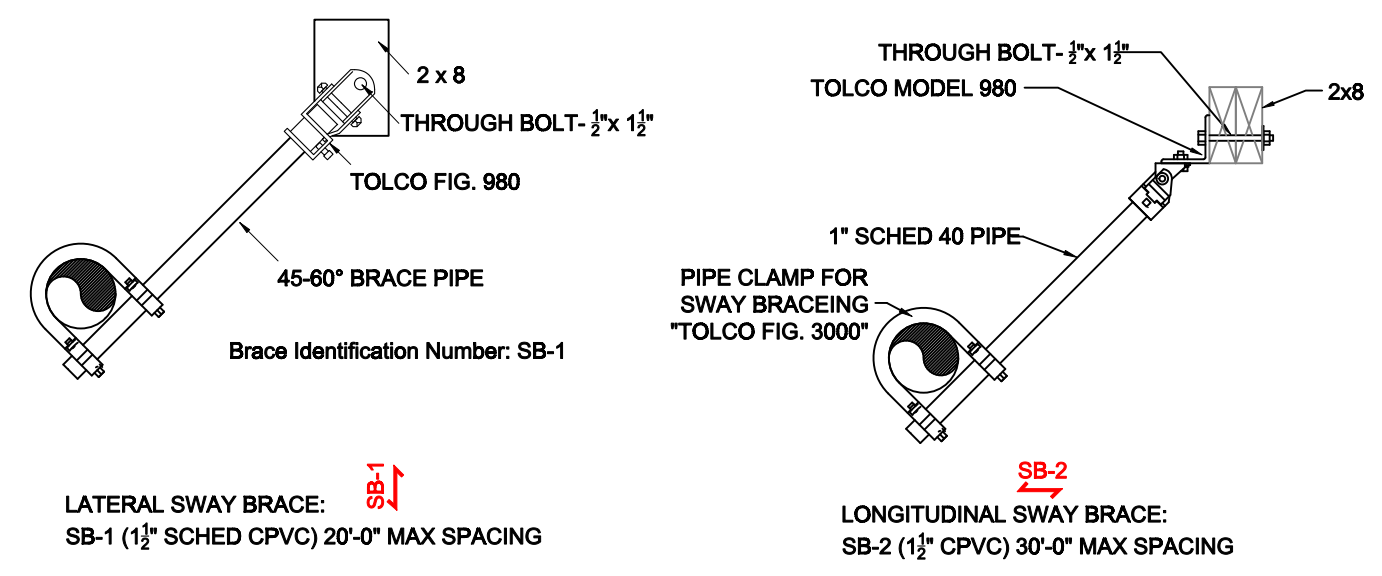


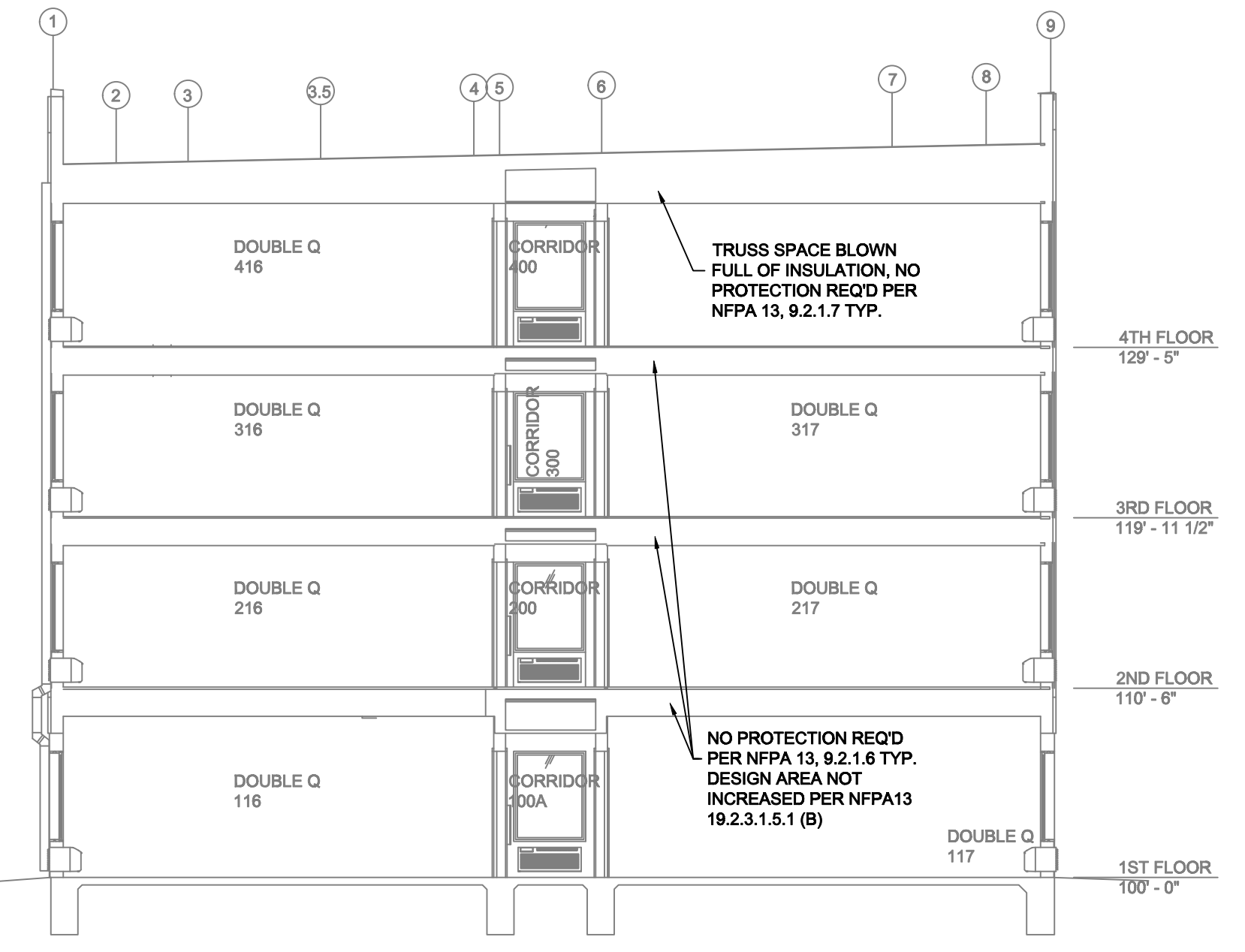
HANGER DETAILS

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

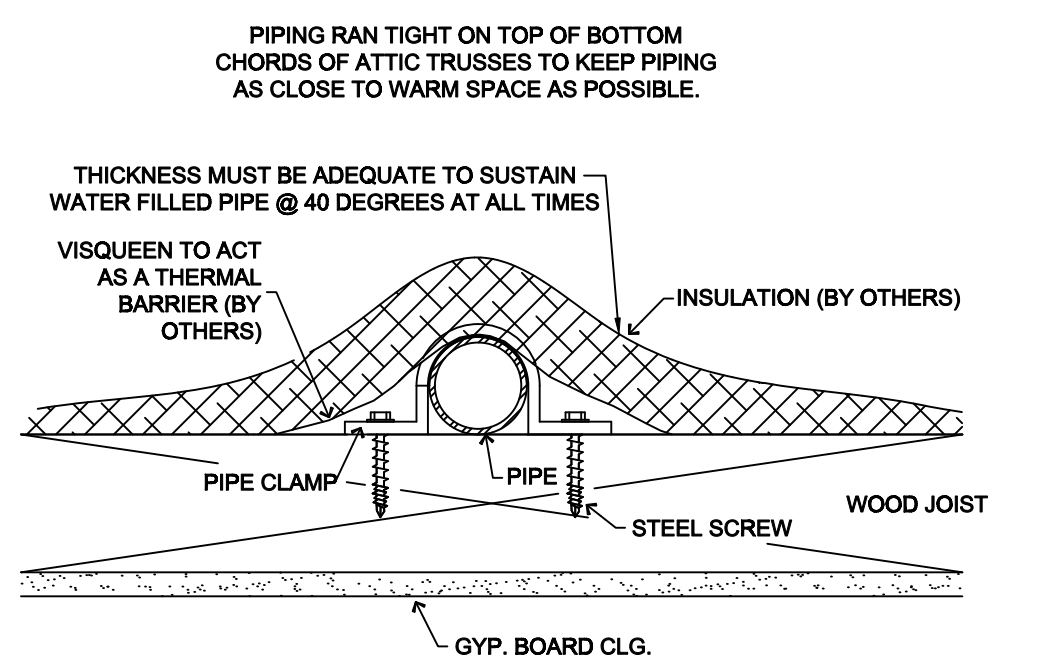
Nominal Pipe Size (in.)	Maximum Distance Between Hangers (ft-in.)							
	1	1 1/4	1 1/2	2	2 1/2	3	4	8
Steel Pipe except threaded lightweight	12-0	12-0	15-0	15-0	15-0	15-0	15-0	15-0
Threaded lightweight steel pipe	12-0	12-0	15-0	15-0	15-0	15-0	N/A	N/A
CPVC	6-0	6-6	7-0	8-0	9-0	10-0	N/A	N/A



SEISMIC HANGER DETAILS



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



NOTES:
 • DO NOT INSTALL INSULATION BETWEEN THE SPRINKLER PIPING AND THE CEILING.
 • THE VISQUEEN AND INSULATION, PLACED OVER THE SPRINKLER PIPING, IS NECESSARY TO ACT AS A THERMAL BARRIER.
 • ADEQUATE HEATING MUST BE MAINTAINED BY OTHERS, AT ALL TIMES.

