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BENTON COUNTY MINNESOTA
MARILYN J NOVAK
COUNTY RECORDER

By: BS

6-6-1

DOCUMENT COVER SHEET

Document Name: **ORDINANCE NO. 455**

Benton County of
The Public

Document Date:

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*Dept of Dev
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no fee*

BENTON COUNTY ORDINANCE NO. 455

WHEREAS, the Benton County Department of Development instituted proceedings to amend the Benton County Ordinance 185; and,

WHEREAS, on May 10, 2016 and May 12, 2016, Notice of Public Hearing and intent to amend Benton County Ordinance was published in the official newspapers of the county; and,

WHEREAS, on May 26, 2016 the Benton County Planning Commission held a public hearing; and,

WHEREAS, on June 21, 2016 the Benton County Board of Commissioners held a public hearing and approved the proposed ordinance amendment; and,

NOW PURSUANT TO THE AUTHORITY VESTED BY MINNESOTA STATUTES
SECTION 394.25, THE BENTON COUNTY BOARD OF COMMISSIONERS ORDAINS:

That the following be amended to read:

Section 3: Definitions

Community Solar Energy System (also called “Solar Garden”) – a solar-electric (photovoltaic) array that provides retail electric power (or a financial proxy for retail power) to multiple community members or businesses residing or located off-site from the location of the solar energy system, under the provisions of Minn. Statutes 216B.1641 or successor statute.

Solar Collector – A device or combination of devices, structure, or part of a device or structure that transforms direct solar energy into thermal, chemical or electrical energy and that contributes significantly to a structure’s energy supply.

Solar Energy – Radiant energy (direct, diffuse, and reflected) received from the sun.

Solar Energy System – A solar collector mounted on a building, pole or rack whose primary purpose is to harvest energy by transforming solar energy into another form of energy or transferring heat from a collector to another medium using mechanical, electrical or chemical means.

Solar Energy System, Accessory – A solar energy system which is directly connected to or designed to serve the energy needs of the primary use.

Solar Farms – A solar array composed of multiple solar panels on ground-mounted rack or poles which is not directly connected to or designed to serve the energy needs of the primary use but rather for the primary purpose of wholesale sales of generated electricity or a financial proxy for retail power. Solar farms include but are not limited to community solar gardens. A community solar system may be either an accessory or a principal use.

Solar Skyspace – The space between a solar energy collector and the sun which must be free of obstructions that may shade the solar energy collector and reduce the solar energy collector's cost-effective operation.

Solar Skyspace Easement – A right, expressed as an easement, covenant, condition, or other property interest in any deed or other instrument obtained by private party, that protects the solar skyspace of an actual, proposed, or designated solar energy collector at a described location by forbidding or limiting activities or land uses by neighboring property owners to prevent the obstruction or reduction of the solar energy collector's access to solar energy. The solar skyspace must be described as the three-dimensional space in which obstruction is prohibited or limited, or as the times of day during which direct sunlight to the solar collector may not be obstructed, or as a combination of the two methods.

Solar Structure – A structure designed to utilize solar energy as an alternative for or supplement to, a conventional energy system.

Section 7: Zoning Use Districts

7.1 Agricultural District "A"

7.1.11 Permitted Accessory Uses:

 Solar Energy System, Accessory in accordance with Section 9.20.3

7.1.24 Interim Uses:

 C. Community Solar Energy System in accordance with Section 9.20.2 for a minimum of 25 years.

7.2 Rural Agricultural District "R-A"

7.2.11 Permitted Accessory Uses:

 Solar Energy System, Accessory in accordance with Section 9.20.3

7.2.27 Interim Uses:

 C. Community Solar Energy System in accordance with Section 9.20.2 for a minimum of 25 years.

7.2A Rural Service District "R-S"

7.2A.11 Permitted Accessory Uses:

 Solar Energy System, Accessory in accordance with Section 9.20.3

7.3 R-1 Single Family Residence District
 7.3.1A Permitted Accessory Uses
 Solar Energy System, Accessory in accordance with Section 9.20.3

7.4 R-2 Single Family Residence District
 7.4.1A Permitted Accessory Uses
 Solar Energy System, Accessory in accordance with Section 9.20.3

7.5 R-3 Single Family and Multiple Dwelling Residence District
 7.5.1A Permitted Accessory Uses
 Solar Energy System, Accessory in accordance with Section 9.20.3

9.20 Solar Energy Systems

9.20.1 Purpose

The purpose of this section is to regulate the installation and operation of Solar Energy Systems not otherwise subject to siting and oversight by the State of Minnesota under the Minnesota Power Plant Siting Act (Minn. Stat. §§116C.51-116C.697) to protect and promote health, safety and general welfare within the county through uniform standards, regulation sand procedures governing the type, size, structure, location, height, erection and use of Solar Energy Systems.

In order to ensure adequate solar skyspace, the County does encourage the use of a solar skyspace easement as a means to protect solar skyspace.

9.20.2 Standards for Solar Farms

Solar Farms shall be subject to the requirements of Section 11.6 or 11.6.3 and the following additional performance standards:

- (1) **Foundations.** A professional licensed engineer in the state of Minnesota shall certify that the foundation and design of the solar panels is within accepted professional standards, given local soil and climate conditions.
- (2) **Other standards and codes.** All solar farms shall comply with any applicable local, state and federal regulatory standards, including the State of Minnesota Uniform Building Code, as amended, the National Electric Code, as amended and shall be in

compliance with all applicable federal, state and local wetland laws, rules and regulations, as amended.

