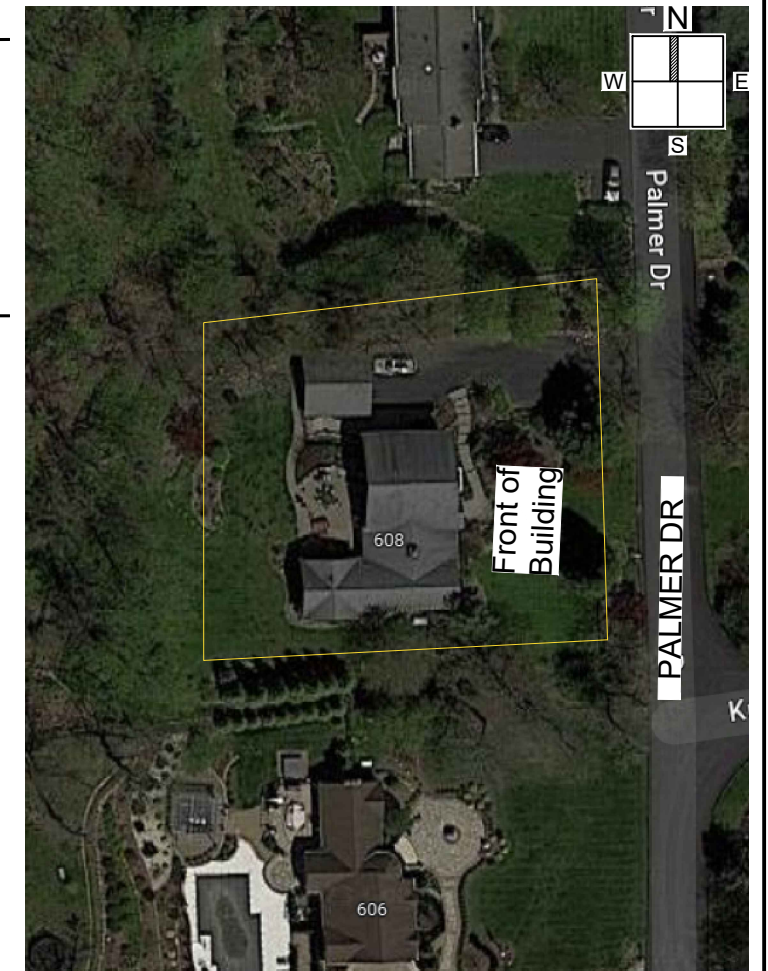


SITE PLAN



General Notes

1. Modules to be SUNPOWER 425 Watt BoB Residential AC Module, to be installed per SUNPOWER Installation Manual.
2. Racking to be InvisiMount Racking, to be installed as per InvisiMount Racking Manufacturer's Specifications.

Wind and Snow Load

Wind Speed: 115 mph
Snow Load: 40 psf

Design Notes (New York)

Design complies with 2020 Fire Code of NYS, 2020 Residential Code of NYS and NEC 2017



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KELLY RESIDENCE

608 PALMER DRIVE
NYACK, NY 10960

SECTION 60.5 BLOCK 2 LOT 35

ROCKLAND
VILLAGE OF UPPER NYACK

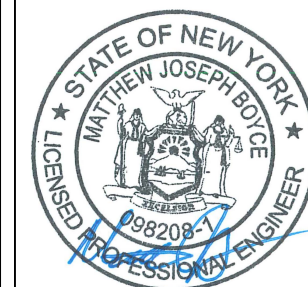
DATE	VER.	BY	CHK	REMARKS
4/26/2023	R0	DJ		

JOB ##22-0216

SYSTEM DESCRIPTION:

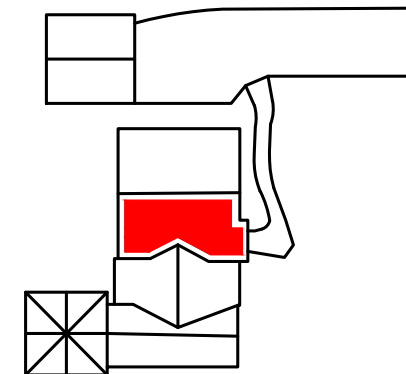
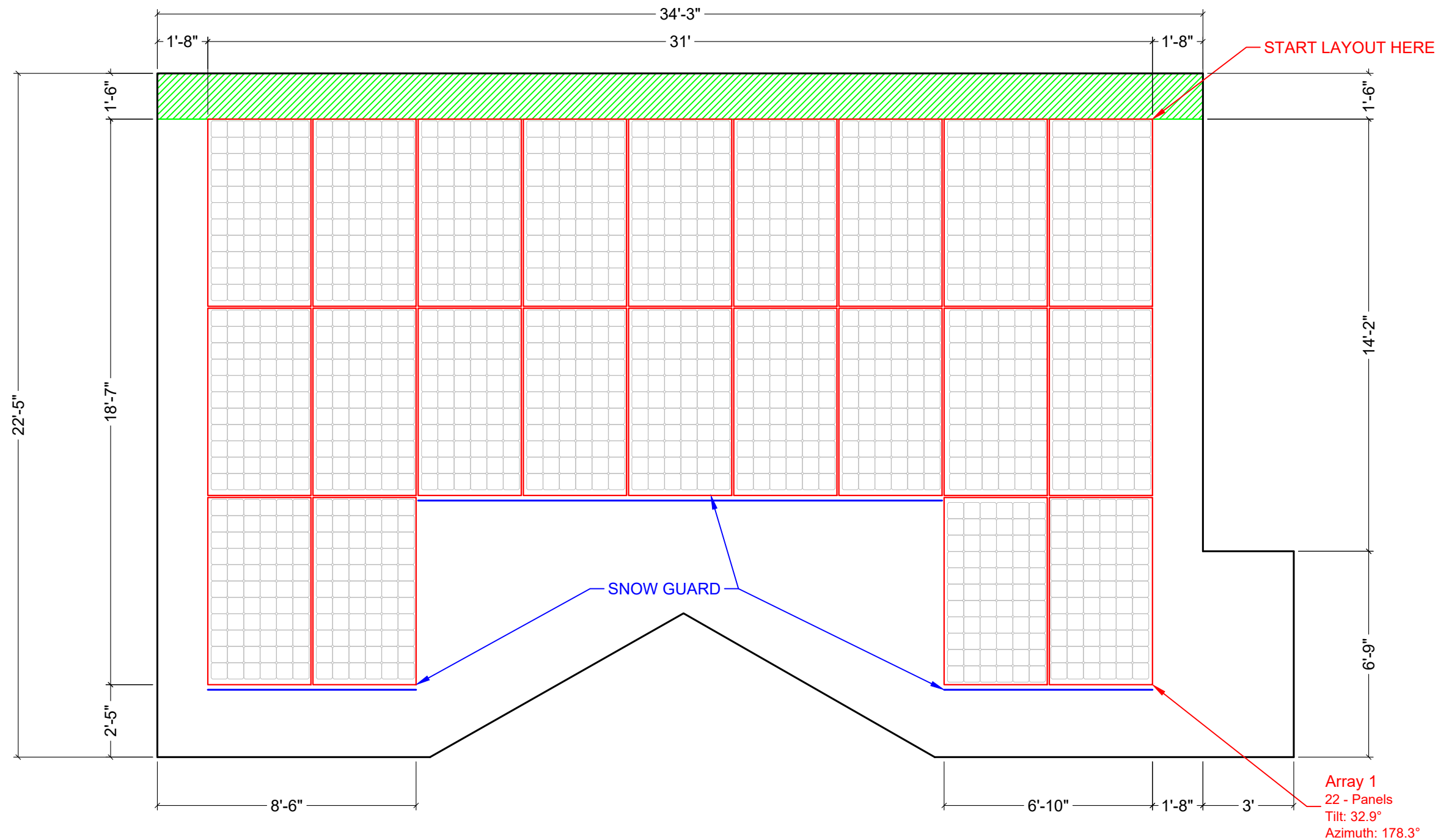
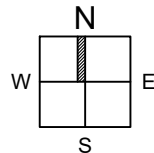
- 22 Photovoltaic Panels
- SUNPOWER
- SPR-M425-BLK-H-AC, BoB
- System Size: 9.35 kW DC
8.45 kW AC

