

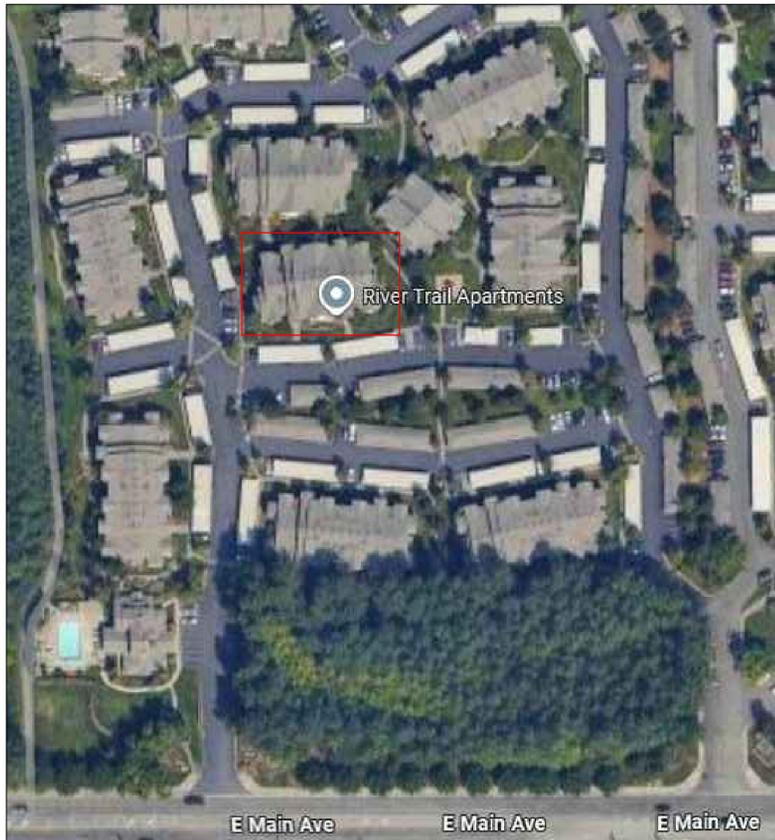


GENERAL NOTES

- INSTALLATION SHALL BE ACCOMPLISHED IN STRICT COMPLIANCE WITH NFPA, LOCAL, AND STATE AHJ'S, NEC, AND CONTRACT DRAWINGS.
- RECORD DRAWINGS ARE REQUIRED AT THE TIME OF AHJ ACCEPTANCE. PATRIOT FIRE PROTECTION, INC. REQUIRES ELECTRICAL RED LINES WITH IN TWO WEEKS PRIOR TO PRIOR AHJ TESTS.
- AGREEMENT AND CONFIRMATION OF ALL MILESTONE EVENTS WILL BE MADE WITH PATRIOT FIRE PROTECTION, INC. PROJECT MANAGER, ALL FS TECHNOLOGIES FIELD SERVICES MUST BE SCHEDULED WITH PATRIOT FIRE PROTECTION, INC. PROJECT MANAGER WITH A MINIMUM OF TEN BUSINESS DAYS ADVANCE NOTICE.
- A SET OF INSTALLATION AS-BUILT DRAWINGS SHOWING ACTUAL CONDUIT AND CONDUCTOR ROUTES SHALL BE KEPT BY PROJECT FOREMAN FOR USE BY PATRIOT FIRE PROTECTION, INC. ALARM TECHNICIAN.
- FIRE ALARM CONTROL PANEL SHALL NOT BE ENEGRIZED WITHOUT THE PRESENCE OF A PATRIOT FIRE PROTECTION, INC. ALARM TECHNICIAN.
- THE FIRE ALARM SYSTEM SHALL BE MONITORED BY UNDERWRITERS LISTED MONITORING STATION BEFORE AHJS TEST.
- THE WIRING ROUTING IS DIAGRAMMATIC IN NATURE ONLY AND NOT INTENDED FOR ACTUAL CONDUIT ROUTING.
- ALL CONDUIT SIZING AND ROUTING BY ELECTRICAL CONTRACTOR PER NEC AND AHJ.
- NO LINE VOLTAGE IN SAME CONDUIT AS POWER LIMITED FIRE ALARM CABLE.
- VERIFY ALL LOCATIONS OF DEVICES WITH ELECTRICAL AND ARCHITECTURAL PLANS, SCALE AND PLACE DEVICES PER ELECTRICAL AND ARCHITECTURAL PLANS
- FIELD VERIFY WATERFLOW SWITCHES, TAMPER SWITCHES, PRESSURE SWITCHES, SMOKE DAMPERS, AND DUCT DETECTOR LOCATIONS.
- FIELD VERIFY ALL WIRING LOCATIONS AND REQUIREMENTS FOR HVAC AND FAN CONTROL.
- SMOKE DETECTORS SHALL NOT BE LOCATED WITH IN 36" OF ANY DIFFUSER
- WALL MOUNTED AUDIBLE/VISUAL APPLIANCES SHALL BE MOUNTED IN SUCH THAT THE ENTIRE LENS IS NOT LESS THAN 80" AND NOT GREATER THAN 96" ABOVE FINISHED FLOOR
- THE OPERABLE PART OF EACH MANUAL FIRE ALARM BOX SHALL NOT BE LESS THAN 3'-6" AND NOT MORE THAN 4'-0" ABOVE THE FINISHED FLOOR.
- NO DETECTORS SHALL BE INSTALLED UNTIL AFTER FINAL CONSTRUCTION CLEAN-UP, DETECTORS THAT HAVE BEEN INSTALLED PRIOR TO CLEAN-UP MUST BE CLEANED OR REPLACED AND WILL BE INVOICED ON A TIME AND MATERIAL BASIS.
