

## GENERAL NOTES

### ELECTRICAL NOTES:

- 1) INSTALLATION SHALL COMPLY WITH NFPA 70, PARTICULARLY ARTICLE 760, AND SHALL ALSO COMPLY WITH NFPA 72, AND ALL LOCAL ELECTRICAL CODES AND LOCAL JURISDICTION REQUIREMENTS.
- 2) CONDUIT INDICATED ON PRINTS IS DIAGRAMMATIC AND MAY BE REROUTED PER FIELD REQUIREMENTS.
- 3) AC POWER SHALL NOT OCCUPY THE SAME CONDUIT AS FIRE PROTECTION CIRCUITS (MOST FIRE DETECTION CKTS ARE NEC CLASS 3).
- 4) ALL SLC LOOP WIRING SHALL BE 2 CONDUCTOR #16, UNSHIELDED, FIRE ALARM CABLE OF THE PROPER RISER AND / OR PLENUM TYPE.
- 5) CONVENTIONAL FIRE DETECTION INITIATING DEVICE CIRCUITS OR NOTIFICATION APPLIANCE CIRCUITS SHALL NOT BE PARALLEL BRANCHED (TEE TAPPED) TO ENSURE SUPERVISION OF WIRING. ADDRESSABLE CLASS "B" FIRE DETECTION SIGNALING LINE CIRCUITS (SLC) MAY BE PARALLEL BRANCHED (TEE TAPPED) IF SO INDICATED ON THE SYSTEM PLANS.
- 6) OBSERVE POLARITY OF ALL FIRE DETECTION WIRING. POLARITY SHALL BE MAINTAINED THROUGHOUT ENTIRE SYSTEM; WIRE SHALL BE MARKED AND IDENTIFIED WHERE SPICED, AND AT ANY JUNCTION BOXES.
- 7) THE FIRE ALARM PANEL GROUND SHALL BE A SEPARATE CONTINUOUS GROUND WIRE BACK TO THE SOURCE GROUND; CONDUIT GROUND IS NOT ACCEPTABLE PER MANUFACTURER'S SPECIFICATIONS.
- 8) FIRE ALARM PANEL AND ANY OTHER FIRE DETECTION EQUIPMENT REQUIRING 120VAC, SHALL BE SUPPLIED BY A DEDICATED CIRCUIT BREAKER OTHER (NON-FIRE DETECTION) EQUIPMENT SHALL NOT SHARE THE FIRE ALARM CIRCUIT(S). THIS BREAKER SHALL BE LOCKED AND CLEARLY MARKED "FIRE ALARM CIRCUIT CONTROL". 120VAC POWER BY OTHERS.

### FIRE ALARM INSTALLATION NOTES:

- 1) NOTIFY NORTHWEST FIRE SYSTEMS, OF ANY DESIGN QUESTIONS OR CHANGES CURRENT CONTRACT DRAWINGS PRIOR TO INSTALLATION.
- 2) ANY ALTERATIONS OR VARIATIONS FROM DRAWINGS SHOULD BE APPROVED PRIOR TO WORK PROCEEDING AND DOCUMENTED ON THE AS BUILT DRAWINGS. VERIFY DEVICE LOCATIONS PRIOR TO INSTALLATION.
- 3) REFERENCE FACTORY INSTRUCTION MANUALS DURING INSTALLATION OF FIRE CONTROL EQUIPMENT.
- 4) DETECTORS SHALL NOT BE MOUNTED IN A DIRECT AIR STREAM. DO NOT INSTALL DETECTORS WITHIN 3'-0" OF AIR SUPPLY DIFFUSERS.
- 5) USE ONLY U.L. LISTED DEVICES.
- 6) DO NOT INSTALL DETECTOR HEADS UNTIL FINAL CLEANING HAS BEEN PERFORMED.
- 7) FIELD DETERMINE INTERFACE REQUIREMENTS AND LOCATIONS OF EQUIPMENT SUPPLIED BY OTHER TRADES. (i.e. SPRINKLER DEVICES, HVAC UNITS, FIRE DAMPERS, ELEVATOR CONTROLS, & FAN CONTROLS.)

# ROUND ONE - T.I. BUILD OUT FIRE ALARM SYSTEM INSTALL 3500 S. MERIDIAN ST PUYALLUP, WA 98373

### SCOPE OF WORK:

NORTHWEST FIRE SYSTEMS WILL BE ADDING AND/RELOCATING FIRE ALARM DEVICES FOR TENANT BUILD OUT. NOTIFICATION WILL AND INITIATING DEVICES WILL BE INSTALLED TO MEET NFPA 72 AND LOCAL JURISDICTION REQUIREMENTS.

\*NOTE: THE BUILDING HAS FULL SPRINKLER COVERAGE.

### MONITORING COMPANY INFORMATION

COMPANY NAME	N/A
PHONE NUMBER	N/A
ADDRESS	N/A

### SYMBOL LEGEND

SYMBOL	DESCRIPTION	MANUFACTURER	PART NUMBER	QUANTITY	USER TEXT	UL	FM
FACP	ENCLOSURE, TRANSPONDER, BLACK, SIZE D	GAMEWELL FCI	E3BB-BD/INX	1			
ANN	CAB A2 REMOTE FLUSH NGA ANN W/ PASSWORD PROTECTED	GAMEWELL FCI	E3BB-NGA-FLUSH	2			
INX1	ENCLOSURE, TRANSPONDER, BLACK, SIZE C	GAMEWELL FCI	E3BB-BC/INX	1			
RPS1	10AMP, 120VAC REMOTE CHARGER POWER SUPPLY, RED ENCLOSURE	HONEYWELL PRODUCTS	HPF-PS10	1			
⊙ ABOVE	PHOTO, SMOKE, DETECTOR, BRIGHT WHITE	GAMEWELL FCI	ASD-PL3	109		S1913	3023594
⊙	THERMAL HEAT DETECTOR 135F, BRIGHT WHITE	GAMEWELL FCI	ATD-L3	3		S2332	3023594
F	PULL STATION, SINGLE ACTION, ADDRESSABLE	GAMEWELL FCI	MS-TASF	9		S2465	
⊙	STROBE, 2 WIRE, M-C, WHITE, CEILING	SYSTEM SENSOR	SCW	5		S5512	3023572
⊙ BELOW	L-SERIES SPEAKER/STROBE, WHITE, CEILING	SYSTEM SENSOR	SPSCWL	57			
WP	WALL SPEAKER STROBE RED OUTDOOR	SYSTEM SENSOR	SPSRK	1		S4048	
4.7K Ⓞ	EOL-4.7K	GAMEWELL FCI	EOL-4.7	10			

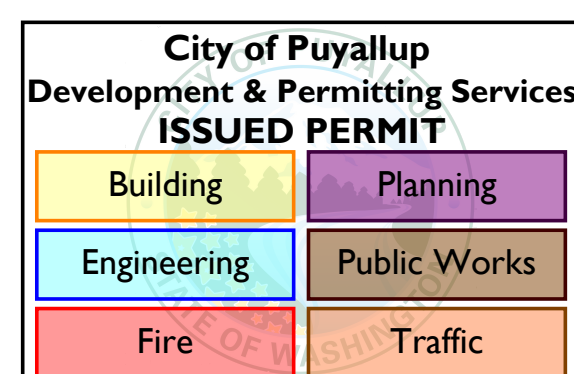
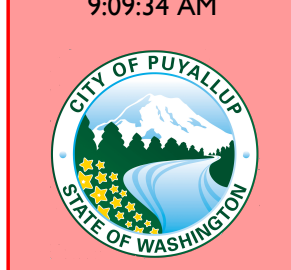
### CONTRACTOR INFORMATION

SERVICE	CONTRACTOR	CONTRACT INFORMATION
INSTALLER	NW FIRE SYSTEMS	(206)772-7502
MONITORING	N/A	N/A
TESTING	NW FIRE SYSTEMS	(206)772-7502
RUNNER	NW FIRE SYSTEMS	(206)772-7502
MAINTENANCE	NW FIRE SYSTEMS	(206)772-7502

Approval of submitted plans is not an approval of omissions or oversight by this office or non-compliance 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.