ARRAY	1
TILT	32.9°
AZIMUTH	178.3°



S1

SITE PLAN



KEY MAP
N.T.S.

Array 1
Rafters: 2x10 @16" o.c.

Array 1
22 - Panels
Tilt: 32.9°
Azimuth: 178.3°

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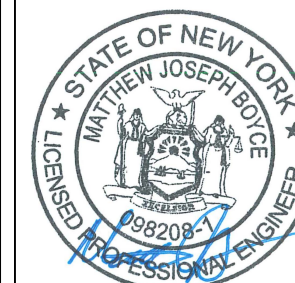
DATE	VER.	BY	CHK	REMARKS
4/26/2023	R0	DJ		

JOB ##22-0216

SYSTEM DESCRIPTION:

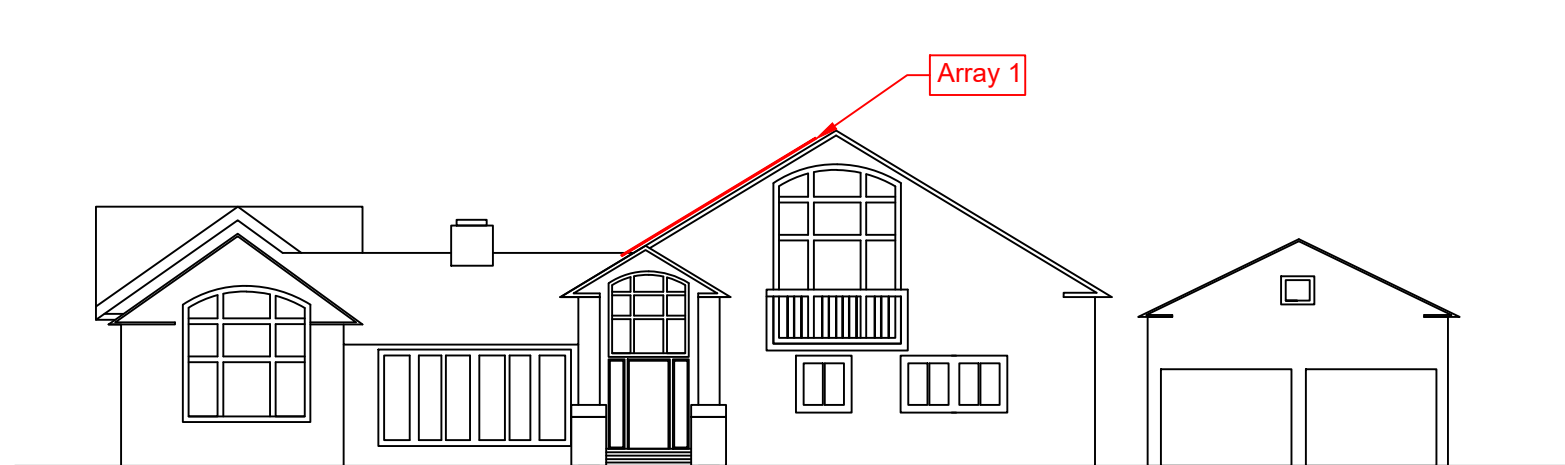
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AZIMUTH	178.3°

