MONTGOMERY COUNTY HISTORIC PRESERVATION COMMISSION
STAFF REPORT

Address: 3905 Prospect St., Kensington
Resource: Secondary Resource
Kensington Historic District
Applicant: Elihu Miles
Review: HAWP
Case No.: 942700
PROPOSAL: Solar Panel Installation

Meeting Date: 4/14/2021
Report Date: 4/7/2021
Public Notice: 3/31/2021
Tax Credit: No
Staff: Dan Bruechert

STAFF RECOMMENDATION

Staff recommends the HPC approve with one (1) condition the HAWP:

1. The approval does not extend to the seven solar panels in the southeast corner of the house (AR-04 and AR-01) or the four panels in the southwest corner of the house (AR-02 and AR-03).

Revised drawings showing this condition has been met need to be submitted to Staff for review and final approval.

ARCHITECTURAL DESCRIPTION

SIGNIFICANCE: Secondary Resource within the Kensington Historic District
STYLE: Colonial Revival
DATE: 2016

Figure 1: 3905 Prospect Street is located off of Connecticut Ave.
I.A

PROPOSAL

The applicant proposes to install 36 (thirty-six) flush-mounted solar panels on all of the roof surfaces.

APPLICABLE GUIDELINES

Kensington Historic District Guidelines

When reviewing alterations and new construction within the Kensington Historic District several documents are to be utilized as guidelines to assist the Commission in developing their decision. These documents include the Approved & Adopted Amendment to the Master Plan for Historic Preservation: Kensington Historic District, Atlas #31/6 (Amendment), Vision of Kensington: A Long-Range Preservation Plan (Vision), Montgomery County Code Chapter 24A (Chapter 24A), and the Secretary of the Interior’s Standards for Rehabilitation (Standards). The pertinent information in these documents is outlined below. The work proposed is additionally covered by the adopted policy on solar panels, Historic Preservation Commission Policy No. 20-01: ADDRESSING EMERGENCY CLIMATE MOBILIZATION THROUGH THE INSTALLATION OF ROOF-MOUNTED SOLAR PANELS. The pertinent information in these documents is outlined below.

Approved & Adopted Amendment to the Master Plan for Historic Preservation: Kensington Historic District, Atlas #31/6

"In regard to the properties identified as secondary resources--that is visually contributing, but non-historic structures or vacant land within the Kensington District--the Ordinance requires the Preservation Commission to be lenient in its judgment of plans for contemporary structures or for plans involving new construction unless such plans would seriously impair the historic or architectural value of surrounding resources or impair the character of the district."

Vision of Kensington: A Long-Range Preservation Plan

The HPC formally adopted the planning study, Vision of Kensington: A Long-Range Preservation Plan, and is directed by the Executive Regulations, which were approved by the County Council, to use this plan when considering changes and alterations to the Kensington Historic District. The goal of this preservation plan "was to establish a sound database of information from, which to produce a document that would serve the HPC, M-NCPCC, their staff and the community in wrestling with the protection of historic districts amidst the pressures of life in the 21st century." (page 1). The plan provides a specific physical description of the district as it is; an analysis of character-defining features of the district; a discussion of the challenges facing the district; and a discussion of proposed strategies for maintaining the character of the district while allowing for appropriate growth and change.

Montgomery County Code; Chapter 24A-8

(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; or
(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 *Standards* are as follows:

1. The historic character of a property shall be retained and preserved. The removal of historic materials or alteration of features and spaces that characterize a property shall be avoided.

**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).

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

**STAFF DISCUSSION**

The subject property is a large two-story, south-facing house constructed in 2016. Because of its proximity to Connecticut Avenue, the subject property is highly visible from around the historic district.