ALL FIRE SPRINKLER PIPING SUBJECT TO FREEZING TO BE "TENTED/COVERED" WITH INSULATION BY THE GENERAL CONTRACTOR IN ACCORDANCE WITH THE INSULATION MANUFACTURER'S GUIDELINES

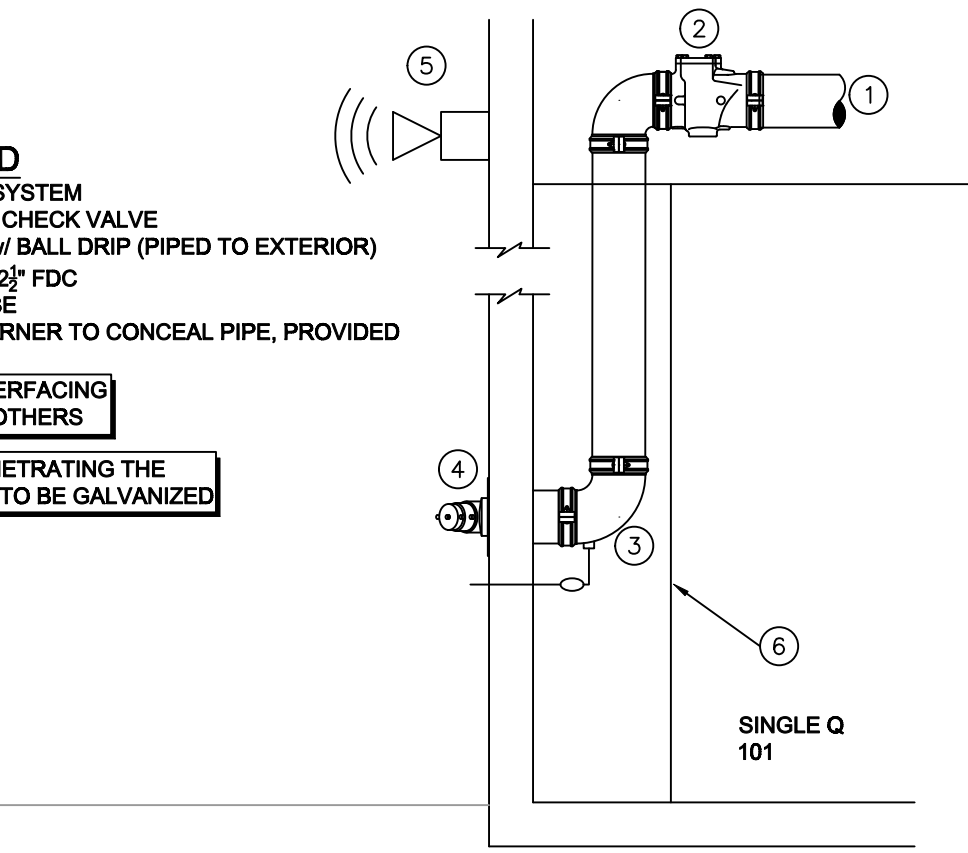
TENTING DETAIL

SPRINKLER HEAD LEGEND

SYM	CNT	POSITION	FINISH	TEMP	K	NPT	SIN	MFG.	MODEL#	ESCUTCHEON	HEAD BOX	MAX SPACING
284		PENDENT	WHITE	150°	4.90	3/4"	RA3518	RELIABLE	F1 RES	SEMI-RECESS	2	16" x 16"
8		SIDEWALL	WHITE	150°	8.00	3/4"	RA862	RELIABLE	F1FR80	SEMI-RECESS	2	16" x 22"
39		PENDENT	WHITE	200°	5.60	1/2"	RA1414	RELIABLE	F1FR56	SEMI-RECESS	2	225 SF (LH) - 130 SF (OH)
3		DRY SIDEWALL	CHROME	200°	5.60	1"	R5734	RELIABLE	F3QR56	SEMI-RECESS	2	14" x 14"
2		DRY PENDENT	CHROME	200°	5.60	1"	V3506	VICTAULIC	VS1	SEMI-RECESS	2	15" x 15"
3		SIDEWALL	BRASS	200°	5.60	1/2"	RA1435	RELIABLE	F1FR56	N/A	2	14" x 14"
319		TOTAL SPK.										

