

## MEMORANDUM

July 13, 2020

TO: Planning, Housing, and Economic Development Committee  
Transportation and Environment Committee

FROM: Jeff Zyontz, Senior Legislative Analyst  
Mira Singhal, Council Summer Fellow

SUBJECT: Zoning Text Amendment 20-01, Solar Collection System – AR Zone Standards

PURPOSE: Worksession

### Potential Participants

Casey Anderson, Chair, Montgomery County Planning Board  
Robert Kronenberg, Deputy Director, Planning Department  
Richard Weaver, Area 3 Chief, Planning Department  
Greg Russ, Planner Coordinator, Planning Department  
Christopher McGovern, GIS Manager, Planning Department  
Adriana Hochberg, Climate Change Coordinator, Office of the County Executive  
Stan Edwards, Chief, Division of Environmental Policy and Compliance, DEP  
Sarah Ramirez, GIS Specialist, DEP  
Jeremy Criss, Director, Office of Agriculture  
Mike Scheffel, Director of Planning and Promotions, Office of Agriculture

### Meeting of July 9

All joint Committee members participated in the meeting, as did Councilmember Rice.<sup>1</sup> All background material and overarching issues in the memorandum for July 9 were discussed by the Committee. No votes were taken at that meeting. The consensus of the meeting was to proceed with reviewing amendments to ZTA 20-01 before making recommendation to the full Council. Committee members were asked to submit their ideas to revise ZTA 20-01 as soon as they could so that they could be addressed by this memorandum.

---

<sup>1</sup> Discussions were conducted with Robert Kronenberg, Deputy Director, Planning Department; Richard Weaver, Area 3 Chief, Planning Department; Adriana Hochberg, Climate Change Coordinator, Office of the County Executive; Stan Edwards, Chief, Division of Environmental Policy and Compliance, DEP; Jeremy Criss, Director, Office of Agriculture; Leslie Elder, Coalition for Community Solar; and Al Barrett, Sierra Club.

## **This Memorandum**

Some possible amendments raised in testimony are repeated from the July 9 memorandum and there are additional issues. Committee members' and the Executive's most recent recommendations (attached) are noted in the material for each issue. (Background material, including a summary of the public hearing testimony, can be found in the July 9 memorandum to the joint Committee. That information is not repeated in this memorandum.)

### **Possible amendments**

#### **1. Restrict facilities to qualified community solar facilities**

The Maryland Residential Community Solar program allows Maryland residents to purchase subscriptions for energy from community solar arrays, gaining the same economic advantages as having solar modules directly on their residences. In support of this program, the Maryland Energy Administration developed the Residential Community Solar Grant program. The program provides a monetary incentive for Maryland residents who wish to purchase (own) the energy benefits of the array. Low-to-moderate income (LMI) residents who subscribe to a community solar array under an ownership model are incentivized at a higher rate than other subscribers. Subscriptions must be to a community solar array within the subscriber's electric utility service area.<sup>2</sup>

The Community Solar program directs locally-produced power to local residents. Local users are matched to the power company receiving the power. Both the subscriber and the solar facility must be in the same area served by the power company. The County is served by 3 power companies: Potomac Electric Power Company (PEPCO), Baltimore Gas and Electric (BG&E), and Potomac Edison. Most of the AR zone is served by Potomac Edison. The urbanized area of the County is served by PEPCO.

There is another program that can take advantage of net metering; the Aggregate Net Energy Metering (ANEM) program is also part of the program. This program allows the interconnection of a solar facility on a piece of property to specific customers. The only entities that qualify for ANEM are:

- Non-profit;
- Agriculture; or
- Local or State Government.

Both the Community Solar program and the Aggregate program benefit the customers of the local electric power companies. Testimony suggested otherwise. Limiting AR solar to Community Solar would limit the applicability of ZTA 20-01 by prohibiting solar facilities that qualify for the ANEM program. Councilmembers Friedson, Jawando, and Riemer indicated an interest in limiting solar projects to those within the Community Solar/Net Metering Program.<sup>3</sup> Staff would recommend that the following amendment be added to line 53<sup>4</sup>:

---

<sup>2</sup> <https://energy.maryland.gov/residential/Pages/Community-Solar.aspx>.

<sup>3</sup> <https://codes.findlaw.com/md/public-utilities/md-code-public-util-sect-7-306-2.html>;  
<http://mdrules.elaws.us/comar/20.50.10>.

<sup>4</sup> Section 7-306 limits the 2 megawatts to an "eligible customer-generator". A customer generator is defined as follows:

- iii. The system may produce a maximum of 2 megawatts (AC) on a parcel or contiguous parcels with the same owner and must be a Solar Collection System regulated under:  
A. Section 7-306.2 of the Maryland Public Utilities Article; and  
B. Maryland COMAR Section 20.50.10.

2. Do not require fences

A 6-foot fence around solar facilities is currently a requirement for limited use approval in non-AR zones and is a proposed requirement in ZTA 20-01. The Planning Board recommended deleting the fence requirement. Industry representatives reported in testimony that a fence is required by insurance companies.

Councilmember Friedson would delete the requirement for a fence. Councilmember Riemer would agree with that change.

Staff has been led to believe that a fence is required to insure solar facilities. Deleting a legislative requirement is not a problem for the solar industry. On the other hand, prohibiting a fence may be tantamount to prohibiting the solar facility.

3. Allow screening waivers by the Planning Board in the course of site plan approval

The current code requires site plan approval for solar installations, except when the use is an accessory use. ZTA 20-01 extends that requirement to the AR zone. When visible from a residential use or a road, screening that satisfies Section 59.6.5.3.C.8 (Option A) would be required under ZTA 20-01 as introduced. Option A requires a 30-foot planting area and a 6-foot fence. The Rustic Roads Advisory Committee requested the option for a screening waiver by the Planning Board. The Planning Board also made that recommendation. The fence requirement was previously discussed.

If retaining natural vegetation cannot be a substitute for the planting required under “Option A”, Staff would recommend allowing a waiver of the planting requirement, but the Planning Board should not be given the authority to prohibit a fence.

Councilmember Friedson and Councilmember Riemer recommend screening, without a fence requirement, **only** when the solar facility is within 200 feet of a neighboring house.

screening that satisfies the planting requirements of Section 59.6.5.3.C.8 (Option A) on the sides of the facility [[visible from the residential use or road]] within 200 feet of a neighboring house is required.

---

Eligible customer-generator means a customer that owns and operates, leases and operates, or contracts with a third party that owns and operates a biomass, micro combined heat and power, solar, fuel cell, wind, or closed conduit hydro electric generating facility that:

- (i) is located on the customer's premises or contiguous property....

A property owner with contiguous property would be allowed 2 megawatts, even if the property were on separate parcels. Planning Staff recommends explicitly including that limitation in the Zoning Ordinance.

#### 4. Planting under solar panels

As drafted, ZTA 20-01 would allow plants and crops conducive to agrivoltaic systems, pollinator-friendly plants, or plants suitable for grazing. Some testimony noted that Maryland's pollinator-friendly certification is still in a draft stage. The Pollinator-Friendly Designation Program bill (SB 1158) was signed by Governor Hogan in May 2017.<sup>5</sup> SB 1158 established a pollinator-friendly designation program for commercial ground-mounted solar facilities. That program is now in effect and a State employee with the Department of Natural Resources is working closely with individuals interested in pursuing the pollinator-friendly designation.

Other testimony communicated that, whatever the State's program requires, the County should require that at least 75% of the plants be native to Maryland.<sup>6</sup> Some speakers wanted more latitude in using other plants that increase agricultural output. Based on research in multiple states, both crops and pollinator-friendly plants are able to co-exist with solar facilities. Crops that have successfully been grown directly under solar panels include, but are not limited to, tomatoes, peppers, beans, carrots, chard, kale, and herbs. Appendix II in the memorandum for the July 9 meeting included a list of agrivoltaic applications in Maryland.

Councilmembers Friedson, Jawando, and Riemer will support expanding "plants" to include all agrivoltaic plants.

The following amendment would be made to the necessary requirements for site plan approval:

For property zoned AR proposed for use as a Solar Collection system:

- a. grading and any soil removal will be minimized; and
- b. the site must be designated pollinator-friendly under the Maryland Pollinator-Friendly Designation Program, or any land on which the solar generation facility is located that is not designated as pollinator friendly must be planted, managed, and maintained in a manner suitable for grazing farm animals or other agrivoltaic plant material.

