

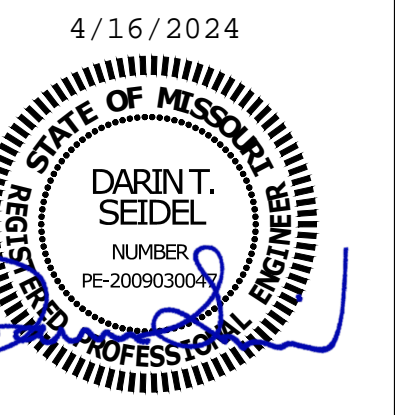
PLAN TYPE:  
FIRE ALARM SYSTEM  
DEVICE LOCATIONS



ARCHWAY  
SYSTEMS  
17020 E. 40 Hwy. Ste 1  
Independence, MO 64055  
Office: (816) 709-3358

FEDERAL PROTECTION  
2500 N AIRPORT COMMERCE AVE.  
SPRINGFIELD, MO 65803  
800-299-5400

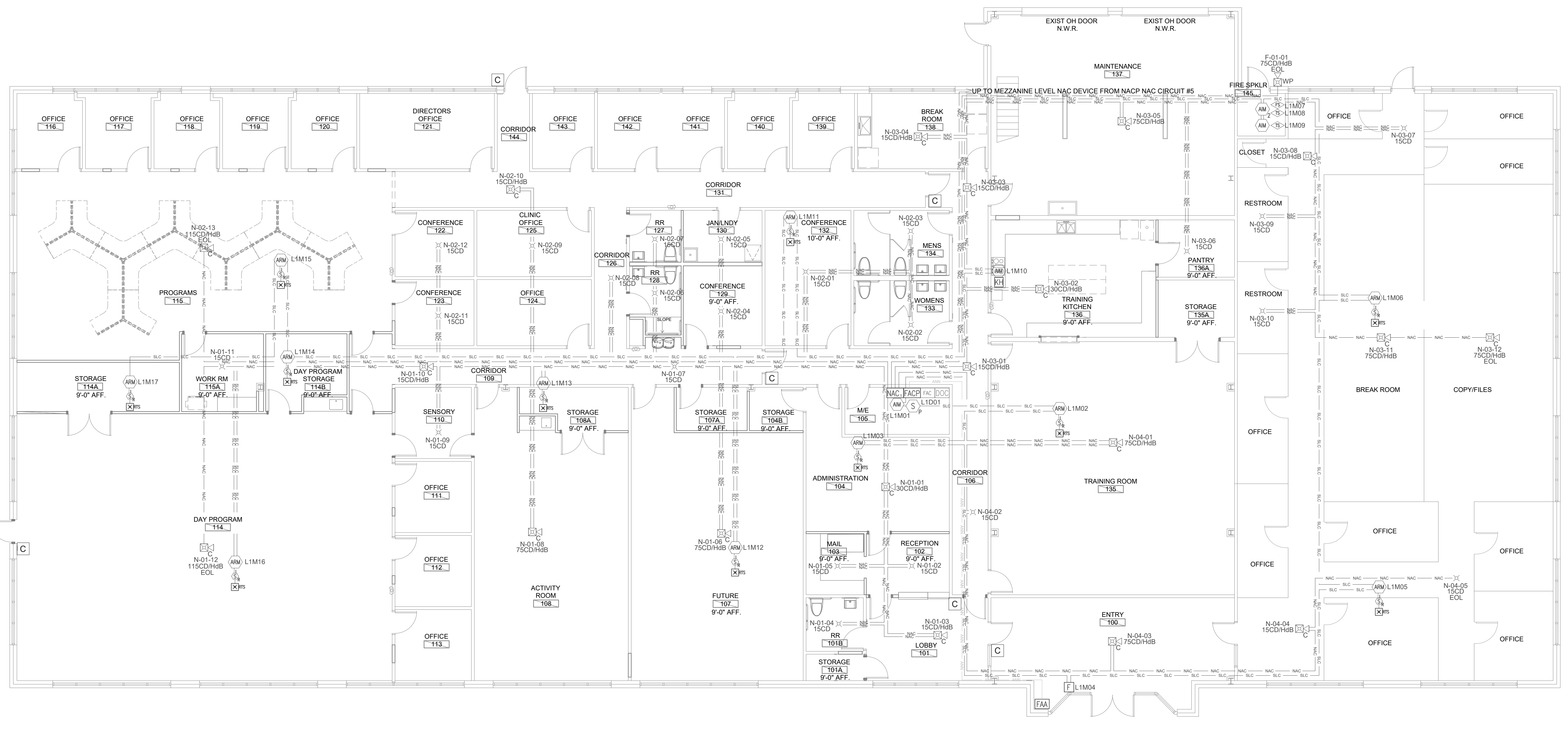
ARC OF THE OZARKS  
500 NE COLBERN RD.  
LEE'S SUMMIT, MO 64086



| NO. | REVISION | DATE |
|-----|----------|------|
|     |          |      |
|     |          |      |
|     |          |      |

