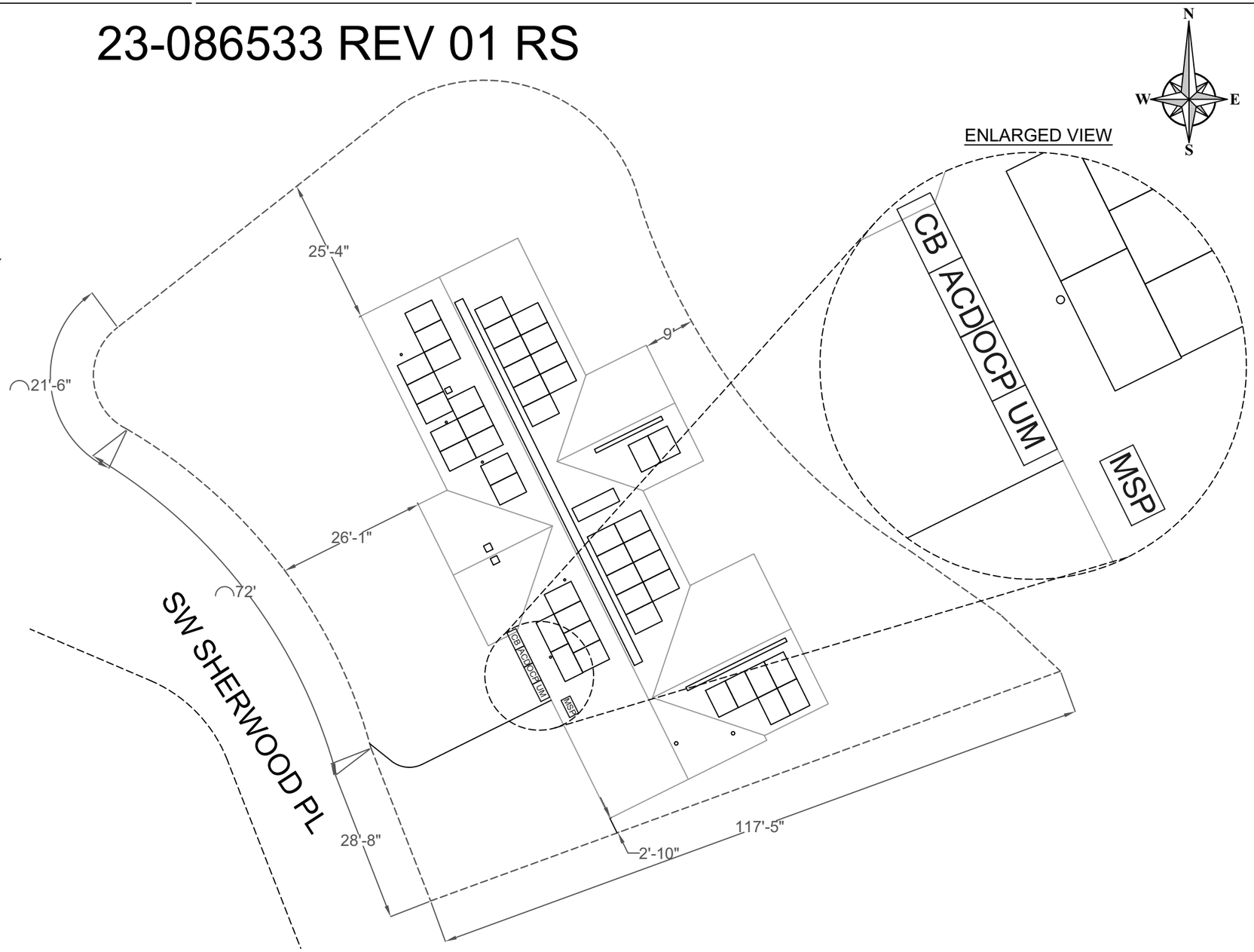
City Of Portland
REVIEWED FOR CODE COMPLIANCE
Date: 11/28/23
Permit #: 23-086533-REV-01-RS

REGISTERED PROFESSIONAL ENGINEER
96303PE
OREGON
JAN 12, 2021
TREVOR JONES
EXPIRES: 06/30/25

11/22/2023
STRUCTURAL ONLY

23-086533 REV 01 RS



SCALE: 1"=20'

