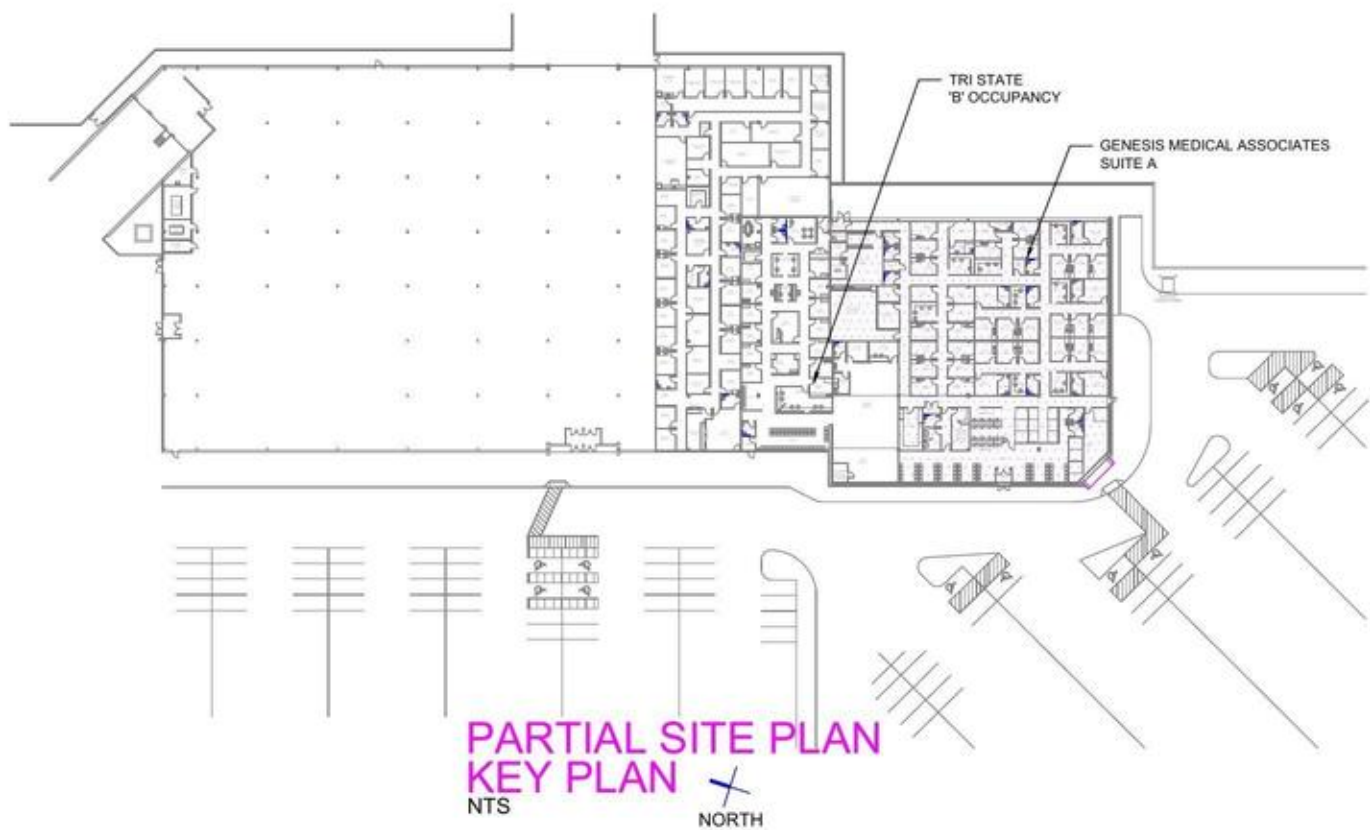


GENESIS MEDICAL ASSOCIATES
TRISTATE ORTHOPEDIC

[LOCATION REDACTED] [REDACTED] [REDACTED]
[LOCATION REDACTED]
[LOCATION REDACTED]
TENANT BUILD OUT
FIRE ALARM SYSTEM



SCOPE OF WORK:

INSTALLATION OF A FIRE ALARM CONTROL
PANEL, POWER SUPPLY AND DEVICES FOR
TENANT BUILD OUT(S).

