

SUBMITTAL

NO SPRINKLERS REQUIRED IN:
 BATHROOMS 55 SQ.FT. OR LESS IN AREA PER NFPA 13D SECTION 8.6.2
 CLOSETS 24 SQ.FT. OR LESS IN AREA PER NFPA 13D SECTION 8.6.3

PROJECT SQUARE FOOTAGES

LOWER FLOOR = 1279 S.F.
 MAIN FLOOR = 2689 S.F.
 UPPER FLOOR = 592 S.F.

NFPA 13 - Table 9.2.2.1(a) Maximum Distance Between Hangers (ft-in.)

Nominal Pipe Size (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	N/A	N/A
Threaded lightwall steel pipe	N/A	12-0	12-0	15-0	15-0	15-0	15-0	N/A	N/A	N/A
Copper tube	8-0	8-0	10-0	10-0	12-0	12-0	12-0	15-0	15-0	15-0
CPVC	5-6	6-0	6-6	7-0	8-0	8-0	10-0	N/A	N/A	N/A

SPRINKLER SPACING

- A SINGLE PENDENT SPRINKLER MAY BE SPACED AT A MAXIMUM OF 18'x18' (324 SQ. FT.) OR UP TO 9' OFF A WALL (MINIMUM 8'-0" BETWEEN SPRINKLERS)
- TWO OR MORE HEADS IN A COMPARTMENT SHALL BE SPACED AT A MAXIMUM OF 18'x18' (324 SQ. FT.) OR UP TO 9' OFF A WALL (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"

PROJECT SUMMARY:

PROJECT NAME: **BARKIN RESIDENCE**
 PROJECT ADDRESS: **547 HEADWATERS WAY, CLEAR CREEK TAHOE, NV 1419-03-002-156**
 APN: **1419-03-002-156**
 PROJECT TYPE: NEW T.I.
 TYPE OF CONSTRUCTION: **V**
 OCCUPANCY GROUP(S): **R3**
 OCCUPIED LEVELS: **3**
 TOTAL SPRINKLERED AREA: **4560** SQ. FT.
 NFPA CODE REQUIREMENT: NFPA 13 NFPA 13R NFPA 13D
 NUMBER OF SYSTEMS: **1**
 SYSTEM TYPE(S): WET ANTI-FREEZE DRY PREACTION
 TOTAL SPRINKLERS: **41**
 SPECIAL NOTES: **SEE FIRE SPRINKLER NOTES THIS SHEET**

