

**ADDENDUM NO. 01**

**TO: PLANS AND SPECIFICATIONS FOR STATE OF MISSOURI**

**Replace Fire & Smoke Detector System  
Harry S. Truman State Office Building  
Jefferson City, Missouri  
PROJECT NO. O2001-01**

**Bidders are hereby informed that the project bid due date has been REVISED. The revised bid date is noted below.**

Bid Due Date: May 21<sup>st</sup>, 2024 (1:30PM)

**Bidders are hereby informed that the construction Plans and/or Specifications are modified as follows:**

**SPECIFICATION CHANGES:**

1. Section 004322 - UNIT PRICES **"This form is to be included when submitting bid in Missouri Buys"**

Section 012200-3.1.C.4.7 – **ADD** "Door Release Relay and Connections: \$\_\_\_\_\_"

2. Section 270528 – PATHWAYS FOR COMMUNICATIONS SYSTEMS

Section 270528-3.2.FF – **ADD** "*Where existing conduit is reused and accessible, the conduit shall be labeled as required within other sections of the specifications and the drawings. Prepare conduit for labeling. Where existing conduit is reused and terminates in a junction box, the junction box cover shall be painted red.*"

3. Section 284621 – ADDRESSABLE FIRE-ALARM SYSTEMS

Section 284621-1.5.A.2 - **REVISE** to read "*Addressable Smoke Detectors: Quantity equal to 10 percent of amount of each type installed, but no fewer than (5) units of each type. This shall exclude beam smoke detectors.*"

Section 284621-2.2.A - **ADD** "*4. Honeywell Gamewell-FCI.*"

Section 284621-2.2.C.2.i.3 - **REVISE** to read "*No more than one building floor shall be installed on each signaling line circuit. Where that quantity exceeds 100 devices, provide isolation modules.*"

Section 284621-2.2.C.2.z - **REVISE** to read "*Batteries: Sealed lead acid or lead calcium.*"

Section 284621-2.3.A - **ADD** "*4. Honeywell Gamewell-FCI.*"

Section 284621-2.4.A.1 - **ADD** "*d. Honeywell Gamewell-FCI.*"

Section 284621-2.4.B.1 - **ADD** "*d. Honeywell Gamewell-FCI.*"

Section 284621-2.5.A.1 - **ADD** “d. Honeywell Gamewell-FCI.”

Section 284621-2.6.A.1 - **ADD** “d. Honeywell Gamewell-FCI.”

Section 284621-2.7.A.1 - **ADD** “d. Honeywell Gamewell-FCI.”

Section 284621-2.7.A.3.b - **REMOVE** “Item 1” Notification devices do not need to be addressable.

Section 284621-2.7.B.1 - **ADD** “d. Honeywell Gamewell-FCI.”

Section 284621-2.7.C.1 - **ADD** “d. Honeywell Gamewell-FCI.”

Section 284621-2.8.A - **ADD** “4. Honeywell Gamewell-FCI.”

Section 284621-2.9.A - **ADD** “4. Honeywell Gamewell-FCI.”

Section 284621-2.10.B.2.b – **REVISE** to read “Connect to fire alarm control panel.”

Section 284621-2.11.A – **ADD** “4. Honeywell.”

Section 284621-2 – **ADD** item 2.12 FIRE-ALARM ANNOUNCEMENTS

A. *Performance Characteristics:*

1. *Provide a flush mounted NEMA 1 enclosure in the Capitol Police Room 17B.*
  - a. *Enclosure shall be flush mounted with a solid hinged lockable inner door, and a see-through outer door. Size as required (Minimum 16” x 16”). Submit enclosure with all push-buttons and labels shown for approval.*
  - b. *Enclosure shall have ten (10) 22mm push-buttons of varying colors. Push-buttons shall be 24-volt or as required to interface with the fire alarm prerecorded messaging module(s).*
  - c. *Provide a label for each push-button, indicating the purpose. Coordinate labels with the owner.*
  - d. *Panel shall be connected to the fire alarm panel to begin the pre-recorded message. A reset/clear button shall reset all messages. Message shall play for minimum 10 seconds, but up to 5 minutes and then automatically reset. (Determine length with the owner)*
2. *Fire Alarm Panel*
  - a. *Provide all programming for the pre-recorded messages, and all modules to support nine (9) pre-recorded messages. Coordinate final wording and each specific message to be broadcast with the owner.*
  - b. *All messages shall be approved by the owner prior to broadcasting.*
  - c. *Provide all additional power supplies and amplifiers to broadcast all messages.*
  - d. *No more than one message shall be played at a time and shall require reset to play the next message. The fire alarm system shall over-ride all paging/messaging, unless messaging is done at the fire alarm panel.*
3. *Wiring*
  - a. *All wiring shall be labeled and neatly bundled in the panel. Route all wiring between panels in conduit.*
  - b. *Color code each conductor to match the push-button color, a white stripe shall be added for the common conductor.*
  - c. *Provide minimum #14awg conductor.*

4. *Testing and Training*
  - a. *Contractor shall test and verify that all pre-recorded messages play over the speakers and all messaging is clear to the listener. Testing shall occur after hours.*
  - b. *Contractor shall provide two (2) 30-minute training sessions for the operation.*
  - c. *Contractor shall verify with the owner at each one year warranty period for additional messages that need added to the system. Contractor shall add all programming to support additional messaging, that should include all new labeling of wiring and new labeling added to the panel and shall match overs. No more than nine (9) messages shall be required on the system.*
5. *Warranty*
  - a. *The warranty for this system shall be the same as the entire fire alarm system.*

Section 284621-3.7.C.2 – **REMOVE** item 2 as a requirement. The existing data center does not have voice capabilities.

Section 284621-3.7.B – **REVISE** to read “*Existing Capitol Police Monitoring System: Provide connection to the existing Capitol Police Monitoring system also part of the Johnson Controls system. All alarms, troubles, notification devices, and initiation devices on the new fire alarm system shall be shown on the Capitol Police monitoring system. Provide all connections, hardware, software, firmware, conduit, wiring, and all additional equipment to make that information viewable on the Capitol Police Monitoring System. All information shown on the system shall be “read only”. FMDC staff shall have to interface with the fire alarm panel to clear or silence alarms. All device and equipment addresses shall be viewable, and a short location description shall be included.*”

Section 284621-3.7. – **ADD** “*D. The existing smoke evacuation and control system operation shall remain as currently installed. All set-points, controls, and operation of units shall remain as is. The only work included in this project is initiation, notification, and any existing controls to maintain current operation. Provide additional programming as required. This system appears to be controlled through the building management system, but contractor shall verify and provide all work to maintain current operation.*”

Section 284621-3.7. – **ADD** “*E. Below is a list of Johnson Controls contacts to obtain information related to the existing JCI system.*”

Jordan Luebbert  
Email: Jordan.M.Luebbert@jci.com  
Phone: 1-573-301-0961

Jack Conroy  
Email: jack.conroy@jci.com  
Phone: 1-314-624-7181”

## **DRAWING CHANGES:**

1. Drawing FA401:
  - a. **ADD** information for Building Announcement panel.

2. Drawing FA503:
  - a. **ADD** detail for building announcement panel “BACP-01”.
  
3. Drawing FA704:
  - a. **ADD** announcement panel to the fire alarm riser diagram.

### **CONTRACTOR QUESTIONS AND RESPONSES:**

Note: Any response that requires a change to the construction documents is noted above. Questions below are *Italicized*, and responses are in **Bold** text.

- Q1. *Do the Remote Power Supplies require both UL and FM Listings? We use a lot of the Potter PSN106B (See attached datasheet) and of course it carries UL but does not carry FM listing.*
- A1. **All equipment shall be UL and FM Global Compliant.**
- Q2. *Class A wiring with only 50 devices per SLC Loop. A notifier SLC loop carries 159 Smoke and 159 Modules if using rule of 50 Devices per SLC loop there are roughly 416 total addressable devices (modules and smoke devices) so we are looking at 9 loops. If we can use Isolation modules 50 Devices with ISO back to panel but using same loop then we can get by with 2 loops which would be a savings of about \$8,000.00 +/- Still achieving for the most part the same objective of out in the field wire getting damage and losing a full loop and can still be done in Class A.*
- A2. **The specification has been modified for a “per floor” approach. Refer to specification changes above.**
- Q3. *I understand the 2 Microphones and I believe you said that the FF phones were going away and there is the alternate for the DAS system in the quote.*
- A3. **Correct. The existing fire phones have been removed and will not be replaced. Alternate bid no.1 is for an Emergency Responder Radio Coverage System. The requirements for that system are noted in specification section 284621-2.11**
- Q4. *For the Interconnection with the JCI Contact closure is acceptable.*
- A4. **The intent is still as specified, we would like to see all fire alarm address points with descriptive location on the JCI system. JCI will need a communication connection and maybe some hardware to interface. Using a BACNET or MODBUS connection to the network should allow duplication for “view only” on their system. Include all JCI cost to integrate the fire alarm system with the JCI system with your bid.**

JCI contact for the Truman Building:

Jordan Luebbert  
Email: Jordan.M.Luebbert@jci.com  
Phone: 1-573-301-0961

Jack Conroy  
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Phone: 1-314-624-7181