DATE: 04/16/2024  
LAYOUT BY: DANIEL HEBBLETHWAITE, ET  
NICET #107102  
SCALE: 1/8" = 1'-0"

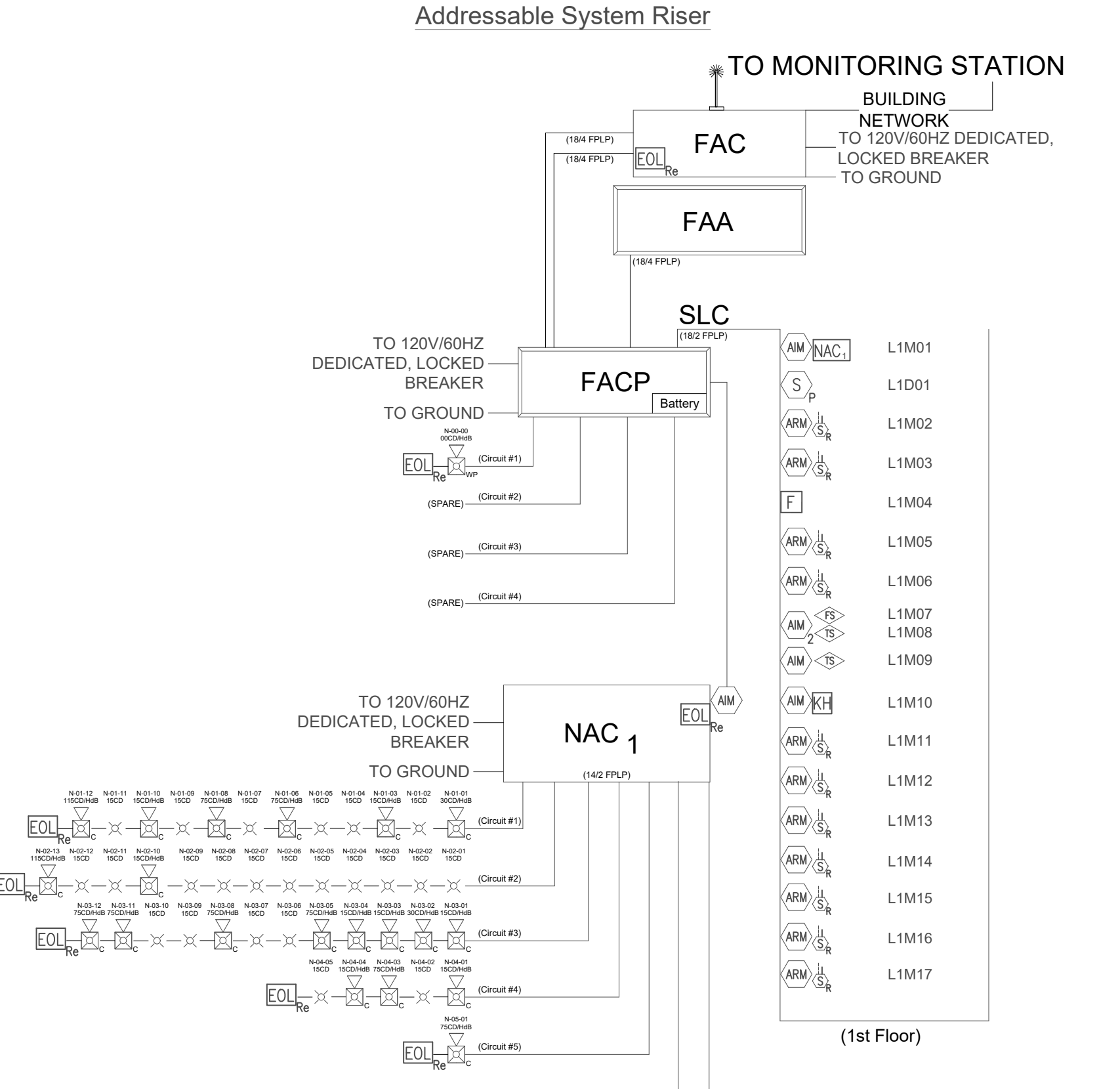
**FA-1 of FA-1**



**FIRST FLOOR FIRE ALARM SYSTEM PLAN**  
Scale: 1/8" = 1'-0"

| Symbol | Qty | Description                                | Manufacturer/Part Number          | Mounting Requirements   |
|--------|-----|--|-----------------------------------|---|
| FACB   | 01  | Fire Alarm Control Panel                   | SILENT KNIGHT 8600                | Surface mounted enclosure provided Top 1/2" AFF consult to ceiling          |
| FAC    | 01  | Commercial Fire Alarm Annunciator          | HANV-300M                         | Surface mounted enclosure provided Within 3' of Ceiling                     |
| FACI   | 01  | Alpha Keyguard                             | SILENT KNIGHT 8660                | Single Gang 4" Outlets in the ceiling                                       |
| FACI   | 01  | Initiator Power Supply                     | HFF-PS10                          | Surface mounted enclosure provided Top 1/2" AFF consult to ceiling          |
| S1     | 01  | Smoke Detector Photo Electric              | SK-PEHTD-W                        | Single Gang 4" Outlets or Square Wall Mounted 48" L of Studless             |
| M1     | 01  | Manual Pull Station                        | SK-MPLL-CA                        | Surface mounted enclosure provided Within 3' of Device                      |
| AM     | 01  | Addressable Monitor Module                 | SILENT KNIGHT SK-MONTR-2          | Surface mounted enclosure provided Within 3' of Device                      |
| AM     | 01  | Relay Module                               | SILENT KNIGHT SK-RELAY            | Surface mounted enclosure provided Within 3' of Device                      |
