

**City of Puyallup
Building
ACCEPTED**

JMontgomery
04/12/2022
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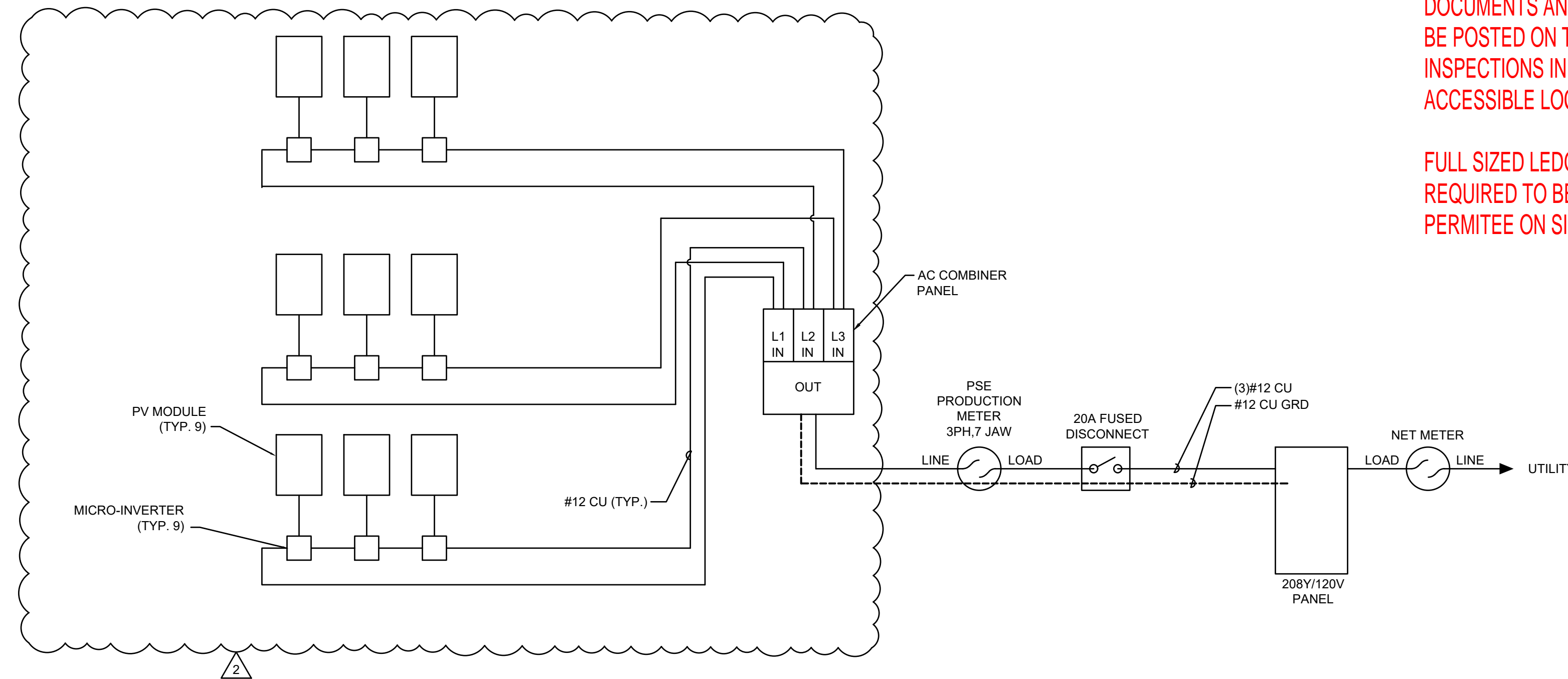


**City of Puyallup
Development & Permitting Services
ISSUED PERMIT**

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



SOLAR ONE-LINE DIAGRAM

SCALE: NTS

SOLAR PANEL SCHEDULE

MAKE	MODEL	QUANTITY	I _{mp} (AMPS)	V _{mp} (VOLTS)	V _{oc} (VOLTS)	I _{sc} (AMPS)	OCPD (AMPS)	P _{max} (WATTS)	WEIGHT	WEIGHT LBS/SF	COMMENTS
Q CELL	Q.PEAK DUO XL-G10.d	9	10.71	44.81	53.61	11.26	20	480	57.3	2.4	

INVERTER SCHEDULE

MAKE	MODEL	QUANTITY	MAX DC POWER (WATTS)	MAX DC VOLT RATING (VOLTS)	MAX DC CURRENT	MAX AC POWER (WATTS)	NOMINAL AC VOLTAGE (VOLTS)	MAX AC CURRENT (AMPS)	MOCP (AMPS)	EFFICINCY	COMMENTS
ENPHASE	IQ 7+	9	NR	60	10.31	295	208	1.39	20	97.0%	

PV MODULE RATINGS @ STC (GUIDE SECTION 5)