Purelight Power

PURELIGHT POWER

3521 AVION DRIVE STE 200,
MEDFORD, OR 97504
CSLB: 226333

PHONE: (541) 816-4047
EMAIL: ADMIN@PURELIGHTPOWER.COM

VERSION

	DATE	DESIGNER
DES 1	11/22/23	MATTHEW DAVID
REV 1		
REV 2		
REV 3		
REV 4		

PROJECT NAME
NELY JOHNSON
3306 SW SHERWOOD PL, PORTLAND OR 97239
APN# 1S1E09BC -03200
AHJ: CITY OF PORTLAND
UTILITY: PORTLAND GENERAL ELECTRIC

LEGEND

- UM - UTILITY METER
- MSP - MAIN SERVICE PANEL
- ACD - AC DISCONNECT
- CB - COMBINER PANEL
- OCP - OCP PANEL
- ---- - PROPERTY LINE
- ——— - DRIVEWAY
- ---- - ROAD LINE
- ---- - TRENCHING PATH

SHEET NAME

SITE PLAN

SHEET NUMBER

PV-1

SYSTEM NOTES:

1. 46 - 405W ZNSHINE PANELS = 18.63 KW DC
2. 8 - HOYMILES HM-1200 (1200W) = 5.00A EACH @ 240V AC
3. 6 - HOYMILES HM-600 (590W) = 2.46A EACH @ 240V AC
4. 2 - HOYMILES HM-300 (295W) = 1.23 EACH @ 240V AC
5. TOTAL AC SYSTEM SIZE = 13.73 KW AC