- Q5. Has it been verified that the JCI monitoring station in the Police Station will accept other Systems signal since it is view only?
- A5. As an extension of the JCI system, they should be able to view everything on the JCI system. Displayed info shall be "View only".**
- Q6. The spec notes Johnson Controls notification to all computers that monitor the building. That should include all software, programming, and software licenses?
- A6. Correct. This shall include all programming, software, and licensing.**
- Q7. How is the fire alarm system expected to interact with the Johnson Controls system and who is responsible for programming the Johnson Controls equipment? Is BACnet acceptable for interfacing the two systems?
- A7. The intent is still as specified, we would like to see all fire alarm address points with descriptive location on the JCI system. JCI will need a communication connection and maybe some hardware to interface. Using a BACNET or MODBUS connection to the network should allow duplication for "view only" on their system. Include all JCI cost to integrate the fire alarm system with the JCI system with your bid.**

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- Q8. The spec notes Printer must be listed and labeled as integral part of fire alarm system. Printer shall be located and connected where directed by FMDC staff on the eighth floor.
- Will the printer be required and if so, can it be mounted next to the fire alarm control panel? Locating the printer in close proximity of the FACP would reduce the cost of the project.
- A8. Bidders shall assume printer will be installed on the 8<sup>th</sup> floor FMDC area and final location will be coordinated with the FMDC staff.**
- Q9. The spec notes install no more than 50 addressable devices on each signaling-line circuit.
- The Notifier panel is capable of supporting 318 addressable devices per SLC loop. Is it acceptable to install devices based on the listed capacity of the panel being provided.
- A9. The specification has been modified for a "per floor" approach. Refer to specification changes above.**
- Q10. The spec notes that the Voice/Alarm Signaling Service shall include redundant microphones, preamplifiers, amplifiers, and tone generators. It also states 2 microphones shall be placed in the Capitol Police Control Command Center on the 1st Flr.
- Will the backups be required for this project? What is the purpose of the 2nd microphone in Capitol Police Control Command Center?
- A10. Two workstations are in the command center and would like each workstation to be able to communicate over the system. Provide two microphones.**

Q11. The spec notes that the backup batteries for the fire alarm control panel will be sealed lead calcium.

Will sealed lead acid batteries be acceptable?

**A11. Yes.**

Q12. The spec notes that notification devices shall be individually addressed and connected to a signaling-line circuit. Notifier is not capable of addressable notification devices. Can this requirement be waived if the provided system does not offer this feature?

**A12. We have removed this requirement, as Simplex might be the only manufacturer that can provide this feature.**

Q13. The spec and the drawing detail are contradictory. The spec references the use of an addressable beam detector due to sections 2.10.B.2.b and 2.10.B.2.i. The drawing detail on sheet FA503 supports the use of 4 wire beam detectors monitored by modules for status.

**A13. This has been clarified above. The devices will not need to be addressable.**

Q14. Is it acceptable to use 4 wire conventional beam detectors monitored with modules? This would reduce the cost of the project. Sections 2.10.B.2.b and 2.10.B.2.i would need to be removed to allow this. Is that acceptable?

**A14. Yes. This has been clarified above.**

Q15. The spec notes that the fire alarm system shall connect to the existing Johnson Controls building automation systems. Provide all connections, hardware, software, firmware, conduit, and all additional equipment to make that information viewable on the building automation system.

What is the expected interface to Johnson Controls? BACnet? If so, the fire alarm programming and BACnet card will be provided by the fire alarm contractor but the Johnson Controls programming would be provided by Johnson Controls.

**A15. The intent is still as specified, we would like to see all fire alarm address points with descriptive location on the JCI system. JCI will need a communication connection and maybe some hardware to interface. Using a BACNET or MODBUS connection to the network should allow duplication for "view only" on their system. Include all JCI cost to integrate the fire alarm system with the JCI system with your bid.**

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Q16. The spec also notes that the Existing Data Center Fire Alarm Panel in the 1st Flr Data Center shall be connected to the new fire alarm panel. It notes that the 2 panels should monitor each other for alarms, troubles and supervisories. Note 2 indicates that voice announcements from the new fire alarm system shall announce on the existing Data Center speakers.

**A16. For the purpose of this response:**

**The new fire alarm control panel for this project = FACP A.**

**The existing data center fire alarm control panel = FACP B.**

**If “FACP A” or “FACP B” is in alarm, both panels shall notify occupants of the alarm condition. All notification devices in the building and the data center shall alarm.**

**“FACP B” shall be seen as a single address on “FACP A”.**

**Like wise, “FACP A” shall also be seen as a single addressable on “FACP B”.**

**Example: The building and data center are both in alarm. When the fire department responds to a fire, they will go to “FACP A”. If “FACP B” caused the alarm, then the fire department would have to go “FACP B” to determine which device caused the alarm. However, if “FACP A” caused the alarm, they would be able to quickly determine the initiation device that caused the alarm.**

Q17. The spec notes that the fire alarm system must be listed for releasing service.

Nothing is shown on the drawings that would relate to a releasing circuit being used. Is there a reason for the requirement?

**A17. This question has to do with Notifier trying to give the owner newer equipment that is not yet listed. In an effort to provide the owner with the newer equipment, we can look past this issue initially, with the understanding that the newer system will be listed before the five year warranty period expires. A letter will need to be provided during the shop drawing process that indicates the system will be listed or rated by the end of the warranty period. Should other manufacturers have the same issue, this response would apply to them as well. We would like to make sure bidders are doing their best to make sure equipment used for the project is not obsolete before the end of the warranty period. The requirement is not removed, rather deferred. By the end of the five years, the FACP shall be listed for “releasing service”.**

Q18. The spec notes that testing of the fire alarm system shall be done in silent mode but then notes testing shall ensure all notification devices are operational.

Is it expected that all notification devices will be tested after hours for each phase of work to ensure they are operational?

**A18. The specifications has two testing requirements. “Preliminary” and “Final”. Refer to specification section 284621-3.10**

**Preliminary: The intent is that the contractor shall test each wing as they complete that area. The contractor will have to complete that wings before moving to a new wing. It is anticipated that the contractor will never have more than two wings at a time. The fire alarm system shall be tested in silent mode and verified that all devices**

are working before turning the wing back over to the owner. This testing shall be completed by the contractor, no formal documentation is required, but the contractor is responsible for proper operation.

**Final:** Before the project is complete, the system shall be fully tested with factory authorized service representative. All speakers, strobes, HVAC units, relays, voice system, etc. shall be fully tested. Testing shall be completed per NFPA 72 requirements. Final testing shall be conducted after hours. Which could mean evenings or weekends. That testing shall be coordinated with the fire alarm department and meet all their requirements too. The authorized factory service representative shall submit all final testing forms to the engineer.

**GENERAL:**

1. A copy of Pre-bid meeting attendance is attached for information only. Changes to, or clarification of the Bid Documents are only made as issued in the Addenda.

By the Order of:

Michael Schrader  
Division of Facilities Management,  
Design and Construction  
05/09/2024

**END OF ADDENDUM NO. 01**



# Per Addendum #1

SECTION 004322 - UNIT PRICES FORM

PROJECT NUMBER: O2001-01

## 1.0 Description

- A. For changing specified quantities of work from those indicated by the contract drawings and specifications, upon written instructions of Owner, the following unit prices shall prevail. The unit prices include all labor, overhead and profit, materials, equipment, appliances, bailing, shoring, shoring removal, etc., to cover the finished work of the several kinds of work called for. Only a single unit price shall be given and it shall apply for either MORE or LESS work than that shown on the drawings and called for in the specifications or included in the Base Bid. In the event of more or less units than so indicated or included during construction the total contract price shall be decreased as appropriate or increased by contract change in accordance with General Conditions Article 4.1.

## 2.0 Unit Prices

### A. Unit Price No. 1 – Name: Fire Alarm Initiating Device

1. Description: Furnish and install one (1) additional fire alarm initiating device. This could include a smoke detector, duct smoke detector, heat detector, pull station, flow station, tamper switch, relay, fire smoke damper, beam detector, or any device that puts the fire alarm system into alarm. This should include all conduit and wiring not to exceed 75'-0", all supports and structures, all terminations, programming, programming at the fire alarm panel, the building automation system, and any other network. Price shall include all components for a fully operational device.
2. Unit of Measurement: One (1) device and all additional items listed in the description above.
3. Base Bid Quantity: Contractor may elect to break out device, conduit, wiring, programming, etc. separately at their option, otherwise the price will assume to be all-inclusive.
4. Example:

1) Smoke Detector:	\$ _____
2) Duct Smoke Detector:	\$ _____
3) Heat Detector:	\$ _____
4) Pull Station:	\$ _____
5) Flow Station:	\$ _____
6) Tamper Switch:	\$ _____
7) Relay:	\$ _____
8) Fire Smoke Damper:	\$ _____
9) Beam Detector:	\$ _____
10) _____	\$ _____
11) _____	\$ _____
12) _____	\$ _____

### B. Unit Price No. 2 – Name: Fire Alarm Notification Device

1. Description: Furnish and install One (1) additional fire alarm notification device. This could include visual strobe, speaker, horn, combination horn/strobe, bell, relay, HVAC unit shutdown, smoke evacuation system activation, fire smoke detector, or any other device to make the occupant or other related systems aware the fire alarm system is in

alarm. This shall include all conduit and wiring not to exceed 75'-0", all supports and structures, all terminations, programming, programming at the fire alarm panel, the building automation system, and any other network. Price shall include all components for a fully operational device. This shall exclude power supplies or extender panels.

2. Unit of Measurement: One (1) device and all additional items listed in the description above.
3. Unit Price No 2 Quantity: Contractor may elect to break out device, conduit, wiring, programming, etc. separately at their option, otherwise the price will assume to be all inclusive.