City of Puyallup  
Fire  
REVIEWED  
FOR  
COMPLIANCE

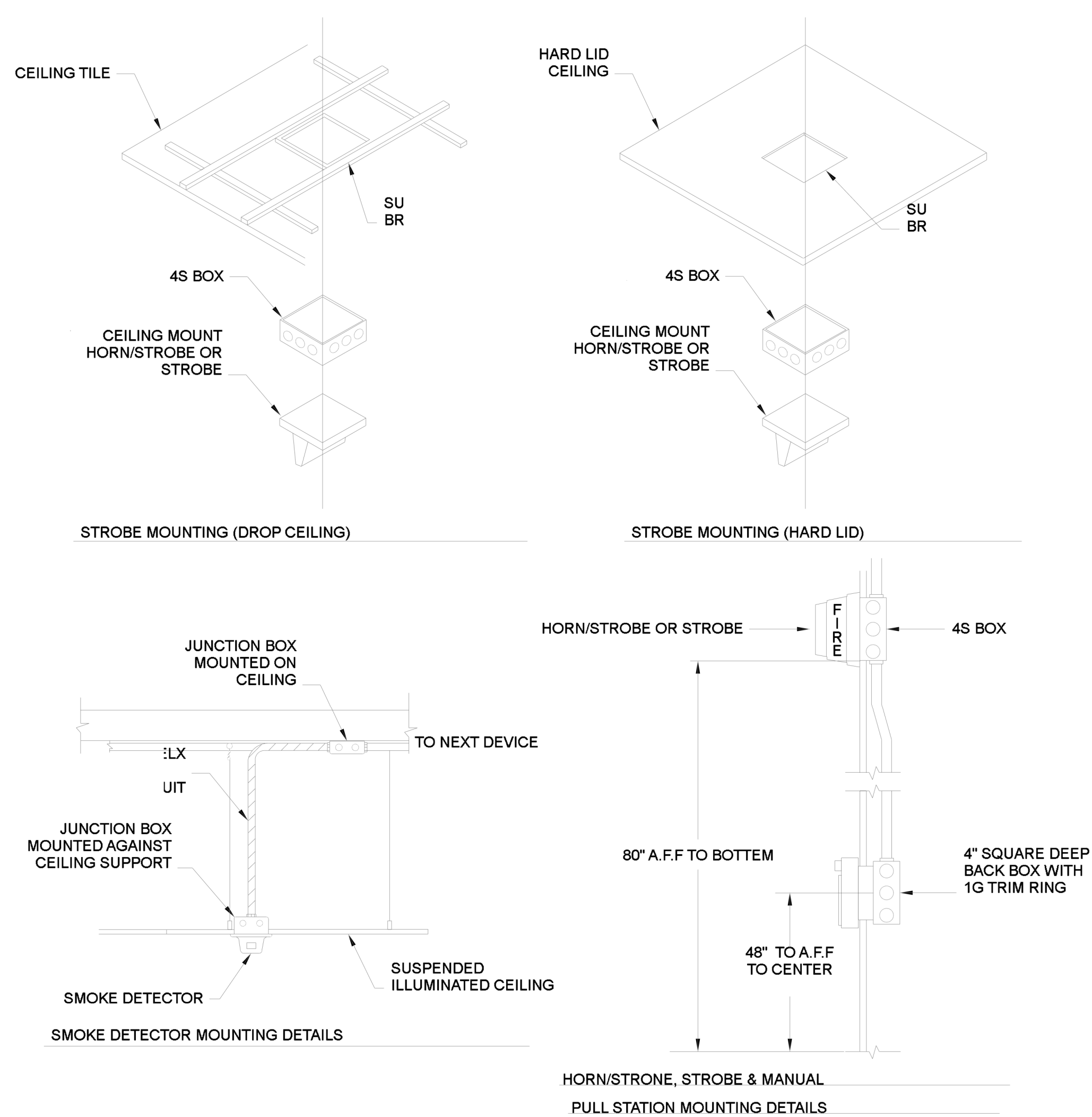
DDrake  
03/23/2022  
9:09:34 AM



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

Read Permit

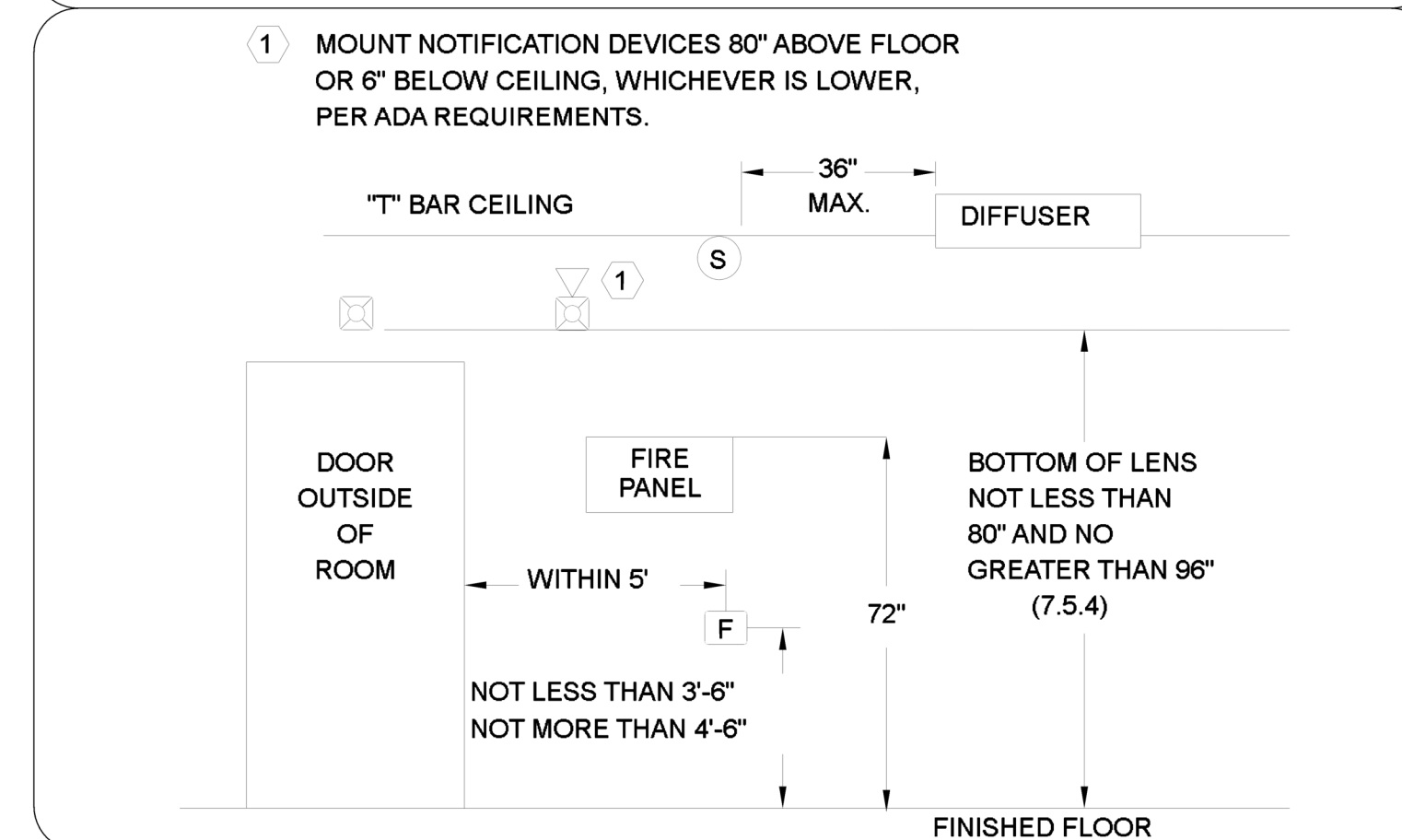
### STANDARD MOUNTING HEIGHT DETAIL



### FIRE ALARM SYSTEM OPERATIONAL MATRIX

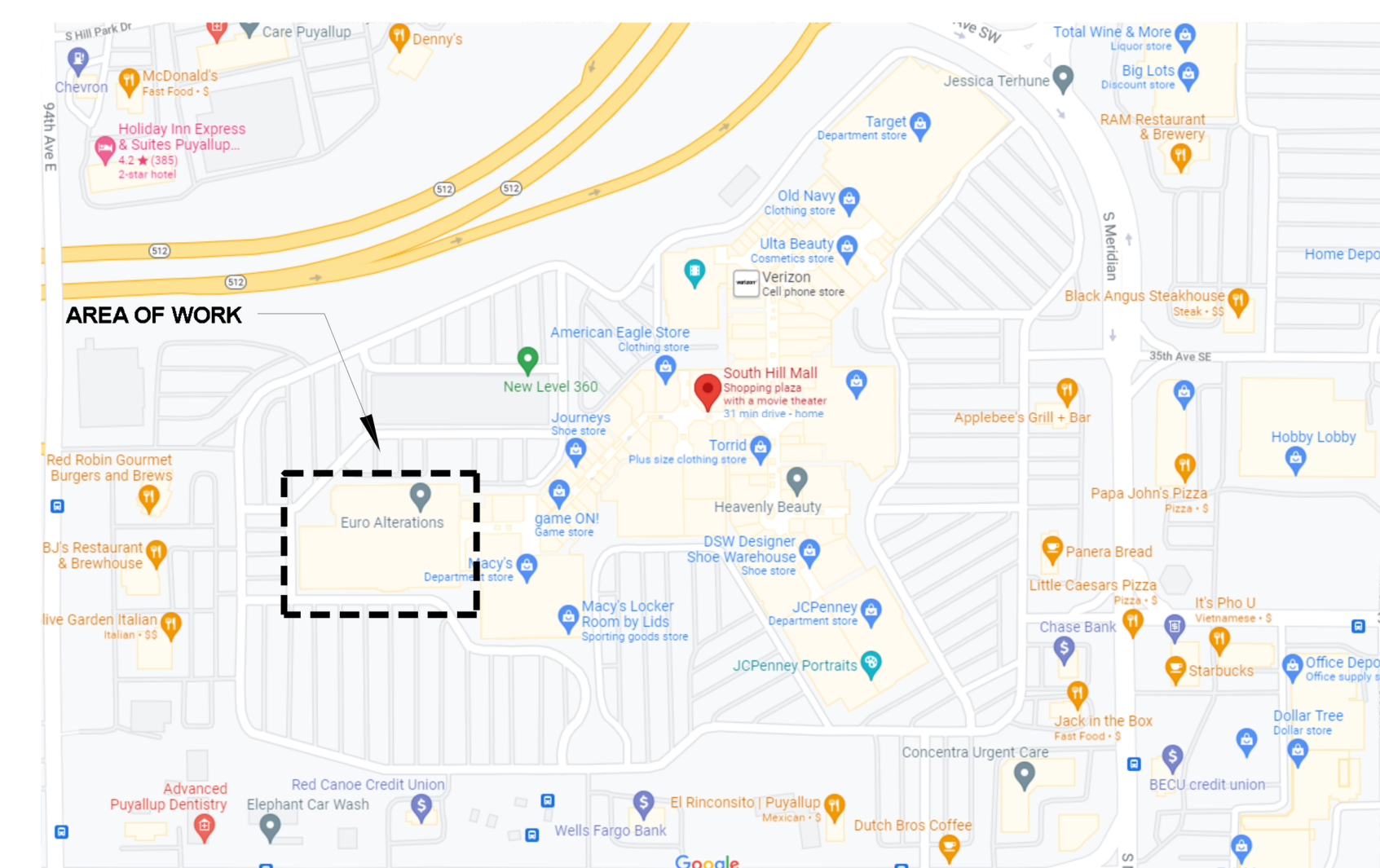
CAUSE	EFFECT								REMARKS
	ALARM AT FACE	ALARM AT ANNUNCIATOR	ALARM AT CONTROL PANEL	ACTIVATE ALL VISUALS	ACTIVATE ALL AUDIBLES	TROUBLE AT FACE	TROUBLE AT ANNUNCIATOR	TROUBLE AT CONTROL PANEL	
SMOKE / HEAT DETECTORS	•	•	•	•	•				
MANUAL PULL STATION	•	•	•	•	•				
SYSTEM RESET						•	•		
SIGNAL SILENCE									
AC POWER FAILURE									
FIRE ALARM TROUBLE (OPEN, SHORTS, OR GROUNDS) ON INITIATION OR SIGNALING CIRCUITS						•	•		
TAMPER SWITCHES									
WATERFLOW SWITCH									

### STANDARD MOUNTING HEIGHT DETAIL



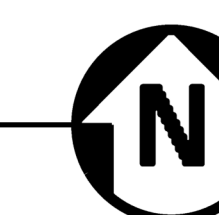
### DRAWING DIRECTORY

SHEET #:	SHEET TITLE:
