STAFF RECOMMENDATION

Staff recommends the applicant make any revisions recommended by the HPC and return for a HAWP.

ARCHITECTURAL DESCRIPTION

SIGNIFICANCE: Outstanding Resource to the Takoma Park Historic District
STYLE: Craftsman
DATE: c.1910

PROPOSAL

The applicant proposes to install 21 (twenty-one) roof mounted solar panels.
I.

APPLICABLE GUIDELINES

When reviewing alterations and new construction within the Takoma Park Historic District several documents are to be utilized as guidelines to assist the Commission in developing their decision. 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). The pertinent information in these documents is outlined below.

Takoma Park Historic District Guidelines

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

The design review emphasis will be restricted to changes that are at 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 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

Specifically, some of the factors to be considered in reviewing HAWPs on Outstanding Resources:

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

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

(a) 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:

2. 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.

9. New additions, exterior alterations, or related new construction will not destroy historic materials, features, and spatial relationships that characterize the property. The new work shall be differentiated from the old and will be compatible with the historic materials, features, size, scale and proportions, and massing to protect the integrity of the property and its environment.

10. New additions and adjacent or related new construction will 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).

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

**STAFF DISCUSSION**

The subject house is a front gable, two-story foursquare with Craftsman details including roof brackets and shingle siding. The house is categorized as an ‘Outstanding Resource’ within the Takoma Park Historic District. Notes in the Historic District amendment identify its wrap-around porch, a variety of shingles, and triple windows as the notable architectural significance for the property.

The applicant proposes to install a total of 21 (twenty-one) solar panels on the house roof on both the south and north roof slopes. Nine panels are proposed for the south (right) roof slope in a compact $3 \times 3$ array. On the north (left) roof slope, the remaining 12 (twelve) panels are proposed for a more sprawling configuration that comes to the front edge of the roof. There are several roof vents on the north slope, which complicate the placement of solar panels.

![Solar Panel Layout](image)

*Figure 2: Proposed solar layout.*

Staff brings this proposal forward as a Preliminary Consultation to solicit input from the HPC because it is the first instance of an Outstanding Resource submitted under the adopted solar policy where the panels
would be visible from the right-of-way.

The first question for the HPC is, whether visible solar panels can be categorically excluded from Outstanding Resources in the Takoma Park Historic District? Evaluations for alterations to this category of resource is largely reliant on the Secretary of the Interior’s Standards for Rehabilitation, though the Design Guidelines do state that sympathetic alterations are permissible.

Should the HPC determine roof-mounted solar panels are allowed on certain Outstanding Resources, the follow-up question is, are solar panels acceptable on this front gable roof? And if solar panels are acceptable on this roof, is the proposed array an appropriate configuration that does not detract from the historic character of the house and surrounding district?

Before considering how the resource is categorized, in applying the solar policy Staff finds that none of the identified preferred locations are feasible for solar collection on site. The small rear addition is partially in the shade of the house and several large trees on the lot and neighboring property. A ground-mounted array cannot be accommodated on the site due to the lot size and the mature tree canopy. Finally, there are no accessory structures on the site that can be utilized for solar panels. Having demonstrated that solar panels cannot be installed in one of the preferred locations, the second consideration in the solar policy has to do with the architectural significance of the roof. Staff does not find that the front gable roof, covered in architectural shingles is particularly significant, and installing solar panels on the roof would not damage any historic fabric. Based on the solar policy alone, this is an instance where roof-mounted solar panels are appropriate.

However, there are a few additional considerations. The first is the heightened requirements for Outstanding Resources identified above. The second consideration is the layout of the panels themselves. Most Outstanding Resources within the district were given that designation because of their architectural significance (a few houses were designated for their association with the early history of Takoma Park, such as the simple Sears kit house at 308 Lincoln Ave. that served as the first public library in Takoma Park). These (mostly) architecturally significant resources tend to have a higher level of stylistic embellishments and also tend to be grander in scale than most of the buildings found throughout the district. Staff finds that in this instance, the simple front gable roof can accommodate solar panels—even though they will be highly visible from the right-of-way—without detracting from the significant architectural features of the subject house. The nine panels on the south roof slope will not be visible from the right of way due to the proximity of the neighboring house at 24 Holt Place and the change in grade in the immediate area around the house. The relatively flat solar panels will be installed so that they do not disrupt the simple roof plane.
Staff finds the panel layout on the south slope is appropriate, compact, and in a contiguous array. This is the preferred configuration for visible solar panel installations as the simple rectangular form appears to cover a smaller area of the roof. The array on the north side, shown above in Fig. 2, was designed to work around two factors. The first factor is the three existing roof vents on the roof slope. It is prohibitively expensive to relocate these vents, and as the panels are a standard size, it isn’t feasible to cut holes in the panels to allow them to be installed anywhere on the roof. The second factor that was considered in designing the north slope array is the sun.

