



MONTGOMERY COUNTY PLANNING BOARD
THE MARYLAND-NATIONAL CAPITAL PARK AND PLANNING COMMISSION

MCPB No. 20-057
Site Plan No. 820200110
Fieldcrest Community Solar
Date of Hearing: July 16, 2020

OCT 01 2020

CORRECTED RESOLUTION

WHEREAS, under Section 59-7.1.2 of the Montgomery County Zoning Ordinance, the Montgomery County Planning Board is authorized to review site plan applications; and

WHEREAS, on February 28, 2020, Turning Point Energy ("Applicant") filed an application for approval of a site plan to construct a solar collection system on a portion of Parcel P707 on 20.07 acres of RE-1 zoned-land, in the Upper Rock Creek Overlay zone, located in the southwest quadrant of the intersection of Fieldcrest Road and Olney Laytonsville Road (MD 108); on Tax Map GU563 ("Subject Property"), in the Rural East Policy Area and 2004 *Upper Rock Creek Area Master Plan* ("Master Plan") area; and

WHEREAS, Applicant's site plan application was designated Site Plan No. 820200110, Fieldcrest Community Solar ("Site Plan" or "Application"); and

WHEREAS, following review and analysis of the Application by Planning Board staff ("Staff") and other governmental agencies, Staff issued a memorandum to the Planning Board, dated June 19, 2020, setting forth its analysis and recommendation for approval of the Application, subject to certain conditions ("Staff Report"); and

WHEREAS, on July 16, 2020, the Planning Board held a public hearing at which it heard testimony and received evidence on the Application; and

WHEREAS, at the hearing, the Planning Board voted to approve the Application subject to certain conditions, by the vote certified below.

NOW, THEREFORE, BE IT RESOLVED that the Planning Board approves Site Plan No. 820200110 for the construction of a Solar Collection System on the Subject Property, subject to the following conditions:¹

1. Land Use

- a. The Site Plan is limited to a Solar Collection System designed to produce no more than 2 megawatts (AC) of electricity, or the maximum electric generation level specified in Section 59.3.7.2 of the Zoning Ordinance.
- b. The Solar Collection System must be removed by the Applicant within 12 months of the date when the use is discontinued or abandoned by the system owner or operator, or upon termination of the useful life of the system, and the Subject Property must be returned to a natural state. The Solar Collection System will be presumed to be discontinued or abandoned if no electricity is generated by the system for a period of 12 continuous months.

2. M-NCPPC Department of Parks

~~Prior to final building permit inspection~~ ~~Prior to issuance of any building permit, or sediment control permit,~~ the Applicant must convey to Maryland-National Capital Park & Planning Commission ("Commission") approximately 8.02 acres of the Subject Property identified as "Park Conveyance Area" on the Certified Site Plan located on the west side of the Subject Property, for a master-planned natural surface trail connection between Fieldcrest Road and Rock Creek Stream Valley Unit 16. The land must be conveyed to the Commission in the form of a deed approved by the Commission's Office of General Counsel. The land to be conveyed must be free of any trash and unnatural debris prior to the deed of conveyance being recorded in the Land Records. Afforestation and any maintenance required within the conveyed area will require a Park Permit.

Site Plan

3. Solar Panel Design and Height

- a. The solar panels are limited to a maximum height of 10-feet, as measured from finished grade to the top of the panel.
- b. The Applicant must install only solar thermal or photovoltaic panels or shingles.
- c. The Applicant must install solar panels with textured glass or an anti-reflective coating.

¹ For the purpose of these conditions, the term "Applicant" shall also mean the developer, the owner or any successor(s) in interest to the terms of this approval.

- d. The Applicant must install a 7-foot-tall fence (without barbed wire) around the solar arrays, as shown on the Certified Site Plan.

Environment

4. Forest Conservation & Tree Save

The Applicant must comply with the conditions of approval for the Preliminary/Final Forest Conservation Plan ("FFCP") No. 820200110, approved as part of this Site Plan, including:

- a. 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.
- b. 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.
- c. The Applicant must install permanent Conservation Easement signage along the perimeter of the Category I Conservation Easement as shown on the approved FFCP.
- d. Prior to any demolition, clearing, grading or construction for this development Application, the Applicant must submit financial surety, in a form approved by Staff, to the M-NCPPC Planning Department for the 8.02 acres of afforestation planting.
- e. Prior to the start of any demolition, clearing, grading, or construction for this development Application, the Applicant must record a Category I Conservation Easement over all areas of forest retention, forest planting and environmental buffers as specified on the approved 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. The Book/Page for the easement must be referenced on the Certified Site Plan.
- f. The Applicant must install the afforestation plantings as shown on the approved FFCP, within the first planting season following the release of the 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.
- g. Prior to any demolition, clearing, grading or construction for this development Application, the Applicant must record an M-NCPPC approved Certificate of Compliance in an M-NCPPC approved off-site forest bank to satisfy the mitigation requirement of a 3:1 replacement rate for encroaching 1.77 acres (77,101.20 square feet) into a stream buffer within the Upper Rock Creek Special Protection Area by purchasing 5.31 acres (231,303.60 square feet) (3:1) of forest credit for planted forest or