- A DEDICATED BRANCH CIRCUIT OF ONE OF THE FOLLOWING SHALL SUPPLY PRIMARY POWER.
 - COMMERCIAL LIGHT AND POWER.
 - AN ENGINE-DRIVEN GENERATOR OR EQUIVALENT WHERE A PERSON SPECIFICALLY TRAINED IN ITS OPERATIONS IS ON DUTY AT ALL TIMES.
 - AN ENGINE-DRIVEN GENERATOR OR EQUIVALENT ARRANGED FOR COGENERATION WITH COMMERCIAL LIGHT AND POWER WHERE A PERSON SPECIFICALLY TRAINED IN ITS OPERATION IS ON DUTY AT ALL TIMES.
- ALL CIRCUITS WILL BE PROPERLY TAGGED AND TESTED FOR OPENS, SHORTS, GROUNDS, AND PROPER "END-TO-LINE" RESISTANCE. EACH CIRCUITS METER READING MUST BE DOCUMENTED AND PRESENTED TO PATRIOT FIRE PROTECTION, INC. ALARM TECHNICIAN UPON ARRIVAL ONSITE FOR STARTUP AND CHECKOUT.
- NO TAPPING OF SIGNALING OR INITIATING ZONE CIRCUITS ARE ALLOWED. T-TAPPING OF STYLE 4 ADDRESSABLE CIRCUITS IS ALLOWED PROVIDING A SPLICE IS PROFESSIONALLY INSTALLED, POLARITY IS OBSERVED, AND SHIELDS ARE CONTINUOUS AND FREE OF GROUNDS. SHIELDS MUST BE TERMINATED AT THE FIRE ALARM CONTROL PANEL ONLY. CABLE SHIELDS SHALL BE SPLICED TOGETHER AT EVERY JUNCTION BETWEEN THE FIRE ALARM CONTROL PANEL AND THE LAST DEVICE ON EACH CABLE RUN. SHIELDS AND OTHER FIRE ALARM CONDUCTORS (EXCEPT POWER GROUNDS) SHALL BE INSULATED AND COMPLETELY FREE FROM CONDUIT OR EARTH GROUNDS. SHIELDS WILL BE TIED TO GROUND ONLY AT THE FIRE ALARM CONTROL PANEL.

DRAWING ACCEPTANCE

THIS DRAWING IS TO BE USED FOR THE PURPOSE OF PLACING AND LOCATING PATRIOT FIRE PROTECTION, INC. FIRE ALARM DEVICES AND IS NOT TO BE USED FOR ANY OTHER PURPOSES.



VICINITY MAP
NOT TO SCALE

SCOPE OF WORK

REPLACE EXISTING SILENT KNIGHT FACP AND ADDRESSABLE DEVICES WITH POTTER EQUIVALENTS.
PROJECT IS DUE TO DISCONTINUED HOCHIKI/SD PARTS AVAILABILITY.
NO CHANGE TO FIELD DEVICE LOCATIONS.
NO CHNAGE TO OCCUPANT NOTIFICATION

USE & OCCUPANCY CLASSIFICATION

- ASSEMBLY (A) A-1 A-2 A-3 A-4 A-5
- BUSINESS (B)
- EDUCATIONAL (E)
- FACTORY & INDUSTRIAL (F) F-1 F-2
- HIGH HAZARD (H) H-1 H-2 H-3 H-4 H-5
- INSTITUTIONAL (I) I-1 I-2 I-3 I-4
- MERCANTILE (M)
- RESIDENTIAL (R) R-1 R-2 R-3 R-4
- STORAGE (S) S-1 S-2 S-3 S-4
- UTILITY & MISCELLANEOUS (U)

