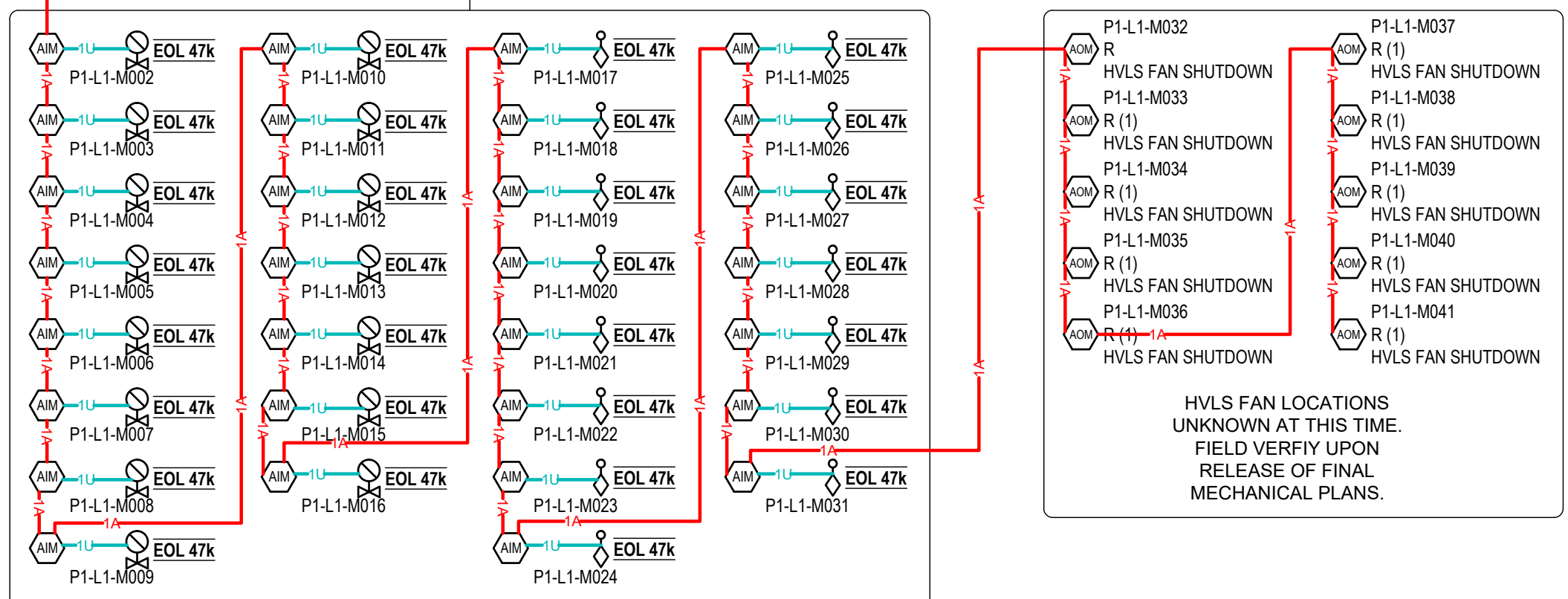
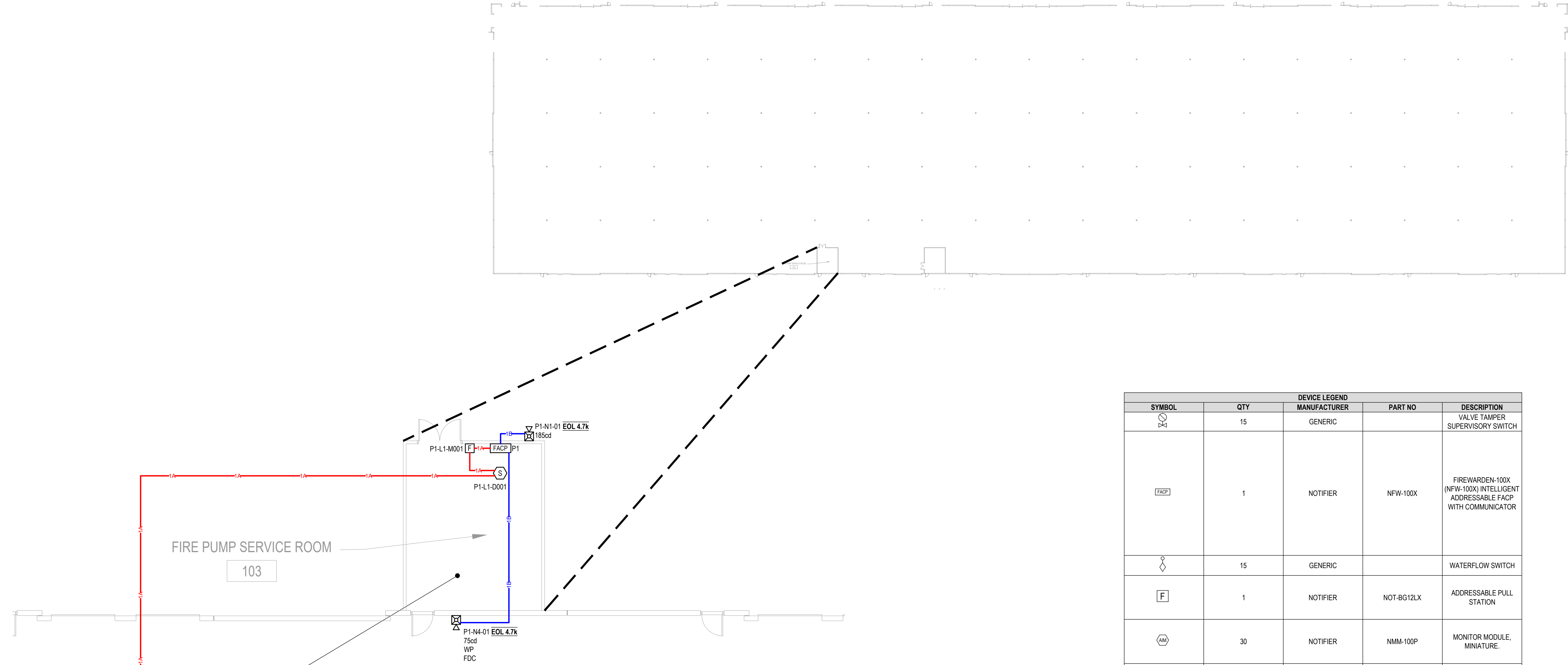