| W      | 01  | Water Flow Switch                          | Required to Service Contractor    | Connection Only   |
| S      | 01  | Smoke Valve Tamper Switch                  | Required to Service Contractor    | Connection Only   |
| 11     | 11  | Dust Smoke Detector Photo Electric - Human | SILENT KNIGHT SK-PEDT-4W          | Dust Mounted  |
| D1     | 11  | Panel Indicator                            | SYSTEM SENSOR 875-125000          | Wall or Ceiling Max. 60" AFF or below the Ceiling of Fire-protected device. |
| K1     | 01  | Kitchen Hood / Area                        | Provided by Mechanical Contractor | Connection Only   |
| 20     | 20  | HandShake Ceiling Carbon Inhaled           | SYSTEM SENSOR 875-125000          | Ceiling Mount, Not Higher than 30" AFF or Ceiling of Square                 |
| 23     | 23  | ADAM Smoke Carbon Inhaled                  | SYSTEM SENSOR 875-125000          | Ceiling Mount, Not Higher than 30" AFF or Ceiling of Square                 |
| 19     | 01  | HandShake Wall-Washer Photo Electric       | SYSTEM SENSOR 875-125000          | Mount above the FDC, locate on side of weather proof break bar              |
| 01     | 01  | Document Control                           | Sen-Age Electronics PSH-AGE-11    | Surface mounted enclosure provided Top 1/2" AFF                             |

| Wire Designation | Wire Type                                 |
|------------------|---|
| SLC              | Signal Line Circuit - 182 FPLP            |
| NA               | Notification Appliance Circuit - 162 FPLP |
| AA               | Annunciator Circuit - 184 FPLP            |
| PA               | Remote Test Switch Circuit - 184 FPLP     |

