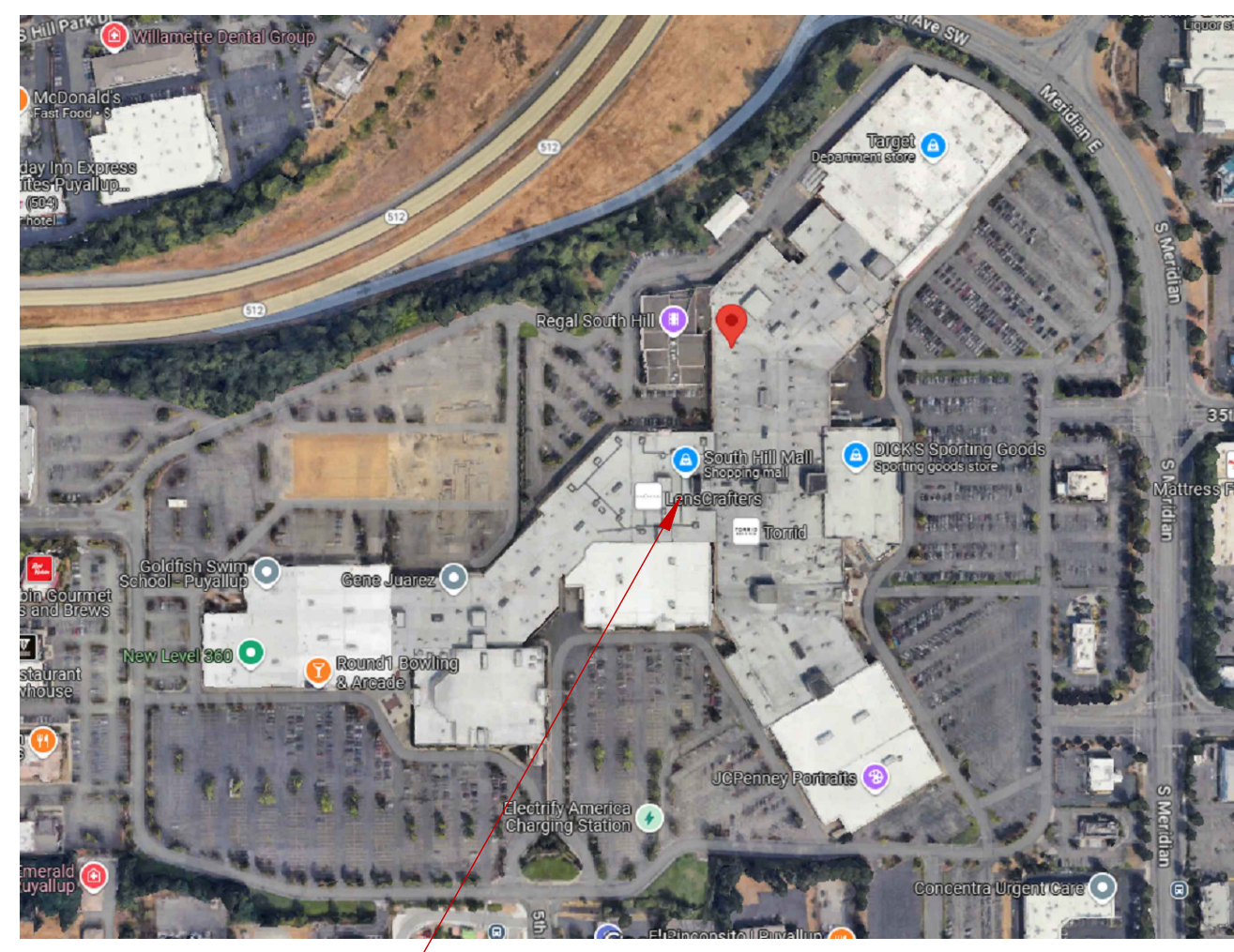


PANDORA
SOUTH HILL MALL #1315
3500 SOUTH MERIDIAN, SPACE #305
PUYALLUP, WA 98373
FIRE ALARM TENANT IMPROVEMENT DRAWINGS



QTY	SYMBOL	DESCRIPTION	MANUF. & PART #	MOUNTING	MOUNT IN
E	FACP	FIRE ALARM CONTROL PANEL	EXISTING	WALL - TOP @ 66"	EXISTING TO REMAIN
E	FPS	FIRE ALARM POWER SUPPLY	EXISTING	WALL - TOP @ 66"	EXISTING TO REMAIN
4	(S)	SMOKE DETECTOR (NEW)	NOTIFIER - FSP-951-IV	CEILING	ON DETECTOR BASE
4	(S)	SMOKE DETECTOR BASE (NEW)	NOTIFIER - B300-6-IV	CEILING	4 SQ. DEEP W/ SINGLE GANG MUD RING - MOUNTED FLUSH
3	(S)	CEILING MOUNT SPEAKER / STROBE	SYSTEM SENSOR - SPSCRLED	CEILING	4 SQ. DEEP - MOUNTED FLUSH
1	(S)	CEILING MOUNT STROBE	SYSTEM SENSOR - SCRLED	CEILING	4 SQ. DEEP - MOUNTED FLUSH

ABBREVIATION	DESCRIPTION	ABBREVIATION	DESCRIPTION
E	EXISTING	AWG	AMERICAN WIRE GAUGE
G	WITH GUARD	TWP	TWISTED PAIR
P	PENDENT MOUNT	TWSP	TWISTED SHIELDED PAIR
R	REMOVE AND RELOCATE	FPLP	FIRE POWER LIMITED PLENUM
S	SOUNDER BASE	FPLR	FIRE POWER LIMITED RISER
WOL	WEATHERPROOF		
EOL	END OF LINE RESISTOR		
EOLR	END OF LINE RELAY		



