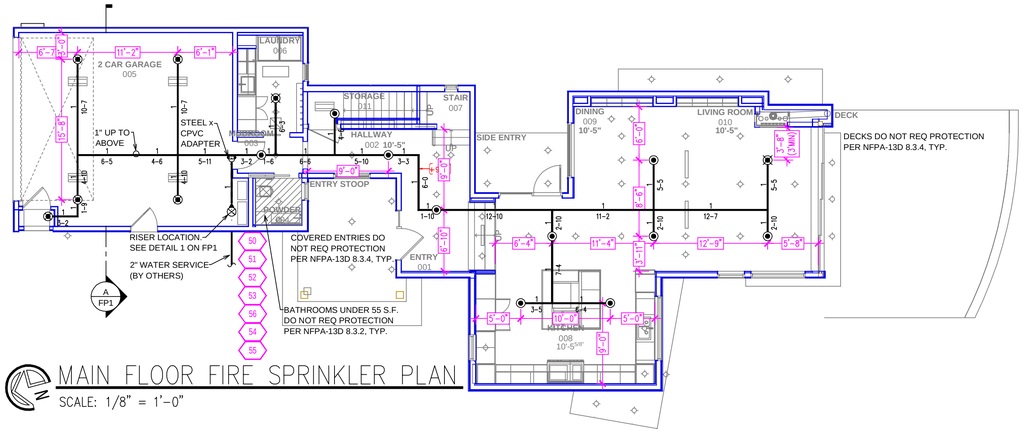
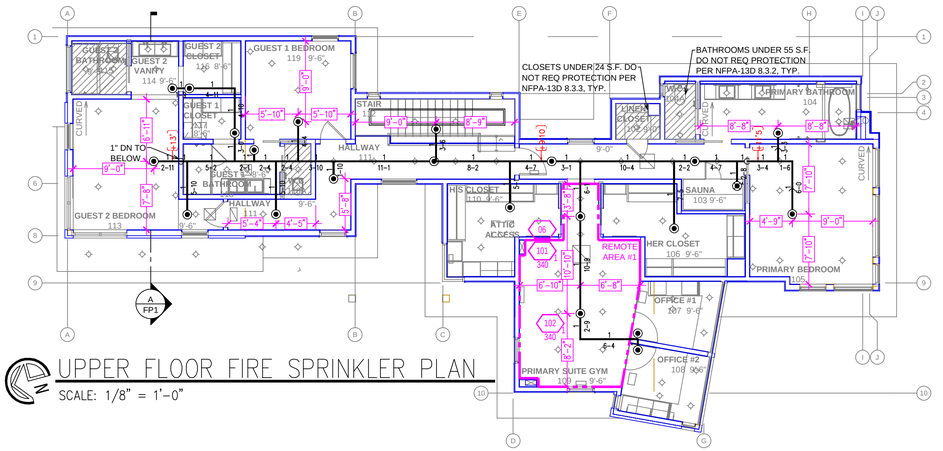


MAIN FLOOR FIRE SPRINKLER PLAN

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



UPPER FLOOR FIRE SPRINKLER PLAN

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

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

MAIN FLOOR = 1904 S.F.
UPPER FLOOR = 2029 S.F.

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

	Nominal Pipe Size (in.)									
	¾	1	1¼	1½	2	2½	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
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	9-0	10-0	N/A	N/A	N/A

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"

SUBMITTAL

PROJECT SUMMARY:

PROJECT NAME:	KIMBERLY RESIDENCE
PROJECT ADDRESS:	8726 BROCKWAY VISTA AVE, KINGS BEACH
APN:	090-141-013
PROJECT TYPE:	☑ NEW ☐ T.I.
TYPE OF CONSTRUCTION:	V
OCCUPANCY GROUP(S):	R3
OCCUPIED LEVELS:	2
TOTAL SPRINKLERED AREA:	3933 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:	39
SPECIAL NOTES:	SEE FIRE SPRINKLER NOTES THIS SHEET

PIPE VOLUMES:

(CPVC)

TOTAL PIPE FOOTAGE AND CAPACITY:
1" = 360' (17.80 GAL)

ADD 10% FOR DROPS AND PIPE SIZE DISCREPANCIES
TOTAL VOLUME: ±19.58 GALLONS

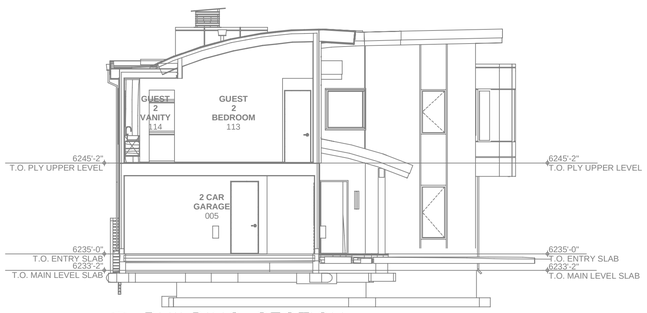
NFPA 13 - Table A.7.2.3 Capacity of 1 ft of pipe (Based on Actual Internal Pipe Diameter)