FA-01	COVER SHEET, AND GENERAL INFORMATION
FA-02	ROUND ONE - NORTH SIDE FIRE ALARM PLAN
FA-03	ROUND ONE - SOUTH SIDE FIRE ALARM PLAN
FA-04	ROUND ONE - CALCULATIONS
FA-05	ROUND ONE - RISER DIAGRAM



### VICINITY MAP

SCALE: N.T.S.



**NORTHWEST FIRE SYSTEMS**  
Saving lives and Protecting Property  
22645 83RD AVE. S., BLDG D KENT, WA 98032  
PHONE: 206.772.7502 • FAX: 206.772.7504  
WWW.NWFIRESYSTEMS.COM  
LIC # NORTH05875M



NO.	BY	DATE	REVISION DESCRIPTION
0	P. LE	03/08/22	ISSUED FOR REVIEW

CONTRACT NAME: ROUND ONE T.I. BUILD OUT  
3500 S. MERIDIAN ST. UNIT 900  
PUYALLUP, WA 98373  
CONTRACT WITH: PANAS ELECTRIC  
P.O. BOX 6839  
KENT, WA 98023  
ONSITE CONTACT: PH: VITALY PANAS 253-355-5647

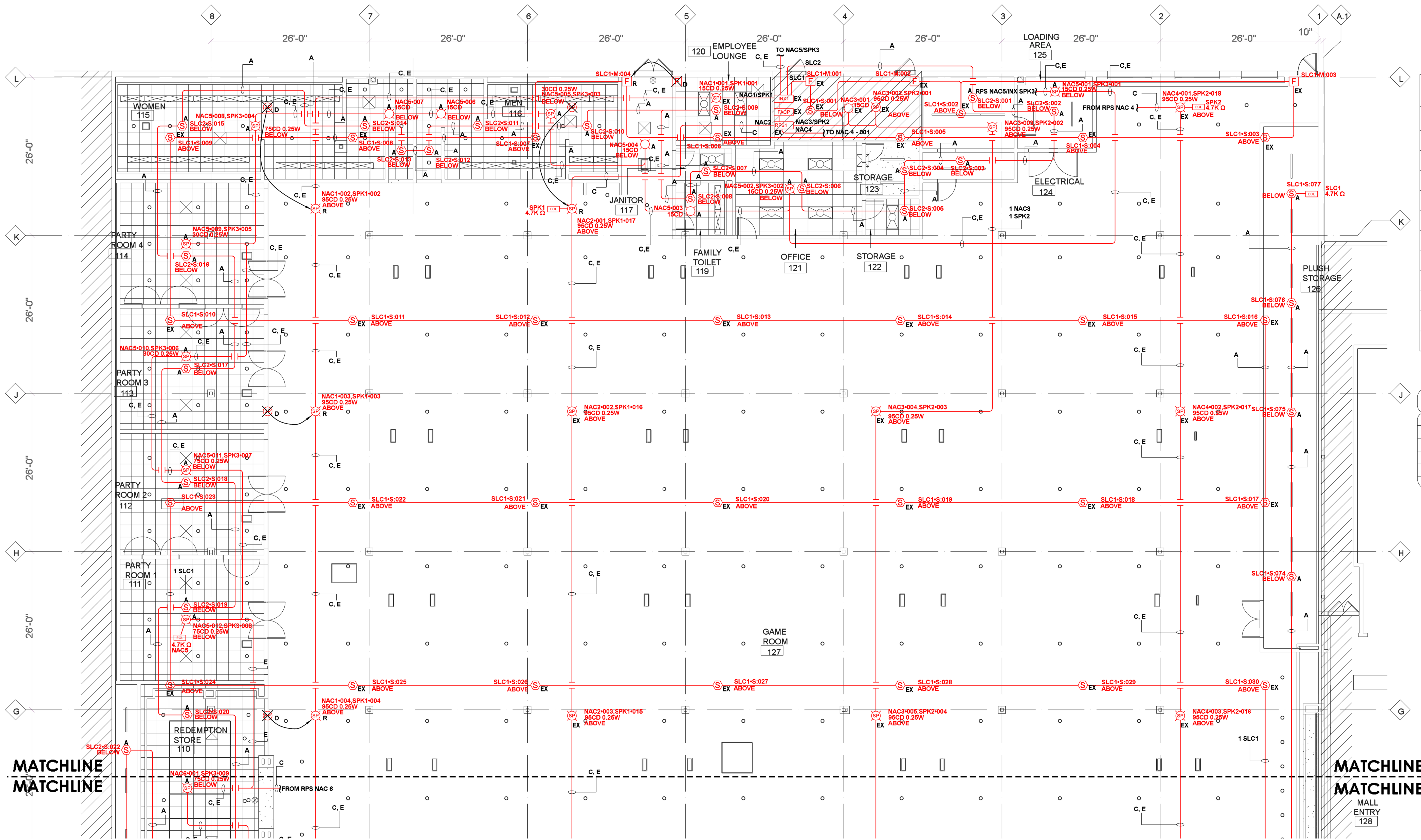
DRAWN BY: DATE: 03/08/22  
PH LE  
DESIGNED BY: DATE: 03/08/22  
PH LE  
APPROVED BY: DATE: 03/08/22  
MIKE REGAN

NICET STAMP  
Michael Regan, ET  
NICET Level 111 Fire Alarm  
Technician ID: 144327  
Expires: 3/1/2023

