

## General Notes

- 1. The fire alarm system shall be designated as "Remote Station" service per NFPA 72.
- 2. The fire alarm system shall be "Power Limited" as defined by NFPA 70 Article 760. 3. The fire alarm system shall provide battery backup power capable of running the system in
- standby operation for 24 hours followed by 5 minutes of alarm operation.
- 4. Conduits shall have no more than 40% fill per NFPA 70. 5. The primary source of power for the fire alarm system shall be a 120 VAC House Power dedicated circuit and shall include a breaker locking device.
- 6. The fire alarm initiation, notification, and SLC circuits shall be class "B". All fire stop penetrations shall be sealed with listed fire stop materials.
- 8. All equipment shall be installed to meet the requirements of NFPA 72 chapter 10 in regards to voltage, temperature, and humidity. The fire alarm control panel shall have an earth ground connection with a minimum size #12AWG copper conductor.

## Calculations

	Autocall 2008FS FACP Load Calcula	itor					
Job Name:	Job Name: Example Project		ID: P1		Date:	Date: 5/20/202	
Area Served:	Whole System	Loc	ation:	Exterior of G		arage 1004	
Model Number	Description	Qty		Standby	Total Standby	Alarm	Total Alarm
A008-9101	Main Board	1	Х	0.13	0.13	0.16	0.16
NA	IDC Circuit @ Full Load	6	Χ	0.009	0.054	0.06	0.36
			Χ		0		0
NAC1	Weatherproof Horn / Strobe	1	X	0	0	0.249	0.249
NAC2		0	X	0	0		0
NAC3		0	X	0	0		0
NAC4		0	Χ	0	0		0
	Total Currents:			Standby	0.18	Alarm	0.77
	Battery Calculations:						
24 hr	Hours of Standby Required:	24	X	0.18	=	4.42	
5 Min	Minutes of Alarm Time Required:	0.084	X	0.77	=	0.06	
	Ampere Hour:					4.48	
	Derating Factor:					1.20	
	Required Ampere Hour:					5.38	
	Battery Amp Hour To Be Used:					7AH	

## scope of work

- Install new zoned fire alarm panel & devices per plans, for the primary
- purpose of monitoring the building's fire sprinkler system • Test & confirm system supervision as required.

## **Zone List**

FIRE ALARM ZONE LIST		
ZONE	DESCRIPTION	
1	FACP Smoke Detector	
2	Pull Station	
3	Garage 1004 Water Flow	
4	Garage 1004 Tamper	
5	Garage 1027 Water Flow	
6	Garage 1027 Tamper	

## **Material List**

<u>Quantity</u>	<u>Description</u>
01	2008FS FACP
01	SLE-MAX2-FIRE
01	A4098-5601 Conventional 2 Wire Smoke Head
01	A4098-5207 Conventional Detector Base
01	AC4907-9131 Conventional WP Horn/Strobe
01	MPSR1-SHTW-GE WP Pull Station
01	STI—1200A NEMA Pull Station Enclosure
01	E120V-GT 120v Surge Protector
03	DTK-2MHLP24BWB 2-slot 24v Surge Protector
02	PS1270F1 12v 7ah SLA Battery

## **Project Data**

Florida Building Code, 8th Edition, 2023 National Electric Code, 2020 (NFPA 70) Florida Fire Prevention Code, 8th Edition, 2023 Fire Code NFPA 1, 2021 Edition Life Safety Code NFPA 101, 2021 Edition National Fire Alarm and Signaling Code, NFPA 72, 2019 Edition

#### Occupancy Group

NFPA 101

CH 30 New Apartment Bldg

# Fire Stop Detail

## 1. WALL ASSEMBLY

THE 1, 2, 3 OR 4 HOUR FIRE RATED GYPSUM WALL BOARDS/STUD WALL ASSEMBLY SHALL BE CONSTRUCTED OF THE MATERIALS AND IN THE MANNER DESCRIBED IN THE INDIVIDUAL U300 OR U400 SERIES WALL OR PARTITION DESIGN IN THE UL FIRE RESISTANCE DIRECTORY AND SHALL INCLUDE THE FOLLOWING CONSTRUCTION FEATURES.

### A. STUDS

- WALL FRAMING MAY CONSIST OF EITHER WOOD STUDS (MAXIMUM 2 HOUR FIRE RATED ASSEMBLIES) OR STEEL CHANNEL STUDS. WOOD STUDS TO CONSIST ON NOM 2x4in. LUMBER SPACED IN 16in. OC (On Center) WIT (Weight) NOM (Nominal) 2x4in. LUMBER, PLATES AND CROSS BRACES. STEEL STUDS TO BE 3-38in. WIDE BY 1-3/8 IN. DEEP CHANNELS SPACED A MAXIMUM 24in. OC.