Nominal Pipe Diameter (in.)	Pipe Schedule 40 (gal)	Schedule 10 (gal)	CPVC
1	0.045	0.049	0.049
1¼	0.078	0.085	0.079
1½	0.106	0.115	0.104
2	0.174	0.190	
2½	0.248	0.283	

SPRINKLER SPACING

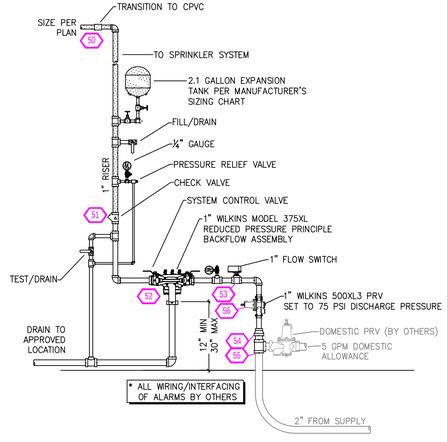
1. A SINGLE PENDENT SPRINKLER MAY BE SPACED AT A MAXIMUM OF 18'x18'(324 SQ. FT.) OR UP TO 9' OFF A WALL.(MINIMUM 8'-0" BETWEEN SPRINKLERS)
2. TWO OR MORE HEADS IN A COMPARTMENT SHALL BE SPACED AT A MAXIMUM OF 18'x18'(324 SQ. FT.) OR UP TO 9' OFF A WALL UNO. (MINIMUM 8'-0" BETWEEN SPRINKLERS)
3. SPRINKLERS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



A BUILDING SECTION

SCALE: ⅛" = 1'-0"



1 RISER DETAIL

SCALE: ½" = 1'-0"

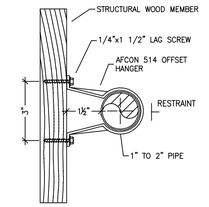
REMOTE AREA 1

Hydraulically Calculated System

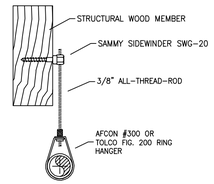
This system as shown on: Fire Protection Plan
company print no.: FP1 dated: 6/1/2026
for: KIMBERLY RESIDENCE
at: PRIMARY SUITE GYM contract no.:
is designed to discharge at a rate of: 0.05 gpm (L/min)per sq ft (m²) of floor area over a maximum area of: NFPA 13D - 2 SPRINKLERS sq ft (m²) when supplied
with water at the rate of: 39.4 gpm (L/min)
at: 134.3 psi (bars) at the base of the riser.
Hose stream allowance of: 5 gpm (L/min) is included in the above.
Occupancy classification: 13D LIGHT HAZARD
Commodity classification: N/A
Maximum storage height: N/A
Safety factor: 16.5

CALCULATION NOTES
AVAILABLE @ CITY MAIN: 39.4 GPM @ 150.8 PSI
REQUIRED @ CITY MAIN: 39.4 GPM @ 134.3 PSI
CALCULATION SAFETY: 16.5 PSI

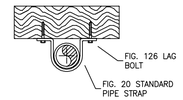
NOTES REGARDING PRV
- AT THE SYSTEM FLOW RATE OF 39.4 GPM, THE CITY SUPPLY PROVIDES 150.8 PSI AT THE TAP.
- AT 39.4 GPM, THERE IS 8.3 PSI OF FRICTION LOSS BETWEEN THE TAP AND THE WATER SERVICE ENTRANCE.
- 150.8 - 8.3 = 142.5 PSI AVAILABLE FROM CITY SUPPLY AT THE SERVICE ENTRANCE (PRV LOCATION).
- THE PRV WILL REDUCE THE PRESSURE FROM 142.5 PSI DOWN TO 75 PSI, A LOSS OF 67.5 PSI ACROSS THE PRV.
- WITH THE PRV's 67.5 PSI OF FRICTION LOSS, THE CALC SHOWS A REQUIRED PRESSURE AT THE CITY TAP OF 134.3 PSI.
- AVAILABLE PRESSURE AT THE CITY TAP OF 150.8 MINUS THE REQUIRED PRESSURE OF 134.3 PSI EQUALS A SAFETY PRESSURE OF 16.5 PSI FOR THE CALCULATION.



