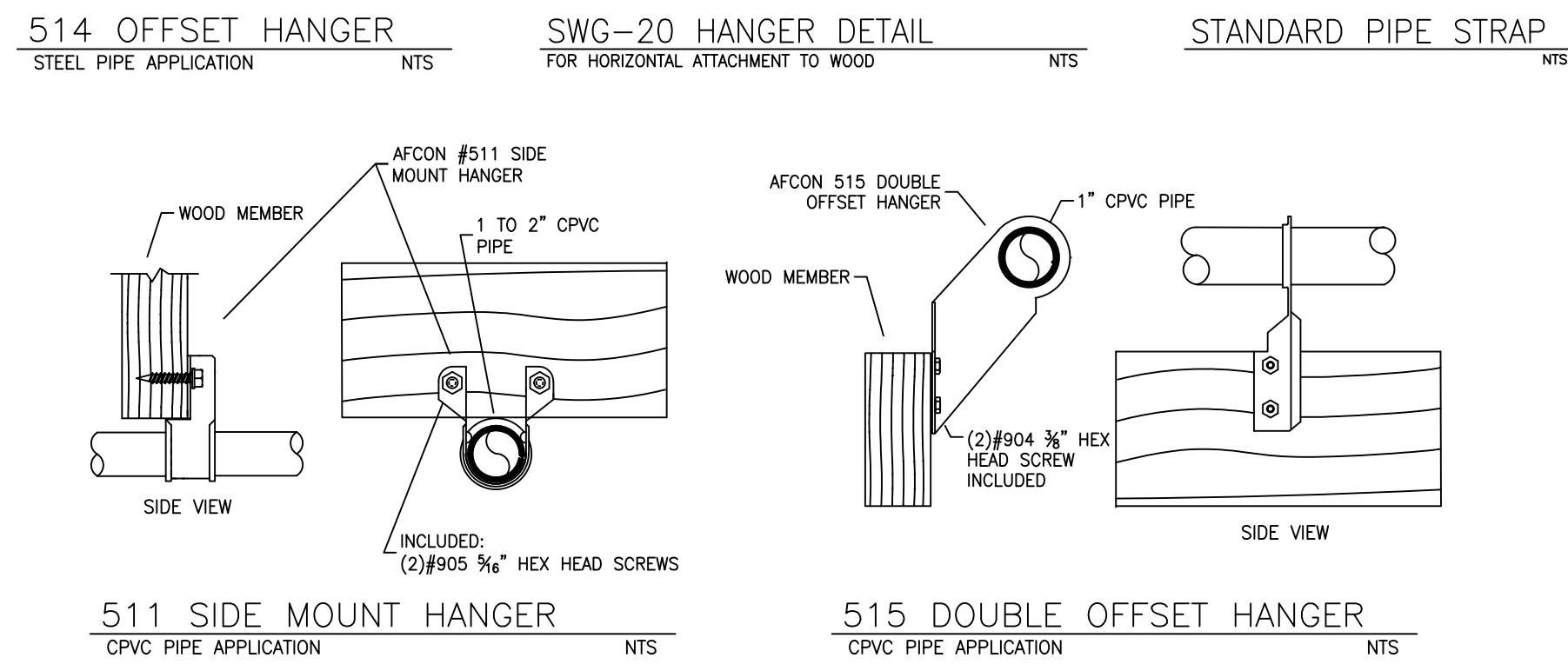
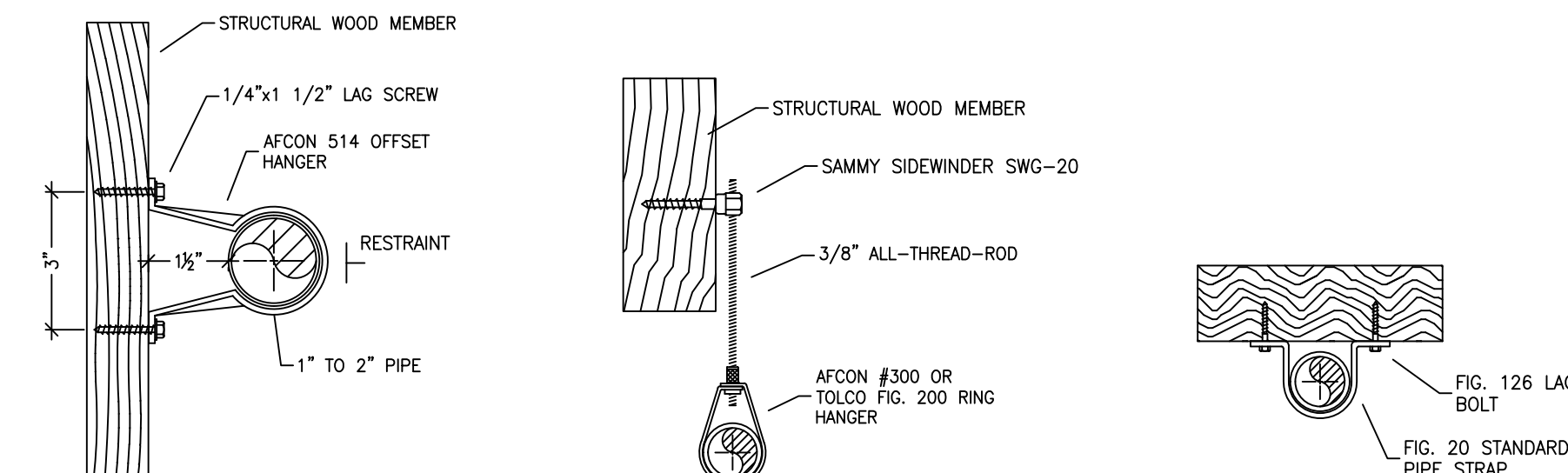


