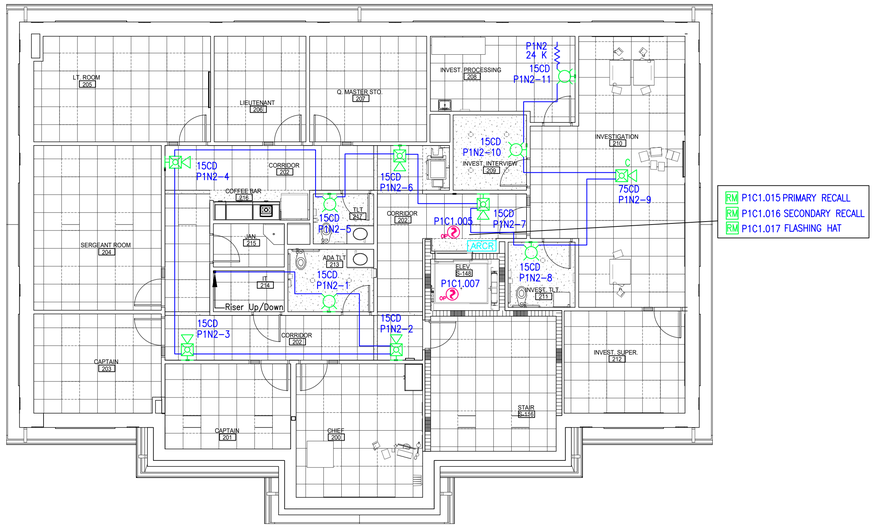
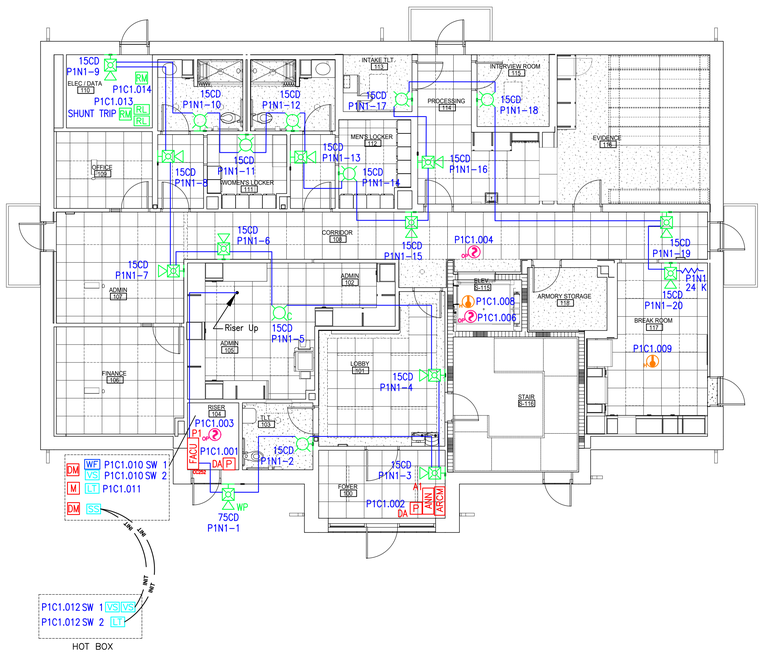


SECOND FLOOR LAYOUT

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



FIRST FLOOR LAYOUT

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

SYMBOL LEGEND	
SYMBOL	DESCRIPTION
	HEAT DETECTOR
DM	DUAL MONITOR MODULE X-SER.
M	MONITOR MODULE X-SER.
P DA	PULL STATION – DUAL ACTION
RM	INPUT/OUTPUT MODULE X-SER.
	SMOKE DETECTOR
	HORN/STROBE – WALL
WP	HORN/STROBE – WALL – WEATHERPROOF
	STROBE – WALL
C	STROBE – CEILING
FACU	FIRE ALARM CONTROL PANEL
ANN	REMOTE ANNUNCIATOR

5' 0' 5' 10'

GRAPHIC SCALE

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

REVISIONS:			
MARK	REVISION	BY	DATE

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NATIONAL INSTITUTE FOR CERTIFICATION IN ENGINEERING TECHNOLOGIES

JEAN-PAUL P. FOISY

CERTIFICATION # 132390

LEVEL IV FIRE ALARM SYSTEMS

Jean-Paul Foisy DATE: 11/17/25

SHOP DRAWINGS

Fire Alarm System Shop Drawings
Town of Angier
Police Headquarters Building
29 W. McIver Street
Angier, North Carolina

BFPE INTERNATIONAL
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DRAWN BY:	JPF
CHECKED BY:	
SCALE:	As Noted
SHEET NO.	1 OF 5 SHEETS
DATE:	11-13-2025
PROJECT NO:	RA-A7854-A-25

Sheet Contents:

Fire Alarm System Layout

DRAWING NO.:

FA101

Town of Angier Police Station
29 W. McIver Street
Angier, North Carolina

Fire Alarm System Sequence of Operation Matrix

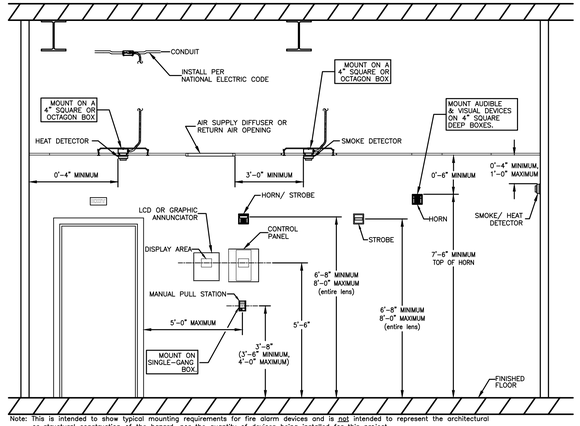
	MANUAL PULL STATION	SMOKE DETECTOR	HEAT DETECTOR - ELEVATOR PIT	SMOKE DETECTOR - FIRST FLOOR ELEVATOR LOBBY	SMOKE DETECTOR - SECOND FLOOR ELEVATOR LOBBY	SMOKE DETECTOR - MACHINE AREA, TOP OF SHAFT	WATERFLOW SWITCH	MONITOR: TAMPER SWITCH (WET & BACKFLOW)	TROUBLE CONDITION ON FACP	TROUBLE CONDITION ON PADS	AC POWER LOSS	GROUND FAULT	OPEN CIRCUIT
ACTIVATE HORN/ STROBES GENERAL ALARM	X	X	X	X	X	X	X	X					
DISPLAY DEVICE ACTUATED ON FACP.	X	X	X	X	X	X	X	X					
DISPLAY DEVICE ACTUATED ON REMOTE ANNUNCIATOR.	X	X	X	X	X	X	X	X					
ACTIVATE SYSTEM ALARM LED ON FACP.	X	X	X	X	X	X	X	X					
ACTIVATE SYSTEM ALARM LED ON REMOTE ANNUNCIATOR.	X	X	X	X	X	X	X	X					
SEND ALARM SIGNAL TO DIGITAL COMMUNICATOR.	X	X	X	X	X	X	X	X					
ACTIVATE SYSTEM TROUBLE LED ON FACP.									X	X	X	X	X
ACTIVATE SYSTEM TROUBLE LED ON REMOTE ANNUNCIATOR.									X	X	X	X	X
SEND TROUBLE SIGNAL TO DIGITAL COMMUNICATOR.									X	X	X	X	X
ACTIVATE SYSTEM SUPERVISORY LED ON FACP.							X						
ACTIVATE SYSTEM SUPERVISORY LED ON REMOTE ANNUNCIATOR.							X						
SEND SUPERVISORY SIGNAL TO DIGITAL COMMUNICATOR.							X						
ACTIVATE AHU SHUTDOWN ON FACP.	X	X	X	X	X		X						
RECALL ELEVATOR PRIMARY				X	X	X							
RECALL ELEVATOR SECONDARY						X							
ELEVATOR HAT													
ACTIVATE ELEVATOR SHUNT TRIP			X										

