HISTORIC PRESERVATION COMMISSION

Marc Elrich
County Executive

Robert Sutton
Chairman

Date: July 3, 2023

MEMORANDUM

TO: Rabbiah Sabbakhan
Department of Permitting Services
FROM: Michael Kyne
Historic Preservation Section
Maryland-National Capital Park & Planning Commission
SUBJECT: Historic Area Work Permit #1033753: Installation of solar panels

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The Montgomery County Historic Preservation Commission (HPC) has reviewed the attached application for a Historic Area Work Permit (HAWP). This application was **Approved with two (2) conditions** at the June 14, 2023 HPC meeting.

1. **The applicant shall submit justification for the exterior conduit (instead of an interior placement) and an elevation/annotated photograph that illustrates the location of the exterior conduit if required.**
2. **The applicant shall submit specification sheets for all exterior inverters, combiners, etc. and an annotated photograph that illustrates their approximate location adjacent to the existing utility meters.**

The HPC staff has reviewed and stamped the attached construction drawings**.**

THE BUILDING PERMIT FOR THIS PROJECT SHALL BE ISSUED CONDITIONAL UPON ADHERENCE TO THE ABOVE APPROVED HAWP CONDITIONS AND MAY REQUIRE APPROVAL BY DPS OR ANOTHER LOCAL OFFICE BEFORE WORK CAN BEGIN.

Applicant: Richard Henrich
Address: 7305 Takoma Avenue, Takoma Park

This HAWP approval is subject to the general condition that the applicant will obtain all other applicable Montgomery County or local government agency permits. After the issuance of these permits, the applicant must contact this Historic Preservation Office if any changes to the approved plan are made. Once work is complete the applicant will contact Michael Kyne at 301.563.3403 or Michael.Kyne@montgomeryplanning.org to schedule a follow-up site visit.

FOR STAFF ONLY:
HAWP# 1028895
DATE ASSIGNED_____

APPLICATION FOR HISTORIC AREA WORK PERMIT

HISTORIC PRESERVATION COMMISSION
301.563.3400

APPLICANT:

Name: Richard Henrich E-mail: rhenrich@erols.com

Address: 7305 Takoma Avenue City: Takoma Park Zip: 20912

Daytime Phone: 2024410832 Tax Account No.: 01073568

AGENT/CONTACT (if applicable):

Name: Fusion Solar Services/ Ola Carew E-mail: permits@fusionss.net

Address: 3600 Commerice Drive Ste 601 City: Halethorpe Zip: 21227

Daytime Phone: 4434253023 Contractor Registration No.: MHIC 30991

LOCATION OF BUILDING/PREMISE: MIHP # of Historic Property_____

Is the Property Located within an Historic District? X Yes/District Name Takoma Park
__No/Individual Site Name_____

Is there an Historic Preservation/Land Trust/Environmental Easement on the Property? If YES, include a map of the easement, and documentation from the Easement Holder supporting this application.

Are other Planning and/or Hearing Examiner Approvals /Revi tion?
(Conditional Use, Variance, Record Plat, etc.?) If YES, include
supplemental information.

REVIEWED
By Michael Kyne at 12:21 pm, Jul 03, 2023

APPROVED
Montgomery County
Historic Preservation Commission

Buildin _____

Town/City: _____ Nearest Cross Stre _____

Lot: _____ Block: _____ Subdivision: _____

TYPE OF WORK PROPOSED: See the checklist on Page 4 to verify that all supporting items for proposed work are submitted with this application. Incomplete Applications will not be accepted for review. Check all that apply:

- ☐ New Construction
- ☐ Addition
- ☐ Demolition
- ☐ Grading/Excavation
- ☐ Deck/Porch
- ☐ Fence
- ☐ Hardscape/Landscape
- ☐ Roof
- ☐ Shed/Garage/Accessory Structure
- ☒ Solar
- ☐ Tree removal/planting
- ☐ Window/Door
- ☐ Other:_____

I hereby certify that I have the authority to make the foregoing application, that the application is correct and accurate and that the construction will comply with plans reviewed and approved by all necessary agencies and hereby acknowledge and accept this to be a condition for the issuance of this permit.

_____ _____

Signature of owner or authorized agent Date

HAWP APPLICATION: MAILING ADDRESSES FOR NOTIFING

[Owner, Owner's Agent, Adjacent and Confronting Property Owners]

Owner's mailing address	**Owner's Agent's** mailing address
7305 Takoma Avenue Takoma Park MD 20912	3600 Commerce Drive Ste 601 Baltimore Md 21227

Adjacent and confronting Property Owners mailing addresses

Jeff Luker 7307 Takoma Ave Takoma Park Md 20912	Remington Stone 1703 Takoma Ave Takoma Park Md 20912
7301 Takoma Avenue, Takoma Park 20912 7305 Takoma Avenue, Takoma Park 20912 7310 Piney Branch Road, Takoma Park 20912	

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Description of Property: Please describe the building and surrounding environment. Include information on significant structures, landscape features, or other significant features of the property:

Home is in great shape and does require any additional work to allow solar panels installation.

Description of Work Proposed: Please give an overview of the work to be undertaken:

Install 13 Roof Mounted Solar Panels on both the front and rare portions of the roof.

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Work Item 1: _____

Description of Current Condition:	Proposed Work:
Good Condition	Install 13 Roof Mounted Solar Panels on both the front and rare portions of the roof.

Work Item 2: _____

Description of Current Condition:	Proposed Work:

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Work Item 3: _____

Description of Current Condition:	Proposed Work:

HISTORIC AREA WORK PERMIT
CHECKLIST OF
APPLICATION REQUIREMENTS

	Required Attachments						
Proposed Work	1. Written Description	2. Site Plan	3. Plans/ Elevations	4. Material Specifications	5. Photographs	6. Tree Survey	7. Property Owner Addresses
New Construction	*	*	*	*	*	*	*
Additions/ Alterations	*	*	*	*	*	*	*
Demolition	*	*	*		*		*
Deck/Porch	*	*	*	*	*	*	*
Fence/Wall	*	*	*	*	*	*	*
Driveway/ Parking Area	*	*		*	*	*	*
Grading/Excavation/Landscaing	*	*		*	*	*	*
Tree Removal	*	*		*	*	*	*
Siding/ Roof Changes	*	*	*	*	*		*
Window/ Door Changes	*	*	*	*	*		*
Masonry Repair/ Repoint	*	*	*	*	*		*
Signs	*	*	*	*	*		*

REVIEWED

By Michael Kyne at 12:21 pm, Jul 03, 2023

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SOLAR PV SYSTEM: 5.265 kWp

HENRICH RESIDENCE

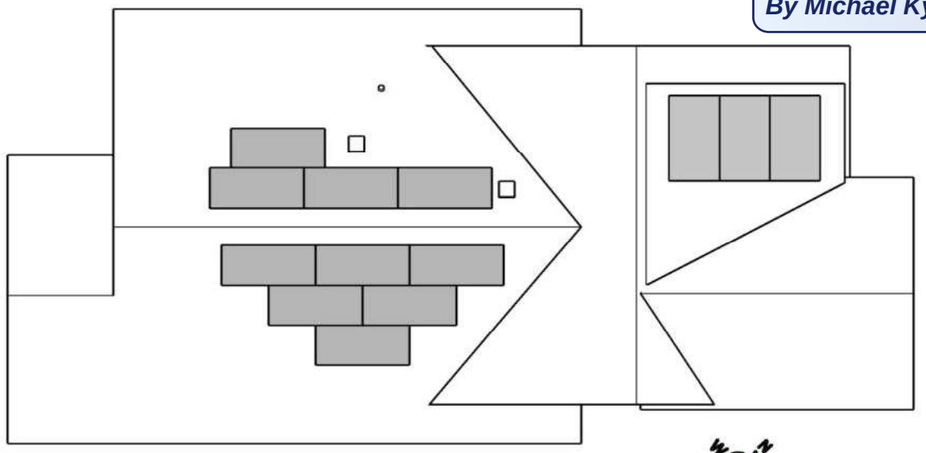
7305 TAKOMA AVENUE TAKOMA PARK MD
UNITED STATES 20912

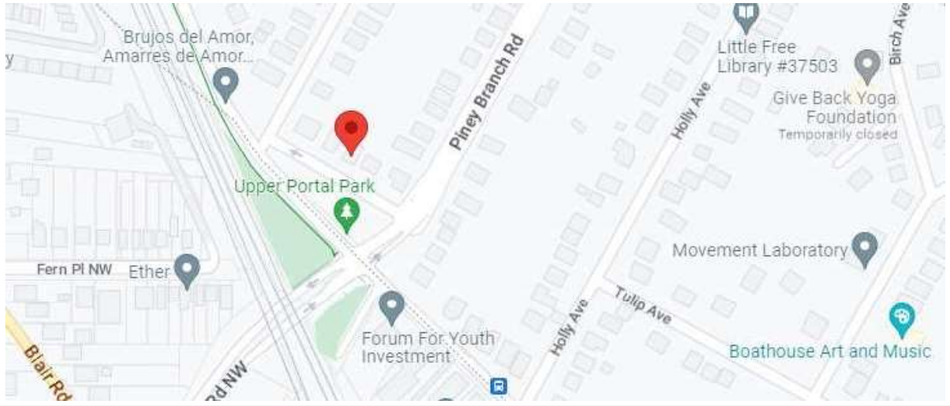
APPROVED
Montgomery County
Historic Preservation Commission