4. Example:

- |                                  |          |
|----------------------------------|----------|
| 1) Visual Strobe:                | \$ _____ |
| 2) Speaker:                      | \$ _____ |
| 3) Horn:                         | \$ _____ |
| 4) Combination horn/strobe:      | \$ _____ |
| 5) Bell:                         | \$ _____ |
| 6) Relay:                        | \$ _____ |
| 7) HVAC Unit Shutdown:           | \$ _____ |
| 8) Smoke Evac System Activation: | \$ _____ |
| 9) Fire Smoke Detector:          | \$ _____ |
| 10) _____                        | \$ _____ |
| 11) _____                        | \$ _____ |
| 12) _____                        | \$ _____ |

C. Unit Price No. 3 – Name: Supplemental Equipment

1. Description: Furnish and install One (1) additional supplemental piece of equipment. This could include extension panels, strobe power supply, amplifier panel, annunciator panel, battery cabinet including 12vDC batteries, microphone. This shall include all conduit and wiring not to exceed 200'-0", all supports and structures, all terminations, programming, interface to fire alarm panel, the building automation system, and any other network. Price shall include all components for a fully operational supplemental piece of equipment, including battery back-up.
2. Unit of Measurement: One (1) device and all additional items listed in the description above.
3. Unit Price No 3 Quantity: Contractor may elect to break out equipment, conduit, wiring, programming, etc. separately at their option, otherwise the price will assume to be all inclusive.

4. Example:

- |                                       |          |
|---------------------------------------|----------|
| 1) Extension Panel:                   | \$ _____ |
| 2) Strobe Power Supply:               | \$ _____ |
| 3) Amplifier Panel:                   | \$ _____ |
| 4) Annunciator Panel:                 | \$ _____ |
| 5) Battery Cabinet:                   | \$ _____ |
| 6) Microphone:                        | \$ _____ |
| 7) Door Release Relay and Connections | \$ _____ |
| 8) _____                              | \$ _____ |

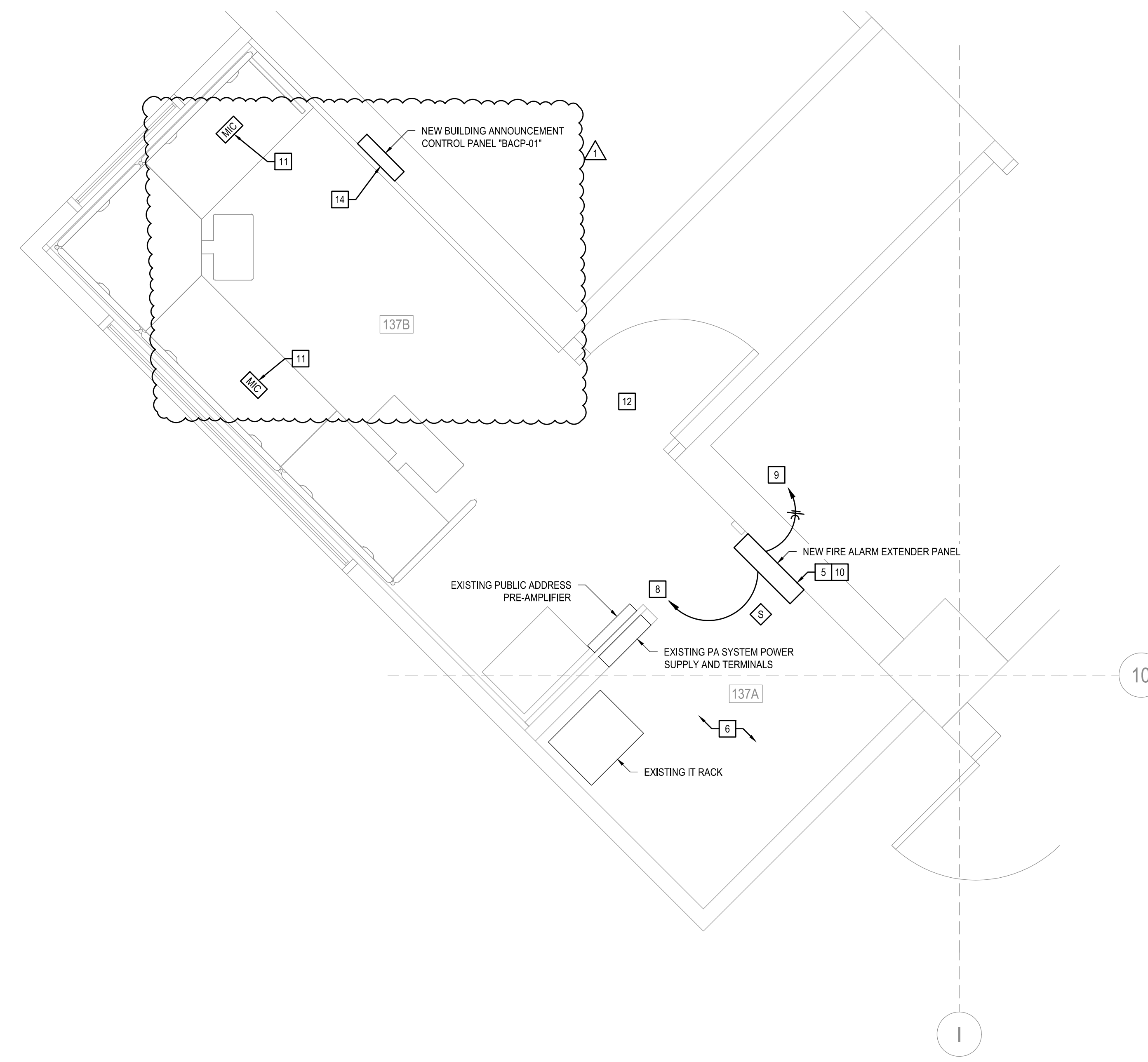
**Pre-Bid Meeting Attendance Sheet  
Replace Fire and Smoke Detector System  
Harry S. Truman State Office Building  
Jefferson City, Missouri**

**Project No. O2001-01  
April 30 – 10:00am**

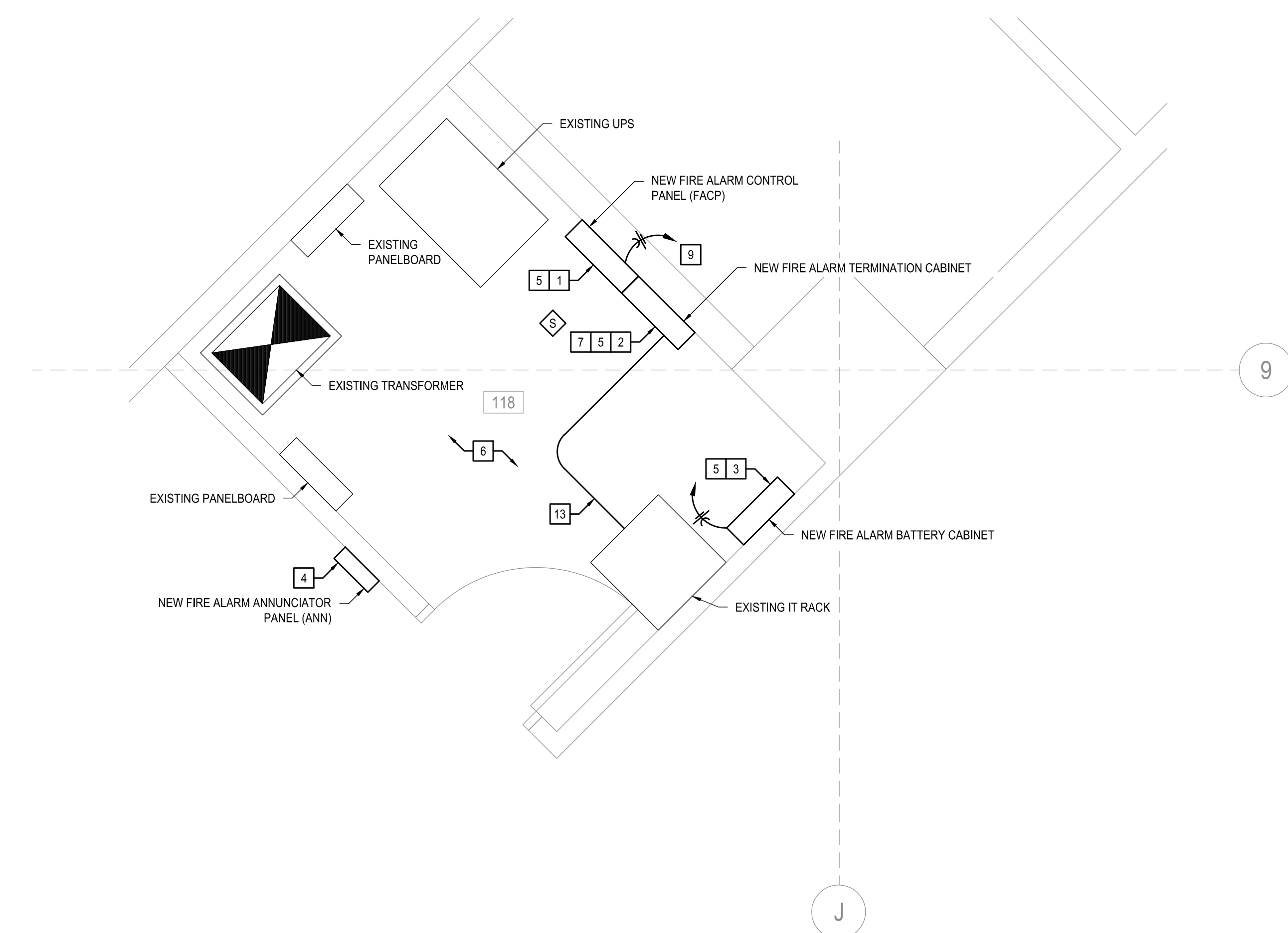
<b>Name &amp; Title</b>	<b>Company Name Type of Contracting</b>	<b>MBE/WBE/ SDVE Status</b>	<b>Phone</b>	<b>E-Mail Address</b>
<b>See attached</b>				

