

One Government Center, Suite 1620, Toledo, OH 43604 P: 419 245-1200 F: 419 936-3730

DATE: September 13, 2024 REF: M-4-24

TO: President Carrie Hartman and Members of Council, City of Toledo

FROM: Toledo City Plan Commission, Thomas C. Gibbons, Secretary

SUBJECT: Review of SolSmart Text Amendment

The Toledo City Plan Commission considered the above-referenced request at its meeting on Thursday, September 12, 2024 at 2:00 P.M.

#### **GENERAL INFORMATION**

Subject

Request	-	Review of SolSmart Text Amendment
Applicant	-	Dana Reising, Sustainability Manager Toledo Division of Solid Waste 3962 Hoffman Road Toledo, OH 43611

Applicable Plans and Regulations

- Toledo Municipal Code Part Eleven: Planning and Zoning
- Forward Toledo Comprehensive Land Use Plan

#### STAFF ANALYSIS

In June of this year, Toledo City Council passed a resolution to begin working towards becoming a SolSmart Community. SolSmart is a national designation program designed to recognize cities, towns, counties, and regional organizations for encouraging local solar energy growth through established best practices. SolSmart is led by the Interstate Renewable Energy Council, and the International City/County Management Association, and funded by the U.S. Department of Energy, Solar Energy Technologies Office. Two key parts of the SolSmart Program are: 1) no-cost technical assistance to local governments to increase local knowledge of solar energy, remove local barriers to solar energy use, and promote the use of solar energy; and 2) recognize local governments commitment to solar energy by awarding them with a SolSmart designation of Platinum, Gold, Silver or Bronze. There are currently twenty (20) local governments and/or organizations in Ohio that are designated SolSmart communities.

## STAFF ANALYSIS (cont'd)

The SolSmart Standard Criteria pathway to becoming a designated SolSmart Community includes meeting prerequisites and obtaining a sufficient number of points in each of the following five categories: Permitting and Inspection, Planning and Zoning, Government Operations, Community Engagement, and Market Development. Sustainability Manager, Dana Reising is overseeing the process for the City of Toledo to become a Bronze designated SolSmart Community and is coordinating with the Plan Commission and Building Inspection to achieve this goal. She has worked with city planning staff to review zoning and land use regulations to identify needed amendments to clarify and make transparent those regulations pertaining to solar energy systems. Based on this review and a preliminary analysis of the City's planning and zoning code by SolSmart, staff is recommending a text amendment pertaining to solar energy systems. Specific text amendment language can be found in the exhibits at the end of this report. Following is a summary of the proposed changes:

- Added Solar Energy Systems as a use in the Use Table in TMC§1104.0100.
- Renamed TMC§1105.0800 Solar Panels to TMC§1105.0800 Solar Energy Systems.
- Added a purpose section that includes Toledo's goals to promote energy efficient development, use of renewable energy sources, and reduce greenhouse gas emissions.
- Clarified in the use table as well as in TMC§1105.0803 that solar energy systems, that are accessory to a principal structure, are permitted by right in all zoning districts.
- Clarified that accessory solar energy systems may be building-mounted (roof or façade), building integrated, or ground-mounted and specified height, placement, and screening for these solar energy systems that are consistent with other permitted accessory structures.
- Added provision for maintenance and abandonment of solar energy systems.
- Added that in addition to properties in Historic Districts, properties in Overlay Districts also need reviewed by the respective designated body.
- Added definitions for solar energy system, building integrated solar energy system, building-mounted solar energy system, ground-mounted solar energy system (accessory), and ground-mounted solar energy system (primary) in TMC§1116.0187.

#### PLAN COMMISSION RECOMMENDATION

The Toledo City Plan Commission recommends approval of M-4-24, a text amendment to the Planning and Zoning Code to amend solar regulations, to the Toledo City Council.

Respectfully Submitted,

7 Sth

Thomas C. Gibbons Secretary

LK Three (3) Exhibits follow

CC: Dana Reising, Division of Solid Waste, 3962 Hoffman Road, Toledo, OH 43611 Lisa Cottrell, Deputy Director Lisa Karcher, Planner

# Exhibit "A" Existing Regulations

#### 1105.0800 Solar Panels

#### 1105.0801 Applicability

The standards of this Section apply to all solar panel energy conversion systems that are accessory to a principal structure.

