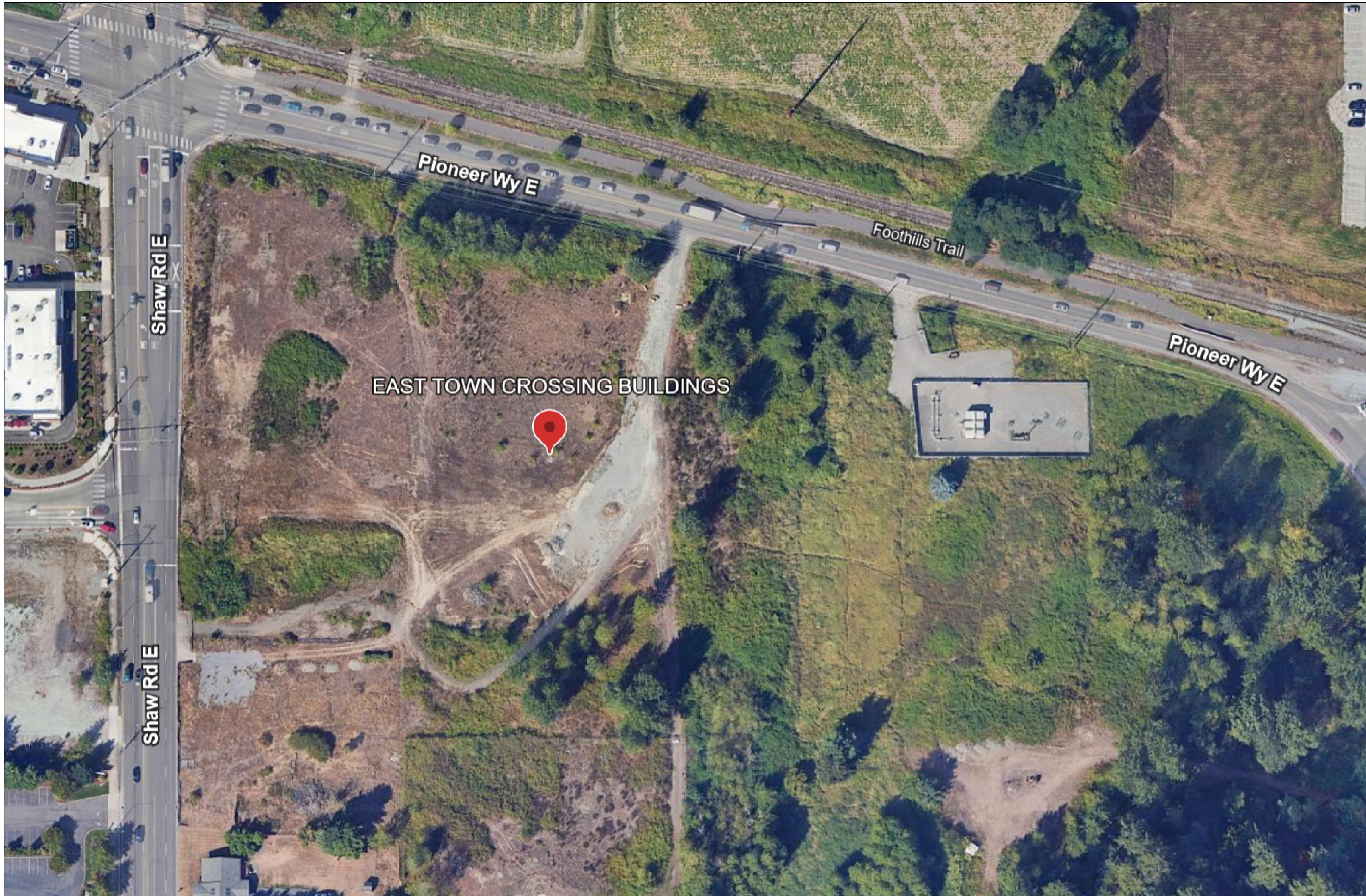


# EAST TOWN CROSSING BUILDING C

SHAW RD. E. & PIONEER WY. E.  
PUYALLUP, WA 98372

## FIRE ALARM SYSTEM



GENERAL NOTES
1. THESE DRAWINGS DEPICT GENERAL LOCATIONS OF LIFE SAFETY EQUIPMENT & FIELD DEVICES. EXACT ROUTING OF CONDUITS TO BE DETERMINED IN THE FIELD BY THE INSTALLING CONTRACTOR TO SUIT CONDITIONS.
2. ALL FIRE ALARM SYSTEM WIRING SHALL BE CLEAR FROM SHORTS, OPENS AND GROUNDS.
3. SHOULD ANY CONDITIONS EXIST THAT DIFFER FROM WHAT IS INDICATED ON THESE DRAWINGS WHICH CAUSE MAJOR DEVIATIONS IN THE WORK SHOWN, THE CONTRACTOR SHALL CONTACT THE DESIGNER IN A TIMELY MANNER SO AS NOT TO IMPAIR THE CONSTRUCTION SCHEDULE.
4. CONTRACTOR IS RESPONSIBLE FOR MAKING AND OBTAINING APPROVAL FOR ALL NECESSARY ADJUSTMENTS IN CIRCUITING AS REQUIRED TO ACCOMMODATE THE RELOCATION OF EQUIPMENT AND/OR DEVICES WHICH ARE AFFECTED BY ANY AUTHORIZED CHANGE.
5. THE POWER CIRCUIT TO THE FACP AND TO THE FIRE ALARM POWER SUPPLIES SHALL BE ON A DEDICATED 120V, 20A BRANCH CIRCUIT BREAKER, AND SHALL HAVE A RED MARKING. LOOK-ON PROVISION AND SHALL BE IDENTIFIED AS "FIRE ALARM CIRCUIT CONTROL." THE LOCATION OF THE CIRCUIT DISCONNECT MEANS (CIRCUIT BREAKER) SHALL BE PERMANENTLY IDENTIFIED AT THE FIRE ALARM CONTROL UNIT.
6. ANY SMOKE DETECTOR HEAD INSTALLED BEFORE THE BUILDING IS CLEANED AND ACCEPTED SHALL BE COVERED TO PROTECT FROM DUST.
7. INSTALLATION OF DEVICES SHALL BE IN ACCORDANCE WITH MANUFACTURER'S INSTRUCTIONS. POWER LIMITED AND NON-POWER LIMITED FIELD WIRING MUST BE INSTALLED WITHIN THE FACP ENCLOSURE IN ACCORDANCE WITH MANUFACTURER'S INSTRUCTIONS.
8. ALL WIRING SHALL BE INSTALLED ACCORDING TO NFPA 70 (NEC).
9. FIRE ALARM CIRCUITS EXTENDING BEYOND ONE BUILDING AND RUN OUTDOORS SHALL BE INSTALLED IN ACCORDANCE WITH NFPA 70 ARTICLES 760, 770, 725 AND 800 WHERE APPLICABLE.
10. ALL WIRING, INCLUDING SHIELDS MUST BE DRY AND FREE OF SHORTS AND GROUNDS.
11. ALL SHIELDED WIRE MUST HAVE SHIELD CONTINUITY AT FULL LENGTH OF THE WIRE.
12. ONLY FIRE ALARM SYSTEM WIRING CAN BE RUN IN THE SAME CONDUIT.
