ROSS #0593
ROOFTOP AIR CONDITIONING UNIT REPLACEMENT PROJECT
4102 S MERIDIAN
PUYALLUP, WA 98373

PROJECT TEAM

OWNER
ROSS NAS

MECHANICAL
ASSOCIATED MECHANICAL ENGINEERS, PLLC.
1121 W WARNER RD, SUITE 107
TEMPE, AZ 85284
480.966.3996 PHONE
480.966.3964 FAX
CONTACT: GEORGE JOSEPHS, P.E.
george@am-engineers.com

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

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 legible 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 non compliance 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
REVIEWED FOR COMPLIANCE
BSnowden
10/02/2025
10:47:49 AM

REVISION | DATE

PIONEER DESIGN & ENGINEERING
2415 S. Power Rd.
Suite 103, Building F
Mesa, Arizona 85209
480.275.3140
NPIES@PIONEERDE.COM

ASSOCIATED MECHANICAL ENGINEERS, PLLC
1121 W. Warner Road, Suite 107
Tempe, AZ 85284
480.966.3996 Phone
480.966.3964 Fax

AME PROJECT # 25-343
AME CONSULTING ENGINEERS MECHANICAL PLUMBING

NATHAN JAMES PIES
STATE OF WASHINGTON
23007
REGISTERED PROFESSIONAL ENGINEER
07-29-25
EXPIRES 5/8/2027

PROJECT NUMBER: 25-343
DATE: 07/25/2025
DESIGNED BY: GJJ
DRAWN BY: GJJ
CHECKED BY: GJJ

ROOFTOP AIR CONDITIONING UNIT REPLACEMENT PROJECT
ROSS #0593
PUYALLUP, WA

SHEET TITLE: COVER SHEET

PRMH20251022

SHEET NUMBER: M1

SYMBOLS

REFER TO PLANS FOR INDIVIDUAL SYMBOLS

TITLE
SCALE:

HVAC SYMBOLS AND ABBREVIATIONS

SINGLE LINE	DOUBLE LINE	DESCRIPTION	ABBR.
		NEW RECTANGULAR DUCTWORK (SUPPLY, RETURN, EXHAUST, RELIEF) REFER TO PLANS FOR SIZE	-
		TRANSITION	-
		NEW ROUND OR OVAL DUCTWORK (SUPPLY, RETURN, EXHAUST, RELIEF) REFER TO PLANS FOR SIZE	-
		EXISTING DUCTWORK	-
		45 DEG. TAP AT BRANCH DUCTS	-
		DUCT SPLIT WITH DAMPER: USE AT ELBOWS, TEES, AND WHERE INDICTATED PER SMACNA (LATEST EDITION)	-
		CURVED ELBOW-MINIMUM RADIUS R: 1.5 WIDTH PER SMACNA (LATEST EDITION)	-
		90 DEG. ELBOW WITH SINGLE RADIUS TURNING VANES	-
		FLEXIBLE DUCT CONNECTION	FLEX
		VOLUME DAMPER WITH LOCKING QUADRANT	VD
		SPIN-IN FLEX DUCT TAKE-OFF WITH VOLUME DAMPER	-
		SPLITTER DAMPER WITH LOCKING QUADRANT	S&Q
		SUPPLY AIR	SA
		EXHAUST AIR	EXH
		RETURN AIR	RA
		RELIEF AIR	REL
		OUTSIDE AIR	OSA
		CONNECTION OF NEW WORK TO EXISTING	P.O.C.
-	-	TRANSFER AIR	TA
-	-	EXHAUST REGISTER	ER
-	-	ABOVE FINISHED FLOOR	AFF
-	-	BELOW FINISHED FLOOR	BFF
-	-	NOT TO SCALE	NTS
S	S	SENSOR	S
T	T	THERMOSTAT	T
		FIRE DAMPER	FD
		COMBINATION FIRE AND SMOKE DAMPER	CFSD
D	D	DUCT MOUNTED SMOKE DETECTOR	SD
F	F	FIRE STAT (REFER TO SPECIFICATIONS FOR TEMP)	-
O	O	OUTSIDE AIR TEMPERATURE SENSOR	-
U/C SIZE	U/C SIZE	DOOR UNDERCUT (WITH SIZE)	-
(E)	(E)	EXISTING	-
(R)	(R)	RELOCATED	-
BDD	BDD	BACK DRAFT DAMPER (ARROW DENOTES DIRECTION OF AIR FLOW)	BDD

PROJECT INFORMATION

CODES
2021 WASHINGTON STATE BUILDING CODE
2021 WASHINGTON STATE MECHANICAL CODE
2021 WASHINGTON STATE PLUMBING CODE
2023 WASHINGTON ELECTRICAL CODE
2021 WASHINGTON STATE FIRE CODE
2021 WASHINGTON STATE ENERGY CODE

