



HOWARD COUNTY DEPARTMENT OF PLANNING AND ZONING
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TECHNICAL STAFF REPORT

Planning Board Meeting of June 15, 2023

Case No./Petitioner: ZRA-204 - Councilwoman Rigby

Request: To amend the definitions of "Parking Area, Parking Facility or Parking Use" and "Solar Collector, Rooftop" to allow solar canopies as a matter of right in Parking Areas and on parking structures.

I. BACKGROUND AND HISTORY OF EXISTING ZONING REGULATIONS

Prior Zoning Regulation Amendments - Solar

In 2012, Council Bill 39-2012 (ZRA- 142) added a definition for Commercial Solar Facility's (CSF) and added solar facilities as a Conditional Use in RC and RR to allow renewable energy sources in the rural portion of the County. The use was prohibited on properties less than 10 acres and on properties in the Agricultural Land Preservation Program.

During the 2013 Comprehensive Zoning, the Accessory Solar Collector use was added in all zoning districts, except R-HED, OT, and SC. The definition of Accessory Solar Collector required the power generated to be consumed primarily by the principal use on the property.

In 2016, Council Bill 59-2016 (ZRA-164) permitted the Commercial Solar Facility Conditional Use on Agricultural Land Preservation Parcels (ALPP) and required review and advisory comments from the Agricultural Preservation Board (APB). A new criterion was to include a visual impact analysis for scenic views and a glare study.

In 2021, Council Bill 17-2021 (ZRA-197) incorporated several changes recommended by the Howard County Solar Task Force, created by Council Resolution 133-2019. Among other changes, it updated the solar definitions in Section 103.0, allowed rooftop commercial and accessory ground-mount solar collectors in all zoning districts, exempted accessory ground-mount solar collectors from the accessory structure lot coverage requirement, allowed ground-mount commercial solar panels in B-1 (Business: Local), B-2 (Business: General), CE (Corridor Employment), M-1 (Manufacturing: Light), M-2 (Manufacturing: Light), POR (Planned Office Research), and PEC (Planned Employment Center) as a matter of right, eliminated the requirement for a glare study, and revised the Agricultural Preservation Board's review process.

Prior Zoning Regulation Amendments - Parking

Parking definitions were first introduced in the 1954 regulations, with ‘parking area, garage, lot and space’ first being outlined in the definition section in 1977.

During the 1993 Comprehensive Zoning, the definition for “Parking Area, Parking Facility or Parking” was expanded to define the “use” as any area of a lot or structure used for off-street parking of motor vehicles or for vehicular circulation, including the area occupied by parking spaces, driveways, or vehicle stacking lanes (e.g., for a car wash or drive-through window).

During the 2004 Comprehensive Zoning, through Council Bill 75-2003, the definition for Parking Area, Parking Facility or Parking Use was amended to exclude loading docks; areas designated to be occupied by a vehicle during loading operations; fuel servicing spaces at a gasoline service station; any area used for outdoor display or storage of merchandise for sale or rent, including motor vehicles; and any area used for storage of inoperative motor vehicles.

The term “Parking Use” is found in the bulk regulations of the CE, B-1, B-2, M-1, M-2, PEC, SC (Shopping Center), and TOD (Transit Oriented Development) zoning districts and allows a reduced setback from public rights-of-way for parking lots in suburban/auto dependent areas.

II. DESCRIPTION OF PROPOSAL

This section contains a summary of the Petitioner’s proposed amendments (Exhibit A), which change the definitions associated with parking and solar collector uses, as outlined below. The Petitioner asserts that ground-mounted solar canopies are not clearly defined as a 'parking use', which limits the locations and options for installation, and including ground-mounted solar canopies as a parking use will expand opportunities for their installation.

