FIRE ALARM GENERAL NOTES

NOTE# | NOTE TEXT

- ALL CIRCUIT POLARITY SHALL BE MAINTAINED.
- SHIELD CONTINUITY SHALL BE MAINTAINED THROUGH OUT ALL SHIELDED CIRCUITS. SHIELDS SHALL BE GROUNDED AT ONLY ONE POINT (THE
- EQUIPMENT HEAD END UNLESS NOTED OTHERWISE). ALL CIRCUITS SHALL BE FREE OF GROUNDS, WIRE TO WIRE SHORTS, AND
- NOTIFICATION APPLIANCE CIRCUITS (NAC) & INITIATING DEVICE CIRCUITS (IDC) ARE SUPERVISED. NO PARALLEL BRANCHING (TEE-TAPPING) SHALL BE PERMITTED. NON-STYLE 6 & 7 SIGNALING LINE CIRCUITS (SLC) ALLOW
- PARALLEL BRANCHING (TEE-TAPPING) AT DEVICES AND RISER BOXES ONLY ALL FIRE ALARM CONDUIT SHALL BE SIZED TO MEET OR EXCEED THE NEC MINIMUM REQUIREMENTS. ALL FIRE ALARM CONDUIT SIZE SHALL BE 3/4" MINIMUM UNLESS SHOWN OTHERWISE. STUB-UPS TO INDIVIDUAL DEVICES
- INSTALLATION MATERIALS (I.E. CONDUIT, FITTINGS, HANGERS, STANDARD
- BOXES, ETC.) ARE NOT PROVIDED BY MIDWEST ALARM SERVICES. ON OPEN WIRE INSTALLATIONS CONDUIT SHALL BE PROVIDED BY OTHERS THROUGH ALL INACCESSIBLE AREAS (I.E. ABOVE HARD CEILINGS, STUB-UPS THROUGH ENCLOSED WALLS, ECT.) AND IN ALL EXPOSED AREAS (I.E. MECHANICAL ROOMS, ELECTRICAL ROOMS, ETC.).
- MANUAL PULL BOXES SHALL BE MOUNTED 48" AFF TO THE
- WALL-MOUNTED AUDIBLE/VISUAL & VISUAL ONLY DEVICES SHALL BE MOUNTED 80" AFF TO THE BOTTOM OF THE DEVICE OR 6" FROM THE CEILING
- TO THE TOP OF THE DEVICE WHICHEVER IS LOWER. INSTALLATION SHALL BE IN STRICT CONFORMANCE WITH THE NATIONAL ELECTRIC CODE, NFPA CODES, LOCAL CODES, AUTHORITIES HAVING
- IURISDICTION AND ALL OF THÉ MANUFACTURÉRS REQUIREMENTS. ALL FIRE ALARM CONTROL RELAYS SHALL BE MOUNTED WITHIN 3' OF THE DEVICES THEY CONTROL. ALL RELAY CONTROL CIRCUITS SHALL BE
- ALL FIRE ALARM JUNCTION BOX COVERS SHALL BE PAINTED RED OR LABELED FOR DISTINCT IDENTIFICATION.
- ALL FIRE ALARM PANELS & EQUIPMENT CABINETS REQUIRE A DEDICATED 120VAC CIRCUIT FOR PRIMARY POWER. FIRE ALARM AC POWER CIRCUITS SHALL BE PERMANENTLY IDENTIFIED AT THE DISTRIBUTION PANEL AND INSIDE THE FIRE EQUIPMENT CABINETS SERVED.

CODE REFERENCES

| | _ | |
|---|---------------------------------------|------|
| # | REFERENCED CODE | YEAR |
| 1 | International Building Code (IBC) | 2018 |
| 2 | International Fire Code (IFC) | 2018 |
| 3 | NFPA 70 National Electrical Code | 2017 |
| 4 | NFPA 72 National Fire Alarm Code | 2016 |
| 5 | NFPA 90A Standard on AC & Ventilating | 2018 |
| | | |

AUTHORITY HAVING JURISDICTION

City of Lee's Summit, MO

PROJECT NARRATIVE

This project is a new apartment building complex including a clubhouse. All buildings are fully sprinklered per NFPA 13R. An addressible fire alarm system is being provided in each building with horn/strobe notification. Only the clubhouse is being submitted at this time.

According to contract documents, the clubhouse building is occupancy group B and S-1 with areas of R-3 and A-3. None of the five AHUs are over 2,000 CFM to require detection and shutdown. Single-Station smoke and CO detectors for the R-3 area are provided by others.

