

MITSUBISHI CITY MULTI VRF INDOOR UNIT SCHEDULE - SECOND FLOOR											
Tag Reference	Model	Type	Nominal Cooling Capacity (BTU/h)	Nominal Heating Capacity (BTU/h)	Refrig Pipe Dim Liquid/Suction (inch)	Peak Fan Airflow (cfm)	Max Fan ESP Setting 208V/230V (IN WG)	Voltage / Phase	Electrical MCA/MCS	Weight	Notes / Options
AH-1	PEFY-P36NMAU-E3	Ceiling concealed type (ducted)	36,000.0	40,000.0	3/8" / 5/8"	1165	0.8/0.8	208/230V1-phase	3.50/208V/3.50/230V/15	86 lbs	1,2
AH-2	PEFY-P36NMAU-E3	Ceiling concealed type (ducted)	36,000.0	40,000.0	3/8" / 5/8"	1165	0.8/0.8	208/230V1-phase	3.50/208V/3.50/230V/15	86 lbs	1,2

- Notes & Options:  
 1. Units are heating only for this phase of the project. Phase 3 of project will tie into a Variable Refrigerant Flow system.  
 2. Per WSEC Section C403.3, Exception #1, DOAS is provided and economizer is not required.

Air Handler Tag	Fan-Coil Units Model #	Supply Air Opening WxH	Supply Air Plenum ID, WxH	Return Air Opening WxH	Filter Rack WxH	Filters Quantity & Size	Airflow CFM	Filter Velocity FPM
AH-1,2	PEFY-P36NMAU-E3	53-9/16" x 7-1/16"	54x8	53-1/2" x 8-5/16"	60x10	x3 10x20x2	1165	280

Lossnay Tag	Make and Model	Core Type	Airflow (cfm)	Max ESP (INWG)	Nominal Recovery Effectiveness (Extra High Fan Speed)			Voltage / Phase	MCA / MOCF	Weight LBS	Sound Rating dB(A)	Notes / Options
					Efficiency	Heating	Cooling					
ERV-1	Lossnay LGH-F300RVX-E	Fixed Permeable Cross Plate	300	0.46	66%	63%	50%	208V1-Phase	2.05/15	75	34	
ERV-2	Lossnay LGH-F470RVX-E	Fixed Permeable Cross Plate	470	0.6	69%	64%	51%	208V1-Phase	3.1/15	110	34.5	

Thermostat & Controller Schedule					
I.D. No.	Mfr. & Model	Type	Unit Served	Notes	Quantity
T	Mitsubishi PAR-40MAU	Thermostat	AH-1 & AH-2	Mount @ 48" A.F.F.	2

T-stat shall be programmable, capable of 5 degree deadband, and have 2 occupied/2 unoccupied schedules for seven days per week. T-stat shall be capable of automatically adjusting the daily start time of the HVAC system in order to bring each space to the desired occupied temperature immediately prior to scheduled occupancy.

Louver Schedule												
I.D. No.	Mfr.	Model	Location	Size	Free Area	Max. CFM	S.P.	Frame	Finish	Quantity	Notes	
L-1	Greenheck	ESD-403	East Wall	30x14	1.15	770	0.09" w.c.	Flanged	Mill	2		
L-2	Greenheck	ESD-403	East Wall	12x12	0.3	55	0.02" w.c.	Flanged	Mill	1		

Duct Heater Schedule										
I.D. No.	Unit	Mfr.	Model	Duct Size	KW	Voltage	Ph.	Control	Notes	
DH-1	ERV-1	Warren	CBK	10"	5	480	3	24 V.	1	
DH-2	ERV-2	Warren	CBK	12"	8	480	3	24 V.	1	
DH-3	AH-1	Warren	CBK	16"	12	480	3	24 V.	1	
DH-4	AH-2	Warren	CBK	16"	6	480	3	24 V.	1	

- Notes:  
 1. Provide built-in thermostat with SCR, Set to 72°. Enabled when OSA temp is below 45°F. Interlock to unit ERV.  
 2. Provide built-in thermostat with SCR, Set to 72°. Interlock to unit AH.

B-20-0306

Mechanical Sheet Index	
Sheet	Title
M-1	HVAC Notes & Schedules
M-2	HVAC Main Floor Plan & Building Section
Site	Site Plan (Jeff Brown Architecture)

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

FULL SIZED LEDGIBLE COLOR PLANS ARE REQUIRED TO BE PROVIDED BY THE PERMITEE ON SITE FOR INSPECTION

Approval of submitted plans is not an approval of omissions or oversights 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 codes and regulations of the local government.

