

# FREE REIN SOLAR FARM & FOREST CONSERVATION PLAN

## CONDITIONAL USE NO. CU202305



### Description

Request for Conditional Use approval to construct and operate a Solar Collection System in the AR Zone.

No. CU202305

Completed: 03-20-2023

MCPB  
Item No. 7  
March 30,  
2023

2425 Reddie Drive  
Floor 14  
Wheaton, MD 20902

[Montgomeryplanning.org](http://Montgomeryplanning.org)

Free Rein Solar Farm, Conditional Use No.CU202305

## Planning Staff



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### LOCATION/ADDRESS

5011 Riggs Road, Gaithersburg 20882

### MASTER PLAN

2005 Olney Master Plan

### ZONE

AR- Agricultural Reserve

### PROPERTY SIZE

82.39 Acres

### APPLICANT

Free Rein Solar Farm LLC

### ACCEPTANCE DATE

November 14, 2022

### REVIEW BASIS

Chapter 22A & 59

### HEARING EXAMINER PUBLIC HEARING

April 28, 2023



### Summary:

- Staff recommends approval of the Conditional Use with conditions and transmittal to the Hearing Examiner.
- Staff recommends approval of the associated Forest Conservation Plan with conditions.
- The Subject Site has an existing Equestrian Facility (horse farm). The Proposal would allow for a Solar Collection System
- Staff has not received any public correspondence as of the date of this Staff Report.

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## SECTION 1: RECOMMENDATIONS AND CONDITIONS

### CONDITIONAL USE NO.CU202305

Staff recommends approval of Free Rein Solar Farm, Conditional Use No. CU202305, for a Solar Collection System, subject to the following conditions:

1. The use is limited to a Solar Collection System
2. The Applicant must restabilize the area around Zion Road where the electric line will be tied into the existing utility pole.
3. The existing horse farm use will remain for the remainder of the Property.

### FOREST CONSERVATION PLAN

1. *The Applicant must schedule the required site inspections by M-NCPPC Forest Conservation Inspection Staff per Section 22A.00.01.10 of the Forest Conservation Regulations.*
2. *The Applicant must comply with all tree protection and tree save measures shown on the approved Final Forest Conservation Plan. Tree save measures not specified on the Final Forest Conservation Plan may be required by the M-NCPPC Forest Conservation Inspection Staff.*
3. *The Limits of Disturbance ("LOD") shown on the Final Sediment and Erosion Control Plan must be consistent with the LOD shown on the approved Final Forest Conservation Plan.*
4. *Before the start of any demolition, clearing, grading, or construction for this development Application, whichever comes first, the Applicant must:*
  - a) *Record a Category I Conservation Easement over all areas of forest retention, forest planting and environmental buffers as specified on the approved Final Forest Conservation Plan. The Category I Conservation Easement must be in a form approved by the M-NCPPC Office of the General Counsel and must be recorded in the Montgomery County Land Records by deed.*
  - b) *Install permanent conservation easement signage along the perimeter of the conservation easements as shown on the FCP, or as directed by the M-NCPPC Forest Conservation Inspection Staff.*
  - c) *Execute a five-year Maintenance and Management Agreement ("MMA") in a form approved by the M-NCPPC Office of the General Counsel. The MMA is required for all forest planting areas, mitigation tree plantings, including variance tree mitigation plantings, and landscape plantings credited toward meeting the requirements of the FCP. The MMA includes invasive species management control measures as deemed necessary by the M-NCPPC Forest Conservation Inspection Staff.*
  - d) *Submit financial surety, in a form approved by the M-NCPPC Office of the General Counsel, to the M-NCPPC Planning Department for the 1.5 acres of new forest planting and mitigation trees and maintenance, including invasive species management controls, credited toward meeting the requirements of the FCP.*

5. *The Applicant must install the Afforestation/Reforestation plantings as shown on the approved FCP, within the first planting season following the release of the first Sediment and Erosion Control Permit from the Montgomery County Department of Permitting Services for the Subject Property, or as directed by the M-NCPPC Forest Conservation Inspection Staff.*
6. *Within the first planting season following the release of the first Sediment and Erosion Control Permit from the Montgomery County Department of Permitting Services for the Subject Property, or as directed by the M-NCPPC Forest Conservation Inspection Staff:*
  - a. *The Applicant must install the variance tree mitigation plantings on the Subject Property as shown on the approved FCP.*
  - b. *The variance tree mitigation plantings must be a minimum size of 3 caliper inches totaling 11.25 caliper inches, as shown on the approved FCP. Adjustments to the planting locations of these trees is permitted with the approval of the M-NCPPC Forest Conservation Inspection Staff*
7. *Impervious surfaces are limited to no more than 10.0 percent within the transition area of the Patuxent River Primary Management Area ("PMA") of the Subject Property as shown on the Impervious Surface Plan dated May 5, 2020.*
8. *Before the start of any clearing, grading, or demolition on the Subject Property, the owner of the Subject Property must enter into an agreement with the Planning Board to limit impervious surfaces within the transition area of the Patuxent River Primary Management Area ("PMA") on the Subject Property to no more than 10.0 percent, as shown on the Impervious Surface Plan dated May 5, 2020. The agreement must be in a form approved by the M-NCPPC Office of the General Counsel and recorded by deed in the Montgomery County Office of Land Records.*

## SECTION 2: NEIGHBORHOOD & SITE DESCRIPTION

### VICINITY

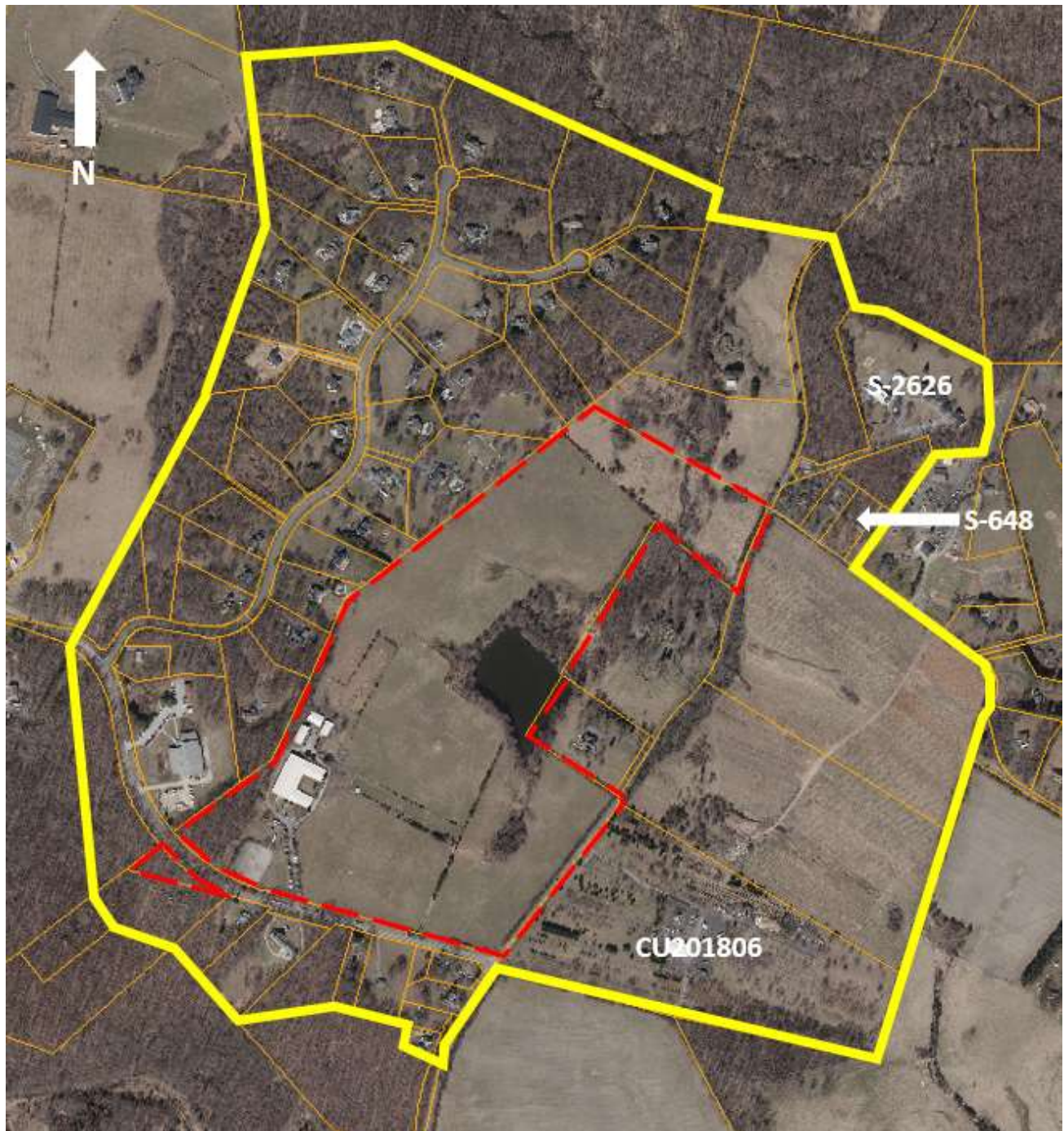
The Subject Property outlined in Figure 1 in the red dashed line is located at 5011 Riggs Road, Gaithersburg 20882. The Property is located in the 2005 Olney Master Plan area.