- NOM 1  $_{\rm /2~OR}$  3/8 in. THICK, 4ft. WIDE WITH SQUARE OR TAPERED EDGE. THE GYPSUM WALL BOARD RYPS, THICKNESS, NUMBER OF LAYERS, FASTENER TYP AND SHEET ORIENTATION SHALL BE SPECIFIED IN THE INDIVIDUAL U300 OR U400 SERIES DESIGN IN THE UL FIRE RESISTANCE DIRECTORY. MAX. DIAMETER OF AN OPENING IS 13-1/2 IN.

#### 2. PIPE OR CONDUIT

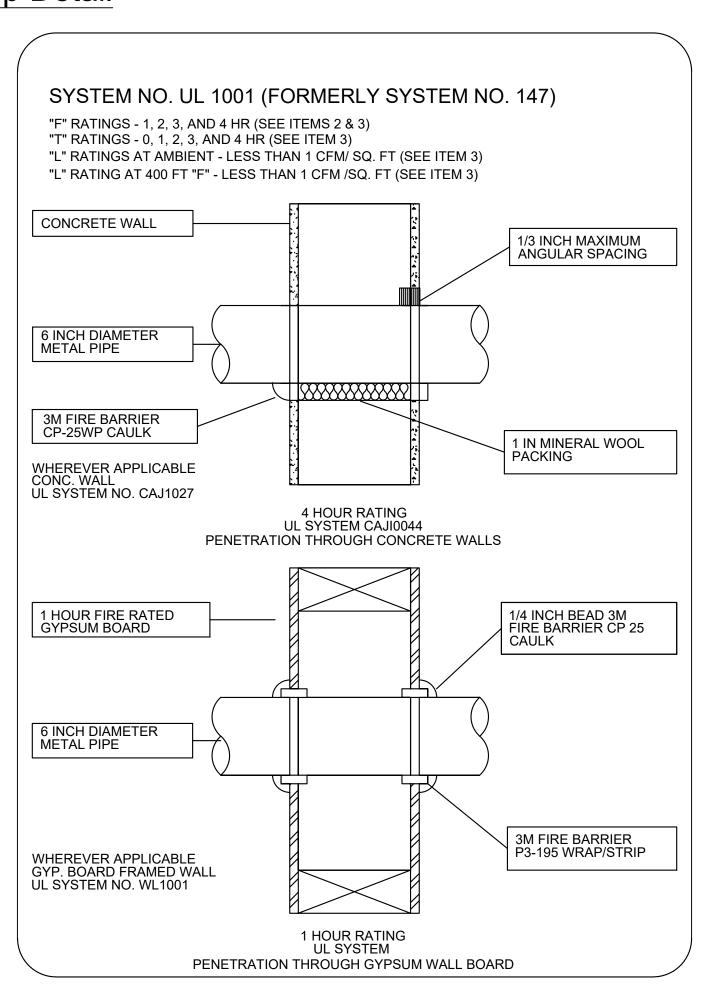
- NOM 12in. DIAMETER (OR SMALLER) SCHEDULE 10 (OR HEAVIER) STEEL PIPE NOM 6in. DIAMETER (OR SMALLER) STEEL CONDUIT, NOM 4in. DIAMETER (OR SMALLER) STEEL (OR SMALLER) FLEXIBLE STEEL CONDUIT. WHEN COPPER PIPE OR FLEXIBLE STEEL CONDUIT IS USED, MAX. "F" RATING OR FIRE STOP SYSTEM (ITEM STRUTTED USING STEEL CHANNEL STUDS). A MAX. OF ONE PIPE OD CONDUIT IS PERMITTED IN THE FIRST STOP SYSTEM, PIPE OR CONDUIT TO BE INSTALLED NEAR CENTER OF STUD CAVITY AND WIDTH TO BE RIGIDLY SUPPORTED ON BOTH SIDES OF WALL ASSEMBLY.

