ARCHITECTURAL & PRELIMINARY SITE PLAN REVIEW BOARD

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RENEE MARCUS, AIA – SUPERINTENDENT OF BUILDINGS
LUCILLE LANGONE – SECRETARY

APRIL 17, 2024
8:00 pm
Note Location: Recreation Center/Pool Building

Case No.	Approximate Time	Address #	Street	Description	Owner	Design Professional
1	8:00 p.m.	99	Covert Avenue	Re-submission – Addition & Alterations	Floral Park Depository 1929 Realty Partners LLC	Kenneth R. Garvin, AIA
2	8:30 p.m.	159	Ash Street	Re-submission – 2nd Story Addition & Alterations	Scott and Lauren Bieniek	Kenneth R. Garvin, AIA
3	8:35 p.m.	150	Charles Street	Solar	Trinity Solar	Roy Shawon
4	8:40 p.m.	246	Jericho Turnpike	Sign	V & W 236-246, LLC	Digi Sign Corp.
5	8:45 p.m.	5	Larch Avenue	Garage	John O'Donnell	Bobby K Architects
6	8:50 p.m.	122	Stewart Street	2nd Story Addition	Vanessa Giovanni	Steven J. Treubert, PE
7	8:55 p.m.	46	Birch Street	2nd Story Rear Addition	Anthony Sperruggia	Thomas Winnes, RA
8	9:00 p.m.	25	Irving Avenue	Front Facade	Shailendra Sah	John Schimenti
9	9:05 p.m.	17	Main Street	Solar	Akhtar Shah	Kamtech

Questions about the projects can be emailed to ARB@FPVillage.org prior to the meeting to allow for the Village and Applicant to be prepared with answers.

Supporting documents will be posted to the Architectural Review Board web page at least 24 hours prior to the meeting.

Click here for the ARB webpage.

Case No.	Approximate Time	Address #	Street	Description	Owner	Design Professional
9	9:05 p.m.	17	Main Street	Solar	Akhtar Shah	Kamtech

17 Main Street (Aerial View)

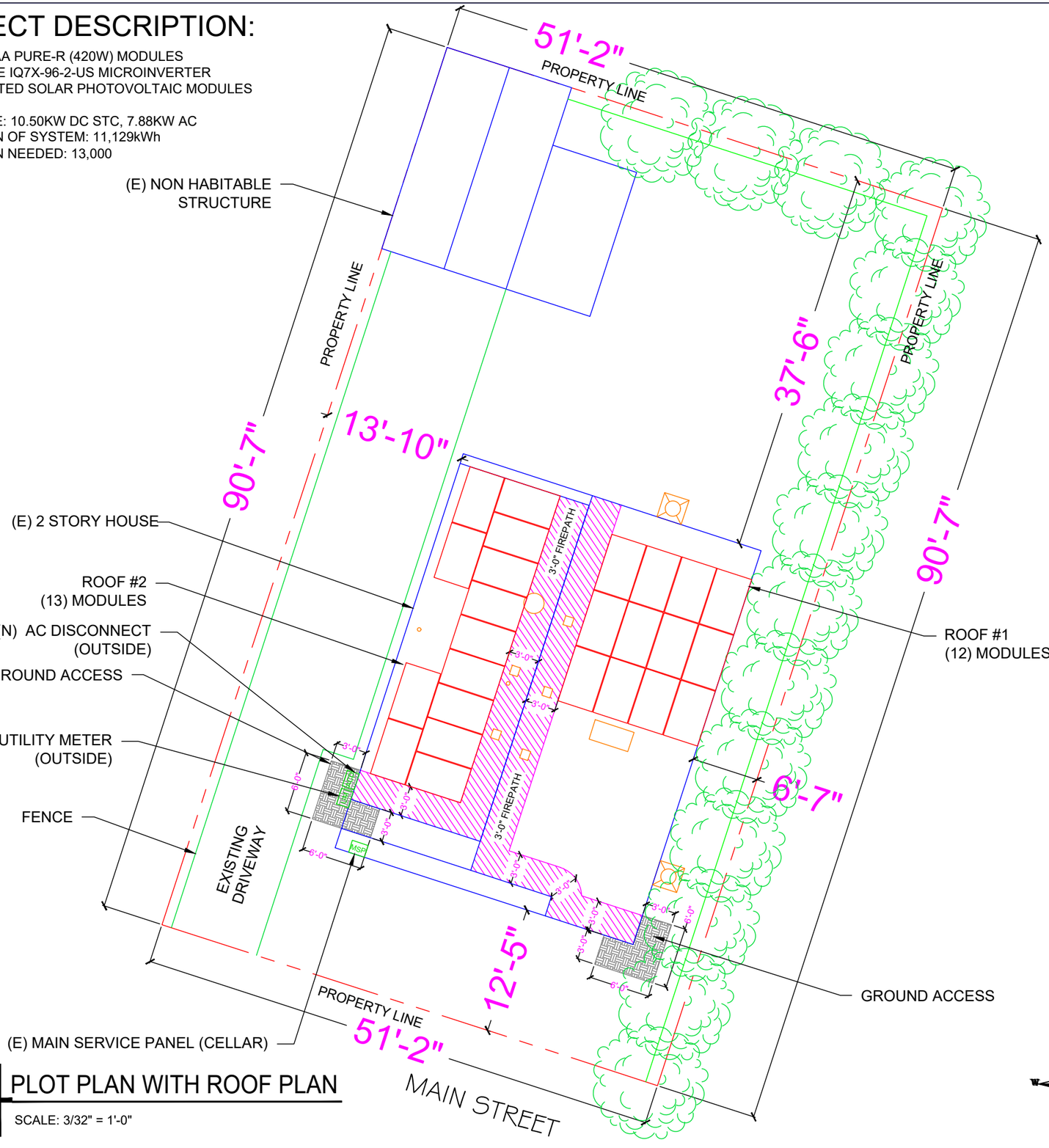
55 Main St

Image capture: Sep 2017 © 2024 Google

PROJECT DESCRIPTION:

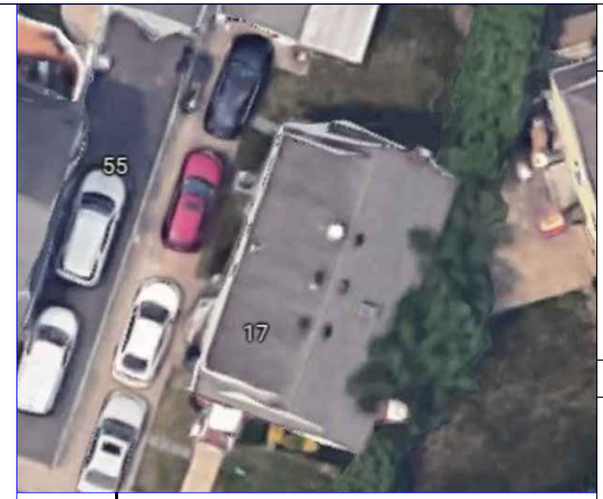
(25) REC420AA PURE-R (420W) MODULES
(25) ENPHASE IQ7X-96-2-US MICROINVERTER
ROOF MOUNTED SOLAR PHOTOVOLTAIC MODULES

SYSTEM SIZE: 10.50KW DC STC, 7.88KW AC
PRODUCTION OF SYSTEM: 11,129kWh
PRODUCTION NEEDED: 13,000



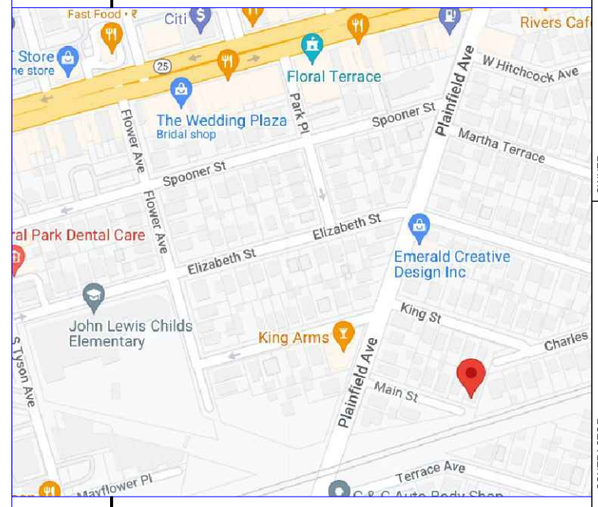
1 PLOT PLAN WITH ROOF PLAN

PV-1 SCALE: 3/32" = 1'-0"



2 HOUSE PHOTO

PV-1 SCALE: NTS



3 VICINITY MAP

PV-1 SCALE: NTS

APPLICABLE CODES & STANDARDS
2020 RESIDENTIAL CODE OF NEW YORK STATE (RCNYS)
NATIONAL ELECTRICAL CODE (NFPA70)/2017

TO THE BEST OF KNOWLEDGE, BELIEF, AND PROFESSIONAL JUDGMENT OF THE UNDERSIGNED, THE PLANS AND SPECIFICATIONS DEPICTED ON THESE DRAWINGS ARE IN COMPLIANCE WITH THE APPLICABLE PROVISIONS OF THE 2020 NEW YORK STATE UNIFORM FIRE PREVENTION AND BUILDING CODE AND ALL SUPPLEMENTS.