The applicant proposes installing 36 (thirty-six) flush-mounted solar panels in ten groups. Staff finds that the proposed arrays on the detached garage and rear gable section of the house are preferred locations for solar panels on houses within historic districts. The arrays in these two locations account for 19 (nineteen) of the proposed solar panels and even though they may be visible from the public right-of-way, these elevations do not have the same degree of architectural embellishment found on the larger cross gable section of the house. Staff additionally finds that the two arrays on the sections to the rear of the house are also appropriate as they are on a preferred roof location, even though they are visible from the public right-of-way. These two arrays include a total of seven panels.

Staff finds the remaining eleven panels are less compatible. The panels on the two south arrays on the southeast side are highly visible from the right-of-way. The visibility of these arrays is compounded by the fact that the property is next to Connecticut Avenue and because Prospect street rises from Connecticut Ave.

*Figure 2: Seven solar panels in two arrays are proposed for the southeast corner of the house.*

Staff finds that even though the subject property is a non-historic construction, these seven solar panels
(labeled Array AR-04 and AR-01 on the submitted plan) will detract from the surrounding historic district and should not be supported under 24A-8(b)(1) and Standard 2. Connecticut Ave. is a major thoroughfare that cuts through the middle of the historic district and the views of the district from this perspective should be given additional consideration. Staff recommends the HPC add a condition for approval that the seven panels in the southeast corner of the house (AR-01 and AR-04) be eliminated from the proposal.

The remaining four solar panels are proposed in two arrays in the southwest corner of the house (see the photo below). These panels will not be visible from Connecticut Ave. In considering the appropriateness of these solar panels, Staff first considers the impact to the historic and architectural significance of the resource. This house was constructed in 2016 and does not have any historical significance, and its architectural importance is to reinforce building patterns found in the surrounding district. The next consideration is the visual impact on the surrounding district. The subject property is surrounded by both Primary and Secondary resources which contribute to the character of the surrounding district, defined as a “Victorian garden suburb.” Staff finds that the panels in the southwest corner identified as AR-2 and AR-3 detract from the character of the district, and the applicant has not provided supplemental information that demonstrates the project as infeasible without these panels. Staff recommends the HPC add a condition that these four panels in the southwest corner be eliminated from the proposal.

![Figure 3: Two arrays with two panels each are proposed in the southwest corner.](image)

The adopted solar policy, cited above, identifies the preferred location for solar arrays to historic properties and properties in historic districts. It is intended to provide added flexibility to residents to install solar panels for electricity generation. Staff finds that under this policy, the applicant has not demonstrated that the proposed solar project is not feasible absent the identified eleven panels. Staff supports 25 (twenty-five) of the 36 (thirty-six) panels (70% of the total proposed) and finds no support for approving the south-facing panels without the applicant demonstrating that the project is infeasible without them.
STAFF RECOMMENDATION

Staff recommends that the Commission **approves** the HAWP application with one condition:

1. The approval does not extend to the seven solar panels in the southeast corner of the house (AR-04 and AR-01) or the four panels in the southwest corner of the house (AR-02 and AR-03). Revised drawings showing this condition has been met need to be submitted to Staff for review and final approval.

under the Criteria for Issuance in Chapter 24A-8(b)(2), (4), and (d), and the Vision of Kensington, and the Kensington Historic District Designation, 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; Historic Preservation Commission Policy No. 20-01: ADDRESSING EMERGENCY CLIMATE MOBILIZATION THROUGH THE INSTALLATION OF ROOF-MOUNTED SOLAR PANELS;

and with the Secretary of the Interior’s Standards for Rehabilitation #2;

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.
APPLICATION FOR
HISTORIC AREA WORK PERMIT
HISTORIC PRESERVATION COMMISSION
301.563.3400

APPLICANT:

Name: ELIHU MILES
Address: 3905 PROSPECT ST
Daytime Phone: 6463196680

E-mail: _________________________________
City: KENSINGTON Zip: 20895
Tax Account No.: 13-03745737

AGENT/CONTACT (if applicable):