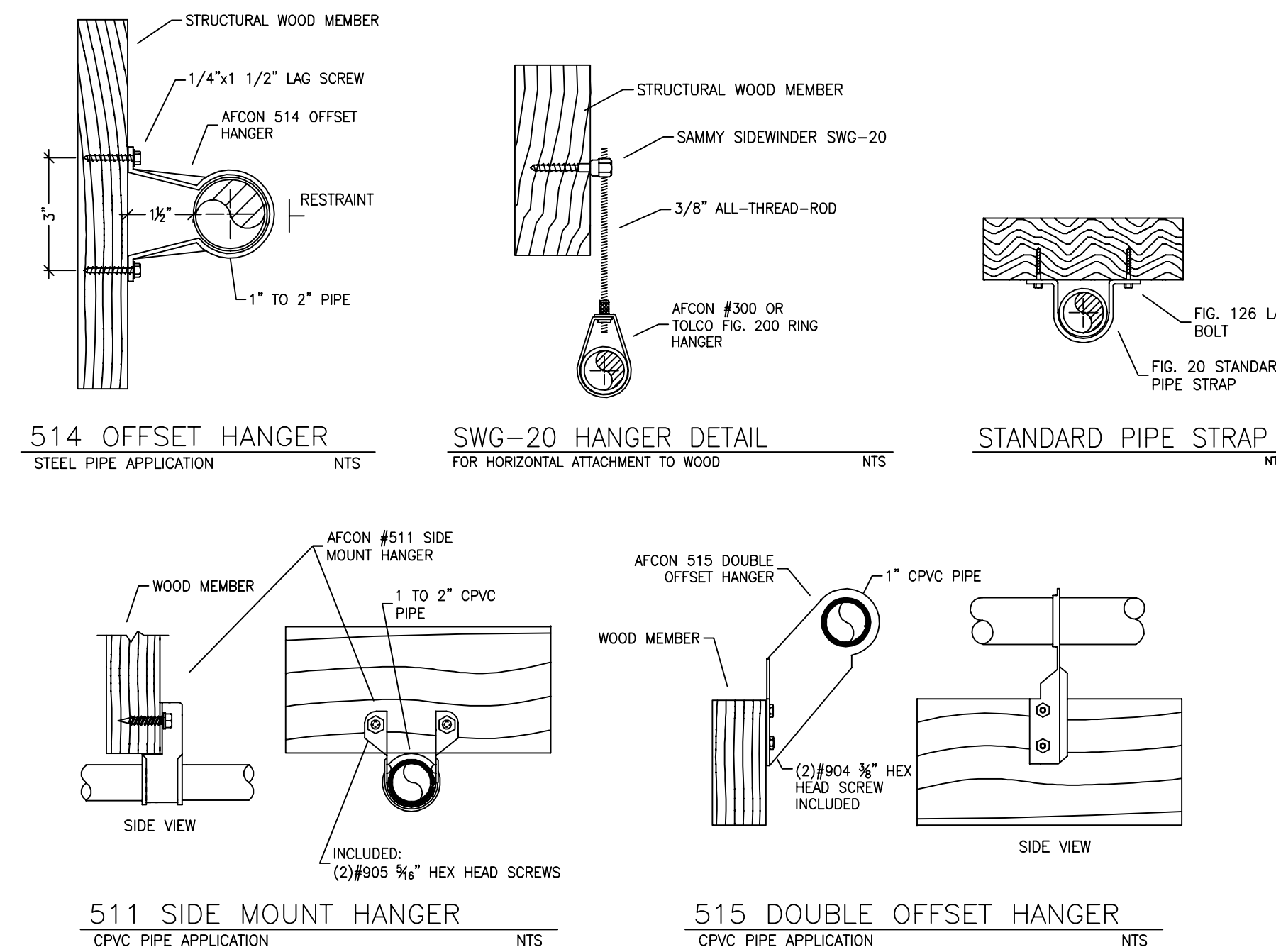
PIPE VOLUMES: (CPVC)

TOTAL PIPE FOOTAGE AND CAPACITY:
 1" = 326' (16.12 GAL)
 1-1/4" = 115' (9.12 GAL)