6/21/2023



REFER TO FIRE SPRINKLER DRAWINGS FOR EXACT QUANTITY & LOCATION OF SPRINKLER FLOW AND TAMPER SWITCHES.

FLOOR PLAN - FIRE ALARM
1/8" = 1'-0"
0 4' 8' 16'

| DEVICE LEGEND | | | | |
|---------------|-----|---------------|------------|---|
| SYMBOL | QTY | MANUFACTURER | PART NO | DESCRIPTION |
| | 15 | GENERIC | | VALVE TAMPER SUPERVISORY SWITCH |
| | 1 | NOTIFIER | NFW-100X | FIREWARDEN-100X (NFW-100X) INTELLIGENT ADDRESSABLE FACP WITH COMMUNICATOR |
| | 15 | GENERIC | | WATERFLOW SWITCH |
| | 1 | NOTIFIER | NOT-BG12LX | ADDRESSABLE PULL STATION |
| | 30 | NOTIFIER | NMM-100P | MONITOR MODULE, MINIATURE. |
| | 10 | NOTIFIER | NC-100R | INTELLIGENT ADDRESSABLE RELAY MODULE. |
| | 1 | NOTIFIER | NP-200 | ADDRESSABLE LOW-PROFILE PHOTOELECTRIC SMOKE DETECTOR. B300-6 BASE INCLUDED. FLASHSCAN ONLY. |
| | 1 | SYSTEM SENSOR | P2RK | 2-WIRE HORN STROBE, STANDARD CD, OUTDOOR |
| | 1 | SYSTEM SENSOR | P2RL | 2-WIRE, HORN STROBE, RED |

| CABLE AND WIRE LEGEND | | | | | |
|-----------------------|------------------|-----|--------------------|--|--------------|
| LABEL | PART NO | AWG | RESISTANCE (Ω/KFT) | DESCRIPTION | TOTAL LENGTH |
| A | 182 FPLP/R (SLC) | 18 | 7.77 | 2 COND. SOLID COPPER FPLP/R ADDRESSABLE UNSHIELDED | 404' |
| B | 142 FPLP/R (NAC) | 14 | 3.07 | 2 COND. SOLID COPPER FPLP/R ANALOG UNSHIELDED | 39' |
| U | 182 FPLP/R (IDC) | 18 | 7.77 | 2 COND. SOLID COPPER FPLP/R ANALOG UNSHIELDED | 126' |