PANDORA - SOUTH HILL MALL
 3500 SOUTH MERIDIAN,
 305# PUYALLUP, WA 98373

- CODE ANALYSIS**
- BUILDING INFORMATION:
- A) OCCUPANCY CLASSIFICATION(S): B/M
 - B) OCCUPANCY LOAD(S): 16 OCC
 - C) SPRINKLERS: YES
 - D) CONSTRUCTION TYPE: IIB
 - E) BUILDING HEIGHT: 1 STORY
 - F) PROJECT SQUARE FOOTAGE: ~928 S.F.
 - G) APPLICABLE CODES:
 2021 INTERNATIONAL FIRE CODE
 2019 NFPA 72
 2021 NEC
 STATE AND LOCAL MARSHAL REGULATIONS
 - H) CIRCUIT CLASSIFICATION: POWER LIMITED
 - I) PARCEL NUMBER: 6021010051

GENERAL NOTES:

- SCOPE OF WORK: THIS PROJECT SHALL INCLUDE. TENANT IMPROVEMENTS TO EXISTING FIRE ALARM SYSTEM AT THE SOUTH HILLS MALL. CONNECT SPEAKER STROBES TO EXISTING SPEAKER AND STROBE CIRCUITS LOCATED IN TENANT SPACE. EXISTING FIRE ALARM POWER SUPPLY TO REMAIN. CONNECT NEW SLC DEVICES TO EXISTING SLC CKT.
- THESE DRAWINGS ARE DIAGRAMMATIC. REFER TO THE ARCHITECTURAL DRAWINGS FOR EXACT DIMENSIONS.
- INSTALLATION SHALL COMPLY WITH NEC, NFPA 72 AND ALL OTHER APPLICABLE CODES AS REQUIRED BY THE LOCAL AUTHORITY HAVING JURISDICTION.
- WIRING DEPICTED ON THESE PLANS IS SCHEMATIC - ACTUAL WIRE LOCATIONS MAY DIFFER FROM THESE PLANS. WIRING SHALL BE PERFORMED AS ACTUAL BUILDING CONSTRUCTION CONDITIONS ALLOW AND TO MINIMIZE PENETRATIONS THROUGH AREA SEPARATION WALLS AND FIRE WALLS. THE USE OF A RACEWAY IS PERMITTED AS LONG AS NO 110V OR HIGHER VOLTAGE CABLES ARE IN THE SAME RACEWAY.
- FIRE RATINGS SHALL BE MAINTAINED FOR ALL PENETRATIONS THROUGH FIRE-RATED CONSTRUCTION.
- POWER FOR ALL FIRE ALARM PANELS AND FIRE ALARM POWER SUPPLIES MUST BE PROVIDED BY A DEDICATED AC BRANCH CIRCUIT. THE LOCATION OF THE BRANCH CIRCUIT BREAKER SHALL BE PERMANENTLY IDENTIFIED AT THE CONTROL UNIT, MECHANICALLY PROTECTED, ACCESSIBLE ONLY TO AUTHORIZED PERSONNEL AND SHALL BE RED AND LABELED "FIRE ALARM CIRCUIT CONTROL" IN ACCORDANCE WITH NFPA 72. ELECTRICAL CONTRACTOR SHALL PERFORM LOAD CALCULATIONS TO DETERMINE SIZE OF WIRING AND BREAKERS FOR ALL FIRE ALARM AC BRANCH CIRCUITS BASED ON THE INFORMATION PROVIDED IN THE BATTERY CALCULATIONS FOR THE FIRE ALARM EQUIPMENT.
- POWER-LIMITED AND NONPOWER-LIMITED CIRCUIT WIRING MUST REMAIN SEPARATED IN CABINET. ALL POWER-LIMITED CIRCUIT WIRING MUST REMAIN AT LEAST 0.25" AWAY FROM ANY NONPOWER-LIMITED CIRCUIT WIRING. FURTHERMORE, ALL POWER-LIMITED AND NONPOWER-LIMITED CIRCUIT WIRING MUST ENTER AND EXIT THE CABINET THROUGH DIFFERENT KNOCK OUTS AND/OR SEPARATE CONDUITS.
- WHEN UTILIZING CLASS "A" CIRCUITS, SEPARATE OUTGOING AND RETURN CONDUCTORS OF CLASS "A" CIRCUITS BY A MINIMUM OF 12" WHERE RUN VERTICALLY AND 48" WHERE RUN HORIZONTALLY.
- WHEN UTILIZING SHIELDED CABLE TIE SHIELDS THROUGH AND INSULATE AT EACH JUNCTION BOX. INSULATE AND TAPE BACK AT END.
- ALL FIRE ALARM CABLING SHALL BE ACCEPTABLE TO THE FIRE ALARM EQUIPMENT MANUFACTURER FOR THE INTENDED PURPOSE. CABLES USED IN VERTICAL RUNS SHALL BE TYPE FPLP OR FPLR. CABLE SPLICES OR TERMINATIONS SHALL BE MADE IN LISTED FITTINGS, BOXES, ENCLOSURES, FIRE ALARM DEVICES, OR UTILIZATION EQUIPMENT. WHERE INSTALLED EXPOSED, CABLES SHALL BE ADEQUATELY SUPPORTED AND INSTALLED IN SUCH A WAY THAT MAXIMUM PROTECTION AGAINST PHYSICAL DAMAGE IS AFFORDED BY BUILDING CONSTRUCTION. WHERE LOCATED WITHIN 7 FT OF THE FLOOR, CABLES SHALL BE SECURELY FASTENED IN AN APPROVED MANNER AT INTERVALS OF NOT MORE THAN 18 IN.
- SMOKE DETECTORS SHALL NOT BE INSTALLED UNTIL AFTER CONSTRUCTION CLEAN-UP IS COMPLETED AND FINAL.
- LOCATE SMOKE DETECTORS A MINIMUM OF THREE (3) FEET FROM MECHANICAL DIFFUSERS. WALL-MOUNTED SMOKE DETECTORS SHALL BE LOCATED A MAXIMUM OF 12" FROM CEILING.
- PROVIDE SYNCHRONIZATION OF ALL VISUAL NOTIFICATION APPLIANCE CIRCUITS. PROVIDE ALL REQUIRED SYNC MODULES. PROVIDE A MULTI-SYNC MODE SLAVE CONNECTION BETWEEN ALL SYNC MODULES.
- VERIFY ALL FIELD SELECTABLE AUDIBILITY SETTINGS OF NOTIFICATION APPLIANCES WITH FIRE ALARM CONTRACTOR.
- UPON COMPLETION OF THE FIRE ALARM SYSTEM INSTALLATION AND PROGRAMMING, THE INSTALLING CONTRACTOR SHALL PERFORM FINAL TESTING OF THE ENTIRE SYSTEM, PER ALL APPLICABLE CODES, AND SHALL COORDINATE AND PERFORM A FINAL FIRE ALARM SYSTEM INSPECTION.
- PROVIDE OFF-SITE MONITORING AS REQUIRED BY THE INTERNATIONAL FIRE CODE, SECTION 907.6.6 AND THE LOCAL AUTHORITY HAVING JURISDICTION.
- INSTALLING CONTRACTOR SHALL, PHYSICALLY, LABEL ALL INITIATING DEVICES AND NOTIFICATION APPLIANCE CIRCUIT END OF LINE (WHEN WIRING CLASS "B"). THESE LABELS SHALL BE IN PLACE PRIOR TO START-UP AND TESTING.
- ROOMS CONTAINING CONTROLS FOR AIR-CONDITIONING SYSTEMS, SPRINKLER RISERS AND VALVES OR OTHER FIRE DETECTION, SUPPRESSION OR CONTROL ELEMENTS SHALL BE IDENTIFIED WITH PERMANENTLY MOUNTED SIGNS WITH LETTERING NOT LESS THAN 2 INCHES TALL WITH A PRINCIPAL STROKE OF NOT LESS THAN 3/8 INCH. LETTERS SHALL CONTRAST WITH BACKGROUND.