13. MAINTAIN 40 PERCENT MAXIMUM CONDUIT FILL RATIO AS PER NEC REQUIREMENTS.
14. EXISTING CONDUITS MAY BE USED BY THE INSTALLATION CONTRACTOR AS DEEMED NECESSARY, HOWEVER, ANY EXISTING CONDUIT WILL BE USED ONLY IF CONDUITS MEET CURRENT STANDARDS AND CODES.
15. THE FIRE ALARM SYSTEM SHALL BE MONITORED BY A CENTRAL UL LISTED MONITORING STATION.
16. ALL CEILINGS ARE ASSUMED TO BE 10' A.F.F., SMOOTH CONSTRUCTION UNLESS NOTED OTHERWISE.

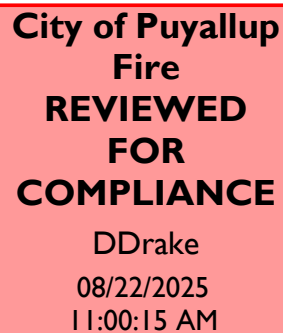
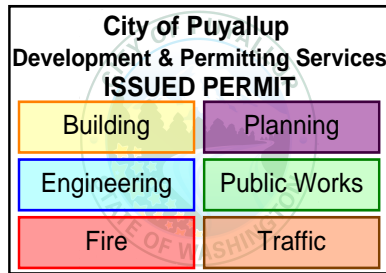
SCOPE OF WORK
NEW MANUAL AND AUTOMATIC FIRE ALARM SYSTEM IN A NEW RESIDENTIAL BUILDING. NEW FIRE ALARM PANEL IS BEING INSTALLED ALONG WITH NOTIFICATION DEVICES AS PER THE APPLICABLE CODES, WITH PULL STATIONS AT EVERY EXIT. SPRINKLER WATERFLOW SWITCH IS BEING MONITORED TO ACTIVATE NOTIFICATION DEVICES UPON ALARM.

APPLICABLE CODES
INTERNATIONAL BUILDING CODE - 2021 ED. INTERNATIONAL MECHANICAL CODE - 2021 ED. UNIFORM PLUMBING CODE - 2021 ED. INTERNATIONAL FUEL GAS CODE - 2021 ED. INTERNATIONAL ENERGY CONSERVATION CODE - 2021 ED. NATIONAL ELECTRICAL CODE - 2023 ED. INTERNATIONAL FIRE CODE - 2021 ED. ADA STANDARDS FOR ACCESSIBLE DESIGN - 2010 ED. NFPA 72 2019 EDITION

CONTRACTOR INFO	
SYSTEM DESIGNER/INSTALLER	DRAWINGS PREPARED BY
NAME: MAX POWER ELECTRIC	JEM SYSTEMS LLC
EMAIL: jeremey@maxpowermw.com	hmadeira@jemsystems.com
PHONE #: 253-838-4400	480-977-3555

MONITORING COMPANY
NAME: NORTHWEST ALARM MONITORING LLC EMAIL: 877-870-2910 PHONE #: 1743 1ST AVE S STE 201, SEATTLE, WA 98134

SHEET INDEX	
FA-00	COVER SHEET
FA-01	PROJECT INFORMATION
FA-02	FIRST, SECOND & THIRD FLOOR PLANS
FA-03	PROJECT CALCULATIONS & RISER DIAGRAM
FA-04	WIRING DIAGRAMS



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.

Jeremey Locken, ET  
NICET Level III Fire Alarm  
Certification #: 95603  
Expires 07/2027



PROJECT  
EAST TOWN CROSSING BUILDING C  
SHAW RD. E. & PIONEER WY. E.  
PUYALLUP, WA 98372

REVISION:
FIRST RELEASE
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SHEET DESCRIPTION:  
FIRE ALARM SYSTEM  
COVER SHEET