A BUILDING SECTION
SCALE: 1/8" = 1'-0"

SYM	QTY	POSITION	FINISH	TEMP	K	NPT	SIN	MFG.	MODEL#	ESQUIRE/CHG	SPACING	U.N.O.
⊙	81	PEND	WHITE	162	4.90	1/2"	SS8464	Senju	RC-RES	CONCEALED	18"x18"	
⊙	1	PEND	WHITE	205	4.90	1/2"	SS8464	Senju	RC-RES	CONCEALED	18"x18"	
⊙	30	PEND	WHITE	205	5.60	1/2"	SS2551	Senju	FR-OR	SEMI-RECESS	15"x15" (130 S.F. IN ORDINARY HAZARD AREAS)	
○	5	UPR	BRASS	205	5.60	1/2"	SS2552	Senju	FR-OR	N/A	120 S.F. IN ATTIC	
○	5	UPR	BRASS	205	5.60	1/2"	SS2552	Senju	FR-OR	N/A	120 S.F. IN ATTIC	
122 TOTAL												

SPRINKLER HEAD LEGEND



HANGER DETAILS

PROJECT SUMMARY:

PROJECT NAME: GRINBERG RESIDENCE
 PROJECT ADDRESS: 638 FAIRVIEW BLVD
 APN: 126-231-05
 PROJECT TYPE: NEW T.I.
 TYPE OF CONSTRUCTION: V
 OCCUPANCY GROUP(S): R3
 OCCUPIED LEVELS: 4
 TOTAL SPRINKLERED AREA: 11,834 SQ. FT.
 NFPA CODE REQUIREMENT: NFPA 13 NFPA 13R NFPA 13D
 NUMBER OF SYSTEMS: 3
 SYSTEM TYPE(S): WET ANTI-FREEZE DRY PREACTION
 TOTAL SPRINKLERS: 122
 SPECIAL NOTES: SEE FIRE SPRINKLER NOTES THIS SHEET

SUBMITTAL

PROJECT SQUARE FOOTAGES

BASEMENT	= 2858 S.F.
1ST FLOOR	= 2975 S.F.
2ND FLOOR	= 3460 S.F.
3RD FLOOR	= 2541 S.F.

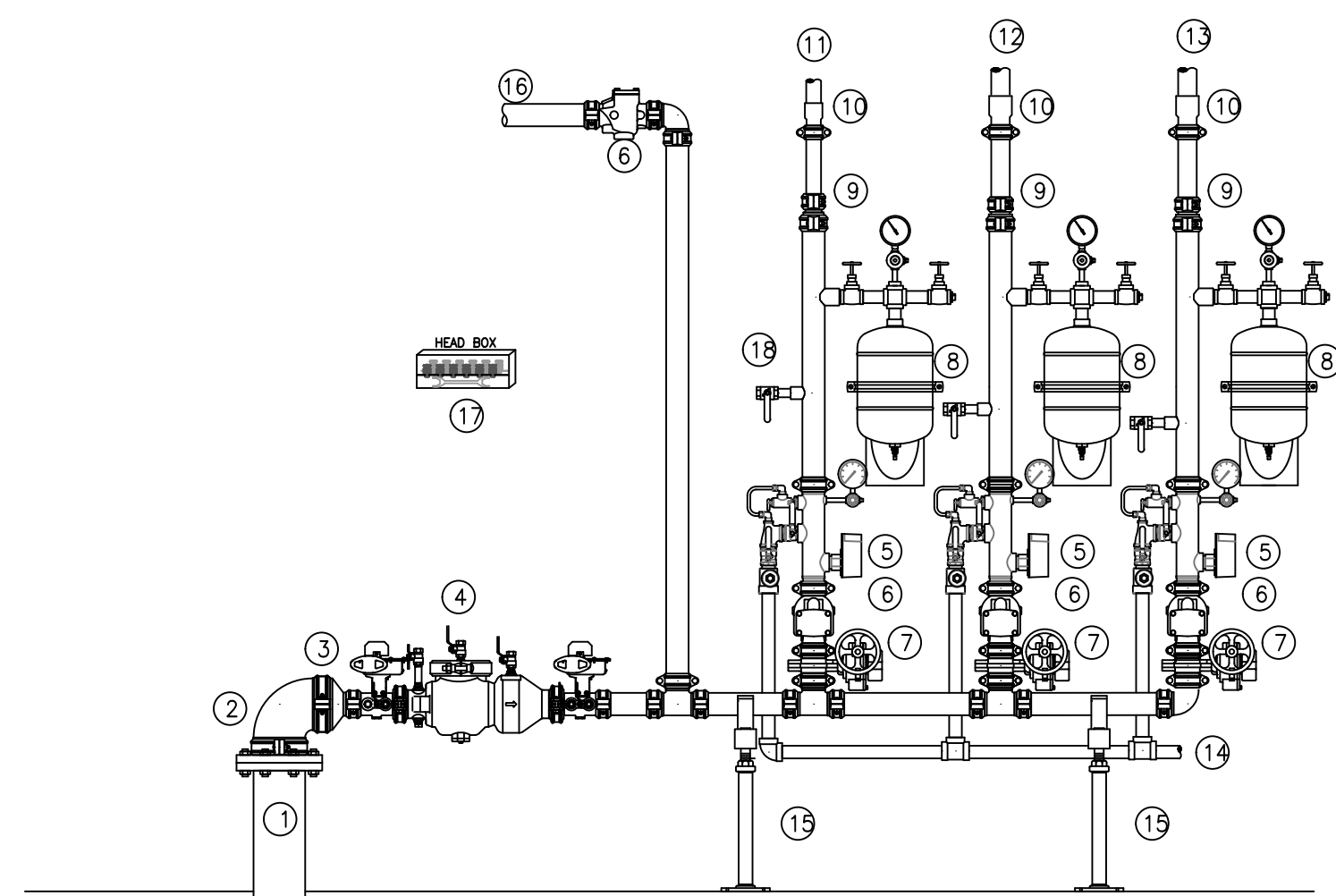
NO SPRINKLERS REQUIRED IN:
BATHROOMS 55 SQ.FT. OR LESS IN AREA
PER NFPA 13 SECTION 9.2.4.1.1

