

CITY OF SHELBYVILLE

ADAM M RUDE
DIRECTOR



ALLAN HENDERSON
DEPUTY DIRECTOR

PLAN COMMISSION

Meeting Date: 6/22/2020

Case Number and Name:	PC 2020-04: Solar Standards and Minor UDO Amendment
Petitioner's Name:	City of Shelbyville, Plan Commission
Action Requested:	A formal recommendation to the Common Council on two proposed text amendments to the City of Shelbyville's Unified Development Ordinance.

The Plan Commission and their staff have been working for several months on a few minor amendments to the Unified Development Ordinance to address certain issues and discrepancies that have been brought up to the Planning Staff. There are two sections of the Unified Development Ordinance that we are proposing to amend, and this report has been structured around those two sections with detailed explanations for both:

1. **Solar Energy Standards:** This is a new section of the ordinance that will help to promote and reasonably regulate solar energy installations in each of our zoning districts. This section has been written to take into account the current and intended characteristics of each zoning district while also anticipating how solar energy installations will be used in each district. This new section is structured in six sections, one section for general standards that apply to all zoning districts, and five sections that are specific for certain zoning districts. Below is a brief explanation of each section:
 - a. **General Solar Energy System Standards:** This section begins by explaining that a number of pre-existing standards (setback, height, density, etc.) should also be considered because they still apply to solar installations. This section also defines some terms that pertain to solar energy installations and establishes a way they will be measured.
 - b. **Agricultural Solar Energy Systems Standards:** These standards apply to our agricultural zoning districts (AG - Agriculture, and AR - Agriculture/Rural Residential), of which we have very few parcels with this zoning classification. This allows solar installations to be ground-mounted or roof-mounted in accordance with the setback and height standards for the subject parcel.
 - c. **Residential and Park Solar Energy System Standards:** These standards apply to our residential districts (R1-Single Family Residential, R2-Two Family Residential, and RM-Multifamily Residential) as well as our PK-Parks and Open Space districts. An improvement location permit (ILP) will be required for all ground-mounted systems to ensure that setbacks and height standards can be verified before installation. For building-mounted systems, no improvement location permit will be required, but an electrical permit to connect the panels into the building's electrical system will be required. There is an exception for the PK-Parks and Open Space district that allows panels to be placed in front, side, and rear yards, which would typically not be permitted for an accessory structure. We added this provision because the "Front Yard" is defined as all of the space between a building and the road, which would have classified most of our parks as "Front Yards" rendering them unable to have solar panels installed.

- d. **Commercial Solar Energy System Standards:** These standards are designed for installations on properties that have a commercial building as the primary structure, and these standards apply to all commercial and institutional zoning districts (IS-Institutional, BN-Business Neighborhood, BC-Business Central, BG-Business General, and BH-Business Highway). Similar setback and height standards apply in these districts, but we also require that an engineering report be prepared showing that the building is structurally sound to support the panels being installed. In these districts, we also classify the panels as “Mechanical Equipment” which requires that they be properly screened from public view.
 - e. **Industrial Solar Energy System Standards:** These standards apply to our industrial zoning districts (IL-Light Industrial and IG-General Industrial) and are intended to allow these industrial facilities to add solar installations to offset their energy needs. This section has all the same requirements of the “Commercial” section, discussed previously, except there are fewer requirements to screen equipment from public view.
 - f. **Solar Farm Energy System Standards:** These standards are intended for large-scale solar farm installations. These standards apply to our most intense zoning district, HI-High Impact, which is reserved for uses that typically have some of the greatest risks for negative impact on surrounding properties. This district has some of the most restrictive development standards to help combat any possible negative impacts on surrounding properties, including minimum setbacks of 150 feet, maximum lot coverage of 50%, and a minimum lot size of 20 acres. Aside from the standards that are already in place for this district, the proposed amendment would require that “Solar Energy Production as a Primary Use” (ie. a Solar Farm) be reviewed and granted a special exception use approval from the Board of Zoning Appeals. This provides the BZA with a chance to review each request on a case by case basis and allows for public input on all of these requests before they are approved.
2. **Preparation of Drainage Reports:** This second proposed amendment is to bring our local regulations in line with state statute. Under current state law, Registered Land Surveyors are strictly prohibited from performing drainage studies and certifying drainage reports. This technical skill is reserved for Professional Engineers licensed by the State. We currently allow both Professional Engineers and Registered Land Surveyors to prepare and certify a drainage report that is required for the Plan Commission Subdivision of Land approval process. The new proposed language would limit this work to Professional Engineers, as dictated in state statute (IC 25-21.5-9). We changed this same language for another Plan Commission submission type in a recent UDO amendment, and this section was not identified until recently.

