

Circuit Calculations

WALL-MOUNTED DETECTOR

FINISHED — WALL

1 221.0000mA #14 0.60 0.1223V 0.6 Ohms 1503'-0

Panel: P1 Card: 00

Total Len | ASD-PL3, 2.000mA | MS-7AF, 3.000mA | AMM-2IF, 0.970mA | AMM-2F, 0.600mA | Total Amps | Gauge | V Drop % | V Drop | Resistance | Max Len

Circuit Description Type Total Len P2RK, 110CD, 221.000mA EOL-4.7 Total Amps Gauge V Drop % V Drop Resistance Max Len

NFPA 72 3' MINIMUM

**MONITORING** 

(TBD)

**NEW FACP** 

**GWF-7075** 

Calculations based on Lump Sum Length.

Terminal Voltage: 16V:DC Amperage: 1.0000A

Cable: 18/2 SOL JKT FPLR 1M RL RED #18

Calculations based on Lump Sum Length.

DEVICE MOUNTING HEIGHTS

SYNCHRONIZE MORE THAN TWO APPLIANCES IN ANY FIELD OF VIEW NFPA 72

FINISHED FLOOR

**EOL 4.7K Ω** 

Circuit Description

Design Criteria: Ambient temperature: 167°F Max. operating voltage drop: 10%

Design Criteria: Ambient temperature: 167°F Max. operating voltage drop: 10%

CEILING MOUNTED

**WP 110CD** 

Signaling line/FCI - SLC, VELOCITY 57'-11/4

CEILING MOUNTED SMOKE / HEAT DETECTOR

10' A.F.F. ANYTHING ABOVE 10' SHALL BE DERATED

Notification 90'-11/4

		Part No:GWF-7075 - GWF-7075, INTELLIGENT FA	OD RED			
		·	T .			
Part No.	Qty.	Description	Standby	Total Standby	Alarm	Total Alarm
		Panel Equipment				
WF-7075_MB	1	GWF-7075_MB	165.0000mA	165.0000mA	310.0000mA	310.0000mA
			Total Panel Stby	165.0000mA	Total Panel Alarm	310.0000mA
		Peripheral Devices				
P2RK	1	HORN/STROBE, 2 WIRE, STANDARD CD, RED, OUTDOOR (Notification) 110CD 88dB	0.0000mA	0.0000mA	221.0000mA	221.0000mA
EOL-4.7	1	EOL-4.7K (Notification)	0.0000mA	0.0000mA	0.0000mA	0.0000mA
MS-7AF	1	PULL STATION, DOUBLE ACTION, ADDRESSABLE (Signaling line)	0.3000mA	0.3000mA	3.0000mA	3.0000mA
ASD-PL3	1	PHOTO, SMOKE, DETECTOR, BRIGHT WHITE (Signaling line)	0.2000mA	0.2000mA	2.0000mA	2.0000m/
AMM-2F	1	MONITOR MODULE, ADDRESSABLE, CLASS B (Signaling line)	0.3750mA	0.3750mA	0.6000mA	0.6000m/
AMM-2IF	2	DUAL MONITOR MODULE, ADDRESSABLE, CLASS B (Signaling line)	0.7500mA	1.5000mA	0.9700mA	1.9400m <i>A</i>
			Total Peripheral Stby	2.3750mA	Total Periph Alarm	228.5400m/
			Total Standby Amps	167.3750mA	Total Alarm Amps	538.5400mA
			•			
				Sta	ndby time: 24 Hrs	4.017Ah
					Alarm time: 5 Min	0.045Ah
				Ва	tterv requirement:	4.062Ah

4.874Ah Compensation Factors - Standby: 1.2 Alarm: 1.2 Requirement with compensation: SYSTEM INPUTS A | B | C | D | E | F | G | H | I | J | K | L 1 | Manual Fire Alarm Boxes 2 Smoke Detectors • 2 3 Waterflow **●** 3 4 | Sprinkler Control Valve 5 5 Fire Alarm AC Power Failure 6 Fire Alarm System Low Battery 6 7 Open Circuit 8 Ground Fault **l** 9 9 Notification Appliance Circuit Short 

