

GENERAL NOTES

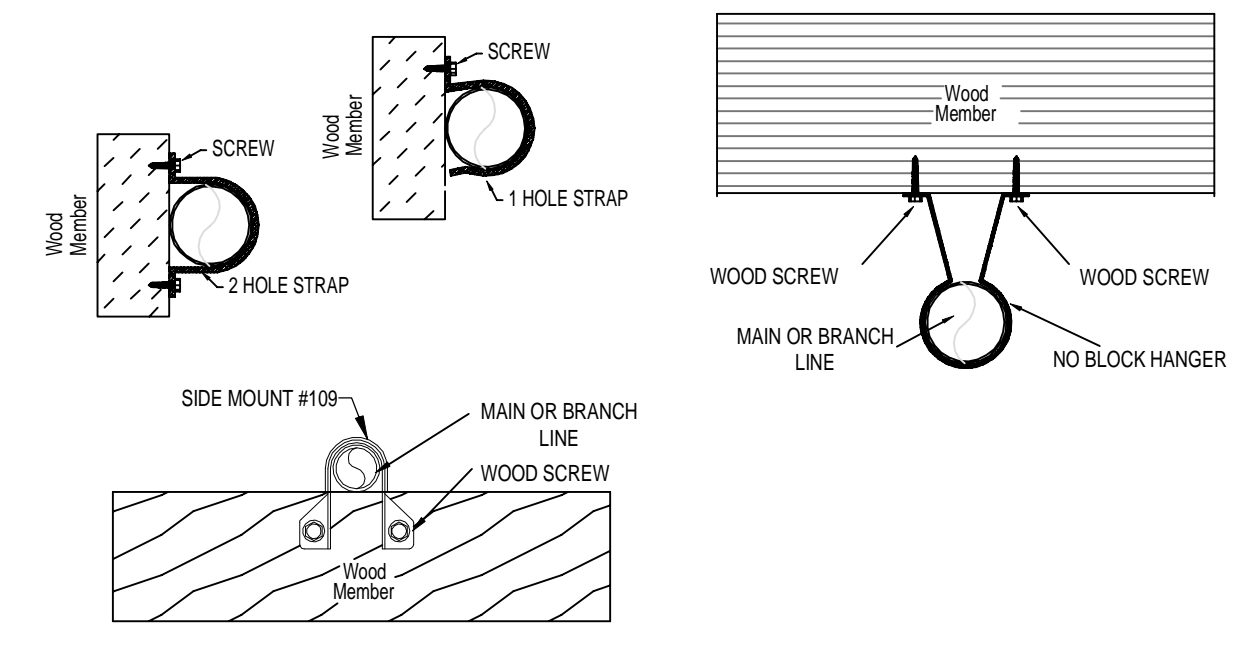
- INTERNATIONAL BUILDING CODE (2015)
 - OCCUPANCY: TYPE R-2; RESIDENTIAL MULTIFAMILY TOWNHOMES
 - TYPE OF CONSTRUCTION: V-A (1HR RATED PROTECTED, COMBUSTIBLE CONSTRUCTION)
 - SPRINKLERED AREAS (APPROXIMATE - SEE ARCHITECTURAL PLANS FOR ACTUAL)
 - 1ST FLOOR = 4,852 S.F.
 - 2ND FLOOR = 4,815 S.F.
 - TOTAL = 9,667 S.F.
 - INSTALLATION STANDARDS: SPRINKLER SYSTEM DESIGNED AND INSTALLED PER NFPA-13R, (2013)
- SPRINKLER PIPE TYPES:
 - WET:
 - 1" BRANCH LINES TO BE BLAZEMASTER CPVC PIPING WITH CEMENTED FITTINGS
 - 1/2" MAIN & BRANCH LINES TO BE BLAZEMASTER CPVC PIPING WITH CEMENTED FITTINGS
- DESIGN CRITERIA
 - UNITS ARE DESIGNED TO LIGHT HAZARD
 - MECHANICAL ROOM IS DESIGNED TO ORDINARY HAZARD GROUP 1
 - UP TO 4 HEADS IN A COMPARTMENT HAVE BEEN CALCULATED PER NFPA 13R SEC. 7.1.1.3.1
- NOTES:
 - ALL MATERIAL TO BE NEW AND MEET U.L. STANDARDS
 - HANGERS TO BE INSTALLED IN ACCORDANCE WITH NFPA 13R (2013) - SEE PLAN FOR HANGING REQ.
 - FITTER TO FIELD LOCATE ANY AUXILIARY DRAINS NEEDED
- 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
- SCOPE OF WORK:
 - TO INSTALL A NEW SINGLE WET ZONE SPRINKLER SYSTEM IN THE DRIFTLESS TOWNHOME BUILDING C. THE NEW SYSTEM WILL BE FED WITH CPVC, WITH PENDENTS ON THE FIRST FLOOR AND BRIDGED SIDEWALLS ON THE TOP FLOOR.
 - ALL AREAS OF THE BUILDING TO BE INSTALLED AND COVERED IN ACCORDANCE WITH THE LOCAL AUTHORITY HAVING JURISDICTION AND PER NFPA 13R (2013)

Design Area # 2 HAZARD: RES
 Zone: 1 System Type: WET
 Location: TH-A
 C01-1
 Flowing Outlets: 2
 Density: 0.10 Remote Area: 240
 Flow: 95.8 gpm @ 48.2 psi
 Calculation Safety: 41.8 psi
 Includes 55 gpm Hose allowance

NFPA 13 CPVC PIPE HANGER SPACING

NOMINAL SIZE inches	MAX SPACING feet
3/4"	5'-6"
1"	6'-0"
1-1/4"	6'-6"
1-1/2"	7'-0"

NOTE: CALCULATED THE 2 MOST DEMANDING RESIDENTIAL SPRINKLERS IN A COMPARTMENT PER NFPA 13R 7.1.1.3.1 55 GPM OF DOMESTIC DEMAND IS INCLUDED AT THE BASE OF THE RISER BECAUSE WATER SUPPLY IS A COMBINED SERVICE.



HANGER DETAILS

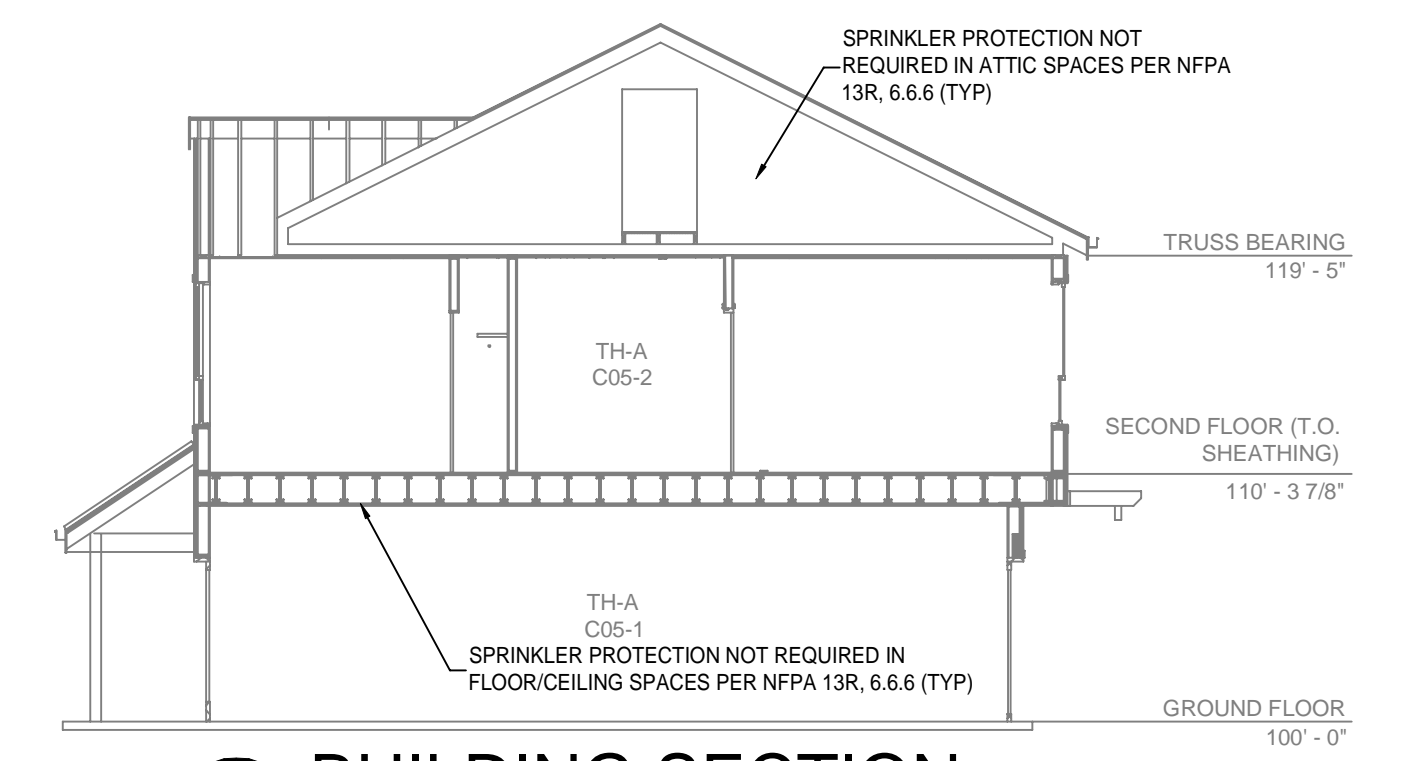
PIPE LEGEND

- BLACK STEEL WET FIRE SPRINKLER PIPING
- CPVC BLAZEMASTER SPRINKLER PIPING
- PIPING PROVIDED BY OTHERS

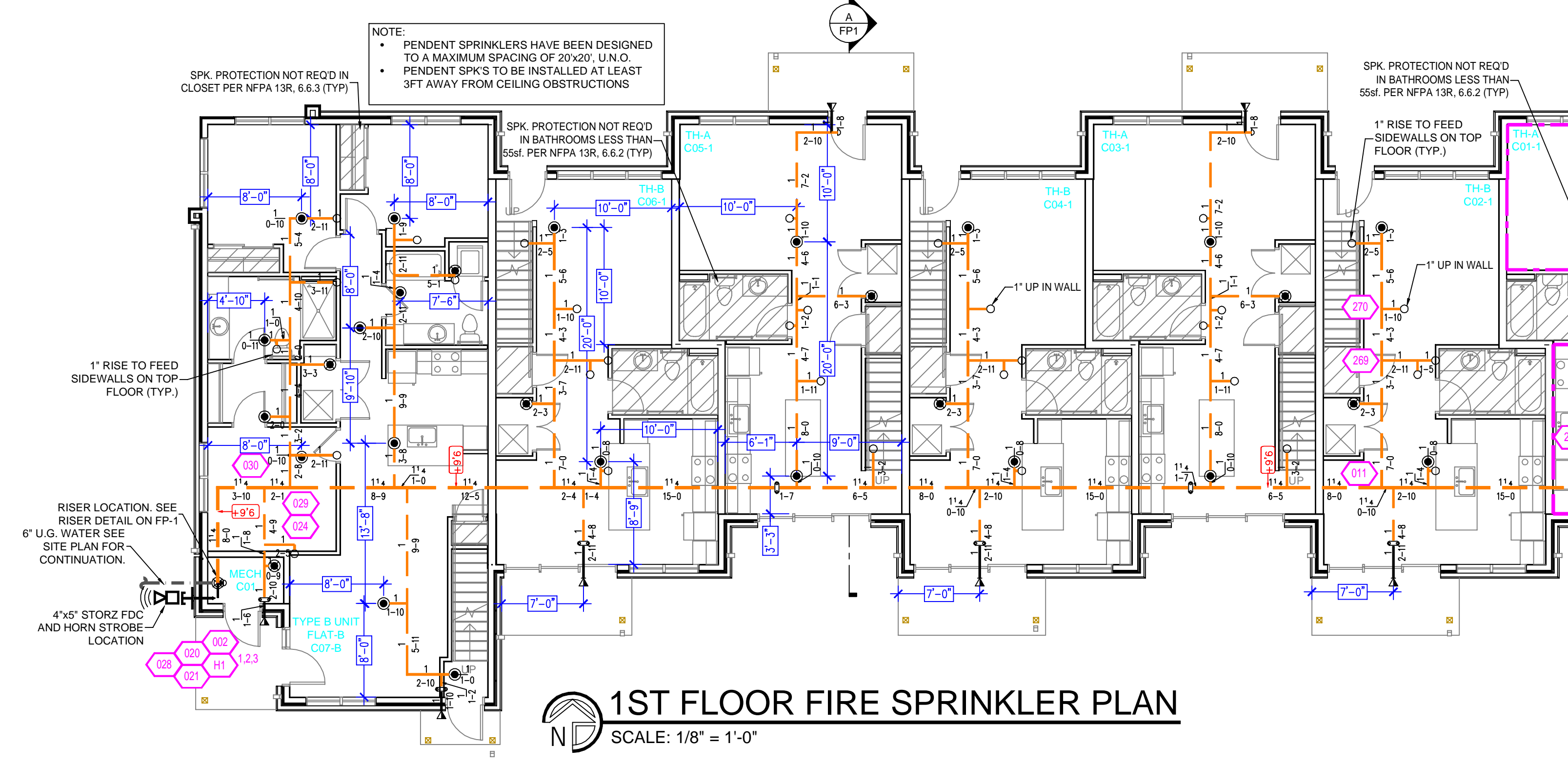
SPRINKLER HEAD LEGEND

SYM	CNT	POSITION	FINISH	TEMP	K	NPT	SIN	MFG.	MODEL#	ESCUTCHEON	SPACING
◁	55	SIDEWALL	WHITE	155	4.40	1/2"	RA3531	RELIABLE	F1 RES	HB	16x16 U.N.O.
●	22	PENDENT	WHITE	155	4.90	1/2"	RA3516	RELIABLE	F1 RES	RECESSED	20x20
⊙	9	PENDENT	WHITE	175	4.90	1/2"	RA3516	RELIABLE	F1 RES	RECESSED	20x20
◀	1	SIDEWALL	WHITE	175	4.40	1/2"	RA3531	RELIABLE	F1 RES	HB	16x16 U.N.O.
⊠	8	SIDEWALL	WHITE	200	5.60	1"	R5734	RELIABLE	F3QR56	HB	14x14
⊠	2	SIDEWALL	WHITE	155	5.80	1/2"	RA3533	RELIABLE	F1 RES	HB	20x20 U.N.O.

