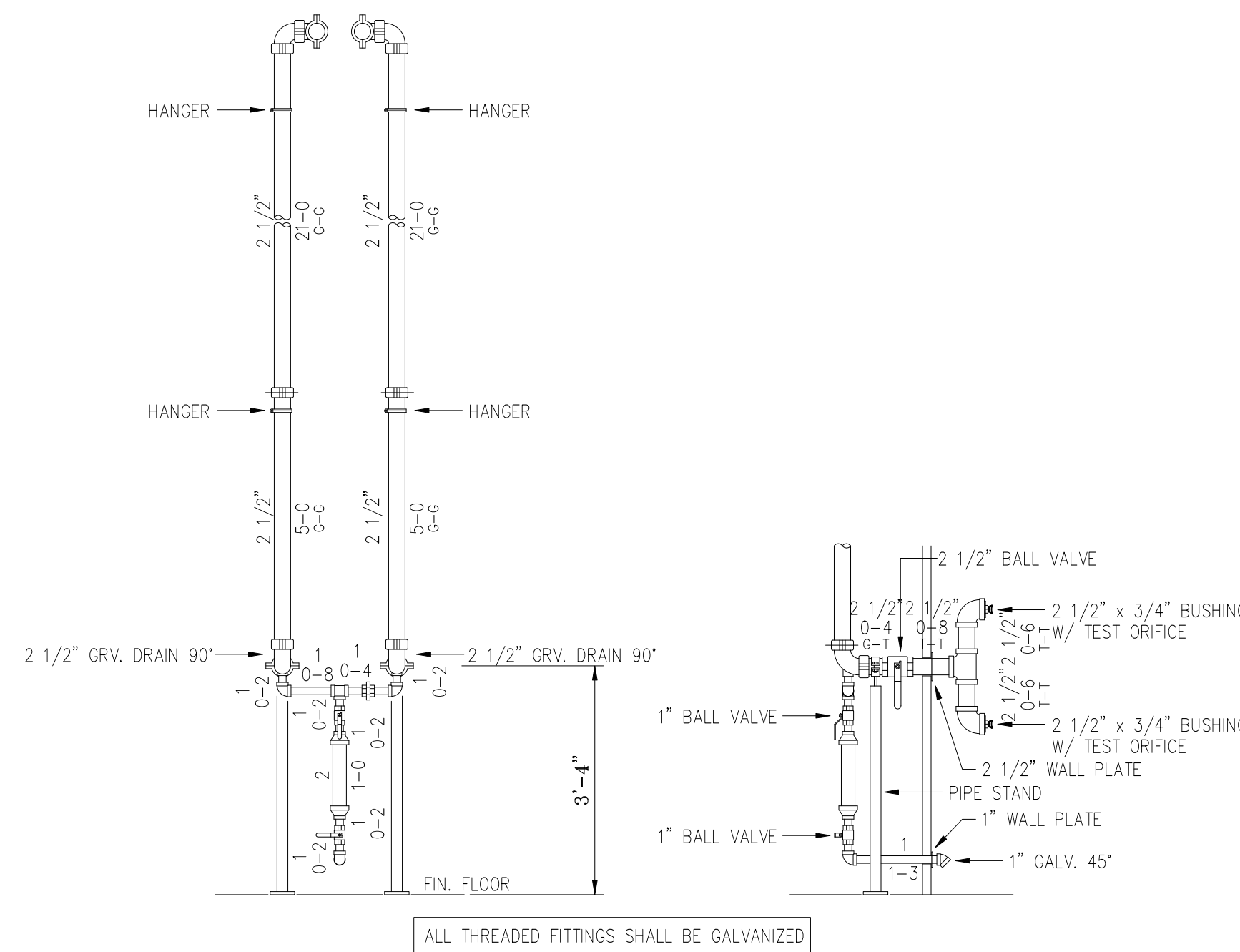
**BUILDING SECTION D**

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

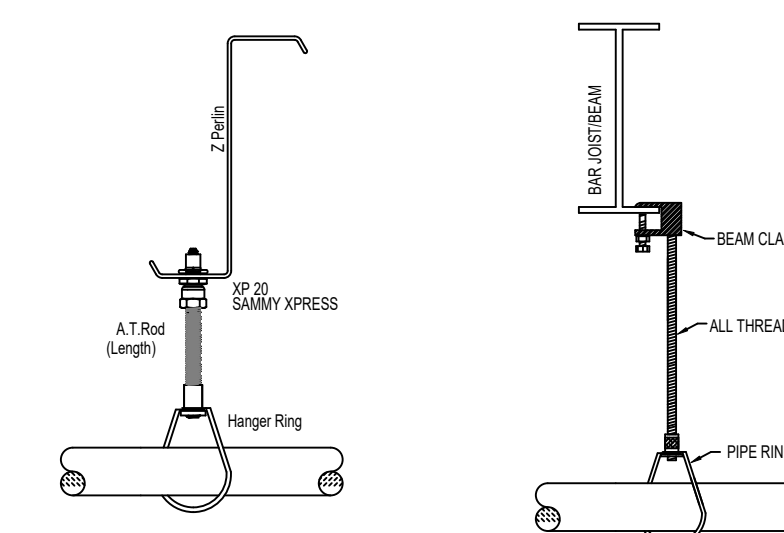


**BUILDING SECTION E**

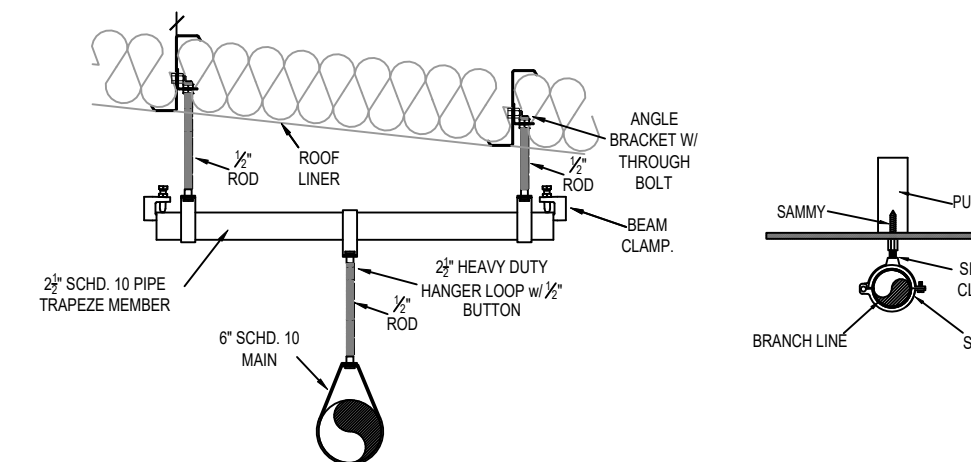
SCALE: 1/8" = 1'-0"