**OPERATIONAL MATRIX** 

A | B | C | D | E | F | G | H | I | J | K | L

SYSTEM OUTPUTS

Notification

## GENERAL NOTES / SCOPE OF WORK 1. SYSTEM WIRING NOTED ON THE DRAWINGS IS PER MANUFACTURE AND CODE

- REQUIREMENTS. ANY ALTERATION TO SYSTEM WIRING, WITHOUT APPROVAL, IS AT ELECTRICAL CONTRACTOR'S OWN RISK!!
- 2. SYSTEM WIRING SHOWN ON DRAWINGS IS DIAGRAMMATIC AND ONLY USED FOR REFERENCE PURPOSES. ACTUAL WIRE AND DEVICE INSTALLATION MAY VARY DUE TO OBSTRUCTIONS.

3. WIRE SHOWN IN THIS DRAWING SET IS PERMITTED IN RACEWAYS LEADING TO

- FIRE PROTECTION EQUIPMENT. OTHER WIRE SHALL NOT BE PERMITTED IN THE SAME RACEWAY. 4. FIRE ALARM SYSTEM INSTALLATION SHALL CONFORM WITH THE LATEST U.L.,
- N.E.C., N.F.P.A., W.A.C., AND OTHER STANDARDS AS APPLICABLE TO THE CITY

5. WHEN NECESSARY, DUE TO CHANGING DESIGN REQUIREMENTS, FACTORY AVAILABILITY, ETC. FIRE SYSTEMS WEST RESERVES THE RIGHT TO SUBSTITUTE

- EQUIPMENT HEREIN MENTIONED OR SPECIFIED, WITH EQUIPMENT OF EQUAL OR BETTER QUALITY, FUNCTION AND DESIGN. 6. PARALLEL BRANCHING (T-TAPPING) OF WIRE TO ALL NOTIFICATION APPLIANCE
- CIRCUITS SHALL NOT BE PERMITTED.
- 7. FIRE SYSTEMS WEST WILL INSTALL A NEW FIRE ALARM CONTROL PANEL.
- 8. FIRE SYSTEMS WEST WILL INSTALL A NEW SMOKE DETECTOR AND MANUAL PULL STATION AT THE FIRE ALARM CONTROL PANEL.
- 9. FIRE SYSTEMS WEST WILL INSTALL NEW DUAL INPUT MODULES TO MONITOR THE SPRINKLER RISER SYSTEM.
- 10. FIRE SYSTEMS WEST WILL INSTALL A NEW DUAL INPUT MODULE TO MONITOR THE KITCHEN HOOD SUPPRESSION SYSTEM.
- 11. FIRE SYSTEMS WEST WILL INSTALL A NEW EXTERIOR NOTIFICATION DEVICE.