FIRE RESISTANCE RATINGS OF STRUCTURAL COMPONENTS

- | | |
|--|---------------|
| 1. STRUCTURAL FRAME | 0 HOUR RATING |
| 2. BEARING WALLS - EXTERIOR & INTERIOR | 0 HOUR RATING |
| 3. NON-BEARING WALLS | 0 HOUR RATING |
| 4. FLOOR CONSTRUCTION | 0 HOUR RATING |
| 5. ROOF FRAMING | 0 HOUR RATING |

FACP Additional Load Battery Calculation		1/30/2026
PROJECT NAME: SOUTH HILLS MALL PANDORA		
Required Standby Time:	24 Hours	
Required Alarm Time:	15 Minutes	
System Manufacturer: Notifier		
AC Branch Current		
AC Branch Current:	2.08 Amps @ 120V	
Maximum NAC Output		
Panel Max:	6.50 Amps	
Circuit Max:	3.00 Amps	
Regulated Load in Standby		
Device Type	Model	Number of Devices
SMOKE DETECTOR	FSP-951-IV	4
		X
		0.000200 =
		0.000800
TOTAL STANDBY LOAD 0.000800		
Regulated Load in ALARM		
Device Type	Model	Number of Devices
SMOKE DETECTOR	FSP-951-IV	4
		X
		0.004500 =
		0.018000
TOTAL ALARM LOAD 0.018000		
Battery Requirements		
Standby Load Current (Amps)	0.000800 X	Required Standby Time in Hours 24.00000 = 0.019200
Alarm Load Current (Amps)	0.018000 X	Required Alarm Time in Hours 0.25000 = 0.048500
Total Ampere Hours (before derating factor)		0.067700
Derating Factor	X	1.2
TOTAL AMPERE HOURS REQUIRED		= 0.081240
BATTERIES TO BE PROVIDED (2 - 12v) FIELD VERIFY		

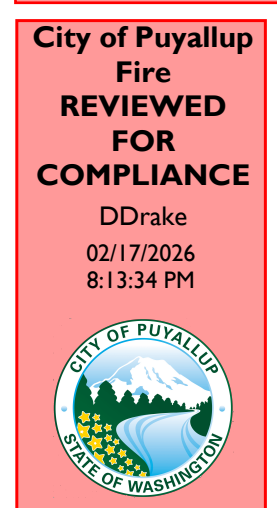
NOTE: THE ABOVE BATTERY CALCULATION IS A COMBINED TOTAL OF THE ADDITIONAL LOADS THAT WILL BE ADDED FROM THE SCOPE OF THIS PROJECT. FIELD VERIFY THE SIZE OF THE EXISTING BATTERIES AND UPSIZE ACCORDINGLY.