AUTOMATIC SPRINKLER PROTECTION

- NO PARTIAL FULL

WIRE LEGEND

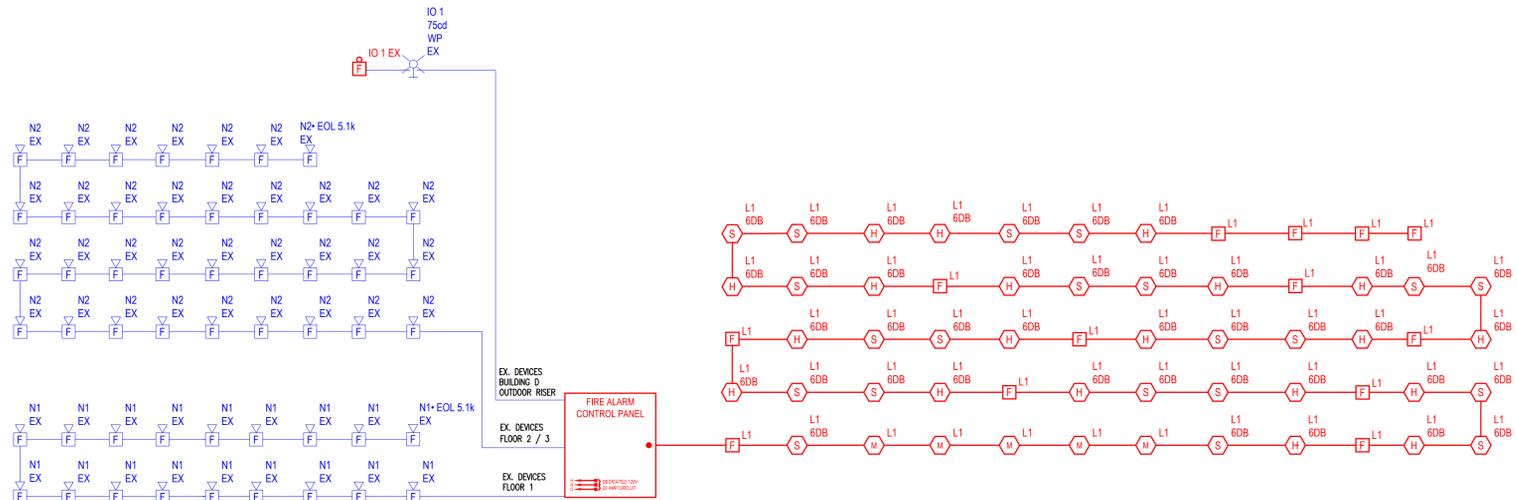
LABEL	PART NO	MANUFACTURER	APPLICATION	RESISTANCE MFT	AWG	DESCRIPTION	TOTAL LENGTH
A	16/2 FPLP	GENERIC	SLC	4.89	16	2 COND. SOLID COPPER FPLR ADDRESSABLE	1890'

DEVICE LEGEND

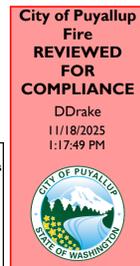
SYMBOL	QUANTITY	MANUFACTURER	PART NO	DESCRIPTION
[FACP]	1	POTTER	AFC-100	FIRE ALARM CONTROL PANEL
[M]	5	POTTER	PAD100-SIM	SINGLE INPUT MODULE
[F]	13	POTTER	PAD100-PSSA	ADDRESSABLE PULL STATION SINGLE ACTION
[S] 6DB	21	POTTER	PAD300-PD WPAD300-6DB	PHOTOELECTRIC SMOKE DETECTOR WITH 6" STANDARD BASE
[H] 6DB	20	POTTER	PAD300-HD WPAD300-6DB	HEAT DETECTOR WITH 6" STANDARD BASE
[WP]	1	EXISTING	EXISTING	STROBE, OUTDOOR
[HORN]	52	EXISTING	EXISTING	MINI-HORN, WHITE
[BELL]	1	EXISTING	EXISTING	BELL

