



A SPRINKLER MONITORING SYSTEM SUBMITTAL

H & E EQUIPMENT SERVICES #4186 1100 SW HAMBLEN RD LEE'S SUMMIT, MO 64081

RELEASED FOR CONSTRUCTION
As Noted on Plan Review
Lee's Summit Fire Department
Lee's Summit, Missouri
03/31/2025

everOn™

BRANCH #66711
15441 W 100th TERRACE,
LENEXA, KS 66219

844-538-3766
WEB: EVERONSOLUTIONS.COM

H&E EQUIPMENT
1100 SW HAMBLEN RD
LEE'S SUMMIT, MO 64081

SPRINKLER MONITORING SYSTEM

This fire alarm shop drawing was prepared for equipment application only. The information contained herein is intended to aid in the installation of this system. No design changes have been made to the engineer of record's contract documents.

Dated: 10/28/24
Signed: *Tara Carroll*
Tara Carroll, ET Ohio #6387
NICET #: 142654
NICET LEVEL III
FIRE ALARM SYSTEMS

CENTRAL STATION LISTING
CCN File No. Vol. No.
UUFX S2684 20

| REVISIONS | | |
|-----------|--------------------|--------------|
| NO. | DATE | REVISION |
| 1 | 10/28/24 BY: DB | - FOR PERMIT |
| 2 | BY: ____ | - |
| 3 | BY: ____ | - |
| 4 | BY: ____ | - |
| 5 | BY: ____ | - |
| 6 | BY: ____ | - |

CODES ADOPTED BY LOCAL AHJ
2014 NEC
2015 IBC
2015 IFC
2013 NFPA 72

| BUILDING INFORMATION | |
|---------------------------------|--|
| OCCUPANCY TYPE = M/S-1 | |
| TOTAL AREA = 14,887 SF (APPROX) | |
| | |
| ONE STORY | |
| FULLY SPRINKLERED | |

PREPARED BY: D. BARRON
CHECKED BY: T. CARROLL
DATE: 10/28/2024
DESIGN REQUEST #: 98380
SALES AGREEMENT #: 891937147
JOB #: 300118734

TITLE: COVER SHEET
NOTES/LEGENDS
OPS MATRIX
RISER DIAGRAM

SHEET:

FA-0
1 of 3

SCOPE OF WORK

1. INSTALLATION OF A NEW POTTER SPRINKLER MONITORING SYSTEM TO REPLACE THE CURRENT SPRINKLER MONITORING SYSTEM LOCATED IN AN EXISTING COMMERCIAL BUSINESS SPACE.
2. PURPOSE OF THE INSTALLATION IS TO REPLACE OBSOLETE FIRE ALARM EQUIPMENT.
3. ALL SIGNALS TRANSMITTED VIA SOLE PATH CELL UNIT IN COMPLIANCE WITH NFPA 72.
4. ALL DEVICES TO BE TESTED IN COMPLIANCE WITH NFPA 72.

GENERAL NOTES

1. SOLE PATH CELLULAR COMMUNICATOR INSTALLATION AND SIGNAL VERIFICATION TO BE PERFORMED ACCORDING TO THE MANUFACTURERS INSTRUCTIONS.
2. SOLE PATH CELLULAR SIGNAL STRENGTH SHALL MEET MANUFACTURERS MINIMUM REQUIREMENTS.
3. ALL WORK PERFORMED IN THE FIELD SHALL BE ACCURATELY RECORDED AND AVAILABLE FOR FINAL INSPECTION.
4. SYSTEM HAS A SURVIVABILITY LEVEL OF 0 PER NFPA 72.
5. SYSTEM SHALL BE MONITORED BY UL LISTED CENTRAL STATION.