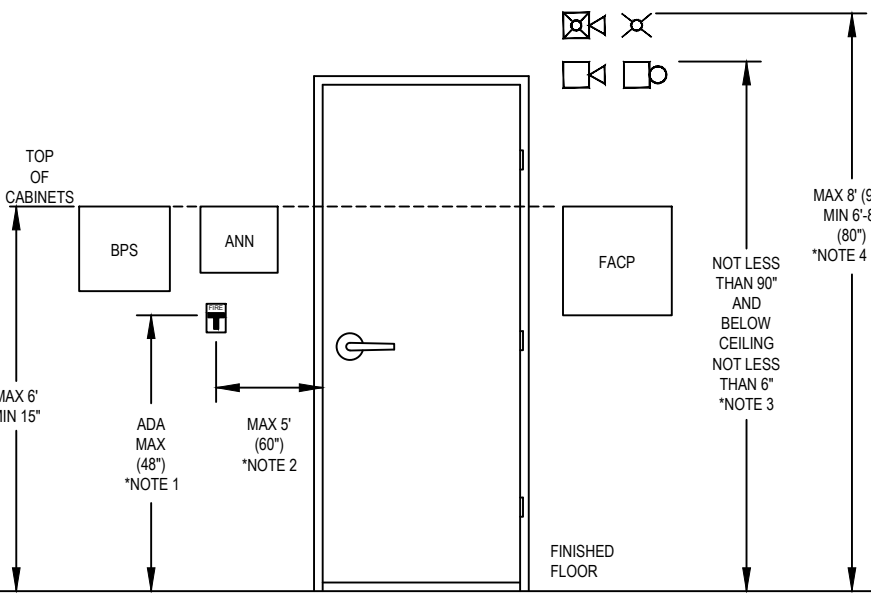
DRAWN BY: JEM SYSTEMS  
DATE: 07.31.2025  
SCALE: SEE DRAWINGS

SHEET:  
**FA-00**



BUILDING DATA			
CONSTRUCTION TYPE:	V-B	FIRE PROTECTION:	FULLY SPRINKLERED
OCCUPANCY GROUP:	R-2	NUMBER OF STORIES:	3
OCCUPANT LOAD:	57	WORK AREA:	15,206 SQFT

- TYPICAL MOUNTING HEIGHTS**
- NFPA 72 2019 17.15.6 THE OPERABLE PART OF EACH MANUAL FIRE ALARM BOX SHALL BE NOT LESS THAN 42in AND NOT MORE THAN 48in FROM THE FINISHED FLOOR.
  - NFPA 72 2019 17.15.9.4 MANUAL FIRE ALARM BOXES SHALL BE LOCATED WITHIN 5R OF EACH EXIT DOORWAY ON EACH FLOOR.
  - NFPA 72 2019 18.4.9.1 IF CEILING HEIGHTS ALLOW, AND UNLESS OTHERWISE PERMITTED BY 18.4.9.2 THROUGH 18.4.9.5, WALL-MOUNTED APPLIANCES SHALL HAVE THEIR TOPS ABOVE THE FINISHED FLOORS AT HEIGHTS OF NOT LESS THAN 90in AND BELOW THE FINISHED CEILINGS AT DISTANCES OF NOT LESS THAN 6in.
  - NFPA 72 2019 18.4.9.3 IF COMBINATION AUDIBLE/ VISIBLE APPLIANCES ARE INSTALLED, THE LOCATION OF THE INSTALLED APPLIANCE SHALL BE DETERMINED BY THE REQUIREMENTS OF 18.5.5. (SEE NOTE 5).
  - NFPA 72 2019 18.5.5.1 WALL-MOUNTED APPLIANCES SHALL BE MOUNTED SUCH THAT THE ENTIRE LENS IS NOT LESS THAN 80in. AND NOT GREATER THAN 96in ABOVE THE FINISHED FLOOR OR AT THE MOUNTING HEIGHT SPECIFIED USING THE PERFORMANCE BASED ALTERNATIVE OF 18.5.5.7.



EQUIPMENT LIST				
SYMBOL	QUANTITY	MANUFACTURER	PART NO	DESCRIPTION
[FACP]	1	POTTER	IPA-4000	FIRE ALARM CONTROL PANEL
[DOC]	1	POTTER	UD-2000	PFC SERIES DIGITAL ALARM COMMUNICATOR TRANSMITTER
[CELL]	1	POTTER	INTELLICOM-SGV	COMMUNICATOR
[AMV]	3	POTTER	PAD100-SIM	ADDRESSABLE SINGLE MONITOR MODULE
[ADM]	1	POTTER	PAD100-DIM	ADDRESSABLE DUAL MONITOR MODULE
[H]	4	POTTER	PAD300-HD	ADDRESSABLE HEAT DETECTOR WITH STANDARD BASE
[S]	1	POTTER	PAD300-PD	ADDRESSABLE SMOKE DETECTOR WITH STANDARD BASE
[F] WP	3	POTTER	RMS-1T-WP	CONVENTIONAL PULL STATION, WEATHERPROOF
[V] WP	4	POTTER	HS-24WR-WP	HORN STROBE, WALL, RED, WEATHERPROOF
[LF]	24	POTTER	PE-LFHW	LOW FREQUENCY HORN, WALL, WHITE
[V] LF	6	POTTER	PE-LFHSW	LOW FREQUENCY HORN/STROBE, WALL, WHITE, 177 FIXED CANDELA
[STW]	4	POTTER	PE-STW	STROBE, WALL, WHITE

CABLE AND WIRE LEGEND					
LABEL	PART NO	RESISTANCE MFT	AWG	DESCRIPTION	TOTAL LENGTH
D	16/2 FPLP (SLC)	4.10	16	SLC - 2 COND. SOLID COPPER FPLP ADDRESSABLE UNSHIELDED	220'
E	RJ31X (PHL)	16.14	22	PHONE LINE - RJ31X SOLID COPPER TWISTED SHIELDED	5'
V	14/2 FPLP (NAC)	2.60	14	NAC - 2 COND. SOLID COPPER FPLP ANALOG UNSHIELDED	1005'
Z	18/2 FPLP (IDC)	6.50	18	IDC - 2 COND. SOLID COPPER FPLP ANALOG UNSHIELDED	140'



Party Site No.: 3670243  
Expires: 31-Dec-2025

#### CERTIFICATE OF COMPLIANCE

**THIS IS TO CERTIFY** that the Alarm / Service Company identified below is included by - UL Solutions (UL) in its UL Product ID directories as eligible to use the UL Listing Mark in connection with Certificated Systems. The only evidence of compliance with UL's requirements is the issuance of a UL Certificate for the System and the Certificate is active under UL's Certificate Verification Service. This Certificate does not apply in any way to the communication channel between the protected property and any facility that monitors signals from the protected property.

