

MONTGOMERY COUNTY HISTORIC PRESERVATION COMMISSION
STAFF REPORT

Address:	7200 Maple Ave., Takoma Park	Meeting Date:	3/6/2024
Resource:	Outstanding Resource Takoma Park Historic District	Report Date:	2/28/2024
Applicant:	Tina Crouse Solar Energy World, Agent	Public Notice:	2/21/2024
Review:	HAWP	Tax Credit:	No
Case Number:	1055219	Staff:	Dan Bruechert
Proposal:	Solar Panel Installation		

RECOMMENDATION

Staff recommends that the Historic Preservation Commission **approve with one (1) condition** the HAWP application:

1. The solar panels on the south roof slope shall be installed so they are centered on the roof and not shifted to the west, as proposed. Final plans showing this condition has been satisfied shall be submitted to Staff for final review and approval before issuing the HAWP.

PROPERTY DESCRIPTION

SIGNIFICANCE: Outstanding Resource to the Takoma Park Historic District
STYLE: Craftsman
DATE: 1923



Figure 1: The subject property is located at the intersection of Maple Ave. and Tulip Ave.

PROPOSAL

The applicant proposes to install 36 (thirty-six) roof mounted solar panels.

APPLICABLE GUIDELINES

The Historic Preservation Office and Historic Preservation Commission (HPC) consult several documents when reviewing alterations and new construction within the Takoma Park Historic District. These documents include the historic preservation review guidelines in the approved and adopted amendment for the *Takoma Park Historic District (Guidelines)*, *Montgomery County Code Chapter 24A (Chapter 24A)*, and the *Secretary of the Interior's Standards for Rehabilitation (Standards)*, and the HPC's *Policy No. 20-01 ADDRESSING EMERGENCY CLIMATE MOBILIZATION THROUGH THE INSTALLATION OF ROOF-MOUNTED SOLAR PANELS*. The pertinent information in these four documents is outlined below.

Takoma Park Historic District Guidelines

There are two broad planning and design concepts which apply to all categories. These are:

- The design review emphasis will be restricted to changes that are all visible from the public right-of-way, irrespective of landscaping or vegetation (it is expected that the majority of new additions will be reviewed for their impact on the overall district), and
- The importance of assuring that additions and other changes to existing structures act to reinforce and continue existing streetscape, landscape, and building patterns rather than to impair the character of the historic district.

Outstanding Resources have the highest level of architectural and/or historical significance. While they will receive the most detailed level of design review, it is permissible to make sympathetic alterations, changes and additions. The guiding principles to be utilized by the Historic Preservation Commission are the *Secretary of the Interior's Standards for Rehabilitation*

Plans for all alterations should be compatible with the resource's original design; additions, specifically, should be sympathetic to existing architectural character, including massing, height, setback, and materials;

Emphasize placement of major additions to the rear of existing structures so that they are less visible from the public right-of-way;

While additions should be compatible, they are not required to be replicative of earlier architectural styles;

Preservation of original and distinctive architectural features, such as porches, dormers, decorative details, shutters, etc. is encouraged;

Preservation of original windows and doors, particularly those with specific architectural importance, and of original size and shape of openings is encouraged;

Preservation of original building materials and use of appropriate, compatible new materials is encouraged;

All changes and additions should respect existing environmental settings, landscaping, and patterns of open space.

Montgomery County Code, Chapter 24A-8

The following guidance which pertains to this project are as follows:

- (b) The commission shall instruct the director to issue a permit, or issue a permit subject to such conditions as are found to be necessary to ensure conformity with the purposes and requirements of this chapter, if it finds that:
 - (1) The proposal will not substantially alter the exterior features of an historic site or historic resource within an historic district; or
 - (2) The proposal is compatible in character and nature with the historical, archeological, architectural or cultural features of the historic site or the historic district in which an historic resource is located and would not be detrimental thereto or to the achievement of the purposes of this chapter;
 - (6) In balancing the interests of the public in preserving the historic site or historic resource located within an historic district, with the interests of the public from the use and benefit of the alternative proposal, the general public welfare is better served by granting the permit.
- (d) In the case of an application for work on an historic resource located within an historic district, the commission shall be lenient in its judgment of plans for structures of little historical or design significance or for plans involving new construction, unless such plans would seriously impair the historic or architectural value of surrounding historic resources or would impair the character of the historic district. (Ord. No. 9-4, § 1; Ord. No. 11-59.)

