



HISTORIC PRESERVATION COMMISSION

Marc Elrich
County Executive

Robert K. Sutton
Chairman

Date: December 7, 2023

MEMORANDUM

TO: Rabbiah Sabbakhan, DPS Director Department of
Permitting Services

FROM: Chris Berger
Historic Preservation Section
Maryland-National Capital Park & Planning Commission

SUBJECT: Historic Area Work Permit #1050721 - Solar Panels

The Montgomery County Historic Preservation Commission (HPC) has reviewed the attached application for a Historic Area Work Permit (HAWP). This application was **Approved** by the HPC Staff.

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: Matt Johnson
Address: 7213 Maple 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 Chris Berger at 301-495-4571 or chris.berger@montgomeryplanning.org to schedule a follow-up site visit.





HISTORIC PRESERVATION COMMISSION

HAWP #: _____ at: _____

submitted on: _____

has been reviewed and determined that the proposal fits into the following category/categories:

Repair or replacement of a masonry foundation with new masonry materials that closely match the original in appearance;

Installation of vents or venting pipes in locations not visible from the public right-of-way;

New gutters and downspouts;

Removal of vinyl, aluminum, asbestos, or other artificial siding when the original siding is to be repaired and/or replaced in kind;

Removal of accessory buildings that are not original to the site or non-historic construction;

Repair or replacement of missing or deteriorated architectural details such as trim or other millwork, stairs or stoops, porch decking or ceilings, columns, railings, balusters, brackets shutters, etc., with new materials that match the old in design, texture, visual characteristics, and, where possible materials, so long as the applicant is able to provide one extant example, photographic evidence, or physical evidence that serves as the basis for the work proposed;

Construction of wooden decks that are at the rear of a structure and are not visible from a public right-of-way;

Roof replacement with -compatible roofing materials, or with architectural shingles replacing 3-Tab asphalt shingles;

Installation of storm windows or doors that are compatible with the historic resource or district;

Repair, replacement or installation of foundation-level doors, windows, window wells, and areaways, or foundation vents, venting pipes, or exterior grills that do not alter the character-defining features and/or the historic character of the resource;

Construction of fences that are compatible with the historic site or district in material, height, location, and design;

Fence is lower than 48" in front of rear wall plane;

Construction of walkways, parking pads, patios, driveways, or other paved areas that are not visible from a public right-of-way and measure no more than 150 square feet in size;

Replacement of existing walkways, parking pads, patios, driveways, or other paved areas with materials that are compatible with the visual character of the historic site and district and that are no greater than the dimensions of the existing hardscape;

Construction of small accessory buildings no larger than 250 square feet in size that are not visible from the public right-of-way;

Installations of skylights on the rear of a structure that will not be visible from the public right-of-way, and would not remove or alter character-defining roof materials;

Installation of solar panels and arrays in locations that are not readily visible from the public right-of-way or that are designed so as to have a minimal impact on the historic resource or the historic district (e.g., systems that are ground-mounted in areas other than the front or side yard of a corner lot, located on accessory or outbuildings, on non-historic additions, or on rear facing roof planes);

Installation of car charging stations in any location on a property or in the right-of-way;

Installation of satellite dishes;

Removal of trees greater than 6" in diameter (d.b.h.) that are dead, dying, or present an immediate hazard.

Removal of trees greater than 6" in diameter (d.b.h.) in the rear of the property that will not impact the overall tree canopy of the surrounding district or historic site;

Replacement tree required as a condition; and,

Other minor alterations that may be required by the Department of Permitting Services post-Commission approval that would have no material effect on the historic character of the property.

Staff finds the proposal complies with Chapter 24A, the Secretary of the Interior's Standards for Rehabilitation, and any additional requisite guidance. Under the authority of COMCOR No. 24A.04.01, this HAWP is approved by Christopher J. Berger on _____. The approval memo and stamped drawings follow.



APPLICATION FOR HISTORIC AREA WORK PERMIT
HISTORIC PRESERVATION COMMISSION
301.563.3400

FOR STAFF ONLY:
HAWP# _____
DATE ASSIGNED _____

APPLICANT:

Name: _____ E-mail: _____
Address: _____ City: _____ Zip: _____
Daytime Phone: _____ Tax Account No.: _____

AGENT/CONTACT (if applicable):

Name: _____ E-mail: _____
Address: _____ City: _____ Zip: _____
Daytime Phone: _____ Contractor Registration No.: _____

LOCATION OF BUILDING/PREMISE: MIHP # of Historic Property _____

REVIEWED
By Chris Berger at 3:32 pm, Dec 07, 2023

APPROVED
Montgomery County
Historic Preservation Commission
[Signature]

Name _____
the Property? If YES, include a
supporting this application.

Are other Planning and/or Hearing Examiner Applications
(Conditional Use, Variance, Record Plat, etc.?) If Yes, include
supplemental information.

Building Number: _____ Street: _____
Town/City: _____ Nearest Cross Street: _____
Lot: _____ Block: _____ Subdivision: _____ Parcel: _____

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

Owner's mailing address

Owner's Agent's mailing address

Adjacent and confronting Property Owners mailing addresses

REVIEWED

By Chris Berger at 3:32 pm, Dec 07, 2023

APPROVED

Montgomery County

Historic Preservation Commission



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

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

brown

REVIEWED

By Chris Berger at 3:32 pm, Dec 07, 2023

APPROVED

Montgomery County

Historic Preservation Commission



Robert G. Patton

Work Item 1: _____	
Description of Current Condition: ----- brown	Proposed Work: ----- brown

Work Item 2: _____	
Description of Current Condition:	Proposed Work:
<div style="border: 1px solid blue; border-radius: 15px; padding: 10px; background-color: #d9e1f2; display: inline-block;"> <p>REVIEWED By Chris Berger at 3:32 pm, Dec 07, 2023</p> </div>	

Work Item 3: _____	
Description of Current Condition:	Proposed Work:

APPROVED
Montgomery County
Historic Preservation Commission



**HISTORIC AREA WORK PERMIT
CHECKLIST OF
APPLICATION REQUIREMENTS**

	Required Attachments						
Proposed Work	I. 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/Landscaping	*	*		*	*	*	*
Tree Removal	*	*		*	*	*	*
Siding/ Roof Changes	*	*	*	*	*		*
Window/Door Changes	*	*	*	*	*		*
Masonry Repair/Repoint	*	*	*	*	*		*
Signs	*	*	*	*	*		*

REVIEWED
By Chris Berger at 3:32 pm, Dec 07, 2023

APPROVED
Montgomery County
Historic Preservation Commission





Subject: Review of PV Electrical Design
Letter Number: 2311-032
Date: November 16, 2023

REVIEWED
By Chris Berger at 3:32 pm, Dec 07, 2023

To whom it may concern: permit office

I have reviewed the drawings for the installation of solar modules on the Residence located at:

Project: Matt Johnson Solar PV, Property Owner: Matt Johnson
Address: 7213 Maple Ave. Takoma Park, MD 20912

I certify that:

- 1) I prepared or approved the electrical drawings and related documents for the photovoltaic (PV) system at the above location.
- 2) The design of the PV system, and all electrical installations and equipment, meets the standards and requirements of the National Electrical Code as adopted by Montgomery County in COMCOR 17.02.01.
- 3) I reviewed and completed the Worksheet for PV System, which was attached to the permit application for the PV system at the above location.

Sincerely,
Timothy E. Rumford, P.E.

Tim Rumford 11/16/2023



MD License No.41066
Expiration date: 2025-09-08

(17) SunPower U-Series (Waaree) 400-watt Type-H AC Panels (6.8 kW-DC)
on InvisiMount Racking with Pegasus Flashing

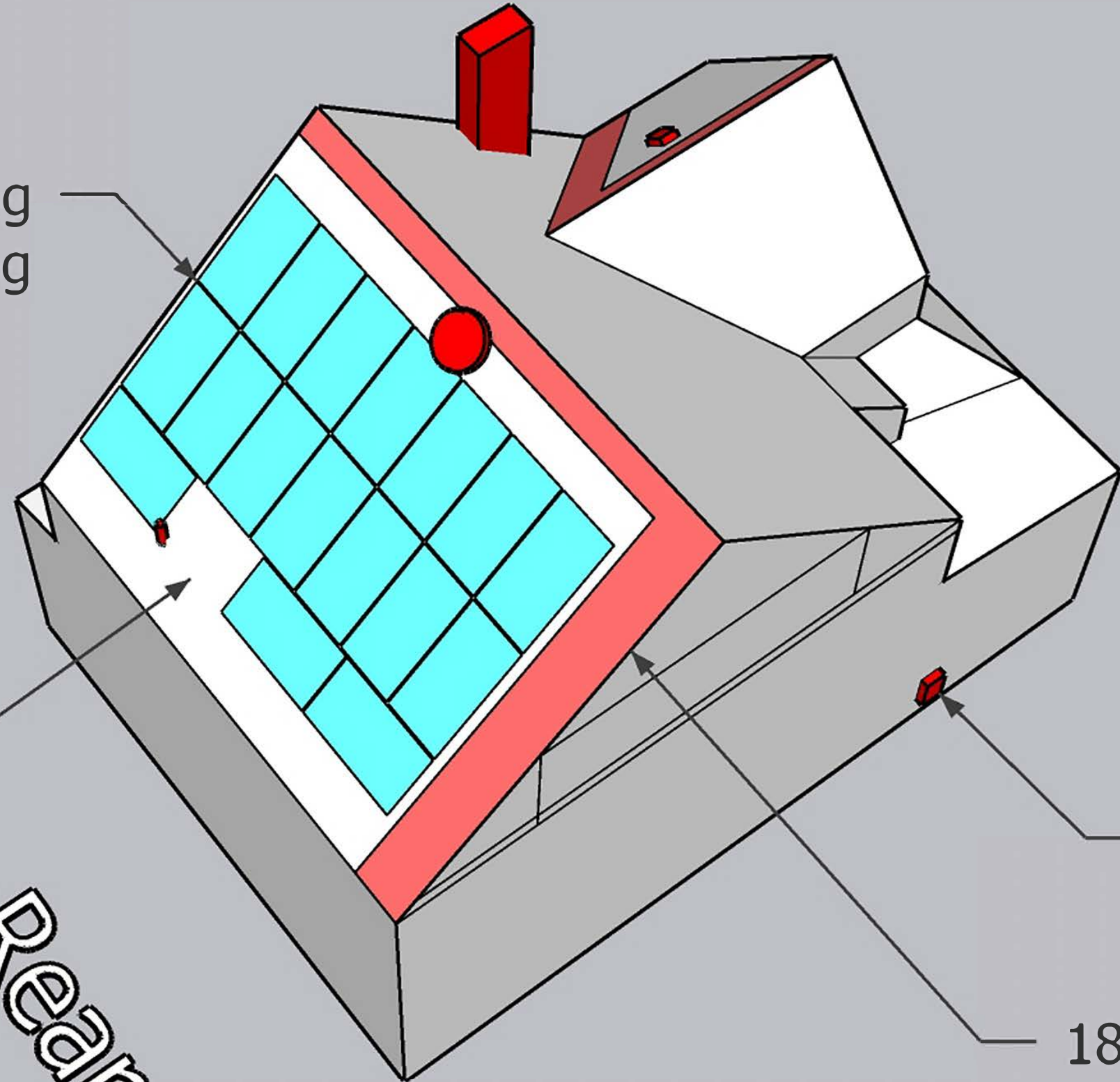
2x6 (actual) 32-OC conventional framing
with knee wall and 2x10 decking