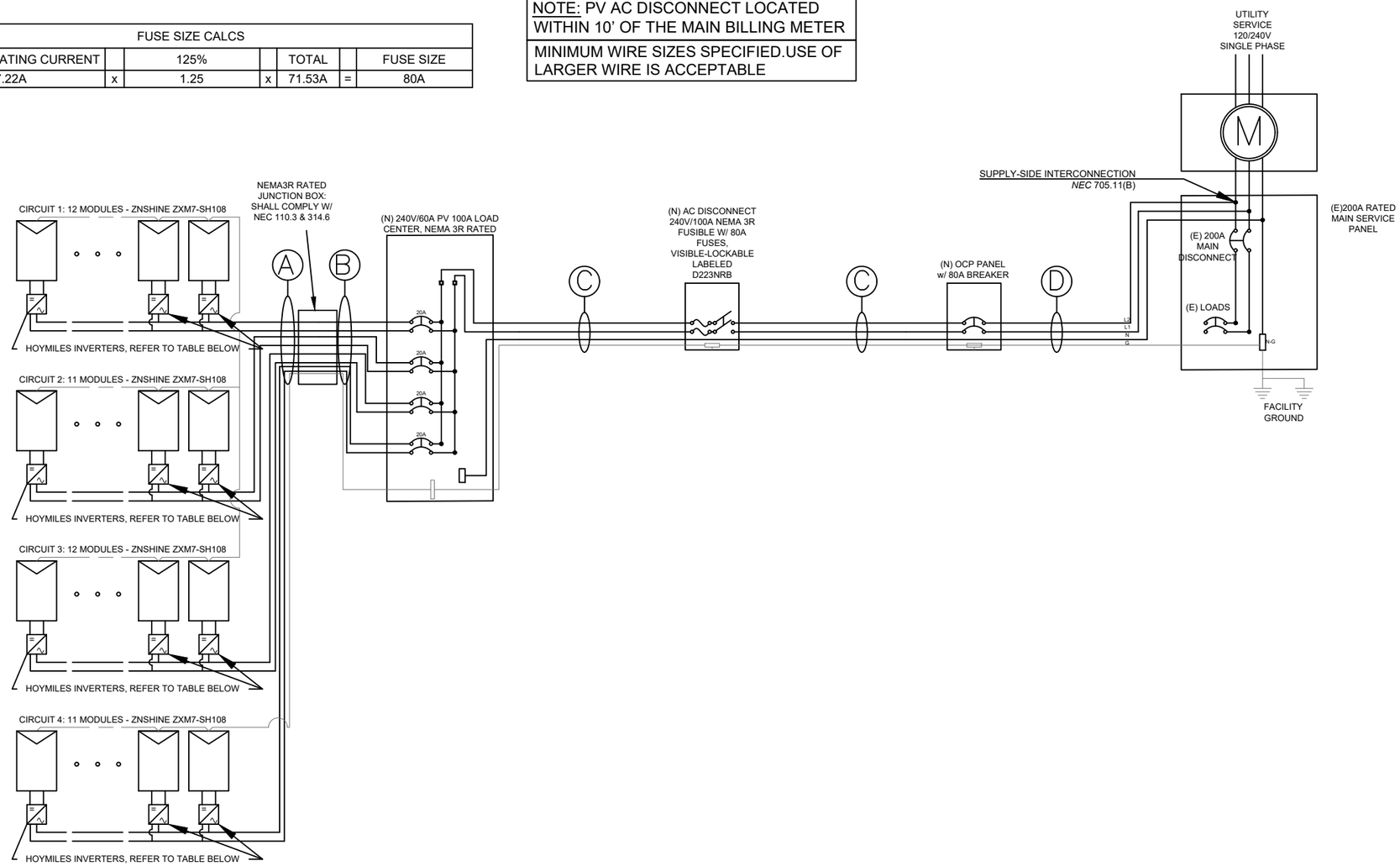
CONDUCTOR SCHEDULE

	CONDUCTORS			GROUND	
TAG ID	WIRES IN CONDUIT	MINIMUM WIRE SIZE	TYPE, MATERIAL	MINIMUM WIRE SIZE	TYPE, MATERIAL
A*	12	#12 AWG	THWN-2, CU	#6 AWG	THWN-2, CU
B	9	#12 AWG	THWN-2, CU	#12 AWG	THWN-2, CU
C	3	#4 AWG	THWN-2, CU	#6 AWG	THWN-2, CU
D	4	#4 AWG	THWN-2, CU	#6 AWG	THWN-2, CU

FUSE SIZE CALCS						
MAX AC OPERATING CURRENT		125%		TOTAL		FUSE SIZE
57.22A	x	1.25	x	71.53A	=	80A

NOTE: PV AC DISCONNECT LOCATED WITHIN 10' OF THE MAIN BILLING METER

MINIMUM WIRE SIZES SPECIFIED.USE OF LARGER WIRE IS ACCEPTABLE



COMBINER BOX PANEL SIZE CALCS																
CIRCUIT #	NUMBER OF MODULES	MICROINVERTER TYPE	NUMBER OF MICROINVERTERS		NOMINAL OUTPUT CURRENT		TOTAL		125%		TOTAL		COMBINED TOTAL		BREAKER SIZE
CIRCUIT 1 (1 of 2)	4	HM-600N	2	X	2.46A	=	4.92A	x	1.25	=	6.15A	=	18.65A	=	20A
CIRCUIT 1 (2 of 2)	8	HM-1200N	2	X	5A	=	10.00A	x	1.25	=	12.50A				
CIRCUIT 2 (1 of 3)	1	HM-300N	1	X	1.23A	=	1.23A	x	1.25	=	1.54A		17.11A	=	20A
CIRCUIT 2 (2 of 3)	2	HM-600N	1	X	2.46A	=	2.46A	x	1.25	=	3.08A				
CIRCUIT 2 (3 of 3)	8	HM-1200N	2	X	5A	=	10.00A	x	1.25	=	12.50A				
CIRCUIT 3 (1 of 2)	4	HM-600N	2	X	2.46A	=	4.92A	x	1.25	=	6.15A	=	18.65A	=	20A
CIRCUIT 3 (2 of 2)	8	HM-1200N	2	X	5A	=	10.00A	x	1.25	=	12.50A				
CIRCUIT 4 (1 of 3)	1	HM-300N	1	X	1.23A	=	1.23A	x	1.25	=	1.54A		17.11A	=	20A
CIRCUIT 4 (2 of 3)	2	HM-600N	1	X	2.46A	=	2.46A	x	1.25	=	3.08A				
CIRCUIT 4 (3 of 3)	8	HM-1200N	2	X	5A	=	10.00A	x	1.25	=	12.50A				