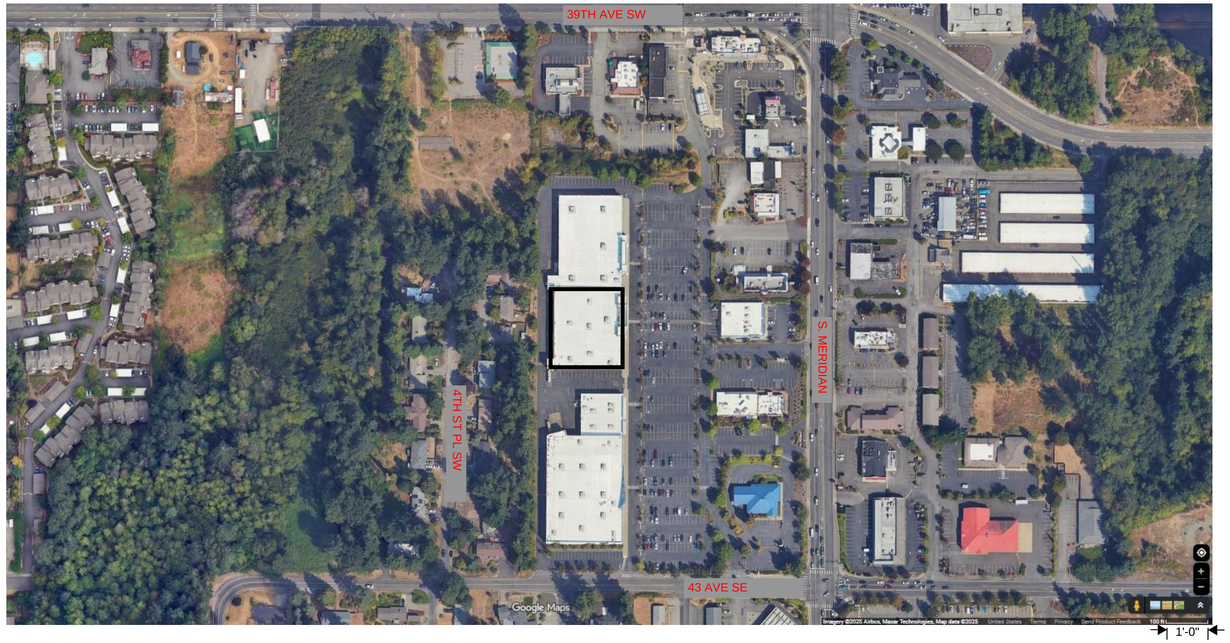
BUILDING INFORMATION;

JURISDICTION	CITY OF PUYALLUP
PROJECT DESCRIPTION	ROOFTOP AIR CONDITIONING UNIT REPLACEMENT
OCCUPANCY CLASSIFICATION	GROUP M
CONSTRUCTION TYPE	TYPE 2
AREA OF CONSTRUCTION	VARIES
FIRE SPRINKLER SYSTEM:	EXISTING

SHEET INDEX

VENTILATION NOTES:

NEW ROOFTOP UNITS REPLACE EXISTING UNITS WITH SAME CAPACITIES.



VICINITY MAP

NORTH

PACKAGED ROOF MOUNTED AIR CONDITIONING UNIT SCHEDULE (AIR-TO-AIR) R-454b: GAS HEATING

TAG (RTU #)	MANUFACTURER	MODEL	AIR CAPACITIES				EER (SEER) / IEER	CYCLE	EVAPORATOR ENTERING		AMBIENT CONDITION		NET COOLING CAPACITIES (MBH)		HEATING CAPACITIES (MBH)		MAIN UNIT ELECTRICAL CHARACTERISTICS				UNIT WEIGHT W/ACCESSORIES
			TOTAL CFM	OA CFM	ESP IWG	BLOWER HP			DB	WB	DB	WB	SENSIBLE	TOTAL	IN	OUT	MCA	MOCP	VOLT	PH	
1,6	LENNOX	LGT036H5E	1,200	150	0.8	0.5	13.5 (17.5)/ –	COOL	80	67	80	64	25.9	36.1	65.0	52.0	10.0	15	460	3	840 LBS
								HEAT	70	–	26	–	–	–							
2	LENNOX	LGT156H5M	5,200	850	1.0	3.0	12.0 / 15.4	COOL	80	67	80	64	109.5	146.6	260.0	211.0	32.0	40	460	3	2,303 LBS
								HEAT	70	–	26	–	–	–							
3	LENNOX	LGT092H5E	3,000	600	1.0	3.75	12.3 / 16.1	COOL	80	67	80	64	63.5	90.0	130.0	104.0	24.0	25	460	3	1,260 LBS
								HEAT	70	–	26	–	–	–							
4	LENNOX	LGT120H5E	4,000	900	0.5	3.75	12.1 / 16.1	COOL	80	67	80	64	85.2	119.2	130.0	104.0	25.0	30	460	3	1,272 LBS
								HEAT	70	–	26	–	–	–							
5,7	LENNOX	LGT072H5E	2,400	480	1.0	1.5	12.2 / 17.3	COOL	80	67	80	64	52.0	70.9	65.0	52.0	17.0	25	460	3	780 LBS
								HEAT	70	–	26	–	–	–							

