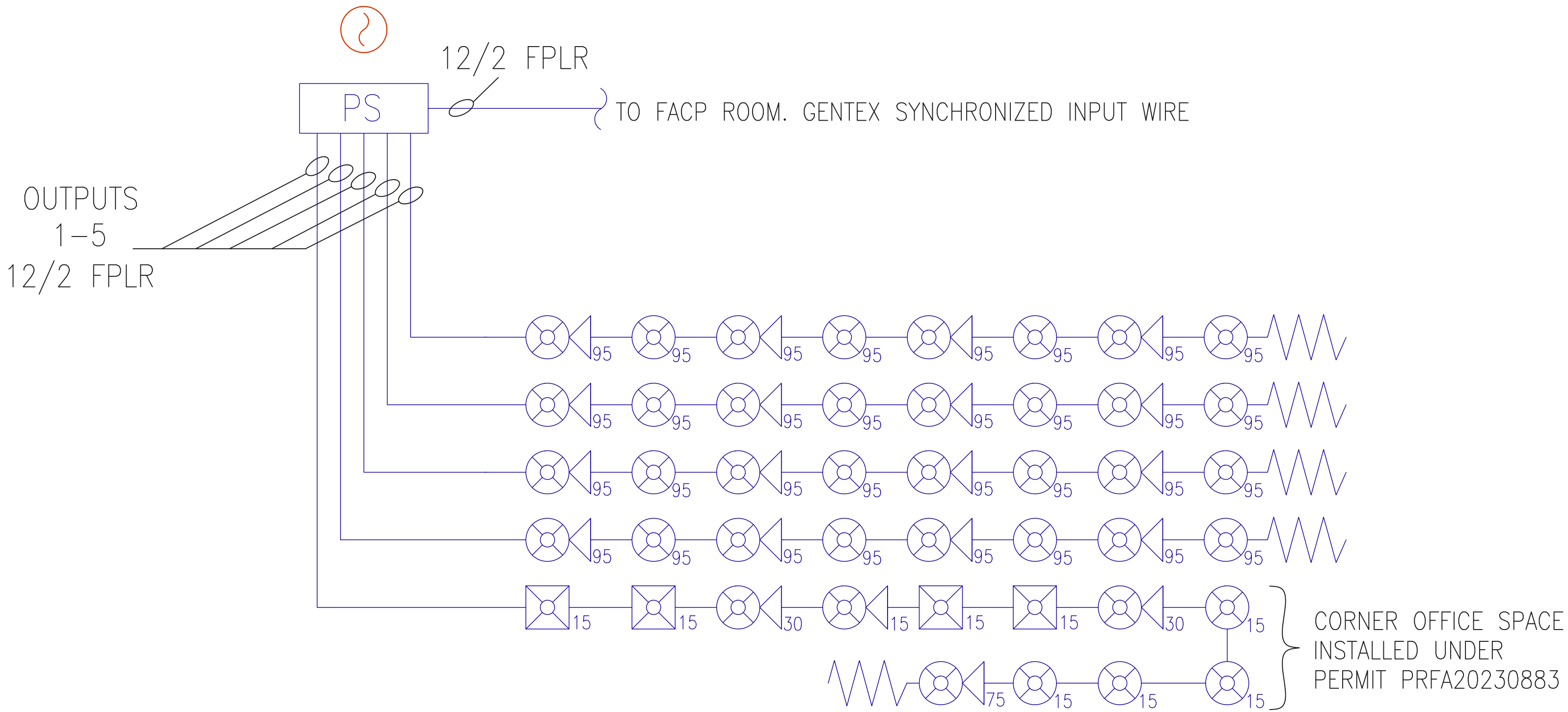


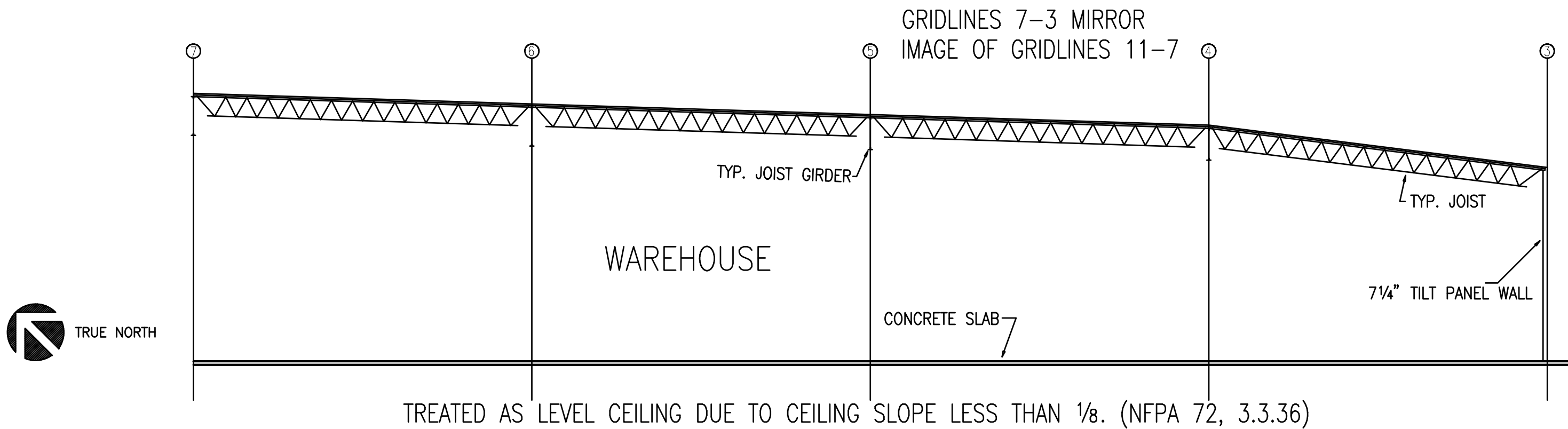


RISER DIAGRAM

NTS

	MANUAL PULL STATION	SMOKE DETECTOR (SPD)	SMOKE DETECTOR (BEAM)	HEAT DETECTOR (DUCT)	WATERFLOW	TAMPER SWITCH	PUMP RUN	PUMP AC LOSS	PUMP PHASE REVERSAL	SYSTEM TROUBLE	AC FAIL
DISPLAY OF AN ALARM EVENT AT THE FACP	X	X	X		X	X					
DISPLAY OF A SUPERVISORY EVENT AT THE FACP				X		X	X	X	X		
DISPLAY OF A TROUBLE EVENT AT THE FACP										X	X
TRANSMIT AN ALARM SIGNAL TO THE CENTRAL STATION	X	X	X		X	X					
TRANSMIT A SUPERVISORY SIGNAL TO THE CENTRAL STATION				X		X	X	X	X		
TRANSMIT A TROUBLE SIGNAL TO THE CENTRAL STATION										X	X
INITIATE BUILDING NOTIFICATION (A/V DEVICES)	X	X	X		X	X					

OPERATIONAL MATRIX



ELEVATION VIEW (NORTH)

NTS

PS10 Battery Calculation										
Secondary Power Source Requirements										
	Standby Current (amps)				Secondary Alarm Current (amps)					
Device Type	Qty		Current Draw	=	Total	Qty		Current Draw	=	Total
Main Circuit Board										
Choose EOLR used :										
4.7k	1	X	0.1560	=	0.1560	1	X	0.1850	=	0.1850
Main Circuit Board with ZNAC-PS Class A card	0	X	0.1490	=	0.0000	0	X	0.1590	=	0.0000
NAC / Output # 1	1	X	0.0000	=	0.0000	1	X	1.2760	=	1.2760
NAC / Output # 2	1	X	0.0000	=	0.0000	1	X	1.2760	=	1.2760
NAC / Output # 3	1	X	0.0000	=	0.0000	1	X	1.2760	=	1.2760
NAC / Output # 4	1	X	0.0000	=	0.0000	1	X	1.2760	=	1.2760
NAC / Output # 5	1	X	0.0000	=	0.0000	1	X	1.0340	=	1.0340
NAC / Output # 6	1	X	0.0000	=	0.0000	1	X	0.0000	=	0.0000
NAC / Output # 7	1	X	0.0000	=	0.0000	1	X	0.0000	=	0.0000
Total Standby Load					0.1560	Total Alarm Load			6.3230	