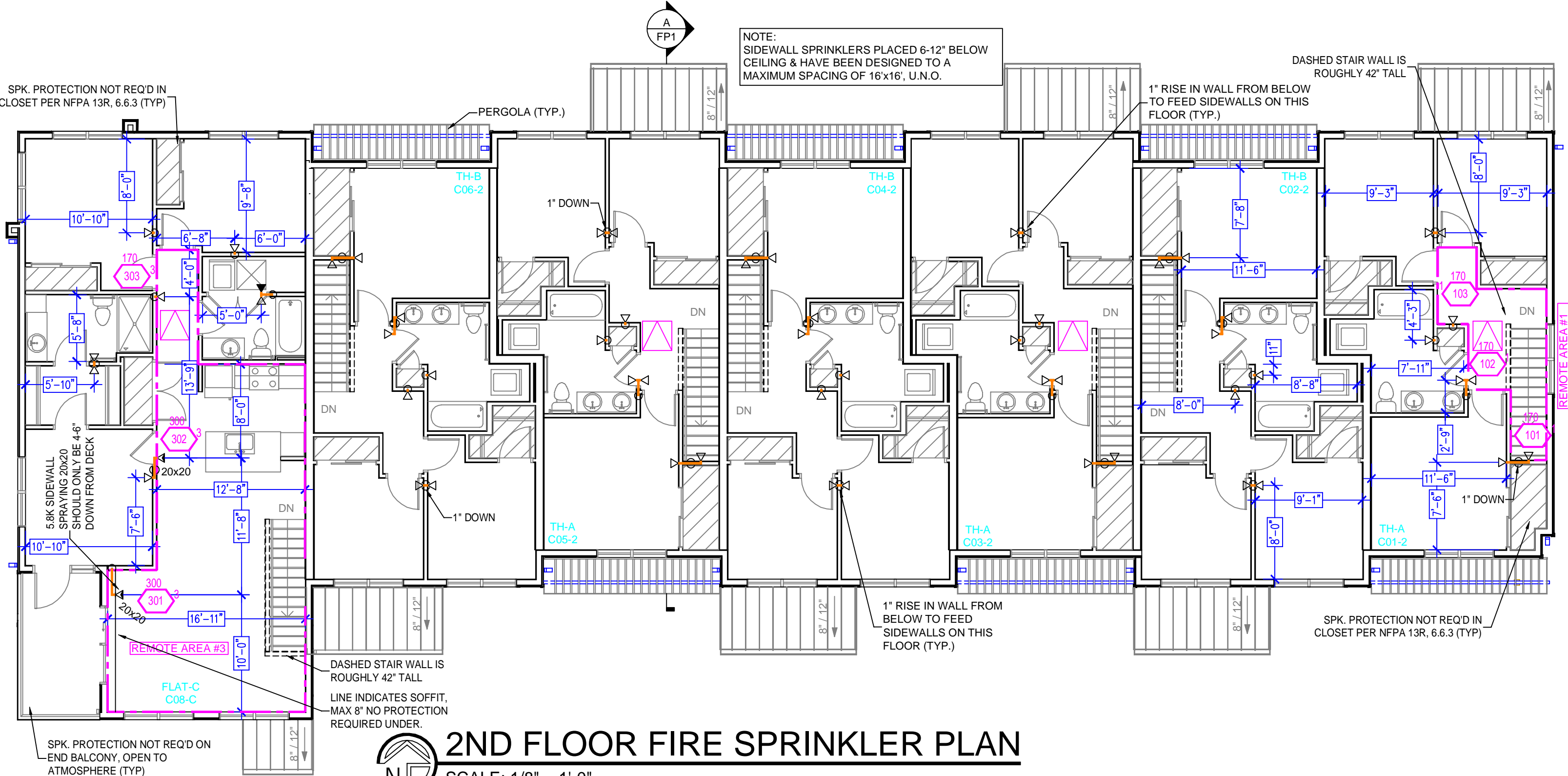
97 TOTAL SPRINKLERS



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



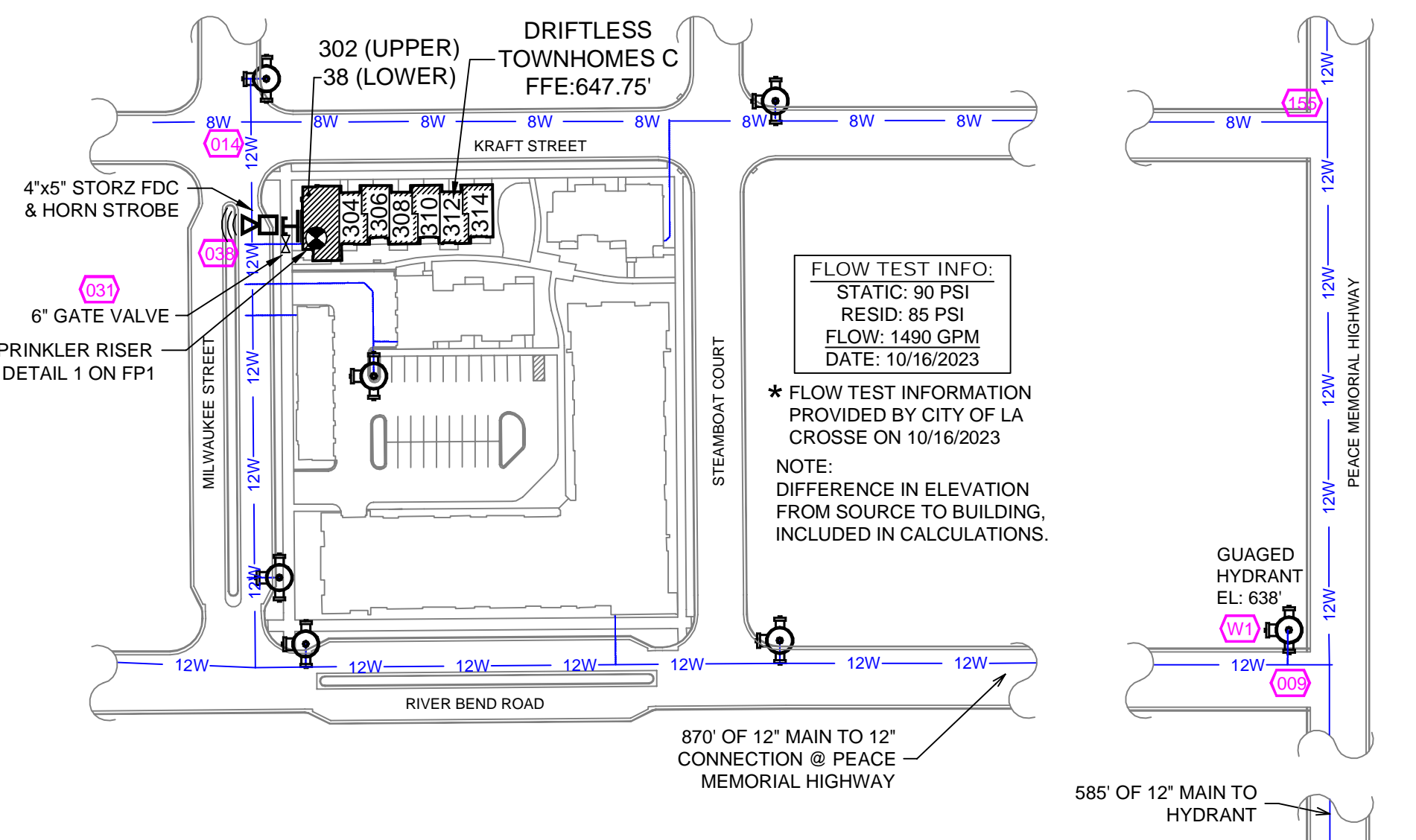
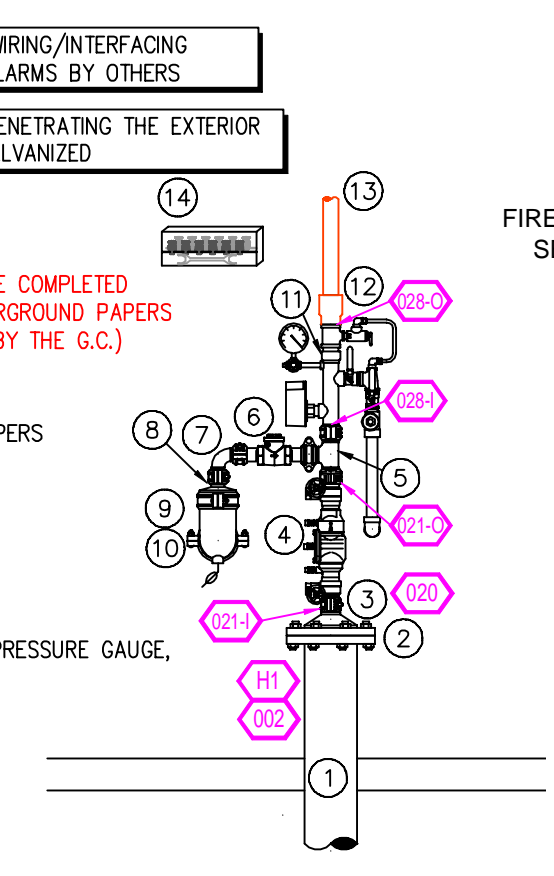
1ST FLOOR FIRE SPRINKLER PLAN
 SCALE: 1/8" = 1'-0"



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

- 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" GROOVE x FLANGE ADAPTER
 - 6"x4" GROOVED CONC. REDUCER
 - 1/2" AMES 2000B-FP BACKFLOW GxG BFV w/ TAMPERS
 - 1/2" GROOVED TEE
 - 1/2" CHECK VALVE
 - 1/2" GROOVED 90 ELBOW
 - 1/2"x4" GROOVED REDUCER
 - 4" GROOVED DRAIN 90 w/ BALL DRIP
 - 4" OUT TO FDC
 - 1/2" GROOVED RISER MANIFOLD w/ FLOW SWITCH, PRESSURE GAUGE, & TEST AND DRAIN
 - 1/2" GROOVED TO CPVC ADAPTER
 - 1/2" TO SYSTEM
 - SPARE HEAD WRENCH & SPARE HEAD BOX