#### 5. Retaining the site's ability to return to commodity agriculture

Testimony described horror stories where all topsoil was stripped for a site before the installation of a solar facility. ZTA 20-01 does include a required site plan finding that the grading and soil removal will be minimized. This is insufficient in the opinion of Councilmembers Friedson and Jawando. They recommend a prohibition on stripping the site plan area of topsoil.

In addition, solar companies have been known to go bankrupt. In the absence of demolition, the site could not be returned to commodity agriculture. Councilmembers Jawando, Friedson, and Riemer support a Bill to require a bonding when a permit to construct is approved to assure sufficient demolition funds. Councilmember Jawando will support prohibiting concrete installations in order to maximize the planting area under solar plans and to minimize the effort required to return the area to its pre-solar installation state. The following finding would be added to the necessary requirements for site plan approval:

*Topsoil has not and will not be scraped from the site.*

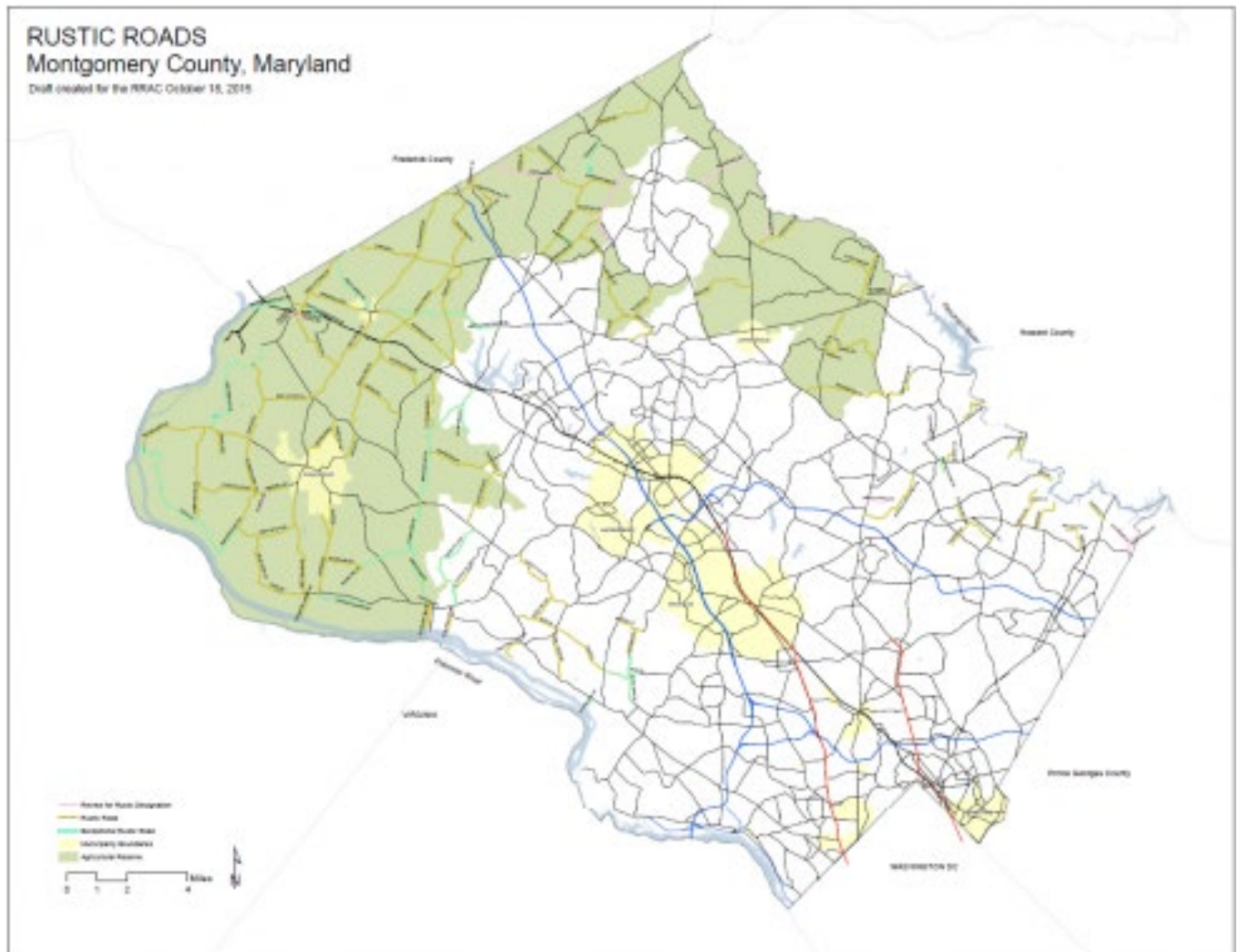
---

<sup>5</sup> [http://mgaleg.maryland.gov/2017RS/chapters\\_noln/Ch\\_372\\_sb1158E.pdf](http://mgaleg.maryland.gov/2017RS/chapters_noln/Ch_372_sb1158E.pdf).

<sup>6</sup> A list of native trees, shrubs, and flowers, as well as non-native plants, can be found in Table 1 of Appendix II.

6. Avoid scenic easements – in general or near rustic roads

Most of the roads in the northwestern portion of the County are rustic roads. The area visible from all roads in the AR zone is not mapped. There is no evaluation of the quality of views from roads. Electric feeder lines tend to be along roads. A pre-existing feeder line with the capacity to carry more current is an attribute that makes solar facilities more economically feasible.



The Rustic Roads Advisory Committee requested consideration of all land within 0.25 miles of a rustic road as possibly scenic. Their recommendation is to require comments from the Committee before the Planning Board may approve a site plan.



Planning Staff recommended that large solar facilities not be located within a scenic view identified in the Rustic Road Functional Plan unless the height of the structure, topography, existing vegetation, and nearby residential properties mitigate visibility from the street. (The Rustic Road Master Plan identifies scenic views as an arrow at a specific location on a road and a direction. It does not indicate a distance from the road.) The Executive also recommended protecting scenic views. The Planning Board recommended protecting scenic views through the site plan process. Staff is under the impression that Councilmember Jawando is interested in specific protection for scenic views. The following finding would be added to the necessary requirements for site plan approval:

*The site is not visible from a scenic view identified in the Rustic Road Master Plan.*

One of the findings the Planning Board must make before approving a site plan is compatibility with “existing and approved or pending adjacent development.” Staff would rely on this requirement for compatibility and not add another step in the approval process.

7. Limit to farmer-owned land – give owner-farmer preference or do not allow on rented land

One of the criticisms of ZTA 20-01 is the possibility it will increase the price of renting farmland. This fear exists, even though the ZTA would only allow solar facilities on a small percentage of AR-zoned land. There is no doubt that solar facilities can and do pay more to the landowner than farmers can afford to pay to grow crops. To the landowner, renting to a solar power company is a better economic option

than renting to a farmer. To the extent that the landowner is the farmer, solar provides a form of subsidy to aid in the continuation of farming.

In addition to limiting the total amount of land that can be used for community-sized solar facilities, ZTA 20-01 limits the size of any individual facility by restricting the facility's ability to generate power to under 2 MW. It has been estimated that the maximum size facility would be about 10 acres. Whether there would be any appreciable effect on the price charged for renting farmland is open to question but if there was a farmer renting that land, there is no doubt that the site's renting farmer would have less land for traditional farming once the solar facility is established.

The opportunity to construct a solar facility cannot be limited to landowners who farm. Zoning controls use, not ownership. A way to ensure solar facilities do not foreclose the opportunity to farm would be to limit the percentage of any parcel that can be used for solar. The zoning code can limit a use to a percentage of an owner's land. If a maximum of a parcel (or abutting parcel under a single ownership) is 20%, then only a parcel 50 acres or greater could have the maximum size solar facility.

