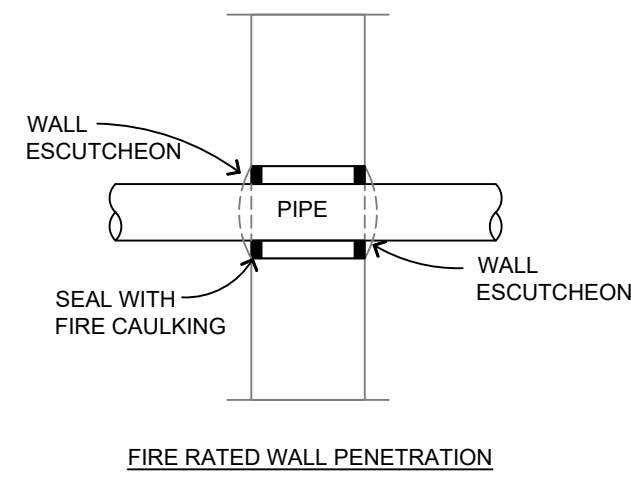


HANGER DETAILS

NFPA 13 STEEL PIPE HANGER SPACING (EXCEPT LIGHT WALL THRO 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'-0"
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"



FIRE STOPPING DETAILS

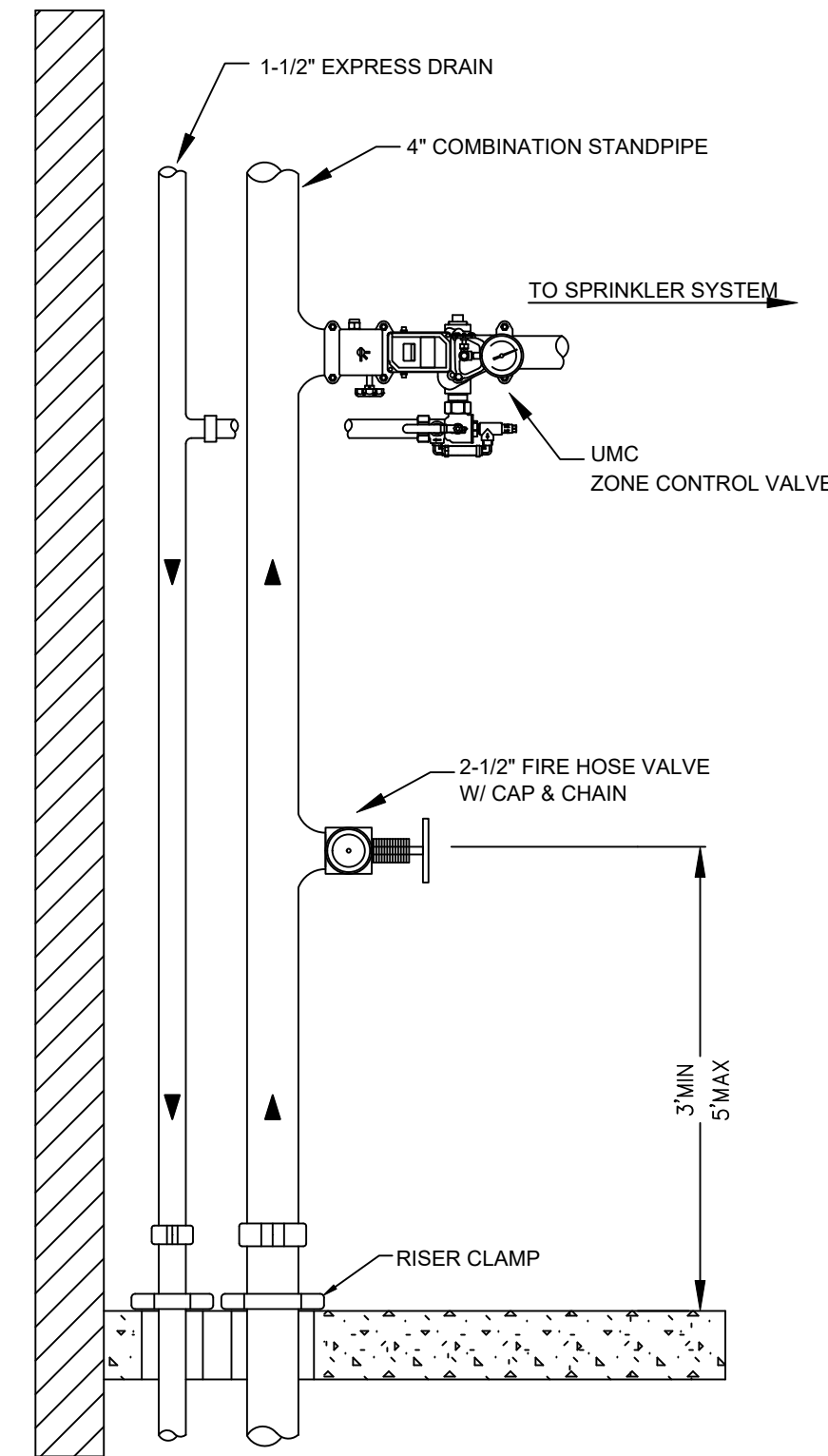
PIPE LEGEND	
	BLACK STEEL FIRE SPRINKLER PIPING
	CPVC FIRE SPRINKLER PIPING
	FIRE SPRINKLER STANDPIPE PIPING
	FIRE DEPARTMENT CONNECTION PIPING

SPRINKLER HEAD LEGEND

SYM	DATE	POSITION	FINISH	TEMP	K	INFT	SRN	MPG	MODEL#	ESCUTCHEON	HEAD BOX
⊗	201	UPRIGHT	BRASS	286	14.00	3/4"	TYE137	TYCO	EC-14	N/A	2
○	7	UPRIGHT	BRASS	200	5.60	1/2"	TY313	TYCO	TY-FRB	N/A	2
⊙	402	PENDENT	WHITE	200	5.60	1/2"	TY323	TYCO	TY-FRB	SEMI-RECESSED	2
⊙	1107	PENDENT	WHITE	155	4.90	1/2"	TY236	TYCO	LF1	SEMI-RECESSED	2
⊙	107	SIDEWALL	WHITE	105	5.90	1/2"	RA1984	RELIABLE	DR56	SEMI-RECESSED	2
⊙	4	SIDEWALL	WHITE	200	5.60	3/4"	TY432	TYCO	TY-FRB	SEMI-RECESSED	2
⊙	139	SIDEWALL	WHITE	200	5.60	1/2"	TY331	TYCO	TY-FRB	SEMI-RECESSED	2
⊙	419	SIDEWALL	WHITE	155	4.40	1/2"	TY234	TYCO	LF1	SEMI-RECESSED	2
⊙	4.0K	25	SIDEWALL	155	4.00	1/2"	VK486	VKING	VK486	SEMI-RECESSED	2
⊙	5	PENDENT	WHITE	200	5.60	1/2"	TY331	TYCO	RF1	SEMI-RECESSED	2
2418 TOTAL SPKS											

ZONE CONTROL DETAIL

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



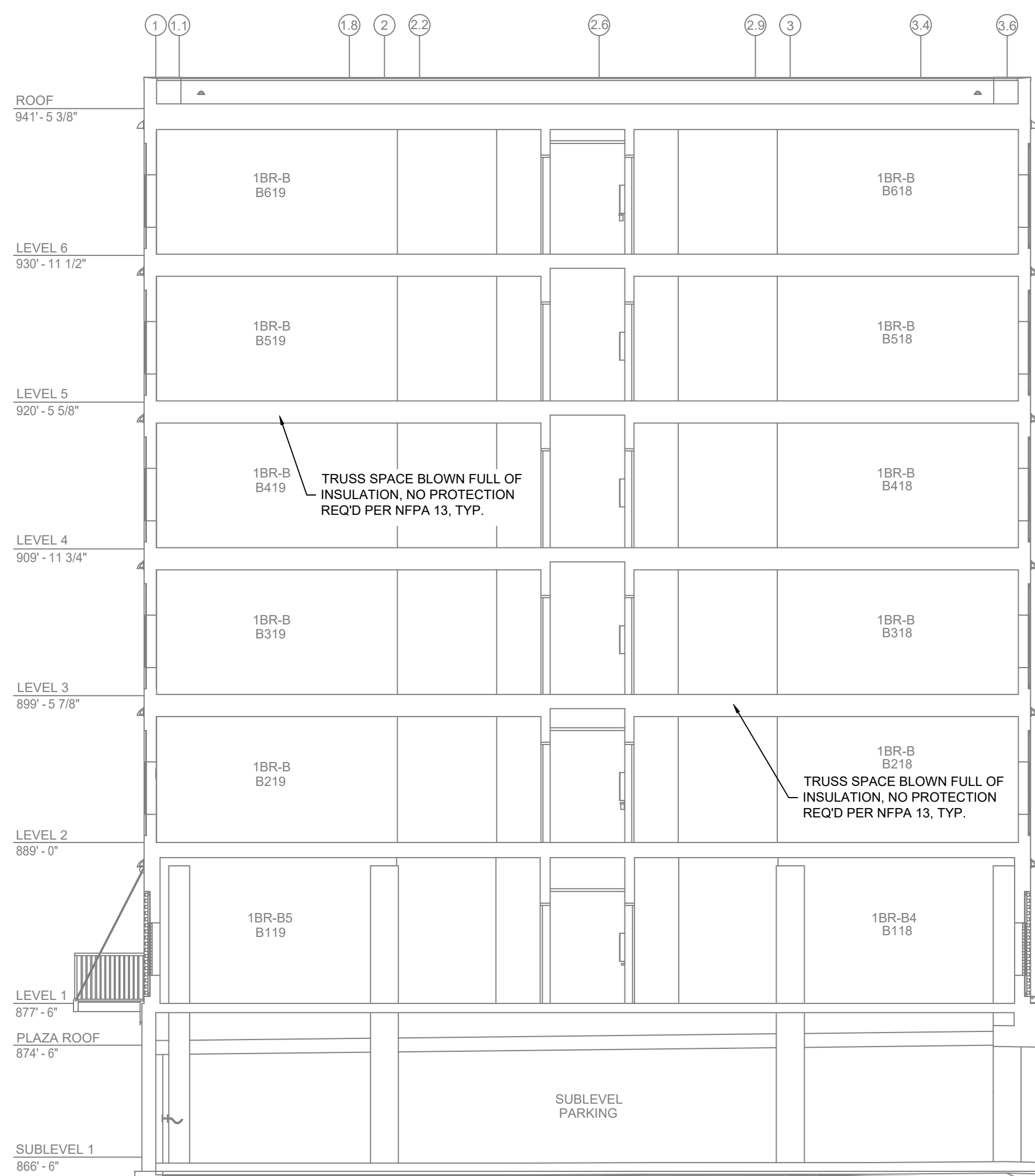
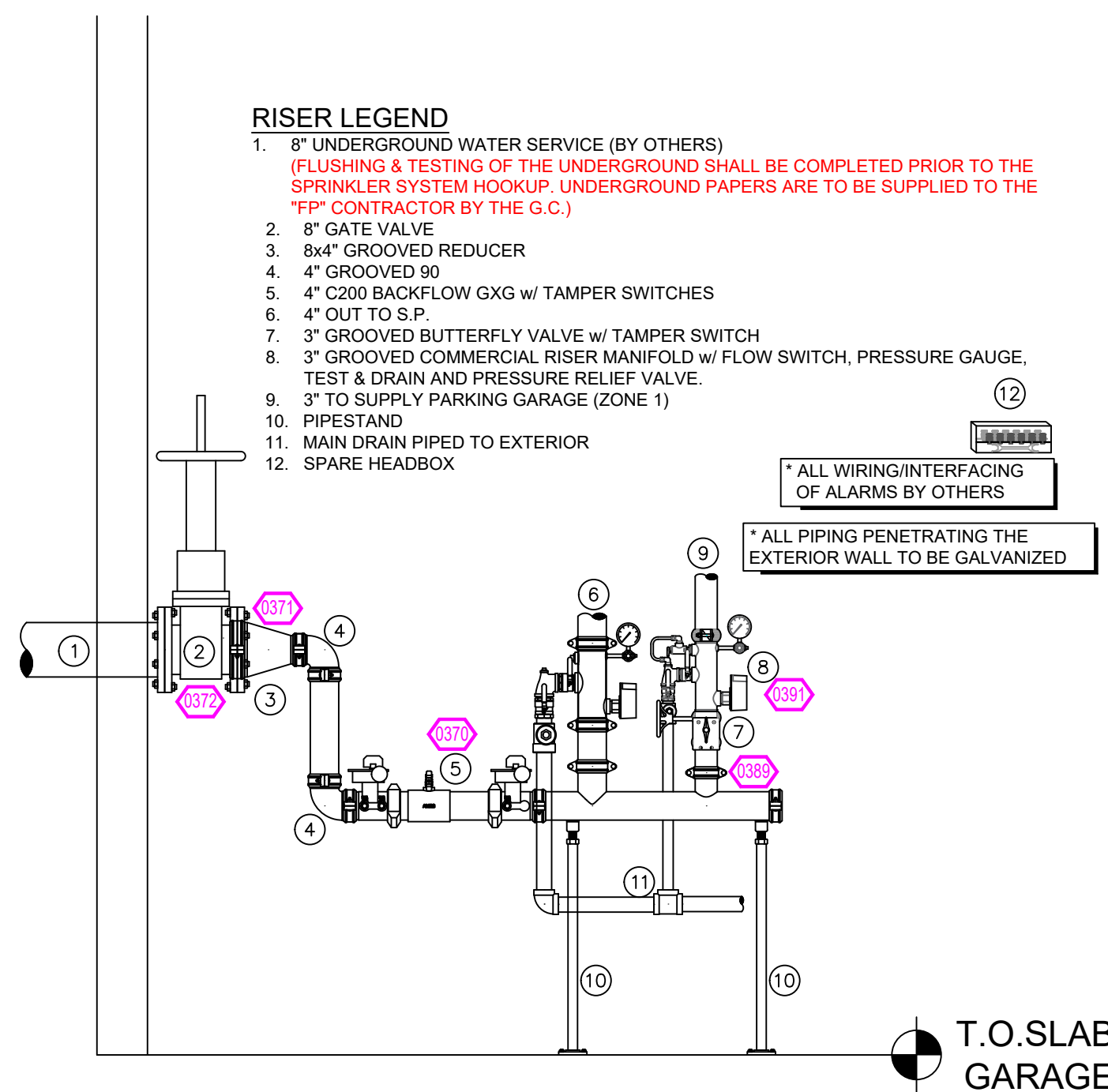
MANUAL WET STANDPIPE
 LOCATION: STAIRWELL A1
 LEVELS 5 & 6
 REQUIRED FLOW: 500 GPM
 OUTLET PSI: 100
 REQUIRED INLET PSI: 148.8