#	REVISION DESCRIPTION:
	02/23/2024 ENPH

OWNER:
AKHTAR SHAH
17 MAIN STREET
FLORAL PARK, NY, 11001

CONTRACTOR:
kamtech SOLAR SOLUTIONS

REGISTERED ARCHITECT CHUN FENG 019517 STATE OF NEW YORK

PAGE NAME: PLOT PLAN

DWG NO:	INSTALL NO:
PV-1	
DESIGNER:	QC BY:
SYSTEM SIZE: 10.50 KW	DATE: 02/23/2024

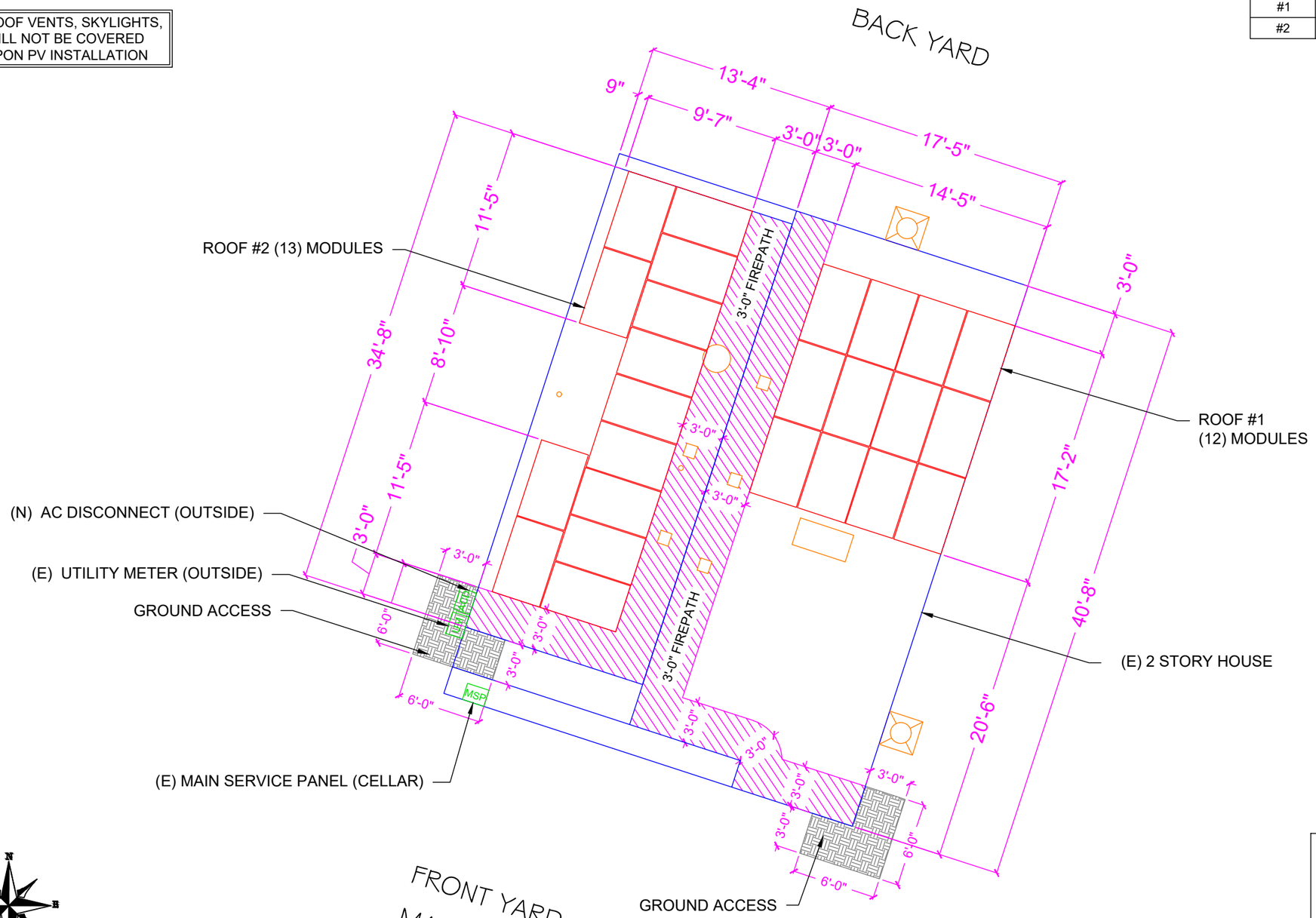
MODULE TYPE, DIMENSIONS & WEIGHT

NUMBER OF MODULES = 25 MODULES
MODULE TYPE = REC420AA PURE-R (420W) MODULE
WEIGHT = 47.4 LBS / 21.5 KG.
MODULE DIMENSIONS = 68.1"X 44.0" = 20.81 SF
UNIT WEIGHT OF ARRAY = 2.28 PSF

ROOF VENTS, SKYLIGHTS, WILL NOT BE COVERED UPON PV INSTALLATION

ARRAY AREA CALC'S				
ARRAY	# OF MODULES	ARRAY AREA (Sq. Ft.)	TOTAL ROOF AREA (Sq. Ft.)	PERCENTAGE AREA OF ROOF COVERED BY SOLAR ARRAY (%)
#1	12	249.72	691.61	36.11
#2	13	270.53	462.22	58.53

ARRAY DESCRIPTION		
ARRAY TYPE		
ARRAY	ARRAY TILT	AZIMUTH
#1	45°	118°
#2	25°	288°



LEGEND

- UM - UTILITY METER
- MSP - MAIN SERVICE PANEL
- ACD - AC DISCONNECT
- - VENT, ATTIC FAN (ROOF OBSTRUCTION)
- - PV MODULES
- - BUILDING OUTLINE

1 ROOF PLAN & MODULES
PV-2
SCALE: 1/8" = 1'-0"

#	REVISION DESCRIPTION:	
	ENPH	02/23/2024

OWNER:
AKHTAR SHAH
17 MAIN STREET
FLORAL PARK, NY, 11001

Kamtech SOLAR SOLUTIONS

REGISTERED ARCHITECT CHUN FENG 019517 STATE OF NEW YORK

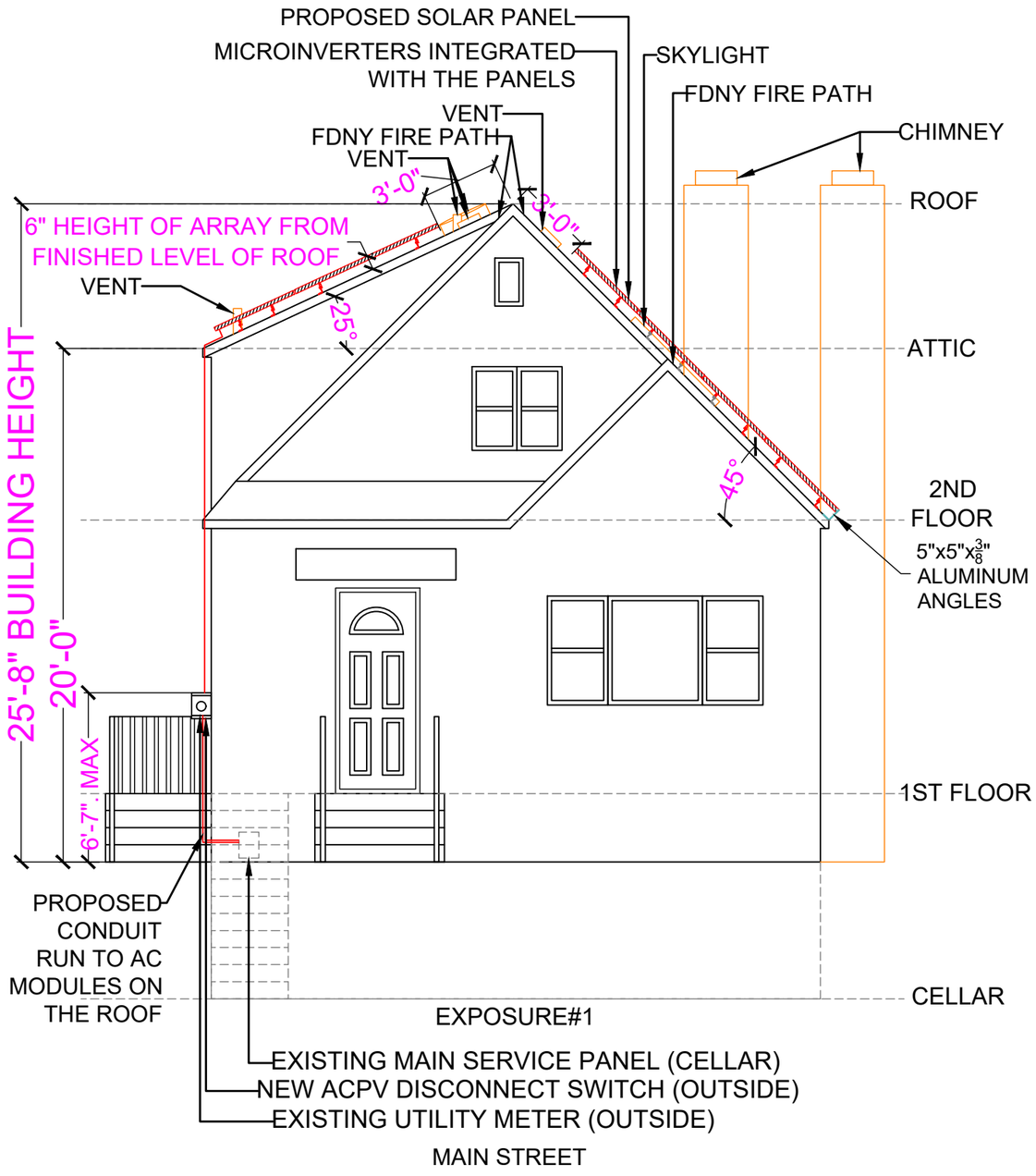
PAGE NAME: ROOF PLAN

DWG NO:	INSTALL NO:
PV-2	
DESIGNER:	QC BY:
SYSTEM SIZE: 10.50 KW	DATE: 02/23/2024

1 SOUTH-WESTERN ELEVATION VIEW (FRONT)

3/16" = 1'-0"

