

# 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 FIRE ALARM CONTROL PANEL AND ADDRESSABLE DEVICES WITH POTTER EQUIVALENTS.  
NO CHANGE TO FIELD DEVICE LOCATIONS  
NO CHANGE TO OCCUPANT NOTIFICATION  
EXISTING WIRING TO BE UTILIZED

# 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

- NONE       PARTIAL       FULL

# DEVICE LEGEND

SYMBOL	QUANTITY	MANUFACTURER	PART NO	DESCRIPTION
[FACP]	1	POTTER	AFC-100	FIRE ALARM CONTROL PANEL
[SM]	8	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
[STROBE]	3	EXISTING	EXISTING	STROBE, WALL, WHITE
[MIN-HORN]	60	EXISTING	EXISTING	MIN-HORN, WHITE
[BELL]	1	EXISTING	EXISTING	10" BELL
<b>ADDITIONAL ASSEMBLY COMPONENTS AND HARDWARE</b>				
	1	POTTER	UD-2000	PFC SERIES DIGITAL ALARM COMMUNICATOR TRANSMITTER

# OPERATION MATRIX

	MANUAL PULL STATION	SMOKE DETECTOR (SPD)	HEAT DETECTOR (SPD)	WATERFLOW	TAMPER	SYSTEM TROUBLE	AC FIRE COMMUNICATOR PANEL
DISPLAY OF AN ALARM EVENT AT THE FACP	X	X	X	X	X		
DISPLAY OF A SUPERVISORY EVENT AT THE FACP						X	
DISPLAY OF A TROUBLE EVENT AT THE FACP						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			

STATE CERTIFICATION

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

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

REVISIONS		
NO	DATE	DESCRIPTION

### SYSTEM DESIGN CODES

INTERNATIONAL BUILDING CODE (IBC 2021 EDITION)  
INTERNATIONAL FIRE CODE (IFC 2021 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

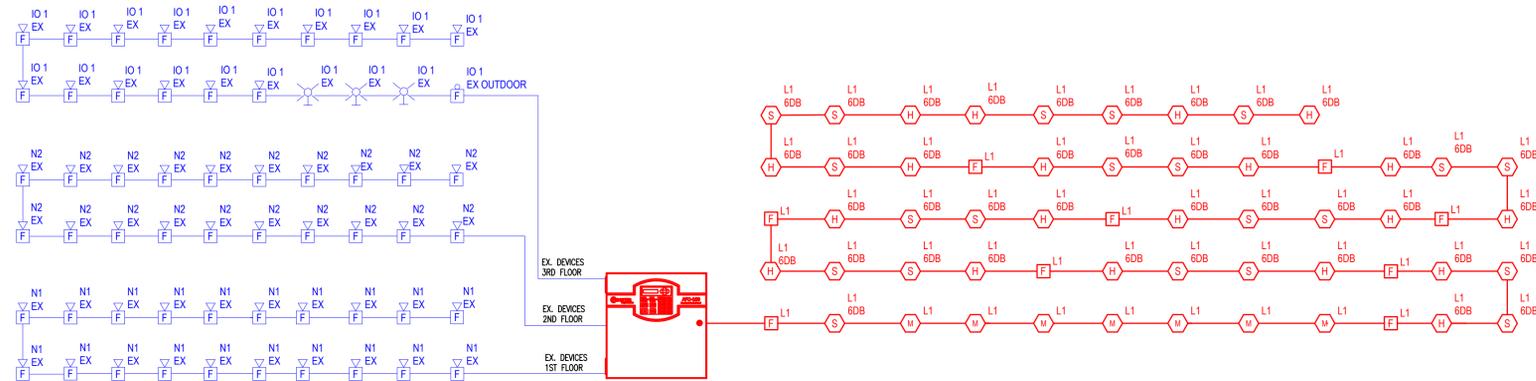
SECURITAS  
4500 3RD AVE SE  
LACEY, WA 98503

CONTRACT WITH:

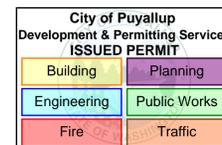
PROJECT NAME:  
**River Trail Apartments**  
Building Z  
1617 E Main Ave  
Puyallup, WA 98372