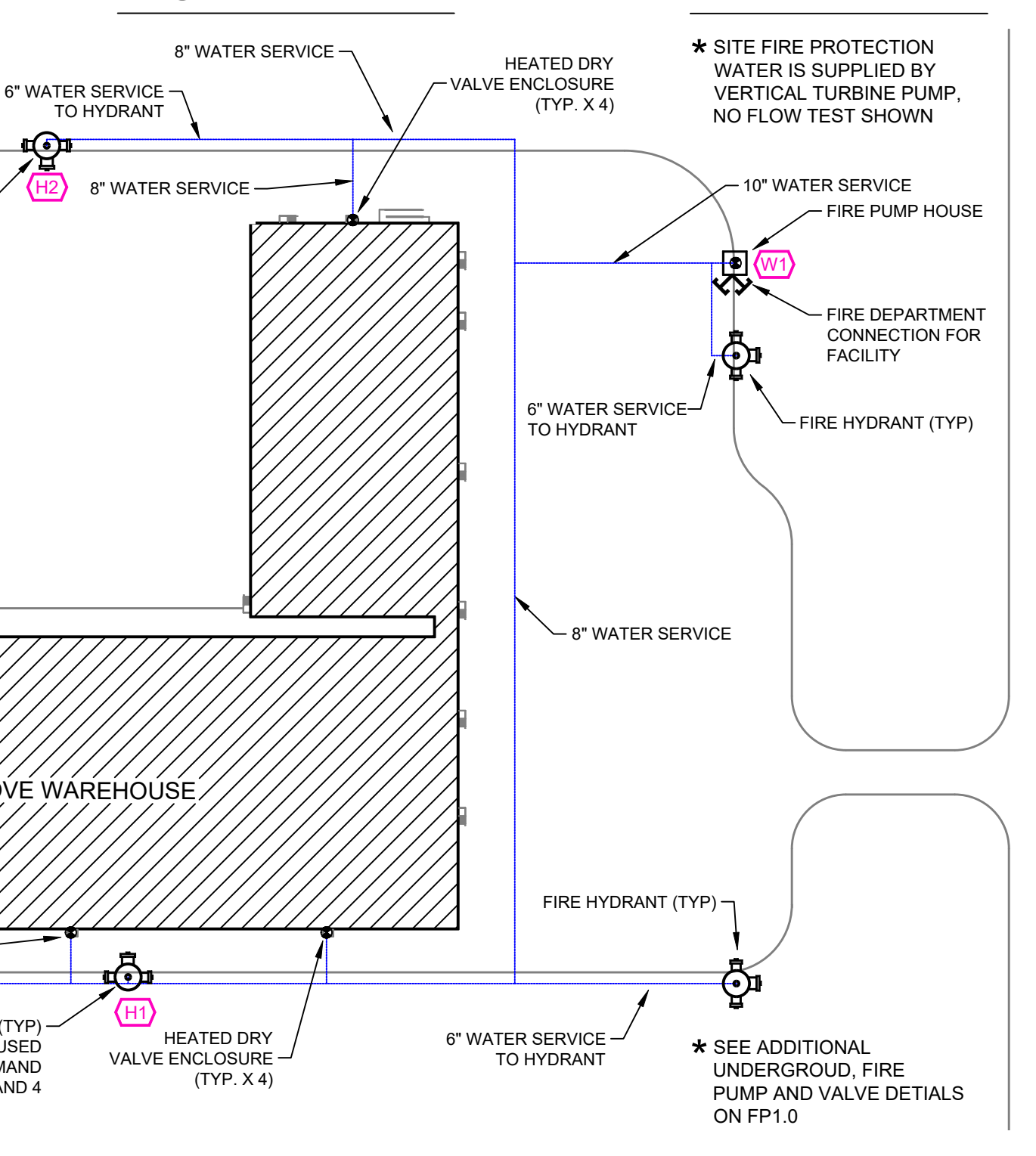
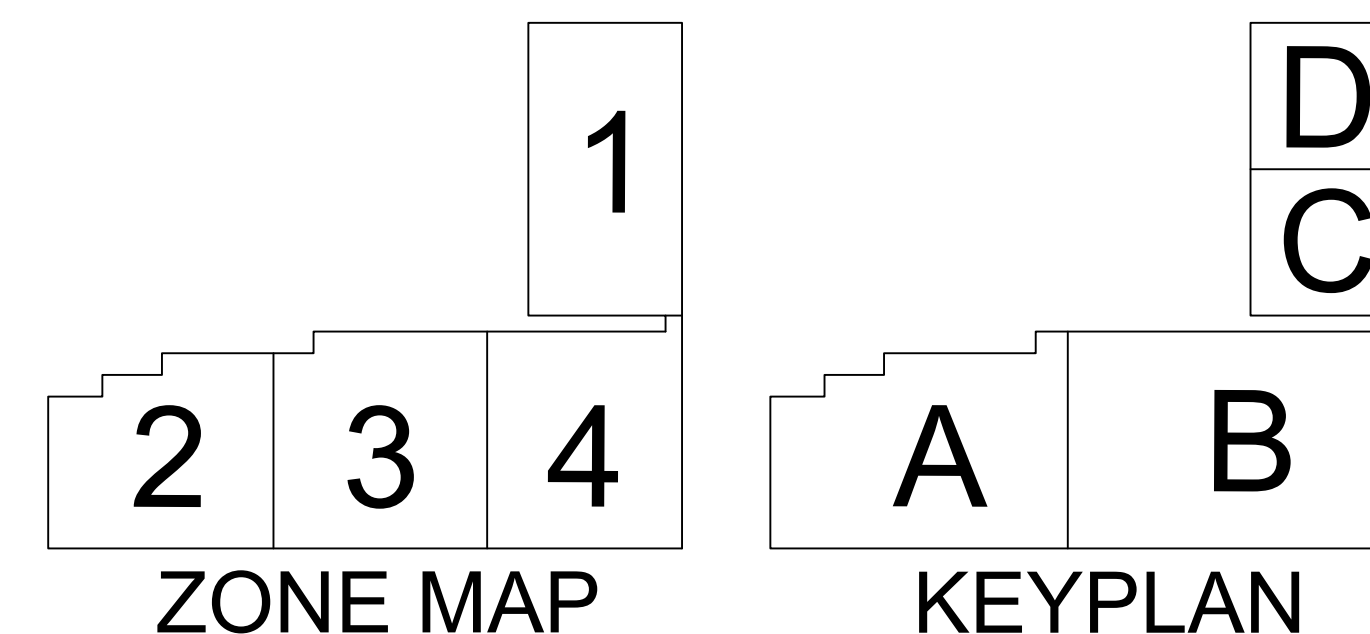
**INSPECTORS TEST DETAILS**