OPERATION MATRIX

	MANUAL PULL STATION	SMOKE DETECTOR (SPD)	HEAT DETECTOR	WATERFLOW	TAMPER	SYSTEM TROUBLE	AC FIRE	COMMUNICATOR FAIL
DISPLAY OF AN ALARM EVENT AT THE FACP	X	X	X	X				
DISPLAY OF A SUPERVISORY EVENT AT THE FACP						X		
DISPLAY OF A TROUBLE EVENT AT THE FACP						X	X	X
TRANSMIT AN ALARM SIGNAL TO THE CENTRAL STATION	X	X	X	X				
TRANSMIT A SUPERVISORY SIGNAL TO THE CENTRAL STATION						X		
TRANSMIT A TROUBLE SIGNAL TO THE CENTRAL STATION						X	X	
INITIATE BUILDING NOTIFICATION (A/V DEVICES)	X	X	X	X				



RISER DIAGRAM
NOT TO SCALE



THE APPROVED CONSTRUCTION PLANS AND ALL ENGINEERING MUST BE POSTED ON THE JOB AT ALL INSPECTIONS IN A VISIBLE AND READILY ACCESSIBLE LOCATION.

Approval of submitted plans is not an approval of omissions or oversight by this office or noncompliance with any applicable regulations of local government. The contractor is responsible for making sure that the building complies with all applicable building codes and regulations of the local government.



STATE CERTIFICATION

SHEET INDEX	DESCRIPTION	REV	GENERAL SHEET	DEVICE LOCATIONS	PRODUCT TYPICALS
FA001	GENERAL SHEET				
FA101	DEVICE LOCATIONS				
FA102	DEVICE LOCATIONS AND CALCULATIONS				
FA103	PRODUCT TYPICALS				

REVISIONS			
NO	DATE	BY	DESCRIPTION

SYSTEM DESIGN CODES

INTERNATIONAL BUILDING CODE (IBC 2021 EDITION)
INTERNATIONAL FIRE CODE (IFC 2020 EDITION)
NATIONAL ELECTRICAL CODE (NFPA 70 2020 EDITION)
ADA INTERNATIONAL CODE ANSII 117.1
NATIONAL FIRE ALARM AND SIGNALING CODE (NFPA 72 2019 EDITION)

