



Town of Lexington
PLANNING BOARD
1625 Massachusetts Avenue
Lexington, MA 02420
Tel (781) 698-4560
planning@lexingtonma.gov
www.lexingtonma.gov/planning

Robert Creech, Chair
Robert D. Peters, Vice Chair
Ginna Johnson, Clerk
Richard L. Canale
Charles Hornig
Michael Leon, Associate

RECOMMENDATION REPORT OF THE LEXINGTON PLANNING BOARD
ARTICLE 13: AMEND ZONING BYLAW – SOLAR ENERGY SYSTEMS

RECOMMENDATION

The Planning Board unanimously recommends that Town Meeting APPROVE the motion under Article 13, Solar Energy Systems. On Wednesday, September 23, 2020, after a series of public hearings, the Planning Board voted to recommend favorable action with a vote of five (5) in favor, zero (0) in opposition, and zero (0) in abstention for Article 13: Solar Energy Systems.

BACKGROUND

Efforts throughout the Commonwealth and country are being made to reduce the reliance on carbon fuels and promote clean sources of energy. Since 2016, the Town of Lexington has taken significant strides in promoting Net-zero carbon-neutral buildings and other sustainable measures. In concert with Sustainable Lexington, the Planning Board developed Article 13: Solar Energy Systems, in order to allow for less restrictive installations for both residential and commercial locations.

Massachusetts General Law (MGL), Chapter (c.) 40A §3 states:

No zoning ordinance or by-law shall prohibit or unreasonably regulate the installation of solar energy systems or the building of structures that facilitate the collection of solar energy, except where necessary to protect the public health, safety or welfare.

Article 13: Solar Energy Systems, as proposed, will regulate Canopy, Large-scale, and Small-scale Solar Energy Systems through a site plan review process, while Building-mounted Solar Energy Systems will be permitted by-right.

To ensure that Canopy, Large-scale, and Small-scale Solar Energy Systems are adequately regulated, the Planning Board will amend the Planning Board Regulations (Chapter 176) by adding a new section, Solar Energy Systems. These regulations will guide Applicants for practical Solar Energy System projects and provide the Planning Board with transparent and predictive review procedures for the review of Solar Energy System projects.

PUBLIC HEARING PROCESS

Due to COVID-19, all of the zoning articles initially scheduled for the 2020 Annual Town Meeting were postponed to a Fall 2020 Special Town Meeting. Due to the length of time between the Annual and Fall Special Town Meetings, the Planning Board was required to hold new public hearings. To ensure all information heard during the public hearings has been communicated, this section of this report provides a review of the public hearings held for the 2020 Annual Town Meeting and Fall 2020 Special Town Meeting.

Annual Town Meeting Public Hearing Proceedings (February – March 2020)

On Wednesday, February 26, 2020, after the publication of the legal advertisement in the Boston Globe Newspaper on February 11, 2020, and February 18, 2020, and notification sent to parties of interest, the Planning Board opened its public hearing for Article 39: Solar Energy Systems. A continued public hearing was held on Wednesday, March 4, 2020, at which time the Planning Board closed the public hearing and made a favorable recommendation to the 2020 Annual Town Meeting.

The Planning Board during the public hearing process provided comments, in addition to taking public comments. Much of the discussion during the Wednesday, March 4, 2020, public hearing was associated with Residential Solar Energy Systems, and the concerns about such installations being located with a front, side, or rear Yard and the removal of large trees. On Thursday, March 5, 2020, the Planning Board reviewed the draft Planning Board Zoning Regulations. The Planning Board also amended the proposed zoning to prohibit Residential Solar Energy Systems from being located within the front, side, and rear Yard.

PUBLIC HEARING MINUTES

MARCH 4, 2020

Robert Creech opened the public hearing on Article 39: Solar Energy Systems and then requested a presentation.