Councilmember Jawando will support limiting a solar installation to a percentage on an underlying land holding. The following finding would be added to the necessary requirements for site plan approval:

*Solar panels do not exceed xx% of the total site.*

As of July 8, the County Executive recommends approval of ZTA 20-01 if solar facilities are an accessory use to farming. (This recommendation is discussed in more detail in issue #10.) Accessory uses are subordinate uses. Limiting solar facility to some percentage of contiguous parcels under a single ownership, as recommended by Councilmember Jawando, is in keeping with a subordinate use. A maximum coverage would effectively remove the ability of smaller sites from having limited use solar facilities.

#### 8. Facilities larger than 2 MW

The Maryland Court of Appeals ruled that, under State law, the County's zoning and subdivision regulations are preempted by the Maryland Public Service Commission (PSC) for large solar facilities. The Court's decision in *Board of County Commissioners of Washington County v. Perennial Solar* means that the PSC has the final say on the location of solar projects that require a Certificate of Public Convenience and Necessity from the PSC. This certificate requirement applies to projects of at least 2 MW (roughly 10 to 20 acres) in size. In the absence of a change in State law, the County is powerless to regulate large solar facilities. The PSC must **consider** local zoning but, as in the situation that provoked the Court's decision, the PSC may overrule zoning.

Currently, the zoning code indicates that larger facilities are to be approved under the same standards as a public utility.<sup>7</sup> Testimony suggested retaining this requirement as guidance to the PSC on what it must consider. ZTA 20-01, as introduced, would amend this provision (lines 74-77) to acknowledge that these larger facilities are exempt from zoning. This was done to put readers on notice of the State law.

From the standpoint of giving the PSC notice of what standards to consider, Staff recommends retaining the existing code provision even though local zoning is preempted.

---

<sup>7</sup> "A system designed to produce more than 2MW (AC) may be allowed as a public utility use under section 3.6.7.E." Section 3.7.2.g.



9. Expand the definition of accessory solar facilities from 120% of on-site use to 200%

Solar panels as an accessory use is currently limited to 120% of on-site energy consumption (baseline annual customer energy use). There are limits on structure heights. ZTA 20-01 as introduced would not change that limitation. Maryland net metering policy allows a maximum of 200% of on-site energy consumption to take advantage of net metering.<sup>8</sup>

Solar panels as an accessory use does not require site plan approval. There is no maximum height for accessory solar panels. If the Council wants to go in this direction, it needs to decide if the new limit should apply to just the AR zone or all zones.

Councilmembers Friedson, Jawando, and Riemer support going to 200% as an accessory use in the AR zone.

10. Define solar facilities related to off-site use as either accessory or as a principal use

When ZTA 20-01 proposed allowing solar facilities as a limited use, the Planning Board recommended that the solar facility be called a principal use. The Executive recommended that it be defined as an accessory use. The Executive went further in the opposite direction by recommending that solar facilities only be allowed as an accessory use and adding the following provision:

**Section 3.1.3. Uses Listed as Accessory**

Uses listed under an accessory use group in the Use Table are uses that are incidental and subordinate to the principal use of a lot, site, or the principal building, and located on the same lot or site as the principal use or building. In the Agricultural Reserve Zone (AR), an accessory use also refers to uses that are subordinate to the intent of the AR Zone to promote agriculture as the primary and preferred land use, should conflict in uses occur. (New text underlined)

Staff does not recommend either recommendation. Solar facilities in the AR zone are an allowed limited use. Nothing more needs to be said. Accessory uses are ordinary and customary uses associated with the principal use. Accessory uses are incidental to the primary use. A 10- to 20-acre facility for off-site benefits is not ordinary and customary to farming. On a small site, the use would not be incidental.

11. Who should monitor the 1,800-acre limit?

DPS staff noted that solar facilities only require an electrical permit. Currently, acreage is not required on an electrical permit application. Planning staff receives a site plan that includes acreage. As introduced, the 1,800 limit applies to those facilities that require site plan approval. Staff recommends amending ZTA 20-01 to require the Planning Board to monitor acreage.

12. Determine where solar facilities should be prohibited

Even before any specific legislative restrictions on the placement of solar facilities, there are both practical and legal limitations. Solar facilities will need to connect to the electric network in a way that allows the

---

<sup>8</sup> Net metering is an electricity billing mechanism that allows consumers who generate some or all of their own electricity to use that electricity anytime, instead of when it is generated. When solar panels produce more electricity than needed, that energy is sent to the grid in exchange for credits.



transmission of power. This is possible using existing 3-phase lines (the power lines running along local streets) ONLY when there is excess capacity in the line servicing the solar facility. Between all lines in the AR zone, it has been estimated that some 500 acres of solar panels can be handled using this excess capacity. There are no power constraints on privately-built power lines going directly to a substation. There is an economic limit. These lines can cost a million dollars per mile. Executive staff assumed that a solar facility was feasible within 2 miles of a substation.

These are legal limitations on the location of solar facilities. Some landowners have sold easements to the Maryland Agricultural Land Preservation Foundation (MALPF) and the Agricultural Easement Program (AEP). These easements would prohibit solar facilities, even if the Zoning Ordinance allowed the use.

Before considering criteria to prohibit solar, the Council might find it useful to reflect on the Planning Board's findings necessary to approve a site plan:

To approve a site plan, the Planning Board must find that the proposed development:

- a. satisfies any previous approval that applies to the site;
- b. satisfies under Section 7.7.1.B.5 the binding elements of any development plan or schematic development plan in effect on October 29, 2014;
- c. satisfies under Section 7.7.1.B.5 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;
- d. satisfies applicable use standards, development standards, and general requirements under this Chapter;
- e. satisfies the applicable requirements of:
  - i. Chapter 19, Erosion, Sediment Control, and Stormwater Management; and
  - ii. Chapter 22A, Forest Conservation.
- f. provides safe, well-integrated parking, circulation patterns, building massing and, where required, open spaces and site amenities;
- g. substantially conforms with the recommendations of the applicable master plan and any guidelines approved by the Planning Board that implement the applicable plan; ...
- j. on a property in all other zones, is compatible with existing and approved or pending adjacent development.

The applicable guidelines include environmental guidelines. The application for a site plan requires environmental documentation. That documentation includes a Natural Resources Inventory/Forest Stand Delineation, a Stormwater Management Concept Application or, if required, a Water Quality Plan Application; and a final Forest Conservation Plan application. Within those guidelines, stream buffers, wetlands, steep slope, and areas with erodible soils are protected.

The Board has significant authority to prevent disturbance of these areas without amendments to ZTA 20-01. The Board has the flexibility to consider unique situations that it would not have considered if solar on land with a specific characteristic is prohibited in the code.

ZTA 20-01 allows a maximum of 1,800 acres of primary use solar in the AR. There are over 94,000 acres in the AR zone. Keeping solar out of land due to a physical characteristic reduces the area in which solar would be allowed. Executive staff found that the limitations they used reduced the allowable locations to 900 acres. If the Council agreed with all of Executive Staff's "rules", the maximum 1,800 acres for solar would be 900 acres.

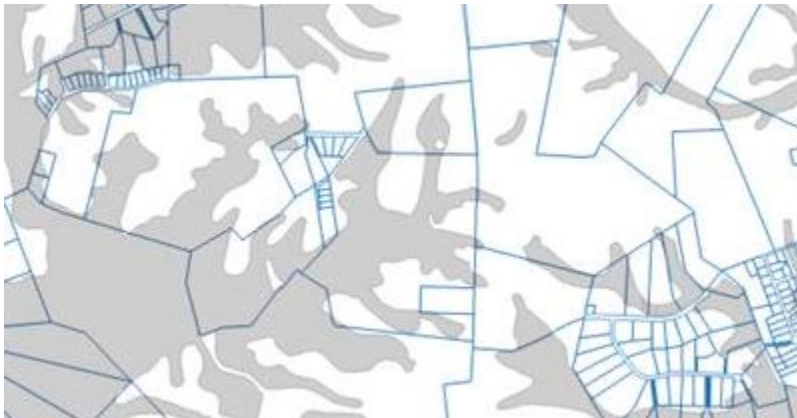
Staff will have mapping resources (GIS) to answer the options the Council may wish to include in the ZTA.