MINIMUM SIEMENS WIRE NOTES

THIS CHART IS TO PROVIDE GUIDANCE IN SIZING WIRE BASED ON THE ALLOWABLE LENGTH TO BE USED IF OTHERWISE NOT SPECIFIED.

CIRCUIT TYPE	CIRCUIT FUNCTION		DISTANCE FT.	TYPICAL WIRE TYPE
1. SLC CIRCUIT (POWER LIMITED)	UNSHIELDED PAIR 150 OHMS MAXIMUM 50 OHMS FOR FULL LOOPS (RESISTANCE PER ZONE)			14 AWG THHN 16 AWG THHN 0.5 microFARAD LINE TO LINE 1.0 microFARAD LINE TO GROUND
2. HNET/ XNET	TWISTED SHIELDED PAIR 80 OHMS MAX BOTH WIRES.			14 AWG BELDEN 9581 WPW 995 16 AWG BELDEN 9575 WPW 991 0.4 microFARAD LINE TO LINE 0.8 microFARAD LINE TO GROUND
3. HZM, TRI MODULE	INITIATING DEVICE	HZM	TO MEET 35 OHMS MAX	14 AWG SOLID THHN 16 AWG SOLID THHN
		TRI MODULE		0.4 microFARAD LINE TO LINE 0.8 microFARAD LINE TO GROUND
4. NAC CIRCUIT (POWER LIMITED)	NOTIFICATION APPLIANCE CIRCUIT		TO MEET 2.0 OHMS MAX 2.7 OHMS MAX	14 AWG SOLID THHN FOR 2.0 AMP DRAW FOR 1.5 AMP DRAW
5. 24VDC POWER RUN (POWER LIMITED)	SYSTEM DEVICE POWER		TO MEET 4V MAX LINE DROP	14 AWG SOLID THHN 16 AWG SOLID THHN

NFPA 72 AND ADA DEVICE INSTALLATION REQUIREMENTS



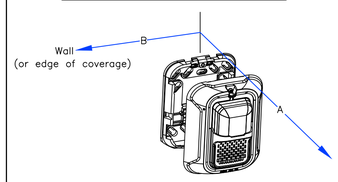
Note: This is intended to show typical mounting requirements for fire alarm devices and is not intended to represent the architectural or structural construction of the hazard, nor the quantity of devices being installed for this project.

*2013 Edition, NFPA 72

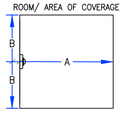
SYSTEM BATTERY CALCULATIONS

	Calculation Basis	Standby time	24 hours	Alarm time	0.084 hours			
PANEL/ P.S.	Standby Load (Amps)	Standby subtotal (AmpHours)	Alarm Load (Amps)	Alarm subtotal (AmpHours)	Secondary Load (AmpHours)	Safety derating factor	Required Battery (AmpHours)	Battery Size Supplied (AmpHours)
FC922	0.529	12.70	1.74	0.14	12.85	x1.25	16.06	18

WALL MOUNT DEVICE STROBE SPACING



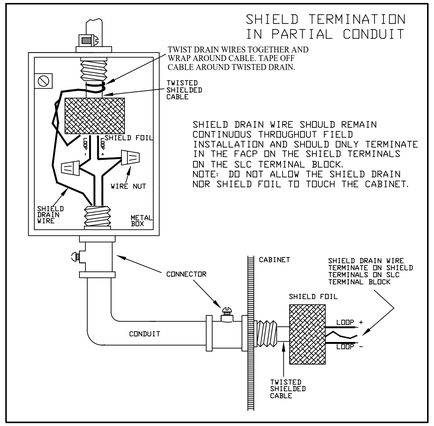
ROOM/ AREA OF COVERAGE



Candela Rating	Dimension "A" (ft)	Dimension "B" (ft)
15	20	10
30	28	14
75	45	22.5
95	50	25
110	54	27
135	60	30
185	70	35

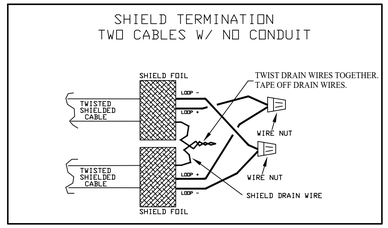
SOURCE: NFPA 72, 2103 EDITION
TABLE 18.5.5.4.1 (a)
N.T.S.

SHIELD TERMINATION IN PARTIAL CONDUIT



*Annunciator Only.

SHIELD TERMINATION TWO CABLES W/ NO CONDUIT



PROJECT SPECIFIC INSTALLATION NOTES

A.) FIRE ALARM DEVICES IN PIT SHALL BE MOUNTED AT 48" FROM THE BOTTOM OF THE PIT, DUE TO THEIR RATING. THEREFORE, THE SPRINKLER HEAD MUST BE MOUNTED AT 24" FROM THE BOTTOM OF THE PIT TO MEET NCDOL REQUIREMENTS.

B.) THE DETECTORS MUST BE WITHIN TWO FEET OF EACH OTHER AND SPRINKLER HEADS (IN THE PIT, SHAFT AND ELEV. MACHINE ROOM.)

C.) THE SMOKE DETECTOR FOR THE MACHINE SPACE SHOULD FIT AT THE TOP OF THE SPACE. IF NOT, INSTALL THE DETECTOR IN CORRIDOR WITHIN THREE FEET OF MACHINE SPACE DOOR. ALSO, INSTALL THE RELAYS WITHIN THREE OF DOOR IF THEY DO NOT FIT IN THE SPACE.