REVIEWED
By Chris Berger at 3:32 pm, Dec 07, 2023



(17) Panels
@42-degree tilt
@205-degree azimuth

Rear



Utility Meter &
Load Center / Disco

18-inch ridge setbacks (<33% coverage)
3-foot pathways



DEPARTMENT OF PERMITTING SERVICES

Marc Elrich
County Executive

Rabbiah Sabbakhan
Director

HISTORIC AREA WORK PERMIT APPLICATION

Application Date: 11/16/2023

Application No: 1050721
AP Type: HISTORIC
Customer No: 1278257

Affidavit Acknowledgement

The Contractor is the Primary applicant authorized by the property owner
This application does not violate any covenants and deed restrictions

Primary Applicant Information

Address 7213 MAPLE AVE
TAKOMA PARK, MD 20912

Othercontact Bruni (Primary)

Historic Area Work Permit Details

Work Type ALTER

Scope of Work Install (17) SunPower 400-watt all-black solar panels to rear roof, flush, 5" above shingles.



REVIEWED

By Chris Berger at 3:32 pm, Dec 07, 2023



REVIEWED

By Chris Berger at 3:32 pm, Dec 07, 2023

Subject: Review of PV Mechanical Design
Letter Number: 2311-033
Date: November 16, 2023



Project: Matt Johnson Solar PV, Property Owner: Matt Johnson
Address: 7213 Maple Ave. Takoma Park, MD 20912

✓ I reviewed the design of the photovoltaic (PV) system, as designed by the manufacturer, and the design criteria utilized for the mounting equipment for the installation of 17 solar modules as shown on the drawings prepared for the above referenced address. I certify that the configurations and design criteria meet the standards and requirements of the International Residential Code (IRC) and International Existing Building Code (IEBC) adopted by Montgomery County in COMCOR 08.00.02.

✓ The attachment of the solar shingles to the building at the above address, including the location, number, and type of attachment points; the number of fasteners per attachment point; and the specific type of fasteners (size, diameter, length, minimum embedment into structural framing, etc.) meets the standards and requirements of the IRC and IEBC adopted by Montgomery County in COMCOR 08.00.02.

✓ I evaluated the existing roof structure of the building at the above address and analyzed its capacity to support the additional loads imposed by the PV system. I certify that no structural modifications of the existing roof structure are required. The existing roof structure meets the standards and requirements of the IRC and IEBC, adopted by Montgomery County in COMCOR 08.00.02, necessary to support the PV system.

I evaluated the existing roof structure of the building at the above address and analyzed its capacity to support the additional loads imposed by the PV system. Structural modifications of the existing roof structure are required. I certify that the roof structure, as modified on the drawings for this project, will support the additional loads imposed by the PV system. I further certify that design of the modified roof structure meets the standards and requirements of the IRC and IEBC, adopted by Montgomery County in COMCOR 08.00.02.

✓ I prepared or approved the construction documents for the mounting equipment, rack system, roof structure for this project.

41066, exp 2025-09-08

Maryland PE License Number

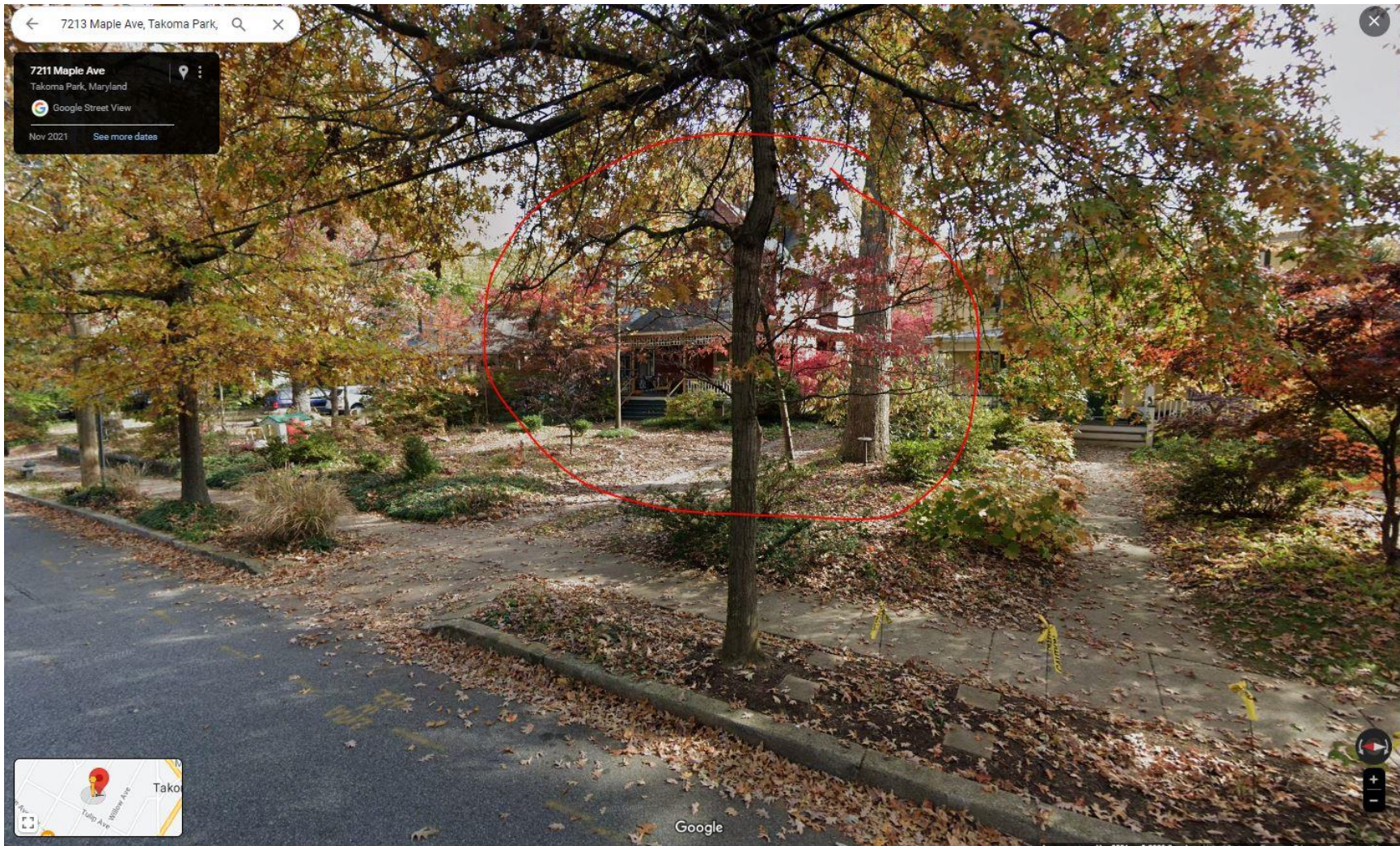
Date 11/16/2023 Seal

Signature

Timothy E. Rumford, P.E.

Tim Rumford





REVIEWED
By Chris Berger at 3:32 pm, Dec 07, 2023

APPROVED
Montgomery County
Historic Preservation Commission

Ronald A. Porter



REVIEWED
By Chris Berger at 3:32 pm, Dec 07, 2023

APPROVED
Montgomery County
Historic Preservation Commission
Robert H. Norton



REVIEWED
By Chris Berger at 3:32 pm, Dec 07, 2023

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Historic Preservation Commission

Robert H. [Signature]

SOLAR INDIVIDUAL PERMIT PACKAGE

MATT JOHNSON

6.8 kW GRID TIED PHOTOVOLTAIC SYSTEM

7213 MAPLE AVE.
TAKOMA PARK, MD 20912

AHJ: MONTGOMERY COUNTY
UTILITY: PEPCO

JOB NOTES

SCOPE OF WORK:

- (N) 86.8 kW PHOTOVOLTAIC SYSTEM
- (17) SUNPOWER (U-SERIES 400 W "BLACK") PV MODULES

REVIEWED

By Chris Berger at 3:50 pm, Dec 07, 2023

APPROVED
Montgomery County
Historic Preservation Commission




11/16/2023

I HEREBY CERTIFY THAT THIS DOCUMENT WAS APPROVED BY ME, AND THAT I AM A DULY LICENSED PROFESSIONAL ENGINEER UNDER THE LAWS OF THE STATE OF MARYLAND, MEMBERS LICENSE NO. 41066, EXPIRATION DATE: 2025-09-08

CODE INFORMATION

APPLICABLE CODES, LAWS AND REGULATIONS

- 2018 INTERNATIONAL BUILDING CODE
- 2018 INTERNATIONAL EXISTING BUILDING CODE
- 2018 INTERNATIONAL RESIDENTIAL CODE
- 2018 INTERNATIONAL ENERGY CONSERVATION CODE
- 2019 WSSC PLUMBING & FUEL GAS CODE
- 2018 INTERNATIONAL MECHANICAL CODE
- 2017 NFPA 70 NATIONAL ELECTRICAL CODE

SATELLITE IMAGE



DRAWING INDEX

PV SOLAR ARCHITECTURAL DRAWINGS

- PVA-0 COVER SHEET
- PVA-1 ARRAY LAYOUT
- PVA-2 FRONT ELEVATION

PV SOLAR STRUCTURAL DRAWINGS

- PVS-1 STRUCTURAL INFORMATION AND MOUNTING DETAILS
- PVS-2 STRUCTURAL CALCULATION, DETAILS

PV SOLAR ELECTRICAL DRAWINGS

- PVE-1 ELECTRICAL SINGLE-LINE DIAGRAM & SPECIFICATIONS
- PVE-2 ELECTRICAL CALCULATIONS
- PVE-3 ELECTRICAL DATA & SPECIFICATIONS
- PVE-4 EQUINOX GROUNDING DETAILS
- PVE-5 ELECTRICAL MODULE SPECS
- PVE-6 MICRO-INVERTER SPECS

PV SOLAR MOUNTING DRAWINGS

- PVM-1 HARDWARE MOUNTING DETAILS, SPECS.