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



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

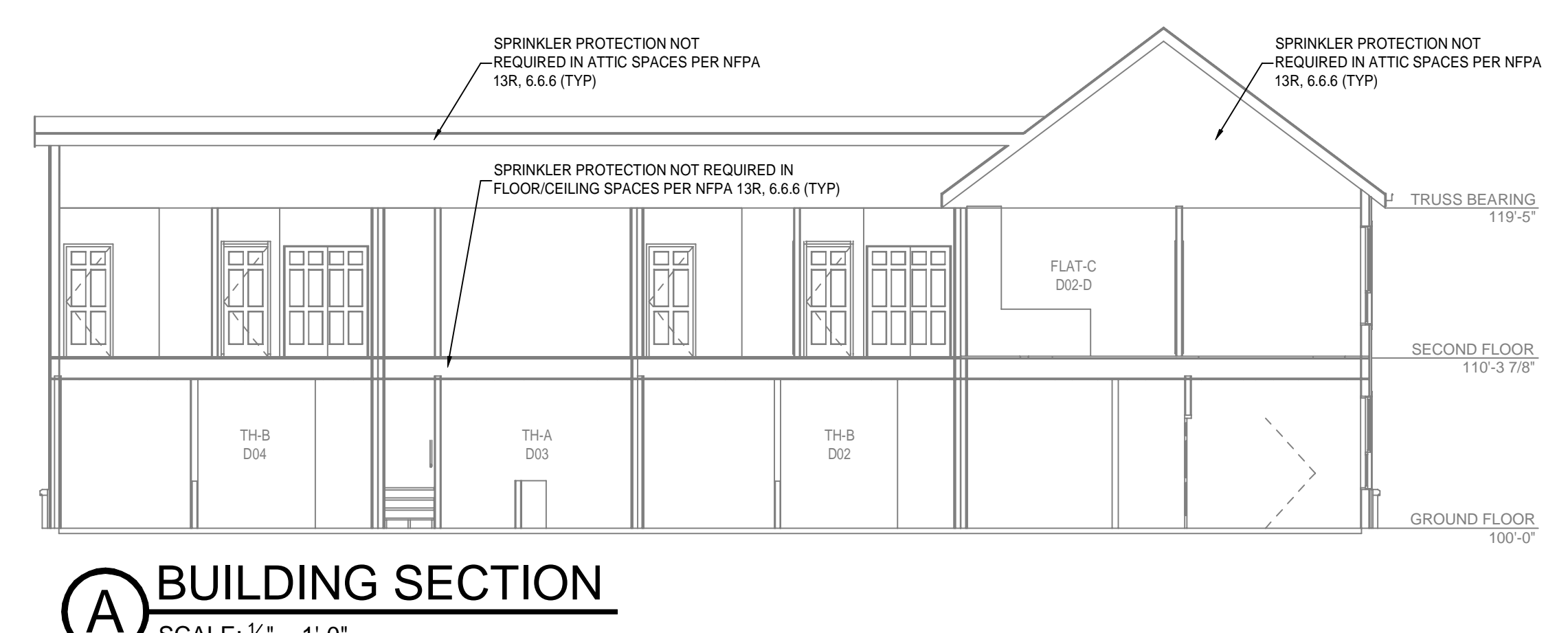
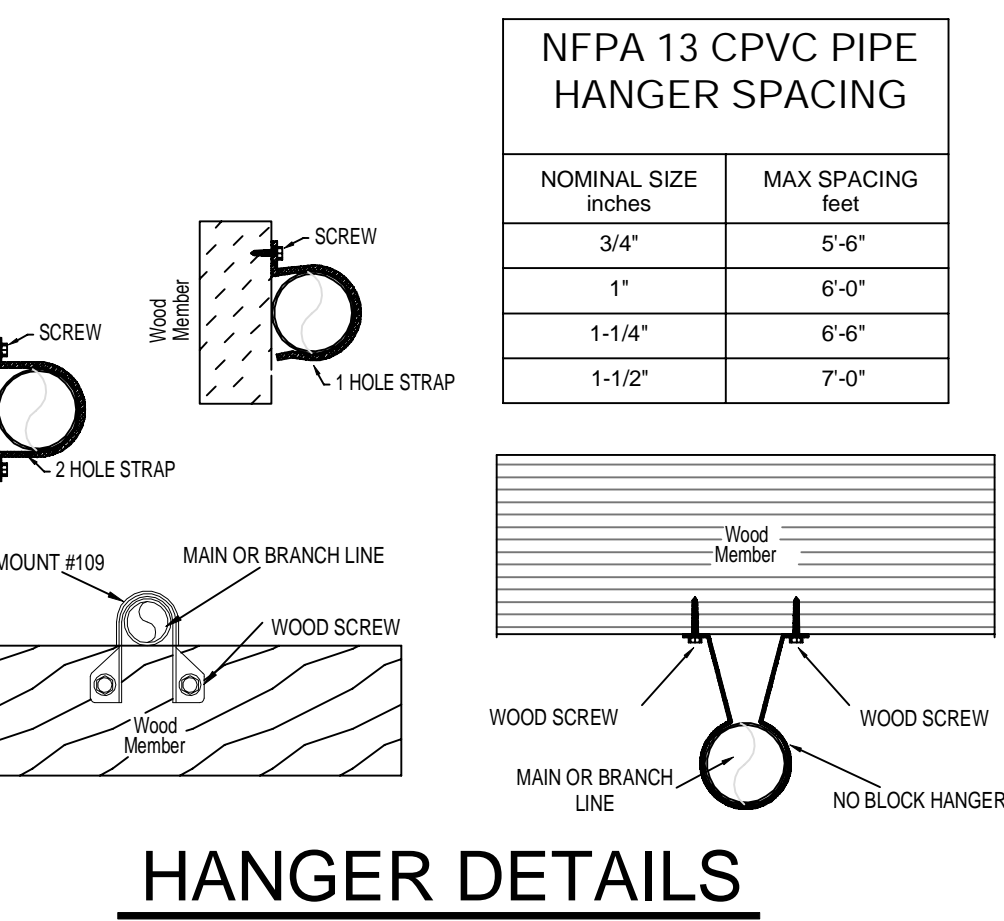
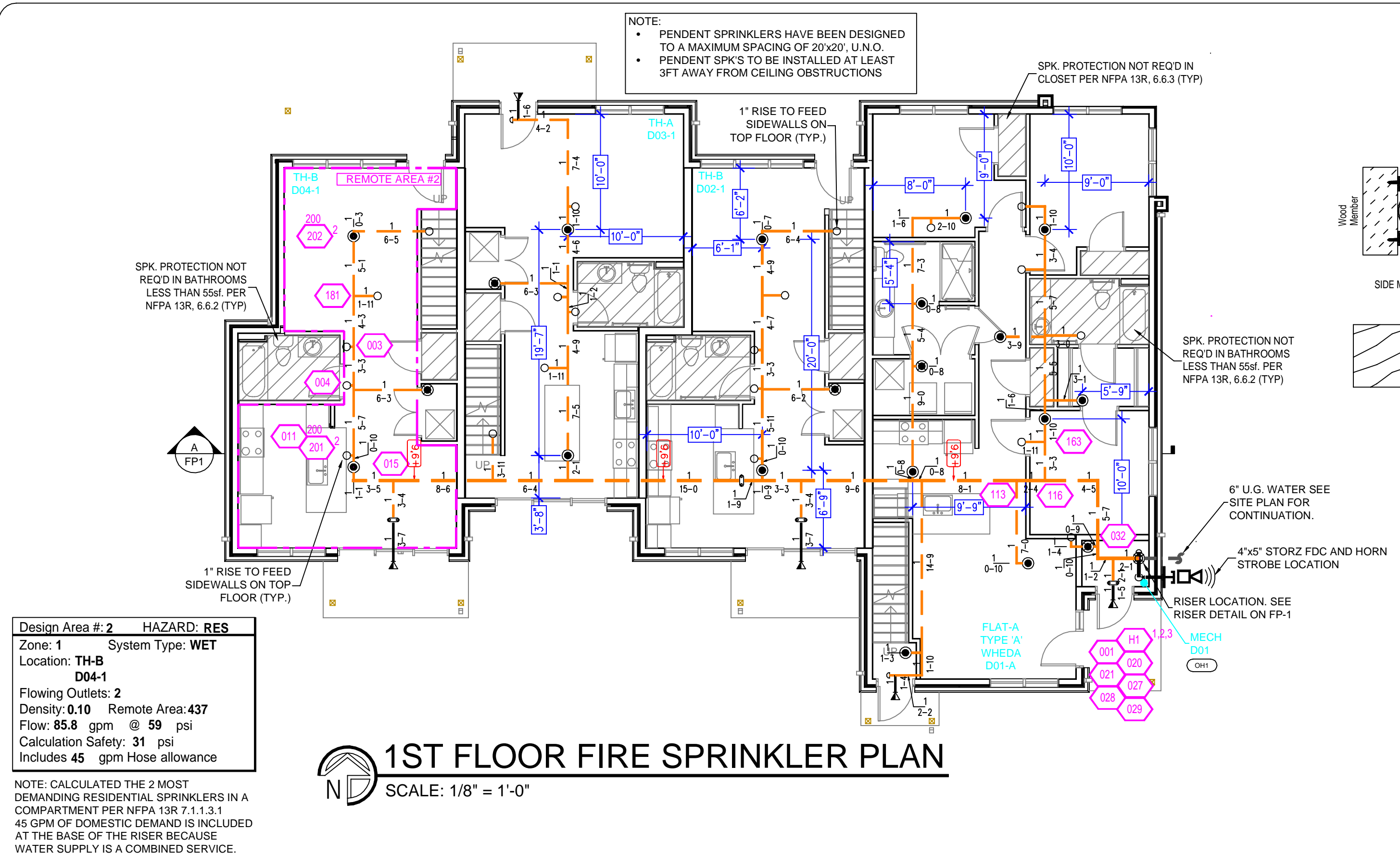
Design Area # 3 HAZARD: RES
 Zone: 1 System Type: WET
 Location: FLAT-C
 C08-C
 Flowing Outlets: 3
 Density: 0.10 Remote Area: 469
 Flow: 138.8 gpm @ 67.5 psi
 Calculation Safety: 22.4 psi
 Includes 55 gpm Hose allowance

Design Area # 1 HAZARD: RES
 Zone: 1 System Type: WET
 Location: TH-A
 C01-2
 Flowing Outlets: 3
 Density: 0.10 Remote Area: 95
 Flow: 107.4 gpm @ 58.8 psi
 Calculation Safety: 31.2 psi
 Includes 55 gpm Hose allowance

NOTE: CALCULATED THE 3 MOST DEMANDING RESIDENTIAL SPRINKLERS IN A COMPARTMENT PER NFPA 13R 7.1.1.3.1 55 GPM OF DOMESTIC DEMAND IS INCLUDED AT THE BASE OF THE RISER BECAUSE WATER SUPPLY IS A COMBINED SERVICE.

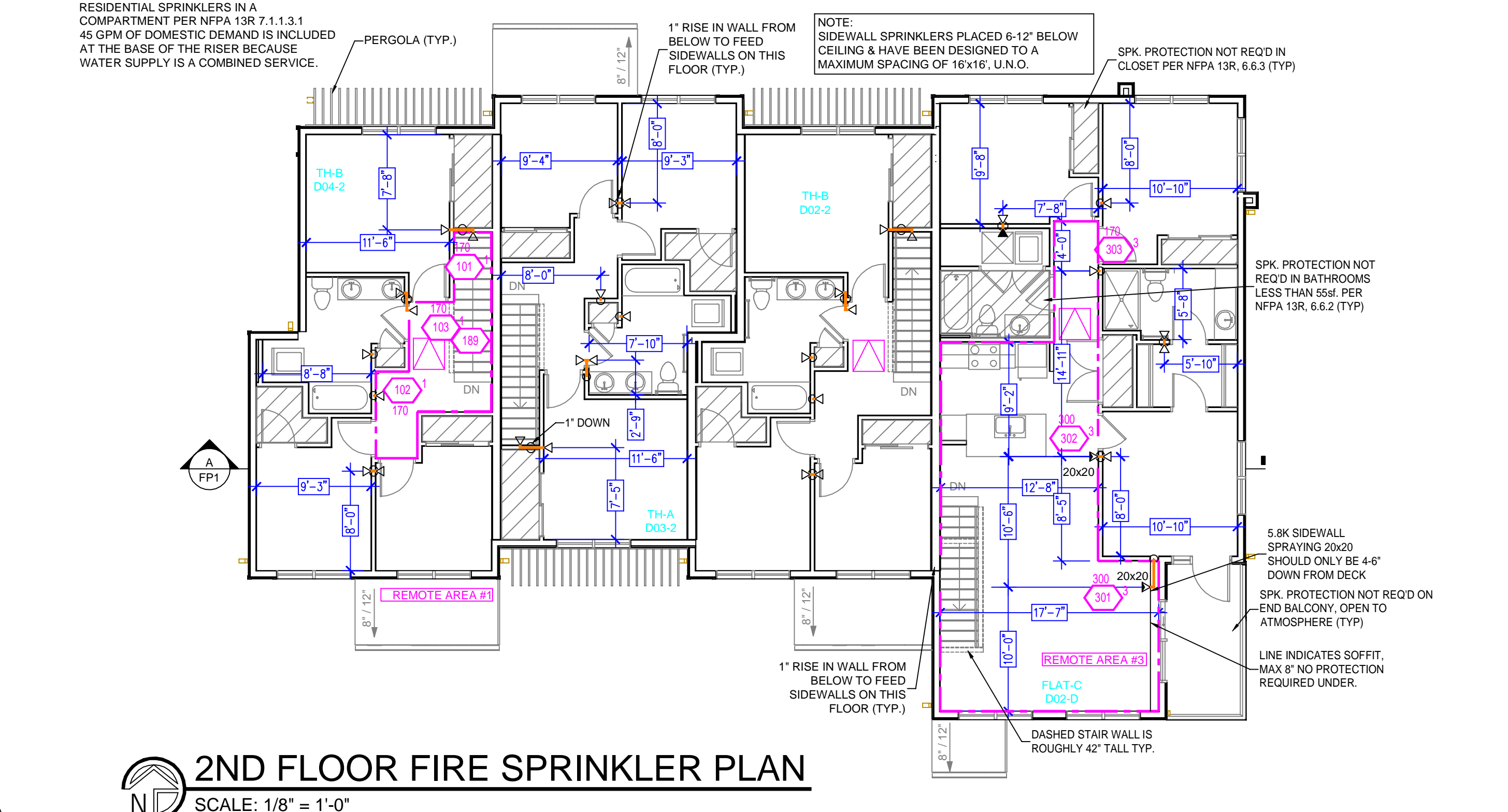
NO.	REVISIONS	BY	DATE	GENERAL NOTES
1				SYSTEM DESIGNED PER NFPA-13R (2013)
2				ALL SYSTEM MATERIAL AND INSTALLATION PER NFPA-13R (2013)
3				ALL HANGER COMPONENTS, LOCATION AND INSTALLATION METHODS PER NFPA-13R (2013)
4				PIPE SPECIFICATIONS: 1" - 2" - 4" S10 PIPE 1/2" - 4" S10 PIPE
5				FITTING SPECIFICATIONS: SCHEDULE - DUCTILE IRON; GROOVED - DUCTILE IRON
6				SYMBOL (H) INDICATES HYD CALC POINT
7				CEILINGS ALL 8'-0" UNLESS NOTED WITH SYMBOL