FACTORY ACCESSORIES ALL RTU'S:
HIGH PERFORMANCE ECONOMIZER
BUILT–IN BACNET IP AND MS/TP (STANDARD)
COMBINATION COIL/HAIL GUARDS
HINGED ACCESS DOORS
15A GFCI FACTORY INSTALLED/FIELD WIRED
SUPPLY & RETURN AIR SMOKE DETECTOR
ENVIRON COIL SYSTEM
2 IN MERV13 FILTER
TEMPERATURE SENSORS

FACTORY ACCESSORIES RTU 1,6:
15A CIRCUIT BREAKER
BAROMETRIC RELIEF DAMPER
LOW NOX
PHASE/VOLTAGE DETECTION
CURB ADAPTER – FIELD INSTALLED

FACTORY ACCESSORIES RTU 2:
40A CIRCUIT BREAKER
STANDARD STATIC POWER EXHAUST FAN

FACTORY ACCESSORIES RTU 3:
25A CIRCUIT BREAKER
STANDARD STATIC POWER EXHAUST FAN
CURB ADAPTER – FIELD INSTALLED

FACTORY ACCESSORIES RTU 4:
30A CIRCUIT BREAKER
STANDARD STATIC POWER EXHAUST FAN
RETURN AIR ADAPTOR PLATE

FACTORY ACCESSORIES RTU 5,7:
25A CIRCUIT BREAKER
STANDARD STATIC POWER EXHAUST FAN
LOW NOX
PHASE/VOLTAGE DETECTION
CURB ADAPTER – FIELD INSTALLED
BAROMETRIC RELIEF DAMPERS – FIELD INSTALLED

NOTE:
ALL UNITS WITH ECONOMIZERS SHALL BE EQUIPPED WITH FAULT DETECTION DIAGNOSTICS (FDD).

SMOKE DETECTORS SHALL REPORT TO THE BUILDING FIRE ALARM SYSTEM IF THE BUILDING IS SO EQUIPPED.
ALL APPLIANCES DESIGNED TO BE FIXED IN POSITION SHALL BE SECURELY FASTENED IN PLACE IN ACCORDANCE WITH MANUFACTURER'S INSTALLATION REQUIREMENTS AND THE BUILDING CODE.
APPLIANCE AND PLUMBING VENTS SHALL BE AT LEAST 10 FEET FROM OSA INTAKES (EXISTING COMPLIANT).
CONDENSATE DRAINS ARE EXISTING TO BE RECONNECTED TO REPLACEMENT UNITS (NOTE THAT THESE ARE UNITS TO REPLACE EXISTING UNITS WITH HEATING AND COOLING CAPACITIES LIKE–FOR–LIKE).

TOTAL HEAT LOSS CALCULATION:
CALCULATED LOAD 597.2 MBH. PROVIDED CAPACITY 627.0 MBH.

TOTAL COOLING LOAD CALCULATION:
CALCULATED LOAD 396.9 MBH. PROVIDED CAPACITY 414.0 MBH.

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NOTE: THIS PROJECT IS AN AIR CONDITIONING UNIT REPLACEMENT WITH HEATING AND COOLING CAPACITIES LIKE–FOR–LIKE. NO PORTIONS OF THE BUILDING ENVELOPE, PLUMBING OR ELECTRICAL SYSTEMS ARE TO BE CHANGED. UNITS SHALL RECONNECT TO EXISTING DUCTWORK, CONDENSATE AND ELECTRICAL UTILITIES.

RTU–1:
REPLACES EXISTING LENNOX UNIT
(E)MODEL LGA036
78,000 BTUH GAS INPUT
(E)TOTAL WEIGHT = 708 LBS
(N)TOTAL WEIGHT = 840 LBS

RTU–2:
REPLACES EXISTING LENNOX UNIT
(E)MODEL LGC156
234,000 BTUH GAS INPUT
(E)TOTAL WEIGHT = 2,535 LBS
(N)TOTAL WEIGHT = 2,303 LBS

