

**SUBMITTAL**

NO SPRINKLERS REQUIRED IN:  
 BATHROOMS 55 SQ.FT. OR LESS IN AREA  
 PER NFPA 130 SECTION 8.6.2  
 CLOSETS 24 SQ.FT. OR LESS IN AREA  
 PER NFPA 130 SECTION 8.6.3

**PROJECT SQUARE FOOTAGES**

LOWER FLOOR = 765 S.F.  
 MAIN FLOOR = 3105 S.F.  
 UPPER FLOOR = 573 S.F.

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

**PIPE VOLUMES: (CPVC)**  
 TOTAL PIPE FOOTAGE AND CAPACITY:  
 1" = 475' (23.49 GAL)  
 ADD 10% FOR DROPS AND PIPE SIZE DISCREPANCIES  
 TOTAL VOLUME: ±25.84 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 (gal)	Schedule 10 (gal)	CPVC (gal)
1	0.045	0.049	0.049
1 1/4	0.078	0.085	0.079
1 1/2	0.106	0.115	0.104
2	0.174	0.190	
2 1/2	0.248	0.283	

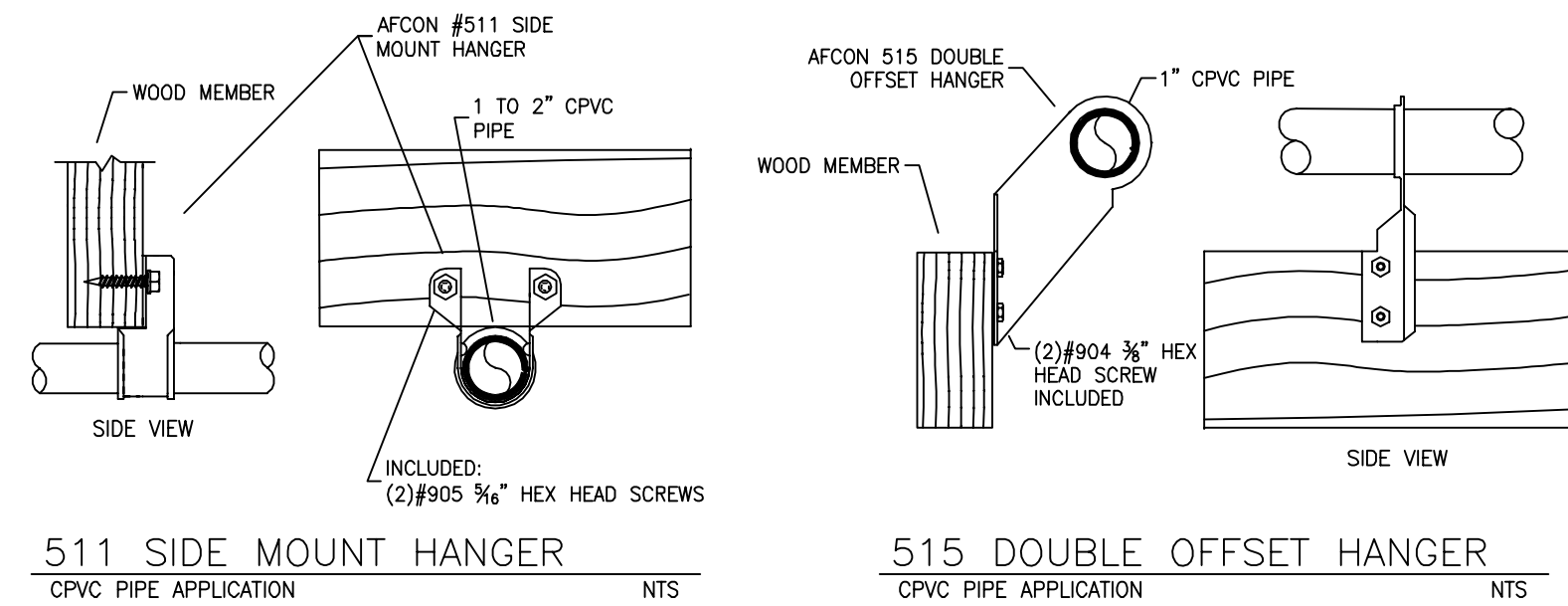
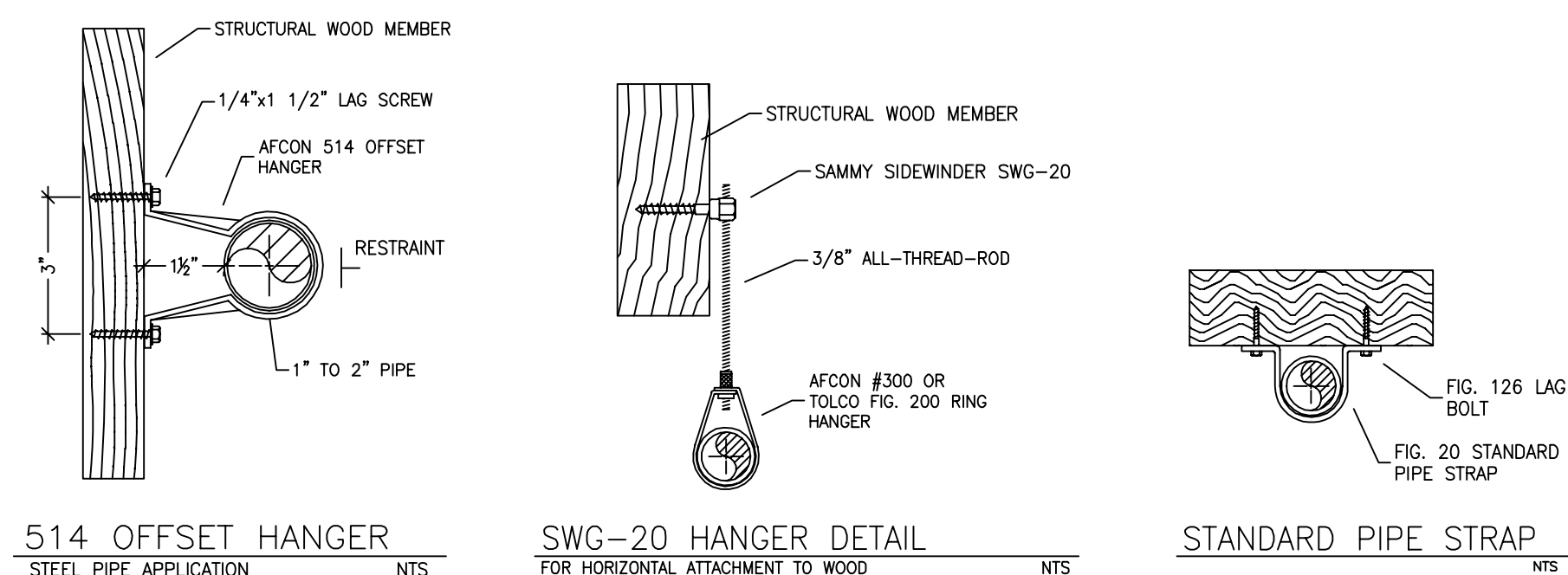
**SPRINKLER SPACING**