PROJECT NUMBER: 04970L  
SHEET TITLE: COVER PAGE  
FIRE ALARM PLAN  
SHEET NUMBER: FA - 01 OF 07

FILE: Round One T.I. DATE: 03/08/22 TIME: 15:23:30





### SYMBOL LEGEND

SYMBOL	DESCRIPTION	MANUFACTURER	PART NUMBER
FACP	ENCLOSURE, TRANSPONDER, BLACK, SIZE D	GAMEWELL FCI	E3BB-BD/NX
ANN	CAB A2 REMOTE FLUSH NGA ANN W/ PASSWORD PROTECTED	GAMEWELL FCI	E3BB-NGA-FLUSH
INX1	ENCLOSURE, TRANSPONDER, BLACK, SIZE C	GAMEWELL FCI	E3BB-BC/NX
RPS1	10AMP, 120VAC REMOTE CHARGER POWER SUPPLY, RED ENCLOSURE	HONEYWELL PRODUCTS	HPF-PS10
S	BRIGHT, SMOKE, DETECTOR, BRIGHT WHITE	GAMEWELL FCI	ASD-PL3
H	THERMAL HEAT DETECTOR 138F, BRIGHT WHITE	GAMEWELL FCI	ATD-L3
F	PULL STATION, SINGLE ACTION, ADDRESSABLE	GAMEWELL FCI	MS-7ASF
STROBE	STROBE, 2 WIRE, M-C, WHITE, CEILING	SYSTEM SENSOR	SCW
SPK	SERIES SPEAKER/STROBE, WHITE, CEILING	SYSTEM SENSOR	SPSCWL
WP	WALL SPEAKER STROBE RED OUTDOOR	SYSTEM SENSOR	SPSRK
4.7K	EOL-4.7K	GAMEWELL FCI	EOL-4.7

### WIRE TAG DESCRIPTION

TAG ID	CIRCUIT DESCRIPTION	WIRE DESCRIPTION
A	FACP SLC CIRCUIT	2 CONDUCTOR, 16 AWG - FPLP
B	FACP SBUS CIRCUIT	4 CONDUCTOR, 16 AWG - FPLP
C	FACP NAC CIRCUIT	2 CONDUCTOR, 14 AWG - FPLP
D	BPS AUX PWR CIRCUIT	2 CONDUCTOR, 14 AWG - FPLP
E	AMP VOICE CIRCUIT	16/2 ADS SOL - FPLP

#### DEVICE NOTES

A ADD NEW DEVICE  
 D DEMO DEVICE  
 R RELOCATE DEVICE  
 EX EXISTING DEVICE  
 WP WEATHER PROOF DEVICE

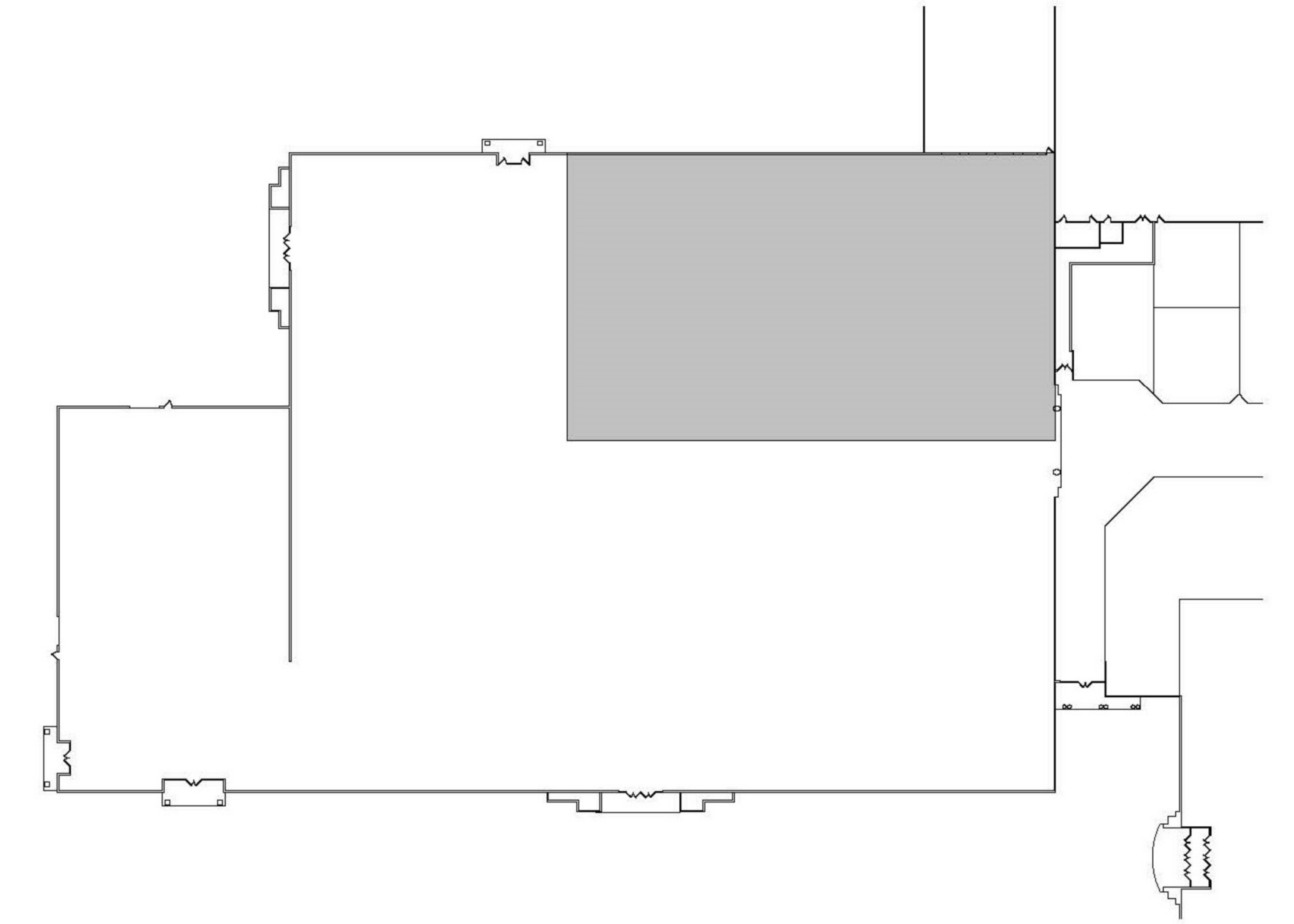
STROBE COVERAGE AREA SHALL BE DEFINED AS:  
 10 FT. CLG. HT. 20 FT. CLG. HT. 30 FT. CLG. HT.  
 15' cd = 20'x20' 30' cd = 30'x30' 45' cd = 40'x40'  
 30' cd = 30'x30' 45' cd = 30'x30' 75' cd = 50'x50'  
 60' cd = 40'x40' 90' cd = 40'x40' 110' cd = 50'x50'  
 90' cd = 50'x50' 115' cd = 50'x50' 150' cd = 50'x50'

**City of Puyallup**  
 Development & Permitting Services  
**ISSUED PERMIT**

Building	Planning
Engineering	Public Works
Fire	Traffic

**ROUND ONE T.I. BUILD OUT**  
 SCALE: 1/8"=1'-0"

**NORTH SIDE FIRE ALARM PLAN**



**KEY PLAN**  
 SCALE: N.T.S.



NO.	BY	DATE	REVISION DESCRIPTION
0	P.L.E.	03/08/22	ISSUED FOR REVIEW

CONTRACTOR: **ROUND ONE T.I. BUILD OUT**  
 3300 S. MERIDIAN ST. UNIT 300  
 PUYALLUP, WA 98373

CONTRACTOR: **CONTRACTOR ELECTRIC**  
 P.O. BOX 100  
 KENT, WA 98023  
 ON-SITE CONTACT: PH: VITALY PANAS 253-335-5647

DRAWN BY: DATE: 03/08/22  
 PH LE  
 DESIGNED BY: DATE: 03/08/22  
 PH LE  
 APPROVED BY: DATE: 03/08/22  
 MIKE REGAN

**NICET STAMP**

Michael Regan, ET  
 NICET Level III Fire Alarm  
 Technician ID: 144327  
 Expires: 3/1/2023