Charles Hornig presented a PowerPoint presentation entitled Article 39: Solar Energy Systems. The presentation cover topics such as Why This Change?; State Law; Solar Energy System Types for Building-mounted, canopy, residential, large-scale; Changes: Uses; Use Classification; Design Standards; Future Work.

Mr. Creech requested comments from members of the Planning Board. The members of the Planning Board asked comments from the public.

Mr. Creech opened the floor for public comment. The following comments were provided.

- A request for clarification regarding abutter notification for Solar Energy Systems in residential zoning districts. It was further requested as to where commercial solar energy systems are installed next to a residential property that the installation is not taller than what is permitted within a residential zoning district.
- A statement of support of both residential and commercial solar energy systems within Lexington
- A statement of dismay for both commercial and residential still being heard together
- A statement in opposition to allowing solar energy system installations within setbacks

- A request for clarification as to whether the panels will get hot, will they be able to burn someone, what is the strength of the panels if a lacrosse ball hits them.
- A statement that Sustainable Lexington voted to support the Solar Energy Systems, through all of its renditions of the bylaw.

Mr. Canale stated that he would like to see the proposed regulations to be better able to evaluate the proposed zoning regulations. Mr. Creech requested clarification as to when such regulations would be able to be reviewed.

Mr. Creech opened the floor again for public comments.

- A member of the public read a letter from State Senator Mike Barrett, dated March 3, 2020.

Mr. Creech provided an example of a solar installation in Burlington, MA, and requested additional comments from the Planning Board.

- Mr. Peter stated that he was in support of moving both the commercial and residential proposals moving forward.
- Ms. Johnson provided a consensus for the Planning Board to consider. Ms. Johnson reviewed a series of impacts that impact stormwater, trees, and the natural environment. Ms. Johnson stated that she could not support solar energy systems.
- Mr. Canale concurred with Ms. Johnson's comments.

MARCH 5, 2020

Robert Creech, Chair, opened the continued public hearing on Article 39: Solar Energy Systems and then requested a review of any updates relative to the Article.

Charles Hornig provided a brief review of updated since Wednesday, March 4, 2020, public hearing on Article 39. Ms. Loomis provided a review of the draft Planning Board Zoning Regulations (Chapter 176), relative to Site Plan Review and Solar Energy Systems.

Mr. Creech opened the floor for comments from the Tree Committee. Gerry Paul, Chair of the Lexington Tree Committee, provided a review of the draft regulations and offered several amendments to the proposed draft language.

Mr. Creech requested comments from members of the Planning Board. The Planning Board provided the following comments.

- Ginna Johnson stated her encouragement for the draft Zoning Regulations as an excellent first effort. Ms. Johnson provided her concerns regarding the anticipation of future installations of Solar Energy Systems, in addition to the problems associated with the loss of trees and climate change. Ms. Johnson requested the provision to not allow solar energy systems to be located in the setback. Ms. Johnson requested clarification regarding the ability of the Town to plant trees on private properties.

Mr. Paul provided a review of recent efforts between the Tree Committee and the Department of Public Works (D.P.W.). Mr. Paul concluded that allowing solar energy system installations in the setbacks is a recipe for removing large trees.

- Ms. Johnson provided a review of the space needed for the installation of replacement trees. Ms. Johnson recommended that the Yard definition be removed from the draft Solar Energy Systems Bylaw.
- Mr. Hornig provided a review of the draft regulations, which helps relocate solar energy systems away from the setbacks but allows for a case-by-case basis.
- Ms. Johnson and Mr. Hornig discussed both sides of locating Solar Energy Systems within a setback.
- Richard Canale concurred with Ms. Johnson's statements about removing the Yard definition modification from the proposal. Mr. Canale stated that the Planning Board agreed upon a phased approach splitting the residential off from the proposal to allow for additional research being done.
- Robert Peters stated that he would not want to allow for residential Solar Energy Systems within the setback.
- Mr. Creech concurred with other members regarding the removal of residential Solar Energy Systems from the setbacks. Mr. Creech proposed that the Planning Board move forward with commercial at this time.