- 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 16'x16' (256 SQ. FT.) OR UP TO 8' OFF A WALL (MINIMUM 8'-0" BETWEEN SPRINKLERS)
- SPRINKLERS SHALL BE MEASURED AT PERPENDICULAR ANGLES TO WALLS AND ALONG THE SLOPES OF CEILINGS.

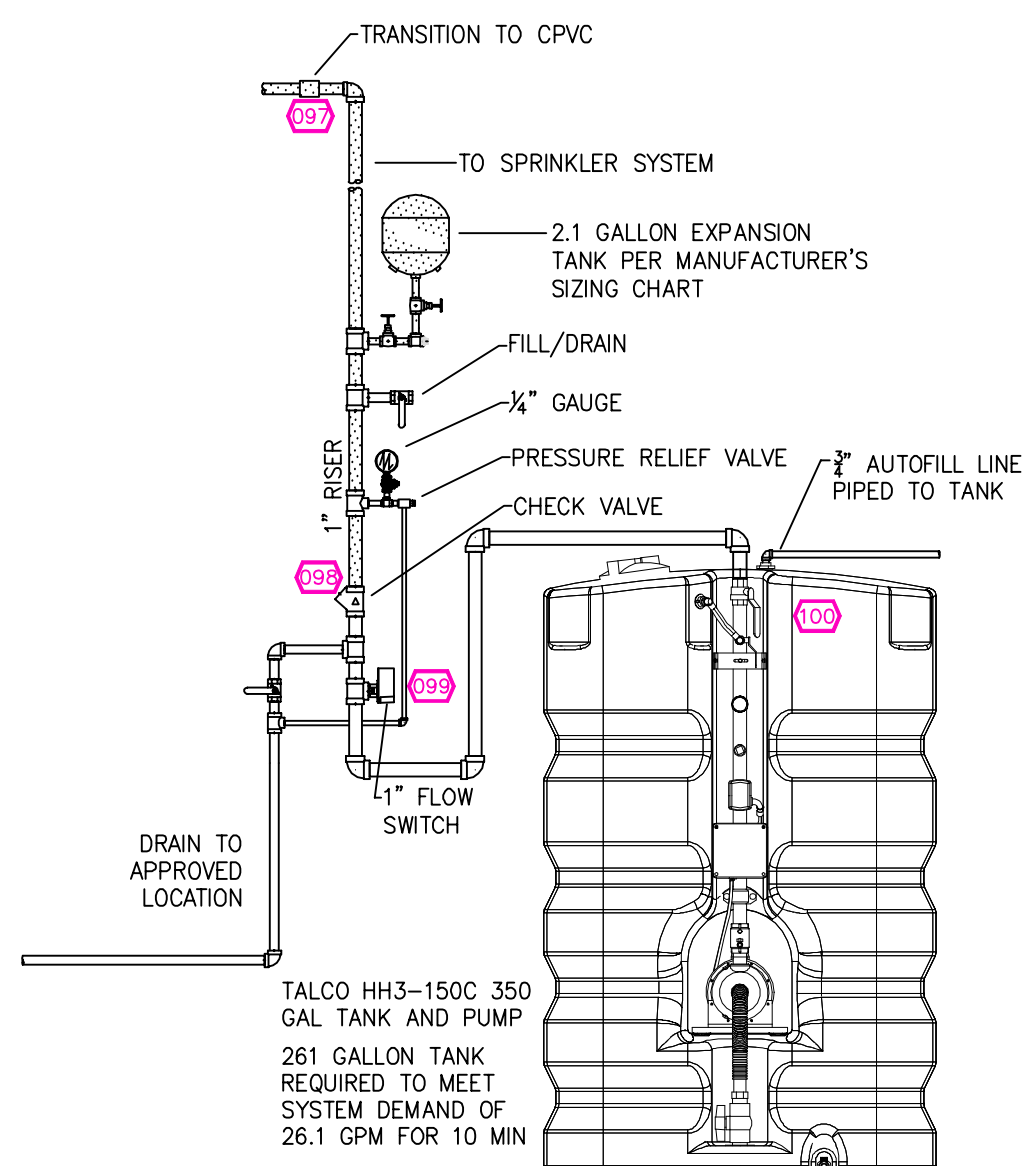
THIS FIRE SPRINKLER SYSTEM UTILIZES THE NOBLE COMPANY FIREFIGHTER ELIMINATOR ANTI-FREEZE SOLUTION