FPS Additional Load Battery Calculation		1/30/2026
PROJECT NAME: SOUTH HILLS MALL PANDORA		
Required Standby Time:	24 Hours	
Required Alarm Time:	15 Minutes	
AC Branch Current		
AC Branch Current:	2.08 Amps @ 120V	
Maximum NAC Output		
Panel Max:	6.50 Amps	
Circuit Max:	3.00 Amps	
Regulated Load in Standby		
Device Type	Model	Number of Devices
TOTAL STANDBY LOAD 0.000000		
Regulated Load in ALARM		
Device Type	Model	Number of Devices
FPS1.1 (See Voltage Drop Calculations)		0.176000 =
		0.176000
TOTAL ALARM LOAD 0.176000		
Battery Requirements		
Standby Load Current (Amps)	0.000000 X	Required Standby Time in Hours 24.00000 = 0.000000
Alarm Load Current (Amps)	0.176000 X	Required Alarm Time in Hours 0.25000 = 0.044000
Total Ampere Hours (before derating factor)		0.044000
Derating Factor	X	1.2
TOTAL AMPERE HOURS REQUIRED		= 0.052800
BATTERIES TO BE PROVIDED (2 - 12v) FIELD VERIFY		

NOTE: THE ABOVE BATTERY CALCULATION IS A COMBINED TOTAL OF THE ADDITIONAL LOADS THAT WILL BE ADDED FROM THE SCOPE OF THIS PROJECT. FIELD VERIFY THE SIZE OF THE EXISTING BATTERIES AND UPSIZE ACCORDINGLY.

Point to Point NAC Voltage Drop Calculation	
Date:	1/30/2026
Project Name:	SOUTH HILLS MALL PANDORA
Circuit Number:	FPS1.1
Nominal System Voltage:	20.4 volts
Minimum Device Voltage:	16.0 volts
Distance from source to 1st device:	21 feet
Wire Gauge for balance of circuit:	14
	3.07
	14
	3.07
Max Output Current:	3.00 amps
Total Circuit Current:	0.176 amps
Spare Current Capacity:	20%
End of Line Voltage:	20.35 volts
Notification Appliance Manufacturer:	System Sensor
Circuit is within limits	
Speaker Identifier	Device Model #
S1.1.1	N1.1.1 SPSCRLED 75
S1.1.2	N1.1.2 SPSCRLED 75
S1.1.3	N1.1.3 SPSCRLED 15
	N1.1.4 SCRLED 15
Device Wattage	Device Current
1/4	0.070
1/4	0.070
1/4	0.018
0.018	52
Distance Previous Device	Voltage at Device
21	20.38
21	20.36
21	20.36
20.35	20.35
Drop From Source	Percent Drop
0.023	0.11%
0.036	0.18%
0.041	0.20%
0.047	0.23%
Totals	
3/4	0.176
115	
Notes:	
Wire resistance is doubled in the calculations for two wires (Positive and Negative). The voltage calculated to the last device must not be lower than the manufacturers listed minimum operating voltage (IE: rated operating voltage 16-33 VDC (24 VDC nominal)).	

Plans do not show above ceiling detection. It will be required if not already existing. Read Conditions List.



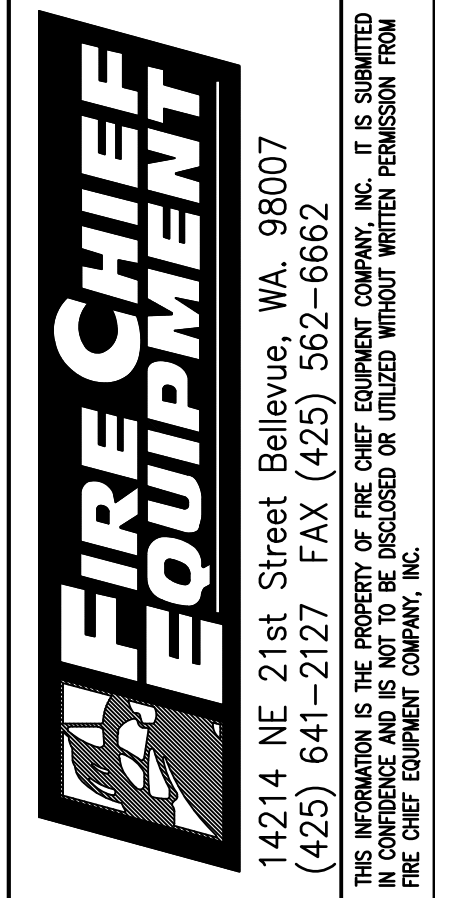
THE APPROVED CONSTRUCTION PLANS AND ALL ENGINEERING MUST BE POSTED ON THE JOB AT ALL INSPECTIONS IN A VISIBLE AND READILY ACCESSIBLE LOCATION.

Approval of submitted plans is not an approval of omissions or oversight by this office or noncompliance with any applicable regulations of local government. The contractor is responsible for making sure that the building complies with all applicable building codes and regulations of the local government.

Drawings reviewed by:
 Cory W. Haws, SET
 NICET Certification
 Fire Protection Engineering Technology
 Fire Alarm Systems - Level IV
 Cert. No. 112381
 Exp 12/1/2028