RISER LEGEND

- 8" 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 "P" CONTRACTOR BY THE G.C.
- 8" GATE VALVE
- 8x4" GROOVED REDUCER
- 4" GROOVED 90
- 4" C200 BACKFLOW GXG w/ TAMPER SWITCHES
- 4" OUT TO S.P.
- 3" GROOVED BUTTERFLY VALVE w/ TAMPER SWITCH
- 3" GROOVED COMMERCIAL RISER MANIFOLD w/ FLOW SWITCH, PRESSURE GAUGE, TEST & DRAIN AND PRESSURE RELIEF VALVE.
- 3" TO SUPPLY PARKING GARAGE (ZONE 1)
- PIPESAND
- MAIN DRAIN PIPED TO EXTERIOR
- SPARE HEADBOX

RISER DETAIL

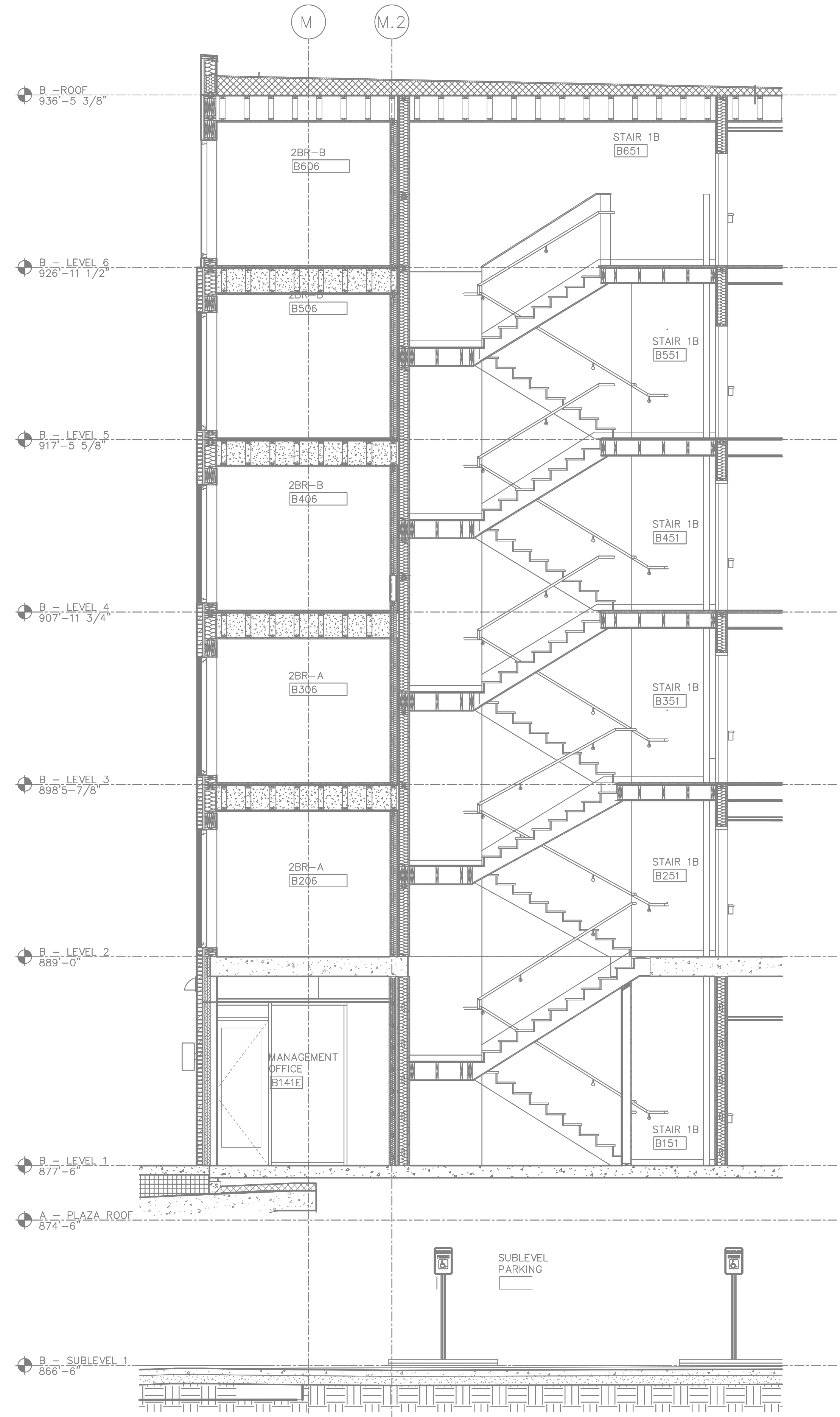
SCALE= 1/2" : 1'-0"



A BUILDING SECTION

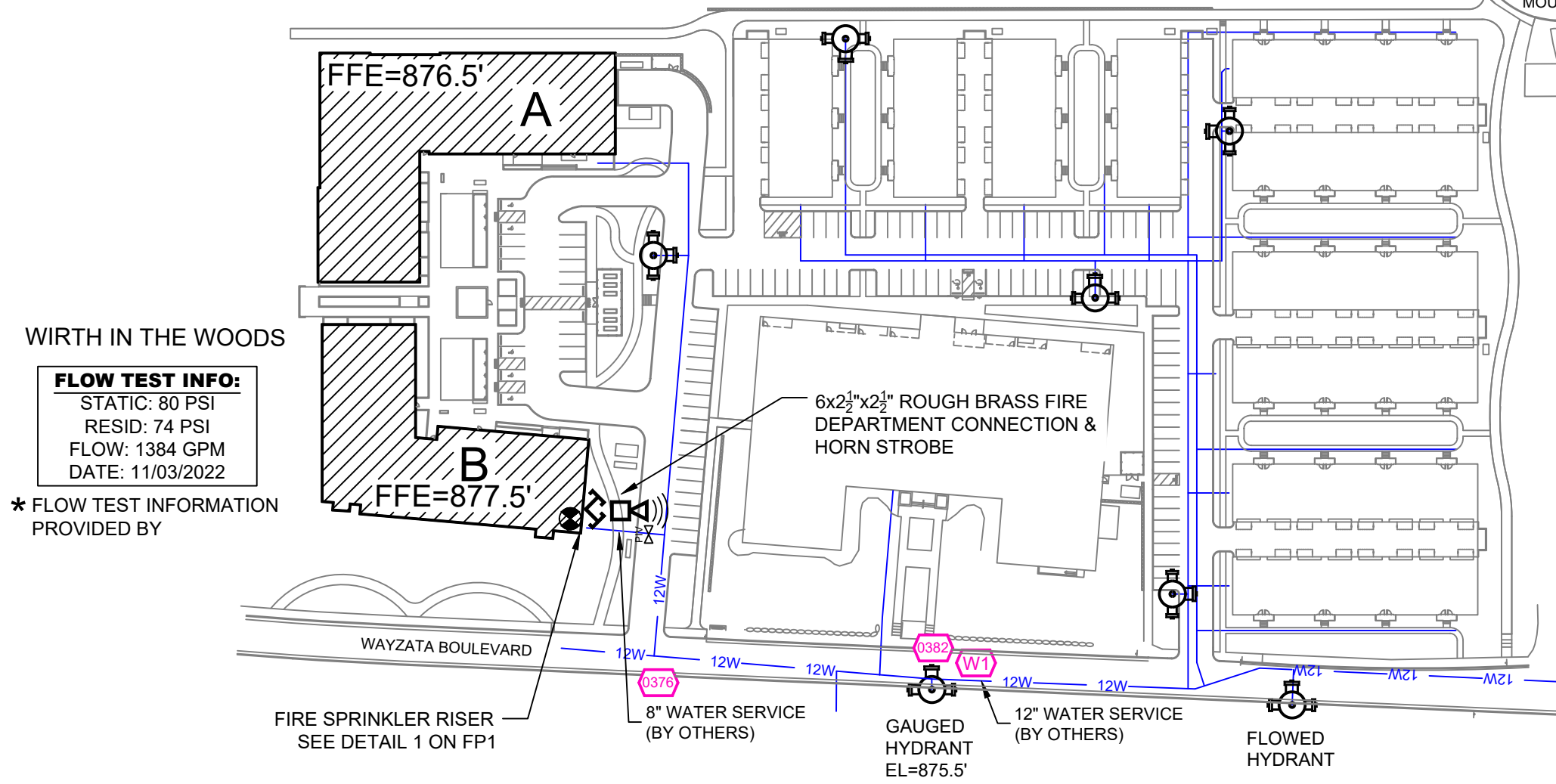
SCALE= 1/8" : 1'-0"

- #### GENERAL NOTES
- MINNESOTA STATE BUILDING CODE (2020)
 - OCCUPANCY: R-2, S-2, A-3
 - TYPE OF CONSTRUCTION: VA
 - SPRINKLERED AREAS (APPROXIMATE - SEE ARCHITECTURAL PLANS FOR ACTUAL)
 - UG. GARAGE = 27,323 S.F. (ZONE 1)
 - LEVEL 1 = 14,348 S.F. (ZONE 3)
 - LEVEL 2 = 14,442 S.F. (ZONE 4)
 - LEVEL 3 = 14,441 S.F. (ZONE 5)
 - LEVEL 4 = 14,441 S.F. (ZONE 6)
 - LEVEL 5 = 14,441 S.F. (ZONE 7)
 - LEVEL 6 = 14,441 S.F. (ZONE 7)
 - THEODORE TOTAL = 113,877 S.F.
 - INSTALLATION STANDARDS: SPRINKLER SYSTEM DESIGNED AND INSTALLED PER NFPA-13 (2016) & NFPA-14 (2016)
 - SCOPE OF WORK:
 - SHALL HAVE 1 ZONE FEEDING LEVEL: 1. PARKING, AS WELL AS A COMBINATION STANDPIPE, FEEDING RESIDENTIAL FLOORS THAT ARE ZONED PER FLOOR.
 - COMBINATION STANDPIPE FOR THEODORE WILL BE IN STAIR 1B WITH HOSE VALVES AT MAIN FLOOR LANDINGS.
 - THE NEW WIRTH IN THE WOODS ELDOSE BUILDING WILL HAVE ONE ZONE IN THE U.G. GARAGE OFF THE COMBINATION STANDPIPE AS WELL AS FEEDING 6 RESIDENTIAL FLOORS THAT ARE ZONED PER FLOOR.
 - COMBINATION STANDPIPE FOR ELDOSE WILL BE IN STAIR 2A WITH HOSE VALVES AT MAIN FLOOR LANDINGS.
 - ALL AREAS OF THE BUILDING TO BE INSTALLED AND COVERED IN ACCORDANCE WITH THE LOCAL AUTHORITY HAVING JURISDICTION AND PER NFPA 13 (2016).