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6.8 kW GRID-TIED PHOTOVOLTAIC SYSTEM

7213 MAPLE AVE.

TAKOMA PARK, MD 20912

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COVER SHEET

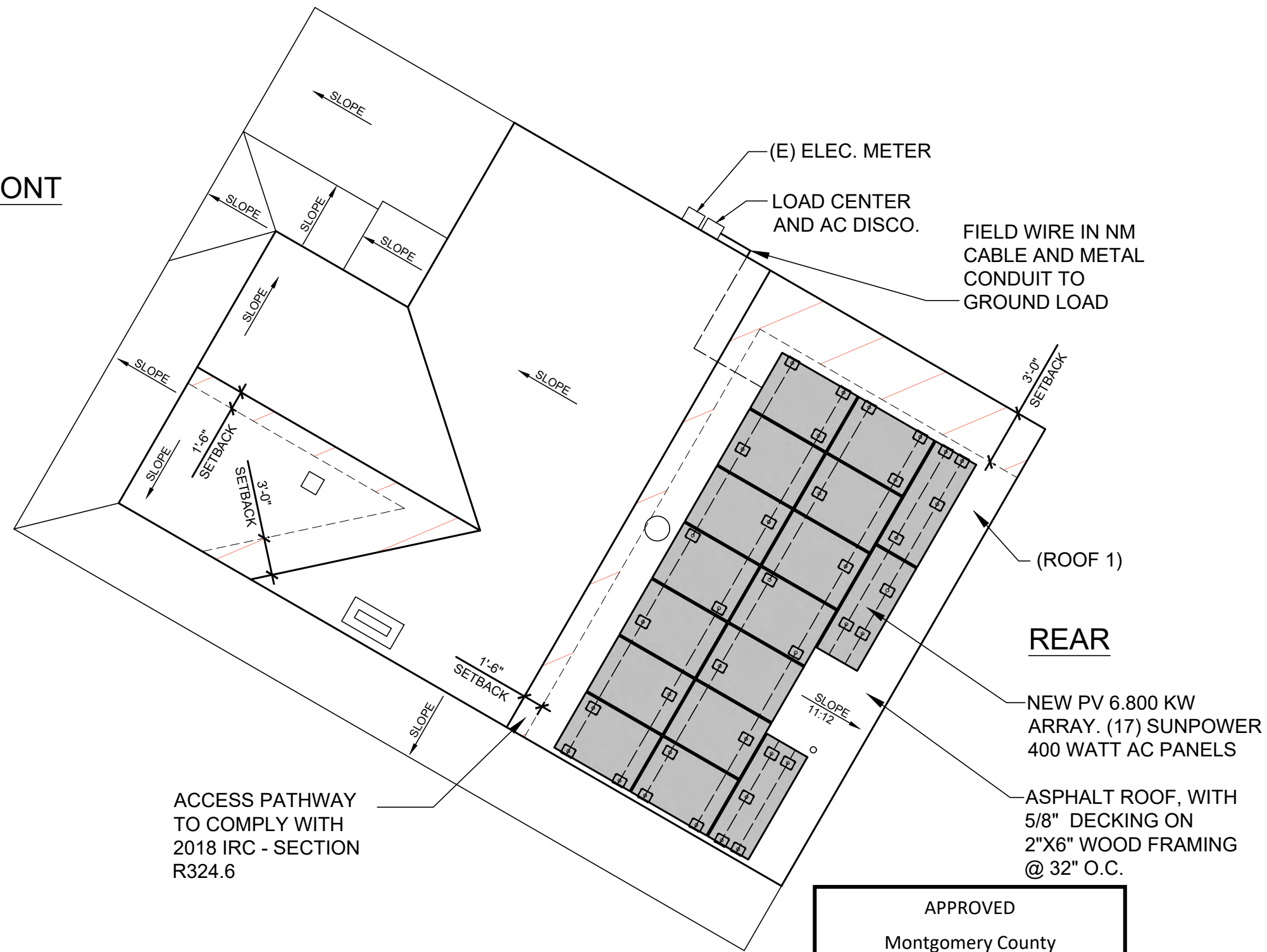
REVISION LEVEL	DATE
REV-1	DATE

DRAWN BY:
G. COBBS

INSTALLER:	
PROJECT:	20912-01
DATE DRAWN:	11-14-2023
SCALE:	NIS

PVA-0

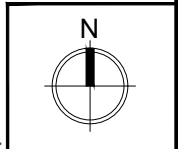
FRONT



ACCESS PATHWAY TO COMPLY WITH 2018 IRC - SECTION R324.6

APPROVED
 Montgomery County
 Historic Preservation Commission

[Signature]



3/8" = 1'-0"

TOTAL ROOF AREA: 1442 SQ. FT.
 TOTAL ARRAY AREA: 369 SQ. FT.
 TOTAL PERCENTAGE OF ROOF COVERED BY SOLAR: 25.59%

ROOF	1	-	-	-	-
MODULE QTY.	18	-	-	-	-
AZIMUTH	205	-	-	-	-
PITCH	11:12	-	-	-	-

CONTRACT MODULE & QUANTITY	17 SUNPOWER 400-WATT AC PANELS
MICROINVERTER TYPE & QUANTITY	INTEGRATED WITH PANEL
ROOF TYPE	ASPHALT ROOF
ROOF ATTACHMENT QUANTITY	36
STORY HOME TYPE	2 - STORY
TOTAL ARRAY AREA	369 SQ. FT.

NOTE:
 1. FIELD ADJUSTMENTS OF FEWER THAN 6" MAY BE ALLOWED BASED ON SITE CONDITIONS AND MEASUREMENTS.



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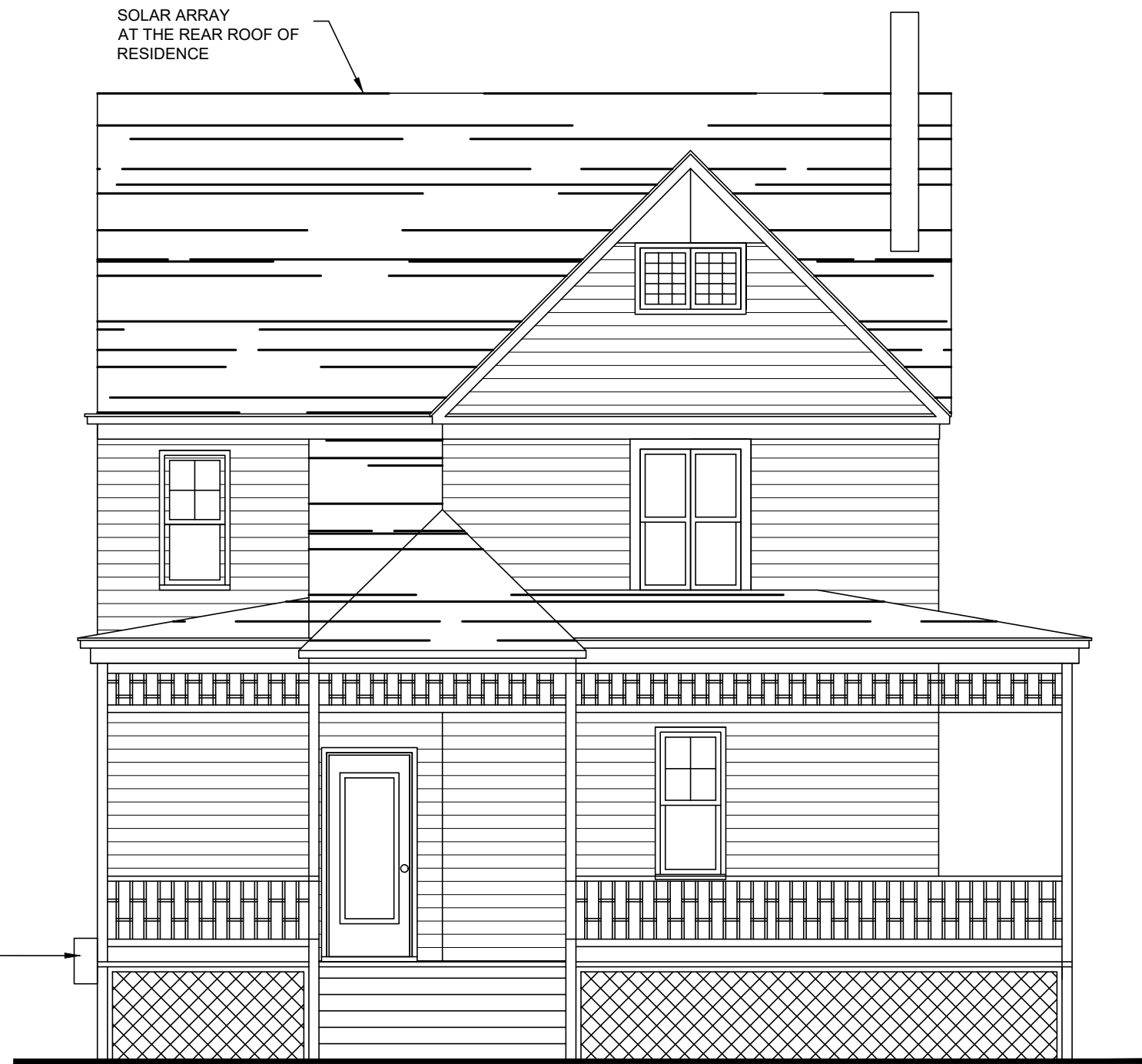
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 6.8 KW GRID-TIED PHOTOVOLTAIC SYSTEM
 7213 MAPLE AVE.
 TAKOMA PARK, MD 20912
 SOLAR INDIVIDUAL PERMIT PACKAGE
 ARRAY LAYOUT

REVISION LEVEL	DATE
REV-1	DATE
DRAWN BY:	G. COBBS
INSTALLER:	
PROJECT:	20912-01
DATE DRAWN:	11-14-2023
SCALE:	3/8" = 1'-0"

PVA-1

SOLAR ARRAY
AT THE REAR ROOF OF
RESIDENCE



LOAD CENTER/AC
DISCO. INSTALLED
IN BASEMENT
WALK-OUT UNDER
DECK AND STAIRS.
OUT OF VIEW.