Suggested areas to prohibit, limit intrusion, or minimize disturbance due to solar facilities:

#### A. Prime Soils

The Executive recommends prohibiting solar facilities on all prime soils. There is a difference between “Prime Soils” and Soil Classification Standards Class I, II, and III. The difference will be discussed at the Committee, both in definitional and geographic terms. **An addendum with material sent by Executive Staff on this topic will be available tomorrow.** Councilmember Friedson would prohibit limited use solar facilities on categories 1 and 2. Councilmember Jawando will support some restriction to avoid the most agriculturally-productive soils. Councilmember Riemer would recommend that the Planning Board find that the use of prime soils for a solar facility be minimized.

The outline shape of soils with the same classification resembles an amoeba.



When parcel outlines are overlaid on that shape, the number of parcels with a contiguous 15-acre area on non-protected soils is significantly diminished. Using Planning Staff's definition of prime soils 875 out of the 5,273 Parcels in AR would have at least 15 acres of contiguous area if these prime soils were removed. The Council may wish to consider a limit to the intrusion (no more than XX% of a facility may be of protected soils) or allow the Planning Board to find that any intrusion has been minimized given the unique site.

#### B. Building Lot Terminated Areas

A building lot termination (BLT) easement is a form of agricultural easement that generally terminates remaining development rights by extinguishing the right to build a dwelling unit on an eligible buildable lot. In addition, a BLT easement creates a transferable development right created from AR zoned that would otherwise be developable for a house. When a BLT easement is recorded in the land records, the easement extinguishes the right to build a dwelling unit in the AR zone. This attribute distinguishes a BLT from other transferable development rights.

BLTs are subsequently used in the development process. Acquisition of whole or partial BLTs is required for all optional method projects in Commercial/Residential (CR) and Life Sciences Center (LSC) zones. BLTs are options in the Commercial Residential Town (CRT) and Employment Office (EOF) zones as part of the public benefit portion of incentive development.

As of February, 61 lots have been terminated.<sup>9</sup> Easements cover a little over 1,500 acres of land.

Councilmember Friedson may support prohibiting solar on properties that received compensation from the Building Lot Termination (BLT) Program.

#### C. Steep Slopes

Councilmember Friedson, the Planning Board, and the Executive support prohibiting solar facilities on slopes 15% or greater.

#### D. Wetlands

Councilmember Friedson, the Executive, and the Planning Board recommended prohibiting limited use solar facilities on highly-erodible soils and soils that seasonally flood. Staff will ask Planning staff why the site plan process does not already keep disturbances off these areas.

<u>This packet contains</u>	<u>© number</u>
ZTA 20-01 as introduced	1 – 6
Planning Board recommendation	7 – 8
Planning staff recommendation	9 – 14
Executive's July 8 recommendation	15 – 17
Memorandum from Councilmember Friedson	18 – 19

F:\Land Use\ZTAS\JZYONTZ\2020 ZTAs\20-01 Solar Collection System - AR Zone Standards\ZTA 20-01 PHED-T&E for July 16.docx

---

<sup>9</sup> <https://mcplanning.maps.arcgis.com/apps/webappviewer/index.html?id=7a2fa5ed38c040cd90840b0ac515d1a7>.

Zoning Text Amendment No.: 20-01  
Concerning: Solar Collection System –  
AR Zone Standards  
Draft No. & Date: 5 – 1/21/20  
Introduced: January 21, 2020  
Public Hearing:  
Adopted:  
Effective:

**COUNTY COUNCIL FOR MONTGOMERY COUNTY, MARYLAND  
SITTING AS THE DISTRICT COUNCIL FOR THAT PORTION OF  
THE MARYLAND-WASHINGTON REGIONAL DISTRICT WITHIN  
MONTGOMERY COUNTY, MARYLAND**

---

Lead Sponsors: Councilmember Riemer and Council Vice President Hucker  
Co-Sponsor: Councilmember Rice

---

**AN AMENDMENT** to the Montgomery County Zoning Ordinance to:

- revise the Solar Collection System use standards to allow larger facilities in the AR zone;
- amend the provisions for Solar Collection Systems in other zones; and
- amend the provisions for site plan approval in the AR zone.

By amending the following sections of the Montgomery County Zoning Ordinance, Chapter 59 of the Montgomery County Code:

Division 3.7.	“Miscellaneous Uses”
Section 3.7.2.	“Solar Collection System”
Division 7.3.	“Regulatory Approvals”
Section 7.3.4.	“Site Plan”

**EXPLANATION:** ***Boldface** indicates a Heading or a defined term.*

*Underlining indicates text that is added to existing law by the original text amendment.*

*[Single boldface brackets] indicate text that is deleted from existing law by original text amendment.*

*Double underlining indicates text that is added to the text amendment by amendment.*

*[[Double boldface brackets]] indicate text that is deleted from the text amendment by amendment.*

*\* \* \* indicates existing law unaffected by the text amendment.*

*ORDINANCE*

*The County Council for Montgomery County, Maryland, sitting as the District Council for that portion of the Maryland-Washington Regional District in Montgomery County, Maryland, approves the following ordinance:*

**Sec. 1. DIVISION 59-3.7 is amended as follows:**

**Division 3.7. Miscellaneous Uses**

\* \* \*

**Section 3.7.2. Solar Collection System**

**A. Defined**

Solar Collection System means an arrangement of panels or other solar energy devices that provide for the collection, inversion, storage, and distribution of solar energy for electricity generation, space heating, space cooling, or water heating. A Solar Collection System includes freestanding or mounted devices.

**B. Use Standards**

Where a Solar Collection System is allowed as a limited use, it must satisfy the following standards:

1. In the Agricultural Reserve zone, all of the standards in Subsection 3.7.2.B.2 and the following standards apply:

[a. A Solar Collection System must be an accessory use as defined in Section 3.1.3.]

[b]a. Written authorization from the local utility company must be provided for a Solar Collection System that will be connected to the utility grid.

[c]b. 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.

[d. Solar panels may encroach into a setback as allowed under Section 4.1.7.B.5.c and may exceed the maximum height as allowed under Section 4.1.7.C.3.b.]

- [e. A freestanding Solar Collection System is allowed only as an accessory use where the system produces a maximum of 120% of on-site energy consumption and must satisfy the same development standards as an accessory structure.]
- c. Except as allowed under Subsection 59.7.3.4.E.5.b, the site must be designated pollinator-friendly under the Maryland Pollinator-Friendly Designation Program.
- d. Cumulatively, on all AR zoned land, a maximum of 1,800 acres of land may be covered by solar panels.

2. In Rural Residential, Residential, Commercial/Residential, Employment, and Industrial zones, where a Solar Collection System is allowed as a limited use, [it must either satisfy Subsection 59.3.7.2.B.1.a through Subsection 59.3.7.2.B.1.e or] it must satisfy the following standards in either subsection a or b:

- a. The Solar Collection System must be an accessory use as follows:
  - i. the system produces a maximum of 120% of on-site energy consumption;
  - ii. encroachment allowed under Section 4.1.7.B.5.C; and
  - iii. a maximum height allowed under 4.1.7.C.3.b.
- b. The Solar Collection System must satisfy the following standards:
  - [a] i. Site plan approval is required under Section 7.3.4.
  - [b] ii. The site must be a minimum of 3 acres in size.
  - [c] iii. The system may produce a maximum of 2 megawatts (AC).
  - [d] iv. All structures must be:



- [i] A. 20 feet in height or less;
- [ii] B. located at least 50 feet from any property line; and
- [iii] C. surrounded by a minimum 6-foot-tall fence.
- [e] v. If a structure for a Solar Collection System is located in an area visible to an abutting residential use or a road:
  - [i] A. only solar thermal or photovoltaic panels or shingles may be used;
  - [ii] B. the panels or shingles must use textured glass or an anti-reflective coating; and
  - [iii] C. 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.
- [f] vi. The Solar Collection System must be removed 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. 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.
- [g] vii. If licensed by the Public Service Commission, [A] a system designed to produce more than 2 megawatts (AC) [may be allowed as a public utility use under Section 3.6.7.E] is not restricted by Chapter 59.

\* \* \*

## **Sec. 2. DIVISION 59-7.3 is amended as follows:**

### **Division 7.3. Regulatory Approvals**

\* \* \*

**Section 7.3.4. Site Plan**

\* \* \*

**E. Necessary Findings**

\* \* \*

5. For property zoned AR proposed for use as a Solar Collection system:

a. grading and any soil removal will be minimized; and

b. the site must be designated pollinator-friendly under the

Maryland Pollinator-Friendly Designation Program, or any land

on which the solar generation facility is located that is not

designated as pollinator friendly must be planted, managed, and

maintained in a manner suitable for grazing farm animals.