PS10 Battery Calculation												
Note 1: You are fully responsible for verifying these calculations.												
Note 2: You only need to make entries in the yellow cells												
Calculation in Total Sheet												
						Required Standby Time in Hours						
						24 Hours						
Standby Load Current (Amps)		0.1560 Amps		X	24	=	3.744 AH					
						Required Alarm Time in Hours						
						5 Minutes						
Alarm Load Current (Amps)		6.3230 Amps		X	0.084	=	0.531 AH					
						Total Current Load				4.28 AH		
						*Multiply by the Derating Factor				1.2	=	x 1.20
Total Ampere Hours Required										5.13 AH		

PS10 Circuit Detail										
NAC / Output # 1 (Rack Aisles)										
Device	Qty	Non-Alarm Draw				Total	Qty	Alarm Draw		Total
GCC24CR (95cd)	4	x	0.000000	=	0.000000		4	x	0.171000	= 0.684000
GCS24CR (95 cd)	4	x	0.000000	=	0.000000		4	x	0.148000	= 0.592000
Total Standby Load					0.000000	Total Alarm Load 1.276000				

NAC / Output # 2 (Rack Aisles)											
Device	Qty	Non-Alarm Draw			Total	Qty	Alarm Draw				
GCC24CR (95cd)	4	x	0.000000	=	0.000000	4	x	0.171000	=	0.684000	
GCS24CR (95 cd)	4	x	0.000000	=	0.000000	4	x	0.148000	=	0.592000	
Total Standby Load					0.000000	Total Alarm Load					1.276000

NAC / Output # 3 (Rack Aisles)											
Device	Qty	Non-Alarm Draw			Total	Qty	Alarm Draw				
GCC24CR (95cd)	4	x	0.000000	=	0.000000	4	x	0.171000	=	0.684000	
GCS24CR (95 cd)	4	x	0.000000	=	0.000000	4	x	0.148000	=	0.592000	
Total Standby Load					0.000000	Total Alarm Load					1.276000

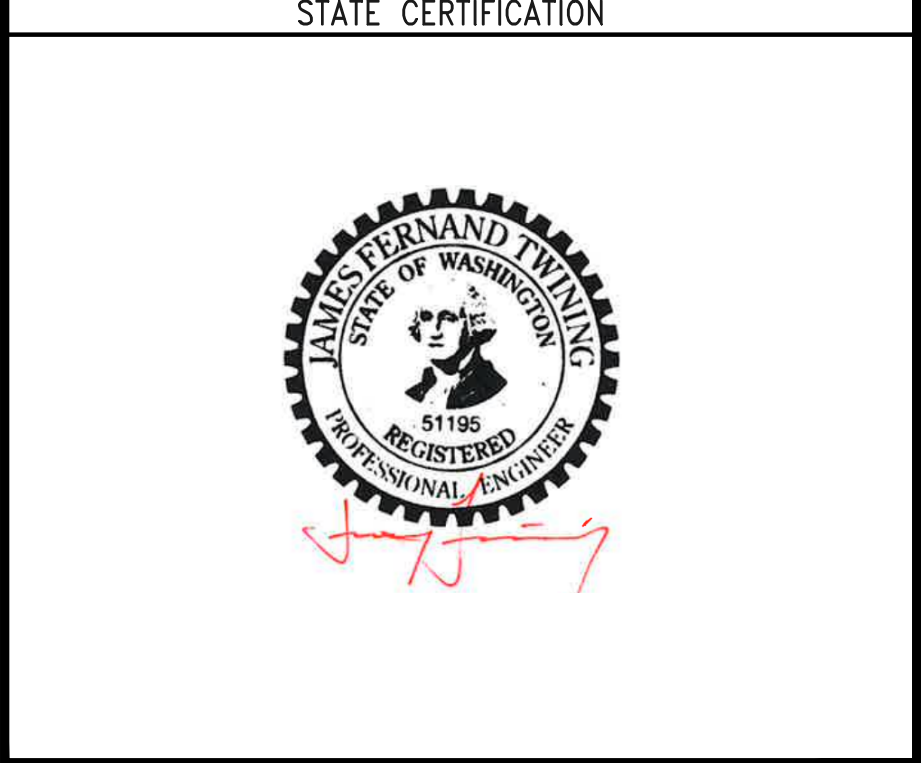
NAC / Output # 4 (Rack Aisles)											
Device	Qty	Non-Alarm Draw			Total	Qty	Alarm Draw			Total	
GCC24CR (95cd)	4	x	0.000000	=	0.000000	4	x	0.171000	=	0.684000	
GCS24CR (95 cd)	4	x	0.000000	=	0.000000	4	x	0.148000	=	0.592000	
Total Standby Load					0.000000	Total Alarm Load					1.276000