Listed Service From: **FIFE, WASHINGTON**

Alarm / Service Company: (3670243)

Max Power Electric, LLC  
5009 Pacific Hwy E, Ste 13  
Fife, Washington 98424-2644 UNITED STATES

The Alarm / Service Company is Listed in the following Certificate Service Categories:

File	Vol No.	CCN	Listing Category
S36997	1	UUFX	Central-station Protective Signaling Services



\*\*\*THIS CERTIFICATE EXPIRES ON 31-DEC-25\*\*\*

"LOOK FOR THE UL ALARM / SYSTEM CERTIFICATE"

#### EVENT

EVENT	ACTION							
	TROUBLE SIGNAL @ FIRE ALARM CONTROL PANEL	SUPERVISORY SIGNAL @ FIRE ALARM CONTROL PANEL	ALARM SIGNAL @ FIRE ALARM CONTROL PANEL	TROUBLE SIGNAL @ FIRE ALARM CONTROL PANEL	SUPERVISORY SIGNAL @ OFF SITE MONITORING	ALARM SIGNAL @ OFF SITE MONITORING	ACTIVATE NOTIFICATION DEVICES	ACTIVATE EXTERIOR NOTIFICATION DEVICE AT F D RESPONSE POINT
SMOKE/HEAT DETECTOR			●			●		
MANUAL PULL STATION			●			●	●	
WATERFLOW SWITCH			●			●	●	●
TAMPER SWITCH		●			●			
FACP AC POWER FAILURE	●			●				
SYSTEM LOW BATTERY	●			●				
OPEN CIRCUIT	●			●				
GROUND FAULT	●			●				
NOTIFICATION APPLIANCE CIRCUIT SHORT	●			●				
CELLULAR DISCONNECT	●			●				

NOTE: ALL SIGNALS WILL BE SENT TO A CENTRAL STATION

City of Puyallup  
Development & Permitting Services  
ISSUED PERMIT

Building	Planning
Engineering	Public Works
Fire	Traffic

Jeremy Locken, ET  
3670243  
NICET Level III Fire Alarm  
Certification #: 955693  
Expires 07/2027



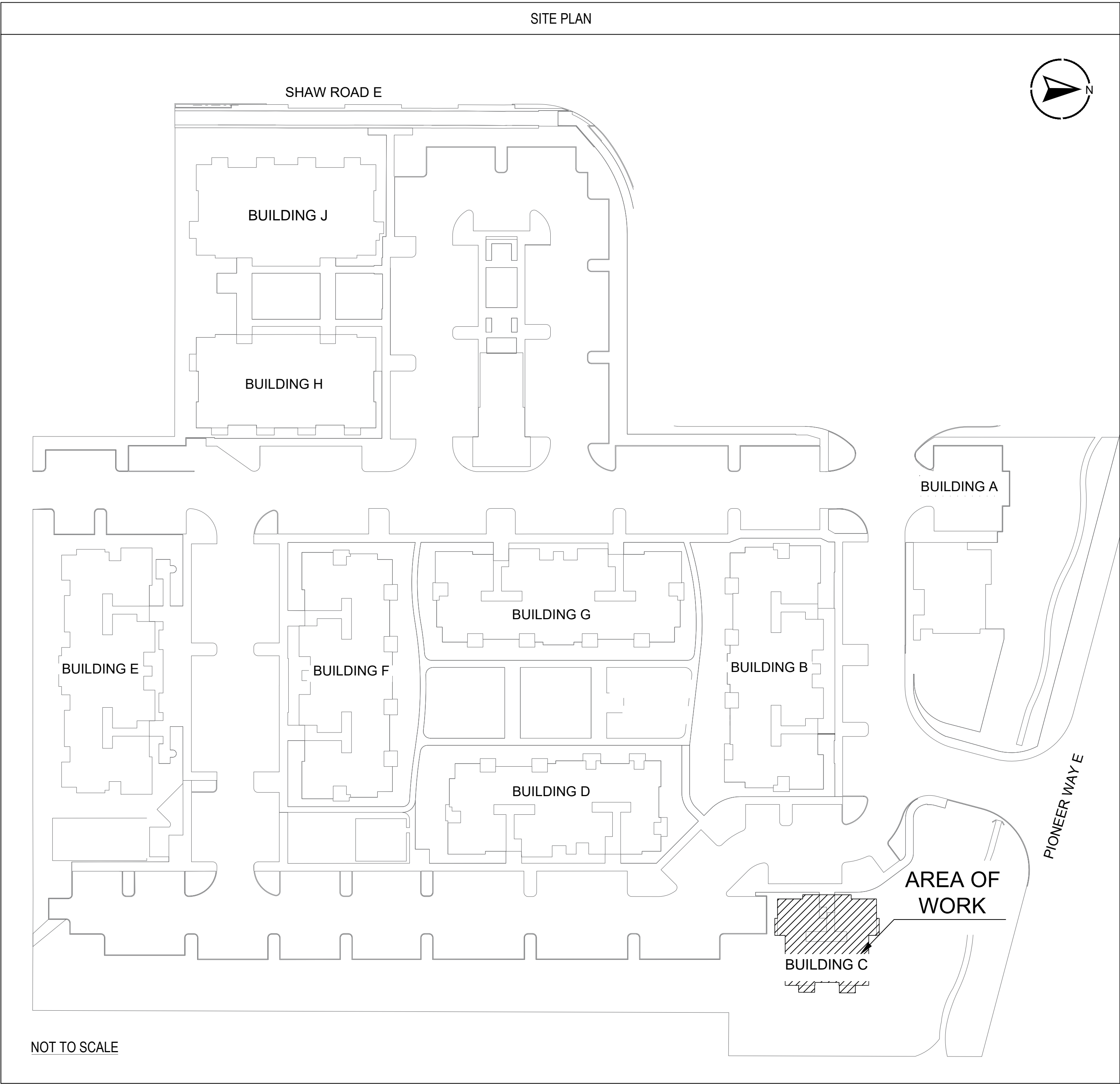
PROJECT  
EAST TOWN CROSSING BUILDING C  
SHAW RD. E. & PIONEER WY. E.  
PUYALLUP, WA 98372