INSTALLATION COMPANY

PATRIOT FIRE PROTECTION, INC.
2707 70TH AVE E, TACOMA, WA 98424

MONITORING COMPANY

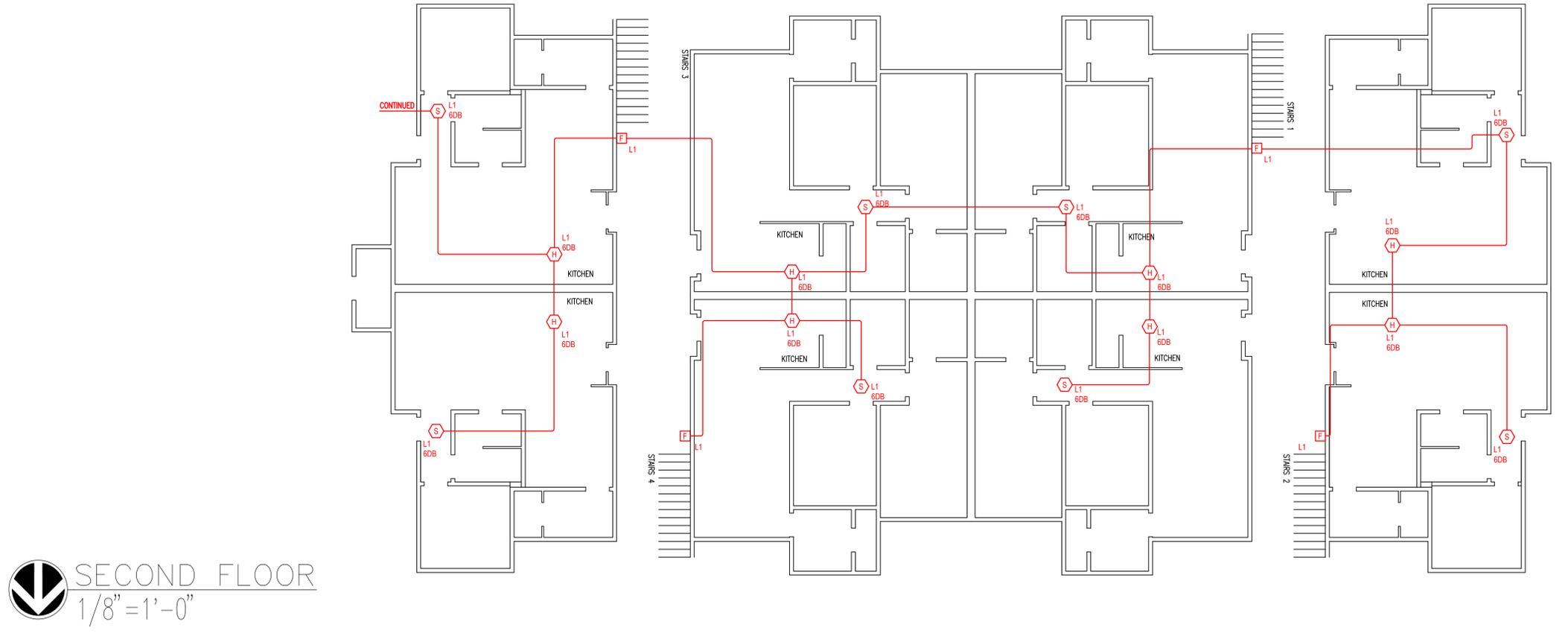
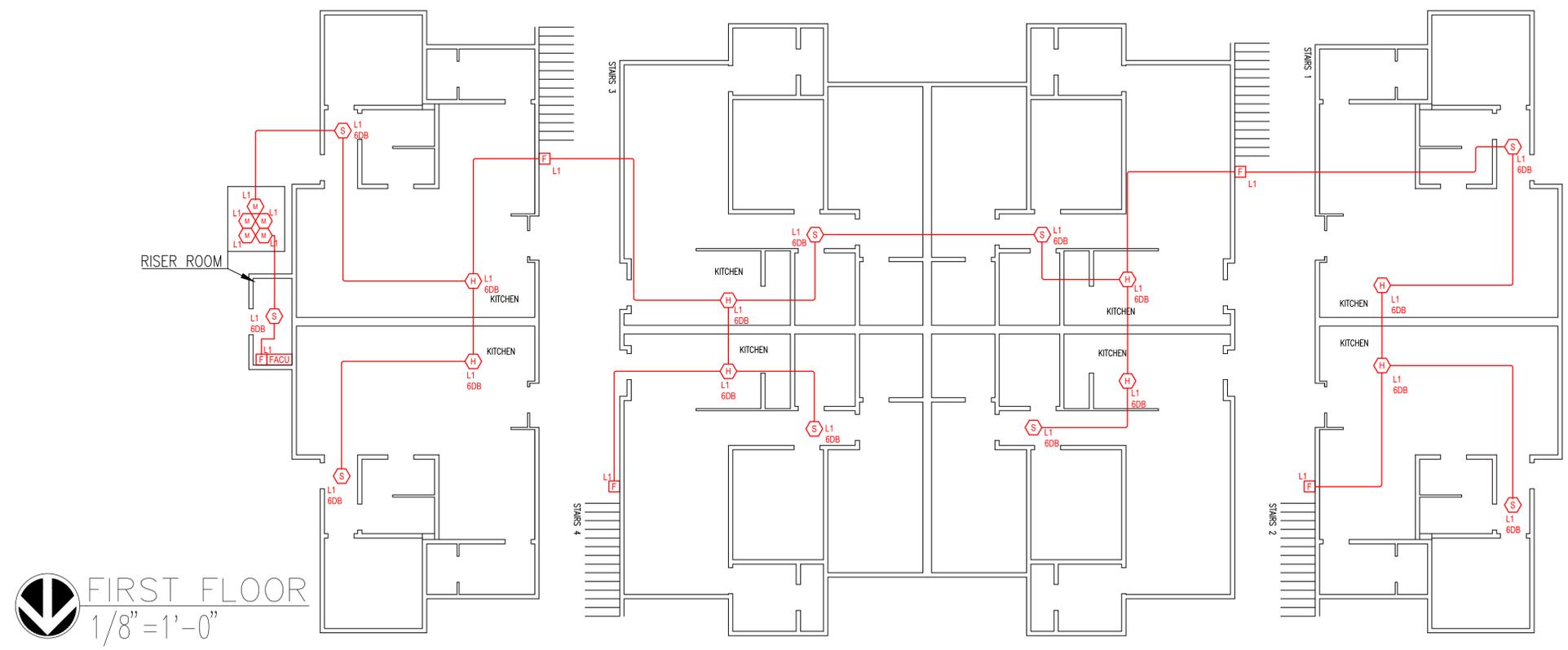
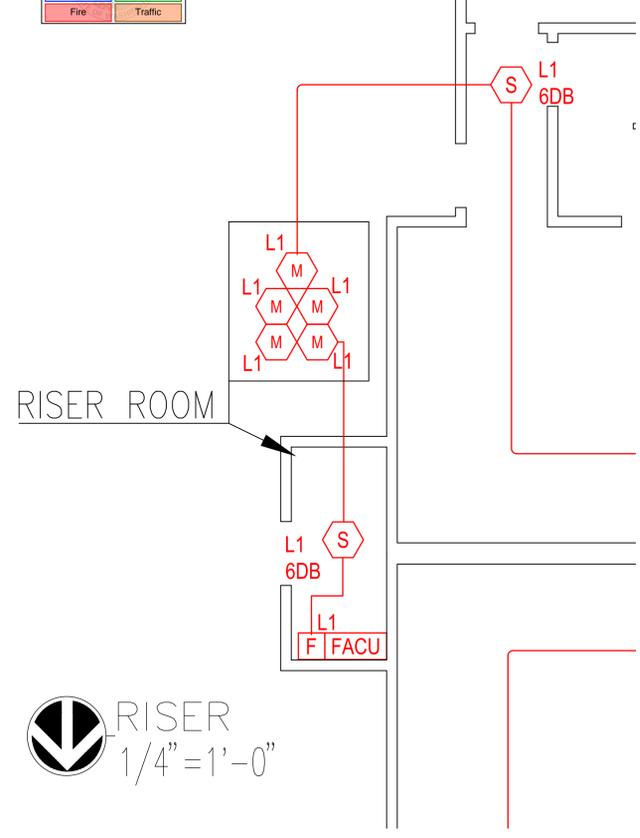
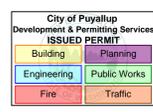
AVANTGUARD MONITORING CENTERS, LLC
4699 HARRISON BLVD, SUITE 100
OGDEN, UT 84403