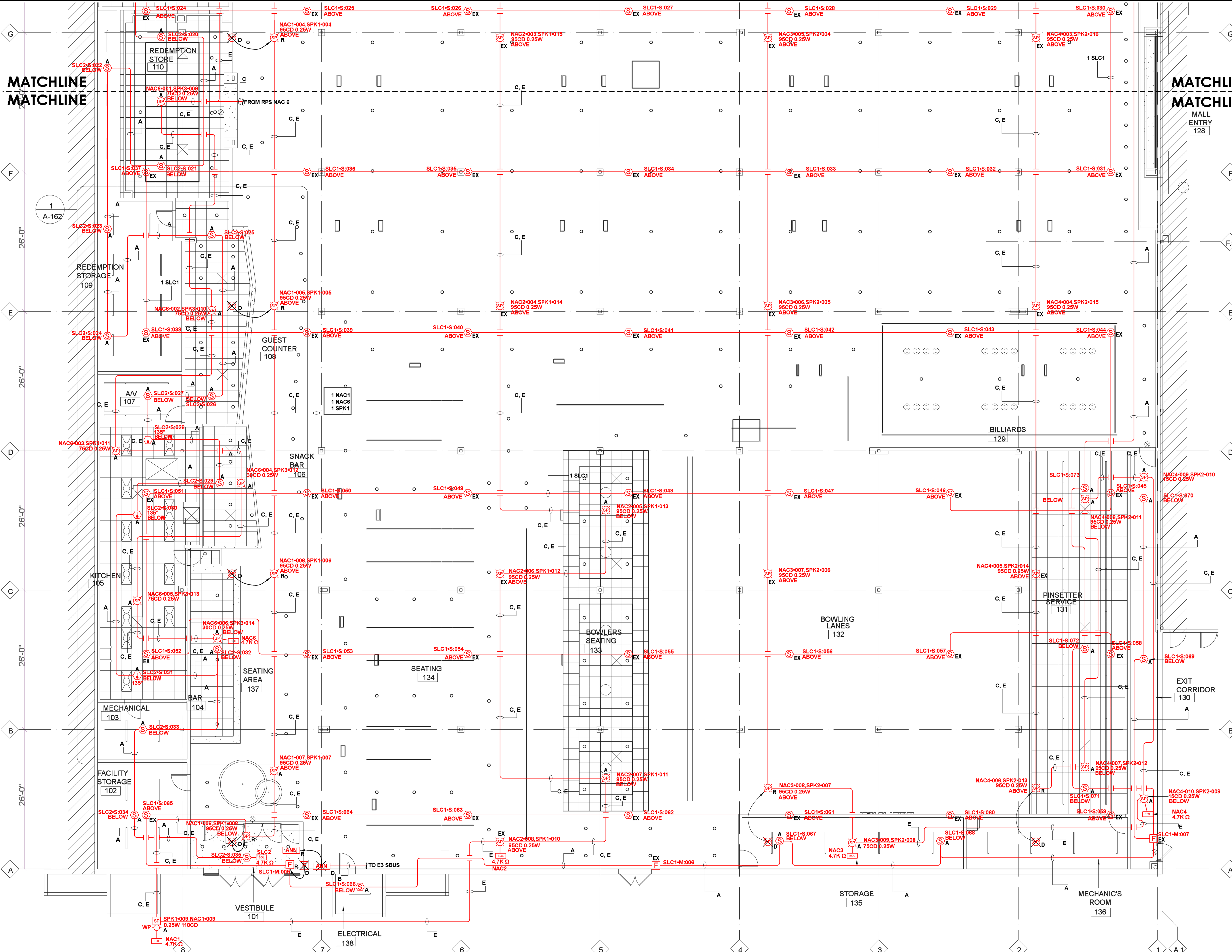
PROJECT NUMBER: 04970L  
 SHEET TITLE: ROUND ONE - NORTH FIRE ALARM PLAN  
 SHEET NUMBER: FA - 02 OF 05

FILE: Round One T.I. DATE: 03/08/22 TIME: 15:23:35



MATCHLINE  
MATCHLINE

MATCHLINE  
MATCHLINE



**SYMBOL LEGEND**

SYMBOL	DESCRIPTION	MANUFACTURER	PART NUMBER
FACP	ENCLOSURE, TRANSPONDER, BLACK, SIZE D	GAMEWELL FCI	E3BB-BD/INX
ANN	CAB A2 REMOTE FLUSH NGA ANN W/ PASSWORD PROTECTED	GAMEWELL FCI	E3BB-NGA-FLUSH
INX1	ENCLOSURE, TRANSPONDER, BLACK, SIZE C	GAMEWELL FCI	E3BB-BC/INX
RPS1	10AMP, 120VAC REMOTE CHARGER POWER SUPPLY, RED ENCLOSURE	HONEYWELL PRODUCTS	HPF-PS10
PHOTO	PHOTO, SMOKE, DETECTOR, BRIGHT WHITE	GAMEWELL FCI	ASD-PL3
TH	THERMAL HEAT DETECTOR 135F, BRIGHT WHITE	GAMEWELL FCI	ATD-L3
F	PULL STATION, SINGLE ACTION, ADDRESSABLE	GAMEWELL FCI	MS-7ASF
STROBE	STROBE, 2 WIRE, M-C, WHITE, CEILING	SYSTEM SENSOR	SCW
SPS	SERIES SPEAKER/STROBE, WHITE, CEILING	SYSTEM SENSOR	SPSCWL
WP	WALL SPEAKER STROBE RED OUTDOOR	SYSTEM SENSOR	SPSRK
4.7K	EOL-4.7K	GAMEWELL FCI	EOL-4.7

**WIRE TAG DESCRIPTION**

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E	AMP VOICE CIRCUIT	16/2 ADS SOL - FPLP

**DEVICE NOTES**

- A ADD NEW DEVICE
- D DEMO DEVICE
- R RELOCATE DEVICE
- EX EXISTING DEVICE
- WP WEATHER PROOF DEVICE

STROBE COVERAGE AREA SHALL BE DEFINED AS:  
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 60' cd = 40' x 40' 85' cd = 40' x 40' 110' cd = 40' x 40'  
 95' cd = 50' x 50' 115' cd = 50' x 50' 150' cd = 50' x 50'

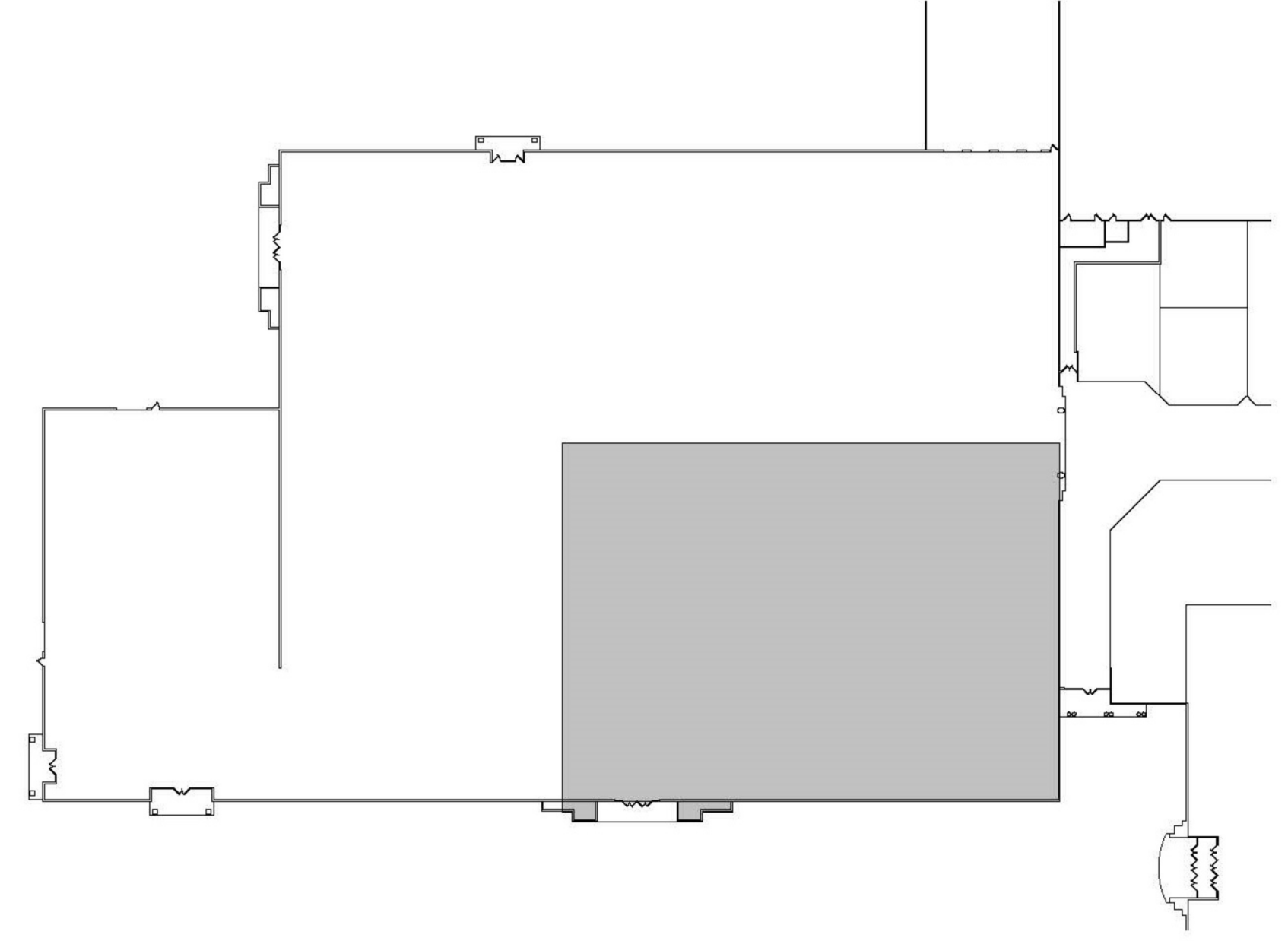
City of Puyallup  
Development & Permitting Services  
**ISSUED PERMIT**

Building	Planning
Engineering	Public Works
Fire	Traffic

# ROUND ONE T.I. BUILD OUT

SCALE: 1/8"=1'-0"

# SOUTH SIDE FIRE ALARM PLAN



**KEY PLAN**  
SCALE: N.T.S.

**NORTHWEST FIRE SYSTEMS**  
Saving lives and Protecting Property  
22645 83RD AVE. S., BLDG D 'KENT, WA 98022  
PHONE: 206.772.7502 • FAX: 206.772.7504  
WWW.NWFIRESYSTEMS.COM  
LIC # NORTHFS875MJ