D.) ALL PROJECT SPECIFIC NOTES SHALL TAKE PRECEDENCE OVER ANY AND ALL NOTES CONTAINED WITHIN THESE PLANS.

ITEM	QTY	PART NO.	MATERIAL DESCRIPTION W/ SPARE PARTS	MANU
1	1	FC922-US	Fire Alarm Panel Kit (w/ FCM2018, FP2011, FCI2016)	Siem
2	1	FHK2002-U3	2 Height Unit System Enclosure (FHB2002, FHD2004, FHD2006)	Siem
3	1	FCA2015-U1	Dact	Siem
4	1	FCA2016-U1	RS485 Class A Module	Siem
5	1	FT2014-U3	Remote Terminal Display	Siem
6	2	XMS-D	Addressable Pull Station, Dual Action	Siem
7	1	XTRI-S	Addressable Monitor Module	Siem
8	2	XTRI-D	Addressable Dual Monitor Module	Siem
9	5	XTRI-R	Addressable Relay Module	Siem
10	5	OP921	Addressable Optical Photo Detector	Siem
11	2	HI921	Addressable Heat Detector	Siem
12	7	DB-11	Detector Base	Siem
13	17	SC-HS-CW-F	Candela Selectable Horn/Strobe, Ceiling Mount, White	Siem
14	1	SC-HS-WW-F	Candela Selectable Horn/Strobe, Wall Mount, White	Siem
15	12	SC-ST-WW-F	Candela Selectable Strobe, Wall Mount, White	Siem
16	1	SC-ST-CW-F	Candela Selectable Strobe, Ceiling Mount, White	Siem
17	1	SL24XST-FW	Candela Selectable Strobe, Wall Mount, White, Weatherproof	Siem
18	2	PS-12180	18 AmpHour, 12 VDC Battery	P.S
19	1	DTK-2MHLP24BWB	24V VDC Surge Suppressor	Ditek
20	2	TA-1	Low Temperature Switch	ADI
21	1	2500-205FM	Area of Refuge 5 Zone Base Station, flush mount	Rath
22	1	2500-PWR24	Area of Refuge Power Supply	Rath
23	1	2100-958NSR	Area of Refuge Call Station	Rath
24	1	7087	Area of Refuge Luminescent Wall Sign	Rath
25	1	7049	Area of Refuge Directions for Call Boxes	Rath

CLASS 'A' (SLC) WIRING NOTES

1.) ALL WIRING SHALL BE IN ACCORDANCE WITH LOCAL AND NATIONAL CODES, INCLUDING NFPA 72 (2013 EDITION), NEC, AND ADA.

2.) ALL WIRING FROM CONTROL PANEL TO ANY DEVICE SHALL BE RUN IN MINIMUM 3/4" CONDUIT. SURFACE METAL RACEWAY IS ACCEPTABLE. FPLP CABLE IS ACCEPTABLE IN AREAS OTHER THAN WHERE WATERPROOF DEVICES ARE REQUIRED. CONDUIT SHALL BE USED TO DROP TO WALL MOUNTED DEVICES AND PENETRATIONS IN RATED WALLS SHALL BE MADE IN CONDUIT PER APPROPRIATE U.L. SYSTEM.

3.) DETECTORS ARE TO BE MOUNTED ON A STANDARD 4" OCTAGON BOX, SEE TYPICAL SUBFLOOR MOUNTING DETAILS IF APPLICABLE.

4.) NO PARALLEL BRANCHING OF WIRES ON SUPERVISED CIRCUITS IS PERMISSIBLE, AND POLARITY MUST BE OBSERVED. NO SPLICES SHALL BE MADE OTHER THAN AT TERMINAL BLOCKS. WIRE NUTS AND CRIMP SPLICES SHALL NOT BE PERMITTED.

5.) ALL FIELD WIRING SHALL BE CHECKED FOR SHORTS, OPENS, AND GROUNDS BEFORE CONNECTING TO THE CONTROL PANEL.

6.) A.C. WIRES SHALL BE RUN IN SEPARATE CONDUIT FROM D.C. WIRING, SUCH THAT A SYSTEM ALARM DOES NOT DE-ENERGIZE THE CONTROL PANEL. MINIMUM SIZE WIRE TO BE AWG 12 THHN. PROTECTION AGAINST VOLTAGE TRANSIENTS AND SURGES SHALL BE INSTALLED AT THE ELECTRICAL PANELBOARD AND INSTALLED BY THE ELECTRICAL CONTRACTOR. ALL AC POWER TO FIRE ALARM EQUIPMENT (i.e. CONTROL PANEL, REMOTE POWER SUPPLY, ETC.) SHALL BE A DEDICATED CIRCUIT. CIRCUIT DISCONNNECTING MEANS SHALL BE PERMANENTLY IDENTIFIED BY THE SYSTEM TYPE;
i.e. 'FIRE ALARM', 'EMERGENCY COMMUNICATIONS', 'FIRE ALARM/ECS'.

7.) NO POWER, INCLUDING EMERGENCY BATTERY SUPPLY, SHALL BE CONNECTED TO THE CONTROL PANEL UNTIL BFPE INTERNATIONAL'S TECHNICIAN IS ON THE JOB SITE.

8.) SEE MANUFACTURER'S DATA SHEETS FOR MOUNTING DETAILS.

9.) ALL JUNCTION BOX COVERS SHALL BE RED IN COLOR. THOSE IN FINISHED AREAS ARE PERMITTED TO MATCH THE FINISH COLOR.

10.) ALL ADDRESSABLE LOOP WIRE SHALL BE AWG 16 MINIMUM, LOW CAPACITANCE, TWISTED UNSHIELDED COPPER PAIR. TYPE TO BE FPL, FPLR, OR FPLP SOLID OR STRANDED COPPER. CABLE JACKET COLOR SHALL BE RED (+) AND BLACK (-) CONDUCTOR INSULATION. REFER TO THE MINIMUM WIRE NOTES REQUIREMENTS NOTE TO DETERMINE MINIMUM REQUIREMENTS OF SIZE AND LENGTH.

11.) ALL NON-ADDRESSABLE WIRE SHALL BE AWG 14 MINIMUM SOLID OR STRANDED COPPER, TYPE THHN/THWN.

12.) ALL ADDRESSABLE SIGNALING LINE CIRCUITS SHALL BE A CLASS 'A' PATHWAY AS DEFINED IN TABLE A.12.3 (b) OF NFPA 72; WHERE A SINGLE GROUND, SINGLE OPEN, AND AN OPEN AND GROUND SHALL NOT PREVENT THE RECEIPT OF AN ALARM AT THE FACP. THESE CONDITIONS AS WELL AS A SHORT, A SHORT AND OPEN, OR A SHORT AND GROUND SHALL SIGNAL A TROUBLE CONDITION AT THE FACP. NO "T" TAPS SHALL BE MADE. OUTGOING AND RETURN CONDUCTORS SHALL BE ROUTED SEPARATELY, i.e. FROM THE FACP AND EACH DEVICE SHALL ENTER AND LEAVE IN SEPARATE CONDUIT.
THE NFPA 72 RECOMMENDED MINIMUM SEPARATIONS ARE 12 INCHES FOR VERITICAL RUNS AND 48 INCHES FOR HORIZONTAL RUNS.

