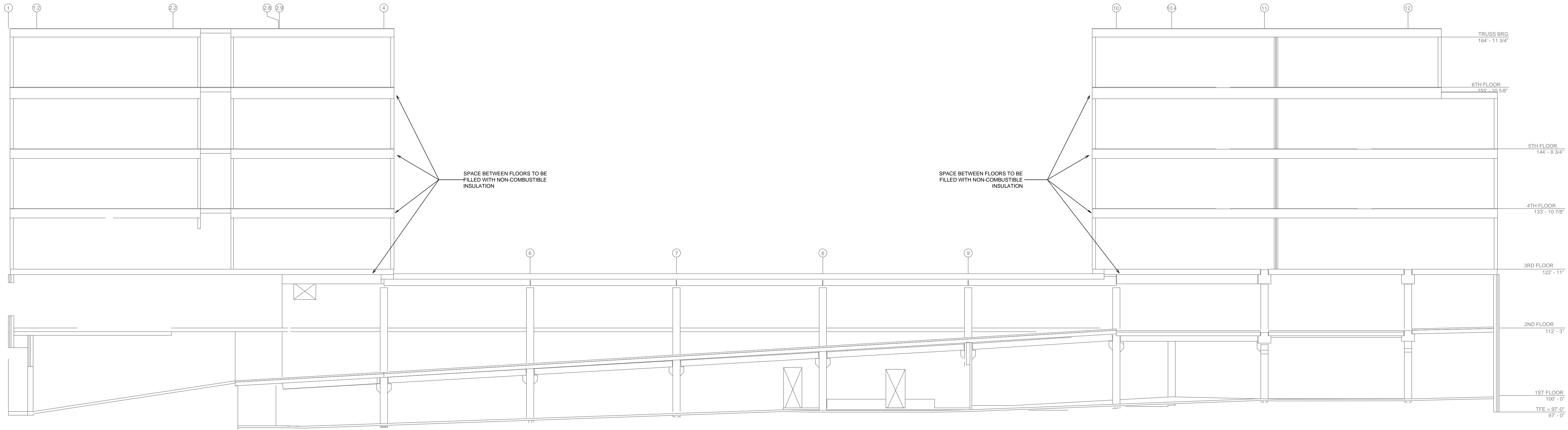


GENERAL NOTES

- SYSTEM INSTALLED PER NFPA 13 (2016 EDITION) AND STATE FIRE MARSHAL'S OFFICE APPROVED LISTED PRODUCTS.
- MINIMUM PIPE SIZE SHALL BE 1" NOMINAL PIPE SIZE UNLESS OTHERWISE NOTED.
- SPRINKLER PIPING SHALL BE WELDED OUTLETS & GROOVED SHORT RADIANT FITTINGS.
- ALL WELDING PER NFPA 54 SHALL BE DONE WITHOUT APPROVED SHOP DRAWINGS.
- CONDUITS SHALL BE PER D RASHEED PRIOR TO FABRICATION AND INSTALLATION BY SPRINKLER CONTRACTOR.
- HIGH TEMPERATURE HEADWARE TO BE FULCRUMATED WHERE REQUIRED.
- HEADWARE SHALL BE USED AS PER NFPA 13 APPROVED LISTING.
- HANGERS ARE TO BE USED AS PER NFPA 13 APPROVED LISTING.
- ELECTRICAL WIRING, ALARM DETECTION AND SUPERVISORY BY OWNER SHALL BE INSTALLED AND TESTED PRIOR TO SPRINKLER TESTING.
- WET SYSTEM PIPING FROM FREEZING.

APPROVAL STAMPS

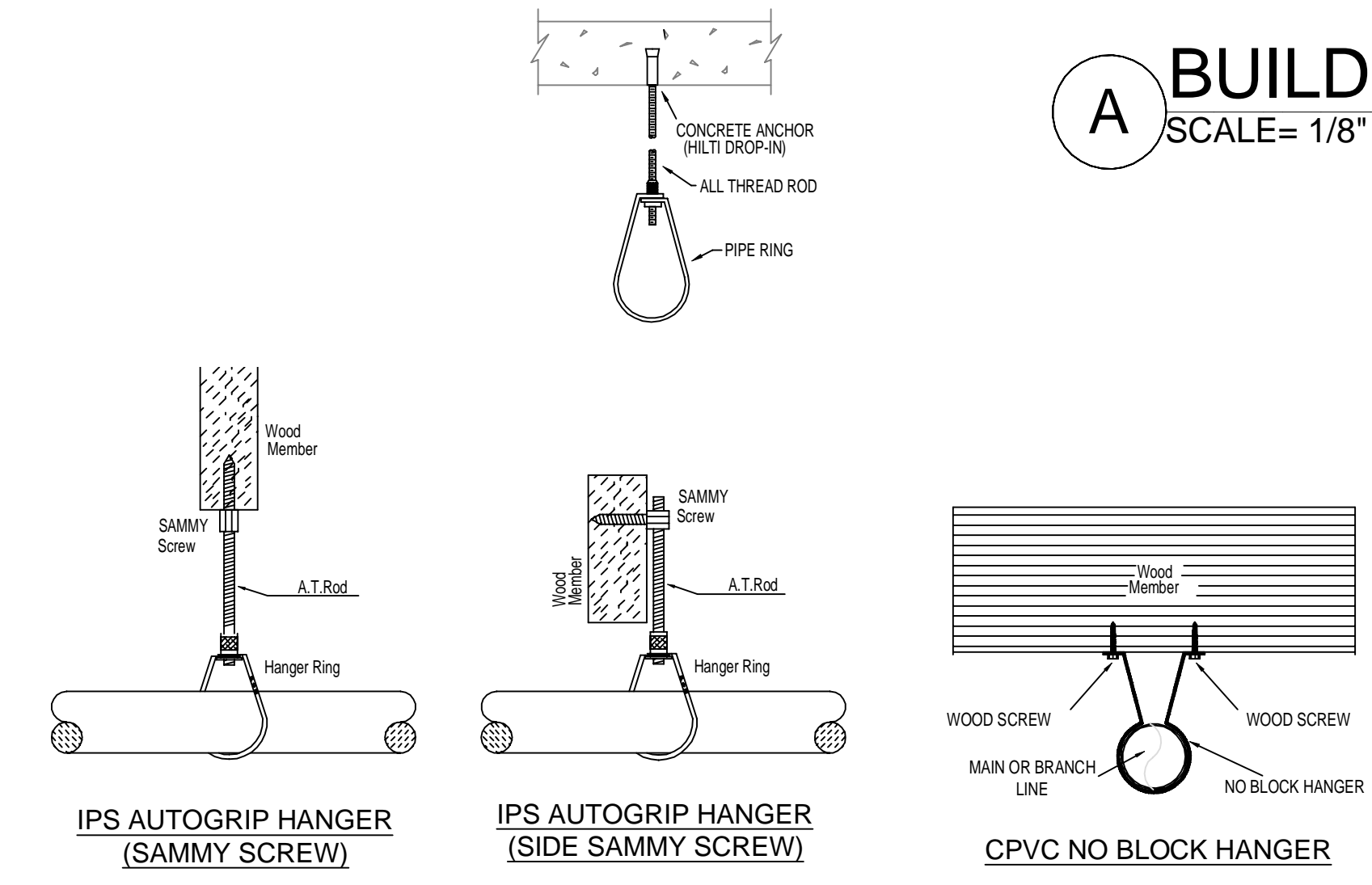
NO.	REVISIONS	DATE



GENERAL NOTES

- MINNESOTA BUILDING CODE (2020)
 - OCCUPANCY B, F, R-2, S-2
 - TYPE OF CONSTRUCTION IA, V-A (1HR RATED PROTECTED, COMBUSTIBLE CONSTRUCTION)
 - SPRINKLERED AREAS (APPROXIMATE - SEE ARCHITECTURAL PLANS FOR ACTUAL)
 - FIRST FLOOR = 26,359 S.F. (ZONE 1)
 - SECOND FLOOR = 28,778 S.F. (ZONE 2)
 - THIRD FLOOR = 29,840 S.F. (ZONE 3)
 - FOURTH FLOOR = 23,790 S.F. (ZONE 4)
 - FIFTH FLOOR = 23,780 S.F. (ZONE 5)
 - SIXTH FLOOR = 23,231 S.F. (ZONE 5)
 - TOTAL = 151,758 S.F.
 - INSTALLATION STANDARDS: SPRINKLER SYSTEM DESIGNED AND INSTALLED PER NFPA-13, NFPA-14 (2016)
- SPRINKLER PIPE TYPES:
 - 1" BRANCH LINES TO BE BLAZEMASTER CPVC PIPING WITH CEMENTED FITTINGS
 - 2" THROUGH 3" MAIN & BRANCH LINES TO BE BLAZEMASTER CPVC PIPING WITH CEMENTED FITTINGS
 - 1" BRANCH LINES TO BE BLK LIGHTWALL PIPING WITH THREADED FITTINGS
 - 1/2" BRANCH LINES TO BE BLK LIGHTWALL PIPING WITH GROOVED FITTINGS
 - 2" THROUGH 6" MAIN & BRANCH LINES TO BE BLK LIGHTWALL PIPING WITH GROOVED FITTINGS
- DESIGN CRITERIA
 - RESIDENTIAL AREAS, OFFICES, RESTROOMS, CORRIDORS AND COMMUNITY SPACES TO BE LIGHT HAZARD
 - MECHANICAL, ELECTRICAL, GARAGE AND STORAGE ROOMS TO BE ORDINARY HAZARD GROUP I
 - PRODUCTION AREA TO BE ORDINARY HAZARD GROUP II
 - REMOTE AREA REDUCTIONS HAVE BEEN TAKEN WHERE APPLICABLE PER NFPA 13 SEC. 11.2.3.2.3
- 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.
- SYMBOLS USED ON DRAWINGS:
 - PIPE ELEVATION A.F.F
 - PIPE ELEVATION BELOW B.O.D
 - ROOM HAZARD CLASSIFICATION (ALL ROOMS ARE CONSIDERED LIGHT HAZARD UNLESS NOTED)
 - HYDRAULIC CALCULATION JUNCTION POINT
 - CEILING HEIGHT
- SCOPE OF WORK:
 - TO INSTALL A 5 ZONE WET SYSTEM IN A NEW APARTMENT BUILDING. STANDPIPES TO BE PROVIDED IN EXIT STAIRWAYS. 1ST FLOOR ZONE TO BE FED FROM COMBINED STANDPIPE SYSTEM. 2ND FLOOR ZONE TO BE FED FROM RISER. 3RD FLOOR THROUGH 6TH FLOOR ZONES TO BE FED FROM STANDPIPES IN STAIR B.
 - 6TH FLOOR TO BE FED FROM 5TH FLOOR.
 - STANDPIPE HOSE VALVES LOCATED ON MAIN LANDINGS.
 - ALL AREAS OF THE BUILDING TO BE INSTALLED AND COVERED IN ACCORDANCE WITH THE LOCAL AUTHORITY HAVING JURISDICTION AND PER NFPA 13 (2016).