City of Puyallup Building ACCEPTED

JMontgomery  
08/17/2022  
8:02:33 AM



Ductless Split System Indoor Unit Schedule											
I.D. No.	Area Served	Outdoor Unit	Mfr.	Model	Type	Electrical Data			Wall Mount Controller	Op. Wt. lbs	Notes
						Voltage	Ph.	MCA			
AH-01	Elevator Machine Room	HP-01	Carrier	40MAHQ12	Wall-Mounted	208	1	0.3125A	Yes	23 lbs.	1,2,3

- Notes:  
 1) Provide with condensate drain pan and condensate pump option.  
 2) See corresponding outdoor unit schedule for capacity and efficiency data.  
 3) High efficiency heat pumps are provided in lieu of Economizer per WSEC Section 403.5, Exception #11, option a.

Ductless Split System Heat Pumps Outdoor Unit Schedule															
I.D. No.	Area Served	Mfr.	Model	Refrigerant	Cooling Capacity		Heating Capacity		Electrical Data			Op. Wt.	Line Set	Notes	
					Total btuh	SEER/EER	Total btuh	HSPF/COP	Voltage	Ph.	MCA				MOCF
HP-01	Elevator Machine Room	Carrier	38MARBQ12AA3	R-410A	12,000	25.5/14.0	12,000	13/3.81	208/230	1	15	15	73 lbs.	1/4"L, 1/2"S	1

- Notes:  
 1) High efficiency heat pumps are provided in lieu of Economizer per WSEC Section 403.5, Exception #11, option a.

Fan Schedule													
I.D. No.	Area Served	Mfr.	Model	Type	CFM	S.P.	RPM	Voltage	Ph.	HP or W	Op. Wt.	Controlled By	Notes
EF-01	Janitors	Greenheck	SP-80-VG	Centrifugal	55	0.375"	935	120	1	6.1 W	12 lbs.	Timer	1,2

- Notes:  
 1) Provide all fans with 70% or greater efficiency motors or ECM as required by WSEC.  
 2) EC to provide starter and disconnect.

**SCOPE OF WORK**

New Addition - Restrooms and Lobby

- Design new HVAC to suit new addition.
- Design new Men's, Women's restrooms exhaust systems.
- Provide Heating and Cooling Calculations.
- Assist with Envelope Compliance Calculations.
- Provide Plans for permitting and construction by ASEI.
- Plans to be designed under the supervision of a licensed Professional Engineer.

**GENERAL NOTES**

- All duct sizes shown are clear inside dimensions.
- All duct gauges and supports per 2015 International Mechanical Code and SMACNA Duct Construction Manual. All ductwork is constructed and sealed per IMC.
- ASEI to air balance all systems to within 10% of design airflow upon project completion.
- All duct transverse seams and longitudinal joints shall be sealed.
- Materials within ducts or plenums shall have a flame spread rating less than 25 and a flame smoke development rating less than 50 per WSEC 2015.
- All duct systems on this project are low pressure.
- Auxiliary condensate drain overflow protection shall be provided per 2015 International Mechanical Code 307.2.3.
- All ductwork is constructed and sealed per IMC. OSA ductwork meets air leakage requirements per C402.5 and vapor retarder requirements per the IBC Insulate supply and return duct work were not located in conditioned space with minimum R-6 Johns Manville Permacote Linacoustic R-300 liner or wrap. Insulate all outside air ducts with minimum R-8 Johns Manville Permacote Linacoustic R-300 liner or wrap. OSA ductwork meets air leakage requirements per C402.5 and vapor retarder requirements per the IBC.
- 90% or more of all occupied, conditioned spaces are served by a DOAS per WSEC Section C403.6. Heating and cooling fans are configured to shut off and central equipment is configured to turn down, when there is no call for heating and cooling in the zone they serve.
- Condensate drain piping shall be copper, PVC, or PEX.
- Provide 1/2" SL for all air handler plenums constructed of sheet metal.
- Spaces with DOAS and a heating/cooling system shall operate independently. Heating and cooling are configured to shut off when there is no call for heating or cooling per IECC section C403.6.2.
- Mechanical ventilation is provided per IMC and configured to provide no more than 150% of the minimum required volume of outdoor air to each zone.
- Adjacent zones controlled by separate thermostats are configured to prevent adjacent zones from operating in conflicting modes (one in heat, other in cool).

**COORDINATION NOTES**

**General Contractor**

- General Contractor to cut and provide openings for all rooftop, ceiling, floor, and wall penetrations, including weatherproof sealing. ASEI to provide size and location.
- General Contractor to provide framed openings where required for all mechanical penetrations, including headers if required. General Contractor to verify penetration locations with ASEI before framing openings.
- General Contractor to provide service access per code to all mechanical equipment.
- General Contractor to provide structure for mounting and hanging members of mechanical equipment.
- General Contractor to provide all cutting of t-bar ceiling and extra material as required for HVAC installation.
- General Contractor to provide access panels in hard lid ceiling.

**Plumbing Contractor**

- ASEI to furnish and install all condensate drain lines per code.
- Plumbing Contractor to offset vents 10 feet minimum from all HVAC fresh air intakes.