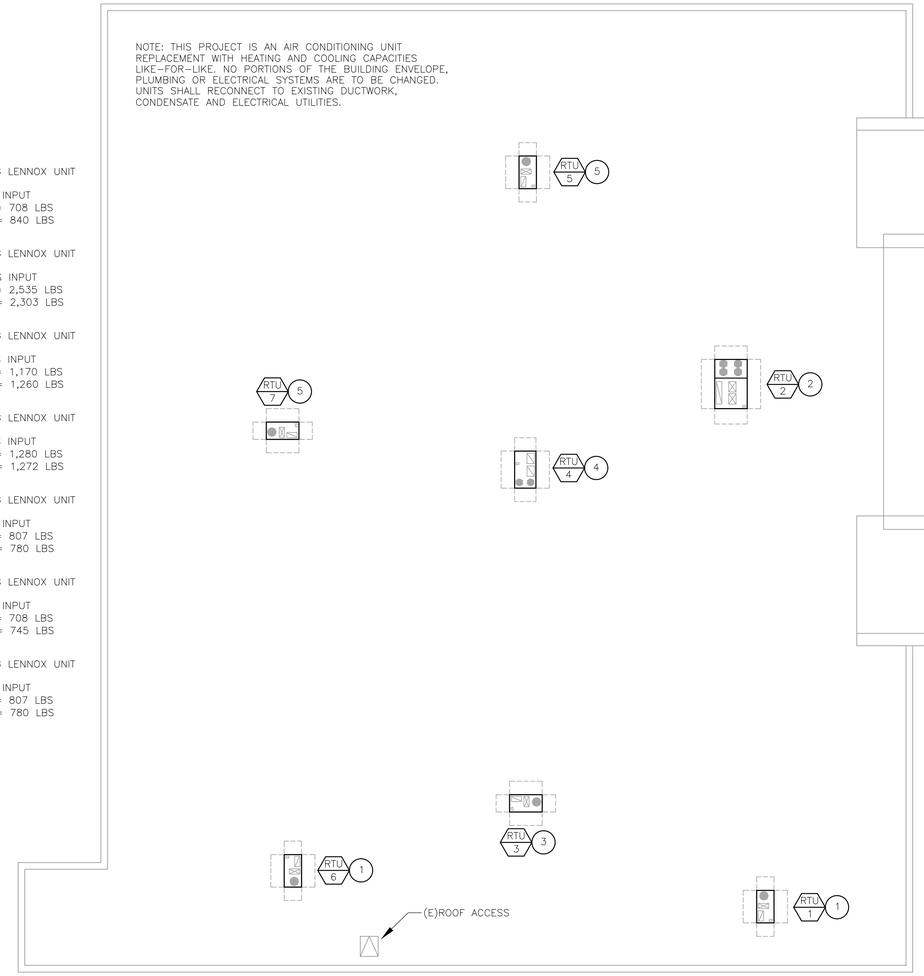
RTU–3:
REPLACES EXISTING LENNOX UNIT
(E)MODEL LGA088
110,000 BTUH GAS INPUT
(E)TOTAL WEIGHT = 1,170 LBS
(N)TOTAL WEIGHT = 1,260 LBS

RTU–4:
REPLACES EXISTING LENNOX UNIT
(E)MODEL LGA120
130,000 BTUH GAS INPUT
(E)TOTAL WEIGHT = 1,280 LBS
(N)TOTAL WEIGHT = 1,272 LBS

RTU–5:
REPLACES EXISTING LENNOX UNIT
(E)MODEL LGA072
78,000 BTUH GAS INPUT
(E)TOTAL WEIGHT = 807 LBS
(N)TOTAL WEIGHT = 780 LBS

RTU–6:
REPLACES EXISTING LENNOX UNIT
(E)MODEL LGA036
78,000 BTUH GAS INPUT
(E)TOTAL WEIGHT = 708 LBS
(N)TOTAL WEIGHT = 745 LBS

RTU–7:
REPLACES EXISTING LENNOX UNIT
(E)MODEL LGA072
78,000 BTUH GAS INPUT
(E)TOTAL WEIGHT = 807 LBS
(N)TOTAL WEIGHT = 780 LBS



MECHANICAL ROOF PLAN
SCALE: 1/16"=1'–0"

NORTH

(#) KEYED NOTES:

(1) NEW 3 TON ROOF TOP UNIT REPLACES EXISTING ROOFTOP UNIT. CONNECT NEW UNIT TO EXISTING ROOF CURB, CURB ADAPTOR REQUIRED. RECONNECT TO EXISTING ELECTRICAL. EXISTING DUCTWORK TO REMAIN, MODIFY AS NECESSARY FOR CONNECTION TO NEW UNIT. RECONNECT GAS LINE. ELECTRICAL REQUIREMENTS ARE LIKE–FOR–LIKE. REFER TO STRUCTURAL CALCULATIONS FOR WEIGHT CHANGE.

(2) NEW 13 TON ROOF TOP UNIT REPLACES EXISTING ROOFTOP UNIT. CONNECT NEW UNIT TO EXISTING ROOF CURB. RECONNECT TO EXISTING ELECTRICAL. CONNECT TO EXISTING CONDENSATE LINE. EXISTING DUCTWORK TO REMAIN, MODIFY AS NECESSARY FOR CONNECTION TO NEW UNIT. RECONNECT GAS LINE. ELECTRICAL REQUIREMENTS ARE LIKE–FOR–LIKE. REFER TO STRUCTURAL CALCULATIONS FOR WEIGHT CHANGE.

(3) NEW 7.5 TON ROOF TOP UNIT REPLACES EXISTING ROOFTOP UNIT. CONNECT NEW UNIT TO EXISTING ROOF CURB. RECONNECT TO EXISTING ELECTRICAL. CONNECT TO EXISTING CONDENSATE LINE. EXISTING DUCTWORK TO REMAIN, MODIFY AS NECESSARY FOR CONNECTION TO NEW UNIT. RECONNECT GAS LINE. ELECTRICAL REQUIREMENTS ARE LIKE–FOR–LIKE. REFER TO STRUCTURAL CALCULATIONS FOR WEIGHT CHANGE.