FDC LEGEND

- 4" FROM SYSTEM
 - 4" GROOVED CHECK VALVE
 - 4" DRAIN 90 w/ BALL DRIP (PIPED TO EXTERIOR)
 - 4" x 2 1/2" x 2 1/2" FDC
 - HORN STROBE
 - CHASE IN CORNER TO CONCEAL PIPE, PROVIDED BY G.C.
- * ALL WIRING/INTERFACING OF ALARMS BY OTHERS
- * ALL PIPING PENETRATING THE EXTERIOR WALL TO BE GALVANIZED



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

SUBMITTAL

PROJECT SQUARE FOOTAGES

1ST FLOOR = 10,396 S.F.
 2ND FLOOR = 10,502 S.F.
 3RD FLOOR = 10,502 S.F.
 4TH FLOOR = 10,502 S.F.
 TOTAL = 41,902 S.F.

PROJECT SUMMARY:

PROJECT NAME: ECHO SUITES
 PROJECT ADDRESS: 545 DOUBLE EAGLE COURT, RENO NV. 89521
 APN: _____
 PROJECT TYPE: NEW T.I.
 TYPE OF CONSTRUCTION: V-A
 OCCUPANCY GROUP(S): R-1
 OCCUPIED LEVELS: 4
 TOTAL SPRINKLERED AREA: 41,902 SQ. FT.
 NFPA CODE REQUIREMENT: NFPA 13 NFPA 13R NFPA 13D
 NUMBER OF SYSTEMS: 4
 SYSTEM TYPE(S): WET ANTI-FREEZE DRY PREACTION
 TOTAL SPRINKLERS: 319
 SPECIAL NOTES: SEE SPRINKLER LEGEND ON EACH SHEET

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 & UNSULATED 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"



GENERAL NOTES

- INTERNATIONAL BUILDING CODE (2018)
 - OCCUPANCY: RESIDENTIAL, R-1
 - TYPE OF CONSTRUCTION: V-A
 - SPRINKLERED AREAS (APPROXIMATE - SEE ARCHITECTURAL PLANS FOR ACTUAL)
 - 1ST FLOOR = 10,396 S.F. (ZONE #1)
 - 2ND FLOOR = 10,502 S.F. (ZONE #2)
 - 3RD FLOOR = 10,502 S.F. (ZONE #3)
 - 4TH FLOOR = 10,502 S.F. (ZONE #4)
 - TOTAL = 41,902 S.F.
 - INSTALLATION STANDARDS: SPRINKLER SYSTEM DESIGNED AND INSTALLED PER NFPA-13, NFPA-14 (2022)
- SPRINKLER PIPE TYPES:
 - 1" BRANCH LINES TO BE BLAZEMASTER CPVC PIPING WITH CEMENTED FITTINGS
 - 1 1/2" THROUGH 2" MAIN & BRANCH LINES TO BE BLAZEMASTER CPVC PIPING WITH CEMENTED FITTINGS
 - 1" BRANCH LINES TO BE BLK SCHEDULE 40 PIPING WITH THREADED FITTINGS
 - 1 1/2" THROUGH 4" MAIN & BRANCH LINES TO BE BLK SCHEDULE 10 PIPING WITH GROOVED FITTINGS
 - MAINS & BRANCH LINES TO BE ROLL-GROOVED BLK SCHEDULE 10 PIPING
- DESIGN CRITERIA
 - CORRIDORS, LOBBIES, STAIRWELLS, TOWERS AND SIMILAR AREAS ARE DESIGNED TO LIGHT HAZARD.
 - MECHANICAL, STORAGE, AND LAUNDRY ROOMS ARE DESIGNED TO ORDINARY HAZARD GROUP 1.
 - RESIDENTIAL SLEEPING ROOMS ARE DESIGNED TO NFPA 13 CRITERIA FOR RESIDENTIAL OCCUPANCIES
 - BATHROOMS LESS THAN 55 S.F. ARE NOT PROTECTED PER NFPA 13 SEC. 9.2.4.1.1
 - REMOTE AREA REDUCTIONS HAVE BEEN TAKEN WHERE APPLICABLE PER NFPA 13 SEC. 19.2.3.2.3
- NOTES:
 - ALL MATERIAL TO BE NEW AND MEET U.L. STANDARDS
 - HANGERS TO BE INSTALLED IN ACCORDANCE WITH NFPA 13 (2022) - SEE PLAN FOR HANGING REQ.
- SYMBOLS USED ON DRAWINGS:
 - 10" PIPE ELEVATION A.F.F
 - 6" PIPE ELEVATION BELOW B.O.D
 - OH ROOM HAZARD CLASSIFICATION (ALL ROOMS ARE CONSIDERED LIGHT HAZARD UNLESS NOTED)
 - HYDRAULIC CALCULATION JUNCTION POINT
 - 0'-0" CEILING HEIGHT
 - 2-WAY SEISMIC BRACING
 - 4-WAY SEISMIC BRACING
- SCOPE OF WORK:
 - TO INSTALL A NEW FIRE SPRINKLER AND STANDPIPE SYSTEM IN THE ECHO SUITES HOTEL. THE SYSTEM SHALL HAVE 4 ZONES; ZONE 1 FEEDING FIRST FLOOR, ZONE 2, FEEDING SECOND FLOOR, ZONE 3, FEEDING THIRD FLOOR, ZONE 4 FEEDING FOURTH FLOOR. ALL RESIDENTIAL FLOORS ARE FED WITH CPVC & DESIGNED TO NFPA 13.
 - ALL AREAS OF THE BUILDING TO BE INSTALLED AND COVERED IN ACCORDANCE WITH THE LOCAL AUTHORITY HAVING JURISDICTION AND PER NFPA 13 (2022)