\* \* \*

**Sec. 3. Reporting.** On April 1, 2021 and annually thereafter, the Department of Permitting Services must report to the County Council the total acreage of Solar Collection System permits in the Agricultural Reserve approved by the Department since the effective date of ZTA 20-01.

**Sec. 4. Effective date.** This ordinance becomes effective 20 days after the date of Council adoption.

This is a correct copy of Council action.

---

Selena Mendy Singleton, Esq.

Clerk of the Council



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

**OFFICE OF THE CHAIR**

February 24, 2020

**TO:** The County Council for Montgomery County, Maryland, sitting as the District Council for the Maryland-Washington Regional District in Montgomery County, Maryland

**FROM:** Montgomery County Planning Board

**SUBJECT:** Zoning Text Amendment No. 20-01

**BOARD RECOMMENDATION**

The Montgomery County Planning Board of The Maryland–National Capital Park and Planning Commission reviewed Zoning Text Amendment No. 20-01 (ZTA 20-01) at its regular meeting on February 20, 2020. By a vote of 4:0, (Commissioner Cichy absent from the hearing) the Planning Board recommends approval of the ZTA with modifications and additional comments (as discussed below), to revise the Solar Collection System use standards to allow larger facilities in the Agricultural Reserve (AR) zone, amend the provisions for Solar Collection Systems in other zones, and amend the provision for site plan approval in the AR zone. Currently, a Solar Collection System in the Agricultural Reserve is limited to an accessory use.

The Board believes that ZTA 20-01 – if modified as recommended in the separate attached ZTA – can strike a balance in addressing the desire to provide more solar production opportunities in the County, including the ability to provide “Community Solar” benefits to those who cannot, or prefer not to, install solar panels on their homes, with the protection measures for properties that are near these facilities. In the case of solar facilities that are not accessory to a principle use, the legislation continues to require site plan approval and provides limitations on the size of the overall system and the height of any freestanding structure.

For a Solar Collection System located in the AR zone, in addition to the aforementioned standards, inclusion of requirements that the ground underneath the panels have pollinator-friendly plants or is suitable for grazing or crop production, that soil and tree removal is minimized, and that a limitation be placed on the amount of agricultural land that can be developed as a Solar Collection System, further assists in reducing the impacts of solar collection as a principle use in the AR zone. However, the Planning Board is also recommending additional requirements that will further strengthen the goal of having Solar Collection Systems in the AR zone be compatible with other public policy goals including agricultural production, environmental sustainability, and Agritourism. These standards pertain to:

- discouraging development on prime agricultural soils,
- prohibiting development on slopes greater than 15% or on an area that has highly erodible soil; and
- prohibiting development on soils that have been delineated as seasonally flooding or saturated.

In addition, the Board identified important issues to be further discussed during site plan review as follows:

- the protection of scenic views identified in the Rustic Roads Functional Master Plan through site plan review,
- removing the fence requirement in the AR zone, recognizing that screening options can be further examined during site plan review.

The Board also believes that the limited area recommended for inclusion for potential development of Solar Collection Systems in the AR zone (1,800 acres or approximately two percent of the total 93,000 acres of the Agricultural Reserve) represents a small enough area of the Agricultural Reserve to not significantly compromise the Master Plan for Preservation of Agricultural and Rural Open Space's designation of farm land and agriculture as the preferred land use in the Agricultural Reserve. Again, please note that the Planning Board's modified text in the separate attachment to this transmittal, includes several clarifications and additional requirements to further strengthen the protections provided by the ZTA as introduced.

Finally, given the numerous requests by community members to delay action on this ZTA until the Climate Action Plan Technical Workgroups have proposed their comprehensive recommendations on reducing carbon emissions, the Planning Board requests that the County Council consider transmitting ZTA 20-01 to the applicable workgroups for their comments, in lieu of indefinitely tabling the legislation.

#### **CERTIFICATION**

This is to certify that the attached report is a true and correct copy of the technical staff report and the foregoing is the recommendation adopted by the Montgomery County Planning Board of The Maryland-National Capital Park and Planning Commission, at its regular meeting held in Silver Spring, Maryland, on Thursday, February 20, 2020.



Casey Anderson  
Chair

CA:GR:aj



**Zoning Text Amendment (ZTA) No. 20-01, Solar Collection System - Standards**

---



Gregory Russ, Planner Coordinator, FP&P, [gregory.russ@montgomeryplanning.org](mailto:gregory.russ@montgomeryplanning.org), 301-495-2174



Jason Sartori, Chief, FP&P, [jason.sartori@montgomeryplanning.org](mailto:jason.sartori@montgomeryplanning.org), 301-495-2172

**Completed: 02/13/20**

---

**Description**

As defined under Section 59.3.7.2.A, Solar Collection System means an arrangement of panels or other solar energy devices that provide for the collection, inversion, storage, and distribution of solar energy for electricity generation, space heating, space cooling, or water heating. A Solar Collection System includes freestanding or mounted devices.

Zoning Text Amendment (ZTA) 20-01 would revise the Solar Collection System use standards to allow larger facilities in the Agricultural Reserve (AR) zone, amend the provisions for Solar Collection Systems in other zones, and amend the provision for site plan approval in the AR zone. Currently, a Solar Collection System in the Agricultural Reserve is limited to an accessory use.

**Summary**

Staff recommends approval of ZTA No. 20-01, with modifications, to revise the Solar Collection System use standards to allow larger facilities in the Agricultural Reserve (AR) zone, amend the provisions for Solar Collection Systems in other zones, and amend the provision for site plan approval in the AR zone. Staff believes that ZTA 20-01 – if modified as recommended in this report - can strike a balance in addressing the desire to provide more solar production opportunities in the County, including the ability to provide “Community Solar” benefits to those who cannot, or prefer not to, install solar panels on their homes, with the protection measures for properties that are near these facilities. In the case of solar facilities that are not accessory to a principle use, the legislation continues to require site plan approval and provides limitations on the size of the overall system and the height of any freestanding structure.

For a Solar Collection System located in the AR zone, in addition to the aforementioned standards, inclusion of requirements that the ground underneath the panels have pollinator-friendly plants or is suitable for grazing or crop production, that soil and tree removal is minimized, and that a limitation be placed on the amount of agricultural land that can be developed as a Solar Collection System, further assists in reducing the impacts of solar collection as a principle use in the AR zone. However, staff is recommending additional requirements that will further strengthen the goal of having Solar Collection Systems in the AR zone be compatible with other public policy goals including agricultural production, environmental sustainability, and Agritourism. Staff also believes that the limited area recommended for inclusion for potential development of Solar Collection Systems in the AR zone

(1,800 acres or approximately two percent of the total 93,000 acres of the Agricultural Reserve) represents a small enough area of the Agricultural Reserve to not significantly compromise the Master Plan for Preservation of Agricultural and Rural Open Space's designation of farm land and agriculture as the preferred land use in the Agricultural Reserve. Again, please note that within the staff report, staff has recommended several clarifications and recommended additional requirements to further strengthen the protections provided by the ZTA as introduced.

## Background/Analysis

On May 15, 2018 the County Council adopted ZTA 18-01 to revise the Solar Collection System use standards to allow larger facilities in Rural Residential, Residential, Commercial/Residential, Employment, and Industrial zones. The sponsors of ZTA 18-01 believed that the public interest would be served by expanding the opportunities for solar production in areas where development is anticipated. The ZTA retained the accessory use limitation on solar collection systems in the Agricultural Reserve (AR) zone. The ZTA included standards to prevent glare and to buffer the facility from surrounding land uses. The ZTA provided more opportunities for community oriented solar facilities. Community oriented solar facilities offer the benefit of solar to those who can't, or prefer not to, install solar panels on their homes. These projects enable individuals, businesses, or organizations to purchase or lease a "share" in a community solar project. Shared solar means photovoltaic (PV) systems can be somewhere else in the community (in a field, on a building, over a parking lot, and elsewhere) but provide the benefits of solar electricity to participating subscribers.