FOR PERMITTING USE ONLY

PROJECT INFORMATION

OWNER:	RICHARD HENRICH
ADDRESS:	7305 TAKOMA AVENUE TAKOMA PARK MD UNITED STATES 20912
AHJ:	MONTGOMERY COUNTY (MD)
ADDRESS:	2425 REEDIE DRIVE WHEATON-GLENMONT, MARYLAND 20902
ZONING:	RESIDENTIAL
BUILDING CODE:	IBC 2018
ELECTRICAL CODE:	NEC 2017
ASCE VERSION:	ASCE 7-16
SNOW LOAD:	30 PSF
WIND SPEED:	115 MPH
WIND EXPOSURE:	B
DC RATING:	5.265 kW
AC RATING:	3.77 kW
RACKING:	UNIRAC SM LIGHT RAIL
MODULE:	(13) REC405AA
INVERTER:	(13) IQ8PLUS-72-2-US





PROJECT SCOPE

THIS PROJECT INVOLVES THE INSTALLATION OF (13) REC PURE 405W ALL BLACK SOLAR MODULES. THE SOLAR MODULES WILL BE RACKED USING A PRE-ENGINEERED RACKING SYSTEM. THE RACKED MODULES WILL BE ELECTRICALLY CONNECTED TO (13) ENPHASE DC TO AC POWER INVERTERS, AND INTERCONNECTED TO THE LOCAL UTILITY USING MEANS AND METHODS CONSISTENT WITH THE RULES ENFORCED BY THE LOCAL UTILITY AND PERMITTING JURISDICTION.

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E001	ELECTRICAL - LINE DIAGRAM
E002	ELECTRICAL - WIRE CALCS
E003	STRING & CONDUIT LAYOUT
E004	EQUIP. RATINGS & SIGNAGE

PROJECT ADDRESS:

RICHARD HENRICH
7305 TAKOMA AVENUE
TAKOMA PARK MD UNITED STATES 20912

CONTRACTOR INFO:

FUSION SOLAR SERVICES
3600 COMMERCE DR
SUITE 601
BALTIMORE, MD 21227
(443) 955-0779

LICENSE NUMBER:
MHIC-30991

REV	DATE
IFC	4/18/2023

COVER

Z001

DocuSigned by:

STATE OF MARYLAND
SCOTT ALEXANDER KIRBY
41308
PROFESSIONAL ENGINEER

DocuSigned by:
Scott Kirby
CAD180010D814CD...
4/22/2023

Professional Certification: I hereby certify that these documents were prepared or approved by me, and that I am a duly licensed professional engineer under the laws of the state of Maryland.
License No: 41308 Exp. Date: 01-06-24

FOR ENGINEERING USE ONLY

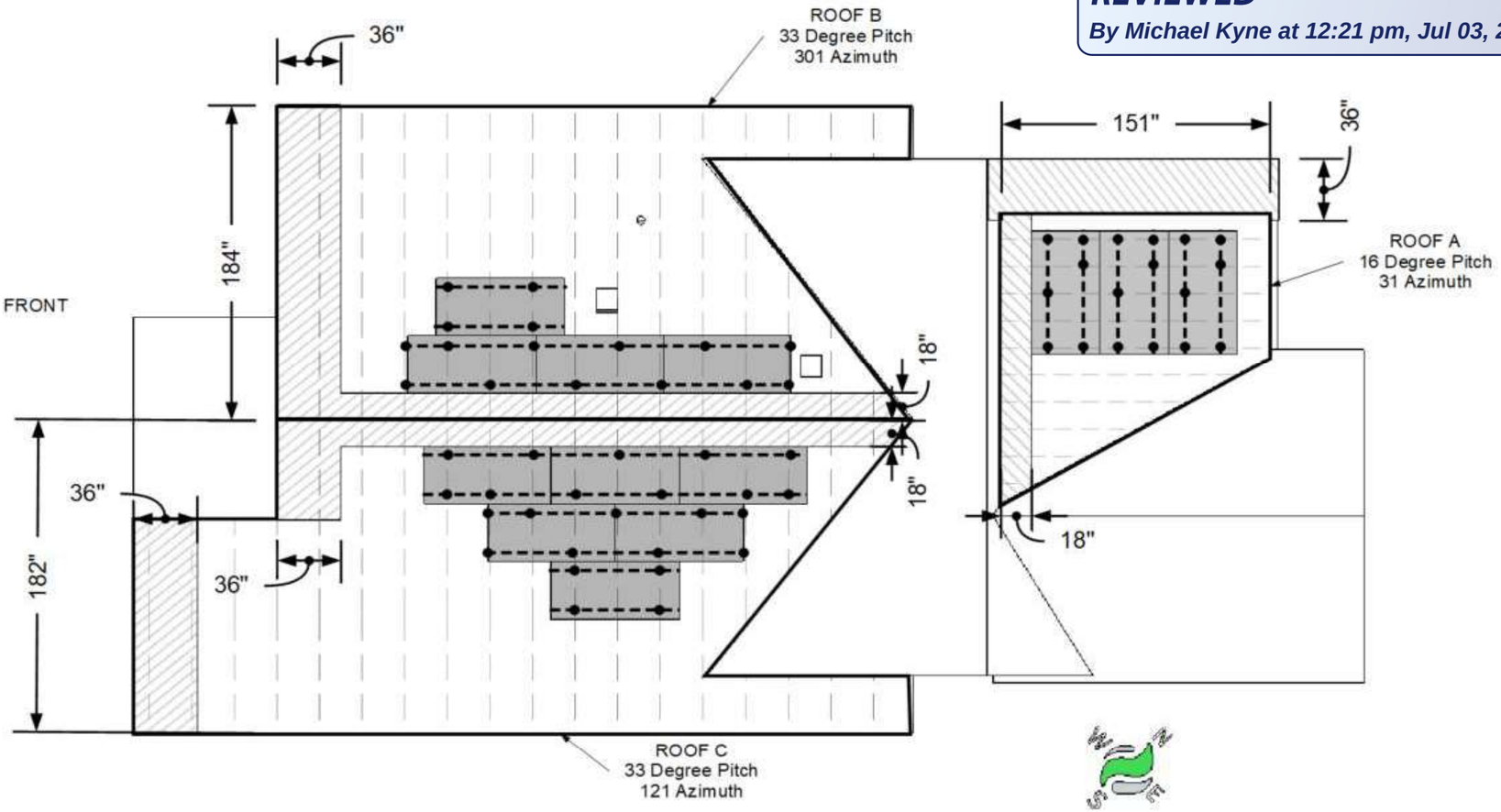
GENERAL NOTES

1) THIS PHOTOVOLTAIC (PV) SYSTEM SHALL COMPLY WITH THE NATIONAL ELECTRIC CODE (NEC) ARTICLE 690, ALL MANUFACTURERS'S LISTING AND INSTALLATION INSTRUCTIONS, AND THE RELEVANT CODES AS SPECIFIED BY THE AUTHORITY HAVING JURISDICTION (AHJ).

2) ALL SIGNAGE TO BE PLACED IN ACCORDANCE WITH LOCAL BUILDING CODE AND AS REQUIRED BY THE NEC AND AHJ.

3) PV SYSTEM CIRCUITS INSTALLED ON OR IN BUILDINGS SHALL INCLUDE A RAPID SHUTDOWN FUNCTION TO REDUCE SHOCK HAZARD FOR EMERGENCY RESPONDERS

4) THIS SYSTEM IS A UTILITY INTERACTIVE SYSTEM, AND THE PV MODULES ARE CONSIDERED NON-COMBUSTIBLE.