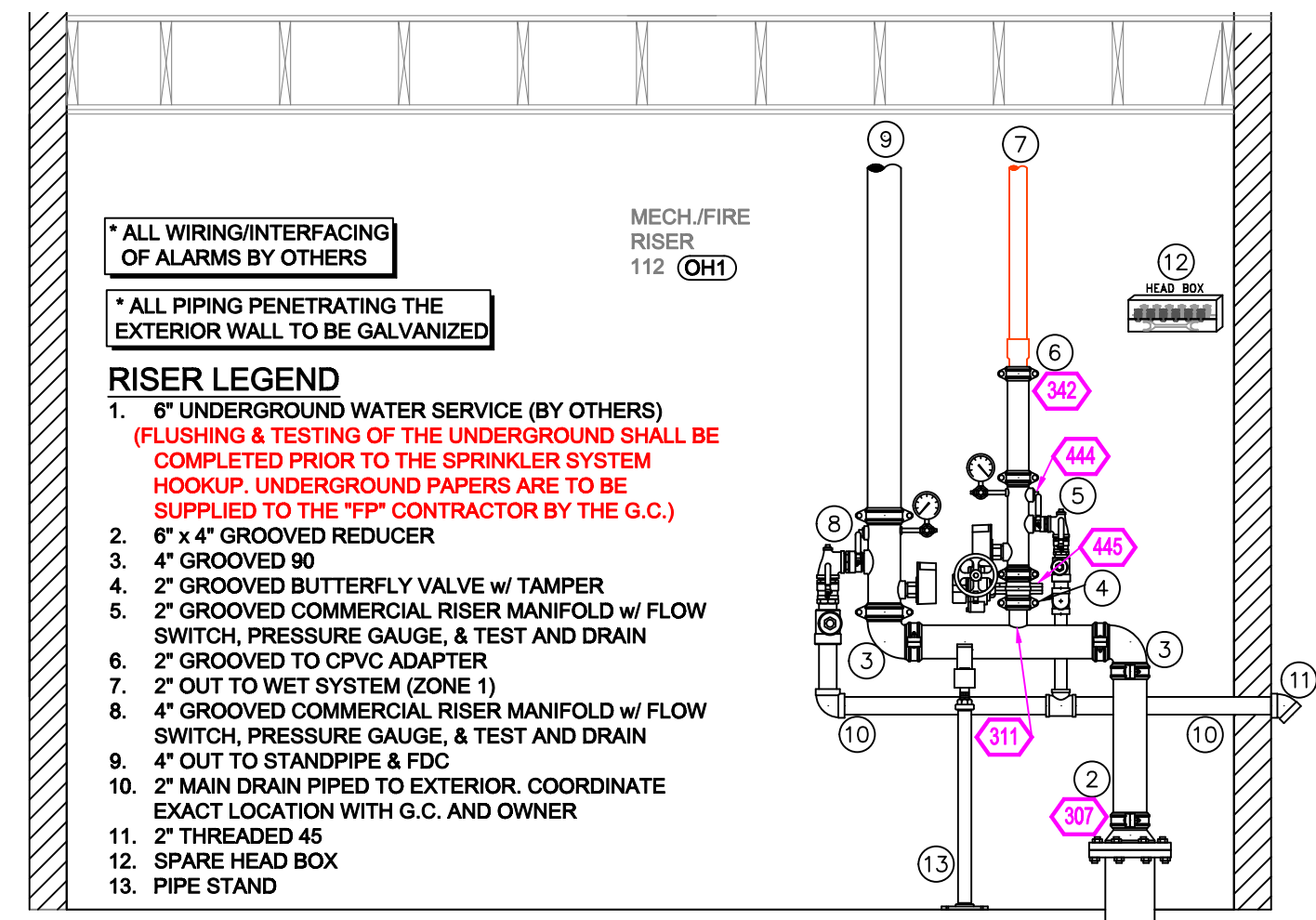
NO.	DATE	REVISIONS	DRAWN	CHECKED

GENERAL CONTRACTOR: _____ AUTHORITY HAVING JURISDICTION: RENO FIRE DEPT
 ADDRESS: 495 E 4TH ST CITY: RENO, NV 89512
 PHONE: 775-334-2300
 CONTACT: _____

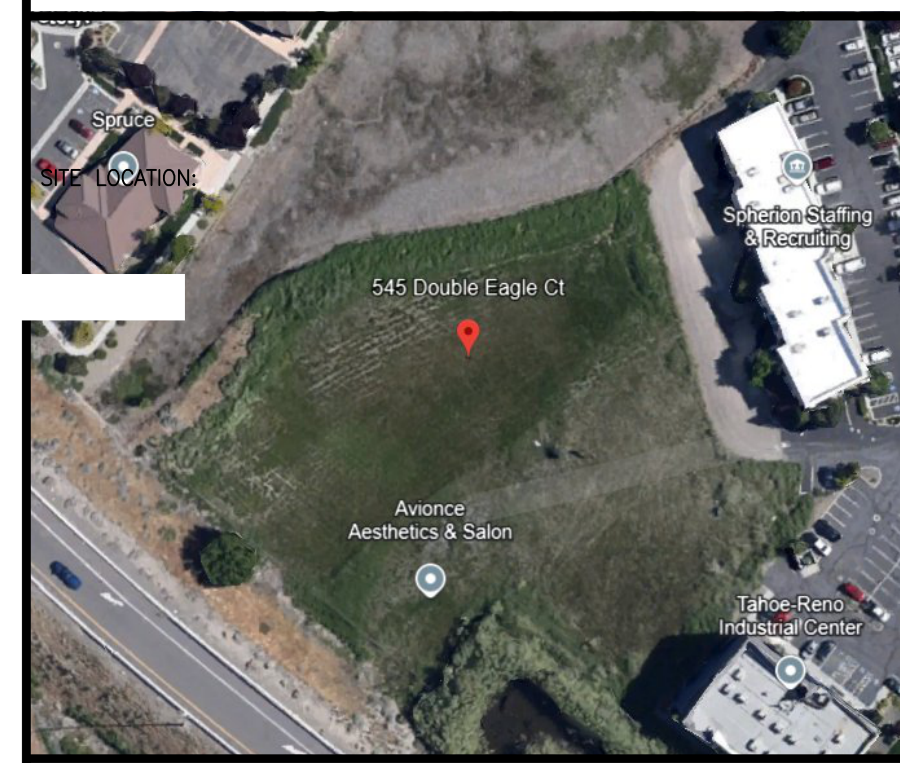
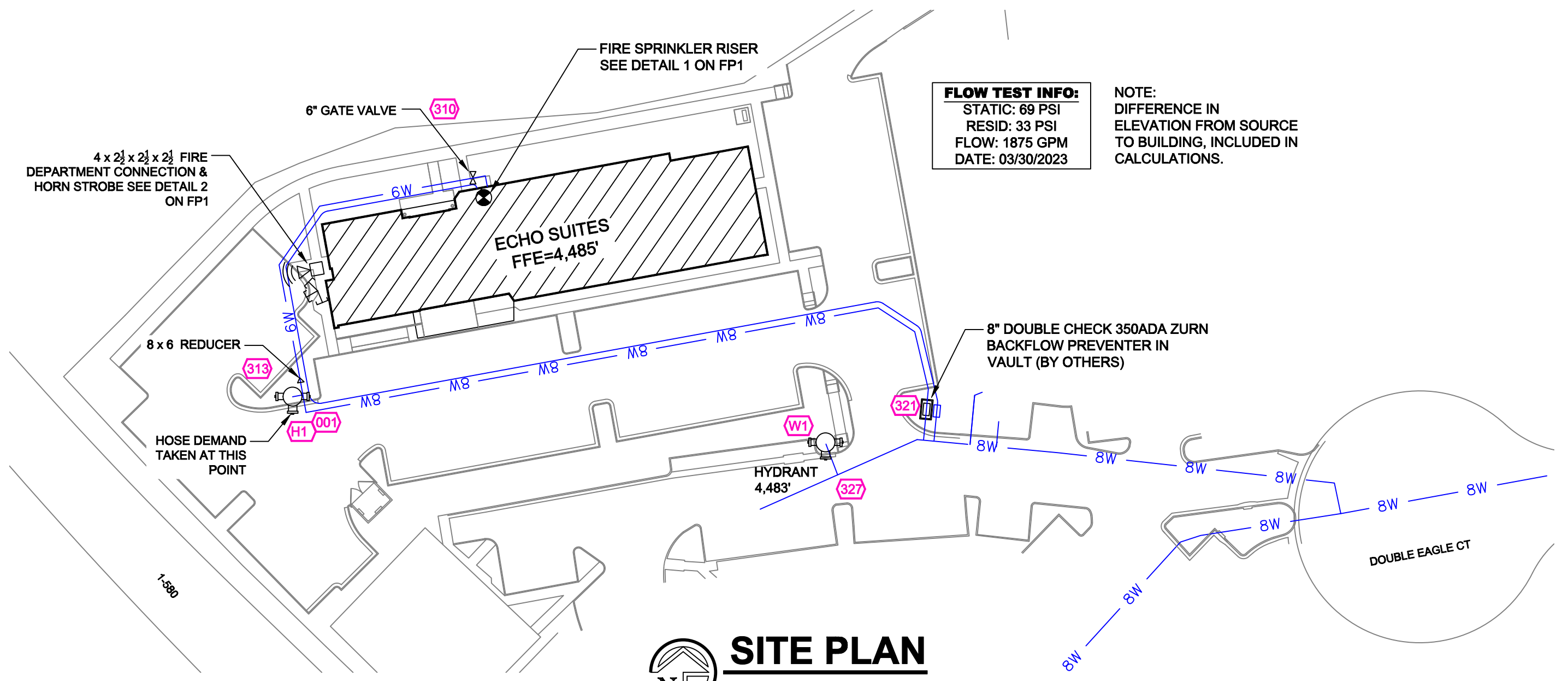
ARCHITECT: MODUS ARCHITECTURE, PLLC. FIELD INSPECTIONS: 1. _____ 2. _____
 ADDRESS: 4040 N CENTRAL EXPY, SUITE 720 CITY: DALLAS, TEXAS 75204 3. _____
 PHONE: 314-302-6864 4. _____