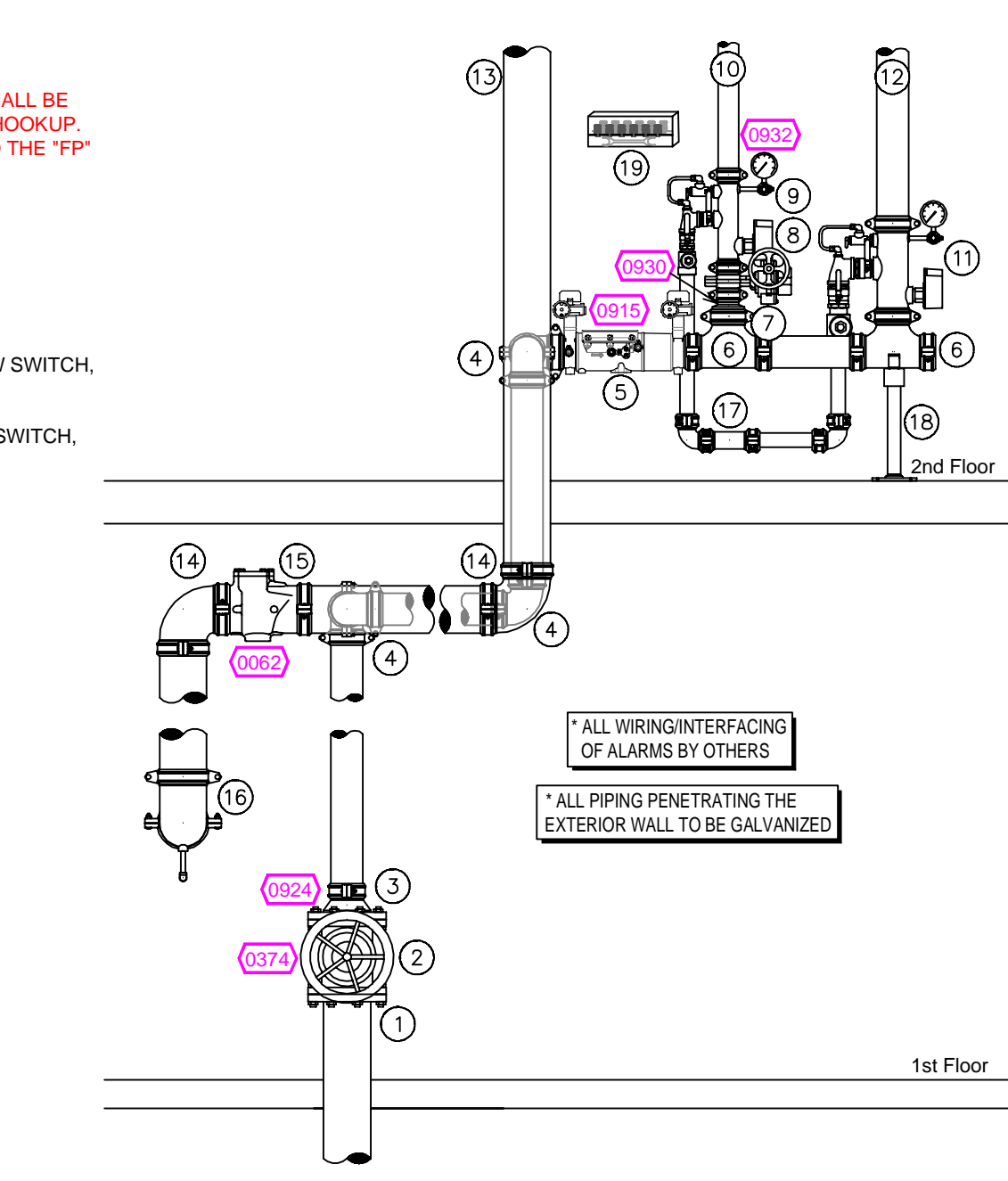
A BUILDING SECTION
SCALE = 1/8" : 1'-0"