REVISION:
FIRST RELEASE
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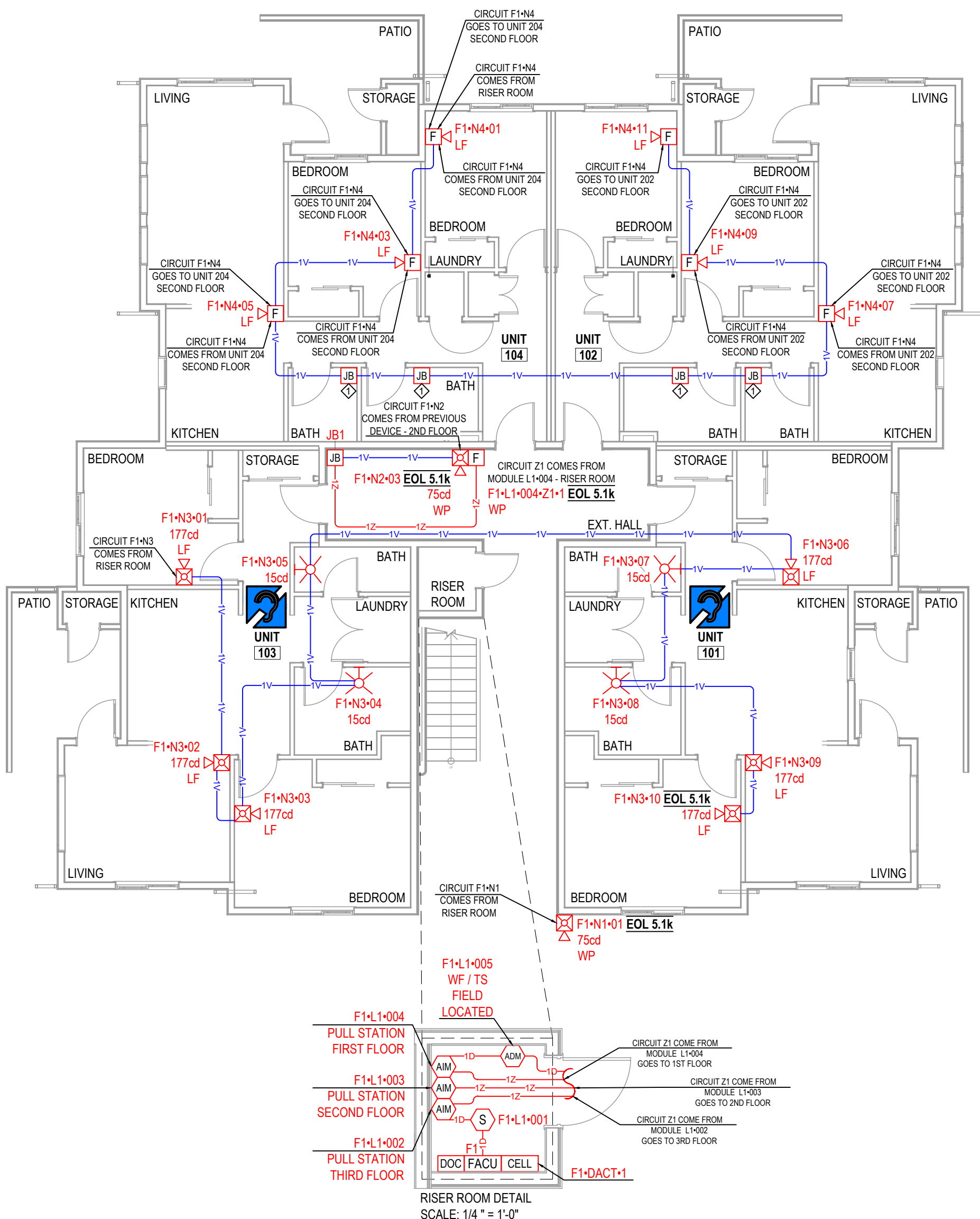
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FIRE ALARM SYSTEM  
PROJECT INFORMATION