APPLICABLE BUILDING CODES:
PENNSYLVANIA STATE BUILDING CODE 2018
PENNSYLVANIA STATE FIRE CODE CODE 2018
PENNSYLVANIA STATE ELECTRIC CODE 2017
NFPA 72, 2019 EDITION

DRAWING INDEX	
FA-0-1	COVER SHEET
FA-1-1	FIRE ALARM LAYOUT - GENESIS MEDICAL ASSOCIATES -SUITE A
FA-1-2	FIRE ALARM LAYOUT - TRISTATE ORTHOPEDIC -SUITE B
FA-2-1	INPUT/OUTPUT MATRIX, RISER DIAGRAM, TYPICAL WIRING DETAILS
FA-3-1	FIRE ALARM CONTROL PANEL WIRING DETAILS AND BATTERY CALCULATIONS
FA-3-2	REMOTE POWER SUPPLY WIRING DETAILS AND BATTERY CALCULATIONS

CABLE AND WIRE LEGEND						
LABEL	PART NO	MANUFACTURER	APPLICATION	RESISTANCE MFT	AWG	DESCRIPTION
A	16/2 FPLPR	GENERIC	SLC	7.77	18	2 COND. SOLID COPPER FPLPR ADDRESSABLE
V	14/2 FPLPR	GENERIC	NAC	3.07	14	2 COND. SOLID COPPER FPLPR ANALOG UNSHIELDED

DEVICE LEGEND				
SYMBOL	QUANTITY	MANUFACTURER	PART NO	DESCRIPTION
[FAU]	1	KIDDE	EVOLVE-ML-R	FOUR LOOP SYSTEM WITH ONE BUILT-IN 250-POINT LOOP, 120V/240V, RED DOOR
[NAC]	1	KIDDE	MRBP66A	REMOTE BOOSTER POWER SUPPLY, 6.5A, 120VAC, RED
[DM]	2	KIDDE	GSA-CT2	SIGNATURE DUAL INPUT MODULE, ONE-GANG STANDARD MOUNT
[F]	6	KIDDE	GSA-M278	SIGNATURE DOUBLE-ACTION, SINGLE-STAGE FIRE ALARM STATION, PLASTIC
[S]	3	KIDDE	KI-OSD WIKI-SB BASE	INTELLIGENT OPTICAL SMOKE DETECTOR
[C]	85	KIDDE	EGCVWF	STROBE, RUNNING MAN, WHITE, FIRE
[C]	35	KIDDE	EGCAVWF	HORN-STROBE, RUNNING MAN, WHITE, FIRE

GENERAL FIRE ALARM INSTALLATION NOTES:

THESE NOTES ARE GENERAL IN NATURE AND APPLY WHERE RELEVANT TO INDIVIDUAL PROJECTS. THEY ARE NOT INTENDED TO
OVERRIDE SPECIFIC SCOPE OR DIRECTION PROVIDED ELSEWHERE IN THE DRAWING SET. WHERE CONFLICTS ARISE,
PROJECT-SPECIFIC DOCUMENTATION SHALL TAKE PRECEDENCE.