As shown in Figure 1 below, Staff defined a neighborhood for purposes of analyzing this Conditional Use and its possible impacts on the character of the surrounding area. Staff determined the neighborhood based on properties that would be most impacted by the Conditional Use. Since the Solar Collection system is in the middle of the Property, Staff limited the neighborhood to mostly the abutting and confronting properties and neighborhoods. The neighborhood as defined is comprised of low-density residential development, agricultural uses and two Conditional Uses/Special Exceptions. The properties to the north, east and west are all zoned AR with a mix of low-density residential development and agricultural uses. Two properties to the northeast have Special Exception approval, one at 21515 Zion Road is a Special Exception for a Private Educational Institution (S-2626) and the other at 4513 Gregg Road is a Home Occupation for a photo studio (S-648). There is another property to the east at 21202 Zion Road which has approval for a Conditional Use for a



Landscape Contractor (CU201806). The properties to the south are zoned RE-2 and are primarily low-density residential development uses with some undeveloped parcels.

The Staff-defined Neighborhood- is shown below (Figure 1), and was defined by including the properties that are accessed from the road network immediately surrounding the Property.



*Figure 1: Vicinity Map with Staff-defined neighborhood highlighted in yellow and Subject Property outlined in red*

Staff identified three approved conditional use/special exception within the defined neighborhood:

1. 21515 Zion Road, S-2626: Private Educational Institution
2. 21201 Zion Road, CU201806: Landscape Contractor
3. 4513 Gregg Road, S-648: Home Occupation (Photo Studio)

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#### PROPERTY DESCRIPTION

The Subject Property (outlined in red) consists of 82.4 acres identified as Parcel P200 on Tax map 01-00004532. The Property has access from an existing driveway on Riggs Road. The Property is on the northwest corner of Riggs Road and Zion Road.

The Property is used as an Equestrian Facility and contains several barns and open pasture areas with one outdoor paddock. The Property also contains a forest stand surrounding a pond that is shared with one of the abutting neighbors to the east. The topography of the Property is made up of some rolling hills and plateaus. There is also a wetland area to the north end of the Property.





Figure 2 – Subject Property



## SECTION 3: PROJECT DESCRIPTION

### PROPOSAL

The Applicant proposes to construct a 2-megawatt Solar Collection System on a 4.92-acre portion of the 82.4-acre Property. The project will consist of solar arrays, fencing around the compound, associated landscaping and access drive from the barns to the solar array compound. Once constructed, there will be no on-site personnel and no traffic other than for the occasional maintenance of the facility.



*Figure 3: Proposed Site Conditions*





Figure 4: Front View of the Subject Property

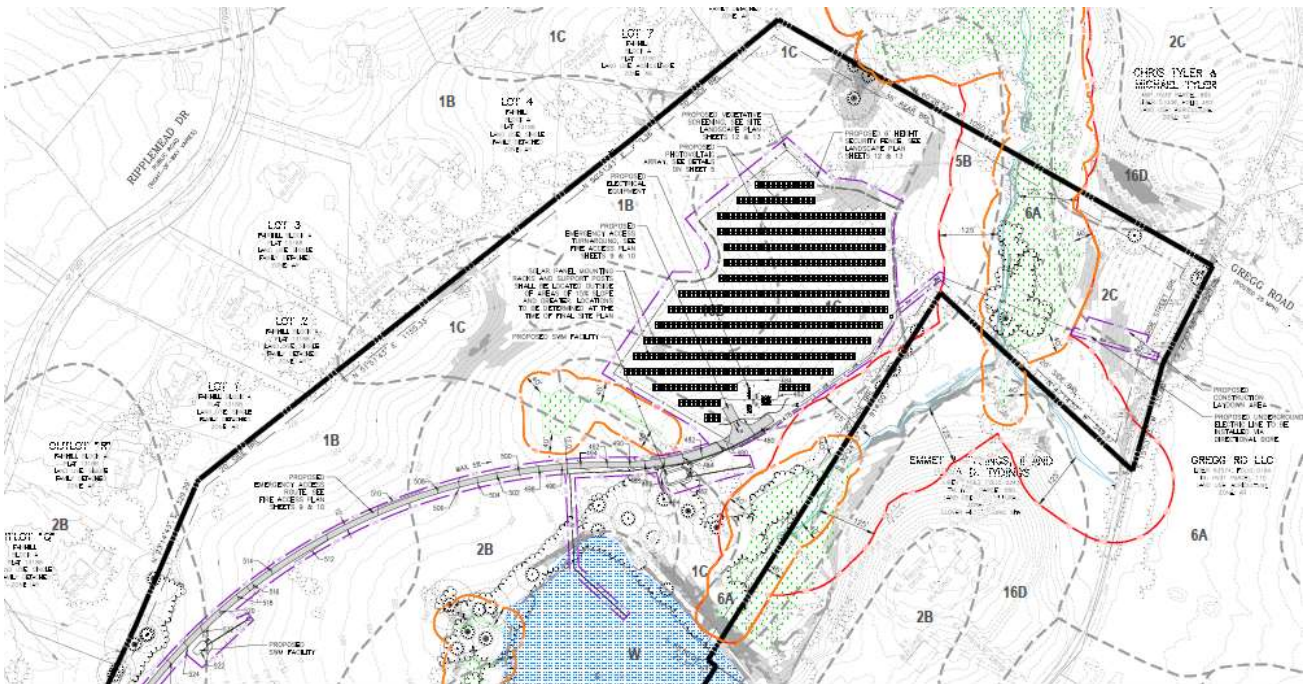


Figure 5: Proposed Solar Collection System

## ENVIRONMENT

The Application is subject to the Montgomery County Forest Conservation Law (Chapter 22A of the County Code) under Section 22A-4(b), a person required by law to obtain approval of a special exception or a conditional use, or a sediment control permit on a tract of land 40,000 square feet or larger, and who is not otherwise required to obtain an approval under subsection (a).