- MONITORING NOTES -

ADT COMMERCIAL
4221 W. JOHN CARPENTER FWY.
IRVING, TEXAS 75063

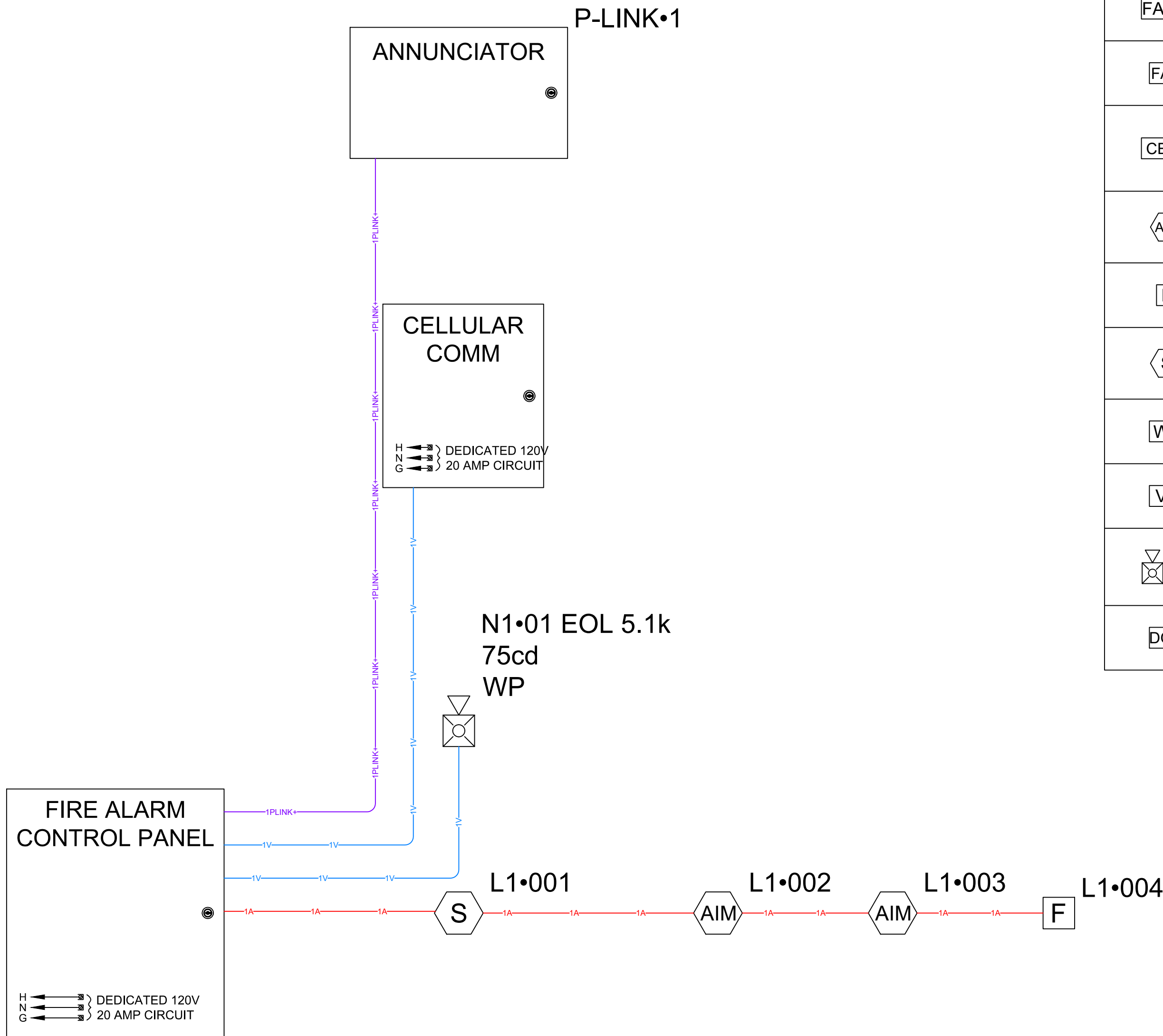
THE ALARM SERVICE COMPANY IS UL LISTED IN THE FOLLOWING CERTIFICATE SERVICE CATEGORIES:

| FILE-VOL NO. | CCN | LISTING CATEGORY |
|--------------|------|--|
| S2684-20 | UUFX | [SIGNAL AND FIRE ALARM EQUIPMENT AND SERVICES] (PROTECTIVE SIGNALING SERVICES) CENTRAL STATION |
| BP1790-3 | CPVX | [BURGLAR ALARMS SYSTEMS] CENTRAL STATION |
| BP10566-1 | CZRM | MONITORING STATIONS, NATIONAL INDUSTRIAL SECURITY |