- INSTALLATION STANDARDS
 - ALL WIRE AND CONDUIT SHALL BE INSTALLED PER PROJECT PLANS, SPECIFICATIONS, AND APPLICABLE CODES.
 - ALL WIRE AND CABLE MUST BE RATED FOR FIRE ALARM USE PER THE LATEST NEC SECTION 760. THIS IS A POWER-LIMITED FIRE ALARM SYSTEM. ACCEPTABLE CABLE MARKINGS INCLUDE FPL, FLP, FPLR, OR CI. WIRE MUST BE RATED FOR THE ENVIRONMENT IN WHICH IT IS INSTALLED. WIRE DESIGNATIONS ASSUME THE ELECTRICAL CONTRACTOR WILL SUBSTITUTE CODE-COMPLIANT EQUIVALENTS AS NEEDED.
 - ALL CONDUCTORS MUST TEST FREE OF GROUNDS AND SHORTS PRIOR TO CONNECTION TO THE FIRE ALARM CONTROL PANEL.
 - TO RETAIN WARRANTY, FIRE ALARM EQUIPMENT MUST BE POWERED UP UNDER THE SUPERVISION OF A QUALIFIED MANUFACTURER'S TECHNICIAN.
 - THE INSTALLING ELECTRICAL CONTRACTOR SHALL COORDINATE ALL FIELD CHANGES—including DEVICES, WIRE, CONDUIT RUNS, AND SYSTEM OPERATION—with the FIRE ALARM CONTRACTOR. THE FIRE ALARM CONTRACTOR IS NOT RESPONSIBLE FOR UNDOCUMENTED CHANGES OR THEIR CONSEQUENCES.
- NOTIFICATION & DEVICE PLACEMENT
 - NOTIFICATION DEVICES MUST BE AUDIBLE THROUGHOUT THE SPACE, WITH SOUND PRESSURE LEVELS AT LEAST 15 DB ABOVE AVERAGE AMBIENT SOUND OR 5 DB ABOVE PEAK AMBIENT SOUND, MEASURED AT 5'0" ABOVE FINISHED FLOOR.
 - MAIN BUILDING FIRE ALARM AND SUPPRESSION SYSTEMS SHALL USE CLASS "B" WIRING. PRE-ACTION AND DELUGE SYSTEMS SHALL USE CLASS "A" WIRING. CLASS "A" CIRCUITS MUST MAINTAIN A MINIMUM SEPARATION OF 48" HORIZONTALLY AND 12" VERTICALLY BETWEEN OUTGOING AND RETURN PATHS.
 - PULL STATIONS AND NOTIFICATION DEVICES SHALL BE MOUNTED PER NFPA 72 AND ADA REQUIREMENTS.
 - DETECTOR SPACING SHALL COMPLY WITH NFPA 72 AND LOCAL CODES.
 - ELECTRICAL CONTRACTOR SHALL COORDINATE ROUGH-IN LOCATIONS WITH ALL OTHER TRADES.
 - ALL FIRE ALARM DEVICES MUST BE SECURELY FASTENED TO WALLS OR CEILINGS.
- DETECTOR PLACEMENT & ENVIRONMENTAL CONSIDERATIONS- SMOKE DETECTORS MUST BE LOCATED AT LEAST 36" FROM ANY AIR REGISTER OR DIFFUSER.
 - HEAT DETECTORS MUST ALSO BE LOCATED AT LEAST 36" FROM ANY AIR REGISTER OR DIFFUSER.
 - PER NFPA 72, CHAPTER 17: SMOKE DETECTORS INSTALLED PRIOR TO FINAL CLEANING MUST BE CLEANED AND VERIFIED TO OPERATE WITHIN LISTED SENSITIVITY. IF NOT, THEY MUST BE REPLACED BEFORE FINAL COMMISSIONING. THE DESIGNER IS NOT RESPONSIBLE FOR LABOR OR MATERIALS RELATED TO CLEANING, SENSITIVITY TESTING, OR REPLACEMENT OF DETECTORS INSTALLED BEFORE FINAL CLEANING.
 - HEAT DETECTORS MUST BE AT LEAST 36" FROM HEAT-GENERATING DEVICES (E.G., FUSES, BOILERS, WATER HEATERS) IN MECHANICAL ROOMS.
 - HEAT DETECTORS MUST BE AT LEAST 18" FROM ANY PART OF A LIGHT FIXTURE.
 - FOR ELEVATOR SHUNT TRIP APPLICATIONS, HEAT DETECTORS MUST BE MOUNTED WITHIN 24" OF A SPRINKLER HEAD IN ELEVATOR MACHINE ROOMS AND SHAFTS.
- WIRING & DOCUMENTATION- INITIATING AND SIGNALING CIRCUITS MAY BE RUN IN THE SAME CONDUIT.
 - ALL CONDUCTORS MUST BE LABELED BY ZONE OR SLC LOOP NUMBER.
 - DRAWINGS DEPICT PANELS, DEVICES, AND WIRING DIAGRAMMATICALLY. THEY DO NOT SHOW RACEWAY OR PATHWAY LOCATIONS. DEVICE AND PANEL LOCATIONS MUST BE COORDINATED BY THE INSTALLING CONTRACTOR DURING CONSTRUCTION.