Secretary of the Interior's Standards for Rehabilitation

The Secretary of the Interior defines rehabilitation as “the act or process of making possible a compatible use for a property through repair, alterations, and additions while preserving those portions or features, which convey its historical, cultural, or architectural values.” The applicable *Standards* are as follows:

- 2. The historic character of a property will be retained and preserved. The removal of distinctive materials or alteration of features, spaces and spatial relationships that characterize a property will be avoided.
- 9. New additions, exterior alterations, or related new construction shall not destroy historic materials that characterize the property. The new work shall be differentiated from the old and shall be compatible with the massing, size, scale, and architectural features to protect the historic integrity of the property and its environment.
- 10. New additions and adjacent or related new construction shall be undertaken in such a manner that if removed in the future, the essential form and integrity of the historic property and its environment would be unimpaired.

Historic Preservation Commission Policy No. 20-01: Addressing Emergency Climate Mobilization Through the Installation of Roof-Mounted Solar Panels

Now, THEREFORE:

WHEREAS, Historic Area Work Permit decisions are guided by the criteria in Section 24A, The Secretary of the Interior’s Standards for Rehabilitation, and pertinent guidance from applicable master plan amendments and/or site or district-specific studies;

WHEREAS, The Secretary of the Interior’s Standards for Rehabilitation as interpreted by the National Park Service limit the placement of rooftop solar panels under Standards 2, 9, and 10 to less conspicuous locations;

WHEREAS, the County Council has established a Climate Emergency;

WHEREAS, the Historic Preservation is a body established by the County Executive and County Council;

WHEREAS, Section 24-8(b)(6) states, “In balancing the interest of the public in preserving the historic site or historic resource located within an historic district, with the interests of the public from the use and benefit of the alternative proposal, the general public welfare is better served by granting the permit;”

WHEREAS, the widespread use of solar panels, both for hot water and for electricity production, will reduce greenhouse gases in the county, in accordance with the aims of the Emergency Climate Mobilization resolution (Resolution No.: 18-974), it shall be the policy of the Historic Preservation Commission that:

1. The preferred locations for solar panel installation(s) on a designated historic site or an historic resource located within an historic district is a) on the rear of the property, b) on non-historic building additions, c) on accessory structures, or d) in ground-mounted arrays;
2. If it is not feasible to install solar panels in one of the identified preferred locations due to resource orientation or other site limitations; and,
3. The roof is determined to be neither architecturally significant, nor a character-defining feature of the resource, nor is it a slate or tile roof, that unless it can be demonstrated that the solar array will be installed without damaging the historic character of the resource or historic fabric; then
4. The public welfare is better served by approving a Historic Area Work Permit for solar panels on all visible side or front roof slopes under Section 24A-8(b)(6).

A Historic Area Work Permit (HAWP) is required for all work referenced in this policy.

STAFF DISCUSSION

The subject property is a two-story side gable house with several Craftsman details at the corner of Maple Ave. and Tulip Ave. The house has a parged concrete foundation, with wood siding. Sometime prior to its 1952 sale, the house had been altered, enclosing the ‘front’ porch facing Maple Ave. and creating a center hall with the main entrance now facing the south (Tulip Ave.) side. The HPC recently reviewed a

HAWP for a modest addition to the house's west side.¹ The applicant proposes to install a total of 36 (thirty-six) solar panels, with 18 (eighteen) on the south roof slope and an additional 18 on the north roof slope. The electrical conduit will be run through the roof. The panels will be attached to the asphalt shingle roof using a SnapTrack TopSpeed mounting system that will mount the panels approximately 4" (four inches) above the roof surface. There is a small shed on the property.

