

THE CITY OF CRANSTON

ORDINANCE OF THE CITY COUNCIL
IN AMENDMENT OF CHAPTER 17.24 OF THE CODE OF THE CITY OF
CRANSTON, 2005, ENTITLED "ZONING"
(Solar Energy Systems)

No.

Passed:

Michael J Farina, Council President

Approved:

Allan W. Fung, Mayor

It is ordained by the City Council of the City of Cranston as follows:

Section 1: Chapter 17.24.020 entitled "Solar Power Performance Standards - Generally" is hereby deleted in its entirety and the following added:

Section 17.24.020. Solar Energy Systems

- A. PURPOSE. The purpose of this section is to regulate Solar Energy Systems (SES's) by providing standards for application requirements specific to SES's, permitting & review processes, placement, design, construction, operation, monitoring, modification, visual screening, interconnection and removal of such systems. These standards are intended to ensure that SES's are sited appropriately with consideration of project type and scale, are compatible with or are effectively screened from the surrounding area, provide for public safety, minimize impacts on scenic, natural, and historic resources, and are consistent with the City's Comprehensive Plan, as amended.
B. APPLICABILITY. The provisions of this section shall apply, as specified herein, to all SES's in the City of Cranston that have been certified as complete after DATE . The provisions of this section shall not apply to any SES certified complete before February 18th, 2019, except that all proposed modifications to legal nonconforming SES's will be subject to City Code Chapter 17.88 - Nonconforming Uses and Structures.
C. DEFINITIONS & TERMS

- 38 1. **Abandoned Solar Energy System.** A solar energy system (SES) that has either
39 reached the end of its useful life or is disconnected.
- 40 2. **Accessory Solar Energy System.** A SES that is incidental and subordinate to the
41 principal use(s) of the parcel(s) or development. There are two categories of
42 Accessory SES's, Minor Accessory SES and Major Accessory SES.
- 43 3. **Approving Body.** The entity which has the authority bestowed by the City
44 Charter and City Code to make final decisions on SES applications. The
45 Approving Body is determined by the type/category of any given SES application
46 as prescribed in Section 17.24.020 (E).
- 47 4. **Building-integrated Solar Energy System.** A SES that is incorporated into or
48 onto a building or structure.
- 49 5. **City.** The City of Cranston, Rhode Island.
- 50 6. **Contaminated site solar energy system.** A principal solar energy system
51 located on a contaminated site pending remediation or a remediated and restricted
52 contamination site.
- 53 7. **Contaminated site pending remediation.** A property that has been identified
54 and confirmed by RIDEM as being contaminated through issuance of a "Letter of
55 Responsibility", but which has not yet been remediated to the satisfaction of
56 RIDEM.
- 57 8. **Decommissioning / Restoration Plan.** A plan for dismantling a solar energy
58 system, along with, a plan for the site restoration of the land where the system is
59 located, and a financial guarantee for the completion of the dismantling and
60 restoration after the system is no longer operational.
- 61 9. **DEM.** Rhode Island Department of Environmental Management.
- 62 10. **DPRC.** Development Plan Review Committee of the City of Cranston.
- 63 11. **Fenced Area.** The area within the perimeter of the safety fence that surrounds a
64 SES and associated infrastructure.
- 65 12. **Ground-mounted Solar Energy System.** A SES that is structurally appended to
66 the ground and is not supported by a structure or building.
- 67 13. **Inclusive Approach.** A cooperative and open process in which a SES
68 developer/applicant works with the abutting property owners within 400' of the
69 project site to design and develop SES plans which take the abutter's concerns
70 into account to the greatest reasonable extent possible.
- 71 14. **Interconnection.** The point at which the solar system is connected to the electric
72 distribution system. The interconnection of the system by the utility will
73 generally be located at the street or along an access driveway outside of the
74 fenced area.
- 75 15. **Inverter.** A piece of equipment that converts Direct Current (DC) electricity from
76 the solar panels into Alternating Current electricity on which the utility
77 distribution grid operates.
- 78 16. **Major Accessory Solar Energy System.** Any Accessory SES which is not a
79 Minor Accessory SES and whose Solar Lot Coverage does not exceed the
80 maximum allotted in the zoning category which it is sited.