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Historic Preservation Commission

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LEGEND

- ROOF SUPPORT
- MOUNTING RAIL
- ROOF ATTACHMENT
- PV ARRAY
- FIRECODE SETBACK

PROJECT ADDRESS:

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ATTACHMENT PLAN

A001

DocuSigned by:

STATE OF MARYLAND
SCOTT ALEXANDER KIRBY
41308
PROFESSIONAL ENGINEER

DocuSigned by:
SCOTT KIRBY
CAD180010D814CD...
4/22/2023

Professional Certification: I hereby certify that these documents were prepared or approved by me, and that I am a duly licensed professional engineer under the laws of the state of Maryland.
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INSTALLATION NOTES

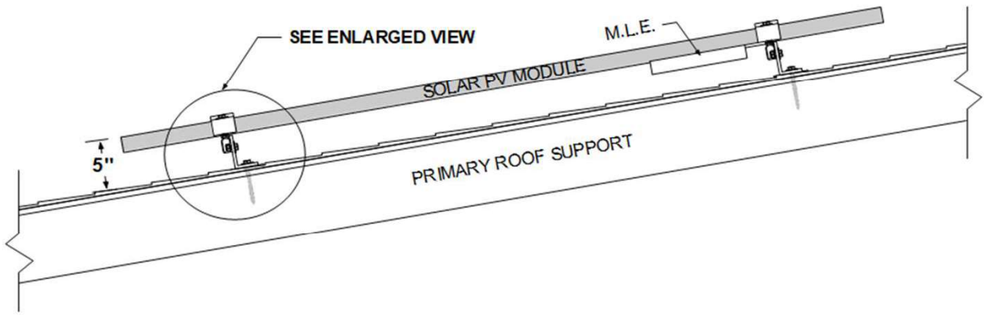
1) ALL SOLAR MODULES SUPPORTED BY ROOF ATTACHMENTS STAGGERED AT 48 IN O.C. (OR AS INDICATED)

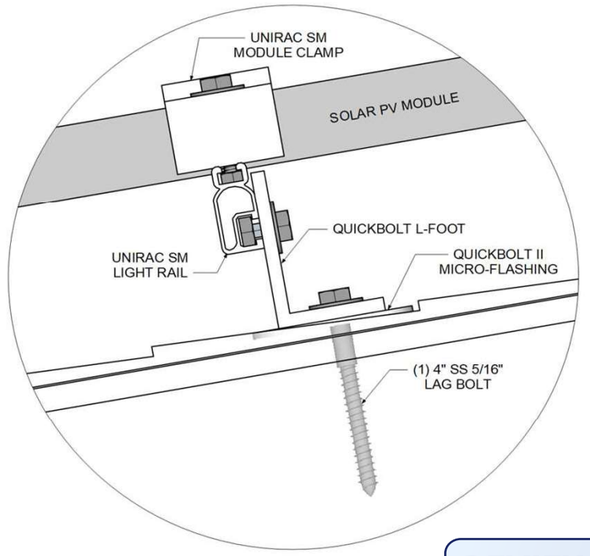
2) SOLAR PHOTOVOLTAIC SYSTEM INSTALLED PARALLEL TO ROOF SURFACE

3) SOLAR PHOTOVOLTAIC SYSTEM INSTALLED AT A MAXIMUM HEIGHT OF 6 IN ABOVE ROOF SURFACE (OR AS INDICATED)

4) ANY ROOFING PENETRATIONS SHALL HAVE PROPER FLASHING SEALANT USED TO PROVIDE WATERTIGHT ASSEMBLY

TOTAL ROOF PLAN AREA =	2190 SQ.FT.
TOTAL SOLAR ARRAY AREA =	258.917 SQ.FT.
ARRAY ROOF COVERAGE =	**12** %





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ROOF PROPERTIES				
	ROOF LABEL:	A	B	C
	MATERIAL:	Architectural Comp Shingle	Architectural Comp Shingle	Architectural Comp Shingle
	PITCH:	16°	33°	33°
	AZIMUTH:	31°	301°	121°
	PRIMARY SUPPORT:	2x10 RAFTERS	2x6 RAFTERS	2x6 RAFTERS
	PRIMARY SUPPORT SPACING:	16"	24"	24"
	SPAN (EAVE TO RIDGE):	7'	12'	12'
	MEAN HEIGHT:	25'	25'	25'
	RACKING:	UNIRAC SM LIGHT RAIL	UNIRAC SM LIGHT RAIL	UNIRAC SM LIGHT RAIL
	STANDOFF:	QUICKBOLT	QUICKBOLT	QUICKBOLT
DEAD & POINT LOAD CALCULATIONS	NUMBER OF MODULES:	3	4	6
	MODULE WEIGHT (LBS):	135.00	180.00	270.00
	M.L.E. WEIGHT (LBS):	7.14	9.52	14.28
	RACKING WEIGHT (LBS):	29.04	38.72	58.08
	STANDOFF WEIGHT (LBS):	4.50	6.00	9.00
	ARRAY WEIGHT (LBS):	175.68	234.24	351.36
	ARRAY AREA (SQ.FT.):	59.75	79.67	119.50
	DISTRIBUTED LOAD (PSF):	**2.94**	**2.94**	**2.94**
	APPROX. NUMBER OF STANDOFFS:	8	10	15
	POINT LOAD (LBS/STANDOFF):	**21.96**	**23.42**	**23.42**

DocuSigned by:

DocuSigned by:
SCOTT KIRBY
CAD180010D814CD...
4/22/2023

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INSTALLATION NOTES

1) ALL RACKING SHALL BE INSTALLED PER MANUFACTURER SPECIFICATIONS

2) M.L.E.'S = MODULE LEVEL ELECTRONICS (IE, POWER OPTIMIZERS, MICRO-INVERTERS, CABLES, ETC)

3) USE 5/16" X 4"HEX HEAD STAINLESS STEEL LAG SCREWS

MOUNTING SYSTEM PROPERTIES	
RACKING	UNIRAC SM LIGHT RAIL
STANDOFF	QUICKBOLT TO PRIMARY SUPPORT
MAX. RAIL SPAN (IN)	48
MIN. FASTENER DEPTH (IN)	2.5
MAX. RAIL CANTILEVER (IN)	16
MAX. ARRAY HEIGHT (IN)	5

PROJECT ADDRESS:

RICHARD HENRICH
7305 TAKOMA AVENUE
TAKOMA PARK MD UNITED STATES 20912

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IFC	4/18/2023

ASSEMBLY & LOAD CALCS

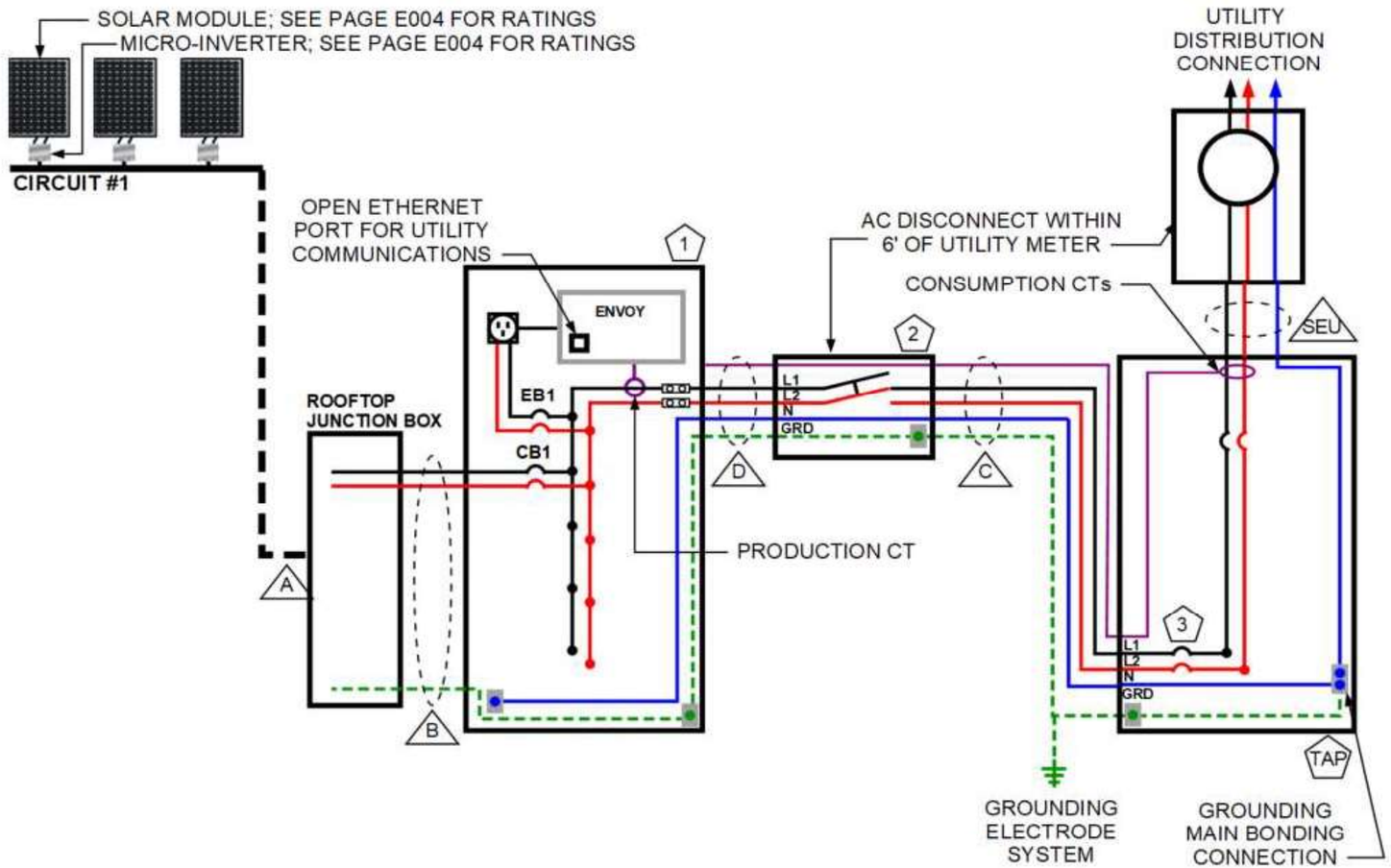
S001

CONDUCTOR AND CONDUIT SCHEDULE

TAG	WIRE SIZE	GROUND SIZE	WIRE TYPE	DESCRIPTION	CONDUIT SIZE	CONDUIT TYPE	LENGTH
SEU	#4/0 AL	N/A	SEU	(2) PHASE CONDUCTORS & (1) NEUTAL	N/A	N/A	5'
A	#12 AWG	#6 AWG	Q-CABLE	(2) PHASE CONDUCTORS & (1) BARE COPPER IN FREE AIR	N/A	N/A	77' (MAX)
B	#10 AWG	#8 AWG	THWN-2	(2) PHASE CONDUCTORS & (1) GROUND	0.75"	EMT	35'
C	#10 AWG	#8 AWG	THWN-2	(2) PHASE CONDUCTORS & (1) NEUTRAL & (1) GROUND	1"	EMT	5'
D	#10 AWG	#8 AWG	THWN-2	(2) PHASE CONDUCTORS & (1) NEUTRAL & (1) GROUND	1"	EMT	5'

EQUIPMENT SCHEDULE

TAG	EQUIPMENT DETAILS	MOUNTING LOCATION
TAP	200 AMP EATON CH MAIN SERVICE PANEL WITH 200 AMP MAIN BREAKER (200 AMP SERVICE)	SURFACE-MOUNTED ON WALL OPPOSITE UTILITY METER
1	ENPHASE COMBINER (MODEL #X-IQ-AM1-240-4) WITH CIRCUITS AS LISTED IN TABLE	MOUNTED ADJACENT TO UTILITY METER
2	30 AMP NEMA3R NON-FUSED DISCO (MODEL #DU221RB)	MOUNTED ADJACENT TO UTILITY METER
3	2 POLE, 20 AMP EATON CH MAIN SERVICE PANEL BREAKER	BREAKER TAP IN MAIN SERVICE PANEL



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CIRCUIT SCHEDULE

CIRCUIT	INVERTER COUNT	AMPERAGE CALCULATION	BREAKER SIZE
#1	13	13 x 1.21 x 125% = 19.66 A	20 AMP (CB1)
		ENVOY BREAKER	15 AMP (EB1)

ELECTRICAL NOTES

WHEN THE AC UTILITY SOURCE IS REMOVED FROM THE INVERTER OUTPUT CIRCUITS VIA ANY MEANS, SUCH AS AN AC BREAKER, AC DISCONNECT, OR REMOVAL OF THE SOLAR OR MAIN UTILITY SERVICE METER, THIS EQUIPMENT PERFORMS THE RAPID SHUTDOWN FUNCTION PER 690.12

ARRAY BONDED WITH #6 BARE Cu

TWO UNGROUNDED CONDUCTORS PER CIRCUIT OF INVERTERS (TYP)

ALL CONDUIT SIZING WILL BE IN ACCORDANCE TO THE NEC, CHAPTER 9

PVC OR LFMC MAY BE USED INSTEAD OF EMT CONDUIT

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ELECTRICAL - LINE DIAGRAM

E001

CALCULATION FOR PV BREAKER					
SYSTEM CURRENT	1.21	x	13	=	15.73 A
DESIGN AMPERAGE (FLA)	15.73	x	125%	=	19.6625 A
MAIN BUSS RATING	200	x	120%	=	240 A
EXISTING MAIN BREAKER					200 A
MAX SOLAR BREAKER	240	-	200	=	40 A

ARRAY TO COMBINER	
WIRE LENGTH	35 FT
WIRE SIZE	#10 AWG
SYSTEM PROPERTIES	
FULL LOAD AMPERAGE	15.73
SOURCE VOLTAGE	240
LENGTH OF RUN (FT)	35
LOAD DUTY	CONTINUOUS
CONDUCTOR TYPE	THWN-2
CONDUCTOR MATERIAL	COPPER
CONDUCTOR LOCATION	DRY OR WET
CONDUCTOR INSULATION TEMP	75ºC
DISTANCE ABOVE ROOF	1/2 to 3-1/2in.
AVERAGE OUTSIDE TEMP (ºF)	94
TEMP ADDER (ºF)	40
ADJUSTED AMBIENT TEMP (ºF)	134
TERMINAL TEMP RATING	75ºC
CIRCUIT TYPE	SINGLE PHASE 2-WIRE
QTY. OF CURRENT-CARRYING CONDUCTORS	2
ADDITIONAL CURRENT-CARRYING CONDUCTORS	
TOTAL # OF CURRENT-CARRYING CONDUCTORS	2
CONDUCTOR CONDITIONS OF USE	
LARGEST CIRCUIT FULL LOAD AMPS	15.73
LOAD DUTY MULTIPLIER	1.25
AMBIENT TEMP FACTOR	0.58
QTY. CONDUCTORS IN CONDUIT FACTOR	1.00
CONDUCTOR SELECTION	
MINIMUM REQUIRED CONDUCTOR AMPACITY	33.90
SELECTED CONDUCTOR AMPACITY	35.00
SELECTED CONDUCTOR SIZE (AWG)	10
TERMINAL REQUIREMENT	
LARGEST CIRCUIT FULL LOAD AMPS	15.73
LOAD DUTY MULTIPLIER	1.25
REQUIRED TERMINAL AMPACITY	19.66
VOLTAGE DROP	
OHMS/MILFT	1.240
LENGTH OF RUN (FT)	35
LOAD CURRENT	15.73
VOLTAGE DROP	1.37
VOLTS AT LOAD TERMINAL	238.63
PERCENT VOLTAGE DROP	0.57%

INTERCONNECTION	
METHOD	BREAKER TAP
WIRE SIZE	#10 AWG
SYSTEM PROPERTIES	
FULL LOAD AMPERAGE	15.73
SOURCE VOLTAGE	240
LENGTH OF RUN (FT)	15
LOAD DUTY	CONTINUOUS
CONDUCTOR TYPE	THWN-2
CONDUCTOR MATERIAL	COPPER
CONDUCTOR LOCATION	DRY OR WET
CONDUCTOR INSULATION TEMP	75ºC
AMBIENT TEMP	26-30ºC
TERMINAL TEMP RATING	75ºC
CIRCUIT TYPE	SINGLE PHASE 3-WIRE
QTY. OF CURRENT-CARRYING CONDUCTORS	2
CONDUCTOR CONDITIONS OF USE	
FULL LOAD AMPS	15.73
LOAD DUTY MULTIPLIER	1.25
AMBIENT TEMP FACTOR	1.00
QTY. CONDUCTORS IN CONDUIT FACTOR	1.00
CONDUCTOR SELECTION	
MINIMUM REQUIRED CONDUCTOR AMPACITY	19.66
SELECTED CONDUCTOR AMPACITY	35.00
SELECTED CONDUCTOR SIZE (AWG)	10
TERMINAL REQUIREMENT	
FULL LOAD AMPS	15.73
LOAD DUTY MULTIPLIER	1.25
REQUIRED TERMINAL AMPACITY	19.66
VOLTAGE DROP	
OHMS/MILFT	1.240
LENGTH OF RUN (FT)	15
LOAD CURRENT	15.73
VOLTAGE DROP	0.59
VOLTS AT LOAD TERMINAL	239.41
PERCENT VOLTAGE DROP	0.24%

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ELECTRICAL - WIRE CALCS

ELECTRICAL NOTES

1) ALL CONDUCTORS SHALL BE COPPER, RATED FOR 75ºC AND WET ENVIRONMENT, UNLESS OTHERWISE NOTED.

2) ALL WIRE TERMINATIONS SHALL BE APPROPRIATELY LABELED AND READILY VISIBLE.

3) MODULE GROUNDING CLIPS TO BE INSTALLED BETWEEN MODULE FRAME AND MODULE SUPPORT RAIL, PER MANUFACTURER'S INSTRUCTION.