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

DESIGNER	ERICK E.	SHEET	FA001
DATE	02/23/26	1 OF 4	
JOB NO.	19-1072		



RISER DIAGRAM  
NOT TO SCALE



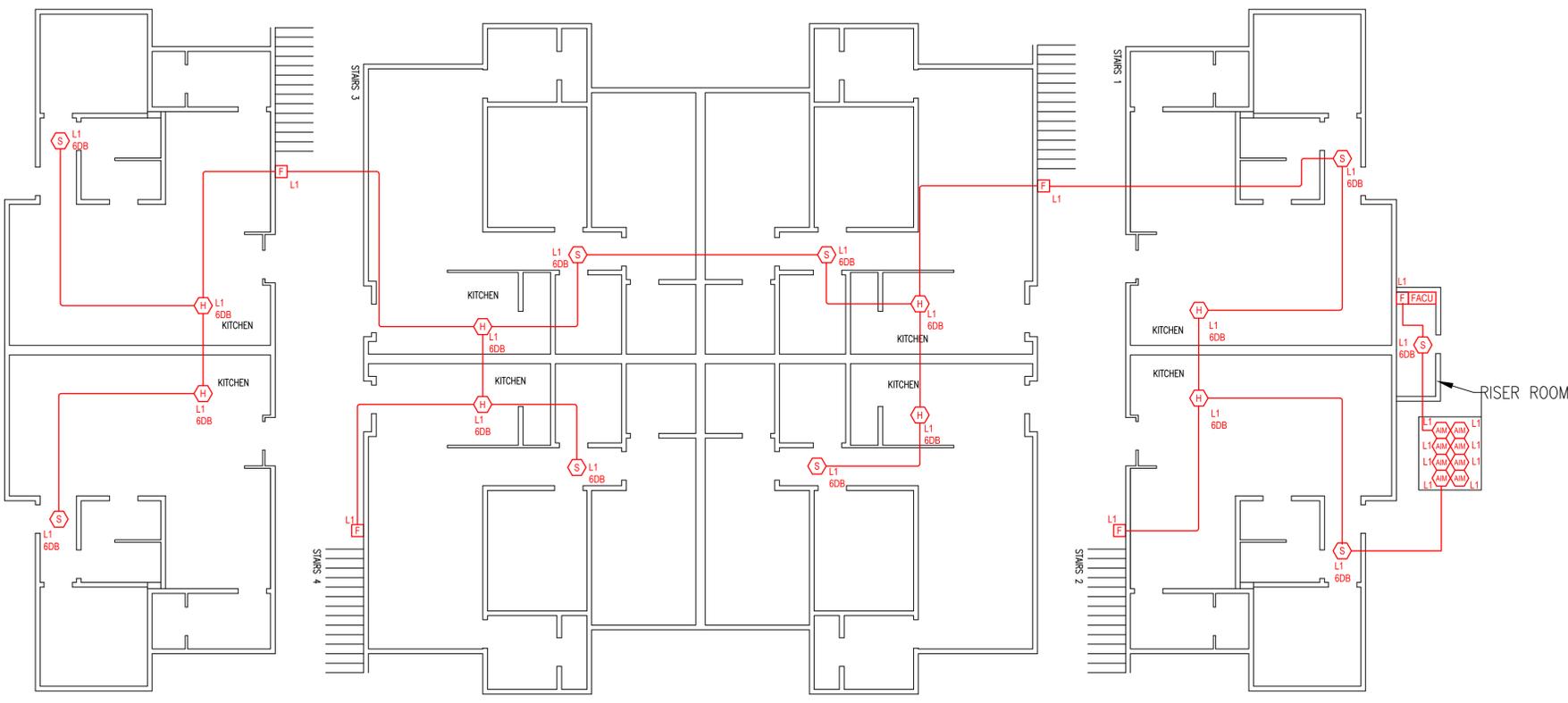
**City of Puyallup**  
Fire  
REVIEWED  
FOR  
COMPLIANCE