B STAIR SECTION

SCALE= 1/4" : 1'-0"



SITE PLAN

SCALE: 1" = 100'-0"

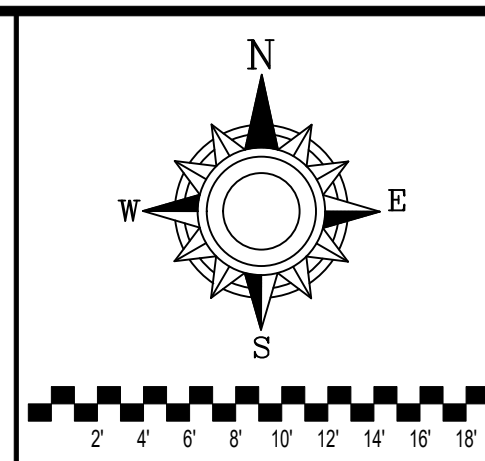
GENERAL NOTES

- SYSTEM INSTALLED PER NFPA 13 (2016 EDITION) AND STATE FIRE MARSHAL.
- ALL WELDING SHALL BE PER NFPA 511 (2015 EDITION) AND STATE FIRE MARSHAL. MINIMUM PIPE SIZE SHALL BE 1" NOMINAL PIPE SIZE.
- ALL WELDING SHALL BE PER NFPA 511 (2015 EDITION) AND STATE FIRE MARSHAL. MINIMUM PIPE SIZE SHALL BE 1" NOMINAL PIPE SIZE.
- SHORT RADIUS FITTINGS SHALL BE WELDED OUTLETS & GROOVED.
- ALL WELDING SHALL BE PER NFPA 511 (2015 EDITION) AND STATE FIRE MARSHAL. MINIMUM PIPE SIZE SHALL BE 1" NOMINAL PIPE SIZE.
- DRAWINGS COORDINATE TO BE PER A RELEASER PRIOR TO FABRICATION AND INSTALLATION BY SPRINKLER CONTRACTOR.
- HIGH TEMPERATURE HEADS ARE TO BE RELOCATED WHERE REQUIRED.
- HANDS ON TO THE FIELD TO BE PER NFPA 511 (2015 EDITION) AND STATE FIRE MARSHAL. MINIMUM PIPE SIZE SHALL BE 1" NOMINAL PIPE SIZE.
- ELECTRICAL WORK, ALARM DETECTION AND SUPERVISORY BY OWNER.
- WET SYSTEM PIPING FROM FREEZING.

NO.	REVISIONS	DATE	APPROVAL STAMPS

WIRTH IN THE WOODS
 2800 N WAZATA BLVD
 MINNEAPOLIS, MN 55405

Contract No: C22-114
 Drawing Date: 03/31/23
 Scale: 1/8" = 1'-0"
 Drawn By: BCJ
 Approval By: STATE FIRE MARSHAL DIV.
 SHEET NO. FP 1 of 9



PIPE LEGEND

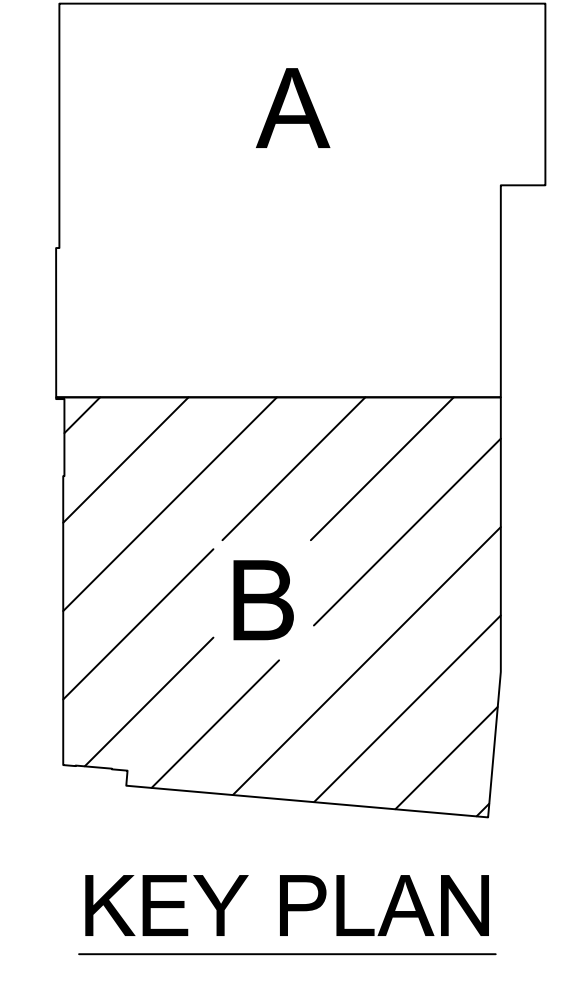
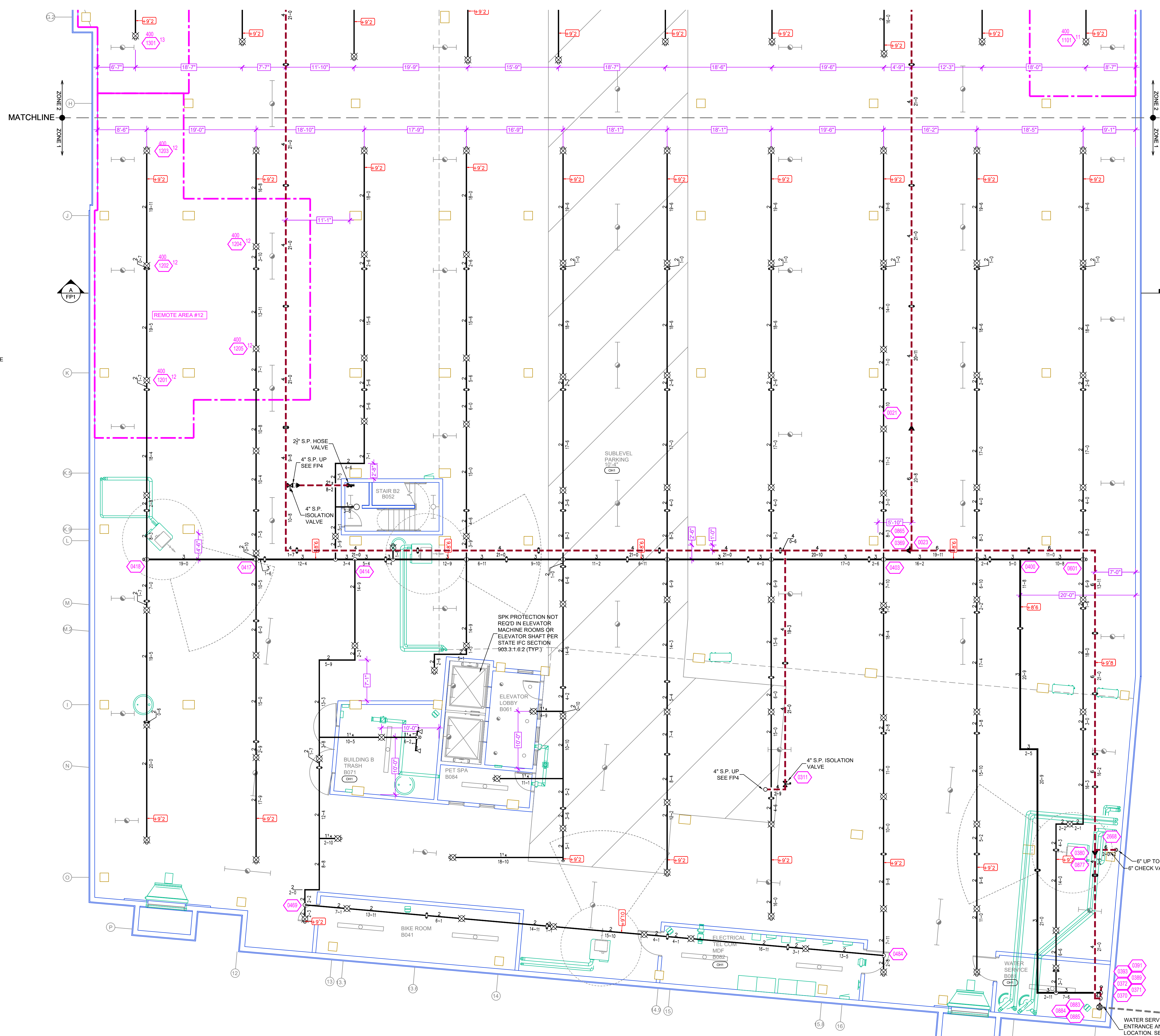
- BLACK STEEL FIRE SPRINKLER PIPING
- CPVC FIRE SPRINKLER PIPING
- FIRE SPRINKLER STANDPIPE PIPING
- FIRE DEPARTMENT CONNECTION PIPING

SPRINKLER HEAD LEGEND

SYM	CRT	POSITION	FINISH	TEMP	K	NPT	SRN	SPG	MODEL#	DESCRIPTION	HEAD BOX	
⊗	201	UPRIGHT	BRASS	200	14.00	3/4"	TY9137	TYCO	IC-14	N/A	2	
○	7	UPRIGHT	BRASS	200	5.60	1/2"	TY313	TYCO	TY-FRB	N/A	2	
⊙	402	PENDENT	WHITE	200	5.60	1/2"	TY323	TYCO	TY-FRB	SEMI-RECESSED	2	
⊙	1107	PENDENT	WHITE	155	4.90	1/2"	TY226	TYCO	LFII	SEMI-RECESSED	2	
⊙	107	SIDEWALL	WHITE	155	5.60	1/2"	RA1964	RELIABLE	DH56	SEMI-RECESSED	2	
⊙	4.0K	6	SIDEWALL	WHITE	200	8.00	3/4"	TY4332	TYCO	TY-FRB	SEMI-RECESSED	2
⊙	139	SIDEWALL	WHITE	200	5.60	1/2"	TY3331	TYCO	TY-FRB	SEMI-RECESSED	2	
⊙	419	SIDEWALL	WHITE	155	4.40	1/2"	TY2334	TYCO	LFII	SEMI-RECESSED	2	
⊙	4.0K	25	SIDEWALL	WHITE	155	4.00	VK486	VKING	VK486	SEMI-RECESSED	2	
⊙	5	PENDENT	WHITE	200	5.60	1/2"	TY3531	TYCO	RFII	SEMI-RECESSED	2	
2418 TOTAL SPK'S												

GENERAL NOTES

- SYSTEM INSTALLED PER NFPA 13 (2016 EDITION) AND STATE FIRE MARSHAL'S APPROVAL. ALL LISTED SPRINKLER HEADS SHALL BE 1" NOMINAL PIPE SIZE UNLESS OTHERWISE NOTED.
- ALL WELDING PER NFPA 54 SHALL BE DONE WITHOUT APPROVED SHOP DRAWINGS. CUSTOMERS ARE TO BE RE-INSPECTED PRIOR TO FABRICATION AND INSTALLATION BY SPRINKLER CONTRACTOR.
- HIGH TEMPERATURE HEADS ARE TO BE FIELD-INSTALLED WHERE REQUIRED.
- HEADS ARE TO BE FIELD-INSTALLED AND APPROVED WRENCH HANDLES ARE TO BE USED TO TIGHTEN HEADS.
- ELECTRICAL WIRING, ALARM DETECTION AND SUPERVISORY BY OWNER.
- WET SYSTEM PIPING FROM FREEZING.