- 81 17. **Major Land Development Plan (MLD)**. Any development plan not classified as
82 a minor land development plan.
- 83 18. **Minor Accessory Solar Energy System**. A category of SES's which applies to
84 all roof-mounted SES's, building-integrated SES's, and Solar Canopies, as well as
85 all accessory ground-mounted SES's that do not produce more than 125% of the
86 total electricity consumed by the use(s) on site.
- 87 19. **Minor Land Development Plan**. A development plan for a residential project as
88 defined in local regulations, provided that the development does not require
89 waivers or modifications as specified in this act. All nonresidential land
90 development projects are considered major land development plans.
- 91 20. **MLD**. See *Major Land Development Plan*.
- 92 21. **Preliminary Interconnection Study**. A study indicating the anticipated route and
93 associated costs for interconnection of a solar energy system to the electric
94 distribution system.
- 95 22. **Principal Solar Energy System**. A ground-mounted SES that is not a Minor or
96 Major Accessory Solar Energy System.
- 97 23. **Remediated and Restricted Contamination Site**. A property (1) that has been
98 identified and confirmed by RIDEM as having contained a hazardous material
99 contamination; (2) on which remediation activities were conducted to the
100 satisfaction of RIDEM as documented within a "Letter of Compliance" or an
101 "Interim Letter of Compliance", and (3) for which RIDEM has required the use of
102 the property to be restricted through an Environmental Land Use Restriction.
- 103 24. **Roof-mounted Solar Energy System**. A SES that is structurally appended onto
104 the roof of a building or structure.
- 105 25. **SES**. See *Solar Energy System*.
- 106 26. **Solar Canopy**. A SES which is elevated as to allow for the traversing or parking
107 of vehicles and/or people underneath. Solar Canopies in residential zones shall be
108 considered and regulated as Building-mounted SES's.
- 109 27. **Solar Energy**. Radiant energy received from the sun that can be collected in the
110 form of heat or light by a solar panel.
- 111 28. **Solar Energy System (SES)**. The components and subsystems required to
112 convert solar energy into electric energy suitable for use.
- 113 29. **Solar Energy System Operator**. The agent or entity that conducts the daily
114 operation and maintenance of the solar energy system under contractual
115 agreement with the solar energy system owner.
- 116 30. **Solar Energy System Owner**. The owner of equipment and appurtenances
117 comprising the solar energy system; said entity may also be the solar energy
118 system operator.
- 119 31. **Solar Lot Coverage**. The amount of Upland Area allowed to be occupied by
120 ground-mounted solar panels and associated ground-mounted equipment,
121 exclusive of fencing, but inclusive of inter-row and panel spacing. The area of
122 abutting lots under common ownership may be combined in the calculation of the

- 123 total Upland Area. Solar Lot Coverage is calculated entirely separately from
 124 building lot coverage as defined by the Cranston City Code, as amended.
 125 32. **Tree Disturbance.** The removal or topping of living trees with a 3” caliper or
 126 greater for the purposes of the SES development. All removal or topping of living
 127 trees within 5 years preceding the submittal of a SES application, as determined
 128 by aerial photographs or other documentation, shall count as Tree Disturbance.
 129 Tree trimming for purposes of forest management is exempt, as well as tree
 130 clearing or trimming conducted solely for the agricultural purposes. Tree removal,
 131 trimming or topping that may occur offsite as part of the interconnection is not
 132 included as part of the Tree Disturbance Maximum on the project site.
 133 33. **Tree Disturbance Maximum.** The maximum percentage of the total Upland
 134 Area of a site from which Tree Disturbance shall be permitted for the
 135 development of a SES. The area of abutting lots under common ownership may
 136 be combined in the calculation of the total Upland Area. Tree removal or
 137 trimming that may occur offsite as part of the interconnection does is not
 138 calculated as part of the Tree Disturbance Maximum.
 139 34. **Upland Area.** Land area which is not wetland or any other body of water or is
 140 constrained by utility easement(s).