NAC / Output # 5 (Office Space)											
Device	Qty	Non-Alarm Draw			Total	Qty	Alarm Draw			Total	
GES3-24WR (15 cd)	4	x	0.000000	=	0.000000	4	x	0.030000	=	0.120000	
GCC24CR (75cd)	1	x	0.000000	=	0.000000	1	x	0.166000	=	0.166000	
GCC24CR (30cd)	2	x	0.000000	=	0.000000	2	x	0.120000	=	0.240000	
GCC24CR (15cd)	1	x	0.000000	=	0.000000	1	x	0.120000	=	0.120000	
GCS24CR (15 cd)	4	x	0.000000	=	0.000000	4	x	0.097000	=	0.388000	
Total Standby Load					0.000000	Total Alarm Load					1.034000

VOLTAGE DROP CALCULATION									
CIRCUIT ID	STANDBY CURRENT	ALARM CURRENT	WIRE TYPE	OHMS / 1,000 FT. @ 72 deg F	LENGTH (ONE WAY)	ACTUAL OHMS	VOLTS @ EOL	% DROP	
NAC 1	0.00	1.276	#12 Solid	1.59	600	1.91	17.97	11.93%	
NAC 2	0.00	1.276	#12 Solid	1.59	600	1.91	17.97	11.93%	
NAC 3	0.00	1.276	#12 Solid	1.59	600	1.91	17.97	11.93%	
NAC 4	0.00	1.276	#12 Solid	1.59	600	1.91	17.97	11.93%	
NAC 5	0.00	1.034	#12 Solid	1.59	300	0.95	19.41	4.84%	

POWER CALCULATIONS

SHEET INDEX		
SHEET	REV	DESCRIPTION
FA101		GENERAL SHEET
FA102		RISER DIAGRAM AND CALCULATIONS
FA103		SUITE 103 RACKING DEVICES
FA104		PRODUCT TYPICALS



City of Puyallup Development & Permitting Services ISSUED PERMIT									
Building		Planning							
Engineering		Public Works							
Fire		Traffic							