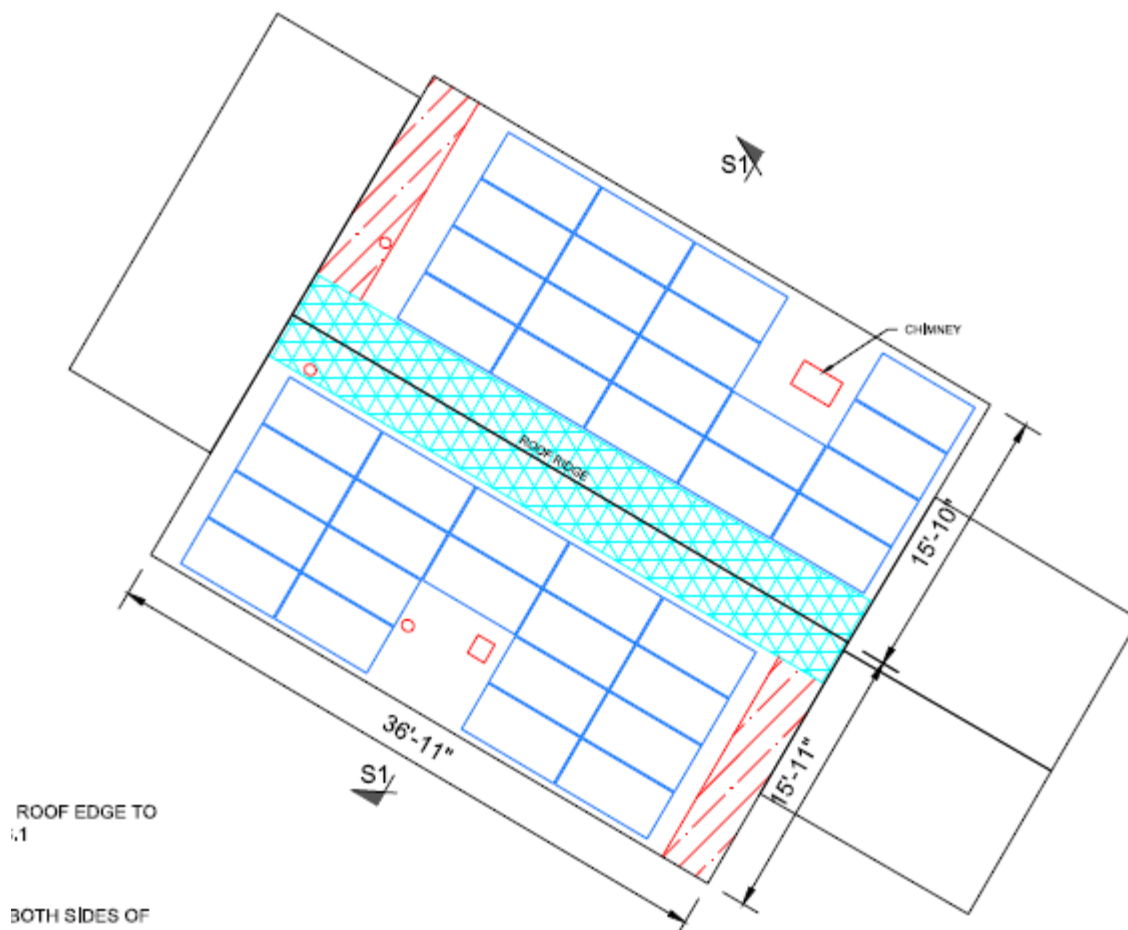


Figure 2: Proposed solar panel layout with the north-facing roof slope showing at the top.

North Roof Slope

The less visible north roof slope is partially obscured by the narrow setback from the property to the north and its two-story height. On the north roof slope, the applicant proposes to install 18 (eighteen solar panels). The panels are arranged in four columns of four with one column of two, to avoid the existing chimney. Staff notes the solar policy and its illustrated guidelines stress that the panels be “arranged in an organized configuration and avoid disjointed and multi-roof solutions.”

Staff finds for all intents and purposes, the north side of the subject property is its ‘rear’ both in terms of visibility and access. Under the adopted solar policy, the rear is one of the identified preferred locations.

¹ The Staff Report and HAWP application for the recently approved HAWP is available here: <https://montgomeryplanning.org/wp-content/uploads/2023/08/1.F-7200-Maple-Avenue-Takoma-Park-1040006.pdf>.

Staff finds none of the other preferred locations are available at the subject property. There is not sufficient space to accommodate a ground-mounted array, the recently approved addition is too small to accommodate solar panels, and the existing outbuilding is too small and not sufficiently engineered for solar panels. Staff additionally finds because of the limited visibility of the north roof slope that the arrangement of the panels, to avoid the chimney, will not detract from the character of the house. Staff additionally finds the asphalt roof is not historically significant and could be repaired or replaced without detracting from the historic character of the site. Staff recommends the HPC approve the 18 (eighteen) solar panels on the north roof slope under 24A-8(b)(2); Standards 2, 9, and 10; and the HPC's adopted solar policy (20-01).