- (3) **Power and communication lines.** Power and communication lines running between banks of solar panels and to electric substations or interconnections with buildings shall be buried underground. Exemptions may be granted by the planning commission in instances where shallow bedrock, water courses, or other elements of the natural landscape interfere with the ability to bury lines.
- (4) **Setbacks.** Solar farms must meet the minimum principal building setback for the zoning district and be located a minimum of one hundred (100) feet from a residential dwelling unit not located on the property.
- (5) **Application Requirements.** The following information shall be provided to the Department as part of the CUP or IUP permit:
 - (1) A site plan of existing conditions showing the following:
 - (a) Existing property lines and property lines extending one hundred (100) feet from the exterior boundaries, including the names of the adjacent property owners and current use of those properties.
 - (b) Existing public and private roads, showing widths of the roads and any associated easements.
 - (c) Location and size of any existing or abandoned wells, and sewage treatment systems
 - (d) Existing buildings and any impervious surface.
 - (e) Topography at two (2) foot intervals and source of contour interval, a contour map of surrounding properties may also be required.
 - (f) Existing vegetation (list type and percent of coverage; i.e. grassland, pasture, plowed field, wooded areas, etc.)
 - (g) Waterways, watercourses, lakes and public water wetlands
 - (h) Delineated wetland boundaries

- (i) The one Hundred (100) - year flood elevation and Regulatory Flood Protection Elevation, if applicable
- (j) Floodway, flood fringe and/or general flood plain district boundary, if applicable
- (k) The shoreland district boundary, if any portion of the project is located within a shoreland overlay district
- (l) In the shoreland overlay district, the toe and top of any bluffs within the project boundaries
- (m) Surface water drainage patterns

(2) Site Plan of Proposed Conditions:

- (a) Location and spacing of solar panels
- (b) Location of access roads
- (c) Planned location of underground or overhead electric lines connecting the solar farm to the building, substation or other electric load.
- (d) New electrical equipment other than at the existing building or substation that is the connection point for the solar farm
- (e) Sketch elevation of the premises accurately depicting the proposed solar energy conversion system and its relationship to structures on adjacent lots (if any);

(3) Manufacturer's specifications and recommended installation methods for all major equipment, including solar panels, mounting systems and foundations for poles or racks;

(4) The number of panels to be installed;

(5) A description of the method of connecting the array to a building or substation;

(6) A copy of the interconnection agreement with the local electric utility or a written explanation outlining why an interconnection agreement is not necessary;

(7) A decommissioning plan shall be required to ensure that facilities are properly removed after their useful life. Decommissioning of solar panels must occur in the event they are not in use for twelve (12) consecutive months. The plan shall include provisions for

removal of all structures and foundations, restoration of soil and vegetation and a plan ensuring financial resources will be available to fully decommission the site. Disposal of structures and/or foundations shall meet all applicable rules and regulations to proper disposal. The Board may require the posting of a bond, letter of credit or the establishment of an escrow account to ensure proper decommissioning.

- (8) Aviation Analysis. If the project is within two miles of an airport, the applicant must complete and provide the results of the Solar Glare Hazard Analysis Tool (SGHAT) for the Airport Traffic Control Tower cab and final approach paths, consistent with the Interim Policy, FAA Review of Solar Energy Projects on Federally Obligated Airports, or successor policy. The applicant must also complete the Air Space Case Analysis (Form 7460) and provide the results.
- (9) Visual Impact Analysis. An analysis of the potential visual impacts from the project including solar panels, roads and fencing along with measures to avoid, minimize or mitigate the visual effects shall be required. A plan may be required showing vegetative screening or buffering of the system from those items to mitigate for visual impacts.

9.20.3

Standards for Solar Energy Systems, Accessory.

Solar Energy Systems, Accessory shall be a permitted accessory use in all zoning districts, subject to the following criteria:

- (1) Accessory Building Limit. Ground mounted systems shall count as an accessory building for the purpose of meeting limits on the number of accessory structures allowed per lot and the coverage limits, as set in Section 6 of this ordinance. Ground mounted systems less than 120 square feet shall not be required to obtain a land use permit, but shall meet the setback requirements of an accessory structure.
- (2) Height. Active solar energy systems are subject to the following height requirements:

- (a) Building or roof-mounted solar energy systems shall not exceed the maximum allowed height in any zoning district. For the purposes of height measurement, solar systems other than building-integrated systems shall be considered to be mechanical devices and are restricted consistent with other building-mounted mechanical devices for the zoning district.
- (b) Ground or pole-mounted solar energy systems shall not exceed twenty-five (25) feet in height when oriented at maximum tilt.

(3) Location within Lot. Solar energy systems must meet the accessory structure setback for the zoning district.

(a) Roof-mounted Solar energy systems. In addition to the building setback, the collector surface and mounting devices for the roof-mounted solar systems that are parallel to the roof surface shall not extend beyond the exterior perimeter of the building on which the system is mounted or built. The collector and racking for roof-mounted systems that have a greater pitch than the roof surface shall be set back from all roof edges by at least two (2) feet. Exterior piping for solar hot water systems shall be allowed to extend beyond the perimeter of the building on a side yard exposure.

(b) Ground-mounted Solar Systems. Ground-mounted solar energy systems may not extend into the side-yard or rear yard setback when oriented at minimum design tilt.

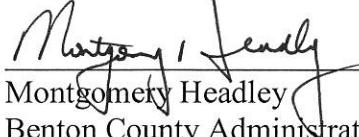
(4) Compliance with State Electric Code. All photovoltaic systems shall comply with the Minnesota State Electrical Code.

(5) Compliance with all applicable federal, state and local wetland laws, rules and regulations.



Spencer C. Buerkle
Benton County Board of Commissioners

ATTEST:



Montgomery Headley
Benton County Administrator