NO.	BY	DATE	REVISION DESCRIPTION
0	P.L.E.	03/08/22	ISSUED FOR REVIEW

CONTRACT WITH:  
 ROUND ONE T.I. BUILD OUT  
 3300 S MERIDIAN ST UNIT 300  
 PUYALLUP WA 98373  
 CONTRACTOR:  
 PUYALLUP ELECTRIC  
 P.O. BOX 100  
 KENT WA 98023  
 ON-SITE CONTACT: PH VITALY PANAS 253-335-5647

DRAWN BY: DATE: 03/08/22  
 PH LE  
 DESIGNED BY: DATE: 03/08/22  
 PH LE  
 APPROVED BY: DATE: 03/08/22  
 MIKE REGAN  
 NICET STAMP  
 Michael Regan, ET  
 NICET Level III Fire Alarm  
 Technician ID: 144327  
 Expires: 3/1/2023

PROJECT NUMBER: 04970L  
 SHEET TITLE: ROUND ONE - SOUTH SHELL FIRE ALARM PLAN  
 SHEET NUMBER: FA - 03 OF 05

FILE: Round One T.I. DATE: 03/08/22 TIME: 15:24:02





NO.	BY	DATE	REVISION DESCRIPTION
0	P.L.E	03/08/22	ISSUED FOR REVIEW

CONTRACT WITH:	ROUND ONE LLC BUILD OUT
ADDRESS:	390 S MERIDIAN ST UNIT 300
CITY:	PUYALLUP WA 98373
STATE:	WA 98033
ON-SITE CONTACT:	PH VITALY PANAS 253-335-5647

DRAWN BY:	DATE:
PH LE	03/08/22
DESIGNED BY:	DATE:
PH LE	03/08/22
APPROVED BY:	DATE:
MIKE REGAN	03/08/22

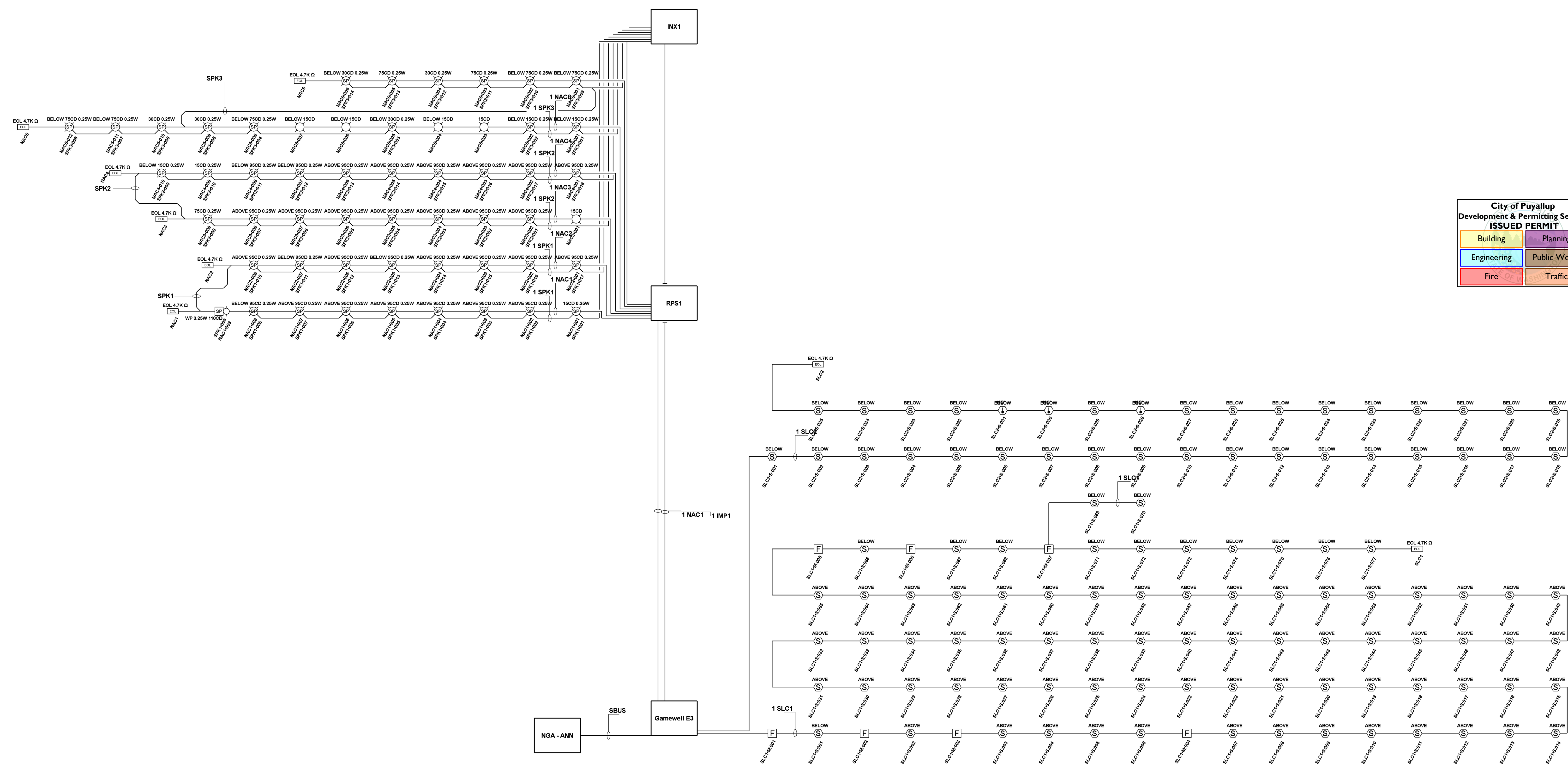
NICET STAMP	
Michael Regan, ET	
NICET Level III Fire Alarm	
Technician ID: 144337	
Expires: 3/1/2023	

PROJECT NUMBER:	04970L
SHEET TITLE:	ROUND ONE - RISER DIAGRAM FIRE ALARM PLAN
SHEET NUMBER:	FA - 04 OF 05

**City of Puyallup**  
 Development & Permitting Services  
**ISSUED PERMIT**

Building	Planning
Engineering	Public Works
Fire	Traffic



**RISER DIAGRAM**



BATTERY CALCULATIONS FOR ROUND ONE T.I. PANEL: GAMEWELL E3						
PART NO:E3BB-BD/INX - ENCLOSURE, TRANSPONDER, BLACK, SIZE D						
PART NO.	QTY.	DESCRIPTION	STANDBY	TOTAL STANDBY	ALARM	TOTAL ALARM
PANEL EQUIPMENT						
IL-MB-E3	1	ILI - MAIN BOARD, (VELOCITI OR CLIP MODE)	162.0000MA	162.0000MA	300.0000MA	300.0000MA
PM-9	1	POWER SUPPLY MODULE - 9-AMP	50.0000MA	50.0000MA	50.0000MA	50.0000MA
LCD-E3	1	LCD KEYPAD DISPLAY	24.0000MA	24.0000MA	28.0000MA	28.0000MA
AM-50-70	1	INX 50 WATT, 70V, AMPLIFIER	49.0000MA	49.0000MA	2300.0000MA	2300.0000MA
TOTAL PANEL STBY			285.0000MA		TOTAL PANEL ALARM	2678.0000MA
PERIPHERAL DEVICES						
ASD-PL3	108	PHOTO, SMOKE, DETECTOR, BRIGHT WHITE (SIGNALING LINE)	0.2000MA	21.6000MA	2.0000MA	218.0000MA
MS-7ASF	7	PULL STATION, SINGLE ACTION, ADDRESSABLE (SIGNALING LINE)	0.3000MA	2.1000MA	10.0000MA	70.0000MA
EOL-4.7	2	EOL-4.7K (SIGNALING LINE)	0.0000MA	0.0000MA	0.0000MA	0.0000MA
ATD-L3	3	THERMAL HEAT DETECTOR 139F, BRIGHT WHITE (SIGNALING LINE)	0.2000MA	0.6000MA	2.0000MA	6.0000MA
HPF-PS10	1	10AMP, 120VAC REMOTE CHARGER POWER SUPPLY, RED ENCLOSURE, HPF-PS10_MB (NOTIFICATION)	2.0000MA	2.0000MA	2.0000MA	2.0000MA
HPF-PS10	1	10AMP, 120VAC REMOTE CHARGER POWER SUPPLY, RED ENCLOSURE (NOTIFICATION)	2.0000MA	2.0000MA	2.0000MA	2.0000MA
TOTAL PERIPHERAL STBY			28.5000MA		TOTAL PERIPH ALARM	298.0000MA
TOTAL STANDBY AMPS				313.5000MA	TOTAL ALARM AMPS	2978.0000MA
					STANDBY TIME: 24 HRS	7.524AH
					ALARM TIME: 15 MIN	0.744AH
					BATTERY REQUIREMENT:	8.268AH
					REQUIREMENT WITH COMPENSATION:	9.922AH
COMPENSATION FACTORS - STANDBY: 1.2 ALARM: 1.2						