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 142 **D. DISTRICT USE REGULATIONS**

143 The Schedule of Uses in Sec. 17.20.030 of the City Code shall incorporate SES’s
 144 accordingly:

<u>SES</u> <u>Category</u>	<u>DISTRICT</u>																
	<u>A-</u> <u>80</u>	<u>A-</u> <u>20</u>	<u>A-</u> <u>12</u>	<u>A-</u> <u>8</u>	<u>A-</u> <u>6</u>	<u>B-</u> <u>1</u>	<u>B-</u> <u>2</u>	<u>C-</u> <u>1</u>	<u>C-</u> <u>2</u>	<u>C-</u> <u>3</u>	<u>C-</u> <u>4</u>	<u>C-</u> <u>5</u>	<u>M-</u> <u>1</u>	<u>M-</u> <u>2</u>	<u>S</u>	<u>EI</u>	<u>G</u>
<u>Minor</u> <u>Accessory</u>	<u>Y</u>	<u>Y</u>	<u>Y</u>	<u>Y</u>	<u>Y</u>	<u>Y</u>	<u>Y</u>	<u>Y</u>	<u>Y</u>	<u>Y</u>	<u>Y</u>	<u>Y</u>	<u>Y</u>	<u>Y</u>	<u>Y</u>	<u>Y</u>	<u>Y</u>
<u>Major</u> <u>Accessory</u>	<u>Y</u>	<u>N</u>	<u>N</u>	<u>N</u>	<u>N</u>	<u>N</u>	<u>N</u>	<u>N</u>	<u>N</u>	<u>N</u>	<u>Y</u>	<u>Y</u>	<u>Y</u>	<u>Y</u>	<u>N</u>	<u>Y</u>	<u>Y</u>
<u>Principal</u>	<u>S</u>	<u>N</u>	<u>N</u>	<u>N</u>	<u>N</u>	<u>N</u>	<u>N</u>	<u>N</u>	<u>N</u>	<u>N</u>	<u>N</u>	<u>N</u>	<u>Y</u>	<u>Y</u>	<u>S</u>	<u>N</u>	<u>N</u>

145 The symbols have the following meanings:

146 Y = use allowed by right

147 N = use not allowed

148 S = special use permit

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 151 **E. PERMIT REQUIREMENTS**

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1. All SES's are subject to the following approval procedures:

<u>SES Use Category</u>	<u>Zone</u>	<u>Development Plan Review Committee (DPRC)</u>	<u>Major Land Development (MLD)</u>	<u>Special Use Permit</u>	<u>Building & Electrical Permit</u>
<u>Minor Accessory</u>	<u>All</u>	<u>N*</u>	<u>N</u>	<u>N</u>	<u>Y</u>
<u>Major Accessory</u>	<u>A-80, S-1</u>	<u>Y</u>	<u>Y**</u>	<u>N</u>	<u>Y</u>
	<u>C-4, C-5, M-1, M-2, EI, G</u>	<u>Y</u>	<u>N</u>	<u>N</u>	<u>Y</u>
<u>Principal</u>	<u>A-80, S-1</u>	<u>Y</u>	<u>Y</u>	<u>Y</u>	<u>Y</u>
	<u>M-1, M-2</u>	<u>Y</u>	<u>Y</u>	<u>N</u>	<u>Y</u>

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*Solar Canopies over 200 kW are subject to DPRC.

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**Any Major Accessory SES project incorporating less than five (5) acres of Solar Lot Coverage is exempt.

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Y = Yes

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N = No

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2. All SES applications located within the City of Cranston and/or National Historical District(s) shall receive approval from the applicable district prior to submittal of a building permit.

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3. Final Plans shall be approved and recorded before any SES that required DPRC and/or MLD approval can submit a building permit to the City.

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4. Issuance of a building permit (local and/or state) is required prior to any installation of a SES.

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F. GENERAL REQUIREMENTS.

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1. **Location.**

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a. SES's shall be allowed under zoning in accordance with the Cranston City Code Use Table Section 17.20.030.

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b. SES's shall not be allowed on land held under conservation easement or land for which the development rights have been sold, transferred, or otherwise removed from the parcel, unless the conditions of the easement, deed or other applicable legal document specifically allows for such facility.

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c. SES panels and equipment shall, to the greatest extent possible, be sited within the project site in the area(s) which are anticipated to minimize potentially adverse impacts to nearby properties, communities and natural resources with reasonable considerations to site conditions and other use(s) on site as applicable.