<u>Company</u>	<u>Name</u>	<u>Phone</u>	<u>Email</u>
InSite Group	Jeremy Rogers	816-400-7783	Jeremy@insitegroup.net
Midwest Alarm Service	John Pike	573-867-8896	john.pike@mw-95.com
<b>R.A. HOWERTON ELECTRIC</b>	<b>DOUG HOWERTON</b>	<b>DOUGIE HOWERTON ELECTRIC.COM</b>	
Meyer Electric	Kirk Fischer	573-893-2335	CR419@MEYER ELECTRIC.NET
FMDC	Jesikah Lanteman	573-418-6622	jesikah.lanteman@oa.mo.gov
FMDC-Safety	Charles Highland	573-508-3820	Charles.highland@oa.mo.gov
FMDC	Robert Rehagen	573-522-0009	robert.rehagen@oa.mo.gov
<del>RANDY BROSCHARD</del> VAZQUEZ	Randy Brockard	816-223-9709	Randybro@vazquezll.com
Kaiser Electric	Tim Otto	573-556-6188	totto@kaisercentralmo.com
Tech Electronics	John Montgomery	573-462-2417	john.montgomery@techelectronics.com
Tech Electronics	John Prenger	573-808-5900	John.prenger@techelectronics.com
VAZQUEZ C.C.	Tim Symmonds	816-604-7563	tims@VAZQUEZCC.COM
ECC	Keith Huntley	816-215-7772	khuntley@eccoinc.com
FMDC	Michael Schrader	573-536-7105	Michael.Schrader@OA.MO.gov
FMDC	John Dodd	573-751-2760	John.Dodd@OA.MO.gov





**1 LEVEL 1 ENLARGED FIRE ALARM PLAN - NEW WORK (CAPITOL POLICE)**  
SCALE: 1/2" = 1'-0"

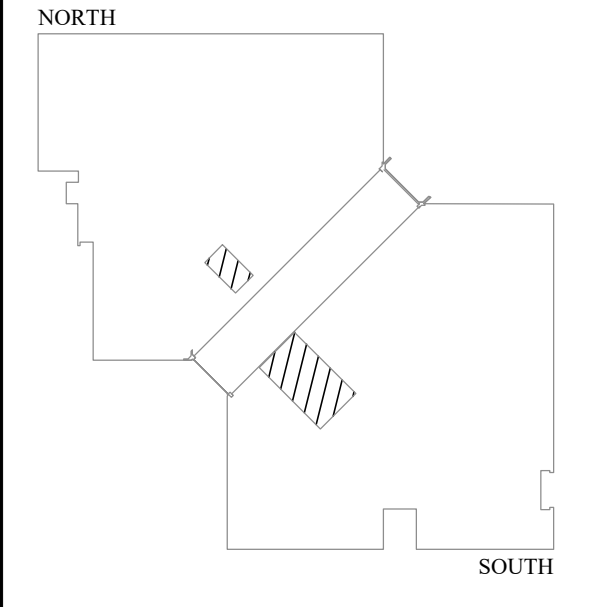


**2 LEVEL 1 ENLARGED FIRE ALARM PLAN - NEW WORK (FA CLOSET)**  
SCALE: 1/2" = 1'-0"

- GENERAL NOTES:**
- REFER TO FA001 FOR A LIST OF ALL FIRE ALARM AND PUBLIC ANNOUNCEMENT GENERAL NOTES.
- KEYED NOTES:**
- INSTALL THE NEW FIRE ALARM CONTROL PANEL IN THIS LOCATION. ALL OF THE EXISTING ZONED CIRCUITS SHALL BE TEMPORARILY CONNECTED TO THIS PANEL. ALL NEW CONDUCTORS INTO THE PANEL SHALL BE NEATLY BUNDLED AND LABELED. LOOSE OR UNBONDED WIRE AT JOB COMPLETION WILL REQUIRE DISCONNECTION AND CLEAN UP. REFER TO THE SPECIFICATIONS AND ONE-LINE DIAGRAMS FOR SPECIFIC REQUIREMENTS OF THE NEW FIRE ALARM CONTROL PANEL.
  - NEW FIRE ALARM TERMINATION CABINET. THE NEW CABINET SHALL BE INSTALLED ADJACENT TO THE NEW FIRE ALARM CABINET. CAREFULLY COORDINATE ALL NEW CONNECTIONS AS REQUIRED.
  - NEW FIRE ALARM CONTROL PANEL BATTERY BACK-UP. THE PANEL SHALL BE MOUNTED WHERE THE EXISTING IS LOCATED.
  - NEW FIRE ALARM ANNUNCIATOR PANEL. THIS PANEL SHALL BE FLUSH-MOUNTED. COORDINATE BEST PLACEMENT IN THE FIELD.
  - ALL NEW WIRING AND CONDUIT TO THIS EQUIPMENT SHALL BE INSTALLED IN A NEAT AND ORDERLY FASHION. ALL CONDUCTORS SHALL BE NEATLY BUNDLED WITH VELCRO FASTENERS. THE CONDUCTORS SHALL BE LABELED WHERE THEY ENTER THE PANEL AND WHERE THEY TERMINATE WITHIN THE PANEL. ALL CONDUCTORS SHALL BE HELD TIGHT AND SECURED TO THE BACK PLATE OF THE ENCLOSURE. ALL CONDUITS INTO THE PANEL SHALL BE LABELED. LABELS THAT DO NOT ADHERE TO THE CONDUIT WILL REQUIRE CLEAR ADHESIVE AROUND THE ENTIRE CONDUIT. LOOSE LABELS WILL NOT BE ACCEPTABLE. CONDUITS FOR NEW CIRCUITS SHALL BE CAREFULLY COORDINATED. THE CURRENT INSTALLATION OF UNBUNDLED CABLES, CLUTTERED GUTTERS, AND GENERALLY MESSY WIRING WILL NOT BE ACCEPTABLE. CAREFULLY COORDINATE THE NEW WORK WITH THE EXISTING.
  - THE CONTRACTOR SHALL SUBMIT A DETAILED METHOD OF PROCEDURE (MOP) FOR WORK IN THIS ROOM TO THE OWNER AND ENGINEER. THIS SHALL INCLUDE A COLORED PHASING PLAN SHOWING HOW THE EXISTING PANEL(S) WILL BE REMOVED AND THE NEW INSTALLED. INDICATE THE GENERAL APPROACH FOR REPLACING THE PANELS IN THIS ROOM. THE CONTRACTOR SHALL OBTAIN AN APPROVED MOP FROM THE ENGINEER AND OWNER PRIOR TO PROCEEDING WITH THE WORK. BELOW IS A LIST OF WHAT SHALL BE INCLUDED IN THE MOP:
    - DATE AND TIME OF THE WORK. THIS WORK WILL NEED TO BE DONE AFTER-HOURS OR ON A WEEKEND.
    - ANTICIPATED LENGTH OF THE WORK AND DOWN TIME FOR THE FIRE ALARM SYSTEM.
    - A LIST OF THOSE THAT WILL NEED TO BE NOTIFIED.
    - WHAT FLOORS AND AREAS WILL BE IMPACTED.
    - STEP-BY-STEP PROCESS OF THE WORK.
    - WHAT OTHER SYSTEM WILL BE AFFECTED BY THE WORK.
    - LIST OF ITEMS THAT HAVE BEEN PROCURED FOR THE WORK.
    - WHAT OTHER SYSTEM WILL BE AFFECTED BY THE WORK.
    - NAMES, TITLES, CELLULAR PHONE NUMBERS OF ALL PARTIES INVOLVED.
    - THIS INCLUDES THE CONTRACTOR, FOREMANS, FMDC STAFF, AND ALL OTHER PARTIES THAT MIGHT BE AFFECTED BY THIS WORK.
  - INSTALL THE NEW FIRE ALARM TERMINAL CABINET IN THIS LOCATION. ALL OF THE EXISTING ZONED CIRCUITS SHALL BE TEMPORARILY CONNECTED TO THIS PANEL. ALL NEW CONDUCTORS INTO THE PANEL SHALL BE NEATLY BUNDLED AND LABELED. LOOSE OR UNBONDED WIRE AT JOB COMPLETION WILL REQUIRE DISCONNECTION AND CLEAN UP. REFER TO THE SPECIFICATIONS AND ONE-LINE DIAGRAMS FOR SPECIFIC REQUIREMENTS OF THE NEW FIRE ALARM CONTROL PANEL.
  - CONNECT TO THE MAIN FIRE ALARM CONTROL PANEL IN THE FIRE ALARM CLOSET NEAR THE WEST DOORS. REFER TO THE ONE-LINE DIAGRAM FOR ADDITIONAL INFORMATION. INSTALL MINIMUM 1" CONDUIT.
  - UTILIZE THE EXISTING 120 VOLT POWER CIRCUIT TO FEED THE NEW PANEL.
  - INSTALL THE NEW FIRE ALARM CONTROL PANEL IN THIS LOCATION. ALL OF THE EXISTING ZONED CIRCUITS SHALL BE TEMPORARILY CONNECTED TO THIS PANEL. ALL NEW CONDUCTORS INTO THE PANEL SHALL BE NEATLY BUNDLED AND LABELED. LOOSE OR UNBONDED WIRE AT JOB COMPLETION WILL REQUIRE DISCONNECTION AND CLEAN UP. REFER TO THE SPECIFICATIONS AND ONE-LINE DIAGRAMS FOR SPECIFIC REQUIREMENTS OF THE NEW FIRE ALARM CONTROL PANEL. THE COMPLEXITY OF REPLACING THIS PANEL AT IS CURRENT LOCATION COULD PRESENT ISSUES FOR THE CONTRACTOR BASED ON FINAL EQUIPMENT SIZES. WHERE THIS LOCATION CREATES ISSUES WITH INSTALLING NEW EQUIPMENT, THE CONTRACTOR SHALL COORDINATE WITH THE OWNER FOR AN ALTERNATE LOCATION. THAT ALTERNATE LOCATION SHALL BE MADE WITH NO ADDITIONAL COST TO THE OWNER. THE PREFERENCE IS TO KEEP THE PANEL IN THIS LOCATION. IF TEMPORARILY SUPPORTING THIS NEW EQUIPMENT IS REQUIRED, THEN MAKE ADJUSTMENTS AS NEEDED.
  - PROVIDE NEW MICROPHONE IN APPROXIMATE LOCATION SHOWN. MICROPHONE IS INTENDED TO BE USED FOR EMERGENCY ANNOUNCEMENTS, AND SHALL BE CONNECTED TO THE NEW FIRE ALARM SYSTEM.
  - EXISTING ACCESS CONTROL DOOR SHALL REMAIN LOCKED WHEN THE NEW FIRE ALARM SYSTEM IS IN ALARM.
  - CONNECT NEW FIRE ALARM CONTROL PANEL TO EXISTING IT RACK. COORDINATE CONNECTION WITH OWNER. PROVIDE ALL PROGRAMMING NECESSARY TO MAKE PROPER CONNECTION. REFER TO ONE-LINE DIAGRAMS FOR ADDITIONAL INFORMATION.
  - PROVIDE NEW 16" X 16" HINGED, LOCKABLE, NEMA 1, FLUSH MOUNTED ENCLOSURE FOR BUILDING ANNOUNCEMENT CONTROLS. PROVIDE WITH CLEAR HINGED COVER. PROVIDE DOOR-IN-DOOR PANEL WHERE POSSIBLE. REFER TO FA003 FOR ADDITIONAL INFORMATION.