THIS CERTIFICATE EXPIRES ON 31-DEC-2024
IRVING, TX
ALARM SERVICE COMPANY: (567560) PARTY SITE NO: (567560)

- COMMUNICATOR NOTE -

STARLINK FIRE SELF-SUPERVISION
NFPA 72 REQUIRES THAT ANY FIRE COMMUNICATOR TROUBLE BE LOCALLY ANNUNCIATED BY THE FIRE PANEL WITHIN 200 SECONDS OF THE TROUBLE. THE TROUBLES INCLUDE LOSS OF SIGNAL, NOC SUPERVISION CHECKING FAILURE, ETC. THE STARLINK SLE-LTEV-FIRE FIRE COMMUNICATOR MODELS INCLUDE A "SELF-SUPERVISING FIRE COMMUNICATOR" FEATURE THAT ALLOWS THE COMMUNICATOR TO ANNUNCIATE A COMMUNICATION TROUBLE WITHOUT THE NEED FOR WIRING TO AN FACU ZONE INPUT OR ANY FACU REPROGRAMMING. THIS IS ACCOMPLISHED BY DROPPING THE EMULATED PHONE LINE VOLTAGE TO THE FACU SECONDARY PHONE LINE, CAUSING THE FACU TO ANNUNCIATE A COMMUNICATION TROUBLE. TO ENABLE SELF-SUPERVISION, SIMPLY REMOVE JUMPER JP2. NOTE THAT WHEN USING SELF-SUPERVISION, SOME FACUS MAY REQUIRE THE JUMPER J7 SHUNT TO BE REMOVED FOR THE PRIMARY PHONE LINE TO RESTORE CORRECTLY. TO ALSO REPORT A COMMUNICATOR TROUBLE TO THE CENTRAL STATION, ENABLE THE FEATURE "TYPING WIRING FAULT REPORT" IN THE ADVANCED TAB IN THE STARLINK NOC.