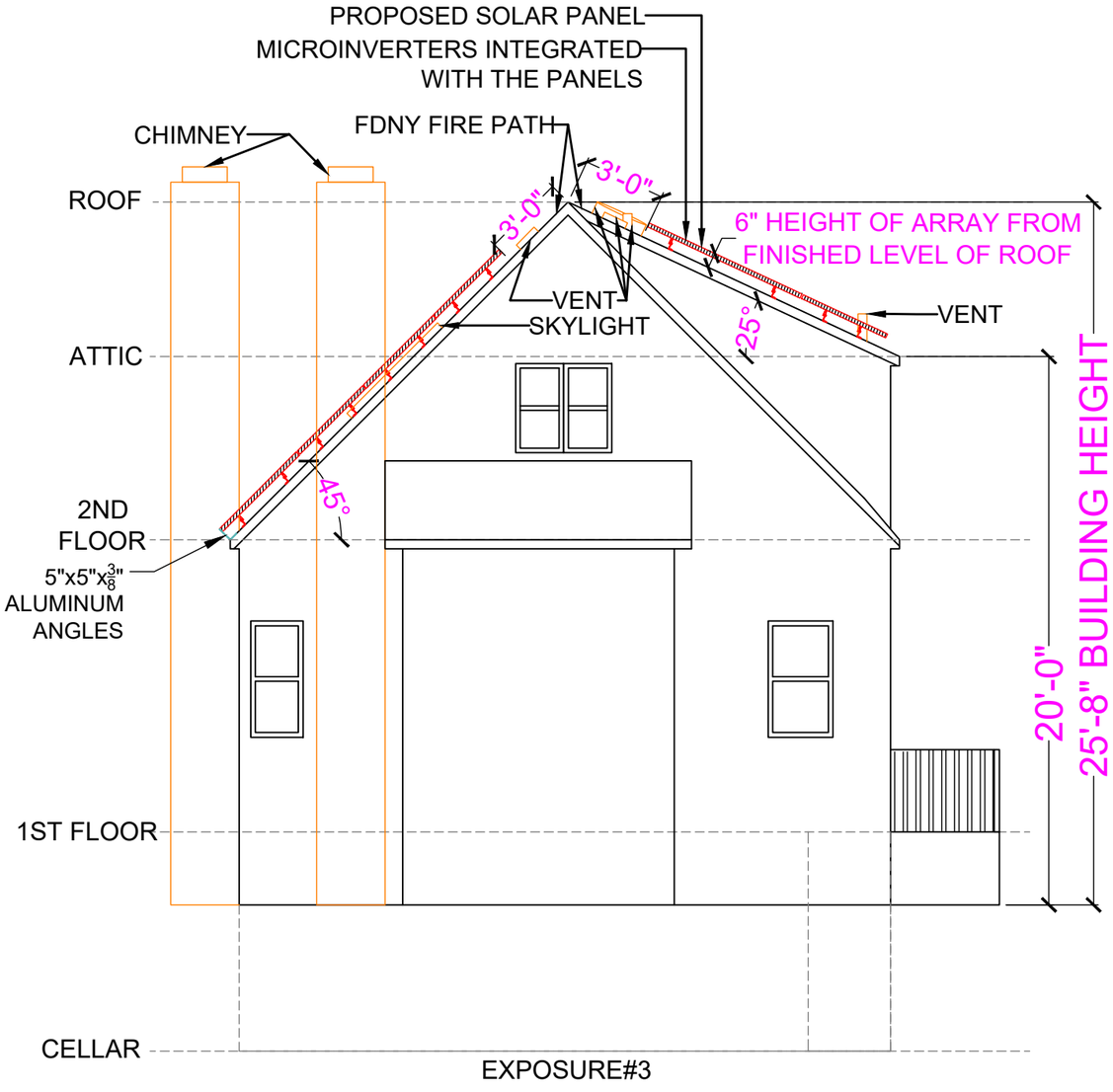
SOUTH-WEST
ARRAY AZIMUTH: 108°, 288°
ROOF PITCH: 25°, 45°



2 NORTH-EASTERN ELEVATION VIEW (BACK)

3/16" = 1'-0"

NORTH-EAST
ARRAY AZIMUTH: 108°, 288°
ROOF PITCH: 25°, 45°



THE SOLAR SYSTEM INSTALLATION COMPLIES WITH ZR 23-621(j)(2)

LOCATION OF DISCONNECT: LOCATION OF SOLAR DISCONNECT COMPLIES WITH NEC 208.24(A): OVERCURRENT DEVICES MUST BE READILY ACCESSIBLE AND INSTALLED SO THAT THE CENTER OF THE GRIP OF THE OPERATING HANDLE OF THE SWITCH OR CIRCUIT BREAKER, WHEN IN ITS HIGHEST POSITION, IS NOT MORE THAN 6 FEET, 7 INCHES ABOVE THE FLOOR OR WORKING PLATFORM.

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REGISTERED ARCHITECT CHUN FENG 019517 STATE OF NEW YORK

PAGE NAME: ELEVATION

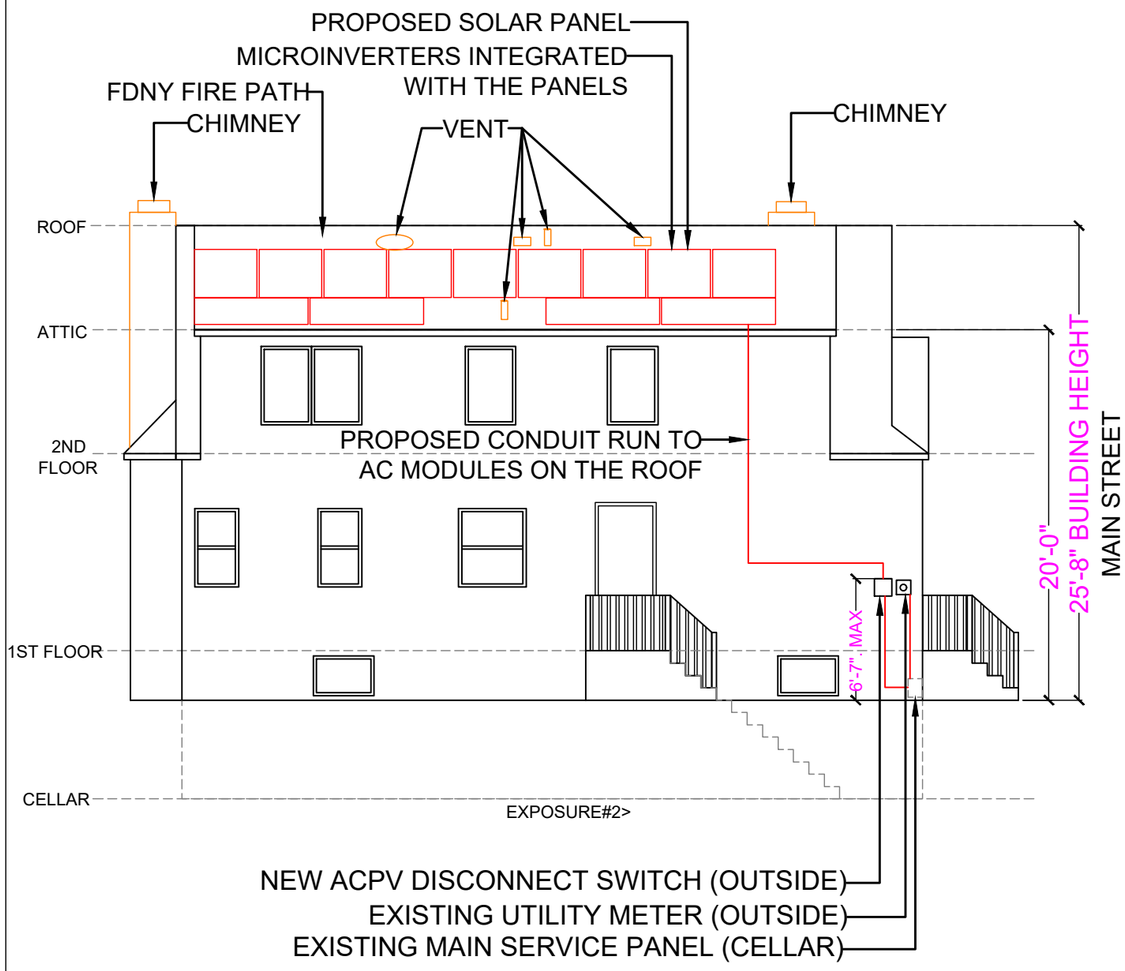
DWG NO:	INSTALL NO:
PV-3	
DESIGNER:	QC BY:
SYSTEM SIZE: 10.50 KW	DATE: 02/23/2024

3 NORTH-WESTERN ELEVATION VIEW (SIDE)

1/8" = 1'-0"