THIS FIRE SPRINKLER SYSTEM UTILIZES
THE TYCO LFP ANTI-FREEZE SOLUTION

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	N/A	12-0	12-0	15-0	15-0	15-0	15-0	15-0	15-0	15-0
lightwall										
CPVC	5-6	6-0	6-6	7-0	8-0	9-0	10-0	N/A	N/A	N/A

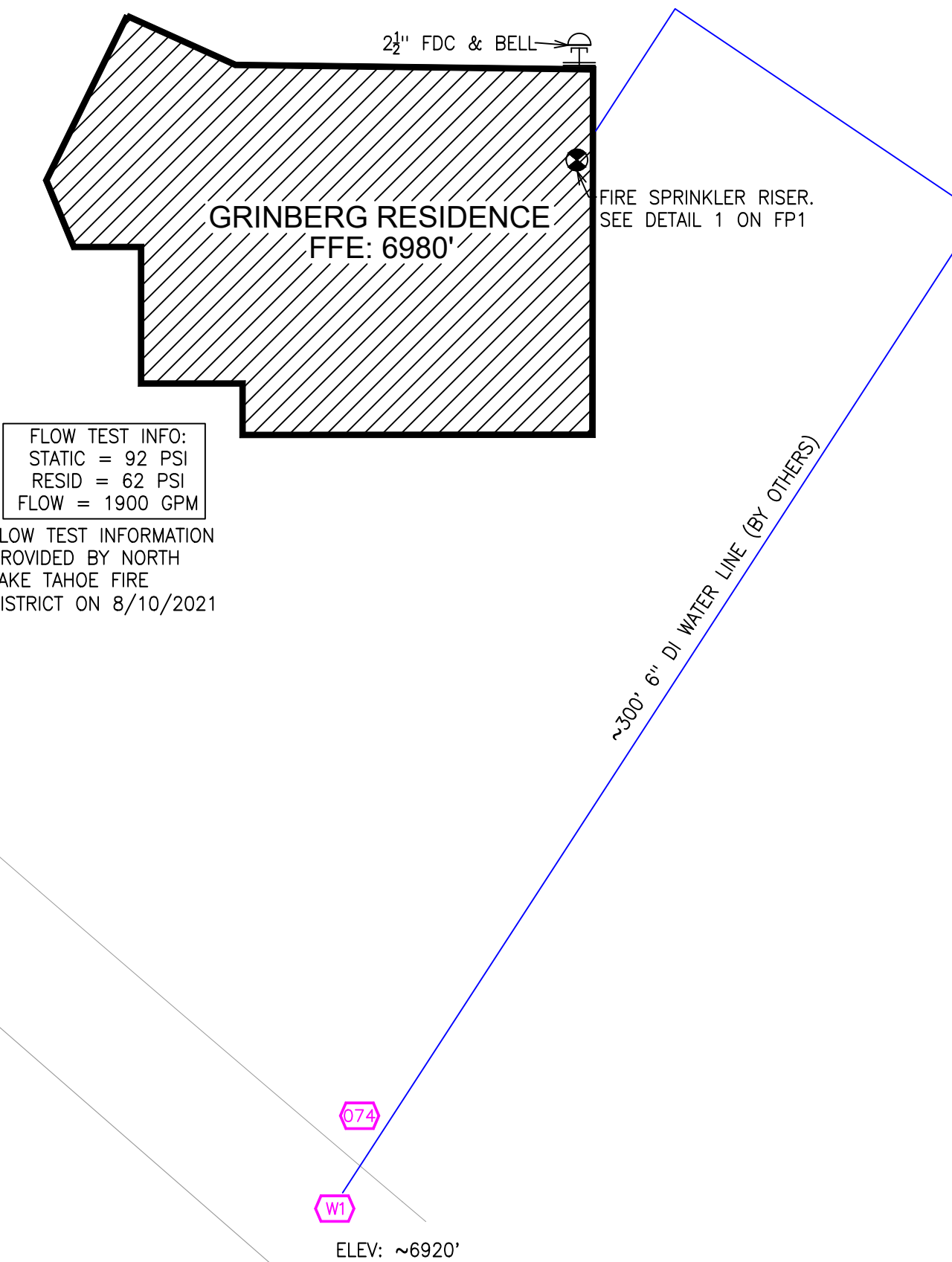
HEAT SOURCE:	ORDINARY TEMP. SPRINKLER	INTERMEDIATE TEMP. SPRINKLER
SIDE OF OPEN OR RECESSED FIRE PLACE	36"	12"
FRONT OF RECESSED FIRE PLACE	60"	36"
COAL OR WOOD BURNING STOVE	42"	12"
RANGE/OVEN, HOT AIR FLUES & UNINSULATED HEAT DUCT	18"	9"
UNINSULATED HOT WATER PIPES & 250-499 WATT LIGHTS	12"	6"
SIDE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