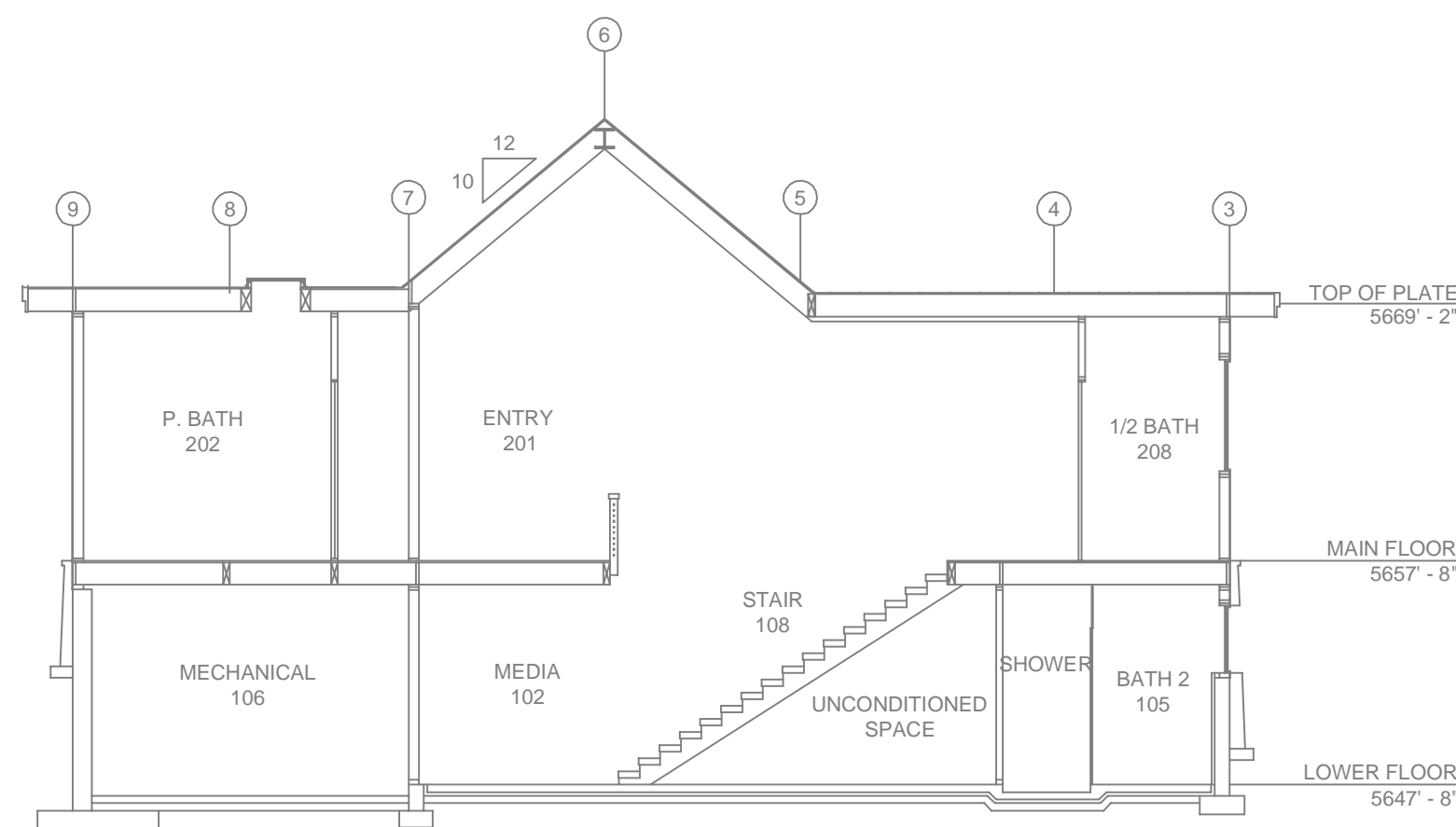
ADD 10% FOR DROPS AND PIPE SIZE DISCREPANCIES
 TOTAL VOLUME: **±27.76 GALLONS**

NFPA 13 - Table A.7.2.3 Capacity of 1 ft of pipe (Based on Actual Internal Pipe Diameter)