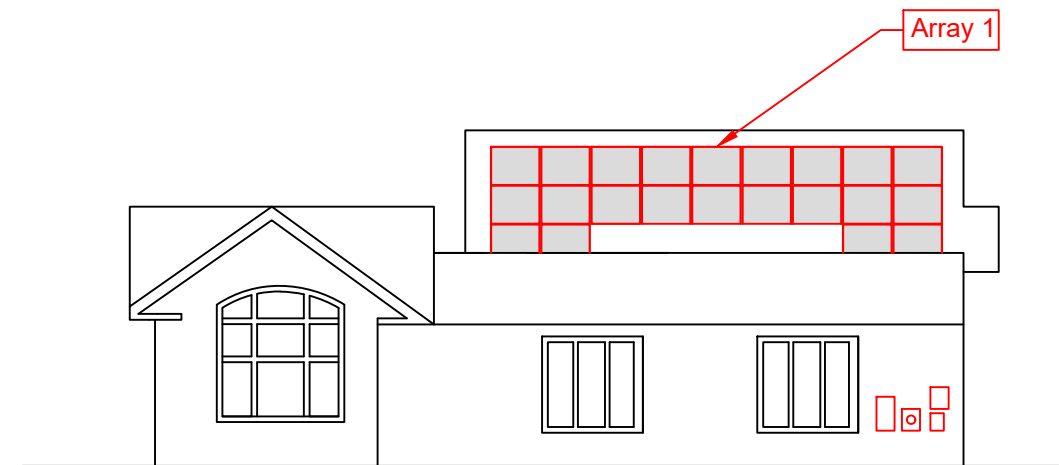


S2.1

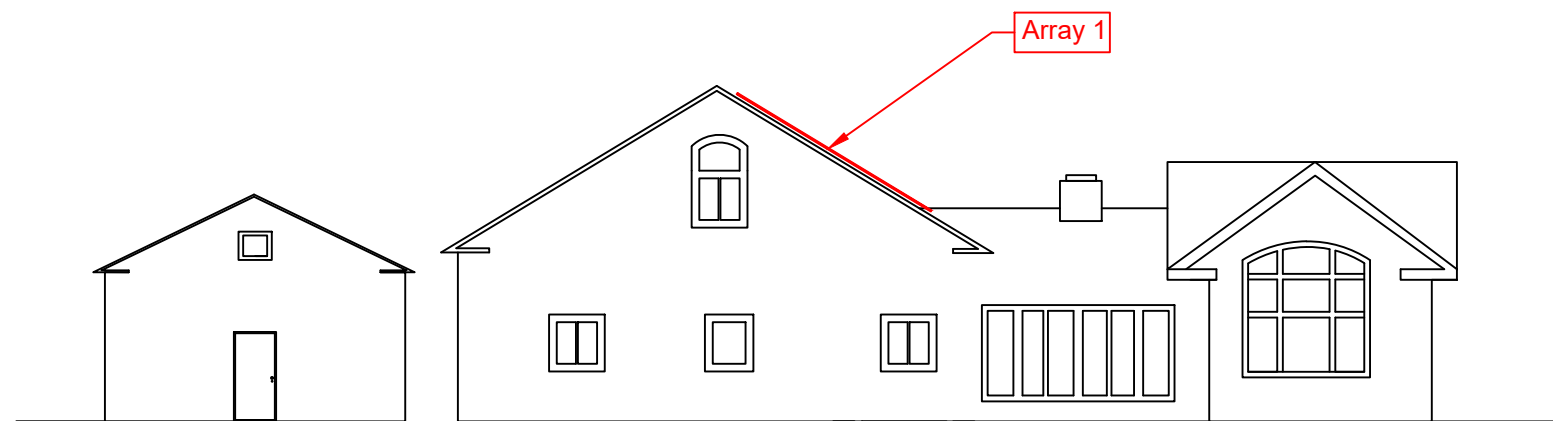
ROOF PLAN



FRONT ELEVATION
N.T.S.



RIGHT SIDE ELEVATION
N.T.S.



BACK ELEVATION
N.T.S.

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SECTION 60.5 BLOCK 2 LOT 35

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VILLAGE OF UPPER NYACK

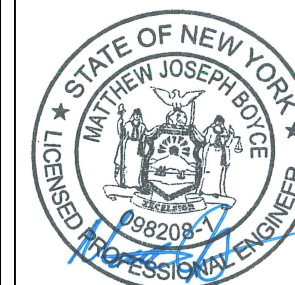
DATE	VER.	BY	CHK	REMARKS
4/26/2023	R0	DJ		

JOB ##22-0216

SYSTEM DESCRIPTION:

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- SPR-M425-BLK-H-AC, BoB
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8.45 kW AC