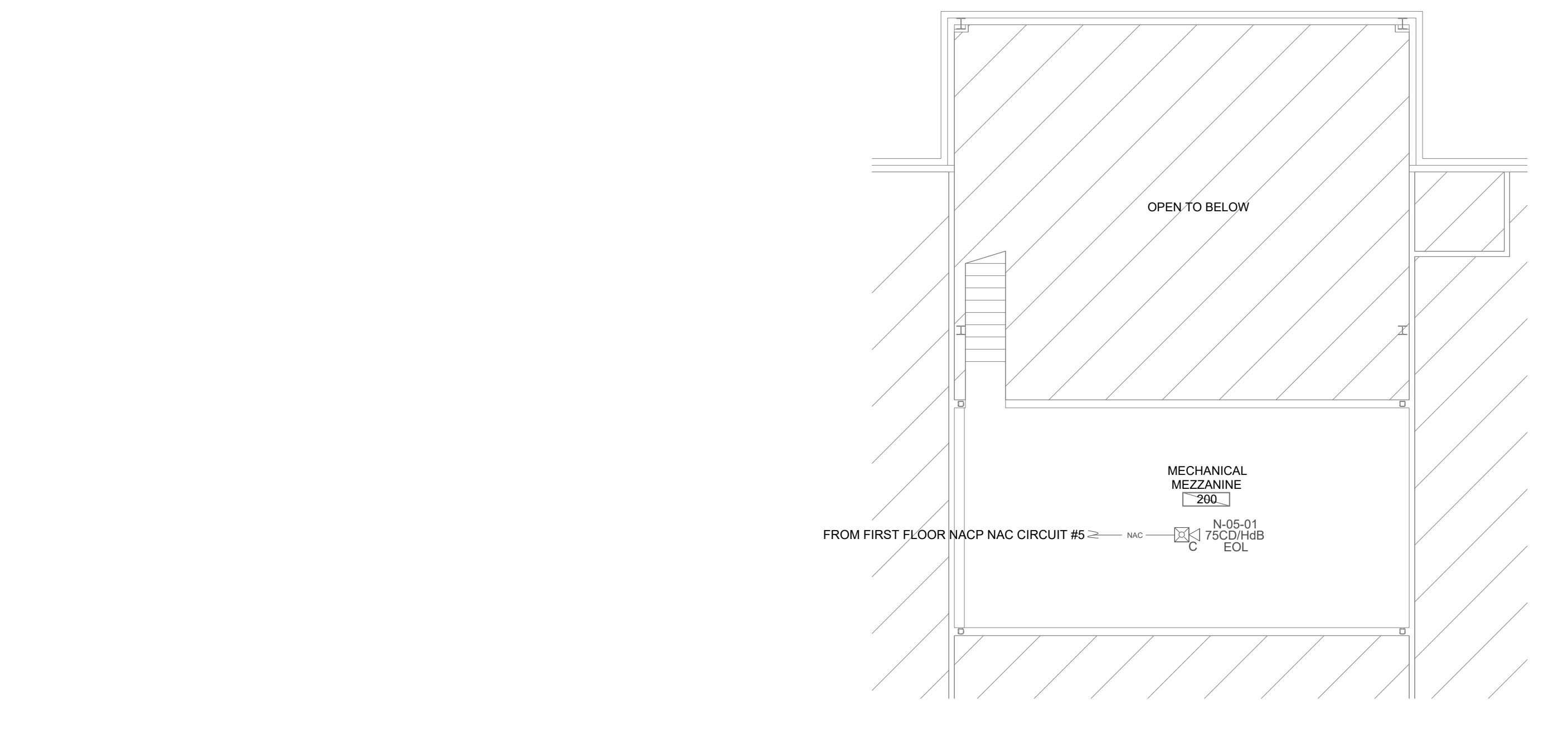


|                                |  |
|--------------------------------|--|
| OCCUPANCY CLASS                | B - BUSINESS   |
| OCCUPANCY LOAD                 | 144 OCCUPANTS  |
| CONSTRUCTION TYPE              | I-B  |
| CODE SUMMARY                   | IBC-2018, IPC-2018, IAC-2018, NEC-2017, IFC-2018, NFPA72-2019.     |
| SPRINKLER                      | FULLY SPRINKLED  |
| SCOPE OF WORK                  | INSTALLATION OF A NEW FIRE ALARM SYSTEM WITH OCCUPANT NOTIFICATION |
| NUMBER OF FLOORS               | 1 FLOOR WITH MEZZANINE   |
| FIRST FLOOR AREA (SQ. FT.)     | 11,840 SQ. FT.   |
| MEZZANINE FLOOR AREA (SQ. FT.) | 383 SQ. FT.  |
| TOTAL BUILDING AREA (SQ. FT.)  | 12,223 SQ. FT.   |