CONTRACT WITH:

PROJECT NAME:
River Trail Apartments Building D
1617 E Main Ave
Puyallup, WA 98372



DESIGNER	ERICK E.	SHEET	1 OF 4	FA001
DATE	10/28/2025			
JOB NO.	19-1015			



STATE CERTIFICATION

Jeff Harasimowitz
Fire Alarm Systems - Level III
NICET Certification Number 160601
Exp: 11/01/2028
Authorizing Signature: *[Signature]*

SHEET INDEX		DESCRIPTION
GENERAL SHEET		
DEVICE LOCATIONS		
PRODUCT TYPICALS		

NO	DATE	BY	DESCRIPTION

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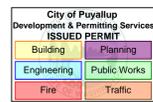
AVANTGUARD MONITORING CENTERS, LLC
4699 HARRISON BLVD, SUITE 100
OGDEN, UT 84403

CONTRACT WITH:

PROJECT NAME:
River Trail Apartments Building D
1617 E Main Ave
Puyallup, WA 98372

PATRIOT FIRE PROTECTION, INC.
2707 70th AVE E, TACOMA, WA 98424
TEL: (253) 532-0967
FAX: (253) 922-6150

DESIGNER	ERICK E.	SHEET	2 OF 4	FA101
DATE	10/28/2025			
JOB NO.	19-1015			



PANEL (AFC-100) BATTERY CALCULATION (SECONDARY POWER SOURCE REQUIREMENTS)									
PANEL COMPONENTS				STANDBY CURRENT		SECONDARY ALARM CURRENT			
CIRCUIT	MAX CARD AMPS	USED CARD AMPS	SYMBOL	QTY	PART NO.	DESCRIPTION	CURRENT DRAW (A)	TOTAL (A)	TOTAL (A)
IO 1	N/A	1.078100	[Bell]	1	AFC-100	FIRE ALARM CONTROL PANEL	0	0	0
				1	AFC-100 MAIN BOARD	FIRE ALARM CONTROL PANEL MAIN BOARD	0.13	0.13	0.2
L1	N/A	1.078100	[WP]	1	EXISTING	BELL	0	0	0.02
				1	EXISTING	STROBE, OUTDOOR 75CD	0	0	0.158
				13	PAD100-PSA	ADDRESSABLE PULL STATION SINGLE ACTION	0.0002	0.0026	0.0002
				5	PAD100-SIM	SINGLE INPUT MODULE	0.00024	0.0012	0.00024
				20	PAD300-HD WIPAD300-6DB	HEAT DETECTOR WITH 6" STANDARD BASE	0.0003	0.006	0.0003
N1	N/A	1.078100	[H]	21	PAD300-PD WIPAD300-6DB	PHOTOELECTRIC SMOKE DETECTOR WITH 6" STANDARD BASE	0.0003	0.0063	0.0003
				18	MHW (EX)	MINI-HORN, WHITE	0	0	0.017
N2	N/A	1.078100	[H]	34	MHW (EX)	MINI-HORN, WHITE	0	0	0.5780
TOTAL STANDBY (A)							0.1461	TOTAL ALARM (A)	1.28
REQUIRED STANDBY TIME (HOURS)							24	REQUIRED ALARM TIME (MINUTES)	5
SECONDARY STANDBY LOAD (A)							0.1461	SECONDARY ALARM LOAD (A)	3.51
STANDBY AND ALARM SUBTOTAL (AMP HOURS)							1.28	0.083	3.61
DERATING FACTOR									1.25
SECONDARY LOAD REQUIREMENTS (AMP HOURS)									4.52
PROVIDE (2) 12V 8AH BATTERIES									
*BATTERY BOX SIZE CAPACITY NOT SPECIFIED. REFER TO MANUFACTURER DOCUMENTATION.									