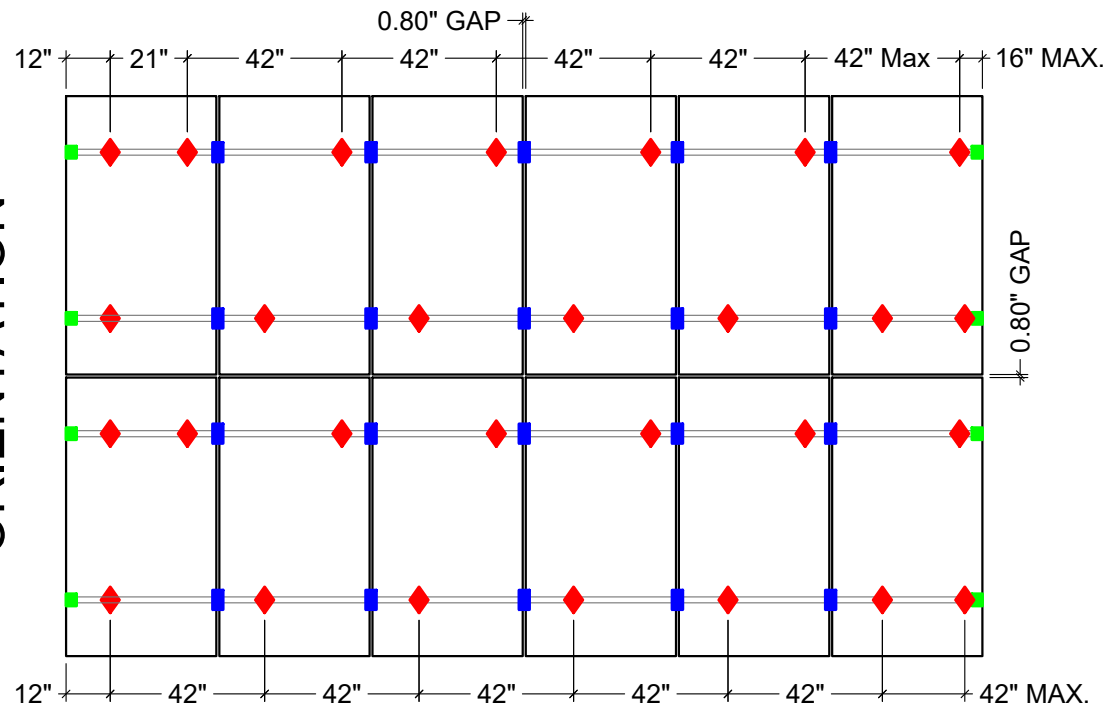
ARRAY	1
TILT	32.9°
AZIMUTH	178.3°



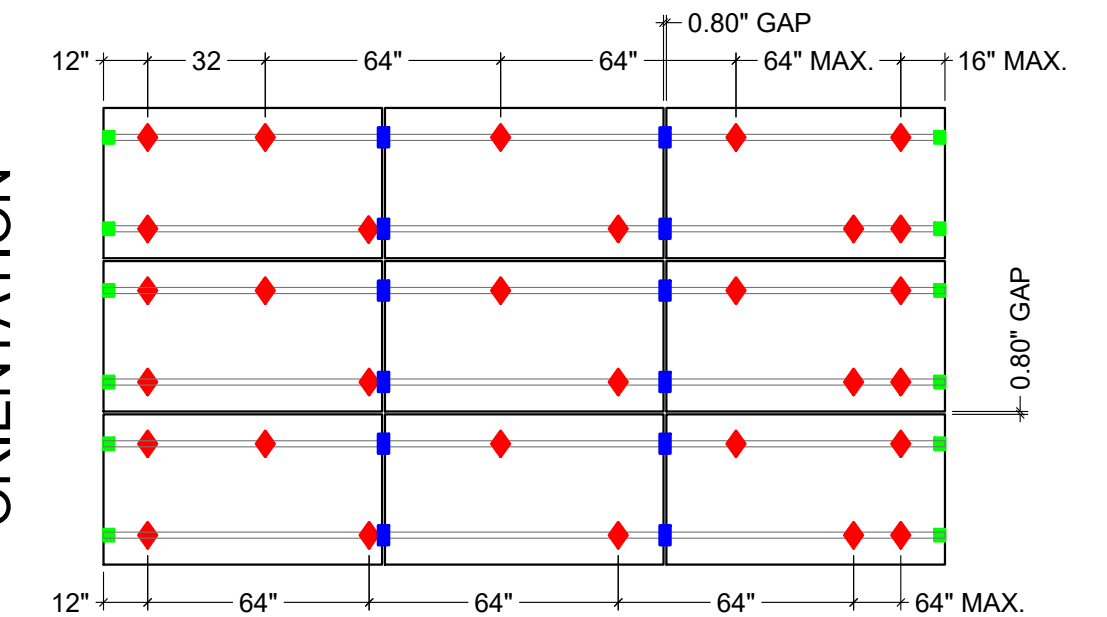
S2.2

ROOF PLAN

PORTRAIT
ORIENTATION



LANDSCAPE
ORIENTATION



ARRAY LAYOUT
NTS

LEGEND

- MID CLAMP
- END CLAMP
- ◆ ROOF ATTACHMENT (MAX SPACING: 64")
- INVISIMOUNT RAILS (2 PER MODULE)
- MODULE
- ▨ RAIL LOCATION, LANDSCAPE ORIENTATION
- ▨ RAIL LOCATION, PORTRAIT ORIENTATION

ATTACHMENT NOTES

- ATTACHMENTS NOT TO EXCEED 42" O.C. HORIZONTALLY
- MAXIMUM RAIL CANTILEVER: 16"
- MINIMUM 2 ATTACHMENT PER MODULE (GLOBALLY)
- STAGGER ATTACHMENTS

CLAMPS NOTES

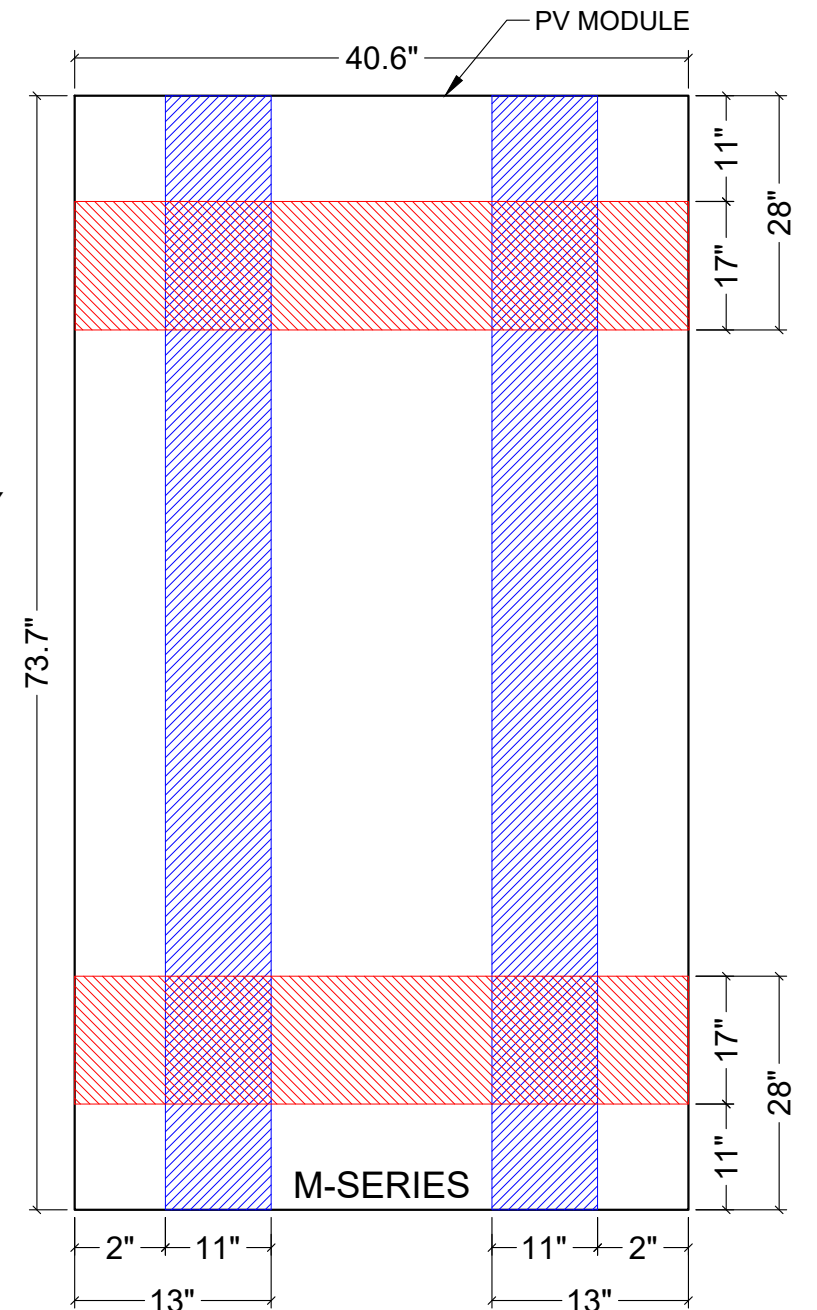
- FOR SUNPOWER U-SERIES MODULE USE UNIVERSAL MID CLAMP AND UNIVERSAL END CLAMP
- FOR SUNPOWER A, M, X & E SERIES USE CLASSIC MID CLAMP AND CLASSIC END CLAMP

RAIL NOTES

- RAILS SHALL BE POSITIONED IN THE HATCHED REGION

MODULE NOTES

- WARNING! DO NOT STEP ON, STAND ON, OR WALK ON THE MODULES OR THE MODULE FRAMES, AND DO NOT PLACE ANYTHING ON THEM--EVEN FOR A MOMENT.