Figure 3: Detail of the subject property. Note the chimney on the north roof slopes and the vents on the south.

South Roof Slope

The south roof slope is much more visible than the north and, after the house reconfiguration, is the front in practice and treatment. The visibility of this elevation is compounded by the fact that the house is on a corner lot and these panels will be visible along both Maple Ave. and Tulip Ave. The applicant proposes to install 18 (eighteen) solar panels with four columns of four panels and one column of two panels (see *Figure 2*). The proposed panels and hardware match those proposed for the north roof slope.

As discussed above, the other preferred locations identified in the adopted solar policy are either not available or not viable at the subject property. The applicant provided additional information on the

house's energy consumption and the amount of electricity the proposed system was expected to generate. The provided heat map shows that the south-facing roof slope would receive much more sunlight, and therefore was capable of producing more electricity. The information provided also demonstrated that the proposed solar array would produce nearly 150% (one hundred fifty percent) of the house's electricity usage in July, but would also produce only 25% (twenty-five percent) of the house's electric needs in January. Staff finds this seasonal difference is based on the increased electrical needs to heat the house in the winter and increased solar collection in the summer based on the angle of the sun and additional hours of daylight. Staff does not find the proposal solar array is overly designed so the homeowner can benefit by selling significant amounts of electricity back to the grid.

Staff does not find the house's roof shape or asphalt shingles to be architecturally significant and that the solar installation will not damage the house's historic character.

Staff's final consideration is the arrangement of the panels and whether that will detract from the character of the house and surrounding district. The illustrated guidelines stress that panels should be arranged to avoid the appearance of a missing tooth. The proposal under consideration has a U-shaped arrangement of panels to avoid two roof vents located above a second-floor bathroom.



Figure 4: Tulip Ave. elevation of the subject property (roof vents omitted from the drawing, located within the red square).

As the objective of this consideration is to unnecessarily distract from the architectural character and features of the historic resources, Staff has identified three potential ways to mitigate the proposal. First, the applicant could relocate the two vents closer to the roof ridge. Staff would then support the addition of two panels to create a four-panel by five-panel rectangular configuration. This is the desired appearance for roof-mounted solar because the panels' arrangement visually recedes. The second option is to eliminate the lower two panels on each of the four, four panel columns. This would result in a five-

panel wide by two-panel tall configuration. This would create a rectangular configuration, near the roof ridge, but would eliminate four of the most productive solar panels in the proposed installation. The third option is to shift the array slightly to the southeast, so that the panels are centered in the middle of the roof so the solar installation would reinforce the architectural symmetry of the south elevation (see *Figures 5 and 6*, below) and avoid unwanted visual attention. This may require a slight adjustment in the location of one of the roof vents, however, Staff does not find this will be as logistically challenging as relocating the two vents closer to the roof ridge. While Staff finds all three options would satisfy the requirements for an approvable HAWP in the Takoma Park Historic District, Staff recommends the HPC add a condition for approval consistent with the third option, requiring the south solar panels to be installed so they are centered on the roof, not slightly off-center as shown in *Figure 5*, below.

Staff recommends the HPC approve the HAWP with the added condition under 24A-8(b)(2); the Takoma Park Historic District Design Guidelines; *Standards # 2, 9, and 10*; and the Historic Preservation Commission Policy (20-01).