REVISION	DESCRIPTION	DATE
0	ISSUED FOR REVIEW & APPROVAL	1/30/2026

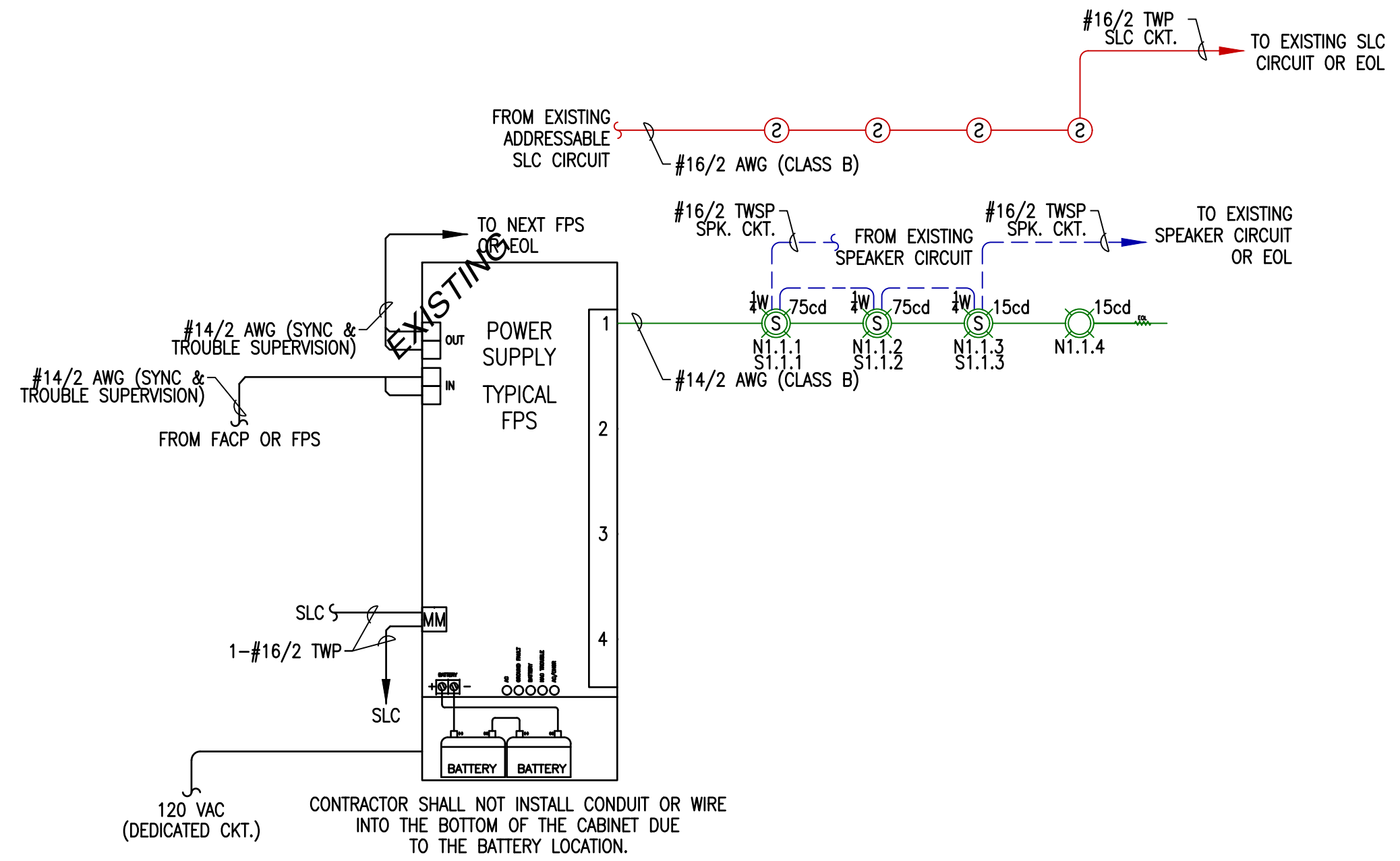


SOUTH HILLS MALL - PANDORA T.I.
3500 S. MERIDIAN - SPACE #305
PUYALLUP, WA 98373

FIRE ALARM LEGEND, NOTES, MAPS, CALCULATIONS

DRAWN	CORY W. HAWS UNICAD JOB #26052
CHECKED	CORY W. HAWS, SET NICET IV FAS 112381
DATE	1/30/2026
REVISION	0
SCALE	1/4"=1'-0"