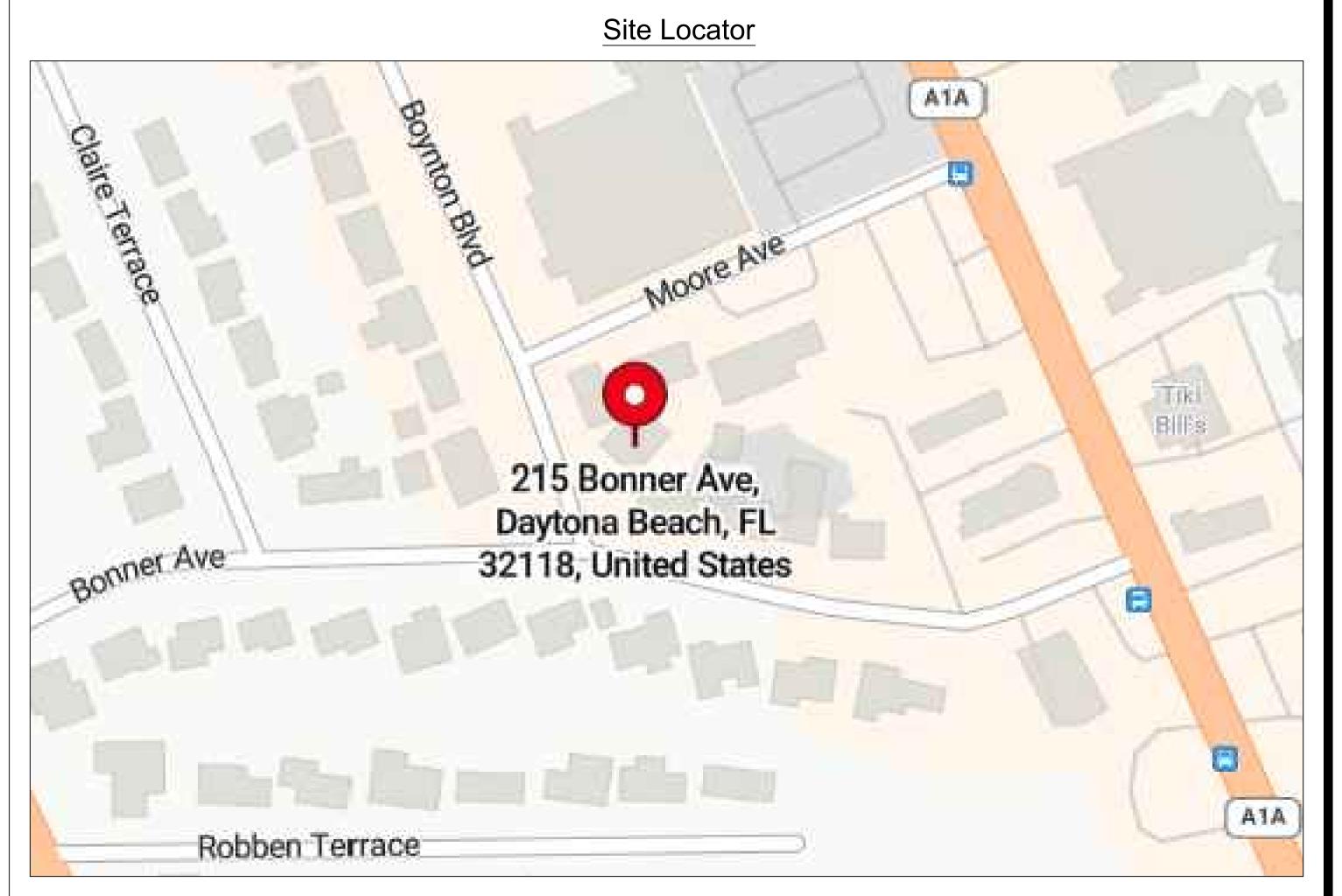
#### 3. FILL, VOID OR CAVITY MATERIAL

- CAULK FILL MATERIAL INSTALLED TO COMPLETELY FILL ANNULAR SPACE BETWEEN PIPE OR CONDUIT AND GYPSUM WALLBOARD AND WITH A MINIMUM 1/4 IN. DIAMETER BEAD OF CAULK APPLIED TO PERIMETER OF PIPE OR CONDUIT AT IT'S EGRESS FROM THE WALL CAULK INSTALLED SYMMETRICALLY ON BOTH SIDES OF THE WALL ASSEMBLY. RATING OF THE WALL ASSEMBLY IN WHICH IT IS INSTALLED, AS SHOWN IN THE FOLLOWING TABLE. THE HOURLY RATING OF THE "T" RATING OF THE FIRE STOP SYSTEM IS DEPENDENT UPON THE TYPE OR SIZE OF THE PIPE OR CONDUIT AND THE HOURLY FIRE RATING OF THE WALL ASSEMBLY IN WHICH IT IS INSTALLED, AS

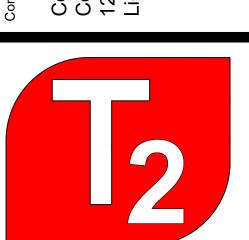
- WHEN COPPER PIPE IS USED, "T" RATING IS 0 NOM MINNESOTA MINING & MFG. CO. TYPES CP-25N/S, CP-25WB, CP-25WB+(NOTE: "L" RATINGS APPLY WHEN TYPE CP-25WS+CAULK IS USED).