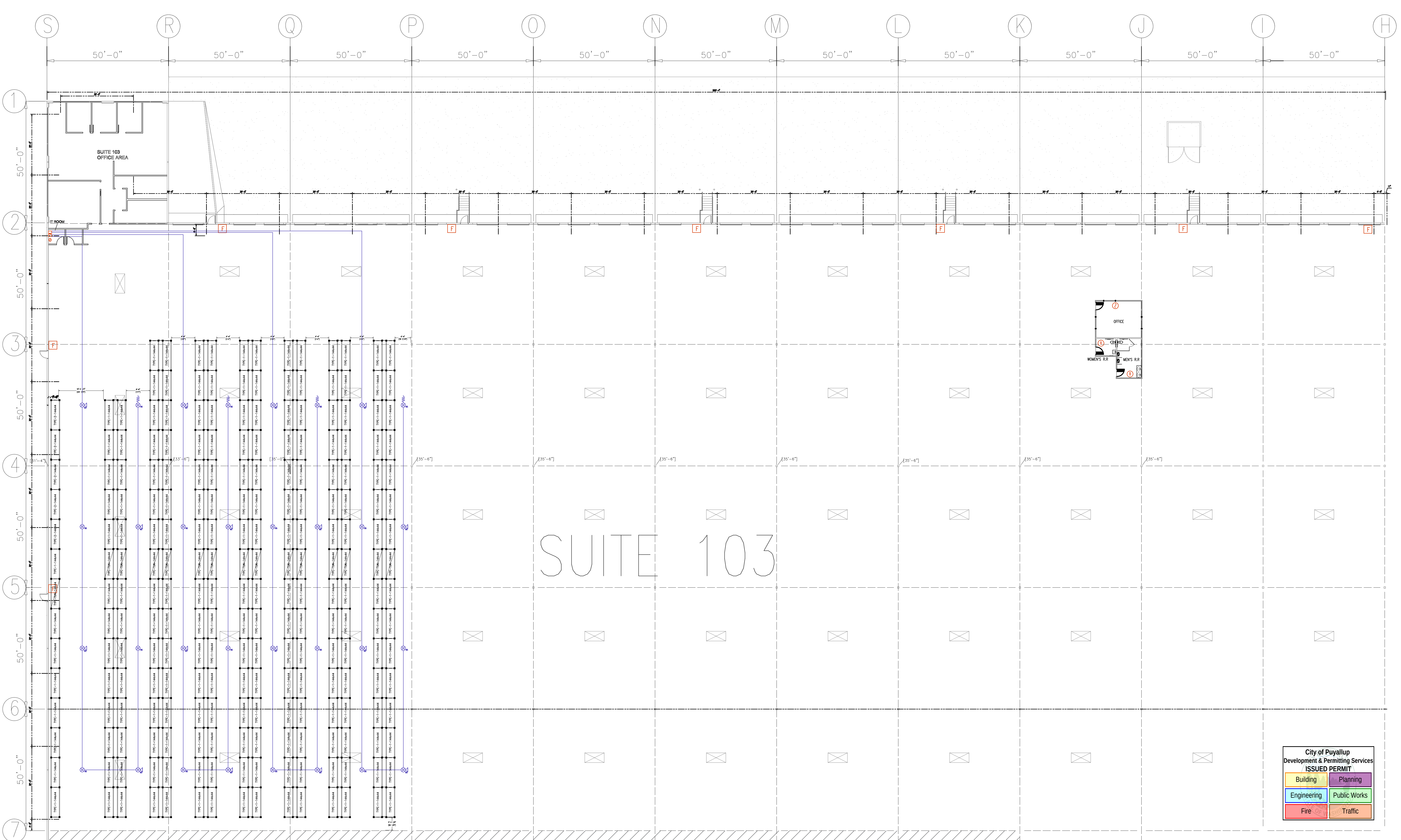
REVISIONS									
NO	DATE	BY	DESCRIPTION						

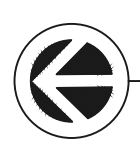
CONTRACT WITH:									
----------------	--	--	--	--	--	--	--	--	--

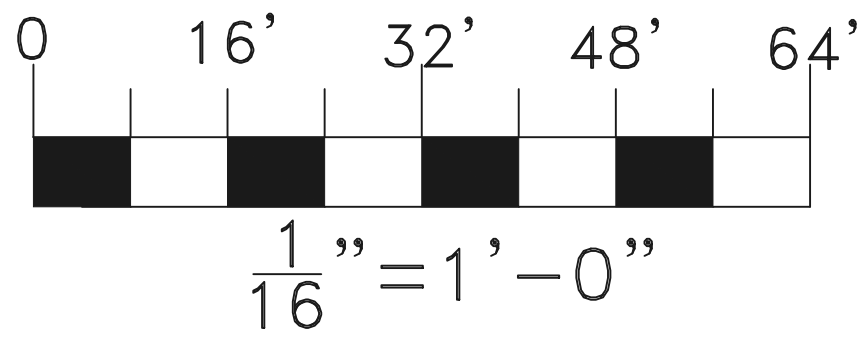
PROJECT NAME:									
PUYALLUP 1									
1601 INDUSTRIAL PARK WAY									
SUITE 101									
PUYALLUP, WA 98371									



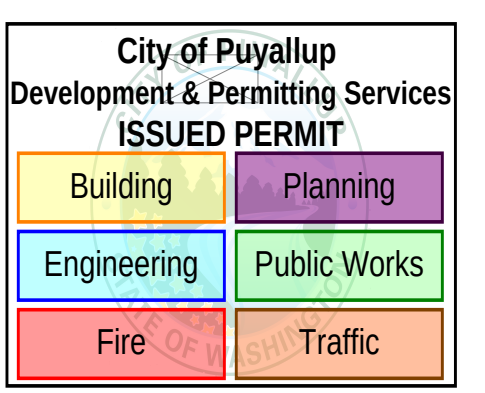
DESIGNER	STEVYN S	SHEET	2 OF 4	FA-102
DATE	12/12/23			
JOB NO.	16-4444			



 SUITE 103 RACKING DEVICE PLAN
1/16" = 1'-0"