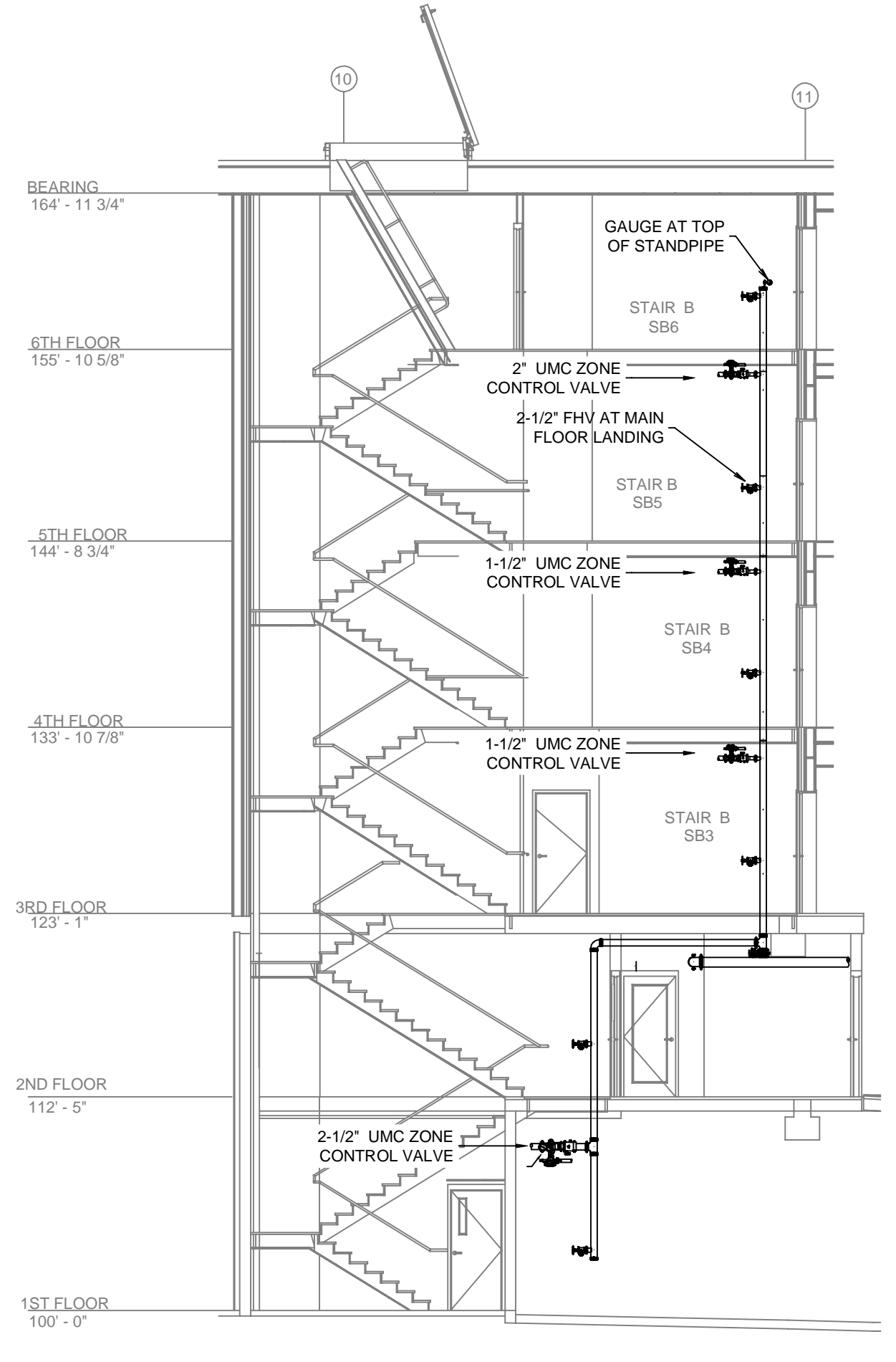
HANGER DETAILS

RISER LEGEND

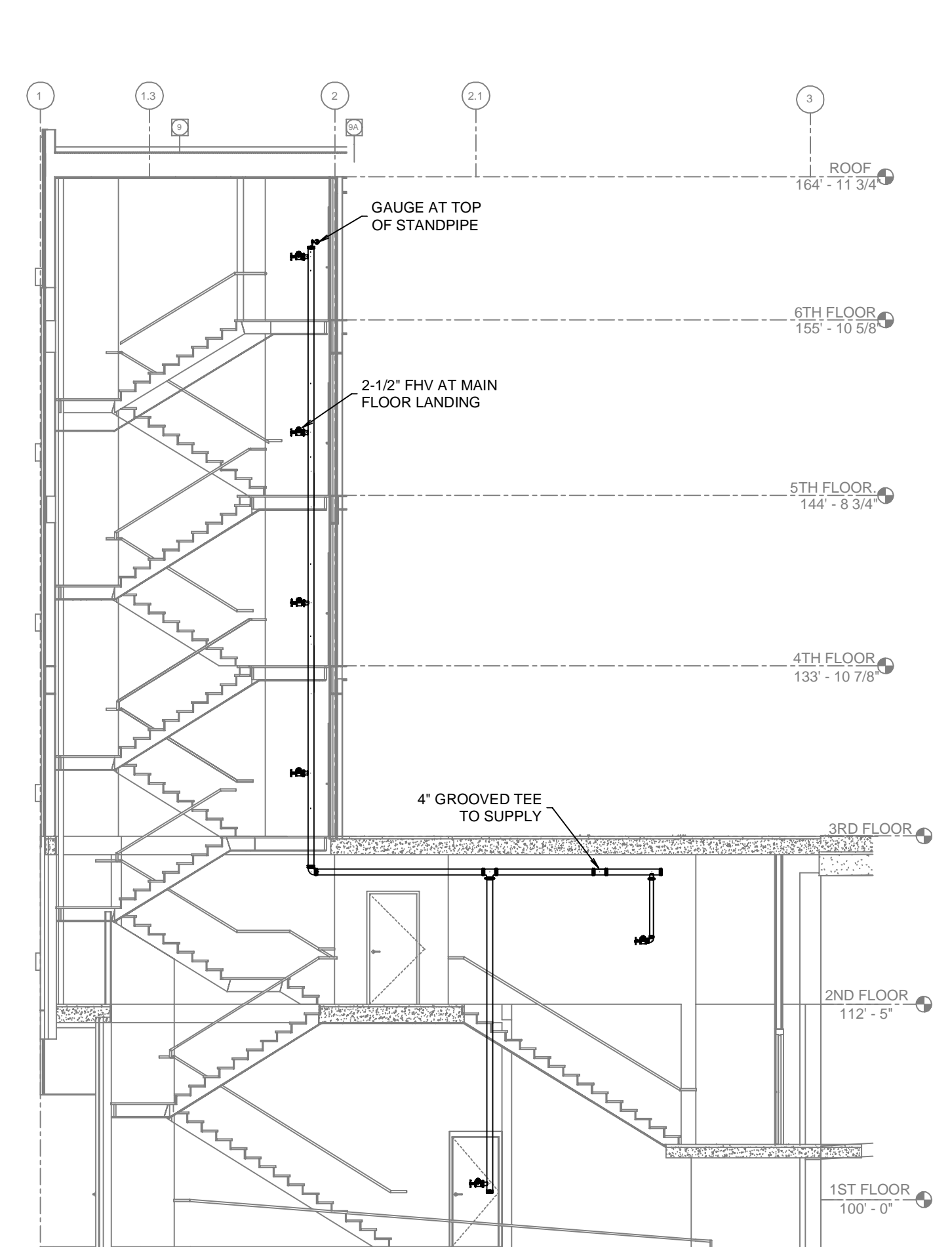
- 6" UNDERGROUND WATER SERVICE (BY OTHERS) (FLUSHING & TESTING OF THE UNDERGROUND SHALL BE COMPLETED PRIOR TO THE SPRINKLER SYSTEM HOOKUP. UNDERGROUND PAPERS ARE TO BE SUPPLIED TO THE "FP" CONTRACTOR BY THE G.C.)
- 6" FLANGED GATE VALVE
- 6" x 4" GROOVED CONCENTRIC REDUCER
- 4" GROOVED 90
- 4" DERINGER 20 BACKFLOW GxG BVF w/ TAMPERS
- 4" GROOVED TEE
- 4" x 2-1/2" GROOVED CONCENTRIC REDUCER
- 2-1/2" GROOVED BUTTERFLY VALVE w/ TAMPERS
- 2-1/2" GROOVED COMMERCIAL MANIFOLD w/ FLOW SWITCH, PRESSURE GAUGE, & TEST AND DRAIN w/ PRV
- 4" GROOVED COMMERCIAL MANIFOLD w/ FLOW SWITCH, PRESSURE GAUGE, & TEST AND DRAIN w/ PRV
- 4" GROOVED TO STANDPIPE / FDC
- 6" FROM FDC TO STANDPIPE SYSTEM
- 6" GROOVED CHECK VALVE
- 6" GROOVED 90
- 6" GROOVED DRAIN 90 w/ BALL DRIP
- MAIN DRAIN PIPED TO OUTSIDE
- PIPE STAND
- HEADBOX W/HEADWRENCH



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



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



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

TIDIPIPE LEGEND

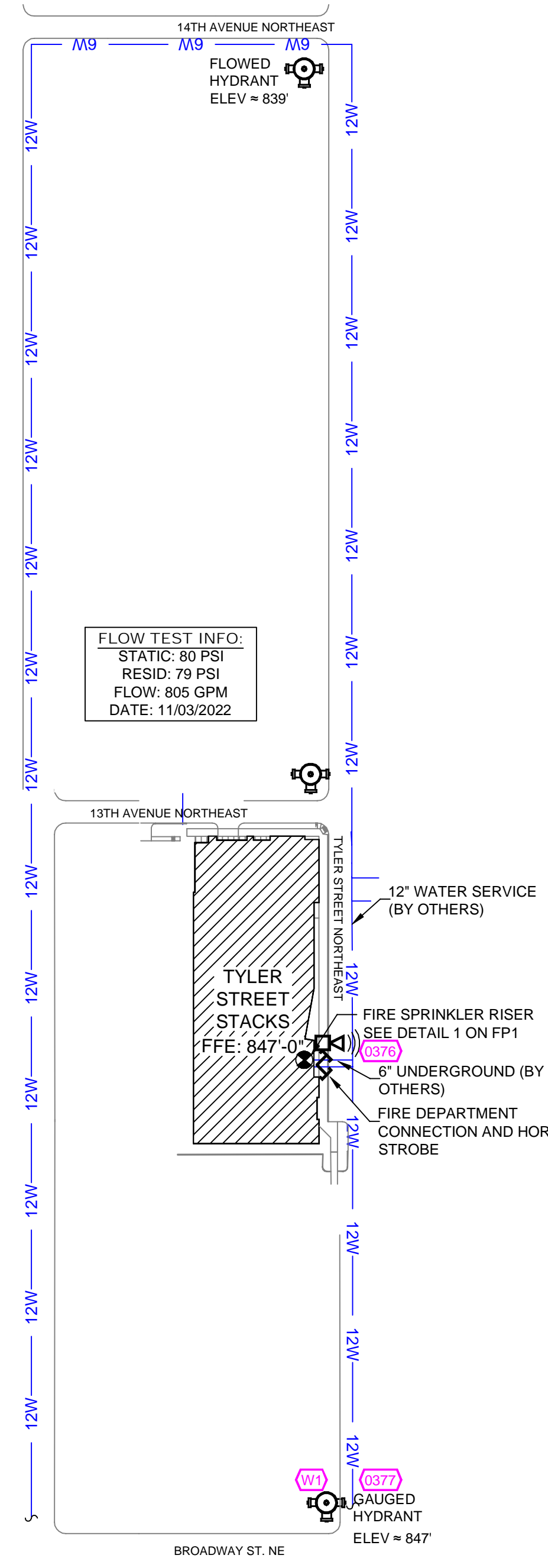


MANUAL WET STANDPIPE

LOCATION: STAIR A
REQUIRED FLOW: 500GPM
OUTLET PSI: 100
REQUIRED INLET PSI: 147

STANDPIPE PLACARD

NFPA 13 STEEL PIPE HANGER SPACING (EXCEPT LIGHT WALL THRU PIPING)		NFPA 13 CPVC PIPE HANGER SPACING	
NOMINAL SIZE (INCHES)	MAX SPACING (FEET)	NOMINAL SIZE (INCHES)	MAX SPACING (FEET)
1"	12'-0"	3/4"	5'-6"
1-1/4"	12'-0"	1"	6'-0"
1-1/2"	15'-0"	1-1/4"	6'-6"
2"	15'-0"	1-1/2"	7'-0"
2-1/2"	15'-0"	2"	8'-0"
3"	15'-0"	2-1/2"	9'-0"
4" & LARGER	15'-0"	3"	10'-0"



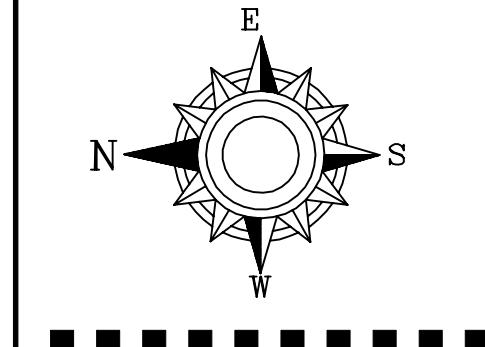
SITE PLAN
SCALE: 1" = 100'-0"