PROFESSIONAL SEAL



LEVEL 1



KEY PLAN



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MO CCA 200200563 - Curtis L. Brungardt, P.E. 2003016693

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FIRE ALARM AND  
SMOKE DETECTION  
REPLACEMENT PROJECT

HARRY S. TRUMAN  
STATE OFFICE BUILDING

JEFFERSON CITY, MO 65102

PROJECT # O2001-01  
SITE # 1001  
FACILITY # 3101001050

REVISION: 1 - ADD 01  
DATE: 05/09/2024  
REVISION: \_\_\_\_\_  
DATE: \_\_\_\_\_  
REVISION: \_\_\_\_\_  
DATE: \_\_\_\_\_  
ISSUE DATE: 03/22/2024  
ISSUE REASON: BID DOCUMENTS  
PROJECT PHASE: CD

CAD DWG FILE: FA401  
DRAWN BY: KAN  
CHECKED BY: JGR  
DESIGNED BY: JGR

SHEET TITLE:  
LEVEL 1 ENLARGED  
FIRE ALARM PLAN -  
NEW WORK

SHEET NUMBER:  
**FA401**  
42 OF 53 SHEETS





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ISSUE REASON: BID DOCUMENTS  
PROJECT PHASE: CD

CAD DWG FILE: FA503  
DRAWN BY: JGR  
CHECKED BY: JGR  
DESIGNED BY: JGR

SHEET TITLE:  
FIRE ALARM  
DETAILS

SHEET NUMBER:  
FA503

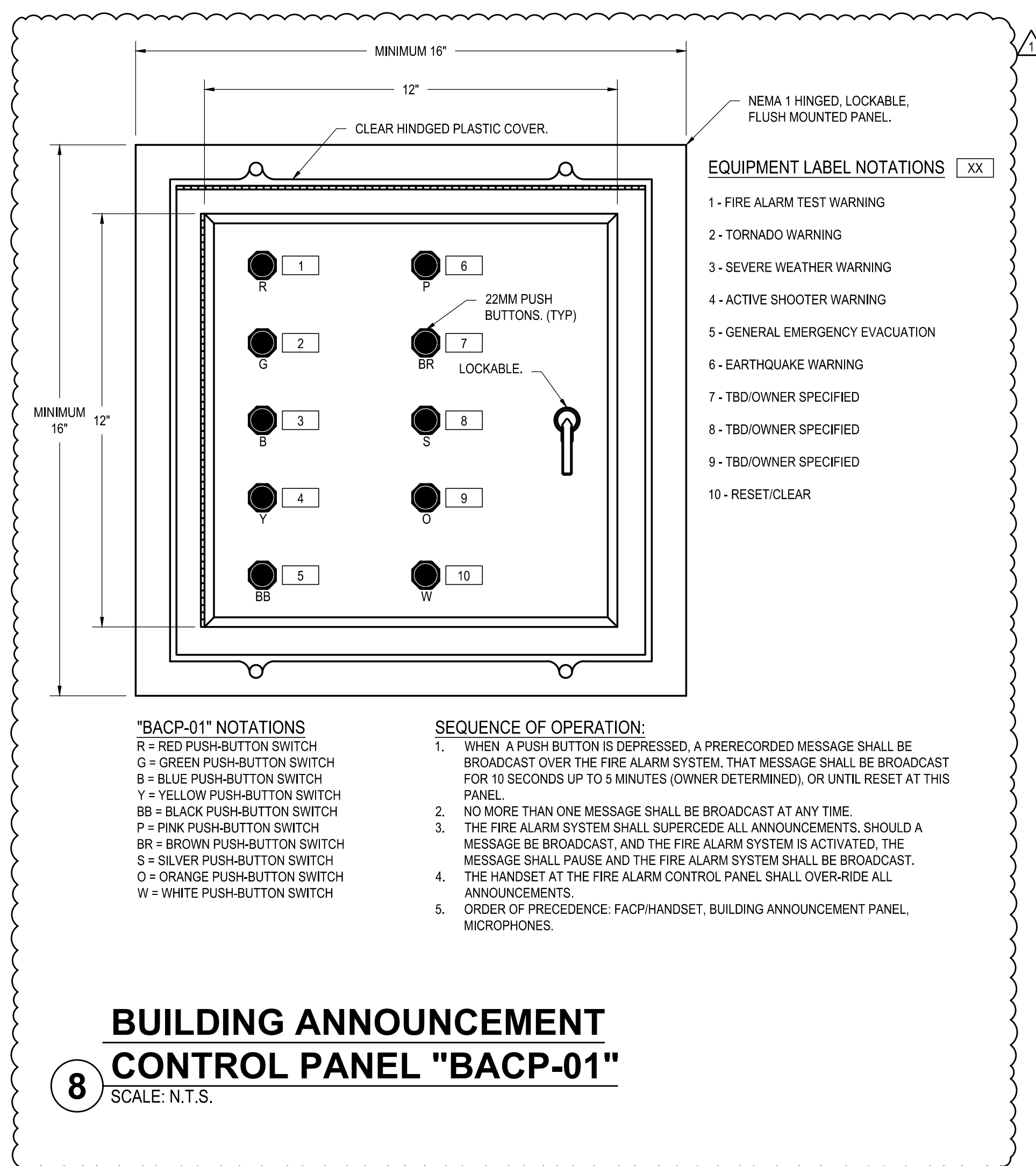
45 OF 53 SHEETS

FIRE ALARM SYSTEM WIRING SCHEDULE		
DESCRIPTION	TYPE	MINIMUM SIZE
STROBE CIRCUIT	SOLID FPLP	14 AWG
HORN/SPEAKER CIRCUIT	TWISTED PAIR SOLID FPLP WITH TRACER	14 AWG
RELAY CIRCUIT	SOLID FPLP	14 AWG
DETECTION CIRCUIT	SOLID FPLP	14 AWG
24 VDC POWER SUPPLY	SOLID FPLP	14 AWG
VOICE NETWORK	TWISTED SHIELDED PAIR SOLID FPLP	14 AWG
NETWORK/COMMUNICATIONS	CAT 6 CABLE	-