BATTERY CALCULATIONS FOR ROUND ONE T.I. PANEL: RPS1						
PART NO:HPF-PS10 - 10AMP, 120VAC REMOTE CHARGER POWER SUPPLY, RED ENCLOSURE						
PART NO.	QTY.	DESCRIPTION	STANDBY	TOTAL STANDBY	ALARM	TOTAL ALARM
PANEL EQUIPMENT						
HPF-PS10_MB	1	MAINBOARD FOR THE HPF-PS10	65.0000MA	65.0000MA	145.0000MA	145.0000MA
TOTAL PANEL STBY			65.0000MA		TOTAL PANEL ALARM	145.0000MA
PERIPHERAL DEVICES						
SPSRK	1	WALL SPEAKER STROBE RED OUTDOOR (NOTIFICATION) 110CD	0.0000MA	0.0000MA	202.0000MA	202.0000MA
SPSCWL	30	L-SERIES SPEAKER/STROBE, WHITE, CEILING (NOTIFICATION) 95CD	0.0000MA	0.0000MA	134.0000MA	4020.0000MA
SPSCWL	6	L-SERIES SPEAKER/STROBE, WHITE, CEILING (NOTIFICATION) 15CD	0.0000MA	0.0000MA	41.0000MA	205.0000MA
EOL-4.7	6	EOL-4.7K (NOTIFICATION)	0.0000MA	0.0000MA	0.0000MA	0.0000MA
SCW	6	STROBE, 2 WIRE, M-C, WHITE, CEILING (NOTIFICATION) 15CD	0.0000MA	0.0000MA	120.0000MA	600.0000MA
SPSCWL	8	L-SERIES SPEAKER/STROBE, WHITE, CEILING (NOTIFICATION) 75CD	0.0000MA	0.0000MA	111.0000MA	888.0000MA
SPSCWL	6	L-SERIES SPEAKER/STROBE, WHITE, CEILING (NOTIFICATION) 30CD	0.0000MA	0.0000MA	63.0000MA	315.0000MA
TOTAL PERIPHERAL STBY			0.0000MA		TOTAL PERIPH ALARM	6230.0000MA
TOTAL STANDBY AMPS				65.0000MA	TOTAL ALARM AMPS	6375.0000MA
					STANDBY TIME: 24 HRS	1.56AH
					ALARM TIME: 15 MIN	1.584AH
					BATTERY REQUIREMENT:	3.154AH
					REQUIREMENT WITH COMPENSATION:	3.785AH
COMPENSATION FACTORS - STANDBY: 1.2 ALARM: 1.2						

BATTERY CALCULATIONS FOR ROUND ONE T.I. PANEL: INX1						
PART NO:E3BB-BC/INX - ENCLOSURE, TRANSPONDER, BLACK, SIZE C						
PART NO.	QTY.	DESCRIPTION	STANDBY	TOTAL STANDBY	ALARM	TOTAL ALARM
PANEL EQUIPMENT						
PM-9	1	POWER SUPPLY MODULE - 9-AMP	50.0000MA	50.0000MA	50.0000MA	50.0000MA
AM-50-70	2	INX 50 WATT, 70V, AMPLIFIER	49.0000MA	98.0000MA	2300.0000MA	4600.0000MA
TOTAL PANEL STBY			148.0000MA		TOTAL PANEL ALARM	4650.0000MA
PERIPHERAL DEVICES						
E3BB-BD/INX	1	ENCLOSURE, TRANSPONDER, BLACK, SIZE D (POWER)	0.0000MA	0.0000MA	0.0000MA	0.0000MA
EOL-4.7	2	EOL-4.7K (NOTIFICATION)	0.0000MA	0.0000MA	0.0000MA	0.0000MA
SPSRK	1	WALL SPEAKER STROBE RED OUTDOOR (NOTIFICATION) 80DB 0.25 WATTS	0.0000MA	0.0000MA	0.0000MA	0.0000MA
SPSCWL	48	L-SERIES SPEAKER/STROBE, WHITE, CEILING (NOTIFICATION) 77DB 0.25 WATTS	0.0000MA	0.0000MA	0.0000MA	0.0000MA
TOTAL PERIPHERAL STBY			0.0000MA		TOTAL PERIPH ALARM	0.0000MA
TOTAL STANDBY AMPS				148.0000MA	TOTAL ALARM AMPS	4650.0000MA
					STANDBY TIME: 24 HRS	3.552AH
					ALARM TIME: 15 MIN	1.163AH
					BATTERY REQUIREMENT:	4.715AH
					REQUIREMENT WITH COMPENSATION:	5.657AH
COMPENSATION FACTORS - STANDBY: 1.2 ALARM: 1.2						

## BATTERY CALCS

CIRCUIT CALCULATIONS PANEL: RPS1 CARD: 20 CIRCUIT:NAC1						
CIRCUIT NAME: NAC1						
CIRCUIT TYPE: NOTIFICATION TERMINAL VOLTAGE: 20.2V/DC AMPERAGE: 2.0000A						
CABLE: 14/2 SOL JKT FPLR 1M RL RED #14						
CALCULATIONS BASED ON RUNNING TOTAL LENGTH.						
DESIGN CRITERIA: AMBIENT TEMPERATURE: 167°F MAX. OPERATING VOLTAGE DROP: 18%						
DEVICE	PART NO	APPLIANCE DESC	DISTANCE	CURRENT	VOLTAGE	VOLTAGE DROP
	HPF-PS10	PANEL			20.2V	
001	SPSCWL	L-SERIES SPEAKER/STROBE, WHITE, CEILING, 15CD	14'-0"	41.0000MA	20.0895V	(0.1015V)
002	SPSCWL	L-SERIES SPEAKER/STROBE, WHITE, CEILING, 95CD	83'-0"	134.0000MA	19.5175V	(0.581V)
003	SPSCWL	L-SERIES SPEAKER/STROBE, WHITE, CEILING, 95CD	33'-0"	134.0000MA	19.5137V	(0.2038V)
004	SPSCWL	L-SERIES SPEAKER/STROBE, WHITE, CEILING, 95CD	49'-0"	134.0000MA	19.0613V	(0.2623V)
005	SPSCWL	L-SERIES SPEAKER/STROBE, WHITE, CEILING, 95CD	49'-0"	134.0000MA	18.8293V	(0.222V)
006	SPSCWL	L-SERIES SPEAKER/STROBE, WHITE, CEILING, 95CD	49'-0"	134.0000MA	18.6476V	(0.1817V)
007	SPSCWL	L-SERIES SPEAKER/STROBE, WHITE, CEILING, 95CD	36'-0"	134.0000MA	18.5437V	(0.1038V)
008	SPSCWL	L-SERIES SPEAKER/STROBE, WHITE, CEILING, 95CD	17'-0"	134.0000MA	18.5086V	(0.0351V)
009	SPSRK	WALL SPEAKER STROBE RED OUTDOOR, 110CD	38'-0"	202.0000MA	18.4615V	(0.0471V)
	EOL-4.7	EOL-4.7K	2'-0"	0.0000MA	18.4615V	(0V)
			370'-0"	1181.0000MA		
					TOTAL CURRENT:	1181.0000MA
					TOTAL VOLTAGE DROP :	1.7395V
(TOTAL VDROPERCENT:8.61%)						

CIRCUIT CALCULATIONS PANEL: RPS1 CARD: 20 CIRCUIT:NAC2						
CIRCUIT NAME: NAC2						
CIRCUIT TYPE: NOTIFICATION TERMINAL VOLTAGE: 20.2V/DC AMPERAGE: 2.0000A						
CABLE: 14/2 SOL JKT FPLR 1M RL RED #14						
CALCULATIONS BASED ON RUNNING TOTAL LENGTH.						
DESIGN CRITERIA: AMBIENT TEMPERATURE: 167°F MAX. OPERATING VOLTAGE DROP: 18%						
DEVICE	PART NO	APPLIANCE DESC	DISTANCE	CURRENT	VOLTAGE	VOLTAGE DROP
	HPF-PS10	PANEL			20.2V	
001	SPSCWL	L-SERIES SPEAKER/STROBE, WHITE, CEILING, 95CD	47'-0"	134.0000MA	18.8906V	(0.3094V)
002	SPSCWL	L-SERIES SPEAKER/STROBE, WHITE, CEILING, 95CD	33'-0"	134.0000MA	19.7068V	(0.1901V)
003	SPSCWL	L-SERIES SPEAKER/STROBE, WHITE, CEILING, 95CD	49'-0"	134.0000MA	19.4587V	(0.2418V)
004	SPSCWL	L-SERIES SPEAKER/STROBE, WHITE, CEILING, 95CD	49'-0"	134.0000MA	19.2571V	(0.2016V)
005	SPSCWL	L-SERIES SPEAKER/STROBE, WHITE, CEILING, 95CD	67'-0"	134.0000MA	19.0685V	(0.1876V)
006	SPSCWL	L-SERIES SPEAKER/STROBE, WHITE, CEILING, 95CD	31'-0"	134.0000MA	18.993V	(0.0765V)
007	SPSCWL	L-SERIES SPEAKER/STROBE, WHITE, CEILING, 95CD	67'-0"	134.0000MA	18.892V	(0.0938V)
008	SPSCWL	L-SERIES SPEAKER/STROBE, WHITE, CEILING, 95CD	31'-0"	134.0000MA	18.8737V	(0.0256V)
	EOL-4.7	EOL-4.7K	3'-0"	0.0000MA	18.8737V	(0V)
			357'-0"	1072.0000MA		
					TOTAL CURRENT:	1072.0000MA
					TOTAL VOLTAGE DROP :	1.3265V
(TOTAL VDROPERCENT:8.57%)						