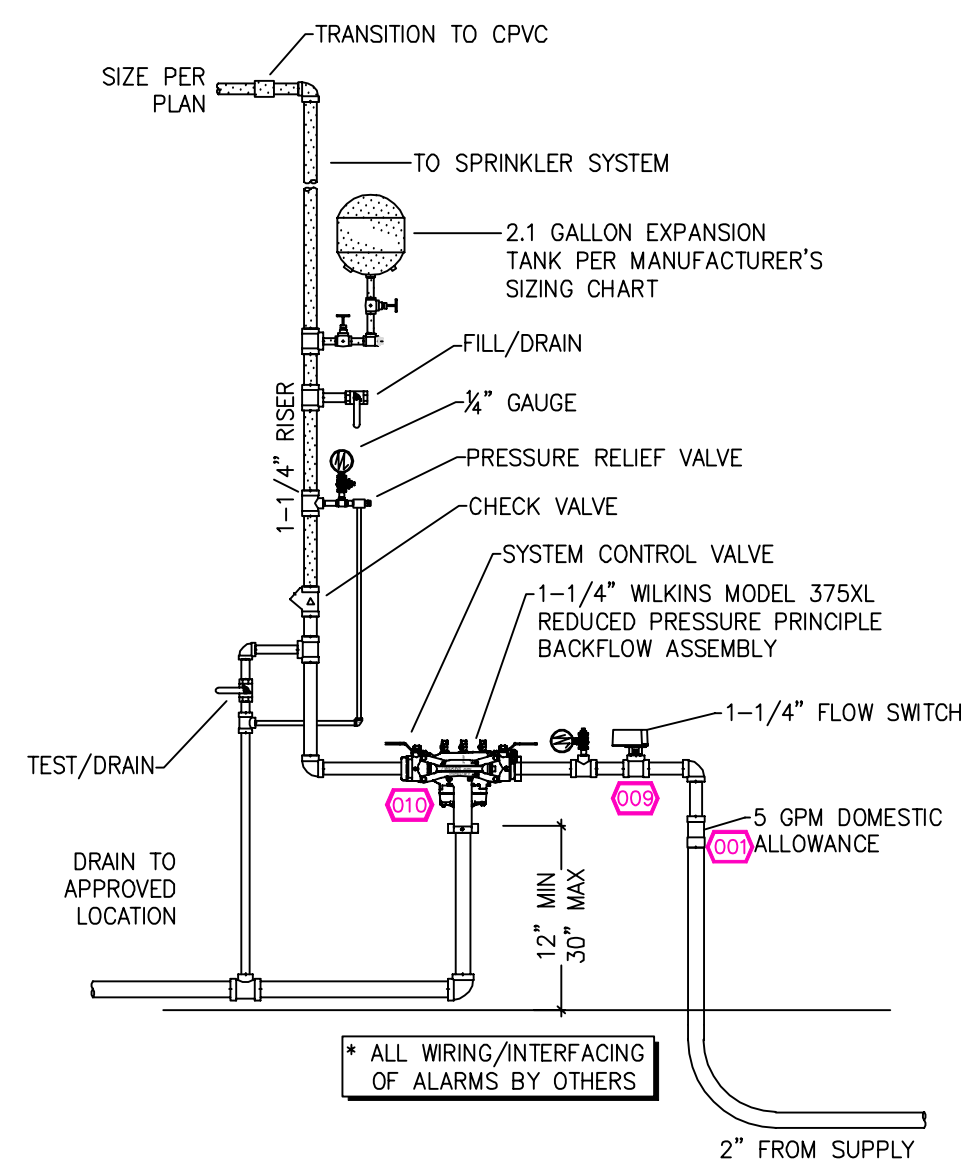
Nominal Pipe Diameter (in.)	Schedule 40 Pipe (gal)	Schedule 10 Pipe (gal)
1	0.045	0.049
1 1/4	0.078	0.079
1 1/2	0.106	0.115
2	0.174	0.190
2 1/2	0.248	0.283



