



Town of Lexington
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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

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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 [redacted] in favor, [redacted] in opposition, and [redacted] 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 Residential Solar Energy Systems through a site plan review process, while Building-mounted Solar Energy Systems will be permitted by-right. Given the differences between commercial and residential Solar Energy System installations, it was determined to separate the two types of Solar Energy Systems.

To ensure that Canopy, Large-scale, and Residential 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.

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PUBLIC HEARING PROCESS

Due to COVID-19, all of the zoning articles initially scheduled for the **2020** Annual Town Meeting were postponed to a **2020** Fall 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

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51 has been communicated, this section of this report provides a review of the public
52 hearings held for the 2020 Annual Town Meeting and 2020 Fall Special Town Meeting,

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

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

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

67 **PUBLIC HEARING MINUTES**

68 **MARCH 4, 2020**

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

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

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

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

- 80 • A request for clarification regarding abutter notification for Solar Energy Systems
81 in residential zoning districts. It was further requested as to where commercial
82 solar energy systems are installed next to a residential property that the
83 installation is not taller than what is permitted within a residential zoning district.
- 84 • A statement of support of both residential and commercial solar energy systems
85 within Lexington
- 86 • A statement of dismay for both commercial and residential still being heard
87 together
- 88 • A statement in opposition to allowing solar energy system installations within
89 setbacks
- 90 • A request for clarification as to whether the panels will get hot, will they be able
91 to burn someone, what is the strength of the panels if a lacrosse ball hits them.

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95 • A statement that Sustainable Lexington voted to support the Solar Energy
96 Systems, through all of its renditions of the bylaw.

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

100 Mr. Creech opened the floor again for public comments.

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

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

105 • Mr. Peter stated that he was in support of moving both the commercial and
106 residential proposals moving forward.

107 • Ms. Johnson provided a consensus for the Planning Board to consider. Ms.
108 Johnson reviewed a series of impacts that impact stormwater, trees, and the
109 natural environment. Ms. Johnson stated that she could not support solar energy
110 systems.

111 • Mr. Canale concurred with Ms. Johnson's comments.

112 MARCH 5, 2020

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

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

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

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

124 • Ginna Johnson stated her encouragement for the draft Zoning Regulations as an
125 excellent first effort. Ms. Johnson provided her concerns regarding the
126 anticipation of future installations of Solar Energy Systems, in addition to the
127 problems associated with the loss of trees and climate change. Ms. Johnson
128 requested the provision to allow solar energy systems to be located in the setback.
129 Ms. Johnson requested clarification regarding the ability of the Town to plant
130 trees on private properties.

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

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- 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.

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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.

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

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- 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.

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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.

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

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

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

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Fall Special Town Meeting Public Hearing Proceedings (September 2020)

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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

173 sent to parties of interest, the Planning Board opened its public hearing for Article 14:
174 Amend Zoning Bylaw – Solar Energy Systems. A continued public hearing was held on
175 Wednesday, September 23, 2020. At such time the Planning Board closed the public
176 hearing and made a favorable recommendation to the 2020 Special Town Meeting-2,

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177 **SEPTEMBER 9, 2020**

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

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

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

198 **SEPTEMBER 23, 2020**

199 **INSERT**

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

202 **ARTICLE MOTION & PROPOSED LANGUAGE**

203 That the Zoning Bylaw, Chapter 135 of the Code of the Town of Lexington, be amended
204 as follows, ~~where (struck through~~ text is to be removed and underlined text is to be
205 added), and further that non-substantive changes to the numbering of this bylaw be
206 permitted in order that it be in compliance with the numbering format of the Code of
207 the Town of Lexington:

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

209 3.2.2 Limit on Size of Accessory Uses.

210 An accessory use may not occupy more than 25% of the area of a lot or more than 25%
211 of the gross floor area on a lot. This limitation does not apply to off-street parking, Solar

216 ~~Energy Systems~~, or to accessory apartments, ~~which are governed by other provisions~~
217 ~~of this bylaw.~~

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

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

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

221 4.3.2 Structures on a Building.

222 Structures erected on a building and not used for human occupancy may exceed the
223 maximum height of a building in feet provided no part of the structure is more than
224 20 feet higher than the upper elevation of the building and the total horizontal
225 coverage of such structures ~~other than Solar Energy Systems~~, on the building, ~~other~~
226 ~~than Solar Energy Systems~~ does not exceed 25%.