ZTA 20-01, Solar Collection Systems – AR Zone Standards, would allow a targeted deployment of community solar projects on farms in the County's Agricultural Reserve.

### Rationale for ZTA Introduction (Excerpt from Fact Sheet prepared by the Sponsors of ZTA 20-01)

ZTA 20-01 would limit the applicability of the legislation to 1,800 acres (or about two percent) of the County's 93,000-acre Agricultural Reserve for community solar as a limited use. Currently, the zoning code prohibits community solar in the Agricultural Reserve.

"As a national environmental leader, Montgomery County has declared a climate emergency and committed to "100 percent elimination" of carbon emissions by 2035 (and 80 percent by 2027). Eliminating carbon emissions will require tackling their sources -- the emissions that come from fossil fuels used to power buildings and transportation, particularly. According to the Metropolitan Washington Council of Governments, 51 percent of County emissions come from the energy used to power our buildings. Achieving a quicker reduction of buildings' emissions requires transforming the sources of energy that our buildings use. That means increasing solar energy production.

Maryland's community solar law allows solar providers to sell solar energy to larger groups of consumers -- groups of houses or apartment communities -- who cannot or have not yet installed solar panels. Community solar farms are smaller than "utility scale" arrays; they only require 10 to 12 acres of land. They may produce up to two megawatts of electricity (or about 4,464,000 kWh's) annually, which replaces energy derived from fossil fuels in the electrical grid.

More specifically, each two-megawatt community solar project avoids the creation of 3,156 metric tons of carbon emissions. That is equivalent to the emissions created by 364 homes in one year. Extrapolating to the full buildout of 1,800 acres in the County's Agricultural Reserve, the solar energy produced would provide enough clean energy for 54,631 homes. Zooming out a bit further, a full buildout under this ZTA would reduce approximately 473,434 metric tons of carbon emissions, or 4.4 percent of the County's total emissions. That would be a sizable step toward meeting the County's climate goals. By contrast, rooftop solar mandates for new construction would take decades to achieve the same level of energy substitution and emissions reduction."

ZTA 20-01 includes a number of provisions to support agriculture, including requirements that the ground under the panels have pollinator-friendly plants or is suitable for grazing and that soil and tree removal is minimized. It also has site size, setback, height and fencing requirements. The goal of this ZTA is to get solar deployed quickly while limiting its impact on the overall Agricultural Reserve. To achieve that balance, community solar is limited to two percent of the Agricultural Reserve (1,800 acres).

Specifically, ZTA 20-01 modifies the Solar Collection System provisions as discussed below:

- **Eliminates the limited use provision requiring that a Solar Collection System located in the Agricultural Reserve zone only be an accessory use.** The ZTA retains language allowing a Solar Collection System as an accessory use in the Agricultural Reserve, Rural Residential, Residential, Commercial/Residential, Employment, and Industrial zones but does not require such. In addition to the current standards for a Solar Collection System in the non-Agricultural Reserve zones (see bullet below), the limited use standards for solar as a principle use in the Agricultural Reserve zone include several of the applicable existing accessory use standards (written authorization from the local utility company when proposed to be connected to the grid, and prohibition of the removal of trees or landscaping otherwise required or attached as a condition of approval of any plan, application, or permit), and two additional standards requiring that: the site be designated pollinator-friendly under the Maryland Pollinator-Friendly Designation Program<sup>1</sup> (except as allowed under Subsection 59.7.3.4.E.5.b., site plan review, necessary findings); and cumulatively, on all AR zoned land, a maximum of 1,800 acres of land may be covered by solar panels. Under the Necessary Finding for site plan review, property zoned AR proposed for use as a Solar Collection system must: minimize grading and any soil removal; and be designated pollinator-friendly under the Maryland Pollinator-Friendly Designation Program, or any land on which the solar generation facility is located that is not designated as pollinator friendly must be planted, managed, and maintained in a manner suitable for grazing farm animals. *(Lines 12-36, 48-77 and 84-92)*
- **In Rural Residential, Residential, Commercial/Residential, Employment and Industrial zones, where a Solar Collection System is allowed as a limited use, the ZTA continues to allow the use as an accessory use or as a principle use.** As an accessory use, the standards as proposed under

---

<sup>1</sup> The Pollinator-Friendly Designation Program bill (SB 1158) was signed by Governor Larry Hogan in May 2017. SB 1158 established a pollinator-friendly designation program for commercial ground-mounted solar facilities. The bill has a scorecard attached which will serve as the initial basis for pollinator-friendly designation of a site.



Subsection 3.7.2.B.2.a. apply (all of which were originally included under the accessory use provisions under the Agricultural Reserve zone). These include:

- the system produces a maximum of 120% of on-site energy consumption;
- encroachment allowed under Section 4.1.7.B.5.C (*may project a maximum of 3 feet into any side setback, or any side street setback of less than 25 feet and may project a maximum of 9 feet into any front setback, rear setback, or any side street setback where the side street setback is a minimum of 25 feet*); and
- a maximum height allowed under 4.1.7.C.3.b. (*maximum height does not apply to solar panels, except in the CRT, CR, Employment, and Industrial zones, solar panels may exceed the established height limit by up to 8 feet, except when located within an airport approach area*)

As a principle use, the following limited use standards apply (*Lines 48-77*):

- Site plan approval is required
- The site must be a minimum of 3 acres in size
- All structures must be: 20 feet in height or less; at least 50 feet from any property line; and surrounded by a minimum 6-foot-tall fence. **Staff believes that fencing should not be allowed to surround a Solar Collection System in the AR zone, as this standard would be unsuitable for establishing grazing for animals. Staff has modified the ZTA to reflect this recommendation.**
- If located in an area visible to an abutting residential use or a road: only solar thermal or photovoltaic panels or shingles may be used; the panels or shingles must use textured glass or an anti-reflective coating; and 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 (minimum depth of screening must be between 30 and 50 feet and must include a 6 foot in height fence or wall).
- The Solar Collection System must be removed 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.
- A system designed to produce more than 2 megawatts (AC) may be allowed as a public utility use.

### Community Correspondence

Concerns have been expressed about ZTA 20-01 in that it: would take fertile farmland out of production; would price farmers out of the Ag Reserve; would possibly damage habitats and forests; is not in line with the master plan; takes green space and sites panels far from power infrastructure.

The comments further recommend that this ZTA be tabled until the Climate Action Plan Technical Workgroups<sup>2</sup> have proposed their comprehensive recommendations for how the County can reduce its carbon emissions. They believe that this County-funded, collaborative and public effort should guide next steps.

## Staff Comments

As written, the ZTA requires all Solar Collection Systems (SCS) located in the AR Zone to be Pollinator-Friendly or suitable for grazing. The text makes no distinction as to whether this applies to an accessory SCS and a SCS as a principle use or to only the SCS as a principle use. Staff assumes that this standard would apply only to a SCS as a principle use given that the Pollinator-Friendly Program is intended for commercial ground-mounted solar facilities. *Staff recommends clarifying the ZTA language to reflect that only in the case of a SCS as a principle use is the ground beneath the panels required to include pollinator-friendly plants or be suitable for grazing of animals. In addition, staff not only believes that land could be made suitable for grazing of animals, but also could be made suitable for crop production. Staff has modified the ZTA language to reflect this recommendation.*

The ZTA also carries forward existing restrictions on accessory SCSs in the AR zone (written authorization from the local utility company when connected to the grid, and a prohibition of the removal of trees or landscaping otherwise required or attached as a condition of approval of any plan, application, or permit) for any SCS in the AR zone. *Staff believes that these two restrictions should be applied to SCSs in all zones.*

Staff further recommends the following additional standards for the placement of a Solar Collection System as a principle use in the AR Zone:

- 1) The use must not be located within a scenic view identified in the Rustic Roads Functional Master Plan
- 2) The use must not be located on Prime Agricultural Soils as identified by USDA or Montgomery County Soil Conservation Service
- 3) The use must not be located on naturally occurring slopes in excess of 8%
- 4) The use must not be located on soils that are seasonally flooded or saturated as identified by USDA or Montgomery County Soil Conservation Service

## Conclusion

Staff believes that ZTA 20-01 – with the recommended modifications – can strike a balance in addressing the desire to provide more solar production opportunities in the County, including the ability to provide

---

<sup>2</sup> In July 2019, Montgomery County launched a planning process to develop prioritized actions and strategies to meet the County's greenhouse gas emissions reduction goals. The County intends to finalize a Climate Action Plan by December of 2020 that will provide a roadmap to achieve carbon neutrality and will also include recommendations for adapting to a changing climate. (For more information, visit <https://www.montgomerycountymd.gov/green/climate/climate-action-planning.html>.)