CLAMP LOCATION
NTS

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SECTION 60.5 BLOCK 2 LOT 35

ROCKLAND
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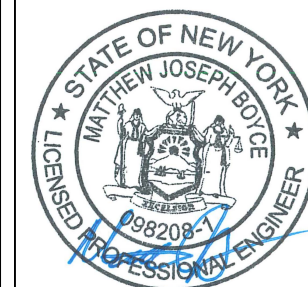
DATE	VER.	BY	CHK	REMARKS
4/26/2023	R0	DJ		

JOB ##22-0216

SYSTEM DESCRIPTION:

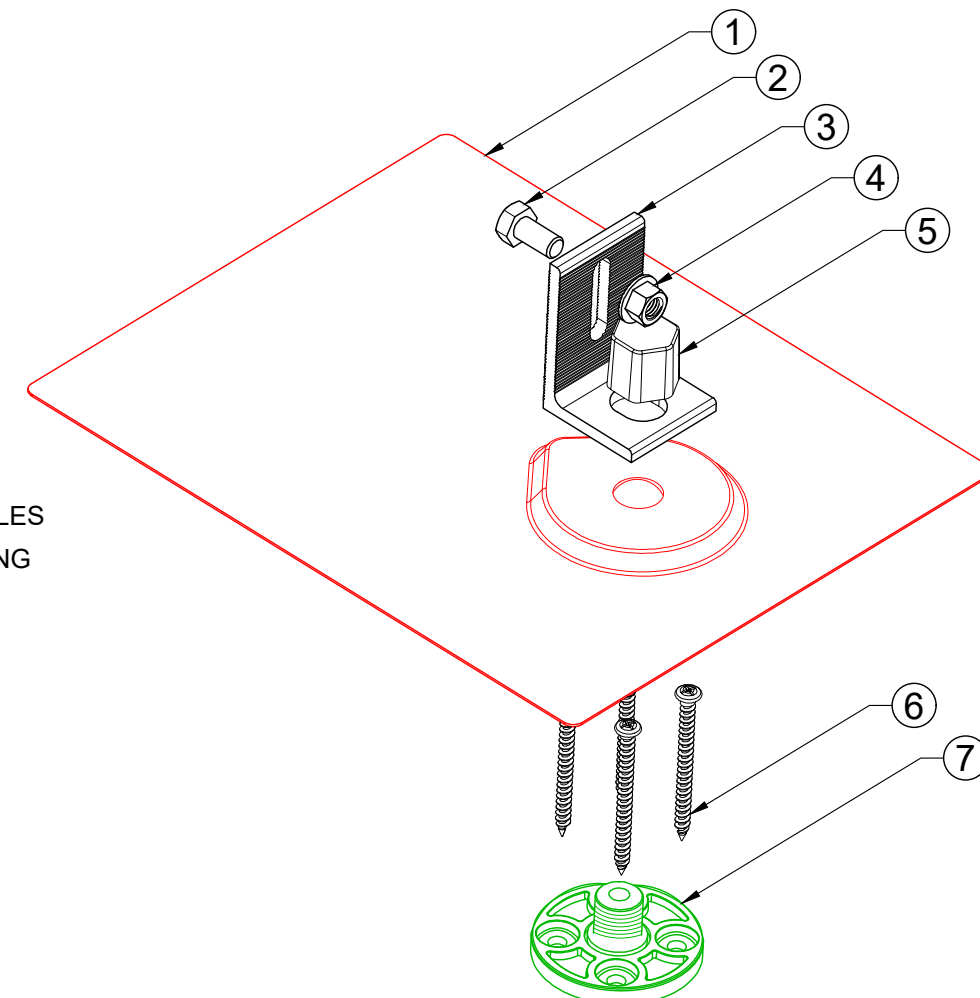
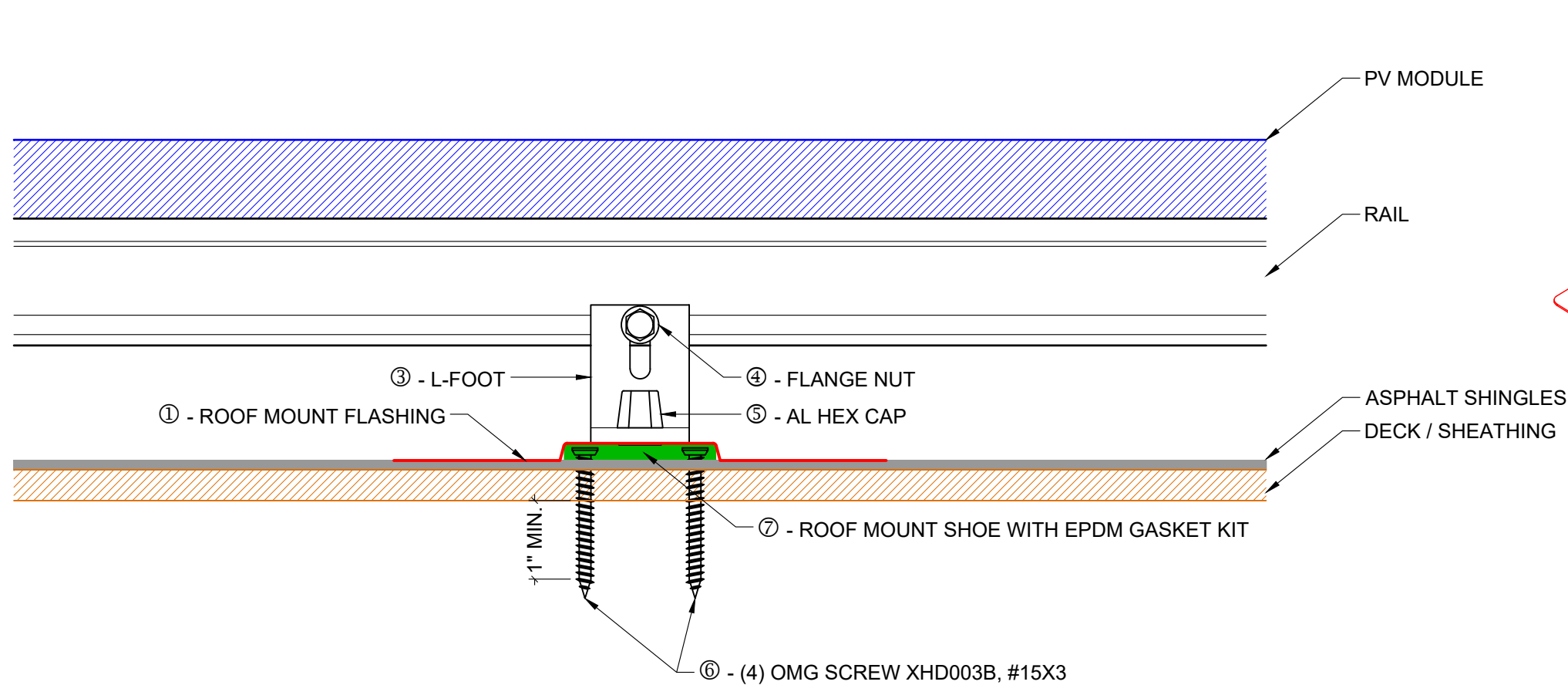
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- SUNPOWER
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8.45 kW AC