DDrake  
03/23/2026  
12:02:50 PM

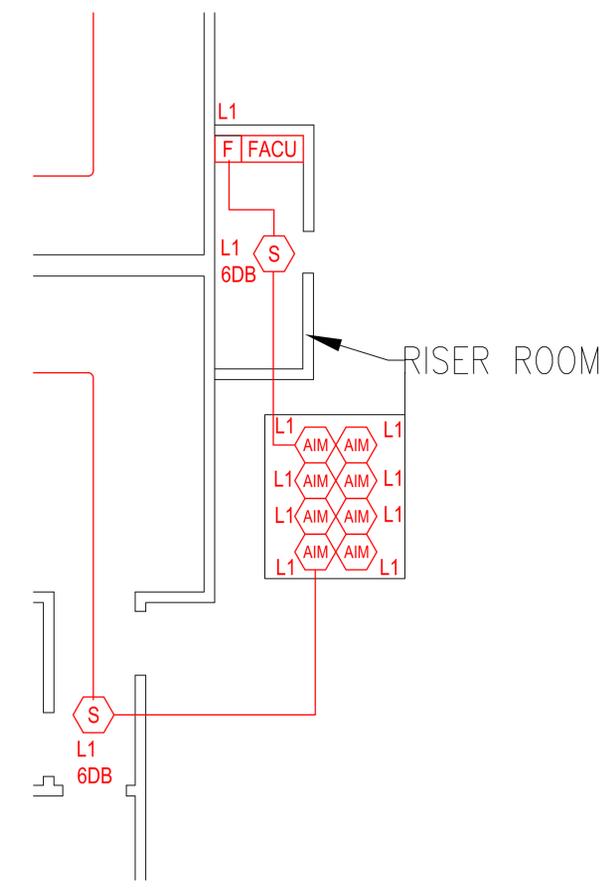


THE APPROVED CONSTRUCTION PLANS AND ALL ENGINEERING MUST BE POSTED ON THE JOB AT ALL INSPECTIONS IN A VISIBLE AND READILY ACCESSIBLE LOCATION.

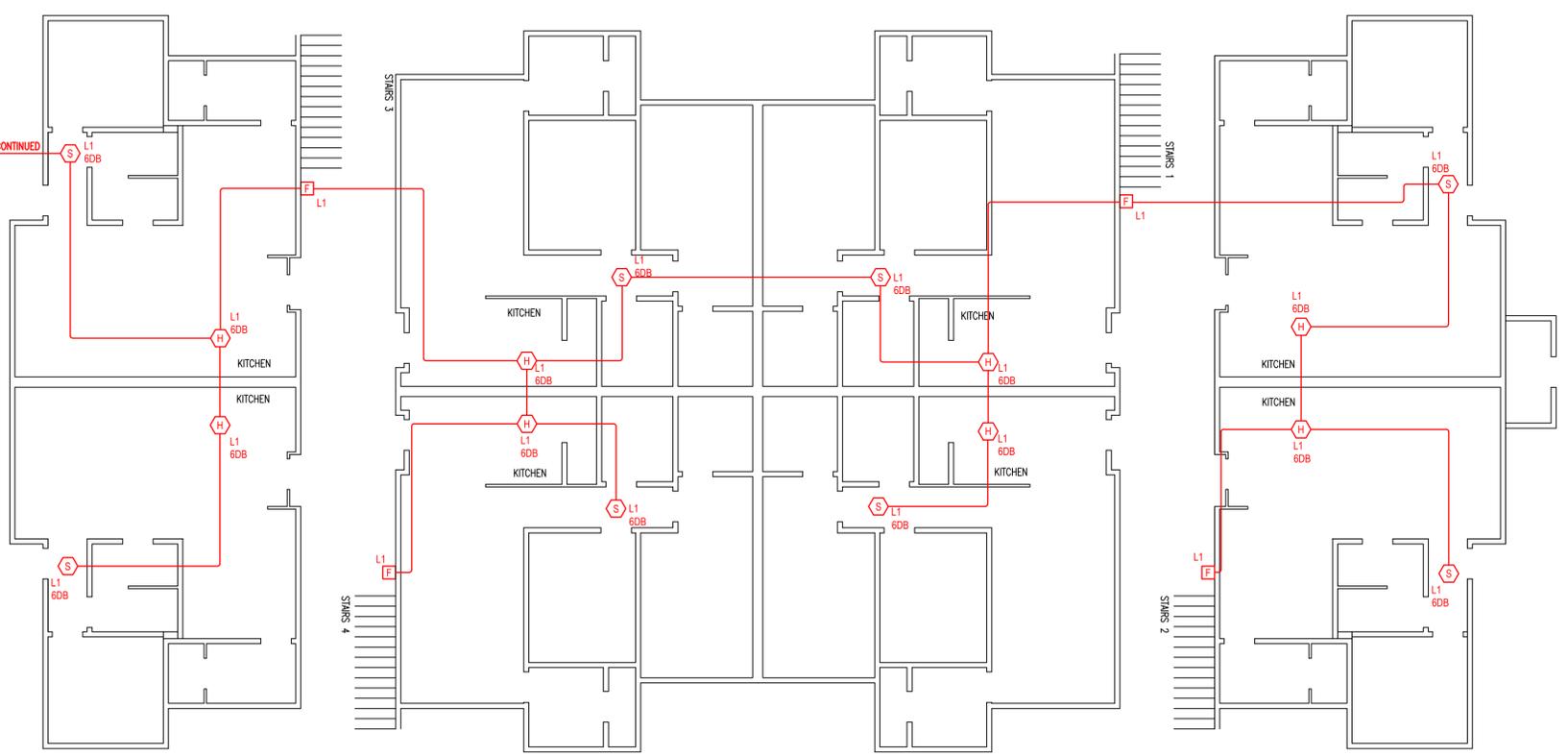
Approval of submitted plans is not an approval of omissions or oversight by this office or noncompliance with any applicable regulations of local government. The contractor is responsible for making sure that the building complies with all applicable building codes and regulations of the local government.