FIRE ALARM SEQUENCE OF OPERATIONS:

(Input/Output Matrix)

SMOKE DETECTOR ACTIVATION - ELEVATOR LANDING PRIMARY FLR

HEAT DETECTOR - ELEVATOR SHAFT OR MACHINE ROOM

SPRINKLER VALVE TAMPER SWITCH ACTIVATION

SMOKE DETECTOR ACTIVATION - ELEVATOR LANDING OTHER FLOORS

1. AC POWER LOSS REPORTED TO SUPERVISING STATION AFTER DELAY OF 30 MINUTES (PROGRAMMABLE).

SYSTEM INPUTS

SIGNALING LINE OR NOTIFICATION APPLIANCE CIRCUIT - OPEN SIGNALING LINE OR NOTIFICATION APPLIANCE CIRCUIT - SHORT SIGNALING LINE OR NOTIFICATION APPLIANCE CIRCUIT - GROUND

FIRE ALARM CONTROL PANEL LOSS OF POWER

FIRE ALARM CONTROL PANEL OTHER TROUBLE

SPRINKLER WATERFLOW ALARM ACTIVATION

MANUAL PULL STATION ACTIVATION SMOKE DETECTOR ACTIVATION

DUCT SMOKE DETECTOR ACTIVATION

RESIDENCES AT BLACKWELL

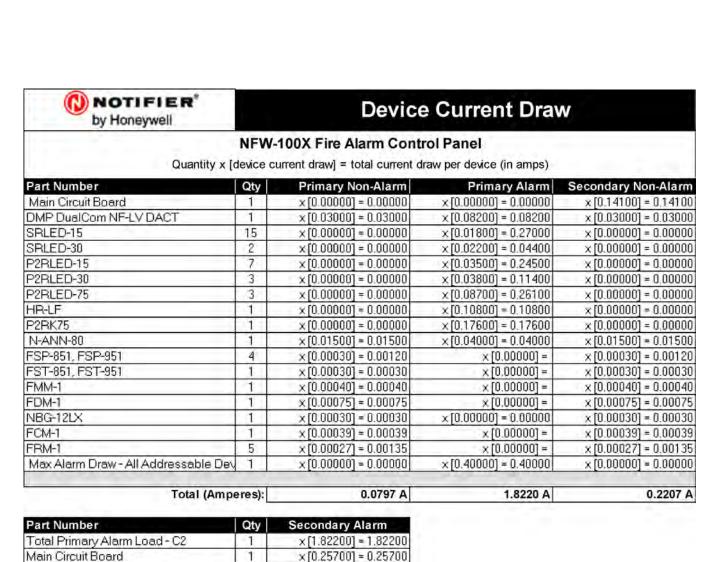
2840 SE Blue Parkway / US 50 Hwy at Blackwell Lee's Summit, MO 64063 Fire Alarm System 28300

DRAWING INDEX:

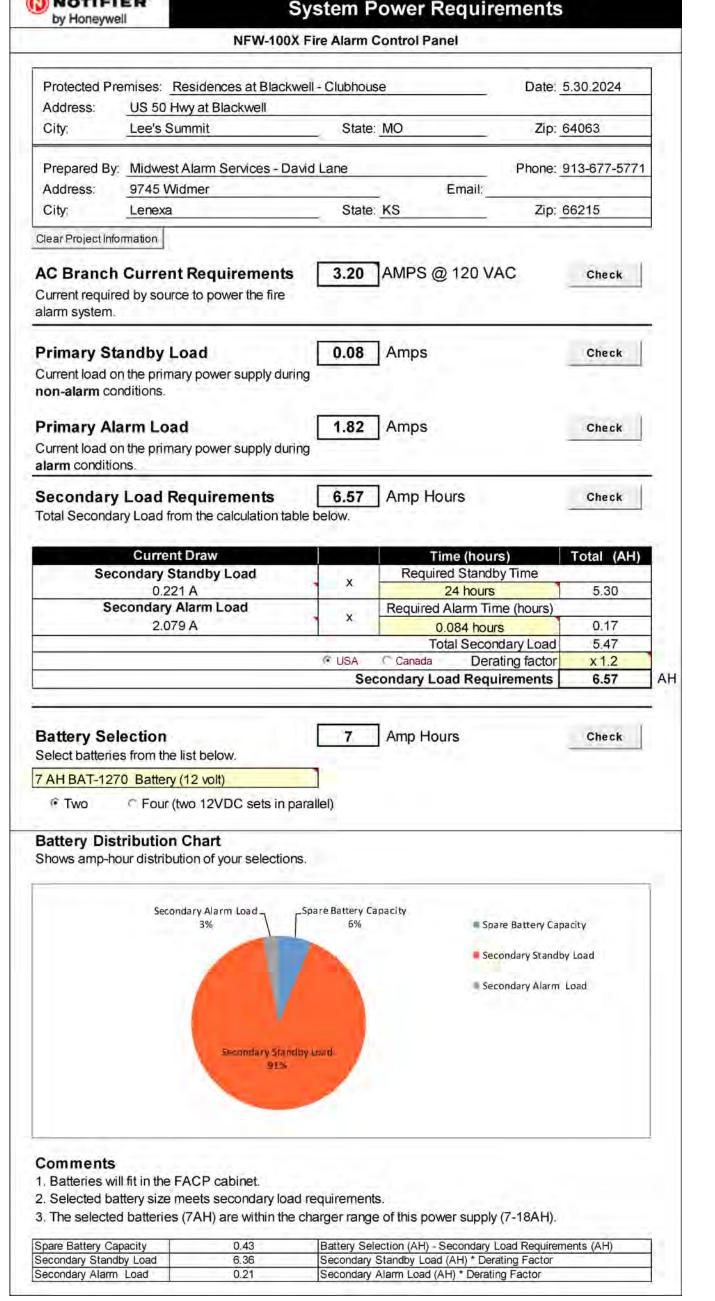
| Sheet: | Title: | Revision #: | Date Issued: |
|--------|---|-------------|--------------|
| FA-0 | COVER SHEET, NOTES, CALCULATIONS FOR CLUBHOUSE | | 05.30.24 |
| FA-101 | FIRE ALARM FLOOR PLAN - CLUBHOUSE | | 05.30.24 |
| FA-102 | DEVICE MOUNTING & WIRING DETAILS | | 05.30.24 |
| FA-103 | PANEL MOUNTING & WIRING, RISER DIAGRAM - CLUBHSE | | 05.30.24 |
| FA-201 | FIRE ALARM FLOOR PLAN - APARTMENT BSMT, RISER | | (future) |
| FA-202 | FIRE ALARM FLOOR PLAN - APARTMENT 1ST & 2ND LEVEL | | (future) |
| FA-203 | FIRE ALARM FLOOR PLAN - APARTMENT 3RD & 4TH LEVEL | | (future) |
| FA-204 | PANEL MOUNTING & WIRING - APARTMENT | | (future) |
| FA-205 | CALCULATIONS - APARTMENT | | (future) |