AREA:	TITLE/DETAILS	PROPERTY	PROJECT:	SHEET/DRAWING No.
DR: J.B.	CHK'D: J.B.	PROJECT:	DRIFTLESS TOWNHOME BUILDING C	FP1 OF 1
SCALE:	1/8" = 1'-0"	ADDRESS:	38,302,304,306,308,310,312,314 KRAFT ST.	
DATE:	12/08/23	AREA:	LA CROSSE, WI 54603	
CAD FILE:	8011-23 FP		TITLE PAGE AND DETAILS	



Design Area # 2 HAZARD: RES
 Zone: 1 System Type: WET
 Location: TH-B
 D04-1
 Flowing Outlets: 2
 Density: 0.10 Remote Area: 437
 Flow: 85.8 gpm @ 59 psi
 Calculation Safety: 31 psi
 Includes 45 gpm Hose allowance

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



GENERAL NOTES

- INTERNATIONAL BUILDING CODE (2015)
 - OCCUPANCY: TYPE R-2; RESIDENTIAL MULTIFAMILY TOWNHOMES
 - TYPE OF CONSTRUCTION: V-A (1HR RATED PROTECTED, COMBUSTIBLE CONSTRUCTION)
 - SPRINKLERED AREAS (APPROXIMATE - SEE ARCHITECTURAL PLANS FOR ACTUAL)
 - 1ST FLOOR = 2,833 S.F.
 - 2ND FLOOR = 2,955 S.F.
 - TOTAL = 5,838 S.F.
 - INSTALLATION STANDARDS: SPRINKLER SYSTEM DESIGNED AND INSTALLED PER NFPA-13R, (2013)
- SPRINKLER PIPE TYPES:
 - WET:
 - 1" BRANCH LINES TO BE BLAZEMASTER CPVC PIPING WITH CEMENTED FITTINGS
 - 1 1/2" MAIN & BRANCH LINES TO BE BLAZEMASTER CPVC PIPING WITH CEMENTED FITTINGS
- DESIGN CRITERIA
 - UNITS ARE DESIGNED TO LIGHT HAZARD
 - MECHANICAL ROOM IS DESIGNED TO ORDINARY HAZARD GROUP 1
 - UP TO 4 HEADS IN A COMPARTMENT HAVE BEEN CALCULATED PER NFPA 13R SEC. 7.1.1.3.1
- NOTES:
 - ALL MATERIAL TO BE NEW AND MEET U.L. STANDARDS
 - HANGERS TO BE INSTALLED IN ACCORDANCE WITH NFPA 13R (2013) - SEE PLAN FOR HANGING REQ.
 - FITTER TO FIELD LOCATE ANY AUXILIARY DRAINS NEEDED
- SYMBOLS USED ON DRAWINGS:
 - 4'-10" PIPE ELEVATION A.F.F
 - 4'-2" PIPE ELEVATION BELOW B.O.D
 - ROOM HAZARD CLASSIFICATION (ALL ROOMS ARE CONSIDERED LIGHT HAZARD UNLESS NOTED)
 - HYDRAULIC CALCULATION JUNCTION POINT
- SCOPE OF WORK:
 - TO INSTALL A NEW SINGLE WET ZONE SPRINKLER SYSTEM IN THE DRIFTLESS TOWNHOME BUILDING D. THE NEW SYSTEM WILL BE FED WITH CPVC, WITH PENDENTS ON THE FIRST FLOOR AND BIRDCAGED SIDEWALLS ON THE TOP FLOOR.
 - ALL AREAS OF THE BUILDING TO BE INSTALLED AND COVERED IN ACCORDANCE WITH THE LOCAL AUTHORITY HAVING JURISDICTION AND PER NFPA 13R (2013)

Design Area # 3 HAZARD: RES
 Zone: 1 System Type: WET
 Location: FLAT-C
 D02-D
 Flowing Outlets: 3
 Density: 0.10 Remote Area: 469
 Flow: 131.4 gpm @ 78.3 psi
 Calculation Safety: 11.7 psi
 Includes 45 gpm Hose allowance

NOTE: CALCULATED THE 3 MOST DEMANDING RESIDENTIAL SPRINKLERS IN A COMPARTMENT PER NFPA 13R 7.1.1.3.1 45 GPM OF DOMESTIC DEMAND IS INCLUDED AT THE BASE OF THE RISER BECAUSE WATER SUPPLY IS A COMBINED SERVICE.

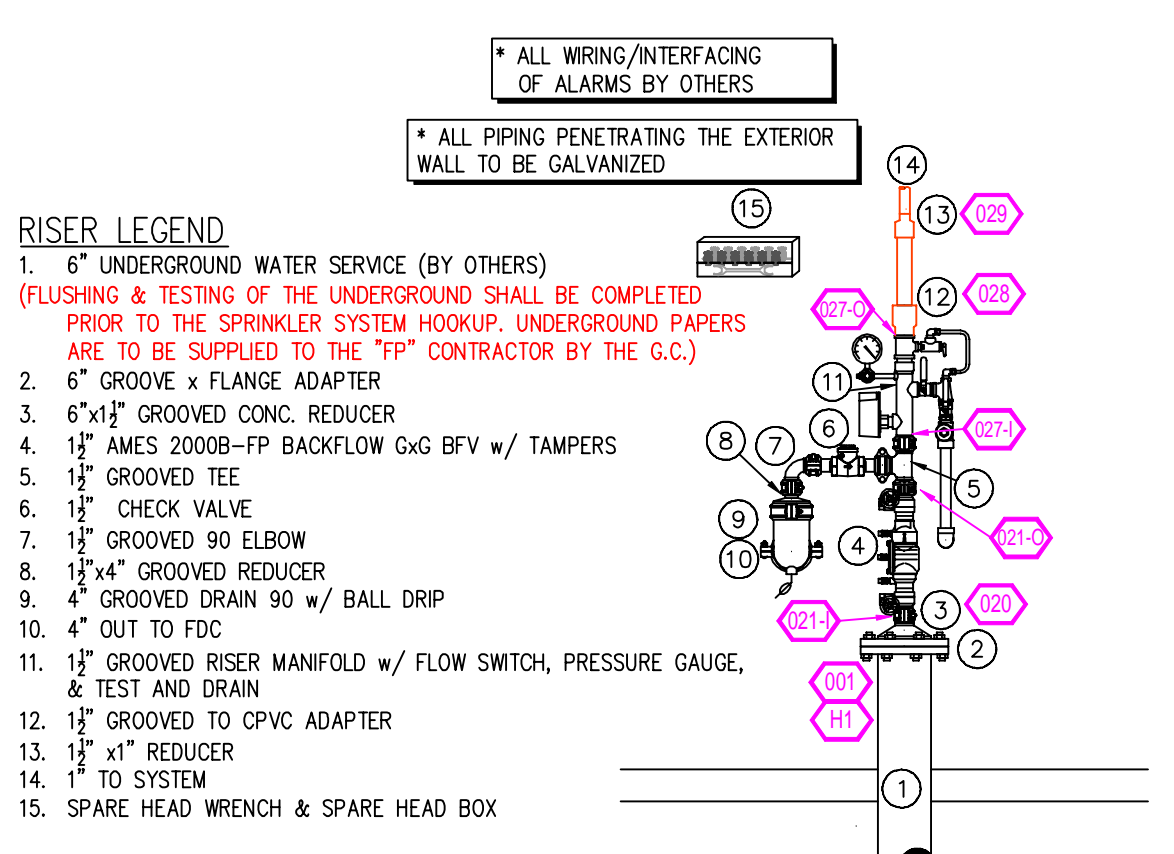
PIPE LEGEND

- BLACK STEEL WET FIRE SPRINKLER PIPING
- CPVC BLAZEMASTER SPRINKLER PIPING
- PIPING PROVIDED BY OTHERS

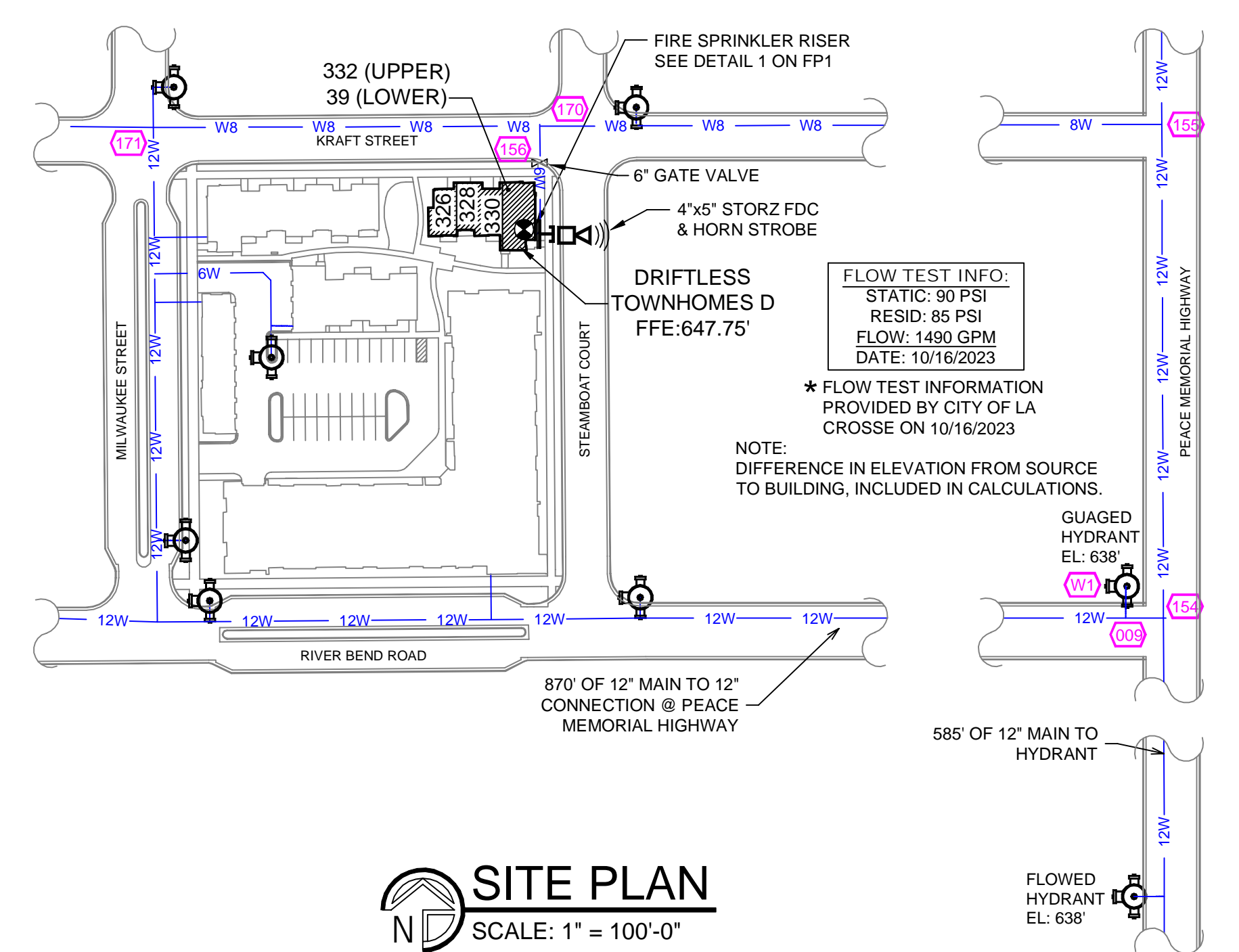
SPRINKLER LEGEND

SYM	CNT	POSITION	FINISH	TEMP	K	NPT	SIN	MFG.	MODEL#	ESCUTCHEON	SPACING
1	30	SIDEWALL	WHITE	155	4.40	1/2"	RA3531	RELIABLE	FT RES	HB	16x16 U.N.O.
2	5	PENDENT	WHITE	155	4.90	1/2"	RA3516	RELIABLE	FT RES	RECESSED	20x20"
3	1	SIDEWALL	WHITE	175	4.40	1/2"	RA3531	RELIABLE	FT RES	HB	16x16 U.N.O.
4	5	SIDEWALL	WHITE	200	5.60	1"	R5734	RELIABLE	F3QR56	HB	14x14"
5	2	SIDEWALL	WHITE	155	5.80	1/2"	RA3533	RELIABLE	FT RES	HB	20x20" U.N.O.