Name: Tuwaun Jefferson
Address: 812 Oregon Ave, Ste J
Daytime Phone: 410.530.8560

E-mail: mdpermitcoordination@sunrun.com
City: Linthicum Zip: 21090
Contractor Registration No.: MHIC# 115875

LOCATION OF BUILDING/PREMISE: MIHP # of Historic Property

Is the Property Located within an Historic District? Yes/District Name KENSINGTON 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: 3905 Street: PROSPECT ST
Town/City: KENSINGTON Nearest Cross Street: ________________________
Lot: 4 Block: 11 Subdivision: 0015 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 ☐ Deck/Porch ☐ Shed/Garage/Accessory Structure
☐ Addition ☐ Fence ☐ Solar
☐ Demolition ☐ Hardscape/Landscape ☐ Tree removal/planting
☐ Grading/Excavation ☐ Roof ☐ 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 _____________

2/19/2021
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 HOME WITH DETACHED GARAGE AND DRIVEWAY.

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

36 FLUSH-MOUNTED SOLAR PANELS TO BE INSTALLED ON ROOFS OF HOME AND GARAGE. TOTAL SYSTEM SIZE OF 12.96KW. ENERGY STORAGE UNIT TO BE INSTALLED ON INTERIOR WALL; (1) TESLA POWERWALL LITHIUM-ION BATTERY WITH BACKUP GATEWAY. NO ADDITIONAL STRUCTURES TO BE BUILT OR ALTERED. PLEASE SEE ATTACHED PLANS.
<table>
<thead>
<tr>
<th>Work Item 1: <strong>SOLAR PANELS</strong></th>
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<tr>
<td>Description of Current Condition: <strong>SINGLE FAMILY HOME</strong></td>
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| Work Item 2: | |
|-----------------------------|
| Description of Current Condition: | Proposed Work: |

| Work Item 3: | |
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| Description of Current Condition: | Proposed Work: |
## HISTORIC AREA WORK PERMIT
### CHECKLIST OF APPLICATION REQUIREMENTS

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<td>Window/Door Changes</td>
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SCOPe OF WORK

- System Size: 12960W DC, 10440W AC
- Modules: (36) LG Electronics: LG360Q1C-A5
- Inverters: (36) Enphase Energy: IQ7PLUS-72-2-US
- Racking: SnapNrack RLU: RL Universal, SpeedSeal Track on Comp, See Detail SNR-DC-00436
- Energy Storage System: (1) Tesla: Powerwall, 13.5 KWh, 5KW Inverter Output, Lithium-Ion Battery (Weight: 251.3LB Each).
- Backup Gateway: (1) 200A Tesla Powerwall Control

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NOTES:

- RESIDENCE DOES NOT CONTAIN ACTIVE FIRE SPRINKLERS.

ARRAY DETAILS:
- TOTAL ROOF SURFACE AREA: 2387 SQFT.
- TOTAL PV ARRAY AREA: 669.5 SQ FT.
- PERCENTAGE PV COVERAGE: 
  \[
  \frac{\text{TOTAL PV ARRAY AREA}}{\text{TOTAL ROOF SURFACE AREA}} \times 100 = 28.0\%
  \]

NOTE: MICRO-INVERTERS INSTALLED UNDER EACH MODULE
MAX DISTRIBUTED LOAD: 3 PSI
SNOW LOAD: 30 PSI
WIND SPEED: 111 MPH 3-SEC GUST
S.S. LAG SCREWS:
- INSTALLERS TO VERIFY RAFTER SIZE, SPACING AND SLOPED SPANS, AND NOTIFY E.O.R. OF ANY DISCREPANCIES BEFORE PROCEEDING.
- IF ARRAY (EXCLUDING SKIRT) IS WITHIN 12" BOUNDARY REGION OF ANY ROOF PLANE EDGES (EXCEPT VALLEYS), THEN ATTACHMENTS NEED TO BE ADDED AND OVERHANG REDUCED WITHIN THE 12" BOUNDARY REGION ONLY AS FOLLOWS:
  - ALLOWABLE ATTACHMENT SPACING INDICATED ON PLANS TO BE REDUCED BY 50%
  - ALLOWABLE OVERHANG INDICATED ON PLANS TO BE 1/5TH OF ALLOWABLE ATTACHMENT SPACING INDICATED ON PLANS

ROOF FRAMING DETAIL - SCALE: NTS
COMP SHINGLE - RLU ROOF
2 X 10 RAFTERS, 16" O.C.