**Electrical Contractor**

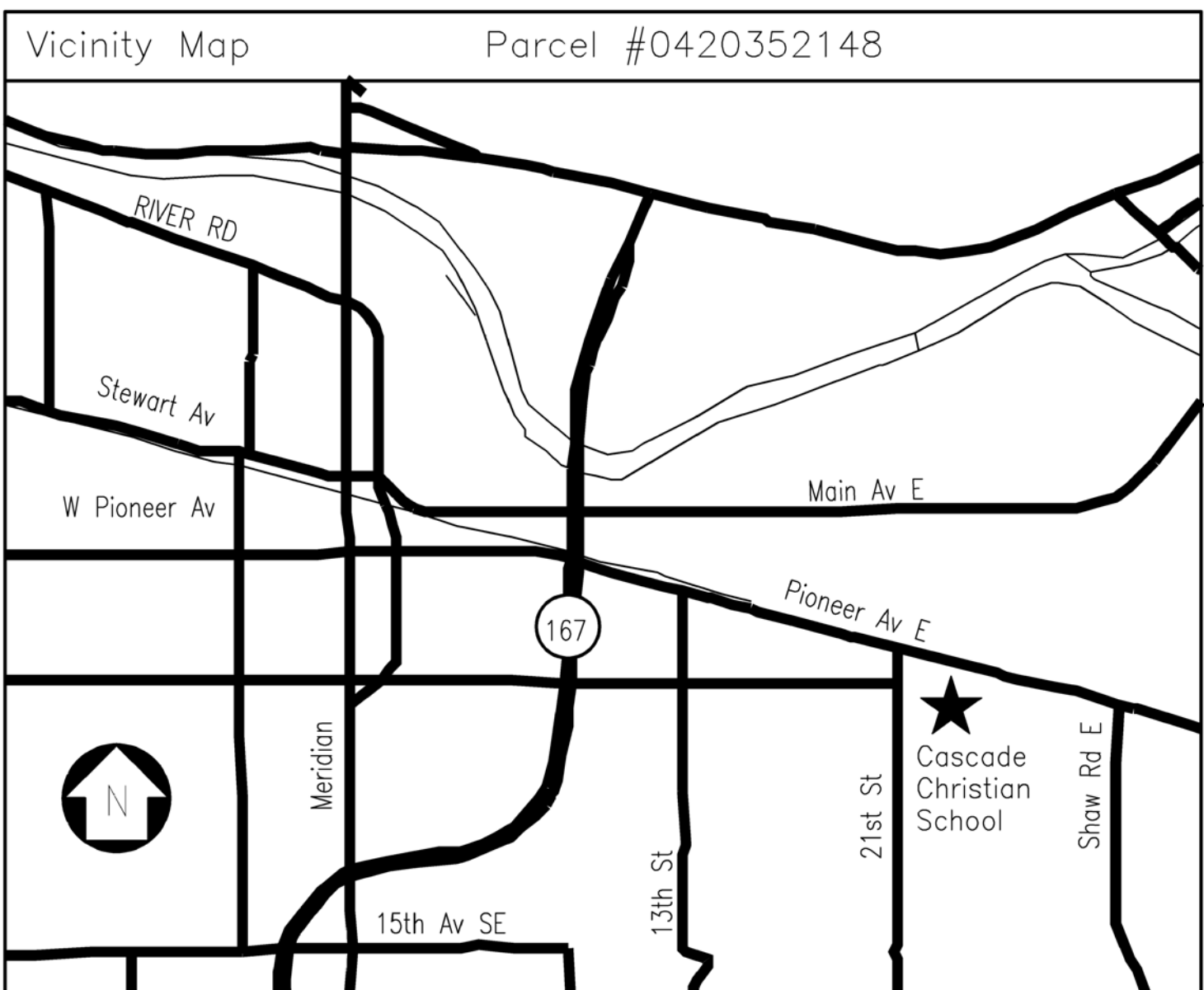
- Electrical Contractor to provide all electrical connections, disconnects, and motor starters for mechanical equipment.
- ASEI to install all 24 volt low voltage wiring for thermostats.
- Electrical Contractor to verify equipment sizes, loads and locations with ASEI mechanical plan and with field conditions.
- Electrical Contractor to provide 120v service outlet within 25 feet of each piece of mechanical equipment.
- Electrical Contractor to install all line voltage wiring and conduit.

**COMPLETION**

Provide Test and Balance Report, Equipment Startup Test Reports, Operation and Maintenance Manuals, and As-built Record Drawings, as applicable, to Owner upon Project Completion.