58 TOTAL SPRINKLERS



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

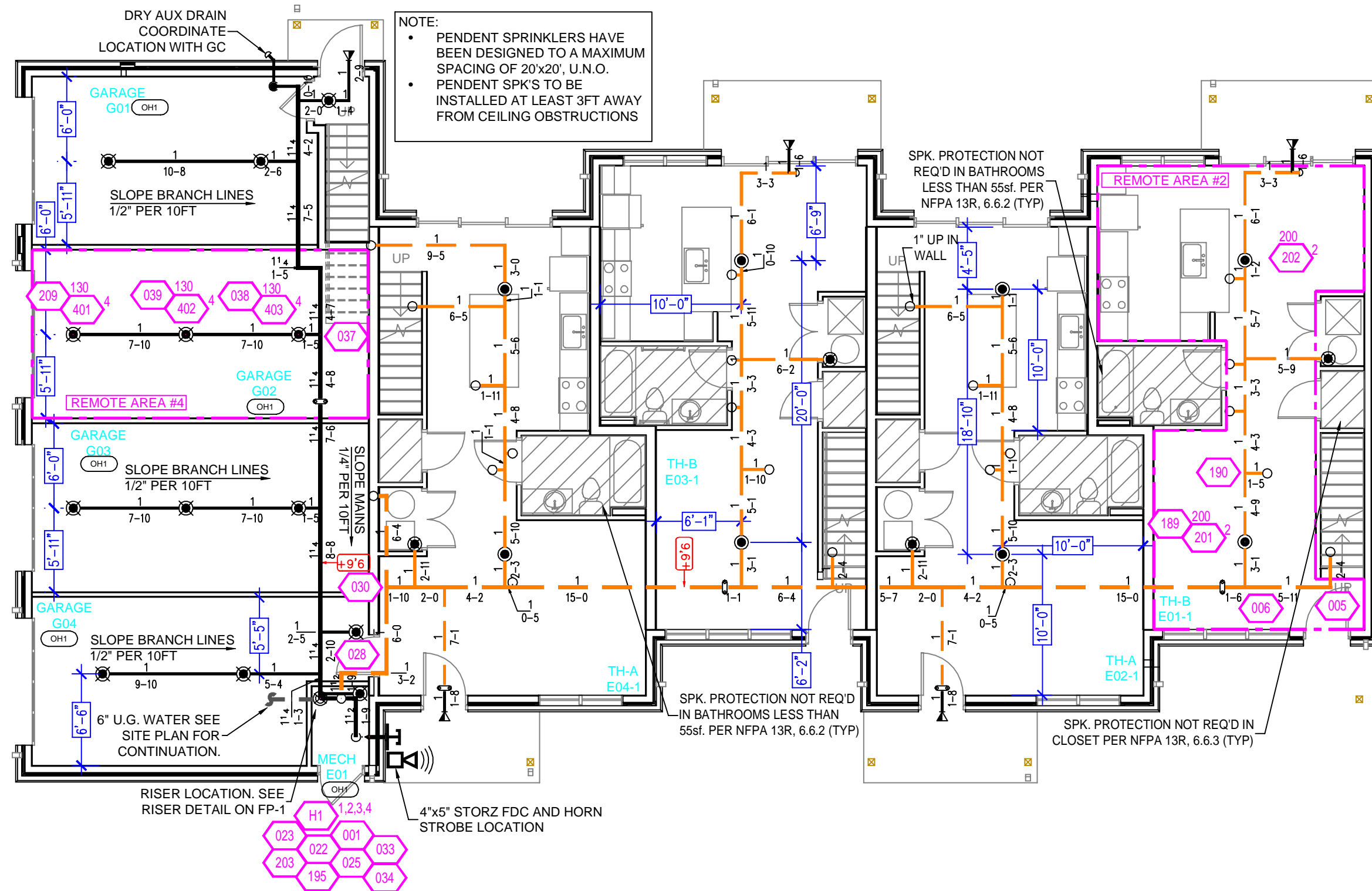


2ND FLOOR FIRE SPRINKLER PLAN
SCALE: 1/8" = 1'-0"

NO.	REVISIONS	BY	DATE	GENERAL NOTES	AREA: TITLE/DETAILS	PROPERTY	PROJECT:	SHEET/DRAWING No.
				1 SYSTEM DESIGNED PER NFPA-13R (2013)	DRIFTLESS TOWNHOMES BUILDING D		39, 326, 328, 330, 332 KRAFT STREET	FP1 OF 1
				2 ALL SYSTEM MATERIAL AND INSTALLATION PER NFPA-13R (2013)			LA CROSSE, WI 54603	
				3 ALL HANGER COMPONENTS, LOCATION AND INSTALLATION METHODS PER NFPA-13R (2013)			TITLE PAGE AND DETAILS	
				4 PIPE SPECIFICATIONS: 2 1/2"-4" S10 PIPE	AREA: 8011-23 FP	PROJECT:		PROJECT REV.
				5 FITTING SPECIFICATIONS: SCHEDULE 40, DUCTILE IRON; GROOVED - DUCTILE IRON		DATE:	12/08/23	8011-23
				6 SYMBOL (D) INDICATES HYD CALC POINT		CAD FILE:	8011-23 FP	
				7 CEILINGS ALL 8'-0" UNLESS NOTED WITH SYMBOL				

Design Area #4 HAZARD: OH1
 Zone: 1 System Type: DRY
 Location: GARAGE
 G02
 Flowing Outlets: 3
 Density: 0.15 Remote Area: 285
 Flow: 108.5 gpm @ 53.8 psi
 Calculation Safety: 36.1 psi
 Includes 45 gpm Hose allowance

NOTE: CALCULATED THE 3 MOST DEMANDING SPRINKLERS IN A COMPARTMENT PER NFPA 13R 7.2.2.1 45 GPM OF DOMESTIC DEMAND IS INCLUDED AT THE BASE OF THE RISER BECAUSE WATER SUPPLY IS A COMBINED SERVICE.



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

Design Area #2 HAZARD: RES
 Zone: 1 System Type: WET
 Location: TH-B
 E01-1
 Flowing Outlets: 2
 Density: 0.10 Remote Area: 240
 Flow: 85.8 gpm @ 59.8 psi
 Calculation Safety: 30.1 psi
 Includes 45 gpm Hose allowance

NOTE: CALCULATED THE 2 MOST DEMANDING RESIDENTIAL SPRINKLERS IN A COMPARTMENT PER NFPA 13R 7.1.1.3.1 45 GPM OF DOMESTIC DEMAND IS INCLUDED AT THE BASE OF THE RISER BECAUSE WATER SUPPLY IS A COMBINED SERVICE.



SPRINKLER HEAD LEGEND

SYM	CNT	POSITION	FINISH	TEMP	K	NPT	SIN	MFG.	MODEL#	ESCUTCHEON	SPACING
◀	39	SIDEWALL	WHITE	155	4.40	1/2"	RA3531	RELIABLE	F1 RES	HB	16x16 U.O.
◀	1	SIDEWALL	WHITE	155	5.80	1/2"	RA3533	RELIABLE	F1 RES	HB	16x16 U.O.
◀	8	PENDENT	WHITE	155	4.90	1/2"	RA3516	RELIABLE	F1 RES	RECESSED	20x20
◀	4	PENDENT	WHITE	175	4.90	1/2"	RA3516	RELIABLE	F1 RES	RECESSED	20x20
◀	1	SIDEWALL	WHITE	175	4.40	1/2"	RA3531	RELIABLE	F1 RES	HB	16x16 U.O.
◀	5	SIDEWALL	WHITE	200	5.60	1"	R5734	RELIABLE	F3QR56	HB	14x14
◀	13	PENDENT	CHROME	200	5.60	1"	R5714	RELIABLE	F3QR	HB	130 SQ.FT.

71 TOTAL SPRINKLERS

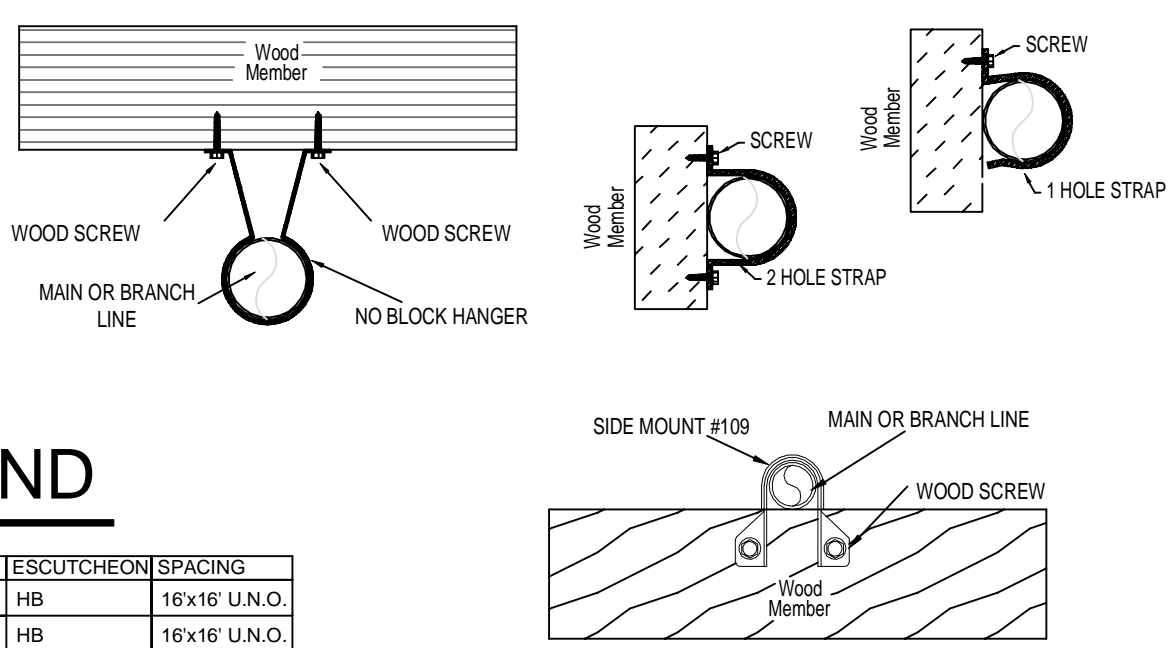
NFPA 13 STEEL PIPE HANGER SPACING
 (EXCEPT LIGHT WALL THRD PIPING)

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"

NFPA 13 CPVC PIPE HANGER SPACING

NOMINAL SIZE inches	MAX SPACING feet
3/4"	5'-0"
1"	6'-0"
1-1/4"	6'-6"
1-1/2"	7'-0"

HANGER DETAILS



GENERAL NOTES

- INTERNATIONAL BUILDING CODE (2015)
 - OCCUPANCY: TYPE R-2; RESIDENTIAL MULTIFAMILY TOWNHOMES, TYPE U; PRIVATE GARAGES
 - TYPE OF CONSTRUCTION: V-A (1HR RATED PROTECTED, COMBUSTIBLE CONSTRUCTION)
 - SPRINKLERED AREAS (APPROXIMATE - SEE ARCHITECTURAL PLANS FOR ACTUAL)
 - 1ST FLOOR = 3,530 S.F.
 - 2ND FLOOR = 3,587 S.F.
 - TOTAL = 7,117 S.F.
 - INSTALLATION STANDARDS: SPRINKLER SYSTEM DESIGNED AND INSTALLED PER NFPA-13R, (2013)
- SPRINKLER PIPE TYPES:
 - WET:
 - 1" BRANCH LINES TO BE BLAZEMASTER CPVC PIPING WITH CEMENTED FITTINGS
 - 1 1/2" MAIN & BRANCH LINES TO BE BLAZEMASTER CPVC PIPING WITH CEMENTED FITTINGS
 - DRY-:
 - 1" BRANCH LINES TO BE SCHEDULE 40 BLK PIPING WITH THREADED FITTINGS
 - 1 1/2" MAIN TO BE BLK SCHEDULE 10 PIPING WITH GROOVED FITTINGS
- DESIGN CRITERIA
 - UNITS ARE DESIGNED TO LIGHT HAZARD
 - MECHANICAL ROOM & GARAGES ARE DESIGNED TO ORDINARY HAZARD GROUP 1
 - UP TO 4 HEADS IN A COMPARTMENT HAVE BEEN CALCULATED PER NFPA 13R SEC. 7.1.1.3.1
- NOTES:
 - ALL MATERIAL TO BE NEW AND MEET U.L. STANDARDS
 - HANGERS TO BE INSTALLED IN ACCORDANCE WITH NFPA 13R (2013) - SEE PLAN FOR HANGING REQ.
 - FITTER TO FIELD LOCATE ANY AUXILIARY DRAINS NEEDED
 - DRY SYSTEM PIPE SLOPE INSTALLATION:
 - SPRINKLER MAINS TO BE 1/4" PER 10 FEET
 - SPRINKLER BRANCH LINES TO BE 1/2" PER 10 FEET
 - 4.5. DRY SYSTEM CAPACITY
 - 108.5 GAL.
- SYMBOLS USED ON DRAWINGS:
 - ◀-10" PIPE ELEVATION A.F.F
 - ◀-12" PIPE ELEVATION BELOW B.O.D
 - OH1 ROOM HAZARD CLASSIFICATION (ALL ROOMS ARE CONSIDERED LIGHT HAZARD UNLESS NOTED)
 - HYDRAULIC CALCULATION JUNCTION POINT
- SCOPE OF WORK:
 - TO INSTALL A NEW WET & DRY ZONE SPRINKLER SYSTEM IN THE DRIFTLESS TOWNHOME BUILDING E. THE NEW DRY SYSTEM WILL BE FED WITH STEEL WITH DRY & RESIDENTIAL PENDENTS ON THE FIRST FLOOR AND THE NEW WET SYSTEM WILL BE FED WITH CPVC & RESIDENTIAL SIDEWALLS ON THE TOP FLOOR.
 - ALL AREAS OF THE BUILDING TO BE INSTALLED AND COVERED IN ACCORDANCE WITH THE LOCAL AUTHORITY HAVING JURISDICTION AND PER NFPA 13R (2013)