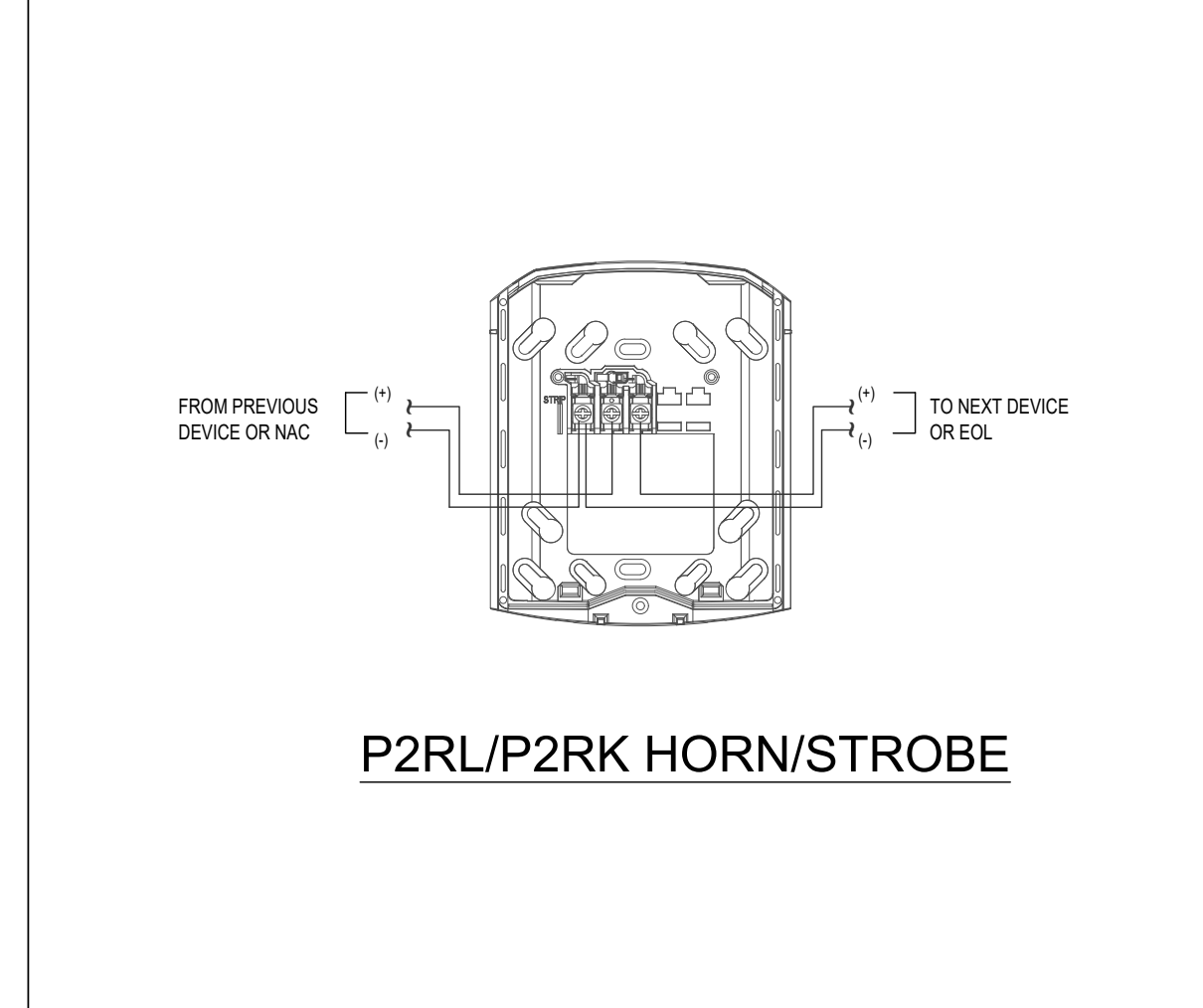
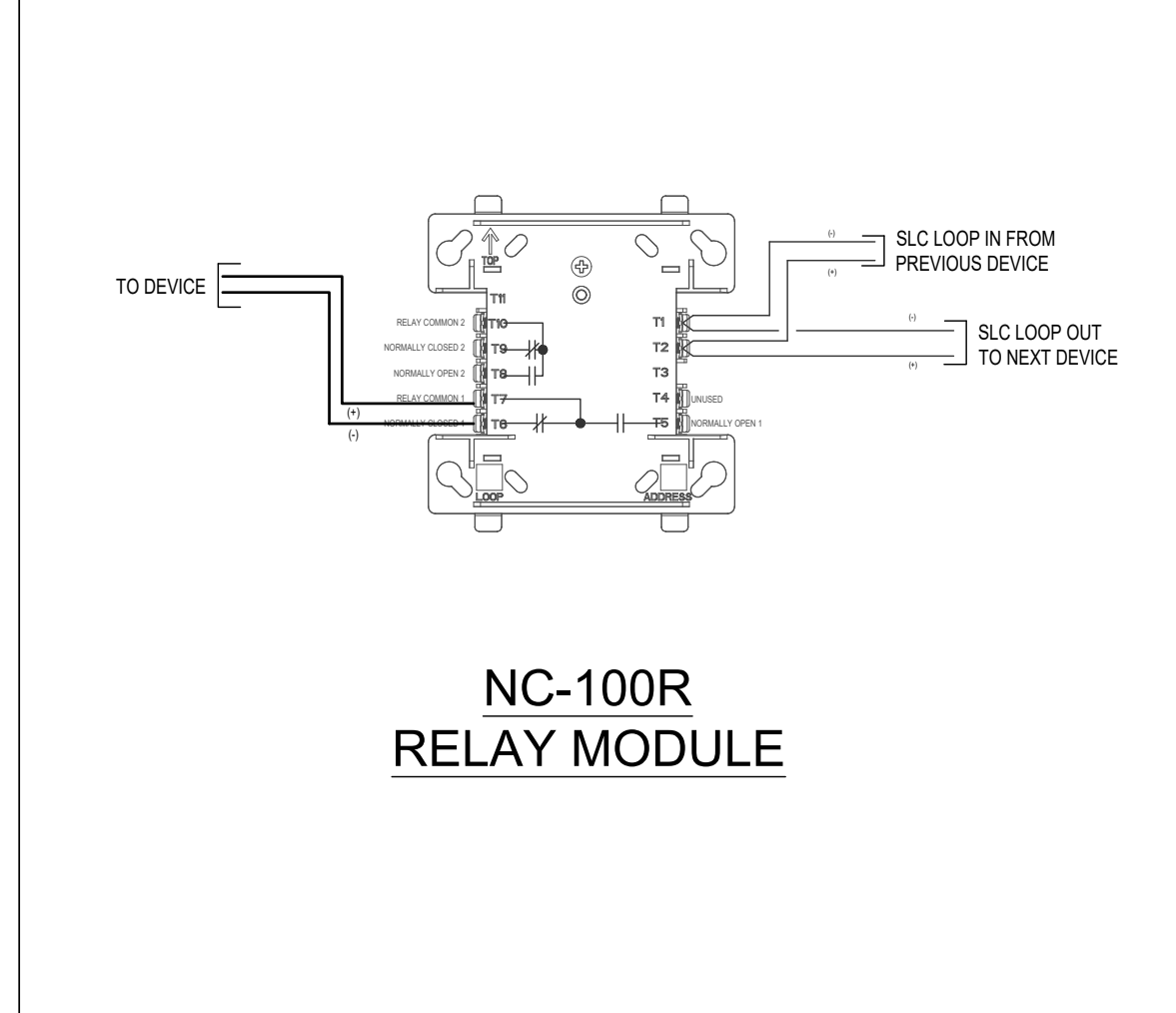