FRONT ELEVATION

APPROVED
Montgomery County
Historic Preservation Commission



Tim Rumford 11/16/2023

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REVIEWED

By Chris Berger at 3:50 pm, Dec 07, 2023



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ARRAY LAYOUT

REVISION LEVEL	DATE
REV-1	DATE
DRAWN BY: G. COBBS	
INSTALLER:	
PROJECT:	20912-01
DATE DRAWN:	11-14-2023
SCALE:	3/8" = 1'-0"

PVA-2

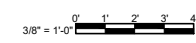
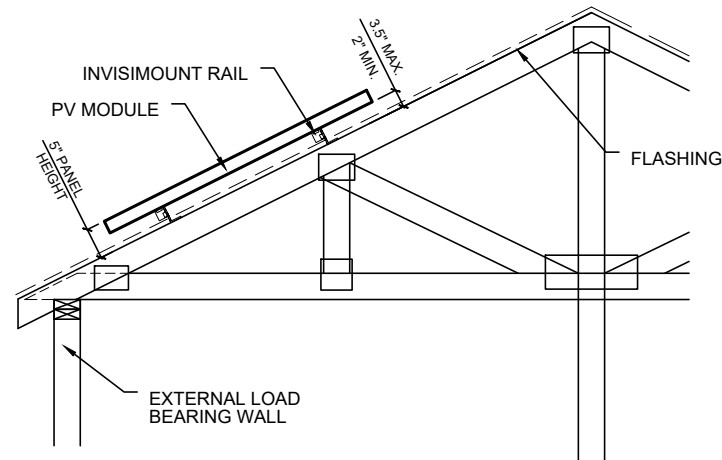
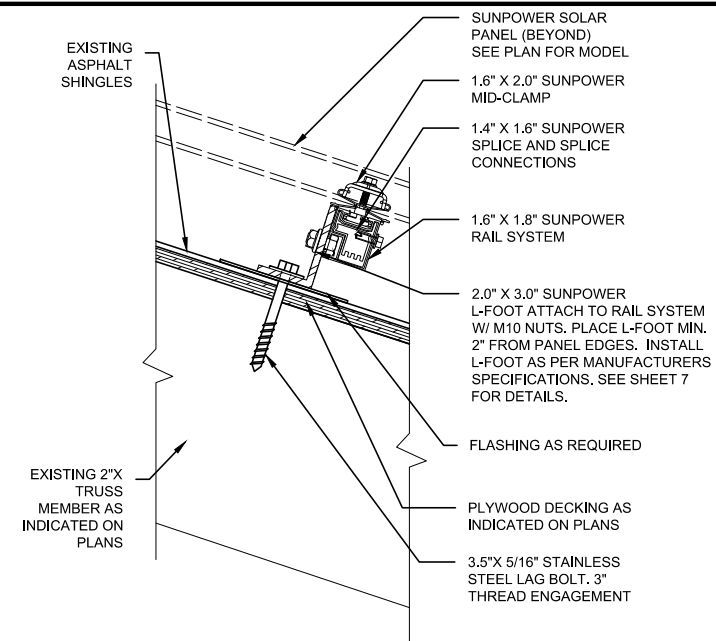


TABLE 1 - ARRAYS INFORMATION

	DEGREE TILT	ROOFING TYPE	ATTACHMENT TYPE	NO. OF STORIES	FRAMING TYPE (IN)	MAX RAFTER SPAN (FT.)	PENETRATION PATTERN (in.)	MAX. ATTACHMENT SPACING (in.)	MAX. RAIL OVERHANG (in.)
ROOF 1	42°	Asphalt Roof	Pegasus L-foot	2	2x6 Truss @ 32" O.C.	7.75'	Staggered	24"	8"
--	--	--	--	--	--	--	--	--	--
--	--	--	--	--	--	--	--	--	--
--	--	--	--	--	--	--	--	--	--
--	--	--	--	--	--	--	--	--	--
--	--	--	--	--	--	--	--	--	--

CHECK TABLE 2 FOR PENETRATION PATTERN GUIDE

FIGURE 2: ROOF ATTACHMENT DETAILS @ TRUSS / RAFTERS



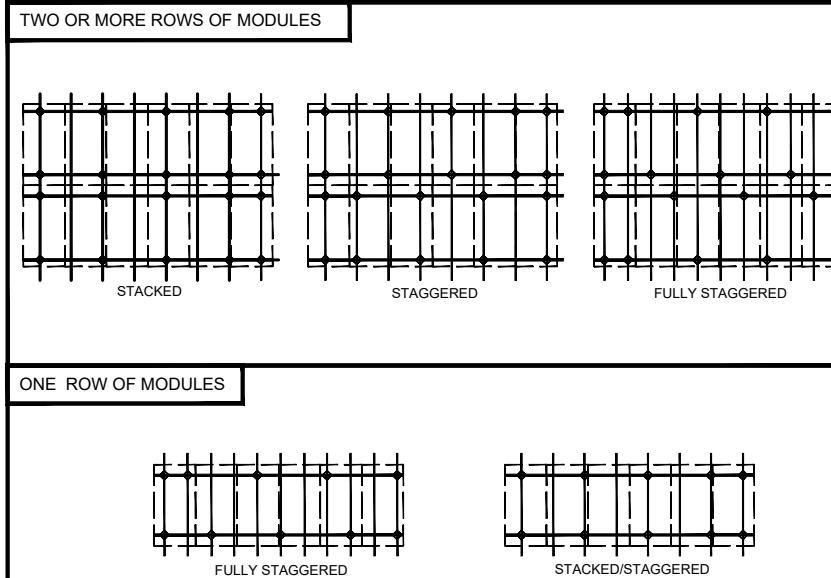
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11/16/2023

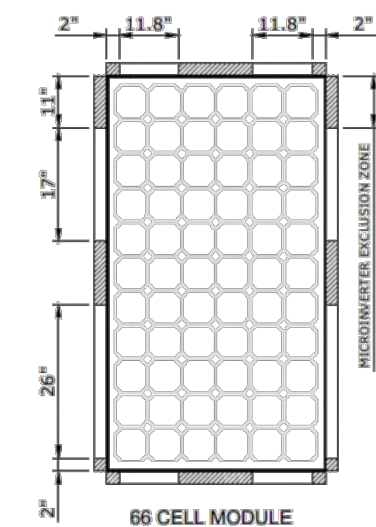
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TABLE 2: PENETRATION GUIDE FOR INSTALL



*CHECK TABLE 1 FOR MAX. PENETRATION SPACING AND PENETRATION PATTERN FOR EACH ARRAY.

FIGURE 3: MOUNTING CLAMP POSITIONING DETAILS



*RAILS SHALL BE POSITIONED IN THE NON-CROSS HATCHED REGIONS

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 Montgomery County
 Historic Preservation Commission

[Signature]

REVIEWED
 By Chris Berger at 3:50 pm, Dec 07, 2023



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MATT JOHNSON
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7213 MAPLE AVE.
 TAKOMA PARK, MD 20912

SOLAR INDIVIDUAL PERMIT PACKAGE
 STRUCTURAL INFORMATION AND MOUNTING DETAILS

REVISION LEVEL	DATE
REV-1	DATE
DRAWN BY: G. COBBS	
INSTALLER:	20912-01
PROJECT:	11-14-2023
DATE DRAWN:	NIS
SCALE:	

PVS-1

Structural Analysis

Project Name: **Matt Johnson - Montgomery County, Takoma Park Historic District**
7213 Maple Ave. Takoma Park, MD 20912

Address:

Description: (17) SunPower U-Series 400-watt BLK Type-H AC Panels, SPR-U400-BLK-H-AC, Invisimount racking with Pegasus Flashing

Load/Structure Assumptions (1)

Wind Speed (mph)	Snow load (psf)	Roof Height (ft)	Importance factor	Wind Exposure Cat	Roof Wind Zone
115	30	<30	II	B	3

Present Conditions and Structure Info

2x6 (actual) 32-OC conventional framing with knee walls and 2x10 decking with shingle roof. @42-degree tilt, @ 205-degree azimuth

Wind Loading (High pitch Roofs)

Pnet = Net Design Wind Pressure (psf)
 From ASCE 7-10, 100sf eff wind area, 27 to 45 deg, zone 3

Down	Up	Wind Speed
19.8	23.8	115 mph

Module Areas (sf): 21.5
 Wind Force (lbs), Per module: Pnet * Area=

Down	Up
425.6	511.6

Array number of fasteners: 36
 Array Number of Modules: 17
 Number of fasteners per module: 2.1 AVE
 Force per fastener: (lbs)

Down	Up
201.0	241.6

Pull out Force per fastener, lbs (2):
 681 5/16" x 3.5" SS Lag. Assumes worst case wood species

Design Margin (Capability/Exposure). >2 required

Down	Up	Margin
3.4	2.8	x margin

OK OK >2
 Uplift wind loads well below pull out force on fasteners. Down Force, since modules are flush, array not likely to affect forces compared to existing bare roof deflection. Uplift psf < negative snow load. Side wind loads negligible.

Snow Load

OK Modules are flush and not likely to affect snow drift

Dead Load

Module Weight (lbs)
 50.9017
 2.4 psf
 OK (negligible effect)

Seismic

Seismic criteria were not considered per provisions of ASCE 7-10 Section 13.1.4
 OK

NOTES

- (1) ASCE 7-10
- (2) NACBEP Guide on withdrawal loads for lag bolts per inch based on lag bolt size and wood type. Since wood type is not known, used the worst case which is white spruce, 227 lbs per inch for 5/16" lags. 3.5" bolt gives 3 inch penetration. 227 x 3.