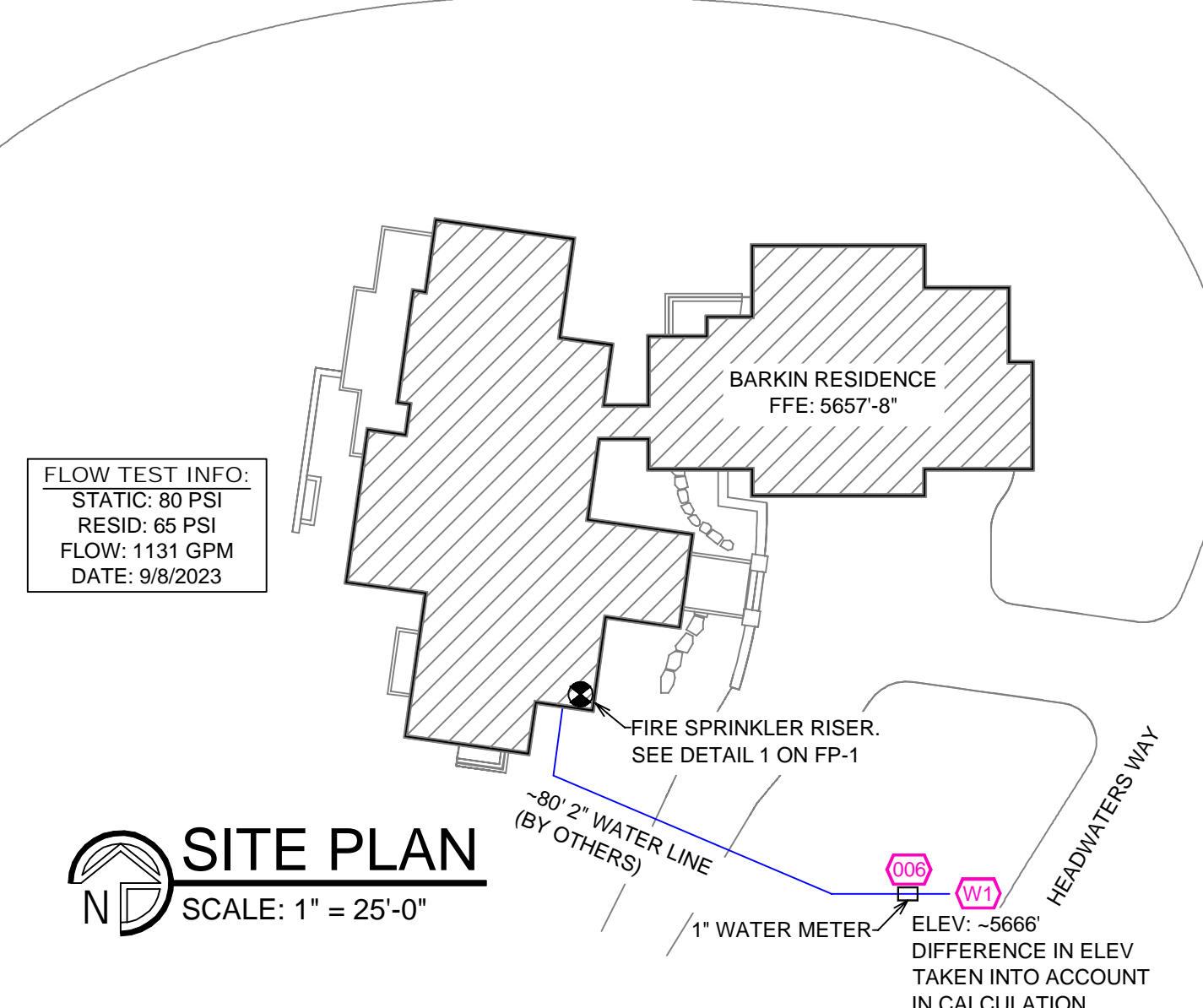
HANGER DETAILS



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



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



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

NO.	DATE	REVISIONS	DRAWN	CHECKED

GENERAL CONTRACTOR: **AUTHORITY HAVING JURISDICTION: DOUGLAS CITY FIRE STATION**
 ADDRESS: **96024 STEINER FLAT RD**
 CITY: **DOUGLAS CITY, CA**
 PHONE: **530-623-5110**
 CONTACT:

ARCHITECT: FIELD INSPECTIONS:
 ADDRESS:
 CITY:
 PHONE:

- ### FIRE SPRINKLER NOTES:
- THE PROPOSED FIRE SPRINKLER SYSTEM IS AN ANTI-FREEZE SYSTEM AND SHALL BE DESIGNED AND INSTALLED IN ACCORDANCE WITH NFPA 13D.
 - THIS SPRINKLER SYSTEM IS HYDRAULICALLY CALCULATED IN ACCORDANCE WITH NFPA 13D 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 2 SPRINKLERS WITH CEILING SLOPES GREATER THAN 8/12. 3 SPRINKLERS SHALL BE CALCULATED PER AHJ.
 - 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 13D 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 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).