EXCEPTIONS IN NFPA 72 TO THE REQUIREMENT THAT OUTGOING AND RETURN CONDUCTORS MUST BE ROUTED SEPARATELY:
A.) FOR DISTANCE UP TO 10 FEET WHERE BOTH CONDUCTORS ENTER OR EXIT A DEVICE OR CONTROL UNIT ENCLOSURES.
B.) SINGLE CONDUIT/ RACEWAY DROPS TO INDIVIDUAL DEVICES.
C.) SINGLE CONDUIT/ RACEWAY DROPS TO MULTIPLE DEVICES WITHIN A SINGLE ROOM NOT TO EXCEED 1,000 SQUARE FEET IN AREA.

13.) ISOLATION MODULES OR BASES SHALL BE PROVIDED AFTER A QUANTITY OF ADDRESSABLE DEVICES NOT EXCEED THE MANUFACTURER'S REQUIRED MAXIMUM (SEE PROJECT SPECIFIC NOTES). AN ISOLATOR SHALL PROVIDED BEFORE THE FIRST DEVICE ON EITHER END OF THE SLC IF THAT DEVICE IS MORE THAN 20 FEET FROM THE FACP. ISOLATORS SHALL BE WITHIN 20 FEET OF A DEVICE. THE MODULES MUST BE MOUNTED IN VISIBLE, ACCESSIBLE LOCATIONS; CLEARLY LABELED, AND SHOWN ON THE AS-BUILT DRAWINGS.

14.) THE AUDIBLE EVACUATION SIGNAL SHALL BE THE ANSI S3.41 THREE-PULSE TEMPORAL PATTERN AS DESCRIBED IN NFPA 72.

15.) ALARM NOTIFICATION CIRCUITS SHALL BE A CLASS 'B' PATHWAY AS DEFINED IN TABLE A.12.3 (c) OF NFPA 72; WHERE A SINGLE GROUND SHALL NOT PREVENT THE RECEIPT OF AN ALARM AT THE FACP. A SINGLE OPEN, SINGLE GROUND, OR A WIRE TO WIRE SHORT SHALL SIGNAL A TROUBLE CONDITION AT THE FACP. EACH CIRCUIT SHALL NOT EXCEED ITS RATED OUTPUT. CIRCUITS SHALL NOT EXCEED 3 FLOORS OF COVERAGE.

16.) ALL WIRE COLORS SHALL BE MAINTAINED FROM DEVICE TO DEVICE AND SHALL NOT BE TRANSPOSED NOR CHANGED AT ANY DEVICE OR TERMINAL BLOCK. PERMANENT WIRE MARKERS SHALL BE USED TO IDENTIFY ALL CONNECTIONS AT THE FACP, OTHER CONTROL EQUIPMENT, POWER SUPPLIES, AND TERMINAL CABINETS.

17.) ALL RIGID OR IMC CONDUIT TERMINATING AT SHEET METAL BOXES OR CABINETS SHALL UTILIZE INSULATING BUSHINGS AND DOUBLE LOCK NUTS. EMT CONNECTORS MUST BE STEEL COMPRESSING TYPE WITH INSULATING THROATS.

18.) NOTIFICATION CIRCUIT BOOSTER POWER SUPPLIES OR 24 VDC POWER CIRCUITS SERVING ADDRESSABLE CONTROL RELAYS SHALL BE INDIVIDUALLY MONITORED FOR INTEGRITY.

19.) SPOT TYPE DETECTOR MUST HAVE THE DETECTOR ADDRESS LOOP AND DEVICE NUMBERS PERMANENTLY MOUNTED TO THEIR BASES, SO IT IS READABLE FROM THE FLOOR. THE ADDRESS MUST BE SHOWN ON THE AS-BUILT PLANS.

20.) DUCT DETECTOR SAMPLING TUBES SHALL EXTEND THE FULL WIDTH OF THE DUCT. ANY TUBES EXCEEDING 36 INCHES SHALL PROTRUDE THROUGH THE FAR END AND ANY TUBES EXCEEDING FIVE FEET SHALL BE SUPPORTED IN THE MIDDLE. INSTALL DETECTOR HOUSING AND SAMPLING TUBES PER MANUFACTURER'S RECOMMENDATIONS.

21.) SPOT TYPE SMOKE DETECTORS SHALL HAVE THEIR SENSITIVITIES SET TO NORMAL/MEDIUM UNLESS OTHERWISE DIRECTED BY THE AHJ OR ENGINEER'S SPECIFICATION.

22.) SMOKE DETECTORS SHALL BE A MINIMUM OF THREE FEET FROM ANY AIR SUPPLY DIFFUSER OR AIR RETURN OPENINGS.

23.) SURGE SUPPRESSORS SHALL BE USED ON A CIRCUIT ANYTIME IT EXITS (OR ENTERS) A BUILDING TO/ FROM THE OUTSIDE.

24.) ALL PENETRATIONS THROUGH RATED WALLS SHALL BE SEALED USING THE APPROPRIATE U.L. SYSTEM.

25.) PERMANENT WIRE MARKERS SHALL BE USED TO IDENTIFY ALL TERMINATIONS AND SPLICES FOR EVERY CIRCUIT.

26.) ALL ADDRESSABLE DEVICES SHALL BE LOCATED INSIDE THE BUILDING, NOT OUTSIDE WHERE THEY WOULD BE EXPOSED TO EXTREME TEMPERATURE AND HUMIDITY. (i.e. THOSE WHICH ARE TO MONITOR DEVICES OR PERFORM SHUTDOWNS.)

27.) DO NOT INSTALL CONDUIT INTO THE BOTTOM OF THE FIRE ALARM CONTROL PANEL(S).

28.) THE ELECTRICAL CONTRACTOR IS RESPONSIBLE FOR METERING ALL WIRES TO ENSURE ALL OF THE CIRCUITS ARE CLEAR OF TROUBLES, i.e. GROUNDS, SHORTS, ETC, AND THAT THE PROPER END OF LINE RESISTANCE IS PRESENT. CHECK MANUFACTURER'S WIRE NOTES FOR OTHER CIRCUIT REQUIREMENTS. BFPE INTERNATIONAL WILL NOT CONNECT THE CIRCUIT TO THE FIRE PANELS UNTIL THE CIRCUITS(S) ARE CLEAR OF ALL TROUBLES.

