

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

PIPE VOLUMES:
(CPVC)

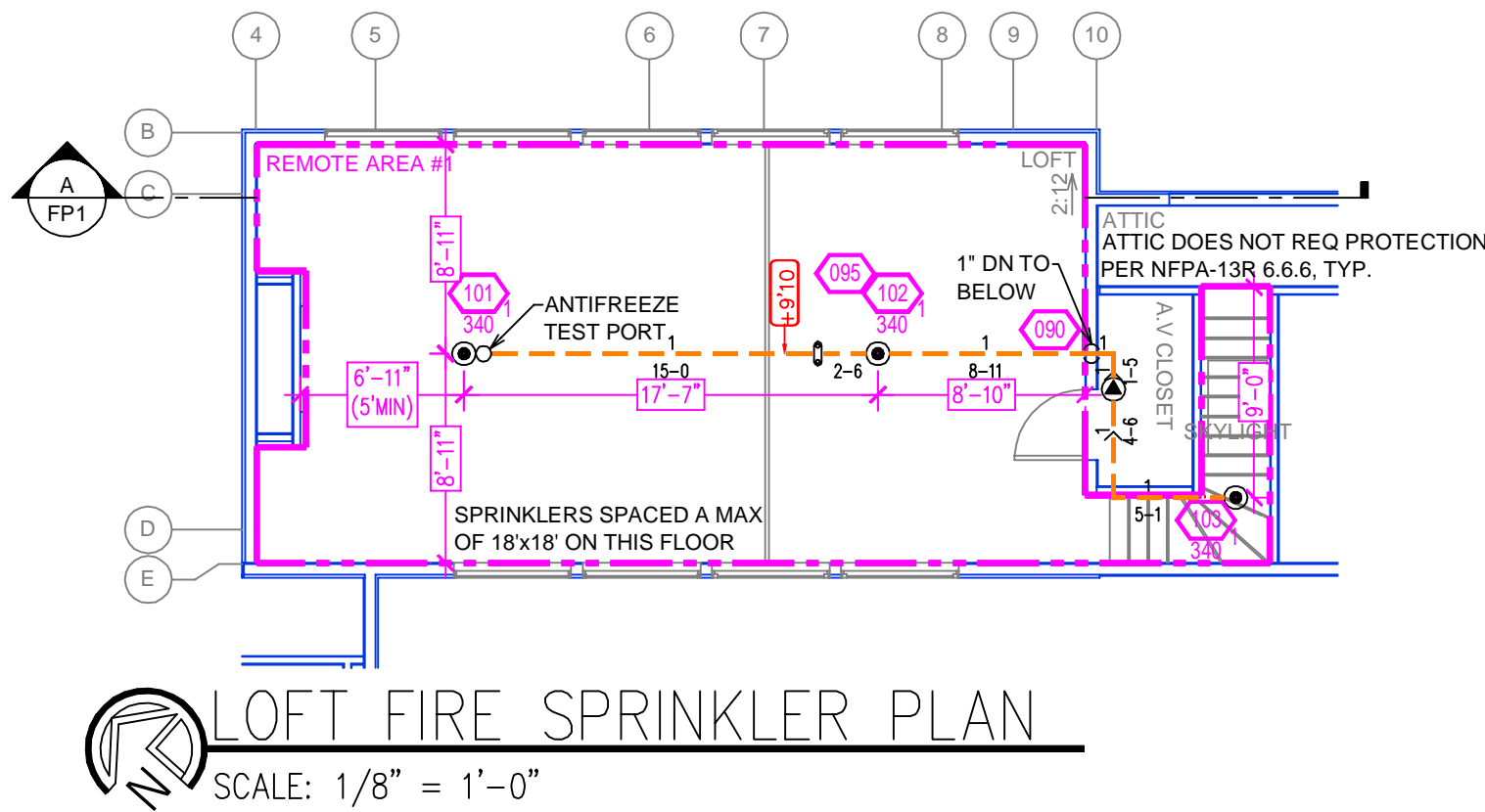
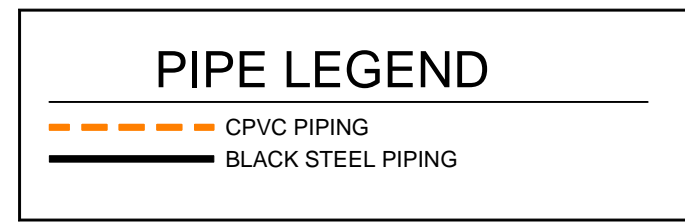
TOTAL PIPE FOOTAGE AND CAPACITY:
1" CPVC = 368' (18.20 GAL)
1-1/4" CPVC = 59' (4.88 GAL)
1" STEEL = 26' (1.17 GAL)