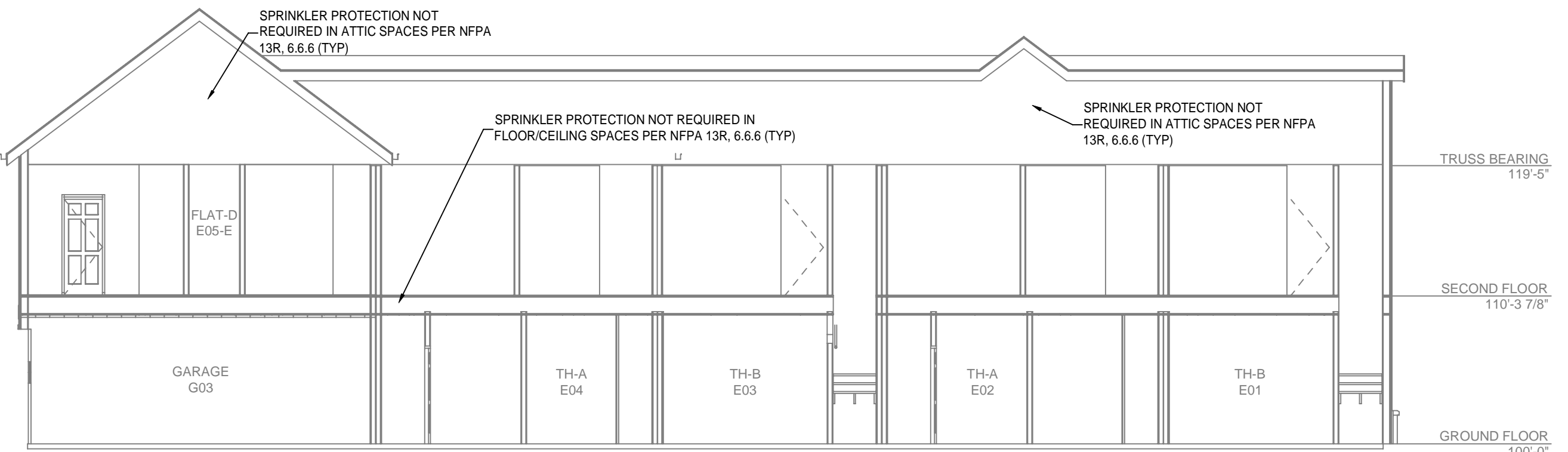
Design Area #3 HAZARD: RES
 Zone: 1 System Type: WET
 Location: FLAT-D
 E05-E
 Flowing Outlets: 3
 Density: 0.10 Remote Area: 240
 Flow: 118.7 gpm @ 80.2 psi
 Calculation Safety: 9.8 psi
 Includes 45 gpm Hose allowance

NOTE: CALCULATED THE 3 MOST DEMANDING RESIDENTIAL SPRINKLERS IN A COMPARTMENT PER NFPA 13R 7.1.1.3.1 45 GPM OF DOMESTIC DEMAND IS INCLUDED AT THE BASE OF THE RISER BECAUSE WATER SUPPLY IS A COMBINED SERVICE.

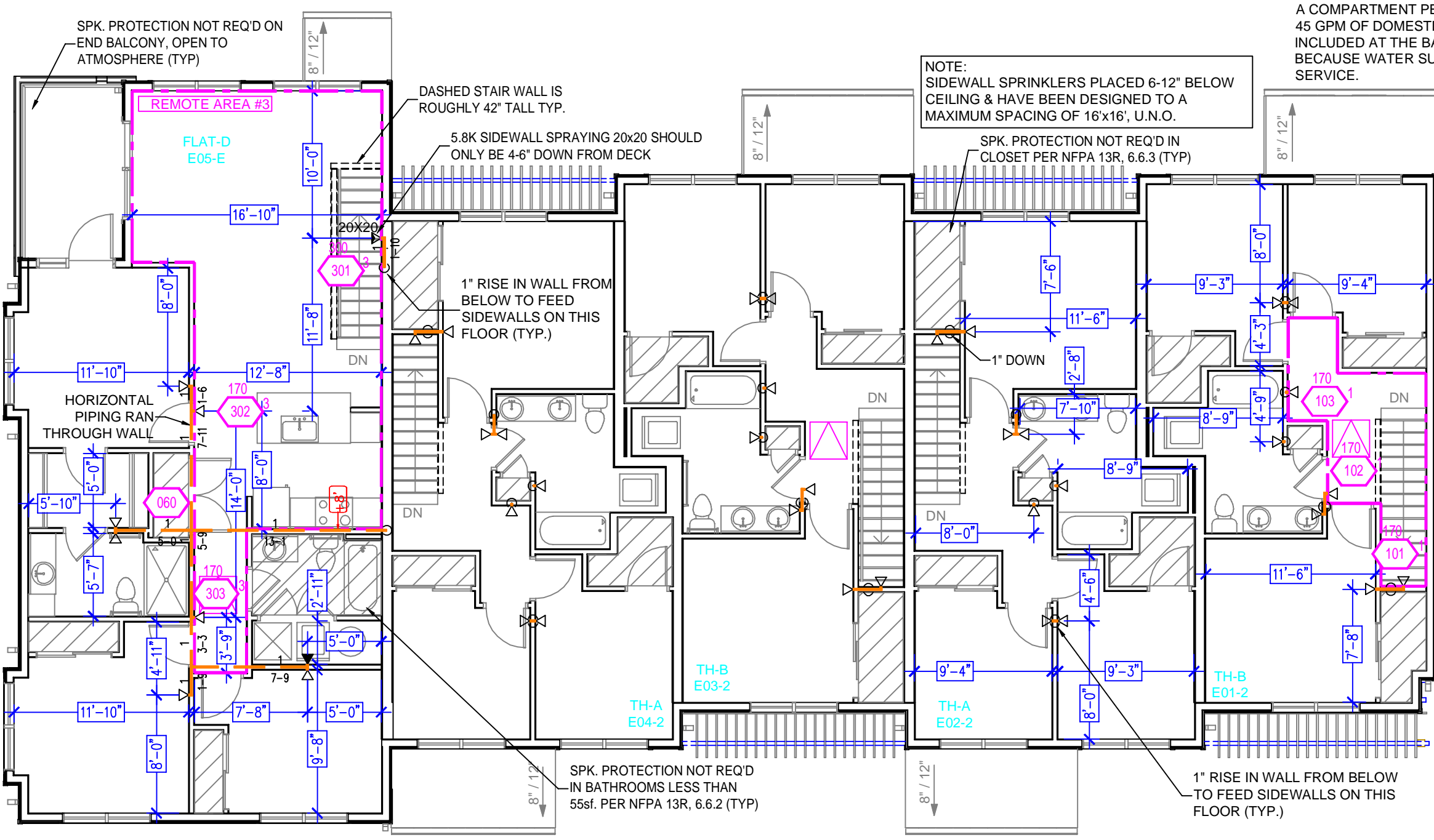
Design Area #1 HAZARD: RES
 Zone: 1 System Type: WET
 Location: TH-B
 E01-2
 Flowing Outlets: 3
 Density: 0.10 Remote Area: 458
 Flow: 97.2 gpm @ 76.4 psi
 Calculation Safety: 13.6 psi
 Includes 45 gpm Hose allowance

NOTE: CALCULATED THE 3 MOST DEMANDING RESIDENTIAL SPRINKLERS IN A COMPARTMENT PER NFPA 13R 7.1.1.3.1 45 GPM OF DOMESTIC DEMAND IS INCLUDED AT THE BASE OF THE RISER BECAUSE WATER SUPPLY IS A COMBINED SERVICE.

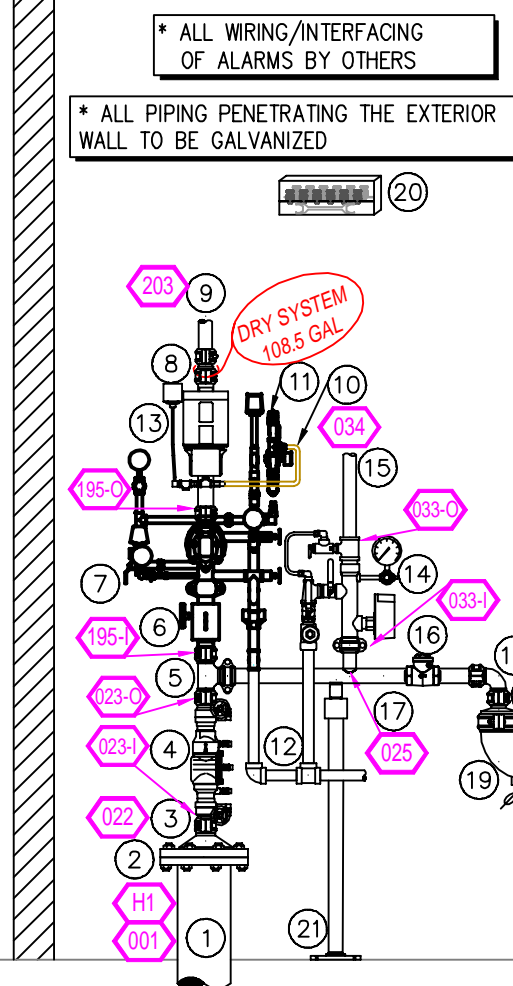
CALC PLACARD



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

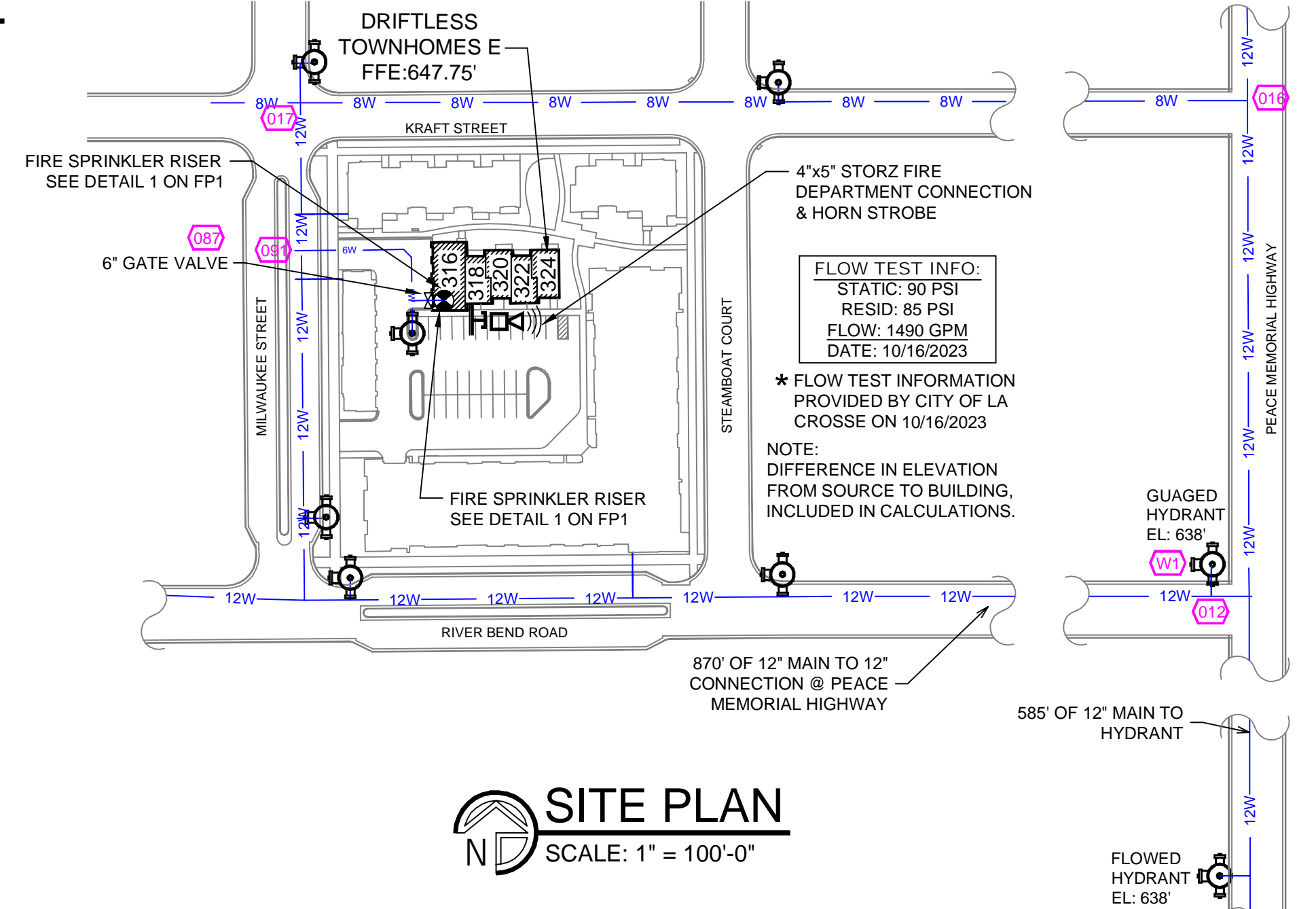


2ND FLOOR FIRE SPRINKLER PLAN
 SCALE: 1/8" = 1'-0"