(4) NEW 10 TON ROOF TOP UNIT REPLACES EXISTING ROOFTOP UNIT. CONNECT NEW UNIT TO EXISTING ROOF CURB. RECONNECT TO EXISTING ELECTRICAL. CONNECT TO EXISTING CONDENSATE LINE. EXISTING DUCTWORK TO REMAIN, MODIFY AS NECESSARY FOR CONNECTION TO NEW UNIT. RECONNECT GAS LINE. ELECTRICAL REQUIREMENTS ARE LIKE–FOR–LIKE. REFER TO STRUCTURAL CALCULATIONS FOR WEIGHT CHANGE.

(5) NEW 6 TON ROOF TOP UNIT REPLACES EXISTING ROOFTOP UNIT. CONNECT NEW UNIT TO EXISTING ROOF CURB, CURB ADAPTOR REQUIRED. RECONNECT TO EXISTING ELECTRICAL. CONNECT TO EXISTING CONDENSATE LINE. EXISTING DUCTWORK TO REMAIN, MODIFY AS NECESSARY FOR CONNECTION TO NEW UNIT. RECONNECT GAS LINE. ELECTRICAL REQUIREMENTS ARE LIKE–FOR–LIKE. REFER TO STRUCTURAL CALCULATIONS FOR WEIGHT CHANGE.

NOTE:
OVERALL GAS INPUT CAPACITY IS 20 CFH HIGHER THAN THE EXISTING. THE EXISTING GAS PIPING SIZE IS ADEQUATE PER 2021 IPC. NO CHANGE REQUIRED.

COMcheck Software Version COMcheckWeb

Mechanical Compliance Certificate

Project Information

Energy Code:	2021 IECC
Project Title:	25-343 ROSS #0593
Location:	Puyallup, Washington
Climate Zone:	4c
Project Type:	Alteration

Construction Site: Owner/Agent: Designer/Contractor:

Mechanical Systems List

Quantity System Type & Description

2 RTU 1,6 (Single Zone):
Heating: 1 each - Central Furnace, Gas, Capacity = 52 kBtu/h
Proposed Efficiency = 81.00% Et, Required Efficiency: 80.00 % Et or 80% AFUE
Cooling: 1 each - Single Package DX Unit, Capacity = 26 kBtu/h, Air-Cooled Condenser, Unknown Economizer
Proposed Efficiency = 17.50 SEER2, Required Efficiency = 13.40 SEER2
Proposed Part Load Efficiency = 0.00 , Required Part Load Efficiency = 0.00
Fan System: FAN SYSTEM 1 -- Compliance (Motor nameplate HP and fan efficiency method) : Passes

Fans:
FAN 1 Supply, Constant Volume, 1200 CFM, 0.5 motor nameplate hp, 0.90 fan energy index , fan exception: Fan array <= 5 total HP or <= 4.1 kW

1 RTU 2 (Single Zone):
Heating: 1 each - Central Furnace, Gas, Capacity = 211 kBtu/h
Proposed Efficiency = 81.00% Et, Required Efficiency: 80.00 % Et or 80% AFUE
Cooling: 1 each - Single Package DX Unit, Capacity = 110 kBtu/h, Air-Cooled Condenser, Air Economizer
Proposed Efficiency = 12.00 EER, Required Efficiency = 11.00 EER
Proposed Part Load Efficiency = 15.40 IEER, Required Part Load Efficiency = 14.60 IEER
Fan System: FAN SYSTEM 2 -- Compliance (Motor nameplate HP and fan efficiency method) : Passes

Fans:
FAN 2 Supply, Constant Volume, 5200 CFM, 3.0 motor nameplate hp, 0.90 fan energy index , fan exception: Fan array <= 5 total HP or <= 4.1 kW

1 RTU 3 (Single Zone):
Heating: 1 each - Central Furnace, Gas, Capacity = 104 kBtu/h
Proposed Efficiency = 81.00% Et, Required Efficiency: 80.00 % Et or 80% AFUE
Cooling: 1 each - Single Package DX Unit, Capacity = 90 kBtu/h, Air-Cooled Condenser, Air Economizer
Proposed Efficiency = 12.30 EER, Required Efficiency = 11.00 EER
Proposed Part Load Efficiency = 16.10 IEER, Required Part Load Efficiency = 14.60 IEER
Fan System: FAN SYSTEM 3 -- Compliance (Motor nameplate HP and fan efficiency method) : Passes

Fans:
FAN 3 Supply, Constant Volume, 3000 CFM, 3.8 motor nameplate hp, 0.90 fan energy index , fan exception: Fan array <= 5 total HP or <= 4.1 kW

1 RTU 4 (Single Zone):
Heating: 1 each - Central Furnace, Gas, Capacity = 104 kBtu/h
Proposed Efficiency = 81.00% Et, Required Efficiency: 80.00 % Et or 80% AFUE
Cooling: 1 each - Single Package DX Unit, Capacity = 85 kBtu/h, Air-Cooled Condenser, Air Economizer
Proposed Efficiency = 12.10 EER, Required Efficiency = 11.00 EER
Proposed Part Load Efficiency = 16.10 IEER, Required Part Load Efficiency = 14.60 IEER
Fan System: FAN SYSTEM 4 -- Compliance (Motor nameplate HP and fan efficiency method) : Passes