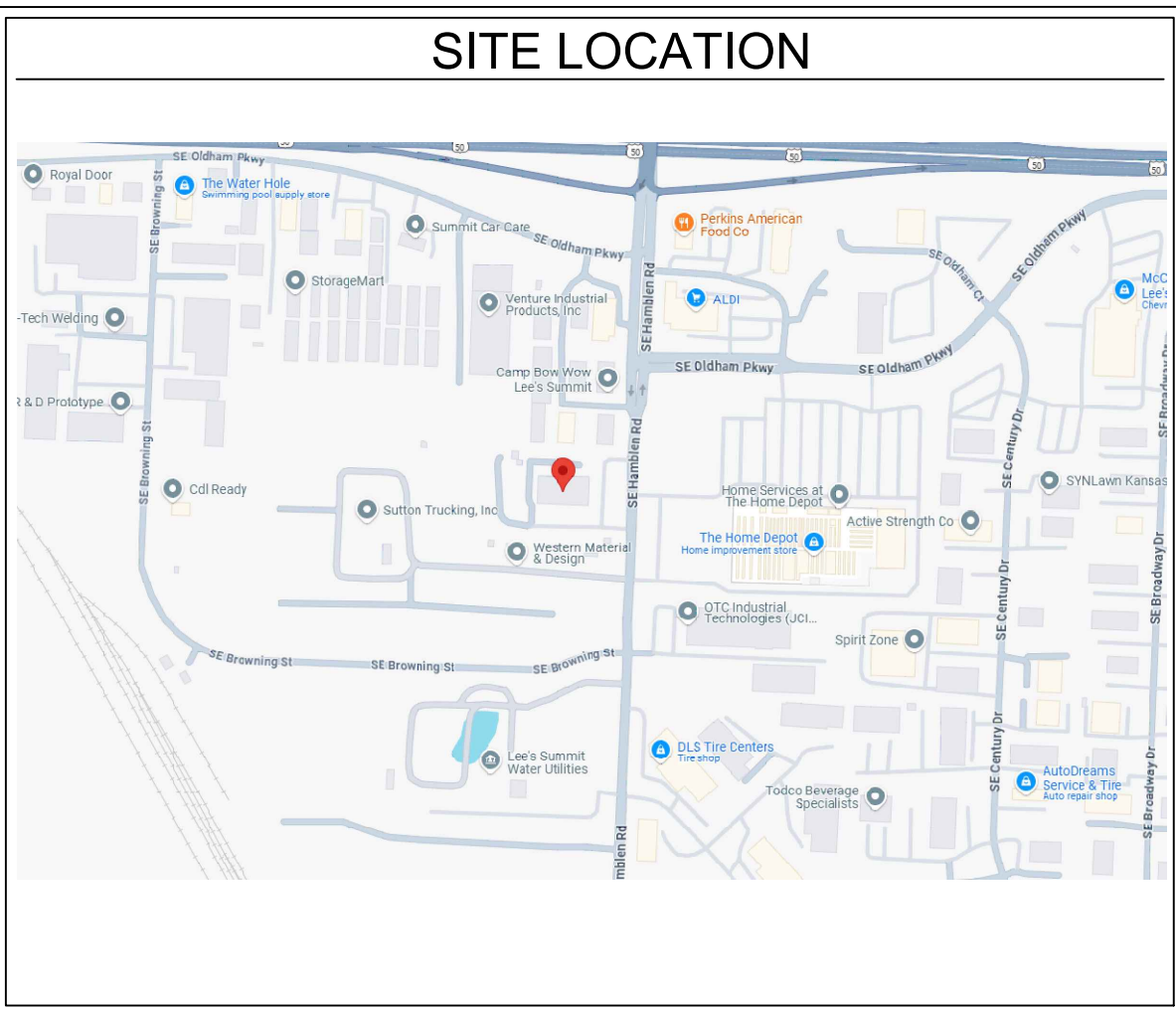







RISER DIAGRAM

SYMBOL LEGEND

| CABLE AND WIRE LEGEND | | | | |
|-----------------------|--------------------------|----------------|-----|---|
| LABEL | PART NO | RESISTANCE MFT | AWG | DESCRIPTION |
| A | 16/2 FPLR (SLC) | 4.890 | 16 | 2 COND. SOLID COPPER FPLR ADDRESSABLE |
| PLINK+ | 18/4 FPLP/R (P-LINK/PWR) | 7.770 | 18 | 4 COND. SOLID COPPER FPLP/R ANALOG UNSHIELDED |
| V | 14/2 FPLP/R (NAC) | 3.070 | 14 | 2 COND. SOLID COPPER FPLP/R ANALOG UNSHIELDED |