| FACP | Ckt Desig | Qty De v | Alarm Load | Max. Load | Percent of Max | Circuit Length | | Start Volts | Line Ω | Load | e Drop | End Volts |
|--------------|--------------|-------------|---------------|--------------|-------------------|-------------------|---------------|----------------|-----------|-------|-----------|--------------|
| Upper Level | P1 | 15 | 0.520 A | 2.50 A | 20.80% | 357 Ft | 14ga solid Cu | 20.4 | 2.19 | 39.2 | 1.14 V | 19.26 |
| Lower Level | P2 | 16 | 0.522 A | 2.50 A | 20.88% | 375 Ft | 14ga solid Cu | 20.4 | 2.30 | 39.1 | 1.20 V | 19.20 |
| spare | P3 | 0 | 0.000 A | 2.50 A | 0.00% | 0 Ft | 14ga solid Cu | 20.4 | 0.00 | | 0.00 V | 20.40 |
| exterior FDC | P4 | 1 | 0.176 A | 2.50 A | 7.04% | 46 Ft | 14ga solid Cu | 20.4 | 0.28 | 115.9 | 0.05 V | 20.35 |
| N/A | - P5 | -0- | 0.000 A | 0.00 A | #DIWO: | DF | 14ga solid Cu | 20.4 | 0.00 | | 0.00 V | 20.40 |
| N/A | P6 | 0 | 0.000 A | 0.00 A | #D/W/01 | IE FI | 14ga solid Cu | 20.4 | 0.04 | | 0.00 V | 20.40 |
| TOTALS | | 32 | 1.218 A | 3.0 A | 40.60% | | | | | | | |

SYSTEM OUTPUTS



Total (Amperes):



NOTIFIER"



M M M F

—DETECTORS—

-MODULES----



DENOTES DEVICE TYPE

(1-159 DET, 1-159 MOD)