**Tax Description**

Section 35 Township 20 Range 04 Quarter 21 - PARCEL "A" OF DBLR 95-12-11-0261 DESC AS FOLL COM AT INTER OF 21ST ST SE & 9TH AVE SE BEING ON SEC LI BETWEEN SECS 26 & 35 TH E ALG SD SEC LI 30 FT TO ELY R/W LI OF SD 21ST ST SE & POB TH CONT E ALG SD SEC LI 181 FT TH N 01 DEG 11 MIN 52 SEC W 88 FT TH S 88 DEG 59 MIN 43 SEC W 181 FT TO ELY R/W LI OF 21ST ST SE TH N ALG SD R/W LI 91.25 FT TH E PAR/W SEC LI 585 FT TH N 01 DEG 11 MIN 52 SEC W 143.25 FT TH E PAR/W SEC LI 672.34 FT TO WLY R/W OF 25TH ST SE TH S ALG SD R/W 322.5 FT TO SEC LI TH CONT ALG SD WLY R/W LI OF 25TH ST SE 215.97 FT TH S 89 DEG 15 MIN 54 SEC W 253.06 FT TH S 01 DEG 01 MIN 12 SEC E 312.48 FT TH S 89 DEG 15 MIN 54 SEC W 371 FT TO E LI OF NW OF NE OF NW TH N ALG SD SUBD 196.75 FT TO SE COR OF N 1/2 OF NW OF NE OF NW TH W ALG SD SUBD 513.88 FT TO SE COR OF S 144 FT OF W 150 FT OF N 1/2 OF NW OF NE OF NW TH N 00 DEG 55 MIN 06 SEC W 144 FT TH S 89 DEG 09 MIN W 120 FT TO SD ELY R/W OF 21ST ST SE TH N ALG SD R/W 183.05 FT TO POB OUT OF 2-145, 2-010 & 04-20-26-3-007 SEG H-0611 JU 1/23/96JU



CITY OF PUYALLUP APPROVAL (#B-20-0306)

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

CITY OF PUYALLUP PROJECT # B-20-0308



REVISIONS	DATE	CHANGE
	APRIL 29, 2020	PERMIT SET
	OCTOBER 6, 2020	ACCESS
	NOVEMBER 2, 2021	LOBBY REVISION
	MAY 20, 2022	GAS PIPE REVISION
	JULY 21, 2022	NATURAL GAS PIPE REVISION

DRAWN	DATE	DESIGN	DATE	APPROVED
BSR	APRIL 23, 2020	JL	APRIL 23, 2020	

CASCADE CHRISTIAN SCHOOL  
 JR HIGH SCHOOL GYM LOBBY ADDITION  
 HVAC SCHEDULES AND NOTES  
 815 21ST ST SE  
 PUYALLUP, WA 98372