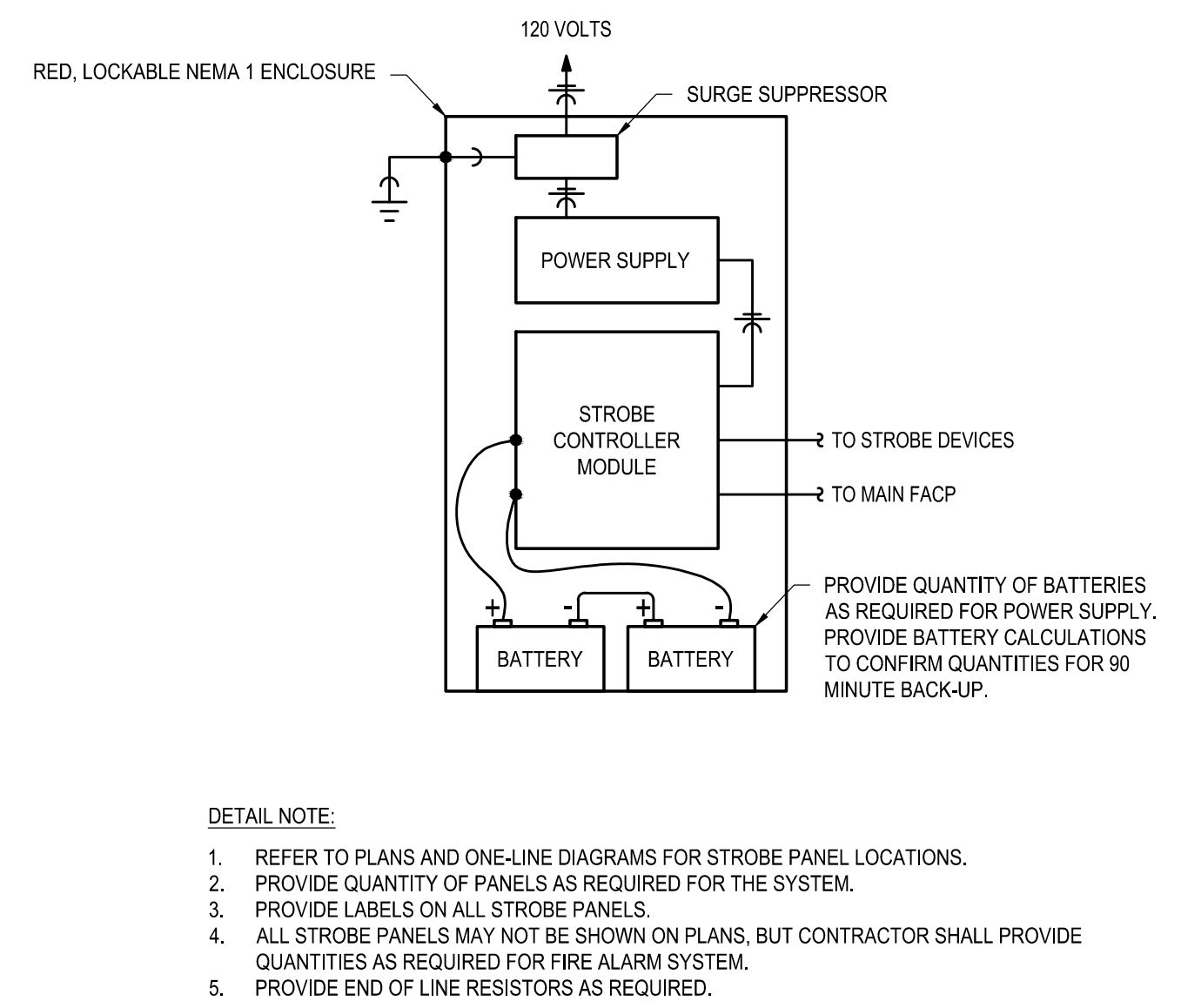
**NOTES:**

- CONTRACTOR SHALL ADJUST ALL CONDUCTOR SIZES PER MANUFACTURER REQUIREMENTS AND FOR VOLTAGE DROP REQUIREMENTS.
- SUBMIT CONDUCTORS FOR ALL CIRCUITS, BASIS OF SOUTHWIRE, BELDEN, OR EQUAL.
- ALL CONDUCTORS SHALL BE PLENUM-RATED REGARDLESS IF INSTALLED IN PLENUM.
- ALL CONDUCTORS SHALL BE INSTALLED IN CONDUITS.

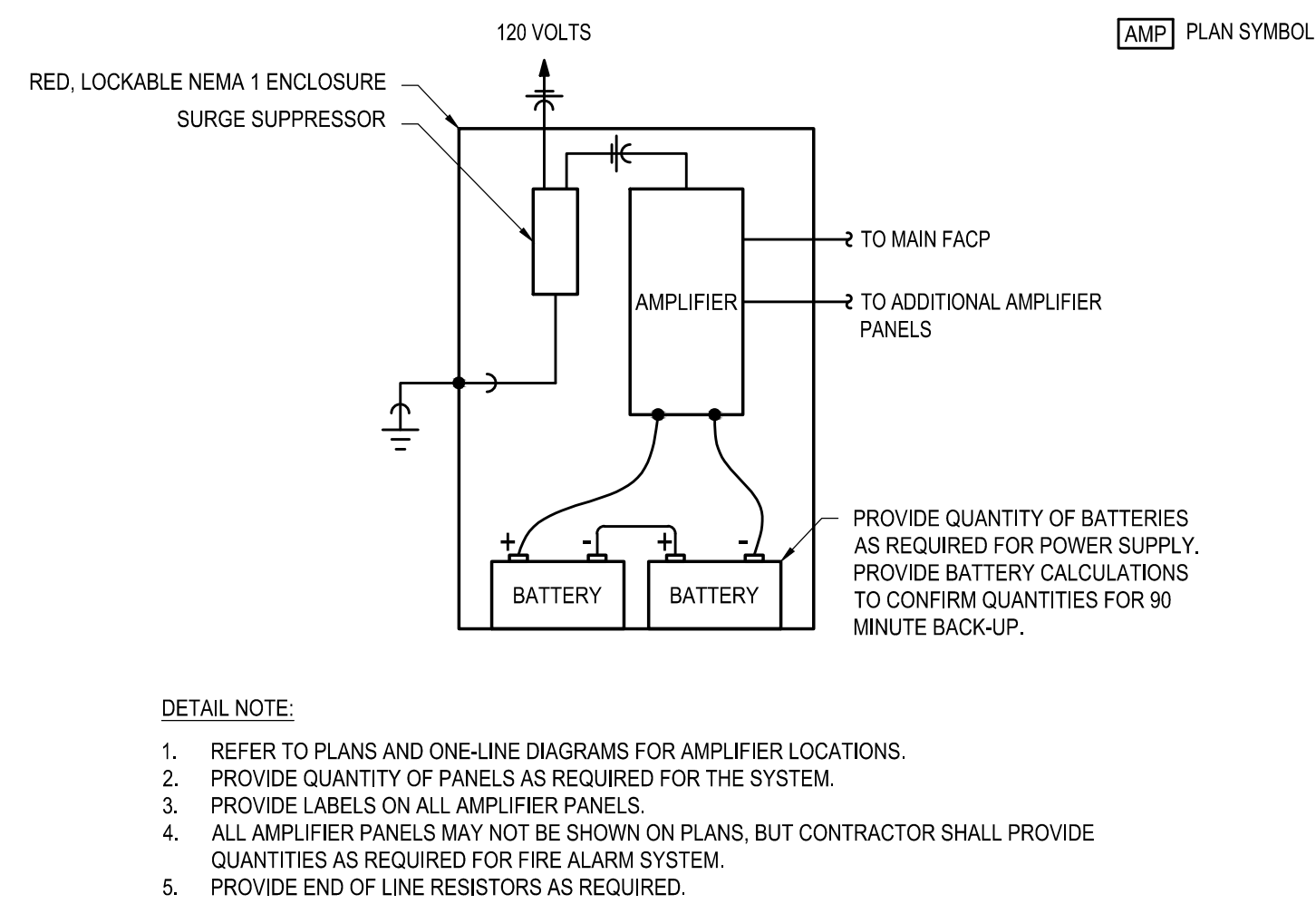
**7 FIRE ALARM SYSTEM WIRING SCHEDULE**  
SCALE: N.T.S.



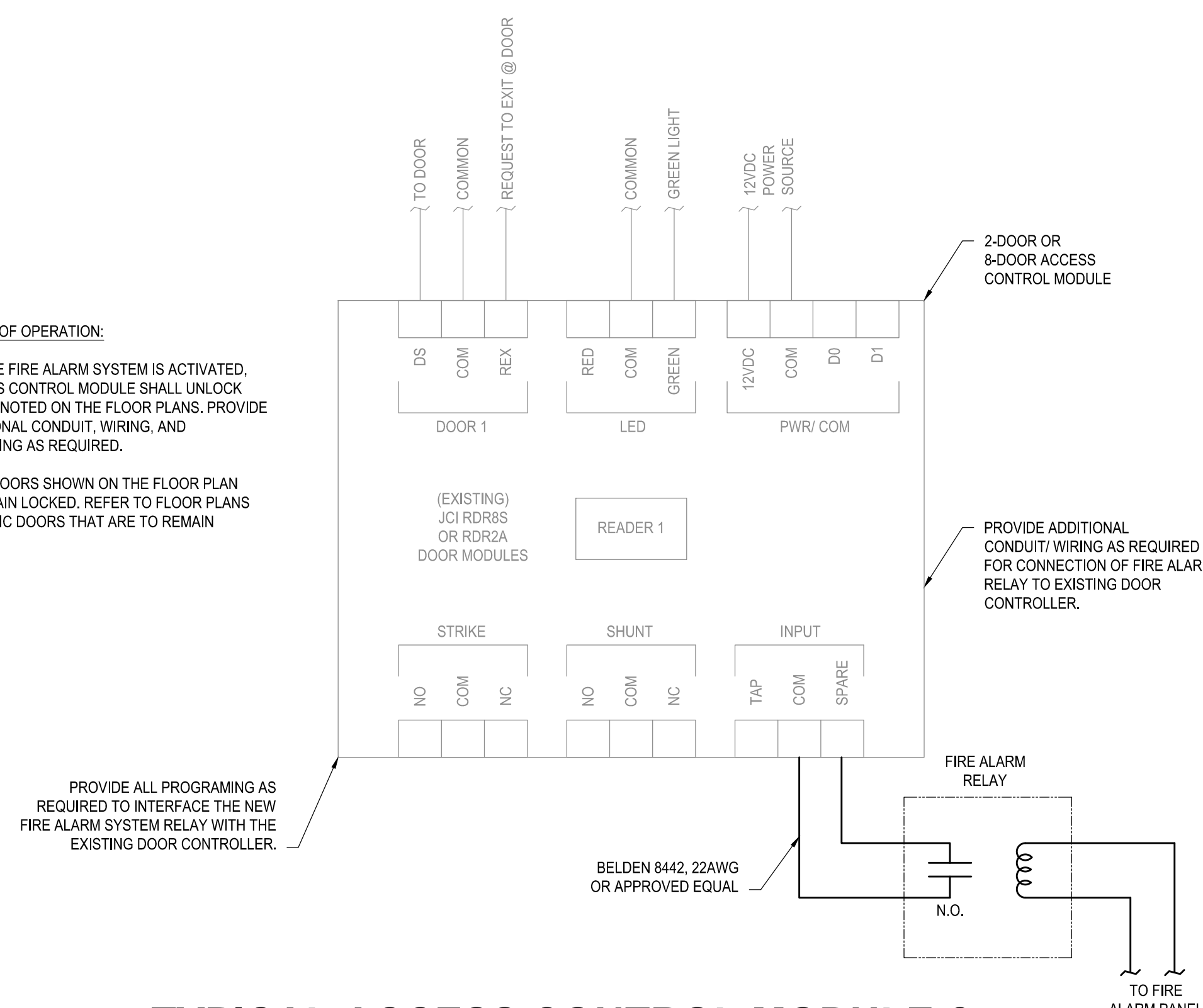
**8 BUILDING ANNOUNCEMENT CONTROL PANEL "BACP-01"**  
SCALE: N.T.S.