“Community Solar” benefits to those who can't, or prefer not to, install solar panels on their homes, with the protection measures for properties that are near these facilities. In the case of solar facilities that are not accessory to a principle use, the legislation continues to require site plan approval and provides limitations on the size of the overall system and the height of any freestanding structure.

For a Solar Collection System located in the AR zone, in addition to the aforementioned standards, inclusion of a requirement that the ground underneath the panels have pollinator-friendly plants or is suitable for grazing or crop production, that soil and tree removal is minimized, and that a limitation be placed on the amount of agricultural land that can be developed as a Solar Collection System, further assists in reducing the impacts of solar collection as a principle use in the AR zone. Staff believes that the limited area recommended for inclusion for potential development of Solar Collection Systems in the AR zone (1,800 acres or approximately two percent of the total 93,000 acres of the Agricultural Reserve) represents a small enough area of the Agricultural Reserve to not significantly compromise the **Master Plan for Preservation of Agricultural and Rural Open Space's** designation of farm land and agriculture as the preferred land use in the Agricultural Reserve.

Staff has included, as a modification to the ZTA (Attachment 1), *clarifying language to reflect that only in the case of a Solar Collection System as a principle use is the ground beneath the panels required to include pollinator-friendly plants or is made suitable for grazing of animals or crop production. Staff also believes that the language currently proposed only for the AR zone that requires written authorization from the local utility company when a Solar Collection System is proposed to be connected to the grid, and the language prohibiting the removal of trees or landscaping otherwise required or attached as a condition of approval of any plan, application, or permit, should be included for all zones.*

Staff has also included in the modified ZTA language, several additional standards that further protect the integrity of the Agricultural Reserve. These standards pertain to protection of scenic views, discouraging development on prime agricultural soils, prohibiting development on slopes greater than 8% and prohibiting development on soils that have been delineated as seasonally flooding or saturated.

#### Attachments

1. ZTA No. 20-01 as modified by staff.




OFFICE OF THE COUNTY EXECUTIVE  
Rockville, Maryland 20850

Marc Elrich  
*County Executive*

**MEMORANDUM**

July 8, 2020

TO: Montgomery County Council

FROM: Marc Elrich, County Executive 

RE: ZTA 20-01, Solar Collection Systems – AR Zone Standards

To help meet the County's greenhouse gas reduction goals, we need to shift our electricity use to renewable sources, including solar. All parts of the County should contribute to local solar generation, including the Agricultural Reserve.

I support the use of solar systems of up to 2 megawatts within the Agricultural Reserve if it is limited to non-prime and non-productive soils and if there is a cap of no more than 1,800 acres that may be covered with solar panels.<sup>1</sup> I agree with the Planning Board's recommendation that solar installations should not be placed on soil classification types I, II, and III within the Agricultural Reserve. Agricultural land is a finite resource and we should treat it accordingly. At least one Maryland jurisdiction that initially allowed solar to be installed on prime soils now has gone back to tighten its policy.<sup>2</sup>

I do not agree with the Planning Board's addition of language that designates solar collection systems as a principal use in the Agricultural Reserve. The primary, preferred land use of the Agricultural Reserve is agriculture. Other land uses like solar systems must not supplant agriculture. See Sec. 4.2.1.A. Agricultural Reserve Zone (AR) Intent Statement.

I support the following recommendations from the Planning Board: (1) protecting scenic views for agritourism; (2) not siting solar on naturally occurring steep slopes – our inter-

---

<sup>1</sup> Please refer to endnote on the technical feasibility of developing solar PV systems in the Agricultural Reserve.

<sup>2</sup> Farmland Preservation Administrator Anne Bradley from Frederick County reported that they had a few hundred acres go into solar panels, but then updated an ordinance to prohibit large-scale solar installations in Priority Preservation Areas, on Ag preserved easement properties or on Prime farmland soils. <https://www.frederickcountymd.gov/DocumentCenter/View/296336/Bill-No-17-07-Solar-Facilities-and-Floating-Zones?bidId=>

departmental working group recommended not in excess of 8% while the Planning Board recommendation says not in excess of 15%; (3) not siting solar on soils that are seasonally flooded or saturated as identified by the USDA or the Montgomery County Soil Conservation Service; (4) protecting forested lands; and (5) co-locating solar with pollinator habitat.

Additionally, I support exploring opportunities to co-locate solar with agriculture (such as planting between the rows of solar arrays), if this conforms to my recommendations for not siting solar on soil classification types I-III.

To keep the designation of solar systems as an accessory use in the Agricultural Reserve, I recommend modifying the definition of “accessory use” in Section 3.1.3 and modifying Section 3.7.2.B.2 to enable the use of community solar systems of up to 2 megawatts. Here is suggested language:

- Section 3.1.3. Uses Listed as Accessory would read: Uses listed under an accessory use group in the Use Table are uses that are incidental and subordinate to the principal use of a lot, site, or the principal building, and located on the same lot or site as the principal use or building. **In the Agricultural Reserve Zone (AR), an accessory use also refers to uses that are subordinate to the intent of the AR Zone to promote agriculture as the primary and preferred land use; if a conflict in uses arises, the primary and preferred land use takes precedence.** (New text underlined in bold) AND
- Section 3.7.2.B. Use Standards 1. In the Agricultural Reserve zone, **a Solar Collection System must be an accessory use as defined in Section 3.1.3. In addition,** all of the standards in Subsection 3.7.2.B.2 and the following standards apply: (*Note: "the following standards" refers to additional standards proposed by the Planning Board or the County Council prior to adoption of the ZTA*)

#### **Endnotes:**

#### ***Technical issues:***

The technical feasibility of developing solar PV systems in the Agricultural Reserve is governed by two things:

1. *Available land area after considering restrictions such as productive soils, agricultural easements, impervious area, steep slopes, forested areas, proximity to water features, etc.*  
– The Executive branch and Montgomery Planning are working together to incorporate the most accurate information into a GIS-based tool that will show the impact of different policy decisions related to these factors.
2. *The ability to connect the PV systems to the distribution grid of the three utilities (Potomac Edison, Pepco, and BGE) serving the Agricultural Reserve – Data is still being*

sought from the utilities to enable reasonable estimates of the ability of the distribution system to accommodate solar installations.

***General concerns:***

Throughout the discussion of this ZTA, farmers and advocates for the Ag Reserve have expressed deep concern that its adoption will weaken the intent of the Reserve and allow for future incursions. I take these concerns very seriously. We are trying to balance the need to find sources for renewable energy with the importance of the Ag Reserve as a source of local food, clean water, and carbon sequestration. My inter-departmental working group has done extensive work done to accommodate both of these goals and is available to answer Councilmembers' questions.

ME/ci/ah

c: Jeffrey L. Zyontz, Senior Legal Analyst



**MONTGOMERY COUNTY COUNCIL**  
ROCKVILLE, MARYLAND

ANDREW FRIEDSON  
COUNCILMEMBER  
DISTRICT 1

**MEMORANDUM**

July 10, 2020

**TO:** Hans Riemer, Chair, PHED Committee  
Tom Hucker, Chair, T&E Committee & Council Vice President

**FROM:** Andrew Friedson, Member, PHED Committee

**SUBJECT:** ZTA 20-01 – Solar Collection System - AR Zone Amendments

Yesterday's joint committee work session on ZTA 20-01 – Solar Collection System – AR Zone Standards provided an important opportunity for us to examine two important public policy issues – how to advance our environmental/renewable energy efforts and the importance of maintaining the viability of our farming industry and preserving the integrity of our coveted Agricultural Reserve. I appreciated the inclusion of subject matter experts and advocates in our discussion who raised thoughtful concerns and constructive suggestions.

After meeting with environmental advocates, representatives from the solar industry, and agricultural community, I believe the following amendments would strengthen this piece of legislation and intend to propose them at our next meeting. As such, I have requested Council Staff to prepare them prior to our next work session on July 16. I appreciate your consideration of these measures and look forward to discussing these issues with you in more detail next week.