DRAWN BY: JEM SYSTEMS  
DATE: 07.31.2025  
SCALE: SEE DRAWINGS

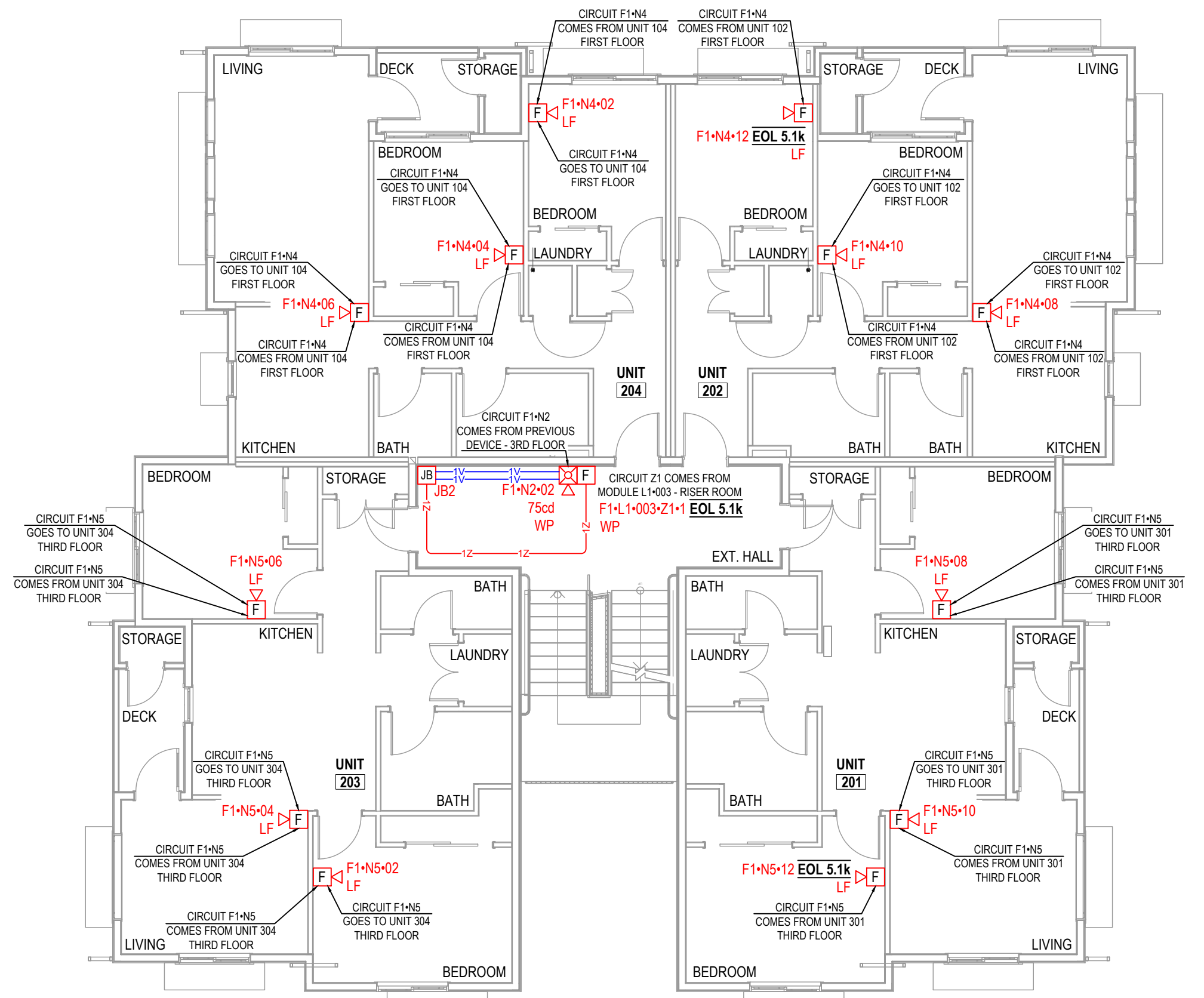
SHEET:  
**FA-01**



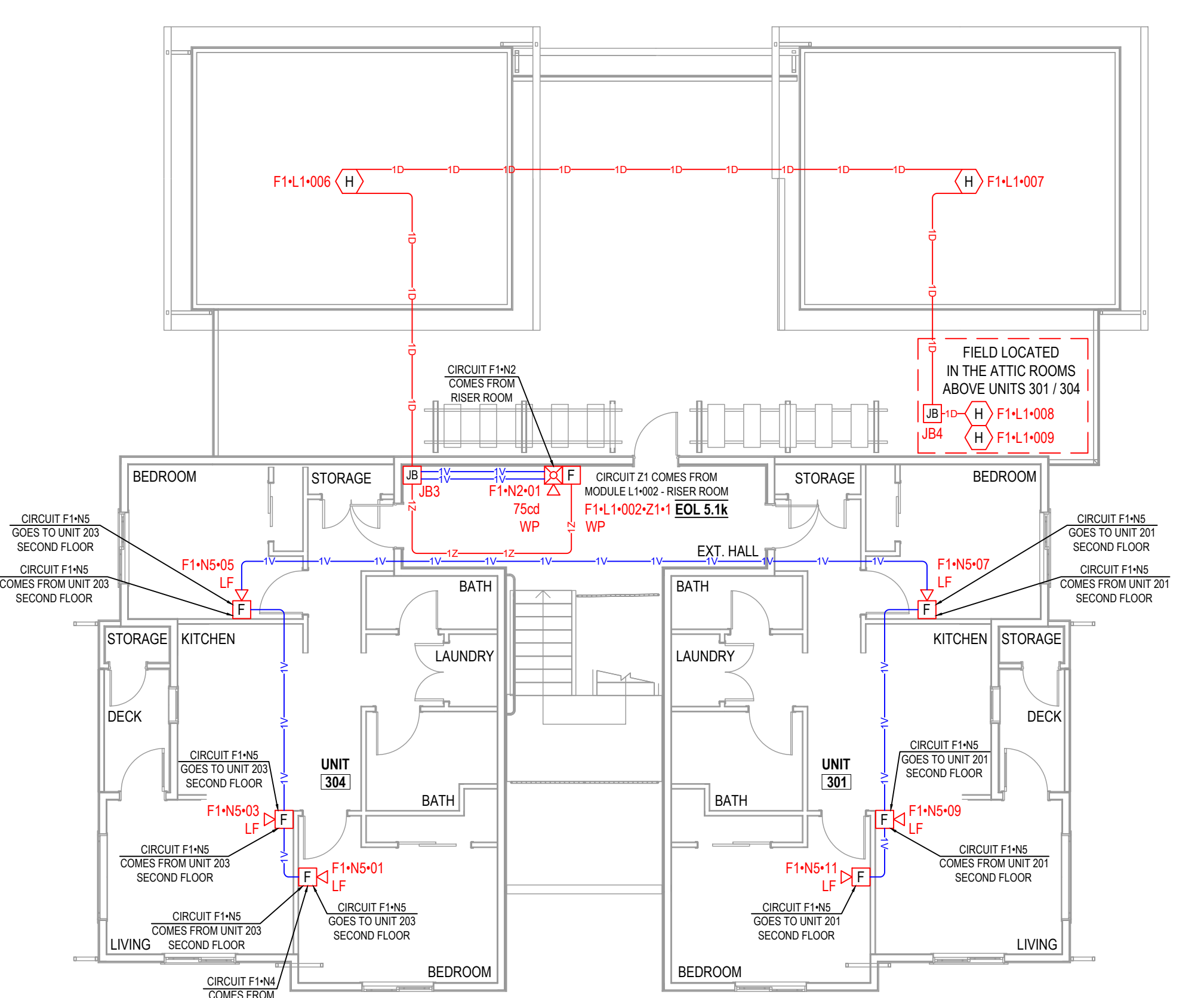




1 FIRST FLOOR PLAN



2 SECOND FLOOR PLAN



3 THIRD FLOOR PLAN

City of Puyallup  
Development & Permitting Services  
ISSUED PERMIT

Building	Planning
Engineering	Public Works
Fire	Traffic

EQUIPMENT LIST	
SYMBOL	DESCRIPTION
[FACU]	FIRE ALARM CONTROL PANEL
[DOC]	FIRE ALARM DOCUMENT CABINET
[CELL]	COMMUNICATOR
[AM]	ADDRESSABLE SINGLE MONITOR MODULE
[ADM]	ADDRESSABLE DUAL MONITOR MODULE
[H]	ADDRESSABLE HEAT DETECTOR WITH STANDARD BASE
[S]	ADDRESSABLE SMOKE DETECTOR WITH STANDARD BASE
[F WP]	CONVENTIONAL PULL STATION, WEATHERPROOF
[WP]	HORN STROBE, WALL, RED, WEATHERPROOF
[F LF]	LOW FREQUENCY HORN, WALL, WHITE
[LF]	LOW FREQUENCY HORN/STROBE, WALL, WHITE, 177 FIXED CANDELA
[WP]	STROBE, WALL, WHITE
[JB]	JUNCTION BOX

CABLE AND WIRE LEGEND		
LABEL	AWG	DESCRIPTION
D	16	SLC - 2 COND. SOLID COPPER FPLP ADDRESSABLE UNSHIELDED
E	22	PHONE LINE - RJ31X SOLID COPPER TWISTED SHIELDED
V	14	NAC - 2 COND. SOLID COPPER FPLP ANALOG UNSHIELDED
Z	18	IDC - 2 COND. SOLID COPPER FPLP ANALOG UNSHIELDED