**HANGER DETAILS**



**SPRINKLER HEAD LEGEND**



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

- GENERAL NOTES**
- INTERNATIONAL BUILDING CODE (2018)
    - OCCUPANCY: S-1; HIGH PILED STORAGE
    - TYPE OF CONSTRUCTION: IIB
    - SPRINKLERED AREAS (APPROXIMATE - SEE ARCHITECTURAL PLANS FOR ACTUAL)
      - ZONE 1 = 37,702 S.F.
      - ZONE 2 = 35,066 S.F.
      - ZONE 3 = 38,807 S.F.
      - ZONE 4 = 33,854 S.F.
      - TOTAL = 145,869 S.F.
    - INSTALLATION STANDARDS: SPRINKLER SYSTEM DESIGNED AND INSTALLED PER NFPA-13, NFPA-20 (2016)
  - SPRINKLER PIPE TYPES:
    - 1" BRANCH LINES TO BE THREADED GALV SCHEDULE 40 WITH GALV THREADED FITTINGS
    - 1/2" THROUGH 6" MAIN & BRANCH LINES TO BE GROOVED GALV SCHEDULE 10 WITH PAINTED GROOVED FITTINGS
  - DESIGN CRITERIA
    - THE ENTIRE FACILITY IS DESIGNED FOR THE STORAGE OF CLASS III COMMODITIES THAT ARE ANTICIPATED TO BE STORED ON SINGLE AND DOUBLE ROW RACKS TO A MAXIMUM HEIGHT OF 25' WITH 8' AISLE WIDTHS AND NO IN RACK SPRINKLERS IN AN UNHEATED BUILDING
    - PRODUCTS ARE NOT ALLOWED TO BE ENCAPSULATED OR IN RACK SPRINKLERS WOULD BE REQUIRED
    - NFPA 13 TABLE 16.2.1.3.2(C) CURVE E HAS BEEN SELECTED FOR THE USE IN DESIGN FOR THIS FACILITY WITH THE USE OF HIGH TEMP SPRINKLERS. THIS YIELDED A DESIGN DENSITY OF 0.37 / 2,000 SQ. FT.
    - FOR THE USE OF DRY SYSTEMS, THE REMOTE AREA IS REQUIRED TO BE INCREASED BY 30% TO A TOTAL OF 2,600 SQ. FT. OF OPERATION
    - PER TABLE 13.2.1.3.2 WE MUST APPLY FIGURE 16.2.1.3.4.1 TO THE DESIGN DENSITY. WITH A MAXIMUM STORAGE HEIGHT OF 25', THE DESIGN DENSITY MUST BE INCREASED BY 17% RESULTING IN A DESIGN DENSITY OF 0.65
    - FINAL RESULTING DESIGN CRITERIA REQUIRES THAT THE SYSTEM IS DESIGNED TO DELIVER 0.65 GPM/S.F. OVER THE MOST DEMANDING 2,600 S.F.
  - NOTES:
    - ALL MATERIAL TO BE NEW AND MEET U.L. STANDARDS
    - HANGERS TO BE INSTALLED IN ACCORDANCE WITH NFPA 13 (2016) - SEE PLAN FOR HANGING REQ.
    - DRY SYSTEM PIPE SLOPE INSTALLATION:
      - SPRINKLER MAINS TO BE 1/4" PER 10 FEET
      - SPRINKLER BRANCH LINES TO BE 1/2" PER 10 FEET
    - DRY SYSTEM CAPACITY:
      - 4.4.1. ZONE 1 = 2,314 GAL.
      - 4.4.2. ZONE 2 = 2,247 GAL.
      - 4.4.3. ZONE 3 = 2,392 GAL.
      - 4.4.4. ZONE 4 = 2,011 GAL.
  - SYMBOLS USED ON DRAWINGS:
    - 6-10" PIPE ELEVATION A.F.F.
    - 12" PIPE ELEVATION BELOW B.O.D.
    - HYDRAULIC CALCULATION JUNCTION POINT
  - SCOPE OF WORK:
    - ALL AREAS OF THE BUILDING TO BE INSTALLED AND COVERED IN ACCORDANCE WITH THE LOCAL AUTHORITY HAVING JURISDICTION AND PER NFPA 13 (2016)
    - THE FACILITY IS SUPPLIED BY A VERTICAL TURBINE FIRE PUMP THAT FEEDS 4 HEATED DRY VALVE ENCLOSURES WITH DRY VALVES INSIDE OF FEEDING INTO THE COLD STORAGE AREAS