Members of the Planning Board discussed the process moving forward for a form of Solar Energy System regulations. A majority of the Planning Board concurred that they needed to move forward with removing Solar Energy Systems from the setbacks.

Mr. Creech opened the floor for public comments. The following comments were provided.

- A statement of potential language regarding the Yard definition and the addition of a new Section 6.3.3.
- A request for clarification regarding what the Planning Board intended to do relative to amending Residential Solar Energy Systems. A statement of a disappointment for the removal of the allowing Residential Solar Energy Systems within a setback, which would be cutting out tools from Lexington's toolbox.
- A statement of support for the proposed regulations, which included support for both residential and commercial Solar Energy Systems.

Mr. Canale stated that Lexington needs to move quickly on this initiative, but needs to be tactful as to what Town Meeting is willing to support.

Public participation continued to allow for additional comments from the public.

- A statement of support from Sustainable Lexington as presented with both residential and commercial Solar Energy System installations.

A request for clarification as to whether a solar carport would be allowed under the proposed regulations.

Fall Special Town Meeting Public Hearing Proceedings (September 2020)

On Wednesday, September 9, 2020, after the publication of the legal advertisement in the Minuteman Newspaper on August 20, 2020, and August 27, 2020, and notification sent to parties of interest, the Planning Board opened its public hearing for Article 13: Amend Zoning Bylaw – Solar Energy Systems. A continued public hearing was held on Wednesday, September 23, 2020. At such time the Planning Board closed the public hearing and made a favorable recommendation to the 2020 Special Town Meeting-2.

SEPTEMBER 9, 2020

The Planning Board reviewed and discussed the proposed amendments to the Lexington Zoning Bylaw, relative to Solar Energy Systems. Charles Hornig presented a PowerPoint presentation entitled Article 13, Solar Energy Systems. The PowerPoint presentation included a review of Why This Change?, Types of Systems, Building-mounted, Canopy, Residential, Large-scale, Other Changes, Common Questions, Future Work. Mr. Hornig stated that Article 13 is the same zoning article that the Planning Board supported the Spring of 2020.

Bob Creech, Chair, requested comments from the Planning Board. The following comments were provided.

- Richard Canale requested clarification about when a residential solar installation becomes commercial and is the community comfortable with commercial use in residential neighborhoods?
- Ginna Johnson stated her concerns regarding the impacts to mature tree canopies. Ms. Johnson noted that the Planning Board prohibited large-scale solar installations on the side, rear, and front setbacks. Mr. Hornig confirmed that such uses are still banned from the Bylaw.
- Mr. Creech stated his concerns regarding the size of a ground-mounted solar installation within proximity to residential uses. Mr. Creech noted that there would be additional research for a proposal for the residential ground mounted uses for an Annual Town Meeting of 2021.

SEPTEMBER 23, 2020

Charles Hornig provided a brief review of the amendments made relative to a recent Sol Smart meeting and compliance with the Dover Use Amendment.

Mr. Creech requested comments from the Planning Board. The following comments were provided.

- Richard Canale requested clarification regarding the difference between Large Scale Solar Energy Systems and a Residential Solar Energy System. Mr. Hornig provided a brief review. Mr. Hornig noted that he had drafted a revised definition for the Residential Solar Energy System to clarify such use. The Planning Board requested to review the revised definition for Residential Solar Energy System.
- Mr. Hornig provided a review of his amendments, which change the Residential Solar Energy System definition to Small Scale Solar Energy System, which is expected to clarify the differences between the different Solar Energy Systems.

The Planning Board reviewed the size associated with a Small Scale Solar Energy System. Ginna Johnson requested that the maximum size of the solar installation be 1500 sf.

Ms. Johnson requested clarification regarding the disposal of solar panels. Mr. Hornig provided a review of the value and decreased efficiency for the panels over the years.

All comments and discussions during the public hearing process can be reviewed on the video stream capture of the public hearing and the associated meeting minutes.