227 D. Add a new § 135-6.10 as follows:

228 6.10 SOLAR ENERGY SYSTEMS.

229 1. Purpose and Intent. As a Green Community, Lexington promotes the installation and
230 use of all Solar Energy Systems within the community. The purpose of this section is
231 to establish standards for permitting, placement, design, construction, operation,
232 monitoring, modification and removal of such installations; while protecting public
233 safety; protecting against undesirable impacts on residential property and
234 neighborhoods; protecting scenic, natural and historic resources; and protecting or
235 providing for wildlife corridors. Lexington intends to promote the creation of Solar
236 Energy Systems in accordance with MGL c.40A, §3 and the Green Communities Act,
237 MGL c.25A, §10, so that Solar Energy System installations do not diminish abutting
238 property values, while meeting sustainability initiatives for a sustainable
239 Lexington.

240 2. Applicability.

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

248 3. Design Standards.

- 249 1. The Planning Board may adopt regulations providing ~~for~~ design standards
250 for Building-mounted Solar Energy Systems, Canopy Solar Energy Systems,
251 Large-scale Solar Energy Systems, and Residential Solar Energy Systems.
- 252 2. The Planning Board may adopt regulations providing for the maintenance
253 and eventual removal of Large-scale Solar Energy Systems and securing
254 the performance thereof.
- 255 3. Large-scale and Residential Solar Energy Systems shall not be located in

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258 the front, side, or rear required Yard.

259 E. Add a new § 135-7.3.4 as follows:

260 7.3.4 Protected uses.

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

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264 1. Building-mounted Solar Energy Systems shall be permitted by right.

265 2. Canopy Solar Energy Systems, Large-Scale Solar Energy Systems, and
266 Residential Solar Energy Systems shall be permitted with site plan review
267 under § 135-9.5.

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

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

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

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

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

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

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

292 SOLAR ENERGY SYSTEM

293 A device or structural design feature, a substantial purpose of which is to

295 provide for the collection, storage, and distribution of solar energy for space
 296 heating or cooling, electrical generation, or water heating.

297 SOLAR ENERGY SYSTEM, BUILDING-MOUNTED
 298 A Solar Energy System that is designed to be securely mounted on a building.

299 SOLAR ENERGY SYSTEM, CANOPY
 300 A Solar Energy System structure that is built to cover a parking lot or other
 301 open-air use that is not a Building-mounted Solar Energy System or
 302 Residential Solar Energy System.

303 SOLAR ENERGY SYSTEM, LARGE SCALE
 304 A Solar Energy System that is not a -Building-mounted Solar Energy System,
 305 Canopy Solar Energy System, or Residential Solar Energy System.

306 SOLAR ENERGY SYSTEM, RESIDENTIAL
 307 A Solar Energy System that is not a Building-mounted Solar Energy System
 308 on a residential lot where the total capacity of all solar energy systems on the
 309 lot is less than or equal to twenty-five kilowatts (25 kW) of electricity, or
 310 equivalent, per dwelling unit.

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

		G.C	RO	RS	RT	CN	CRS	CS	CB	CLO	CRO	CM	C.S. X.
O.1.10	Ground mounted solar energy	Y	N	N	N	N	N	N	N	N	R	R	N
O.1.10	Solar Energy System, Building-	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y
O.1.11	Solar Energy System, Canopy	Y	R	R	R	R	R	R	R	R	R	R	R
O.1.12	Solar Energy System, Large-scale	Y	R	R	R	R	R	R	R	R	R	R	R
O.1.13	Solar Energy System, Residential	Y	R	R	R	R	R	R	R	R	R	R	R

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 316 **Planning Board Vote**
 317 **moved that the Planning Board recommend favorable action for Article 13: Amend**
 318 **Zoning Bylaw – Solar Energy Systems, as presented. seconded the motion. The**
 319 **Planning Board voted in favor of the motion ____.** **MOTION PASSED**

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- 322 Robert Creech
- 323 Robert Peters.....
- 324 Ginna Johnson.....
- 325 Richard Canale.....
- 326 Charles Hornig.....

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328 **Record of Vote**

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

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

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338 **Signature of the Planning Board**

339 Signatures of a majority of the Planning Board,

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Robert Creech, Chair

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