CALC PLACARD

Design Area # 12 HAZARD 0H1
 Zone: 1 System Type: WET
 Location: SOUTH GARAGE

Flowing Outlets: 5
 Density: 0.15 Remote Area: 1695
 Flow: 574.7 gpm @ 58.9 psi
 Calculation Safety: 19.9 psi
 Includes 250 gpm Hose allowance

NOTE:
 1500 S.F. REMOTE AREA USED DUE TO THE USE OF STANDARD RESPONSE SPRINKLERS.
 EXTENDED COVERAGE UPRIGHT SPRINKLERS ARE CALCULATED AT A MAXIMUM SPACING OF 20x20

APPROVAL STAMPS

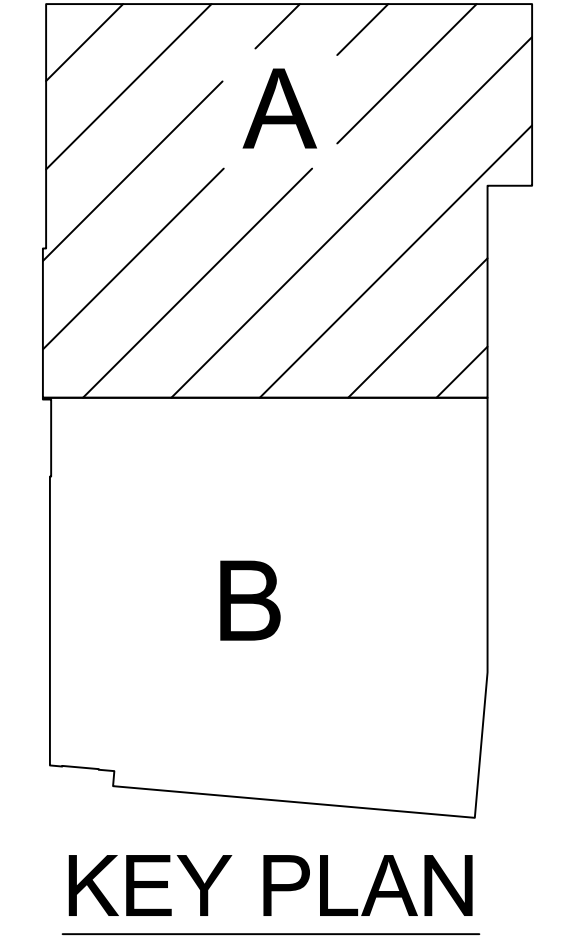
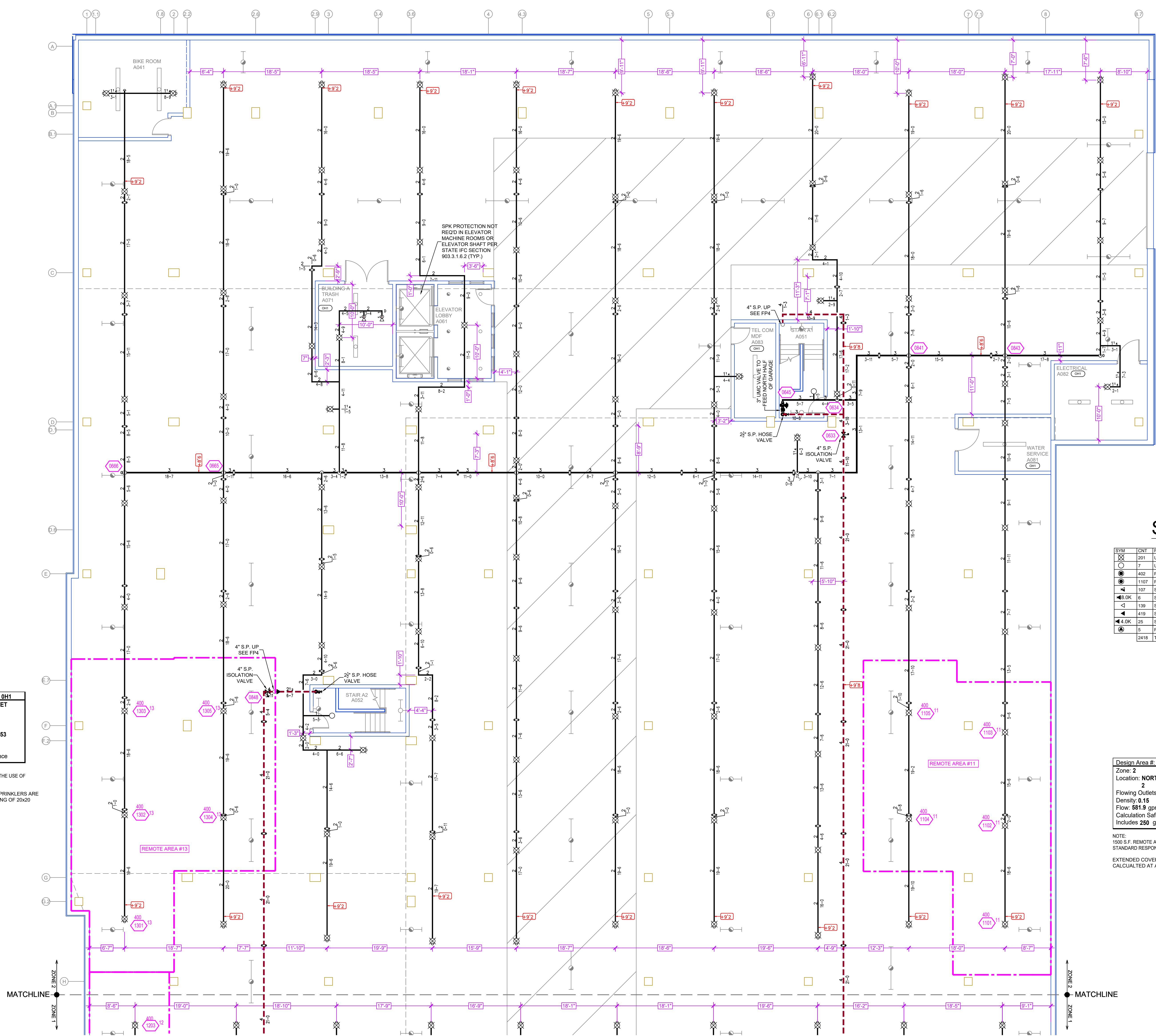
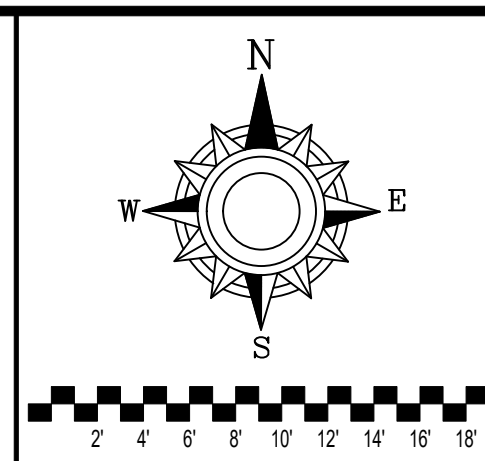
NO.	REVISIONS	DATE

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

FIRE PROTECTION PLAN

WIRTH IN THE WOODS
 2800 N WAYZATA BLVD
 MINNEAPOLIS, MN 55405

Contract No: C22-114
 Drawing Date: 03/31/23
 Scale: 1/8" = 1'-0"
 Drawn By: BCJ
 Approval By: STATE FIRE MARSHAL DIV.
 SHEET NO. FP 2 of 9



PIPE LEGEND

- BLACK STEEL FIRE SPRINKLER PIPING
- CPVC FIRE SPRINKLER PIPING
- FIRE SPRINKLER STANDPIPE PIPING
- FIRE DEPARTMENT CONNECTION PIPING

SPRINKLER HEAD LEGEND

SYM	QTY	POSITION	FINISH	TEMP	K	NPT	SIN	MPG	MODEL#	ESCUTCHEON	HEAD BOX
○	7	UPRIGHT	BRASS	286	14.00	3/4"	TY6137	TYCO	EC-14	N/A	2
○	197	SIDEWALL	WHITE	155	5.60	1/2"	TY313	TYCO	TY-FRB	N/A	2
●	402	PENDENT	WHITE	200	5.60	1/2"	TY323	TYCO	TY-FRB	SEMI-RECESSED	2
●	1107	PENDENT	WHITE	155	4.90	1/2"	TY2236	TYCO	LFII	SEMI-RECESSED	2
◄	4	SIDEWALL	WHITE	155	5.60	1/2"	RA1594	RELIABLE	DM56	SEMI-RECESSED	2
◄	8,0K	SIDEWALL	WHITE	200	8.00	3/4"	TY4332	TYCO	TY-FRB	SEMI-RECESSED	2
◄	139	SIDEWALL	WHITE	200	5.60	1/2"	TY3331	TYCO	TY-FRB	SEMI-RECESSED	2
◄	419	SIDEWALL	WHITE	155	4.40	1/2"	TY2334	TYCO	LFII	SEMI-RECESSED	2
◄	4.0K	25	SIDEWALL	WHITE	155	4.00	VK486	VKING	VK486	SEMI-RECESSED	2
◄	5	PENDENT	WHITE	200	5.60	1/2"	TY3531	TYCO	RFII	SEMI-RECESSED	2
2418 TOTAL SPK'S											

CALC PLACARD

Design Area # 13 HAZARD: 0H1
 Zone: 2 System Type: WET
 Location: NORTH GARAGE

1
 Flowing Outlets: 5
 Density: 0.15 Remote Area: 1853
 Flow: 578.1 gpm @ 70.2 psi
 Calculation Safety: 8.6 psi
 Includes 250 gpm Hose allowance

NOTE:
 1500 S.F. REMOTE AREA USED DUE TO THE USE OF STANDARD RESPONSE SPRINKLERS.
 EXTENDED COVERAGE UPRIGHT SPRINKLERS ARE CALCULATED AT A MAXIMUM SPACING OF 20x20

Design Area # 11 HAZARD: 0H1
 Zone: 2 System Type: WET
 Location: NORTH GARAGE

2
 Flowing Outlets: 5
 Density: 0.15 Remote Area: 1677
 Flow: 581.9 gpm @ 66.2 psi
 Calculation Safety: 12.6 psi
 Includes 250 gpm Hose allowance

NOTE:
 1500 S.F. REMOTE AREA USED DUE TO THE USE OF STANDARD RESPONSE SPRINKLERS.
 EXTENDED COVERAGE UPRIGHT SPRINKLERS ARE CALCULATED AT A MAXIMUM SPACING OF 20x20

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

GENERAL NOTES

- SYSTEM INSTALLED PER NFPA 13 (2016 EDITION) AND STATE FIRE MARSHAL'S APPROVED LISTING.
- ALL SPRINKLER HEADS SHALL BE LISTED.
- MINIMUM PIPE SIZE SHALL BE 1" NOMINAL PIPE SIZE.
- SHORT RISE FITTINGS SHALL BE WELDED OUTLETS & GROUNDED.
- ALL WELDING PER NFPA 54 SHALL BE DONE WITHOUT APPROVED SHOP DRAWINGS.
- DRAWINGS CUSTOMER USE TO BE RELEASSED PRIOR TO FABRICATION AND INSTALLATION BY SPRINKLER CONTRACTOR.
- HIGH TEMPERATURE HEADS ARE TO BE FIELD LOCATED WHERE REQUIRED.
- HANDS ON TO BE USED TO REMOVE AND REPAIR SPRINKLER HEADS.
- ELECTRICAL WORK, ALARM DETECTION AND SUPERVISORY BY OWNER.
- WET SYSTEM PIPING FROM FREEZING.