| DEVICE LEGEND | | | | | |
|---------------|----------|-------------|-----------------------|---------------------------------|--|
| SYMBOL | QUANTITY | IS EXISTING | MANUFACTURER | PART NO | DESCRIPTION |
| | 1 | NEW | POTTER | AFC-100 | FIRE ALARM CONTROL PANEL |
| | 1 | NEW | POTTER | RA-6500 | 160 CHARACTER LCD ANNUNCIATOR |
| | 1 | NEW | NAPCO | SLE-MAX2-CFBPS | UNIVERSAL FIRE COMMUNICATOR, DUAL SIM, DUAL PATH, DIRECT AC POWER 120VAC METAL HOUSING W/ PROVISION FOR PLUG-IN TRF12 XFORMER, 16VAC, 20VA (W/ PROVISION FOR BACKUP BATTERY) |
| | 2 | NEW | POTTER | PAD100-MIM | MICRO INPUT MODULE |
| | 1 | NEW | POTTER | PAD100-PSSA | ADDRESSABLE PULL STATION SINGLE ACTION |
| | 1 | NEW | POTTER | PAD200-PD | PHOTOELECTRIC SMOKE SENSOR |
| | 1 | EXISTING | GENERIC | WATERFLOW SWITCH | WATERFLOW SWITCH |
| | 1 | EXISTING | GENERIC | VALVE TAMPER SUPERVISORY SWITCH | VALVE TAMPER SUPERVISORY SWITCH |
| | 1 | NEW | POTTER | HS-24WR-WP | OUTDOOR HORN STROBE, FIXED 75 CANDELA, STANDARD ENCLOSURE, RED |
| | 1 | NEW | SPACE AGE ELECTRONICS | SSU00690 | FIRE ALARM DOCUMENT CABINET W/8GB USB DRIVE (ACE-11), RED WITH CUSTOM LOGO |



| PANEL (AFC-100) BATTERY CALCULATION (SECONDARY POWER SOURCE REQUIREMENTS) | | | | | | | | |
|---|--|-------------------------------------|-------------|---|-------------------------------|-----------|-------------------------|-----------|
| PANEL COMPONENTS | | QTY | PART NO. | DESCRIPTION | STANDBY CURRENT | | SECONDARY ALARM CURRENT | |
| | | | | | CURRENT DRAW (A) | TOTAL (A) | CURRENT DRAW (A) | TOTAL (A) |
| | | 1 | AFC-100 | FIRE ALARM CONTROL PANEL | 0.000 | 0.000 | 0.000 | 0.000 |
| 1 | AFC-100 MAIN BOARD | FIRE ALARM CONTROL PANEL MAIN BOARD | 0.130 | 0.130 | 0.200 | 0.200 | | |
| CIRCUIT | SYMBOL | QTY | PART NO | DESCRIPTION | CURRENT DRAW (A) | TOTAL (A) | CURRENT DRAW (A) | TOTAL (A) |
| L1 |  | 2 | PAD100-MIM | MICRO INPUT MODULE | 0.0002 | 0.000 | 0.0002 | 0.000 |
| |  | 1 | PAD100-PSSA | ADDRESSABLE PULL STATION SINGLE ACTION | 0.0002 | 0.000 | 0.0002 | 0.000 |
| |  | 1 | PAD200-PD | PHOTOELECTRIC SMOKE SENSOR | 0.0003 | 0.000 | 0.0003 | 0.000 |
| N1 |  WP | 1 | HS-24WR-WP | OUTDOOR HORN STROBE, FIXED 75 CANDELA, STANDARD ENCLOSURE, RED 75CD | 0.000 | 0.000 | 0.168 | 0.168 |
| P-LINK |  | 1 | RA-6500 | 160 CHARACTER LCD ANNUNCIATOR | 0.020 | 0.020 | 0.025 | 0.025 |
| | | | | | TOTAL STANDBY (A) | 0.151 | TOTAL ALARM (A) | 0.394 |
| | | | | | REQUIRED STANDBY TIME (HOURS) | | 24 | |
| | | | | | REQUIRED ALARM TIME (MINUTES) | | 5 | |
| SECONDARY STANDBY LOAD (A) | | | | 0.151 | 24.000 | | 3.622 | |
| SECONDARY ALARM SUBTOTAL (A) | | | | 0.394 | 0.083 | | 0.033 | |
| STANDBY AND ALARM SUBTOTAL (AMP HOURS) | | | | | | | 3.654 | |
| DERATING FACTOR | | | | | | | 1.250 | |
| SECONDARY LOAD REQUIREMENTS (AMP HOURS) | | | | | | | 4.568 | |
| PROVIDE (2) 12V 8AH BATTERIES | | | | | | | | |
| *BATTERY BOX SIZE CAPACITY NOT SPECIFIED. REFER TO MANUFACTURER DOCUMENTATION. | | | | | | | | |