SV#	QTY	POSITION	FINISH	TEMP	K	NPT	SIN	MFG.	MODEL#	ESCOUT/CHCN
137	1	UPRIGHT	BRASS	286	5.60	1/2"	TY3161	TYCO	TY-B	NA
138	1	SIDEWALL	BRASS	200	11.20	3/4"	TY3332	TYCO	EL02W020	NA
139	1	SIDEWALL	WHITE	200	5.60	1/2"	TY3331	TYCO	TY-FRB	SEMI-RECESSED
140	1	UPRIGHT	BRASS	286	14.00	3/4"	TY6137	TYCO	EC-14	SEMI-RECESSED
141	5	UPR	BRASS	286	5.60	1/2"	TY3151	TYCO	TY-B	NA
142	1	PENDENT	WHITE	200	5.60	1/2"	TY2323	TYCO	TY-FRB	SEMI-RECESSED
143	1	SIDEWALL	CHROME	200	5.60	1"	TY3365	TYCO	DS-1	SEMI-RECESSED
144	1	PENDENT	WHITE	155	4.90	1/2"	TY2236	TYCO	LF1	SEMI-RECESSED
145	1	PENDENT	WHITE	200	8.00	3/4"	TY4282	TYCO	EC-8C	SEMI-RECESSED
146	1	PENDENT	WHITE	200	5.60	1/2"	TY323	TYCO	TY-FRB	SEMI-RECESSED
147	1	PENDENT	WHITE	155	3.00	1/2"	TY1234	TYCO	LF1	SEMI-RECESSED
148	1	SIDEWALL	WHITE	155	4.40	1/2"	TY2334	TYCO	LF1	SEMI-RECESSED
149	1	SIDEWALL	WHITE	155	8.00	3/4"	TY4332	TYCO	TY-FRB	SEMI-RECESSED
150	1	SPRIG	BRASS	200	5.60	1/2"	TY313	TYCO	TY-FRB	NA
151	1	UPRIGHT	BRASS	200	5.60	1/2"	TY313	TYCO	TY-FRB	NA
152	1	SIDEWALL	CHROME	200	11.20	1"	TY5339	TYCO	DS-3	SEMI-RECESSED
153	1	TOTAL								

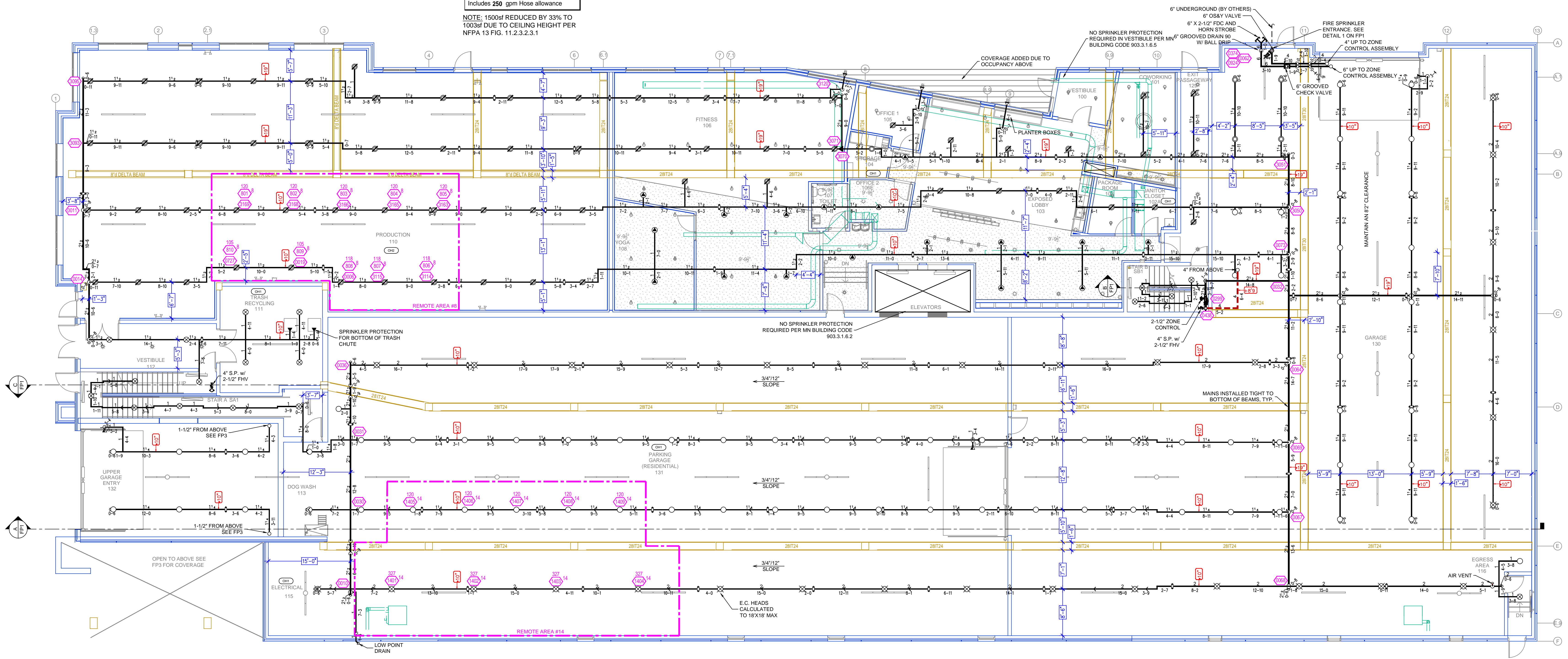
SPRINKLER HEAD LEGEND

TYLER STREET STACKS
950 13TH AVENUE NE,
MINNEAPOLIS, MN 55413

Contract No: **C22-37**
Drawing Date: 12/20/2022
Scale: 1/8" = 1'-0"
Drawn By: AM
Approval By: STATE FIRE MARSHAL DIV.
SHEET NO. **FP 1 of 5**



Design Area # 8 HAZARD: OH2
 Zone: 1 System Type: WET
 Location: PRODUCTION AREA
 1ST FLOOR
 Flowing Outlets: 9
 Density: 0.20 Remote Area: 1004
 Flow: 489.6 gpm @ 67.5 psi
 Calculation Safety: 12.1 psi
 Includes 250 gpm Hose allowance
 NOTE: 1500sf REDUCED BY 33% TO 1003sf DUE TO CEILING HEIGHT PER NFPA 13 FIG. 11.2.3.2.3.1



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

CALC PLACARD
 Design Area # 14 HAZARD: OH1
 Zone: 1 System Type: WET
 Location: 1ST FLOOR
 PARKING
 Flowing Outlets: 9
 Density: 0.15 Remote Area: 1523
 Flow: 543 gpm @ 67.3 psi
 Calculation Safety: 12.3psi
 Includes 250 gpm Hose allowance
 NOTE: 1500sf CALC DUE TO STANDARD RESPONSE SPRINKLERS BEING UTILIZED

TIDPIPE LEGEND
 --- WET SYSTEM BLACK STEEL PIPING
 --- CPVC BLACKMASTER PIPING
 --- STANDPIPE PIPING

SPRINKLER HEAD LEGEND

SYM	QTY	POSITION	FINISH	TEMP	K	NPT	SIN	MPGL	MODEL#	ESCUTCHEON
○	137	UPRIGHT	BRASS	286	5.60	1/2"	TY3151	TYCO	TY-B	N/A
◁	3	SIDEWALL	BRASS	200	11.20	3/4"	TY9332	TYCO	ELOS20	N/A
◁	57	SIDEWALL	WHITE	200	5.60	1/2"	TY3331	TYCO	TY-FRB	SEMI-RECESSED
◁	101	UPRIGHT	BRASS	286	14.00	3/4"	TY16137	TYCO	EG-14	SEMI-RECESSED
◁	5	UPR	BRASS	286	5.60	1/2"	TY3151	TYCO	TY-B	N/A
◁	163	PENDENT	WHITE	200	5.60	1/2"	TY323	TYCO	TY-FRB	SEMI-RECESSED
◁	3	SIDEWALL	CHROME	200	5.60	1"	TY3365	TYCO	DS-1	SEMI-RECESSED
◁	642	PENDENT	WHITE	155	4.90	1/2"	TY2236	TYCO	LF1	SEMI-RECESSED
◁	62	PENDENT	WHITE	200	8.00	3/4"	TY4282	TYCO	EG-8C	SEMI-RECESSED
◁	66	PENDENT	WHITE	200	5.60	1/2"	TY323	TYCO	TY-FRB	SEMI-RECESSED
◁	2	PENDENT	WHITE	155	3.00	1/2"	TY1234	TYCO	LF1	SEMI-RECESSED
◁	186	SIDEWALL	WHITE	155	4.40	1/2"	TY2334	TYCO	LF1	SEMI-RECESSED
◁	4	SIDEWALL	WHITE	155	8.00	3/4"	TY4332	TYCO	TY-FRB	SEMI-RECESSED
◁	65	SPRIG	BRASS	200	5.60	1/2"	TY313	TYCO	TY-FRB	N/A
◁	50	UPRIGHT	BRASS	200	5.60	1/2"	TY313	TYCO	TY-FRB	N/A
◁	1	SIDEWALL	CHROME	200	11.20	1"	TY3339	TYCO	DS-3	SEMI-RECESSED
1481 TOTAL										