ARRAY	1
TILT	32.9°
AZIMUTH	178.3°



S3

**RACKING
LAYOUT**



ITEM	PART NUMBER	DESCRIPTION	QTY
1	A20052-001	ROOF MOUNT FLASHING	1
2	B15018-001	HEX CAP SCREW 3/8-16 X 3/4	1
3	A20064-003	L-FOOT	1
4	B15003-001	FLANGE NUT 3/8-16	1
5	A20066-001	AL HEX CAP	1
6	B15040-001	OMG SCREW XHD003B,#15X3	4
7	K10291-001	ROOF MOUNT SHOE WITH EPDM GASKET KIT	1

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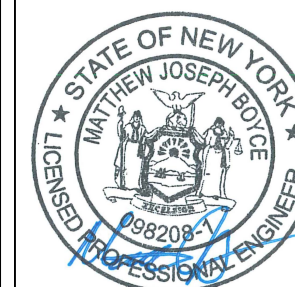
DATE	VER.	BY	CHK	REMARKS
4/26/2023	R0	DJ		

JOB ##22-0216

SYSTEM DESCRIPTION:

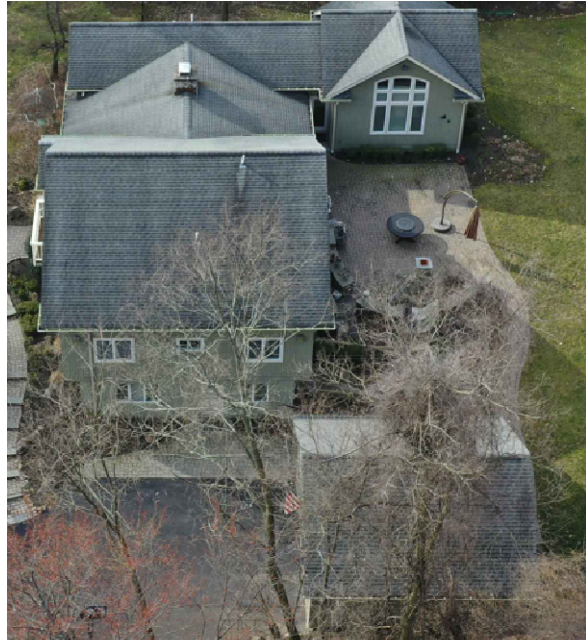
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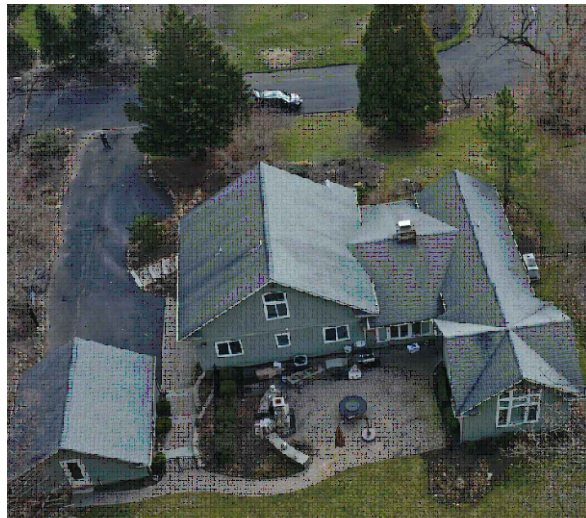