### *Environmental Guidelines*

A Natural Resource Inventory/Forest Stand Delineation (NRI/FSD) # 420221890 was approved for the Property on June 14, 2022. The Property is within the Hawlings River watershed, which is classified by the State of Maryland as Use IV-P watershed, and contains steep slopes, streams, wetlands, floodplains, and Environmental Buffers. There are large specimen trees distributed along the waterways and pond on the Property. The Property is not within Special Protection Area of Primary Management Area. However, the Property is within the Patuxent River Watershed Primary Management Area (PMA). The Preliminary Forest Conservation Plan (PFCP) submitted with this Application conforms with the Environmental Guidelines.

## SECTION 4: ANALYSIS AND FINDINGS

### CONDITIONAL USE NO. CU202305

***Section 3.7.2 of the Zoning Code requires the following:***

- 1. A Solar Collection System may be allowed as a Conditional Use in the AR zone if it exceeds a facility rated at more than 200% of on-site energy use and is less than 2 megawatts (AC). Where a Solar Collection System is allowed as a conditional use in the AR zone, it may be permitted by the Hearing Examiner under Section 7.3.1. Conditional Use and the following standards:***

***a. The Solar Collection System is prohibited:***

- i. on soils classified by the United States Department of Agriculture as either Soil Classification Category I or Category II;***

The proposed Solar Collection System will be located on soils in Category III, IV, & V according to the USDA soils map.

- ii. in a stream buffer;***

The proposed Solar Collection System will not be located within any Stream Buffers.

**iii. on wetlands; or**

The proposed Solar Collection System will not be located in wetlands or their buffer.

**iv. on slopes equal to or greater than 15%.**

The proposed Solar Collection System will not be located on slopes 15% or greater.

**b. Scraping topsoil from the site is prohibited.**

The Applicant is not proposing to scrape the topsoil from the Property.

**c. Grading and any soil removal are minimized.**

Grading and soil removal will be minimized as required. The installation of the solar supports, panels, fencing and electrical equipment can proceed on the naturally existing soils and topography of the Project site.

**d. The solar collection system is compliant with the requirements of the State's net metering program under Maryland Code §7-306, COMAR 20.50.10, and COMAR 20.62.**

The Project will be in compliance with requirements of the State's net metering program and all applicable codes and regulations.

**e. The area under the solar facility must be actively used for farming or agricultural purposes by satisfying one or more of the following requirements:**

**(i) designated pollinator-friendly under the Maryland Pollinator-Friendly Designation Program;**

**(ii) planted, managed, maintained, and used for grazing farm animals; or**

**(iii) planted, managed, maintained, and used for any other agrivoltaic plant material.**

The Applicant is proposing pollinator seeding under and around the Solar Collection System. The Applicant will work with the County to establish and maintain these plantings.

**f. The applicant must provide evidence that the local utility company will allow the Solar Collection System to be connected to the utility grid.**

The Applicant has provided a letter from PEPCO, dated July 27, 2022, authorizing connection to the utility grid.

**g. The applicant must provide evidence that the application was submitted to the Office of Agriculture.**



The Office of Agriculture (OAG) provided a letter to Staff, dated January 17, 2023, supporting this Application. The Applicant forwarded the final documents to the OAG after addressing final comments from Staff.

***h. Removal of trees or landscaping otherwise required or attached as a condition of approval of any plan, application, or permit for the installation or operation of a Solar Collection System is prohibited.***

There will be no trees or landscaping removed that were otherwise required as condition of any previous approvals.

***i. Any tree in or on a floodplain, stream buffer, steep slope, critical habitat, contiguous forest, or historic site, and any champion tree or other exceptionally large tree is left undisturbed unless a disturbance is allowed under Section 22A-12(b)(1).***

A Preliminary Forest Conservation Plan has been prepared in compliance with County Code Section 22A-12(b)(1) and submitted to M-NCPPC for review and approval concurrently with this application. None of the trees being removed are in a flood plain, stream buffer, steep slope, critical habitat, contiguous forest, or historic site. The forest proposed for removal does not prevent contiguous forest from remaining adjacent to the clearing.

***j. Except for pad areas for transformers and electrical equipment, the use of concrete is prohibited.***

The use of concrete is only limited to the transformer and electrical equipment pads.

***k. Screening that satisfies Section 59.6.5.3.C.8 (Option A) on the sides of the facility within 200 feet of any neighboring house is required; however, a fence may not be required or prohibited.***

The solar array and associated compound is more than 200 feet from any neighboring house; therefore, no screening is required. However, the Applicant is providing landscaping along the uphill side of the compound to help screen from the neighboring house to the east which is over 200 feet away.

***l. The Hearing Examiner's decision must consider the recommendations of the Office of Agriculture.***

Staff received a letter from the OAG, dated January 17, 2023, in support of this Application.

***m. The applicant must include a calculation of the total acreage used for the Solar Collection System, including any required setbacks and all acreage within the fenced or shrubbed area.***

The proposed fenced area is 4.92 acres and the net area that includes the access road totals 7.73 acres.

***n. The land area approved for the Conditional Use, in addition to all other Conditional Use approvals for solar facilities in the AR zone, will not exceed 1,800 acres of land.***

This is the first Conditional Use application for a Solar Collection System in the AR zone; therefore, the county is well under the 1,800 acres of land.

***Section 59.7.3.1.E.***

***2. Per Section 59.7.3.1.E., to approve a conditional use application, the Hearing Examiner must find that the proposed development:***

***a) satisfies any applicable previous approval on the subject site or, if not, that the previous approval must be amended.***

There are no previous approvals on the subject Site.

***b) satisfies the requirements of the zone, use standards under Article 59-3, and to the extent the Hearing Examiner finds necessary to ensure compatibility, meets applicable general requirements under Article 59-6;***

***i. Use Standards for Solar Collection System- Section 59.3.7.2.B.2***

The proposed Solar Collection System satisfies the use standard in Section 59.3.7.2.B.2

***ii. Development Standards***

The Subject Property is in the AR zone, which allows a Solar Collection System as a Conditional Use. The Project complies with all development standards of the AR zone, as shown on the Development Standards Table below.

*Table 1: Conditional Use Development and Parking Standards (Agricultural Reserve- AR)*

| <b>Development Standard<br/>Section XXX</b> | <b>Permitted/<br/>Required</b> | <b>Existing/Proposed*</b> |
|---|--------------------------------|---------------------------|
| Minimum Lot Area                            | 25 acres                       | 82.39 acres               |
| Minimum Lot Width at Front Building Line    | 125 feet                       | > 125 feet                |
| Minimum Lot Width at Front Lot Line         | 25 feet                        | >25 feet                  |
| Maximum Density                             | 1 dwelling/25 acres            | N/A                       |
| Maximum Building Lot Coverage               | 10%                            | 1%                        |
| Minimum Front Setback                       | 50 feet                        | 600+ feet                 |
| Minimum Side Setback                        | 20 feet                        | 230 feet                  |
| Minimum Sum of Side Setbacks                | N/A                            | N/A                       |
| Minimum Rear Setback                        | 35 feet                        | 225 feet                  |

|   |         |     |
|---|---------|-----|
| Maximum Height  | 50 feet | N/A |
| <b>Vehicle Parking Requirement<br/>(Section 59.6.2.4.B)</b> | N/A     | N/A |

\*There is no proposed development with this Application.