PIPE LEGEND

- BLACK STEEL FIRE SPRINKLER PIPING
- CPVC FIRE SPRINKLER PIPING
- FIRE SPRINKLER STANDPIPE PIPING
- FIRE SPRINKLER FDC PIPING



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

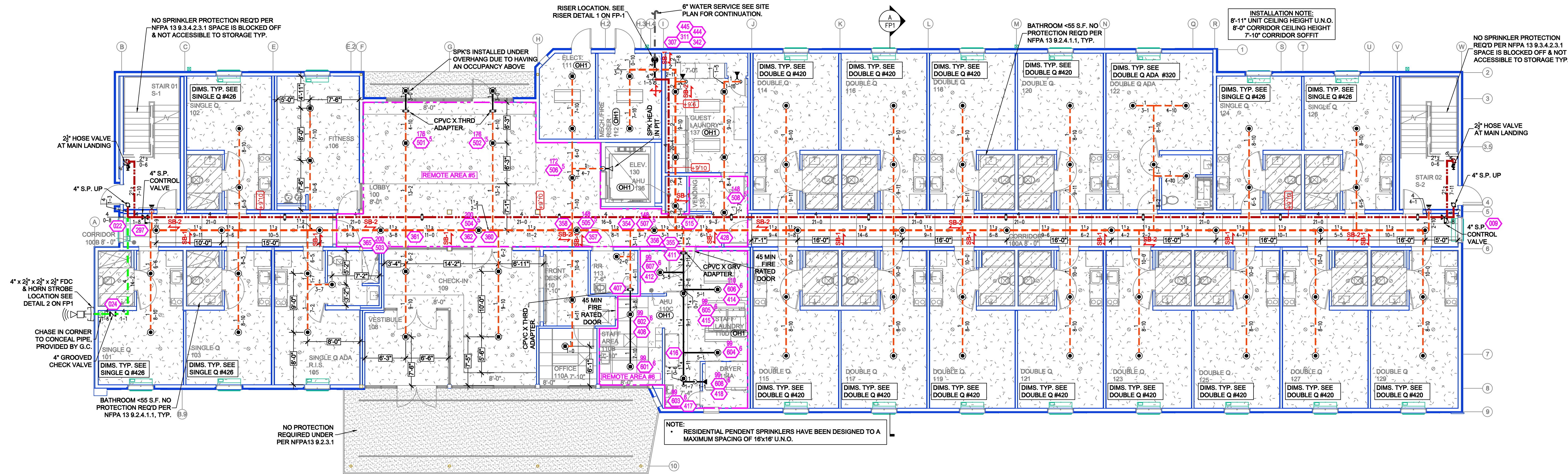


PROJECT NAME: FIRE SPRINKLER PLANS FOR
ECHO SUITES
 545 DOUBLE EAGLE COURT
 RENO, NV 89521

STAMP: NV 89501
 PHONE: 615-370-1779
 FIELD INSPECTIONS:
 1. _____
 2. _____
 3. _____
 4. _____

DRAWING TITLE:
FIRE SPRINKLER PLAN

SCALE: 1/8"=1'-0" JOB NO.: 10/09/2024
 DRAWN BY: _____ DWG NO.: _____
 BORN ON DATE: 10/09/2024 SHEET NO.: FP-1
 FILE: 10/09/2024 SHEET 1 OF 3

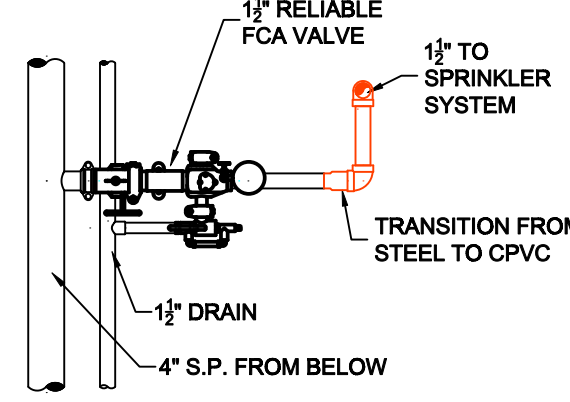


NO.	DATE	REVISIONS	DRAWN	CHECKED

GENERAL CONTRACTOR: AUTHORITY HAVING JURISDICTION:
 ADDRESS: ADDRESS: 495 E 4TH ST
 CITY: CITY: RENO, NV 89512
 PHONE: PHONE: 775-334-2300
 CONTACT: CONTACT:

ARCHITECT: FIELD INSPECTIONS:
 MODUS ARCHITECTURE, PLLC. 1.
 ADDRESS: 4040 N CENTRAL EXPY, SUITE 720 2.
 CITY: DALLAS, TEXAS 75204 3.
 PHONE: 314-302-6864 4.