ZONE NUMBER	AREA SERVED	SYSTEM VOLUME	SYSTEM TYPE
ZONE 1	BASEMENT & FIRST FLOOR	38 GAL	ANTI-FREEZE
ZONE 2	2ND FLOOR	29 GAL	ANTI-FREEZE
ZONE 3	3RD FLOOR	30 GAL	ANTI-FREEZE



- RISER LEGEND**
- 6" UNDERGROUND
 - 6" FLANGE ADAPTER
 - 6" X 2-1/2" GROOVED CONCENTRIC REDUCER
 - 2-1/2" WILKINS MODEL 375ADA BACKFLOW GXG w/TAMPERS
 - 2-1/2" RISER MANIFOLD w/ FLOW SWITCH, PRESSURE GAUGE, PRESSURE RELIEF & TEST AND DRAIN
 - 2-1/2" GROOVED CHECK VALVE
 - 2-1/2" GROOVED SUPERVISED BVF
 - 2.87 GAL EXPANSION CHAMBER (MATCH AT LEAST THIS SIZE)
 - GROOVED CONCENTRIC REDUCERS
 - GROOVED TO CPVC ADAPTER
 - 1-1/2" OUT TO ZONE 1
 - 2" OUT TO ZONE 2
 - 2" OUT TO ZONE 3
 - 1-1/4" MAIN DRAIN PIPED TO EXTERIOR. COORDINATE EXACT LOCATION WITH G.C. AND OWNER.
 - PIPE STANDS
 - 2-1/2" OUT TO FDC
 - SPARE HEAD BOX
 - FILL/DRAIN

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



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

NO.	DATE	REVISIONS	DRAWN	CHECKED

GENERAL CONTRACTOR: AUTHORITY HAVING JURISDICTION:
 N LAKE TAHOE FIRE PROTECTION DISTRICT
 ADDRESS: 886 ORIOLE WAY
 CITY: INCLINE VILLAGE, NV
 PHONE: 775-831-0351
 CONTACT: CONTACT:

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

- FIRE SPRINKLER NOTES:**
- THE PROPOSED FIRE SPRINKLER SYSTEM IS AN ANTI-FREEZE SYSTEM AND SHALL BE DESIGNED AND INSTALLED IN ACCORDANCE WITH NFPA 13.
 - THIS SPRINKLER SYSTEM IS HYDRAULICALLY CALCULATED IN ACCORDANCE WITH NFPA 13 TO PROVIDE 0.10 GPM PER SQ. FT. OVER THE MOST REMOTE AREA.
 - THE NUMBER OF DESIGN SPRINKLERS SHALL INCLUDE THE 4 MOST DEMANDING ADJACENT SPRINKLERS PER NFPA 13.
 - THE GARAGE HAS BEEN DESIGNED TO ORDINARY HAZARD 1 (OH1) CRITERIA IN ACCORDANCE WITH NFPA 13 TO PROVIDE 0.10 GPM PER SQ. FT. OVER THE MOST REMOTE AREA.
 - 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 13
 - HOLE 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.

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
⊕	GRID OR THRD CAP	⊕ AUX DRAIN
⊕	GRID COUPLING	⊕ REVISION NOTATION
⊕	TYPICAL POINT OF CONNECTION (POC)	⊕ LOCAL ALARM