- 10.62 acres (462,607.20 square feet) (6:1) of forest credit for existing forest. The off-site requirement may be met by purchasing from a mitigation bank elsewhere in the County, subject to Staff approval, if forest is unavailable for purchase within the Upper Rock Creek watershed.
- h. Prior to any demolition, clearing, grading or construction for this development Application, the Applicant must submit a five-year Maintenance and Management Agreement ("MMA") approved by the M-NCPPC Office of General Counsel. The MMA is required for all forest planting areas and landscape plantings credited toward meeting the requirements of the FFCP.
 - i. 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.
5. The Planning Board has reviewed and accepts the recommendations of the Montgomery County Department of Permitting Services ("MCDPS") – Water Resources Section in its Final Water Quality Plan and Stormwater Management Concept letter dated December 31, 2019 and revised May 1, 2020 and hereby incorporates them as conditions of the Site Plan approval. The Applicant must comply with each of the recommendations as set forth in the letter, which may be amended by MCDPS – Water Resources Section provided that the amendments do not conflict with other conditions of the Site Plan approval.
6. Stormwater Management and Final Water Quality Plan
The Applicant must comply with the conditions of approval for the Final Water Quality Plan including:
- a. Impervious surfaces are limited to no more than 1.0% of the Application within the Upper Rock Creek Overlay Zone as shown on the Impervious Surface Plan dated May 15, 2020.
 - b. Prior to the start of any demolition, clearing, grading, or construction on the Subject Property, the Applicant must enter into an agreement with the Planning Board to limit impervious surfaces to no more than 1.0% of the Application within the Upper Rock Creek Overlay Zone and as shown on the Impervious Surface Plan dated May 15, 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.

Transportation & Circulation/ Adequate Public Facilities (APF)

7. Pedestrian & Bicycle Circulation

- a. Prior to issuance of any building permit, or sediment control permit, the Applicant must submit to Staff for review a construction cost estimate for bikeable shoulders on Fieldcrest Road and Olney-Laytonsville Road, approved by MCDOT and MDSHA, respectively.
- b. Prior to final building permit inspection, the Applicant must provide a 5-foot wide bikeable shoulder along the Subject Property frontage on Fieldcrest Road, subject to final approval by the Montgomery County Department of Transportation ("MCDOT").
- c. Prior to final building permit inspection, the Applicant must provide a 6-foot wide bikeable shoulder along the Subject Property frontage on Olney-Laytonsville Road (MD 108), subject to final approval by the Maryland State Highway Administration ("MDSHA").

8. Validity

The Adequate Public Facility Review (APF) will remain valid for sixty (60) months from the date of mailing of the Planning Board Resolution for the Site Plan.

9. Fire Department Access and Water Supply

The Planning Board has reviewed and accepts the recommendations of the MCDPS – Fire Department Access and Water Supply Section in its letter dated June 6, 2019, and hereby incorporates them as conditions of approval. The Applicant must comply with each of the recommendations as set forth in the letter, which MCDPS may amend if the amendments do not conflict with other conditions of Site Plan approval.

10. The Planning Board has reviewed and accepts the recommendations of the MCDPS – Right-of-Way Plan Review Section in its memorandum dated May 11, 2020, and hereby incorporates them as conditions of approval. The Applicant must comply with each of the recommendations as set forth in the memorandum, which MCDPS may amend if the amendments do not conflict with other conditions of Site Plan approval.

11. Site Plan Surety and Maintenance Agreement

Prior to issuance of any building permit, or sediment control permit, the Applicant must enter into a Site Plan Surety and Maintenance Agreement with the Planning Board in a form approved by the M-NCPPC Office of General Counsel that outlines the responsibilities of the Applicant. The Agreement must include a performance bond(s) or other form of surety in accordance with Section 59.7.3.4.K.4 of the Montgomery County Zoning Ordinance, with the following provisions:

- a. A cost estimate of the materials and facilities, which, upon Staff approval, will establish the surety amount.
- b. The cost estimate must include applicable Site Plan elements, including, but not limited to plant material, fences, private utilities, and associated improvements of development, including storm drainage facilities. The surety must be posted before issuance of any building permit of development and will be tied to the development program.
- c. The bond or surety must be tied to the development program, and completion of all improvements covered by the surety for each phase of development will be followed by a site plan completion inspection. The surety may be reduced based upon inspector recommendation and provided that the remaining surety is sufficient to cover completion of the remaining work.