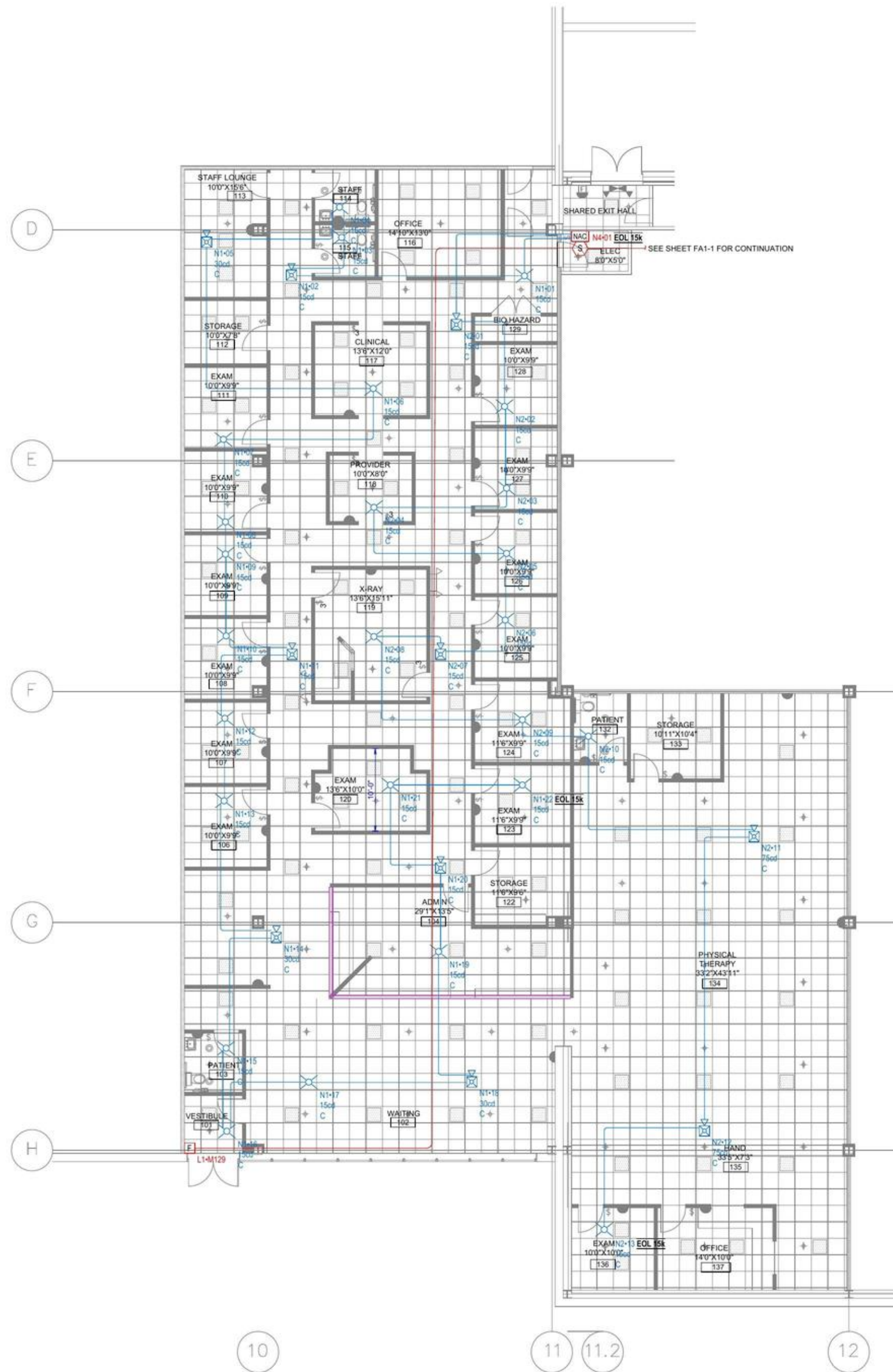
REV	JOB#- DESCRIPTION	DATE	BY
0	INITIAL SUBMISSION	09/28/2025	CAV

DRAWN BY:	CAV
PROJECT DESIGNER:	CAV
PROJECT MANAGER:	JS
JOB NUMBER:	
SCALE:	AS SHOWN
DATE:	09/28/2025

[LOCATION REDACTED]
GENESIS MEDICAL/TRISTATE ORTHO
[LOCATION REDACTED]
[LOCATION REDACTED]