IO 1 OUTPUT LUMP SUM REPORT			
CURRENT SUMMARY		POWER SUMMARY	
MAX. CIRCUIT CURRENT (A):	1	STARTING CALC. VOLTAGE:	20.40
TOTAL CIRCUIT CURRENT (A):	0.178	MAX. VOLTAGE DROP:	0.3
SPARE CIRCUIT CURRENT (A):	0.8220	VOLTAGE DROP %:	1.48 %
SPARE CIRCUIT CURRENT %:	82.20 %	MIN. OPERATIONAL VOLTAGE:	16
MAX. CARD CURRENT (A):	n/a	END OF LINE VOLTAGE:	20.10
TOTAL CARD CURRENT (A):	1.08	WIRE RESISTANCE (Ω/KFT):	3.07
SPARE CARD CURRENT (A):		TOTAL CIRCUIT LENGTH (FT):	277
SPARE CARD CURRENT %:		TOTAL CIRCUIT RESISTANCE (Ω):	1.70

SYMBOL	QUANTITY	PART NO.	DESCRIPTION	CANDELAS	ALARM CURRENT (A)	TOTAL CURRENT (A)
[Bell]	1	EXISTING	10" BELL		0.02	0.02
[WP]	1	EXISTING	STROBE, OUTDOOR	75CD	0.158	0.158

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)

N1 LUMP SUM REPORT			
CURRENT SUMMARY		POWER SUMMARY	
MAX. CIRCUIT CURRENT (A):	3	STARTING CALC. VOLTAGE:	20.40
TOTAL CIRCUIT CURRENT (A):	0.306	MAX. VOLTAGE DROP:	0.590
SPARE CIRCUIT CURRENT (A):	2.69	VOLTAGE DROP %:	2.91 %
SPARE CIRCUIT CURRENT %:	89.80 %	MIN. OPERATIONAL VOLTAGE:	16
MAX. CARD CURRENT (A):	n/a	END OF LINE VOLTAGE:	19.81
TOTAL CARD CURRENT (A):	1.08	WIRE RESISTANCE (Ω/KFT):	3.07
SPARE CARD CURRENT (A):		TOTAL CIRCUIT LENGTH (FT):	316
SPARE CARD CURRENT %:		TOTAL CIRCUIT RESISTANCE (Ω):	1.94