1 2.3750mA #18 0.01 0.0021V 0.9 Ohms 43351'-0

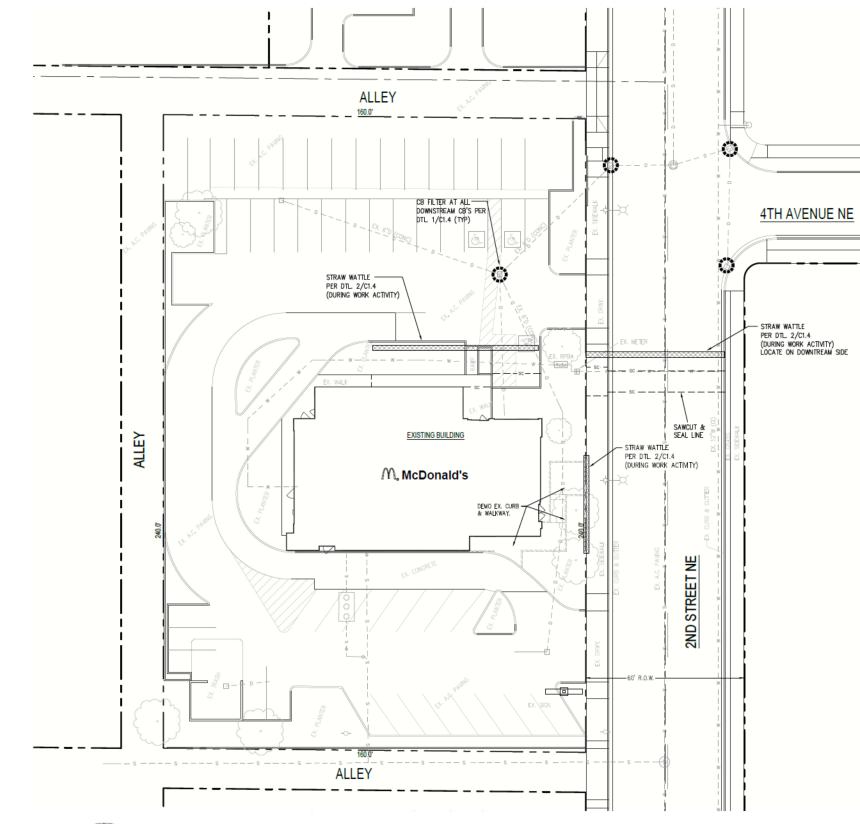
10/03/2024

10:07:35 AM

City of Puyallup THE APPROVED CONSTRUCTION PLANS AND ALL ENGINEERING Fire MUST BE POSTED ON THE JOB AT **REVIEWED** ALL INSPECTIONS IN A VISIBLE AND **FOR** READILY ACCESSIBLE LOCATION. **COMPLIANCE DDrake** 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.

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



DESIGNER

CAMRYN OLIVAREZ NICET FAS-II, #153071

FIRE SYSTEMS WEST, INC

206 FRONTAGE ROAD NORTH #C

PACIFIC, WASHINGTON 98047

(aux)

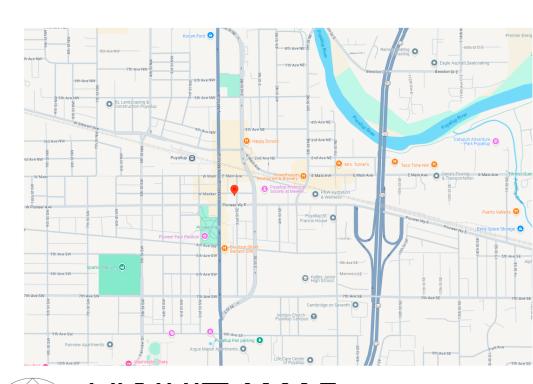
**REVISIONS** 

ISSUED\_FOR\_REVIEW 09/06/2024 CO MWC

DATE BY CHK

DESCRIPTION





**VICINITY MAP** N NOT TO SCALE



206 Frontage Rd. North #C Pacific, WA 98047 f:(253) 735-0113 t:(253) 833-1248 WA ECL# FIRESWI 055LW WA CL# FIRESWI 140B1



**20 AMP DEDICATED CIRCUIT** 

14/2 FPLP 16/2 FPLP EX **EXISTING LOCATION DEMO DEVICE NEW DEVICE** RELOCATE STROBE COVERAGE AREA SHALL BE DEFINED AS 20 FT. CLG. HT. 30 FT. CLG. HT. 75 cd = 20'x20'30 cd = 30'x30'95 cd = 30'x30' 75 cd = 30'x30'

95 cd = 50'x50'

95 cd = 40'x40'

110 cd = 50'x50'

110 cd = 40'x40'

115 cd = 50'x50'