### **iii. General Requirements**

**Article 59-6 has the following requirements which help ensure compatibility:**

#### **6.2 Parking**

No parking is required for this use. If service or maintenance is needed, there is sufficient area on the Property for parking.

#### **6.4 Landscaping and Lighting**

##### **Lighting**

No lighting is being proposed with the Application.

#### **6.5 Screening**

##### **Screening**

The Applicant is not required to provide screening because the facility is more than 200 feet away from any neighboring house (pursuant to 59.3.7.2.B.2.k). However, the Applicant is providing landscaping along the uphill side of the compound to provide screening to the east.

#### **6.7 Signs**

##### **Signage**

No signage is being proposed with this Application.

**c) substantially conforms with the recommendations of the applicable master plan;**

#### 2005 Olney Master Plan

The Site is located within the Northern Olney area of the 2005 *Olney Master Plan* area, which has no specific recommendations for the Property other than the continuation of its existing AR Zone (formerly known as RDT). The area is generally to remain agricultural and rural. The Solar Collection System will serve to support and enhance the existing agricultural equestrian facility on the Property.

#### 1993 Patuxent River Watershed Functional Master Plan

The Property is within the Patuxent River Primary Management Area (PMA), which was limited by the 1993 *Functional Master Plan for the Patuxent River Watershed* to 10 percent imperviousness.

#### Impervious Areas:

Due to proximity to tributary streams, the Property is located within the Patuxent River Primary Management Area (PMA). The PMA on the Property is the land area within 1/8 mile (660 feet) of the streams on and near the property. The 660-foot-wide PMA consists of the stream valley buffer and the

transition area. There are specific requirements outlined in the Environmental Guidelines for properties located within the PMA. The stream valley buffer is delineated based on the stream buffer calculations outlined in the Environmental Guidelines. The remaining area within the 660-foot-wide PMA is the transition area. To protect the water quality within the Patuxent watershed, the Environmental Guidelines establish impervious limits and states the following:

Patuxent River Primary Management Area (PMA): Overall imperviousness within the PMA transition area of a development site should not exceed 10 percent. If a higher imperviousness is desirable in the transition area to maintain community character, achieve compatibility and/or accomplish master plan goals, imperviousness may be averaged over the entire site (i.e., not to exceed 10 percent on the entire site, p. 25).

There is currently no existing development within the PMA transition area. The new construction to accommodate the proposed use will add 0.63 acres of impervious surfaces which equates to 8.4 percent imperviousness within the transition area.

The project is below the ten percent threshold recommended by the Environmental Guidelines.

- Impervious surfaces are limited to no more than 10.0 percent of the Subject Property as shown on the Impervious Surface Plan dated, February 7, 2023.
- Prior to the start of any clearing, grading, or demolition on the Subject Property, the owner of the Subject Property must enter into an agreement with the Planning Board to limit impervious surfaces within the transition area of the Patuxent River Primary Management Area (“PMA”) on the Subject Property to no more than 10.0 percent, as shown on the Impervious Surface Plan dated, February 7, 2023. The agreement must be in a form approved by the M-NCPPC Office of the General Counsel and recorded by deed in the Montgomery County Office of Land Records.

Accordingly, the proposed use substantially conforms to the recommendations of the 1993 *Functional Master Plan for the Patuxent River Watershed*.

***d) is harmonious with and will not alter the character of the surrounding neighborhood in a manner inconsistent with the plan; The proposal is harmonious with, and will not alter the character of, the surrounding neighborhood.***

The project is harmonious with and will not alter the character of the surrounding neighborhood with a minimal amount of noise, traffic, and visual impacts. The project is well within the boundaries of the more than 82-acre Property with natural screening along most areas along with some additional screening that will be provided as part of this project.

***e) will not, when evaluated in conjunction with existing and approved conditional uses in any neighboring Residential Detached zone, increase the number, intensity or scope of***



***conditional uses sufficiently to affect the area adversely or alter the predominantly residential nature of the area; a conditional use application that substantially conforms with the recommendations of a master plan does not alter the nature of an area;***

The Property is zoned AR and is not located in a Residential Detached zone. This application does not adversely affect or alter the predominantly low-density residential and agricultural uses in the area.

- f) will be served by adequate public services and facilities including schools, police and fire protection, water, sanitary sewer, public roads, storm drainage, and other public facilities. If an approved adequate public facilities test is currently valid and the impact of the conditional use is equal to or less than what was approved, a new adequate public facilities test is not required. If an adequate public facilities test is required and:***
- i. if a preliminary subdivision plan is not filed concurrently or required subsequently, the Hearing Examiner must find that the proposed development will be served by adequate public services and facilities, including schools, police and fire protection, water, sanitary sewer, public roads, and storm drainage, or***
  - ii. if a preliminary subdivision plan is filed concurrently or required subsequently, the Planning Board must find that the proposed development will be served by adequate public services and facilities including schools, police and fire protection, water, sanitary sewer, public roads, and storm drainage, and***

Adequate public facilities exist to serve the proposed project, which does not require water or sanitary sewer.

The Applicant has obtained PEPCO approval to tie into their grid system with the proposed Solar Collection System. The Applicant has submitted a Fire Department Access Plan with DPS and is waiting for approval of the plan.

The proposed solar collection system is located on Riggs Road, approximately 1,000 feet westbound from the intersection of Zion Road and Riggs Road. East of Zion Road, Riggs Road is recognized as a Rustic Road. The section fronted by the Subject Property is not designated as a Rustic Road. Access to the proposed facility is provided via an existing driveway from Riggs Road. The proposed use is not expected to generate regular daily peak-hour trips; it will at most generate a few intermittent trips on a monthly basis. The proposed use will have a de minimis impact on local transportation. The property is exempt from completing a Transportation Impact Study because the site will not generate 50-weekday net-new peak-hour trips.

The Subject Property is also exempt from providing frontage improvements as it is located within a Rural Zone, as the county Road Code dictates. Per section 49-33(e), properties located within a Rural Zone are exempt from providing pedestrian and bicycle improvements. The 2018 *Bicycle Master Plan* does not give any recommendations for bicycle facilities on Riggs Road.

- g) will not cause undue harm to the neighborhood as a result of a non-inherent adverse effect alone or the combination of an inherent and a non-inherent adverse effect in any of the following categories:***
- i. the use, peaceful enjoyment, economic value or development potential of abutting and confronting properties or the general neighborhood;***
  - ii. traffic, noise, odors, dust, illumination, or a lack of parking; or***
  - iii. the health, safety, or welfare of neighboring residents, residents, visitors, or employees.***

The Zoning Ordinance defines inherent adverse effects as “adverse effects created by physical or operational characteristics of a conditional use necessarily associated with a particular use, regardless of its physical size or scale of operations.” Non-inherent adverse effects, on the other hand, are those associated with a conditional use “not necessarily associated with the particular use or created by an unusual characteristic of the site” (59.1.4.2). Inherent adverse effects alone are not a sufficient basis to deny a conditional use application. Non-inherent adverse effects, either alone or in combination with inherent effects, are sufficient to deny an application.