Fans:
FAN 4 Supply, Constant Volume, 4000 CFM, 3.8 motor nameplate hp, 0.90 fan energy index , fan exception: Fan array <= 5 total HP or <= 4.1 kW

Quantity System Type & Description

2 RTU 5,7 (Single Zone):
Heating: 1 each - Central Furnace, Gas, Capacity = 52 kBtu/h
Proposed Efficiency = 81.00% Et, Required Efficiency: 80.00 % Et or 80% AFUE
Cooling: 1 each - Single Package DX Unit, Capacity = 71 kBtu/h, Air-Cooled Condenser, Air Economizer
Proposed Efficiency = 12.20 EER, Required Efficiency = 11.00 EER
Proposed Part Load Efficiency = 17.30 IEER, Required Part Load Efficiency = 14.60 IEER
Fan System: FAN SYSTEM 5 -- Compliance (Motor nameplate HP and fan efficiency method) : Passes

Fans:
FAN 5 Supply, Constant Volume, 2400 CFM, 1.5 motor nameplate hp, 0.90 fan energy index , fan exception: Fan array <= 5 total HP or <= 4.1 kW

Mechanical Compliance Statement

Compliance Statement: The proposed mechanical alteration project represented in this document is consistent with the building plans, specifications, and other calculations submitted with this permit application. The proposed mechanical systems have been designed to meet the 2021 IECC requirements in COMcheck Version COMcheckWeb and to comply with any applicable mandatory requirements listed in the Inspection Checklist.

NATHAN PIES, P.E. — Name - Title
Signature
07/25/2025 — Date

REVISION | DATE

PIONEER DESIGN & ENGINEERING
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Suite 104 PMB 207
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AME PROJECT # 25-343
AME CONSULTING ENGINEERS MECHANICAL PLUMBING