No.	Date	Description

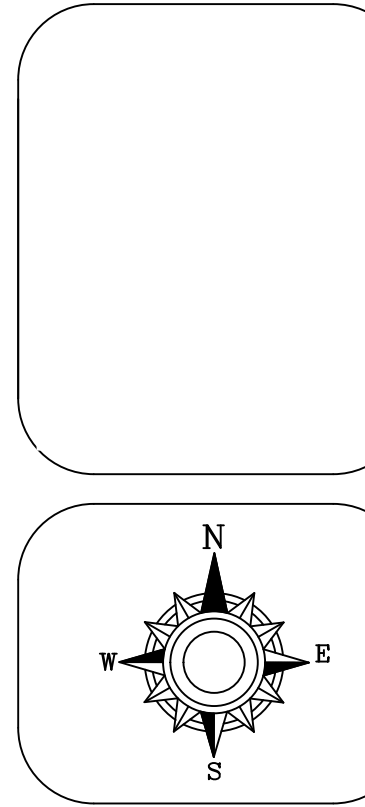


**DRAWN BY**  
J.V.G.

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

**DATE**  
9/23/2023

**JOB NUMBER**  
00269

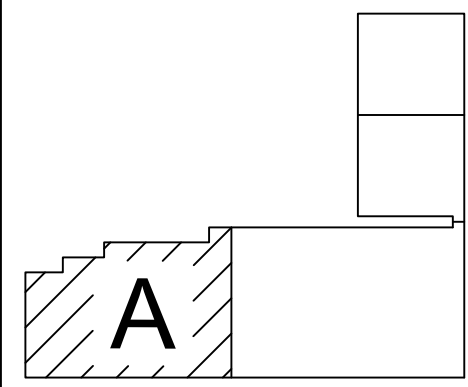


**CEDAR GROVE WAREHOUSE**  
2165 MCMINNVILLE HWY  
MANCHESTER, TENNESSEE 37355

**DRAWING TITLE**  
FIRE SPRINKLER DETAILS DRAWING

**SHEET**  
FP1.2





# SPRINKLER HEAD LEGEND

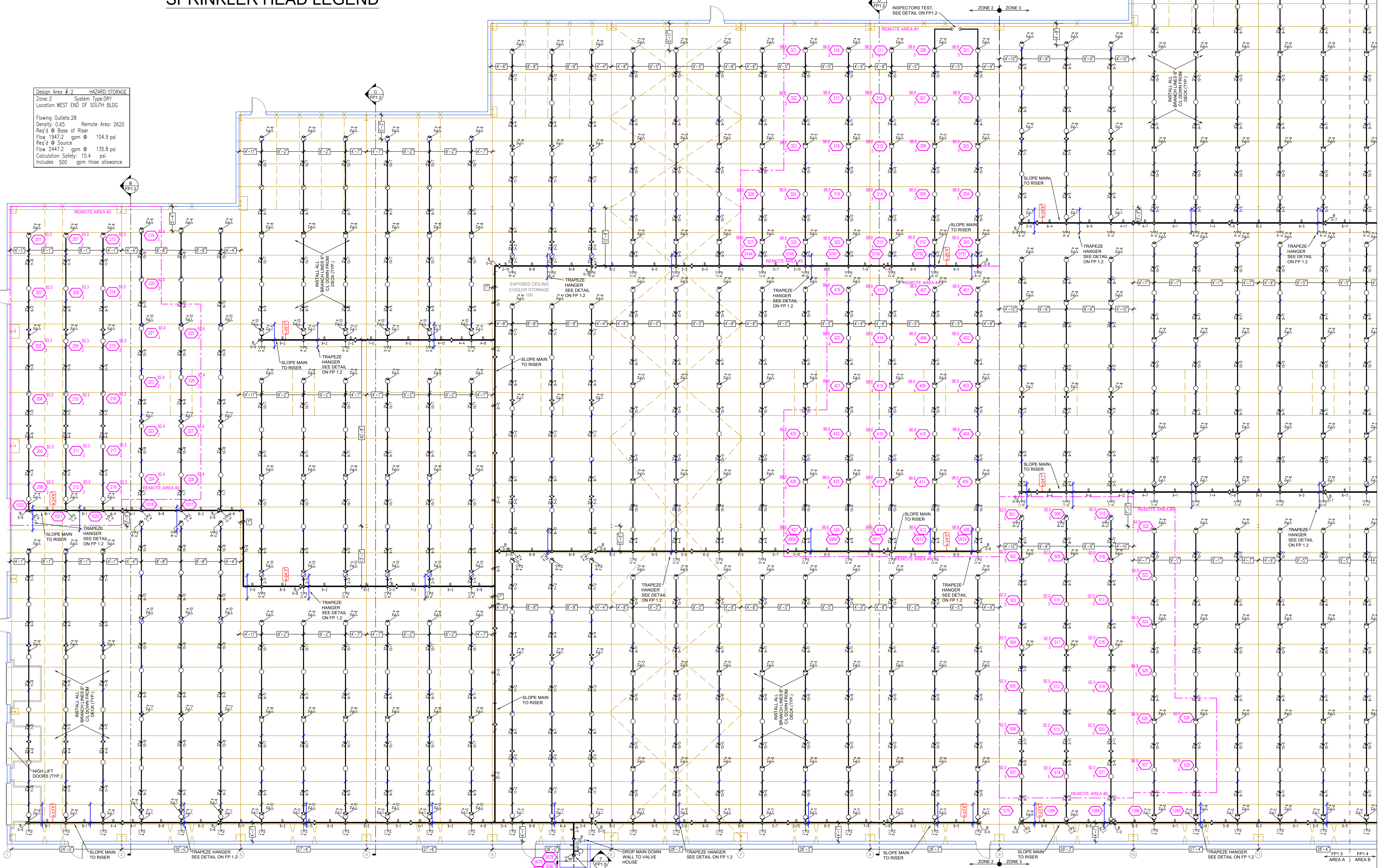
SVM	CONT	POSITION	FINISH	TEMP	K	NPT	SN	MFG	MODEL#
○	1499	UPFR	BRASS	200	16.80	3/4"	RA1124	RELIAB	7168