- 1) Prohibit solar installation on Prime Agricultural Soils - Class I & II as defined by USDA Soil Capability Soil Classification System
- 2) Require solar collection systems to be part of Maryland's Community Solar Program
- 3) Allow accessory solar facilities to produce 200% on site in AR zones rather than the current 120%
- 4) Exclude BLT agricultural easements





MONTGOMERY COUNTY COUNCIL  
ROCKVILLE, MARYLAND

ANDREW FRIEDSON  
COUNCILMEMBER  
DISTRICT 1

- 5) Prohibit removal of prime and productive agricultural soils from site
- 6) Require screening within 200 ft. of a house/ Otherwise, remove screening requirement
- 7) Prohibit installations on slopes greater than 15% slopes (PB) instead of 8%
- 8) Expand the list of plants allowed under a solar facility
- 9) Remove fence requirement

Additionally, I support Councilmember Jawando's suggestion that we should include a bonding requirement to sufficiently protect property owners and ensure the land can be restored for farming in the future. I believe this requires a stand-alone piece of legislation.

cc: Will Jawando, Councilmember  
Evan Glass, Councilmember  
Jeff Zyontz, Council Staff

**ADDENDUM**

PHED & T&E Committees #1  
July 16, 2020

**M E M O R A N D U M**

July 14, 2020

TO: Planning, Housing, and Economic Development Committee  
Transportation and Environment Committee

FROM: Jeff Zyontz, Senior Legislative Analyst

SUBJECT: Zoning Text Amendment 20-01, Solar Collection System – AR Zone Standards

PURPOSE: Worksession – Additional Material

The attached material was submitted for the Joint Committee's consideration after the distribution (online posting) of the Staff memorandum for the July 16 meeting:

- 1) Councilmember Jawando submitted recommended amendments in a memorandum dated July 13, 2020. (Except for the specific parcel coverage for a solar facility, these proposed amendments were reflected in Staff's memorandum dated July 13.) (©1-2)
- 2) County Executive Elrich submitted additional material. (©3-4)



**MONTGOMERY COUNTY COUNCIL  
ROCKVILLE, MARYLAND**

WILL JAWANDO  
COUNCILMEMBER  
AT-LARGE

**MEMORANDUM**

July 13, 2020

**TO:** Hans Riemer, Chair, PHED Committee  
Tom Hucker, Chair, T&E Committee & Council Vice President  
**FROM:** Will Jawando, Member, PHED Committee  
**SUBJECT:** ZTA 20-01 – Solar Collection System – AR Zone Amendments

Last week's joint committee work session on ZTA 20-01 – Solar Collection System – AR Zone Standards provided a deep look at two important issues for our county, how to ensure access to high-quality locally sourced food, and how to improve our energy mix as a county to ensure more renewable sources. We need more solar in this County, and the urbanized areas of the County will not be sufficient. However, it is also essential that we protect the Agricultural Reserve to preserve its role in local food production. The AR Zone is a national model for agricultural preservation, we would be wise to approach any changes to this model carefully to avoid setting a dangerous precedent.

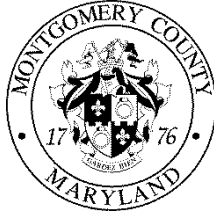
With that in mind, I have consulted with advocates on both sides of this issue to find an approach that accomplishes both goals. I believe that the following amendments will help ensure that we can meet our climate obligations while ensuring the viability of farming in the AR Zone for decades to come. I have requested that Council Staff draft the following amendments in preparation for a discussion during Thursday's work session. More than anything we need to be able to evaluate the effects of these changes together in order to determine a safe middle ground that will allow solar to proceed in the AR Zone while also protecting its status as an agricultural preserve.

- 1) Require that solar collection facilities be a part of Maryland's Community Solar Program or the aggregate net energy metering program,
- 2) Prohibit the use of concrete in solar installations.
- 3) Allow accessory solar facilities to produce 200% of on-site electricity usage within the AR Zone.
- 4) Explicitly prohibit the removal of top soil or other prime and productive soils from the site.
- 5) Allow growing agrivoltaic crops under solar panels for table crops as an alternative to pollinator friendly habitats.
- 6) Limit solar installations to 20% of a property or adjacent properties with common ownership.
- 7) Prohibit solar installation on Class I and II Prime Agricultural Soils as defined by the USDA soil capability classification system.

Additionally, I believe that we need to create a bonding requirement requiring that funds be set aside to restore agricultural land to its original state when the facility is eventually removed. Council staff has indicated that this must occur separately from the ZTA, so I am requesting that they draft legislation to that effect.

Together, these amendments strengthen this bill by decreasing the likelihood of farmers being priced off of farmland, ensuring that the best farmland is reserved for farming, and making it easier to restore farmland to production at the end of the lease. We need to evaluate the effects of all of these amendments together in light of the GIS data we should have before the Joint Committee Work Session on Thursday.

cc: Evan Glass, Councilmember  
Andrew Friedson, Councilmember  
Jeff Zyontz, Council Staff




OFFICE OF THE COUNTY EXECUTIVE  
Rockville, Maryland 20850

Marc Elrich  
*County Executive*

**MEMORANDUM**

July 14, 2020

TO: Montgomery County Council

FROM: Marc Elrich, County Executive 

SUBJECT: ZTA 20-01, Solar Collection Systems – AR Zone Standards

Because the Executive branch will be responsible for implementing this zoning text amendment if adopted, I would like to request some clarifications and make some additional comments based on last week's discussions at the joint PHED/T&E Committee meeting and Councilmember Friedson's proposed amendments to ZTA 20-01. These are from members of my inter-departmental working group as well as from me.

We would like the joint committees to discuss the discrepancy regarding the determination of soil classifications, as well as its significance. While the Planning Department relied on a 1984 USDA Soil Survey to determine the number of acres of class I, II, and III soils in the Ag Reserve, my inter-departmental working group relied on the 1995 Montgomery County Soil Survey. I understand that the Planning Department has deferred to the working group's assessment, which is based on land classifications required by the Maryland Agricultural Land Preservation Foundation. We have provided our mapping under separate cover and continue to support the prohibition of solar collection systems in soil classes I, II, and III.

ZTA 20-01 should include language that makes it clear that the legislative intent is to retain the stated primary purpose of the Agricultural Reserve while allowing community solar systems (up to 2MW). Absent a strong statement of intent, the ZTA would lay the groundwork for those who want to make the case for utility-scale systems in the Agricultural Reserve. While every part of the county should be part of the move toward renewable energy resources, we should take every possible step to ensure that the primary, preferred land use in the 40-year-old landmark Agricultural Reserve remains agriculture. This can be accomplished by using the term "Community Solar Collections Systems" based on the state's definition of the term. Limitations on the size of solar uses can also be accomplished by revising the definition of an accessory use or limiting community solar systems to no more than 2MW or 49% of a property, whichever is less. Councilmember Friedson's proposed amendment to allow accessory solar facilities to produce 200% on site in the AR zones (rather than the current 120%) is another way to achieve your goal of increasing the production of solar energy without unduly compromising the Ag Reserve. The Office of Agricultural Services will be available on Thursday talk about the practical effects of this proposed amendment.

We believe stronger language is needed to protect trees and landscaping in the Ag Reserve (see Section 3.7.2.B.1.b in the ZTA as introduced). The ZTA allows the Planning Board to make decisions regarding their removal as part of its site plan review process. Given the importance of forests and tree canopies for carbon sequestration, we must provide full protection in the legislation itself instead of ceding responsibility to site plan review. We also support the protection of scenic views in the Ag Reserve and disagree with the assertion made in last week's committee session that solar panels are scenic. Most people would disagree with that assertion, an important point to consider as we seek to increase agritourism.

Finally, I would like to thank committee members for giving the Office of Agricultural Services the opportunity to participate last week. They and other members of the working group have done extensive work to accommodate the dual goals of finding sources for renewable energy while recognizing the importance of the Ag Reserve as a source of local food, clean water, and carbon sequestration. I urge you to call on the team members for background information and essential data during this week's very important discussion.

ME/ci/ah

c: Jeffrey L. Zyontz, Senior Legal Analyst