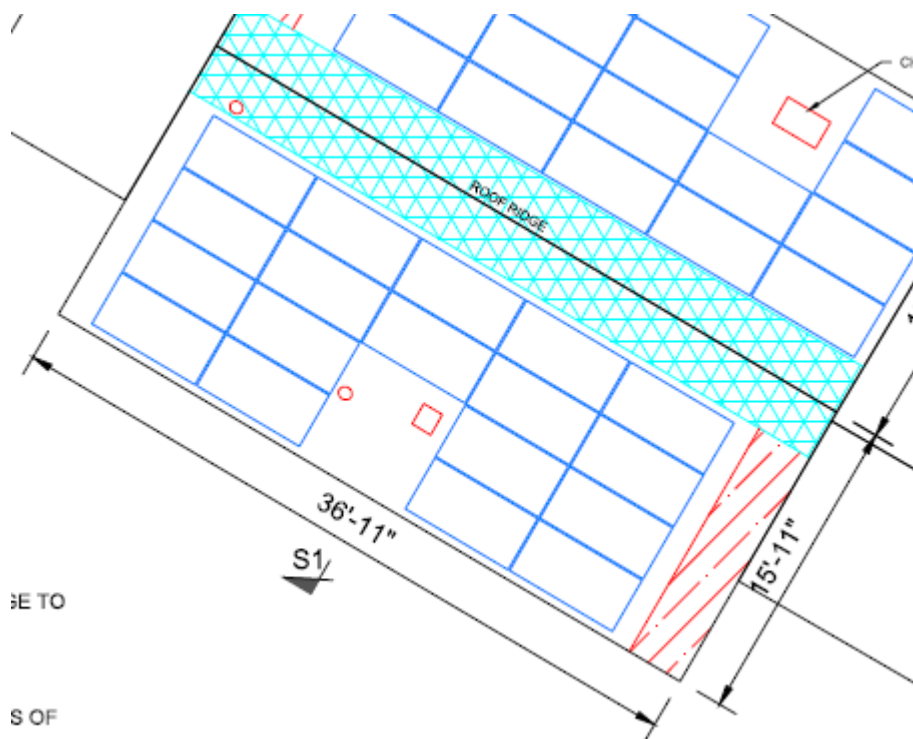


Figure 5: Detail of the proposed installation on the south roof slope.



Figure 6: Proposed layout (slightly offset to the left), suggested recommended revision (centered on the roof). This small alteration would center the ‘gap’ symmetrically over the central window opening on the 2nd floor. Note: dimensions of panels are approximate.

The final consideration in this Staff report is the impact on the surrounding outstanding resources. The buildings to the south, west, and east are all outstanding, as is the property to the southeast. The property to the east is the Takoma Park Presbyterian Church, which has solar panels on its flat roofed annex building (the solar panels are a recent installation and we do not have an aerial photo showing the solar panels). Staff finds the proposed solar panels, installed flush against the gable roof will not have a significant impact on the character of the streetscape or surrounding resources and recommends the HPC approve the HAWP with the identified condition.



Figure 7: The subject property (shown with a star) and Outstanding Resources in the area (shown with an 'O').

STAFF RECOMMENDATION

Staff recommends that the Commission **approve with one (1) condition** the HAWP application with final approval of all details delegated to staff:

1. The solar panels on the south roof slope shall be installed so they are centered on the roof and not shifted to the west, as proposed. Final plans showing this condition has been satisfied shall be submitted to Staff for final review and approval before issuing the HAWP. under the Criteria for Issuance in Chapter 24A-8(b)(6), and (d), having found that the proposal will not substantially alter the exterior features of the historic resource and is compatible in character with the district and the purposes of Chapter 24A;

and with the *Secretary of the Interior's Standards for Rehabilitation #2, #9, and #10*;

and with the *Historic Preservation Commission Policy No. 20-01*;

and with the general condition that the applicant shall present an electronic set of drawings, if applicable, to Historic Preservation Commission (HPC) staff for review and stamping prior to submission for the Montgomery County Department of Permitting Services (DPS) building permits;

and with the general condition that final project design details, not specifically delineated by the Commission, shall be approved by HPC staff or brought back to the Commission as a revised HAWP application at staff's discretion;

and with the general condition that the applicant shall notify the Historic Preservation Staff if they propose to make **any alterations** to the approved plans. Once the work is completed the applicant will contact the staff person assigned to this application at 301-563-3400 or dan.bruechert@montgomeryplanning.org to schedule a follow-up site visit.

Ryan Sent 12/18/23
FOR STAFF ONLY:
HAWP# _____
DATE ASSIGNED _____



APPLICATION FOR HISTORIC AREA WORK PERMIT

HISTORIC PRESERVATION COMMISSION
301.563.3400

APPLICANT:

Name: Tina Crouse
Address: 7200 Maple Avenue
Daytime Phone: 410-579-2009

E-mail: tcrouse @Solarenergyworld .com
City: Takoma Park Zip: 20912
Tax Account No.: 01061220

AGENT/CONTACT (if applicable):

Name: Tina Crouse
Address: 14880 Sweitzer Lane
Daytime Phone: 410-579-2009

E-mail: tcrouse@solarenergyworld .com
City: Laurel Zip: 20707
Contractor Registration No.: 12735

LOCATION OF BUILDING/PREMISE: MIHP # of Historic Property 1055219

Is the Property Located within an Historic District? 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 /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: 7200 Street: Maple Avenue
Town/City: Takoma Park Nearest Cross Street: Tulip Avenue
Lot: P1 Block: 5 Subdivision: 0025 Parcel: 0000

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 checked="" 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.