12. Development Program

The Applicant must construct the development in accordance with a development program table that will be reviewed and approved prior to the approval of the Certified Site Plan.

13. Certified Site Plan

Before approval of the Certified Site Plan, the following revisions must be made and/or information provided subject to Staff review and approval:

- a. Include the stormwater management concept approval letter, development program, and Site Plan resolution (and other applicable resolutions) on the approval or cover sheet(s).
- b. Add a note to the Site Plan stating that "M-NCPPC Staff must inspect all tree-save areas and protection devices before clearing and grading."
- c. Add a note stating that "Minor modifications to the limits of disturbance shown on the site plan within the public right-of-way for utility connections may be done during the review of the right-of-way permit drawings by the Department of Permitting Services."
- d. Modify data table to reflect development standards approved by the Planning Board.
- e. Ensure consistency of all details and layout between the Site and Landscape plans.
- f. Remove the 10' PUE along Subject Property frontage on MD 108 and add following note to the Site Plan: "No longitudinal dry utility is proposed within the right-of-way as part of this Site Plan."
- g. Amend the Park Conveyance Area Plan to reflect the 8.02-acre area as shown on Figure 10 of the Staff Report.

BE IT FURTHER RESOLVED that all site development elements shown on the latest electronic version of Fieldcrest Community Solar, Site Plan No. 820200110 and Final Water Quality Plan, submitted via ePlans to the M-NCPPC as of the date of the Staff Report, are required, except as modified by the above conditions of approval; and

BE IT FURTHER RESOLVED that having considered the recommendations and findings of its Staff as presented at the hearing and as set forth in the Staff Report, which the Board hereby adopts and incorporates by reference (except as modified herein), and upon consideration of the entire record, the Planning Board FINDS, with the conditions of approval, that:

1. *The development satisfies any previous approval that applies to the site.*

The Site is not subject to any previous approvals. A Preliminary Plan is not required because no building permits for habitable structures are proposed that would initiate a Chapter 50 review as part of this Site Plan.

2. *The development satisfies the binding elements of any development plan or schematic development plan in effect on October 29, 2014.*

This section is not applicable as there are no binding elements of an associated development plan or schematic development plan in effect on October 29, 2014.

3. *The development satisfies any green area requirement in effect on October 29, 2014 for a property where the zoning classification on October 29, 2014 was the result of a Local Map Amendment.*

This section is not applicable as the Site's zoning classification on October 29, 2014, was not the result of a Local Map Amendment.

4. *The development satisfies applicable use standards, development standards, and general requirements under the Zoning Ordinance.*

- a. Use Standards

A Solar Collection System use is allowed as a limited use in the RE-1 Zone, subject to the requirements of Section 59.3.7.2.B.2.

1. In Rural Residential, Residential, Commercial/Residential, Employment, and Industrial zones, where a Solar Collection System is allowed as a limited use, it must satisfy the following standards:

Table 1 – Solar Collection System Limited Use Standards

Required	Approved
a. Site Plan approval is required under Section 7.3.4.	The Subject Application meets this requirement.
b. The site must be a minimum of 3 acres in size.	The Site Plan area is 20.07 acres in size.
c. The system may produce a maximum of 2 megawatts (AC).	As conditioned, the system must produce no more than 2 megawatts (AC).
d. All structures must be: <ul style="list-style-type: none"> i. 20 feet in height or less; ii. located at least 50 feet from any property line; and iii. surrounded by a minimum 6-foot-tall fence. 	No habitable structures are proposed on the Site. The Solar Components are not taller than 10-feet and located a minimum of 50 feet from any property line. The Applicant is providing a 7-foot-tall chain-link fence around each pod of Solar modules. Typically, the fencing around solar fields includes an angle arm mounted at the top with barbed wire, however, the Applicant has agreed to forgo barbed wire in this case to enhance compatibility and improve the facility aesthetically.
e. If a structure for a Solar Collection System is located in an area visible to an abutting residential use or a road: <ul style="list-style-type: none"> i. only solar thermal or photovoltaic panels or shingles may be used; ii. the panels or shingles must use textured glass or an anti-reflective coating; and iii. screening that satisfies Section 59.6.5.3.C.8 (Option A) on the sides of the facility visible from the residential use or road is required. 	As conditioned, the Applicant will install only solar thermal or photovoltaic panels and use panels or shingles with textured glass or an anti-reflective coating. As discussed on page 11 of this Resolution, the north and west sides of the Site will be screened according to Section 59.6.5.3.C.8 (Option A). The Applicant proposes Alternative compliance to meet the screening requirements on the west and south sides of the Site.
f. The Solar Collection System must be removed within 12 months of the	As conditioned, the Applicant is responsible for removing the Solar

date when the use is discontinued or abandoned by the system owner or operator, or upon termination of the useful life of the system. The Solar Collection System will be presumed to be discontinued or abandoned if no electricity is generated by the system for a period of 12 continuous months.	Collection System within 12 months if the use is discontinued or abandoned by the operator.
g. A system designed to produce more than 2 megawatts (AC) may be allowed as a public utility use under Section 3.6.7.E.	This standard does not apply to this Application.

