

ORDINANCE NO. 19-01

AN ORDINANCE AMENDING CHAPTER 4 OF THE NEW HOPE CITY CODE ESTABLISHING SOLAR ENERGY SYSTEM REGULATIONS

THE CITY COUNCIL OF THE CITY OF NEW HOPE ORDAINS:

Section 1. Section 4-2, Zoning – Rules and definitions is hereby amended to add the underlined text as follows:

(b) *Definitions.* The following words and terms, wherever they occur in this zoning code, shall be interpreted as follows:

Ground-mounted solar energy system means a solar energy system that is freestanding with its own foundation and structural support system.

Passive solar energy system means a system that captures solar light or heat without transforming it to another form of energy or transferring the energy via a heat exchanger.

Photovoltaic system means a solar energy system that converts solar energy directly into electricity.

Roof-mounted solar energy system means a solar energy system that is an integral part of a principal or accessory building, rather than a separate ground-mounted mechanical device, replacing or substituting for an architectural or structural component of the building including, but not limited to, photovoltaic or hot water solar systems contained within roofing materials, windows, skylights and awnings.

Solar energy system means a device or structural design feature, a substantial purpose of which is to provide daylight for interior lighting or provide for the collection, storage and distribution of solar energy for space heating or cooling, electricity generation or water heating.

Section 2. Section 4-3, General provisions is hereby amended to add the underlined text as follows:

(n) Solar energy systems.

(1) Purpose and Intent. The purpose of this section is to:

a. Accommodate solar energy systems that may be integrated into local buildings and sites and create a clear regulatory path for approving solar energy systems.

b. Create a livable community where development incorporates sustainable design elements such as resource and energy conservation and use of renewable energy.

c. Protect and enhance air quality and decrease use of fossil fuels.

d. Accommodate solar energy development in locations where the technology is viable and environmental, economic, and social impacts can be mitigated.

(2) Solar energy systems zoning district allowances.

a. Exemption. Passive solar energy systems are exempt from the requirements of this section and shall be regulated as any other building element in all zoning districts.

b. Roof-mounted solar energy systems in accordance with the standards in this section shall be allowed as a permitted accessory use in all zoning districts.

c. Ground-mounted solar energy systems in accordance with the standards of this section shall be allowed with an administrative permit in the CB, CC, GPO, Industrial, LB, R-B, and R-O zoning districts.

(3) General requirements. The following standards are applicable to all solar energy systems in the city.

a. Exemption. Passive solar energy systems are exempt from the requirements of this section and shall be regulated as any other building element in all zoning districts.

1. Standards. Solar energy systems shall meet the minimum standards outlined by the International Electrotechnical Commission (IEC), the American Society of Heating, Refrigerating, and Air-conditioning Engineers (ASHRAE), ASTM International, British Standards Institution (BSI), International Electrotechnical Commission (IEC), International Organization for Standardization (ISO), Underwriter's Laboratory (UL), the Solar Rating and Certification Corporation (SRCC), or other standards as determined by the city building official.

2. Certification. Solar energy systems shall be certified by the Underwriters Laboratories, Inc. and the National Renewable Energy Laboratory, the Solar Rating and Certification Corporation or other body as determined by the Community Development Director. The city reserves the right to deny a building permit for proposed solar energy systems if deemed to have inadequate certification.

3. Utility connection. All grid-connected systems shall have an agreement with the local utility prior to the issuance of a building permit. A visible external disconnect shall be provided if required by the utility.

4. Building Code. All solar energy systems shall meet approval of the city building official, consistent with the Minnesota State Building Code, and solar thermal systems shall comply with HVAC-related requirements of the Energy Code.

5. Electrical Code. All photovoltaic systems shall comply with applicable National Electrical Code requirements.

6. Plumbing Code. Solar thermal systems shall comply with applicable Minnesota State Plumbing Code requirements.

7. Abandonment. If a solar energy system remains nonfunctional or inoperative for a continuous period of one year, the system shall be deemed to be abandoned and shall constitute a public nuisance. The property owner shall remove the abandoned system and restore vegetation upon the site at his/her expense after a demolition permit has been obtained. Removal includes the entire structure including transmission equipment.

8. Tree removal associated with the installation of a solar energy system shall be subject to tree replacement standards of Section 4-3(d)(4)c. of this Code.

9. Glare. All solar energy systems shall be erected and maintained in a manner that prevents beams or rays of light from being directed at any portion of the right-of-way of such intensity or brilliance so as to cause glare or impair the vision of the operator of any motor vehicle. All systems shall be constructed as to prevent beams or rays of light from being directed at any portion of a building or residence, as determined by the building official. The use of reflectors to enhance solar production shall be prohibited.

b. Roof-mounted solar energy systems.

- 1. Shall comply with maximum height requirements in the applicable zoning district.
- 2. Systems on pitch roofs shall not have a finished pitch steeper than the roof pitch on which it is mounted. The system and its framing shall be no higher than ten inches above the roof surface.
- 3. On flat roofs solar energy systems shall not extend more than 15 feet above the roof surface and may not be pitched at an angle greater than 45 degrees.
- 4. Shall comply with applicable principal or accessory building setback requirements in the applicable zoning district and shall not extend beyond the exterior perimeter of the building on which the system is mounted.
- 5. May be flush-mounted or bracket-mounted. Bracket-mounted collectors shall be permitted only when the city building official makes a determination that the underlying roof structure will support apparatus, wind, and snow loads and all applicable building standards are satisfied.
- 6. Shall be spaced to provide a three-foot aisle between solar panel arrays to allow for fire access and equipment maintenance.

c. Ground-mounted solar systems:

- 1. Height. Ground-mounted solar energy systems shall not exceed 20 feet in height and may not be pitched at an angle greater than 45 degrees.
- 2. Setbacks. Ground-mounted solar energy systems shall comply with the following setbacks:
 - Front yard: 30 feet
 - Side yard interior: 5 feet
 - Side yard abutting a street: 20 feet
 - Rear yard: 5 feet
- 3. Easements. Solar energy systems shall not encroach on public drainage, utility roadway or trail easements.
- 4. Parking. Ground-mounted solar systems shall not be located in required parking areas and shall not interfere with the on-site traffic circulation patterns.
- 5. Maximum area. Ground-mounted solar energy systems shall be limited in lot coverage to no more than 30 percent of the floor area of the principal building on the lot provided all setbacks and locational restrictions are adhered to.

6. Feeder lines. The electrical collection system shall be placed underground within the interior of each lot. The collection system may be placed overhead near substations or points of interconnection to the electric grid.

7. Tree removal associated with the installation of a solar energy system shall be subject to tree replacement standards of Section 4-3(d)(4)c. of this Code.

(4) Review process.

a. Roof-mounted solar energy systems shall be processed as a building permit. Full building and electrical permits and plans illustrating the proposed system design components and installation information for the building and the solar energy system are required.

b. Ground-mounted solar energy systems shall be processed as an administrative permit per section 4-31 of this Code. Building and electrical permits and plans are required. Submission information for ground-mounted solar energy systems shall consist of a narrative and site plan including the informational requirements outlined in Section 4-35(f) of this Code.

Section 3. Effective Date. This ordinance shall be effective upon passage and publication.

APPROVED by the New Hope City Council this 22nd day of April, 2019.

Kathi Hemken, Mayor

ATTEST:

Valerie Leone, City Clerk