E002

LEGEND

- JUNCTION BOX
- SOLADECK
- END CAP
- EXTERIOR CONDUIT
- INTERIOR CONDUIT
- BASEMENT CONDUIT
- TRUNK CABLE

COLOR	CIRCUIT	MODULE COUNT
	#1	13

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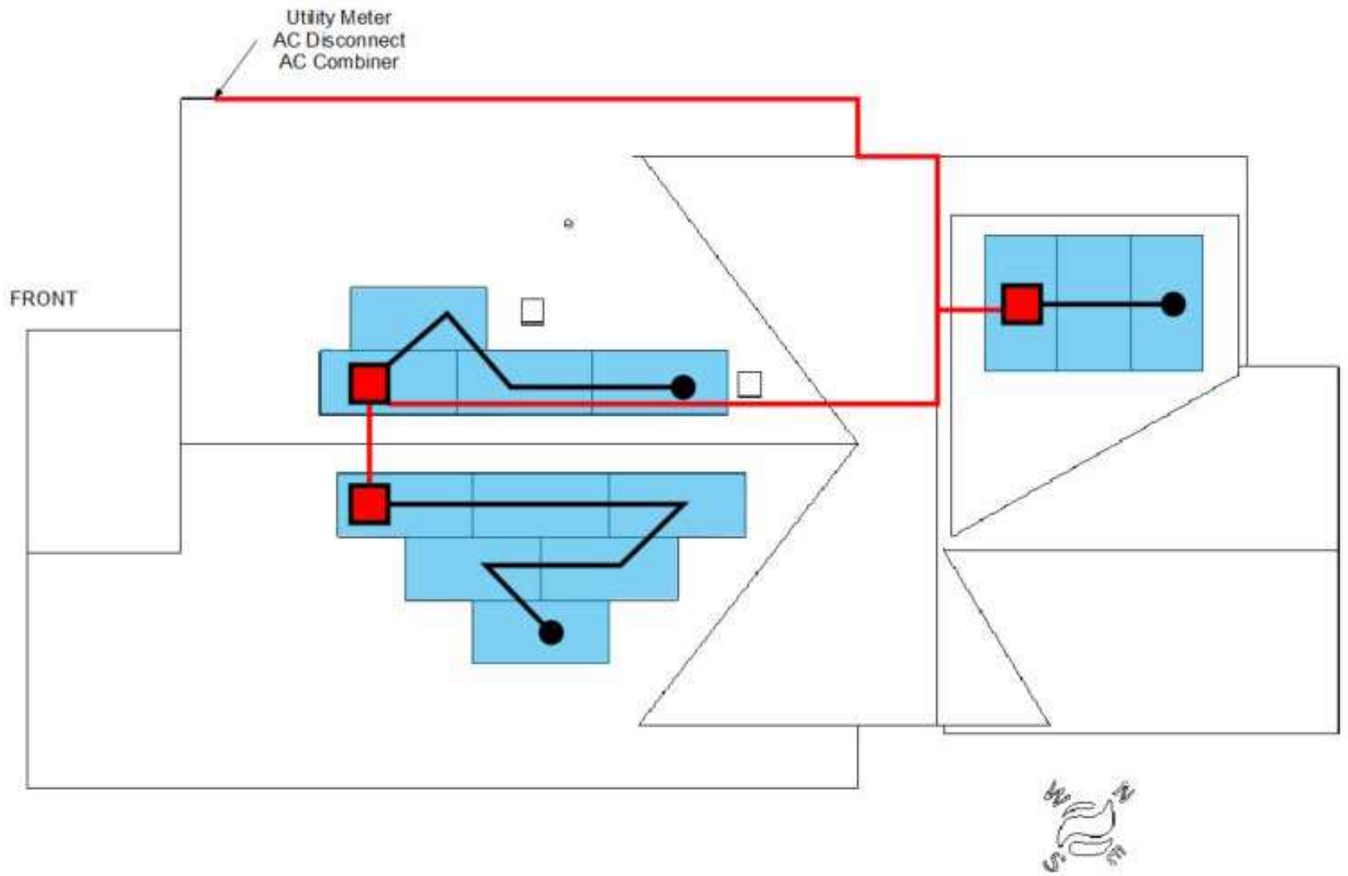

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CIRCUIT & CONDUIT LAYOUT

E003

SOLAR MODULE RATINGS		
REC Pure 405w All Black Specifications		
Length:	71.7	in
Width:	40	in
Thickness:	1.2	in
Weight:	45.00	lbs
Imp:	9.56	A
Vmp:	42.4	V
Voc:	48.9	V
Isc:	10.14	A
OCPD:	25	A
Pmax:	405	W
Vmax:	1000	V
Temp. Coefficient:	-0.24	%Voc/ºC

INVERTER 1 RATINGS		
Enphase IQ8+ Specifications		
Max # Per String:	13	
Imax (ac):	1.21	A
Vmax (dc):	60	V
Pmax:	290	W
Nom. AC Voltage:	240	V
OCPD:	20	A
Weight (Optimizer):	2.38	lbs
Imax (Input):	15	A
Pmax (dc) Input:	440	V

WARNING: PHOTOVOLTAIC POWER SOURCE

LABEL TO BE INSTALLED AT EXPOSED RACEWAYS, CABLE TRAYS, AND OTHER WIRING METHODS; SPACED AT MAXIMUM 10FT SECTION OR WHERE SEPARATED BY ENCLOSURES, WALLS, PARTITIONS, CEILINGS, OR FLOORS.

LETTERS AT LEAST 3/8 INCH; WHITE ON RED BACKGROUND; REFLECTIVE

PHOTOVOLTAIC DC DISCONNECT

LABEL TO BE INSTALLED AT EACH DC DISCONNECTING MEANS

PHOTOVOLTAIC AC DISCONNECT

LABEL TO BE INSTALLED AT EACH AC DISCONNECTING MEANS

PHOTOVOLTAIC SYSTEM EQUIPPED WITH RAPID SHUTDOWN

LABEL TO BE INSTALLED AT RAPID SHUTDOWN SWITCH

LETTERS AT LEAST 3/8 INCH; WHITE ON RED BACKGROUND; REFLECTIVE

WARNING

ELECTRICAL SHOCK HAZARD

DO NOT TOUCH TERMINALS! TERMINALS ON BOTH LINE AND LOAD SIDES MAY BE ENERGIZED IN THE OPEN POSITION

LABEL TO BE INSTALLED AT EACH DISCONNECTING MEANS FOR PHOTOVOLTAIC EQUIPMENT

WARNING

ELECTRICAL SHOCK HAZARD

IF GROUND FAULT IS INDICATED NORMALLY GROUNDED CONDUCTORS MAY BE UNGROUNDED AND ENERGIZED

LABEL TO BE INSTALLED AT EACH DISCONNECTING MEANS FOR PHOTOVOLTAIC EQUIPMENT

WARNING

DUAL POWER SOURCE SECOND SOURCE IS PHOTOVOLTAIC SYSTEM

LABEL TO BE INSTALLED ON EXTERIOR OF MAIN ELECTRICAL PANEL

WARNING

INVERTER OUTPUT CONNECTION. DO NOT RELOCATE THIS OVERCURRENT DEVICE

LABEL TO BE APPLIED TO THE DISTRIBUTION EQUIPMENT

INTERACTIVE PHOTOVOLTAIC SYSTEM CONNECTED

LABEL TO BE INSTALLED AT UTILITY METER

SOLAR PV LOADCENTER

5.265 kW DC SOLAR ARRAY

240 VOLT AC SYSTEM

INSTALLED COMPONENTS

(13) REC Pure 405w All BlackW Modules

(13) Enphase IQ8+

CIRCUIT CALCULATIONS

SYSTEM CURRENT:	1.21	x	13	=	15.73 A
DESIGN AMPERAGE:	15.73	x	125%	=	19.6625 A

CIRCUIT #1 =	13	15.73	19.66

REVIEWED

By Michael Kyne at 12:21 pm, Jul 03, 2023

SOLAR PV SYSTEM DISCONNECT

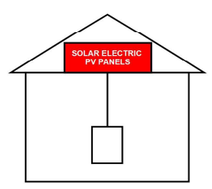
RATED AC OUTPUT CURRENT: **15.73 A**

NOMINAL OPERATING AC VOLTAGE: **240 V**

LABEL TO BE INSTALLED AT AN ACCESSIBLE LOCATION AT THE DISCONNECTING MEANS AS A POWER SOURCE

SOLAR PV SYSTEM IS EQUIPPED WITH RAPID SHUTDOWN

TURN RAPID SHUTDOWN SWITCH TO THE "OFF" POSITION TO SHUT DOWN PV SYSTEM AND REDUCE SHOCK HAZARD IN ARRAY.