MAXIMUM PIPE OR CONDUIT INCH DIAMETER	ANGULAR SPACE IN INCHES	"F" RATING HOUR	"T" RATING HOUR
1	0 TO 3/16	1 OR 2	0 + 10R 2
1	1/4 TO 1/2	3 OR 4	3 OR 4
4	0 TO 1/4	1 OR 2	0
6	1/4 TO 1/2	3 OR 4	0
12	3/16 TO 3/8	1 OR 2	0





Revisions



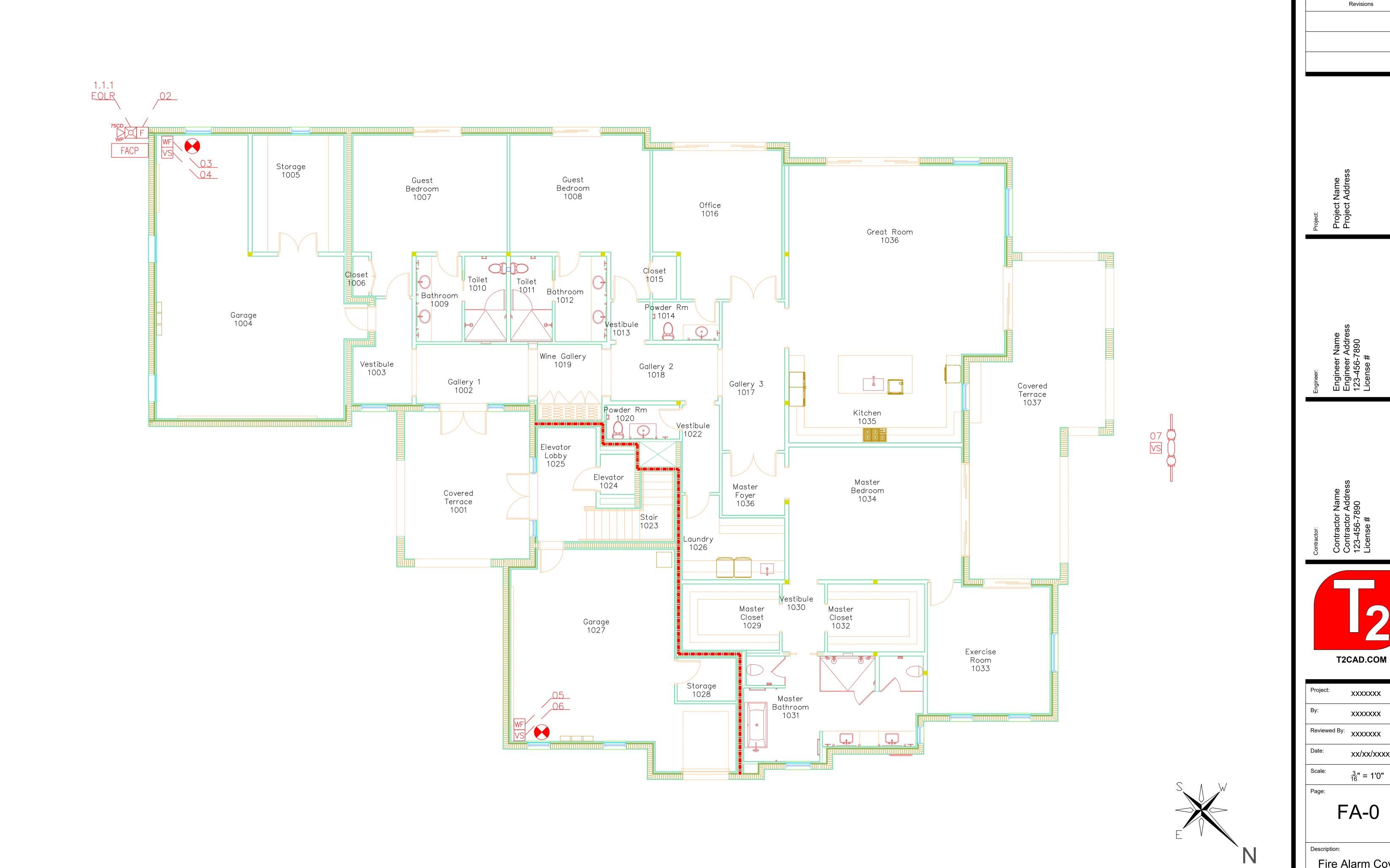
T2CAD.COM

Project:	xxxxxx
Ву:	xxxxxx
Reviewed By:	xxxxxx
Date:	xx/xx/xxxx
Scale:	As Noted

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Description:

Fire Alarm Cover Page W/ Design **Details** 





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Fire Alarm Cover Page W/ Design Details