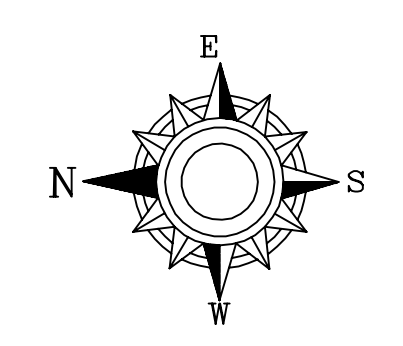
GENERAL NOTES
 1. SYSTEM SHALL BE PER NFPA 13 CODE EDITION AND STATE FIRE MARSHAL'S OFFICE APPROVED LISTING. ALL LISTED MINIMUM PIPE SIZE SHALL BE 1" NOMINAL PIPE SIZE UNLESS OTHERWISE NOTED.
 2. ALL WELDING SHALL BE PER NFPA 51B AND SHALL BE APPROVED SHOP WELDING.
 3. ALL WELDING SHALL BE PER NFPA 51B AND SHALL BE APPROVED SHOP WELDING.
 4. ALL WELDING SHALL BE PER NFPA 51B AND SHALL BE APPROVED SHOP WELDING.
 5. ALL WELDING SHALL BE PER NFPA 51B AND SHALL BE APPROVED SHOP WELDING.
 6. ALL WELDING SHALL BE PER NFPA 51B AND SHALL BE APPROVED SHOP WELDING.
 7. ALL WELDING SHALL BE PER NFPA 51B AND SHALL BE APPROVED SHOP WELDING.
 8. ALL WELDING SHALL BE PER NFPA 51B AND SHALL BE APPROVED SHOP WELDING.
 9. ALL WELDING SHALL BE PER NFPA 51B AND SHALL BE APPROVED SHOP WELDING.
 10. ALL WELDING SHALL BE PER NFPA 51B AND SHALL BE APPROVED SHOP WELDING.
 11. ALL WELDING SHALL BE PER NFPA 51B AND SHALL BE APPROVED SHOP WELDING.
 12. ALL WELDING SHALL BE PER NFPA 51B AND SHALL BE APPROVED SHOP WELDING.
 13. ALL WELDING SHALL BE PER NFPA 51B AND SHALL BE APPROVED SHOP WELDING.
 14. ALL WELDING SHALL BE PER NFPA 51B AND SHALL BE APPROVED SHOP WELDING.
 15. ALL WELDING SHALL BE PER NFPA 51B AND SHALL BE APPROVED SHOP WELDING.
 16. ALL WELDING SHALL BE PER NFPA 51B AND SHALL BE APPROVED SHOP WELDING.
 17. ALL WELDING SHALL BE PER NFPA 51B AND SHALL BE APPROVED SHOP WELDING.
 18. ALL WELDING SHALL BE PER NFPA 51B AND SHALL BE APPROVED SHOP WELDING.
 19. ALL WELDING SHALL BE PER NFPA 51B AND SHALL BE APPROVED SHOP WELDING.
 20. ALL WELDING SHALL BE PER NFPA 51B AND SHALL BE APPROVED SHOP WELDING.

APPROVAL STAMPS

NO	REVISIONS	DATE

FIRE PROTECTION PLAN
 Drawing Title: FIRE PROTECTION PLAN
 Contract No.: C22-37
 Drawing Date: 12/20/2022
 Scale: 1/8" = 1'-0"
 Drawn By: AM
 Approval By: STATE FIRE MARSHAL DIV.
 SHEET NO. FP 2 of 5

TYLER STREET STACKS
 950 13TH AVENUE NE,
 MINNEAPOLIS, MN 55413

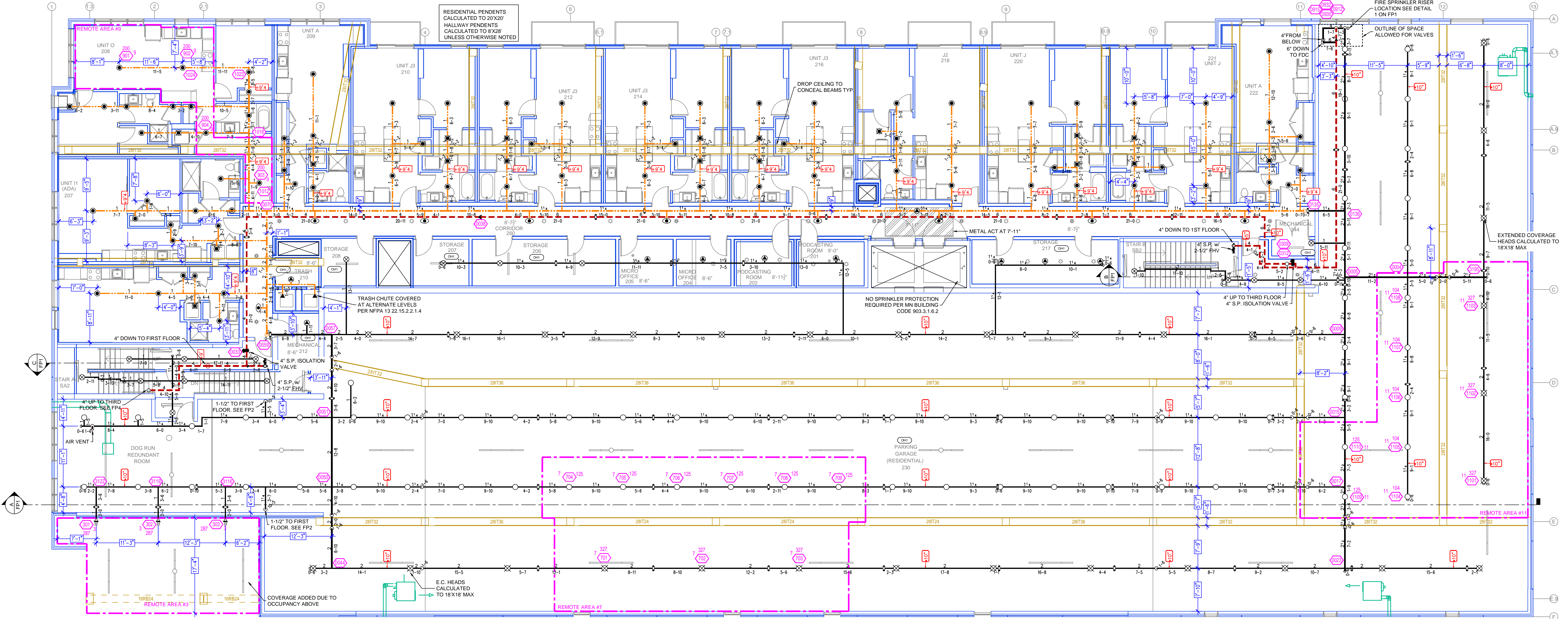


Design Area # 9 HAZARD: RES
 Zone: 2 System Type: WET
 Location: UNIT 208
 Flowing Outlets: 4
 Density: 0.10 Remote Area: 420
 Flow: 189.1 gpm @ 53.4 psi
 Calculation Safety: 26.5 psi
 Includes 100 gpm Hose allowance
 NOTE: 4 HEAD RESIDENTIAL CALC PER NFPA 13 11.3.1.1

- GENERAL NOTES
1. SYSTEM SHALL BE PER NFPA 13 (2015 EDITION) AND STATE FIRE MARSHAL'S OFFICE APPROVED LISTED COMPONENTS.
 2. ALL PIPING SHALL BE 1" NOMINAL PIPE SIZE UNLESS OTHERWISE NOTED.
 3. SHORT RAN PIPING SHALL BE WELDED OUTLETS & GROUNDED.
 4. ALL WELDING PER NFPA 54 SHALL BE DONE WITHOUT APPROVED SHOP DRAWINGS.
 5. CONDUITS SHALL BE PER FABRICATOR'S RECOMMENDATION AND SHALL BE INSTALLED BY SPRINKLER CONTRACTOR AND SHALL BE INSTALLED PRIOR TO FABRICATION.
 6. HIGH TEMPERATURE HEADS ARE TO BE CALCULATED WHERE REQUIRED.
 7. HANDS ARE TO BE USED TO REMOVE AND INSTALL APPROVED HEADS.
 8. HANDS ARE TO BE USED TO REMOVE AND INSTALL APPROVED HEADS.
 9. HANDS ARE TO BE USED TO REMOVE AND INSTALL APPROVED HEADS.
 10. HANDS ARE TO BE USED TO REMOVE AND INSTALL APPROVED HEADS.
 11. ELECTRICAL WORK, LAMP DETECTION AND SUPERVISORY BY OWNER.
 12. WET SYSTEM PIPING FROM FREEZING.