ADDRESSABLE DEVICES

"M"=MODULE, "D"=DETECTOR

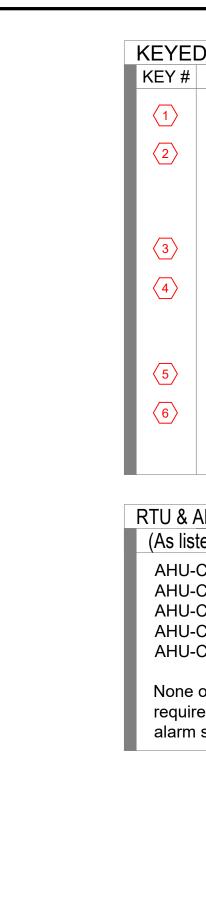
— DEVICE ADDRESS NUMBER

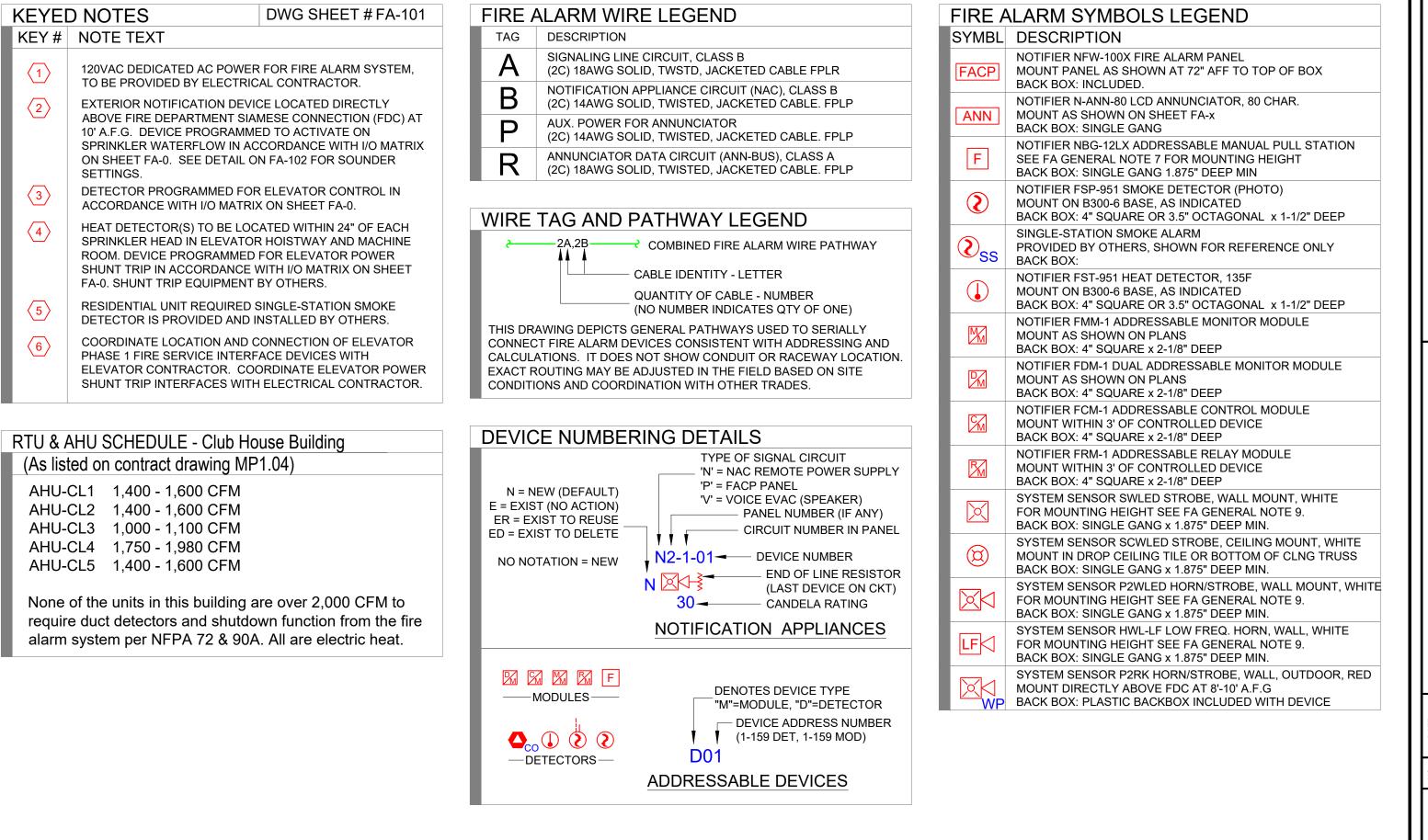
D.LANE 05.07.24 3303 24050258 SHEET TITLE: FIRE ALARM SYSTEM