**FIRST FLOOR PLAN**  
1/8" = 1'-0"



**RISER**  
1/4" = 1'-0"



**SECOND FLOOR PLAN**  
1/8" = 1'-0"

STATE CERTIFICATION

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

REV	DESCRIPTION	REVISIONS

**SYSTEM DESIGN CODES**

INTERNATIONAL BUILDING CODE (IBC 2021 EDITION)  
INTERNATIONAL FIRE CODE (IFC 2021 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**

SECURITAS  
4500 3RD AVE SE  
LACEY, WA 98503

CONTRACT WITH:

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FIRE PROTECTION, INC.  
2707 70th Ave E.  
Tacoma, WA 98424

WWW.PATRIOTFIRE.COM  
Erick.Escobedo@patriotfire.com  
TEL: (253) 532-0967  
FAX: (253) 922-6150

DESIGNER	ERICK E.	SHEET	<b>FA101</b>
DATE	02/23/26	2 OF 4	
JOB NO.	19-1072		

IO 1 OUTPUT LUMP SUM REPORT		CURRENT SUMMARY			POWER SUMMARY		
MAX. CIRCUIT CURRENT (A):	1	STARTING CALC. VOLTAGE:	20.40				
TOTAL CIRCUIT CURRENT (A):	0.346	MAX. VOLTAGE DROP:	0.45				
SPARE CIRCUIT CURRENT (A):	0.6540	VOLTAGE DROP %:	2.20 %				
MAX. CARD CURRENT (A):	n/a	MIN. OPERATIONAL VOLTAGE:	16				
TOTAL CARD CURRENT (A):	1.11	END OF LINE VOLTAGE:	19.95				
SPARE CARD CURRENT (A):		WIRE RESISTANCE (Ω/KFT):	3.07				
		TOTAL CIRCUIT LENGTH (FT):	212				
		SPARE CARD CURRENT %:	1.30				
CIRCUIT WIRING PROPERTIES: * 142 FPLP/NAC 14 AWG, 2 COND. SOLID COPPER FPLP/NAC 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)
⏏	16	MHW	MINI-HORN, WHITE		0.017	0.272
🔔	1	PDC-10-12	10" BELL		0.02	0.02
⚡	3	SWLED	STROBE, WALL, WHITE	15CD	0.018	0.054