Staff enquired about the feasibility of relocating some of the panels on the north roof slope towards the rear to reduce the visual impact the panels would have on the surrounding district. In retrospect, based on the high degree of visibility of the north roof slope (see Fig. 3), it may not be feasible to reduce the panels’ visual impact. The applicant submitted the analysis of the proposed roof (Fig. 4) compared to a revised design with panels moved away from the front wall plane (Fig. 5 and 6). Based on the sunlight collected, the alternative design would produce 100 kWh/year fewer than the proposed design. A more significant consideration for our purposes is whether relocating the panels away from the front wall plane improves the visual characteristics of the proposal. Staff finds it does not. Staff finds that because the revised array still needs to avoid the roof vents, it cannot be as compact as the array on the south roof slope.

The information that remains unavailable is how many panels, and in what location, are necessary on the north roof slope to make the project feasible. The objective of the applicants is to maximize the efficiency of the system for the property owners. However, that is not the objective of the HPC. In fact, the adopted solar policy only includes consideration of the feasibility of the proposal. The HPC may find
it necessary to request additional information to be submitted with the HAWP submission to make that feasibility determination.

No matter the configuration, roof-mounted solar panels on this house will be visible from the right of way. The proposed panels will only project above the roof by 4” (four inches), so the proposal will not significantly alter the roof plane. Additionally, Staff finds the identified significant architectural features will not be impacted by the proposed work to the roof. Staff’s final consideration is one of permanence. The proposed panels can be removed with no damage to the historic fabric.

The panels would blend in with the roof if the roof shingles were a dark gray instead of brown, but that discussion is beyond the scope of this HAWP. Staff request feedback from the HPC regarding:

• The feasibility of installing solar panels to any Outstanding Resource in the Takoma Park Historic District;
• The appropriateness of installing solar panels on this highly visible front gable roof;
• The appropriateness of the proposed north and south solar arrays;
• Any recommended changes to the proposal prior to consideration as a HAWP;
• Additional information to be included with the HAWP.
Roof 2:

Design Properties:
- Module Manufacturer: Custom
- Module Model: Q-PEAK DUO BLK-G6-340W
- Inverter Manufacturer: Custom
- Inverter Model: Enphase IQ7-60-2-US
  (Due to spacing constraints, only the manufacturer and model of the first inverter is included in this report)
  Derate Factor: 0.83

Design Result Chart:

<table>
<thead>
<tr>
<th>Month</th>
<th>Roof 2 AC (kWh)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Jan</td>
<td>216.6</td>
</tr>
<tr>
<td>Feb</td>
<td>272.3</td>
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<tr>
<td>Mar</td>
<td>416.8</td>
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<td>Jul</td>
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<td>601.3</td>
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<td>Sep</td>
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<td>221.6</td>
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<tr>
<td>Dec</td>
<td>189.9</td>
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<tr>
<td><strong>Annual</strong></td>
<td><strong>4710.9</strong></td>
</tr>
</tbody>
</table>

Layout View:
- Length: 19.20 ft
- Width: 19.40 ft
- Azimuth: 225.00°
- Slope: 33.00°
- Total Modules: 12

Color Legend:
- 95%
- 90%
- 85%
- 80%

Figure 4: Proposed solar panel configuration.
Figure 5: Alternative layout based on Staff inquiry.
II.A

STAFF RECOMMENDATION

Staff recommends the applicant make revisions to the proposal based on the feedback from the HPC and return for a HAWP.
APPLICATION FOR
HISTORIC AREA WORK PERMIT
HISTORIC PRESERVATION COMMISSION
301.563.3400

APPLICANT:
Name: Ryan Doyle
Address: 14 Crescent Pl.
Daytime Phone: 410-579-5172
E-mail: rdoyle@solarenergyworld.com
City: Takoma Park
Tax Account No.: 01075283
Zip: 20912