APPROVAL STAMPS

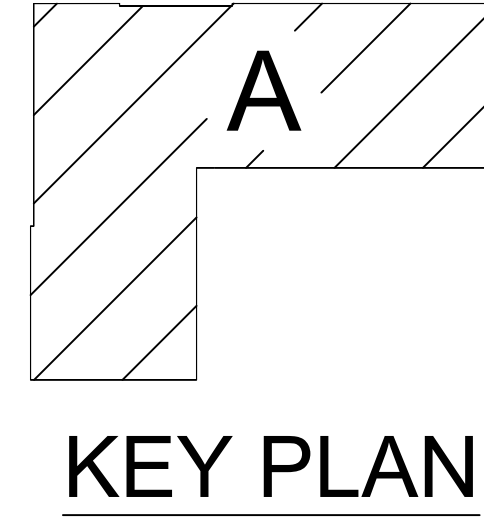
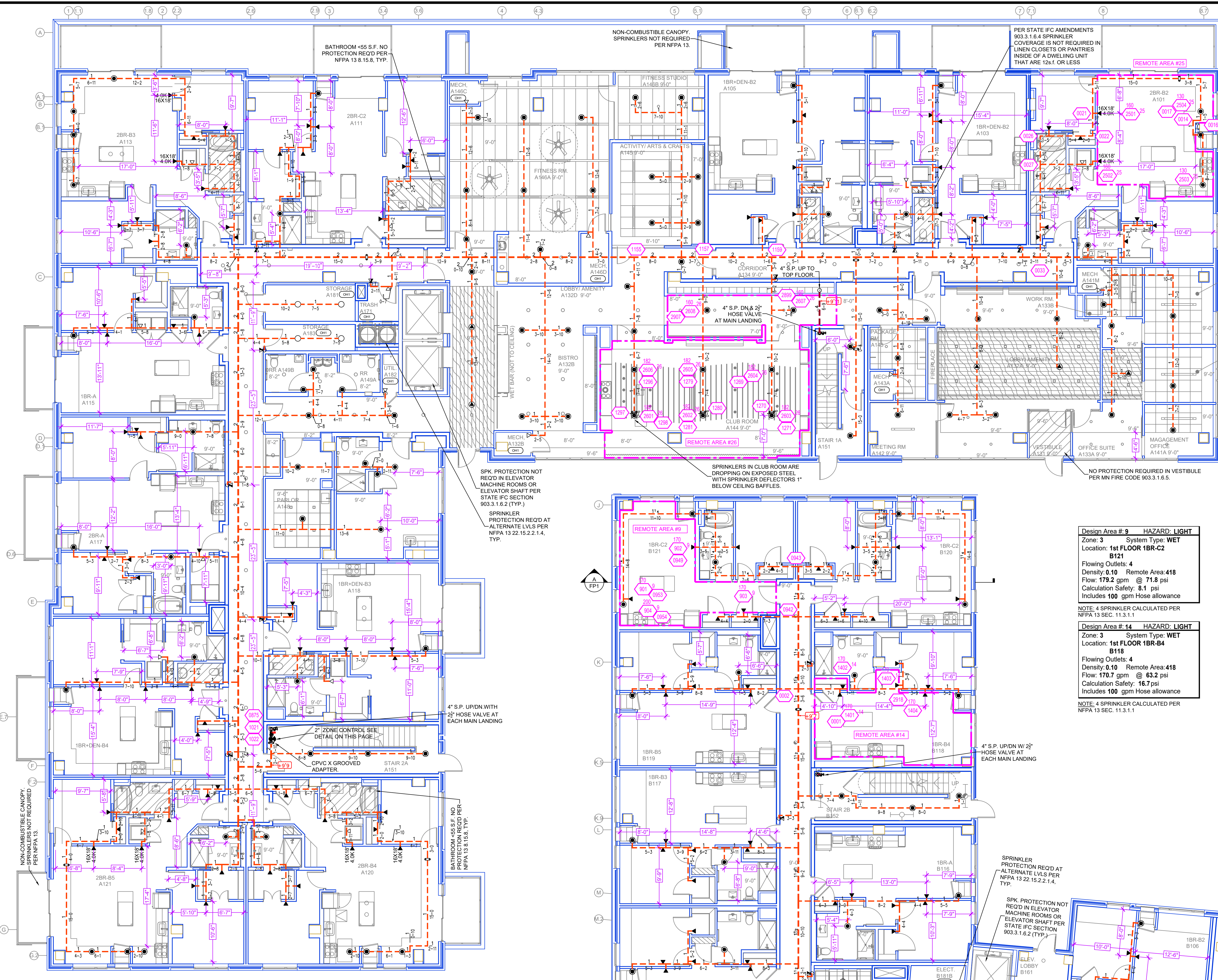
NO.	REVISIONS	DATE

FIRE PROTECTION PLAN

Contract No: **C22-114**

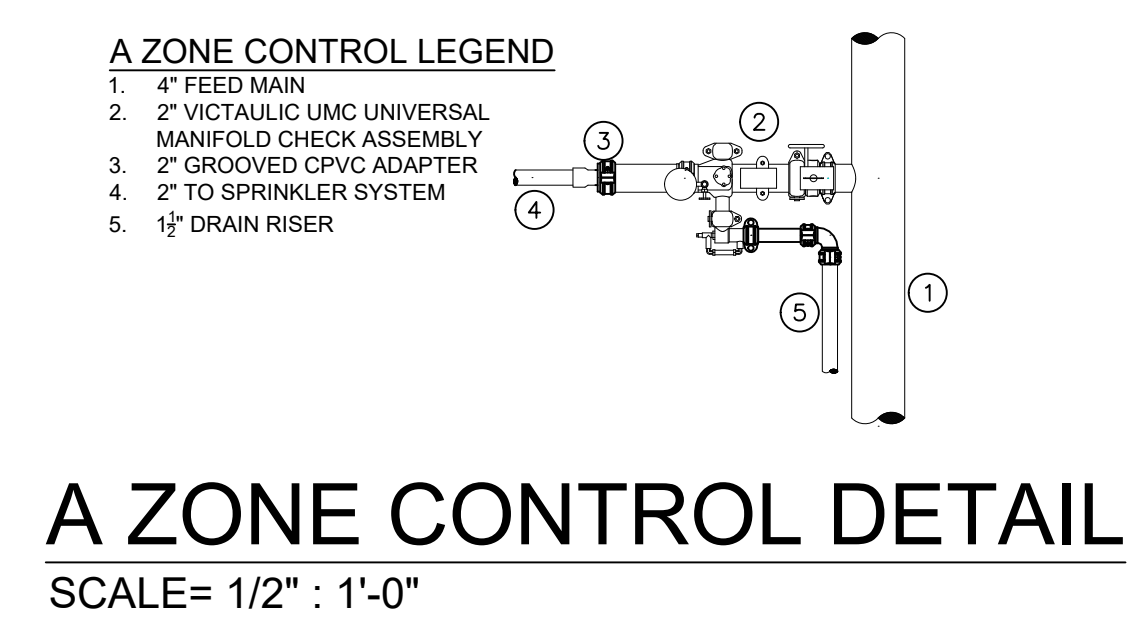
Drawing Date: 03/31/23
 Scale: 1/8" = 1'-0"
 Drawn By: BCJ
 Approval By: STATE FIRE MARSHAL DIV.
 SHEET NO. **FP 3 of 9**

WIRTH IN THE WOODS
 2800 N WAYZATA BLVD
 MINNEAPOLIS, MN 55405

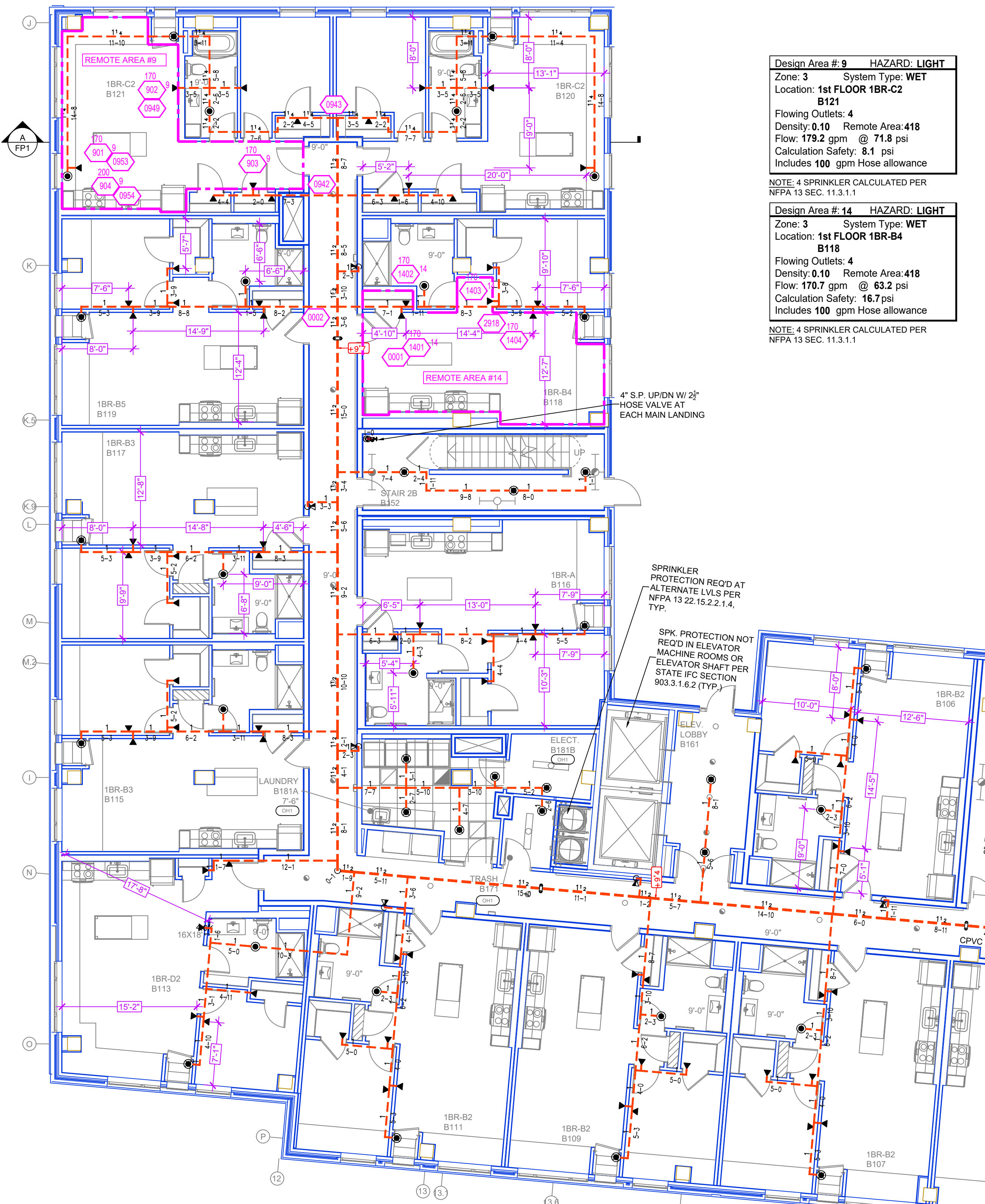


Design Area # 25 HAZARD: LIGHT
 Zone: 8 System Type: WET
 Location: 1st FLOOR 2BR-B2 A101
 Flowing Outlets: 4
 Density: 0.10 Remote Area: 392
 Flow: 166.4 gpm @ 62 psi
 Calculation Safety: 17.9 psi
 Includes 100 gpm Hose allowance
 NOTE: 4 SPRINKLER CALCULATED PER NFPA 13 SEC. 11.3.1.1

Design Area # 26 HAZARD: LIGHT
 Zone: 8 System Type: WET
 Location: 1st FLOOR CLUB ROOM A144
 Flowing Outlets: 8
 Density: 0.10 Remote Area: 923
 Flow: 255 gpm @ 70.9 psi
 Calculation Safety: 17.9 psi
 Includes 100 gpm Hose allowance
 NOTE: 1900ft REDUCED BY 40% TO 900ft DUE TO CEILING HEIGHT PER NFPA 13 FIG. 11.2.3.2.3.1

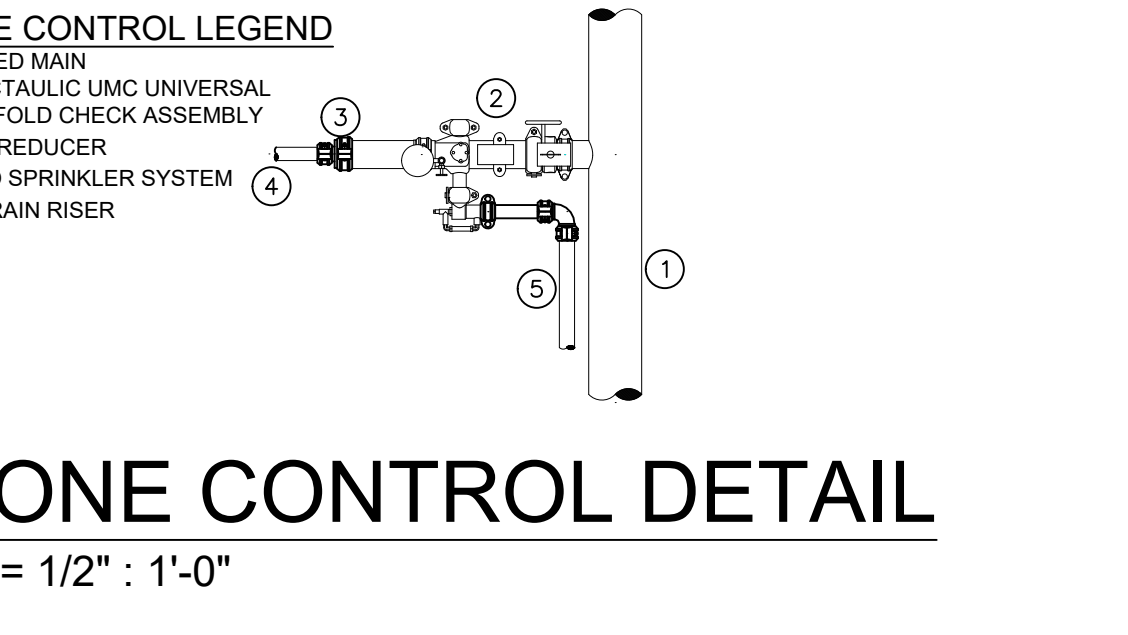


A ZONE CONTROL DETAIL
 SCALE= 1/2" : 1'-0"



