



Logan-Union-Champaign
regional planning commission

Director: Jenny R. Snapp

Zoning & Subdivision Committee
Thursday, November 8, 2012 12:45 pm

Start Time: _____

- Minutes from last meeting of September 13, 2012

1st: _____ 2nd: _____

- Urbana Township, Champaign County, Zoning Text Amendments regarding Small Wind Turbines and Solar Panels - Staff Report by Wes Dodds

Adjourn End Time: _____

1st: _____ 2nd: _____

Members:

Scott Coleman – Logan County Engineer
Greg DeLong – Marysville Planning
Charles Hall – Union County Commissioner
Jeff Stauch – Union County Engineer
Paul Hammersmith – Dublin Engineer
Fereidoun Shokouhi – Champaign County Engineer
Brad Bodenmiller – Urbana Zoning
Robert A. Yoder – North Lewisburg Administrator
Joel Kranenburg- Village of Russells Point
Jenny Snapp – LUC
Wes Dodds – LUC
Heather Martin – LUC

Guests:



STAFF REPORT

FOR CONSIDERATION BY LUC REGIONAL PLANNING COMMISSION EXECUTIVE
COMMITTEE
November 8, 2012

URBANA TOWNSHIP ZONING AMENDMENT – Small Wind Projects Less than 5MW & Solar Panels

APPLICANT: Urbana Township Zoning Commission

REQUEST: Review of zoning text amendments to the Urbana Township Zoning Resolution. These amendments include the addition of language for *Small Wind Projects Less than 5MW*, and *Solar Panels*.

****Please note, this is the same language reviewed and approved by LUC at the April 2012 meetings. The township has requested another recommendation from LUC, as they failed to act on the language in the time frames outlined in chapter 519.12 of the Ohio Revised Code. The previous recommendations from the LUC Zoning and Subdivision Committee are included at the bottom of this report for your reference.***

PROPOSED AMENDMENT: Due to activity in surrounding areas the Urbana Township Zoning Commission contacted the LUC office to meet with them to draft language for Small Wind Projects Less than 5MW and Solar Panels. LUC Staff attended several meetings with the Urbana Township Zoning Commission to discuss these issues with them. The LUC model text for Small Wind Projects was presented and used as starting place for wind language; LUC researched several examples of language for zoning regarding solar panels, and these examples were presented to the Urbana Township Zoning Commission as starting place for the language regarding solar panels.



STAFF ANALYSIS:

Small Wind Projects Less than 5MW

- The Urbana Township Zoning Commission decided to use the LUC model text for Small Wind Projects Less than 5MW, with a few changes. The deviations for the LUC model text are as follows:
 - Small Wind Projects will be a permitted use in the U-1, M-1 & M-2 districts. They will be a conditional use in the R-1 and B-1 districts.
 - Reduced the maximum allowed height to 100 feet from 125 feet in the model text.
 - Increased setback requirement to 1.5 times the total height of the tower from 1.1 times the height in the model text.
 - Changed the language for the required site drawing to read "A site drawing showing the location of the unit in relation to existing structures on the property, **the location of existing wiring and wiring for the wind turbine generator, roads and other public right-of-ways, and neighboring property lines.**" The Zoning Commission felt this would be important information to have on record in the event the property sold in the future.
- Before deciding on these changes, the Zoning Commission discussed extensively many options for changes in the model text, and ultimately decided the changes above were in the best interest of the residents of Urbana Township.

Solar Panels

- The Urbana Township Zoning Commission looked at several different examples of zoning text regarding solar panels from around the state. After discussion about each, and input from LUC Staff, the Zoning Commission decided to base their language for solar panels on the example from Ashtabula Township in Ashtabula County. Both LUC Staff and the Zoning Commission felt that this language was adequate to project neighboring property owners, yet simple enough to enforce.



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- The Urbana Township Zoning Commission felt very comfortable with the language from Ashtabula Township, with one addition as follows:
 - **All applicants shall submit a site drawing showing the location of the unit in relation to existing structures on the property, the location of existing wiring and wiring for the solar panels, roads and other public right-of-ways, and neighboring property lines.**

STAFF RECOMMENDATIONS:

Staff recommends **APPROVAL** of the proposed zoning text amendments to the Urbana Township Zoning Commission.

Additionally, staff received a phone call last week from the Urbana Township Zoning Inspector with a question regarding an intermodal container being used as a storage area in a yard in the township. Currently, the Urbana Township Zoning Resolution does not clearly address this issue. To address this situation in the future, staff recommends adding the following definition to the Urbana Township Zoning Resolution as part of this zoning amendment process:

- **Semitrailer/Intermodal Containers.** A vehicle designed or used for carrying persons or property with another and separate motor vehicle, so that in operation, a part of its own weight or that of its load, or both, rests upon and is carried by another vehicle; also portable storage containers. A semitrailer/intermodal container shall not be used for storage, advertising, business, and residence. Portable storage containers shall only be permitted for 90 days.