b. Development Standards

The Subject Property includes approximately 20.07 acres zoned RE- 1 and within the Upper Rock Creek Overlay zone. The Application satisfies the applicable development standards as shown in the following data table:

Data Table - RE-1 zone

Development Standard	Permitted/Required	Provided
Min. Tract Area	40,000	No new lots are approved as part of this Application. See Limited Use Standards.
Maximum Density	1 DU/AC	N/A
Minimum Building Setbacks		N/A
From Detached House	17 ft.	N/A
From Street	50 ft.	N/A
From Adjoining Lots		See Limited Use Standards
Maximum Building Coverage	15%	N/A
Parking Spaces	0	0

Upper Rock Creek Overlay Zone

The Application meets the requirements of the Upper Rock Creek Overlay Zone, including the 8% impervious cap. As approved, the Applicant must comply with the conditions of approval for the Final Water Quality Plan which limits impervious surfaces to no more than 1.0% of the Application within the Upper Rock Creek Overlay Zone as shown on the Impervious Surface Plan dated May 15, 2020. The Applicant will also enter into an agreement with the Planning Board to limit impervious surfaces to no more than 1% on the Subject Property.

c. General Requirements

i. *Site Access*

The Subject Property is accessible from Fieldcrest Road via two new curb cuts. Two access points are required because the solar panels, along with the necessary switchgear, will be installed on the east and west side of the stream. The stream and associated environmentally sensitive areas bisect the Subject Property and preclude having a vehicular connection between the solar fields, hence the need for two separate access points. The only connection between the two solar fields is an underground electrical connection, which will be drilled horizontally to limit impact to the stream valley and associated buffer.

ii. *Parking, Queuing, and Loading*

Parking, queuing and loading spaces are not required for the use, with the exception of fire access improvements and the two driveways needed for access to maintain the electrical equipment cabinets which are located on the pads on either side of the stream valley.

iii. *Open Space and Recreation*

Open Space and Recreation are not required as part of this Application.

iv. *General Landscaping and Outdoor Lighting*

Landscaping is not required as part of this Application, except for screening, which is discussed in Section 5, Site Plan Findings, of this Resolution. The Site Plan meets the standards for the provision of landscaping as required by Division 6.4. The

landscaping provided by the Application is appropriate for a residential area by providing a buffer between new and old uses.

No lighting is being provided as part of this Application. Generally lighting is reviewed for pedestrian and vehicular safety, adequacy of illumination (proper coverage) and compatibility (light pollution/spillage). However, due to the nature of solar as a primary use on the Subject Property, lighting is not required or necessary. Any maintenance requiring illumination can be accommodated on a temporary (mobile) basis or maintenance can be accommodated during the daytime. In this case, not to provide lighting on-site furthers the compatibility with the adjacent residential properties, eliminating the potential for light spillage and glare that could adversely affect the existing residences.

v. *Screening*

A Solar Collection System is a limited use in the RE-1 zone, and one of the limited use standards requires perimeter screening under Section 59.6.5.3.C.8, Option A, where the solar panels are visible from existing residential development or roads.

Alternative Compliance Section 59.6.8.1

The Applicant requested alternative compliance under Section 59.6.8.1, to modify the standard planting requirements of Section 59.6.5.3.C.8, Option A. Due to the nature of the Solar Collection System and the angle of the sun, planting canopy trees along the southern and western perimeter of the Subject Property would potentially shade the solar modules, making them less effective.

Alternative compliance may be found with any requirement of Division 6.1 and Division 6.3 through Division 6.6 if it is determined that there is a unique site, a use characteristic, or a development constraint, such as grade, visibility, an existing building or structure, an easement, or a utility line.

The applicable deciding body must also determine that the unique site, use characteristic, or development constraint precludes safe or efficient development under the requirements of the applicable Division.

Because of the environmental constraints of the Subject Property, much of the site is undevelopable, leaving only two small developable areas. Additionally, due to the unique needs of solar, and the specific requirement to provide canopy trees as part of the screening requirements, the viability of solar is significantly inhibited on the southern half of the Site which has the most intense (and desirable) sun exposure for solar. Planting deciduous trees within the buffer would not only shade the solar panels but require regular pruning to reduce the possibility that tree branches would damage the solar components. The Applicant is not requesting the Planning board waive the screening requirement, instead they are proposing to plant large, lower growing evergreen trees in lieu of canopy trees.

There are four additional findings the Planning Board must make when granting alternative compliance to Section 6 of the zoning ordinance.