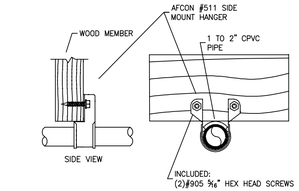
514 OFFSET HANGER
STEEL PIPE APPLICATION NTS



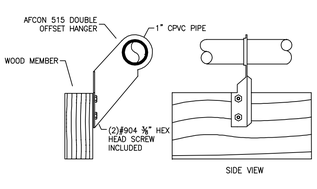
SWG-20 HANGER DETAIL
FOR HORIZONTAL ATTACHMENT TO WOOD NTS



STANDARD PIPE STRAP
NTS

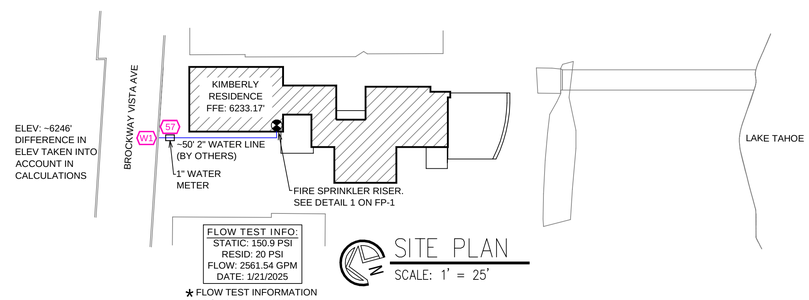


511 SIDE MOUNT HANGER
CPVC PIPE APPLICATION NTS



515 DOUBLE OFFSET HANGER
CPVC PIPE APPLICATION NTS

HANGER DETAILS



FLOW TEST INFO:
STATIC: 150.9 PSI
RESID: 20 PSI
FLOW: 2561.54 GPM
DATE: 1/21/2025

* FLOW TEST INFORMATION PROVIDED BY NTFPD. PRV INSTALLED TO REDUCE STATIC PRESSURE TO 75 PSI.

SITE PLAN

SCALE: 1' = 25'

NO.	DATE	REVISIONS	DRAWN	CHECKED

GENERAL CONTRACTOR:	AUTHORITY HAVING JURISDICTION: NORTH TAHOE FIRE PROTECTION DISTRICT
ADDRESS:	ADDRESS: 288 N SHORE BLVD.
CITY:	CITY: KINGS BEACH, CA 96143
PHONE:	PHONE: 530-583-6911
CONTACT:	CONTACT:
ARCHITECT:	FIELD INSPECTIONS:
	1.
ADDRESS:	2.
CITY:	3.
PHONE:	4.

FIRE SPRINKLER NOTES:

1. THE PROPOSED FIRE SPRINKLER SYSTEM IS AN ANTI-FREEZE SYSTEM AND SHALL BE DESIGNED AND INSTALLED IN ACCORDANCE WITH NFPA 13D 2022
2. THIS SPRINKLER SYSTEM IS HYDRAULICALLY CALCULATED IN ACCORDANCE WITH NFPA 13D TO PROVIDE 0.05 GPM PER SQ. FT. OVER THE MOST REMOTE AREA.
3. THE NUMBER OF DESIGN SPRINKLERS SHALL INCLUDE ALL SPRINKLERS WITHIN A COMPARTMENT UP TO A MAXIMUM OF 2 SPRINKLERS.
4. ALL SPRINKLER PIPING CONCEALED ABOVE CEILINGS SHALL BE CPVC PIPING UNLESS OTHERWISE NOTED.
5. ALL DIMENSIONS SHOWN ARE CENTER TO CENTER U.O.N.
6. ALL HANGERS SHALL BE INSTALLED IN ACCORDANCE WITH NFPA 13D AND/OR NFPA 13 REQUIREMENTS.
7. HOLES THROUGH SOLID STRUCTURAL MEMBERS SHALL BE PERMITTED TO SERVE AS HANGERS FOR THE SUPPORT OF SYSTEM PIPING.
8. ALL SYSTEM PIPING SHALL BE TESTED FOR LEAKAGE AT NORMAL SYSTEM OPERATING PRESSURE.
9. 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

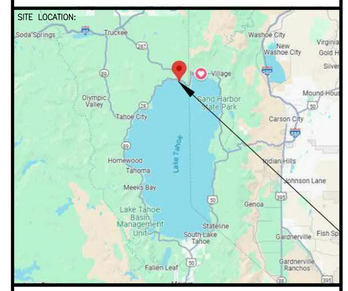
SYM	QTY	TYPE	MFG.	MODEL#	NPT	K	TEMP	FINISH	S.I.N.
⊗	31	CONCEALED	SENJU	RC-RES	1/2"	4.9	162	WHITE	SS8464
⊠	2	CONCEALED	SENJU	RC-RES	1/2"	4.9	205	WHITE	SS8464
⊗	5	SEMI-RECESS	SENJU	FR-RES	1/2"	4.9	205	WHITE	SS4451
⊗	1	SEMI-RECESS	SENJU	FR-QR	1/2"	5.6	286	WHITE	SS2551

39 TOTAL SPRINKLERS ON THIS SHEET

FIRE SPRINKLER SYMBOLS

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

SITE LOCATION:



PROJECT NAME:
FIRE SPRINKLER PLANS FOR
KIMBERLY RESIDENCE
8276 BROCKWAY VISTA
KINGS BEACH, CA 96143

STAMP:

DRAWING TITLE:
FIRE SPRINKLER PLAN

SCALE: 1/8"=1'-0"	JOB NO.: 25-5021
DRAWN BY:	DWG NO.: FP-1
BORN ON DATE: 6/4/2026	
FILE:	SHEET 1 OF 1