ZONING & SUBDIVISION COMMITTEE RECOMMENDATIONS:

The LUC Zoning & Subdivision Committee recommended **APPROVAL** of the proposed text as submitted, along with addition of the definition of *Semitrailer/Intermodal Container*.

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The LUC Executive Committee commented that the township should consider replacing the words “*flush mounted*” with “*mounted parallel*” when referring to how solar panels may be erected on roofs. The committee also commented that they felt restricting the height of roof mounted solar panels to eight (8) inches above the finished plane of the roof was too restrictive, and the township should consider increasing this number.

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Urbana Township Proposed Zoning Text for Small Wind Turbines & Solar Panels

Small Wind Projects less than 5MW – Urbana Township

DEFINITIONS:

Accessory Structures: Structures such as sheds, storage sheds, pool houses, unattached garages, and barns.

Anemometer: An instrument that measures the force and direction of the wind.

Clear Fall Zone: An area surrounding the wind turbine unit into which the turbine and -or turbine components might fall due to inclement weather, poor maintenance, faulty construction methods, or any other condition causing turbine failure that shall remain unobstructed and confined within the property lines of the primary parcel where the turbine is located. The purpose of the zone being that if the turbine should fall or otherwise become damaged, the falling structure will be confined to the primary parcel.

Cowling: A streamlined removable cover that encloses the turbine's nacelle.

Decibel: A unit of relative loudness equal to ten times the common logarithm of the ratio of two readings. For sound, the decibel scale runs from zero for the least perceptible sound to 130 for sound that causes pain.

Nacelle: Sits atop the tower and contains the essential mechanical components of the turbine to which the rotor is attached.

Primary Structure. For each property, the structure that one or more persons occupy the majority of time on that property for either business or personal reasons. Primary structures include structures such as residences, commercial buildings, hospitals, and day care facilities. Primary structures exclude structures such as hunting sheds, storage sheds, pool houses, unattached garages, and barns.

Professional Engineer. A qualified individual who is licensed as a Professional Engineer in the State of Ohio.

Megawatt (MW): A unit of power, equal to one million watts.

Small Wind Project: Any wind project less than 5MW which includes the wind turbine generator and anemometer.

Section XXXX Small Wind Projects less than 5MW

Wind Projects of 5MW or more shall be required to submit an application with the Ohio Power Siting Board (OPSB) at the Public Utilities Commission of Ohio (PUCO) and are required to meet OPSB regulations. Small Wind Projects less than 5MW and used solely for Agriculture will be exempt from these zoning regulations as an Agricultural Use. Any proposed construction, erection, or siting of a small wind project less than 5MW including the wind turbine generator or anemometer or any parts thereof shall be a Permitted Use in the U-1, M-1 & M-2 districts, and a conditional use in the R-1 & B-1 districts.

- A. The maximum height of any turbine shall be 100 ft. For purposes of this Resolution, maximum height shall be considered the total height of the turbine system including the tower, and the maximum vertical height of the turbine's blades. Maximum height therefore shall be calculated by measuring the length of a prop at maximum vertical rotation to the base of the tower.
- B. Setbacks: the following shall apply in regards to setbacks.
 - 1. Any turbine erected on a parcel of land shall be setback 1.5 times the height of the tower, or established "clear fall zone", from all road right-of-way lines and neighboring property lines. A turbine shall be erected and placed in such a manner that if it were to fall, whatever direction the fall occurs would be contained solely on the property where the turbine is located at.
- C. Maintenance
 - 1. Wind turbines must be maintained in good working order. The owner shall within 30 days of permanently ceasing operation of a wind turbine, provide written notice of abandonment to the Zoning Inspector. An unused wind turbine or small wind project may stand no longer than 12 months following abandonment. All costs associated with the demolition of the wind turbine and associated equipment shall be borne by the owner. A wind turbine is considered abandoned when it ceases transmission of electricity for 30 consecutive days. Wind turbines that become inoperable for more than 12 months must be removed by the owner within thirty (30) days of issuance of zoning violation. Removal includes removal of all apparatuses, supports, and or other hardware associated with the existing wind turbine.
- D. Decibel Levels
 - 1. Decibel levels shall not exceed those provided by the manufacturer as requested in II Permits, 2., e.
- E. Wiring and electrical apparatuses:
 - 1. All wires and electrical apparatuses associated with the operation of a wind turbine unit shall be located underground and meet all applicable local, state, and federal codes including the County Building Regulations and Residential Building Code of Ohio.