CONTRACT WITH:		PATRIOT FIRE PROTECTION, INC. 2707 70TH AVENUE EAST TACOMA, WA 98424		PATRIFP099CF WWW.PATRIOTFIRE.COM Steyn.Stuart@patriotfire.com TEL: (253) 926-2290 FAX: (253) 922-6150	
PROJECT NAME: PUYALLUP 1 SUITE 103 - 1601 INDUSTRIAL PARK WAY PUYALLUP, WA 98371		DESIGNER STUART	DATE 12/12/23	SHEET 3 OF 4	FA-103
		JOB NO. 16-4444			



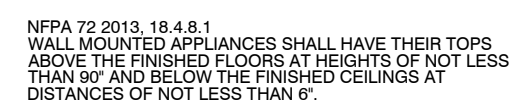
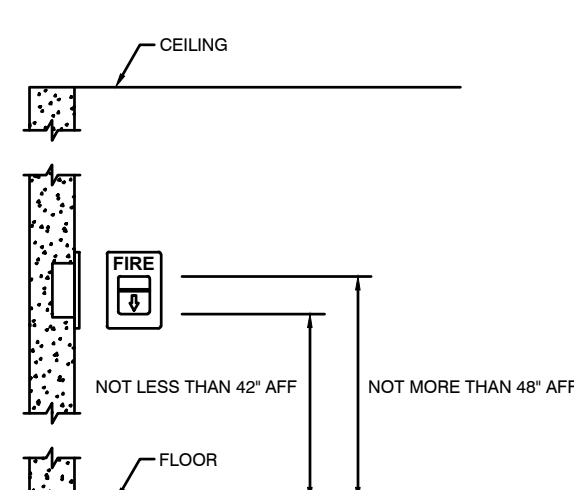


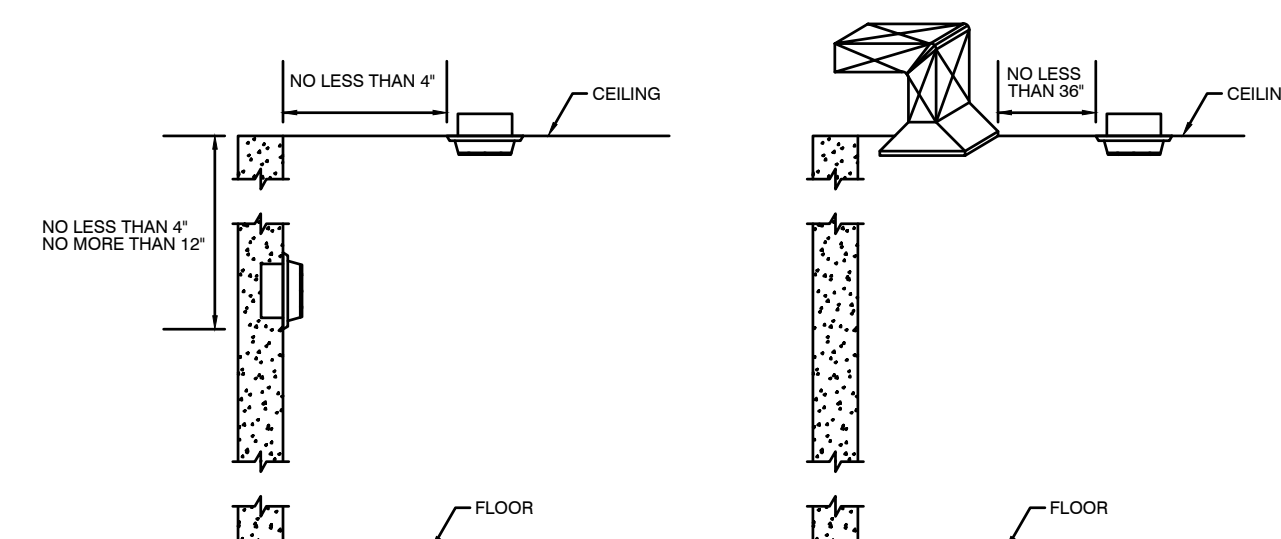
Diagram illustrating the required clearance for a fire extinguisher:

- IF TOTAL HEIGHT IS LESS THAN 6'6" MOUNT 6' FROM CEILING BUT NOT GREATER THAN 9'6" AFF
- NOT LESS THAN 9'6" AFF

NFPA 72 2013, 18.5.5.1
WALL MOUNTED APPLIANCES SHALL BE MOUNTED
SUCH THAT THE ENTIRE LENS IS NOT LESS THAN 80°
AND NOT GREATER THAN 96° ABOVE THE FINISHED
FLOOR.