NORTH-WEST
ARRAY AZIMUTH: 288°
ROOF PITCH: 25°

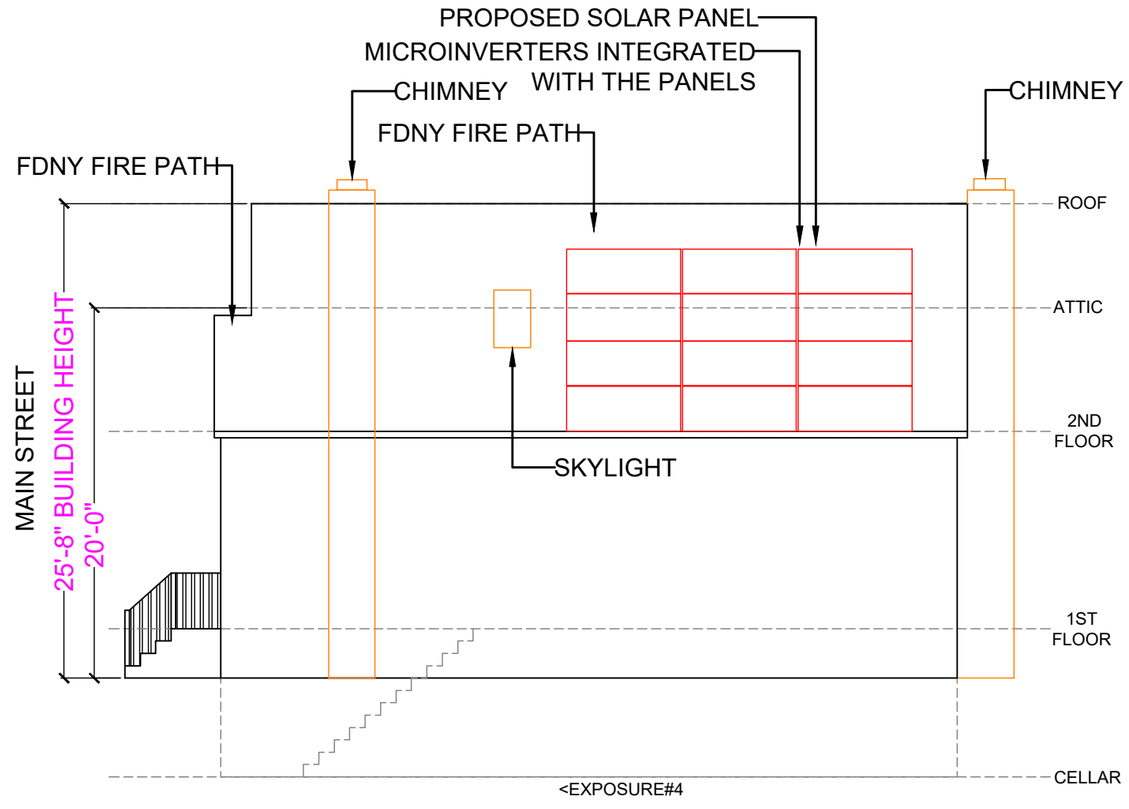
THE SOLAR SYSTEM INSTALLATION COMPLIES WITH ZR 23-621(j)(2)



4 SOUTH-EASTERN ELEVATION VIEW (SIDE)

1/8" = 1'-0"

SOUTH-EAST
ARRAY AZIMUTH: 108°
ROOF PITCH: 45°



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REGISTERED ARCHITECT CHUN FENG 019517 STATE OF NEW YORK

PAGE NAME:
ELEVATION

DWG NO:	INSTALL NO:
PV-4	
DESIGNER:	QC BY:
SYSTEM SIZE: 10.50 KW	DATE: 02/23/2024

#	REVISION DESCRIPTION:	02/23/2024
		ENPH

OWNER:

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17 MAIN STREET
FLORAL PARK, NY, 11001

Kamtech SOLAR SOLUTIONS

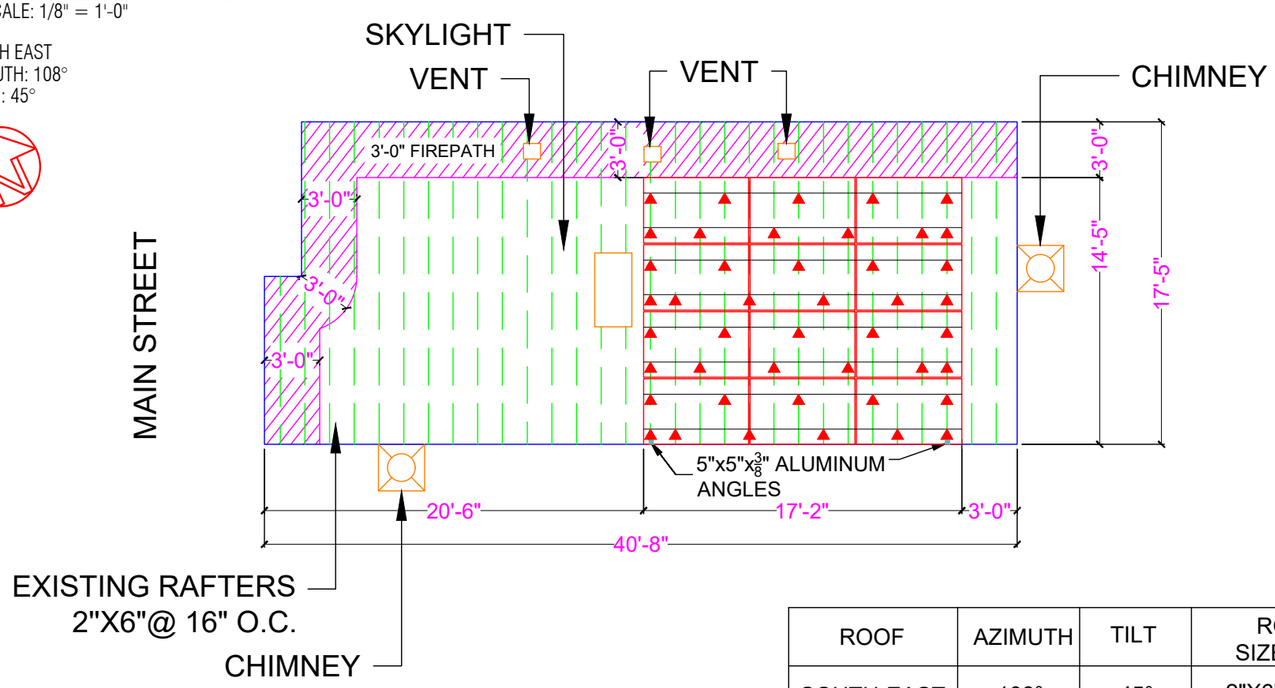
REGISTERED ARCHITECT
CHUN FENG
019517
STATE OF NEW YORK

PAGE NAME:
RENDERINGS

DWG NO:	INSTALL NO:
PV-4.2	
DESIGNER:	QC BY:
SYSTEM SIZE: 10.50 KW	DATE: 02/23/2024

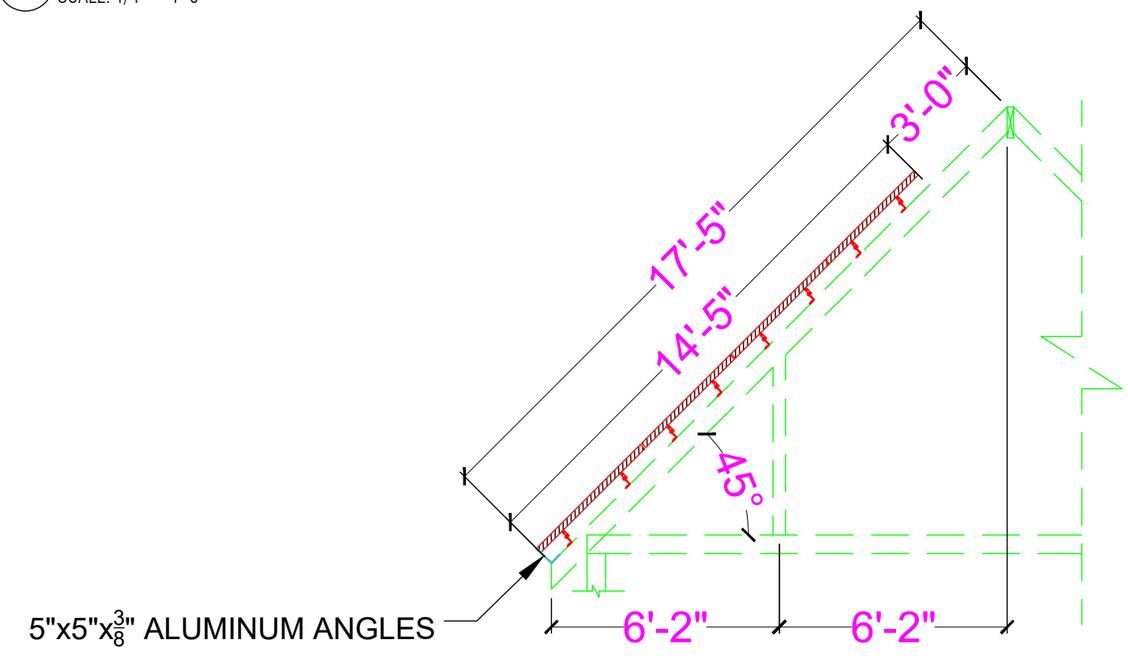
1 ROOF TOP MODULE LAYOUT PLAN
SCALE: 1/8" = 1'-0"