MATERIALS:
- 2X10 RAFTERS 16" OC

ATTACHMENT INFORMATION
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<th>Type</th>
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<td>2X10 RAFTERS</td>
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ROOF INFO

SUNRUN
MHIC #132591
2000 MICHIGAN AVE, #111, OSAGE HEIGHTS, MD 21223
TOLL FREE: 443-457-5012

CUSTOMER RESIDENCE:
ELIHU MILES
3905 PROSPECT ST,
KENSINGTON, MD, 20895

TELEPHONE: (415) 580-6920
FAX: 0

DESIGNER: JAKE TAYLOR

PROJECT NUMBER: PV-3.0

LAYOUT

PAGE PV-3.0

Rev. A 11/18/2020
SNAPRACK RL UNIVERSAL FLASHTRACK COMP MOUNTING

EMBED ø5/8" UMBRELLA LAG SCREW 2-1/2" INTO THE ROOF STRUCTURAL MEMBER / RAFTER

FOR TORQUE SPECIFICATIONS SEE INSTALLATION MANUAL.

ø5/8" S.S. UMBRELLA LAG SCREW 2-1/2" MINIMUM EMBEDMENT

FLASHTRACK COMP

COMP FLASHING

SLIP FLASHING UNDER SHINGLE ABOVE

PILOT HOLE

COMP FLASHING (HATCHED)

FLASH TRACK SHOULD BE INSTALLED PARALLEL TO RAFTER

ROOF SHEATHING, UNDERLAYMENT, AND ROOFING MATERIAL (TYP.)

2-1/2" MIN. EMBEDMENT INTO RAFTER OR STRUCTURAL MEMBER

COMP FLASHING

ROOF SHEATHING

ROOF DECKING

FLASHING SHOULD NOT EXTEND PAST END OF SHINGLE COURSE

COMP FLASHING

UMBRELLA GASKET (SHADED GRAY)

STRUCTURAL MEMBER / RAFTER

FLASHTRACK COMP

UMBRELLA LAG SCREW 2-1/2" INTO THE ROOF STRUCTURAL MEMBER / RAFTER

FOR TORQUE SPECIFICATIONS SEE INSTALLATION MANUAL

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FLASHTRACK COMP

UMBRELLA LAG SCREW 2-1/2" INTO THE ROOF STRUCTURAL MEMBER / RAFTER

FOR TORQUE SPECIFICATIONS SEE INSTALLATION MANUAL

ø5/8" S.S. UMBRELLA LAG SCREW 2-1/2" MINIMUM EMBEDMENT

FLASHTRACK COMP

COMP FLASHING

SLIP FLASHING UNDER SHINGLE ABOVE

PILOT HOLE

COMP FLASHING (HATCHED)

FLASH TRACK SHOULD BE INSTALLED PARALLEL TO RAFTER

ROOF SHEATHING, UNDERLAYMENT, AND ROOFING MATERIAL (TYP.)

2-1/2" MIN. EMBEDMENT INTO RAFTER OR STRUCTURAL MEMBER

COMP FLASHING

ROOF SHEATHING

ROOF DECKING

FLASHING SHOULD NOT EXTEND PAST END OF SHINGLE COURSE

COMP FLASHING

UMBRELLA GASKET (SHAVED GRAY)

STRUCTURAL MEMBER / RAFTER