NATHAN JAMES PIES
STATE OF WASHINGTON
23047
REGISTERED
PROFESSIONAL ENGINEER
Nathan Pies 07-29-25
EXPIRES 5/8/2027

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CHECKED BY: GJJ

ROSS DRESS FOR LESS®

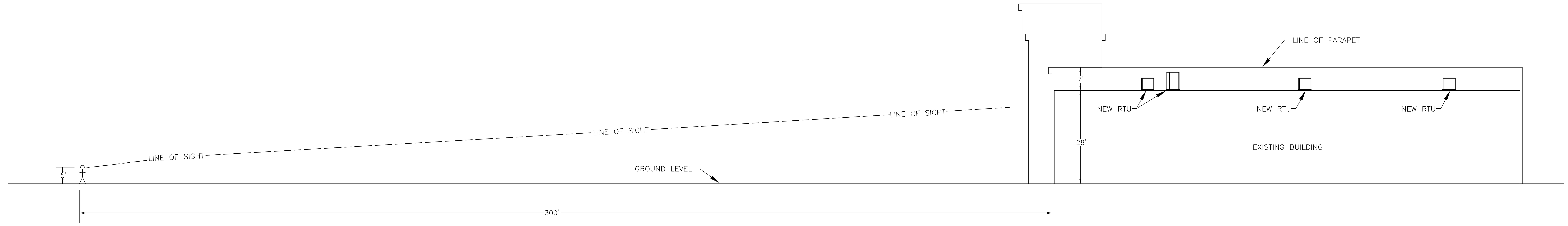
ROOFTOP AIR CONDITIONING UNIT REPLACEMENT PROJECT

ROSS #0593
PUYALLUP, WA

SHEET TITLE:
MECHANICAL ROOF PLAN, SCHEDULES, & COMCHECK

PRMH20251022

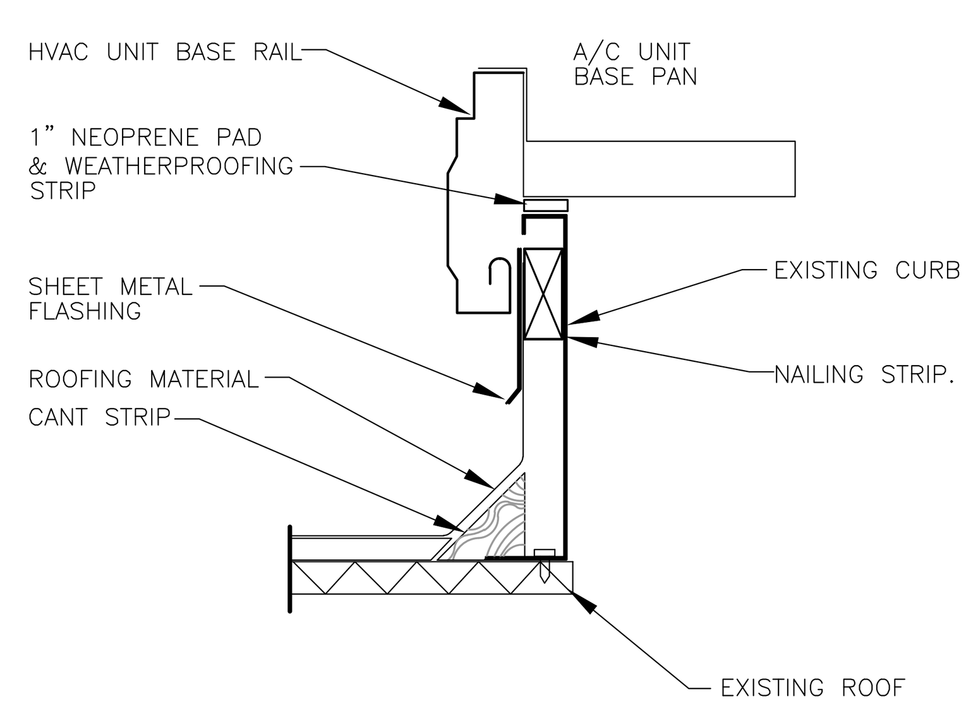
SHEET NUMBER:
M2



(A) LINE OF SIGHT ELEVATION

NOT TO SCALE

NOTES:
1. UNIT SHALL CONNECT TO EXISTING ROOF CURB, CURB ADAPTER REQUIRED (TYP.)



(1) ROOFTOP A/C UNIT MOUNTING

NOT TO SCALE

MECHANICAL COMPLIANCE SUMMARY

2021 WSEC Compliance Forms for Commercial Buildings including Group R1, R2, and Group R3 & R4 over 3 stories

Project & Applicant Information	Project Title	ROSS #0593 - 2021 WSEC	For Building Department Use: Date: Jul 25, 2025
	Project Address	4102 S MERIDIAN Puyallup, WA 98373	
	Applicant Name	PERRY NICOLOPOULOS	
	Applicant Phone	480-966-3999	
	Applicant Email	perry@am-engineers.com	

Mechanical Compliance Summary Scope - Compliance verification provided in this report is limited to code minimum efficiency requirements for mechanical equipment types defined in Tables C403.3.2(1) through C403.3.2(16) of the 2021 WSEC-C. This includes efficiency multipliers for economizer exceptions. Performance criteria for additional energy efficiency and load management measures ARE NOT included in this report. Additional documentation is required to demonstrate compliance with all other provisions of the energy code, including better than code efficiency criteria for Section C406. For questions about this report, contact WSEC Commercial Technical Support at 360-539-5300 or via email at com.techsupport@waenergycodes.com.

General Occupancy	All Commercial		General Building Use Type(s)	Retail, General Sales		Building Cond. Floor Area	38,500
General Project Types	Alteration	New Building or Addition Mechanical Scope		Alteration Mechanical Scope	Single Zone Systems & Equipment	Project Cond. Floor Area	38,500
						Floors Above Grade	1
						Overall Compliance Path	General Prescriptive
Mechanical Project Description	SEVEN ROOFTOP AIR CONDITIONING UNITS BEING REPLACED LIKE-FOR-LIKE.						

Mechanical Compliance Scope and Method	Project Type	Mechanical Scope	Economizer Exception(s) Applied?	DOAS Ventilation Provided?		Equipment Efficiency Compliance Verification
	Alteration	Single Zone Systems & Equipment	Yes	No		**COMPLIES**
Additional Energy Efficiency Measures (AEM)	No mechanical additional energy efficiency measures included in project			Load Management Measures (LDM)	No mechanical load management measures included in project	
Does building include occupancy classifications requiring DOAS?			No	Does project include DOAS equipment?		No
Based on project scope do TSPR requirements apply?			No	Do all systems comply with Appendix D standard reference design or qualify for an exception to TSPR?		No

Scope & Space Conditioning	ALTERATION - SINGLE ZONE SYSTEMS & EQUIPMENT	Compliance Verification	COMPLIES

Single Zone Air Systems Category - Air conditioner, split & single package, SC, SDHV

Air Systems Summary Information

System/Equip ID	Quantity of Items	Supply Airflow Control	Ventilation Standard	Ventilation CFM (Total if Multiple Items)	Ventilation Air Source	Paired with DOAS	Ventilation energy recovery	Energy Recovery Efficiency (%)
RTU 1,6	2	Constant volume	IMC Ventilation	150	Integral		Not provided, not required	
RTU 2		Constant volume	IMC Ventilation	850	Integral		Not provided, not required	
RTU 3		Constant volume	IMC Ventilation	600	Integral		Not provided, not required	
RTU 4		Constant volume	IMC Ventilation	900	Integral		Not provided, not required	
RTU 5,7	2	Constant volume	IMC Ventilation	480	Integral		Not provided, not required	

Air Systems & Equipment - Cooling

System/ Equip ID	Cooling System/Equip Type	Specific Type	Cooling Capacity per item (Btu/h)	Econo Exception Multipliers (Full/IPLV)		Required Cooling Efficiency (Code Min + Econo)	Required Part Load Efficiency (Code Min + Econo)	Proposed Cooling Efficiency	CE Units	Proposed Part Load Efficiency	PL Units	Efficiency Compliance Verification
RTU 1,6	Air conditioner, air cooled	Single package DX	36,100	0	0	13.4	0	17.5	SEER2		IEER	COMPLIES
RTU 2	Air conditioner, air cooled	Single package DX	146,600	0	0	10.8	14.0	12	EER	15.4	IEER	COMPLIES
RTU 3	Air conditioner, air cooled	Single package DX	90,000	0	0	11.0	14.6	12.3	EER	16.1	IEER	COMPLIES
RTU 4	Air conditioner, air cooled	Single package DX	119,200	0	0	11.0	14.6	12.1	EER	16.1	IEER	COMPLIES
RTU 5,7	Air conditioner, air cooled	Single package DX	70,900	0	0	11.0	14.6	12.2	EER	17.3	IEER	COMPLIES