29.) THE ELECTRICAL CONTRACTOR IS RESPONSIBLE FOR LABELING ALL EOL'S AND ADDRESSABLE DEVICES WITH THEIR DEVICE ADDRESS. THE LABELS SHALL BE SELF-ADHEVISE TAPE, BLACK LETTERING ON WHITE OR CLEAR BACKGROUND AND LEGIBLE FROM THE FLOOR.

30.) ALL WIRE SHALL BE INSTALLED PER THE WIRE SCHEDULE IN THESE PLANS.

31.) PER 23.6 IN NFPA 72, SIGNALING LINE CIRCUITS SHALL BE CONFIGURED SO THAT A SINGLE FAULT ON THE PATHWAY SHALL NOT CAUSE THE LOSS OF MORE THAN 50 ADDRESSABLE DEVICES. REFER TO THE WIRING DIAGRAMS/RISER, PROJECT SPECIFIC NOTES, AND NOTES ON THE LAYOUT SHEETS IN THIS PLAN SET AS DESIGNED TO MAKE SLC INSTALLATION COMPLY WITH THIS NFPA 72 REQUIREMENT.

MARK	REVISIONS:	DATE	BY

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NATIONAL INSTITUTE FOR CERTIFICATION IN ENGINEERING TECHNOLOGIES
JEAN-PAUL P. FOISY
CERTIFICATION # 132390
LEVEL IV FIRE ALARM SYSTEMS
Jean-Paul Foisy DATE: 11/17/25

SHOP DRAWINGS

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SHEET NO. 2 OF 5 SHEETS
DATE: 11-13-2025
PROJECT NO: RA-A7854-A-25

Sheet Contents:
Fire Alarm System Installation Notes

DRAWING NO.:
FA201

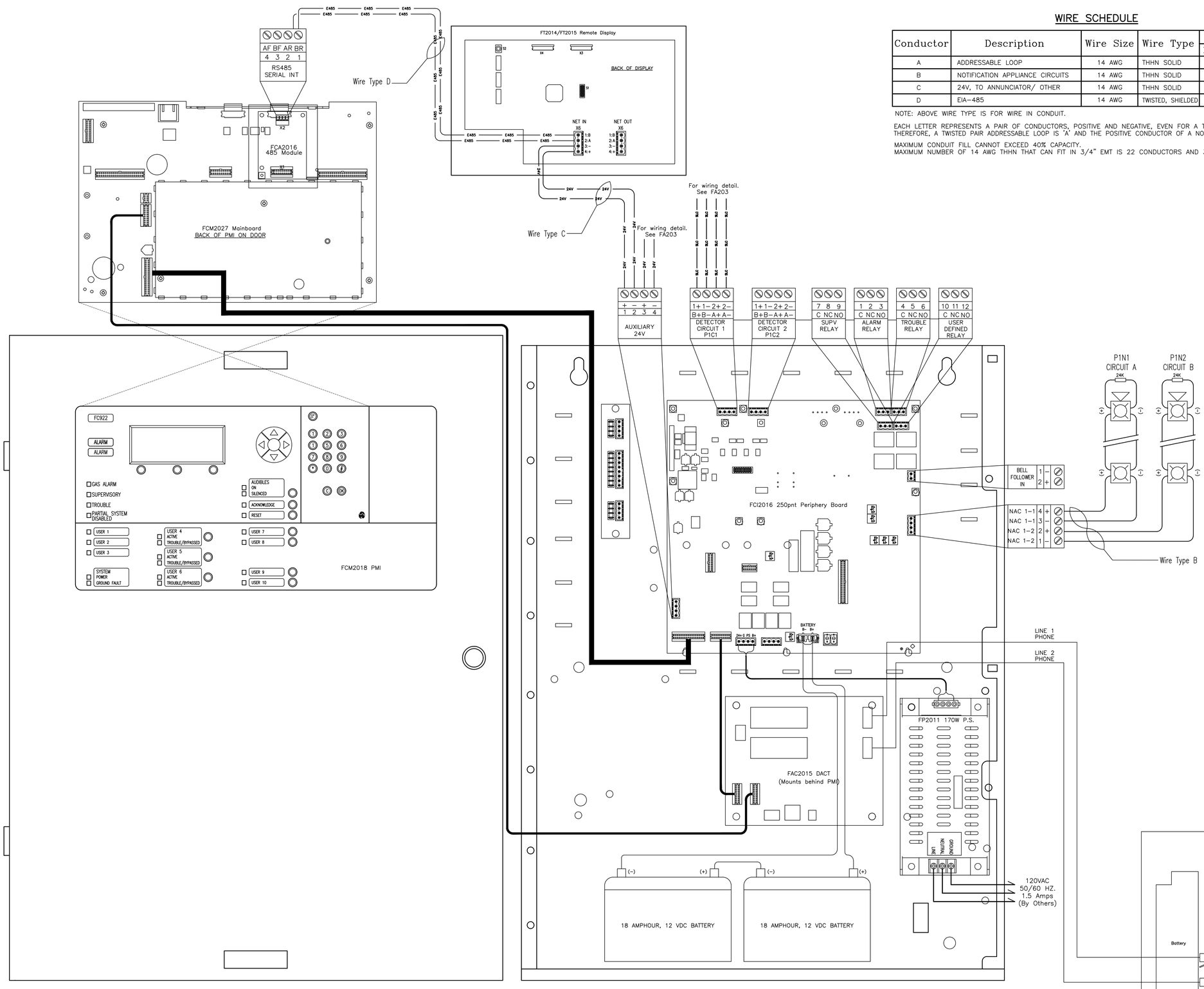
WIRE SCHEDULE

Conductor	Description	Wire Size	Wire Type	Wire Color	
				Positive(+)	Negative(−)
A	ADDRESSABLE LOOP	14 AWG	THHN SOLID	RED	BLACK
B	NOTIFICATION APPLIANCE CIRCUITS	14 AWG	THHN SOLID	BLUE	BLACK
C	24V, TO ANNUNCIATOR/ OTHER	14 AWG	THHN SOLID	YELLOW	BROWN
D	EIA−485	14 AWG	TWISTED, SHIELDED	RED	BLACK

NOTE: ABOVE WIRE TYPE IS FOR WIRE IN CONDUIT.

EACH LETTER REPRESENTS A PAIR OF CONDUCTORS, POSITIVE AND NEGATIVE, EVEN FOR A TWISTED PAIR.
THEREFORE, A TWISTED PAIR ADDRESSABLE LOOP IS 'A' AND THE POSITIVE CONDUCTOR OF A NOTIFICATION CIRCUIT IS (1/2)'B'.

MAXIMUM CONDUIT FILL CANNOT EXCEED 40% CAPACITY.
MAXIMUM NUMBER OF 14 AWG THHN THAT CAN FIT IN 3/4" EMT IS 22 CONDUCTORS AND 35 CONDUCTORS IN 1" EMT.