CIRCUIT CALCULATIONS PANEL: RPS1 CARD: 20 CIRCUIT:NAC3						
CIRCUIT NAME: NAC3						
CIRCUIT TYPE: NOTIFICATION TERMINAL VOLTAGE: 20.2V/DC AMPERAGE: 2.0000A						
CABLE: 14/2 SOL JKT FPLR 1M RL RED #14						
CALCULATIONS BASED ON RUNNING TOTAL LENGTH.						
DESIGN CRITERIA: AMBIENT TEMPERATURE: 167°F MAX. OPERATING VOLTAGE DROP: 18%						
DEVICE	PART NO	APPLIANCE DESC	DISTANCE	CURRENT	VOLTAGE	VOLTAGE DROP
	HPF-PS10	PANEL			20.2V	
001	SCW	STROBE, 2 WIRE, M-C, WHITE, CEILING, 15CD	14'-0"	120.0000MA	20.0895V	(0.1005V)
002	SPSCWL	L-SERIES SPEAKER/STROBE, WHITE, CEILING, 95CD	10'-0"	134.0000MA	20.0351V	(0.0644V)
003	SPSCWL	L-SERIES SPEAKER/STROBE, WHITE, CEILING, 95CD	22'-0"	134.0000MA	19.9115V	(0.1236V)
004	SPSCWL	L-SERIES SPEAKER/STROBE, WHITE, CEILING, 95CD	65'-0"	134.0000MA	19.5999V	(0.3117V)
005	SPSCWL	L-SERIES SPEAKER/STROBE, WHITE, CEILING, 95CD	49'-0"	134.0000MA	19.4052V	(0.1847V)
006	SPSCWL	L-SERIES SPEAKER/STROBE, WHITE, CEILING, 95CD	49'-0"	134.0000MA	19.2508V	(0.1543V)
007	SPSCWL	L-SERIES SPEAKER/STROBE, WHITE, CEILING, 95CD	49'-0"	134.0000MA	19.1368V	(0.114V)
008	SPSCWL	L-SERIES SPEAKER/STROBE, WHITE, CEILING, 95CD	39'-0"	134.0000MA	19.0781V	(0.0687V)
009	SPSCWL	L-SERIES SPEAKER/STROBE, WHITE, CEILING, 75CD	26'-0"	111.0000MA	19.0604V	(0.0177V)
	EOL-4.7	EOL-4.7K	2'-0"	0.0000MA	19.0604V	(0V)
			325'-0"	1169.0000MA		
					TOTAL CURRENT:	1169.0000MA
					TOTAL VOLTAGE DROP :	1.1396V
(TOTAL VDROPERCENT:5.64%)						

CIRCUIT CALCULATIONS PANEL: RPS1 CARD: 20 CIRCUIT:NAC4						
CIRCUIT NAME: NAC4						
CIRCUIT TYPE: NOTIFICATION TERMINAL VOLTAGE: 20.2V/DC AMPERAGE: 2.0000A						
CABLE: 14/2 SOL JKT FPLR 1M RL RED #14						
CALCULATIONS BASED ON RUNNING TOTAL LENGTH.						
DESIGN CRITERIA: AMBIENT TEMPERATURE: 167°F MAX. OPERATING VOLTAGE DROP: 18%						
DEVICE	PART NO	APPLIANCE DESC	DISTANCE	CURRENT	VOLTAGE	VOLTAGE DROP
	HPF-PS10	PANEL			20.2V	
001	SPSCWL	L-SERIES SPEAKER/STROBE, WHITE, CEILING, 95CD	127'-0"	134.0000MA	19.3001V	(0.8899V)
002	SPSCWL	L-SERIES SPEAKER/STROBE, WHITE, CEILING, 95CD	49'-0"	134.0000MA	18.9933V	(0.3069V)
003	SPSCWL	L-SERIES SPEAKER/STROBE, WHITE, CEILING, 95CD	49'-0"	134.0000MA	18.7267V	(0.2666V)
004	SPSCWL	L-SERIES SPEAKER/STROBE, WHITE, CEILING, 95CD	49'-0"	134.0000MA	18.5004V	(0.2262V)
005	SPSCWL	L-SERIES SPEAKER/STROBE, WHITE, CEILING, 95CD	49'-0"	134.0000MA	18.3145V	(0.1859V)
006	SPSCWL	L-SERIES SPEAKER/STROBE, WHITE, CEILING, 95CD	39'-0"	134.0000MA	18.1986V	(0.1159V)
007	SPSCWL	L-SERIES SPEAKER/STROBE, WHITE, CEILING, 95CD	13'-0"	134.0000MA	18.1707V	(0.0279V)
008	SPSCWL	L-SERIES SPEAKER/STROBE, WHITE, CEILING, 95CD	54'-0"	134.0000MA	18.0991V	(0.0716V)
009	SPSCWL	L-SERIES SPEAKER/STROBE, WHITE, CEILING, 15CD	15'-0"	41.0000MA	18.0915V	(0.0078V)
010	SPSCWL	L-SERIES SPEAKER/STROBE, WHITE, CEILING, 15CD	63'-0"	41.0000MA	18.0757V	(0.0159V)
	EOL-4.7	EOL-4.7K	3'-0"	0.0000MA	18.0757V	(0V)
			510'-0"	1154.0000MA		
					TOTAL CURRENT:	1154.0000MA
					TOTAL VOLTAGE DROP :	2.1243V
(TOTAL VDROPERCENT:10.52%)						

## VOLTAGE DROPS

CIRCUIT CALCULATIONS PANEL: RPS1 CARD: 20 CIRCUIT:NAC5						
CIRCUIT NAME: NAC5						
CIRCUIT TYPE: NOTIFICATION TERMINAL VOLTAGE: 20.2V/DC AMPERAGE: 2.0000A						
CABLE: 14/2 SOL JKT FPLR 1M RL RED #14						
CALCULATIONS BASED ON RUNNING TOTAL LENGTH.						
DESIGN CRITERIA: AMBIENT TEMPERATURE: 167°F MAX. OPERATING VOLTAGE DROP: 18%						
DEVICE	PART NO	APPLIANCE DESC	DISTANCE	CURRENT	VOLTAGE	VOLTAGE DROP
	HPF-PS10	PANEL			20.2V	
001	SPSCWL	L-SERIES SPEAKER/STROBE, WHITE, CEILING, 15CD	62'-0"	41.0000MA	19.7873V	(0.4127V)
002	SPSCWL	L-SERIES SPEAKER/STROBE, WHITE, CEILING, 15CD	97'-0"	41.0000MA	19.1662V	(0.6212V)
003	SCW	STROBE, 2 WIRE, M-C, WHITE, CEILING, 15CD	20'-0"	120.0000MA	19.9431V	(0.123V)
004	SCW	STROBE, 2 WIRE, M-C, WHITE, CEILING, 15CD	19'-0"	120.0000MA	19.9466V	(0.0378V)
005	SPSCWL	L-SERIES SPEAKER/STROBE, WHITE, CEILING, 30CD	26'-0"	63.0000MA	18.824V	(0.1216V)
006	SCW	STROBE, 2 WIRE, M-C, WHITE, CEILING, 15CD	18'-0"	120.0000MA	18.7467V	(0.0773V)
007	SCW	STROBE, 2 WIRE, M-C, WHITE, CEILING, 15CD	9'-0"	120.0000MA	18.7147V	(0.032V)
008	SPSCWL	L-SERIES SPEAKER/STROBE, WHITE, CEILING, 75CD	24'-0"	111.0000MA	18.6471V	(0.0676V)
009	SPSCWL	L-SERIES SPEAKER/STROBE, WHITE, CEILING, 30CD	31'-0"	63.0000MA	18.5809V	(0.0662V)
010	SPSCWL	L-SERIES SPEAKER/STROBE, WHITE, CEILING, 30CD	37'-0"	63.0000MA	18.5161V	(0.0647V)
011	SPSCWL	L-SERIES SPEAKER/STROBE, WHITE, CEILING, 75CD	29'-0"	111.0000MA	18.4766V	(0.0395V)
012	SPSCWL	L-SERIES SPEAKER/STROBE, WHITE, CEILING, 75CD	43'-0"	111.0000MA	18.4473V</	