SOUTH EAST
AZIMUTH: 108°
PITCH: 45°



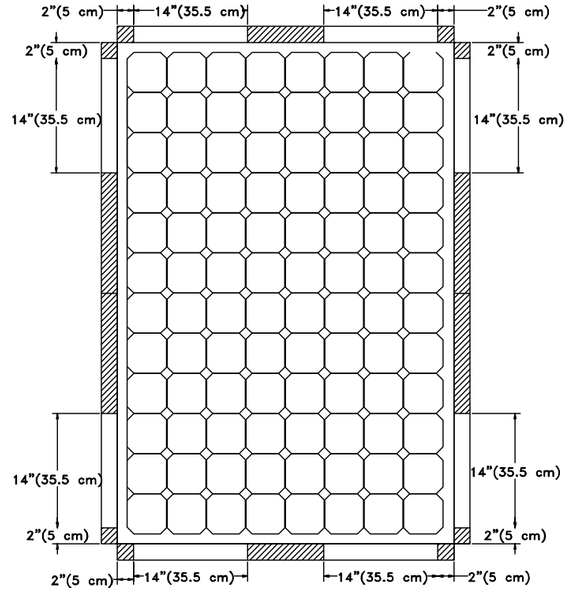
ROOF	AZIMUTH	TILT	ROOF JOIST SIZE & SPACING
SOUTH-EAST	108°	45°	2"X6" @ 16" O.C

2 SECTION - CONSTRUCTION CONNECTION DETAILS
SCALE: 1/4" = 1'-0"



LEGEND
- PV MODULES
- BUILDING OUTLINE
- VENT, ATTIC FAN (ROOF OBSTRUCTION)
- ROOF ATTACHMENT
- RAIL
- RAFTERS
- 3' - 0" FIRE PATH SETBACK

3 REC MODULE DETAILS AND RAIL MOUNTING ALLOWANCE STANDARDS
SCALE: 5" = 1'-0"



INVISIMOUNT RAIL MOUNTING ALLOWANCE STANDARDS FOR 96 CELL MODULE

RAILS MAYBE POSITIONED IN THE NON-CROSSHATCHING REGIONS ONLY. RAILS MAY BE POSITIONED A MINIMUM OF 2" (5cm) BUT NOT MORE THAN 16" (40.6cm) FROM ANY MODULE CORNER.

NOTE: MAXIMUM ARRAY WIDTH IS 40' (12.2m). TO INSTALL ADDITIONAL MODULES BEYOND THIS MAXIMUM INSTALLER MUST BEGIN A NEW ARRAY. MINIMUM DISTANCE BETWEEN ARRAYS IS 2"(5CM).

STRUCTURAL NOTES:

1. THE CONTRACTOR SHALL VERIFY ALL DIMENSIONS IN THE FIELD.
2. THE CONTRACTOR SHALL PROVIDE ALL MEASURES NECESSARY TO PROTECT THE STRUCTURE DURING CONSTRUCTION. THE ENGINEER SHALL NOT BE RESPONSIBLE FOR THE CONTRACTOR'S MEANS, METHODS, TECHNIQUES, SEQUENCES FOR THE PROCEDURE OF CONSTRUCTION, OR THE SAFETY PRECAUTIONS AND THE PROGRAMS INCIDENT THERETO.
3. THE EXISTING ROOF STRUCTURAL MEMBERS WITHOUT ADDITIONAL REINFORCEMENT ARE ADEQUATE TO SUPPORT THE LIVE, SNOW, AND WIND DESIGN LOADS REQUIRED BY THE BUILDING CODE IN ADDITION TO THE EXISTING DEAD LOAD AND THE SELF-WEIGHT OF THE PV MODULES AND MOUNT RAIL SYSTEM AS SHOWN ON THESE DRAWINGS.
4. THE STRUCTURAL ANALYSIS WAS PERFORMED IN ACCORDANCE WITH THE BUILDING CODE AND THE ASCE 7-10 STANDARD, BASED ON THE FOLLOWING DESIGN CRITERIA:

   GROUND SNOW LOAD =20 PSF

   BASIC WIND SPEED = 130 MPH (RISK CATEGORY II)
5. THE 5/16" Ø STAINLESS STEEL HEX LAG SCREWS 4" LONG WITH A 2 1/2" MIN. EMBEDMENT INTO CENTER OF RAFTERS ARE ADEQUATE TO SUPPORT THE MAXIMUM WIND UPLIFT DESIGN LOAD ACTING ON THE MODULES. PROVIDE CHEMLINK M-1 SEALANT OR APPROVED EQUAL AT LAG SCREWS PENETRATION POINTS.
6. PV MOUNTING SYSTEM TO ATTACH PANELS TO ROOF STRUCTURE TO BE INVISIMOUNT RAIL MOUNTING SYSTEM BY REC. INSTALL PER MANUFACTURER'S RECOMMENDATIONS.

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CONTRACTOR:
Kamtech SOLAR SOLUTIONS

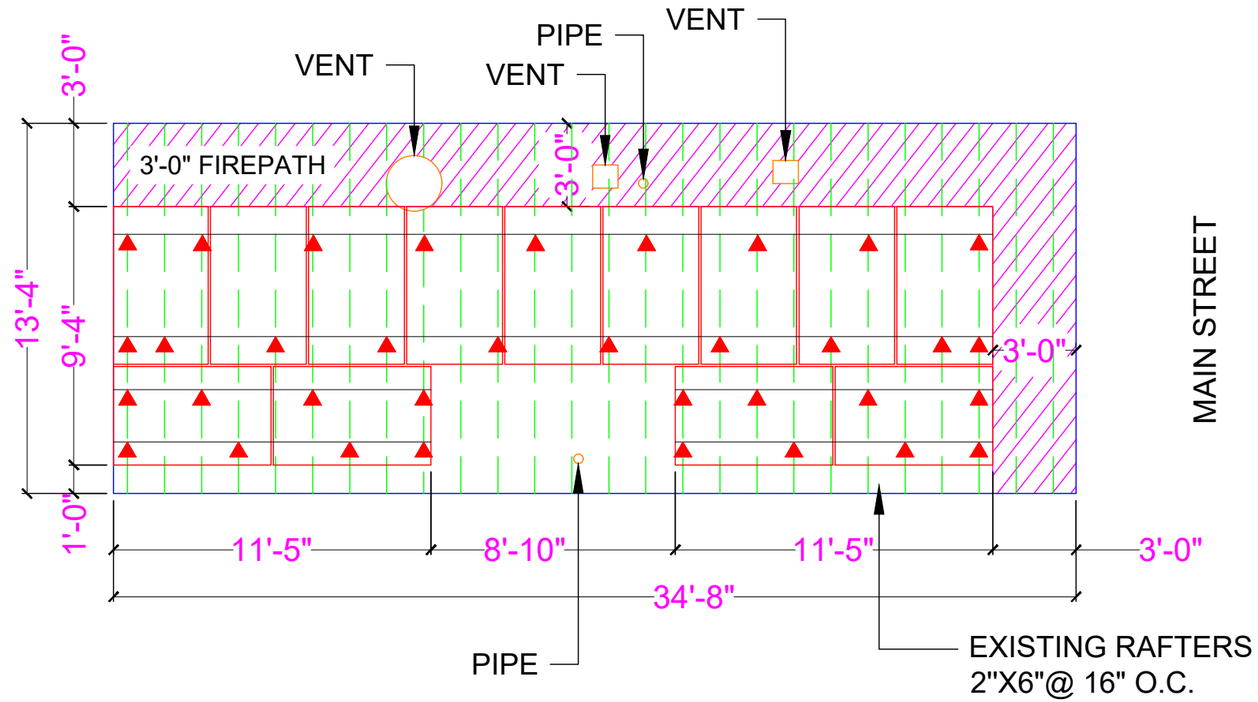
REGISTERED ARCHITECT CHUN FENG 019517 STATE OF NEW YORK

PAGE NAME: ROOF PLAN

DWG NO:	INSTALL NO:
PV-5	
DESIGNER:	QC BY:
SYSTEM SIZE: 10.50 KW	DATE: 02/23/2024

1 ROOF TOP MODULE LAYOUT PLAN
SCALE: 3/16" = 1'-0"

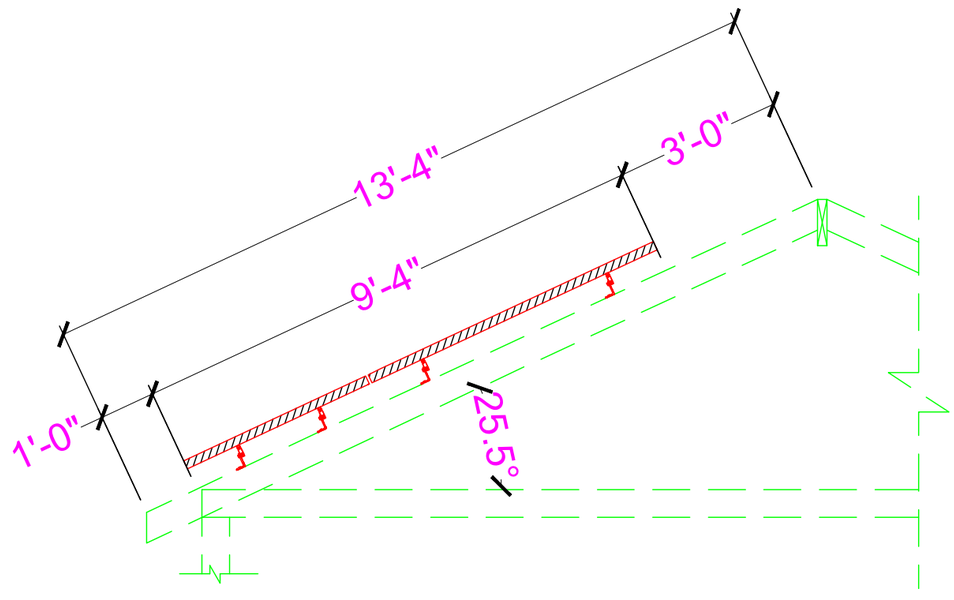
NORTH WEST
AZIMUTH: 288°
PITCH: 25°



LEGEND

- PV MODULES
- BUILDING OUTLINE
- VENT, ATTIC FAN (ROOF OBSTRUCTION)
- ROOF ATTACHMENT
- RAIL
- RAFTERS
- 3' - 0" FIRE PATH SETBACK