MODULE MAKE	Q CELL
MODULE MODEL	Q.PEAK DUO XL-G10.d
MAX POWER-POINT CURRENT (I _{mp})	10.71
MAX POWER-POINT VOLTAGE (V _{mp})	44.81
OPEN-CIRCUIT VOLTAGE (V _{oc})	53.61
SHORT-CIRCUIT CURRENT (I _{sc})	11.26
MAX SERIES FUSE (OCPD)	20
MAXIMUM POWER (P _{max})	480
MAX VOLTAGE (TYP 600V _{oc})	1500
VOC TEMP COEFF (%/°C)	-0.27
IF COEFF SUPPLIED, CIRCLE UNITS	

NOTES FOR ALL DRAWINGS

OCPD=OVERCURRENT PROTECTION DEVICE
NATIONAL ELECTRICAL CODE® REFERENCES SHOWN AS (NEC XXX.XX)

INVERTER RATINGS (Guide Section 4)

INVERTER MAKE	ENPHASE
INVERTER MODEL	IQ 7+
MAX DC VOLT RATING	60
MAX POWER @40°C	295
NOMINAL AC VOLTAGE	208
MAX AC CURRENT	1.39
MAX OCPD RATING	20

SIGNS-SEE GUIDE SECTION 7

SIGN FOR INVERTER OCPD AND AC DISCONNECT (IF USED)

SOLAR PV SYSTEM AC POINT OF CONNECTION	
AC OUTPUT CURRENT	7.23
NOMINAL AC VOLTAGE	208-3Ø V
THIS PANEL FED BY MULTIPLE SOURCES (UTILITY AND SOLAR)	

NOTES FOR ARRAY CIRCUIT WIRING (Guide Section 6 and 8 and Appendix D)

- 1.) LOWEST EXPECT AMBIENT TEMPERATURE BASED ON ASHRAE MINIMUM MEAN EXTREME DRY BULB TEMPERATURE FOR ASHRAE LOCATION MOST SIMILAR TO INSTALLATION LOCATION. LOWEST EXPECTED AMBIENT TEMP -7 °C
- 2.) HIGHEST CONTINUOUS AMBIENT TEMPERATURE BASED ON ASHRAE HIGHEST MONTH 2% DRY BULB TEMPERATURE FOR ASHRAE LOCATION MOST SIMILAR TO INSTALLATION LOCATION. HIGHEST CONTINUOUS TEMPERATURE 27 °C
- 3.) 2005 ASHRAE FUNDAMENTALS 2% DESIGN TEMPERATURES DO NOT EXCEED 47°C IN THE UNITED STATES (PALM SPRINGS, CA IS 44.1°C). FOR LESS THAN 9 CURRENT-CARRYING CONDUCTORS IN ROOF-MOUNTED SUNLIT CONDUIT AT LEAST 0.5" ABOVE ROOF AND USING THE OUTDOOR DESIGN TEMPERATURE OF 47°C OR LESS (ALL OF UNITED STATES)
 - a) 12 AWG, 90°C CONDUCTORS ARE GENERALLY ACCEPTABLE FOR MODULES WITH I_{sc} OF 7.68 AMPS OR LESS WHEN PROTECTED BY A 12-AMP OR SMALLER FUSE.
 - b) 10 AWG, 90°C CONDUCTORS ARE GENERALLY ACCEPTABLE FOR MODULES WITH I_{sc} OF 9.6 AMPS OR LESS WHEN PROTECTED BY A 15 AMP OR SMALLER FUSE.

NOTES FOR INVERTER CIRCUITS (Guide Section 8 and 9):

- 1) IF UTILITY REQUIRES A VISIBLE-BREAK SWITCH, DOES THAT SWITCH MEET THE REQUIREMENT? - YES
- 2) IF GENERATION METER REQUIRED, DOES THIS METER SOCKET MEET THE REQUIREMENT? - YES
- 3) SIZE PHOTOVOLTAIC POWER SOURCE (DC) CONDUCTORS BASED ON MAX CURRENT ON NEC 690.53 SIGN OR OCPD RATING AT DISCONNECT
- 4) SIZE INVERTER OUTPUT CIRCUIT (AC) CONDUCTORS ACCORDING TO INVERTER OCPD AMPERE RATING. (See Guide Section 9)
- 5) TOTAL OF 9 INVERTER OCPD(S), ONE FOR EACH INVERTER, DOES TOTAL SUPPLY BREAKERS COMPLY WITH 120% BUSBAR EXCEPTION IN 690.64(B)(2)(a)? -

Contractor Name, Address and Phone:		Notes for One-Line Standard Electrical Diagram for Single-Phase PV Systems	
Sunset Air Inc. 5210 Lacey Blvd SE Lacey, WA 98503 360-456-4956 Drawn By: ZMD Checked By:		Larson Jeep Site Address: System AC Size: Size FSCM NO DWG NO REV Scale Date Sheet /	