FC922(P1) PANEL WIRING DIAGRAM

SCALE: N.T.S.

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NATIONAL INSTITUTE FOR CERTIFICATION IN ENGINEERING TECHNOLOGIES
JEAN−PAUL P. FOISY
CERTIFICATION # 132390
LEVEL IV FIRE ALARM SYSTEMS
Jean-Paul Foisy DATE: 11/17/25

SHOP DRAWINGS

Fire Alarm System Shop Drawings
Town of Angier
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SHEET NO. 3 OF 5 SHEETS
DATE: 11−13−2025
PROJECT NO: RA−A7854−A−25

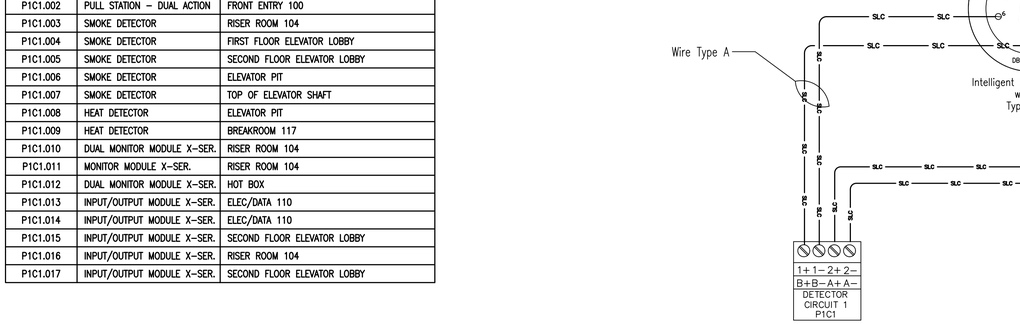
Sheet Contents:
Fire Alarm System
Detailed Riser
~FACP~

DRAWING NO.:
FA202

CIRCUIT NAME: P1C1		
DEVICE ADDRESS	DEVICE LABEL	LOCATION
P1C1.001	PULL STATION – DUAL ACTION	RISER ROOM 104
P1C1.002	PULL STATION – DUAL ACTION	FRONT ENTRY 100
P1C1.003	SMOKE DETECTOR	RISER ROOM 104
P1C1.004	SMOKE DETECTOR	FIRST FLOOR ELEVATOR LOBBY
P1C1.005	SMOKE DETECTOR	SECOND FLOOR ELEVATOR LOBBY
P1C1.006	SMOKE DETECTOR	ELEVATOR PIT
P1C1.007	SMOKE DETECTOR	TOP OF ELEVATOR SHAFT
P1C1.008	HEAT DETECTOR	ELEVATOR PIT
P1C1.009	HEAT DETECTOR	BREAKROOM 117
P1C1.010	DUAL MONITOR MODULE X-SER.	RISER ROOM 104
P1C1.011	MONITOR MODULE X-SER.	RISER ROOM 104
P1C1.012	DUAL MONITOR MODULE X-SER.	HOT BOX
P1C1.013	INPUT/OUTPUT MODULE X-SER.	ELEC/DATA 110
P1C1.014	INPUT/OUTPUT MODULE X-SER.	ELEC/DATA 110
P1C1.015	INPUT/OUTPUT MODULE X-SER.	SECOND FLOOR ELEVATOR LOBBY
P1C1.016	INPUT/OUTPUT MODULE X-SER.	RISER ROOM 104
P1C1.017	INPUT/OUTPUT MODULE X-SER.	SECOND FLOOR ELEVATOR LOBBY

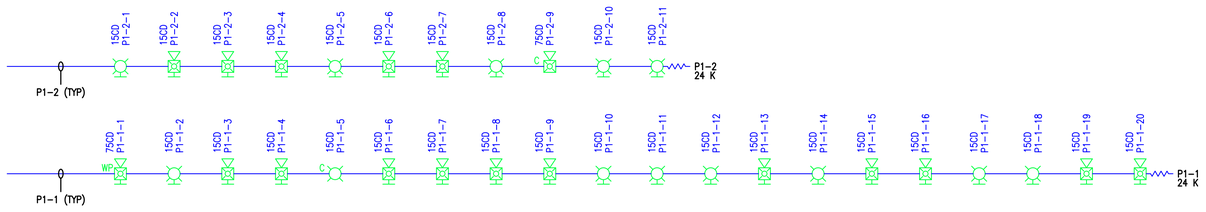
CIRCUIT NAME: P1-1			
DEVICE ADDRESS	DEVICE LABEL	LOCATION	RATING
P1-1-1	HORN/STROBE	RISER ROOM 104	75CD
P1-1-2	STROBE	TOILET 103	15CD
P1-1-3	HORN/STROBE	FRONT ENTRY 100	15CD
P1-1-4	HORN/STROBE	LOBBY 101	15CD
P1-1-5	STROBE	ADMIN 105	15CD
P1-1-6	HORN/STROBE	O/S ADMIN 107	15CD
P1-1-7	HORN/STROBE	ADMIN 107	15CD
P1-1-8	HORN/STROBE	WOMEN'S LOCKER 111	15CD
P1-1-9	HORN/STROBE	ELEC/DATA 110	15CD
P1-1-10	STROBE	WOMEN'S LOCKER 111	15CD
P1-1-11	STROBE	WOMEN'S LOCKER 111	15CD
P1-1-12	STROBE	MEN'S LOCKER 112	15CD
P1-1-13	HORN/STROBE	MEN'S LOCKER 112	15CD
P1-1-14	STROBE	MEN'S LOCKER 112	15CD
P1-1-15	HORN/STROBE	O/S PROCESSING 114	15CD
P1-1-16	HORN/STROBE	PROCESSING 114	15CD
P1-1-17	STROBE	INTAKE TOILET 113	15CD
P1-1-18	STROBE	INTERVIEW ROOM 115	15CD
P1-1-19	HORN/STROBE	O/S EVIDENCE ROOM 116	15CD
P1-1-20	HORN/STROBE	BREAKROOM 117	15CD

CIRCUIT NAME: P1-2			
DEVICE ADDRESS	DEVICE LABEL	LOCATION	RATING
P1-2-1	STROBE	ADA TOILET 213	15CD
P1-2-2	HORN/STROBE	O/S STAIR S-116	15CD
P1-2-3	HORN/STROBE	O/S CAPTAIN OFFICE 203	15CD
P1-2-4	HORN/STROBE	O/S LT. ROOM 205	15CD
P1-2-5	STROBE	TOILET 217	15CD
P1-2-6	HORN/STROBE	Q. MASTER STORAGE 207	15CD
P1-2-7	HORN/STROBE	SECOND FLOOR ELEVATOR LOBBY	15CD
P1-2-8	STROBE	INVEST. TOILET 211	15CD
P1-2-9	HORN/STROBE	INVESTIGATION 210	75CD
P1-2-10	STROBE	INVEST INTERVIEW 209	15CD
P1-2-11	STROBE	INVEST. PROCESSING 208	15CD



INITIATING ZONE SUMMARY

SCALE: N.T.S.