**Design Area # 3 HAZARD STORAGE**  
 Zone: 2 System Type: DRY  
 Location: NE CORNER OF ZONE 2  
 Flowing Outlets: 27  
 Density: 0.65 Remote Area: 2694  
 Req'd @ Base of Riser  
 Flow 1889.4 gpm @ 98.2 psi  
 Req'd @ Source  
 Flow 2389.4 gpm @ 127.8 psi  
 Calculation Safety: 24.1 psi  
 Includes 500 gpm Hose allowance

**Design Area # 4 HAZARD STORAGE**  
 Zone: 2 System Type: DRY  
 Location: CENTER OF ZONE 2  
 Flowing Outlets: 27  
 Density: 0.65 Remote Area: 2693  
 Req'd @ Base of Riser  
 Flow 1982.8 gpm @ 105.3 psi  
 Req'd @ Source  
 Flow 2492.8 gpm @ 137.3 psi  
 Calculation Safety: 13.5 psi  
 Includes 500 gpm Hose allowance

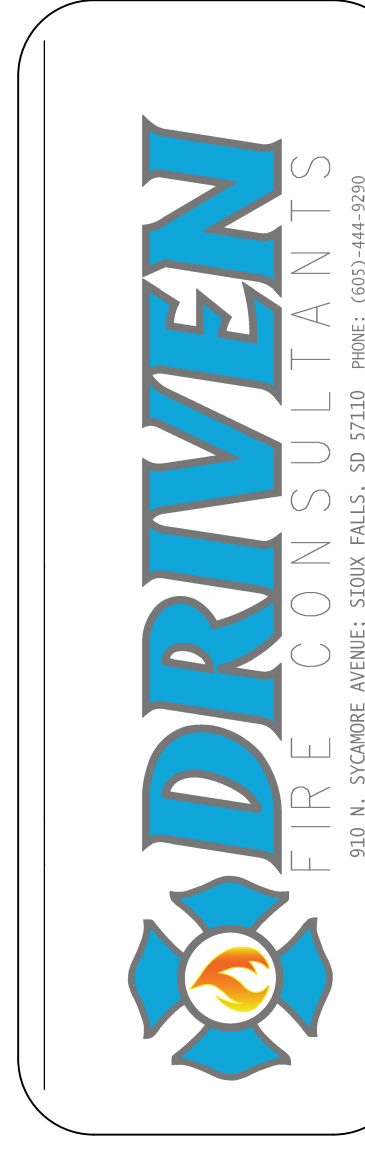
**Design Area # 5 HAZARD STORAGE**  
 Zone: 3 System Type: DRY  
 Location: SW CORNER OF ZONE 3  
 Flowing Outlets: 29  
 Density: 0.65 Remote Area: 2680  
 Req'd @ Base of Riser  
 Flow 2098.3 gpm @ 93.7 psi  
 Req'd @ Source  
 Flow 2598.3 gpm @ 128.2 psi  
 Calculation Safety: 21.2 psi  
 Includes 500 gpm Hose allowance

**Design Area # 2 HAZARD STORAGE**  
 Zone: 2 System Type: DRY  
 Location: WEST END OF SOUTH BLDG  
 Flowing Outlets: 28  
 Density: 0.65 Remote Area: 2620  
 Req'd @ Base of Riser  
 Flow 1947.2 gpm @ 104.9 psi  
 Req'd @ Source  
 Flow 2447.2 gpm @ 135.8 psi  
 Calculation Safety: 15.4 psi  
 Includes 500 gpm Hose allowance