Tina Crouse

12/8/2023

Signature of owner or authorized agent

Date

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

- Single family dwelling built in 1923

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

- Install (36) roof mounted solar panels, 14.76 kW
- Install (1) Inverter
- Galvanized Steel conduit to run from equipment along and tucked into attic.



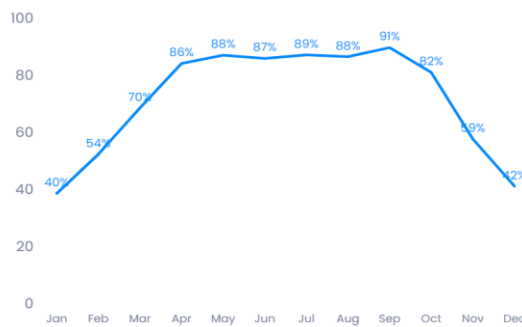
2/7/24

To whom it may concern,

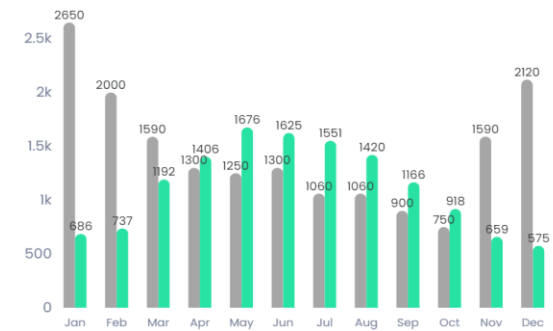
- Explain how many solar panels are required to support the home vs. how many are there to sell power back to the grid.

Monthly energy consumption for 7200 Maple Ave, Silver Spring, MD 20912 vs the proposed system monthly production

Monthly Average Solar Access



Monthly Consumption and Production (kWh)



- The home had an annual usage of roughly 16821 kWh in 2023. Our proposed system is estimated to have 13611 kWh in annual production. The homeowner is simply attempting to offset their energy consumption.
- The panels will vary in production based on their location on the structure, but this estimated production for a 36-panel system breaks down to roughly 378 kWh per panel annually. The system production estimate of 13611 kWh is 3959 kWh smaller than the consumption for the household.