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):	0.408	MAX. VOLTAGE DROP:	0.5				
SPARE CIRCUIT CURRENT (A):	2.59	VOLTAGE DROP %:	2.46 %				
MAX. CARD CURRENT (A):	n/a	MIN. OPERATIONAL VOLTAGE:	16				
TOTAL CARD CURRENT (A):	1.11	END OF LINE VOLTAGE:	19.90				
SPARE CARD CURRENT (A):		WIRE RESISTANCE (Ω/KFT):	3.07				
		TOTAL CIRCUIT LENGTH (FT):	200				
		SPARE CARD CURRENT %:	1.23				
CIRCUIT WIRING PROPERTIES: * 142 FPLP/NAC 14 AWG, 2 COND. SOLID COPPER FPLP/NAC ANALOG UNSHIELDED							
DISTANCE MEASURED USING DRAWN SEGMENT LENGTHS WITH 10.00 % ADDITIONAL LENGTH CALCULATED							

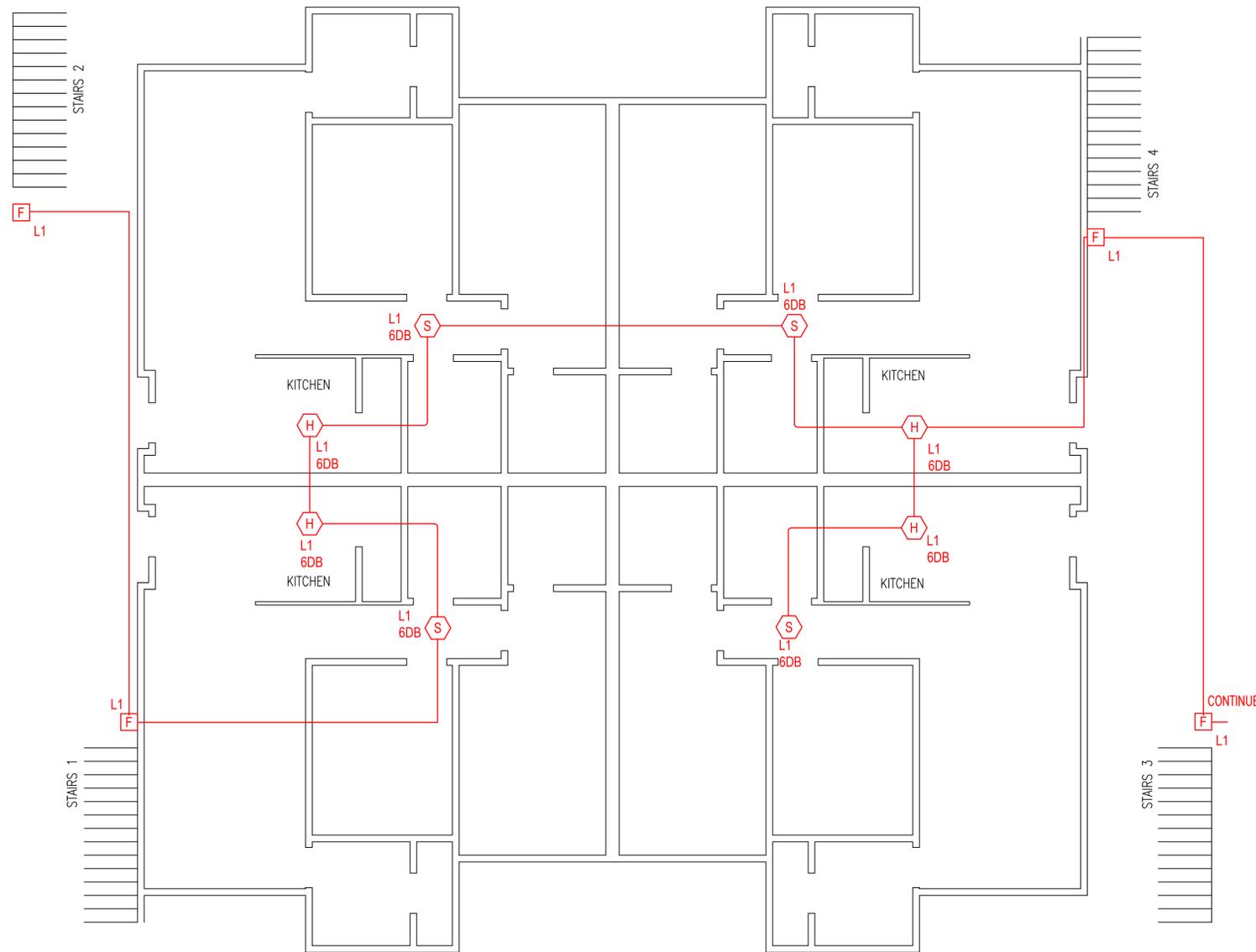
SYMBOL	QUANTITY	PART NO	DESCRIPTION	CANDELAS	ALARM CURRENT (A)	TOTAL CURRENT (A)
⏏	24	MHW	MINI-HORN, WHITE		0.017	0.408