ARTICLE MOTION & PROPOSED LANGUAGE

MOTION: That the Zoning Bylaw, Chapter 135 of the Code of the Town of Lexington, be amended as follows (~~struck through~~ text is to be removed and underlined text is to be added), and further that non-substantive changes to the numbering of this bylaw be permitted so that it comply with the numbering format of the Code of the Town of Lexington:

A. Amend § 135-3.2.2 so that it reads:

3.2.2 Limit on Size of Accessory Uses. An accessory use may not occupy more than 25% of the area of a lot or more than 25% of the gross floor area on a lot. This limitation does not apply to off-street parking, Solar Energy Systems, or to accessory apartments, ~~which are governed by other provisions of this bylaw.~~

B. Add a new § 135-4.3.1.3 as follows:

3. A Solar Energy System may be located over any paved parking lot.

C. Amend § 135-4.3.2 so that it reads:

4.3.2 Structures on a Building. Structures erected on a building and not used for human occupancy may exceed the maximum height of a building in feet provided no part of the structure is more than 20 feet higher than the upper elevation of the building and the total horizontal coverage of such structures on the building, other than Solar Energy Systems, does not exceed 25%.

D. Add a new § 135-6.10 as follows:

6.10 SOLAR ENERGY SYSTEMS.

1. Purpose and Intent. As a Green Community, Lexington promotes the installation

and use of all Energy Systems within the community. The purpose of this section is to establish standards for permitting, placement, design, construction, operation, monitoring, modification, and removal of such installations; while protecting public safety; protecting against undesirable impacts on residential property and neighborhoods; protecting scenic, natural, and historic resources; and protecting or providing for wildlife corridors. Lexington intends to promote the creation of Energy Systems per MGL c.40A, §3, and the Green Communities Act, MGL c.25A, §10, while meeting sustainability initiatives for a sustainable Lexington.

2. **Applicability.**

1. The construction and operation of all proposed Solar Energy Systems shall be consistent with all applicable local, state, and federal requirements, including but not limited to all applicable safety, construction, electrical, communications, and aviation requirements.
2. All buildings and structures forming part of a Solar Energy System shall be constructed per the State Building Code and approved by the Building Commissioner.

3. **Design Standards.**

1. The Planning Board may adopt regulations providing reasonable design standards for Solar Energy Systems protected under MGL c. 40A, §3. The standards shall not be more restrictive than those applied to other structures.
2. The Planning Board may adopt regulations providing for the maintenance and eventual removal of Large-scale Solar Energy Systems and securing the performance thereof.
3. Large-scale and Small-scale Solar Energy Systems shall not be located in the front, side, or rear required Yard.
4. The permit granting authorities may waive any standards in this Bylaw which are not reasonable as applied in a particular case or which effectively prohibit the protected use.

E. Add a new § 135-7.3.4 as follows:

7.3.4 Protected uses.

Notwithstanding other provisions of § 7.3 and any preliminary site development and use plan, the following uses and structures protected by MGL c. 40A, §3 shall be permitted in any PD, CD, or RD district:

1. Building-mounted Solar Energy Systems shall be permitted by right.
2. Canopy Solar Energy Systems, Large-Scale Solar Energy Systems, and Small-scale Solar Energy Systems shall be permitted with site plan review under § 135-9.5.

F. In § 135-10.1, amend the definition of SITE COVERAGE so that it reads:

The sum of all parts of a lot that are covered by a principal or accessory building or other structure, ~~other than a Solar Energy System~~, such portions of the lot to be delineated by the intersection of the ground with the vertical plane of the outermost walls or projections of a building or structure whether in contact with the ground or projecting over it.

G. In § 135-10.1, amend the definition of STRUCTURE so that it reads:

Anything constructed or erected, the use of which requires a fixed location on the ground, or attachment to something located on the ground, including buildings, mobile homes, billboards, tanks, ~~Solar Panels~~ ~~Energy Systems~~, or the like, or the parts thereof, and swimming pools, but not including paved surfaces such as a driveway, a walk or a patio.