3 SECTION - CONSTRUCTION CONNECTION DETAILS
SCALE: 3/8" = 1'-0"



ROOF	AZIMUTH	TILT	ROOF JOIST SIZE & SPACING
NORTH-WEST	288°	25°	2"X6" @ 16" O.C

#	REVISION DESCRIPTION:
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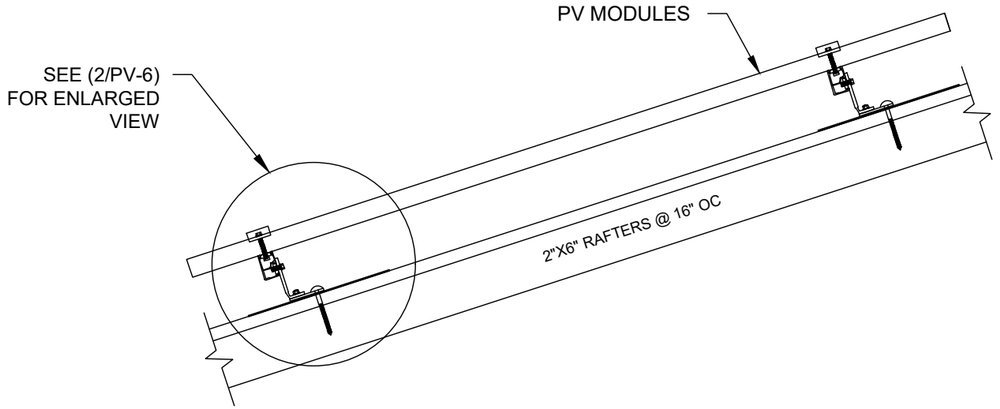
17 MAIN STREET
FLORAL PARK, NY, 11001

CONTRACTOR:
Kamtech SOLAR SOLUTIONS

REGISTERED ARCHITECT
CHUN FENG
019517
STATE OF NEW YORK

PAGE NAME:
ROOF PLAN

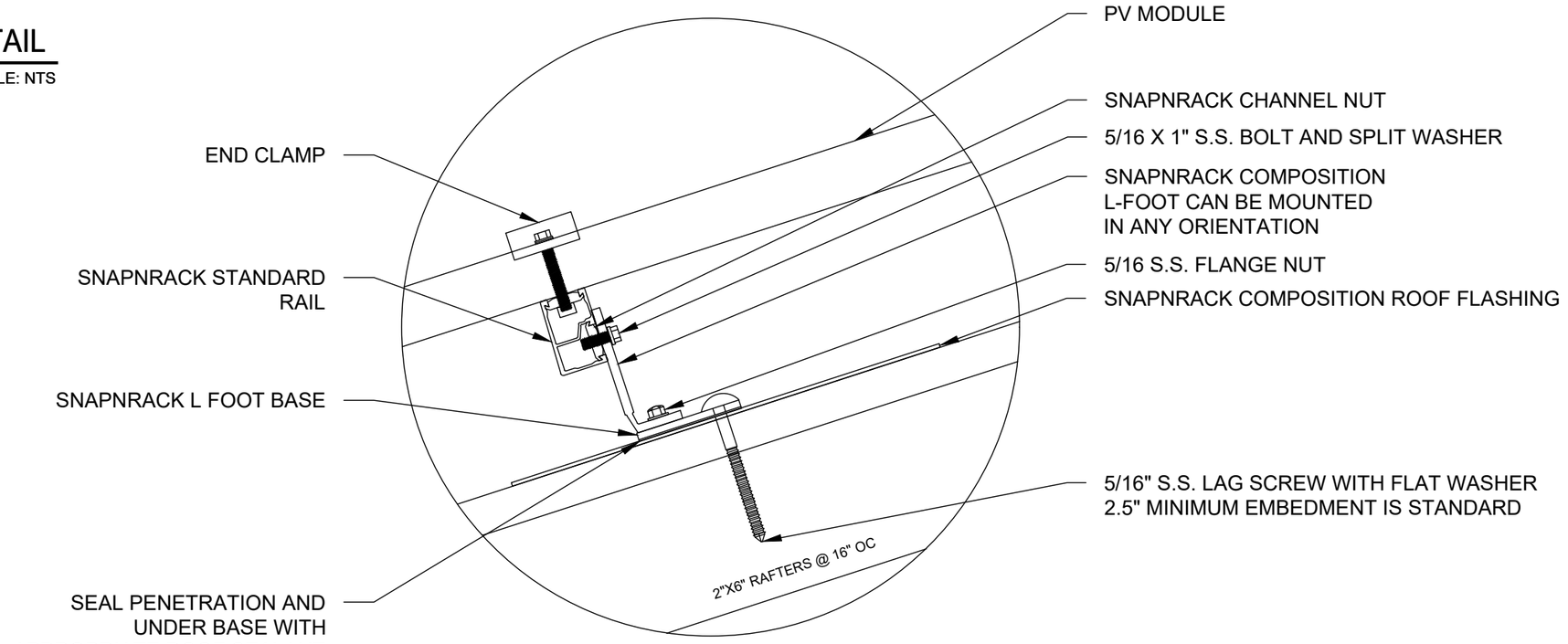
DWG NO:	INSTALL NO:
PV-5.1	
DESIGNER:	QC BY:
SYSTEM SIZE: 10.50 KW	DATE: 02/23/2024



1 ATTACHMENT DETAIL

PV-6

SCALE: NTS



2 ATTACHMENT DETAIL (ENLARGED VIEW)

PV-6

SCALE: NTS

#	REVISION DESCRIPTION:	
	ENPH	02/23/2024

OWNER:
AKHTAR SHAH
17 MAIN STREET
FLORAL PARK, NY, 11001

CONTRACTOR:
Kamtech SOLAR SOLUTIONS

REGISTERED ARCHITECT
CHUN FENG
019517
STATE OF NEW YORK

PAGE NAME:
MOUNTING DETAILS

DWG NO:	INSTALL NO:
PV-6	
DESIGNER:	QC BY:
SYSTEM SIZE:	DATE:

SYSTEM LABELS:

WARNING - DUAL POWER SOURCE
SECOND SOURCE IS PV SYSTEM

LABEL LOCATION: (MP) ITEM #596-00231
PER CODE: NEC 705(D)(3)(4)

PHOTOVOLTAIC AC DISCONNECT
MAXIMUM AC OPERATING CURRENT: 32.75A
NOMINAL OPERATING AC VOLTAGE: 240 V

LABEL LOCATION: (ACD) ITEM #596-00239
PER CODE: NEC 690.54

PHOTOVOLTAIC SYSTEM EQUIPPED WITH RAPID SHUTDOWN

LABEL LOCATION: (M) ITEM #596-00677
PER CODE: NEC 690.56(C), MUST BE REFLECTIVE

⚠ WARNING
INVERTER OUTPUT CONNECTION. DO NOT RELOCATE THIS OVERCURRENT DEVICE.

LABEL LOCATION: (POI) ITEM #596-00589
PER CODE: NEC 705.12(D)(3)(4)

WARNING: PHOTOVOLTAIC POWER SOURCE

LABEL LOCATION: (C) EVERY 10' ITEM #596-00206
PER CODE: NEC 690.31(E)(3)

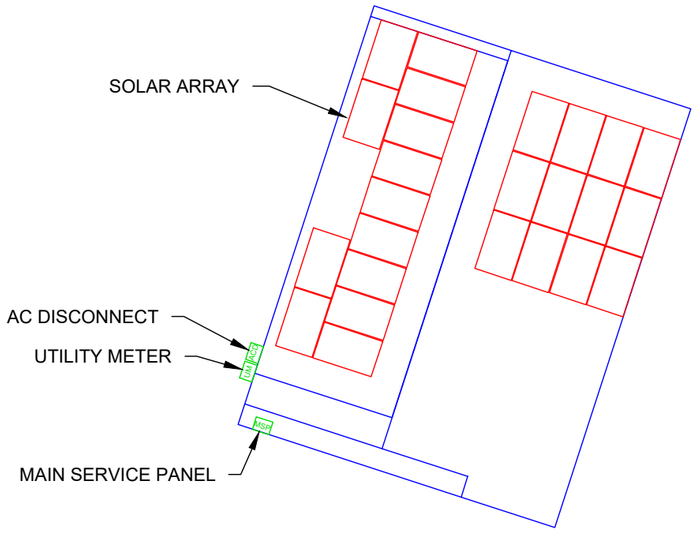
⚠ **WARNING**
INVERTER OUTPUT CONNECTION. DO NOT
RELOCATE THIS OVERCURRENT DEVICE.