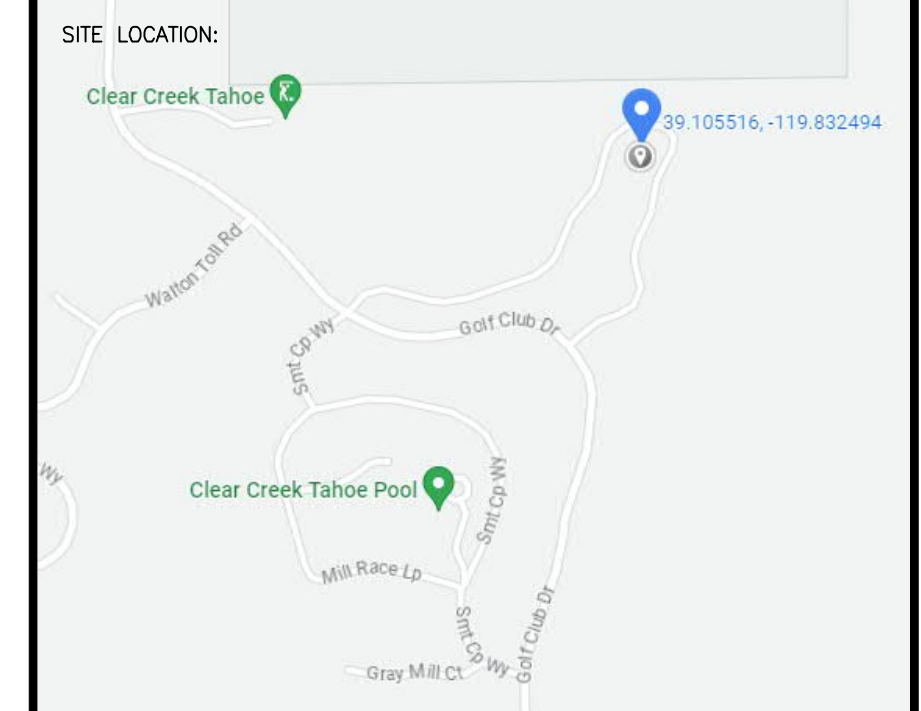
SPRINKLER HEAD LEGEND

SYM	QTY	TYPE	MFG.	MODEL#	NPT	K	TEMP	FINISH	S.I.N.
⊗	33	CONCEALED	SENJ	RC-RES	1/2"	4.9	162	WHITE	SS4464
⊗	1	CONCEALED	SENJ	RC-RES	1/2"	4.9	205	WHITE	SS4464
⊗	7	SEMI-RECESS	SENJ	FR-RES	1/2"	4.9	205	WHITE	SS4451

41 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
- PIPE HANGER & TYPE DESIGNATION
- HYDRAULIC REF PT
- GRID OR THRD CAP
- GRID COUPLING
- TYPICAL POINT OF CONNECTION (POC)
- CHANGE ELEVATION UP
- ↔ CHANGE ELEVATION DN
- ⊗ INSPECTORS TEST
- ⊗ AUX DRAIN
- ⊗ REVISION NOTATION
- ⊗ LOCAL ALARM



PROJECT NAME: **FIRE SPRINKLER PLANS FOR BARKIN RESIDENCE**
CLEAR CREEK TAHOE LOT 354
547 HEADWATERS WAY
DOUGLAS COUNTY, NV

STAMP:

DRAWING TITLE: **FIRE SPRINKLER PLAN**

SCALE: 1/8" = 1'-0"	JOB NO.:
BORN ON DATE: 10/9/2023	DWG NO.:
FILE: 	FP-1