AGENT/CONTACT (If applicable):
Name: Ryan Doyle
Address: 5681 Main St.
Daytime Phone: 410-579-5172
E-mail: rdoyle@solarenergyworld.com
City: Elkridge
Contractor Registration No.: MHIC 127353
Zip: 21075

LOCATION OF BUILDING/PREMISE: MHP # 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: 14 Street: Crescent Place

Town/City: Takoma Park Nearest Cross Street: Holt Place

Lot: 12 Block: 4 Subdivision: 0025 Parcel: N/A

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: 4/16/2021
<table>
<thead>
<tr>
<th>Owner's mailing address</th>
<th>Owner's Agent's mailing address</th>
</tr>
</thead>
<tbody>
<tr>
<td>James Coleman</td>
<td>Ryan Doyle</td>
</tr>
<tr>
<td>14 Crescent Pl.</td>
<td>5681 Main St.</td>
</tr>
<tr>
<td>Takoma Park, MD 20912</td>
<td>Elkridge, MD 21075</td>
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</tbody>
</table>

<table>
<thead>
<tr>
<th>Adjacent and confronting Property Owners mailing addresses</th>
</tr>
</thead>
<tbody>
<tr>
<td>David HauK</td>
</tr>
<tr>
<td>24 Holt Pl.</td>
</tr>
<tr>
<td>Takoma Park, MD 20912 Adjacent</td>
</tr>
<tr>
<td>Stephen Whitney</td>
</tr>
<tr>
<td>16 Crescent Pl.</td>
</tr>
<tr>
<td>Takoma Park, MD 20912 Adjacent</td>
</tr>
</tbody>
</table>
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 built in 1910

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

- Install 21 roof mounted solar panels
- Micro-Inverters to be installed under each panel
- Utility disconnect to be installed next to utility meter
Historical Area Work Permit Application for Roof Mounted Solar
James Coleman, 14 Crescent Place, Takoma Park, MD 20912

Existing Property Condition Photographs

Front View

East View

West View

Utility Side Before Installation

Utility Side After Installation
MUNICIPALITY LETTER
April 15, 2021

To: James Coleman / jstevecoleman@gmail.com / 202-390-6495
14 Crescent Pl,
Takoma Park, MD 20912

To: Department of Permitting Services
255 Rockville Pike, 2nd Floor
Rockville, Maryland 20850-4166 Fax 240-777-6398; 240-777-6262; 240-777-6223

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/email: Ryan Doyle / rdoyle@solarenergyworld.com / 410-579-5172
Location of Project: 14 Crescent Pl, Takoma Park, MD, 20912
Proposed Scope of Work: Install 21 roof mounted solar panels, 7.14 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.
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 5/8" in diameter or greater), located on the property or on an adjacent property, may require a Tree Impact Assessment and Tree Protection Plan. Make sure to submit a Tree Impact Assessment and schedule a site visit with the City's Urban Forest Manager if any urban forest tree will be impacted by the proposed construction. The removal of any urban forest tree will require a tree removal application. The tree ordinance is detailed in the City Code, section 12.12. For permit information check: [https://takomaparkmd.gov/services/permits/tree-permits/](https://takomaparkmd.gov/services/permits/tree-permits/) The City's Urban Forest Manager can be reached at 301-891-7612 or janvz@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 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: [https://takomaparkmd.gov/government/public-works/stormwater-management-program/](https://takomaparkmd.gov/government/public-works/stormwater-management-program/). The City Engineer should be contacted to determine if a City permit is required 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/](https://takomaparkmd.gov/services/permits/) or contact the Takoma Park 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.
KEY

- FIRE SAFETY ZONE

PLAN VIEW TOTAL ROOF AREA: 1137.4 sqft
SOLAR ARRAY AREA: 406 sqft
THE SOLAR ARRAY IS 35% OF THE PLAN VIEW TOTAL ROOF AREA

NOTES:
1. THE SYSTEM SHALL INCLUDE [31] NUMERO OUTDOOR 6 IN X 6 IN MODULES.
2. STRUCTURE RAL WILL BE INSTALLED IN ACCORDANCE WITH STRUCTURE INSTALLATION MANUAL.
3. DIMENSIONS INDICATED (*) ARE ALONG ROOF SLOPE.
4. REFER TO STRUCTURAL DRAWING FOR SECTIONS MARKED (*) AND ADDITIONAL NOTES.