| PANEL (SLE-MAX2-CFBPS) BATTERY CALCULATION (SECONDARY POWER SOURCE REQUIREMENTS) | | | | | | | | | | | |
|--|--------|-----|---------|-------------|-------------------------------|---------------------------|--|-----------|-------|-------|-------|
| | | | | | STANDBY CURRENT | | SECONDARY ALARM CURRENT | | | | |
| | | | | | CURRENT DRAW (A) | TOTAL (A) | CURRENT DRAW (A) | TOTAL (A) | | | |
| | | | | | | | | | | | |
| PANEL COMPONENTS | | | | | 1 | SLE-MAX2-CFBPS | UNIVERSAL FIRE COMMUNICATOR, DUAL SIM, DUAL PATH, DIRECT AC POWER 120VAC METAL HOUSING W/ PROVISION FOR PLUG-IN TRF12 XFORMER, 16VAC, 20VA (W/ PROVISION FOR BACKUP BATTERY) | 0.000 | 0.000 | 0.000 | 0.000 |
| | | | | | 1 | SLE-MAX2-CFBPS MAIN BOARD | | 0.200 | 0.200 | 0.200 | 0.200 |
| CIRCUIT | SYMBOL | QTY | PART NO | DESCRIPTION | CURRENT DRAW (A) | TOTAL (A) | CURRENT DRAW (A) | TOTAL (A) | | | |
| | | | | | TOTAL STANDBY (A) | 0.200 | TOTAL ALARM (A) | 0.200 | | | |
| | | | | | REQUIRED STANDBY TIME (HOURS) | | | 24 | | | |
| | | | | | REQUIRED ALARM TIME (MINUTES) | | | 5 | | | |
| SECONDARY STANDBY LOAD (A) | | | | | 0.200 | | 24.000 | | 4.800 | | |
| SECONDARY ALARM LOAD (A) | | | | | 0.200 | | 0.083 | | 0.017 | | |
| STANDBY AND ALARM SUBTOTAL (AMP HOURS) | | | | | | | | 4.817 | | | |
| DERATING FACTOR | | | | | | | | 1.250 | | | |
| SECONDARY LOAD REQUIREMENTS (AMP HOURS) | | | | | | | | 6.021 | | | |
| PROVIDE (1) 12V 7AH BATTERY | | | | | | | | | | | |

BATTERY CALCULATIONS

| N1 LUMP SUM REPORT | | | | CIRCUIT SETTINGS | | TOTALS | | |
|--|----------|------------|--|-------------------------------|-------------------|-------------------|----------------------------|---------|
| | | | | STARTING CALCULATION VOLTAGE: | | 20.400 | MAX. VOLTAGE DROP: | 0.04 |
| | | | | | | | VOLTAGE DROP %: | 0.21 % |
| | | | | MIN. OPERATIONAL VOLTAGE: | | 16 | END OF LINE VOLTAGE: | 20.36 |
| | | | | MAX. CIRCUIT CURRENT (A): | | 3 | TOTAL CIRCUIT CURRENT (A): | 0.168 |
| | | | | | | | SPARE CIRCUIT CURRENT (A): | 2.832 |
| | | | | | | | SPARE CIRCUIT CURRENT %: | 94.40 % |
| | | | | WIRE RESISTANCE (Ω/KFT): | | 3.070 | TOTAL CIRCUIT LENGTH (FT): | 41 |
| TOTAL CIRCUIT RESISTANCE (Ω): | 0.250754 | | | | | | | |
| CIRCUIT WIRING PROPERTIES: 'V' 14/2 FPLP/R (NAC) 14 AWG, 2 COND. SOLID COPPER FPLP/R ANALOG UNSHIELDED | | | | | | | | |
| DISTANCE MEASURED USING DRAWN SEGMENT LENGTHS WITH 10.00 % ADDITIONAL LENGTH CALCULATED | | | | | | | | |
| SYMBOL | QUANTITY | PART NO | DESCRIPTION | CANDELAS | ALARM CURRENT (A) | TOTAL CURRENT (A) | | |
|  WP | 1 | HS-24WR-WP | OUTDOOR HORN STROBE, FIXED 75 CANDELA, STANDARD ENCLOSURE, RED | 75CD | 0.168 | 0.168 | | |
| CALCULATION METHODS: | | | | | | | | |
| TOTAL RESISTANCE (Ω) = WIRE RESISTANCE (Ω/FT) X 2 X TOTAL CIRCUIT LENGTH (FT) | | | | | | | | |
| TOTAL VOLTAGE DROP = TOTAL RESISTANCE (Ω) X TOTAL CIRCUIT CURRENT (A) | | | | | | | | |