- a. Satisfy the intent of the applicable Division;

The intent of Division 6.5 is to ensure appropriate screening between different building types and uses.

In this Application, the purpose is to screen the solar panels from the surrounding one-family detached dwellings located in a residential detached zone and existing roads. The only modification being requested is substituting deciduous canopy trees with evergreens along the western and southern property lines. Evergreens are a very common choice of tree for screening and will provide a more dense, year round visual buffer than the required canopy trees, which will satisfy the intent of the screening requirement.

- b. *Modify the applicable functional results or performance standards the minimal amount necessary to accommodate the constraints;*

Two large evergreen trees (Virginia Pine and Shortleaf Pine) and two small evergreen trees (American Holly and Eastern Redcedar) will be substituted for the two canopy trees (per 100 feet) that are typically required.

The evergreens will provide year-round screening, versus the deciduous canopy trees that shed their leaves and provide little screening in the winter months. Taking into consideration the required limited use standards and the limited scope of modification to the screening requirements being requested, the proposed Alternative Compliance will satisfy the intent of the screening requirements.

Where existing residences abut the stream buffer on the Subject Property, landscape screening is not required because the environmental buffer will be afforested by the Applicant and there is ample separation between the abutting properties and solar modules.

- c. *Provide necessary mitigation alleviating any adverse impacts; and*

There is no additional mitigation necessary to alleviate any adverse impacts because the Site Plan still provides the screening plantings as required.

- d. *Be in the public interest*

Granting the alternative compliance request is not averse to the public interest. Screening is still provided between the solar arrays and residences, and in a manner that will provide the necessary visual buffer. In addition, promoting renewable energy production, such as solar, is one of the County Council's goals.

Based on the above analysis, alternative compliance for Division 6.5 Screening is appropriate and Staff recommends the Planning Board grant the Applicant's request.

5. *The development satisfies the applicable requirements of Chapters 19 and 22A of the Montgomery County Code.*

- a. Chapter 19, Erosion, Sediment Control, and Stormwater Management

The Site Plan meets the requirements of Chapter 22A, Forest Conservation Law, and Chapter 19, Water Resource Protection.

Water Quality Plan – Upper Rock Creek Special Protection Area (SPA)

The entirety of the Subject Property is located within the Upper Rock Creek SPA and is therefore required to obtain approval of a Water Quality Plan under Section 19-62 of the Montgomery County Code. This section of the Code states:

(b) Privately owned property. Except as otherwise expressly provided in the Chapter, the requirements for a water quality inventory and a preliminary and final water quality plan apply in any area designated as a special protection area to a person proposing a land disturbing activity on privately owned property:

- (1) who is required by law to obtain approval of a development plan, diagrammatic plan, schematic development plan, project plan, special exception, preliminary plan of subdivision, or site plan; or
- (2) who is seeking approval of an amendment to an approved development plan, diagrammatic plan, schematic development plan, project plan, special exception, preliminary plan of subdivision, or site plan.

As part of the requirements of the SPA law, a Water Quality Plan should be reviewed in conjunction with a Site Plan. Under Section 19-65 of the Montgomery County Code, the Montgomery County Department of Permitting Services and the Planning Board have different responsibilities in the review of a Water Quality Plan. MCDPS has reviewed and conditionally approved the elements of the Final Water Quality Plan under its purview. The Planning Board must determine if SPA forest conservation and planting requirements, environmental buffer protection, and limits on impervious surfaces have been satisfied. Sec. 19-65(a)(2)(A) of the Montgomery County Code states that:

In acting on a preliminary or final water quality plan, the Planning Board has lead agency responsibility for:

- (i) Conformity with all policies in the Planning Board's Environmental Guidelines which apply to special protection areas;
- (ii) Conformity with any policy or requirement for special protection areas, including limits on impervious area, in a land use plan, watershed plan, or the Comprehensive Water Supply and Sewer System Plan; and
- (iii) Any other element of the plan in which the Planning Board has lead agency design, review, and approval responsibility.

MCDPS Special Protection Area Review Elements

In a letter dated December 31, 2019 and revised on May 1, 2020, MCDPS found the Water Quality Plan and Stormwater Management Concept for this Site Plan to be acceptable for the portion of the Final Water Quality Plan under its purview including 1) stormwater management facilities and 2) sediment and erosion control measures. No specific performance goals were established for this Site Plan. The Plan will meet stormwater management requirements through the use of non-roof disconnects and bioswales.

Planning Board Special Protection Area Review Elements

Following is an analysis of the Planning Board's responsibilities in the review of the Final Water Quality Plan. Staff recommends approval of the elements of the SPA Water Quality Plan under its purview.