APPROVED
 Montgomery County
 Historic Preservation Commission




Tim Rumford
 11/16/2023

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 TAKOMA PARK, MD 20912
 SOLAR INDIVIDUAL PERMIT PACKAGE
 STRUCTURAL CALCULATIONS, DETAILS

REVISION LEVEL	DATE
REV-1	DATE

DRAWN BY: G. COBBS

INSTALLER: PROJECT: 20912-01
 DATE DRAWN: 11-14-2023
 SCALE: NIS

PVS-2

6,800 Wdc

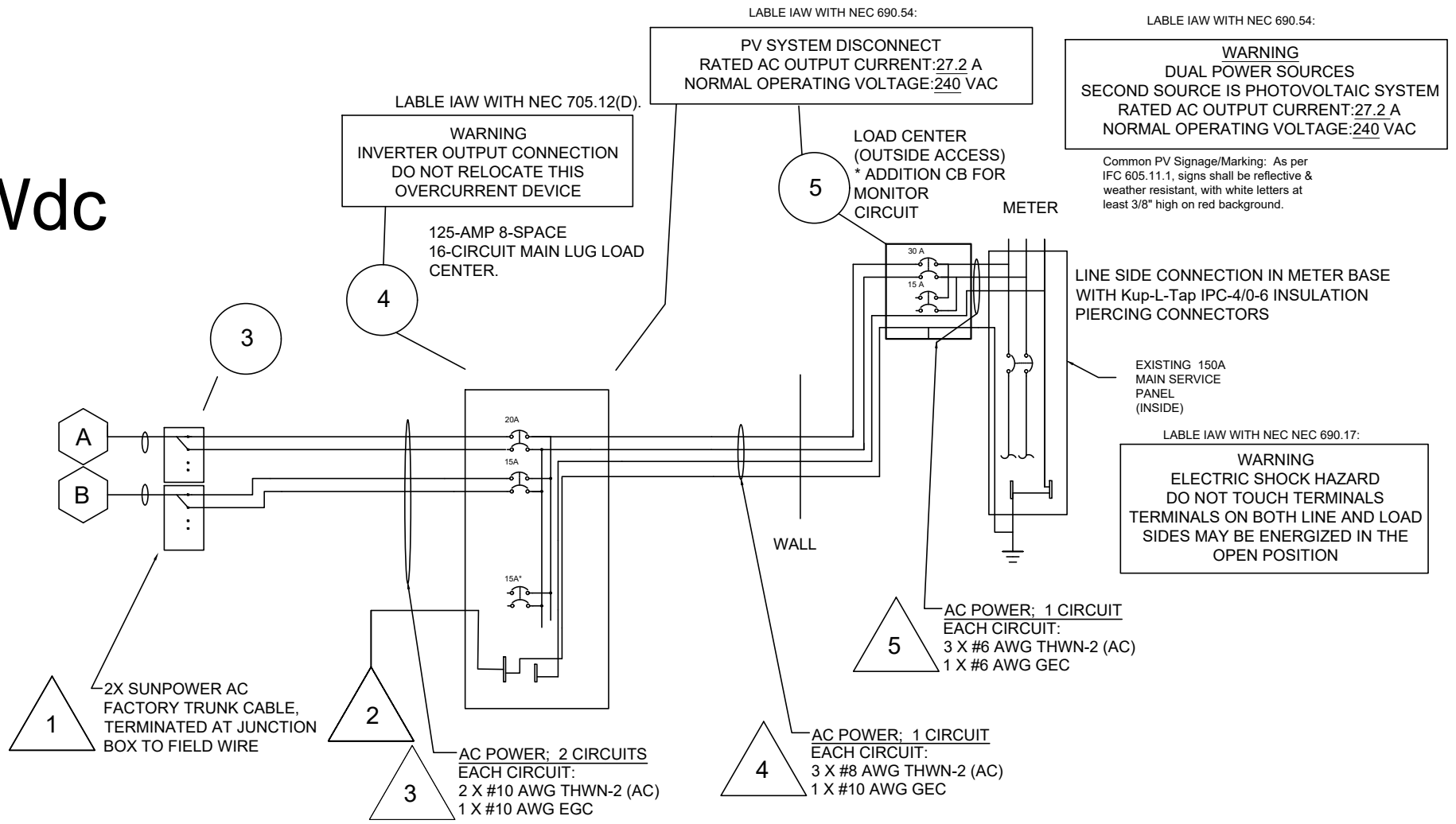
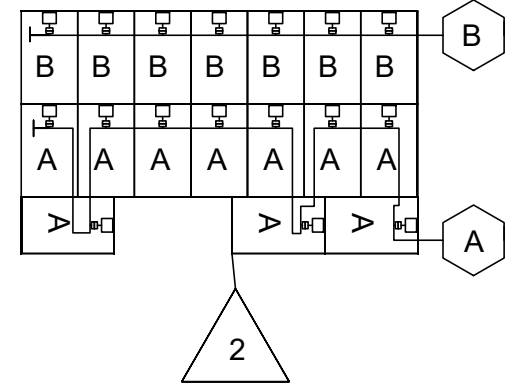
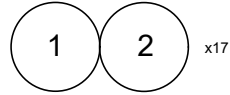


TABLE IAW WITH NEC 690.54:
PV SYSTEM DISCONNECT
 RATED AC OUTPUT CURRENT: 27.2 A
 NORMAL OPERATING VOLTAGE: 240 VAC

WARNING
 DUAL POWER SOURCES
 SECOND SOURCE IS PHOTOVOLTAIC SYSTEM
 RATED AC OUTPUT CURRENT: 27.2 A
 NORMAL OPERATING VOLTAGE: 240 VAC

WARNING
 INVERTER OUTPUT CONNECTION
 DO NOT RELOCATE THIS
 OVERCURRENT DEVICE

Common PV Signage/Marking: As per IFC 605.11.1, signs shall be reflective & weather resistant, with white letters at least 3/8" high on red background.

LINE SIDE CONNECTION IN METER BASE WITH Kup-L-Tap IPC-4/0-6 INSULATION PIERCING CONNECTORS

WARNING
 ELECTRIC SHOCK HAZARD
 DO NOT TOUCH TERMINALS
 TERMINALS ON BOTH LINE AND LOAD SIDES MAY BE ENERGIZED IN THE OPEN POSITION

EQUIPMENT SCHEDULE				
TAG	NAME	P/N	QTY	NOTES
1	SOLAR MODULES	SunPower U-series 400-watt BLK Type-H AC Panels**	17	2 CIRCUIT
2	MicroInverters	SUNPOWER FACTORY ul	17	Mounted to modules at factory
3	JUNCTION BOX	Field determined	2	JUNCTION BOX, LOCATED ON ROOF
4	LOAD CENTER	125-AMP 8-SPACE 16-CIRCUIT MAIN LUG LOAD CENTER. OR EQUIV	1	For OUTSIDE access.
5	LOAD CENTER	70-AMP 2-SPACE 4 CIRCUIT MAIN LUG LOAD CENTER. OR EQUIV, 30A OCPD	1	For INSIDE access.

WIRE SCHEDULE (EACH CIRCUIT)				
TAG	DESCRIPTION	GAUGE	QTY	CONDUIT, DISTANCE
1	SUNPOWER AC Cable, 1-Ph (3-Wire), CAP UNUSED CONNECTORS, CAP AS SHOWN	#10 (REF)	1	FACTORY CABLE, WITH INTEGRATED CONNECTORS. TIE TO MOUNTING RAILS. LENGTH OF ARRAY
2	CONTINUOUS EGC COPPER RACKING SYSTEM TO EARTH GROUND -	AR	1	Routed with MicroInverter cable assembly and spliced to EGC from consolidating Load Center
3	AC POWER FROM ROOF JBS TO AC LOAD CENTER THWN-2 (240 VAC) MAX DERATING CURRENT (SEE CALCS PAGE); MAX VOLTAGE (SEE CALCS PAGE)	#10 (L1, L2), #10 (EGC)	3	ROUTES ACROSS ROOF AND DOWN SIDE BACK OF BUILDING TO LOAD CENTER, IN EMT. APPROX. 100 FEET.
4	AC LOAD CENTER TO OUTDOOR AC LOAD CENTER (DISCONNECT) THWN-2 (240 VAC) MAX DERATING CURRENT (SEE CALCS PAGE); MAX VOLTAGE (SEE CALCS PAGE)	#8 (L1, L2, N), #10 (EGC)	4	ROUTES THROUGH BUILDING to AC Disco, APPROX 25 FEET
5	INSIDE AC LOAD CENTER TO LST AT MSP THWN-2 (240 VAC) MAX DERATING CURRENT (SEE CALCS PAGE); MAX VOLTAGE (SEE CALCS PAGE)	#6 (L1, L2, N), #6 (GEC)	4	OUTSIDE OF BUILDING TO AC Disco, < 10 FEET

APPROVED
 Montgomery County
 Historic Preservation Commission

REVIEWED
 By Chris Berger at 3:50 pm, Dec 07, 2023



11/16/2023
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MATT JOHNSON
 6.8 KW GRID-TIED PHOTOVOLTAIC SYSTEM
 7213 MAPLE AVE.
 TAKOMA PARK, MD 20912
 SOLAR INDIVIDUAL PERMIT PACKAGE
 ELECTRICAL SINGLE-LINE DIAGRAM & SPECIFICATIONS

REVISION LEVEL	DATE
REV-1	DATE

DRAWN BY: G. COBBS

INSTALLER: G. COBBS

PROJECT: 20912-01

DATE DRAWN: 11-14-2023

SCALE: NTS

PVE-1

1. Conductor Sizing per Art. 690.8(B)(1)

- a. Conductor must have 30 deg. C ampacity \geq 125% of continuous current per Art 215.2(A)(1).
- b. Conductor must have (after corrections for conditions of use) \geq continuous current per Table 310.16
- c. Evaluate conductor temperature at termination per Art 110.14(C). Ampacity of wire derated for conditions of termination must be \geq continuous current * 1.25. All string terminations are rated at 90 degrees C.

2. OOP Sizing per Art. 690.8(B)(1)

- a. Round up to next size per Art 240.4(B)

3. Conductor Sizing per Art. 690.8(B)(1)

- a. Conductor must have 30 deg. C ampacity \geq 125% of continuous current per Art 215.2(A)(1).
- b. Conductor must have (after corrections for conditions of use) \geq continuous current per Table 310.16
- c. Evaluate conductor temperature at termination per Art 110.14(C). Ampacity of wire derated for conditions of termination must be \geq continuous current * 1.25. All string terminations are rated at 75 degrees C min.

4. OOP Sizing

- a. Round up to next size per Art 240.4(B)

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REVIEWED

By Chris Berger at 3:50 pm, Dec 07, 2023

current per Art 215.2(A)(1).

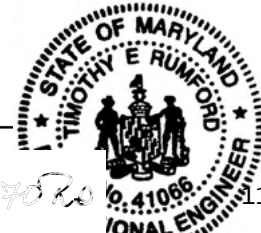
7. Conductor Sizing per Art. 690.8(B)(1)

- a. Conductor must have 30 deg. C ampacity \geq 125% of continuous current per Art 215.2(A)(1).
- b. Conductor must have (after corrections for conditions of use) \geq continuous current per Table 310.16
- c. Evaluate conductor temperature at termination per Art 110.14(C). Ampacity of wire derated for conditions of termination must be \geq continuous current * 1.25. All inverter output terminations are rated at 75 degrees C min.