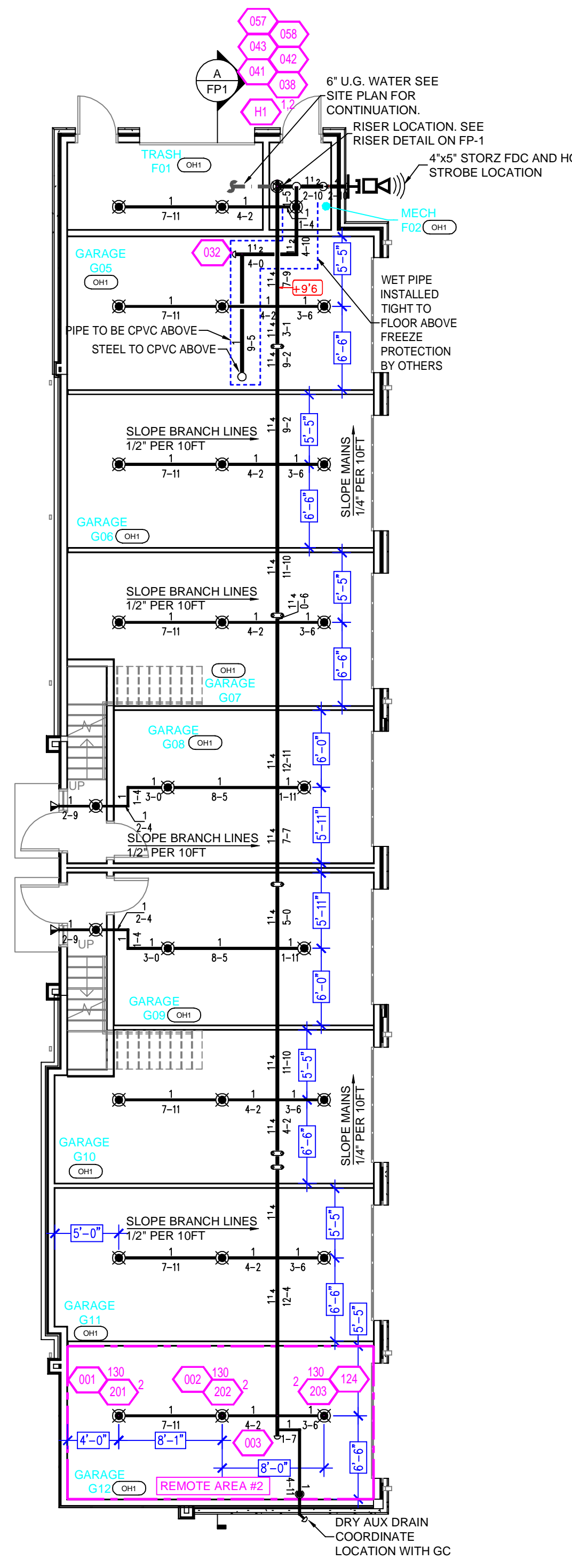
RISER DETAIL
 SCALE: 1/2" = 1'-0"

- 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" GROOVE x FLANGE ADAPTER
 - 6"x1 1/2" GROOVED CONC. REDUCER
 - 1 1/2" AMES 2000B-FPP BACKFLOW GXG BFW w/ TAMPERS
 - 1 1/2" GROOVED TEE
 - 1 1/2" GROOVED BUTTERFLY w/TAMPER
 - 1 1/2" VICTALLIC NXT 788N
 - 1 1/2"x1 1/2" REDUCER
 - 1 1/2" TO DRY SYSTEM ZONE 1 (GARAGES)
 - 2" COPPER LINE FROM AIR COMPRESSOR TO AIR MAINTENANCE DEVICE
 - VICTALLIC AIR MAINTENANCE DEVICE
 - 1" MAIN DRAIN TO BE PIPED OUTSIDE
 - AIR COMPRESSOR
 - 1 1/2" GROOVED RISER MANIFOLD w/ FLOW SWITCH, PRESSURE GAUGE, & TEST AND DRAIN
 - 1 1/2" TO WET SYSTEM ZONE 1 (MAIN FLOOR FIRE SPRINKLER PLAN)
 - CHECK VALVE
 - 1 1/2" GROOVED 90
 - 4"x1 1/2" GROOVED CONC. REDUCER
 - 4" GROOVED DRAIN 90 TO FDC SEE PLAN SPRINKLER PLAN
 - SPARE HEAD WRENCH & SPARE HEAD BOX
 - PIPE STAND



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

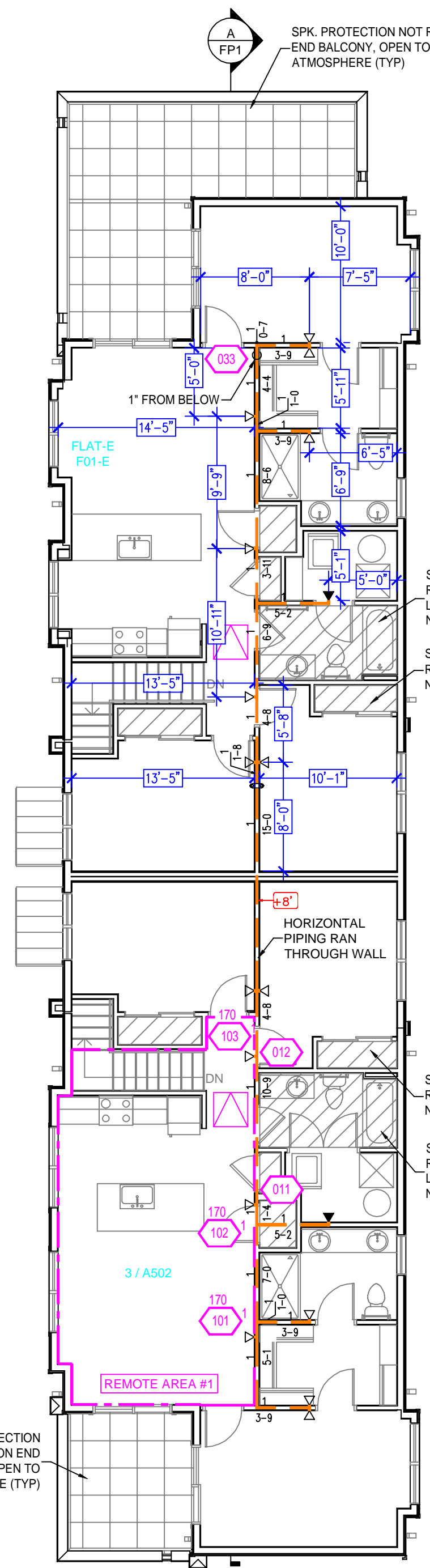
NO.	REVISIONS	BY	DATE	GENERAL NOTES	AREA: TITLE/DETAILS	PROPERTY	PROJECT:	DRIFTLESS TOWNHOMES BUILDING E	SHEET/DRAWING No.
1				1 SYSTEM DESIGNED PER NFPA-13R (2013)	DR: E. J. CHK'D: J.B.	PROJECT:	316, 318, 320, 322, 324 KRAFT STREET	FP1 OF 1	
2				2 ALL SYSTEM MATERIAL AND INSTALLATION METHODS PER NFPA-13R (2013)	SCALE: 1/8" = 1'-0"	ADDRESS:	LA CROSSE, WI 54603	PROJECT	
3				3 ALL HANGER COMPONENTS, LOCATION AND INSTALLATION METHODS PER NFPA-13 (2013)	DATE: 12/08/23	AREA:	TITLE PAGE AND DETAILS	REV.	
4				4 PIPE SPECIFICATIONS: 1 1/2"-2" S40/310 CPVC PIPE	CAD FILE: 8011-23 FP			8011-23	
5				5 FITTING SPECIFICATIONS: SCHEDULE 40 DUCTILE IRON; GROOVED - DUCTILE IRON					
6				6 SYMBOL (D) INDICATES HYD CALC POINT					
7				7 CEILINGS ALL 8'-0" UNLESS NOTED WITH SYMBOL					



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

Design Area #: 2 HAZARD: OH1
Zone: 1 System Type: DRY
Location: GARAGE
G12
Flowing Outlets: 3
Density: 0.15 Remote Area: 285
Flow: 92.7 gpm @ 65.9 psi
Calculation Safety: 24.1 psi
Includes 30 gpm Hose allowance

NOTE: CALCULATED THE 3 MOST DEMANDING SPRINKLERS IN A COMPARTMENT PER NFPA 13R 7.2.2.1 30 GPM OF DOMESTIC DEMAND IS INCLUDED AT THE BASE OF THE RISER BECAUSE WATER SUPPLY IS A COMBINED SERVICE.

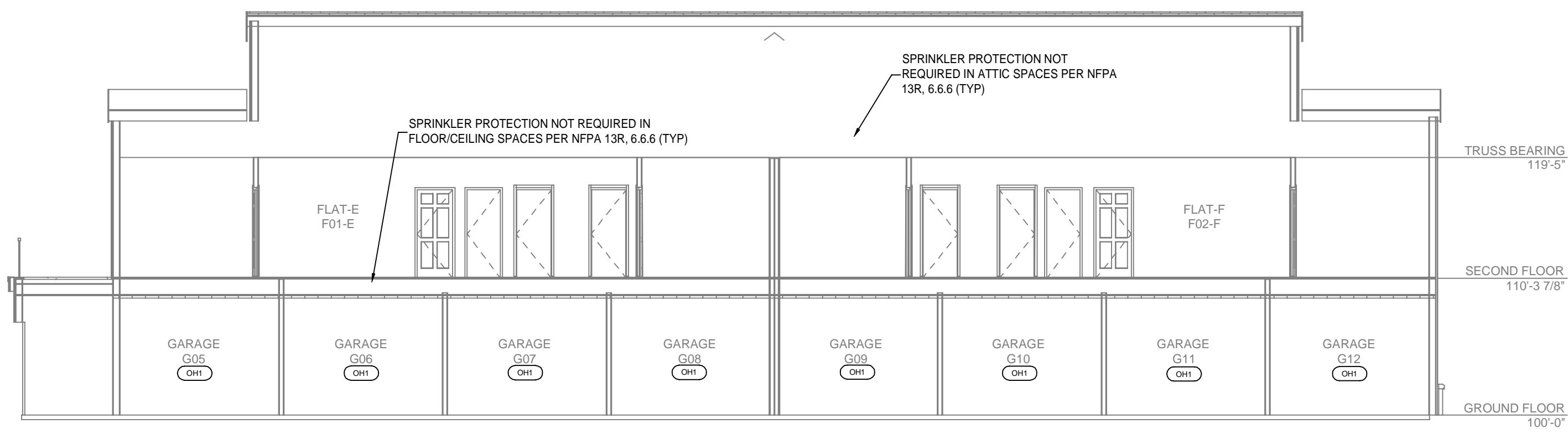


2ND FLOOR FIRE SPRINKLER PLAN
SCALE: 1/8" = 1'-0"

Design Area #: 1 HAZARD: RES
Zone: 1 System Type: WET
Location: 3 / A502
Flowing Outlets: 3
Density: 0.10 Remote Area: 378
Flow: 82.7 gpm @ 83.4 psi
Calculation Safety: 6.6 psi
Includes 30 gpm Hose allowance

NOTE: CALCULATED THE 3 MOST DEMANDING RESIDENTIAL SPRINKLERS IN A COMPARTMENT PER NFPA 13R 7.1.1.3.1 30 GPM OF DOMESTIC DEMAND IS INCLUDED AT THE BASE OF THE RISER BECAUSE WATER SUPPLY IS A COMBINED SERVICE.