**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"



**HANGER DETAILS**



PER CFC AMENDMENTS TO NFPA 130, A STAND-ALONE PUMP, WHICH DOES NOT SUPPLY THE DOMESTIC WATER, IS PERMITTED IF THE FOLLOWING CONDITIONS ARE MET:  
 A. THE PUMP SHALL BE CONNECTED TO A 220-VOLT CIRCUIT BREAKER SHARED WITH A COMMON HOUSEHOLD APPLIANCE (E.G., RANGE, OVEN, DRYER)  
 B. THE PUMP SHALL BE A STAINLESS STEEL 240-VOLT PUMP  
 C. A SIGN SHALL BE PROVIDED STATING: "VALVE MUST BE OPENED MONTHLY FOR 5 MINUTES"

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

**TALCO Fire Systems**  
 RESIDENTIAL & COMMERCIAL FIRE PUMP SPECIALISTS  
 8048 NE 107TH AVE., PORTLAND, OREGON 97220  
 PHONE: 503-978-8888 WWW.TALCOFIRE.COM

**HOME HYDRANT BRAND FIRE PUMP SYSTEM**  
 NFPA-130 Packaged Residential Fire Pump & Tank  
 U.S. Patents #8,678,032 & 8,905,069

**HH3-150C**  
 40GPM @ 40PSI

350 Gallon Water Tank  
 (1) Tank Drain 1/2"(GHT)  
 (2) Overflow Fitting 1"(NPT)  
 (3) Auto-Fill Valve 3/4"(NPT)

1.5HP Electric Motor  
 240 Volt Single-Phase  
 8.1 Amp (Full Load)