ELECTRICAL CALCULATIONS

Matt Johnson - Montgomery County, Takoma Park Historic District
 7213 Maple Ave. Takoma Park, MD 20912

Module	17 SunPower U-series 400-watt BLK Type-H AC Panels**	400	6800 W STC	
Inverter	17 SUNPOWER FACTORY ui		384 W max 6528	
Photovoltaic Module AC Electrical Specifications (REF):			** WAAREE WSMDi-400 with factory (Sunpower) mounted microinver (Type H/ Enphase IQ7HS) - i.e., same AC performance as M-Series: A410-BLK	
Pnim (DC)=	400 W			
AC Electrical Data				
Output @ 240 (min/nom/max);	211/240/264 V			
Operating Frequency (min.-max.)	47-68 Hz			
Output Power Factor (min.)	1			
AC Max. Continuous Output Current @ 240 V	1.6 A			
Inverter Specifications:				
Input Recom. (W)	FACTORY	OK	OUTPUT	
Max in DC Voltage	FACTORY	OK	Rated output (W)	384
Max In Current (A)	FACTORY	OK	Peak output (W)	384
			Nom. output Cur (A)	1.6
			max number in series:	10
				ok
Conductor Sizing, Inverter Input			1-way length (ft)	na
NA, inverter input wiring is factory cable, designed for the purpose.				
Verify Max numbers of inverters per strings is equal/less than 10				
max string: A	10 ok \leq 10	and	B = 7	
Conductor sizing, Inverter Output (each circuit- -BOUNDING/WORST CASE)			1-way len	100
Icont=	16.00 A	(1.45 A x number of inverters per ckt)		
Icont*1.25+	20.00 A	OCP	20 A	15A FOR CIRC B
Wire	#10 AWG THWN-2	40 A	NEC TABLE 310.16	
Temp derate factor		0.58 unitless	67 C PER NEC TBL 310.15(B)(2)(.c)	
derated:		23.2 A	OK>	
				20.00
Conductor sizing, Combined Output from Load Center via ac disco/cut off switch				25.00
Icont=	27.20 A	(1.45A x number of inverters)		
Icont*1.25+	34.00 A			
Wire	#8 AWG THWN-2	55 A	NEC TABLE 310.16	
Temp derate factor		0.87 unitless	45 C	
Conduit Fill factor		1 unitless	Table 310.15(B)(2)(a)	
Derated		47.85 A	OK>	
				34.00
	use	OCP	30 A	
Voltage Drop = (Amp*2*ft*ohm/ft)/V				
	Amp	ft	ohm/ft	V
Inverter output=	16.00	100	0.00126	240
				#10
Inverter output=	1.68%	ok	<3%	ok
Load center output=	34.00	25.00	0.00078	240
				#8
Load center output=	0.55%	ok	<3%	ok


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7213 MAPLE AVE.
TAKOMA PARK, MD 20912

SOLAR INDIVIDUAL PERMIT PACKAGE
ELECTRICAL CALCULATION

REVISION LEVEL	DATE
REV-1	DATE
DRAWN BY: G. COBBS	
INSTALLER:	
PROJECT:	20912-01
DATE DRAWN:	11-14-2023
SCALE:	NIS

PVE-2

**SOLAR ELECTRIC SYSTEM
DISCONNECT LOCATED IN MAIN
SERVICE PANEL**

LOCATION: USE ONLY WHEN THE MAIN SERVICE DISCONNECT IS ON THE METER (METER MAIN) LABEL ON THE OUTSIDE OF THE METER ENCLOSURE (WHEN THE METER ACTS AS THE RAPID SHUTDOWN): NEC 705.10 & 690.56(B)

PV SYSTEM POINT OF INTERCONNECTION

LOCATION: MAIN SERVICE PANEL

NOMINAL OPERATING AC VOLTAGE:	240V
NOMINAL OPERATING AC FREQUENCY:	60 HZ
MAXIMUM AC POWER:	6528 W
MAXIMUM AC CURRENT:	27.20 A
MAXIMUM OVERCURRENT PROTECTIVE DEVICE FOR AC MODULE PROTECTION:	30 A

LOCATION AT POINT OF INTERCONNECTION CODE SECTION NEC 690.52

**WARNING - PHOTOVOLTAIC
POWER SOURCE**

IF APPLICABLE PER IFC 605.11.1.2

CAUTION SOLAR CIRCUIT

LABEL EVERY 10'

GENERAL NOTE:
ALL LABELS ARE TO MEET NEC 690 AND ANSI Z535.4 STANDARDS. SPECIFIC SYSTEMS REQUIREMENTS MAY VARY AS PER IFC 605.11.1 SIGNS SHALL BE REFLECTIVE & WEATHER RESISTANT WITH WHITE LETTERS ON AT LEAST 3/8" HIGH ON RED BACKGROUND

**RAPID SHUTDOWN SWITCH
FOR SOLAR PV SYSTEM**

LOCATION: PV SYSTEM DISCONNECT



ELECTRIC SHOCK HAZARD

DO NOT TOUCH TERMINALS
TERMINALS ON BOTH LINES AND
LOAD SIDE MAY BE ENERGIZED IN
THE OPEN POSITION

LOCATION: PV SYSTEM DISCONNECT

WARNING

DUAL POWER SUPPLY

SOURCES: UTILITY GRID AND SOLAR PHOTOVOLTAIC SYSTEM

LOCATION: MAIN SERVICE PANEL

PHOTOVOLTAIC SYSTEM DISCONNECT

OPERATING AMPS	27.20 A
OPERATING VOLTAGE	240V

LOCATION: PV SYSTEM DISCONNECT

**SOLAR PV SYSTEM EQUIPPED
WITH RAPID SHUTDOWN**

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

APPROVED

Montgomery County
Historic Preservation Commission

REVIEWED
By Chris Berger at 3:50 pm, Dec 07, 2023

Tim Rumford

11/16/2023

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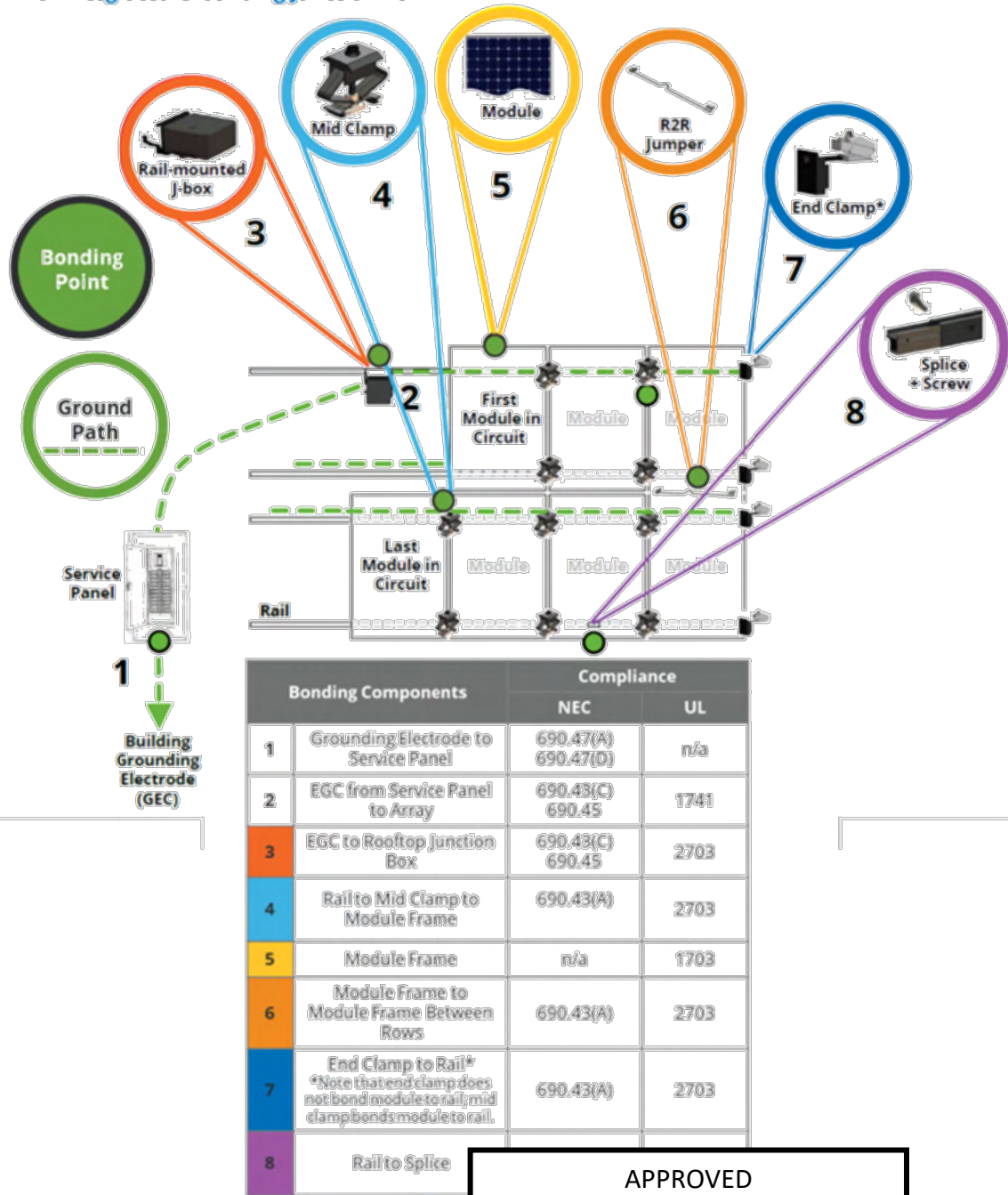
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TAKOMA PARK, MD 20912
SOLAR INDIVIDUAL PERMIT PACKAGE
ELECTRICAL DATA & SPECIFICATIONS

REVISION LEVEL	DATE
REV-1	DATE
DRAWN BY:	G. COBBS
INSTALLER:	
PROJECT:	20912-01
DATE DRAWN:	11-14-2023
SCALE:	NIS

PVE-3

Ground Path and Compliance
 SunPower® Universal InvisiMount®
 with Integrated Grounding Junction Box



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U-Series 8

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REVIEWED FIGURE 1: SUNPOWER EQUIPMENT
 By Chris Berger at 3:50 pm, Dec 07, 2023