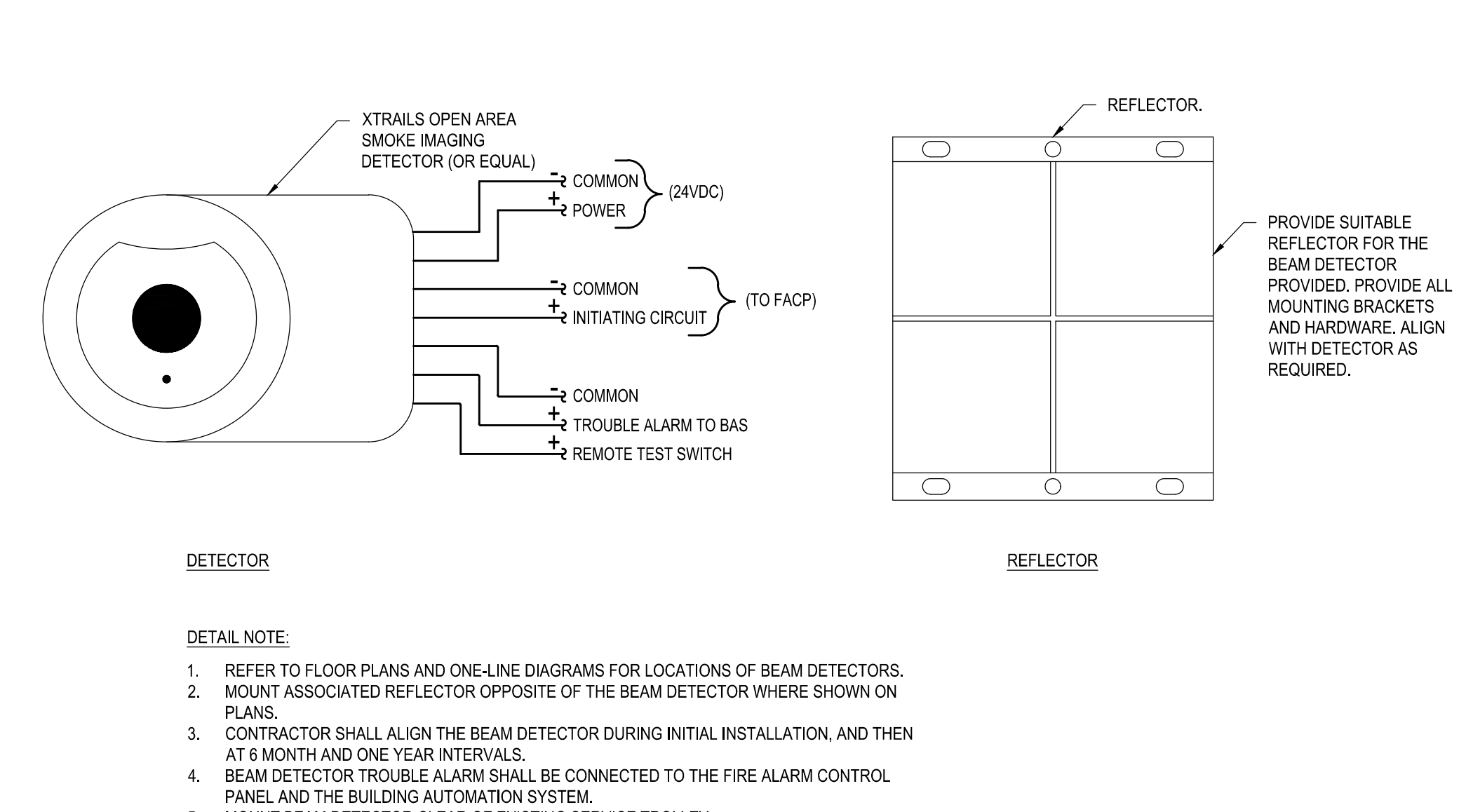
**4 STROBE PANEL POWER SUPPLY DETAIL**  
SCALE: N.T.S.



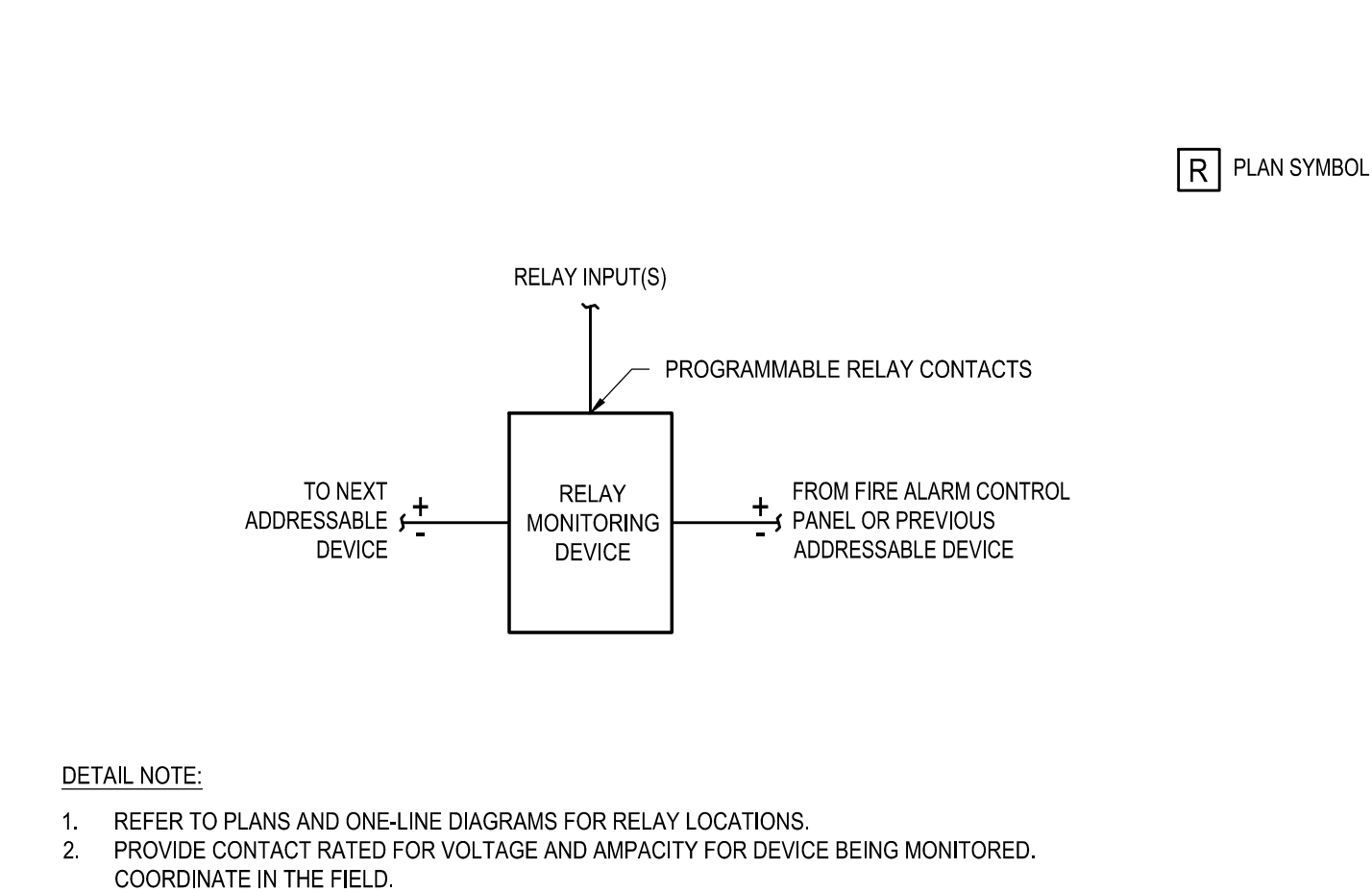
**5 AMPLIFIER PANEL WIRING DETAIL**  
SCALE: N.T.S.