1) Priority Forest Conservation Areas

The Application meets the requirements of Chapter 22A of the Montgomery County Forest Conservation Law. The FFCP was submitted with this Application. The forest conservation requirements are described in more detail in the Forest Conservation Plan section of this Resolution. Per SPA requirements outlined in the Environmental Guidelines, all environmental buffer areas lacking forest cover will be afforested, forest plantings will occur during the first planting season after issuance of sediment and erosion control permits when possible, and a five-year maintenance program to better ensure forest survival, with emphasis on controlling invasive species, is required. The planted forest on-site will be protected through a Category I Conservation Easement.

2) SPA Environmental Buffer Protection

There are 2.98 acres of wetlands, two streams, a spring and associated floodplain on the Subject Property, resulting in 9.78 acres of environmental buffers. The Application proposes 1.77 acres of encroachment into the environmental buffers for the installation of a portion of the solar array panels. This has been deemed acceptable with mitigation since the encroachment only involves the installation of support posts for the solar panels. There will be no grading or construction within the environmental buffers. The ground beneath the panels will remain generally undisturbed. To mitigate for the buffer encroachments, the Applicant will take the 1.77 acres of encroachment to an off-site forest bank at a 3:1 rate. In addition, the Applicant has agreed to replace the existing fescue ground cover under the solar panels with an upland pollinator meadow seed mix which, in

time, will provide habitat for local pollinator species. The FFCP meets the requirements of the Environmental Guidelines for sensitive area protection.

3) *Impervious Surfaces*

The Upper Rock Creek SPA has a specific numerical limit on impervious surfaces of 8% as defined in the Zoning Ordinance, Chapter 59, Section 4.9.20.C:

“Impervious surfaces are restricted to a maximum of 8% of the tract of any application for development.”

The Applicant has demonstrated that this Application is in compliance with the impervious surface restrictions of the Upper Rock Creek SPA Overlay Zone. Based on the Site Plan area of 20.07 acres (874,318 sq. ft.), a maximum of 8% or 1.60 acres (69,939 sq. ft.) of imperviousness is allowed on the Site. The Application results in 7,862 square feet (1.0%) of impervious area (on and off-site), far lower than what is permitted, or would be expected, if the Subject Property were developed with houses. The impervious elements of the Application include the two access driveways, concrete electrical equipment mounting pads, concrete footers for the security fence posts, and the bikeable shoulders within the rights-of-way for Fieldcrest and Olney-Laytonsville Roads as shown on the Impervious Surface Plan dated May 15, 2020. The solar panels themselves are not considered impervious under Maryland State law. In addition, the mounting posts for the solar panels do not have concrete footers.

b. Chapter 22A, Forest Conservation

The Natural Resources Inventory/Forest Stand Delineation (“NRI/FSD”) #420191800 for the Subject Property was approved on August 13, 2019. The NRI/FSD identifies the environmental features and forest resources on the Site. The Subject Property is located at the headwaters of the Upper Rock Creek watershed, a Use Class III-P stream. There are no steep slopes or erodible soils present on the Site. The Site is also within the Upper Rock Creek SPA. The Subject Property contains no forest cover and is currently being used as pasture for cattle.

The Subject Property contains a perennial stream system comprised of two streams with associated non-tidal wetlands. The stream system is comprised of a main stem that runs in a north-south orientation located

on the western section of the Subject Property. This mainstem begins on the properties to the north, on the opposite side of Fieldcrest Road, flows under the road in a dual culvert and flows onto the Subject Property. The mainstem then flows in a southerly direction until it exits the property flowing into the M-NCPPC Parks Department, Rock Creek Stream Valley Park. There is a small tributary that begins at a seep located on the southern property line adjacent to the residential properties and flows in a westerly direction along the southern property line until it joins the mainstem. There is approximately 2.98 acres of wetlands associated with this stream system. The Subject Property is located within the Upper Rock Creek SPA and the stream is a Use Class III-P. As required in the Environmental Guidelines, there is a 150-foot buffer required on all streams, seeps, springs and wetlands for slopes less than 15%.

Forest Conservation Plan

The Application meets the requirements of Chapter 22A of the Montgomery County Forest Conservation Law. As required by Chapter 22A, a Preliminary/Final Forest Conservation Plan was submitted with the Application. The total net tract area for forest conservation purposes is 20.07 acres. The Property is zoned RE-1 and is classified as Medium Density Residential as specified in the Trees Technical Manual and Section 22A-3 of the Forest Conservation Law. The Subject Property contains 0.00 acres of forest. This results in a total afforestation requirement of 4.01 acres.

As conditioned, the Application will meet the 4.01-acre requirement by afforesting 8.02 acres of the total 9.78 acres of environmental buffers on-site. Planting and protecting all on-site environmental buffers is a requirement of the Environmental Guidelines for sites within an SPA and of the FCP under Section 22A-12(b). However, in this case, an encroachment of 1.77 acres into the stream buffer has been proposed to occur.