KEY NOTES	
1	JUNCTION BOXES IN BATHROOMS ARE FOR FUTURE ADA ADAPTABILITY.

ABBREVIATIONS	
WF	WATERFLOW
TS	TAMPER SWITCH

ADDRESS & LABEL CLARIFICATION

PANEL NUMBER  
SLC LOOP NUMBER  
DEVICE ADDRESS ON SLC LOOP

F1•L1•001

PANEL NUMBER  
NOTIFICATION CIRCUIT NUMBER  
DEVICE NUMBER ON CIRCUIT

F1•N1•01

CABLE QUANTITY  
TYPE OF CABLE (CHECK CABLE AND WIRE LEGEND)

1D

PANEL NAME:  
F1: FIRE ALARM CONTROL PANEL  
P1: REMOTE POWER SUPPLY

NFPA 72 - TABLE A.18.4.4 AVERAGE AMBIENT SOUND LEVEL ACCORDING TO LOCATION	
LOCATION	SOUND LEVEL (dBA)
1. BUSINESS OCCUPANCIES	54
2. EDUCATIONAL OCCUPANCIES	45
3. INDUSTRIAL OCCUPANCIES	88
4. INSTITUTIONAL OCCUPANCIES	50
5. MERCANTILE OCCUPANCIES	40
6. MECHANICAL ROOMS	91
7. PIERS AND WATER SURROUNDED STRUCTURES	40
8. PLACES OF ASSEMBLY	60
9. RESIDENTIAL OCCUPANCIES	35
10. STORAGE OCCUPANCIES	30
11. THOROUGHFARES, HIGH-DENSITY URBAN	70
12. THOROUGHFARES, MEDIUM-DENSITY URBAN	55
13. THOROUGHFARES, RURAL AND SUBURBAN	40
14. TOWER OCCUPANCIES	35
15. UNDERGROUND STRUCTURES AND WINDOWLESS BLDGS	40
16. VEHICLES AND VESSELS	50

Jeremy Locken, ET  
NICET Level III Fire Alarm  
Certification #: 95603  
Expires 07/2027