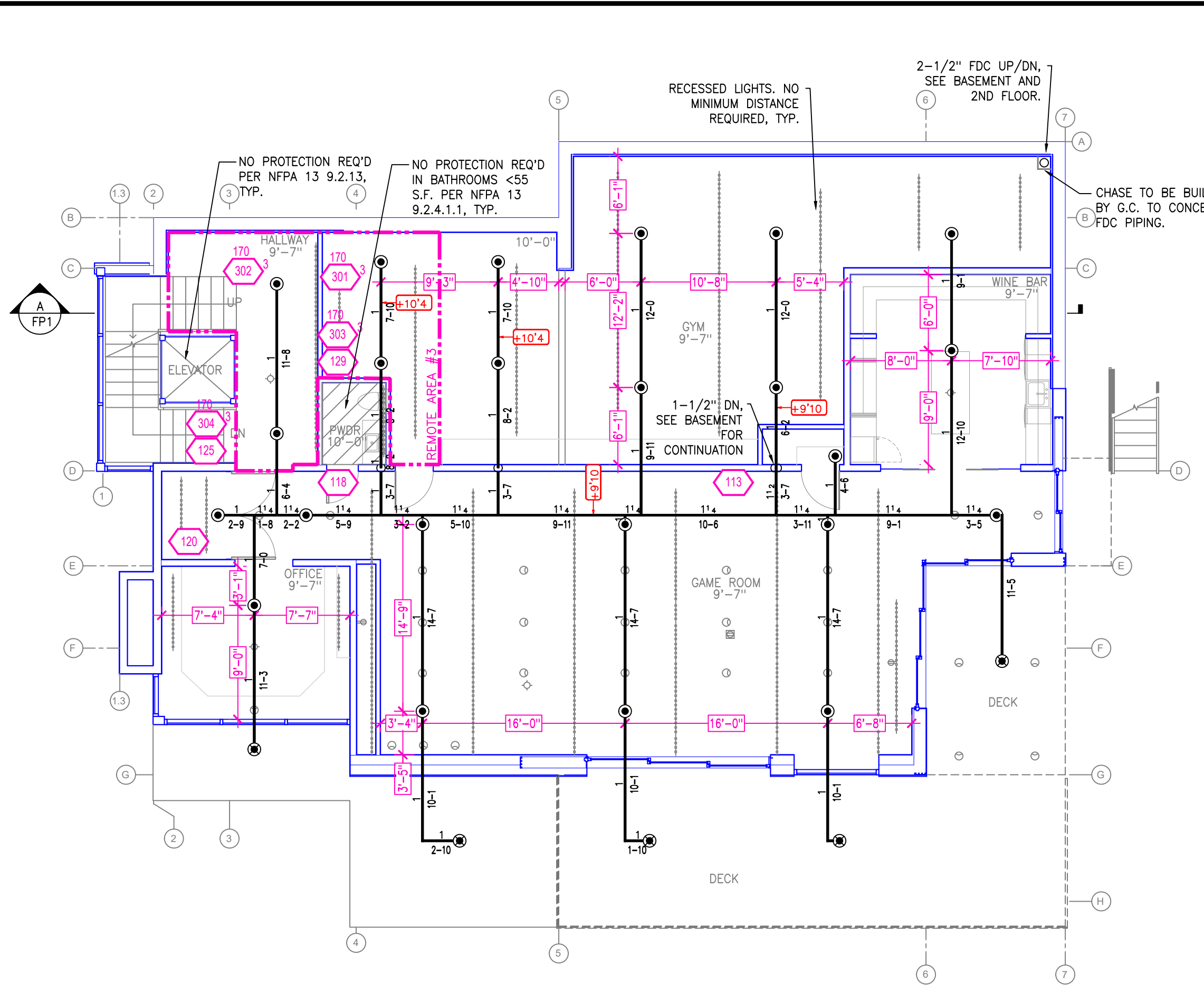


PROJECT NAME: FIRE SPRINKLER PLANS FOR
GRINBERG RESIDENCE
 638 FAIRVIEW BLVD
 INCLINE VILLAGE, NV 89451

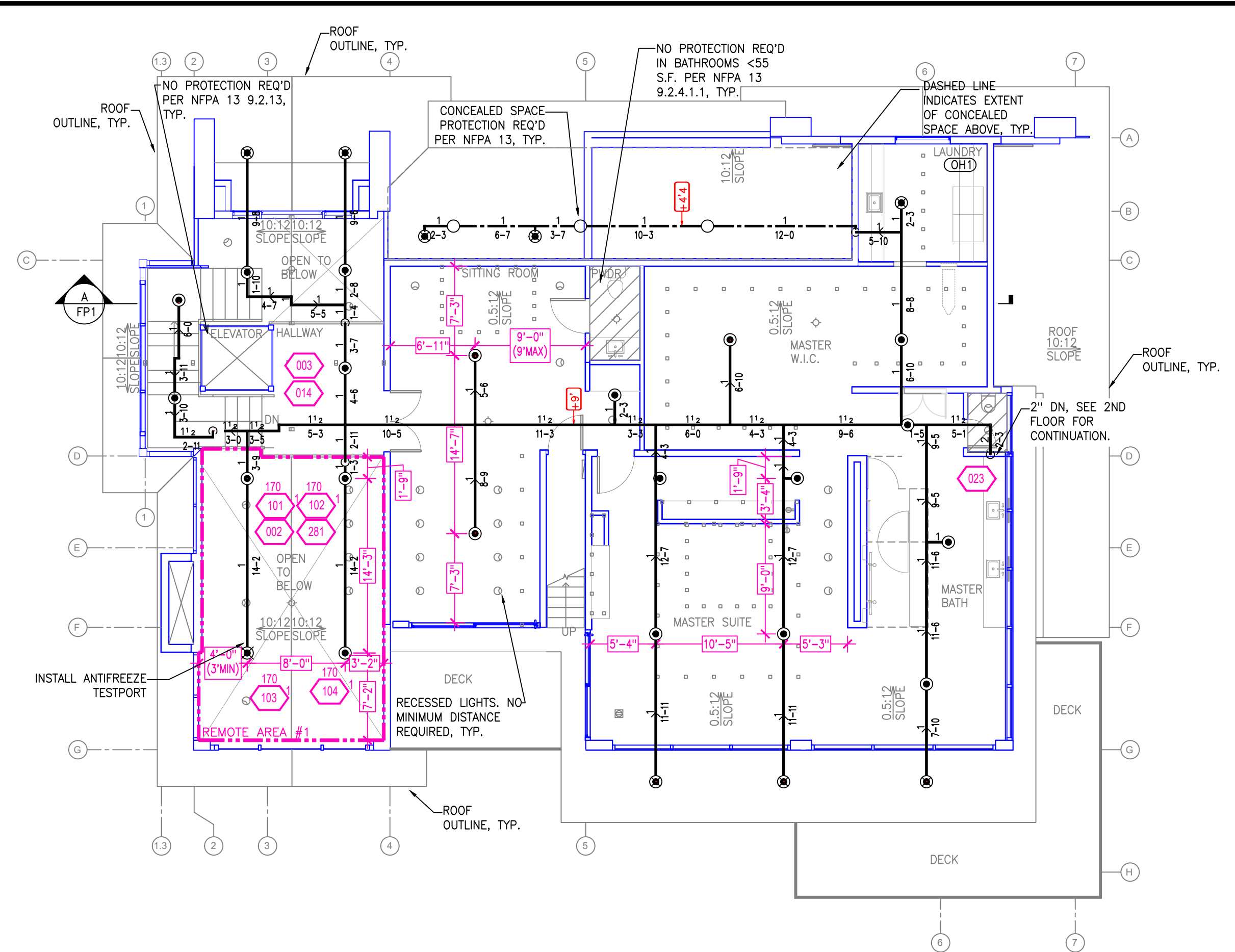
STAMP:

DRAWING TITLE:
FIRE SPRINKLER PLAN

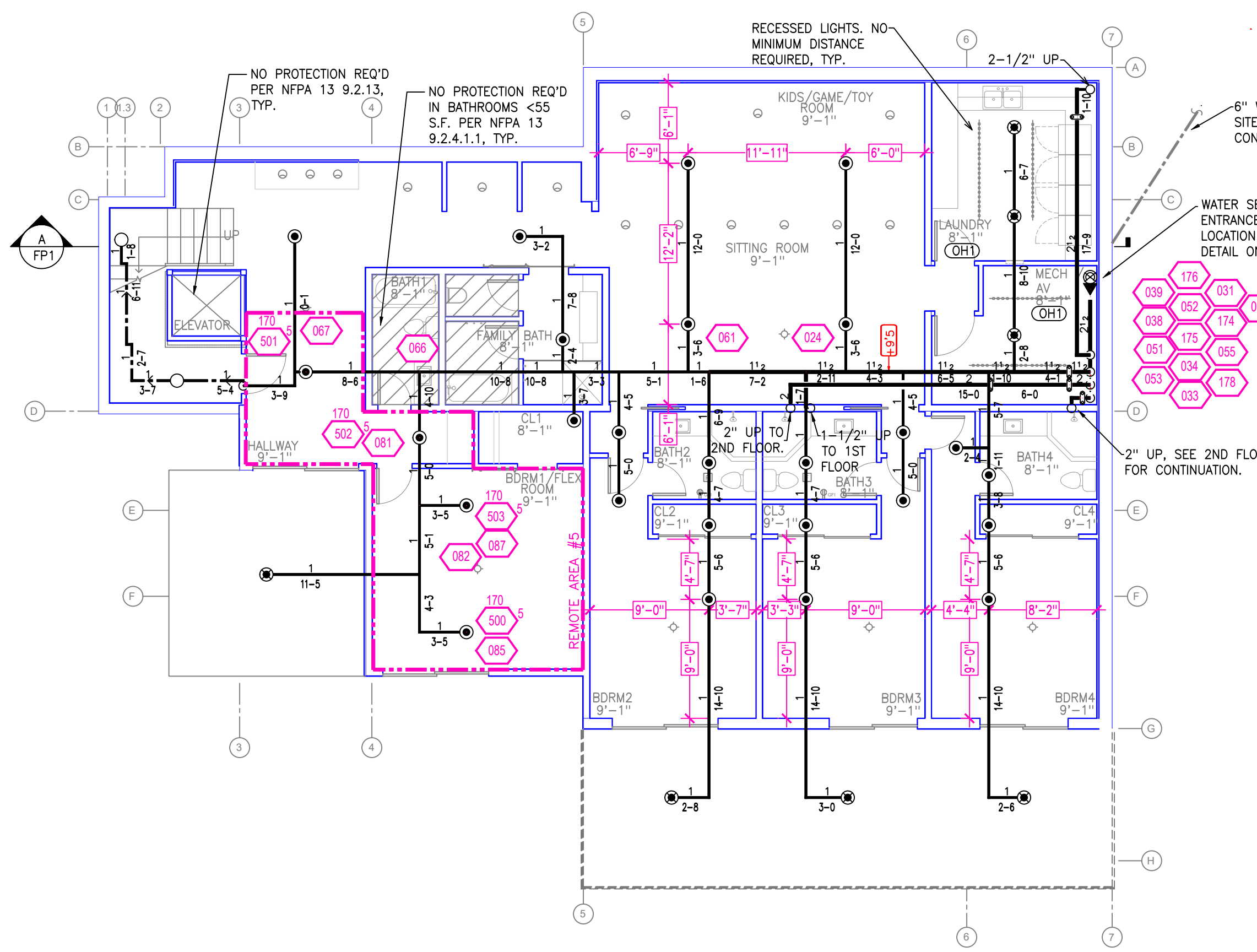
SCALE: 1/8"=1'-0"	JOB NO.:
DRAWN BY:	DWG NO.:
BORN ON DATE: 1/13/2021	FP-1
FILE: 1/13/2021	SHEET 1 OF 2