1.01 SL-01: General Solar Energy System Standards

This Solar Energy Standards (SL) section applies to the following zoning districts:



- A. Project Applicability: Installation of any solar energy system shall meet the following standards:
- B. Cross Reference:
 - 1. *Accessory Use and Structure Standards(AS) (5.02)*
 - 2. *Architectural Standards(AR) (5.07)*
 - 3. *Density and Intensity Standards(DI) (5.11)*
 - 4. *Height Standards(HT) (5.23)*
 - 5. *Setback Standards(SB) (5.55)*
- C. Definitions:
 - 1. *Ground Installation*: shall include any solar energy systems that is attached directly to the ground, including all systems that are not attached or mounted on a primary or accessory structure.
 - 2. *Building Installation*: shall include any solar energy system that is attached to a primary or accessory structure, which can include systems that are not mounted directly to the roof of a structure.
- D. Accessory Structures: Any ground installation shall be considered an accessory structure as defined by this ordinance, and shall meet the applicable standards established for each zoning district, unless otherwise stated in this section.
- E. Measurement of Solar Devices:
 - 1. *Ground Installation*: The height of a solar installation shall be measured as a vertical distance from the highest natural grade below each solar panel to the uppermost point on the device.
 - 2. *Building Installation*: The height of a solar installation shall be measured as the vertical distance from the lowest horizontal plane of the system to the uppermost point of the device. Installations on roofs exceeding a 1:3 slope shall be measured as a distance from the plane of the roof, at an angle perpendicular to the roof plane.
- F. Height:
 - 1. *Ground Installation*: Any ground mounted solar installation shall not exceed twenty (20) feet in height, or the maximum accessory structure height established for that district, whichever is greater.
 - 2. *Building Installation*: Any rooftop solar installation on a flat roof or roof with a slope less than 1:3 shall not exceed ten (10) feet above the existing height of the structure, but solar installations themselves may exceed the maximum height of the structure as prescribed earlier in this ordinance. Any installation exceeding a 1:3 slope shall be installed parallel to the roof with the height not exceeding eighteen (18) inches of the existing roof height.
- G. Prohibited: Installation of solar energy systems shall not be permitted in the MP District.
- H. Permits: All solar installation types shall be required to obtain an electrical permit in accordance with procedures and requirements established by the Office of the Shelbyville Building Commissioner, and:
 - 1. *Ground Installation*: An Improvement Location Permit shall be required for any new solar energy system installation.
 - 2. *Rooftop Installation*: An Improvement Location Permit shall be required for any new solar energy system installation except for the R1, R2, AG, and AR districts which do not require an Improvement Location Permit.
- I. Abandoned Systems: A solar energy system shall be considered abandoned if its inoperable and/or not producing energy for more than six (6) months. The solar energy system shall be removed within six (6) months after being deemed abandoned by the Zoning Administrator. The Plan Commission and their staff shall utilize the “General Violations” enforcement procedures established in Article 10 of this Ordinance to address “Abandoned Systems.”
- J. Floodplain: Any solar installations located within the floodplain shall be exempt from floodplain setback standards established in Section 5.55 of this Ordinance. Solar energy systems within a floodplain must meet all standards set by the Federal Emergency Management Agency, Indiana Department of Natural Resources, and any other applicable governmental agencies.

1.02 SL-02: Agricultural Solar Energy System Standards

This Solar Energy Standards (SL) section applies to the following zoning districts:



A. Scale:

1. *Ground Installation:* Shall be limited in scale by the Density and Intensity Standards established under Section 5.11 of this Ordinance.
2. *Building Installation:* May utilize the entire area of the structure's roof on the subject property.

B. Location:

1. *Ground Installation:* Shall meet all setback requirements set forth in Section 5.55 of this Ordinance.
2. *Building Installation:* Solar energy systems may be located on the roof, of a primary or accessory structure, but shall meet all requirements set forth in this document. Roof trusses shall have sufficient strength to accommodate the weight of solar energy systems.

1.03 SL-03: Residential and Park Solar Energy System Standards

This Solar Energy Standards (SL) section applies to the following zoning districts:



A. Scale:

1. *Ground Installation:* Shall be limited in scale by the Density and Intensity Standards established under Section 5.11 of this Ordinance.
2. *Building Installation:* May utilize the entire area of the structure's roof on the subject property.