SECOND FLOOR



ZONE CONTROL DETAIL
 SCALE = 1/2" : 1'-0"

CALC PLACARD

Design Area #:	HAZARD:
5	HAZARD: LIGHT
6	HAZARD: OH1

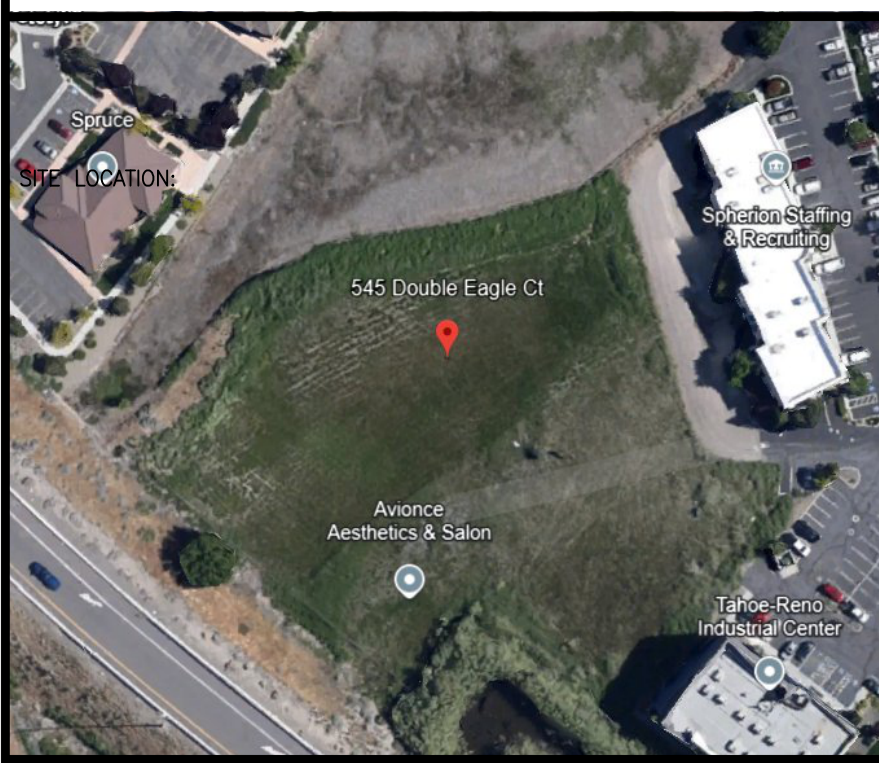
FIRST FLOOR FIRE SPRINKLER PLAN
 SCALE: 1/8" = 1'-0"

SPRINKLER HEAD LEGEND

SYM	QTY	POSITION	FINISH	TEMP	K	NPT	SIN	MFG.	MODEL#	ES/OUT/CHON	HEAD BOX	MAX SPACING
⊙	284	PENDENT	WHITE	165°	4.90	1/2"	RA3516	RELIABLE	F1R53	SEMI-RECESS	2	16' x 16'
⊙	4	SIDEWALL	WHITE	165°	8.00	3/4"	RA882	RELIABLE	F1FR80	SEMI-RECESS	2	16' x 22'
⊙	38	PENDENT	WHITE	200°	6.80	1/2"	RA1414	RELIABLE	F1FR66	SEMI-RECESS	2	225 SF (LH) - 130 SF (OH)
⊙	4	DRY SIDEWALL	CHROME	200°	6.80	1"	RS734	RELIABLE	F3QR66	SEMI-RECESS	2	14' x 14'
⊙	2	DRY PENDENT	CHROME	200°	6.80	1"	V3508	VICTAULIC	VS1	SEMI-RECESS	2	15' x 15'
⊙	3	SIDEWALL	BRASS	200°	6.80	1/2"	RA1435	RELIABLE	F1FR56	N/A	2	14' x 14'
⊙	319	TOTAL SPK.										

PIPE LEGEND

- BLACK STEEL FIRE SPRINKLER PIPING
- CPVC FIRE SPRINKLER PIPING
- FIRE SPRINKLER STANDPIPE PIPING
- FIRE SPRINKLER FDC PIPING



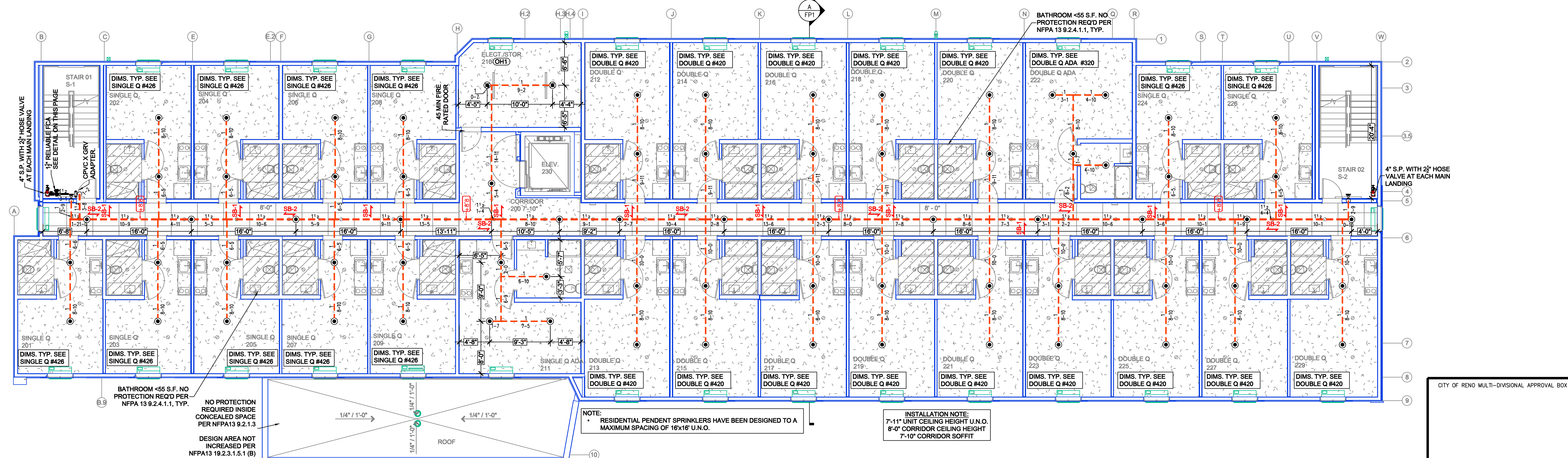
PROJECT NAME: FIRE SPRINKLER PLANS FOR
ECHO SUITES
 545 DOUBLE EAGLE COURT
 RENO, NV 89521