**OCCUPANT TYPE:** OCCUPANT LOAD: AREA: CONSTRUCTION:

CODE COMPLIANCE

PUYALLUP MUNICIPAL CODE

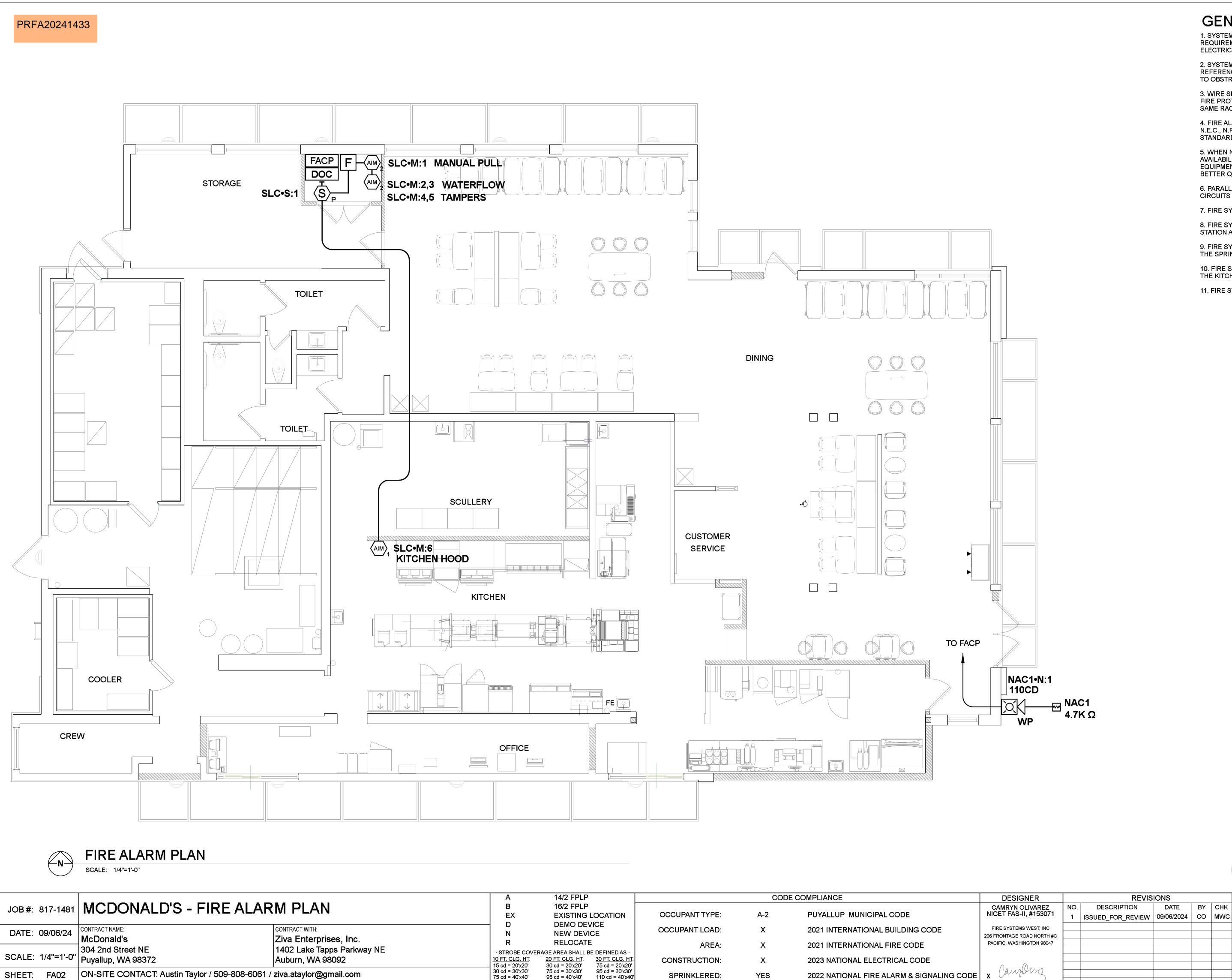
2021 INTERNATIONAL BUILDING CODE

2023 NATIONAL ELECTRICAL CODE

2021 INTERNATIONAL FIRE CODE

2022 NATIONAL FIRE ALARM & SIGNALING CODE

SPRINKLERED:



95 cd = 40'x40' 110 cd = 50'x50'

110 cd = 40'x40'

115 cd = 50'x50'

75 cd = 40'x40'

95 cd = 50'x50'

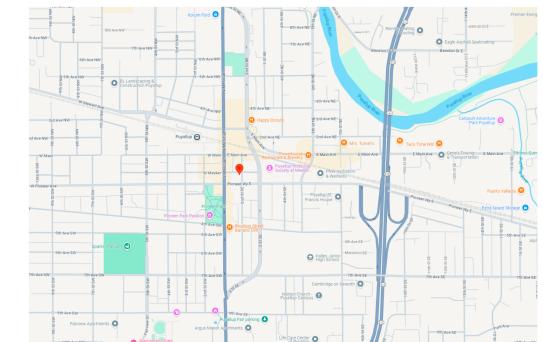
## GENERAL NOTES / SCOPE OF WORK

- 1. SYSTEM WIRING NOTED ON THE DRAWINGS IS PER MANUFACTURE AND CODE REQUIREMENTS. ANY ALTERATION TO SYSTEM WIRING, WITHOUT APPROVAL, IS AT ELECTRICAL CONTRACTOR'S OWN RISK!!
- 2. SYSTEM WIRING SHOWN ON DRAWINGS IS DIAGRAMMATIC AND ONLY USED FOR REFERENCE PURPOSES. ACTUAL WIRE AND DEVICE INSTALLATION MAY VARY DUE TO OBSTRUCTIONS.
- 3. WIRE SHOWN IN THIS DRAWING SET IS PERMITTED IN RACEWAYS LEADING TO FIRE PROTECTION EQUIPMENT. OTHER WIRE SHALL NOT BE PERMITTED IN THE SAME RACEWAY.
- 4. FIRE ALARM SYSTEM INSTALLATION SHALL CONFORM WITH THE LATEST U.L., N.E.C., N.F.P.A., W.A.C., AND OTHER STANDARDS AS APPLICABLE TO THE CITY STANDARDS.

5. WHEN NECESSARY, DUE TO CHANGING DESIGN REQUIREMENTS, FACTORY AVAILABILITY, ETC. FIRE SYSTEMS WEST RESERVES THE RIGHT TO SUBSTITUTE

- EQUIPMENT HEREIN MENTIONED OR SPECIFIED, WITH EQUIPMENT OF EQUAL OR BETTER QUALITY, FUNCTION AND DESIGN.
- 6. PARALLEL BRANCHING (T-TAPPING) OF WIRE TO ALL NOTIFICATION APPLIANCE CIRCUITS SHALL NOT BE PERMITTED.
- 7. FIRE SYSTEMS WEST WILL INSTALL A NEW FIRE ALARM CONTROL PANEL.
- 8. FIRE SYSTEMS WEST WILL INSTALL A NEW SMOKE DETECTOR AND MANUAL PULL STATION AT THE FIRE ALARM CONTROL PANEL.
- 9. FIRE SYSTEMS WEST WILL INSTALL NEW DUAL INPUT MODULES TO MONITOR THE SPRINKLER RISER SYSTEM.
- 10. FIRE SYSTEMS WEST WILL INSTALL A NEW DUAL INPUT MODULE TO MONITOR THE KITCHEN HOOD SUPPRESSION SYSTEM.
- 11. FIRE SYSTEMS WEST WILL INSTALL A NEW EXTERIOR NOTIFICATION DEVICE.

City of Puyallup Development & Permitting Services
ISSUED PERMIT Planning **Public Works** Engineering



**VICINITY MAP** N NOT TO SCALE



206 Frontage Rd. North #C Pacific, WA 98047 f:(253) 735-0113 t:(253) 833-1248 WA ECL# FIRESWI 055LW

WA CL# FIRESWI 140B1