NOTIFICATION ZONE SUMMARY

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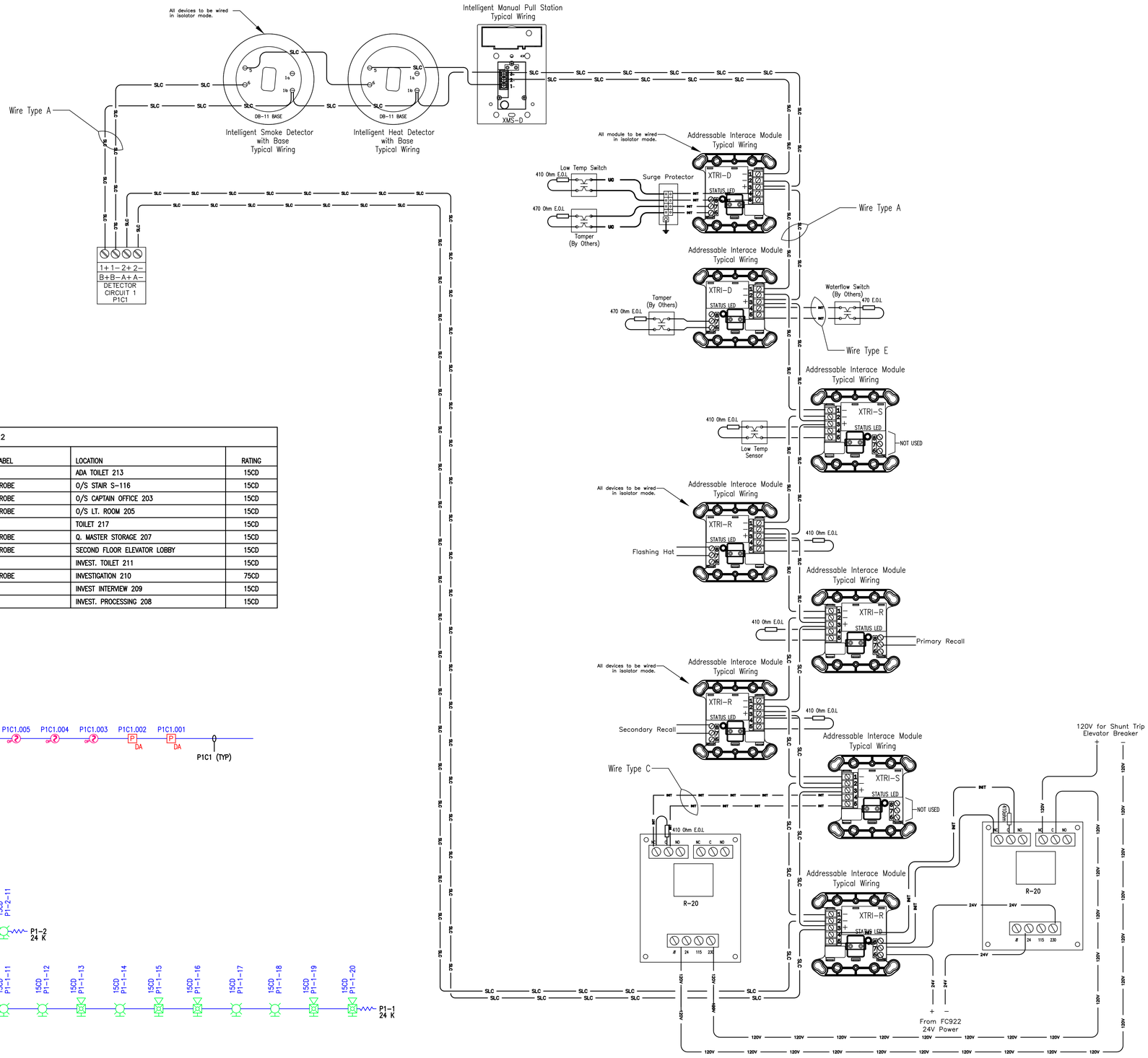


DETECTOR CIRCUIT #1 TYPICAL WIRING CONFIGURATION

SCALE: NONE

MARK	
REVISION	
BY	
DATE	

REVISIONS:

Seal

NATIONAL INSTITUTE FOR CERTIFICATION IN ENGINEERING TECHNOLOGIES
JEAN–PAUL P. FOISY
CERTIFICATION # 132390
LEVEL IV FIRE ALARM SYSTEMS
Jean-Paul Foisy DATE: 11/17/25

SHOP DRAWINGS

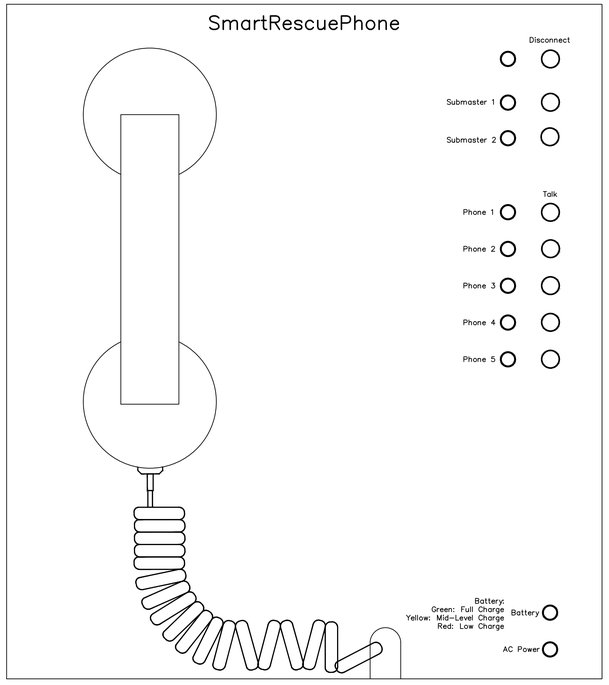
Fire Alarm System Shop Drawings
Town of Angier
Police Headquarters Building
29 W. Mclver Street
Angier, North Carolina