To determine the impact of adverse effects on the neighborhood in which a proposed conditional use is located, analysts have focused on seven characteristics: size, scale, scope, light, noise, traffic, and environment. In this case, those effects typically and necessarily associated with a Solar Collection System are considered inherent effects, and those not usually associated with the use or created by site characteristics are considered noninherent effects. The physical and operational characteristics inherent with a Solar Collection System are:

- ground mount solar arrays
- access road
- temporary construction noise
- visual impacts (arrays are 6’-6” high & fence is 6’-0” high)
- solar array compound that may be enclosed within the fence and landscape screening
- limited vehicle trips for construction and maintenance.

The Solar Collection System will not be detrimental to surrounding properties and Staff has identified no non-inherent adverse effects associated with this application.

The Project will be screened by existing trees, so it will have a limited visual impact, and will not cause any objectionable noise, fumes, or illumination or decrease in the economic value of surrounding properties. The proposed use will have no adverse effect on road congestion or safety, as no on-site personnel are required. Once the Solar Collection System is constructed, the only traffic to the facility would be for routine maintenance or emergency repair, which is expected to be only once every 2 to 3 months. There will be no noise generated by this Site. The solar arrays and associated equipment are located on a secure foundation. There will be no offensive odors emitted by the equipment. The Site will not cause any vibrations.

The Conditional Use generates almost no traffic and does not have a parking requirement. There is no noise, odors, dust, or illumination associated with the Application. The Proposed

Use, provided all requirements and conditions of the use are satisfied, will have no adverse impacts on the health, safety, or welfare of neighboring residents, visitors, or employees.

- 3. Any structure to be constructed, reconstructed, or altered under a conditional use in a Residential Detached zone must be compatible with the character of the residential neighborhood.**

The Property is located in the AR zone and is not located in a Residential Detached zone, so this section does not pertain to this application.

- 4. The fact that a proposed use satisfies all specific requirements to approve a conditional use does not create a presumption that the use is compatible with nearby properties and is not sufficient to require conditional use approval.**

The use is compatible with the nearby properties and the staff recommends approval with conditions.

- 5. In evaluating the compatibility of an agricultural conditional use with surrounding Agricultural or Rural Residential zoned land, the Hearing Examiner must consider that the impact does not necessarily need to be controlled as stringently as if it were abutting a Residential zone.**

The proposed use of a Solar Collection System is not considered an agricultural conditional use, so this section does not pertain to this application.

- 6. The following conditional uses may only be approved when the Hearing Examiner finds from a preponderance of the evidence of record that a need exists for the proposed use to serve the population in the general neighborhood, considering the present availability of identical or similar uses to that neighborhood:**

- a) Filling Station;**
- b) Light Vehicle Sales and Rental (Outdoor);**
- c) Swimming Pool (Community); and**
- d) the following Recreation and Entertainment Facility use: swimming pool, commercial.**

This section does not pertain to this application.

- 7. The following conditional uses may only be approved when the Hearing Examiner finds from a preponderance of the evidence of record that a need exists for the proposed use due to an insufficient number of similar uses presently serving existing population concentrations in the County, and the uses at the location proposed will not result in a multiplicity or saturation of similar uses in the same general neighborhood:**

- a) Funeral Home; Undertaker;**
- b) Hotel, Motel;**
- c) Shooting Range (Outdoor);**

- d) Drive-Thru**
- e) Landfill, Incinerator, or Transfer Station; and**
- f) a Public Use Helipad, Heliport or a Public Use Helistop.**

This section does not pertain to this application.

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## PRELIMINARY FOREST CONSERVATION PLAN

### ***All Forest Conservation Law, Chapter 22A requirements are satisfied.***

The Application meets the requirements of Chapter 22A of the Montgomery County Forest Conservation Law.

A Preliminary Forest Conservation Plan has been submitted for review.

The net tract area for the project is equal to the Property size of 82.39 acres minus the amount of land to remain in commercial agricultural production, 74.87 acres, for a net tract area of 7.52 acres subject to Chapter 22A. Within the 7.5-acre net tract area there is 0.30 acres of forest.

The project proposes to clear 0.30 acres existing forest, small area on west side of existing barn. Based on the land use category, Agricultural Resource Area (ARA) and the forest conservation worksheet's afforestation and reforestation thresholds (20% and 50% respectively) the application generates a 1.50-acre planting requirement. The applicant is proposing to meet the entire 1.5 Acre planting requirement on the overall parent tract.

### *Forest Conservation Variance*

Section 22A-12(b)(3) of Montgomery County Forest Conservation Law provides criteria that identify certain individual trees as high priority for retention and protection ("Protected Trees"). Any impact to these trees, including removal of the subject tree or disturbance within the tree's critical root zone ("CRZ") requires a variance under Section 22A-12(b)(3) ("Variance"). Otherwise, such resources must be left in an undisturbed condition. An applicant for a variance must provide certain written information in support of the required findings in accordance with Section 22A-21 of the County Forest Conservation Law. The law requires no impact to trees that: measure 30 inches or greater DBH; are part of an historic site or designated with an historic structure; are designated as a national, State, or County champion trees; are at least 75 percent of the diameter of the current State champion tree of that species; or trees, shrubs, or plants that are designated as Federal or State rare, threatened, or endangered species.

### *Variance Request*

This Forest Conservation Plan variance request is for one (1) on-site specimen tree to be removed and six (6) on-site trees to be impacted by construction activities. The trees identified in this variance



request for removal or CRZ impacts are shown on the Forest Conservation Plan. The trees to be removed are either located within the limits of disturbance or the LOD impacts to their critical root zone are too large to expect tree survival.

| <b>Tree No.</b> | <b>Species</b> | <b>DBH in Inches</b> | <b>Tree Condition</b> | <b>% CRZ Impact</b> | <b>% Proposed Impervious Area w/in CRZ</b> | <b>Reason for Disturbance</b>            | <b>Preserve/ Remove</b> |
|-----------------|----------------|----------------------|-----------------------|---------------------|--|--|-------------------------|
| 13              | Silver Maple   | 46"                  | Fair                  | 12%                 | N/A  | Proposed bioretention facility & grading | Preserve                |
| 15              | Silver Maple   | 45"                  | Poor                  | 43%                 | 10%  | Proposed emergency access road & grading | <b>Remove</b>           |
| 86              | White Oak      | 38"                  | Good                  | 10%                 | 4%   | Proposed emergency access road & grading | Preserve                |
| 89              | Tulip Poplar   | 32"                  | Good                  | 27%                 | 11%  | Proposed emergency access road & grading | Preserve                |
| 91              | Tulip Poplar   | 50"                  | Good                  | 30%                 | 9%   | Proposed emergency access road & grading | Preserve                |
| 93              | Red Oak        | 42"                  | Poor                  | 15%                 | 7%   | Proposed emergency access road & grading | Preserve                |
| 95              | Tulip Poplar   | 33"                  | Fair                  | 16%                 | 7%   | Proposed emergency access road & grading | Preserve                |