#### 1105.0802 Location without Special Use

Solar panels are permitted when:

- **A.** Panels are attached to a building and are not visible from a street.
- **B.** Panels are visible from a street as long as the panels are installed parallel to the roof slope and project no more than 12 inches from the roof surface.

#### 1105.0803 Location with Special Use

Special Use approval is required in accordance with Sec. 1111.0700 when the solar panel energy conversion system is a stand-alone facility or cannot meet the standards of Sec. 1105.0802

#### 1105.0804 Location within Historic Districts

Solar panel energy conversion systems may not be located in a designated Historic District unless approved by the respective Historic District Commission.

# Exhibit "B" Proposed Modifications (Additions highlighted. Deletions in italic strikethrough.)

# 1104.0100 Use Table

Use Category	RS 12	RS 9	RS 6	RD 6	RM (all)	R MH	CN	со	СМ	CS	CR	CD	IL	IG	IP	POS	IC
Other Use Types	112225																- Solar
Solar Energy Systems																	
Accessory	P [33]	P [33]	P [33]	P [33]	P [33]	P [33]	P [33]	P [33]	P [33]	P [33]	P [33]	P [33]	P [33]	P [33]	P [33]	P [33]	P [33]
Primary	S	S	S	S	S	S	S	S	S	S	S	S	S	S	S	S	P
Urban Agriculture																	
Major	S	S	S	S	S	S	P	P	P	P	P	P	P	P	P	P	P
and the set of the set	[31]	[31]	[31]	[31]	[31]	[31]	[31]	[31]	[31]	[31]	[31]	[31]	[31]	[31]	[31]	[31]	[31]
Minor	P [31]	P [31]	P [31]	P [31]	P [31]	P [31]	P  [31]	P [31]									
Mining		-	-	-	-	-	-	-	-	-	-	-	-	Р	-	-	-
Recycling Facilities																	
Large Collection Facilities	-		_	-	-	-	-	-	-	-	-	-	Р	Р	-	-	-
Small Collection Facilities			_	-	-	-	_	_	-	Р	Р	Р	Р	Р	-	-	-
Processing Center	-		-	-	-	-	-	-	-	-	-	-	Р	Р	-	-	-
Wireless Telecommunications Facilities																	
Co-Located	P [25]	P [25]	P [25]	P [25]	P [25]	P [25]	P [25]	P [25]	P [25]	P [25]	P [25]	P [25]	P [25]	P [25]	P [25]	P [25]	P [25]
Freestanding	S [25]	S [25]	S [25]	S [25]	S [25]	S [25]	P [25]	P [25]	S [25]	S [25]	P [25]	P [25]	P [25]	P [25]	P [25]	S [25]	P [25]
Radio/TV Towers		-	-	-	-	-	-	_	-	-	S [25]	S [25]	S [25]	S [25]	S [25]	-	_

[33] Subject to the standards of Sec 1105.0800 | Solar Energy Systems

# 1105.0800 Solar Panels Energy Systems

# 1105.0801 Purpose

The purpose of this Section is to establish standards permitting solar energy systems in an effort to promote energy efficient development and the use of renewable energy sources while reducing greenhouse gas emissions. It is the intent to balance permitting solar energy systems through appropriate standards for the design, installation and maintenance with minimizing potential impacts to the health, safety, welfare, and character of the area in which they are cited.

## Exhibit "B" (cont'd)

## 1105.08042 Applicability

The standards of this Section apply to all solar *panel* energy *conversion* systems that are accessory to a principal structure. Solar energy systems constructed prior to the effective date of these regulations shall not be required to meet these provisions. However, if an existing solar energy system is upgraded, modified or changed in a way that materially alters its size or placement, it shall comply with these provisions.

# 1105.08023 Location without Special Use (Accessory)

Solar *panels are* energy systems are permitted *when* by right in all zoning districts as an accessory use to a principal structure subject to the following development and design standards:

- A. Panels are attached to a building and are not visible from a street.
- B. Panels are visible from a street as long as the panels are installed parallel to the roof slope and project no more than 12 inches from the roof surface.
- A. Solar energy systems shall be designed for on-site generation of electricity for the principal use; however, excess power generated may be sold to the electric utility provider.
- **B.** Prior to the installation or modification of a solar energy system, an electrical permit application and a building permit application along with two sets of Ohio stamped engineered plans with structural analysis, shall be submitted to and approved by the Division of Building Inspection.
- **C.** Solar energy systems may be building-mounted, building integrated or ground-mounted subject to all applicable requirements for that location as follows:
  - 1. Building-Mounted and Building Integrated Solar Energy Systems
    - a. Building-mounted solar energy systems may be mounted on the roof, side façade or rear facade of a principal or accessory structure.
    - b. Roof-mounted solar energy systems installed on a sloped roof shall be mounted parallel to the roof surface and shall not extend below the roof line or above the ridgeline of the roof to which they are attached when the panels are at maximum design tilt.
    - c. Roof-mounted solar energy systems installed on a flat roof may exceed the maximum principal building height or accessory building height for the specified zoning district by up to 5 feet above the roof surface to which it is attached when the panels are at maximum design tilt. In no instance shall any part of the solar energy system extend beyond the edge of the roof.

#### Exhibit "B" (cont'd)

- d. Roof-mounted solar energy systems are exempt from screening requirements, except for mechanical equipment pursuant to Section 1105.0803(D).
- e. Roof-mounted solar energy systems shall comply with applicable state and local fire codes to ensure emergency access to the roof, provide pathways to specific areas of the roof, provide areas for smoke ventilation, and provide emergency egress from the roof.
- f. Façade mounted solar energy systems shall not project more than 4 feet from a façade and shall not extend into the required building setback to which it is attached.
- g. Building integrated solar energy systems are considered building materials and shall be reviewed as building materials and therefore shall comply with applicable building setbacks for the zoning district.

## 2. Ground-Mounted Solar Energy Systems

- a. Ground-mounted solar energy systems are permitted in rear yards only.
- b. Ground-mounted solar energy systems shall not exceed the maximum building height for accessory buildings in the applicable zoning district when the panels are at maximum design tilt.
- c. Ground-mounted solar energy systems shall meet side and rear yard setback standards for accessory buildings in the applicable zoning district.
- d. Ground-mounted solar energy systems shall not count toward the maximum number of accessory structures permitted.
- e. Ground-mounted solar energy systems are exempt from screening requirements, except for mechanical equipment pursuant to Section 1105.0803(D).
- f. Ground-mounted solar energy systems are exempt from lot coverage if the area under the system is vegetative ground cover.
- g. Ground-mounted solar energy systems shall not be placed in any legal easement, right-of-way, required landscape buffer or placed in any stormwater conveyance system that would in any manner impede storm water runoff.

## Exhibit "B" (cont'd)

- h. Power transmission lines from ground-mounted solar energy systems shall be located underground.
- **D.** All mechanical equipment, except for the solar collection device, associated with and necessary for the operation of solar energy systems shall comply with the following:
  - 1. Mechanical equipment shall not be located within the front yard.
  - **2.** Mechanical equipment shall meet side and rear yard setbacks for accessory buildings in the applicable zoning district.
  - **3.** Mechanical equipment shall meet screening requirements in the applicable zoning district.
  - **4.** Appropriate safety/warning signage concerning voltage shall be placed at ground-mounted devices, equipment and structures.
  - 5. All electric control devices associated with the solar energy system shall be locked to prevent unauthorized entry.
- **E.** Solar Access Easements Owners of solar energy systems are solely responsible for negotiating with other property owners for any desired solar easements to protect access to sunlight. Any such easements must be consistent with the requirements of Section 5301.63 of the Ohio Revised Code.
- **F.** Maintenance and Abandonment of Solar Energy Systems All components of a solar energy system including the structure and property upon which the system is located, shall be maintained in good condition and in safe working order. Any solar energy system that is not operated on a functional basis for a period of twelve (12) consecutive months shall be deemed abandoned. The Chief Building Official may order the repair or removal of said solar energy system in accordance with these provisions. The applicant, owner, or other person responsible for the system shall repair or remove the same within thirty (30) days of receipt of notification by certified mail. If said facility is not either operational or remove the system at the owner's expense.

#### 1105.08034 Location with Special Use (Primary)

Special Use approval is required in accordance with Sec. 1111.0700 when the solar *panel* energy *conversion* system is a stand-alone facility *or cannot meet the standards of Sec. 1105.0802*.

## Exhibit "B" (cont'd)

### 1105.08045 Location within Historic Districts or Overlay Districts

Solar panel energy conversion systems may not be located in a designated Historic District unless approved by the respective Historic District Commission.

- **A.** Solar energy systems in a designated Historic District shall require a Certificate of Appropriateness from the respective Historic District pursuant to Chapter 1103.
- **B.** Solar energy systems in an Overlay District shall require review and approval by the respective designated body (i.e. Architectural Review Committee, Development Corporation, etc.) pursuant to Chapter 1103.