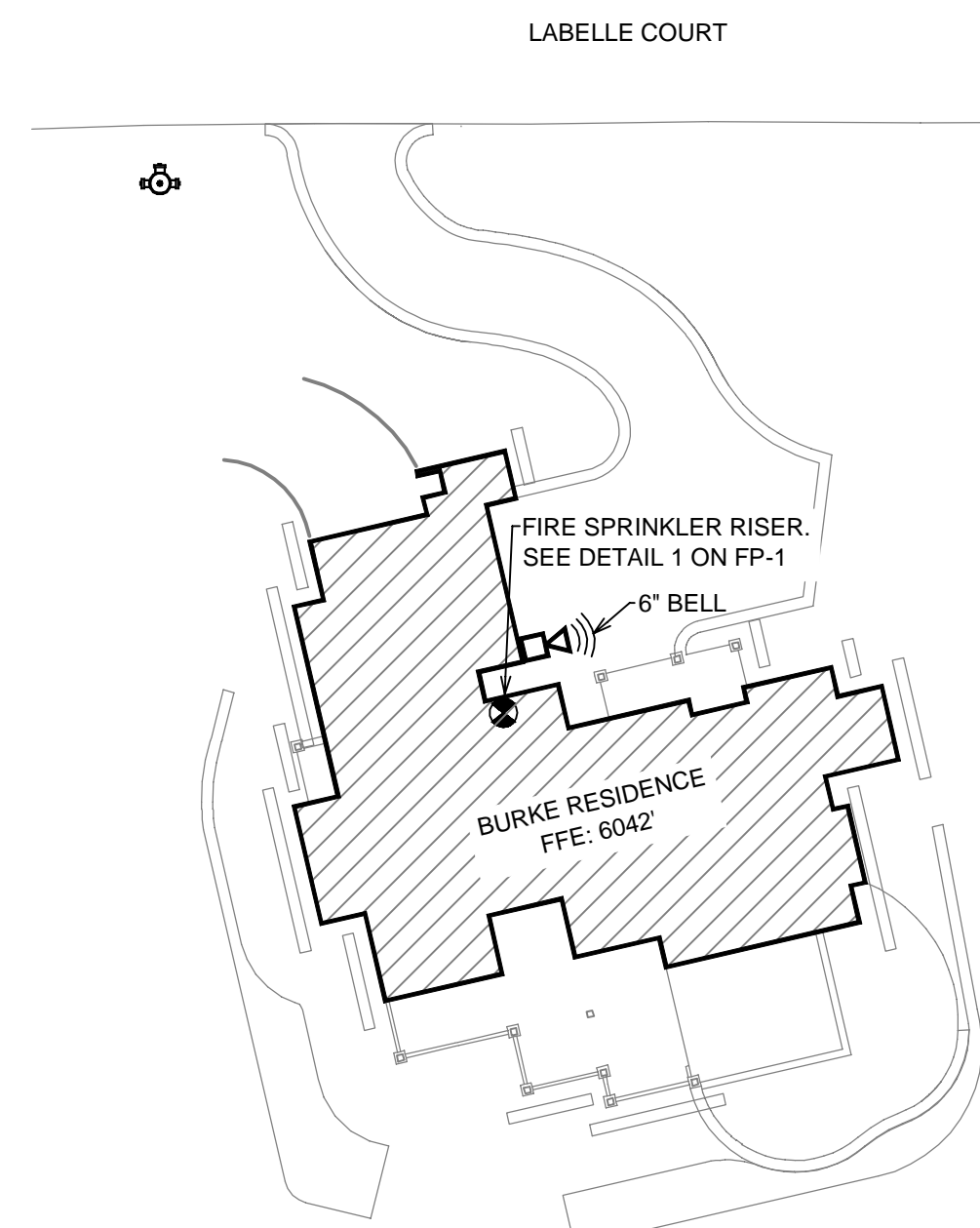
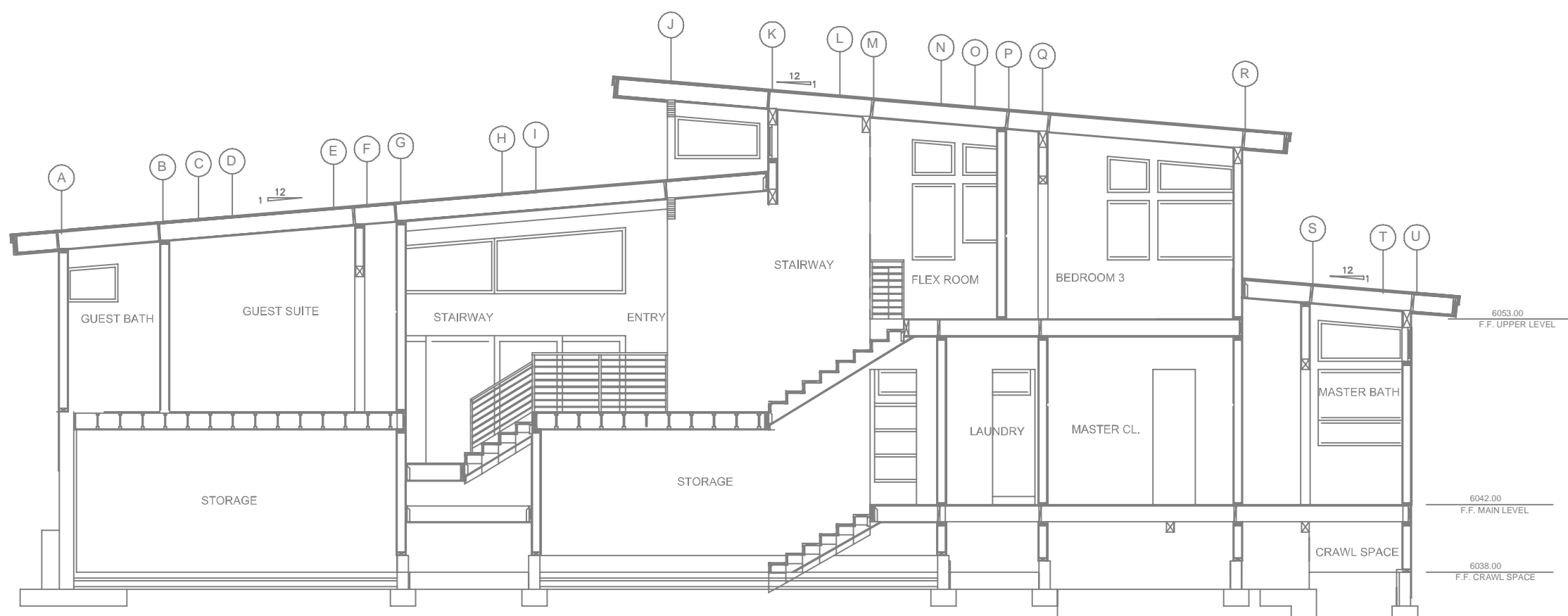
1 1/2" Discharge (NPT)  
 Smart Riser Control System  
 (4) Isolation Ball Valve  
 (5) Test Line/System Drain  
 (6) 30-50 Pressure Switch  
 (7) Pressure Gauge  
 (8) Flow Switch  
 (9) Run-Time Controller  
 (10) Discharge Check Valve  
 (11) Suction Shut-off Valve

**Performance**

GPM	0	20	25	30	35	40	45
PSI	47	45	44	43	41	40	39

**PROJECT SUMMARY:**

PROJECT NAME: BURKE RESIDENCE  
 PROJECT ADDRESS: 10769 LABELLE COURT, TRUCKEE CA  
 APN: 019-780-009-000  
 PROJECT TYPE:  NEW  T.I.  
 TYPE OF CONSTRUCTION: V  
 OCCUPANCY GROUP(S): R3  
 OCCUPIED LEVELS: 3  
 TOTAL SPRINKLERED AREA: 4443 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: 50  
 SPECIAL NOTES: SEE FIRE SPRINKLER NOTES THIS SHEET



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

NO.	DATE	REVISIONS	DRAWN	CHECKED

GENERAL CONTRACTOR: AUTHORITY HAVING JURISDICTION:  
 TOWN OF TRUCKEE BUILDING DIVISION  
 ADDRESS: 10183 TRUCKEE AIRPORT RD  
 CITY: TRUCKEE, CA 96161  
 PHONE: 530-582-7820  
 CONTACT: CONTACT:

ARCHITECT: FIELD INSPECTIONS:  
 1.  
 2.  
 3.  
 4.