SECTION 103.0: - Definitions - Parking Area, Parking Facility or Parking Use:

Parking Area, Parking Facility or Parking Use: Any area of a lot or structure used for off-street parking and circulation of motor vehicles, including the area occupied by parking spaces, driveways, and vehicle stacking lanes (e.g., for a car wash or drive-through window). The following are not part of a parking area or parking use: loading docks; areas designated to be occupied by a vehicle during loading operations; fuel servicing spaces at a Motor Vehicle Fueling Facility; parking lot islands, any area used for outdoor display or storage of merchandise for sale or rent, including motor vehicles; and any area used for storage of inoperative motor vehicles

The Petitioner proposes adding “Ground-mounted parking canopies shall be considered a parking use” to this definition.

SECTION 103.0: - Definitions - Solar Collector, Rooftop

Solar Collector, Rooftop: A solar collector or commercial solar collector and all supporting electrical and structural components that is attached to the rooftop of an existing structure, or integrated into the building, where the solar panels themselves act as a building material or structural element.

The Petitioner proposes adding “including ground mounted parking canopies” to the definition.

III. EVALUATION OF PROPOSAL

This section contains the Department of Planning and Zoning (DPZ) technical evaluation of ZRA-204 in accordance with Section 16.208.(d) of the Howard County Code. The Petitioner’s proposed amendment text is attached as Exhibit A.

1. **The compatibility, including potential adverse impacts and consequences, of the proposed Zoning Regulation Amendment with the existing and potential uses of the surrounding areas and within the same zoning district.**

Currently, structures, including parking canopies, are required to meet the structure and use setbacks from the public street rights-of-way; however, parking uses are allowed to be closer to the public street rights-of-way in the CE, B-1, B-2, M-1, M-2, PEC, SC, and TOD zoning districts. Thus, only a portion of parking lots that are adjacent to public street rights-of-way in these zoning districts may have solar parking canopies. These amendments allow solar parking canopies to meet the parking use setback and cover a larger portion of these parking lots.

The proposed amendments are unlikely to result in adverse impacts to surrounding properties based on the following:

- The CE, B-1, B-2, M-1, M-2, PEC, SC, and TOD zoning districts consist of commercial/industrial uses and are primarily located on collector and arterial roads;
- Residential uses are typically located behind the commercial/industrial uses;
- Parking canopies are currently allowed at the structure and use setback;
- Rooftop/ground-mounted solar collectors are permitted as a matter of right in these zoning districts; and
- Solar collectors can have an anti-reflective coating or light trapping technology that minimize glare.

2. **The properties to which the Zoning Regulation Amendment could apply and, if feasible, a map of the impacted properties.**

ZRA-204 will apply to the CE, B-1, B-2, M-1, M-2, PEC, SC, and TOD zoning districts. A map of these properties is attached as “Attachment A”.

3. **Conflicts in the Howard County Zoning Regulations as a result of the Zoning Regulation Amendment.**

While not a conflict with the Zoning Regulations, the Division of Land Development has reviewed ZRA-204 and identified potential conflicts with the objectives of the Subdivision and Land Development Regulations and Howard County Landscape Manual.

Parking lot landscaping and street tree plantings

- 1) Section 16.124 of the Subdivision and Land Development Regulations and the Howard County Landscape Manual requires subdivisions and developments to provide perimeter and parking lot landscaping and street tree plantings. The construction of parking lot solar canopies may impact required landscaping in the following ways:
 - a) Perimeter Landscaping – Perimeter landscaping is required along the outside boundary of a property.
 - i) Perimeter landscaping buffers consist of a range of shade and evergreen trees. These trees may be impacted if clearing of vegetation is needed to provide solar canopy structures with direct access to sunlight.
 - b) Parking Lots Adjacent to Roadways - The Landscape Manual requires a combination of low shrubs and canopy trees to provide visibility through a site while partially screening cars parked immediately adjacent to the roadway.
 - i) A solar canopy may shade smaller vegetation, such as shrubs, and reduce the survivability of trees due to loss of sunlight and precipitation.
 - ii) Required shade trees may be impacted if clearing of vegetation is needed to provide solar canopy structures with direct access to sunlight.
 - c) Parking Lot Internal Landscaping – All parking lots must provide permanently landscaped areas consisting of planted islands, peninsulas, or medians within the interior of the lot. Grouping of parking spaces should generally not exceed 12 in a row for residential land uses, 24 in a row for commercial or institutional land uses, and 30 in a row for large regional shopping centers and malls.
 - i) The requirement to provide parking lot landscaping within islands, peninsulas or medians would be impacted by the placement of solar canopies within a parking lot.
 - d) Street Trees – Street trees shall be provided on new internal roads and on existing roads involving road improvements as a component of Complete Streets.
 - i) Large shade trees required for street tree plantings may be impacted if clearing of large tree canopies are needed to provide solar canopy structures with direct access to sunlight.
4. **The compatibility of the proposed Zoning Regulation Amendment with the Policies and objectives, specifically including the environmental policies and objectives, of the Howard County General Plan.**