Design Area # 9 HAZARD: LIGHT
 Zone: 3 System Type: WET
 Location: 1st FLOOR 1BR-C2 B121
 Flowing Outlets: 4
 Density: 0.10 Remote Area: 418
 Flow: 179.2 gpm @ 71.8 psi
 Calculation Safety: 8.1 psi
 Includes 100 gpm Hose allowance
 NOTE: 4 SPRINKLER CALCULATED PER NFPA 13 SEC. 11.3.1.1

Design Area # 14 HAZARD: LIGHT
 Zone: 3 System Type: WET
 Location: 1st FLOOR 1BR-B4 B118
 Flowing Outlets: 4
 Density: 0.10 Remote Area: 418
 Flow: 170.7 gpm @ 63.2 psi
 Calculation Safety: 16.7 psi
 Includes 100 gpm Hose allowance
 NOTE: 4 SPRINKLER CALCULATED PER NFPA 13 SEC. 11.3.1.1



B ZONE CONTROL DETAIL
 SCALE= 1/2" : 1'-0"

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

SPRINKLER HEAD LEGEND

SYM	CNT	POSITION	FINISH	TEMP	K	NPT	SIN	MPG	MODEL#	ES/OUT/CHGN	HEAD BOX
201	UPRIGHT	BRASS	286	14.00	3/4"	TY6137	TYCO	EC-14	NA	NA	2
402	PENDENT	WHITE	200	5.60	1/2"	TY2323	TYCO	TY-FRB	NA	NA	2
1107	PENDENT	WHITE	155	4.90	1/2"	TY2236	TYCO	LFJI	SEMI-RECESSED	2	2
107	SIDEWALL	WHITE	155	5.60	1/2"	RA1564	RELIABLE	DH56	SEMI-RECESSED	2	2
8.0K	SIDEWALL	WHITE	200	8.00	3/4"	TY4332	TYCO	TY-FRB	SEMI-RECESSED	2	2
139	SIDEWALL	WHITE	200	5.60	1/2"	TY3331	TYCO	TY-FRB	SEMI-RECESSED	2	2
419	SIDEWALL	WHITE	155	4.40	1/2"	TY2334	TYCO	LFJI	SEMI-RECESSED	2	2
25	SIDEWALL	WHITE	155	4.00	1/2"	VK466	VIKING	VK466	SEMI-RECESSED	2	2
5	PENDENT	WHITE	200	5.60	1/2"	TY3331	TYCO	RFJI	SEMI-RECESSED	2	2
2418	TOTAL										

PIPE LEGEND

---	BLACK STEEL FIRE SPRINKLER PIPING
---	CPVC FIRE SPRINKLER PIPING
---	FIRE SPRINKLER STANDPIPE PIPING
---	FIRE DEPARTMENT CONNECTION PIPING

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

WIRTH IN THE WOODS
 2800 N WAYZATA BLVD
 MINNEAPOLIS, MN 55405

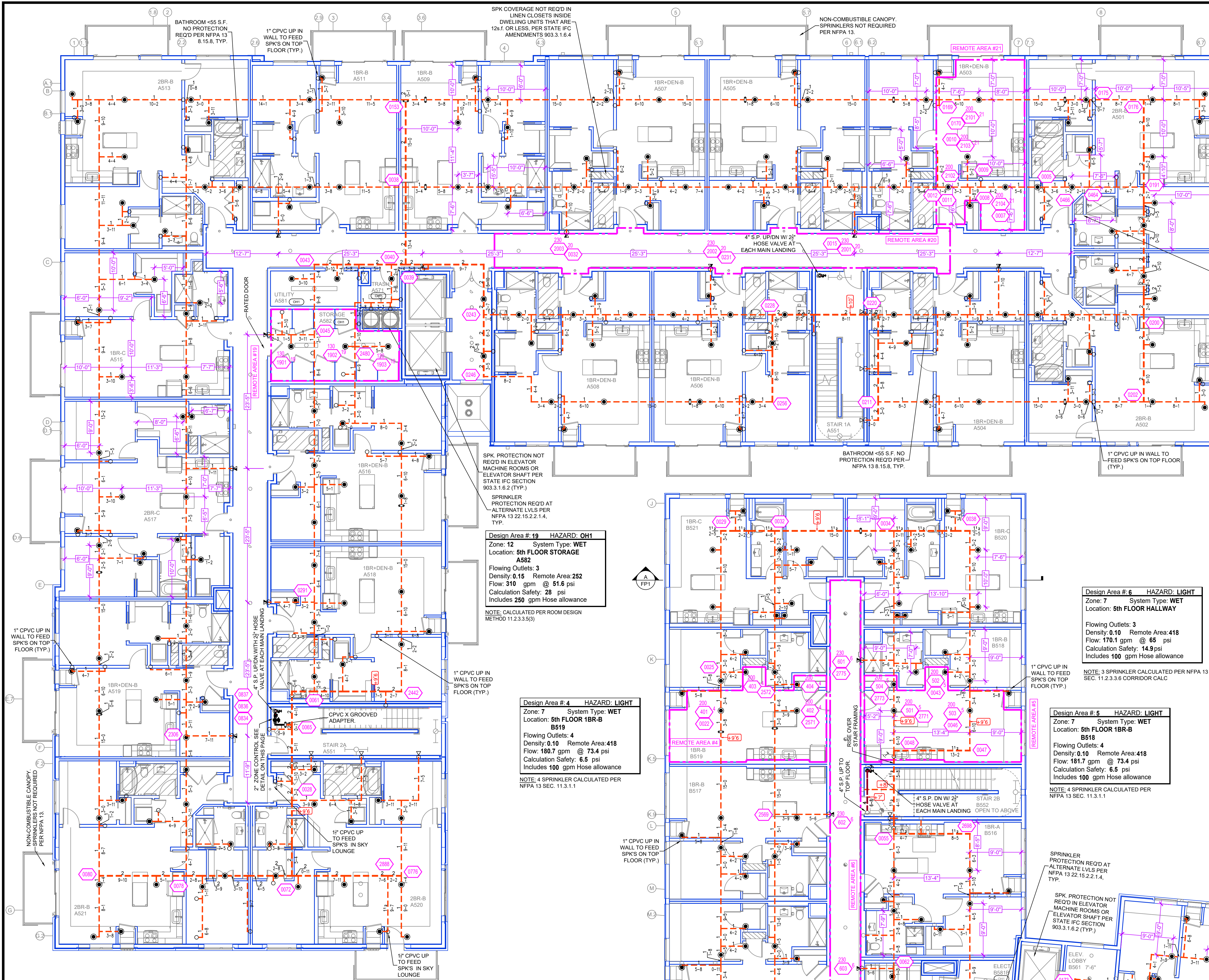
Contract No: **C22-114**
 Drawing Date: 03/31/23
 Scale: 1/8" = 1'-0"
 Drawn By: BCJ
 Approval By: STATE FIRE MARSHAL DIV.
 SHEET NO. **FP 4 of 9**

NO	REVISIONS	DATE

GENERAL NOTES:
 1. SYSTEM SHALL BE PER NFPA 13 2016 EDITION, AND STATE FIRE MARSHAL APPROVAL. THE UL LISTED MINIMUM PIPE SIZE SHALL BE 1" NOMINAL PIPE SIZE. SHORT RISE FITTINGS SHALL BE WELDED OUTLETS & GROOVED END CONNECTIONS. ALL WELDING SHALL BE TO BE PER APPROVED SHOP DRAWINGS. COUPLERS USE TO BE PER APPROVED PRIOR TO FABRICATION AND INSTALLATION BY SPRINKLER CONTRACTOR. HIGH TEMPERATURE HEAD ARE TO BE RELOCATED WHERE REQUIRED. HANDS ON THE HEAD AND USE OF APPROVED WRENCH. 10. ELECTRICAL WORK, ALARM DETECTION AND SUPERVISORY BY OWNER. 11. WET SYSTEM PIPING FROM FREEZING.

APPROVAL STAMPS:
 DATE: _____
 REVISIONS: _____
 NO: _____

FIRE PROTECTION PLAN



LEVEL 5 AREA A FIRE SPRINKLER PLAN
SCALE= 1/8" : 1'-0"

***CEILING NOTE: 5th FLOOR**
UNITS @ 9'-0"
UNIT SKIFFS @ 8'-0"
CORRIDORS @ 9'-6"

B CEILING NOTE: 5th FLOOR
UNITS @ 8'-0"
UNIT SKIFFS @ 7'-0"
CORRIDORS @ 7'-8"

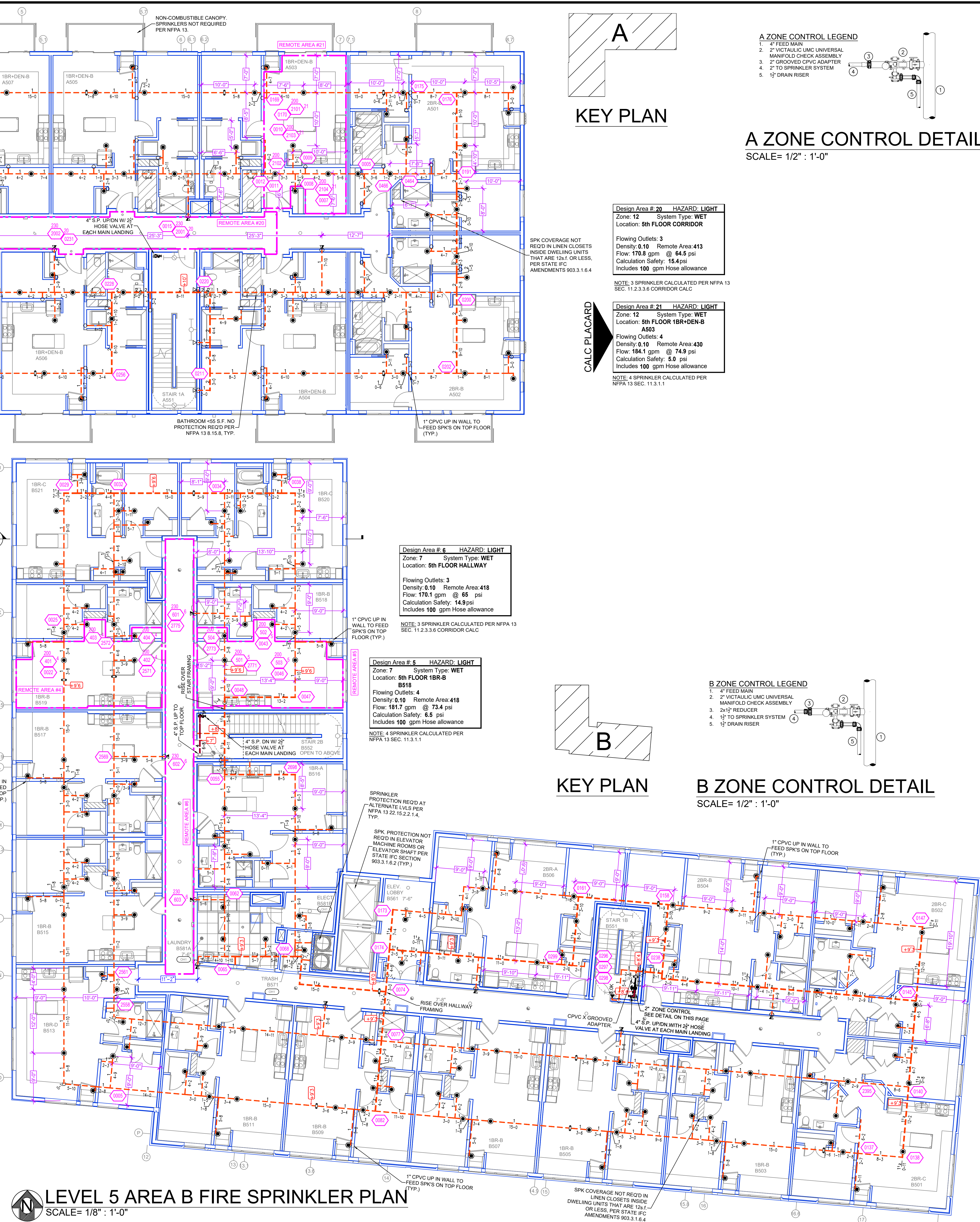
NOTE: RESIDENTIAL PENDENT SPRINKLERS IN UNITS SPACED AT A MAX OF 20'-0" U.N.O.
HALLWAY SIDEWALL SPRINKLERS, SPACED AT A MAX OF 20'-0" & 6'-12" BELOW THE DECK.