| Part Number | Description  | Quantity | Per Device   | All Devices | Per Device | All Devices |
|-------------|--|----------|--------------|-------------|------------|-------------|
| 8600        | Addressable Fire Alarm Control Panel                     | 1        | 0.180000     | 0.180000    | 0.250000   | 0.250000    |
| 6800        | Remote Annunciator                                       | 1        | 0.020000     | 0.020000    | 0.050000   | 0.050000    |
| SK-PHTD-W   | Photoelectric Smoke Detector, White                      | 1        | 0.002000     | 0.002000    | 0.004500   | 0.004500    |
| SK-PULL-CA  | Addressable Manual Pull Station                          | 1        | 0.000300     | 0.000300    | 0.000300   | 0.000300    |
| SK-MONTR    | Addressable Monitor Module                               | 3        | 0.000400     | 0.001200    | 0.005500   | 0.016500    |
| SK-MONTR-2  | Dual Tone Monitor Module                                 | 1        | 0.000700     | 0.000700    | 0.000700   | 0.000700    |
| SK-RELAY    | Relay Module   | 11       | 0.000255     | 0.002805    | 0.000255   | 0.002805    |
| SK-PHTD-R-W | Photoelectric Detector w/ remote Test Capability, use V1 | 11       | 0.000000     | 0.000000    | 0.000000   | 0.000000    |
| TAC-DC      | Total Alarm Current Max DC                               |          | 0.000000     | 0.000000    | 0.040000   | 0.000000    |
| TAC-SLC     | Total Alarm Current Max SLC                              |          | 0.000000     | 0.000000    | 0.400000   | 0.000000    |
|             | Total Aux current  |          | Maximum Amps | 2.0000      | Standby    | 0.230       |

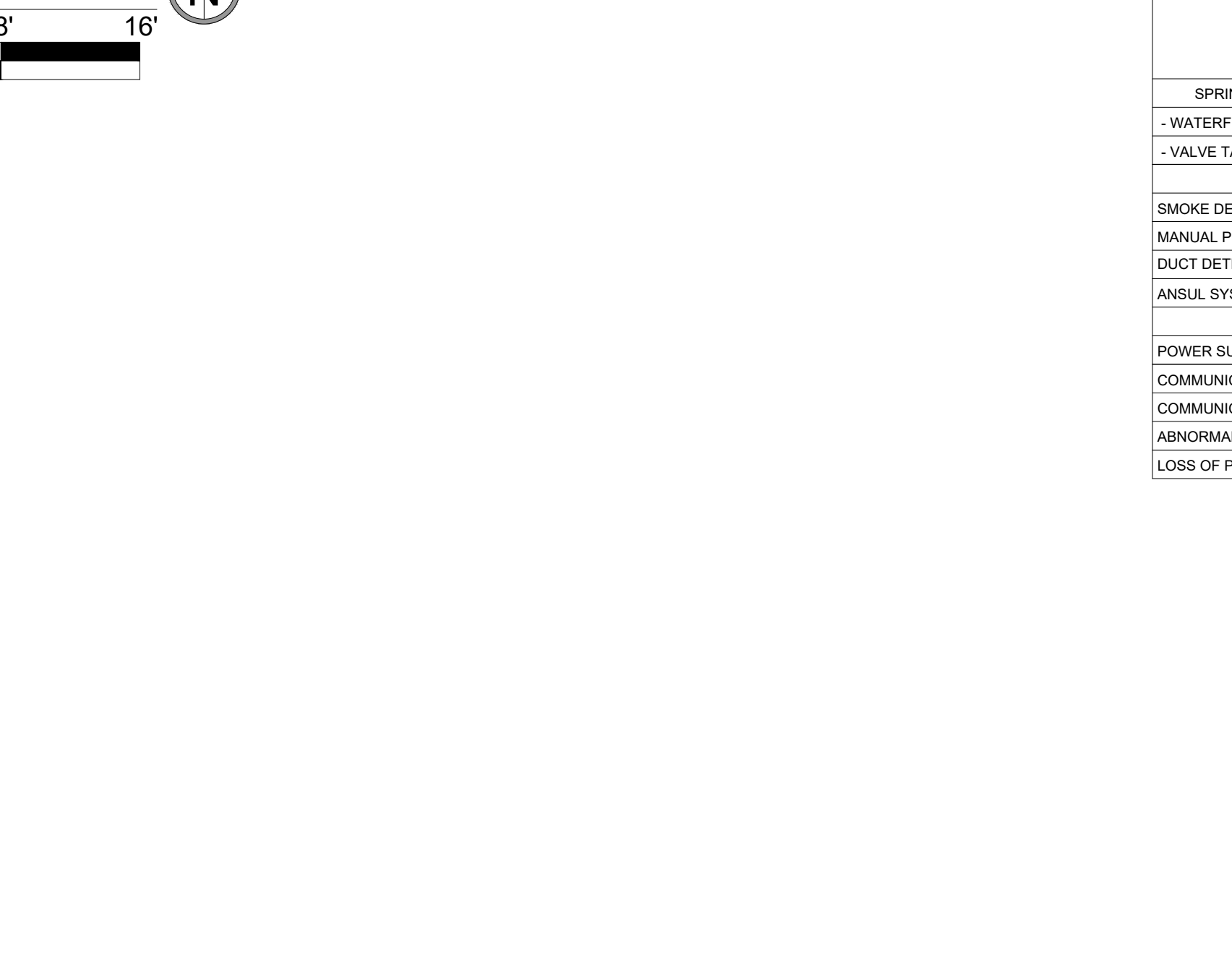
| Circuit        | Device      | Quantity     | Per Device | Alarm | Current | All Devices |
|----------------|-------------|--------------|------------|-------|---------|-------------|
| Circuit 1      | P2RK (75db) | 1            | 0.168      | 0.168 | 0.168   | 0.000       |
| <b>Total 1</b> |             |              |            |       |         |             |
| Circuit 2      |             | Maximum Amps | 2.5000     | 0.000 | 0.000   | 0.000       |
| <b>Total 2</b> |             |              |            |       |         |             |
| Circuit 3      |             | Maximum Amps | 2.5000     | 0.000 | 0.000   | 0.000       |
| <b>Total 3</b> |             |              |            |       |         |             |
| Circuit 4      |             | Maximum Amps | 2.5000     | 0.000 | 0.000   | 0.000       |
| <b>Total 4</b> |             |              |            |       |         |             |
| <b>Total 4</b> |             |              |            |       |         |             |
|                |             | Maximum Amps | 2.5000     | 0.000 | 0.000   | 0.000       |
|                |             | Maximum Amps | 2.5000     | 0.000 | 0.000   | 0.483       |