*Table 1: Variance Trees to be Impacted/Removed*

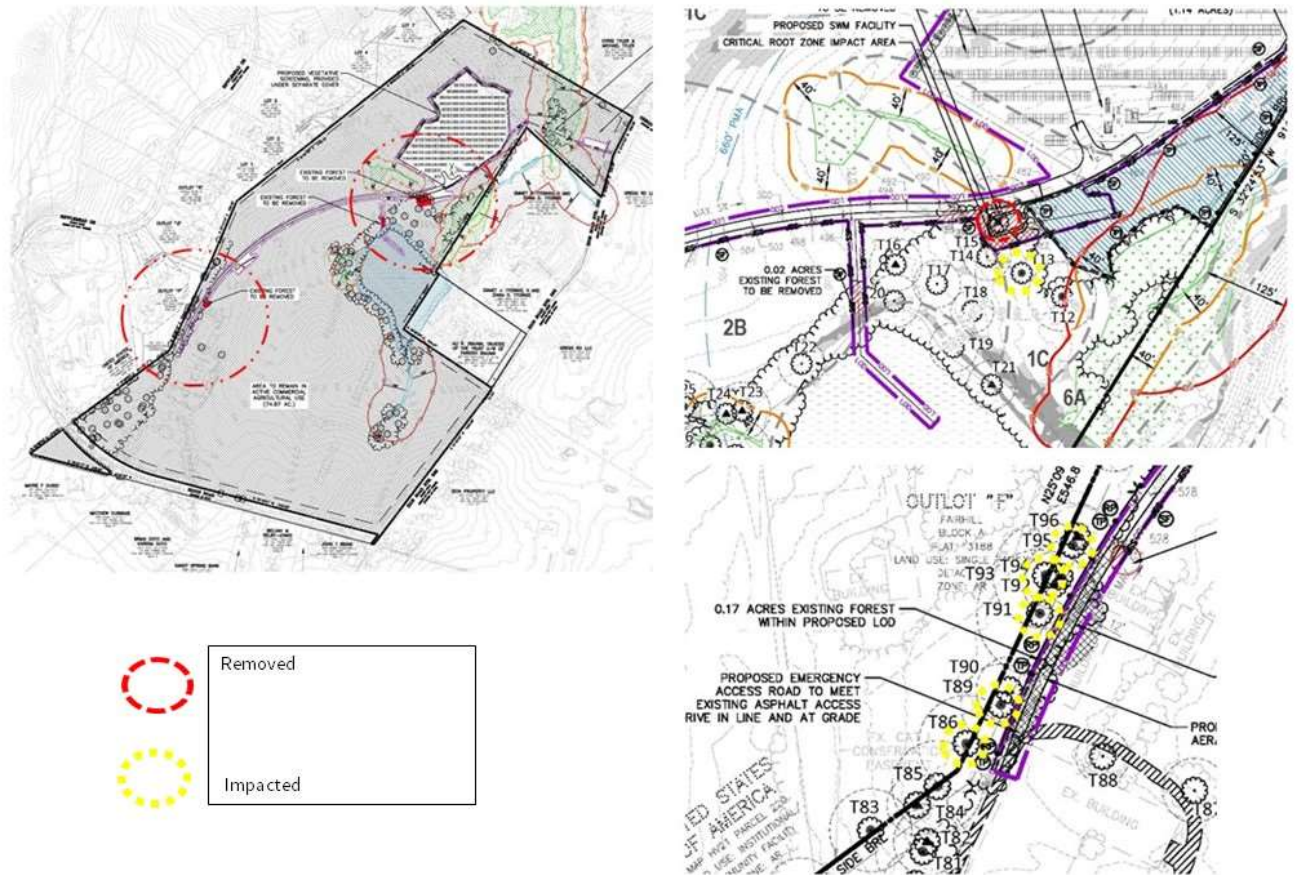


Figure 1: Impacted Variance Trees

### Unwarranted Hardship Basis

Per Section 22A-21, a variance may only be granted if the Planning Board finds that leaving the requested trees in an undisturbed state would result in unwarranted hardship, denying the Applicant reasonable and significant use of the Property. In this case, there are several special conditions on the Property which would cause unwarranted hardship, absent of a variance for removal of specimen trees.

T13, a 46" Silver Maple in fair condition is located within an existing forest stand in the northern/central portion of the property. The tree will be impacted by the installation of a proposed bioretention facility and associated grading improvements. The impact from this encroachment will be minimized to the greatest extent practicable utilizing temporary tree protection fence and signage.

T15, a 45" Red Maple in poor condition is located within an existing forest stand in the northern/center portion of the property. The tree will be impacted by the installation of the proposed emergency and construction access road and associated grading. Due to both existing health/condition of the tree and the severity of construction impacts within the CRZ, the tree is proposed to be removed. T86, a 38" White Oak in good condition is located within an existing forest stand along the western property line.

The tree will be impacted by the installation of the proposed emergency and construction access road and associated grading. The impact from this encroachment will be minimized to the greatest extent possible utilizing temporary tree protection fence, signage, root pruning (via air excavation) and root aeration matting as shown on the FFCP.

T89, a 32" Tulip Poplar in good condition is located within an existing forest stand along the western property line. The tree will be impacted by the installation of the proposed emergency and construction access road and associated grading. The impact from this encroachment will be minimized to the greatest extent possible utilizing temporary tree protection fence, signage, root pruning (via air excavation) and root aeration matting as shown on the FFCP.

T91, a 50" Tulip Poplar in good condition is located within an existing forest stand along the western property line. The tree will be impacted by the installation of the proposed emergency and construction access road and associated grading. The impact from this encroachment will be minimized to the greatest extent possible utilizing temporary tree protection fence, signage, root pruning (via air excavation) and root aeration matting as shown on the FFCP.

T93, a 42" Red Oak in poor condition is located within an existing forest stand along the western property line. The tree will be impacted by the installation of the proposed emergency and construction access road and associated grading. The impact from this encroachment will be minimized to the greatest extent possible utilizing temporary tree protection fence, signage, root pruning (via air excavation) and root aeration matting as shown on the FFCP.

T95, a 33" Tulip Poplar in fair condition is located within an existing forest stand along the western property line. The tree will be impacted by the installation of the proposed emergency and construction access road and associated grading. The impact from this encroachment will be minimized to the greatest extent possible utilizing temporary tree protection fence, signage, root pruning (via air excavation) and root aeration matting as shown on the FFCP.

The access route to the solar project site was selected to minimize impacts to natural resources to the greatest extent possible while remaining compatible with the property owner's existing agricultural use, an equestrian riding and boarding facility. The Applicant's proposed location of the access road is the most viable route through the property owner's farm to the solar project site. A route around the west side of the barn to avoid the variance trees would create an unwarranted hardship on the current agricultural operations.

The need for a Variance in this case is based upon existing site conditions and compliance with necessary design and infrastructure elements that are required of any solar collection system conditional use permit application, such that if disturbance or removal of Protected Trees pursuant to Chapter 22A is not allowed in this case, the Applicant would suffer unwarranted hardship.

Therefore, the Applicant has a sufficient unwarranted hardship to justify a variance request.

Section 22A-21 of the County Forest Conservation Law sets forth the findings that must be made by the Planning Board for a variance to be granted.

#### *Variance Findings*

**1. Will not confer on the applicant a special privilege that would be denied to other applicants.**

Granting the variance will not confer a special privilege on the Applicant as the removal and impacts of the trees is due to the location of the trees and necessary site design requirements unique to a Solar Collection Facility. The Applicant proposes removal of the 1 tree with mitigation. Therefore, granting of this variance is not a special privilege that would be denied to other applicants.

**2. Is not based on conditions or circumstances which are the result of the actions by the applicant.**

The requested variance is not based on conditions or circumstances which are the result of actions by the Applicant. The requested variance is based upon the existing site conditions and necessary design requirements of this specific use.

**3. Is not based on a condition relating to land or building use, either permitted or non-conforming, on a neighboring property.**

The requested variance is a result of the existing conditions and not as a result of land or building use on a neighboring property.

**4. Will not violate State water quality standards or cause measurable degradation in water quality.**

The variance will not violate State water quality standards or cause measurable degradation in water quality. The FCP proposes to provide mitigation for the removal of Protected Trees in the form of tree planting on the Property. These trees will replace any water quality functions that may be lost by the removed trees.