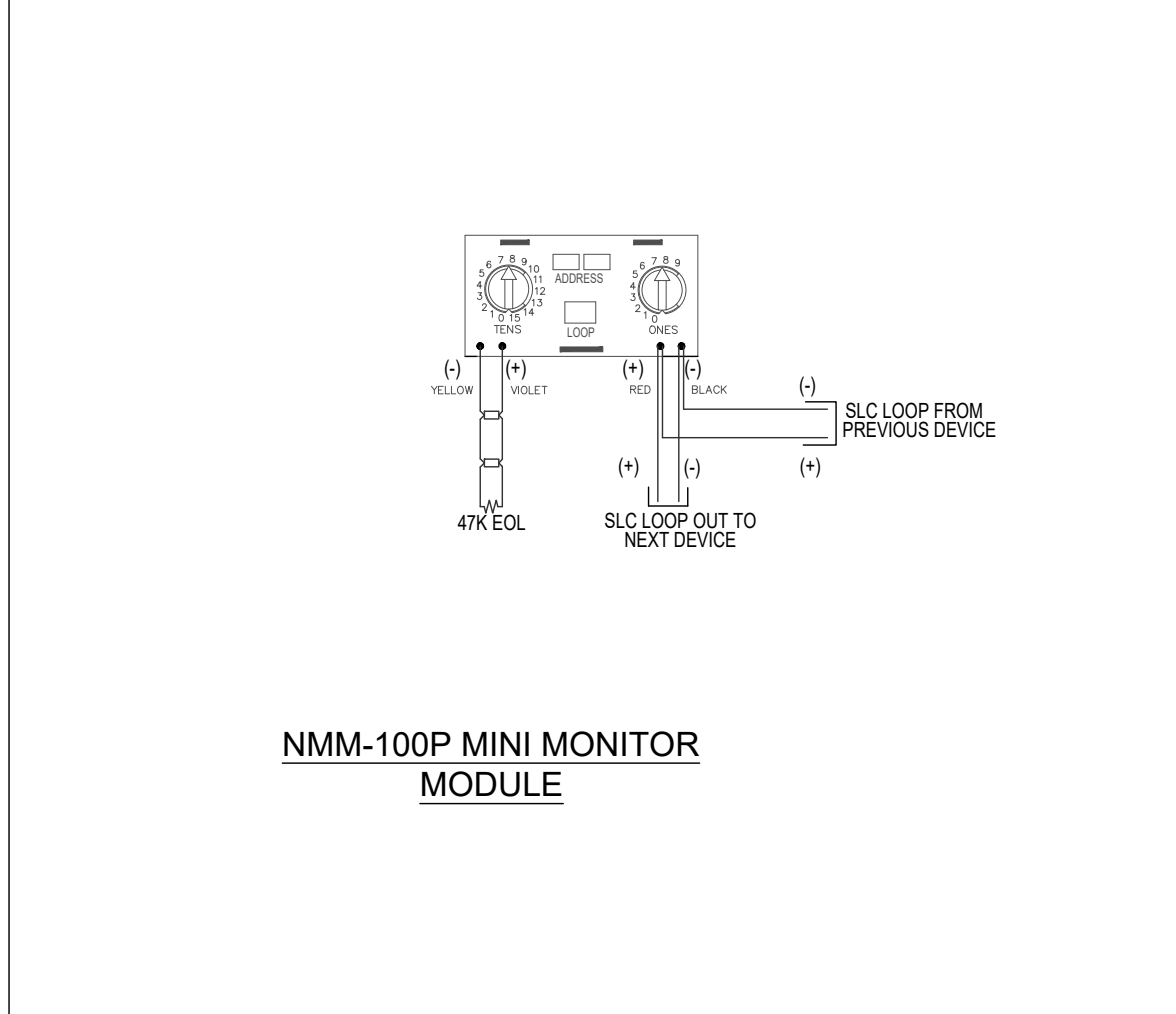