ADD 10% FOR DROPS AND PIPE SIZE DISCREPANCIES
TOTAL VOLUME: ±26.44 GALLONS

Nominal Pipe Diameter (in.)	Pipe Schedule 40 Schedule 10 (gal)	CPVC
1	0.045	0.049
1-1/4	0.078	0.085
1-1/2	0.106	0.115
2	0.174	0.190
2-1/2	0.248	0.283

REMOTE AREA 1		REMOTE AREA 2		REMOTE AREA 3	
Hydraulically Calculated System This system as shown on Fire Protection Plan company print no. FP1 dated 6/13/2025 for DAMELIO RESIDENCE at LOFT contract no. is designed to discharge at a rate of 0.05 gpm (L/min) per sq ft (m²) of floor area over a maximum area of NFPA 13R-3 SPRINKLERS sq ft (m²) when supplied with water at the rate of 77.7 gpm (L/min) at 64.8 psi (bars) at the base of the riser. Hose stream allowance of 25 gpm (L/min) is included in the above.		Hydraulically Calculated System This system as shown on Fire Protection Plan company print no. FP1 dated 6/13/2025 for DAMELIO RESIDENCE at ENTRY/HALL contract no. is designed to discharge at a rate of 0.05 gpm (L/min) per sq ft (m²) of floor area over a maximum area of NFPA 13R-4 SPRINKLERS sq ft (m²) when supplied with water at the rate of 88.1 gpm (L/min) at 75.0 psi (bars) at the base of the riser. Hose stream allowance of 25 gpm (L/min) is included in the above.		Hydraulically Calculated System This system as shown on Fire Protection Plan company print no. FP1 dated 6/13/2025 for DAMELIO RESIDENCE at MASTER BEDROOM contract no. is designed to discharge at a rate of 0.05 gpm (L/min) per sq ft (m²) of floor area over a maximum area of NFPA 13R-1 SPRINKLER sq ft (m²) when supplied with water at the rate of 42.0 gpm (L/min) at 44.0 psi (bars) at the base of the riser. Hose stream allowance of 25 gpm (L/min) is included in the above.	
Occupancy classification: NFPA 13R - LIGHT Commonly classification: NA Maximum storage height: NA Safety factor: 25.1		Occupancy classification: NFPA 13R - LIGHT Commonly classification: NA Maximum storage height: NA Safety factor: 14.8		Occupancy classification: NFPA 13R - LIGHT Commonly classification: NA Maximum storage height: NA Safety factor: 45.9	

25 GPM DOMESTIC DEMAND INCLUDED IN CALCULATIONS



NO SPRINKLERS REQUIRED IN:
BATHROOMS 50 SQ. FT. OR LESS IN AREA PER NFPA 13R SECTION 6.6.2
CLOSETS 24 SQ. FT. OR LESS IN AREA PER NFPA 13R SECTION 6.6.3

PROJECT SQUARE FOOTAGES
MAIN LEVEL = 3765 SF
LOFT LEVEL = 704 SF

NFPA 13 - Table 9.2.2.1(a) Maximum Distance Between Hangers (ft-in.)																
	Nominal Pipe Size (in.)															
	3/4	1	1 1/4	1 1/2	2	2 1/2	3	4	6	8						
Steel Pipe except threaded lightwall	N/A	12-0	12-0	15-0	15-0	15-0	15-0	15-0	15-0	15-0	15-0					
Threaded lightwall steel pipe	N/A	12-0	12-0	15-0	15-0	15-0	15-0	N/A	N/A	N/A	N/A					
Copper tube	8-0	8-0	10-0	10-0	10-0	12-0	12-0	12-0	15-0	15-0	15-0	15-0				
CPVC	5-6	6-0	6-6	7-0	8-0	9-0	10-0	N/A	N/A	N/A	N/A	N/A				