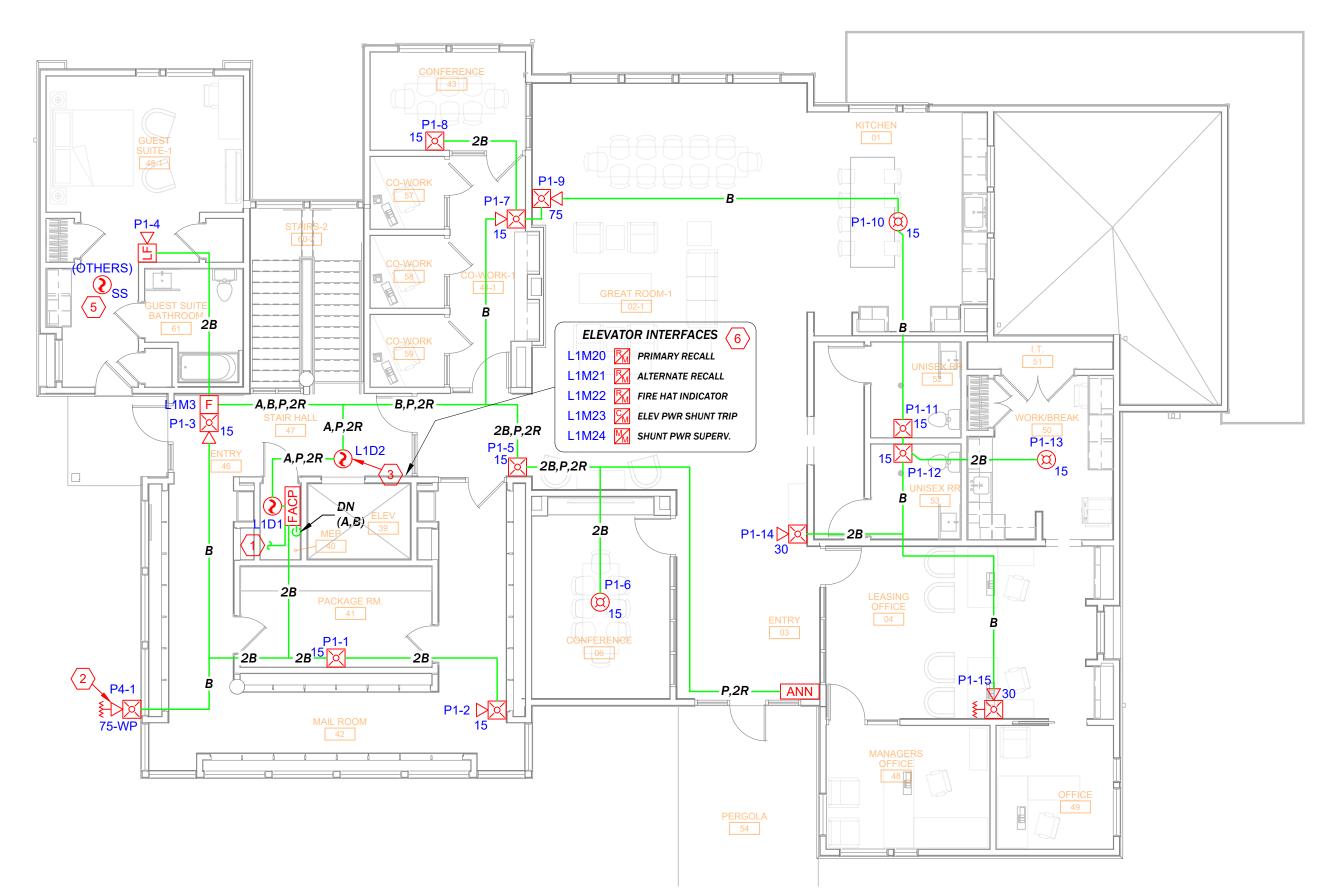
prepared 4700 Roe Parkw

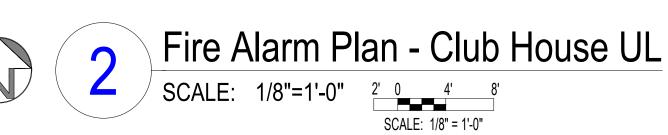
Resident

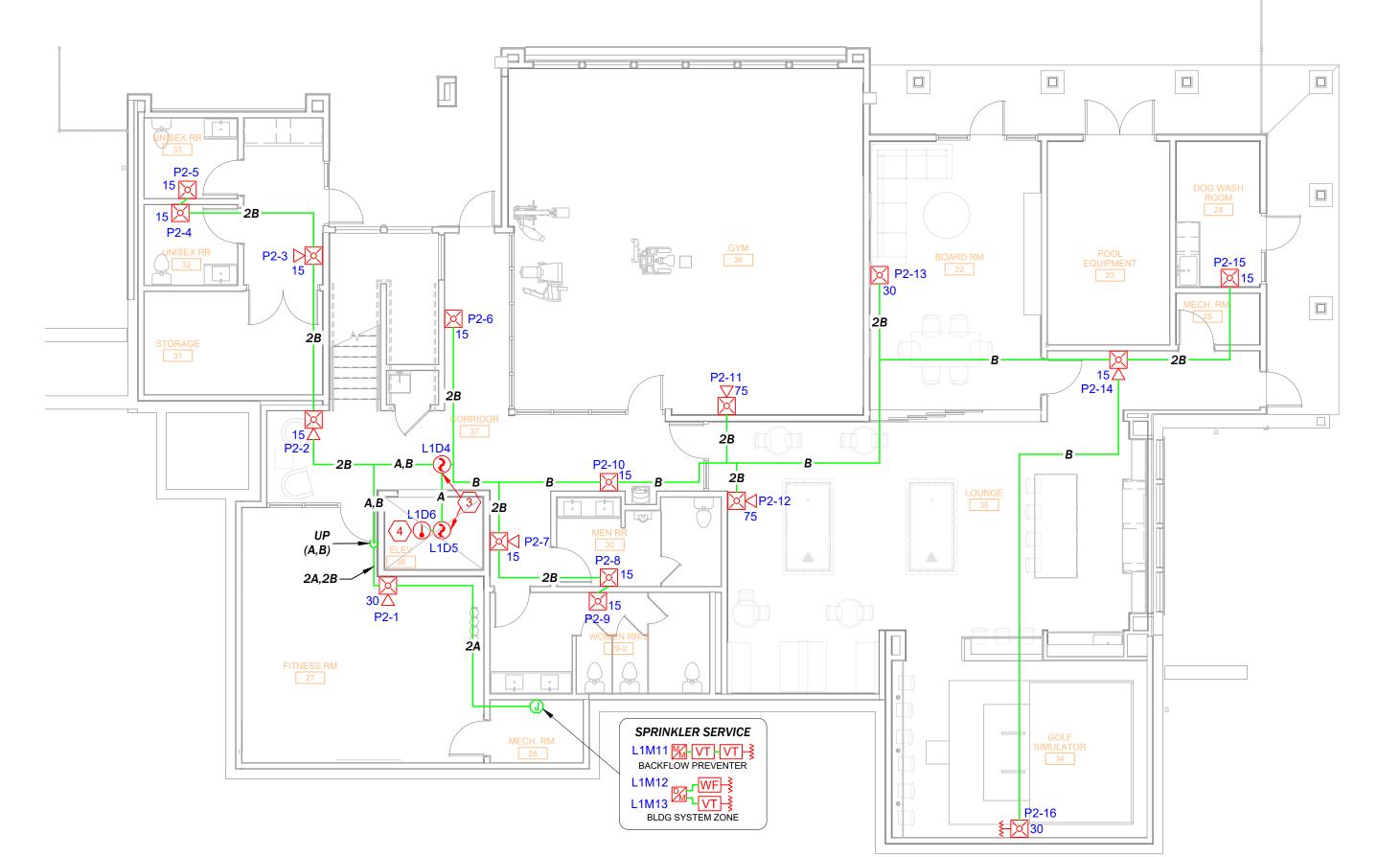
Cover Page & Notes Calculations - Clubhouse FA-0