AIR SYSTEMS Engineering Inc. DESIGN & INSTALLATION (206) 576-9884 3002 SOUTH PINE/FAVORITE, WA 98469

**COMFORTUSA SYSTEMS**

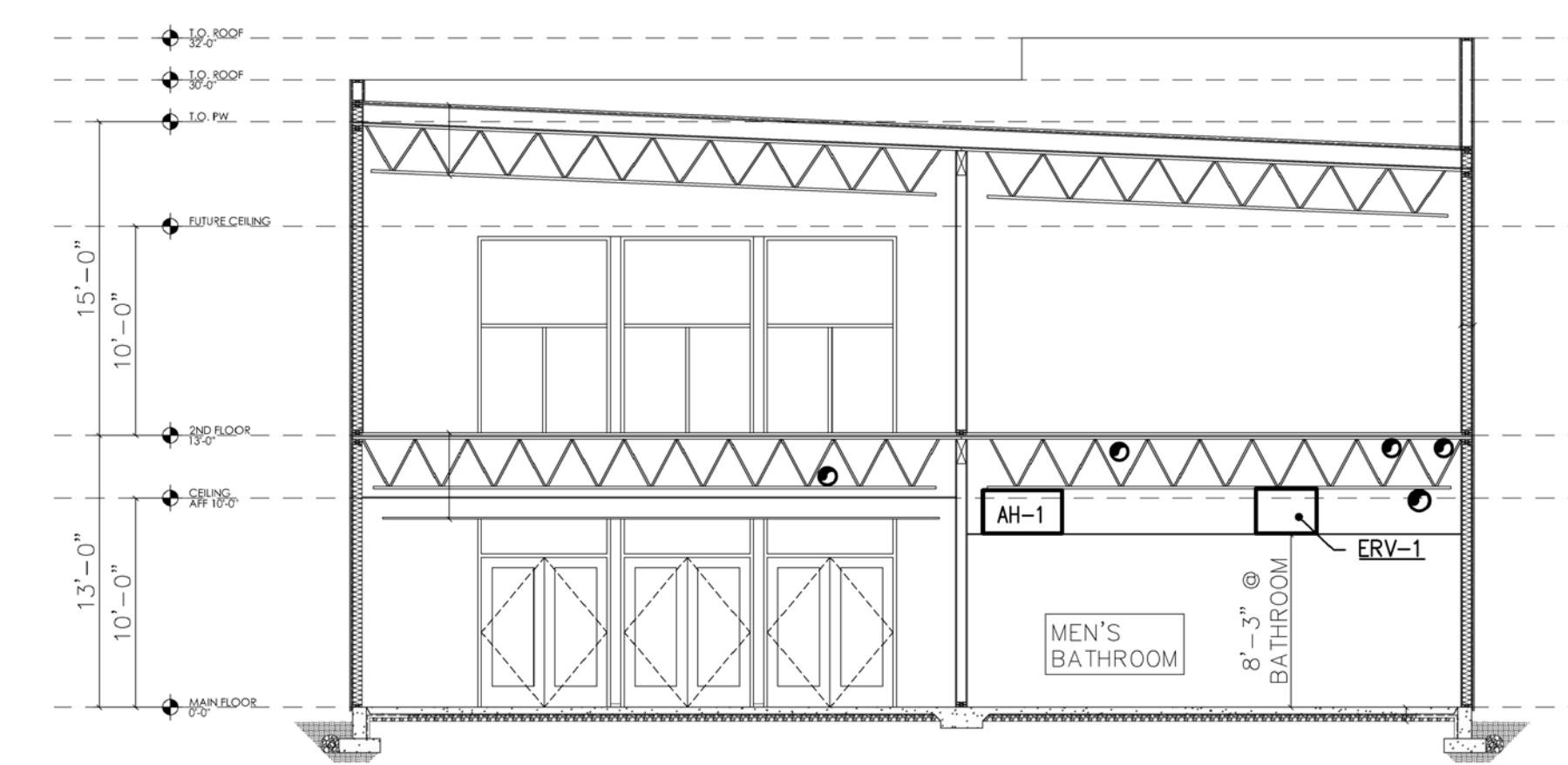
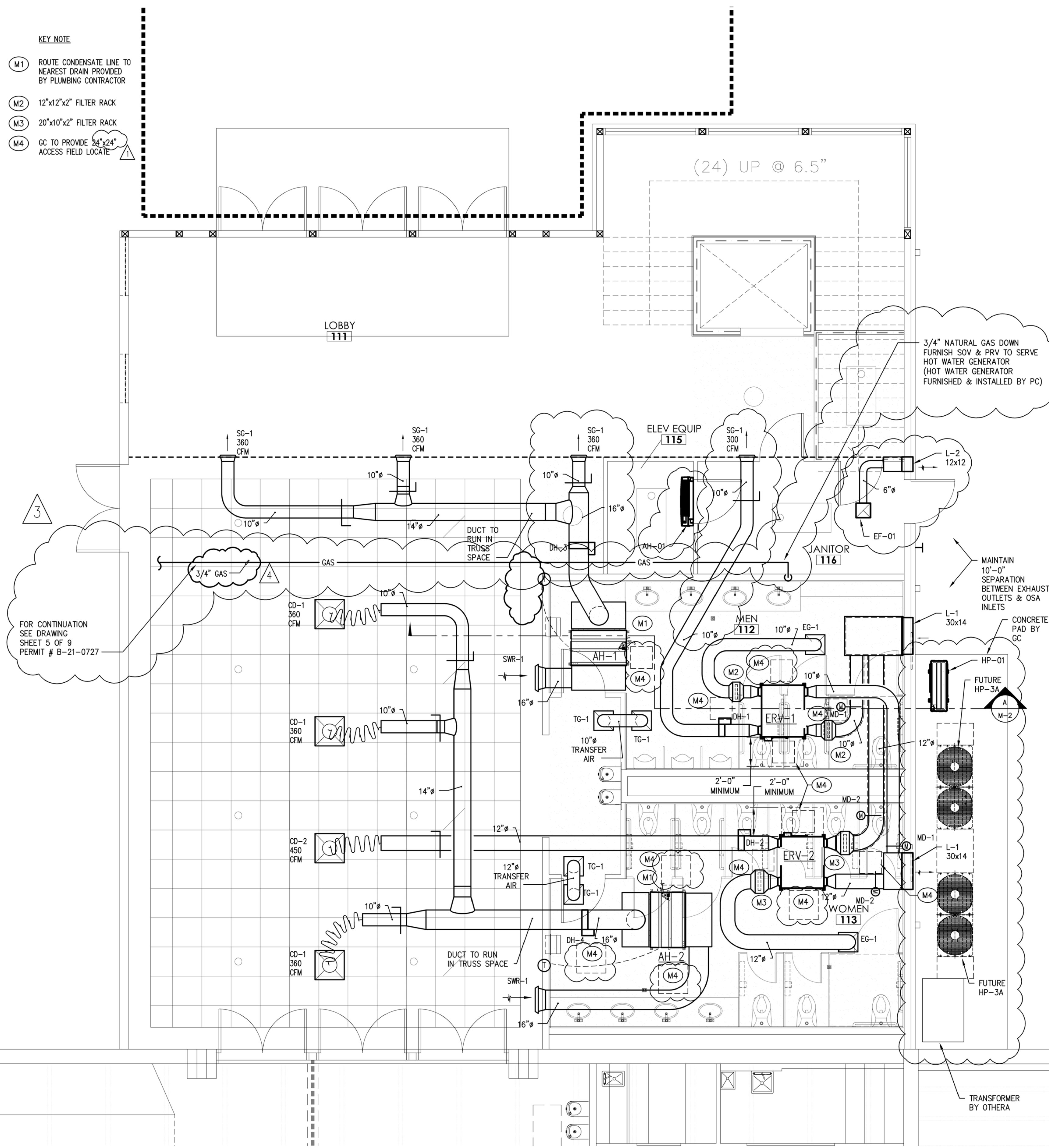
AIR CONDITIONING/SHEET METAL/REFRIGERATION/PROFESSIONAL ENGINEERS/SERVICE & MAINTENANCE