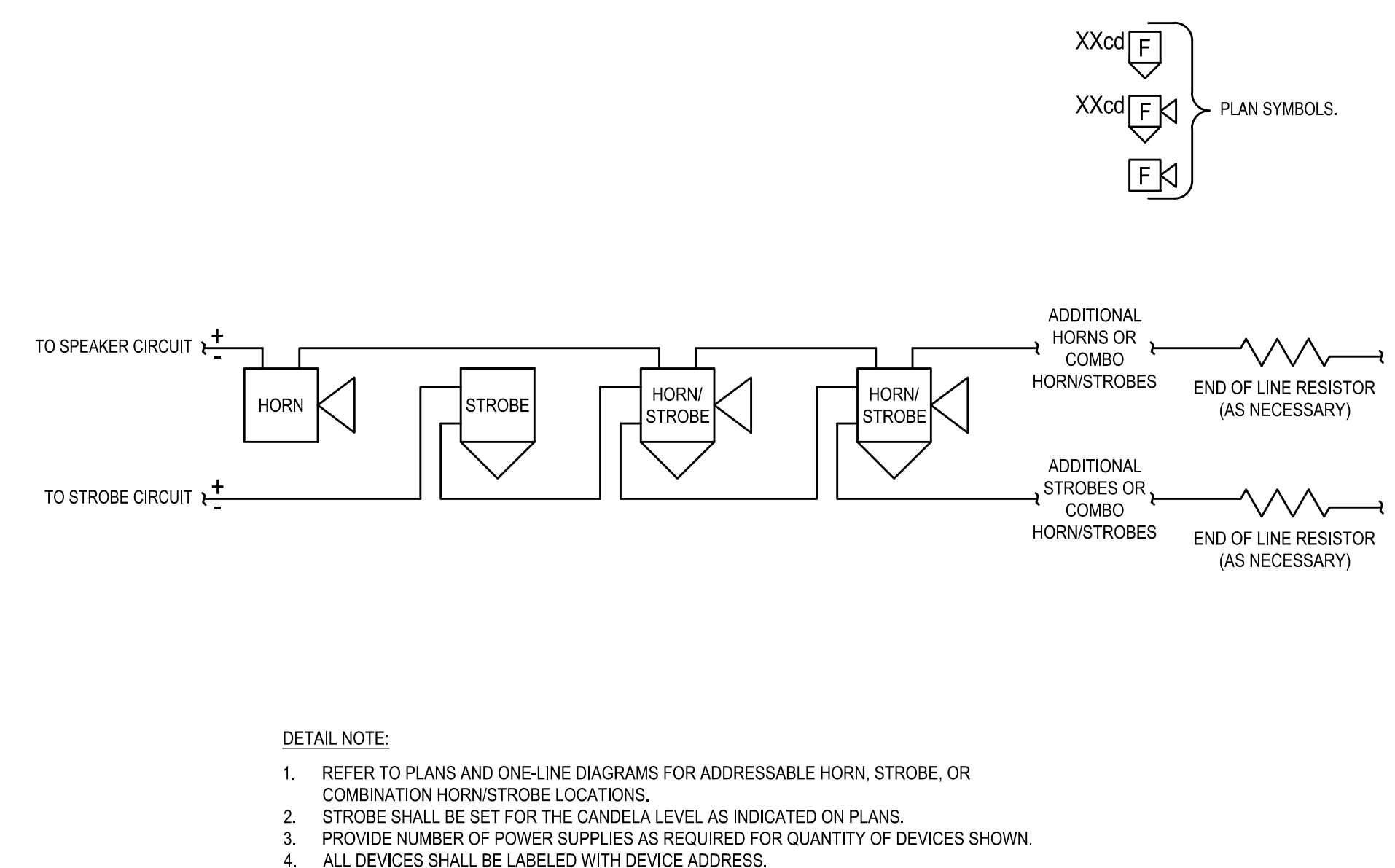
**6 TYPICAL ACCESS CONTROL MODULE & FIRE ALARM INTERFACE WIRING DIAGRAM**  
SCALE: N.T.S.



**1 BEAM SMOKE DETECTION WIRING DETAIL**  
SCALE: N.T.S.



**2 ADDRESSABLE RELAY WIRING DETAIL**  
SCALE: N.T.S.



**3 ADDRESSABLE HORN, STROBE, AND HORN/STROBE WIRING DETAIL**  
SCALE: N.T.S.

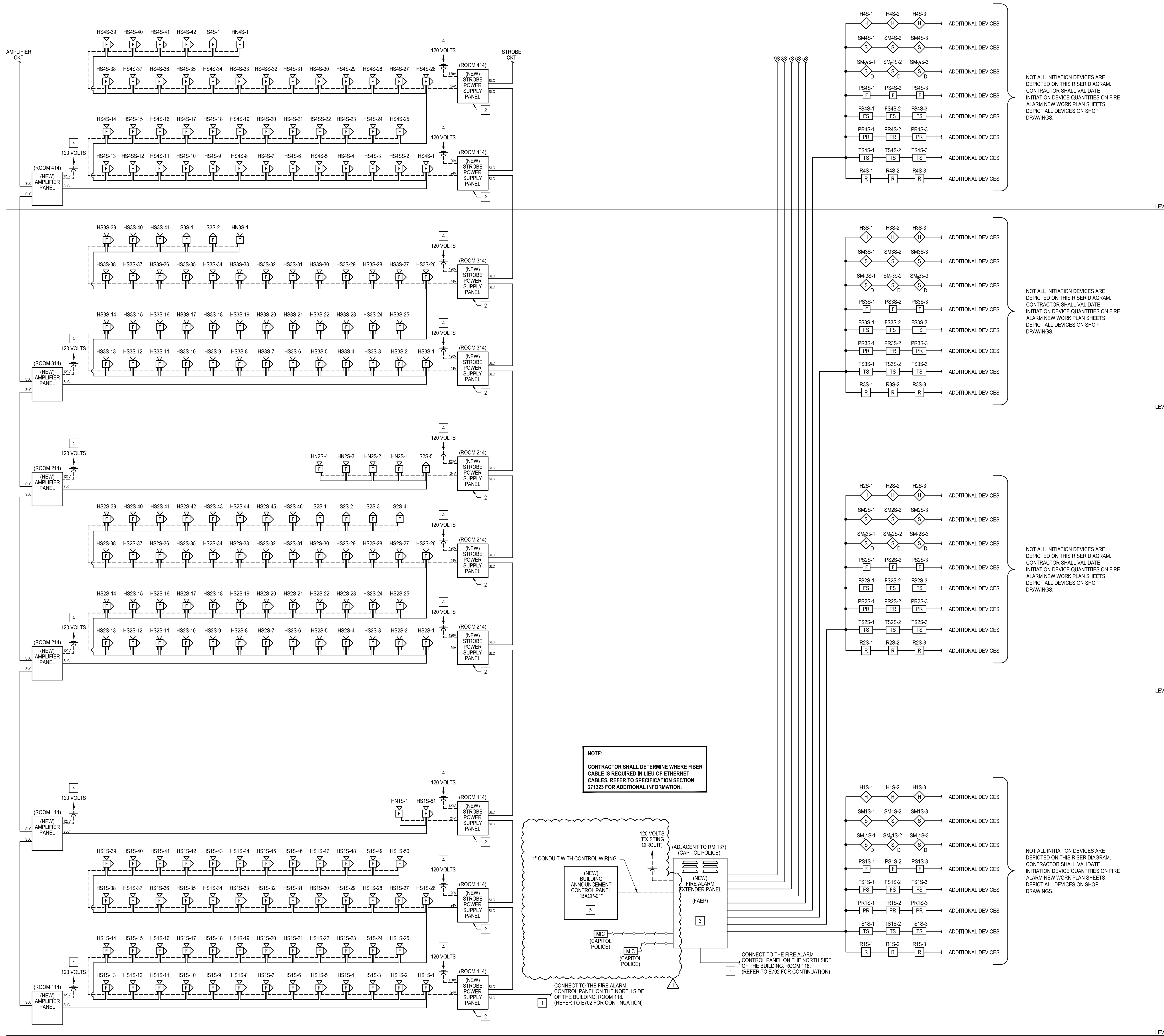




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**KEYED NOTES:** #

1. CIRCUITING FROM THE NEW FIRE ALARM CONTROL PANEL THE NEW PANELS LOCATED IN ROOM 118. REFER TO SHEET FA702 FOR CONTINUATION.
2. PROVIDE POWER SUPPLY FOR STROBES, HORNS, COMBINATION HORN/STROBES. PROVIDE WITH CONTROLLER, POWER SUPPLY, AND BATTERY BACK-UP. BASIS OF DESIGN: SIEMENS.
3. PROVIDE FIRE ALARM EXTENDER PANEL. CABINET SHALL BE PROVIDED WITH STROBE MODULES, ANNUNCIATOR MODULES, PAGING ADAPTER, SURGE PROTECTION, PAGING MODULE, AND ALL TERMINAL BLOCKS FOR CONNECTION. BASIS OF DESIGN: SIEMENS.
4. REFER TO FLOOR PLANS FOR CIRCUIT NUMBER.
5. PROVIDE FLUSH MOUNTED PANEL IN THE CAPITAL POLICE ROOM. CONTROL PANEL SHALL HAVE TEN (10) PUSH-BUTTONS TO ACTIVATE TEN PRE-RECORDED MESSAGES. PROVIDE CONDUIT AND WIRING BETWEEN THE PANEL AND THE FAEP AS REQUIRED. PROVIDE ALL PROGRAMMING AS REQUIRED. REFER TO THE SPECIFICATIONS FOR ADDITIONAL REQUIREMENTS.



**1 PARTIAL FIRE ALARM RISER DIAGRAM - SOUTH LEVELS 1 - 4**  
SCALE: N.T.S



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MO CCA 200200563 - Curtis L. Brungardt, P.E. 2003016693

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DRAWN BY: JGR  
CHECKED BY: JGR  
DESIGNED BY: JGR

SHEET TITLE:  
**FIRE ALARM  
RISER DIAGRAM**

SHEET NUMBER:  
**FA704**  
52 OF 53 SHEETS