Section 22A-12(b) states, in part:

(b) Retention

(2) In general, areas protected under this subsection include:

(A) floodplains, stream buffers, steep slopes and critical habitats.

This encroachment into the stream buffer was requested so that the Applicant could install the required solar panel array configuration to generate the necessary wattage to meet State electrical power generation codes. The resulting disturbance to the stream buffer for the installation of the solar panels is deemed de-minimis. The support posts for the solar panels are installed via a pile driven system with no concrete footers. The small construction equipment required to install the support posts will

cause some soil compaction, but this will be offset with the installation of the upland pollinator meadow in which the solar panels are located. The meadow seed mix will, over time as it matures, offset the compaction caused by the installation of the solar panels. This stream buffer encroachment is seen to have some environmental benefits as well. First, the area of encroachment will be replanted with an upland pollinator meadow seed mix which will provide habitat and food for our local pollinator species. Also, the 1.77 acres of encroachment will be afforested by taking this area off-site at a 3:1 rate to a M-NCPPC approved forest bank. Finally, this encroachment will, in part, assist with the removal of the herd of cattle that currently grazes unobstructed within the stream buffer.

The 8.02 acres of afforestation is being met with two separate planting areas. The first is an understory tree planting area of 1.85 acres. This area will be located approximately 50-feet off of the solar panel arrays and is intended to keep the tree canopy lower in height to allow as much sunlight as possible to reach the solar panels. This area will have plantings of MD native trees that are lower in height. This area will also be seeded with a MD native pollinator meadow seed mix. The second area is 6.17 acres in size and located in the stream buffers outside of the understory tree planting area. This larger area will be planted with the standard M-NCPPC reforestation tree mix of overstory, understory and shrub layers. The entire 8.02 acres of on-site afforestation will be placed into a Category I Conservation Easement.

The Board finds that as conditioned the Forest Conservation Plan complies with the requirements of the Forest Conservation Law.

6. *The development provides safe, well-integrated parking, circulation patterns, building massing and, where required, open spaces and site amenities.*

This finding does not apply based on the proposed use.

7. *The development substantially conforms to the recommendations of the applicable master plan and any guidelines approved by the Planning Board that implement the applicable plan.*

Land Use

2004 Upper Rock Creek Area Master Plan

There are no specific recommendations for this Property regarding development. However, the Master Plan does provide general land use recommendations, and the Site Plan is consistent with the general land use recommendations concerning dedication of easements to open space, preserving/restoring natural resources (stream restoration), and maintaining low-density development adjacent to stream valleys.

A primary goal of the Master Plan is to protect environmental resources and maintain stream quality by keeping streams, forests and wetlands in a natural state. Additionally, preserving the generally low-density residential character of the Plan area is an equally important goal of the Master Plan. Specifically, the Master Plan's concept directs growth away from stream valleys, forests, and other environmentally sensitive areas while encouraging the integration of new development so that it does not diminish the character of neighboring communities.

With the exception of the Parkland Conveyance Area intended to create improved trail connections, there are no specific land use recommendations that pertain to the Subject Property. The Application is compatible with the following general land use recommendations:

- *Augment the stream valley park system by adding expanded stream buffers and contiguous forests, by continuing to preserve views and conservation areas already in parkland, such as the Agricultural History Farm Park and by locating stormwater management systems away from buffers and sensitive resources.*
- *Encourage new development that preserves natural resources.*
- *Enhance the character of new communities by increasing natural open space where appropriate.*

The Subject Property is currently used as cow pasture, which degrades and contaminates the streambed and stream buffer areas. As discussed in this Resolution and as part of the development of the Solar Collection System, the Applicant will afforest the currently degraded stream buffers for conservation.

This fee simple conveyance to M-NCPPC is for the purposes of envisioned stream valley park expansion, water quality protection and to extend an existing public natural surface trail to Fieldcrest Road. The conveyance will become part of Rock Creek Stream Valley Park Unit 16.

As conditioned, the Applicant will place the entire 8.02 acres of on-site reforestation (future Parkland) in a Category I Conservation Easement and provide a deed of conveyance to the Parks Department.

The alignment of the 10-foot-wide natural surface trail will be staked in the field by Parks prior to construction. Identifying the alignment prior to construction and afforestation, eliminates potential conflicts with reforestation planting and allows the new trail to be implemented with little disturbance to the stream valley buffer. The Applicant will then afforest the area and maintain the area. Once the Parks Department is ready to install the natural surface trail, the deed will be recorded and the connection formalized- meeting the intent of the Countywide Park Trails Plan.

The 8.02-acre conveyance area will add to the stream valley park system, thereby preserving natural views, conservation areas, and parkland. The stream buffer restoration and conveyance to the Parks Department will increase natural open space and thus enhance the natural character of the community. It will also reduce the forest gap in the vicinity.