1116.0187 Solar	(1) <b>Solar Energy System (SES)</b> - An energy system that consists of one or more solar collection devices, solar-energy related equipment, and other associated infrastructure with the primary intention of generating electricity, storing electricity, or otherwise converting solar energy to a different form of energy. Solar energy systems may generate energy in excess of the energy requirements for a property if it is to be sold back
	to a public utility in accordance with the law.
	(2) <b>Building Integrated Solar Energy System</b> - An SES where solar materials are incorporated into building materials, such that the two are reasonably indistinguishable, or where solar materials are used in place of traditional building components, such that the SES is structurally an integral part of a house, building, or other structure.
	(3) <b>Building-Mounted Solar Energy System</b> - An SES that is affixed to or mounted on a rack that is ballasted on, or is attached to the roof or façade of a principal or accessory building or structure. A roof-mounted system is accessory to the primary use.
	(4) Ground-Mounted Solar Energy System (Accessory) - An SES mounted on a rack or pole that is ballasted on, or attached to the ground, and is accessory to the primary use.
	(5) <b>Ground-Mounted Solar Energy System (Primary)</b> - A SES mounted on a rack or pole that is ballasted on, or attached to the ground, and is the primary land use for the parcel(s) on which it is located. Primary use systems are permitted through the Special Use Permit process.

# Exhibit "C" Proposed Regulations

### 1104.0100 Use Table

Use Category	RS 12	RS 9	RS 6	RD 6	RM (all)	R MH	CN	со	СМ	CS	CR	CD	IL	IG	IP	POS	IC
Other Use Types																	
Solar Energy Systems									MERCHARCONSTRAN		SALISATION TO MAN					And the second second	
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Primary	S	S	S	S	S	S	S	S	S	S	S	S	S	S	S	S	P
Urban Agriculture			nepermittelity Dis			2020803800207										-	
Major	S [31]	S [31]	S [31]	S [31]	S [31]	S [31]	P [31]	P [31]	P [31]	P [31]	P [31]	P [31]	P [31]	P [31]	Р [31]	P [31]	Р [31]
Minor	P [31]	P [31]	P [31]	P [31]	P [31]	P [31]	P [31]	P [31]	P [31]	P [31]	P [31]	P [31]	P [31]	P [31]	Р [31]	P [31]	P [31]
Mining			-					-		-				P		-	
Recycling Facilities																	ALCOLOGIA TROUGHOUS
Large Collection Facilities					-			-	-	-	_		Р	Р	-	-	
Small Collection Facilities	_	_		-	_	-	_	-	-	Ρ	Р	Р	Р	Р	_	_	-
Processing Center	_	_		-	-	-		-		_	-	_	Р	Р		-	
Wireless Telecommunications Facilities																	
Co-Located	P [25]	P [25]	P [25]	P [25]	P [25]	P [25]	P [25]	P [25]	P [25]	P [25]	Р [25]	P [25]	P [25]	P [25]	P [25]	P [25]	P [25]
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Radio/TV Towers			-	_	_	-	_	-		-	S [25]	S [25]	S [25]	S [25]	S [25]	-	_

[33] Subject to the standards of Sec 1105.0800 | Solar Energy Systems

# 1105.0800 Solar Energy Systems

# 1105.0801 Purpose

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## Exhibit "C" (cont'd)

## 1105.0802 Applicability

The standards of this Section apply to all solar energy systems that are accessory to a principal structure. Solar energy systems constructed prior to the effective date of these regulations shall not be required to meet these provisions. However, if an existing solar energy system is upgraded, modified or changed in a way that materially alters its size or placement, it shall comply with these provisions.

## 1105.0803 Location without Special Use (Accessory)

Solar energy systems are permitted by right in all zoning districts as an accessory use to a principal structure subject to the following development and design standards:

- **A.** Solar energy systems shall be designed for on-site generation of electricity for the principal use; however, excess power generated may be sold to the electric utility provider.
- **B.** Prior to the installation or modification of a solar energy system, an electrical permit application and a building permit application along with two sets of Ohio stamped engineered plans with structural analysis, shall be submitted to and approved by the Division of Building Inspection.
- **C.** Solar energy systems may be building-mounted, building integrated or ground-mounted subject to all applicable requirements for that location as follows:

### 1. Building-Mounted and Building Integrated Solar Energy Systems

- a. Building-mounted solar energy systems may be mounted on the roof, side façade or rear facade of a principal or accessory structure.
- b. Roof-mounted solar energy systems installed on a sloped roof shall be mounted parallel to the roof surface and shall not extend below the roof line or above the ridgeline of the roof to which they are attached when the panels are at maximum design tilt.
- c. Roof-mounted solar energy systems installed on a flat roof may exceed the maximum principal building height or accessory building height for the specified zoning district by up to 5 feet above the roof surface to which it is attached when the panels are at maximum design tilt. In no instance shall any part of the solar energy system extend beyond the edge of the roof.
- d. Roof-mounted solar energy systems are exempt from screening requirements, except for mechanical equipment pursuant to Section 1105.0803(D).

## Exhibit "C" (cont'd)

- e. Roof-mounted solar energy systems shall comply with applicable state and local fire codes to ensure emergency access to the roof, provide pathways to specific areas of the roof, provide areas for smoke ventilation, and provide emergency egress from the roof.
- f. Façade mounted solar energy systems shall not project more than 4 feet from a façade and shall not extend into the required building setback to which it is attached.
- g. Building integrated solar energy systems are considered building materials and shall be reviewed as building materials and therefore shall comply with applicable building setbacks for the zoning district.

## 2. Ground-Mounted Solar Energy Systems

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- b. Ground-mounted solar energy systems shall not exceed the maximum building height for accessory buildings in the applicable zoning district when the panels are at maximum design tilt.
- c. Ground-mounted solar energy systems shall meet side and rear yard setback standards for accessory buildings in the applicable zoning district.
- d. Ground-mounted solar energy systems shall not count toward the maximum number of accessory structures permitted.
- e. Ground-mounted solar energy systems are exempt from screening requirements, except for mechanical equipment pursuant to Section 1105.0803(D).
- f. Ground-mounted solar energy systems are exempt from lot coverage if the area under the system is vegetative ground cover.
- g. Ground-mounted solar energy systems shall not be placed in any legal easement, right-of-way, required landscape buffer or placed in any stormwater conveyance system that would in any manner impede storm water runoff.
- h. Power transmission lines from ground-mounted solar energy systems shall be located underground.

# Exhibit "C" (cont'd)

- **D.** All mechanical equipment, except for the solar collection device, associated with and necessary for the operation of solar energy systems shall comply with the following:
  - 1. Mechanical equipment shall not be located within the front yard.
  - **2.** Mechanical equipment shall meet side and rear yard setbacks for accessory buildings in the applicable zoning district.
  - **3.** Mechanical equipment shall meet screening requirements in the applicable zoning district.
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# 1105.0804 Location with Special Use (Primary)

Special Use approval is required in accordance with Sec. 1111.0700 when the solar energy system is a stand-alone facility.

# 1105.0805 Location within Historic Districts or Overlay Districts

**A.** Solar energy systems in a designated Historic District shall require a Certificate of Appropriateness from the respective Historic District pursuant to Chapter 1103.

#### Exhibit "C" (cont'd)

- **B.** Solar energy systems in an Overlay District shall require review and approval by the respective designated body (i.e. Architectural Review Committee, Development Corporation, etc.) pursuant to Chapter 1103.
- 1116.0187 Solar
  (1) Solar Energy System (SES) An energy system that consists of one or more solar collection devices, solar-energy related equipment, and other associated infrastructure with the primary intention of generating electricity, storing electricity, or otherwise converting solar energy to a different form of energy. Solar energy systems may generate energy in excess of the energy requirements for a property if it is to be sold back to a public utility in accordance with the law.
  - (2) Building Integrated Solar Energy System An SES where solar materials are incorporated into building materials, such that the two are reasonably indistinguishable, or where solar materials are used in place of traditional building components, such that the SES is structurally an integral part of a house, building, or other structure.
  - (3) **Building-Mounted Solar Energy System** An SES that is affixed to or mounted on a rack that is ballasted on, or is attached to the roof or façade of a principal or accessory building or structure. A roof-mounted system is accessory to the primary use.
  - (4) Ground-Mounted Solar Energy System (Accessory) An SES mounted on a rack or pole that is ballasted on, or attached to the ground, and is accessory to the primary use.
  - (5) Ground-Mounted Solar Energy System (Primary) A SES mounted on a rack or pole that is ballasted on, or attached to the ground, and is the primary land use for the parcel(s) on which it is located. Primary use systems are permitted through the Special Use Permit process.