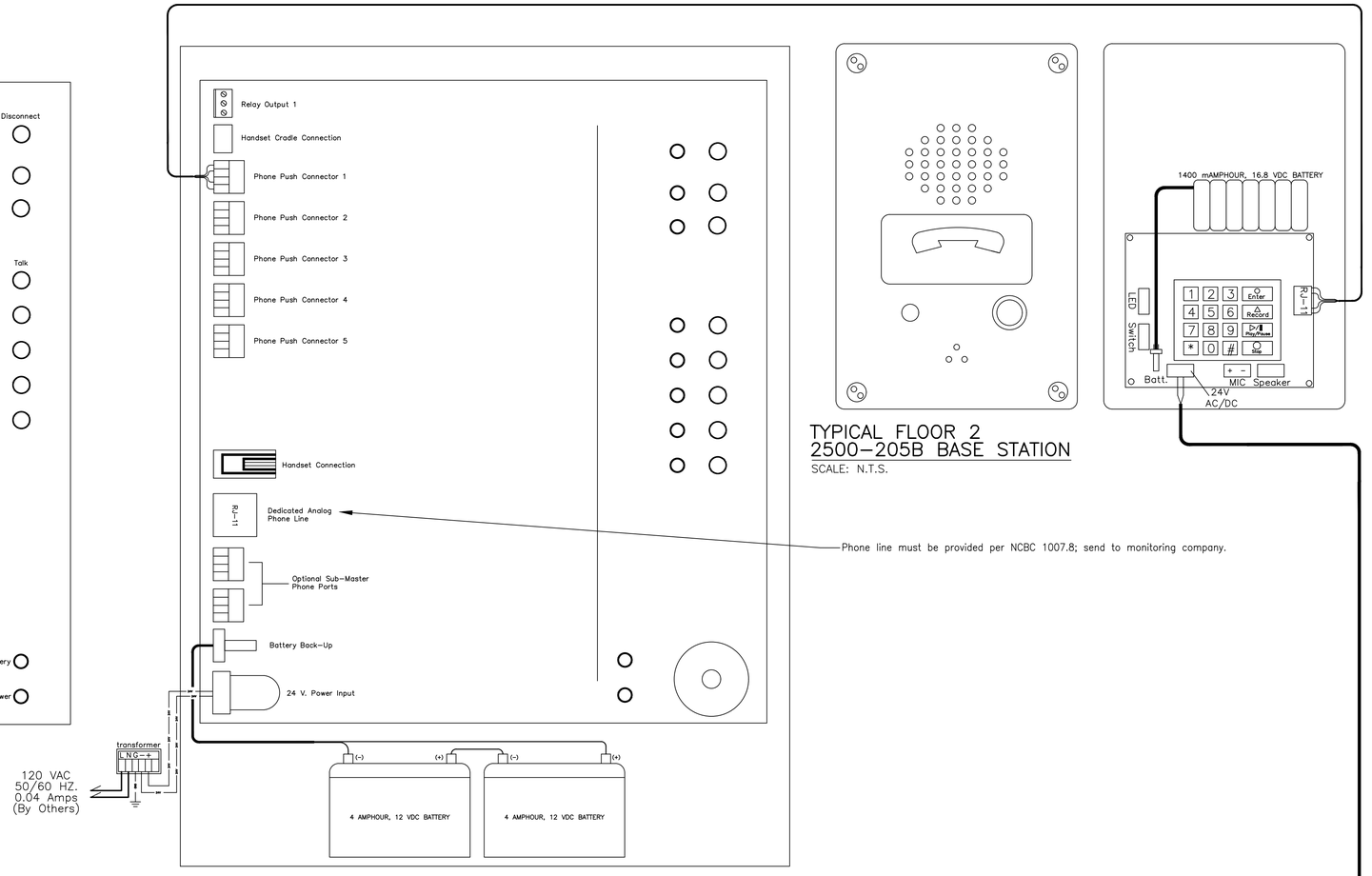
BFPE INTERNATIONAL
FIRE·SAFETY·SECURITY
116 BESTWOOD DRIVE
CLAYTON, NC 27520
Ph: 919-550-2699 • Web: www.bfpe.com
BFPE International NC Firm License No.: C-0205

DRAWN BY:	JPF
CHECKED BY:	
SCALE:	N.T.S.
SHEET NO.	4 OF 5 SHEETS
DATE:	11–13–2025
PROJECT NO:	RA–A7854–A–25

Sheet Contents:
Fire Alarm System
Detailed Riser
~SLC Loop~

DRAWING NO.:
FA203

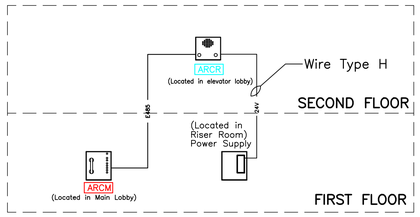




2500-205B BASE STATION
SCALE: N.T.S.

TYPICAL FLOOR 2
2500-205B BASE STATION
SCALE: N.T.S.

Phone line must be provided per NCBC 1007.8; send to monitoring company.



DETAILED ONE LINE RISER DIAGRAM

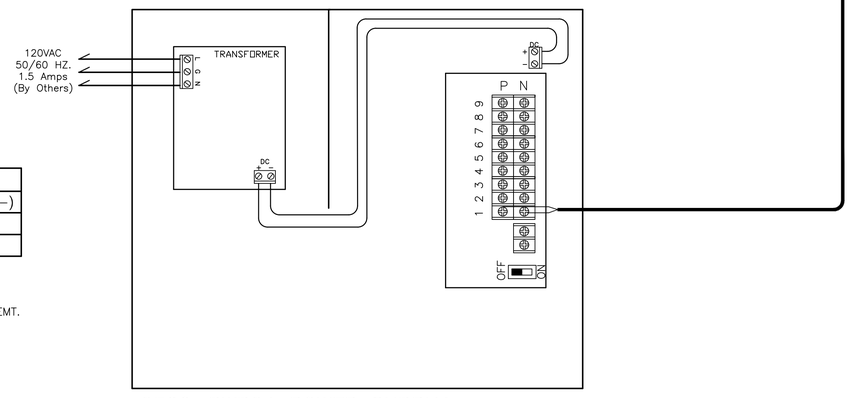
WIRE SCHEDULE

Conductor	Description	Wire Size	Wire Type	Wire Color	
				Positive(+)	Negative(-)
H	24 V POWER	14 AWG	THHN SOLID	BLUE	BLACK
i	COMMUNICATION CABLE	22 AWG	CAT 5E		

NOTE: ABOVE WIRE TYPE IS FOR WIRE IN CONDUIT.

MAXIMUM CONDUIT FILL CANNOT EXCEED 40% CAPACITY.
MAXIMUM NUMBER OF 14 AWG THHN THAT CAN FIT IN 3/4" EMT IS 22 CONDUCTORS AND 35 CONDUCTORS IN 1" EMT.

SCALE: N.T.S.



2500-PWR24 POWER SUPPLY
SCALE: N.T.S.

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LEVEL IV FIRE ALARM SYSTEMS
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DRAWN BY: JPF
CHECKED BY:
SCALE: N.T.S.
SHEET NO. 5 OF 5 SHEETS
DATE: 11-13-2025
PROJECT NO: RA-A7854-A-25

Sheet Contents:
Two-Way Elevator
Communication System
Detailed Riser

DRAWING NO.:
FA204