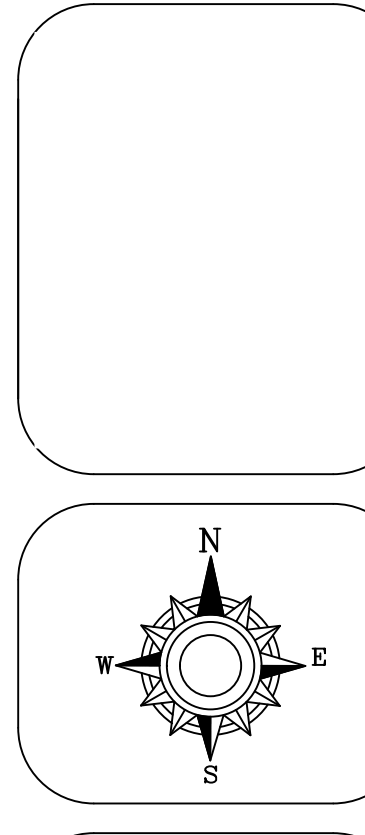


**AREA A FIRE SPRINKLER PLAN**  
 SCALE: 1/8" = 1'-0"

No.	Date	Description



**DRAWN BY**  
 J.V.G.  
**SCALE**  
 1/8" = 1'-0"  
**DATE**  
 9/23/2023  
**JOB NUMBER**  
 00269

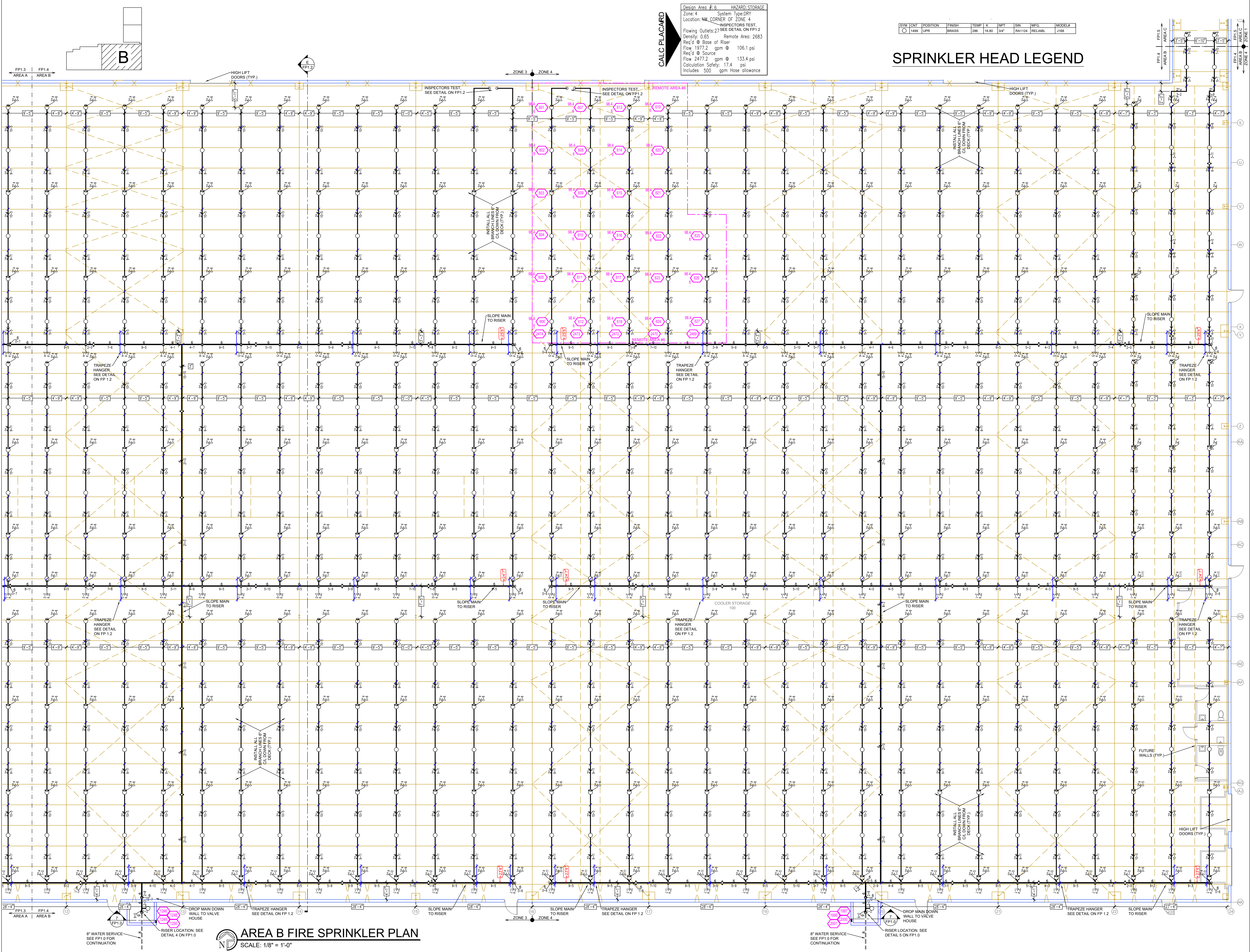


**CEDAR GROVE WAREHOUSE**  
 2165 McMinnville Hwy  
 Manchester, Tennessee 37355

**DRAWING TITLE**  
 FIRE SPRINKLER PLAN SOUTH BUILDING AREA A

**SHEET**  
 FP1.3



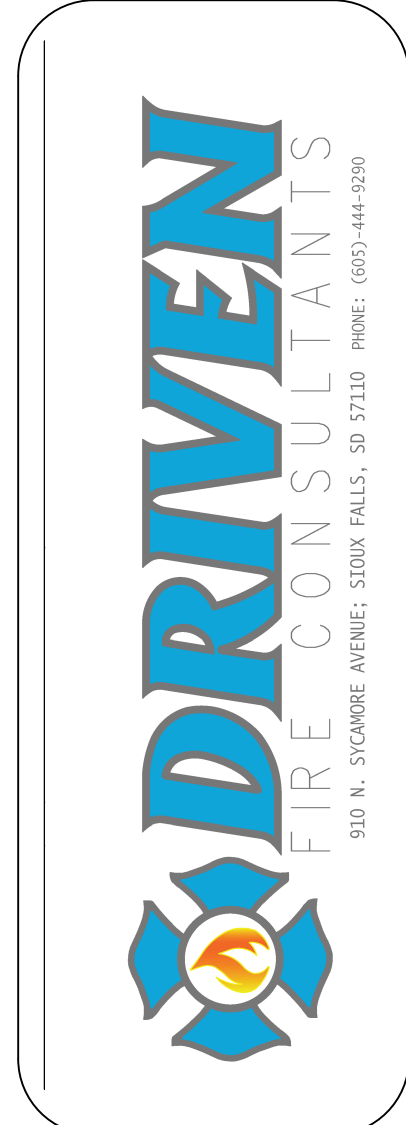


**Design Area #6 HAZARD STORAGE**  
 Zone 4 System Type: DRY  
 Location: NW CORNER OF ZONE 4  
 Inspectors Test  
 Remote Area #6  
 Flowing Outlets: 27 SEE DETAIL ON FP1.2  
 Density: 0.65  
 Req'd @ Base of Riser: 1977.2 gpm @ 106.1 psi  
 Req'd @ Source: 2477.2 gpm @ 133.4 psi  
 Calculation Safety: 17.4 psi  
 Includes 500 gpm hose allowance