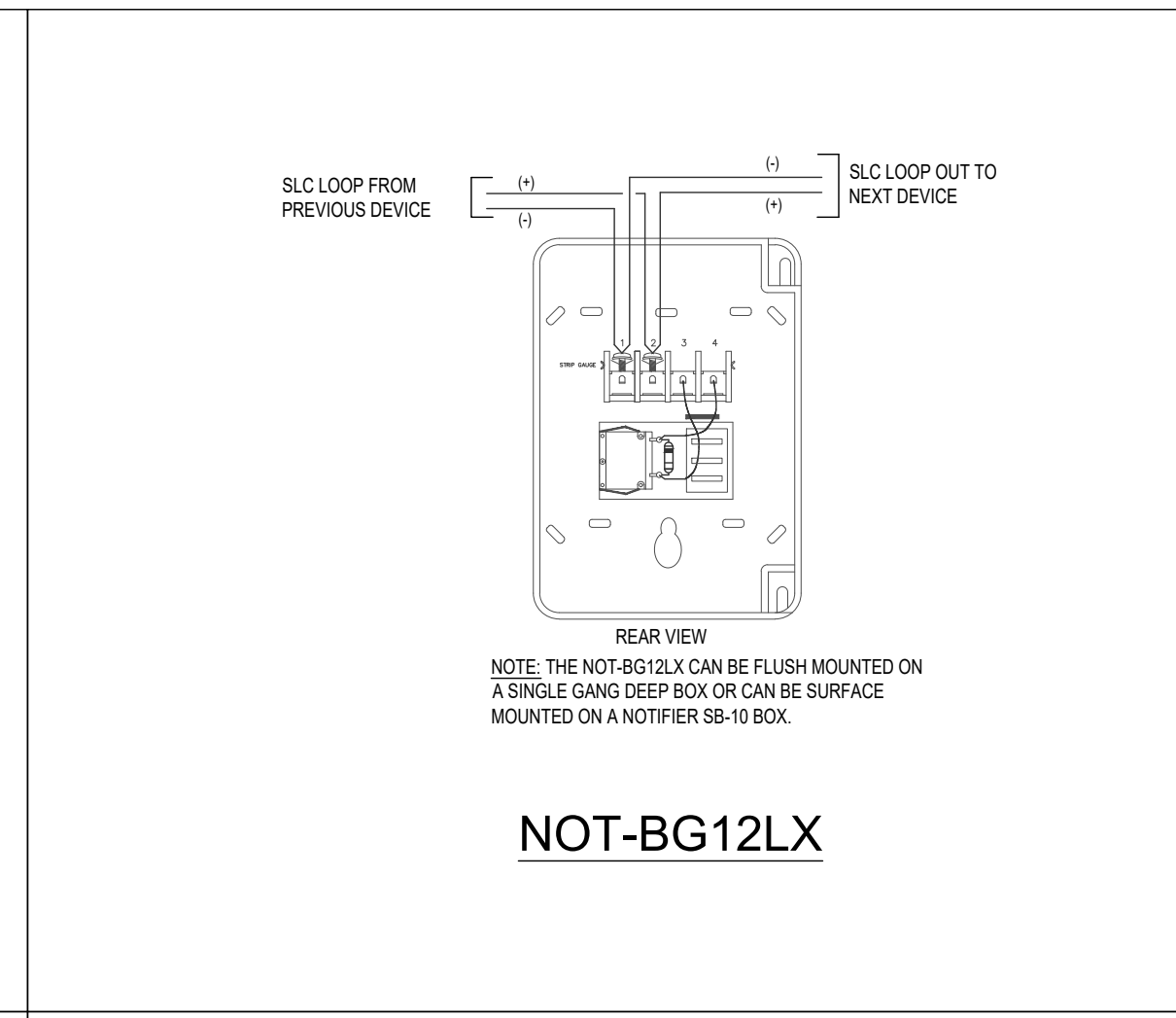
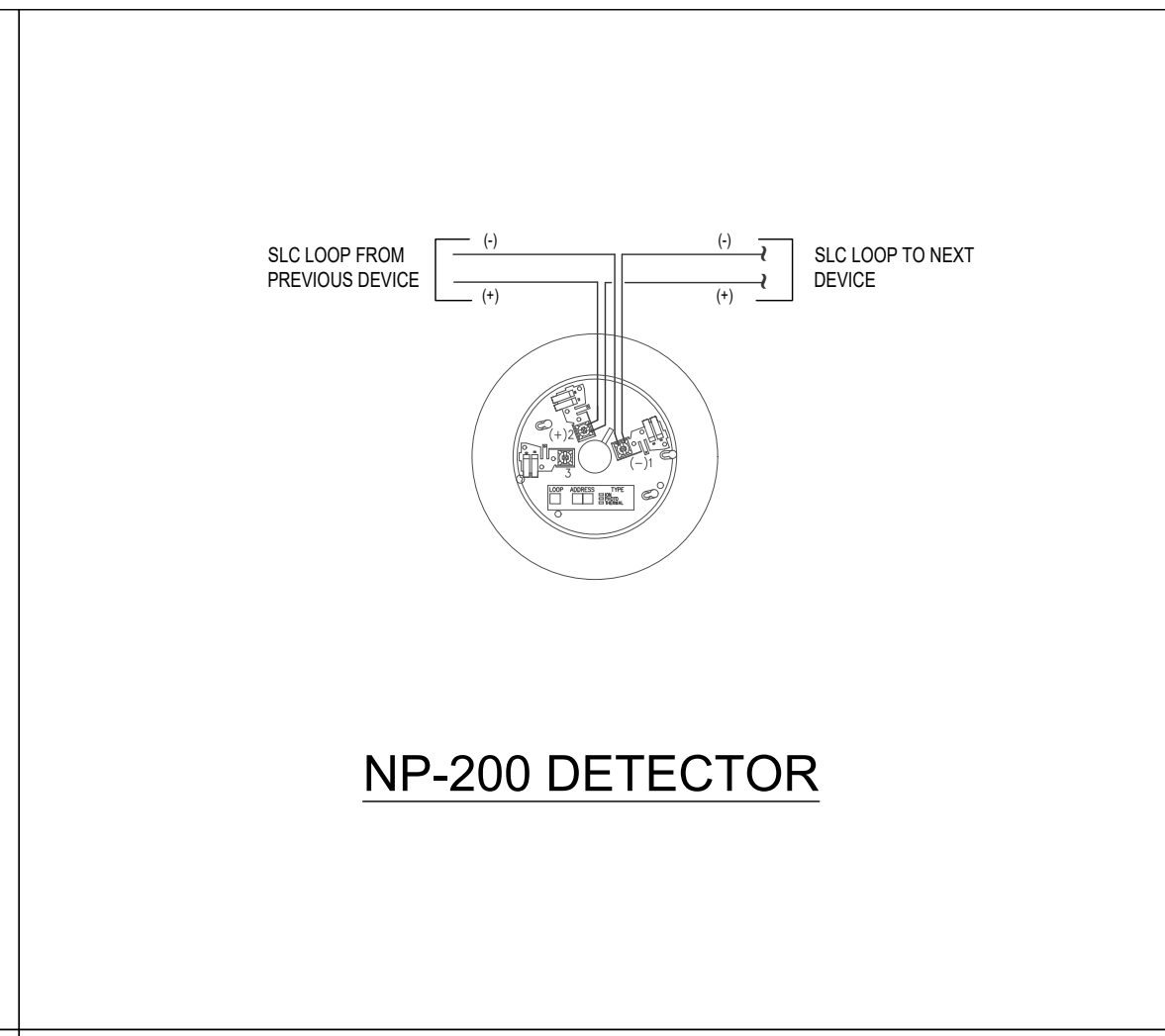