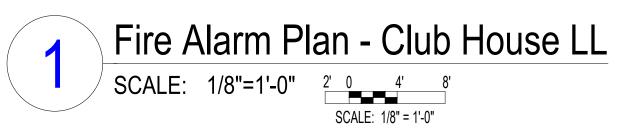














at Blackwell

Residences 2840 SF Blue Parkwa

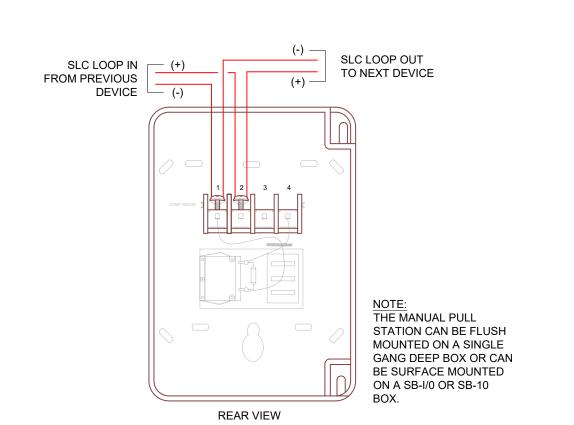
3303 24050258

SHEET TITLE: FIRE ALARM SYSTEM Club House Floor Plan Layouts

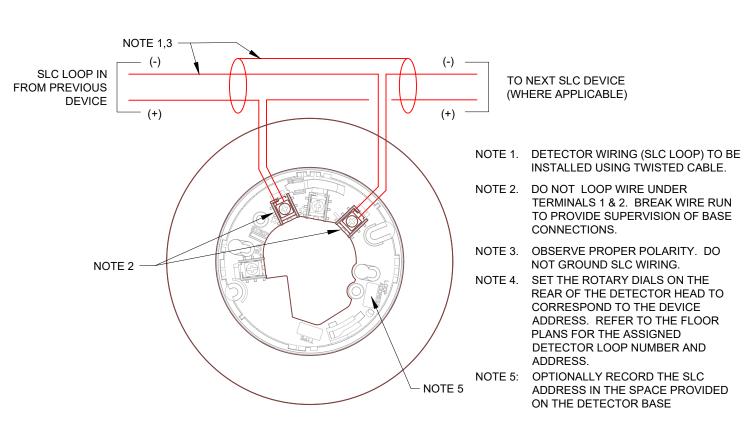
FA-101

Ridgeline |

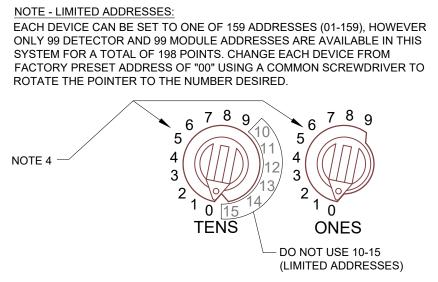
prepared 74700 Roe Parkw



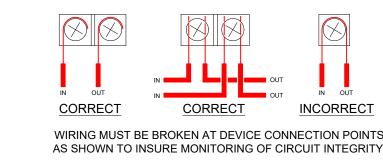
NBG-12LX MANUAL PULL STATION



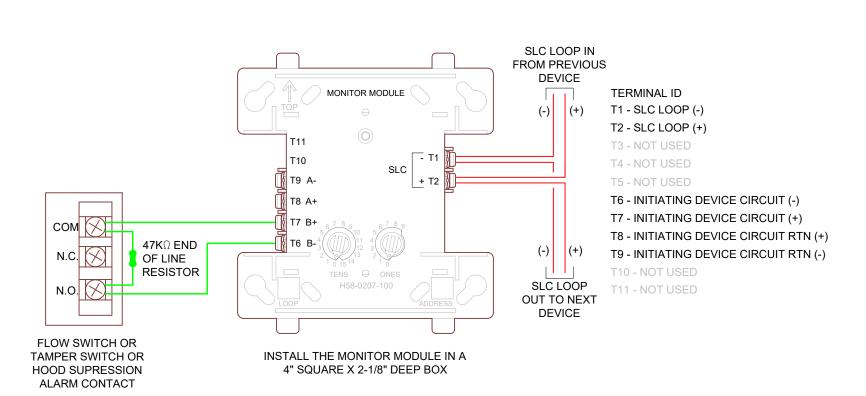
B300-6 DETECTOR BASE WIRING DETAIL



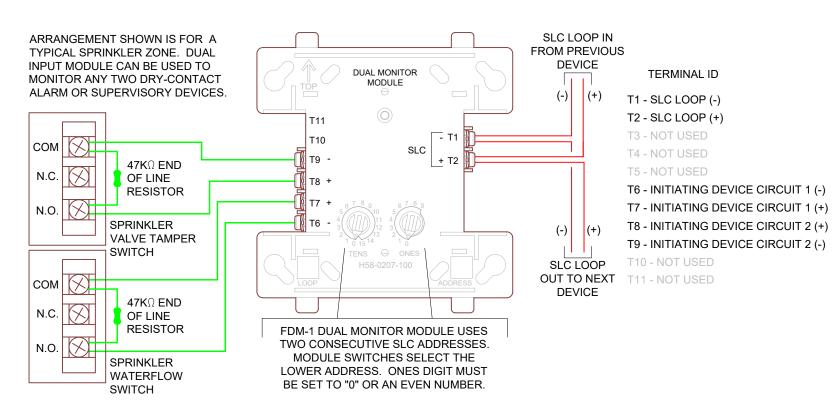
SETTING SLC ADDRESS (ROTARY DIALS)