**FIRE SPRINKLER NOTES:**

- THE PROPOSED FIRE SPRINKLER SYSTEM IS AN ANTI-FREEZE SYSTEM w/ TANK & PUMP AND SHALL BE DESIGNED AND INSTALLED IN ACCORDANCE w/ NFPA 13D AND THE AUTHORITY HAVING JURISDICTION.
- 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.
- ALL SPRINKLER PIPING CONCEALED ABOVE CEILING 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 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).

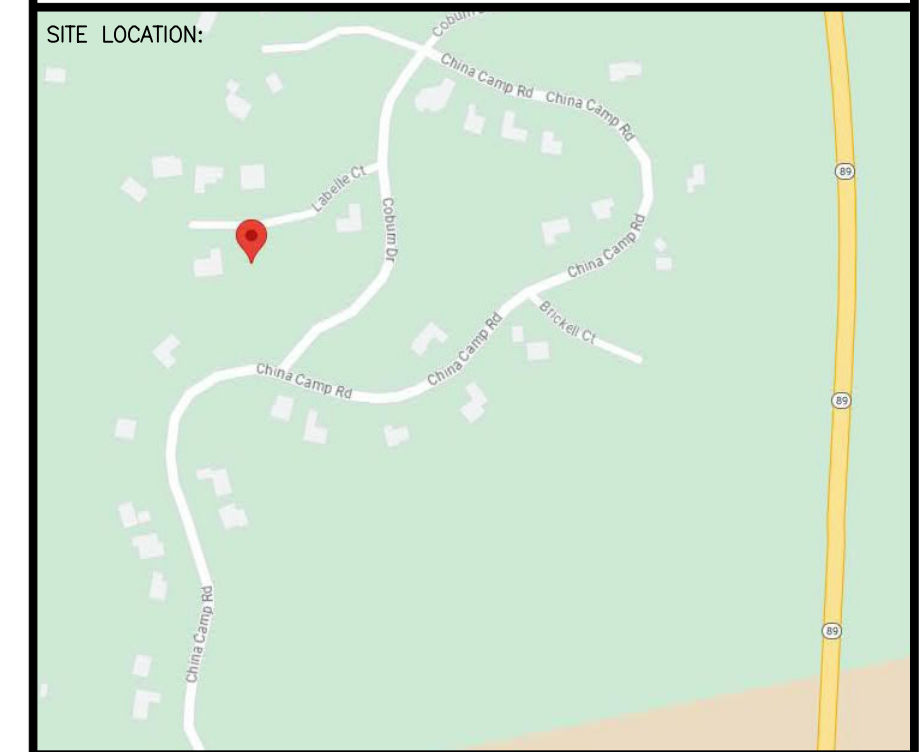
**SPRINKLER HEAD LEGEND**

SYM	QTY	TYPE	W.D.	MODEL	NPT	K	TEMP	FINISH	S.I.N.
⊗	32	CONCEALED	SENJU	RC-RES	1/2"	4.9	162	WHITE	SS8464
⊗	8	CONCEALED	SENJU	RC-RES	1/2"	4.9	205	WHITE	SS8464
⊗	10	SEMI-RECESS	SENJU	FR-RES	1/2"	4.9	205	WHITE	SS4451