SYM	CONT	POSITION	FINISH	TEMP	K	NPT	SN	MFG.	MODEL#
○	UPR		BRASS	280	16.00	1/4"	RA1124	RELIAB.	J188

### SPRINKLER HEAD LEGEND

No.	Date	Description

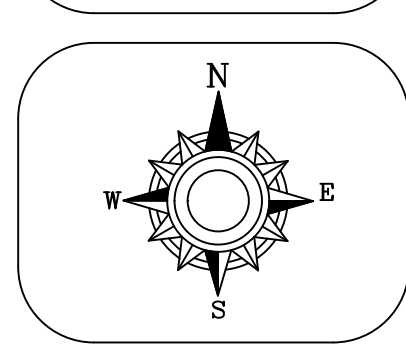


**DRAWN BY**  
J.V.G.

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

**DATE**  
9/23/2023

**JOB NUMBER**  
00269



**CEDAR GROVE WAREHOUSE**  
 2165 McMinnville Hwy  
 Manchester, Tennessee 37355

**DRAWING TITLE**  
 FIRE SPRINKLER PLAN SOUTH BUILDING AREA B

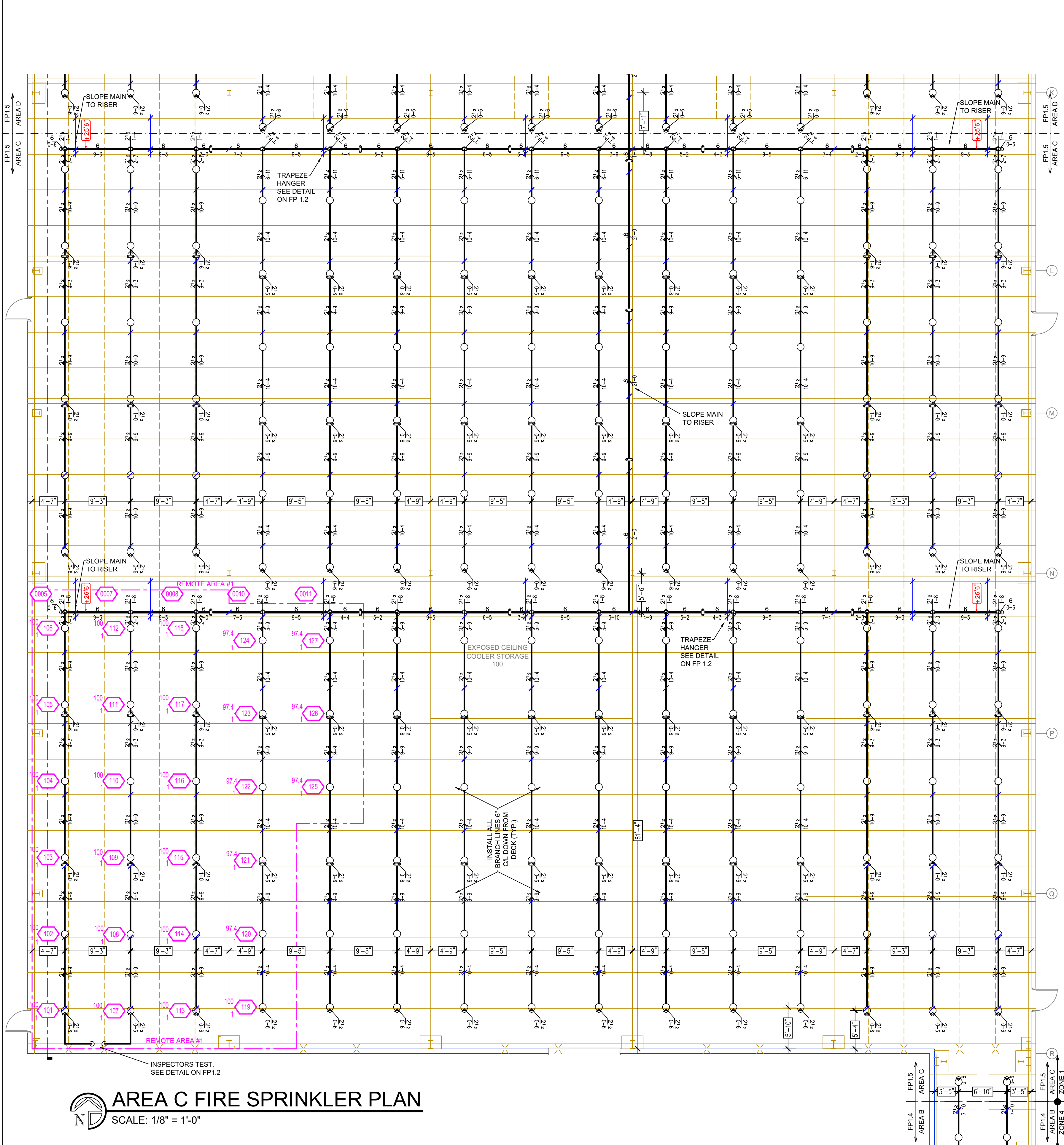
**SHEET**  
 FP1.4

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



SYM	CNT	POSITION	FINISH	TEMP	K	NPT	SIN	INFO	MODEL#
○	1499	UPR	BRASS	250	16.80	3/4"	RAY124	RELIAB.	1108

## SPRINKLER HEAD LEGEND

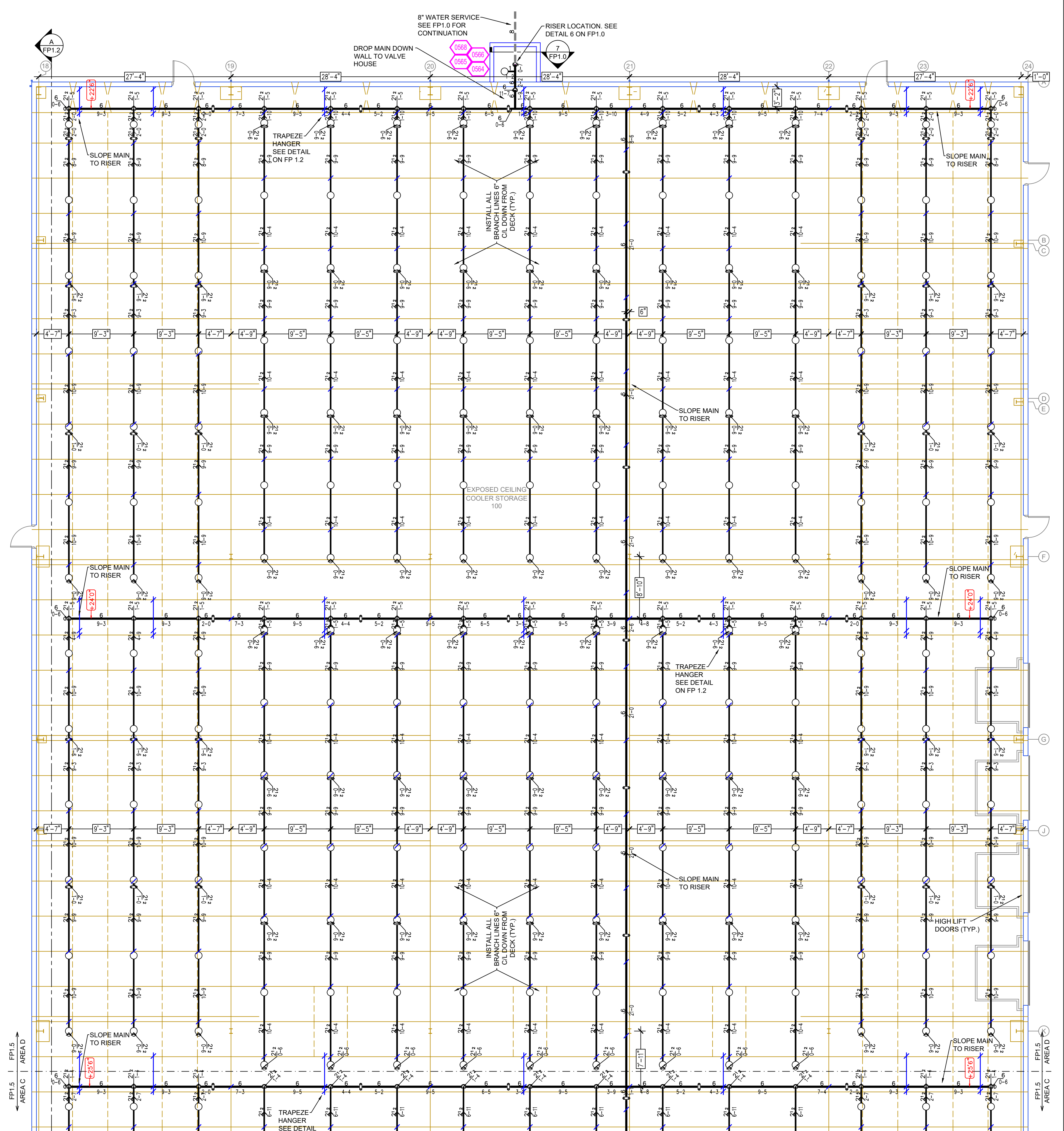


**AREA C FIRE SPRINKLER PLAN**  
SCALE: 1/8" = 1'-0"