SPRINKLER HEAD LEGEND

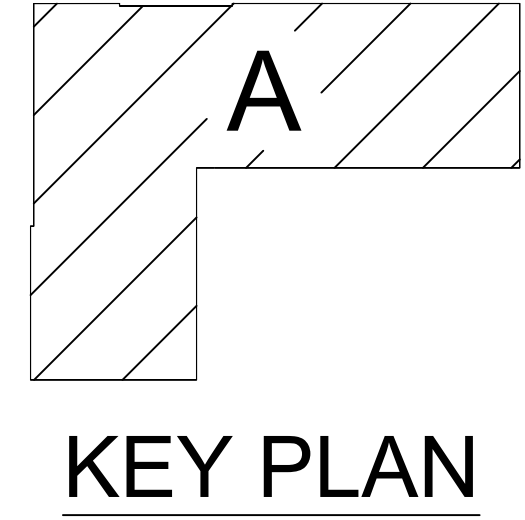
SVM	CNT	POSITION	FINISH	TEMP	K	NPT	SIN	MFG.	MODEL#	ESCA/TCHEON	HEAD BOX
201	UPRIGHT	BRASS	286	14.00	34"	TY1617	TYCO	EC-14	N/A	N/A	2
402	PENDENT	WHITE	200	5.60	1/2"	TY323	TYCO	TY-FRM	SEM-RECESSED	2	2
1107	PENDENT	WHITE	155	4.90	1/2"	TY2236	TYCO	LFH	SEM-RECESSED	2	2
107	SIDEWALL	WHITE	155	5.60	1/2"	RA1864	RELIABLE	DH56	SEM-RECESSED	2	2
8	SIDEWALL	WHITE	200	8.00	3/4"	TY4332	TYCO	TY-FRM	SEM-RECESSED	2	2
136	SIDEWALL	WHITE	200	5.60	1/2"	TY3331	TYCO	TY-FRM	SEM-RECESSED	2	2
419	SIDEWALL	WHITE	155	4.40	1/2"	TY2334	TYCO	LFH	SEM-RECESSED	2	2
25	SIDEWALL	WHITE	155	4.00	1/2"	VK486	VIKING	VK486	SEM-RECESSED	2	2
5	PENDENT	WHITE	200	5.60	1/2"	TY3331	TYCO	RFH	SEM-RECESSED	2	2
2418	TOTAL SPKS										

PIPE LEGEND

- BLACK STEEL FIRE SPRINKLER PIPING
- CPVC FIRE SPRINKLER PIPING
- FIRE SPRINKLER STANDPIPE PIPING
- FIRE DEPARTMENT CONNECTION PIPING



LEVEL 5 AREA B FIRE SPRINKLER PLAN
SCALE= 1/8" : 1'-0"



KEY PLAN

- A ZONE CONTROL LEGEND**
- 4" FEED MAIN
 - 2" VICTAULIC UMC UNIVERSAL MANIFOLD CHECK ASSEMBLY
 - 2" GROOVED CPVC ADAPTER
 - 2" TO SPRINKLER SYSTEM
 - 1/2" DRAIN RISER

A ZONE CONTROL DETAIL
SCALE= 1/2" : 1'-0"

Design Area # 20 HAZARD: LIGHT
Zone: 12 System Type: WET
Location: 5th FLOOR CORRIDOR

Flowing Outlets: 3
Density: 0.10 Remote Area: 413
Flow: 170.8 gpm @ 64.5 psi
Calculation Safety: 15.4 psi
Includes 100 gpm Hose allowance

NOTE: 3 SPRINKLER CALCULATED PER NFPA 13 SEC. 11.2.3.3.6 CORRIDOR CALC

Design Area # 21 HAZARD: LIGHT
Zone: 12 System Type: WET
Location: 5th FLOOR 1BR+DEN-B A503

Flowing Outlets: 4
Density: 0.10 Remote Area: 430
Flow: 184.1 gpm @ 74.9 psi
Calculation Safety: 5.0 psi
Includes 100 gpm Hose allowance

NOTE: 4 SPRINKLER CALCULATED PER NFPA 13 SEC. 11.3.1.1

Design Area # 6 HAZARD: LIGHT
Zone: 7 System Type: WET
Location: 5th FLOOR HALLWAY

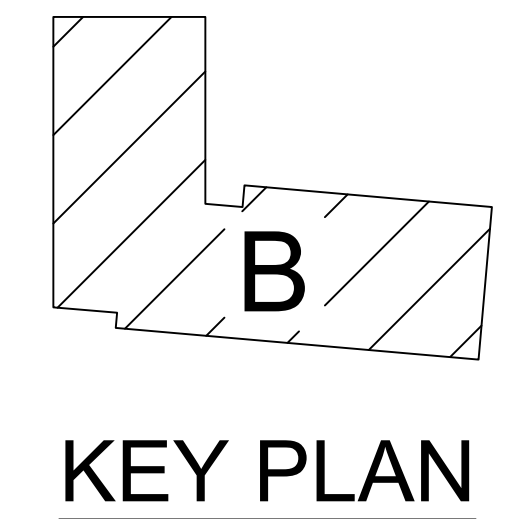
Flowing Outlets: 3
Density: 0.10 Remote Area: 418
Flow: 170.1 gpm @ 65 psi
Calculation Safety: 14.9 psi
Includes 100 gpm Hose allowance

NOTE: 3 SPRINKLER CALCULATED PER NFPA 13 SEC. 11.2.3.3.6 CORRIDOR CALC

Design Area # 5 HAZARD: LIGHT
Zone: 7 System Type: WET
Location: 5th FLOOR 1BR-B B519

Flowing Outlets: 4
Density: 0.10 Remote Area: 418
Flow: 181.7 gpm @ 73.4 psi
Calculation Safety: 6.5 psi
Includes 100 gpm Hose allowance

NOTE: 4 SPRINKLER CALCULATED PER NFPA 13 SEC. 11.3.1.1



KEY PLAN

- B ZONE CONTROL LEGEND**
- 4" FEED MAIN
 - 2" VICTAULIC UMC UNIVERSAL MANIFOLD CHECK ASSEMBLY
 - 2x1/2" REDUCER
 - 1/2" TO SPRINKLER SYSTEM
 - 1/2" DRAIN RISER

B ZONE CONTROL DETAIL
SCALE= 1/2" : 1'-0"

GENERAL NOTES

- SYSTEMS INSTALLED PER NFPA 13 CODE EDITION AND STATE FIRE MARSHAL'S APPROVAL.
- ALL UNITS SHALL BE 1" NOMINAL PIPE.
- MINIMUM PIPE SIZE SHALL BE 1" NOMINAL PIPE.
- SHORT RABBIT FITTINGS, SPRING HAS WELDED OUTLETS & GROOVED END.
- ALL WELDING PER NFPA 13 & 13.6.2 TO BE PERFORMED WITHOUT APPROVED SHOP DRAWINGS.
- CONDUITS USE TO BE FIELD RASSED PRIOR TO FABRICATION AND INSTALLATION BY SPRINKLER CONTRACTOR.
- HIGH TEMPERATURE HEAD ARE TO BE RELOCATED WHERE REQUIRED.
- HAZARD CLASSIFICATION TO BE DETERMINED BY APPROVED WRECH.
- HAZARD CLASSIFICATION TO BE DETERMINED BY APPROVED WRECH.
- ELECTRICAL WORK, ALARM DETECTION AND SUPERVISORY BY OWNER.
- WET SYSTEM PIPING FROM FREEZING.

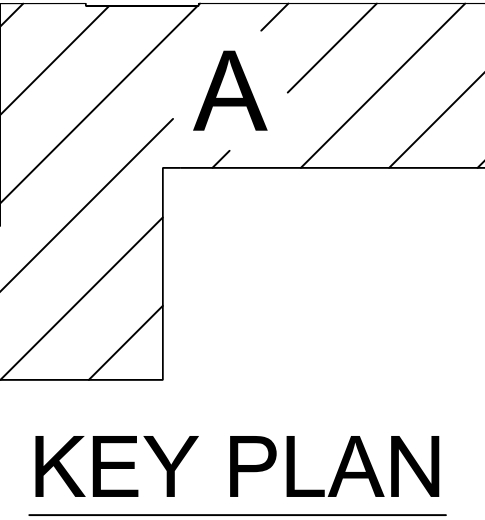
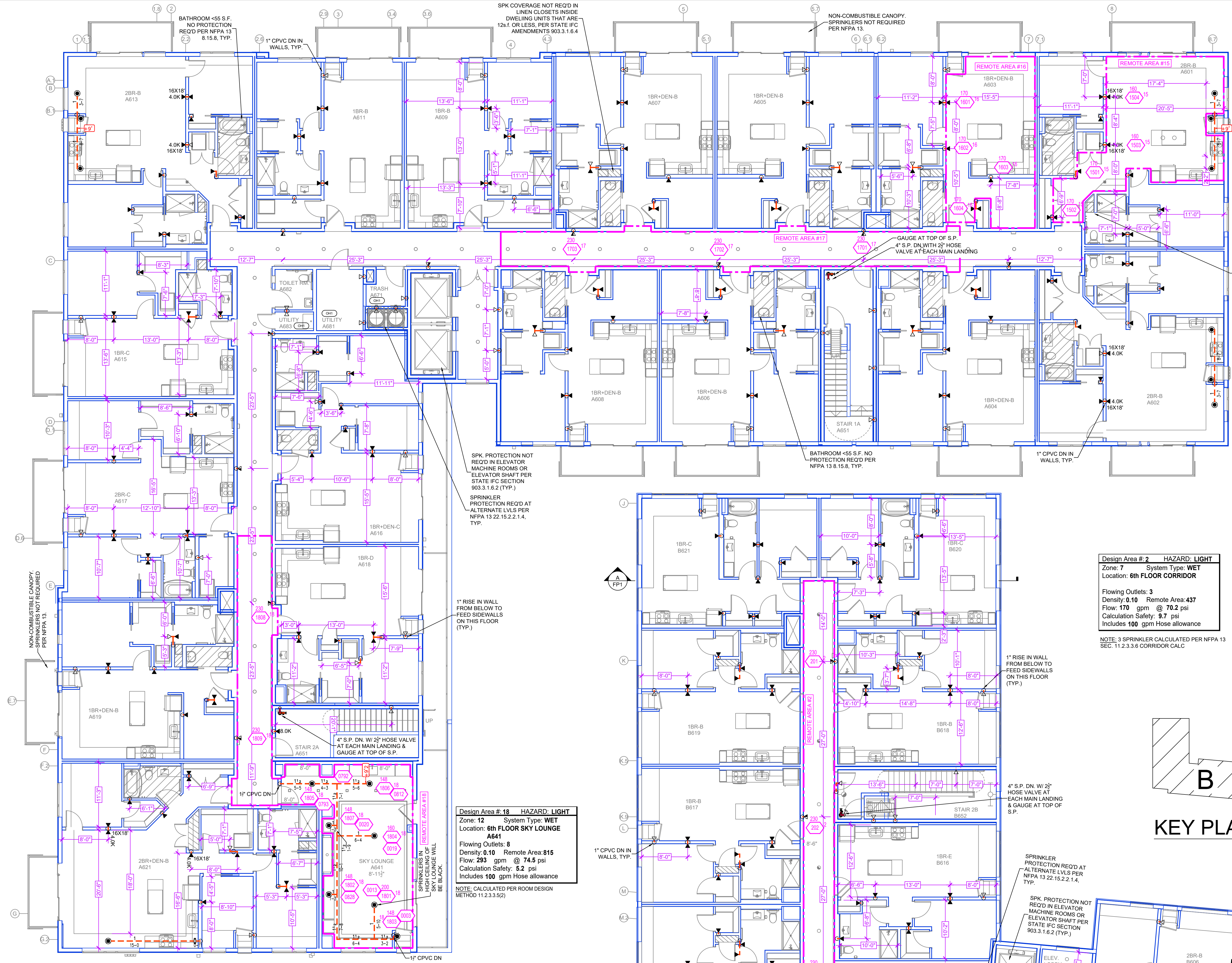
APPROVAL STAMPS