COVER SHEET
FIRE ALARM SYSTEM
DRAWING:
FA-0-1

IF DRAWING IS NOT 30" x 42" IT IS A SCALED COPY



FIRE ALARM LAYOUT -TRISTATE ORTHOPEDIC - SUITE B
[LOCATION REDACTED]
SCALE: 1/8"=1'-0"

REV	JOB# - DESCRIPTION	DATE	BY
5	INITIAL SUBMISSION	09/28/2025	CAV

DRAWN BY: CAV
PROJECT DESIGNER: CAV
PROJECT MANAGER: JS
JOB NUMBER: [REDACTED]
SCALE: AS SHOWN [DATE: 09/28/2025]

GENESIS MEDICAL/TRISTATE ORTHO
[LOCATION REDACTED]
[LOCATION REDACTED]

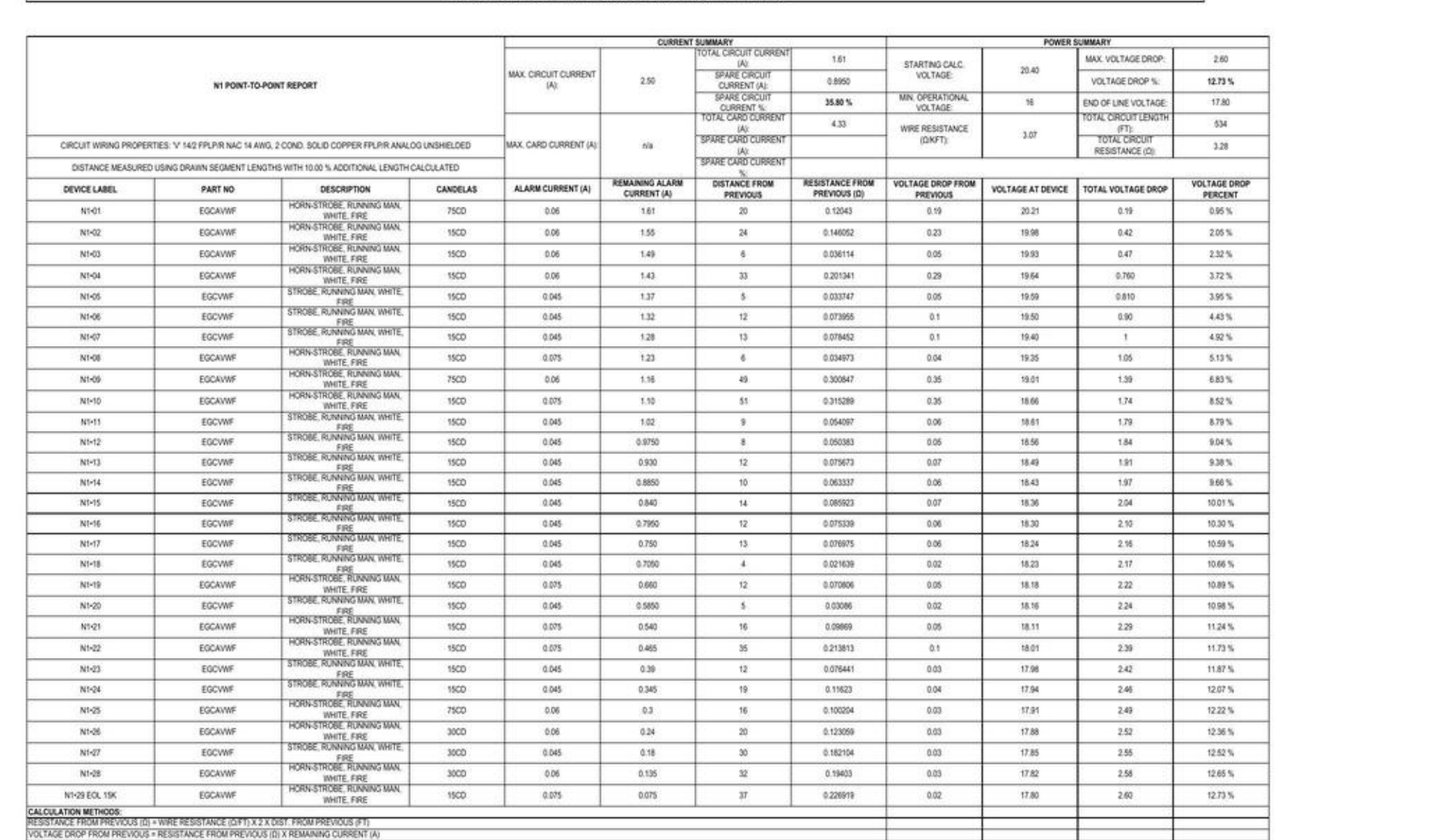
FIRE ALARM LAYOUT-TRISTATE
ORTHOPEDIC - SUITE B
FIRE ALARM SYSTEM

DRAWING: FA-1-2

FIRE ALARM INPUT/OUTPUT MATRIX

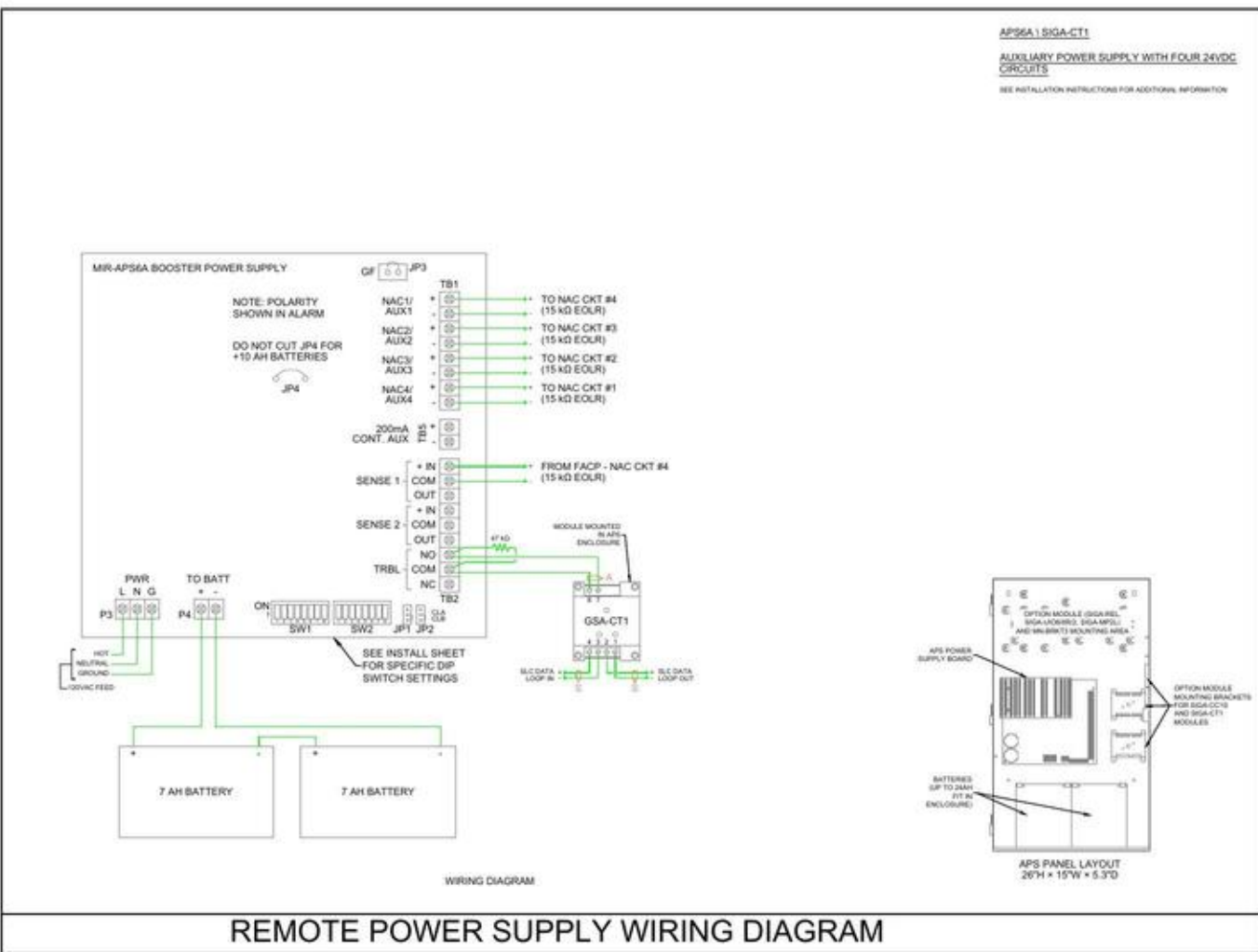


[LOCATION REDACTED] GENESIS MEDICAL / TRISTATE ORTHO [LOCATION REDACTED]	
INPUT/OUTPUT MATRIX, RISER DIAGRAM, TYPICAL MOUNTING DETAIL FIRE ALARM SYSTEM	
DRAWING:	FA-2-1

[illegible]

N4 POINT-TO-POINT REPORT										
CURRENT SUMMARY						POWER SUMMARY				