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2. **Building permit and inspection.** No SES shall be constructed, installed, or modified without first obtaining a building permit and such facility shall be subject to periodic inspections as deemed necessary by the building official and/or electrical inspector.
3. **Height.**
 - a. Roof-mounted and building-integrated SES's are exempt from building height regulations.
 - b. No Solar Canopy shall exceed the height limitation of the zoning district on which the SES which it is located.
 - c. No individual panel within a ground-mounted SES shall exceed 12 feet in height. The approving body may grant relief from this requirement at its discretion should uses(s) be proposed underneath the panels which are allowed under zoning and are compatible and appropriate uses on the site.
4. **Minimum Lot Area.**
 - a. There are no additional minimum lot area requirements for SES's in any zone other than A-80 & S-1.
 - b. In A-80 & S-1 zones:
 - i. There is no additional minimum lot area requirement for Minor Accessory SES's.
 - ii. Major Accessory SES's shall only be permitted on lots with a minimum of 10 acres of Upland Area. The area of abutting lots under common ownership may be combined to meet this requirement. If the Administrative Officer determines that it is not clear whether this requirement is met, a Class I survey and RIDEM verification of the wetland boundary may be required as part of the Master Plan submittal.
 - iii. Principal SES's shall only be permitted on lots with a minimum of 30 acres of Upland Area. The area of abutting lots under common ownership may be combined to meet this requirement. If the Administrative Officer determines that it is not clear whether this requirement is met, a Class I survey and RIDEM verification of the wetland boundary may be required as part of the Master Plan submittal.
5. **Solar Lot Coverage.**

- 222 a. **Definition.** The amount of Upland Area allowed to be occupied by ground-
- 223 mounted solar panels and associated equipment, exclusive of fencing, but
- 224 inclusive of inter-row and panel spacing. Solar Lot Coverage is calculated
- 225 entirely separately from building lot coverage, as defined by the Cranston City
- 226 code, as amended.
- 227 b. **Applicability.** Solar Lot Coverage applies to all Major Accessory and
- 228 Principal SES's. This section shall not apply to Minor Accessory SES's.
- 229 c. The Solar Lot Coverage of all ground-mounted SES's are as follows:
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	<u>A-80 & S-1</u>	<u>M-1 & M-2</u>	<u>C-4 & C-5</u>	<u>EI & G</u>
<u>Major Accessory</u>	<u>25%</u>	<u>30%</u>	<u>20%</u>	<u>20%</u>
<u>Principal</u>	<u>60%</u>	<u>85%</u>	<u>N/A</u>	<u>N/A</u>

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232 6. **Conservation & Tree Canopy.**

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- 234 a. **Definitions.**
- 235 i. **Tree Disturbance.** The removal or topping of living trees with a 3”
- 236 caliper or greater or the purposes of the SES development. All removal
- 237 or topping of living trees within 5 years preceding the submittal of a SES
- 238 application shall count as Tree Disturbance. Tree trimming for the
- 239 purposes of forest management is exempt. Tree removal, topping or
- 240 trimming that may occur offsite as part of the interconnection is not
- 241 considered as part of the Maximum Tree Disturbance on the project site.
- 242 ii. **Tree Disturbance Maximum.** The maximum percentage of the total
- 243 Upland Area of a site from which Tree Disturbance shall be permitted
- 244 for the development of a ground-mounted SES. The area of abutting lots
- 245 under common ownership may be combined to in the calculation of the
- 246 total Upland Area. Tree removal or trimming that may occur offsite as
- 247 part of the interconnection is not considered as part of the Tree
- 248 Disturbance Maximum.
- 249 iii. **Tree Disturbance Setback.** Areas where Tree Disturbance is restricted
- 250 on SES sites.
- 251 b. **Applicability.** Tree Disturbance regulations only apply to ~~all~~ Major
- 252 Accessory and Principal SES's in A-80 and S-1 zones only. This section shall
- 253 not apply to Minor Accessory SES's.
- 254 c. Nothing in this section shall be interpreted to override or grant relief from
- 255 landscaping requirements.
- 256 d. The Tree Disturbance Setback shall be 400' measured from off-site primary
- 257 residential structures, 100' measured from all public rights-of-way and 100'
- 258 measured from all property boundaries of all off-site lots that have been
- 259 allocated residential land use codes by the City Tax Assessor. The minimum

260 necessary disturbance for the interconnection and ingress/egress is exempt
 261 from the Tree Disturbance Setback, but is not exempt from the Tree
 262 Disturbance Maximum.