**CALC PLACARD**

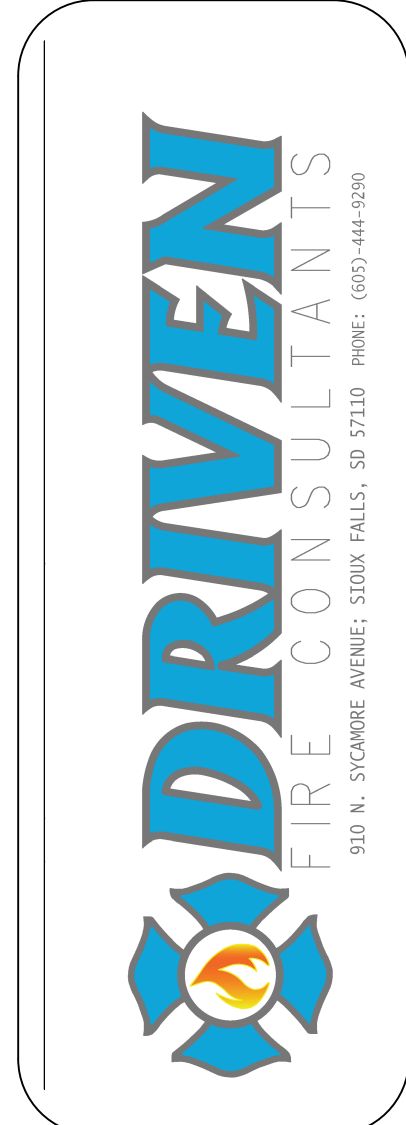
Design Area #1 HAZARD STORAGE  
Zone 1 System Type DRY  
Location: SW CORNER OF NORTH BLDG

Flowing Outlets: 27 Remote Area: 2667  
Density: 0.65  
Req'd @ Base of Riser: 117.2 psi  
Flow 2004.1 gpm @ 117.2 psi  
Req'd @ Source: 131.7 psi  
Flow 2504.1 gpm @ 131.7 psi  
Calculation Safety: 18.1 psi  
Includes 500 gpm Hose allowance



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

No.	Date	Revision Description

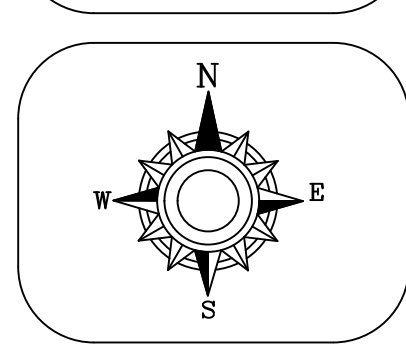


DRAWN BY  
J.V.G.

SCALE  
1/8" = 1'-0"

DATE  
9/23/2023

JOB NUMBER  
00269



**CEDAR GROVE WAREHOUSE**  
2165 MCMINNILLE HWY  
MANCHESTER, TENNESSEE 37355

DRAWING TITLE  
**FIRE SPRINKLER PLAN NORTH BUILDING AREA C&D**

SHEET  
**FP1.5**