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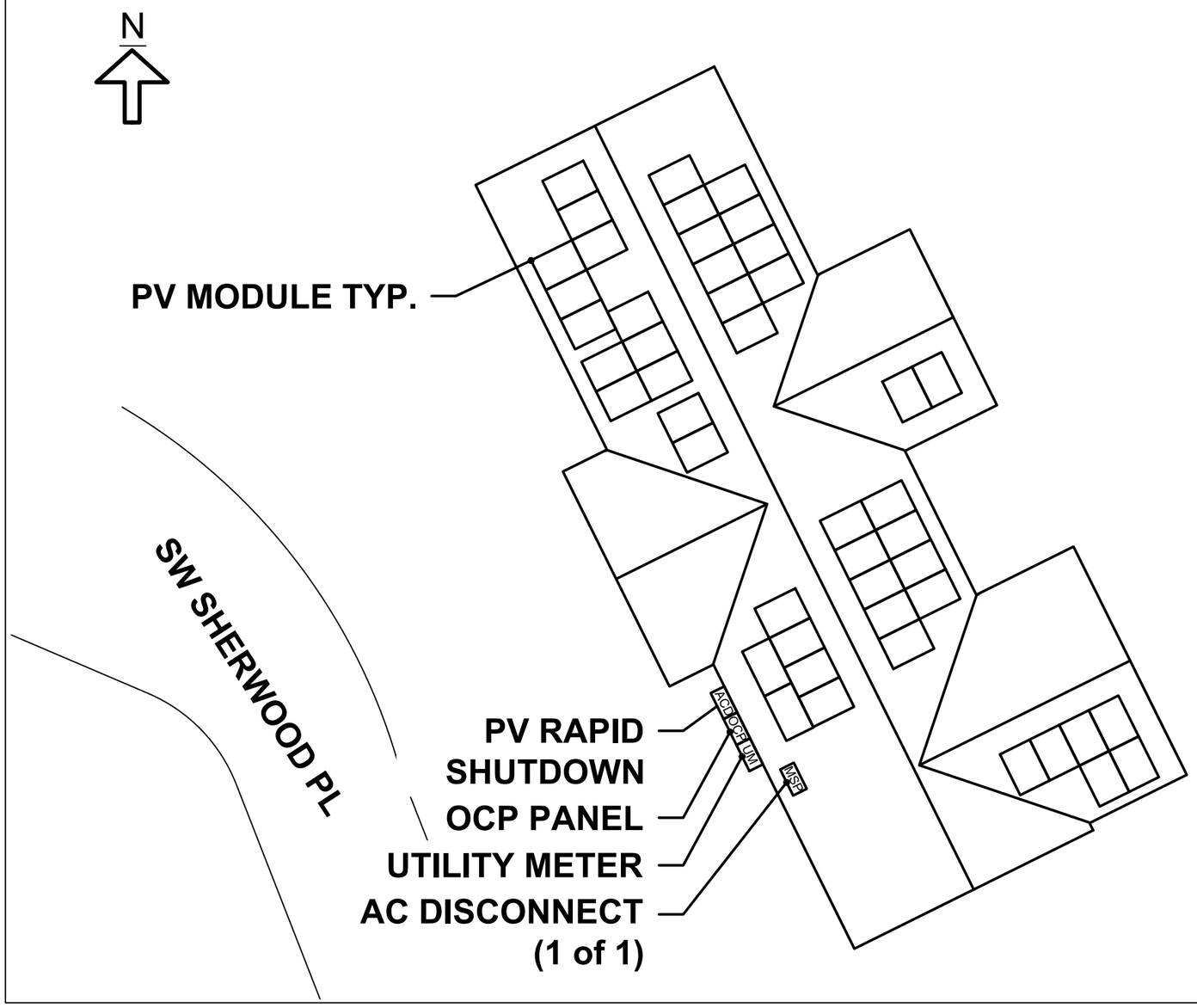
SHEET NAME
ELECTRICAL DIAGRAM

SHEET NUMBER
PV-5

CAUTION

POWER TO THIS BUILDING IS SUPPLIED FROM THE FOLLOWING SOURCES WITH DISCONNECTS LOCATED AS SHOWN:

3306 SW Sherwood Pl, Portland OR 97239



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SHEET NAME

PLACARD

SHEET NUMBER

PV-8