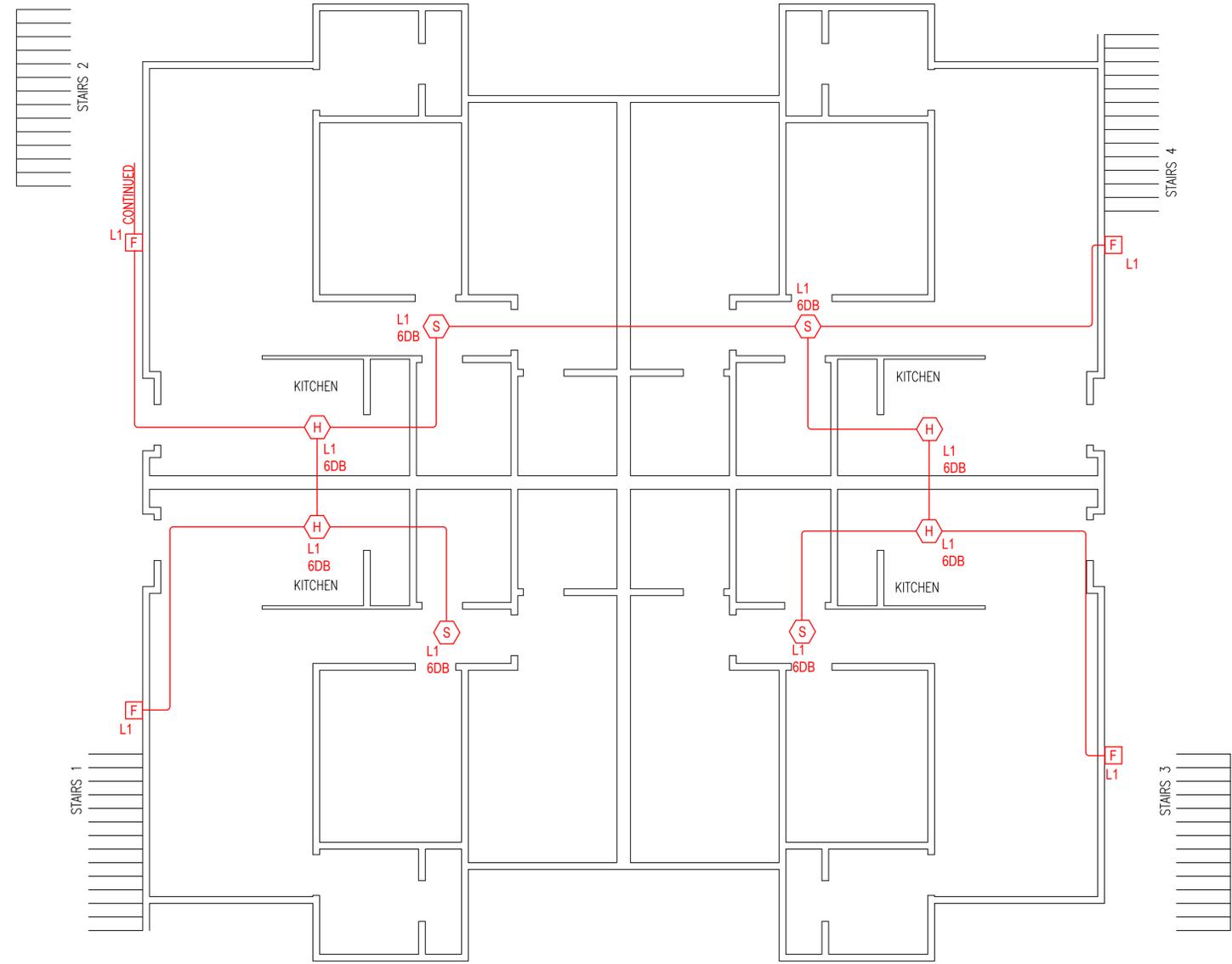
SYMBOL	QUANTITY	PART NO.	DESCRIPTION	CANDELAS	ALARM CURRENT (A)	TOTAL CURRENT (A)
[H]	18	EXISTING	MINI-HORN		0.017	0.306

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)

N2 LUMP SUM REPORT			
CURRENT SUMMARY		POWER SUMMARY	
MAX. CIRCUIT CURRENT (A):	3	STARTING CALC. VOLTAGE:	20.40
TOTAL CIRCUIT CURRENT (A):	0.5780	MAX. VOLTAGE DROP:	1.52
SPARE CIRCUIT CURRENT (A):	2.42	VOLTAGE DROP %:	7.46 %
SPARE CIRCUIT CURRENT %:	80.73 %	MIN. OPERATIONAL VOLTAGE:	16
MAX. CARD CURRENT (A):	n/a	END OF LINE VOLTAGE:	18.88
TOTAL CARD CURRENT (A):	1.08	WIRE RESISTANCE (Ω/KFT):	3.07
SPARE CARD CURRENT (A):		TOTAL CIRCUIT LENGTH (FT):	429
SPARE CARD CURRENT %:		TOTAL CIRCUIT RESISTANCE (Ω):	2.63

SYMBOL	QUANTITY	PART NO.	DESCRIPTION	CANDELAS	ALARM CURRENT (A)	TOTAL CURRENT (A)
[H]	34	EXISTING	MINI-HORN		0.017	0.5780

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)



THIRD FLOOR
 3/16" = 1'-0"

STATE CERTIFICATION

Jeff Harasimowitz
 Fire Alarm Systems - Level III
 NICET Certification Number 160601
 Exp: 11/01/2028
 Authorizing Signature: [Signature]

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INSTALLATION COMPANY

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 2707 70TH AVE E, TACOMA, WA 98424

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FIRE PROTECTION, INC.
 2707 70th Ave E.
 TACOMA, WA 98424
 TEL: (253) 532-0967
 FAX: (253) 922-6150

DESIGNER	ERICK E.	SHEET	FA102
DATE	10/28/2025	3 OF 4	
JOB NO.	19-1015		