MAX. CIRCUIT CURRENT (A)	2.50	WIRE CIRCUIT CURRENT (A)		0.006	STARTING CALC. VOLTAGE	20.40	MAX. VOLTAGE DROP	0.01		
		SPARE CIRCUIT CURRENT (A)		2.49						
		WIRE CIRCUIT CURRENT (A)		99.75%						
		TOTAL CIRCUIT CURRENT		4.33						
		MAX. CIRCUIT CURRENT (A)		n/a						
WIRE CIRCUIT CURRENT		4.33	WIRE RESISTANCE (MIL)	0.07	TOTAL CIRCUIT LENGTH (FT)	393				
SPARE CIRCUIT CURRENT		2.17								
CIRCUIT WIRING SPECIFICATIONS: 14 1421 FROM NAC 14 AWG, 2 COND. 50.0 C DIFFERENTIAL ANALYSIS UNDESIRABLE										
DISTANCE MEASURED USING DRAWING MEASURE LENGTH WITH 10.0% ADJUSTED LENGTH CALCULATED										
DEVICE NAME	DESCRIPTION	CANDELAB	ALARM CURRENT (A)	REMAINING ALARM CURRENT (A)	DISTANCE FROM PREVIOUS	RESISTANCE FROM PREVIOUS (Ω)	VOLTAGE DROP FROM PREVIOUS	VOLTAGE AT DEVICE	TOTAL VOLTAGE DROP	VOLTAGE DROP PERCENT
SHORT EDC, 15K	REMOVIT BOOSTER POWER SUPPLY, 6.5A, 120VAC, RED		0.008	0.008	393	2.17	0.21	20.19	0.07	0.36%
CALCULATION METHODS										