#### *Mitigation for Trees Subject to the Variance Provision*

Mitigation for Trees Subject to the Variance Provision – There is one tree to be removed in this variance request resulting in 45 inches of DBH removed. The Applicant proposes mitigation at a rate that approximates the form and function of the trees removed. These trees will be replaced at a ratio of approximately 1-inch caliper for every four inches removed using trees that are a minimum of three caliper inches in size. This results in a total mitigation of 11.25 inches with the installation of 4 3-inch caliper trees. Although these trees will not be as large as the trees lost, they will provide some

immediate benefit and ultimately replacing the canopy lost by the removal of these trees. These mitigation trees must be overstory trees native to the region. There is some disturbance within the critical root zones of five trees; however, these trees will not be removed, it will receive adequate tree protection measures, the roots will regenerate, and the functions it currently provides will continue. Therefore, no mitigation is recommended for trees impacted but retained.

#### *Variance Recommendation*

Staff recommends the Planning Board approve the variance request.

#### *CONCLUSION*

The Preliminary Forest Conservation Plan meets all applicable requirements of Chapter 22A of the County Code. Therefore, Staff recommends that the Planning Board approve the Preliminary Forest Conservation Plan with the conditions cited in this Staff Report.

## **SECTION 5: COMMUNITY CORRESPONDENCE**

As of the date of this Staff Report, Staff has not received any letters of correspondence from the community.

## **SECTION 6: CONCLUSION**

The proposed conditional use complies with the general conditions and standards of a Solar Collection System, subject to the recommended conditions of approval. The proposed use is consistent with the goals and recommendations of the *2005 Olney Master Plan* and the *1993 Functional Master Plan for the Patuxent River Watershed*, will not alter the residential character and agricultural uses of the surrounding neighborhood, and will not result in any unacceptable noise, traffic, or environmental impacts on surrounding properties. Staff recommends approval of the Conditional Use with conditions and transmittal of comments to the Hearing Examiner and approval of the associated Forest Conservation Plan.

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### **ATTACHMENTS**

Attachment A: Letter from The Office of Agriculture

Attachment B: Letter from PEPCO

Attachment C: Permission Email from Neighbor that shares the pond

Attachment D: Rustic Roads Advisory Letter



**THE OFFICE OF AGRICULTURE**

Marc Elrich  
*County Executive*

Jeremy V. Criss  
*Director*

DATE: January 17, 2023

TO: Mark Beall, Senior Planner, Upcounty Division,  
Montgomery County Planning Department

FROM: Jeremy Criss, Director *Jeremy V. Criss*  
Office of Agriculture

SUBJECT: Riggs Road Solar Project, CU #202305

When ZTA 20-01 was adopted by the County Council on February 23, 2021, it contained specific language for applicants proposing to construct 2MW Solar Collection Facilities in the Agricultural Reserve (AR) Zone. On lines 155-156, ZTA 20-01 state, "The applicant must provide evidence the application was submitted to the Office of Agriculture."

With respect to the Office of Agriculture's role in a 2MW solar collection facility in the AR Zone, lines 171 – 172 of ZTA 20-01 state," The Hearing Examiner's decision must consider the recommendations of the Office of Agriculture."

After reviewing the documents related to the Conditional Use application #202305, the Office of Agriculture has the following comments:

- The applicant proposes to install 4.92-acres of solar panels on class III soils or higher, on slopes less than 15%, with out stripping topsoil and minimizing grading on-site.
- The applicant proposes to meet the farming or agricultural activity requirement by planting the area underneath the solar panels in a pollinator habitat with an appropriate seed mix during the correct planting season using best practices.

Based on the review of the community solar project documents for CU#202305, the Office of Agriculture supports the Riggs Road Solar Project as proposed.





July 27, 2022

Free Rein Solar Farm, LLC  
4611 Sleaford Rd  
Bethesda, MD 20814

RE: 1 MW Solar Photovoltaic ("PV") Interconnection with Free Rein Solar Farm, LLC at 5011 Riggs Road, Gaithersburg, MD 20882 (CSEGS)

Dear Free Rein Solar Farm, LLC (Attn: Mike Chapman),

The above system has been identified as a community solar project. Pepco has prepared the following requirements to insure safe and reliable operation. Pepco approves the interconnection of the Project with the Company's electric distribution system with the delineated requirements and customer agreement to pay the system upgrade cost of \$288,092<sup>1</sup>. (You will be referred to in this letter agreement as the "owner" or the "customer."); See Attachment

Distribution: 350 ft.. Feeder 15906 extension, necessary poles and associated 477 ACSR conductor, dedicated gang switch, recloser package, primary meter package, and associated voltage regulator upgrades

Telecom: Coordination for remote trip telemetry from recloser

| Cost Breakdown          |                  |
|-------------------------|------------------|
| Distribution            | \$258,092        |
| Telecom                 | \$30,000         |
| <b>Project Estimate</b> | <b>\$288,092</b> |

In order to proceed with the application, please indicate your intention to move forward by signing, dating and returning the attachment to the address below within 30 days. After sending a signed agreement, Pepco will issue an invoice for upgrades after which the customer may send in payment. **Pepco notes that Free Rein Solar Farm, LLC will be paying 50% of total cost towards engineering and procurement after receipt of this signed letter. The remaining balance will be due prior to the release of construction. Pepco construction will not begin until the project costs have been paid in full.** The estimated time to complete this work is 12-18 months after receipt of a fully executed interconnection agreement, after interconnection work is invoiced, and after payment is received. Before construction can begin, and before approval to install can be issued, the Company requests payment for the full amount. Please provide a response or a written request for an extension within 30 days; otherwise the application will be withdrawn.

Best Regards,

Erika Knight,  
Project Manager

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<sup>1</sup> Cost estimate and scope of work are high level, based on knowns and assumptions from the information provided on the application and/or a preliminary site visit. Project costs are subjected to a true up at the customer's expense once completed.

**Attachment**

**Upgrade and Operating Requirements**

- Operate inverters at a leading power factor ("PF") of (**1.00**), absorbing Volt-amperes-reactive ("VARs")
- The Customer must provide us with a relay coordination study that demonstrates how their protective relay scheme interties with the Pepco system under fault current conditions.
- Relay Equipment, final one-line, and settings will be checked after the Customer submits a relay coordination study. This must be approved by Protection & Controls Engineering prior to approval to operate.
- All upgrades must be completed before permission to operate is granted.