FA-1

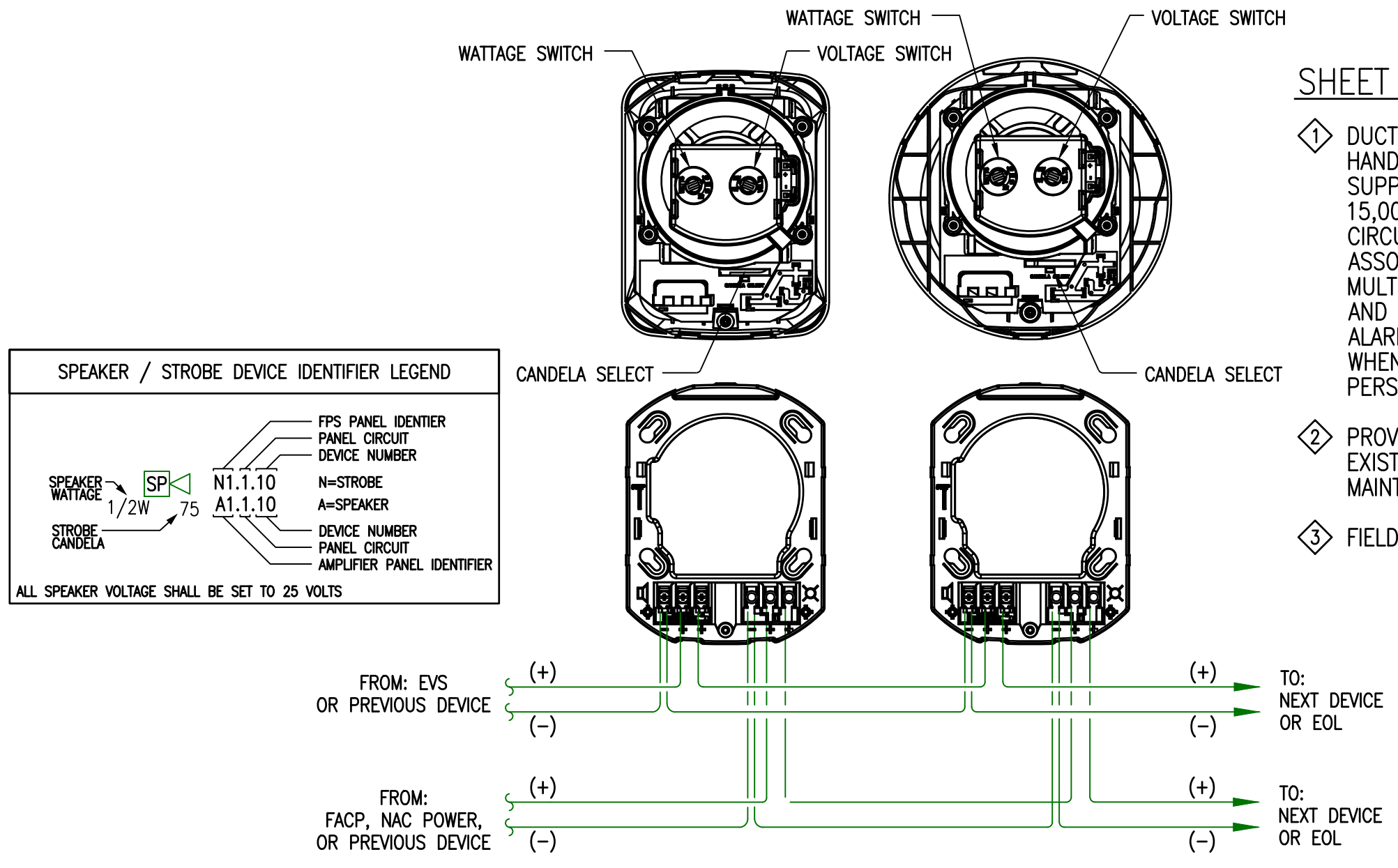


FIRE ALARM RISER DIAGRAM

SCHEMATIC: NOT TO SCALE

OPERATIONS MATRIX		FIRE ALARM OUTPUT												
FIRE ALARM INPUT		DISPLAY DESCRIPTIVE TEXT AT FACP AND/OR ANNUNCIATOR	ACTIVATE ALARM INDICATOR AT FACP	ACTIVATE AUDIBLE ALARM AT FACP	ACTIVATE SUPERVISORY INDICATOR AT FACP	ACTIVATE AUDIBLE SUPERVISORY SIGNAL AT FACP	ACTIVATE TROUBLE INDICATOR AT FACP	ACTIVATE AUDIBLE TROUBLE INDICATOR AT FACP	TRANSMIT WATERFLOW SIGNAL	TRANSMIT ALARM SIGNAL	TRANSMIT SUPERVISORY SIGNAL	TRANSMIT TROUBLE SIGNAL	ACTIVATE NOTIFICATION APPLIANCES	SHUTDOWN AIR HANDLERS IN EXCESS OF 2,000 CFM
SMOKE DETECTORS		●	●	●										
PULL STATIONS		●	●	●										
WATERFLOW SWITCHES		●	●	●					●					
VALVE SUPERVISORY SWITCHES		●			●	●								
FIRE ALARM AC POWER FAIL		●					●	●						
FIRE ALARM LOW BATTERY		●					●	●						
OPEN CIRCUIT		●					●	●						
GROUND FAULT		●					●	●						
NAC SHORT CIRCUIT		●					●	●						
LOSS OF AC TO BUILDING		●					●	●						

NOTE: NO NEW INITIATING DEVICES ARE BEING INSTALLED AS PART OF THIS SCOPE OF WORK. EXISTING INPUT/OUTPUT OPERATIONS SHALL REMAIN. NOTIFICATION APPLIANCES ARE BEING REMOVED AND RELOCATED AND SHALL MAINTAIN EXISTING OUTPUT MAPPING.