NO.	DATE	REVISIONS

FIRE PROTECTION PLAN

WIRTH IN THE WOODS
2800 N WAYZATA BLVD
MINNEAPOLIS, MN 55405

Contract No: **C22-114**
Drawing Date: 03/31/23
Scale: 1/8" = 1'-0"
Drawn By: BCJ
Approval By: STATE FIRE MARSHAL DIV.
SHEET NO. **FP 8 of 9**

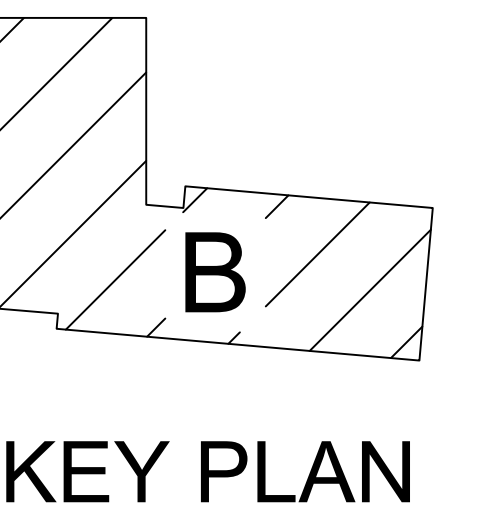
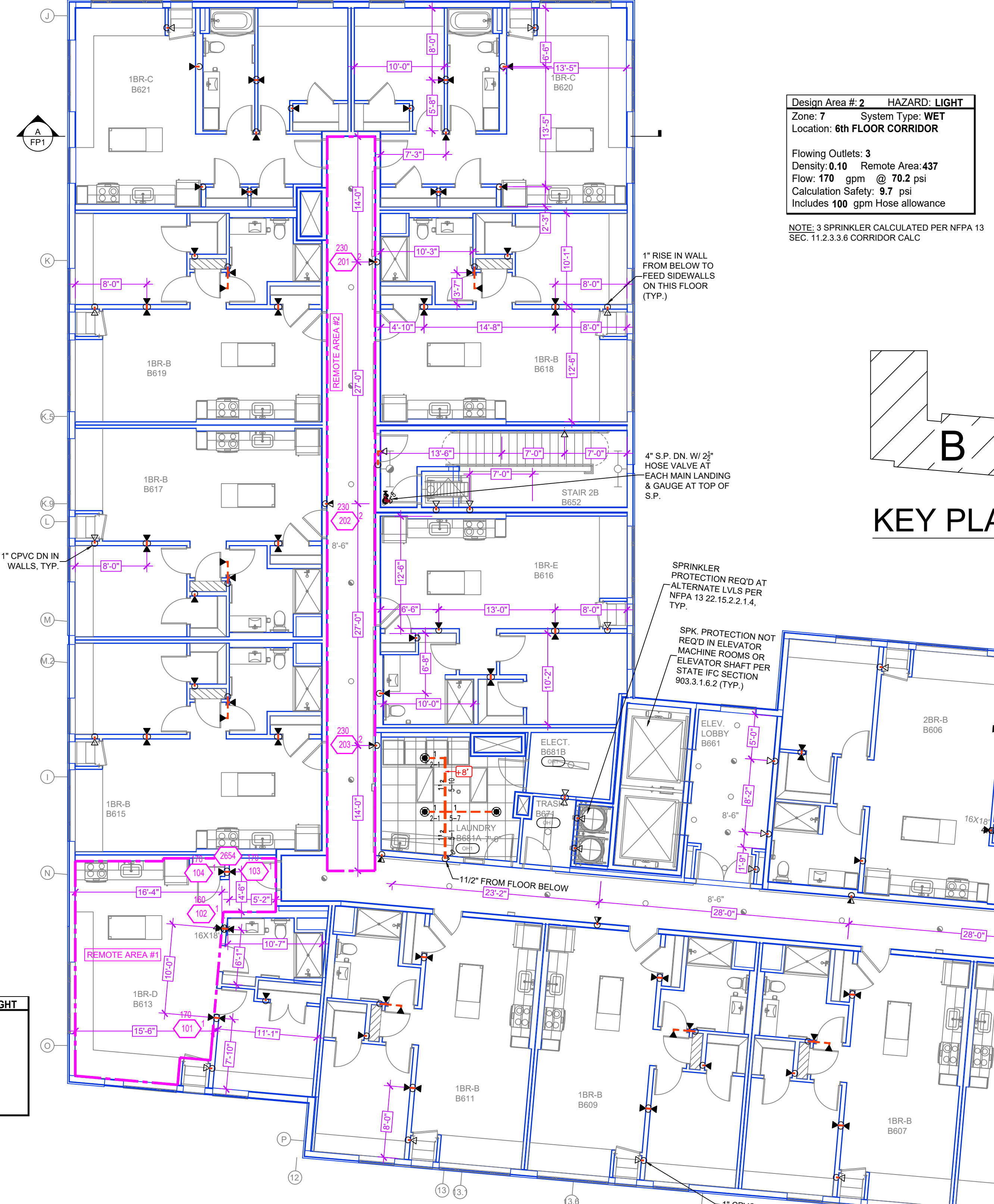


Design Area # 16 HAZARD: LIGHT
 Zone: 12 System Type: WET
 Location: 6th FLOOR 1BR-DEN-B A603
 Flowing Outlets: 4
 Density: 0.10 Remote Area: 430
 Flow: 170.6 gpm @ 71.1 psi
 Calculation Safety: 8.8 psi
 Includes 100 gpm Hose allowance
 NOTE: 4 SPRINKLER CALCULATED PER NFPA 13 SEC. 11.3.1.1

Design Area # 15 HAZARD: LIGHT
 Zone: 12 System Type: WET
 Location: 6th FLOOR 2BR-B A601
 Flowing Outlets: 4
 Density: 0.10 Remote Area: 498
 Flow: 168.3 gpm @ 70.0 psi
 Calculation Safety: 9.9 psi
 Includes 100 gpm Hose allowance
 NOTE: 4 SPRINKLER CALCULATED PER NFPA 13 SEC. 11.3.1.1

Design Area # 17 HAZARD: LIGHT
 Zone: 12 System Type: WET
 Location: 6th FLOOR CORRIDOR
 Flowing Outlets: 3
 Density: 0.10 Remote Area: 437
 Flow: 170.7 gpm @ 70.0 psi
 Calculation Safety: 9.9 psi
 Includes 100 gpm Hose allowance
 NOTE: 3 SPRINKLER CALCULATED PER NFPA 13 SEC. 11.2.3.3.6 CORRIDOR CALC

LEVEL 6 AREA A FIRE SPRINKLER PLAN
 SCALE = 1/8" : 1'-0"



Design Area # 2 HAZARD: LIGHT
 Zone: 7 System Type: WET
 Location: 6th FLOOR CORRIDOR
 Flowing Outlets: 3
 Density: 0.10 Remote Area: 437
 Flow: 170 gpm @ 70.2 psi
 Calculation Safety: 9.7 psi
 Includes 100 gpm Hose allowance
 NOTE: 3 SPRINKLER CALCULATED PER NFPA 13 SEC. 11.2.3.3.6 CORRIDOR CALC

Design Area # 3 HAZARD: LIGHT
 Zone: 7 System Type: WET
 Location: 6th FLOOR 1BR-B B615
 Flowing Outlets: 4
 Density: 0.10 Remote Area: 361
 Flow: 171.3 gpm @ 67.2 psi
 Calculation Safety: 12.7 psi
 Includes 100 gpm Hose allowance
 NOTE: 4 SPRINKLER CALCULATED PER NFPA 13 SEC. 11.3.1.1

Design Area # 18 HAZARD: LIGHT
 Zone: 12 System Type: WET
 Location: 6th FLOOR SKY LOUNGE A641
 Flowing Outlets: 8
 Density: 0.10 Remote Area: 815
 Flow: 293 gpm @ 74.5 psi
 Calculation Safety: 5.2 psi
 Includes 100 gpm Hose allowance
 NOTE: CALCULATED PER ROOM DESIGN METHOD 11.2.3.3.5(2)

Design Area # 1 HAZARD: LIGHT
 Zone: 7 System Type: WET
 Location: 6th FLOOR 1BR-D B613
 Flowing Outlets: 4
 Density: 0.10 Remote Area: 413
 Flow: 171.7 gpm @ 73.9 psi
 Calculation Safety: 6 psi
 Includes 100 gpm Hose allowance
 NOTE: 4 SPRINKLER CALCULATED PER NFPA 13 SEC. 11.3.1.1

LEVEL 6 AREA B FIRE SPRINKLER PLAN
 SCALE = 1/8" : 1'-0"

SPRINKLER HEAD LEGEND

1" CEILING NOTE: 6th FLOOR
 UNITS @ 9'-0"
 UNIT SPACINGS @ 9'-0"
 CORRIDORS @ 8'-4"

RESIDENTIAL SIDEWALL SPRINKLERS IN UNITS SPACED AT A MAX OF 16'-18" U.N.L.O.
 HALLWAY SIDEWALL SPRINKLERS SPACED AT A MAX OF 28'-6"
 ALL SIDEWALLS ARE PLACED 6'-12" FROM THE DECK

B CEILING NOTE: 6th FLOOR
 UNITS @ 8'-0"
 UNIT SPACINGS @ 7'-0"
 CORRIDORS @ 8'-4"

RESIDENTIAL SIDEWALL SPRINKLERS IN UNITS SPACED AT A MAX OF 16'-18" U.N.L.O.
 HALLWAY SIDEWALL SPRINKLERS SPACED AT A MAX OF 28'-6"
 ALL SIDEWALLS ARE PLACED 6'-12" FROM THE DECK

PIPE LEGEND

- BLACK STEEL FIRE SPRINKLER PIPING
- CPVC FIRE SPRINKLER PIPING
- FIRE SPRINKLER STANDPIPE PIPING
- FIRE DEPARTMENT CONNECTION PIPING

SVM	CNT	POSITION	FINISH	TEMP	K	NPT	BSN	MPG	MODEL#	ESLUTCHIGN	HEAD BOX
201	UPRIGHT	BRASS	286	14.00	3/4"	TY6137	TYCO	EC-14	N/A		2
7	UPRIGHT	BRASS	200	5.60	1/2"	TY313	TYCO	TY-FRB	N/A		2
402	PENDENT	WHITE	200	5.60	1/2"	TY203	TYCO	TY-FRB	SEM-RECESSED		2
1107	PENDENT	WHITE	155	4.90	1/2"	TY2236	TYCO	LF#	SEM-RECESSED		2
107	SIDEWALL	WHITE	155	5.60	1/2"	RA1564	RELIABLE	DH56		SEM-RECESSED	2
6	SIDEWALL	WHITE	200	8.00	3/4"	TY4332	TYCO	TY-FRB	SEM-RECESSED		2
139	SIDEWALL	WHITE	200	5.60	1/2"	TY3331	TYCO	TY-FRB	SEM-RECESSED		2
119	SIDEWALL	WHITE	155	4.40	1/2"	TY2334	TYCO	LF#	SEM-RECESSED		2
25	SIDEWALL	WHITE	155	4.00	1/2"	VK486	VIKING	VK486	SEM-RECESSED		2
5	PENDENT	WHITE	200	5.60	1/2"	TY3331	TYCO	RF#	SEM-RECESSED		2
2418	TOTAL SPKS										

GENERAL NOTES

- SYSTEMS INSTALLED PER NFPA 13 2015 EDITION, AND STATE FIRE MARSHAL'S APPROVAL.
- ALL PIPING SHALL BE 1" MINIMUM PIPE SIZE UNLESS OTHERWISE NOTED.
- SHORT RADIUS FITTINGS SHALL BE WELDED OUTLETS & GROUNDED.
- ALL WELDING SHALL BE PER NFPA 51B & SHALL BE WITNESSED BY APPROVED SHOP DRAWINGS.
- CONDUITS SHALL BE PER NFPA 70B & SHALL BE WITNESSED BY APPROVED SHOP DRAWINGS.
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- CONDUITS SHALL BE PER NFPA 70B & SHALL BE WITNESSED BY APPROVED SHOP DRAWINGS.

APPROVAL STAMPS

NO.	DATE	REVISIONS

FIRE PROTECTION PLAN

WIRTH IN THE WOODS
 2800 N WAYZATA BLVD
 MINNEAPOLIS, MN 55405

Contract No: C22-114
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 SHEET NO. FP 9 of 9