S4

**ATTACHMENT
 DETAIL**



NORTH SIDE



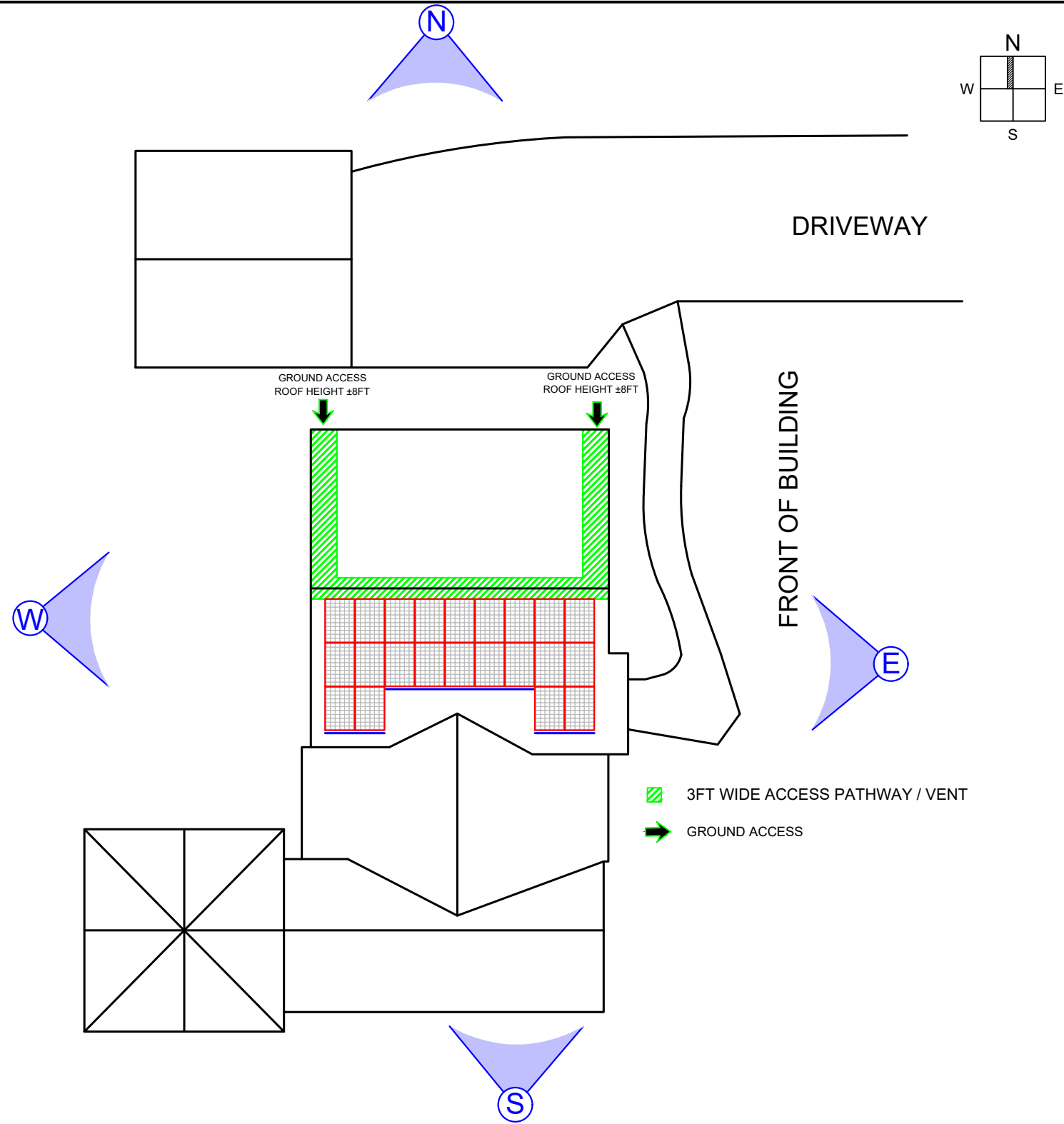
WEST SIDE



EAST SIDE



SOUTH SIDE



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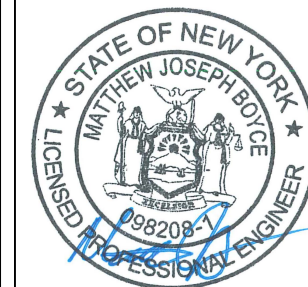
ROCKLAND
VILLAGE OF UPPER NYACK

DATE	VER.	BY	CHK	REMARKS
4/26/2023	R0	DJ		
JOB ##22-0216				

SYSTEM DESCRIPTION:

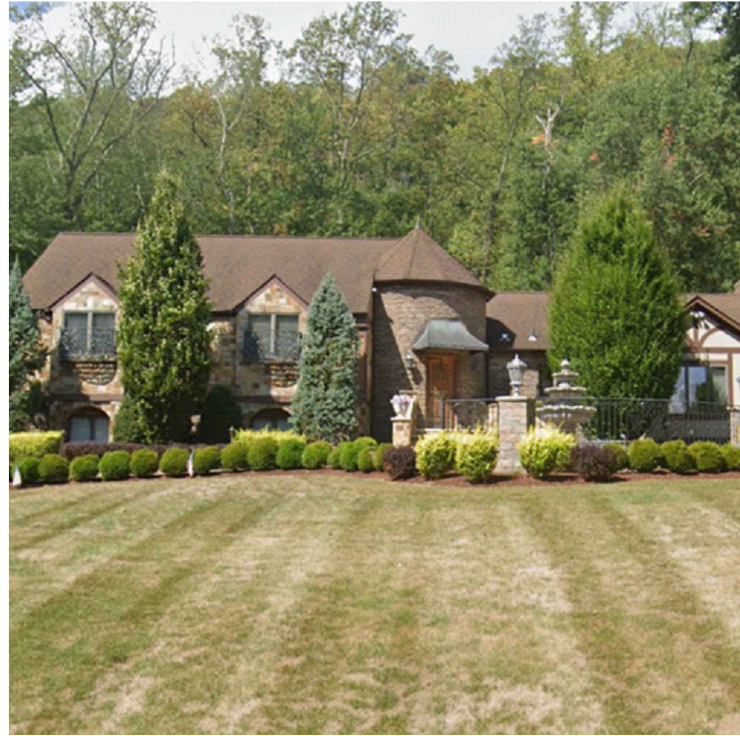
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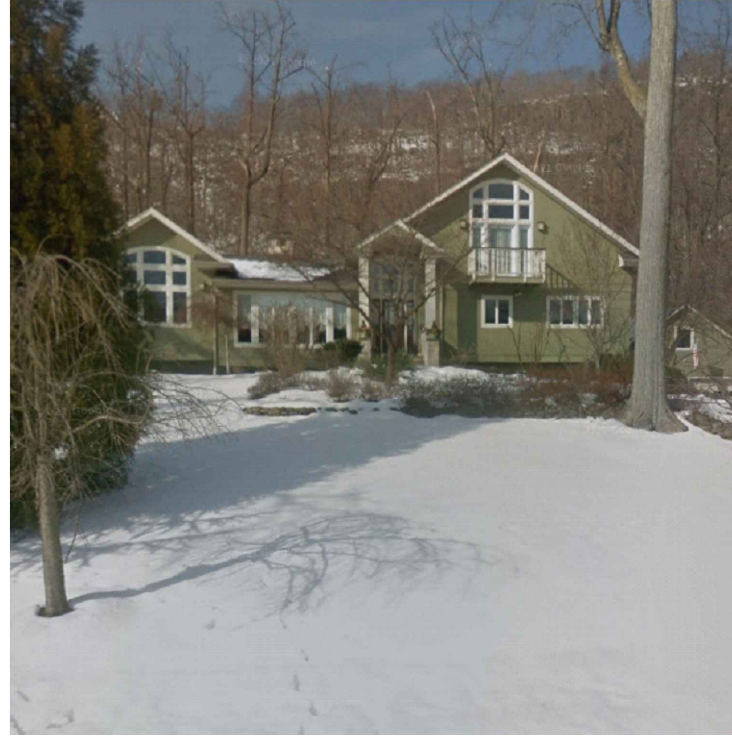


S5

**ROOF ACCESS
PLAN**



ADJACENT PROPERTY ON THE LEFT



OWNER'S PROPERTY



ADJACENT PROPERTY ON THE RIGHT



PROPERTY ACROSS THE STREET

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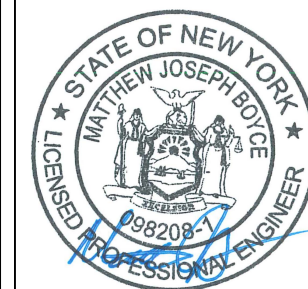
DATE	VER.	BY	CHK	REMARKS
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JOB ##22-0216

SYSTEM DESCRIPTION:

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- SUNPOWER
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8.45 kW AC