SHEET NO. **M-1** OF **2** JOB NO. **4126**

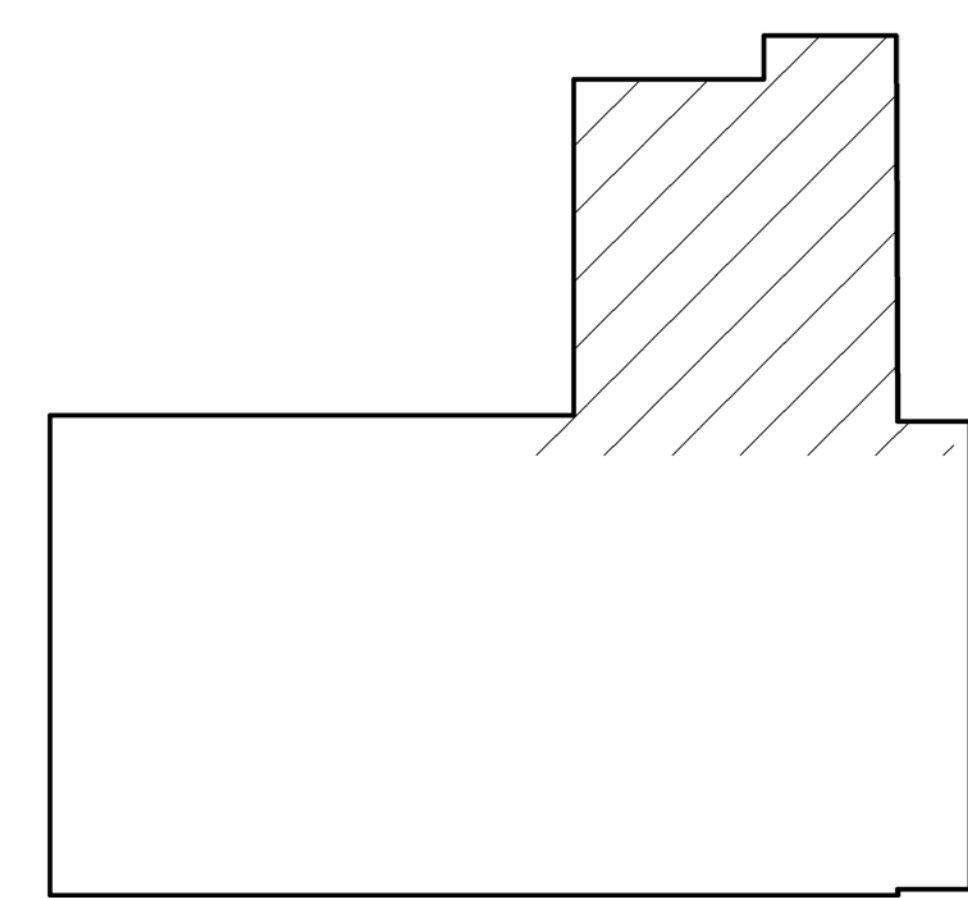
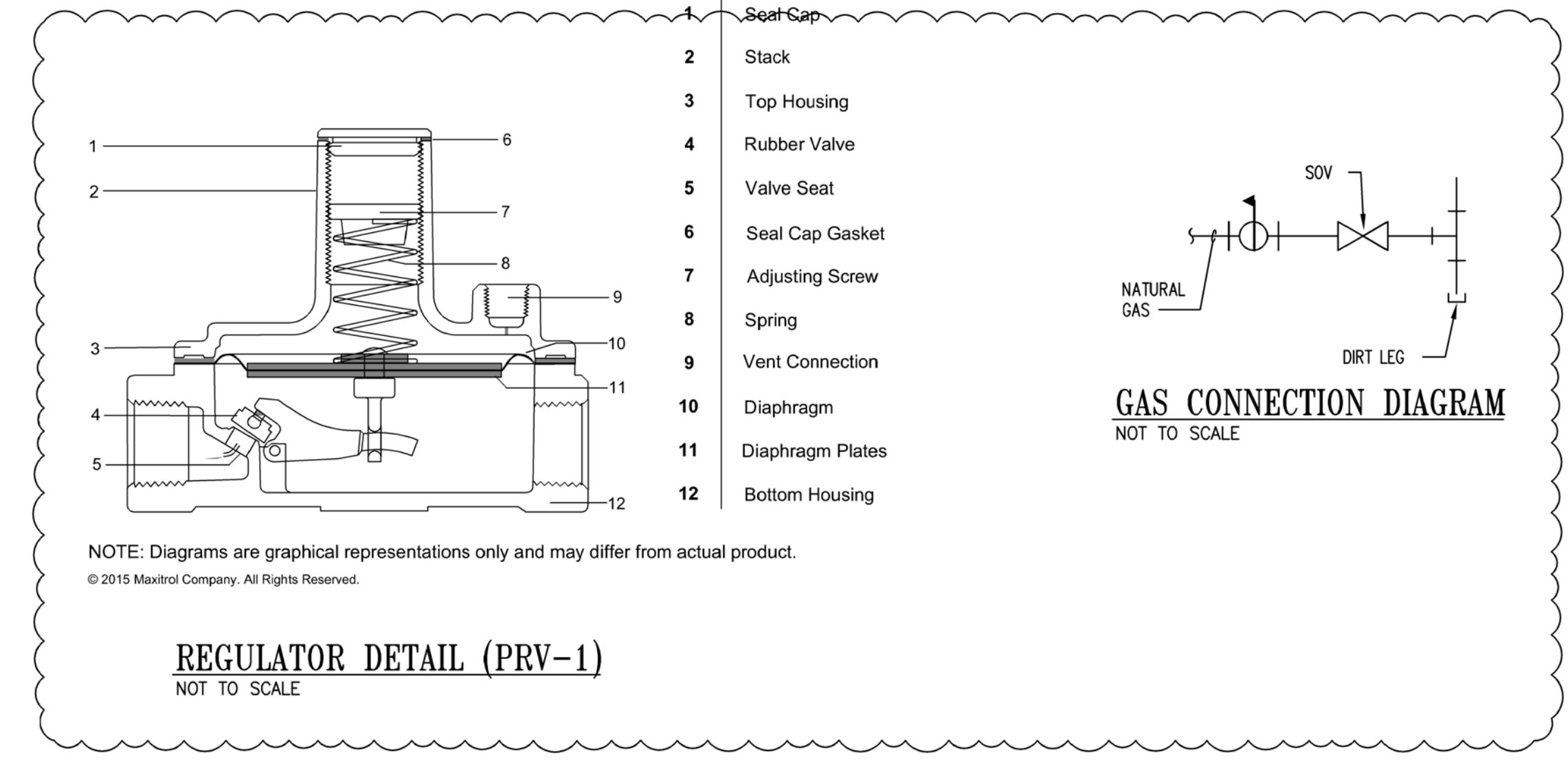