50 TOTAL SPRINKLERS

**FIRE SPRINKLER SYMBOLS**

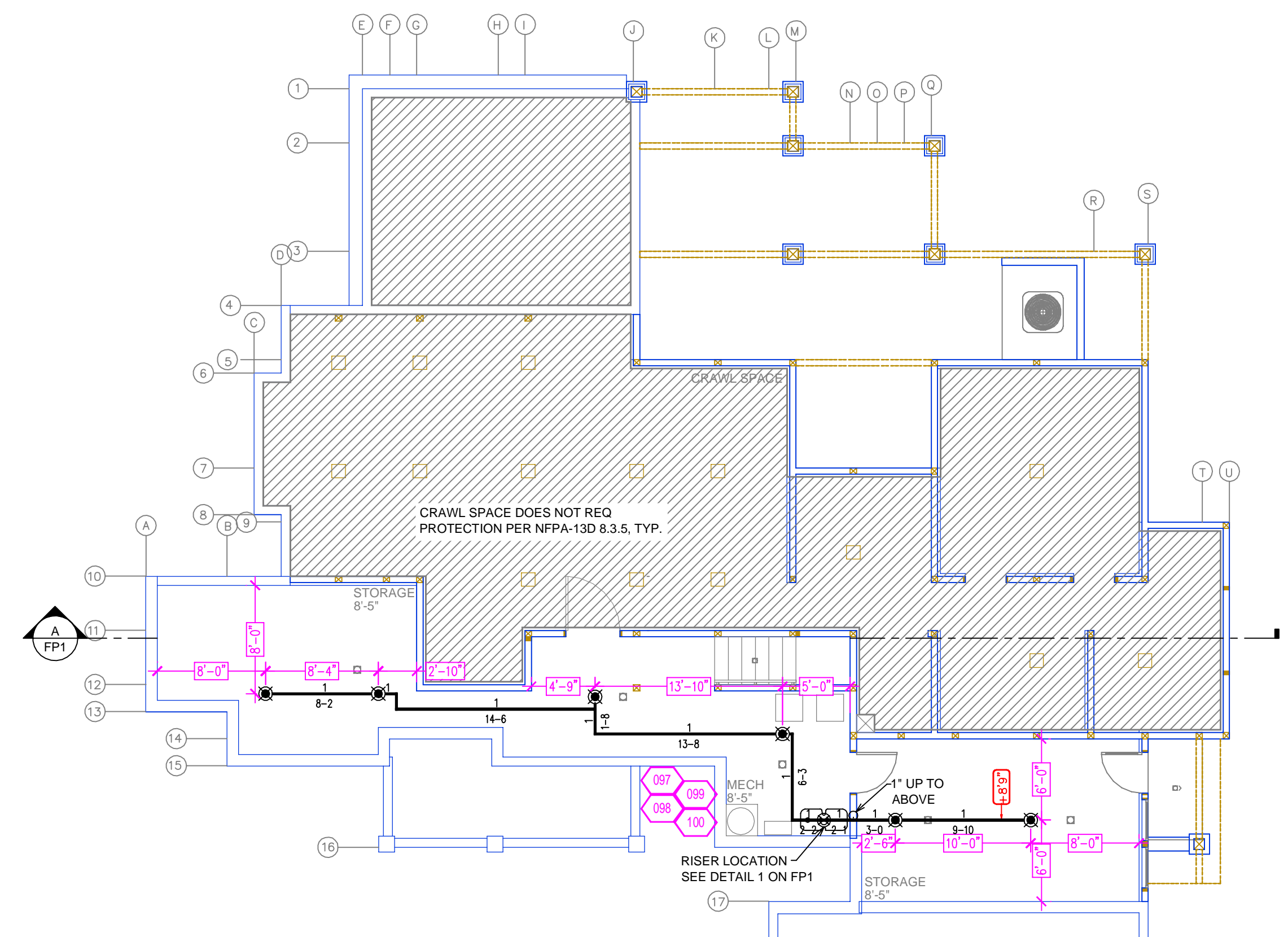
⊗	AUTOMATIC SPRINKLER RISER	+13" ELEV. BELOW DECK OR TOS
⊕	EARTHQUAKE BRACING	+12"-9" ELEV. ABOVE FINISHED FLOOR
+	2-WAY & 4-WAY	— CHANGE ELEVATION UP
+	PIPE HANGER &	— CHANGE ELEVATION DN
+	TYPE DESIGNATION	— INSPECTORS TEST
+	HYDRAULIC REF PT	— AUX DRAIN
+	GRVD OR THRD CAP	— REVISION NOTATION
+	GRVD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



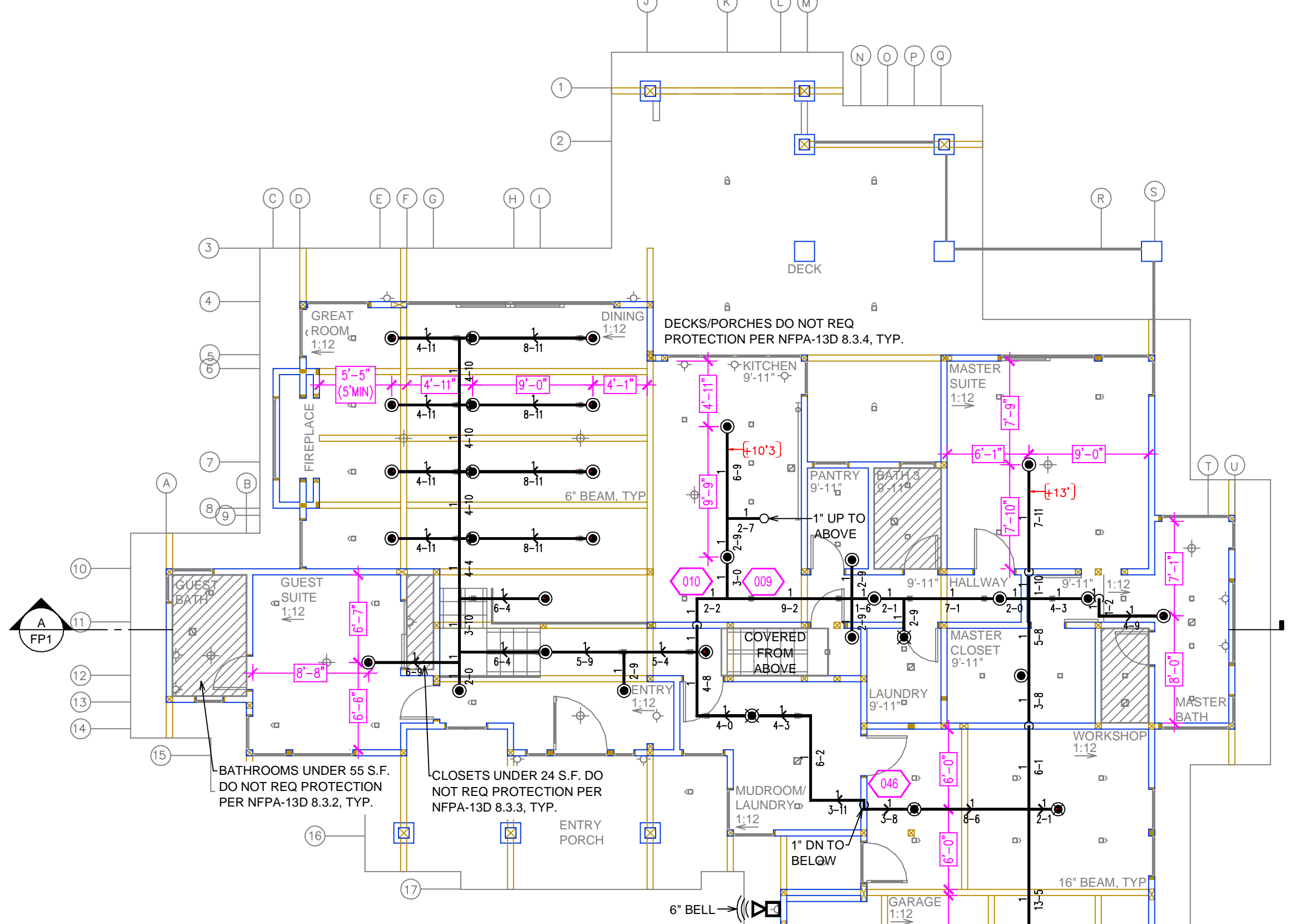
PROJECT NAME: FIRE SPRINKLER PLANS FOR  
**BURKE RESIDENCE**  
 10769 LABELLE COURT  
 TRUCKEE, CA 96161