87XAV-RENO, NV 89501
 PHONE: 615-370-1779
 FIELD INSPECTIONS:
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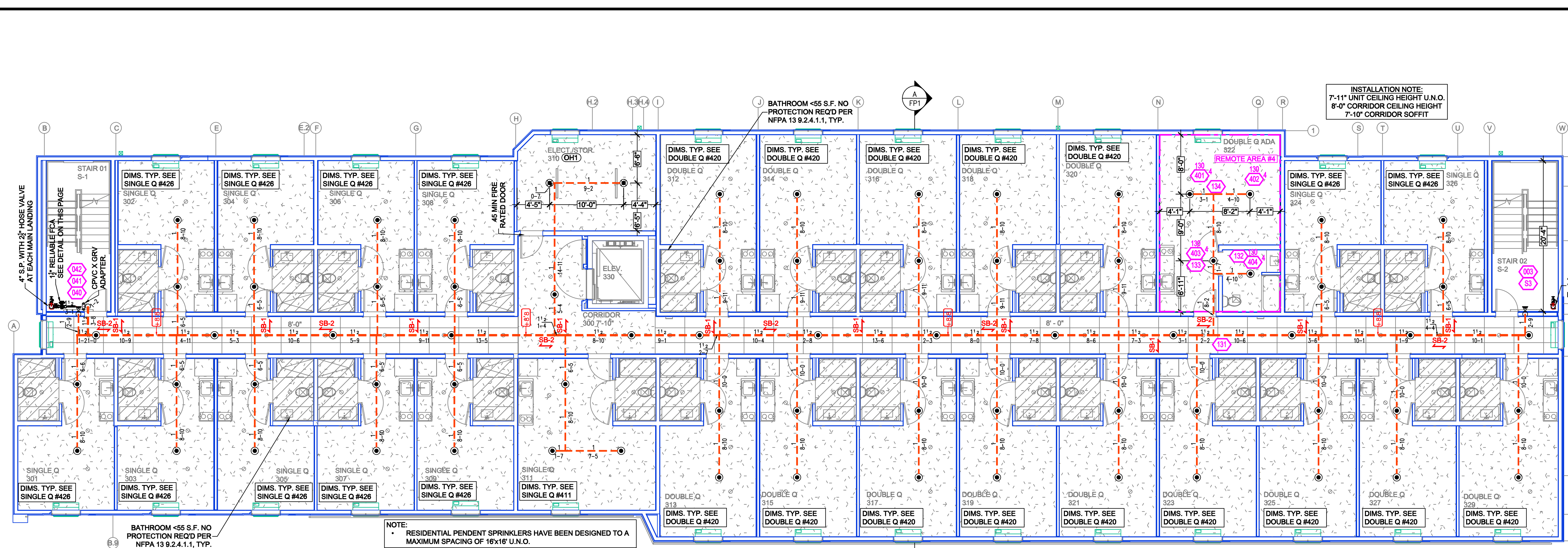
DRAWING TITLE:
FIRE SPRINKLER PLAN

SCALE: 1/8"=1'-0" JOB NO.: 1009/2024
 DRAWN BY: DWG NO.:
 BORN ON DATE: 10/09/2024 FILE: 10/09/2024 SHEET 2 OF 3

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



CITY OF RENO MULTI-DIVISIONAL APPROVAL BOX

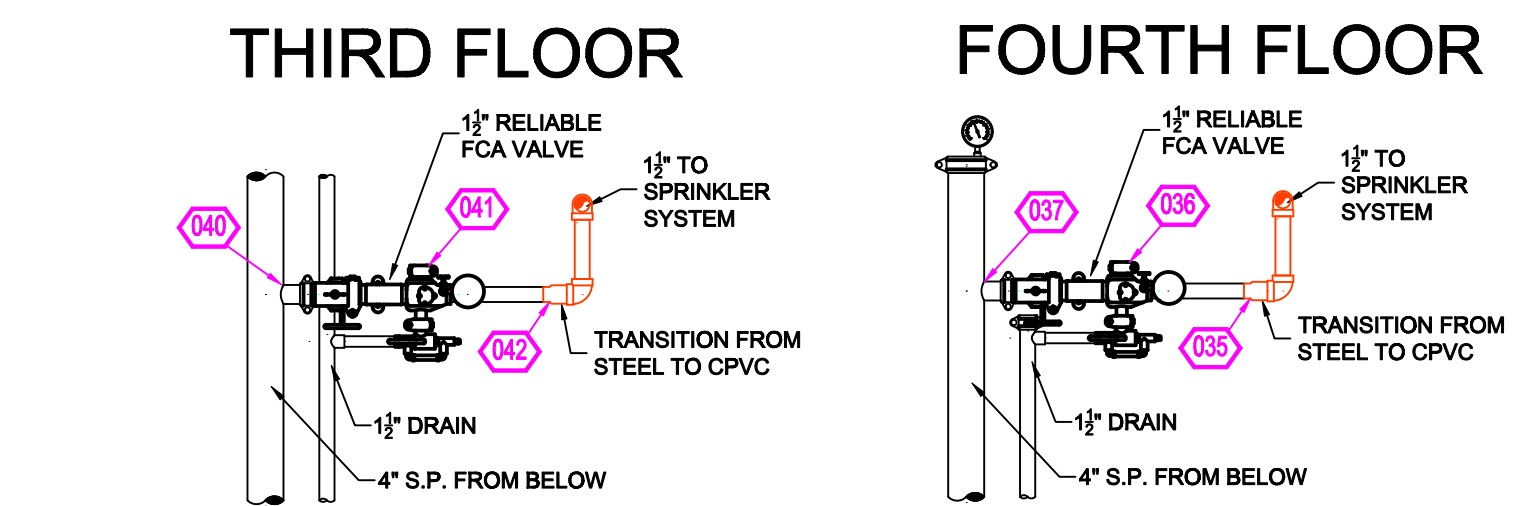


Design Area # 4 HAZARD: RES
 Zone: 3 System Type: WET
 Location: 3RD FLOOR UNIT
 DOUBLE Q ADA 322
 Flowing Outlets: 4 Remote Area: 387
 Density: 0.10
 Req'd @ Base of Riser
 Flow 154.4 gpm @ 51.3 psi
 Req'd @ Source
 Flow 54.4 gpm @ 28 psi
 Calculation Safety: 17.3 psi
 Includes 100 gpm Hose allowance
 NOTE: FOUR MOST DEMANDING RESIDENTIAL SPRINKLERS CALCULATED PER NFPA 13 19.3.1.1

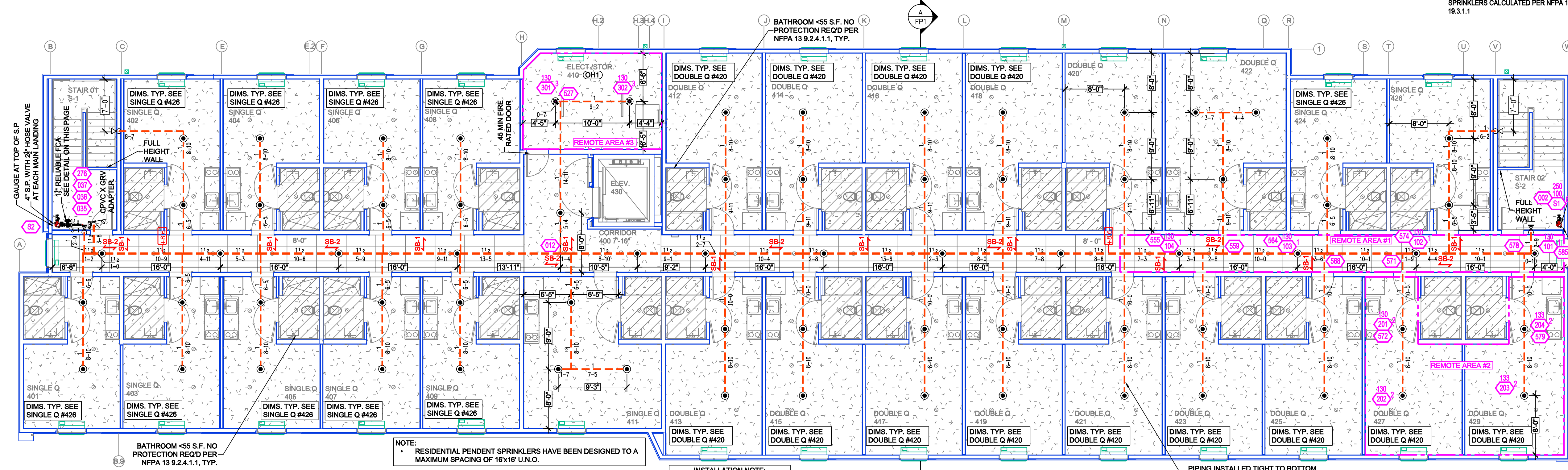
THIRD FLOOR FIRE SPRINKLER PLAN
 SCALE: 1/8" = 1'-0"