VOLTAGE DROP CALCULATIONS



BRANCH #66711
15441 W 100th TERRACE,
LENEXA, KS 66219

844-538-3766
WEB: EVERONSOLUTIONS.COM

H&E EQUIPMENT
1100 SW HAMBLEN RD
LEE'S SUMMIT, MO 64081

SPRINKLER
MONITORING
SYSTEM

This fire alarm shop drawing was prepared for equipment application only. The information contained herein is intended to aid in the installation of this system. No design changes have been made to the engineer of record's contract documents.

Dated: 10/28/24
Signed: 
Tara Carroll, ET Ohio #6387
NICET #: 142654
NICET LEVEL III
FIRE ALARM SYSTEMS

CENTRAL STATION LISTING
CCN File No. Vol. No.
UUFx S2684 20

| REVISIONS | | |
|-----------|----------|---------------------|
| NO. | DATE | REVISION |
| 1 | 10/28/24 | BY: DB - FOR PERMIT |
| 2 | | BY: ____ - |
| 3 | | BY: ____ - |
| 4 | | BY: ____ - |
| 5 | | BY: ____ - |
| 6 | | BY: ____ - |

CODES ADOPTED BY LOCAL AHJ

2014 NEC
2015 IBC
2015 IFC
2013 NFPA 72

BUILDING INFORMATION

OCCUPANCY TYPE = M/S-1
TOTAL AREA = 14,887 SF (APPROX)

ONE STORY
FULLY SPRINKLERED

PREPARED BY: D. BARRON

CHECKED BY: T. CARROLL

DATE: 10/28/2024

DESIGN REQUEST #: 98380
SALES AGREEMENT #: 891937147
JOB #: 300118734

TITLE:

CALCULATIONS

SHEET:

FA-1

2 of 3

© 2024 Everon Solutions. All rights reserved. The product/service names listed in this document are marks and/or registered marks of their respective owners and used under license. Unauthorized use strictly prohibited.

| REVISIONS | | |
|-----------|--------------------|--------------|
| NO. | DATE | REVISION |
| 1 | 10/28/24 BY: DB | - FOR PERMIT |
| 2 | BY: ____ | - |
| 3 | BY: ____ | - |
| 4 | BY: ____ | - |
| 5 | BY: ____ | - |
| 6 | BY: ____ | - |

CODES ADOPTED BY LOCAL AHJ
2014 NEC
2015 IBC
2015 IFB
2013 NFPA 72

| BUILDING INFORMATION | |
|---------------------------------|--|
| OCCUPANCY TYPE = M/S-1 | |
| TOTAL AREA = 14,887 SF (APPROX) | |
| ONE STORY | |
| FULLY SPRINKLERED | |

PREPARED BY: D. BARRON
CHECKED BY: T. CARROLL
DATE: 10/28/2024
DESIGN REQUEST #: 98380
SALES AGREEMENT #: 891937147
JOB #: 300118734

TITLE:
FLOORPLAN

SHEET:
FA-2
3 of 3