**300 BLDG
LARSON AUTOMOTIVE GROUP**
300 RIVER ROAD
PUYALLUP, WA 98371

DESIGNED BY: ZMD
DRAWN BY: ZMD
REVIEWED BY: RJP

REVISIONS	DATE	DESCRIPTION
0	01/21/22	PERMIT SET
1	02/22/22	DOAS REV
2	03/30/22	PERMIT RESUBMITTAL

SCHEDULES, ONE LINE
DIAGRAM

SHEET NUMBER

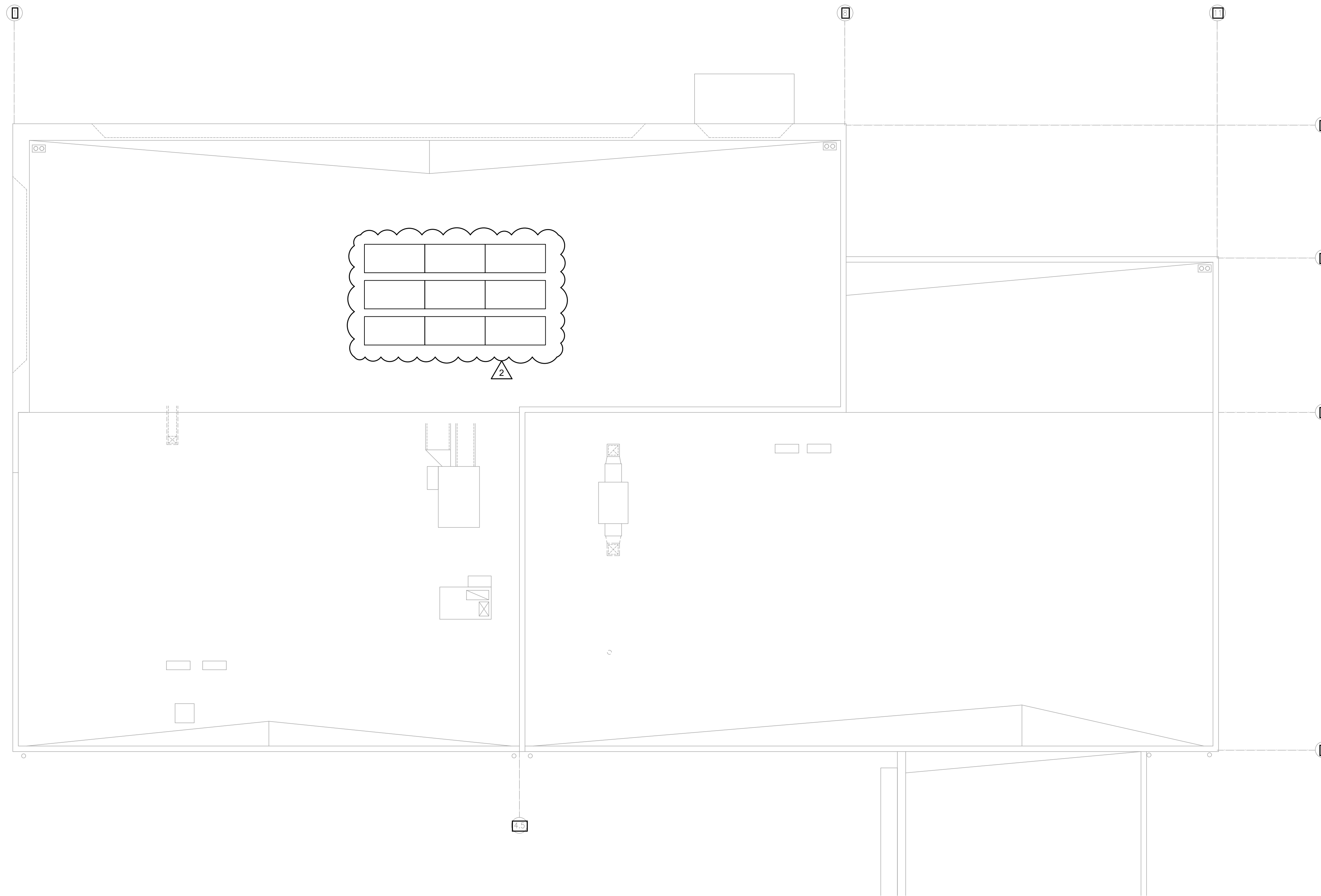
PV1.0

Sunset Air
INCORPORATED
5210 LACEY BLVD, LACEY WA 98503 SUNSETAIR.COM (360)456-4956

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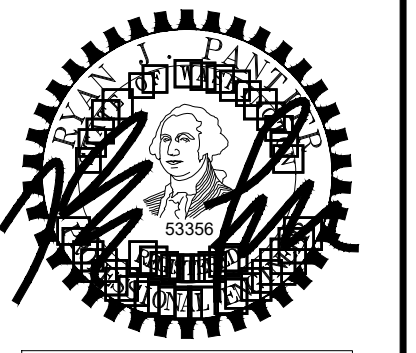
EXPIRES: 08-11-22



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300 BLDG
LARSON AUTOMOTIVE GROUP
300 RIVER ROAD
PUYALLUP, WA 98371

DESIGNED BY: ZMD
DRAWN BY: ZMD
REVIEWED BY: RJP

REVISIONS

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1	02/22/22	DOAS REV
2	03/30/22	PERMIT RESUBMITTAL

PV ARRAY PLAN

SHEET NUMBER

PV2.0

ROOF PLAN - PV ARRAY
SCALE: 1/8" = 1' - 0"