DRAWING TITLE:  
**FIRE SPRINKLER PLAN**

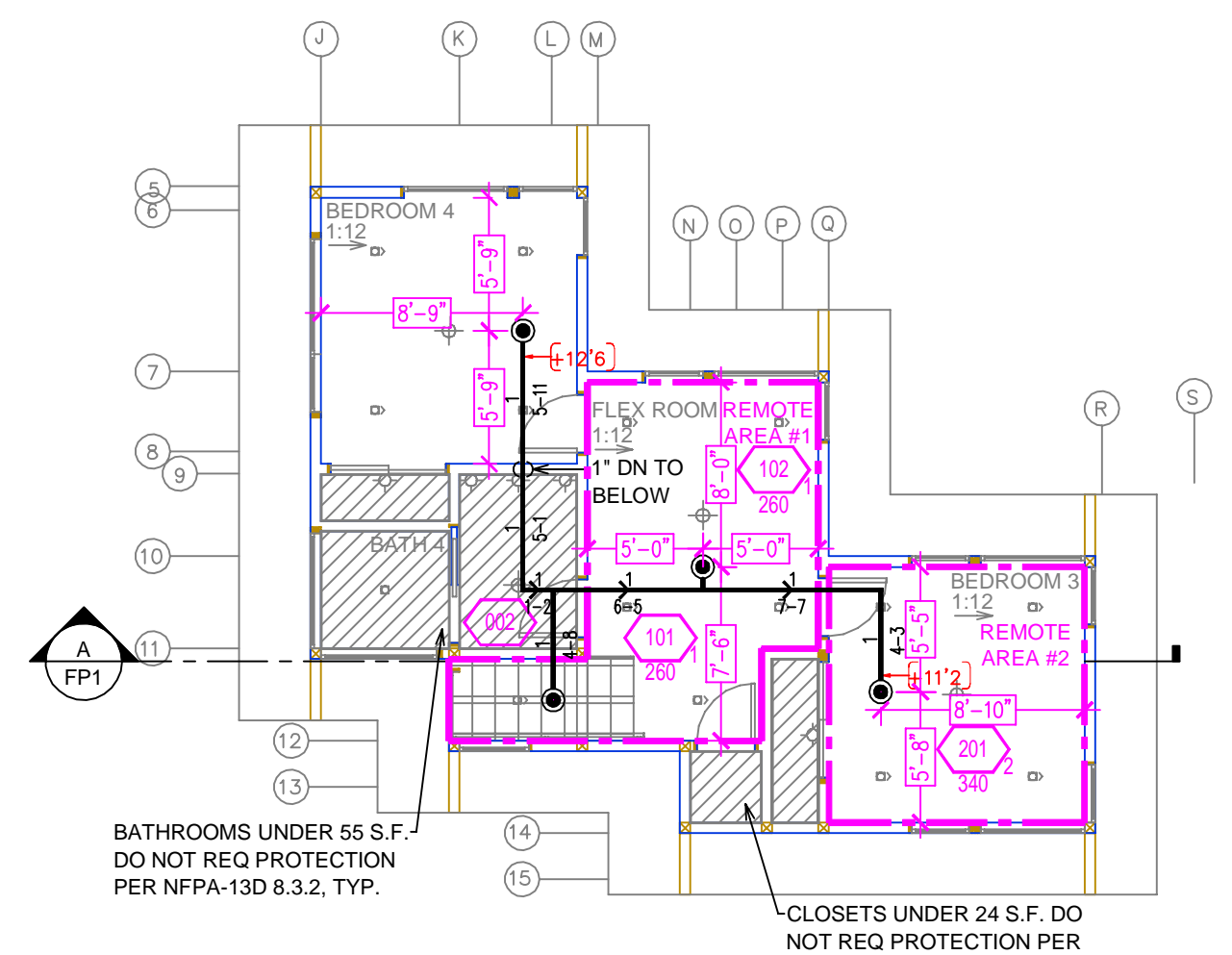
SCALE: 1/8" = 1'-0"	JOB NO.:
BORN ON DATE: 9/13/2023	DWG NO.:
FILE:	FP-1
	SHEET 1 OF 2