H. In § 135-10.1, amend the definition of YARD so that it reads:

An open space on a lot unoccupied by a building or structure or such parts thereof as covered or uncovered porches, steps, cornices, eaves, and other projections; provided however that fences, gates or security stations, yard accessories, ornaments and furniture, ~~Solar Energy Systems~~, and customary summer awnings are permitted in any yard but shall be subject to height limitations. Yard depth shall be measured from the street or lot line and not from the middle of any public or private way, whether owned pursuant to the derelict fee statute or otherwise, to the nearest point on a building in a line perpendicular or normal to such lot or street line. The minimum required Yard shall be a strip of land of uniform depth required by this Bylaw measured from the lot or street line and adjacent thereto.

I. In § 135-10.1, add definitions as follows:

SOLAR ENERGY SYSTEM

A device or structural design feature, a substantial purpose of which is providing for the collection, storage, and distribution of solar energy for space heating or cooling, electrical generation, or water heating.

SOLAR ENERGY SYSTEM, BUILDING-MOUNTED

A Solar Energy System that is designed to be securely mounted on a building.

SOLAR ENERGY SYSTEM, CANOPY

A Solar Energy System structure that is built to cover a parking lot or other open-air use that is not a Building-mounted Solar Energy System.

SOLAR ENERGY SYSTEM, LARGE SCALE

A Solar Energy System that is not a Building-mounted Solar Energy System, Canopy Solar Energy System, or Small-scale Solar Energy System.

SOLAR ENERGY SYSTEM, SMALL-SCALE

A Solar Energy System that is not a Building-mounted Solar Energy System or Canopy Solar Energy System where the total lot area covered by all solar energy systems on the lot is less than or equal to 1500 square feet.

J. In Table 1, Permitted Uses and Development Standards, replace row O.1.10 with four new rows, so that it reads:

		GC	RO	RS	RT	CN	CRS	CS	CB	CLO	CRO	CM	CSX
<u>O.1.10</u>	<u>Ground-mounted solar energy</u>	Y	N	N	N	N	N	N	N	N	R	R	N
<u>O.1.10</u>	<u>Solar Energy System. Building-mounted</u>	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y
<u>O.1.11</u>	<u>Solar Energy System. Canopy</u>	Y	R	R	R	R	R	R	R	R	R	R	R
<u>O.1.12</u>	<u>Solar Energy System. Large-scale</u>	Y	R	R	R	R	R	R	R	R	R	R	R
<u>O.1.13</u>	<u>Solar Energy System. Small-scale</u>	Y	R	R	R	R	R	R	R	R	R	R	R

Planning Board Vote

Charles Hornig moved that the Planning Board recommend favorable action for Article 13: Amend Zoning Bylaw - Solar Energy Systems, as presented. Robert Peters seconded the motion. The Planning Board voted in favor of the motion 5-0-0. MOTION PASSED

- Robert Creech yes
- Robert Peters..... yes
- Ginna Johnson..... yes
- Richard Canaleyes
- Charles Hornig yes

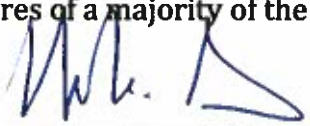
Record of Vote

On May 13, 2020, the Planning Board voted to allow the Planning Board Chair to sign documents on behalf of the Planning Board.

Charles Hornig moved that the Planning Board vote to allow the Chair of the Planning Board to sign all documents for the Planning Board during the COVID-19 State of Emergency. Robert Peters seconded the motion. The Planning Board voted in favor of the motion 5-0-0 (Roll Call: Robert Peters - yes; Charles Hornig - yes; Richard Canale - yes; Ginna Johnson - yes; and Robert Creech - yes). MOTION PASSED

Signature of the Planning Board

Signatures of a majority of the Planning Board,



Robert Creech, Chair