CALC PLACARD



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

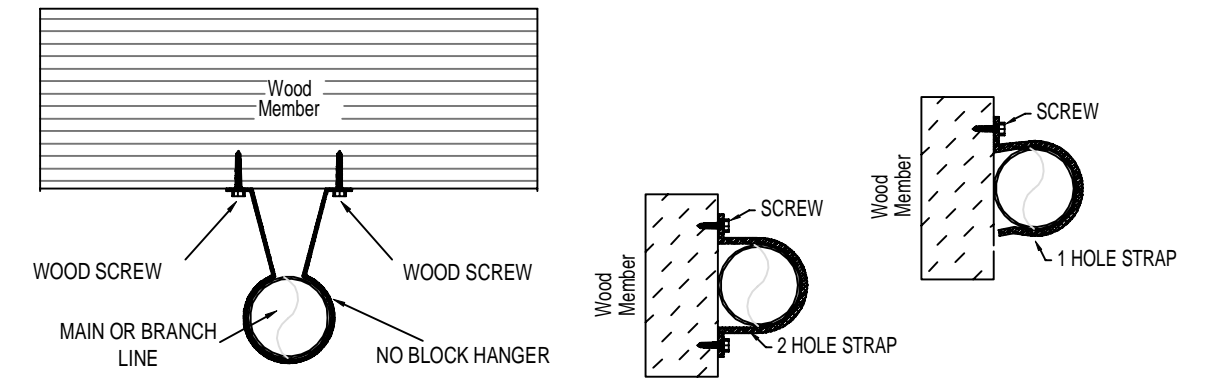
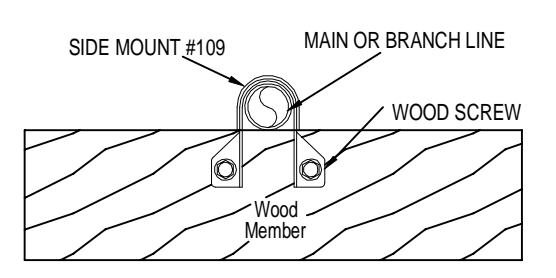
PIPE LEGEND
— BLACK STEEL DRY FIRE SPRINKLER PIPING
— CPVC BLAZEMASTER SPRINKLER PIPING
- - - PIPING PROVIDED BY OTHERS

SPRINKLER HEAD LEGEND

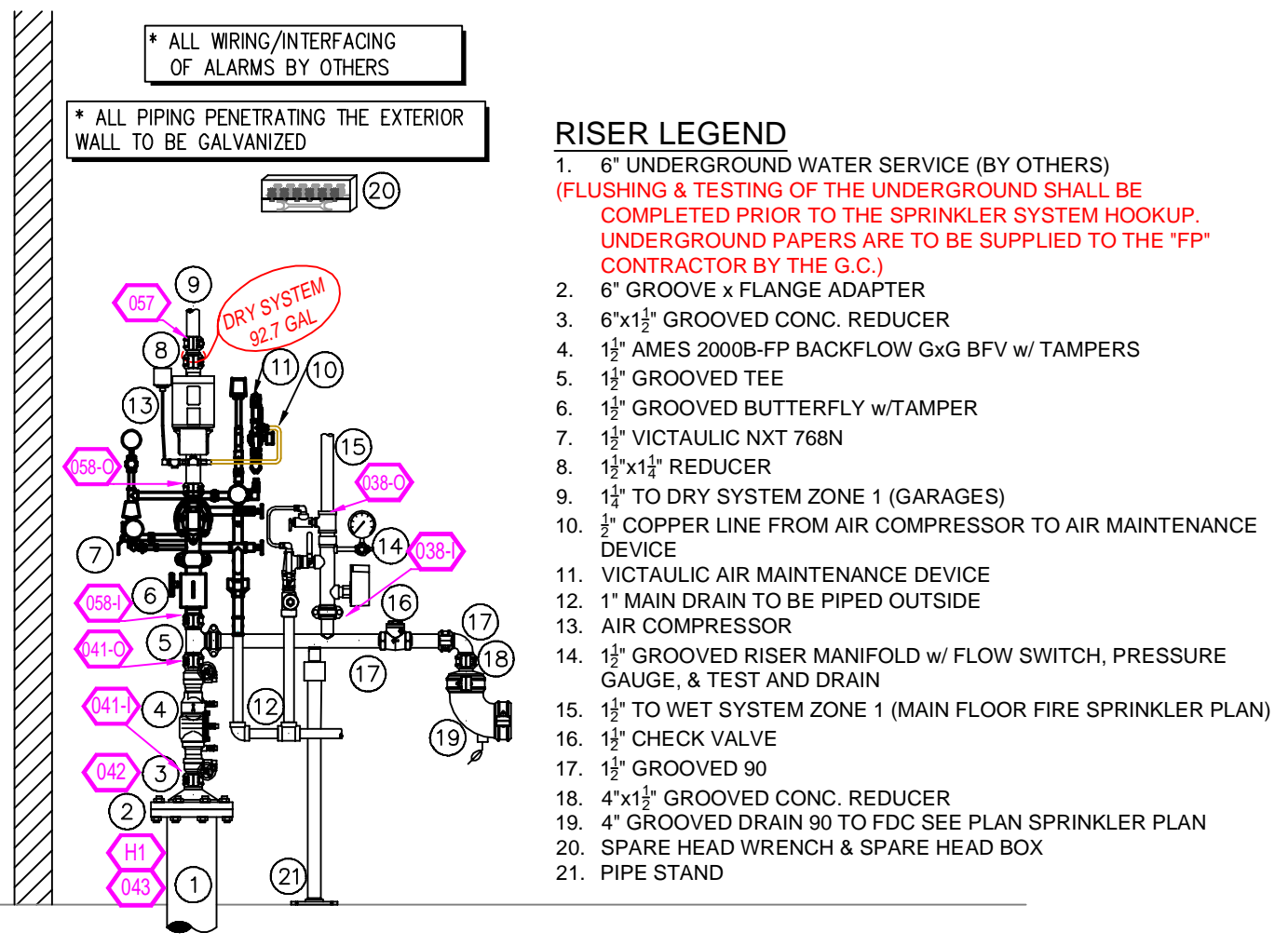
SYM	CNT	POSITION	FINISH	TEMP	K	NPT	SIN	MFG	MODEL#	ESCU/TCHEON	SPACING
◀	16	SIDEWALL	WHITE	155	4.40	1/2"	RA531	RELIABLE	F1 RES	HB	16x16" U.N.O.
◀	2	SIDEWALL	CHROME	200	5.60	1"	R5734	RELIABLE	F3QR56	HB	14x14"
◀	2	SIDEWALL	WHITE	175	4.40	1/2"	RA531	RELIABLE	F1 RES	HB	16x16" U.N.O.
◀	127	PENDENT	CHROME	200	5.60	1"	R5714	RELIABLE	F3QR	HB	130 SQ.FT.

47 TOTAL SPRINKLERS

NFPA 13 CPVC PIPE HANGER SPACING		NFPA 13 STEEL PIPE HANGER SPACING (EXCEPT LIGHT WALL THRD PIPING)	
NOMINAL SIZE inches	MAX SPACING feet	NOMINAL SIZE inches	MAX SPACING feet
3/4"	5'-6"	1"	12'-0"
1"	6'-0"	1-1/4"	12'-0"
1-1/4"	6'-6"	1-1/2"	15'-0"
1-1/2"	7'-0"	2"	15'-0"
		2-1/2"	15'-0"

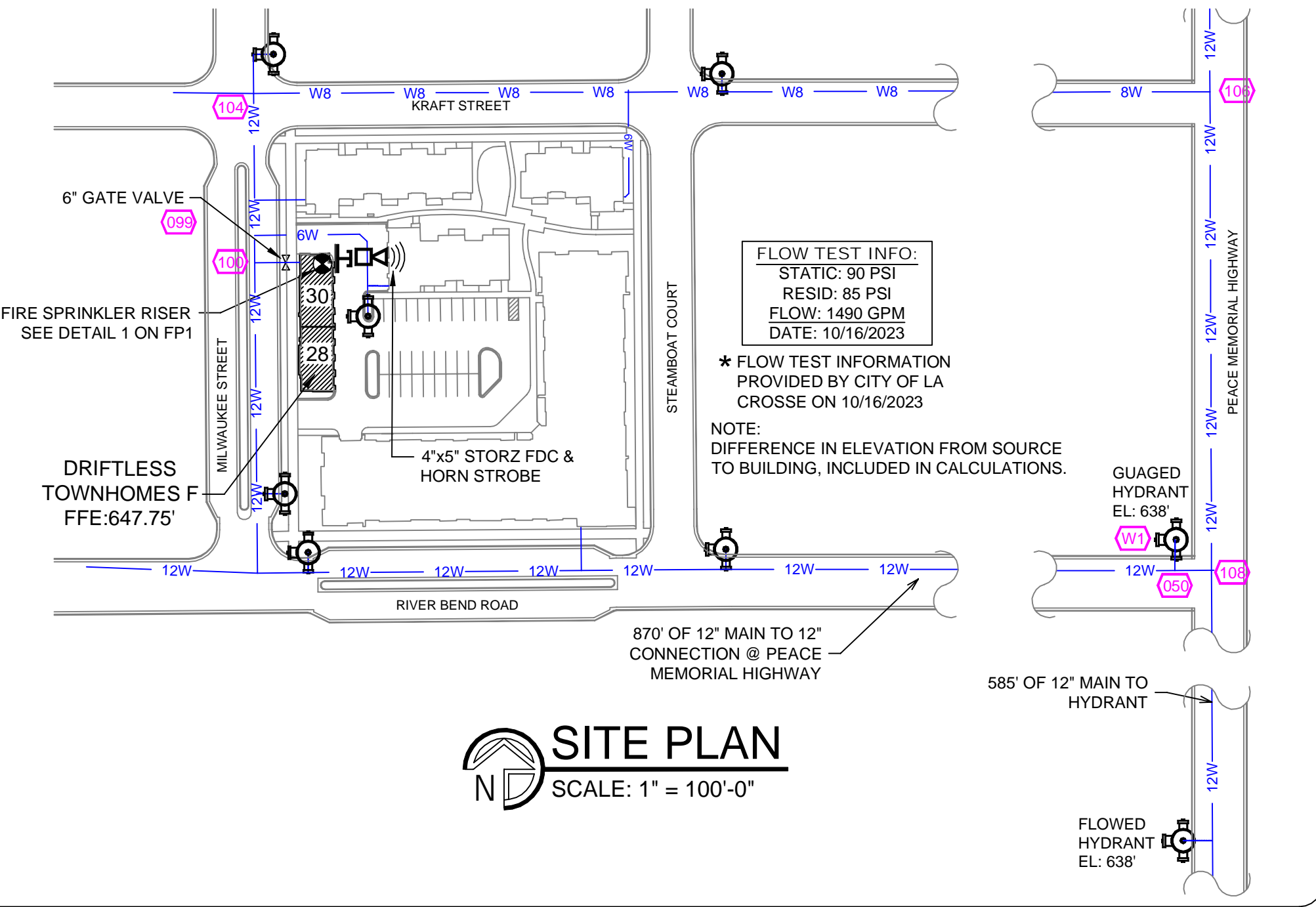


HANGER DETAILS



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

- 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" GROOVE X FLANGE ADAPTER
 - 6"x1 1/2" GROOVED CONC. REDUCER
 - 1/2" AMES 2000B-FP BACKFLOW GxG BFV w/ TAMPERS
 - 1/2" GROOVED TEE
 - 1/2" GROOVED BUTTERFLY w/TAMPER
 - 1/2" VICTAULIC WKT 788N
 - 1/2"x1 1/2" REDUCER
 - 1/2" TO DRY SYSTEM ZONE 1 (GARAGES)
 - 1/2" COPPER LINE FROM AIR COMPRESSOR TO AIR MAINTENANCE DEVICE
 - VICTAULIC AIR MAINTENANCE DEVICE
 - 1" MAIN DRAIN TO BE PIPED OUTSIDE
 - AIR COMPRESSOR
 - 1/2" GROOVED RISER MANIFOLD w/ FLOW SWITCH, PRESSURE GAUGE, & TEST AND DRAIN
 - 1/2" TO WET SYSTEM ZONE 1 (MAIN FLOOR FIRE SPRINKLER PLAN)
 - 1/2" CHECK VALVE
 - 1/2" GROOVED 90
 - 4"x1 1/2" GROOVED CONC. REDUCER
 - 4" GROOVED DRAIN 90 TO FDC SEE PLAN SPRINKLER PLAN
 - SPARE HEAD WRENCH & SPARE HEAD BOX
 - PIPE STAND



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

FLOW TEST INFO:
STATIC: 90 PSI
RESID: 85 PSI
FLOW: 1490 GPM
DATE: 10/16/2023

* FLOW TEST INFORMATION PROVIDED BY CITY OF LA CROSSE ON 10/16/2023

NOTE: DIFFERENCE IN ELEVATION FROM SOURCE TO BUILDING, INCLUDED IN CALCULATIONS.

870' OF 12" MAIN TO 12" CONNECTION @ PEACE MEMORIAL HIGHWAY

585' OF 12" MAIN TO HYDRANT

NO.	REVISIONS	BY	DATE	GENERAL NOTES
1				SYSTEM DESIGNED PER NFPA-13R (2013)
2				ALL SYSTEM MATERIAL AND INSTALLATION PER NFPA-13R (2013)
3				ALL HANGER COMPONENTS, LOCATION AND INSTALLATION METHODS PER NFPA-13 (2013)
4				PIPE SPECIFICATIONS: 1" - 2" S40/S10/CPVC PIPE 2 1/2" - 4" S10 PIPE
5				FITTING SPECIFICATIONS: SCHEDULE 40 DUCTILE IRON; GROOVED - DUCTILE IRON
6				SYMBOL (H) INDICATES HYD CALC POINT
7				CEILINGS ALL 8'-0" UNLESS NOTED WITH SYMBOL

AREA: TITLE/DETAILS	PROPERTY	DRIFTLISS TOWNHOMES BUILDING F	SHEET/DRAWING No.
DR: J.B. CHK'D: J.B.	PROJECT:	28, 30 MILWAUKEE STREET	FP1 OF 1
SCALE: 1/8" = 1'-0"	ADDRESS:	LA CROSSE, WI 54603	PROJECT REV.
DATE: 12/08/23	AREA:	TITLE PAGE AND DETAILS	8011-23
CAD FILE: 8011-23 FP			