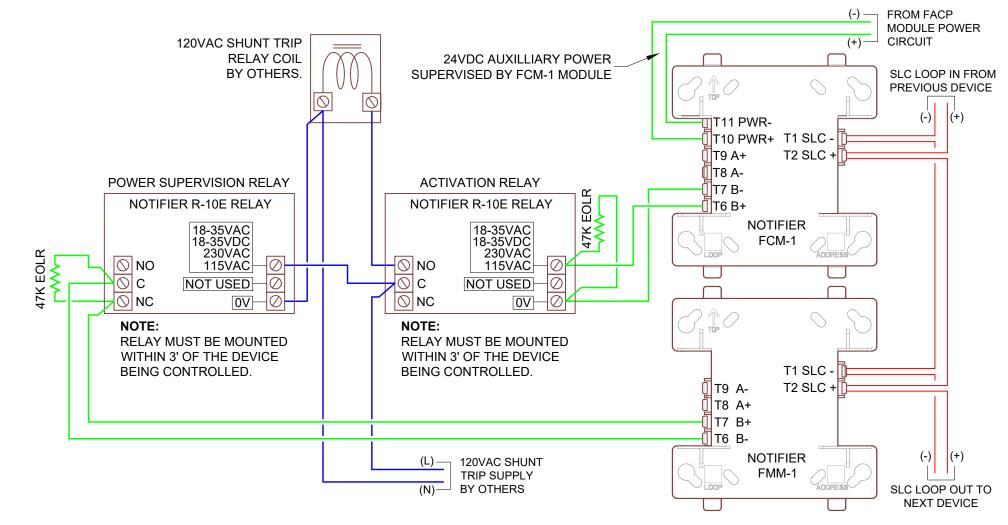
WIRING METHODS



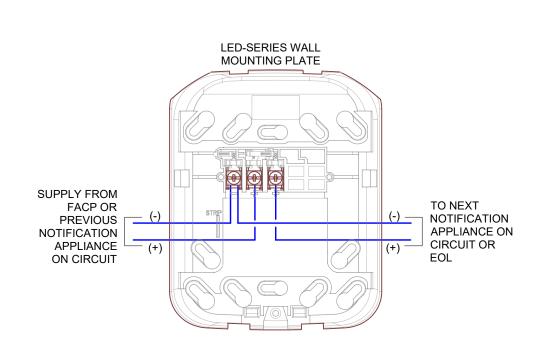
FMM-1 ADDRESSABLE MONITOR MODULE



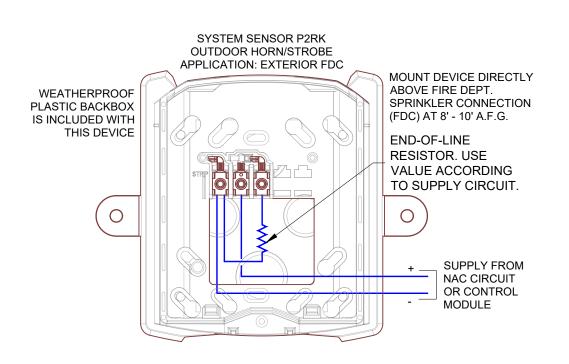
FDM-1 DUAL INPUT MONITOR MODULE - TYPICAL WIRING



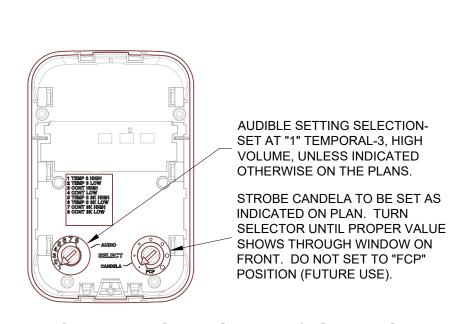
ELEVATOR SHUNT TRIP WIRING DETAIL



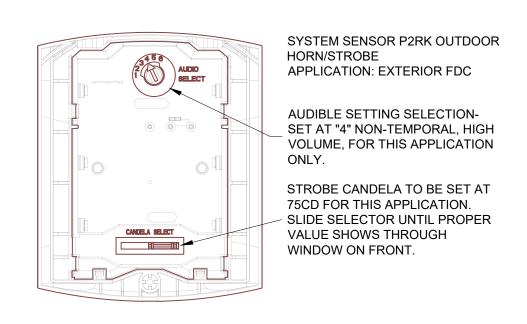
SYSTEM SENSOR LED-SERIES
HORN / STROBE & STROBE



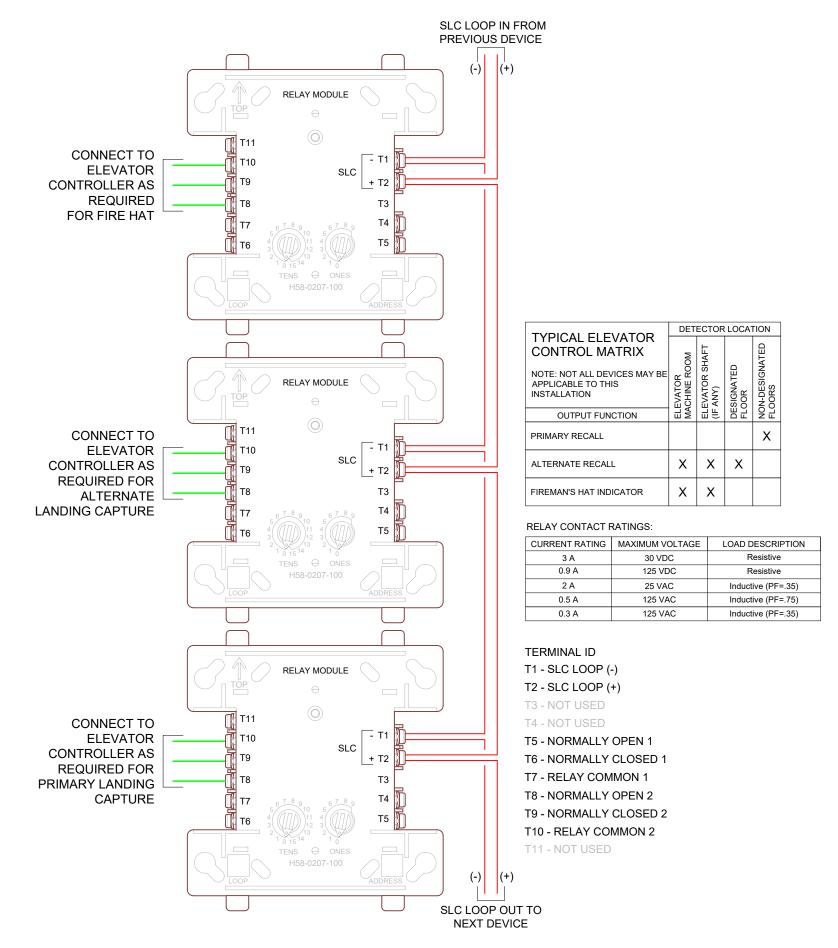