APPROVAL STAMPS

DATE	REVISIONS	NO



CALC PLACARD

Design Area # 3 HAZARD: OH1
 Zone: 2 System Type: WET
 Location: ELECTRICAL SWITCH GEAR
 Flowing Outlets: 3
 Density: 0.15 Remote Area: 570
 Flow: 385.2 gpm @ 67.2 psi
 Calculation Safety: 12.5 psi
 Includes 250 gpm Hose allowance
 NOTE: ROOM DESIGN CALC PER NFPA 13 11.2.3.3

Design Area # 7 HAZARD: OH1
 Zone: 2 System Type: WET
 Location: PARKING GARAGE
 Flowing Outlets: 9
 Density: 0.15 Remote Area: 1566
 Flow: 544.5 gpm @ 71.3 psi
 Calculation Safety: 8.2 psi
 Includes 250 gpm Hose allowance
 NOTE: 1500sf CALC DUE TO STANDARD RESPONSE SPRINKLERS BEING UTILIZED

2ND FLOOR FIRE SPRINKLER PLAN
 SCALE= 1/8" = 1'-0"

Design Area # 11 HAZARD: OH1
 Zone: 2 System Type: WET
 Location: 2ND FLOOR PARKING
 Flowing Outlets: 10
 Density: 0.15 Remote Area: 1503
 Flow: 546.5 gpm @ 60.3 psi
 Calculation Safety: 19.3 psi
 Includes 250 gpm Hose allowance
 NOTE: 1500sf CALC DUE TO STANDARD RESPONSE SPRINKLERS BEING UTILIZED

TIDYPIPE LEGEND

— WET SYSTEM BLACK STEEL PIPING
 — CPVC BLAZEMASTER PIPING
 - - - STANDPIPE PIPING

SPRINKLER HEAD LEGEND

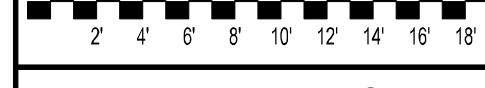
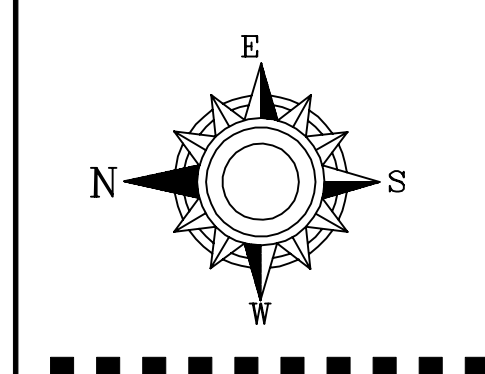
SYM	QTY	POSITION	FINISH	TEMP	K	NPT	SIN	MFG	MODEL#	ESCUTCHEON
○	137	UPRIGHT	BRASS	286	5.60	1/2"	TY3151	TYCO	TY-B	N/A
◄	3	SIDEWALL	BRASS	200	11.20	3/4"	TY5332	TYCO	ELOW20	N/A
◄	57	SIDEWALL	WHITE	200	5.60	1/2"	TY3331	TYCO	TY-FRB	SEMI-RECESSED
◄	51	UPRIGHT	BRASS	286	14.00	3/4"	TY6137	TYCO	EC-14	SEMI-RECESSED
◄	5	UPR	BRASS	286	5.60	1/2"	TY3151	TYCO	TY-B	N/A
◄	183	PENDENT	WHITE	200	5.60	1/2"	TY3323	TYCO	TY-FRB	SEMI-RECESSED
◄	3	SIDEWALL	CHROME	200	5.60	1"	TY3355	TYCO	DS-1	SEMI-RECESSED
◄	642	PENDENT	WHITE	155	4.90	1/2"	TY2296	TYCO	LFI	SEMI-RECESSED
◄	62	PENDENT	WHITE	200	5.60	3/4"	TY4282	TYCO	EC-AC	SEMI-RECESSED
◄	46	PENDENT	WHITE	200	5.60	1/2"	TY3223	TYCO	TY-FRB	SEMI-RECESSED
◄	2	PENDENT	WHITE	155	3.00	1/2"	TY1234	TYCO	LFI	SEMI-RECESSED
◄	186	SIDEWALL	WHITE	155	4.40	1/2"	TY2334	TYCO	LFI	SEMI-RECESSED
◄	6	SIDEWALL	WHITE	155	8.00	3/4"	TY4332	TYCO	TY-FRB	SEMI-RECESSED
◄	65	SPRIG	BRASS	200	5.60	1/2"	TY3151	TYCO	TY-FRB	N/A
◄	50	UPRIGHT	BRASS	200	5.60	1/2"	TY3151	TYCO	TY-FRB	N/A
◄	3	SIDEWALL	CHROME	200	11.20	1"	TY5339	TYCO	DS-3	SEMI-RECESSED
1491 TOTAL										

FIRE PROTECTION PLAN

TYLER STREET STACKS
 950 13TH AVENUE NE,
 MINNEAPOLIS, MN 55413

Contract No:
C22-37

Drawing Date: 12/20/2022
 Scale: 1/8" = 1'-0"
 Drawn By: AM
 Approval By: STATE FIRE MARSHAL DIV.
 SHEET NO. **FP 3 of 5**

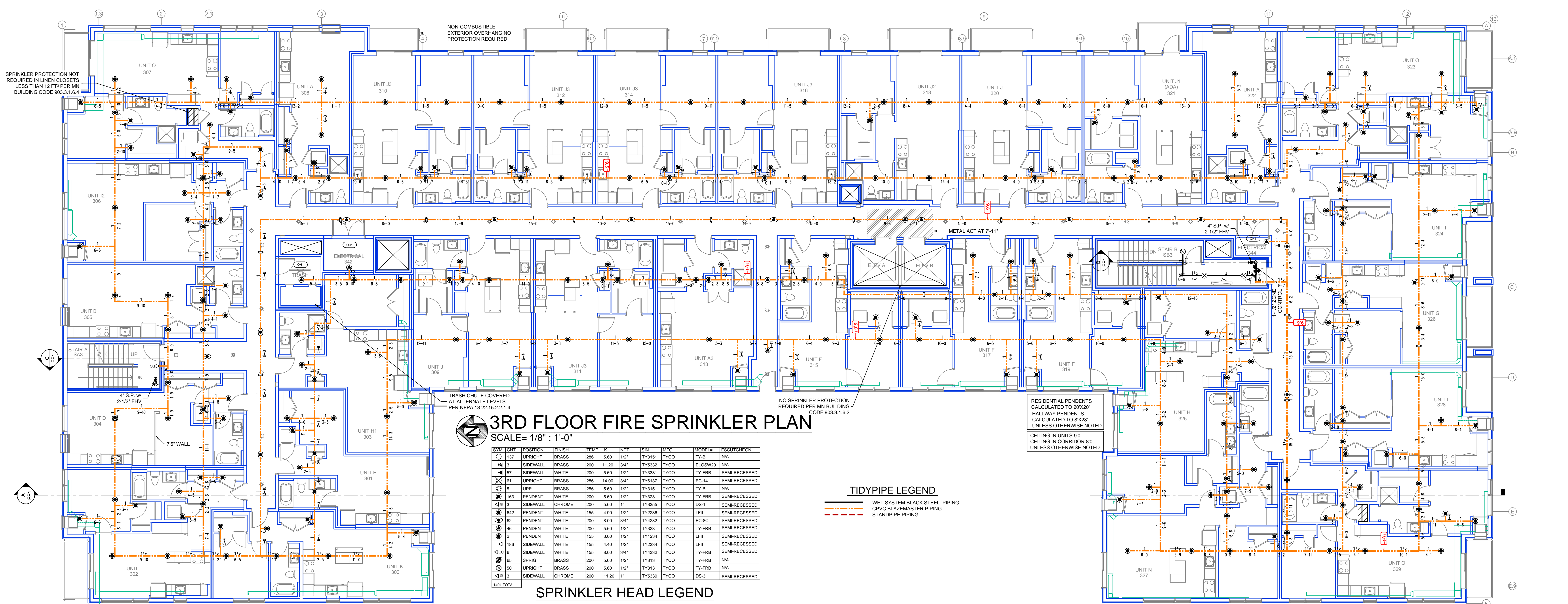


GENERAL NOTES

- SYSTEMS SHALL BE PER NFPA 13 (SEE SECTION) AND STATE FIRE MARSHAL'S OFFICE APPROVALS (SEE LISTED).
- MINIMUM PIPE SIZE SHALL BE 1" NOMINAL PIPE SIZE UNLESS OTHERWISE NOTED.
- SHORT RAN PIPING SHALL BE WELDED OUTLETS & GROUNDED.
- ALL WELDING PER NFPA 54 SHALL BE TO BE DONE WITHOUT APPROVED SHOP DRAWINGS.
- CONDUITS SHALL BE PER NFPA 70 (SEE SECTION) AND SHALL BE INSTALLED BY SPRINKLER CONTRACTOR AND SHALL BE INSTALLED PRIOR TO FABRICATION AND INSTALLATION OF SPRINKLER CONTRACTOR.
- HIGH TEMPERATURE HEADWARE TO BE ALLOCATED WHERE REQUIRED.
- HEADWARE SHALL BE USED AND SHALL BE APPROVED WRENCH HANDLES SHALL BE USED AND SHALL BE APPROVED.
- ELECTRICAL WORK, ALARM DETECTION AND SUPERVISORY BY OWNER SHALL BE PER NFPA 72 (SEE SECTION).
- WET SYSTEM PIPING FROM FREEZING.