LABEL TO BE INSTALLED ON NO MORE THAN 3FT FROM THE SERVICE DISCONNECTING MEANS

RAPID SHUTDOWN SWITCH FOR SOLAR PV SYSTEM

LABEL TO BE INSTALLED ON OR NO MORE THAN 3FT FROM THE RAPID SHUTDOWN SWITCH

APPROVED

Montgomery County

Historic Preservation Commission

FOR PERMITTING USE ONLY

PROJECT ADDRESS:

RICHARD HENRICH
7305 TAKOMA AVENUE
TAKOMA PARK MD UNITED STATES 20912

CONTRACTOR INFO:

FUSION SOLAR SERVICES

3600 COMMERCE DR
SUITE 601
BALTIMORE, MD 21227
(443) 955-0779

LICENSE NUMBER:

MHIC-30991

SIGNAGE NOTES

1) ALL PLAQUES AND LABELS SHALL HAVE A RED BACKGROUND (OR AS SHOWN HERE)

2) ALL LETTERING SHALL BE WHITE AND HAVE A MINIMUM HEIGHT OF 3/8" (OR AS SHOWN HERE)

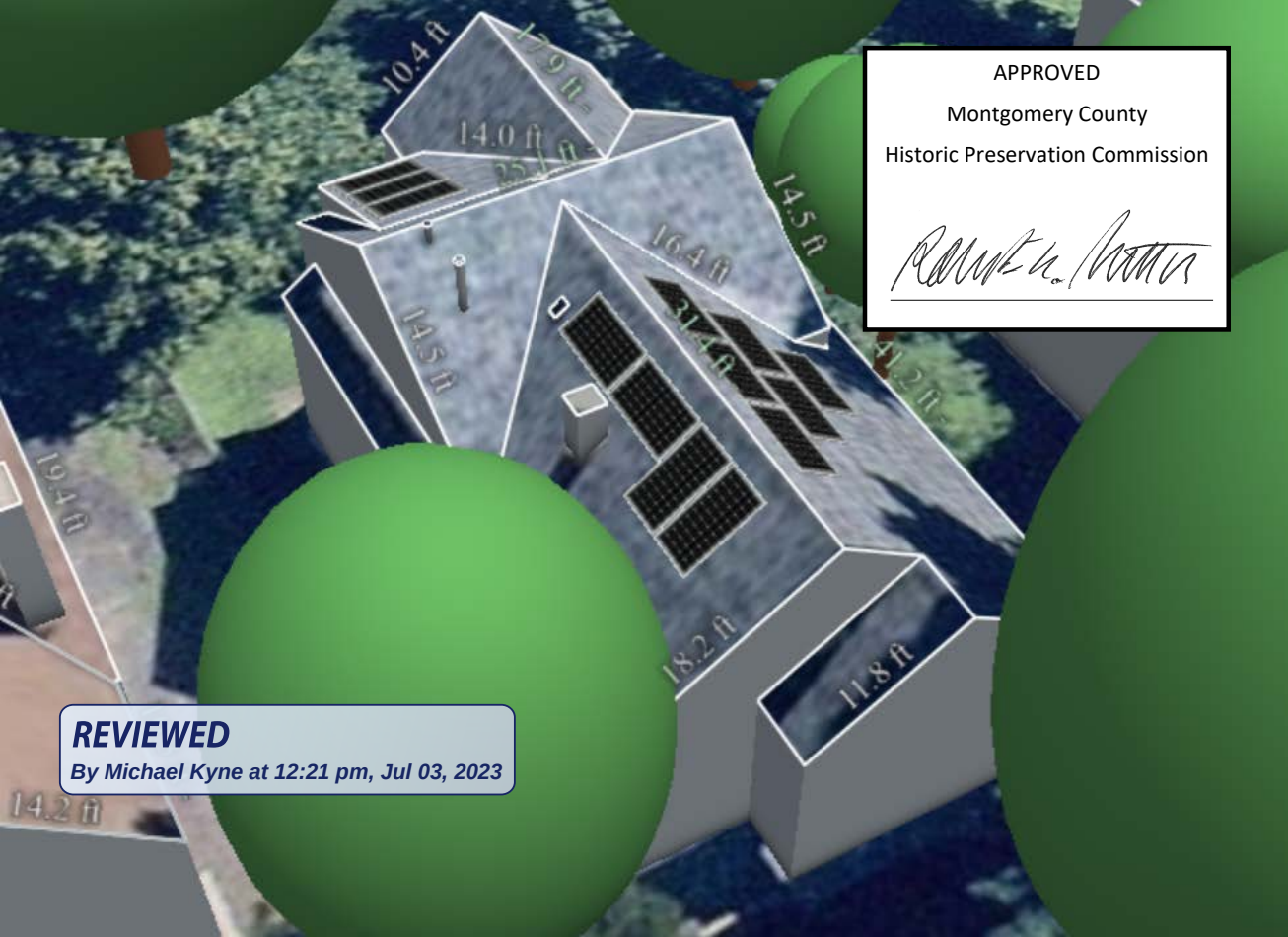
3) FONT SHALL BE ARIAL (OR SIMILAR) AND ALL LETTERING SHALL BE CAPITALIZED

4) ALL PLAQUES AND LABELS SHALL BE OF A MATERIAL SUITABLE FOR THE ENVIRONMENT INSTALLED

REV	DATE
IFC	4/18/2023

EQUIP. RATINGS & SIGNAGE

E004



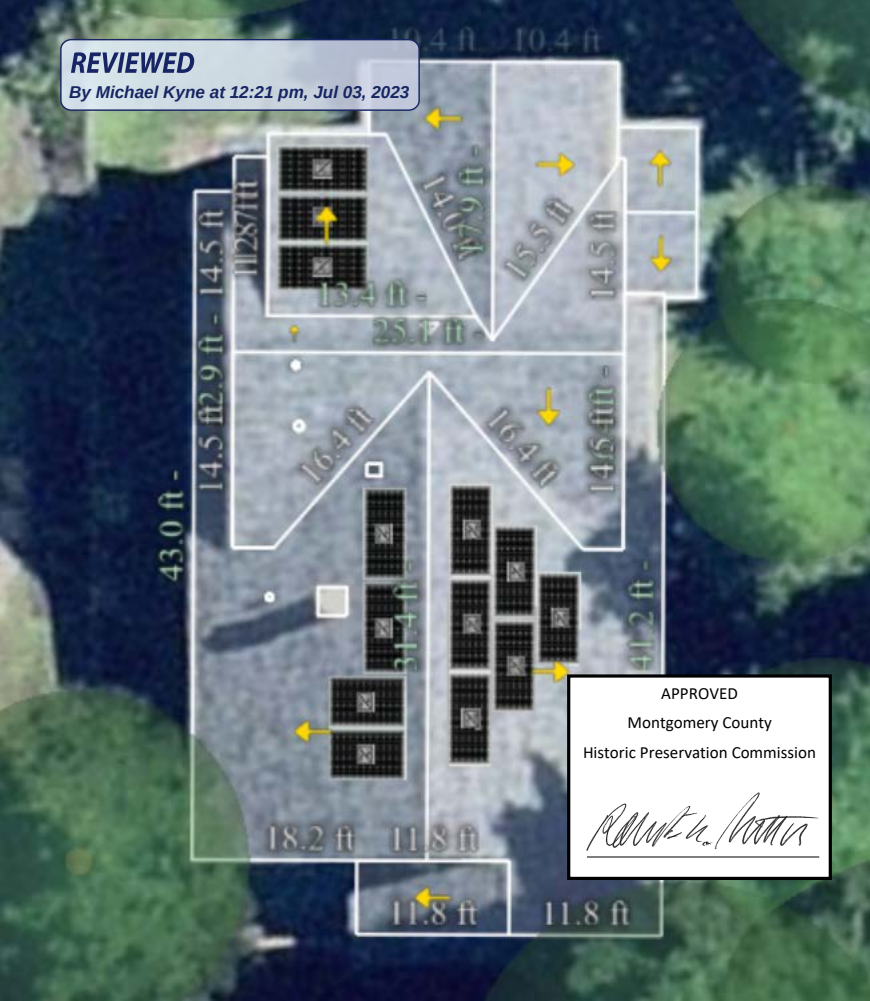
APPROVED

Montgomery County

Historic Preservation Commission

REVIEWED

By Michael Kyne at 12:21 pm, Jul 03, 2023


REVIEWED
By Michael Kyne at 12:21 pm, Jul 03, 2023
10.4 ft
10.4 ft
14.5 ft
14.5 ft
14.5 ft
15.5 ft
14.5 ft
13.4 ft -
25.4 ft
14.5 ft
14.5 ft
16.4 ft
16.4 ft
14.5 ft
43.0 ft -
31.4 ft
41.2 ft -
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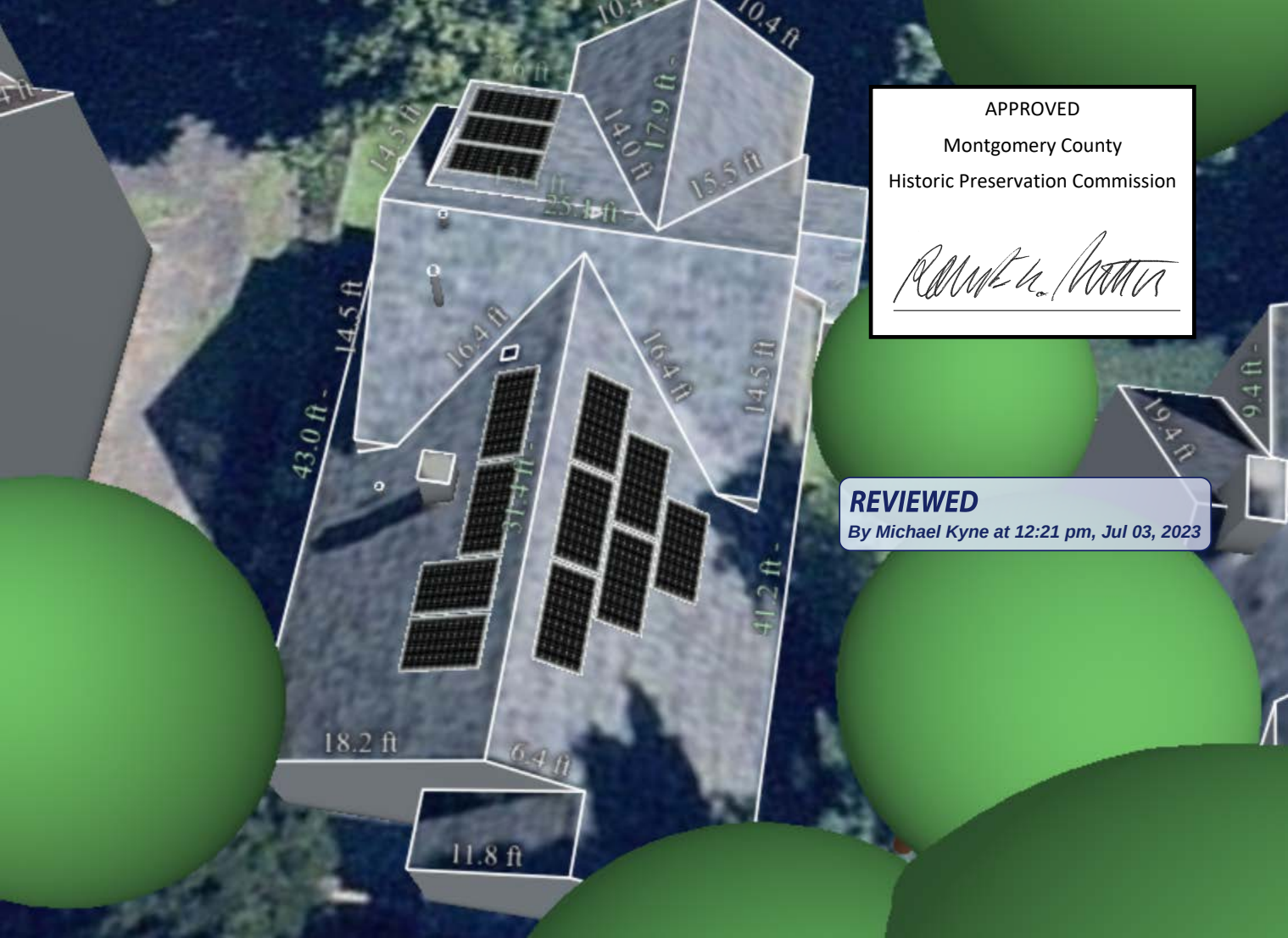
Montgomery County
Historic Preservation Commission
18.2 ft
11.8 ft
11.8 ft
11.8 ft


APPROVED
Montgomery County
Historic Preservation Commission
REVIEWED
By Michael Kyne at 12:21 pm, Jul 03, 2023
10.4 ft
14.0 ft
17.9 ft
15.5 ft
14.5 ft
25.1 ft
43.0 ft
14.5 ft
16.4 ft
16.4 ft
14.5 ft
31.4 ft
41.2 ft
19.4 ft
9.4 ft
18.2 ft
6.4 ft
11.8 ft

City of Takoma Park

Housing and Community Development Department

Main Office 301-891-7119
Fax 301-270-4568
www.takomaparkmd.gov

7500 Maple Avenue
Takoma Park, MD 20912

MUNICIPALITY LETTER

To: Richard Henrich
7305 Takoma Ave
rhenrich@erols.com 202-441-0832

To: Department of Permitting Services
2425 Reedie Drive, 7th floor
Wheaton, Maryland 20902

From: Planning and Development Services Division

REVIEWED
By Michael Kyne at 12:21 pm, Jul 03, 2023

THIS IS NOT A PERMIT – For Information

VALID FOR ONE YEAR FROM DATE

APPROVED
Montgomery County
Historic Preservation Commission

The property owner is responsible for obtaining all required permits fro f Takoma Park. If this property is in the **Takoma Park Historic District** Historic Preservation requirements.

Representative Name: Ola Carew ocarew@lum
Location of Project: 7305 Takoma Avenue
Proposed Scope of Work: Install 13 Roof Mounted Solar Panels

The purpose of this municipality letter is to inform you that the City of Takoma Park has regulations and city permit requirements that may apply to your project. This municipality letter serves as notification that, in addition to all Montgomery County requirements, you are required to comply with all City permitting requirements, including:

- Tree Impact Assessment/Tree Protection Plan
- Stormwater management
- City Right of Way

Failure to comply with these requirements could result in the issuance of a Stop Work Order and other administrative actions within the provisions of the law. Details of Takoma Park's permit requirements are attached on page 2.

The issuance of this letter does not indicate approval of the project nor does it authorize the property owner to proceed with the project. The City retains the right to review and comment on project plans during the Montgomery County review process.

City Of Takoma Park

The City of Takoma Park permits for the following issues:

Tree Impact Assessment/Tree Protection Plan/Tree Removal Application:

Construction activities that occur within 50 feet of any urban forest tree (7 and 5/8" in trunk diameter or greater), located on the project property or on an adjacent property, may require a Tree Impact Assessment and possibly a Tree Protection Plan Permit. Make sure to submit a request for a Tree Impact Assessment and schedule a site visit with the City's Urban Forest Manager if any urban forest tree is in the vicinity of proposed construction activities. See the Tree Permits section of the City website for the specific conditions in which a Tree Impact Assessment is required. Depending on the Urban Forest Manager's conclusion following the Tree Impact Assessment, you may need to prepare a full Tree Protection Plan and apply for a Tree Protection Plan Permit as well. Separately, the removal of any urban forest tree will require a Tree Removal Permit application. The tree ordinance is detailed in the City Code, section 12.12. For permit information check: https://takomaparkmd.gov/services/permits/tree-permits. The City's Urban Forest Manager can be reached at 301-891-7612 or urbanforestmanager@takomaparkmd.gov.

Stormwater Management:

If you plan to develop or redevelop property, you may be required to provide appropriate stormwater management measures to control or manage runoff, as detailed in City Code section 16.04. All commercial or institutional development in the city must apply for a Stormwater Management Permit regardless of the size of the land disturbance. Additions or modifications to existing detached single-family residential properties do not require a Stormwater Management permit if the project does not disturb more than 5,000 square feet of area. For more information visit: https://takomaparkmd.gov/government/public-works/stormwater-management-program/. The City Engineer should be contacted to determine if a permit is required. The City Engineer can be reached at 301-891-7620.

REVIEWED
By Michael Kyne at 12:21 pm, Jul 03, 2023

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Montgomery County
Historic Preservation Commission

City Right of Way:

- To place a **construction dumpster or storage container** temporarily in the City right of way (on the adjacent road), you will need to obtain a permit. A permit is not required for placement on a privately-owned driveway or parking lot.
- If you plan to install a new **driveway apron**, or enlarge or replace an existing driveway apron, you need a Driveway Apron Permit.
- If you plan to construct a **fence** in the City right of way, you need to request a Fence Agreement. If approved, the Agreement will be recorded in the Land Records of Montgomery County.

For more information and applications for City permits, see: https://takomaparkmd.gov/services/permits/ or contact the Department of Public Works at 301-891-7633.

Failure to comply with the City's permitting requirements could result in the issuance of a Stop Work Order and other administrative actions within the provisions of the law.

eSigned via SeamlessDocs.com
Ola Carew
Key: 38bf2056622713c0bf979ea7ee94776a

Ola Carew

04-25-2023

Gmail

Olajumoke Carew <ocarew@luminasolar.com>

Fwd: Solar Panels - Historical Area Work Permit

6 messages

Steven Coffman <scoffman@luminasolar.com>
To: Olajumoke Carew <ocarew@luminasolar.com>

Mon, May 8, 2023 at 6:33 PM

---------- Forwarded message ---------
From: **Jeffrey Luker** <jeffrey.luker@quinnevans.com>
Date: Mon, May 8, 2023, 9:26 AM
Subject: RE: Solar Panels - Historical Area Work Permit
To: scoffman@luminasolar.com <scoffman@luminasolar.com>
Cc: Remington Stone <remstone@yahoo.com>, Richard Henrich <rhenrich@erols.com>

Hi Steve,

We are Richard Henrich's immediate neighbor and located at 7307 Takoma Ave, Takoma Park Maryland. We are aware of the proposed solar panel installation, and we have no objection to the project.

We look forward to seeing the project proceed and would like to talk about similar work at our house.

Sincerely,

REVIEWED
By Michael Kyne at 12:21 pm, Jul 03, 2023

APPROVED
Montgomery County
Historic Preservation Commission

Jeffrey Luker, AIA, LEED AP

Principal

202 591 2509 direct

202 744 7494 mobile

From: Richard Henrich <rhenrich@erols.com>
Sent: Monday, May 8, 2023 8:58 AM
To: Jeffrey Luker <jeffrey.luker@quinnevans.com>; 'Remington Stone' <remstone@yahoo.com>
Cc: scoffman@luminasolar.com
Subject: Solar Panels - Historical Area Work Permit

Hi Jeff, Hi Remington!