B. Location:

1. *Ground Installation:* Shall meet all setback requirements set forth in Section 5.55 of this Ordinance.
2. *Building Installation:* Solar energy systems may be located on the roof, of a primary or accessory structure, but shall meet all requirements set forth in this document. Roof trusses shall have sufficient strength to accommodate the weight of solar energy systems.

- C. Setback: Solar energy systems residing in the PK Zoning District shall be exempt from setback standards established in Section 5.55 of this Ordinance, and shall be permitted within any front yard or side yard.

1.04 SL-04: Commercial Solar Energy System Standards

This Solar Energy Standards (SL) section applies to the following zoning districts:



A. Scale:

1. *Ground Installation:* Shall be limited in scale by the Density and Intensity Standards established under Section 5.11 of this Ordinance.
2. *Building Installation:* May utilize the entire area of the structure's roof on the subject property.

B. Location:

1. *Ground Installation:* Solar energy systems may be located on the ground, but shall meet all setback requirements set forth by this Ordinance.
2. *Building Installation:* Solar energy systems may be located on the roof, but shall meet all requirements set forth in this Ordinance. Roof trusses shall have sufficient strength to accommodate the weight of solar energy systems and when installed on flat-roofs or roofs with slopes of 1:1 or less, shall be considered, "mechanical equipment" and screened accordingly. A report shall be prepared by a Professional Engineer that determines that the roof truss system of the structure will safely support the proposed solar energy installation.

1.05 SL-05: Industrial Solar Energy System Standards

This Solar Energy Standards (SL) section applies to the following zoning districts:



A. Scale:

1. *Ground Installation:* Shall be limited in scale by the Density and Intensity Standards established under Section 5.11 of this Ordinance.
2. *Building Installation:* May utilize the entire area of the structure's roof on the subject property.

B. Location:

1. *Ground Installation:* Solar energy systems may be located on the ground, but shall meet all setback requirements set forth by this Ordinance.
2. *Building Installation:* Solar energy systems may be located on the roof, but shall meet all requirements set forth in this Ordinance. Roof trusses shall have sufficient strength to accommodate the weight of solar energy systems and when installed on flat-roofs or roofs with slopes of 1:1 or less, shall be considered, "mechanical equipment" and screened accordingly. A report shall be prepared by a Professional Engineer that determines that the roof truss system of the structure will safely support the proposed solar energy installation.

1.06 SL-06: Solar Farm Energy System Standards

This Solar Energy Standards (SL) section applies to the following zoning districts:



A. Scale:

1. *Ground Installation:* Shall be limited in scale by the Density and Intensity Standards established under Section 5.11 of this Ordinance.
2. *Building Installation:* May utilize the entire area of the structure's roof on the subject property.

- B. Uses: A solar energy system as an accessory structure shall be permitted by-right, but a solar energy system as a primary use shall be treated as a special exception and shall only be permitted after receiving approval in accordance with Section 9.07 of this Ordinance.

C. Location:

1. *Ground Installation:* Solar energy systems located on the ground shall only be permitted via special exception by the Shelbyville Board of Zoning Appeals.
2. *Building Installation:* Solar energy systems may be located on the roof, but shall meet all requirements set forth in this Ordinance. Roof trusses shall have sufficient strength to accommodate the weight of solar energy systems and when installed on flat-roofs or roofs with slopes of 1:1 or less, shall be considered, "mechanical equipment" and screened accordingly. A report shall be prepared by a Professional Engineer that determines that the roof truss system of the structure will safely support the proposed solar energy installation.

ORDINANCE NO. 20-XXXX

**AN ORDINANCE OF THE COMMON COUNCIL OF THE CITY OF SHELBYVILLE,
INDIANA, AMENDING THE CITY OF SHELBYVILLE UNIFIED DEVELOPMENT
ORDINANCE**

WHEREAS, the Common Council of the City of Shelbyville, Indiana recognizes the need for orderly growth and development within the City of Shelbyville and those areas within its planning jurisdiction;

WHEREAS, the City of Shelbyville has an existing Unified Development Ordinance that regulates development within its jurisdictional areas;

WHEREAS, the City of Shelbyville desires to update its development regulations to meet current economic conditions, current trends, and to promote quality growth;

WHEREAS, Public Notice was given for at least one public hearing as required by Indiana Code 36-7-4-604; and

WHEREAS, the Shelbyville Plan Commission has approved the amendments to the Unified Development Ordinance as required by Indiana Code 36-7-4-605.