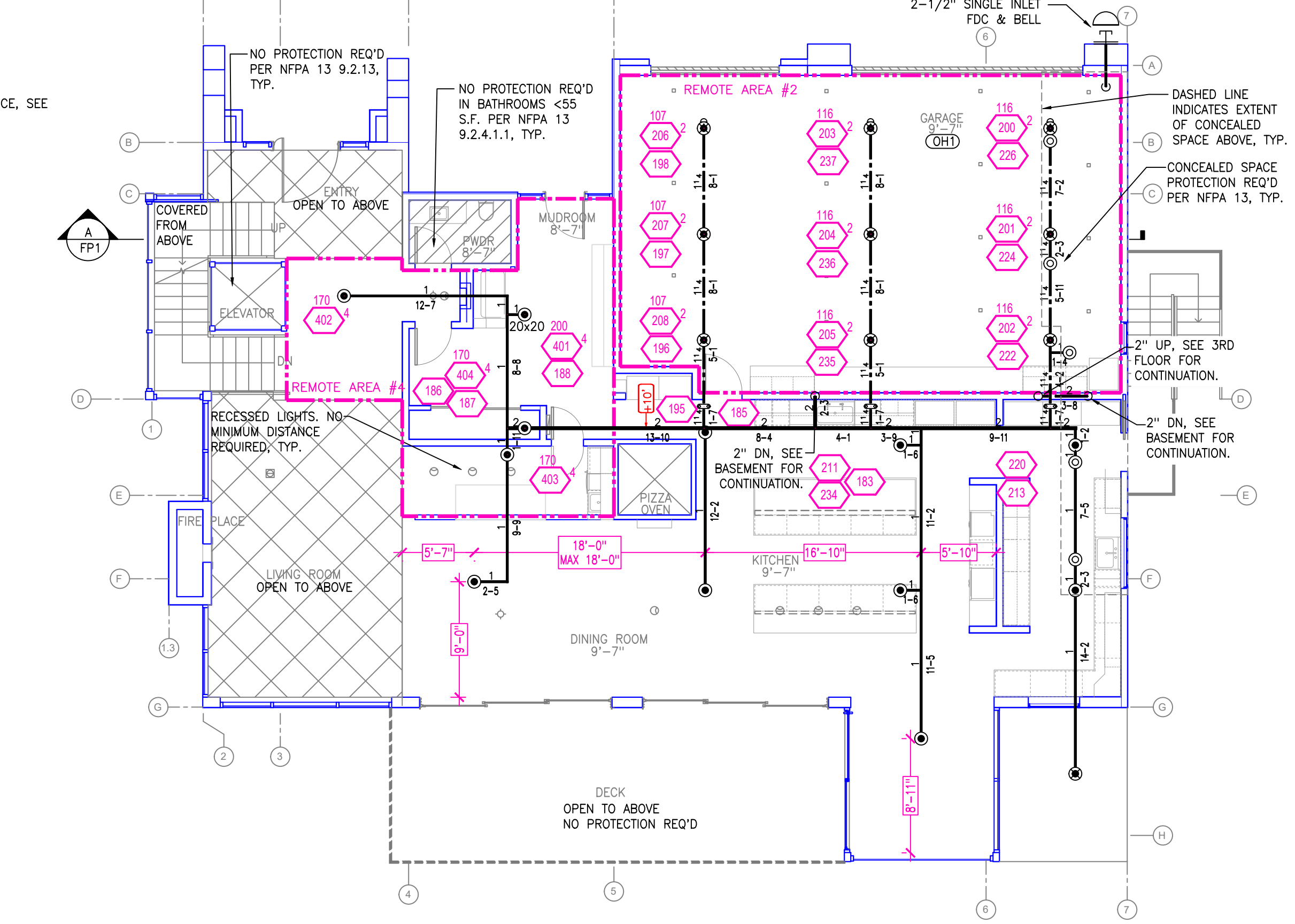
FIRE SPRINKLER PLAN - 1ST FLOOR
SCALE: 1/8" = 1'-0"



FIRE SPRINKLER PLAN - 3RD FLOOR
SCALE: 1/8" = 1'-0"



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



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

PIPE LEGEND

CPVC	---
STEEL	---

SPRINKLER HEAD LEGEND

SYM	CNT	POSITION	FINISH	TEMP	K	NPT	SIN	MFG.	MODEL#	ESCUTCHEON	SPACING U.N.O.
⊙	81	PEND	WHITE	162	4.90	1/2"	S8464	Senju	RC-RES	CONCEALED	18"x18"
⊙	1	PEND	WHITE	205	4.90	1/2"	S8464	Senju	RC-RES	CONCEALED	18"x18"
⊙	30	PEND	WHITE	205	5.60	1/2"	SS2551	Senju	FR-OR	SEMI-RECESS	15"x15" (130 S.F. IN ORDINARY HAZARD AREAS)
⊙	5	UPR	BRASS	205	5.60	1/2"	SS2552	Senju	FR-OR	N/A	120 S.F. IN ATTIC
⊙	5	UPR	BRASS	205	5.60	1/2"	SS2552	Senju	FR-OR	N/A	120 S.F. IN ATTIC
122 TOTAL											