SYSTEM SENSOR P2RK OUTDOOR HORN / STROBE



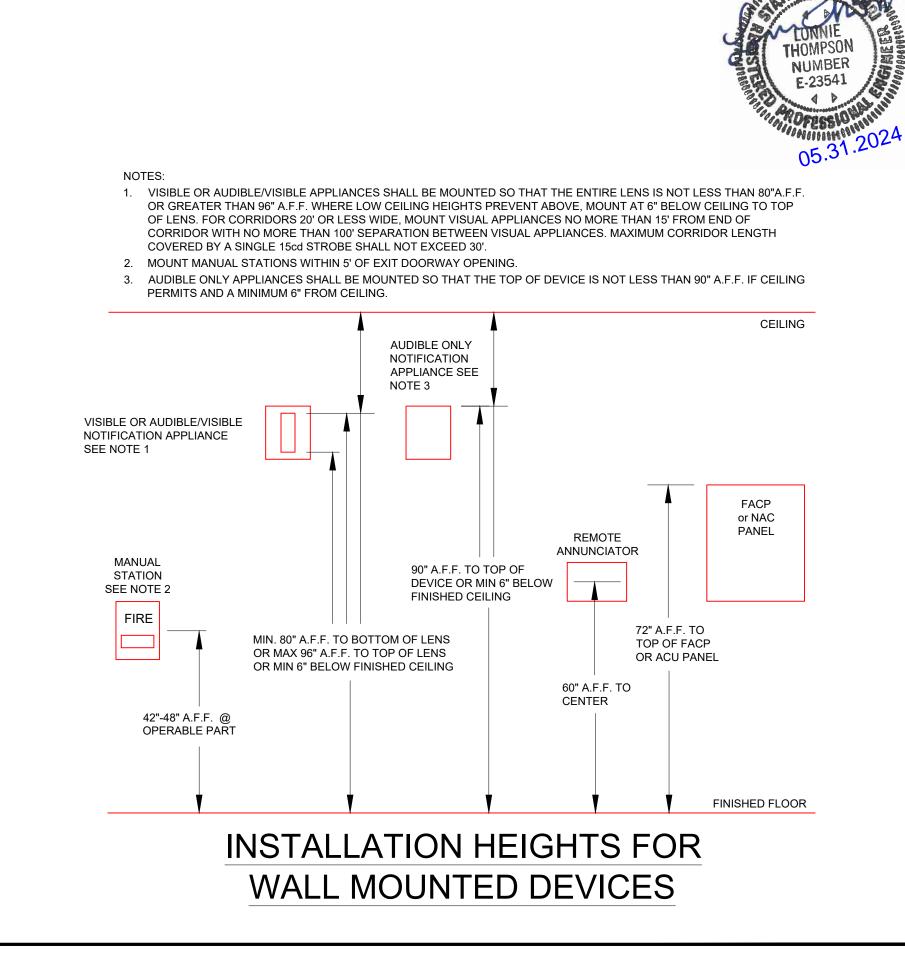
LED-SERIES HORN / STROBE CANDELA & AUDIBLE SETTINGS



P2RK OUTDOOR HORN / STROBE CANDELA & AUDIBLE SETTINGS



FRM-1 RELAY MODULE/ELEVATOR INTERFACES



Blackwell

Residen

D.LANE

PR

3303 24050258

SHEET TITLE: FIRE ALARM SYSTEM

Device Wiring & Mounting Details

FA-102

Ridgeline ission, KS 66205

prepared 4700 Roe Parkw