| Device   | Device Standby Current | Device Alarm Current | Quantity | Total Standby Draw | Total Alarm Draw | Wire Size | Alarm Min |
|----------|------------------------|----------------------|----------|--------------------|------------------|-----------|-----------|
| HWF2-COM | 0.23                   | 0.95                 | 1        | 0.23               | 0.95             | 18        | 15        |
|          | 0                      | 0                    | 0        | 0                  | 0                |           |           |
|          | 0                      | 0                    | 0        | 0                  | 0                |           |           |
|          | 0                      | 0                    | 0        | 0                  | 0                |           |           |



**MECHANICAL MEZZANINE FLOOR FIRE ALARM SYSTEM PLAN**  
Scale: 1/8" = 1'-0"

| Device          | Current Draw | Quantity | Total Current | Circuit #1 | Circuit #2 | Circuit #3 | Circuit #4 | Circuit #5 | Circuit #6 | Circuit #7 | Circuit #8 |
|-----------------|--------------|----------|---------------|------------|------------|------------|------------|------------|------------|------------|------------|
| PC2VLED (115cd) | 0.120        | 1        | 0.12          | 0          | 0.12       | 0          | 0.12       | 0          | 0.00       | 0          | 0          |
| PC2VLED (75db)  | 0.087        | 2        | 0.174         | 0          | 0          | 3          | 0.261      | 2          | 0.174      | 1          | 0.067      |
| PC2VLED (90db)  | 0.038        | 1        | 0.038         | 0          | 0          | 0          | 0.038      | 0          | 0          | 0          | 0          |
| PC2VLED (15cd)  | 0.035        | 2        | 0.07          | 1          | 0.035      | 4          | 0.14       | 1          | 0.035      | 0          | 0          |
| SCWLED (15cd)   | 0.018        | 6        | 0.108         | 11         | 0.186      | 4          | 0.072      | 2          | 0.035      | 0          | 0          |
| P2RK (75db)     | 0.168        | 0        | 0             | 0          | 0          | 0          | 0          | 0          | 0          | 0          | 0          |



**NFPA 72 AND ADA DEVICE  
INSTALLATION REQUIREMENTS**

THIS IS FOR REFERENCE ONLY. NOT ALL DEVICES MAY BE USED.  
SEE SPECIFICATION IF CONDUIT IS TO BE NEEDED THROUGHOUT.