The Application will help achieve many of the goals in the Master Plan, including those to enhance and protect environmental resources by improving stream quality by keeping streams, forests and wetlands in a natural state. Therefore, the Application substantially conforms with the Master Plan's land use recommendations and goals.

Bikeways Functional Master Plan

The 2018 *Bicycle Master Plan* requires 5-foot-wide bikeable shoulders along the Subject Property frontage on Fieldcrest Road and a 6-foot-wide bikeable shoulder on Olney-Laytonsville Road (MD 108). As conditioned, the Applicant is constructing this improvement.

Transportation access is safe and adequate for the proposed use. As proposed, the Application is consistent with the 2018 *Master Plan of Highways and Transitways*, the 2018 *Bicycle Master Plan* and the 2004 *Upper Rock Creek Area Master Plan*.

8. *The development 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.*

This Application does not propose occupancy of the Subject Property and therefore requires neither water supply nor wastewater disposal systems. The existing W-1 and S-6 service area categories identify a property that would use

public water service and an onsite septic system, if needed. The S-6 sewer category and use of private septic system are reflected on the Site Plan.

Transportation

Access to the Subject Property will occur via two driveway entrances along Fieldcrest Road. The Applicant provided a Transportation Exemption Statement dated December 23, 2019, explaining that the solar operation will be unmanned, with only infrequent vehicular trips to the Site for maintenance and therefore generating no measurable net increase in trips on the AM or PM peak periods. Therefore, the Application is exempt from additional LATR review. Similarly, there will be no formal circulation path internal to the Site as access will be infrequent; all areas not covered by solar panel modules will remain unpaved/natural surface.

9. *The development is compatible with the character of the residential neighborhood.*

The Subject Property is in the RE-1 zone, a Residential zone, and while solar is not a residential use, it is an allowed use in the zone, and with the unique location of the Subject Property, the provided setbacks, screening, and Site layout, as conditioned the Site Plan is compatible with the character of the adjacent residential neighborhood.

The Subject Property is located on the northern most outer edge of the existing residential development (south and west) at the corner of two public roads. The Subject Property is not located within an existing residential neighborhood. The linear Property is bound by public roads on two sides, one of which is a major highway (MD 108), and the other (Fieldcrest Road) directly abuts a 250-foot-wide PEPCO transmission line right-of-way. At this location, north of MD 108 is Blue Mash Golf Course, and the Oaks Landfill (not active) site, both of which are in the Agricultural Reserve (AR) zone, a non-residential zone. In addition to its location, the Subject Property is naturally broken into two separate developable pods by a stream. As such the solar modules will not be grouped in one larger field, but two smaller areas divided by a 150-foot-wide swath of vegetated stream buffer. As discussed further on page 11 of this Resolution, the Applicant is providing landscape screening along the perimeter of the Subject Property, with the exception of the areas within the stream valley buffer, which will be reforested according to the Forest Conservation Law. The modified landscape screening will be more effective than the standard screening because it includes additional evergreen trees. In this case lighting is not being provided on site because it is not required as unnecessary given the proposed use. The Site Plan shows the solar panels will be mounted on rails supported by pilings with a total

height of 10 feet, significantly less than the 50-foot height limit for detached houses in the RE-1 zone. Since no lighting is provided, there is no possibility of light pollution/spillage onto the adjacent residential lots creating compatibility issues. As conditioned, the development of the Subject Property with solar is compatible with the adjacent residential neighborhood.

BE IT FURTHER RESOLVED that this Resolution incorporates by reference all evidence of record, including maps, drawings, memoranda, correspondence, and other information; and

BE IT FURTHER RESOLVED that this Site Plan shall remain valid as provided in Montgomery County Code § 59-7.3.4.H; and

BE IT FURTHER RESOLVED that this Resolution constitutes the written opinion of the Board in this matter, and the date of this Resolution is **August 20, 2020** (which is the date that **the original** resolution **was** mailed to all parties of record); and

BE IT FURTHER RESOLVED that any party authorized by law to take an administrative appeal must initiate such an appeal within thirty days of the date of this Resolution, consistent with the procedural rules for the judicial review of administrative agency decisions in Circuit Court (Rule 7-203, Maryland Rules).

* * * * *

CERTIFICATION

This is to certify that the foregoing is a true and correct copy of a resolution adopted by the Montgomery County Planning Board of the Maryland-National Capital Park and Planning Commission on motion of Commissioner Verma, seconded by Commissioner Cichy, with Chair Anderson, Vice Chair Fani-González, and Commissioners Cichy, Patterson, and Verma voting in favor at its regular meeting held on Thursday, September 10, 2020, in Silver Spring, Maryland.



Casey Anderson, Chair
Montgomery County Planning Board