NOW, THEREFORE, BE IT ORDAINED, by the Common Council of the City of Shelbyville as follows:

1. Article 5 of the Shelbyville Unified Development Ordinance is amended to include Exhibit A (Solar Energy Standards) attached hereto and incorporated herein.
2. Article 9, Section 9.11(D)(2)(g)(i) of the Shelbyville Unified Development Ordinance is amended to delete “or land surveyor”.
3. Article 9, Section 9.11(D)(2)(h) of the Shelbyville Unified Development Ordinance is amended to delete “or land surveyor”.
4. Article 2, Section 2.01 of the Shelbyville Unified Development Ordinance is amended to include “Solar Energy Production, As An Accessory Use” to the list of “Permitted Uses”
5. Article 2, Section 2.03 of the Shelbyville Unified Development Ordinance is amended to include “Solar Energy Production, As An Accessory Use” to the list of “Permitted Uses”

6. Article 2, Section 2.05 of the Shelbyville Unified Development Ordinance is amended to include “Solar Energy Production, As An Accessory Use” to the list of “Permitted Uses”

7. Article 2, Section 2.07 of the Shelbyville Unified Development Ordinance is amended to include “Solar Energy Production, As An Accessory Use” to the list of “Permitted Uses”

8. Article 2, Section 2.09 of the Shelbyville Unified Development Ordinance is amended to include “Solar Energy Production, As An Accessory Use” to the list of “Permitted Uses”

9. Article 2, Section 2.11 of the Shelbyville Unified Development Ordinance is amended to include “Solar Energy Production, As An Accessory Use” to the list of “Permitted Uses”

10. Article 2, Section 2.13 of the Shelbyville Unified Development Ordinance is amended to include “Solar Energy Production, As An Accessory Use” to the list of “Permitted Uses”

11. Article 2, Section 2.15 of the Shelbyville Unified Development Ordinance is amended to include “Solar Energy Production, As An Accessory Use” to the list of “Permitted Uses”

12. Article 2, Section 2.17 of the Shelbyville Unified Development Ordinance is amended to include “Solar Energy Production, As An Accessory Use” to the list of “Permitted Uses”

13. Article 2, Section 2.19 of the Shelbyville Unified Development Ordinance is amended to include “Solar Energy Production, As An Accessory Use” to the list of “Permitted Uses”

14. Article 2, Section 2.21 of the Shelbyville Unified Development Ordinance is amended to include “Solar Energy Production, As An Accessory Use” to the list of “Permitted Uses”

15. Article 2, Section 2.23 of the Shelbyville Unified Development Ordinance is amended to include “Solar Energy Production, As An Accessory Use” to the list of “Permitted Uses”

16. Article 2, Section 2.25 of the Shelbyville Unified Development Ordinance is amended to include “Solar Energy Production, As An Accessory Use” to the list of “Permitted Uses”

17. Article 2, Section 2.27 of the Shelbyville Unified Development Ordinance is amended to include “Solar Energy Production, As An Accessory Use” to the list of “Permitted Uses”

18. Article 2, Section 2.29 of the Shelbyville Unified Development Ordinance is amended to include “Solar Energy Production, As An Accessory Use” to the list of “Permitted Uses”, and include “Solar Energy Production, As A Primary Use” to the list of “Special Exception Uses”

19. Article 11 of the Shelbyville Unified Development Ordinance is amended to include the following definition: “Solar Energy Production: The use of photovoltaic panels or other similar technologies for the conversion of sunlight into energy for consumption, storage, or sale.”

This Ordinance shall be in full force and effect upon its passage, approval, and publication pursuant to Indiana law.

Passed by the Common Council of the City of Shelbyville, Indiana, on the first reading this ____ day of _____, 2020.

VOTE: Ayes _____ Nays _____

PRESIDING OFFICER:

Thomas D. DeBaun, Mayor

ATTEST:

Scott Asher, Clerk-Treasurer

Passed by the Common Council of the City of Shelbyville, Indiana, on the second reading this
____ day of _____, 2020.

VOTE: Ayes _____ Nays _____

PRESIDING OFFICER:

Thomas D. DeBaun, Mayor

MAYORAL APPROVAL:

Thomas D. DeBaun, Mayor

ATTEST:

Scott Asher, Clerk-Treasurer

CERTIFICATION

The undersigned Clerk-Treasurer does hereby certify that the above ordinance was presented to the Mayor, approved and signed by the Mayor on the date shown, and that said Mayor announced its approval to the Common Council this ____ day of _____, 2020.

Scott Asher, Clerk-Treasurer