PROJECT SUMMARY:

PROJECT NAME: DAMELIO RESIDENCE
PROJECT ADDRESS: 1066 FLUME RD, INCLINE VILLAGE, NV 130-162-05
APN: 130-162-05
PROJECT TYPE: NEW [X] T.I. []
TYPE OF CONSTRUCTION: V
OCCUPANCY GROUP(S): R3
OCCUPIED LEVELS: 2
TOTAL SPRINKLERED AREA: 4469 SQ. FT.
NFPA CODE REQUIREMENT: [] NFPA 13 [] NFPA 13R [X] NFPA 13D
NUMBER OF SYSTEMS: 1
SYSTEM TYPE(S): [] WET [X] ANTI-FREEZE [] DRY [] PREACTION
TOTAL SPRINKLERS: 37
SPECIAL NOTES: SEE FIRE SPRINKLER NOTES THIS SHEET

SUBMITTAL

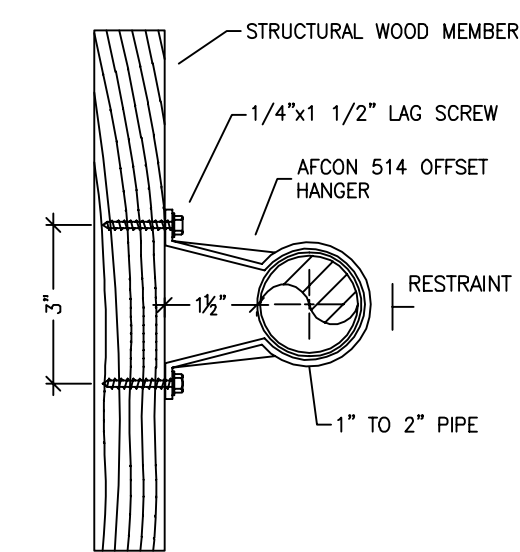
SPRINKLER SPACING

- A SINGLE PENDENT SPRINKLER IN A COMPARTMENT MAY BE SPACED AT A MAXIMUM OF 18'x18' (324 SQ. FT.) OR UP TO 9' OFF A WALL.
- FOUR OR MORE HEADS IN A COMPARTMENT SHALL BE SPACED AT A MAXIMUM OF 16'x16' (256 SQ. FT.) OR UP TO 8' OFF A WALL U.N.O. (MINIMUM 8'-0" BETWEEN SPRINKLERS)
- SPRINKLERS SHALL BE MEASURED AT PERPENDICULAR ANGLES TO WALLS AND ALONG THE SLOPES OF CEILINGS.

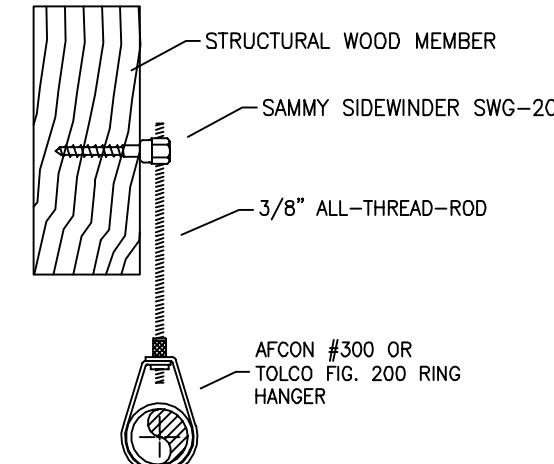
THIS FIRE SPRINKLER SYSTEM UTILIZES THE NOBLE COMPANY FIREFIGHTER ELIMINATOR ANTI-FREEZE SOLUTION

SPRINKLER HEAT ZONES:

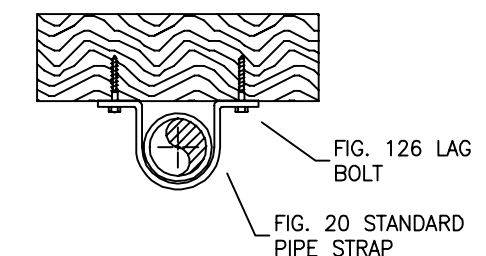
HEAT SOURCE:	ORDINARY TEMP. SPRINKLER	INTERMEDIATE TEMP. SPRINKLER
SIDE OF OPEN OR RECESSED FIRE PLACE	36"	12"
FRONT OF RECESSED FIRE PLACE	60"	36"
COAL OR WOOD BURNING STOVE	42"	12"
RANGE/OVEN, HOT AIR FLUES & UNINSULATED HEAT DUCT	18"	9"
UNINSULATED HOT WATER PIPES & 250-499 WATT LIGHTS	12"	6"
SIDE OF CEILING OR WALL MOUNTED HOT AIR DIFFUSERS	24"	12"
FRONT OF WALL MOUNTED HOT AIR DIFFUSERS	36"	18"
HOT WATER HEATER, FURNACE, LIGHT FIXTURE 0-250 WATT	6"	3"