- 263 e. The Tree Disturbance Maximum for Major Accessory SES's in A-80 and S-1
 264 is 10%.
- 265 f. The Tree Disturbance Maximum for Principal SES's in A-80 and S-1 is 60%.
- 266 g. **Relief.** The Tree Disturbance Maximum may be exceeded if and only if relief
 267 is granted by the approving body. In order to request relief, a Tree
 268 Disturbance plan and mitigation plan must be submitted as part of the
 269 application package that provides plantings on a designated area on the project
 270 site equal to twice the area exceeding the maximum. For example, if a
 271 proposal includes the request to disturb trees on an area 15% of the project site
 272 for a Major Accessory SES in an A-80 zone (exceeding the Tree Disturbance
 273 Maximum by 5%), request for relief would include a mitigation plan including
 274 plantings on a minimum of 10% of the total site area. Compliance with the
 275 submittal requirements does not guarantee relief from the Tree Disturbance
 276 Maximum requirement, relief is at the discretion of the approving body. The
 277 approving body, among other factors, shall consider the applicant's hardship
 278 and/or justification for exceeding the Maximum Tree Disturbance requirement
 279 as well as the perceived benefit of the location, species, and number of
 280 proposed plantings compared to the impacts to the proposed disturbed area
 281 beyond the Tree Disturbance Maximum requirement.

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283 7. **Setbacks.**

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- 285 a. All roof-mounted and building integrated SES's are exempt from building
 286 setbacks so long as they do not encroach into any setback beyond the building
 287 on which they are proposed.
- 288 b. Solar Canopies and ground-mounted Minor Accessory SES's shall be setback
 289 a minimum the setback requirements of the applicable zoning district. The
 290 setbacks for Accessory structures/buildings in City Code Section 17.60.010
 291 shall not apply.
- 292 c. All Major Accessory SES's in nonresidential zones and Principal SES's in M-
 293 1 and M-2 zones including electrical equipment shall comply with the setback
 294 requirements of the applicable zoning district, or the distance necessary to
 295 accommodate required visual screening, whichever is greater, as determined
 296 by the Approving Body(s).
- 297 d. All Major Accessory and Principal SES's in A-80 & S-1 zoning including
 298 electrical equipment shall be setback a minimum 100' from all property lines,
 299 or the distance necessary to accommodate required visual screening.

300 whichever is greater, as determined by the Approving Body(s). The setbacks
 301 for Accessory structures/buildings in City Code Section 17.60.010 shall not
 302 apply.

304 8. **Visual Screening / buffering.**

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- 306 a. **Applicability.** This section applies to Major Accessory and Principal SES's.
 307 This section shall not apply to Minor Accessory SES's.
- 308 b. **Longevity.** Required visual screening shall be maintained for the life of the
 309 SES. The property owner and/or facility owner shall be required to replant
 310 any section of the buffer/screening found not to meet the requirements of this
 311 section as determined by the City Zoning Official.
- 312 c. **A-80 & S-1 zones.**
- 313 i. Visual screening (aka buffering) will be required for all ground-mounted
 314 SES's abutting residential zones or properties with a residential use,
 315 including mixed use zones. The widths of the buffers will be required to
 316 be as wide as necessary to effectively screen the solar panels and
 317 equipment. Required widths may vary depending on topography or other
 318 site conditions. The Approving Body shall have the authority to set site
 319 specific width of buffers, height of plants at planting, and to require an
 320 opaque screen adjacent to properties and/or public roads.
- 321 ii. Pollinator- friendly seed mixtures shall be used along with native
 322 coniferous and deciduous species to the maximum extent possible. All
 323 plants and seeds should be native to the greatest extent practicable, and no
 324 plants known or suspected to be invasive (e.g. aggressive spreading non-
 325 natives) should be used.
- 326 iii. Applicants for Major Accessory and Principal SES's shall use an
 327 Inclusive Approach with the abutters within 400' of the project site to
 328 develop an effective visual screening plan. The applicant shall
 329 demonstrate that they have considered the abutter's request for buffer
 330 widths, both the understory and canopy so as to appear naturalized, the
 331 minimum height of plantings at the time of installation, planting species,
 332 maturities and heights at the time of installation.
- 333 iv. The Plan Commission may require an independent review of the visual
 334 screening/buffering plan as by a Rhode Island licensed and registered
 335 Landscape Architect in according with the City of Cranston Subdivision
 336 Regulations, as amended.
- 337 v. To incentivize SES's on already cleared sites, buffer depth requirements
 338 will be flexible as to an appropriate extent based on site conditions while
 339 still achieving effective visual screening. Where appropriate, stockade

fencing shall be used to satisfy the screening where the existing screening is insufficient. The materials and aesthetics of the stockade fence shall be a topic to be addressed as part of the Inclusive Approach, and may be conditioned by the Approving Body. A stockade fence alone will not suffice for visual screening from the right-of way or abutting properties. Plantings shall be required in between the project fencing and the property lines as determined during the inclusive process.