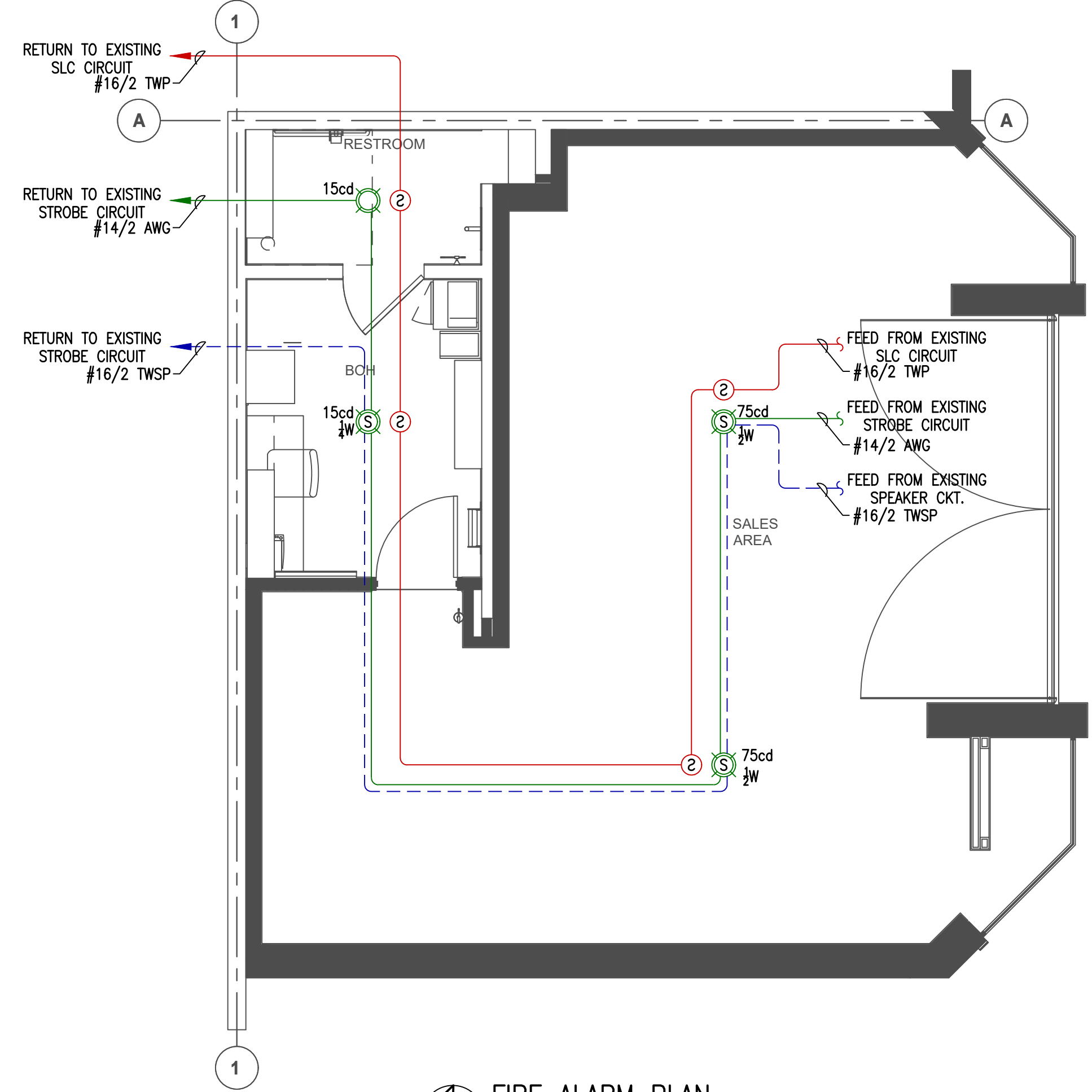


TYPICAL SPEAKER STROBE WIRING DIAGRAM

SCHEMATIC: NO SCALE

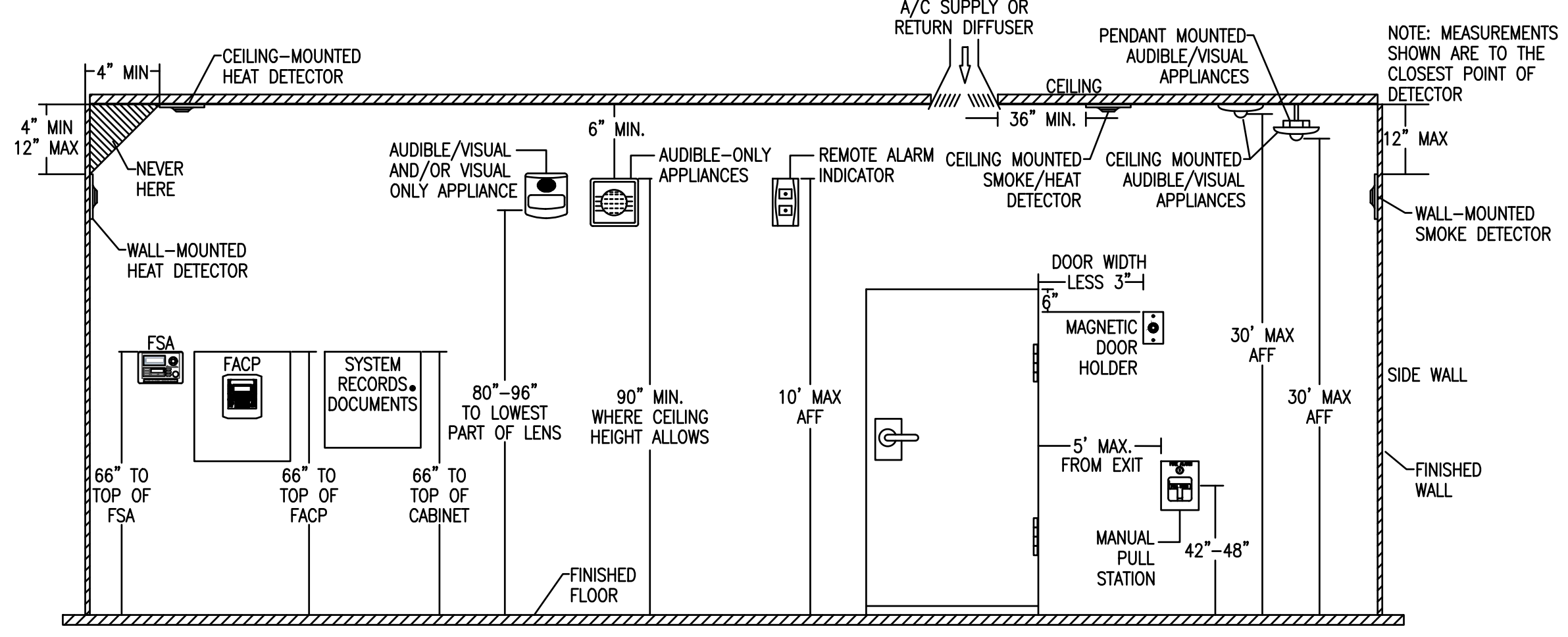
SHEET NOTES:

- 1. DUCT SMOKE DETECTORS PROVIDED FOR THE RETURN AIR PATH AT ALL AIR HANDLING UNITS HAVING A CAPACITY GREATER THAN 2,000 CFM AND FOR THE SUPPLY AIR PATH AT ALL AIR HANDLING UNITS HAVING A CAPACITY GREATER THAN 15,000 CFM. INSTALLING CONTRACTOR SHALL FIELD VERIFY EXACT MOUNTING, CIRCUITING AND PROGRAMMING REQUIREMENTS. PROVIDE FOR SHUT DOWN OF THE ASSOCIATED UNIT FAN(S). FIELD VERIFY UNIT POWER SOURCE. USE MULTI-VOLTAGE CONTROL RELAY(S) IF REQUIRED. FIELD VERIFY EXACT QUANTITY AND LOCATION(S) WITH MECHANICAL DIVISION. PROVIDE REMOTE ALARM/SUPERVISORY INDICATION IN A LOCATION ACCEPTABLE TO THE LOCAL AHJ WHEN IN-DUCT SMOKE DETECTOR INDICATOR IS NOT VISIBLE TO RESPONDING PERSONNEL.
- 2. PROVIDE AND INSTALL INITIATING DEVICE(S). CONNECT NEW DEVICE(S) TO NEAREST EXISTING SLC. INSTALLING CONTRACTOR SHALL FIELD VERIFY EXISTING CIRCUIT. MAINTAIN EXISTING WIRE STYLE, CLASS, AND SUPERVISION.
- 3. FIELD VERIFY EXACT LOCATION AND PLACEMENT OF REMOTE TEST SWITCH(S).



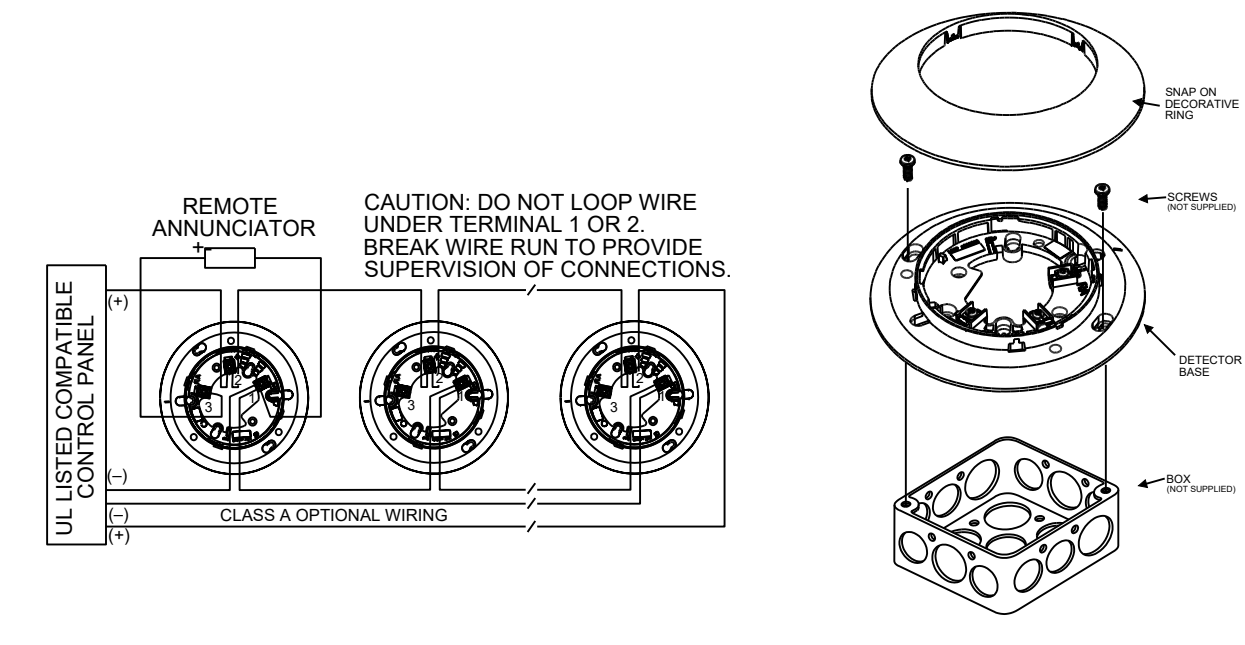
FIRE ALARM PLAN

SCALE: 1/4"=1'-0"



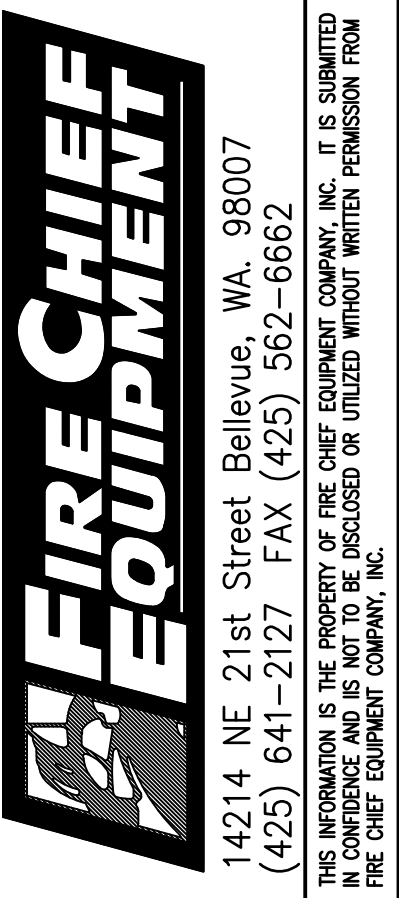
FIRE ALARM DEVICE MOUNTING HEIGHTS

SCALE: NOT TO SCALE



6" DETECTOR BASE WIRING DETAIL

SCHEMATIC: NO SCALE



SOUTH HILLS MALL - PANDORA T.I.
3500 S. MERIDIAN - SPACE #305
PUYALLUP, WA 98373

FIRE ALARM PLAN, RISER DIAGRAM, DETAILS

DRAWN	CORY W. HAWS UNICAD JOB #26052
CHECKED	CORY W. HAWS, SET NICET IV FAS 112381
DATE	1/30/2026
REVISION	0
SCALE	1/4"=1'-0"

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