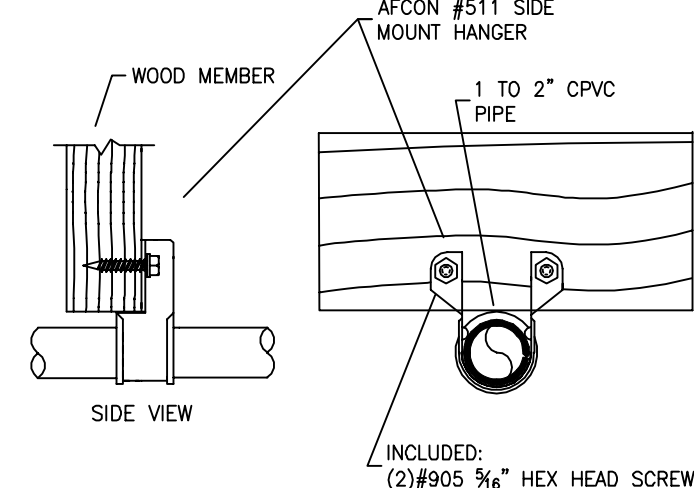
514 OFFSET HANGER
STEEL PIPE APPLICATION NTS



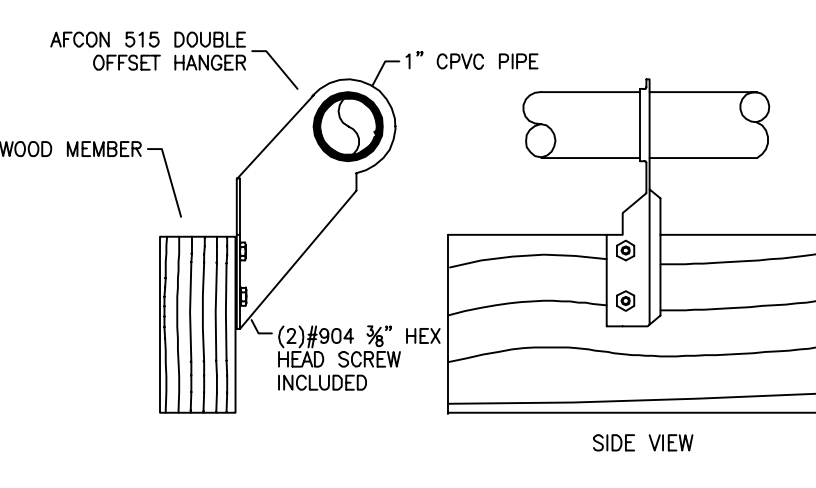
SWG-20 HANGER DETAIL
FOR HORIZONTAL ATTACHMENT TO WOOD NTS



STANDARD PIPE STRAP
NTS

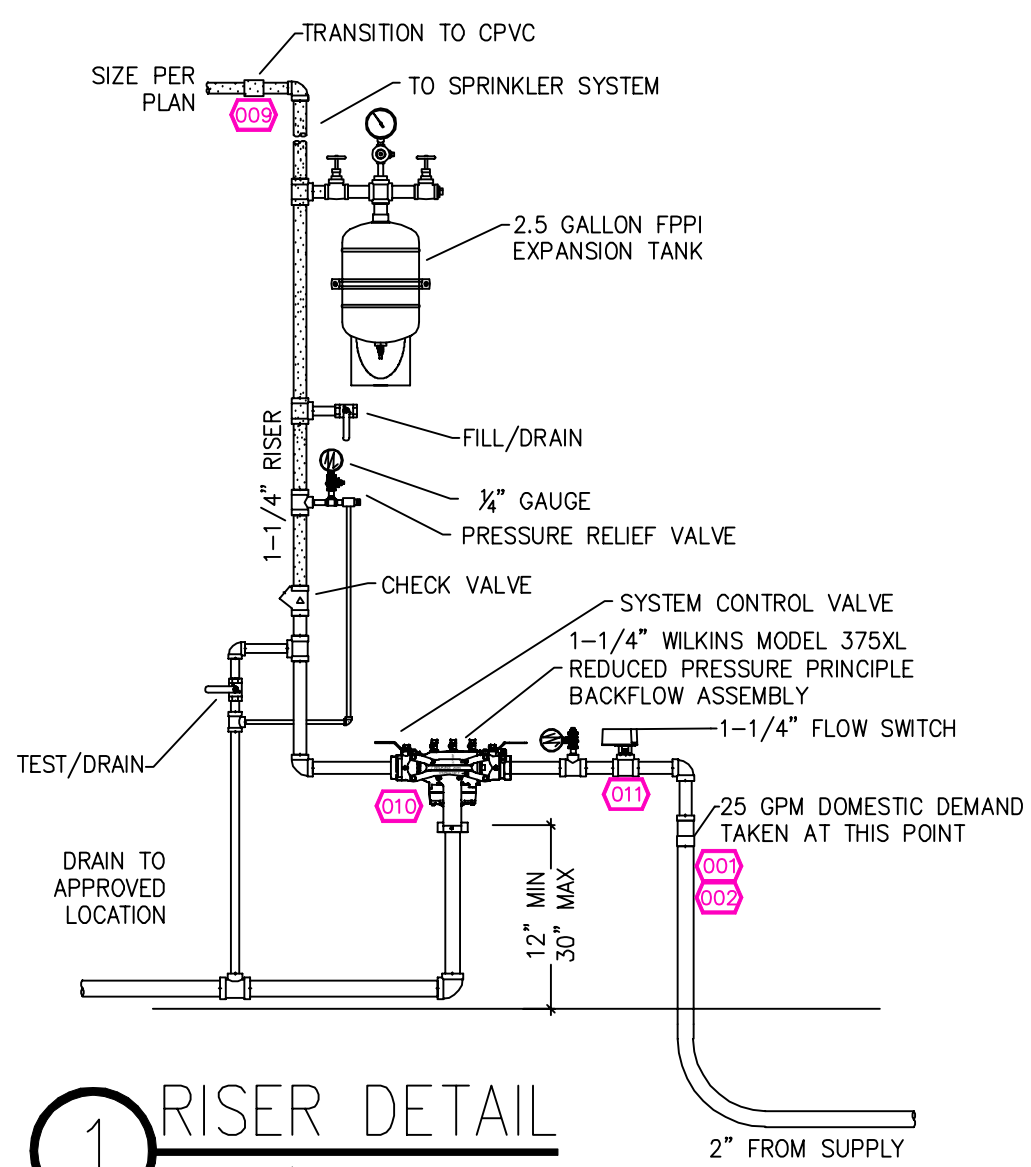


511 SIDE MOUNT HANGER
CPVC PIPE APPLICATION NTS

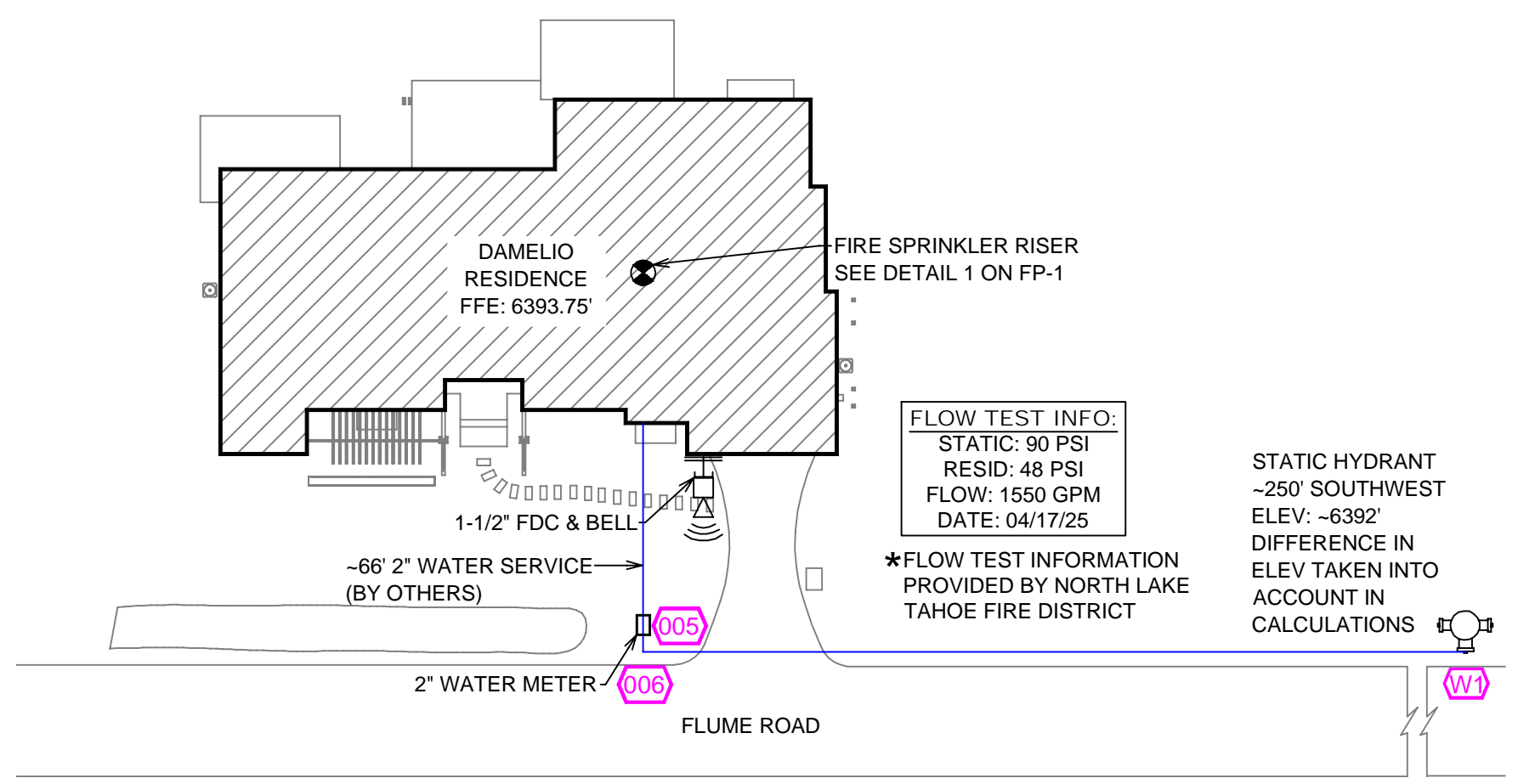


515 DOUBLE OFFSET HANGER
CPVC PIPE APPLICATION NTS

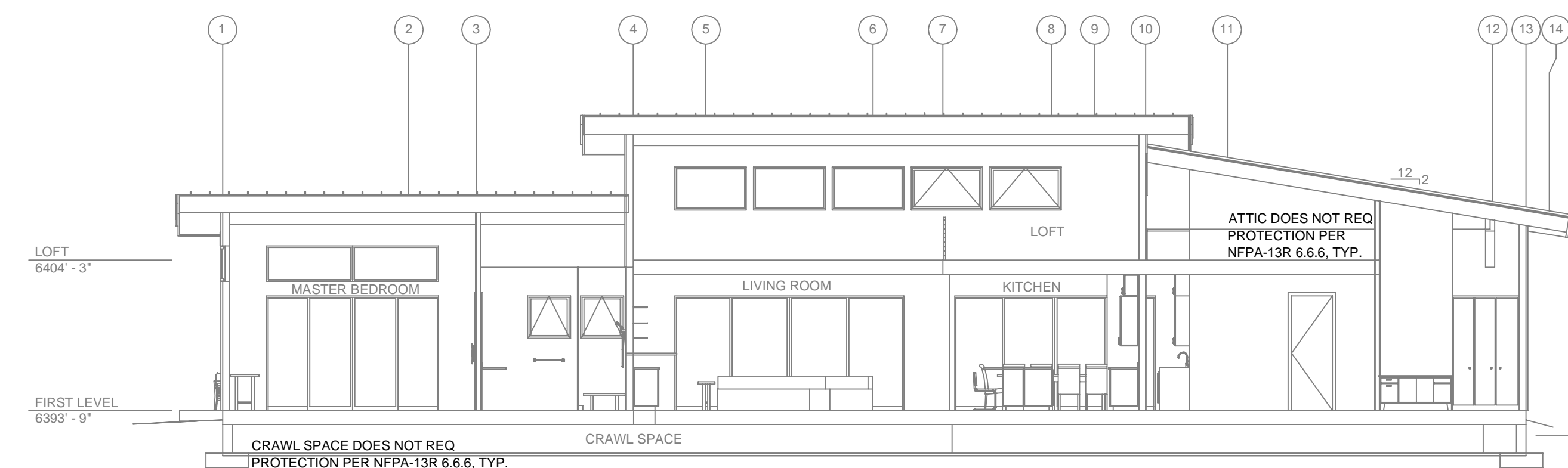
HANGER DETAILS



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



SITE PLAN
SCALE: 1" = 25'-0"



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

NO.	DATE	REVISIONS	DRAWN	CHECKED

GENERAL CONTRACTOR:		AUTHORITY HAVING JURISDICTION:	