SPRINKLER HEAD LEGEND

SYM	QNT	POSITION	FINISH	TEMP	K	NPT	SIN	MFG.	MODEL#	ESCUIT/CEON	HEAD BOX	MAX SPACING
⊙	284	PENDENT	WHITE	155°	4.90	1/2"	RA3516	RELIABLE	F1 RES	SEMI-RECESS	2	16' x 16'
⊙	8	SIDEWALL	WHITE	155°	8.00	3/4"	RA882	RELIABLE	F1FR80	SEMI-RECESS	2	16' x 22'
⊙	39	PENDENT	WHITE	200°	5.60	1/2"	RA1414	RELIABLE	F1FR56	SEMI-RECESS	2	225 SF (LH) - 130 SF (OH)
⊙	3	DRY SIDEWALL	CHROME	200°	5.60	1"	R5734	RELIABLE	F3QR56	SEMI-RECESS	2	14' x 14'
⊙	2	DRY PENDENT	CHROME	200°	5.60	1"	V3506	VICTAULIC	VS1	SEMI-RECESS	2	15' x 15'
⊙	3	SIDEWALL	BRASS	200°	5.60	1/2"	RA1455	RELIABLE	F1FR56	N/A	2	14' x 14'
	319	TOTAL SPK.										



ZONE CONTROL DETAILS
 SCALE: 1/2" = 1'-0"



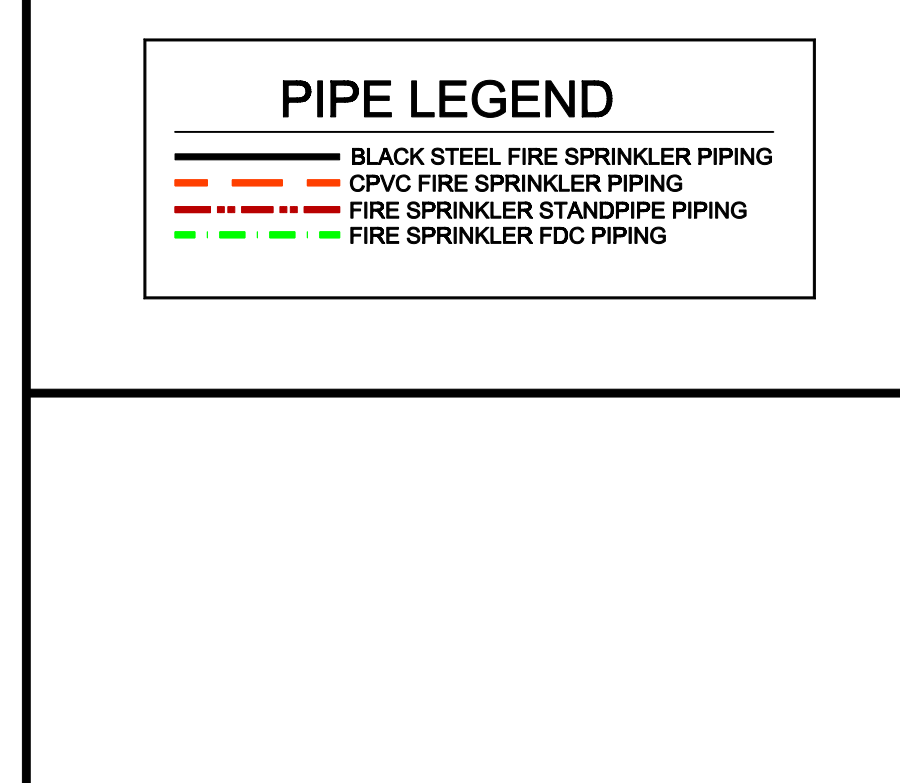
Design Area # 1 HAZARD: RES
 Zone: 4 System Type: WET
 Location: 4TH FLOOR CORRIDOR
 Flowing Outlets: 4 Remote Area: 4 SPK
 Density: 0.10
 Req'd @ Base of Riser
 Flow 153.3 gpm @ 48.1 psi
 Req'd @ Source
 Flow 53.3 gpm @ 20.7 psi
 Calculation Safety: 20.6 psi
 Includes 100 gpm Hose allowance
 NOTE: FOUR MOST DEMANDING RESIDENTIAL SPRINKLERS CALCULATED PER NFPA 13 19.3.1.1

Design Area # 2 HAZARD: RES
 Zone: 4 System Type: WET
 Location: 4TH FLOOR UNIT
 427, 429
 Flowing Outlets: 4 Remote Area: 532
 Density: 0.10
 Req'd @ Base of Riser
 Flow 154.1 gpm @ 52.3 psi
 Req'd @ Source
 Flow 54.1 gpm @ 24.8 psi
 Calculation Safety: 16.3 psi
 Includes 100 gpm Hose allowance
 NOTE: FOUR MOST DEMANDING RESIDENTIAL SPRINKLERS CALCULATED PER NFPA 13 19.3.1.1

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

NO.	DATE	REVISIONS	DRAWN	CHECKED

GENERAL CONTRACTOR: AUTHORITY HAVING JURISDICTION:
 RENO FIRE DEPT
 ADDRESS: 495 E 4TH ST
 CITY: RENO, NV 89512
 PHONE: 775-334-2300
 CONTACT:
 ARCHITECT: FIELD INSPECTIONS:
 MODUS ARCHITECTURE, PLLC. 1.
 ADDRESS: 4040 N CENTRAL EXPY, SUITE 720 2.
 CITY: DALLAS, TEXAS 75204 3.
 PHONE: 314-302-6864 4.



PROJECT NAME: FIRE SPRINKLER PLANS FOR

ECHO SUITES
 545 DOUBLE EAGLE COURT
 RENO, NV 89521

CITY: RENO, NV 89501
 PHONE: 615-370-1779
 FIELD INSPECTIONS:
 1.
 2.
 3.
 4.

CITY OF RENO APPROVAL

CITY OF RENO MULTI-DIVISIONAL APPROVAL BOX

DRAWING TITLE: **FIRE SPRINKLER PLAN**

SCALE: 1/8"=1'-0" JOB NO.: 1009/2024
 DRAWN BY: DWG NO.:
 BORN ON DATE: 10/09/2024 FILE: 10/09/2024 SHEET 3 OF 3