NFPA 72 2013, 17.14.5
THE OPERABLE PART OF A MANUALLY ACTUATED
ALARM INITIATING DEVICE SHALL BE NOT LESS THE
42" AND NOT MORE THAN 48" FROM THE FINISHED FLOOR



NFPA 72 2013, 17.6.3.1.3.1
DETECTORS SHALL BE LOCATED ON THE CEILING NOT
LESS THAN 4' FROM THE SIDEWALL OR ON THE
SIDEWALLS BETWEEN 4" AND 12" FROM THE CEILING.

NFPA 72 2013, A.17.7.4.1
DETECTORS SHALL NOT BE LOCATED IN
DIRECT AIRFLOW OR CLOSER THAN 36" FROM AN AIR
SUPPLY DIFFUSER OR RETURN AIR OPENING

Diagram illustrating the correct and incorrect methods for securing a fire alarm conductor:

- Correct Method (Left):** The fire alarm conductor is secured using a **WIRE TIE OR WIRE HANGER**. The conductor is enclosed in a **CONDUIT**.
- Incorrect Method (Right):** The fire alarm conductor is secured using **STAPLES**, which is labeled **NO STAPLES**.

FIRE ALARM - CEILING TO WALL TRANSITION AND OPEN WIRING

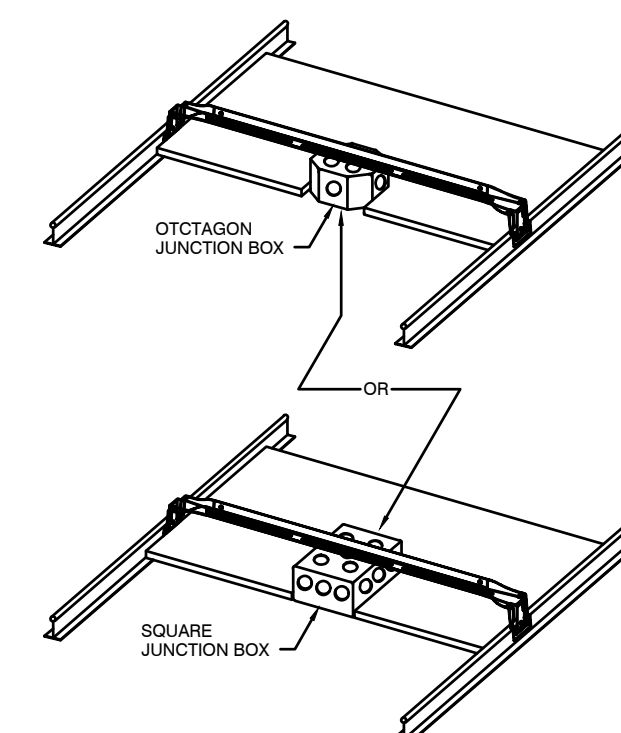
[illegible]

Diagram illustrating the connection between a Fire Alarm Control Panel and a Distribution Panel. A conduit connects the two panels, with a label "DEDICATED LOCKED CONDUIT" pointing to it. Labels include: FIRE ALARM CONTROL PANEL, DISTRIBUTION PANEL, and CONDUIT.

[illegible]

STATE CERTIFICATION



City of Puyallup
Development & Permitting Services
ISSUED PERMIT

Building	Planning
Engineering	Public Works
Fire	Traffic

REVISIONS

REVISIONS			
NO	DATE	BY	DESCRIPTION

CONTRACT WITH:

PROJECT NAME:

PUYALLUP 1
1601 INDUSTRIAL PARK WAY
SUITE 103
PUYALLUP, WA 98371



2707 70TH AVENUE E
TACOMA WA 98424

PATRIFFP099C
WWW.PATRIOTFIRE.CO
Stevyn.Stuart@patriotfire.co

TEL: (253) 926-229
FAX: (253) 922-615

DESIGNER	STEYVN S	SHEET	FA-104
DATE	12/12/23	4 OF 4	
JOB NO	16-4444		

FA-104