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):	0.34	MAX. VOLTAGE DROP:	0.38				
SPARE CIRCUIT CURRENT (A):	2.66	VOLTAGE DROP %:	1.88 %				
MAX. CARD CURRENT (A):	n/a	MIN. OPERATIONAL VOLTAGE:	16				
TOTAL CARD CURRENT (A):	1.11	END OF LINE VOLTAGE:	20.02				
SPARE CARD CURRENT (A):		WIRE RESISTANCE (Ω/KFT):	3.07				
		TOTAL CIRCUIT LENGTH (FT):	184				
		SPARE CARD CURRENT %:	1.13				
CIRCUIT WIRING PROPERTIES: * 142 FPLP/NAC 14 AWG, 2 COND. SOLID COPPER FPLP/NAC 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)
⏏	20	MHW	MINI-HORN, WHITE		0.017	0.34

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 PLAN  
3/16" = 1'-0"

PANEL (AFC-100) BATTERY CALCULATION (SECONDARY POWER SOURCE REQUIREMENTS)												
PANEL COMPONENTS				STANDBY CURRENT		SECONDARY ALARM CURRENT						
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)	
IO 1 OUTPUT	N/A	1.110820		⏏	16	MHW	MINI-HORN, WHITE	0	0	0.017	0.272	
				🔔	1	PDC-10-12	10" BELL	0	0	0.02	0.02	
				⚡	3	SWLED	STROBE, WALL, WHITE 15CD	0	0	0.018	0.054	
L1	N/A	1.110820		F	13	PAD100-PSSA	ADDRESSABLE PULL STATION SINGLE ACTION	0.0002	0.0026	0.0002	0.0026	
				Ⓜ	8	PAD100-SIM	SINGLE INPUT MODULE	0.00024	0.00192	0.00024	0.00192	
				Ⓜ	20	PAD300-HD W/PAD300-6DB	HEAT DETECTOR WITH 6" STANDARD BASE	0.0003	0.006	0.0003	0.006	
N1	N/A	1.110820		Ⓜ	21	PAD300-PD W/PAD300-6DB	PHOTOELECTRIC SMOKE DETECTOR WITH 6" STANDARD BASE	0.0003	0.0063	0.0003	0.0063	
				⏏	24	MHW	MINI-HORN, WHITE	0	0	0.017	0.408	
N2	N/A	1.110820		⏏	20	MHW	MINI-HORN, WHITE	0	0	0.017	0.34	
TOTAL STANDBY (A)								0.16282		TOTAL ALARM (A)		1.33
REQUIRED STANDBY TIME (HOURS)								24		REQUIRED ALARM TIME (MINUTES)		5
SECONDARY STANDBY LOAD (A)								0.16282		SECONDARY ALARM LOAD (A)		3.91
STANDBY AND ALARM SUBTOTAL (AMP HOURS)								1.33	0.083	DERATING FACTOR		4.02
DERATING FACTOR										SECONDARY LOAD REQUIREMENTS (AMP HOURS)		1.25
SECONDARY LOAD REQUIREMENTS (AMP HOURS)										PROVIDE (2) 12V 8AH BATTERIES		5.02

\*BATTERY BOX SIZE CAPACITY NOT SPECIFIED. REFER TO MANUFACTURER DOCUMENTATION.

STATE CERTIFICATION

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

REVISIONS	NO	DATE	BY	DESCRIPTION

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DESIGNER	ERICK E.	SHEET	FA102
DATE	02/23/26	3 OF 4	
JOB NO.	19-1072		