ZRA-204 is compatible with the following PlanHoward 2030 policies that encourage sustainable energy production and green industries.

Policy 4.12, “develop an energy plan that prepares for different future energy scenarios, examines options for various kinds of future energy sustainability, promotes conservation and renewable resources, and sets targets to reduce greenhouse gases.”

Policy 5.3, “promote future energy and green industries.”

Policy 10.6: “improve the competitiveness and design of commercial areas”.

d. Parking Design. Discourage large parking lots in locations that dominate the public image of the site along main roads. Increase the requirements for internal parking lot landscaping to visually break up large lots, provide more shade, and improve the pedestrian environment.

The proposed ZRA could help advance green technologies, however, the visual impact that ground mounted solar canopies could have on parking area appearance and parking design should be considered. Incorporation of these structures within parking areas that dominate the public image along main roads may or may not break up large lots, provide more shade, and improve the pedestrian environment in a manner equivalent to internal landscaping outlined in Policy 10.6. Compatible incorporation of landscaping requirements with ground mounted parking canopies is best addressed as a site-specific design issue.

Environmental Policies and Objectives

The Resource Conservation Division finds that ZRA-204 is consistent with the environmental policies of PlanHoward 2030 and will expand opportunities for the generation of solar powered energy, a renewable energy source, throughout the County.

5. If the zoning regulation text amendment would impact eight parcels of land or less:

- (i) A list of those impacted parcels;**
- (ii) The address of each impacted parcel;**
- (iii) The ownership of each impacted parcel; and**
- (iv) The contact information for the owner, if an individual, or resident agent or owner, if a corporate entity, of each impacted parcel.**

ZRA-204 impacts more than eight (8) parcels; therefore, this criterion does not apply.

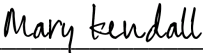
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 65E27A8800A740C
 Mary Kendall, Acting Director
 6/1/2023
 Date

Exhibit A

Petitioner's Proposed Text

(CAPITALS indicate text to be added; text in [[brackets]] indicates text to be deleted.)

Section 103.0: Definitions

Parking Area, Parking Facility or Parking Use: Any area of a lot or structure used for off-street parking and circulation of motor vehicles, including the area occupied by parking spaces, driveways, and vehicle stacking lanes (e.g. for a car wash or drive-through window). GROUND-MOUNTED PARKING CANOPIES SHALL BE CONSIDERED A PARKING USE. The following are not part of a parking area or parking use: loading docks; areas designated to be occupied by a vehicle during loading operations; fuel servicing spaces at a Motor Vehicle Fueling Facility; parking lot islands, any area used for outdoor display or storage of merchandise for sale or rent, including motor vehicles; and any area used for storage of inoperative motor vehicles.

Solar Collector, Rooftop : A solar collector or commercial solar collector and all supporting electrical and structural components that is attached to the rooftop of an existing structure, INCLUDING GROUND MOUNTED PARKING CANOPIES, or integrated into the building, where the solar panels themselves act as a building material or structural element.

Exhibit B

How the Text Would Appear Normally If Adopted

Section 103.0: Definitions

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Attachment A