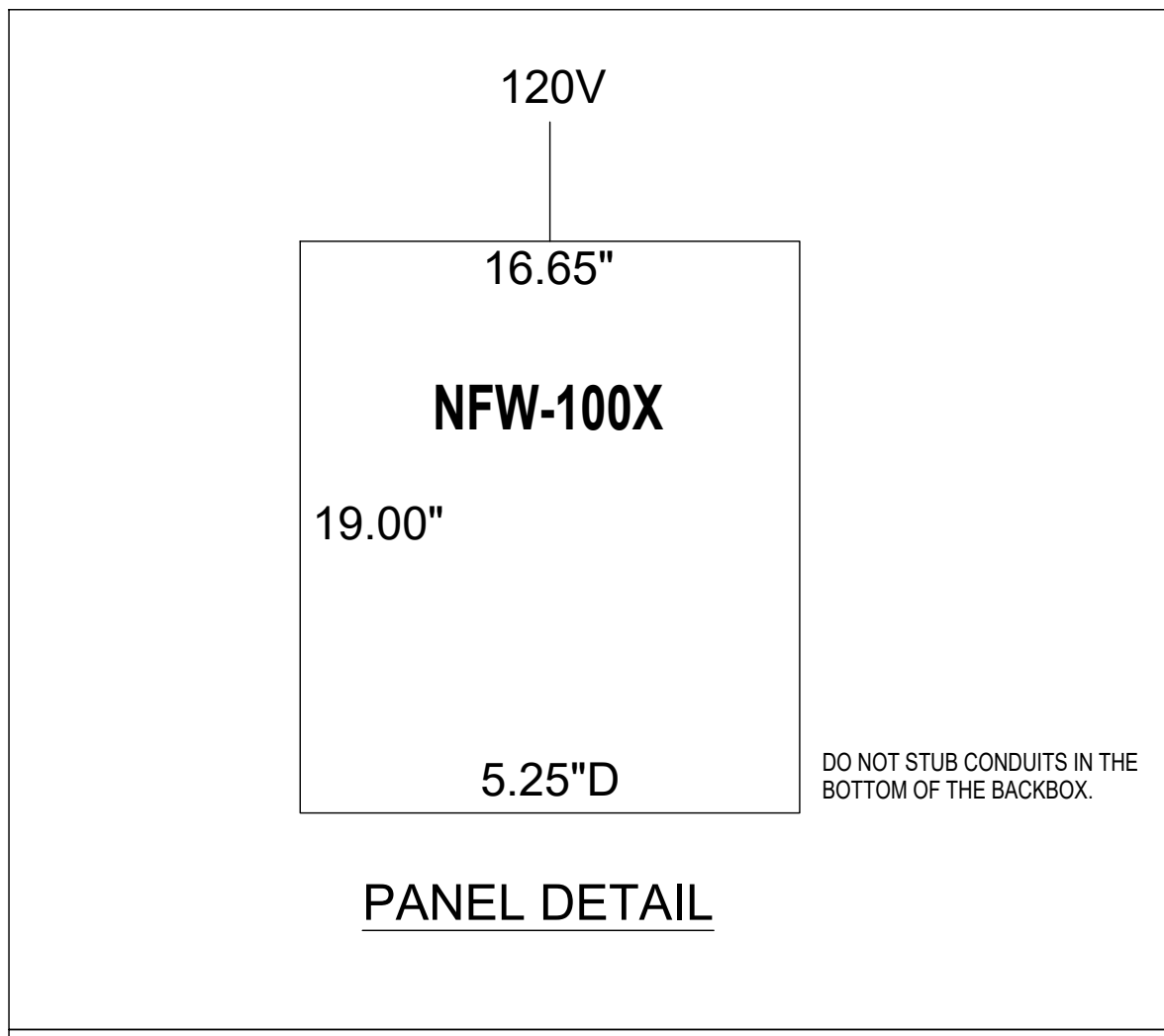
NO. DATE: REVISION DESCRIPTION:

PROJECT NAME / CUSTOMER / LOCATION:

TOWN CENTRE LOGISTICS, LOT 4
500 NE TOWN CENTRE BLVD.
LEE'S SUMMIT, MO 64064

SYSTEM DESCRIPTION:
NEW FIRE ALARM SYSTEM

PROJECT MANAGER:
DARIN WASSINGER
(816) 206-3328
DESIGNER: SAS DRAFTER: SAS
DRAWING #: **FA101**
PROJECT JOB#: PJ2305300006
DATE: 06/19/2023
ISSUED FOR: CONSTRUCTION



| SYSTEM INPUTS | | | | | | | | | | SYSTEM OUTPUTS | | | | | | | | | | | | | | | | | | | | |
|---------------|---|---|---|---|---|---|---|---|---|----------------|---|---|---|----|--|---|---|---|---|---|---|---|---|---|---|---|---|---|---|--|
| | A | B | C | D | E | F | G | H | I | J | K | L | M | N | | A | B | C | D | E | F | G | H | I | J | K | L | M | N | |
| 1 | MANUAL PULL STATION | * | * | | | | | * | * | * | * | * | * | * | 1 | CONTROL LINE INDICATION | | | | | | | | | | | | | | |
| 2 | SMOKE DETECTOR | * | * | | | | | * | * | * | * | * | * | * | 2 | ACTIVATE COMMAND/ALARM SIGNAL INDICATOR | | | | | | | | | | | | | | |
| 3 | WATERFLOW SWITCH | * | * | | | | | * | * | * | * | * | * | * | 3 | ACTIVATE ALARM/RECALL SIGNAL INDICATOR | | | | | | | | | | | | | | |
| 4 | VALVE TAMPER SWITCH | * | * | | | | | * | * | * | * | * | * | * | 4 | ACTIVATE COMMAND/SUPERVISORY SIGNAL INDICATOR | | | | | | | | | | | | | | |
| 5 | FIRE ALARM CONTROL PANEL AC POWER FAILURE | | | * | * | | | | | * | * | * | * | 5 | ACTIVATE ALARM/RECALL SIGNAL INDICATOR | | | | | | | | | | | | | | | |
| 6 | FIRE ALARM CONTROL PANEL LOW BATTERY | | | * | * | | | | | * | * | * | * | 6 | ACTIVATE ALARM/RECALL SIGNAL INDICATOR | | | | | | | | | | | | | | | |
| 7 | OPEN CIRCUIT | | | * | * | | | | | * | * | * | * | 7 | ACTIVATE ALARM/RECALL SIGNAL INDICATOR | | | | | | | | | | | | | | | |
| 8 | GROUND FAULT | | | * | * | | | | | * | * | * | * | 8 | ACTIVATE ALARM/RECALL SIGNAL INDICATOR | | | | | | | | | | | | | | | |
| 9 | NOTIFICATION APPLIANCE CIRCUIT SHORTED | | | * | * | | | | | * | * | * | * | 9 | ACTIVATE ALARM/RECALL SIGNAL INDICATOR | | | | | | | | | | | | | | | |
| 10 | ALL OTHER TROUBLES | | | * | * | | | | | * | * | * | * | 10 | ACTIVATE ALARM/RECALL SIGNAL INDICATOR | | | | | | | | | | | | | | | |