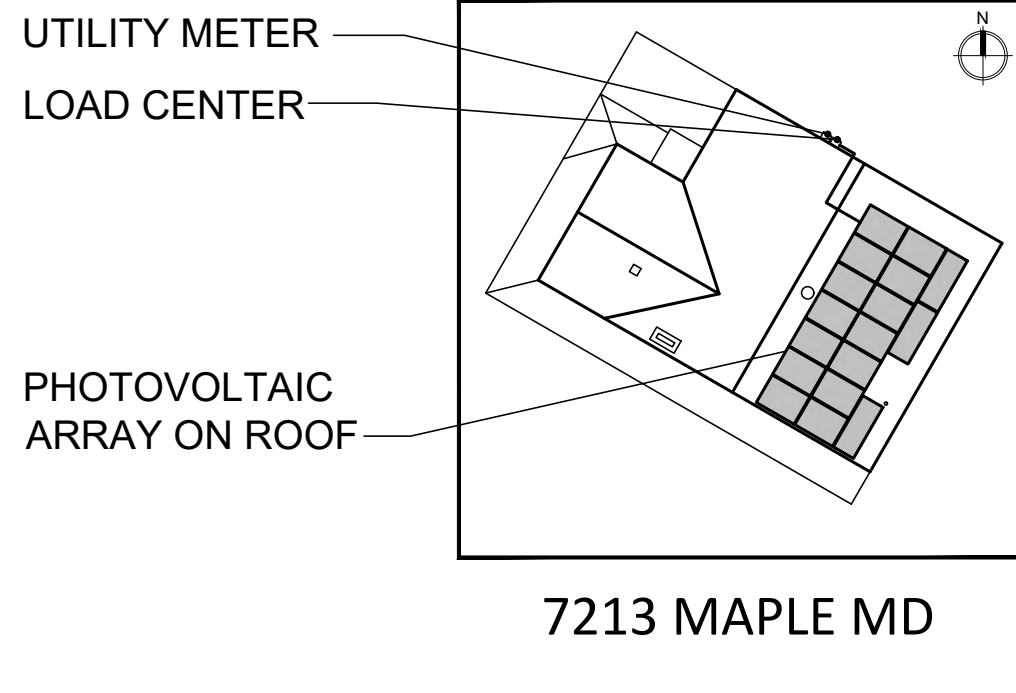


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CAUTION:

POWER TO THIS BUILDING IS ALSO SUPPLIED FROM THE FOLLOWING SOURCES WITH DISCONNECT(S) LOCATED AS SHOWN:



7213 MAPLE MD

FIGURE 2: PLACARD IDENTIFYING LOCATION OF DISCONNECTS AND POWER SOURCES



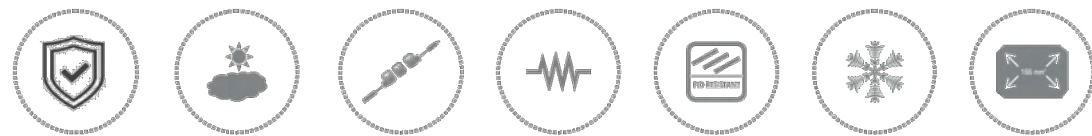
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 EQUINOX GROUNDING DETAILS

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G. COBBS	
INSTALLER:	
PROJECT:	20912-01
DATE DRAWN:	11-14-2023
SCALE:	NIS

PVE-4

U-SERIES WSMDI-395 to WSMDI-415



Highest reliability & enhanced crack tolerant 9BB module

Better performance under all climatic conditions

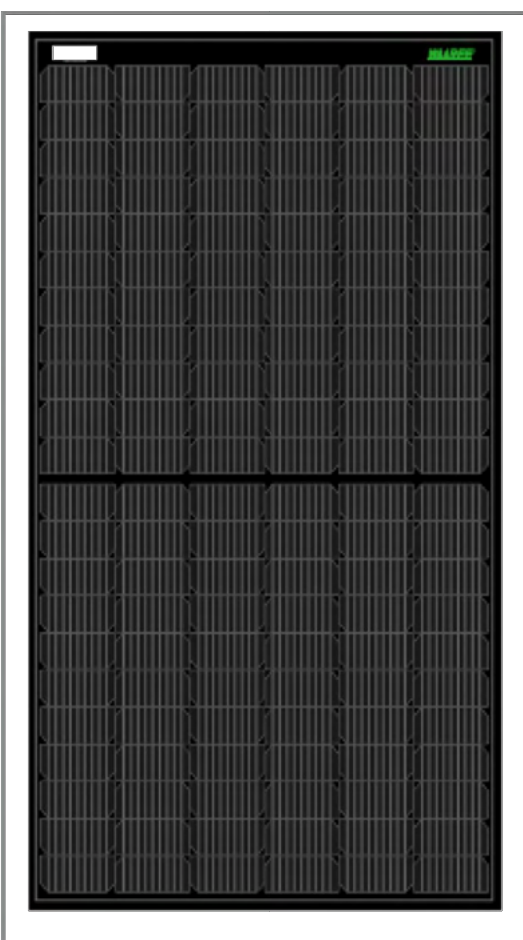
Split junction box

Reduced power losses up to 1/4 times

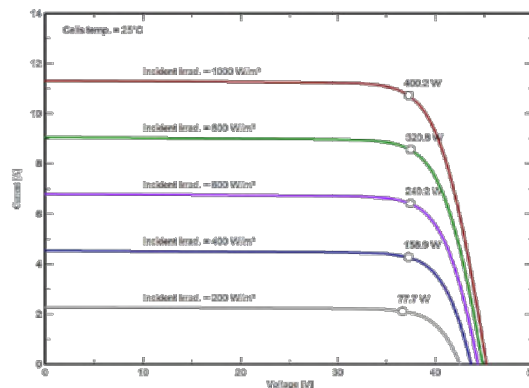
PID resistant with long term reliability

Sustain heavy wind & snow loads (2400 pa & 5400 pa)

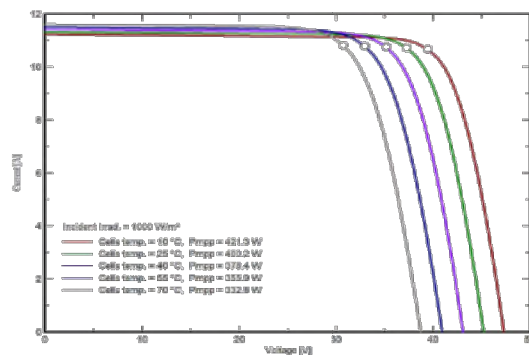
M6 Mono PERC cells



I-V VARIATION WITH IRRADIANCE



I-V VARIATION WITH TEMPERATURE



The Graphs are for reference purpose only. Please consult Waare's technical team for further clarifications.

INTERNATIONAL & NATIONAL CERTIFICATIONS

IEC 61215 | IEC 61730 | UL1713D
IEC TS 62804-1

ISO 9001:2015 | ISO 14001:2015
Independent assessment of factors



TIER 1

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By Chris Berger at 3:50 pm, Dec 07, 2023

11/16/2023

EXPIRATION DATE: 2025-09-08

U-SERIES WSMDI-395 to WSMDI-415



ELECTRICAL CHARACTERISTICS

Models	Pmax (W)		Vmp (V)		Imp (A)		Isc (A)		Voc (V)		Module Eff. (%)
	STC	NOCT	STC	NOCT	STC	NOCT	STC	NOCT	STC	NOCT	
WSMD-395	395	296.8	37.77	34.70	10.47	8.55	11.24	9.08	45.00	42.10	19.78
WSMD-400	400	300.6	38.00	34.90	10.54	8.62	11.32	9.14	45.22	42.30	20.03

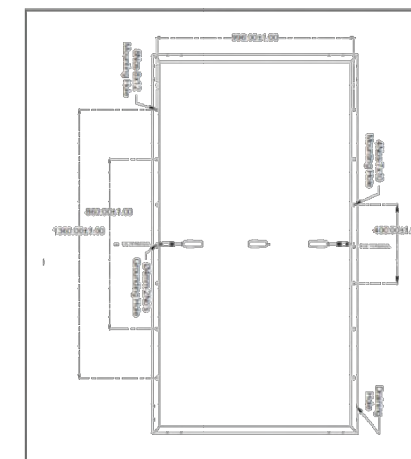
*Standard Test Conditions (STC) - 1000 W/m² irradiance, Air Mass 1.5 and 25°C cell temperature. Nominal Operating Cell Temperature (NOCT) - 800 W/m² irradiance, Air Mass 1.5, Ambient temperature 20°C and Wind speed 1 m/s. Average power reduction of 4.5% at 200 W/m² as per IEC 60904-1. Measuring Uncertainty ± 3%.

Inverter Model: Type H (Enphase IQ7HS)	@240 VAC	@208 VAC
Max. Continuous Output Power (VA)	384	369
Nom. (L-L) Voltage/Range ³ (V)	240 / 211-264	208 / 183-229
Max. Continuous Output Current (A)	1.60	1.77
Max. Units per 20 A (L-L) Branch Circuit ⁴	10	9
CEC Weighted Efficiency	97.0%	96.5%
Nom. Frequency	60 Hz	60 Hz
Extended Frequency Range	47-68 Hz	47-68 Hz
AC Short Circuit Fault Current Over 3 Cycles	4.82 A	4.82 A
Overvoltage Class AC Port	III	III
AC Port Backfeed Current	18 mA	18 mA
Power Factor Setting	1.0	1.0
Power Factor (adjustable)	0.85 (inductive) / 0.85 (capacitive)	0.85 (inductive) / 0.85 (capacitive)

MECHANICAL CHARACTERISTICS

Length x Width x Thickness (L x W x T)	1924 mm (L) x 1038 mm (W) x 35 mm (T)
Weight	22 kgs
Solar Cells per Module (Units) / Arrangement	132 cells / (11x6 11x6)
Solar Cell Type & Size	Mono PERC, 83 x 166 mm
Front Glass	3.2 mm Low Iron and Tempered glass with ARC coating
Encapsulate	PID Free & UV Resistant
Junction Box (Protection degree/ Material)	IP68 / Weatherproof PPD
Cable & Connector (Protection degree / Type)	IP68 rated / Staubli MC4 Connector
Cable cross - section & Length	4 mm² & 1200mm
Frame	Anodized Aluminium Alloy, Anodization thickness ≥ 15 micron
Fire rating	Type 2

DESIGN SPECIFICATIONS



Module Fire Performance: Type 2

THERMAL CHARACTERISTICS

Temperature coefficient of Current (Is), α (%/°C)	0.055
Temperature coefficient of Voltage (Voc), β (%/°C)	-0.285
Temperature coefficient of Power (Pm), γ (%/°C)	-0.365
NOCT (°C)	43 ± 2
Operating temperature range (°C)	-40 to 85



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TAKOMA PARK, MD 20912
SOLAR INDIVIDUAL PERMIT PACKAGE
ELECTRICAL MODULE SPECS

REVISION LEVEL DATE

REV-1 DATE

DRAWN BY:
G. COBBS

INSTALLER:

PROJECT: 20912-01

DATE DRAWN: 11-14-2023

SCALE: NTS

PVE-5

1-800-SUNPOWER | sunpower.com

Data Sheet
Enphase Microinverters
 Region: AMERICAS

Enphase IQ7HS Microinverter

The high-powered smart grid-ready **Enphase IQ7HS Microinverter™** with integrated MC4 connectors dramatically simplify the installation process while achieving the highest system efficiency.