B-20-0306

- KEY NOTE**
- M1 ROUTE CONDENSATE LINE TO NEAREST DRAIN PROVIDED BY PLUMBING CONTRACTOR
  - M2 12"x12"x2" FILTER RACK
  - M3 20"x10"x2" FILTER RACK
  - M4 GC TO PROVIDE 24"x24" ACCESS FIELD LOCATE



**A BUILDING SECTION**  
M-2 1/8"=1'-0"



**KEY PLAN**  
NOT TO SCALE

**MAIN FLOOR HVAC PLAN**  
1/4"=1'-0"

REVISIONS	CHANGE	DATE
PERMIT SET		APRIL 29, 2020
ACCESS		OCTOBER 6, 2020
LOBBY REVISION		NOVEMBER 2, 2021
GAS PIPE REVISION		MAY 20, 2022
NATURAL GAS PIPE REVISION		JULY 21, 2022

DRAWN	DESIGN	DATE
BSR	JL	April 23, 2020

APPROVED

CASCADE CHRISTIAN SCHOOL  
JR HIGH SCHOOL GYM LOBBY ADDITION  
MAIN FLOOR HVAC PLAN & BUILDING SECTION

815 21ST ST SE  
PUYALLUP, WA 98372

**Air Systems Engineering Inc.**  
AIR CONDITIONING DESIGN & INSTALLATION  
(253) 575-9884  
3802 SOUTH PINE/FACOML WA 98469

**COMFORTS USA SYSTEMS**  
AIR CONDITIONING/SHEET METAL/REFRIGERATION/PROFESSIONAL ENGINEERS/SERVICE & MAINTENANCE

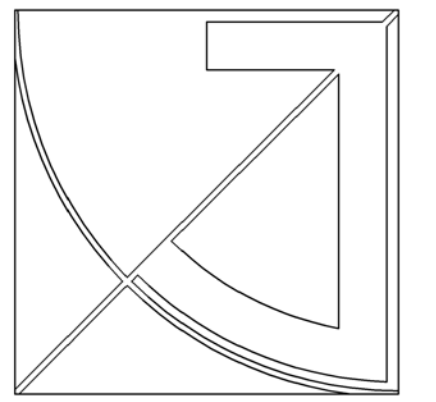
City of Puyallup  
Development & Permitting Services  
**ISSUED PERMIT**