Air Systems & Equipment - Heating

System /Equip ID	Heating System/Equip Type	Specific Type	Heat Pump Heating Capacity (Btu/h)	Cooling Capacity per Item (Btu/h) (Identical to Cooling Table)	Required Heat Pump Heating Efficiency	Required Low OSA Temp Efficiency	Proposed Heat Pump Heating Efficiency	HPH Units	Proposed Low OSA Temp Efficiency	LTH Units	Efficiency Compliance Verification
RTU 1,6	Furnace	Warm air, gas fired (Et)	0	0							COMPLIES
RTU 2	Furnace	Warm air, gas fired (Et)	0	0							COMPLIES
RTU 3	Furnace	Warm air, gas fired (Et)	0	0							COMPLIES
RTU 4	Furnace	Warm air, gas fired (Et)	0	0							COMPLIES
RTU 5,7	Furnace	Warm air, gas fired (Et)	0	0							COMPLIES

Air Systems & Equipment Details

System/Equip ID	Discrete Area(s) Served	Location In Project Documents - Plan/Detail #	System/Equip Compliance Path
RTU 1,6	RETAIL	ALL	General Prescriptive
	Heating Section/Auxiliary Heating Type: Fuel-fired		Economizer Compliance Method: Air-side economizer provided
	WSEC Equip Efficiency Reference Table - Cooling: Table C403.3.2(1) Unitary Air Conditioners & Condensing Units		
	WSEC Equip Efficiency Reference Table - Heating: Table C403.3.2(5) Warm Air Furnaces		
RTU 2	RETAIL	ALL	General Prescriptive
	Heating Section/Auxiliary Heating Type: Fuel-fired		Economizer Compliance Method: Air-side economizer provided
	WSEC Equip Efficiency Reference Table - Cooling: Table C403.3.2(1) Unitary Air Conditioners & Condensing Units		
	WSEC Equip Efficiency Reference Table - Heating: Table C403.3.2(5) Warm Air Furnaces		
RTU 3	RETAIL	ALL	General Prescriptive
	Heating Section/Auxiliary Heating Type: Fuel-fired		Economizer Compliance Method: Air-side economizer provided
	WSEC Equip Efficiency Reference Table - Cooling: Table C403.3.2(1) Unitary Air Conditioners & Condensing Units		
	WSEC Equip Efficiency Reference Table - Heating: Table C403.3.2(5) Warm Air Furnaces		
RTU 4	RETAIL	ALL	General Prescriptive
	Heating Section/Auxiliary Heating Type: Fuel-fired		Economizer Compliance Method: Air-side economizer provided
	WSEC Equip Efficiency Reference Table - Cooling: Table C403.3.2(1) Unitary Air Conditioners & Condensing Units		
	WSEC Equip Efficiency Reference Table - Heating: Table C403.3.2(5) Warm Air Furnaces		
RTU 5,7	RETAIL	ALL	General Prescriptive
	Heating Section/Auxiliary Heating Type: Fuel-fired		Economizer Compliance Method: Air-side economizer provided
	WSEC Equip Efficiency Reference Table - Cooling: Table C403.3.2(1) Unitary Air Conditioners & Condensing Units		
	WSEC Equip Efficiency Reference Table - Heating: Table C403.3.2(5) Warm Air Furnaces		

City of Puyallup
Development & Permitting Services
ISSUED PERMIT

Building	Planning
Engineering	Public Works
Fire	Traffic

REVISION

DATE

PIONEER DESIGN & ENGINEERING
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ASSOCIATED MECHANICAL ENGINEERS, PLLC
1121 W. Warner Road, Suite 107
Tempe, AZ 85284
480.966.3996 Phone
480.966.3964 Fax

AME PROJECT # 25-343
AME
CONSULTING ENGINEERS
MECHANICAL ▼ PLUMBING

NATHAN JAMES PIES
STATE OF WASHINGTON
49247
REGISTERED
PROFESSIONAL ENGINEER
07-29-25
EXPIRES 5/8/2027

PROJECT NUMBER: 25-343

DATE: 07/25/2025

DESIGNED BY: GJJ

DRAWN BY: GJJ

CHECKED BY: GJJ

ROSS DRESS FOR LESS®

ROOFTOP AIR CONDITIONING UNIT REPLACEMENT PROJECT

ROSS #0593
PUYALLUP, WA

SHEET TITLE:
MECHANICAL LINE OF SIGHT, DETAILS, & WSEC COMPLIANCE

PRMH20251022

SHEET NUMBER:

M3