PROJECT  
EAST TOWN CROSSING BUILDING C  
SHAW RD. E. & PIONEER WY. E.  
PUYALLUP, WA 98372

REVISION:
FIRST RELEASE

SHEET DESCRIPTION:  
FIRE ALARM SYSTEM  
FIRST, SECOND  
& THIRD  
FLOOR PLANS

DRAWN BY: JEM SYSTEMS  
DATE: 07.31.2025  
SCALE: SEE DRAWINGS

SHEET:  
**FA-02**



PANEL F1 (IPA-4000) BATTERY CALCULATION							
(SECONDARY POWER SOURCE REQUIREMENTS)							
PANEL COMPONENTS		STANDBY CURRENT		SECONDARY ALARM CURRENT			
		QTY	PART NO.	DESCRIPTION	CURRENT DRAW (A)	TOTAL (A)	TOTAL (A)
		1	IPA-4000 MAIN BOARD	MAIN BOARD FOR IPA-4000 FIRE ALARM CONTROL PANEL	0.13	0.13	0.22
		1	UD-2000	UD-2000 PFC SERIES DIGITAL ALARM COMMUNICATOR TRANSMITTER	0.016	0.016	0.023
CIRCUIT	SYMBOL	QTY	PART NO.	DESCRIPTION	CURRENT DRAW (A)	TOTAL (A)	TOTAL (A)
F1-L1		1	PAD100-DIM	DUAL INPUT MODULE	0.00024	0.00024	0.00024
		3	PAD100-SIM	SINGLE INPUT MODULE	0.00024	0.00072	0.00072
		4	PAD300-HD WIPAD300-6DB	HEAT DETECTOR WITH 6" STANDARD BASE	0.0003	0.0012	0.0012
		1	PAD300-PD WIPAD300-6DB	PHOTOELECTRIC SMOKE DETECTOR WITH 6" STANDARD BASE	0.0003	0.0003	0.0003
F1-N1		1	HS-24WR-WP	OUTDOOR HORN STROBE, FIXED 75 CANDELA, STANDARD ENCLOSURE, RED 75CD	0	0	0.140
F1-N2		3	HS-24WR-WP	OUTDOOR HORN STROBE, FIXED 75 CANDELA, STANDARD ENCLOSURE, RED 75CD	0	0	0.420
F1-N3		6	PE-LFHSW	LED LOW PROFILE HORN STROBE, LOW FREQUENCY, 177 CANDELA, WHITE 177CD	0	0	0.256
		4	PE-STW	LED STROBE, 24 VDC, WHITE 15CD	0	0	0.088
F1-N4		12	PE-LFHNV	LOW PROFILE HORN, LOW FREQUENCY, WHITE	0	0	0.098
F1-N5		12	PE-LFHNV	LOW PROFILE HORN, LOW FREQUENCY, WHITE	0	0	0.098
F1-OACT		1	INTELLICOM-5GV	5G LTE-M DUAL PATH COMMERCIAL FIRE ALARM COMMUNICATOR (VERIZON)	0	0	0
					TOTAL STANDBY (A)	0.14846	TOTAL ALARM (A)
					REQUIRED STANDBY TIME (HOURS)		24
					REQUIRED ALARM TIME (MINUTES)		5
					SECONDARY STANDBY LOAD (A)	0.14846	24
					SECONDARY ALARM LOAD (A)		3.56
					STANDBY AND ALARM SUBTOTAL (AMP HOURS)	4.78	0.398
					DERATING FACTOR		1.25
					SECONDARY LOAD REQUIREMENTS (AMP HOURS)		4.95
PROVIDE (2) 12V 8AH BATTERIES							

LUMP SUM REPORT SUMMARY																			
SOURCE	CIRCUIT	PART NO	MAX. CARD CURRENT (A)	TOTAL CARD CURRENT (A)	SPARE CARD CURRENT (A)	SPARE CARD CURRENT %	MAX. CIRCUIT CURRENT (A)	TOTAL CIRCUIT CURRENT (A)	SPARE CIRCUIT CURRENT (A)	SPARE CIRCUIT CURRENT %	WIRE GAUGE	WIRE RESISTANCE (OHM/FT)	TOTAL CIRCUIT LENGTH (FT)	TOTAL CIRCUIT RESISTANCE (OHM)	STARTING CALCULATION VOLTAGE	MIN. OPERATIONAL VOLTAGE	MAX. VOLTAGE DROP	END OF LINE VOLTAGE	VOLTAGE DROP %
F1 (IPA-4000)	N1	IPA-4000 MAIN BOARD	10	4.44	5.56	55.59 %	3	0.112	2.89	96.27 %	14	2.60	47	0.24474	20.40	16	0.03	20.37	0.13 %
	N2						3	0.336	2.66	88.80 %	14	2.60	129	0.669	20.40	16	0.22	20.18	1.10 %
	N3						3	1.82	1.38	45.87 %	14	2.60	183	0.949	20.40	16	1.54	18.86	7.56 %
	N4						3	1.18	1.82	60.80 %	14	2.60	297	1.54	20.40	16	1.82	18.58	8.91 %
	N5						3	1.18	1.82	60.80 %	14	2.60	346	1.80	20.40	16	2.12	18.28	10.38 %
CALCULATION METHODS:																			
TOTAL RESISTANCE (OHM) = WIRE RESISTANCE (OHM) X 2 X TOTAL CIRCUIT LENGTH (FT)																			
TOTAL VOLTAGE DROP = TOTAL RESISTANCE (OHM) X TOTAL CIRCUIT CURRENT (A)																			

CALCULATION METHODS:  
TOTAL RESISTANCE (OHM) = WIRE RESISTANCE (OHM/FT) X 2 X TOTAL CIRCUIT LENGTH (FT)  
TOTAL VOLTAGE DROP = TOTAL RESISTANCE (OHM) X TOTAL CIRCUIT CURRENT (A)

## RADIO FIRE ALARM COMMUNICATOR

Battery Calculation Worksheet  
(current values will be expressed in mA)

Device	Quantity of Devices	Standby mA Per Device	Alarm mA Per Device	Total Device Standby mA	Total Device Alarm mA
INTELLICOM-5GV	1	68	140	68	140
Total Current				68	140
Summary Section					
				Standby Hours Required	24
				Alarm Minutes Required	5
				Total System Standby mA	68
				Total System Alarm mA	140
				Standby Hours * (Total Standby mA * .001) =	Total System Standby AH 1.63
				Alarm Minutes * .0167 * (Total Alarm mA * .001) =	Total System Alarm AH 0.01
				Total Standby AH + Total Alarm AH =	Total System AH 1.64
				Total System AH * 1.25 =	Minimum Required AH 2.05
25% CONTINGENCY FACTOR ADDED					
INSTALL (1)-12VDC 12AH BATTERY					

1

### KEY NOTES

JUNCTION BOXES IN BATHROOMS ARE FOR FUTURE ADA ADAPTABILITY.