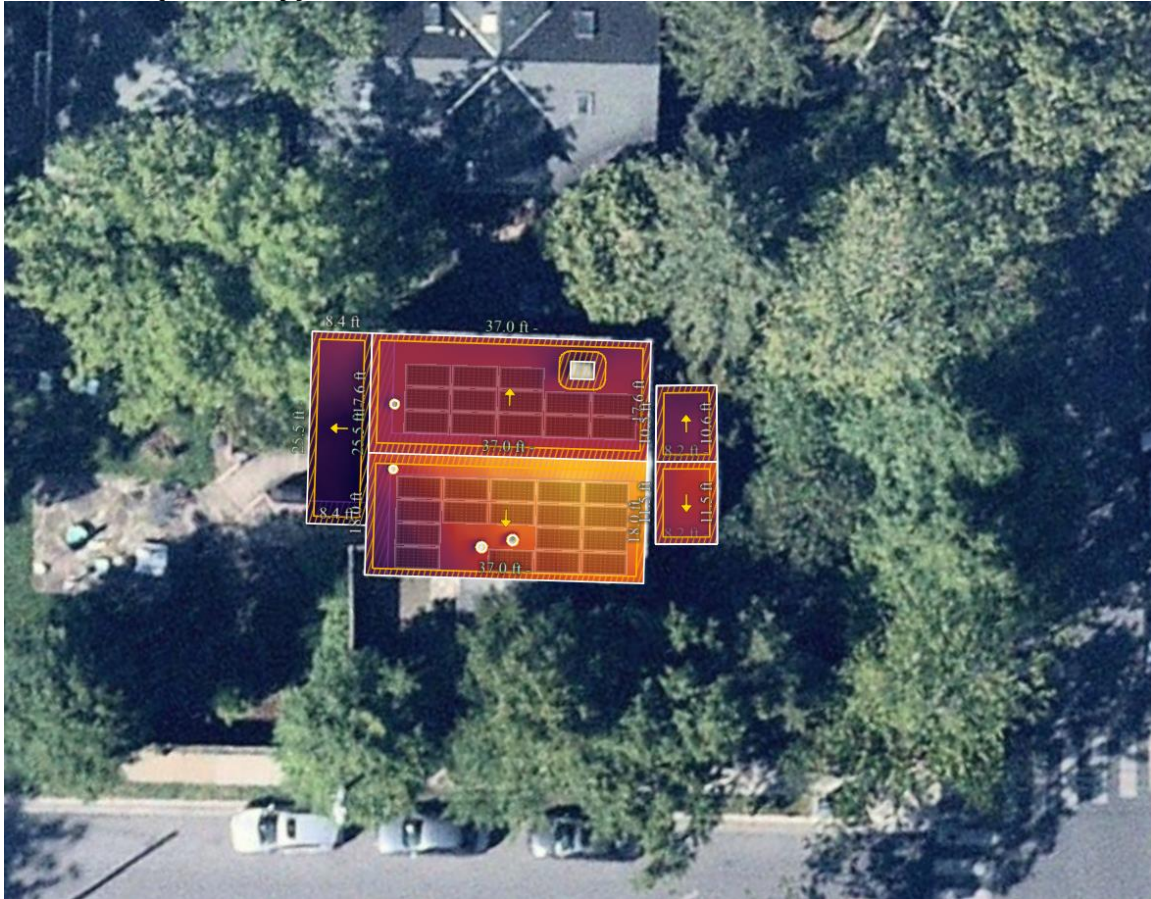
Justification for the Placement of the panels.

- Both faces of the main gable were used for the design of this system due to significant shading from the surrounding the property. The lower roof planes located to the east and west of the home experience significant shading from previously noted trees and because they are closer to ground level.
- The roof planes on the main gable are 36” from the roof ridge since the system is over 33% of the total roof area.
- Due to fire pathway requirements the eastern and western roof planes are not large enough to accommodate a significant amount of PV



SolarEnergyWorld
Because Tomorrow Matters

Irradiance (Heat Map)



Thank you,

Frank Greco
Design Engineer at Solar Energy World.

HAWP APPLICATION: MAILING ADDRESSES FOR NOTIFYING
 [Owner, Owner's Agent, Adjacent and Confronting Property Owners]

<p>Owner's mailing address Elizabeth Baer 7200 Maple Avenue Takoma Park, MD 20912</p>	<p>Owner's Agent's mailing address Tina Crouse 14880 Sweitzer Lane Laurel, MD 20770</p>
<p align="center">Adjacent and confronting Property Owners mailing addresses</p>	
<p>Julia Sweig 7202 Maple Ave Takoma Park, MD 20912 (Adjacent)</p>	<p>John Cavanagh 214 Tulip Ave Takoma Park, MD 20912 (Confronting)</p>
<p>James Saloma 7124 Maple Ave Takoma Park, MD 20912 (Adjacent)</p>	<p>Takoma Park Presbyterian Church 310 Tulip Ave Takoma Park, MD 20912 (Confronted)</p>
<p>7201 Maple Avenue, Takoma Park MD 20912 7137 maple Avenue, Takoma Park MD 20912</p>	



Front of House

Back of Home



Left Side of Home



Right side of Home



Utility Meter before Installation



Utility Meter after Installation

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

January 08, 2024

To: Elizabeth Baer
7200 Maple Ave
Daniel.eichner@gmail.com (202) 403-7549

To: Department of Permitting Services
2425 Reedie 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: Tina Crouse permitting@solarenergyworld.com 410-579-2009

Location of Project: 7200 Maple Avenue, Takoma Park, MD 20912

Proposed Scope of Work: Install (36) roof mounted solar panels, 14.76 kW

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 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.

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
Tina Crouse
Key: 38bf2056622713c0b979ea7ee94776a

Tina Crouse

01-08-2024

eSigned via SeamlessDocs.com
Takoma Park Planning Division
Key: 19fe64f123e96a3ff4576219059d5fba

01-08-2024