Building	Planning
Engineering	Public Works
Fire	Traffic

SHEET NO. **M-2** OF 2  
JOB NO. 4126

B-20-0306

City of Puyallup Development & Permitting Services ISSUED PERMIT	
Building	Planning
Engineering	Public Works
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**JEFF BROWN  
ARCHITECTURE**

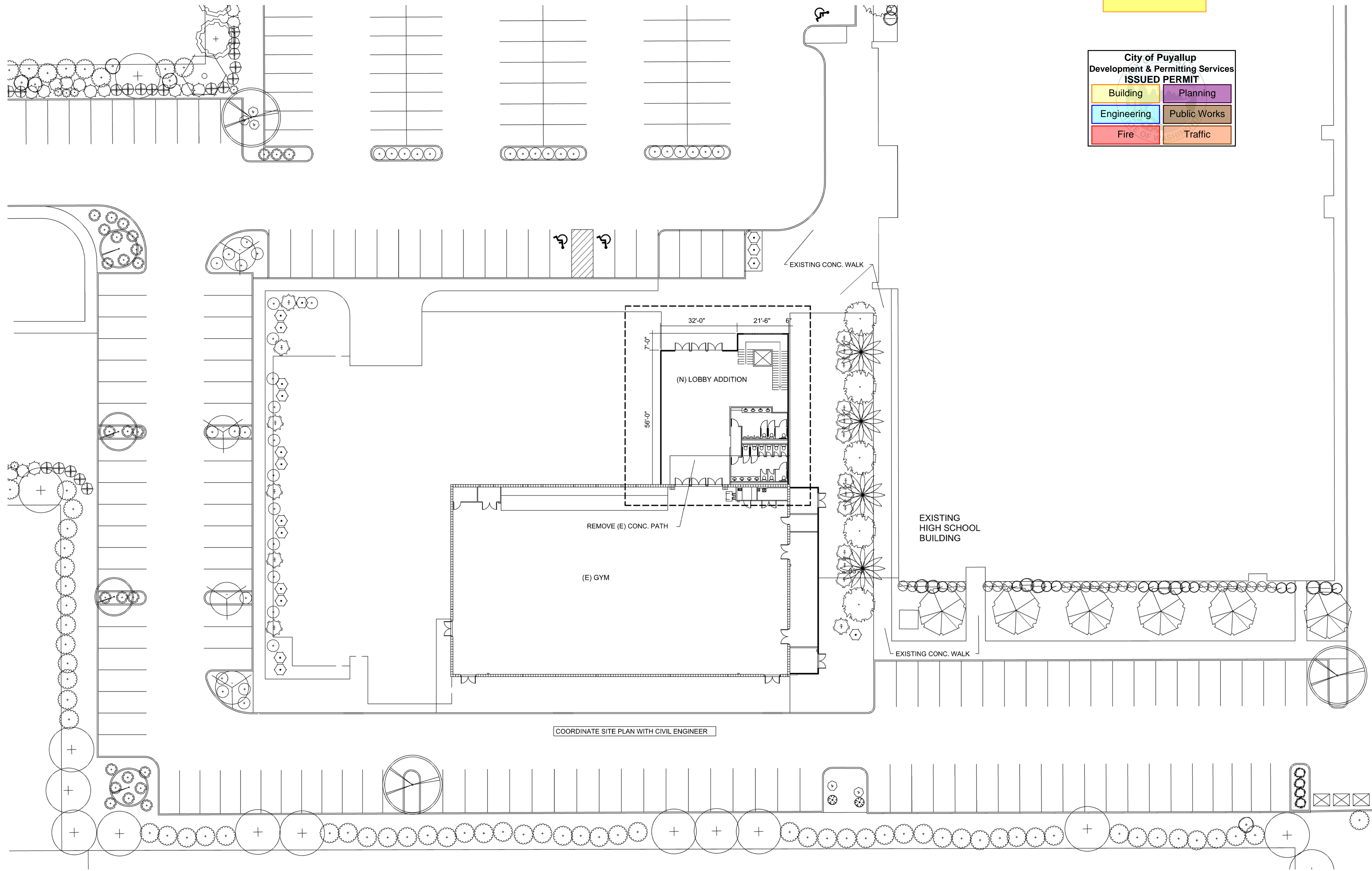
JEFF BROWN ARCHITECTURE  
12181 C STREET SOUTH  
TACOMA, WA 98444

PROJECT LEAD  
JEFFREY E. BROWN  
253.406.8324  
jeb@jeffbrownarchitecture.com

PROJECT NAME/ADDRESS

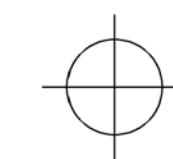
**CASCADE CHRISTIAN JR. HIGH SCHOOL  
LOBBY ADDITION**

815 21ST STREET SE  
PUYALLUP, WA 98372



COORDINATE SITE PLAN WITH CIVIL ENGINEER

PARTIAL SITE



REFERENCE ONLY

SITE