You can see from the email below from Lumina Solar that we are seeking an Historical Area Work Permit for the solar panel installation on my house. I will be very grateful if you can email a reply to Steve Coffman (below) indicating you are aware of the project and you have no objection.

Please let me know if you would like more info – I now have detailed plans and specs for the panel installation.

Steve also reminded me that Lumina is offering a $1,500 bonus to anyone who makes a referral that ultimately leads to a new installation for Lumina – I gather this is true even if you do not retain Lumina for an installation yourself. What a deal!

All the best,

--Richard

202-441-0832

REVIEWED
By Michael Kyne at 12:21 pm, Jul 03, 2023

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Montgomery County
Historic Preservation Commission

From: Steven Coffman <scoffman@luminasolar.com>
Sent: Monday, May 8, 2023 8:39 AM

To: Richard Henrich <rhenrich@erols.com>
Subject: Historical Area Work Permit

Hello Mr. Henrich,

Hope all is well with you! Good news,

We are ready to move forward with the Historic Area Work Permit. We do need to get approval from 2 of your neighbors to proceed. You can forward this email letting each know that you are planning to have solar panels installed. All they have to do is reply saying they do not object. Please include me in the reply or forward the email back to me.

Let me know if you have any questions. I will reach out to you by phone as well.

Best regards,

Steve Coffman

Solar Consultant

301.509.4376
luminasolar.com

3600 Commerce Dr., Ste 601
Baltimore, MD 21227

REVIEWED
By Michael Kyne at 12:21 pm, Jul 03, 2023

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Montgomery County
Historic Preservation Commission

Leave us a Review!

Google - Lumina Solar

SolarReviews - Lumina Solar

Facebook - Lumina Solar

Energysage - Lumina Solar

Home Advisor - Lumina Solar

2 attachments

image001.png
9K

image001.png
9K

REVIEWED
By Michael Kyne at 12:21 pm, Jul 03, 2023

APPROVED

Montgomery County

Historic Preservation Commission

Steven Coffman <scoffman@luminasolar.com> Mon, May 8, 2023 at 6:33 PM
To: Olajumoke Carew <ocarew@luminasolar.com>

---------- Forwarded message ---------
From: **Remington Stone** <remstone@yahoo.com>
Date: Mon, May 8, 2023, 9:04 AM
Subject: Re: Solar Panels - Historical Area Work Permit
To: Luker, Jeff <jluker@quinnevans.com>, Richard Henrich <rhenrich@erols.com>
Cc: scoffman@luminasolar.com <scoffman@luminasolar.com>

Hello Richard and Steve-

We are aware of the project and fully supportive, no objections here!

[Quoted text hidden]

Olajumoke Carew <ocarew@luminasolar.com> Tue, May 9, 2023 at 8:41 AM

To: Steven Coffman <scoffman@luminasolar.com>

Thanks Steven, can you please send me the neighbors addresses. I will submit once I have that information.

Ola
[Quoted text hidden]

Steven Coffman <scoffman@luminasolar.com> Tue, May 9, 2023 at 8:52 AM
To: Olajumoke Carew <ocarew@luminasolar.com>

7307 Takoma Ave, Takoma Park Maryland for Mr. Luker
7303 for Stone

Steve Coffman
Solar Consultant
301.509.4376
luminasolar.com

3600 Commerce Dr., Ste 601
Baltimore, MD 21227

REVIEWED
By Michael Kyne at 12:21 pm, Jul 03, 2023

APPROVED
Montgomery County
Historic Preservation Commission

Leave us a Review!

Google - Lumina Solar
SolarReviews - Lumina Solar
Facebook - Lumina Solar
Energysage - Lumina Solar
Home Advisor - Lumina Solar

[Quoted text hidden]

Olajumoke Carew <ocarew@luminasolar.com> Wed, May 10, 2023 at 9:20 AM
To: Steven Coffman <scoffman@luminasolar.com>

Thank you!
[Quoted text hidden]

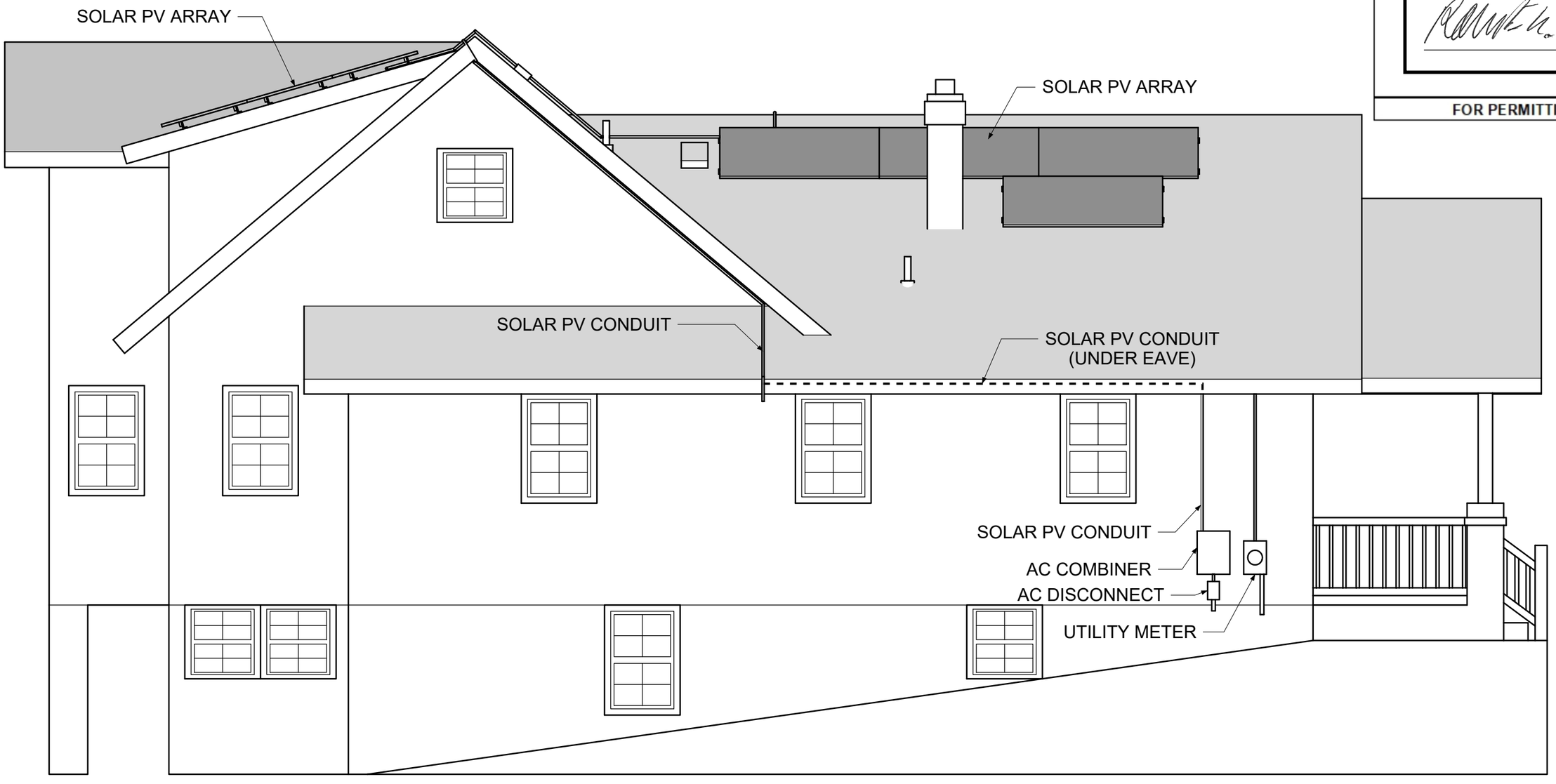
Steven Coffman <scoffman@luminasolar.com> Wed, May 10, 2023 at 9:22 AM
To: Olajumoke Carew <ocarew@luminasolar.com>

Welcome!
[Quoted text hidden]

REVIEWED
By Michael Kyne at 12:21 pm, Jul 03, 2023

APPROVED
Montgomery County
Historic Preservation Commission

FOR PERMITTING USE ONLY



1
V002

LEFT SIDE ELEVATION

SCALE: 1/4" = 1' / 1:48

PROJECT ADDRESS:

RICHARD HENRICH
7305 TAKOMA AVENUE
TAKOMA PARK, MD 20912

CONTRACTOR INFO:

FUSION SOLAR SERVICES

3600 COMMERCE DR
SUITE 601
BALTIMORE, MD
21227
(443) 955-0779

LICENSE NUMBER:
MHIC-30991

REV	DATE
IFC	06/14/2023

LEFT SIDE ELEVATION

V002