d. **M-1 & M-2 Zones.**

- i. To incentivize SES's in M-1 and M-2 zones, no additional visual screening will be required unless the project abuts an incompatible use or a residential zone.
- ii. Where a project abuts incompatible use or a residential zone, the applicant shall use an Inclusive Approach with the abutters within 400' of the project site do develop an effective visual screening plan. Buffer depth requirements will be flexible as to an appropriate extent based on site conditions while still achieving effective visual screening. Where appropriate, stockade fencing shall be used to satisfy the screening where the existing screening is insufficient. The materials and aesthetics of the stockade fence shall be a topic to be addressed as part of the Inclusive Approach, and may be conditioned by the Approving Body. A stockade fence alone will not suffice for visual screening, from the right-of way or abutting properties Plantings shall be required in between the project fencing and the property lines as determined during the Inclusive Approach.
- iii. The Plan Commission may require an independent review of the visual screening/buffering plan as by a Rhode Island registered Landscape Architect in according with the City of Cranston Subdivision Regulations, as amended.

9. **Fencing.**

- a. **Applicability.** This section shall apply to all Major Accessory and Principal SES's. This section shall not apply Minor Accessory SES's.
- b. The applicant shall be required to install a minimum of an 8-foot fence around the perimeter of all ground-mounted SES's. In instances where the applicant can show that the surrounding area and site do not require fencing for protection or trespass, or to allow agricultural production within the array area, the Planning Board may waive the fencing requirements.
- c. Barbed wire, razor or anything similar is prohibited.
- d. Where chain-link fencing is allowed, it must be black vinyl-coated.

- 380 e. Additional requirements in A-80 & S-1 zones.
 381 1. Fences shall be installed a minimum of 6-8 inches off the ground to
 382 allow small animals to pass underneath.
 383 2. Portions of any fence visible from the public right-of-way or other
 384 private property shall be required to be stockade fencing. The materials
 385 and aesthetics of the stockade fence shall be a topic to be addressed as part
 386 of the Inclusive Approach, and may be conditioned by the Approving
 387 Body.

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 389 10. **Grading & Topsoil**
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- 391 a. **Applicability.** This section shall apply to all Major Accessory and Principal
 392 SES's in A-80 & S-1 zones only.
 393 b. All ground-mounted SES's shall keep with the existing contours of the land to
 394 the greatest extent possible, and only pile driven or ballast block footing are to
 395 be used so as to minimize the disturbance of soils during installation. The
 396 minimum grading necessary to install appropriately sited access roads and
 397 equipment pads will be allowed.
 398 c. No unnecessary disturbance of topsoil is permitted as part of the installation or
 399 maintenance. Any topsoil that must be moved shall be stored and stabilized
 400 on-site for future use.

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 402 11. **Stormwater Management and Erosion and Sediment Control.**
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- 404 1. **Applicability.** This section shall apply to all SES's in all zones.
 405 2. Site alterations must conform to the most recent edition of the RIDEM
 406 Stormwater Design and Installation Standards Manual and any other
 407 applicable agencies of jurisdiction and the RI Soil Erosion and Sediment
 408 Control handbook, as well as applicable City regulations.
 409 3. All applicable erosion and sediment controls must be in place prior to
 410 construction, including site work, begins.

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 412 12. **Utilities.**
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- 414 a. **Applicability.** This section shall apply to all Major Accessory and Principle
 415 SES's in all zones. This section shall not apply to Minor Accessory SES's.
 416 b. All utility cables on the project site shall be underground. The Approving
 417 Body may, at its discretion, grant relief from this requirement if there are
 418 physical barriers to underground utilities as found by National Grid which are

419 entirely separate from matters of cost. The Approving Body may deny a
 420 project based on the aesthetic impacts of aboveground utilities.