PERFORM OPERATION/REPORT DEVICE STATUS

| PANEL P1 (NFW-100X) BATTERY CALCULATION | | | | | | | |
|--|-----|------------------------|---|---|-----------------|--------------------------------|-----------|
| (SECONDARY POWER SOURCE REQUIREMENTS) | | | | | | | |
| PANEL POWER SUPPLY MAX CURRENT = 6A | | | | TOTAL USED CAPACITY (IN ALARM) = 0.7785A (12.98%) | | | |
| | | STANDBY CURRENT (AMPS) | | SECONDARY ALARM CURRENT (AMPS) | | | |
| PANEL COMPONENTS | QTY | PART NO. | DESCRIPTION | CURRENT DRAW (A) | TOTAL (A) | CURRENT DRAW (A) | TOTAL |
| | 1 | NFW-100X Main Board | Fire Alarm Control Panel Main Board | 0.141 | 0.141 | 0.257 | 0.257 |
| CIRCUIT | QTY | PART NO. | DESCRIPTION | CURRENT DRAW (A) | TOTAL (A) | CURRENT DRAW (A) | TOTAL (A) |
| | 1 | PWRMOD24 | Power Expander Module | 0.007 | 0.007 | 0.008 | 0.008 |
| P1-L1 | 10 | NC-100R | Intelligent addressable relay module. | 0.000255 | 0.00255 | 0.0065 | 0.065 |
| | 30 | NMM-100P | Monitor module, miniature. | 0.00035 | 0.0105 | 0.0006 | 0.018 |
| | 1 | NOT-BG12LX | Addressable Pull Station | 0.000375 | 0.000375 | 0.005 | 0.005 |
| | 1 | NP-200 | Addressable low-profile photoelectric smoke detector. 8300-G base included. FlashScan only. | 0.0002 | 0.0002 | 0.0045 | 0.0045 |
| P1-N1 | 1 | P2RL | 2-Wire, Horn Strobe, Red 185cd | 0 | 0 | 0.245 | 0.245 |
| P1-N4 | 1 | P2RK | 2-Wire Horn Strobe, Standard cd, Outdoor 75cd | 0 | 0 | 0.176 | 0.176 |
| TOTAL STANDBY (A) | | | | 0.161625 | TOTAL ALARM (A) | 0.7785 | |
| REQUIRED STANDBY TIME = 24 HOURS | | | | REQUIRED ALARM TIME = 5 MINUTES | | | |
| SECONDARY STANDBY LOAD (A) | | 0.161625 | | 24 | | 3.88 | |
| SECONDARY ALARM LOAD (A) | | 0.7785 | | 0.08 | | 0.06 | |
| STANDBY AND ALARM SUBTOTAL (AMP HOURS) | | | | 3.94 | | 1.25 | |
| DERATING FACTOR | | | | 1.25 | | 4.93 | |
| SECONDARY LOAD REQUIREMENTS (AMP HOURS) | | | | 4.93 | | PROVIDE (2) 12V 12AH BATTERIES | |
| *BATTERY BOX SIZE CAPACITY NOT SPECIFIED. REFER TO MANUFACTURER DOCUMENTATION. | | | | | | | |

| P1 N1 POINT-TO-POINT REPORT | | | | | | | | CIRCUIT SETTINGS | | TOTALS | |
|--|----------|--------------------------------|--------------------|-----------------------|--------------------------|------------------------------|----------------------------|-------------------------------|--------------------|----------------------|-------|
| Circuit Wiring Properties: 'B' 14/2 FPLP/R (NAC) 14 AWG, 2 Cond. Solid Copper FPLP/R Analog Unshielded | | | | | | | | Starting Calculation Voltage: | 20.4 | Max. Voltage Drop: | 0.01 |
| Distance measured using drawn segment lengths with 10.00% additional length calculated | | | | | | | | Min. Operational Voltage: | 16 | End Of Line Voltage: | 20.39 |
| Device Label | Part No. | Description | Device Current (A) | Remaining Current (A) | Dist. From Previous (Ft) | Resistance From Previous (Ω) | Voltage Drop From Previous | Voltage At Device | Total Voltage Drop | Voltage Drop Percent | |
| P1-N1-01 EOL 4.7k | P2RL | 2-Wire, Horn Strobe, Red 185cd | 0.245 | 0.245 | 5 | 0.032707 | 0.01 | 20.39 | 0.01 | 0.04% | |

| P1 N4 POINT-TO-POINT REPORT | | | | | | | | CIRCUIT SETTINGS | | TOTALS | |
|--|----------|---|--------------------|-----------------------|--------------------------|------------------------------|----------------------------|-------------------------------|--------------------|----------------------|-------|
| Circuit Wiring Properties: 'B' 14/2 FPLP/R (NAC) 14 AWG, 2 Cond. Solid Copper FPLP/R Analog Unshielded | | | | | | | | Starting Calculation Voltage: | 20.4 | Max. Voltage Drop: | 0.04 |
| Distance measured using drawn segment lengths with 10.00% additional length calculated | | | | | | | | Min. Operational Voltage: | 16 | End Of Line Voltage: | 20.36 |
| Device Label | Part No. | Description | Device Current (A) | Remaining Current (A) | Dist. From Previous (Ft) | Resistance From Previous (Ω) | Voltage Drop From Previous | Voltage At Device | Total Voltage Drop | Voltage Drop Percent | |
| P1-N4-01 EOL 4.7k | P2RK | 2-Wire Horn Strobe, Standard cd, Outdoor 75cd | 0.176 | 0.176 | 34 | 0.208491 | 0.04 | 20.36 | 0.04 | 0.18% | |

NO. DATE: REVISION DESCRIPTION:

PROJECT NAME / CUSTOMER / LOCATION:

TOWN CENTRE LOGISTICS, LOT 4
500 NE TOWN CENTRE BLVD.
LEE'S SUMMIT, MO 64064

PROJECT MANAGER:
DARIN WASSINGER
(816) 206-3328

DESIGNER: SAS
DRAFTER: SAS

DRAWING #: **FA501**

PROJECT JOB#: PJ2305300006

DATE: 06/19/2023

ISSUED FOR: CONSTRUCTION

SYSTEM DESCRIPTION:
NEW FIRE ALARM SYSTEM