APPROVAL STAMPS

DATE	
REVISIONS	
NO	



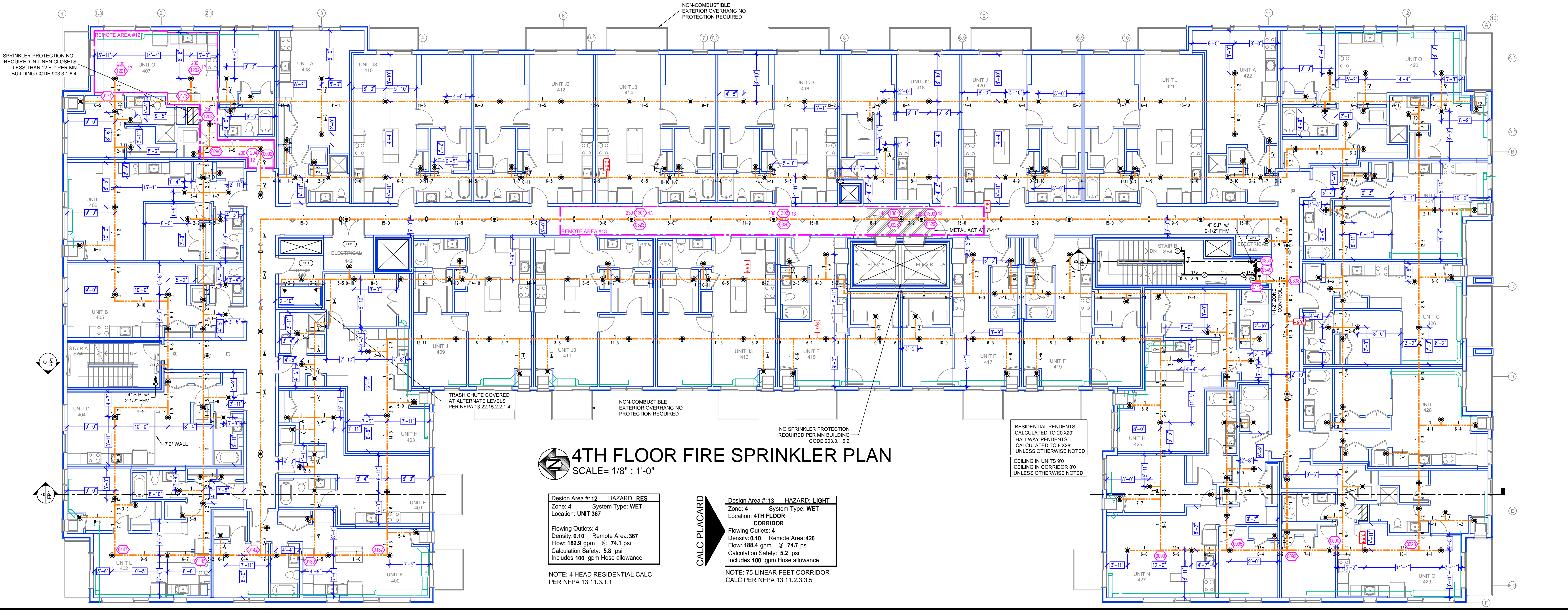
3RD FLOOR FIRE SPRINKLER PLAN
SCALE= 1/8" = 1'-0"

SYM	QTY	POSITION	FRESH	TEMP	K	NPT	SRN	MPG	MODEL#	ESCUTCHION
137	1	UPRIGHT	BRASS	288	5.80	1/2"	TY3151	TYCO	TY-48	N/A
3	3	SIDEWALL	BRASS	200	11.20	3/4"	TY3332	TYCO	ELORWB0	N/A
57	57	SIDEWALL	WHITE	200	5.80	1/2"	TY3331	TYCO	TY-FRB	SEM-RECESSED
61	61	UPRIGHT	BRASS	288	14.00	3/4"	TY6137	TYCO	EC-14	SEM-RECESSED
5	5	UPR	BRASS	288	5.80	1/2"	TY3151	TYCO	TY-B	N/A
163	163	PENDENT	WHITE	200	5.80	1/2"	TY323	TYCO	TY-FRB	SEM-RECESSED
188	188	SIDEWALL	CHROME	200	5.80	1"	TY3365	TYCO	DS-1	SEM-RECESSED
442	442	PENDENT	WHITE	155	4.90	1/2"	TY2258	TYCO	LFI	SEM-RECESSED
62	62	PENDENT	WHITE	200	8.00	3/4"	TY4282	TYCO	EC-8C	SEM-RECESSED
46	46	PENDENT	WHITE	200	5.80	1/2"	TY323	TYCO	TY-FRB	SEM-RECESSED
2	2	PENDENT	WHITE	155	3.00	1/2"	TY1234	TYCO	LFI	SEM-RECESSED
188	188	SIDEWALL	WHITE	155	4.40	1/2"	TY2258	TYCO	LFI	SEM-RECESSED
6	6	SIDEWALL	WHITE	155	8.00	3/4"	TY4332	TYCO	TY-FRB	SEM-RECESSED
65	65	SPRIG	BRASS	200	5.80	1/2"	TY913	TYCO	TY-FRB	N/A
50	50	UPRIGHT	BRASS	200	5.80	1/2"	TY313	TYCO	TY-FRB	N/A
3	3	SIDEWALL	CHROME	200	11.20	1"	TY3330	TYCO	DS-3	SEM-RECESSED
1481 TOTAL										

SPRINKLER HEAD LEGEND

TIDYPIPE LEGEND

- WET SYSTEM BLACK STEEL PIPING
- CPVC BLAZEMASTER PIPING
- STANDPIPE PIPING



4TH FLOOR FIRE SPRINKLER PLAN
SCALE= 1/8" = 1'-0"

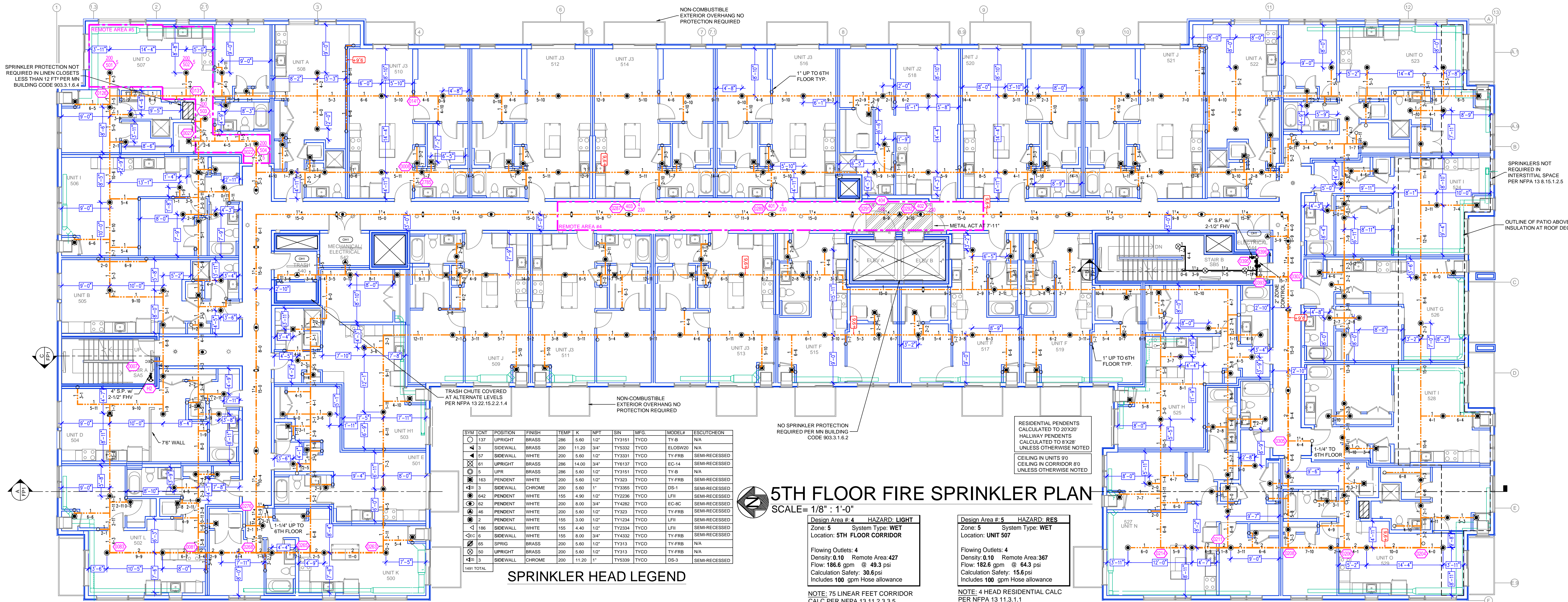
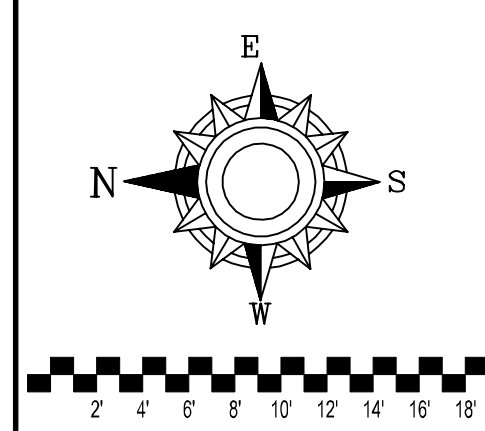
Design Area #12 HAZARD: RES
Zone: 4 System Type: WET
Location: UNIT 367
Flowing Outlets: 4
Density: 0.10 Remote Area: 367
Flow: 182.9 gpm @ 74.1 psi
Calculation Safety: 5.8 psi
Includes 100 gpm Hose allowance
NOTE: 4 HEAD RESIDENTIAL CALC PER NFPA 13 11.3.1.1

CALC PLACARD
Design Area #13 HAZARD: RES
Zone: 4 System Type: WET
Location: 4TH FLOOR CORRIDOR
Flowing Outlets: 4
Density: 0.10 Remote Area: 426
Flow: 188.4 gpm @ 74.7 psi
Calculation Safety: 5.2 psi
Includes 100 gpm Hose allowance
NOTE: 75 LINEAR FEET CORRIDOR CALC PER NFPA 13 11.2.3.3.5