F. Warning Signs:

1. Appropriate warning signs to address voltage shall be posted (where and meeting sign requirements).

G. Building Permits:

1. All Small Wind Projects and parts thereof shall obtain all applicable Building Permits from the State of Ohio and County Building Regulations where required.

II. Permits

- A. A permit shall be required before construction can commence on an individual wind turbine project.

- B. As part of the permit process, the applicant shall inquire with the County Building Regulations as to whether or not additional height restrictions are applicable due to the unit's location in relation to any local airports.

- C. Applicant shall then provide the Township Zoning Inspector with the following items and or information when applying for a permit:

1. Location of all public and private airports in relation to the location of the wind turbine.

2. A report that shows:

- a. The total size and height of the unit

- b. If applicable, the total size and depth of the unit's foundation structure, as well as soil and bedrock data.

- c. A list and or depiction of all safety measures that will be on the unit including anti-climb devices, grounding devices, and lightning protection, braking systems, guy wiring & anchors.

- d. Data specifying the kilowatt size and generating capacity in kilowatts of the particular unit.

- e. The maximum decibel level of the particular unit. This information shall be obtained from the manufacturer of the turbine unit.

- f. Hazardous materials containment and disposal plan.

3. A site drawing showing the location of the unit in relation to existing structures on the property, the location of existing wiring and wiring for the wind turbine generator, roads and other public right-of-ways, and neighboring property lines.

4. Evidence of established setbacks of 1.5 times the height of the wind turbine and "clear fall zone."
5. A dismantling plan that outlines how the unit will be dismantled shall be required as part of the permit.

Section XXXX Solar Panels

SOLAR PANELS

A. Solar panels are a permitted accessory use, subject to the following requirements:

1. Ground-mounted solar panels shall be located in the side or rear yard only in accordance with the setbacks established for all accessory uses and shall not exceed twelve (12) feet in height.
2. Roof-mounted solar panels on the principal building shall be installed on the plane of the roof material (flush mounted) or made part of the roof design (e.g. utilizing capping or framing compatible with the color of the roof or structure), but shall not extend more than eight inches from the roof surface. Accessory buildings shall not exceed the height requirements established for all accessory buildings.
3. All solar panel installations shall comply with all applicable building, plumbing, and electrical codes.
4. All applicants shall submit a site drawing showing the location of the unit in relation to existing structures on the property, the location of existing wiring and wiring for the solar panels, roads and other public right-of-ways, and neighboring property lines.
5. There is no limit on the number of solar modules or arrays installed on each property, except for the following:
 - a) Solar energy commercial operations are prohibited.

DEFINITIONS:

SOLAR ENERGY COMMERCIAL OPERATION: Solar energy systems whose main purpose is to generate energy for sale back into the energy grid system, rather than being consumed on site.

SOLAR PANEL: A solar photovoltaic panel, or solar hot air or water panel collector device, which relies upon solar radiation as an energy source for the generation of electricity or transfer of stored heat.



Zoning & Subdivision Committee
Thursday, November 8, 2012

The Zoning and Subdivision Committee met in regular session on Thursday, November 8, 2012, at 12:45 pm at the LUC Office in East Liberty. Zoning & Subdivision Committee Members were in attendance as follows: Brad Bodenmiller, Jeremy Hoyt for Greg DeLong, Wes Dodds, Charles Hall, Joel Kranenburg, Heather Martin, Steve McCall for Fereidoun Shokouhi, Jenny Snapp, and Andy Yoder. Absent members included: Scott Coleman, Paul Hammersmith, and Jeff Stauch. Guest included: Paul Blair.

Brad Bodenmiller chaired the Zoning & Subdivision Committee Meeting in the absence of Scott Coleman and Greg DeLong.

Minutes of the September 13, 2012, meeting were approved as written with Charles Hall making the first motion to approve, and Andy Yoder making the second motion to approve. All in favor.

1. Urbana Township, Champaign County, Zoning Text Amendments regarding Small Wind Turbines and Solar Panels - Staff Report by Wes Dodds
 - o Wes advised the committee that this language was the same language previously reviewed in April of this year, and it was back in front of the committee due to a procedural issue. Wes gave a brief overview of the language and advised that previously both staff and the committee recommended approval of the language with the recommendation that the words "flush mounted" be changed to "mounted parallel with". There were no additional comments from the committee.
 - o Andy Yoder made the first motion to recommend approval of the Urbana Township, Champaign County, Zoning Text Amendments regarding Small Wind Turbines and Solar Panels with staff comment and Charles Hall made the second motion to recommend approval of the Urbana Township, Champaign County, Zoning Text Amendments regarding Small Wind Turbines and Solar Panels with staff comment. All in favor.

The Zoning and Subdivision Committee adjourned at 12:49 pm with Charles Hall making the first motion to adjourn, and Andy Yoder making the second motion to adjourn. All in favor.