ADDRESS:		NORTH LAKE TAHOE FIRE PROTECTION DISTRICT	
CITY:		ADDRESS: 866 ORIOLE WAY	
PHONE:		CITY: INCLINE VILLAGE, NV	
CONTACT:		PHONE: 775-831-0351	
		CONTACT:	

FIRE SPRINKLER NOTES:

- THE PROPOSED FIRE SPRINKLER SYSTEM IS AN ANTI-FREEZE SYSTEM AND SHALL BE DESIGNED AND INSTALLED IN ACCORDANCE WITH NFPA 13R 2022 WITH MODIFICATIONS MANDATED BY THE AHJ AS FOLLOWS:
 - SPRINKLER PROTECTION FOR BALCONIES, DECKS, PATIOS & OTHER OVERHANGS OVER 4'-0".
 - 4 HEAD CALCULATION.
 - ANTIFREEZE TESTPORT
- THIS SPRINKLER SYSTEM IS HYDRAULICALLY CALCULATED IN ACCORDANCE WITH NFPA 13R TO PROVIDE 0.05 GPM PER SQ. FT. OVER THE MOST REMOTE AREA.
- THE NUMBER OF DESIGN SPRINKLERS SHALL INCLUDE ALL SPRINKLERS WITHIN A COMPARTMENT UP TO A MAXIMUM OF 4 SPRINKLERS.
- ALL SPRINKLER PIPING CONCEALED ABOVE CEILINGS SHALL BE CPVC PIPING UNLESS OTHERWISE NOTED.
- ALL DIMENSIONS SHOWN ARE CENTER TO CENTER U.O.N.
- ALL HANGERS SHALL BE INSTALLED IN ACCORDANCE WITH NFPA 13R AND/OR NFPA 13 REQUIREMENTS.
- HOLES THROUGH SOLID STRUCTURAL MEMBERS SHALL BE PERMITTED TO SERVE AS HANGERS FOR THE SUPPORT OF SYSTEM PIPING.
- ALL SYSTEM PIPING SHALL BE TESTED FOR LEAKAGE AT NORMAL SYSTEM OPERATING PRESSURE.
- THE OWNER SHALL BE RESPONSIBLE FOR MAINTAINING A MINIMUM TEMPERATURE OF 40° FAHRENHEIT TO PROTECT FROM FREEZING. THE SECTIONS OF THE SPRINKLER SYSTEM WHERE THERE IS NO ANTI-FREEZE IN THE PIPING (UPSTREAM OF THE RISER).