FIRE PROTECTION PLAN

TYLER STREET STACKS
950 13TH AVENUE NE,
MINNEAPOLIS, MN 55413

Contract No: **C22-37**
Drawing Date: 12/20/2022
Scale: 1/8" = 1'-0"
Drawn By: AM
Approval By: STATE FIRE MARSHAL DIV.
SHEET NO. **FP 4 of 5**



SYM	CNT	POSITION	FINISH	TEMP	K	NPT	SN	MFL	MODEL#	ESC/NOTATION
137	1	UPRIGHT	BRASS	286	5.60	1/2"	TY3151	TYCO	TY-B	N/A
13	1	SIDEWALL	BRASS	200	11.20	3/4"	TY3332	TYCO	ELOW20	N/A
57	1	SIDEWALL	WHITE	200	5.60	1/2"	TY3331	TYCO	TY-FRB	SEMI-RECESSED
81	1	UPRIGHT	BRASS	286	14.00	3/4"	TY8197	TYCO	EC-14	SEMI-RECESSED
15	1	UPR	BRASS	286	5.60	1/2"	TY3151	TYCO	TY-B	N/A
163	1	PENDENT	WHITE	200	5.60	1/2"	TY323	TYCO	TY-FRB	SEMI-RECESSED
418	1	SIDEWALL	CHROME	200	5.60	1"	TY3355	TYCO	DB-1	SEMI-RECESSED
642	1	PENDENT	WHITE	155	4.90	1/2"	TY2236	TYCO	LFPI	SEMI-RECESSED
62	1	PENDENT	WHITE	200	8.00	3/4"	TY4282	TYCO	EC-8C	SEMI-RECESSED
46	1	PENDENT	WHITE	200	5.60	1/2"	TY323	TYCO	TY-FRB	SEMI-RECESSED
12	1	PENDENT	WHITE	155	3.00	1/2"	TY1234	TYCO	LFPI	SEMI-RECESSED
186	1	SIDEWALL	WHITE	155	4.40	1/2"	TY2334	TYCO	LFPI	SEMI-RECESSED
6	1	PENDENT	WHITE	155	8.00	3/4"	TY4332	TYCO	TY-FRB	SEMI-RECESSED
65	1	SPRNG	BRASS	200	5.60	1/2"	TY313	TYCO	TY-FRB	N/A
50	1	UPRIGHT	BRASS	200	5.60	1/2"	TY313	TYCO	TY-FRB	N/A
13	1	SIDEWALL	CHROME	200	11.20	1"	TY3339	TYCO	DB-3	SEMI-RECESSED
TSH TOTAL										

5TH FLOOR FIRE SPRINKLER PLAN

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

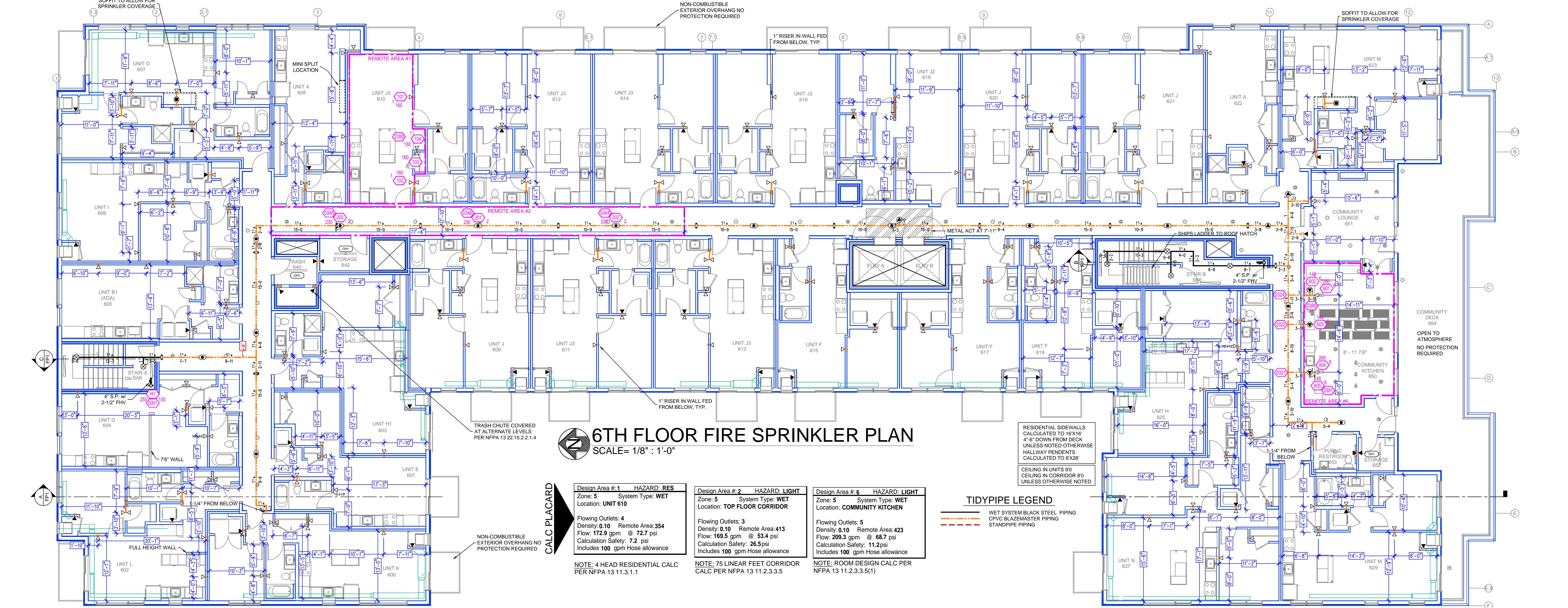
Design Area # 4 HAZARD: LIGHT
 Zone: 5 System Type: WET
 Location: 5TH FLOOR CORRIDOR
 Flowing Outlets: 4
 Density: 0.10 Remote Area: 427
 Flow: 186.6 gpm @ 49.3 psi
 Calculation Safety: 30.6 psi
 Includes 100 gpm Hose allowance

Design Area # 5 HAZARD: RES
 Zone: 5 System Type: WET
 Location: UNIT 507
 Flowing Outlets: 4
 Density: 0.10 Remote Area: 367
 Flow: 182.6 gpm @ 64.3 psi
 Calculation Safety: 15.6 psi
 Includes 100 gpm Hose allowance

NOTE: 75 LINEAR FEET CORRIDOR CALC PER NFPA 13 11.2.3.3.5

NOTE: 4 HEAD RESIDENTIAL CALC PER NFPA 13 11.3.1.1

SPRINKLER HEAD LEGEND



6TH FLOOR FIRE SPRINKLER PLAN

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

Design Area # 1 HAZARD: RES
 Zone: 5 System Type: WET
 Location: UNIT 610
 Flowing Outlets: 4
 Density: 0.10 Remote Area: 354
 Flow: 172.9 gpm @ 72.7 psi
 Calculation Safety: 7.2 psi
 Includes 100 gpm Hose allowance

Design Area # 2 HAZARD: LIGHT
 Zone: 5 System Type: WET
 Location: TOP FLOOR CORRIDOR
 Flowing Outlets: 3
 Density: 0.10 Remote Area: 413
 Flow: 169.5 gpm @ 55.4 psi
 Calculation Safety: 26.5 psi
 Includes 100 gpm Hose allowance

Design Area # 6 HAZARD: LIGHT
 Zone: 5 System Type: WET
 Location: COMMUNITY KITCHEN
 Flowing Outlets: 5
 Density: 0.10 Remote Area: 423
 Flow: 209.3 gpm @ 68.7 psi
 Calculation Safety: 11.2 psi
 Includes 100 gpm Hose allowance

NOTE: 4 HEAD RESIDENTIAL CALC PER NFPA 13 11.3.1.1

NOTE: 75 LINEAR FEET CORRIDOR CALC PER NFPA 13 11.2.3.3.5

NOTE: ROOM DESIGN CALC PER NFPA 13 11.2.3.3.5(1)

TIDYPIPE LEGEND

- WET SYSTEM BLACK STEEL PIPING
- CPVC BLAZEMASTER PIPING
- STANDPIPE PIPING

GENERAL NOTES:
 1. SYSTEM SHALL BE PER NFPA 13 (2015 EDITION) AND STATE FIRE MARSHAL'S APPROVED LISTING.
 2. MINIMUM PIPE SIZE SHALL BE 1" NOMINAL PIPE SIZE.
 3. SHORT RAN PIPING SHALL BE WELDED OUTLETS APPROVED SHOP.
 4. ALL WELDING PER NFPA 54 SHALL BE PER WELDER WITHOUT APPROVED SHOP DRAWINGS.
 5. CONDUITS SHALL BE PER NFPA 70 (2017 EDITION) AND SHALL BE INSTALLED BY SPRINKLER CONTRACTOR.
 6. HIGH TEMPERATURE HEADWARE TO BE ILLUMINATED WHERE REQUIRED.
 7. HANDS ARE TO BE USED TO REMOVE ANY APPROVED WRENCH.
 8. ELECTRICAL WORK SHALL BE PER NFPA 70 (2017 EDITION) AND SHALL BE INSTALLED BY LICENSED ELECTRICIAN.
 9. WET SYSTEM PIPING FROM PREZING.

NO	REVISIONS	DATE	APPROVAL STAMPS

TYLER STREET STACKS
 950 13TH AVENUE NE,
 MINNEAPOLIS, MN 55413

Contract No: **C22-37**
 Drawing Date: 12/20/2022
 Scale: 1/8" = 1'-0"
 Drawn By: AM
 Approval By: STATE FIRE MARSHAL DIV.
 SHEET NO. **FP 5 of 5**