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 66-cell* modules
- Highest CEC efficiency of 97.0%
- 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

* The IQ7

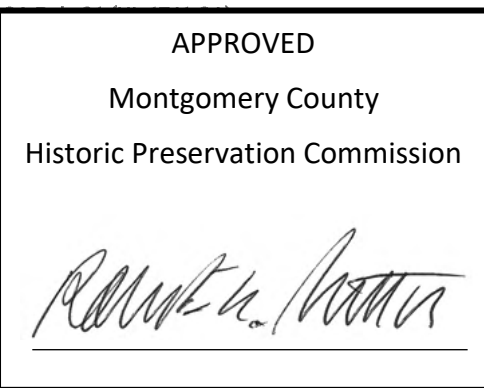


11/16/2023

To learn more about Enphase offerings:

REVIEWED

By Chris Berger at 3:50 pm, Dec 07, 2023



Enphase IQ7HS Microinverter

INPUT DATA (DC)		IQ7HS-66-M-US	
Commonly used module pairings ¹	320 W - 460 W +		
Module compatibility	66-cell PV modules		
Maximum input DC voltage	59 V		
Peak power tracking voltage	38 V - 43 V		
Operating range	20 V - 59 V		
Min/Max start voltage	30 V / 59 V		
Max DC short circuit current (module I _{sc})	15 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	384 VA	369 VA	
Maximum continuous output power	384 VA	369 VA	
Nominal (L-L) voltage/range ²	240 V / 211-264 V	208 V / 183-229 V	
Maximum continuous output current	1.60 A (240V)	1.77 A (208V)	
Nominal frequency	60 Hz	60 Hz	
Extended frequency range	47 to 68 Hz	47 to 68 Hz	
AC short circuit fault current over 3 cycles	4.82 A	4.82 A	
Maximum units per 20 A (L-L) branch circuit ³	10	9	
Overvoltage class AC port	III	III	
AC port backfeed current	18 mA	18 mA	
Power factor setting	1.0	1.0	
Power factor (adjustable)	0.85 leading ...0.85 lagging	0.85 leading ...0.85 lagging	
EFFICIENCY		@240 V	@208 V
CEC weighted efficiency	97.0 %	96.5 %	
MECHANICAL DATA			
Ambient temperature range	-40°C to +60°C		
Relative humidity range	4% to 100% (condensing)		
Connector type	Staubli made MC4		
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, corrosion resistant polymeric enclosure		
Environmental category / UV exposure rating	NEMA type 6 / outdoor		
Altitude	2000m		
FEATURES			
Communication	Power Line Communication (PLC)		
Disconnecting means	The AC and DC connectors have been evaluated and approved by UL for use as the load-break disconnect means required by NEC 690 and C22.1-2018 Rule 64-220.		
Compliance	CA Rule 21 (UL 1741-SA), HECO v1.1 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 to 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

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 7213 MAPLE AVE.
 TAKOMA PARK, MD 20912
 SOLAR INDIVIDUAL PERMIT PACKAGE
 MICRO-INVERTER SPECS

REVISION LEVEL	DATE
REV-1	DATE
DRAWN BY:	
G. COBBS	
INSTALLER:	
PROJECT:	20912-01
DATE DRAWN:	11-14-2023
SCALE:	NIS

PVE-6



SunPower® InvisiMount™ | Residential Mounting System

SunPower® InvisiMount™ | Residential Mounting System

Simple and Fast Installation

- Integrated module-to-rail grounding
- Pre-assembled mid and end clamps
- Levitating mid clamp for easy placement
- Mid clamp width facilitates even module spacing
- Simple, pre-drilled rail splice
- UL 2703 Listed integrated grounding

Flexible Design

- Addresses nearly all sloped residential roofs
- Design in landscape and portrait
- Rails enable easy obstacle management

Customer-Preferred Aesthetics

- #1 module and #1 mounting aesthetics
- Best-in-class system aesthetics
- Premium, low-profile design
- Black anodized components
- Hidden mid clamps and end clamps hardware, and capped, flush rails

Part of Superior System

- Built for use with SunPower DC and AC modules
- Best-in-class system reliability and aesthetics
- Combine with SunPower modules and monitoring app

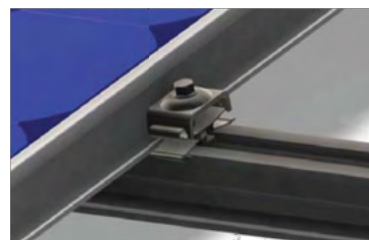


Elegant Simplicity

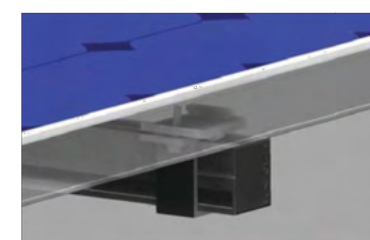
SunPower® InvisiMount™ is a SunPower-designed rail-based mounting system. The InvisiMount system addresses residential sloped roofs and combines faster installation time, design flexibility, and superior aesthetics. The InvisiMount product was specifically envisioned and engineered to pair with SunPower modules. The resulting system-level approach will amplify the aesthetic and installation benefits for both homeowners and installers.

InvisiMount Component Images

Module* / Mid Clamp and Rail



Module* / End Clamp and Rail



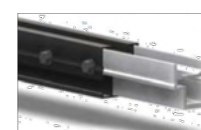
Mid Clamp



End Clamp



Rail & Rail Splice



Ground Lug Assembly



End Cap



InvisiMount Component Details		
Component	Material	Weight
Mid Clamp	Black oxide stainless steel AISI 304	63 g (2.2 oz)
End Clamp	Black anodized aluminum alloy 6063-T6	110 g (3.88 oz)
Rail	Black anodized aluminum alloy 6005-T6	830 g/m (9 oz/ft)
Rail Splice	Aluminum alloy 6005-T5	830 g/m (9 oz/ft)
Ground Lug Assembly	304 stainless (A2-70 bolt; tin-plated copper lug)	106.5 g/m (3.75 oz)
End Cap	Black acetal (POM) copolymer	10.4 g (0.37 oz)

InvisiMount Operating Conditions	
Temperature	-40° C to 90° C (-40° F to 194° F)
Max. Load	2400 Pa uplift 5400 Pa downforce

InvisiMount Warranties And Certifications	
Warranties	25-year product warranty 5-year finish warranty
Certifications	UL 2703 Listed Class A fire rating when distance between roof surface and bottom of SunPower module frame is ≤ 3.5"

Roof Attachment Hardware Supported by InvisiMount System Design Tool	
Application	<ul style="list-style-type: none"> • Composition Shingle Rafter Attachment • Composition Shingle Roof Decking Attachment • Curved and Flat Tile Roof Attachment • Universal Interface for Other Roof Attachments

Roof Attachment Hardware Warranties	
Refer to roof attachment hardware manufacturer's documentation	



DocuSigned by:
Tom Runforo
087D845E
11/16/2023



APPROVED
Montgomery County
Historic Preservation Commission

Robert H. ...

REVIEWED
By Chris Berger at 3:50 pm, Dec 07, 2023

*Module frame that is compatible with the InvisiMount system required for hardware interoperability.

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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

November 20, 2023

To: Matt Johnson
7213 Maple Ave. Takoma Park, MD 20912
mattj6434@gmail.com

703-725-9514

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

From: Planning and Development Services Division



THIS IS NOT A PERMIT – For Informational Purposes Only

VALID FOR ONE YEAR FROM DATE OF ISSUE

The property owner is responsible for obtaining all required permits from Montgomery County and the City of Takoma Park. If this property is in the **Takoma Park Historic District**, it is subject to Montgomery County Historic Preservation requirements.

Representative Name: Anthony Colella permits@edge-gogreen.com 434-568-7220

Location of Project: 7213 Maple Ave. Takoma Park, MD 20912

Proposed Scope of Work: Install (17) SunPower 400-watt all black solar panels to rear roof.

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

Mo **REVIEWED** review process.

By Chris Berger at 3:51 pm, Dec 07, 2023

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 land area. For more information on visit: <https://takomaparkmd.gov/government/public-works/stormwater-management-program/>. The City Engineer should be contacted to determine if a City permit is required. The City Engineer can be reached at 301-891-7620.

City Right of Way:

- To place a **construction dumpster or storage container** temporarily on a City right of way (usually an adjacent road), you will need to obtain a permit. A permit is not required if the dumpster is placed in 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.



Takoma Park Planning Division

for City permits, see: <https://takomaparkmd.gov/services/permits/> or
at 301-891-7633.

Violating requirements could result in the issuance of a Stop Work Order and
provisions of the law.

Anthony Colella

11-16-2023

11-20-2023

REVIEWED

By Chris Berger at 3:51 pm, Dec 07, 2023



**APPLICATION FOR
HISTORIC AREA WORK PERMIT**
HISTORIC PRESERVATION COMMISSION
301.563.3400

FOR STAFF ONLY:
HAWP# _____
DATE ASSIGNED _____

APPLICANT:

Name: _____ E-mail: _____
Address: _____ City: _____ Zip: _____
Daytime Phone: _____ Tax Account No.: _____

AGENT/CONTACT (if applicable):

Name: _____ E-mail: _____
Address: _____ City: _____ Zip: _____
Daytime Phone: _____ Contractor Registration No.: _____

LOCATION OF BUILDING/PREMISE: MIHP # of Historic Property _____

Is the Property Located within an Historic District? Yes/District Name _____
 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 /Reviews Required as part of this Application? (Conditional Use, Variance, Record Plat, etc.?) If YES, include information on these reviews as supplemental information.

Building Number: _____ Street: _____

Town/City: _____ Nearest Cross Street: _____

Lot: _____ Block: _____ Subdivision: _____ Parcel: _____

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:

- | | | |
|---|--|--|
| <input type="checkbox"/> New Construction | <input type="checkbox"/> Deck/Porch | <input type="checkbox"/> Shed/Garage/Accessory Structure |
| <input type="checkbox"/> Addition | <input type="checkbox"/> Fence | <input type="checkbox"/> Solar |
| <input type="checkbox"/> Demolition | <input type="checkbox"/> Hardscape/Landscape | <input type="checkbox"/> Tree removal/planting |
| <input type="checkbox"/> Grading/Excavation | <input type="checkbox"/> Roof | <input type="checkbox"/> Window/Door |
| | | <input type="checkbox"/> 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