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



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



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

**REMOTE AREA 1**  
Hydraulically Calculated System

This system as shown on Fire Protection Plan  
company print no. FP1 dated 9/12/2023  
for BURKE RESIDENCE  
at FLEX ROOM contract no. \_\_\_\_\_

is designed to discharge at a rate of 0.05 gpm  
(L/min) per sq ft (m<sup>2</sup>) of floor area over a maximum area of  
[N/A] sq ft (m<sup>2</sup>) when supplied  
with water at the rate of 26.7 gpm (L/min)  
at 37.5 psi (bars) at the base of the riser.

Hose stream allowance of  
is included in the above.

Occupancy classification: 130 LIGHT HAZARD  
Commodity classification: N/A  
Maximum storage height: N/A  
Safety factor: 6.3

**REMOTE AREA 2**  
Hydraulically Calculated System

This system as shown on Fire Protection Plan  
company print no. FP1 dated 9/12/2023  
for BURKE RESIDENCE  
at BEDROOM 3 contract no. \_\_\_\_\_

is designed to discharge at a rate of 0.05 gpm  
(L/min) per sq ft (m<sup>2</sup>) of floor area over a maximum area of  
[N/A] sq ft (m<sup>2</sup>) when supplied  
with water at the rate of 17.0 gpm (L/min)  
at 34.7 psi (bars) at the base of the riser.

Hose stream allowance of  
is included in the above.

Occupancy classification: 130 LIGHT HAZARD  
Commodity classification: N/A  
Maximum storage height: N/A  
Safety factor: 10.8

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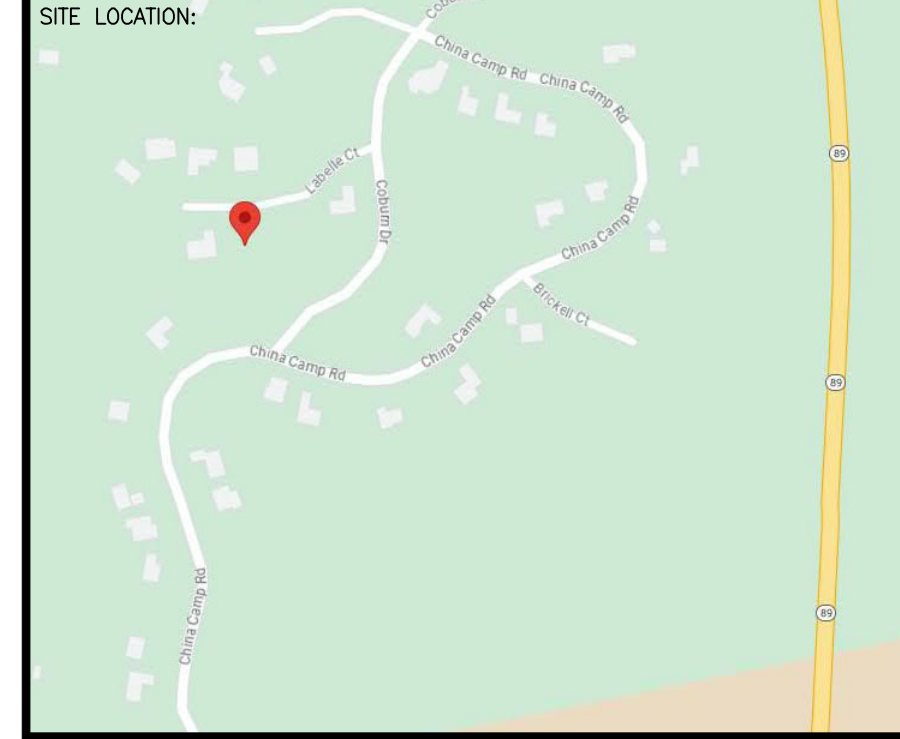
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- 50 TOTAL SPRINKLERS ON THIS SHEET**
- FIRE SPRINKLER SYMBOLS**
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  - ⊕ EARTHQUAKE BRACING
  - ⊖ 2-WAY & 4-WAY
  - ⊗ PIPE HANGER & TYPE DESIGNATION
  - ⊖ HYDRAULIC REF PT
  - ⊖ GRVD OR THRD CAP
  - ⊖ GRVD COUPLING
  - ⊖ TYPICAL POINT OF CONNECTION (POC)
  - +12" 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



PROJECT NAME: FIRE SPRINKLER PLANS FOR  
**BURKE RESIDENCE**  
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TRUCKEE, CA 96161

DRAWING TITLE:  
**FIRE SPRINKLER PLAN**

SCALE: 1/8" = 1'-0"	JOB NO.:
BORN ON DATE: 9/13/2023	DWG NO.:
FILE:	FP-2

SHEET 2 of 2