LABEL LOCATION: (D) NEXT TO BREAKER ITEM #596-00589
PER CODE: NEC 705.12(D)(3)(4)

CAUTION:

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

N



17 MAIN STREET, FLORAL PARK, NY 11001

#	REVISION DESCRIPTION:	
	ENPH	02/23/2024

OWNER:
AKHTAR SHAH
17 MAIN STREET
FLORAL PARK, NY, 11001

CONTRACTOR:
Kamtech SOLAR SOLUTIONS

REGISTERED ARCHITECT CHUN FENG 019517 STATE OF NEW YORK

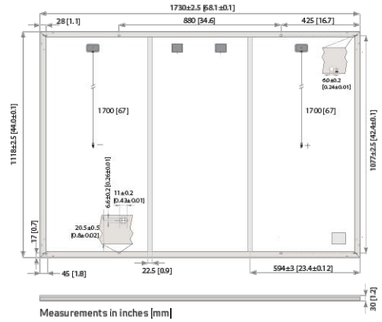
PAGE NAME: SYSTEM LABELS

DWG NO:	INSTALL NO:
PV-7	
DESIGNER:	QC BY:
SYSTEM SIZE: 10.50 KW	DATE: 02/23/2024

REC ALPHA PURE-R SERIES
PRODUCT SPECIFICATIONS

REC
SOLAR'S MOST TRUSTED

GENERAL DATA	
Cell type:	80 half-cut REC bifacial, heterojunction cells with lead-free, gapless technology
Glass:	0.13 in (3.2 mm) solar glass with anti-reflective surface treatment in accordance with EN 12150
Backsheet:	Highly resistant polymer (black)
Frame:	Anodized aluminum (black)
Junction box:	4-part, 4 bypass diodes, lead-free IP68 rated, in accordance with IEC 62790
Connectors:	Stäubli MC4 PV-KBT4/KST4 (12 AWG) in accordance with IEC 62852, IP68 only when connected
Cable:	12 AWG (4 mm²) PV wire, 67 + 67 in (1.7 + 1.7 m) in accordance with EN 50618
Dimensions:	68.1 x 44.0 x 1.2 in (20.77 ft²) / 1730 x 1118 x 30 mm (1.93 m²)
Weight:	47.4 lbs (21.5 kg)
Origin:	Made in Singapore



Measurements in inches [mm]

ELECTRICAL DATA	Product Code*: RECxxxAA PURE-R			
Power Output - P_{MAX} (Wp)	400	410	420	430
Watt Class Sorting - (W)	0/+10	0/+10	0/+10	0/+10
Nominal Power Voltage - V_{MPP} (V)	48.8	49.4	50.0	50.5
Nominal Power Current - I_{MPP} (A)	8.20	8.30	8.40	8.52
Open Circuit Voltage - V_{OC} (V)	58.9	59.2	59.4	59.7
Short Circuit Current - I_{SC} (A)	8.80	8.84	8.88	8.91
Power Density (W/ft²)	19.26	19.74	20.22	20.70
Panel Efficiency (%)	20.7	21.2	21.8	22.3
Power Output - P_{MAX} (Wp)	305	312	320	327
Nominal Power Voltage - V_{MPP} (V)	46.0	46.6	47.1	47.6
Nominal Power Current - I_{MPP} (A)	6.64	6.70	6.80	6.88
Open Circuit Voltage - V_{OC} (V)	55.5	55.8	56.0	56.3
Short Circuit Current - I_{SC} (A)	7.11	7.16	7.20	7.24

STC / NMOT

Values at standard test conditions (STC: air mass AM 1.5, irradiance 1075 W/sqft (1000 W/m²), temperature 77°F (25°C), based on a production spread with a tolerance of P_{MPP}, V_{OC} & I_{SC} ±3% within one watt class. Nominal module operating temperature (NMOT: air mass AM 1.5, irradiance 800 W/m², temperature 68°F (20°C), windspeed 3.3 ft/s (1 m/s). *Where xxx indicates the nominal power class (P_{MAX}) at STC above.

MAXIMUM RATINGS	
Operational temperature:	-40…+85°C
System voltage:	1000 V
Test load (front):	+7000 Pa (146 lbs/ft²)*
Test load (rear):	-4000 Pa (83.5 lbs/ft²)*
Series fuse rating:	25 A
Reverse current:	25 A

*See installation manual for mounting instructions. Design load = Test load / 1.5 (safety factor)

WARRANTY	Standard	REC ProTrust	
Installed by an REC Certified Solar Professional	No	Yes	Yes
System Size	All	≤25 kW	25-500 kW
Product Warranty (yrs)	20	25	25
Power Warranty (yrs)	25	25	25
Labor Warranty (yrs)	0	25	10
Power in Year 1	98%	98%	98%
Annual Degradation	0.25%	0.25%	0.25%
Power in Year 25	92%	92%	92%

See warranty documents for details. Conditions apply

Available from:

Founded in 1996, REC Group is an international pioneering solar energy company dedicated to empowering consumers with clean, affordable solar power. As Solar's Most Trusted, REC is committed to high quality, innovation, and a low carbon footprint in the solar materials and solar panels it manufactures. Headquartered in Norway with operational headquarters in Singapore, REC also has regional hubs in North America, Europe, and Asia-Pacific.

CERTIFICATIONS	
IEC 61215:2016, IEC 61730:2016, UL 61730	
IEC 62804	PID
IEC 61701	Salt Mist
IEC 62716	Ammonia Resistance
UL 61730	Fire Type 2
IEC 62782	Dynamic Mechanical Load
IEC 61215-2:2016	Hailstone (35mm)
IEC 62321	Lead-free acc. to RoHS EU 863/2015
ISO 14001, ISO 9001, IEC 45001, IEC 62941	

Living Building Challenge Compliant

Declare.

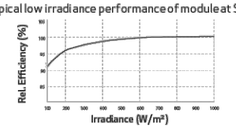
TEMPERATURE RATINGS*	
Nominal Module Operating Temperature:	44°C (±2°C)
Temperature coefficient of P_{MAX}:	-0.24 %/°C
Temperature coefficient of V_{OC}:	-0.24 %/°C
Temperature coefficient of I_{SC}:	0.04 %/°C

*The temperature coefficients stated are linear values

DELIVERY INFORMATION	
Panels per pallet:	33
Panels per 40 ft GP/high cube container:	858 (26 pallets)
Panels per 53 ft truck:	858 (26 pallets)

LOW LIGHT BEHAVIOUR

Typical low irradiance performance of module at STC:



REC Solar PTE. LTD.
20 Tuas South Ave. 14
Singapore 637312
post@recgroup.com
www.recgroup.com

REC

Specifications subject to change without notice.

Ref: PD-DS-AAPR Rev 32 10.23

#	REVISION DESCRIPTION:	
	ENPH	02/23/2024

OWNER:
AKHTAR SHAH
17 MAIN STREET
FLORAL PARK, NY, 11001

CONTRACTOR:
Kamtech SOLAR SOLUTIONS

REGISTERED ARCHITECT CHUN FENG 019517 STATE OF NEW YORK

PAGE NAME: SPEC SHEET

DWG NO:	INSTALL NO:
PV-8	
DESIGNER:	QC BY:
SYSTEM SIZE: 10.50 KW	DATE: 02/23/2024

Data Sheet
Enphase Microinverters
Region: AMERICAS

Enphase IQ 7X Microinverter

The high-powered smart grid-ready **Enphase IQ 7X Micro™** dramatically simplifies the installation process while achieving the highest system efficiency for systems with 96-cell modules.

Part of the Enphase IQ System, the IQ 7X Micro integrates with the Enphase IQ Envoy™, Enphase IQ Battery™, and the Enphase Enlighten™ monitoring and analysis software.

The IQ Series Microinverters extend the reliability standards set forth by previous generations and undergo over a million hours of power-on testing, enabling Enphase to provide an industry-leading warranty of up to 25 years.

Easy to Install

- Lightweight and simple
- Faster installation with improved, lighter two-wire cabling
- Built-in rapid shutdown compliant (NEC 2014 & 2017)

Efficient and Reliable

- Optimized for high powered 96-cell* modules
- Highest CEC efficiency of 97.5%
- More than a million hours of testing
- Class II double-insulated enclosure
- UL listed

Smart Grid Ready

- Complies with advanced grid support, voltage and frequency ride-through requirements
- Remotely updates to respond to changing grid requirements
- Configurable for varying grid profiles
- Meets CA Rule 21 (UL 1741-SA)

* The IQ 7X is required to support 96-cell modules.

UL CERTIFIED SAFETY US-CA E341165

To learn more about Enphase offerings, visit **enphase.com**

ENPHASE.