REMOTE AREA 1
Hydraulically Calculated System

This system as shown on Fire Protection Plan company print no. FPT dated 12/22/2021 for GRINBERG RESIDENCE at LIVING ROOM contract no. _____ is designed to discharge at a rate of 0.10 gpm (L/min) per sq ft (m²) of floor area over a maximum area of NFPA 13-4 SPRINKLERS sq ft (m²) when supplied with water at the rate of 170.6 gpm (L/min) at 79.6 psi (bars) at the base of the riser. Hose stream allowance of 100 gpm (L/min) is included in the above.

Occupancy classification 13 LIGHT HAZRD
Commodity classification N/A
Maximum storage height N/A
Safety factor 12.0

Installed by _____

REMOTE AREA 2
Hydraulically Calculated System

This system as shown on Fire Protection Plan company print no. FPT dated 12/22/2021 for GRINBERG RESIDENCE at GARAGE contract no. _____ is designed to discharge at a rate of 0.15 gpm (L/min) per sq ft (m²) of floor area over a maximum area of 852 sq ft (m²) when supplied with water at the rate of 411.9 gpm (L/min) at 79.8 psi (bars) at the base of the riser. Hose stream allowance of 250 gpm (L/min) is included in the above.

Occupancy classification 13 OH1
Commodity classification N/A
Maximum storage height N/A
Safety factor 10.4

Installed by _____

REMOTE AREA 3
Hydraulically Calculated System

This system as shown on Fire Protection Plan company print no. FPT dated 12/22/2021 for GRINBERG RESIDENCE at GYMHALLWAY contract no. _____ is designed to discharge at a rate of 0.10 gpm (L/min) per sq ft (m²) of floor area over a maximum area of NFPA 13-4 SPRINKLERS sq ft (m²) when supplied with water at the rate of 171.3 gpm (L/min) at 79.9 psi (bars) at the base of the riser. Hose stream allowance of 100 gpm (L/min) is included in the above.

Occupancy classification 13 LIGHT HAZRD
Commodity classification N/A
Maximum storage height N/A
Safety factor 11.7

Installed by _____

REMOTE AREA 4
Hydraulically Calculated System

This system as shown on Fire Protection Plan company print no. FPT dated 12/22/2021 for GRINBERG RESIDENCE at MUDROOM contract no. _____ is designed to discharge at a rate of 0.10 gpm (L/min) per sq ft (m²) of floor area over a maximum area of NFPA 13-4 SPRINKLERS sq ft (m²) when supplied with water at the rate of 183.4 gpm (L/min) at 75.8 psi (bars) at the base of the riser. Hose stream allowance of 100 gpm (L/min) is included in the above.

Occupancy classification 13 LIGHT HAZRD
Commodity classification N/A
Maximum storage height N/A
Safety factor 15.8

Installed by _____

REMOTE AREA 5
Hydraulically Calculated System

This system as shown on Fire Protection Plan company print no. FPT dated 12/22/2021 for GRINBERG RESIDENCE at BEDROOM 1 contract no. _____ is designed to discharge at a rate of 0.10 gpm (L/min) per sq ft (m²) of floor area over a maximum area of NFPA 13-4 SPRINKLERS sq ft (m²) when supplied with water at the rate of 172.9 gpm (L/min) at 78.6 psi (bars) at the base of the riser. Hose stream allowance of 100 gpm (L/min) is included in the above.

Occupancy classification 13 LIGHT HAZRD
Commodity classification N/A
Maximum storage height N/A
Safety factor 13.1

Installed by _____

NO.	DATE	REVISIONS	DRAWN	CHECKED

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

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

FIRE SPRINKLER NOTES:

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- ALL SYSTEM PIPING SHALL BE TESTED FOR LEAKAGE AT NORMAL SYSTEM OPERATING PRESSURE.
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FIRE SPRINKLER SYMBOLS

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⊙	2-WAY & 4-WAY	---	CHANGE ELEVATION UP
⊙	PIPE HANGER & TYPE DESIGNATION	---	CHANGE ELEVATION DN
⊙	HYDRAULIC REF PT	---	INSPECTORS TEST
⊙	GRV OR THRD CAP	---	AUX DRAIN
⊙	GRID COUPLING	---	REVISION NOTATION
⊙	TYPICAL POINT OF CONNECTION (POC)	---	LOCAL ALARM



PROJECT NAME: FIRE SPRINKLER PLANS FOR GRINBERG RESIDENCE
638 FAIRVIEW BLVD
INCLINE VILLAGE, NV 89451

STAMP: _____

DRAWING TITLE: **FIRE SPRINKLER PLAN**

SCALE: 1/8"=1'-0" JOB NO.: _____
DRAWN BY: _____ DWG NO.: _____
BORN ON DATE: 1/13/2021 FILE: 1/13/2021 SHEET 2 OF 2