REDUCTION FROM PREVIOUS = WIRE RESISTANCE (SPFT X 1 X 0.001 FROM PREVIOUS) + VOLTAGE DROP FROM PREVIOUS + RESISTANCE FROM PREVIOUS (X 1.0) + VOLTAGE DROP FROM PREVIOUS (X 1.0)										

DRAWING: FA-3-1



PANEL W401 EOL 15K (MRPISA) 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	MRPISA	MRPISA BOOSTER POWER SUPPLY 6.8A 120VAC RED WARDWARD FOR BISA	0.07	0.07
					1	MRPISA	MRPISA BOOSTER POWER SUPPLY 6.8A 120VAC RED WARDWARD FOR BISA	0.07	0.07
CIRCUIT	MAX CARD AMPS	USED CARD AMPS	SPARE CARD AMPS	SYMBOL	QTY	PART NO.	DESCRIPTION	CURRENT DRAW (A)	TOTAL (A)
									CURRENT DRAW (A)
									TOTAL (A)
					3	EGCAVWF	HORN-STROBE, RUNNING MAN, WHITE, FIRE 15C	0	0.06
					3	EGCAVWF	HORN-STROBE, RUNNING MAN, WHITE, FIRE 15C	0	0.075
N1					16	EGCVWF	STROBE, RUNNING MAN, WHITE, FIRE 15C	0	0.045
					2	EGCAVWF	HORN-STROBE, RUNNING MAN, WHITE, FIRE 15C	0	0.06
					2	EGCAVWF	HORN-STROBE, RUNNING MAN, WHITE, FIRE 15C	0	0.075
N2					9	EGCVWF	STROBE, RUNNING MAN, WHITE, FIRE 15C	0	0.045