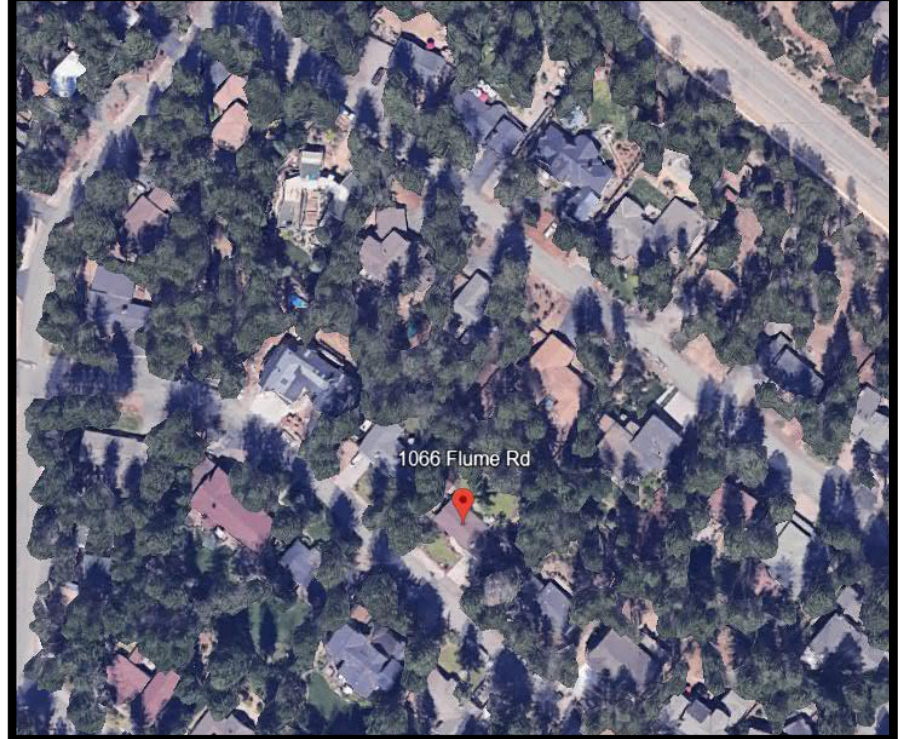
SPRINKLER HEAD LEGEND

SYM	QTY	TYPE	MFG.	MODEL#	NPT	K	TEMP	FINISH	S.I.
⊗	26	CONCEALED	SENJAY	RC-RES	1/2"	4.9	162	WHITE	SS8464
⊗	6	SEM-RECESS	SENJAY	PR-RES	1/2"	4.9	205	WHITE	SS8451
⊗	3	EXPOSED	SENJAY	RC-RES	1/2"	4.9	205	BRASS	SS8464
⊗	2	CONCEALED	SENJAY	RC-RES	1/2"	4.9	205	WHITE	SS8464

37 TOTAL SPRINKLERS ON THIS SHEET

FIRE SPRINKLER SYMBOLS

⊗	AUTOMATIC SPRINKLER RISER	+13" ELEV. BELOW DECK OR TOS
⊕	EARTHQUAKE BRACING	+12'-9" ELEV. ABOVE FINISHED FLOOR
⊕	2-WAY & 4-WAY	— CHANGE ELEVATION UP
⊕	PIPE HANGER & TYPE DESIGNATION	— CHANGE ELEVATION DN
⊕	HYDRAULIC REF PT	— INSPECTORS TEST
⊕	GRVD OR THRD CAP	— AUX DRAIN
⊕	GRVD COUPLING	△ REVISION NOTATION
⊕	TYPICAL POINT OF CONNECTION (POC)	△ LOCAL ALARM



PROJECT NAME: FIRE SPRINKLER PLANS FOR
DAMELIO RESIDENCE
1066 FLUME ROAD
INCLINE VILLAGE, NV 89451

STAMP:

DRAWING TITLE:
FIRE SPRINKLER PLAN

SCALE: 1/8" = 1'-0"	JOB NO.:
DRAWN BY:	DWG NO.:
BORN ON DATE: 6/18/2025	FP-1
FILE:	SHEET 1 OF 1