*Also applied are the following general requirements:*

**A. Inverter Operation:**

*The inverters used for this project shall be capable of operating at a power factor(s) specified by the Company (0.95 lead to 0.95 lag). It is the responsibility of the developer/customer to obtain inverters that can operate with these requirements while also meeting all applicable requirements of the latest IEEE and UL standards such as but not limited to IEEE 1547 and UL 1741.*

*The system shall be set to unity power factor unless otherwise required by the Company. The inverter shall be able to regulate output based on the input of the reverse power relay that is monitoring the power flowing over the supply lines to the customer facility or facilities.*

**B. Operating and Future Requirements:**

- a) The Distributed Resource ("DR") facility shall not cause high voltage on the distribution feeder. "High voltage" will be defined as voltages over 126V per ANSI (American National Standards Institute) C84.1. If the DR facility shall cause high voltage on the distribution feeder, the DR facility shall reduce or cease operations until the situation is remedied, at which time the Company shall authorize the resumption of normal operations. Normal operations shall not resume until Pepco provide authorization.*
- b) The DR facility shall not cause voltage fluctuations above 2% at the point of interconnection. If it exceeds that amount, the DR facility shall reduce or cease operations until the situation is remedied, at which time the Company shall authorize the resumption of normal operations. Normal operations shall not resume until Pepco provides authorization.*
- c) If the operation of the DR facility causes any adverse effects on the automatic line equipment such as switched capacitor banks, voltage regulators or the Under Load Tap Changer ("ULTC") at the substation, or secondary network equipment, the owner shall cooperate in reasonable mitigation efforts.*
- d) The Company may request that the PV system be disconnected during system emergencies, restoration or other unforeseen events and the owner shall have means of complying with the Company's request in a timely manner. Once the system emergency or other unforeseen event subsides, the Company shall*

*authorize the resumption of normal operations. Normal operations shall not resume, however, until Pepco shall provide authorization.*

- e) If the PV inverters' anti-islanding measures fail to perform, the DR facility shall cease operations until such time as the equipment is remedied or a transfer trip scheme is implemented at the customer's expense.*
- f) If the Company reasonably determines the need to install additional metering and telemetry and/or the capability of remote disconnect, the owner shall allow this to be installed as expeditiously as possible.*
- g) If Pepco determines the need to install power quality monitoring equipment on the inverter output to collect data that will confirm the required PF settings or allow evaluation of other electrical characteristics of the PV system, the owner agrees to accommodate installation of equipment and monitoring. This will be done in a manner that is intended to impact the PV operations as minimally as possible.*

The Company's obligation to provide safe and reliable service is paramount. By signing below, the customer acknowledges (i) that they understand the "Required Information," "Inverter Operation" and "Operating and Future Requirements" associated with Pepco's willingness and ability to interconnect with the Project and (ii) that the customer and/or its duly authorized representatives will supply the "Required Information" and implement and adhere to the "Inverter Operation" and "Operating and Future Requirements."

This letter agreement is not intended to confer rights upon either party that are inconsistent with the requirements of the Public Service Commissions' regulations governing interconnection. **and is a supplement to the Terms and Conditions for Interconnection for a Small Generator Facility.** Thank you for your cooperation and courtesies. We look forward to working with you.

Acknowledged and agreed this 17th day of August, 2022.

FOR THE CUSTOMER:

Signature: 

Name: Michael Chapman

Title: President

FOR THE OWNER (If different than customer):

Signature: \_\_\_\_\_

Name: same

Title: \_\_\_\_\_

FOR THE COMPANY:

Signature: 

Name: Alex Vermoer

Title: Manager GPC

**From:** Ali Irvani iravani.ali@gmail.com  
**Subject:** Re: Free Rein Solar -- Pond Access  
**Date:** February 12, 2023 at 12:09 AM  
**To:** Mike Chapman mc@freereinsolar.com

Note: Mr. Irvani is the Farm's neighbor to the southeast. The pond being proposed as the fire protection water source is mainly on Farm property, but also partially (roughly 10%) on Mr. Irvani's property.

Hi Mike,

How are you? Hope all is well with you and family. Marty, our next door neighbor, already told me about it a couple weeks ago. I also had a feeling that something was up when you did the survey of the pond at the end of last year.

Thank you very much for taking time and sharing it with me in detail. You got my trust and I have faith in you to do the right thing. **I am fine with it as long as it will be constructed sound and safe, without affecting the pond environment, and also does not fail on its own after a while, and the valve structure will be designed in a manner that only authorizes people such as fire department folks could open it in emergency cases.** We have a good number of people, mainly kids that we have noticed around the pond, probably trespassing, drinking and smoking. I just don't want any of them to be able to access the valves and furthermore be able to drain the water intentionally or accidentally.

Furthermore, just for my curiosity, what about the rest of farmland solar projects that do not have either ponds next door or public water/hydrants closeby! I think MoCo County is not fair to you and imposing unnecessary extra burden and cost to your project! It would be very interesting to find out what the county will come up with the Gregg Road project across Zion Rd (Staddler's properties). I assume you may know that they are doing the same project as yours across the road from us. They have no water source on that land. What does the county do in that case!?

All the best,  
ali

On Sat, Feb 11, 2023 at 1:58 PM Mike Chapman <[mc@freereinsolar.com](mailto:mc@freereinsolar.com)> wrote:

Ali,

The County Fire Marshall is requiring the solar project to provide a water source at the solar array for fire-fighting support. They suggested accessing the water in the pond for that purpose. Of course we don't expect it to ever be needed, but the Fire Marshal is asking us to install an intake system that is capable of flowing pond water to the solar array if needed. I know you value the pond as-is, and we don't propose to change it in any way that would be visible, but I want to discuss with you our proposal and make sure it would be acceptable to you.

We have prepared the attached description of the system, how it would function and the construction plan. Essentially we would be installing an 8-inch diameter PVC pipe horizontally into the pond with a wire screen intake on the end. If fire water is ever needed, the fire dept. would open a valve and water would flow down the hill to a hydrant that a truck could access. The intake pipe would be located about 2.5 feet below the surface of the water at the pond's minimum level and would not be visible. We've surveyed the pond and it contains orders of magnitude more water than would be needed for fire fighting. Our modeling also shows that the refill rate on the pond would be pretty quick, probably on the order of a couple of months if water were ever to be drawn. Also note that going forward, the solar project will in fact have a vested interest in keeping the pond as close as possible to its present state. We will participate in any future dam maintenance costs.

Please take a look at the attached document and let me know if you have questions and/or are generally OK with the plan. I'm available this week to have a discussion if you'd like and answer any questions. I appreciate your consideration of this development. I will commit to carrying out any construction as responsibly as possible and restoring/preserving the pond in its present state. The construction plan does not require the pond to be drained. Also note that I am talking with the company (Broadleaf) that you had work on the pond previously about doing the work.

Regards-  
Mike  
301-442-9712  
12





## RUSTIC ROADS ADVISORY COMMITTEE



DATE: March 6, 2023

TO: Mark Beall, Montgomery Planning Department

RE: Rustic Road Name and Classification: Zion Road (rustic)

Application and #: Rein Community Solar, CU202305

Address: 5011 Riggs Road, Gaithersburg

DATE OF COMMITTEE ACTION: March 2, 2023

### REVIEW AND RECOMMENDATIONS:

1. The Committee reviewed this Conditional Use plan for its impact on rustic Zion Road, where the electrical connection installation will take place. It is not known if equipment will enter the property from Zion, the extent to which the power line will be bored underground and from what direction, or whether some trenching will also occur.
2. The Committee requests that any loss of trees with diameter 4 inches or greater due to the installation of the electrical connection be mitigated with the same number of trees on site, and chosen from the Roadside Tree list.
3. The Committee asks that additional screening similar to that shown on the Landscape Plan for the north and west sides of the solar array be provided on the east side of the solar array anywhere that would be visible from Zion Road in the winter.

### OTHER INFORMATION:

The Committee appreciates the opportunity to comment on this project. If there are changes or additions to the work as reviewed, please submit those changes to the Committee.

Please feel free to contact us through our staff coordinator, Darcy Buckley, at [Darcy.Buckley@montgomerycountymd.gov](mailto:Darcy.Buckley@montgomerycountymd.gov). Thank you.

A handwritten signature in cursive script that reads "Laura Van Etten".

Laura Van Etten, Chair

### Committee Members:

N. Anne Davies, Barbara Hoover, Charles Mess,  
Kamran Sadeghi, Dan Seamans, Elena Shuvalov,  
Jamey Pratt