Enphase IQ 7X Microinverter

INPUT DATA (DC)	IQ7X-96-2-US	
Commonly used module pairings[1]	320 W - 460 W +	
Module compatibility	96-cell PV modules	
Maximum input DC voltage	79.5 V	
Peak power tracking voltage	53 V - 64 V	
Operating range	25 V - 79.5 V	
Min/Max start voltage	33 V / 79.5 V	
Max DC short circuit current (module Isc)	10 A	
Overvoltage class DC port	II	
DC port backfeed current	0 A	
PV array configuration	1 x 1 ungrounded array; No additional DC side protection required; AC side protection requires max 20A per branch circuit	
OUTPUT DATA (AC)	**@ 240 VAC**	**@ 208 VAC**
Peak output power	320 VA	
Maximum continuous output power	315 VA	
Nominal (L-L) voltage/range[2]	240 V / 211-264 V	208 V / 183-229 V
Maximum continuous output current	1.31 A (240 VAC)	1.51 A (208 VAC)
Nominal frequency	60 Hz	
Extended frequency range	47 - 68 Hz	
AC short circuit fault current over 3 cycles	5.8 Arms	
Maximum units per 20 A (L-L) branch circuit[3]	12 (240 VAC)	10 (208 VAC)
Overvoltage class AC port	III	
AC port backfeed current	18 mA	
Power factor setting	1.0	
Power factor (adjustable)	0.85 leading ... 0.85 lagging	
EFFICIENCY	**@240 VAC**	**@208 VAC**
CEC weighted efficiency	97.5 %	97.0 %
MECHANICAL DATA		
Ambient temperature range	-40°C to +60°C	
Relative humidity range	4% to 100% (condensing)	
Connector type (IQ7X-96-2-US)	MC4 (or Amphenol H4 UTX with optional Q-DCC-5 adapter)	
Dimensions (WxHxD)	212 mm x 175 mm x 30.2 mm (without bracket)	
Weight	1.08 kg (2.38 lbs)	
Cooling	Natural convection - No fans	
Approved for wet locations	Yes	
Pollution degree	PD3	
Enclosure	Class II double-insulated, corrosion resistant polymeric enclosure	
Environmental category / UV exposure rating	NEMA Type 6 / outdoor	
FEATURES		
Communication	Power Line Communication (PLC)	
Monitoring	Enlighten Manager and MyEnlighten monitoring options Compatible with Enphase IQ Envoy	
Disconnecting means	The AC and DC connectors have been evaluated and approved by UL for use as the load-break disconnect required by NEC 690.	
Compliance	CA Rule 21 (UL 1741-SA) UL 62109-1, UL1741/IEEE1547, FCC Part 15 Class B, ICES-0003 Class B, CAN/CSA-C22.2 NO. 107.1-01 This product is UL Listed as PV Rapid Shut Down Equipment and conforms with NEC-2014 and NEC-2017 section 690.12 and C22.1-2015 Rule 64-218 Rapid Shutdown of PV Systems, for AC and DC conductors, when installed according manufacturer's instructions.	

1. No enforced DC/AC ratio. See the compatibility calculator at https://enphase.com/en-us/support/module-compatibility.
2. Nominal voltage range can be extended beyond nominal if required by the utility.
3. Limits may vary. Refer to local requirements to define the number of microinverters per branch in your area.

To learn more about Enphase offerings, visit **enphase.com**

ENPHASE.

2019-3-26

#	REVISION DESCRIPTION:
	02/23/2024 ENPH

OWNER:
AKHTAR SHAH
17 MAIN STREET
FLORAL PARK, NY, 11001

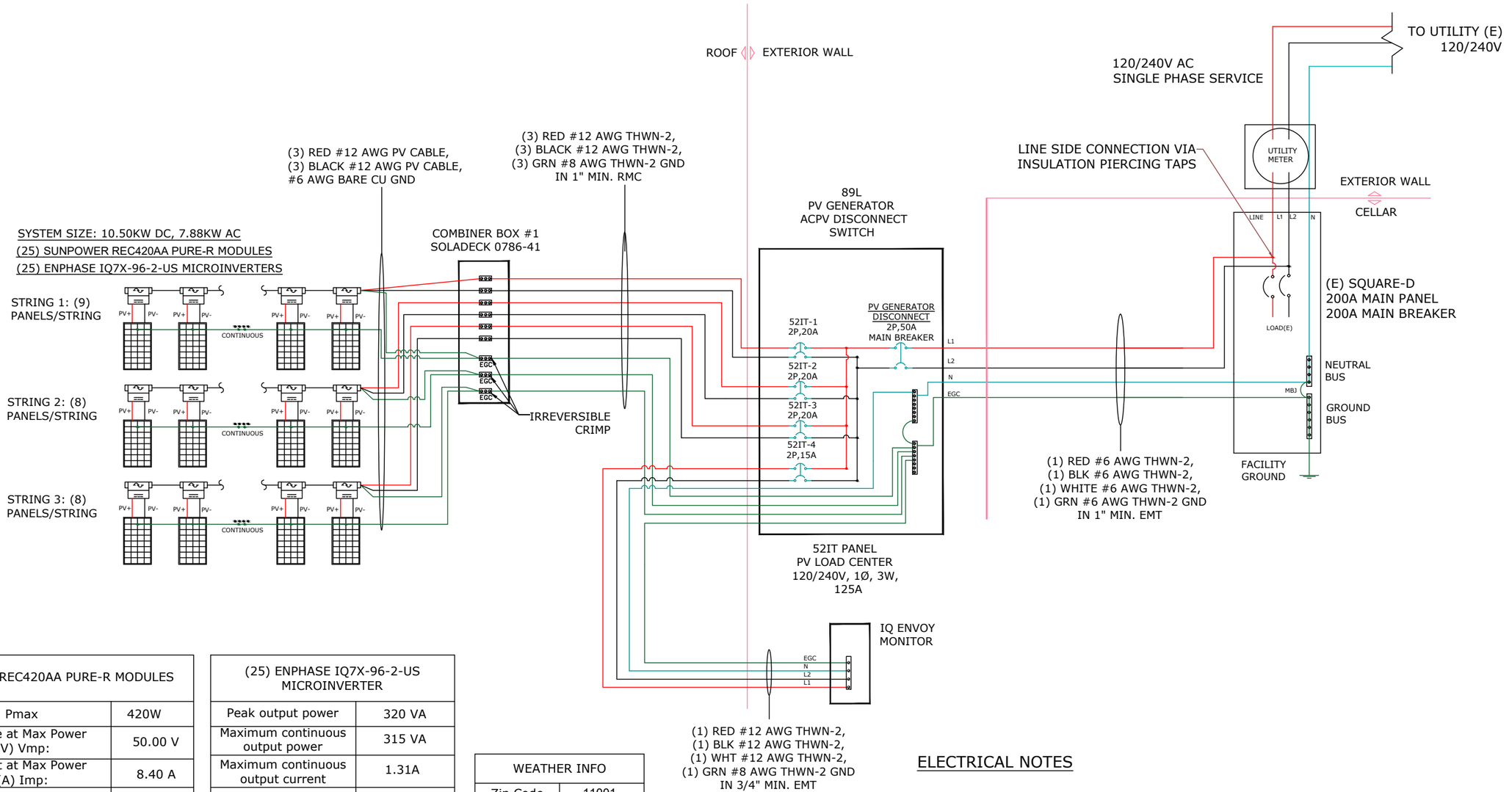
CONTRACTOR:
Kamtech SOLAR SOLUTIONS

REGISTERED ARCHITECT CHUN FENG 019517 STATE OF NEW YORK

PAGE NAME: SPEC SHEET

DWG NO:	INSTALL NO:
PV-8.1	
DESIGNER:	QC BY:
SYSTEM SIZE: 10.50 KW	DATE: 02/23/2024

ACCOUNT #: 5157264006
METER #: 98443900



(25) REC420AA PURE-R MODULES	
Pmax	420W
Voltage at Max Power (V) Vmp:	50.00 V
Current at Max Power (A) Imp:	8.40 A
Open Circuit Voltage (Voc)	59.40 V
Short Circuit Current (A) Isc	8.88 A
System voltage	1000 V

(25) ENPHASE IQ7X-96-2-US MICROINVERTER	
Peak output power	320 VA
Maximum continuous output power	315 VA
Maximum continuous output current	1.31A
Nominal frequency	60 Hz
Maximum units per 20 A (L-L) branch circuit³	12
CEC Efficiency	97.5%

WEATHER INFO	
Zip Code	11001
Max Average High	31°C/87.8°F
Record High	35°C/95°F
Record Low	-14°C/6.8°F

ELECTRICAL NOTES

1. ALL CONDUCTORS ARE COPPER UNLESS NOTED OTHERWISE.
2. AC & DC GROUNDING CONDUCTORS PER NEC ARTICLE 690.47(c)(2) CONNECTED AS PER 250.64(c)(1)
3. ALL EXTERIOR MOUNTED COMBINERS, JUNCTION BOXES, TROUGHS, DISCONNECTS, ETC. SHALL BE MIN. NEMA 3R RATED.
4. CT'S TO BE LOCATED BETWEEN THE MAIN BREAKER AND THE LINE SIDE TAP. LABELS ON THE CT SHOULD BE FACING THE TAP.

#	REVISION DESCRIPTION:	
	ENPH	02/23/2024

OWNER:
AKHTAR SHAH
17 MAIN STREET
FLORAL PARK, NY, 11001

CONTRACTOR:
Kamtech SOLAR SOLUTIONS

REGISTERED ARCHITECT
CHUN FENG
019517
STATE OF NEW YORK

PAGE NAME:
THREE LINE DIAGRAM

DWG NO:	INSTALL NO:
PV-9	
DESIGNER:	QC BY:
SYSTEM SIZE: 10.50 KW	DATE: 02/23/2024