421 c. All electrical equipment associated with the SES shall be pad-mounted.
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423 13. **Parking and circulation.** Adequate access, parking and turnarounds shall be
 424 provided for service and emergency vehicles for all Solar Canopies, Major
 425 Accessory & Principal SES's.
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427 14. **Lighting.** Lighting of a SES's shall be consistent with applicable local, state and
 428 federal law. Lighting of other parts of the facility, such as appurtenant structures,
 429 shall be limited to that required for safety and operational purposes, and shall be
 430 reasonably shielded from abutting properties. Where feasible, lighting of the facility
 431 shall be directed downward and shall incorporate full cut-off fixtures to reduce light
 432 pollution.
 433

434 15. **Noise.** Applicants for a building permit to construct a SES must submit a noise
 435 study as part of their application. The noise study assesses the potential impacts at
 436 any off-site noise receptors (e.g. residences) due to sound emitted by the SES's
 437 electrical equipment including, but not limited to, inverters and transformers. The
 438 noise study is required to demonstrate that the facility, as designed, does not exceed
 439 a forty (40) decibel noise level (approximately the noise level experienced in a quiet
 440 office or library). The city's review engineer will assess the noise study to determine
 441 acceptable distance from the SES to any off-site receptor.
 442

443 16. **Glare.** All SES's shall be designed and located to prevent reflective glare toward
 444 any inhabited buildings or adjacent properties. Glare generated from solar panels
 445 shall not interfere with traffic or create a safety hazard. Racks shall have a matt
 446 finish to reduce glare and glimmer.
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448 17. **Prime Farmland.** In any areas of the site where prime farmland or farmland of
 449 statewide importance, as determined by the United States Department of
 450 Agriculture Natural Resource Conservation Service within the most recent Rhode
 451 Island Soil Survey, and where the solar facility or a portion of is proposed, the
 452 following is required:
 453

454 a. If soils need to be disturbed in areas of the site for installation purposes, the
 455 soils must be stored on site for future reclamation and areas under the panels
 456 are to be replanted with grass or low growth vegetation that is listed in the
 457 University of Rhode Island's native plant database;

- 458 b. Siting of the facility overall and individual panels shall keep with the existing
 459 contours of the land, and only pile driven or ballast block footing are to be
 460 used, so as to minimize the disturbance of soils during installation; and
 461 c. Required vegetative buffers are to be composed of plant materials listed in the
 462 University of Rhode Island’s native plant database (except as otherwise
 463 permitted in this ordinance), with a preference for pollinator-friendly materials
 464 to the maximum extent practicable.

465
 466 18. **Manufacturing.** SES’s shall be manufactured and designed to comply with
 467 applicable industry standards, as may amended for time to time, including but not
 468 limited to, the American National Standards Institute (ANSI), Underwriters
 469 Laboratories (UL), the American Society for Testing and Materials (ASTM), and
 470 other appropriate certifying organizations as may be required by Federal, or State
 471 Laws or utility regulations.

472
 473 19. **Herbicides and pesticides.** SES’s shall be constructed and maintained in a way that
 474 minimizes or refrains from the use of herbicides and pesticides.

475
 476 20. **Decommissioning & Restoration.** Any SES shall be removed within 180 days
 477 from the date of discontinued operations. Decommissioning and restoration shall
 478 consist of:

- 479
 480 a. Physical removal and recycling of all solar energy facility structure,
 481 equipment, security barriers, fencing and overhead and underground electrical
 482 lines from the site.
 483 b. Disposal of all solid and hazardous waste in accordance with all federal, state
 484 and local laws, regulations and ordinances.
 485 c. Disposal of all components, wiring, and/or foundations in accordance with the
 486 provisions of the City’s solid waste regulations.
 487 d. Stabilization and re-vegetation of the site in compliance with all state and
 488 local laws, regulations, and ordinances necessary to minimize erosion. The
 489 site shall be inspected by the Zoning Inspector and/or his/her designee in
 490 coordination with the Planning Director.

491
 492 G. **Specific Review Requirements for Major Accessory and Principal SES.** Major
 493 Accessory and Principal SES applications must include the following:

- 494
 495 1. Required at Master Plan stage
 496 a. A site plan showing the Tree Disturbance Setbacks and the proposed limits of
 497 tree disturbance with area calculations;

536 Sponsored by Mayor Fung, Council President Farina and Council Vice President Favicchio

537 Referred to Ordinance Committee October 17, 2019

538