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TILT	32.9°
AZIMUTH	178.3°



S6

ADJACENT /
 ACROSS
 PROPERTIES

INVERTER SETTINGS:

IEEE1547 Protective Settings

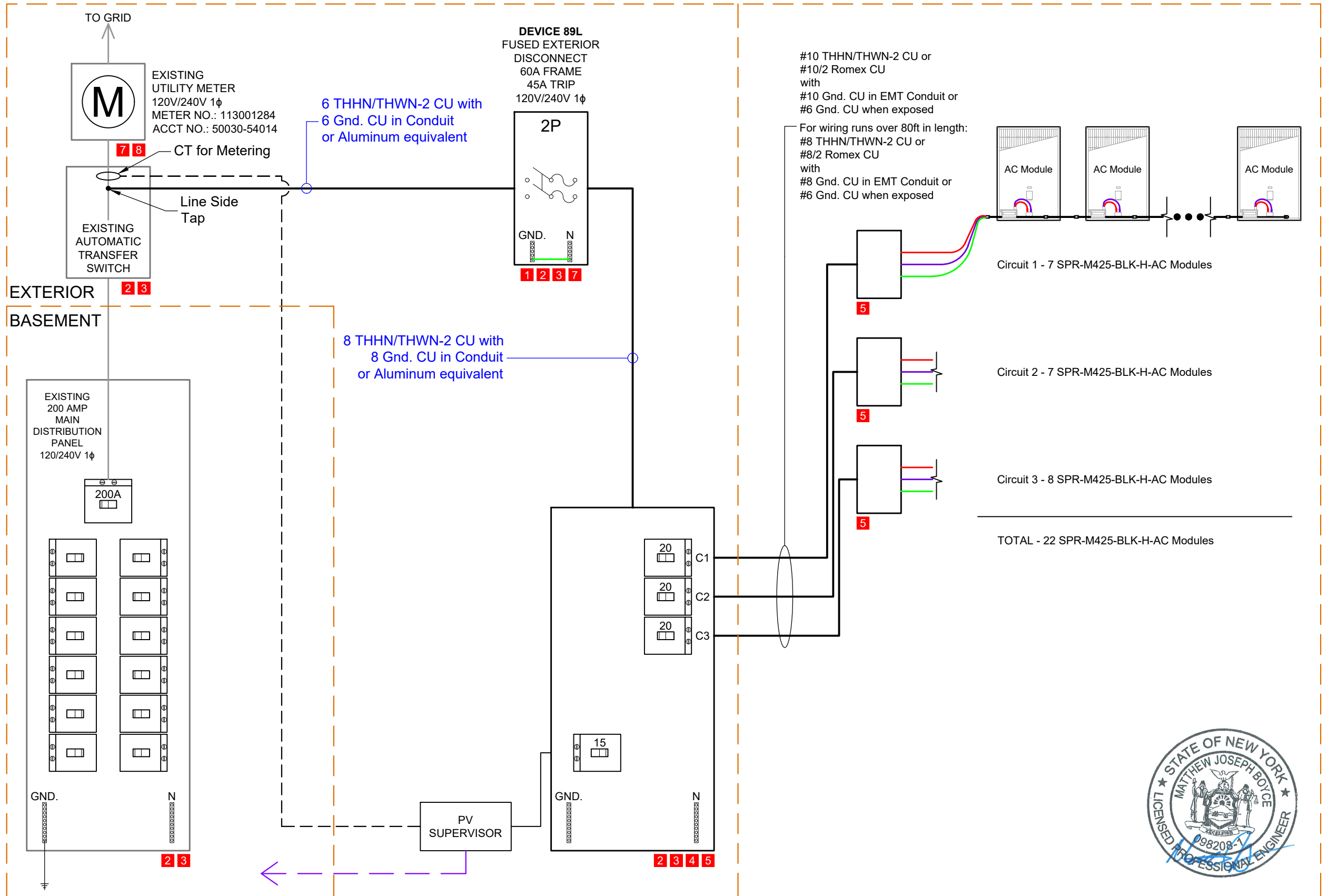
FREQUENCY DISTURBANCE TRIP		
Trip Function	Voltage (p.u.)	Clearing Time (s)
OF2	62.0	0.16
OF1	61.2	300
UF1	58.5	300
UF2	56.5	0.16

VOLTAGE DISTURBANCE TRIP		
Trip Function	Voltage (p.u.)	Clearing Time (s)
OV2	1.20	0.16
OV1	1.10	2.00
UV1	0.80	3.00
UV2	0.50	1.10

NOTES:

- Labels to comply with PSC and NEC requirements.
- All wiring to comply with NEC.
- Ground to be continuous
- Ground wire connections to be "irreversible"
- Meter pan to be grounded only.
- Neutral to pass through Meter Pan
- No line side tap connection in utility meter pan
- All equipment to be bonded with ground lug per NEC Code.
- No additional breakers to be added to spare spaces

- 1** 89L SOLAR AC DISCONNECT
- 2** Warning - Inverter Output Connection Do NOT Relocate This Overcurrent Device
- 3** WARNING - DUAL POWER SOURCES
Second Source is a Photovoltaic System
Rated AC Current _____ Amps
Nominal AV Voltage _____ Volts
- 4** SOLAR AC COMBINER PANEL
- 5** SOLAR PV CIRCUITS ONLY
Do Not Use For Non-PV Circuits
- 6** SOLAR PRODUCTION METER
- 7** WARNING
DUAL POWER SOURCE
SECOND SOURCE IS PV SYSTEM
- 8** PHOTOVOLTAIC SYSTEM EQUIPPED WITH RAPID SHUTDOWN



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Sect. 60.5, Block 2, Lot 35

DATE	VER.	BY	CHK	REMARKS
DJ	RD			

JOB ##22-0216

Circuit Calculation:
 Max. no. of Inverter per circuit = 10
 $(1.25 \times 10 \times 384W) \div 240V = 20.00A$, **Use 20A OCPD**
 Total no. of Inverter = 22
 $(1.25 \times 22 \times 384W) \div 240V = 44.00A$, **Use 45A OCPD**

System Specifications:
 Total System:
 22 Mod x 425W = 9.4kW DC STC
 22 Inv x 384W = 8.4kW AC
 Nominal AC Voltage = 240V
 Max AC Current = 35.2A

Legend:

— Existing Service	— Ground
— L3 Blue Wire	— Data Comm.
— L2 Red Wire	— Sensor or Switch
— L1 Black Wire	— PV Label
— Neutral	

E1
LINE DIAGRAM