

TOWN OF HAMDEN
LOCAL LAW # 1 OF 2024

SOLAR ENERGY SYSTEMS
LOCAL LAW

6/6/2024

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Section 1 Authority

Be it enacted that the Town of Hamden Town Board hereby adopts this Solar Energy Systems Local Law pursuant to sections 261 and 263 of the Town Law and section 20 of the Municipal Home Rule Law of the State of New York, which authorize the Town of Hamden to adopt provisions that advance and protect the health, safety, and welfare of the community, and, in accordance with the Town Law of New York State, “to make provisions for, so far as conditions may permit, the accommodation of solar energy systems and equipment and access to sunlight necessary therefor.”

Section 2 Statement of Purpose

This Solar Energy Systems Local Law is adopted to advance and protect the public health, safety, and welfare of the Town of Hamden by creating regulations for the installation and use of Solar Energy Systems and equipment with the following objectives:

- 1) To take advantage of a safe, abundant, renewable and non-polluting energy resource;
- 2) To help manage the cost of electricity to the owners of residential and commercial properties, including single-family residences;
- 3) To increase employment and business opportunities, in the Town of Hamden, in parallel with the installation, maintenance, and decommissioning of Solar Energy Systems;
- 4) To mitigate the impacts of Solar Energy Systems on environmental resources such as important agricultural lands, forests, wildlife, and other protected resources;
- 5) To balance the environmental benefits of renewable energy with potential adverse impacts of energy generating systems on the environment and on the community while preserving the rights of property owners to install solar collections systems without excess regulation;
- 6) To promote the effective and efficient use of solar energy resources, participate in the developing practice of Agrivoltaics, and to set provisions for the placement, design, construction, and operation of such systems to be consistent with the Town of Hamden’s Comprehensive Plan and Farmland Protection Plan;
- 7) To align the laws and regulations of the community with several policies of the State of New York, particularly those that encourage distributed energy systems.

Section 3 Definitions

Unless otherwise listed below, the numbers, abbreviations, terms, and words used herein shall have the meaning of common usage as set forth in the latest edition of Merriam-Webster's Collegiate Dictionary.

ACCESSORY STRUCTURE – Any structure designed to accommodate an accessory use but detached from the principal structure, such as a free standing garage for vehicles accessory to the principal use, a storage shed, garden house, or similar facility.

ACTIVE AGRICULTURAL LAND – Land used for a farm operation in accordance with Agriculture and Markets Law Section 301 – uses of which include production of crops, livestock, and livestock products – within the last two years.

ANSI – American National Standards Institute

BATTERY (IES) – A single cell or a group of cells electrically connected together in a series, in parallel, or a combination of both, which can charge, discharge, and store energy electrochemically. For the purpose of this law batteries utilized in consumer products are excluded from this definition.

BUILDING-INTEGRATED SOLAR ENERGY SYSTEM – A combination of solar panels and solar energy equipment integrated into any building envelope system such as vertical facades, semi-transparent skylight systems, roofing materials, or shading over windows, which produce electricity for onsite or offsite consumption.

BUILDING-MOUNTED SOLAR ENERGY SYSTEM – A Solar Energy System that is affixed to the side(s) of a building or other structure either directly or by means of support structures or other mounting devices, but not including those mounted to the roof or top surface of a building.

D.B.H. – Diameter at breast height is an industry standard measurement of tree size.

ENERGY CODE – The New York State Energy Conservation Construction Code adopted pursuant to Article 11 of the Energy Law, as currently in effect and as hereafter amended from time to time.

FACILITY AREA – The cumulative land area occupied during the operation of the Solar Energy System. This shall include all areas and equipment within the facility's perimeter boundary – including the Solar Energy System, onsite interconnection equipment, onsite electrical energy storage equipment, battery storage components, and any other associated equipment – as well as any site improvements beyond the facility's perimeter boundary such as access roads, permanent parking areas, or other permanent improvements. The facility area shall not include site improvements established for impact mitigation purposes, including but not limited to vegetative buffers and landscaping features.

FARMLAND OF STATEWIDE IMPORTANCE – Land, designated as “Farmland of Statewide Importance” in the U.S. Department of Agriculture Natural Resources Conservation Service (NRCS)'s Soil Survey Geographic (SSURGO) Database on Web Soil Survey, that is of state wide

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importance for the production of food, feed, fiber, forage, and oilseed crops as determined by the appropriate state agency or agencies. Farmland of Statewide Importance may include tracts of land that have been designated for agriculture by state law.

FARMLAND OF STATEWIDE IMPORTANCE IF DRAINED – Soils that are designated as Farmland of Statewide Importance, if drained meet all the Farmland of Statewide Importance criteria except for depth to seasonal high water table, and are suitable for drainage.

FIRE CODE – The fire code section of the New York State Uniform Fire Prevention and Building Code adopted pursuant to Article 18 of the Executive Law, as currently in effect and as hereafter amended from time to time.

GLARE – The effect by reflections of light with intensity sufficient as determined in a commercially reasonable manner to cause annoyance, discomfort, or loss in visual performance and visibility in any material respects.

GROUND-MOUNTED SOLAR ENERGY SYSTEM – A Solar Energy System that is anchored to the ground via a pole or other mounting system, detached from any other structure, that generates electricity for onsite or offsite consumption.

HOST COMMUNITY BENEFIT AGREEMENT– A contract between a Solar Energy System owner/operator and a local governing body, whereby the owner/operator agrees to provide the community with certain benefits to mitigate impacts of a proposed project on the community.

KILOWATT (kW) – a UNIT OF POWER EQUAL TO 1,000 WATTS. The nameplate capacity of Solar Energy Systems may be described in terms of kW.

LOT – A single parcel of land, the dimensions of which are described in a deed to such parcel and/or survey of such parcel and which has been identified by the Town of Hamden as a single Tax Map Parcel and is identified by a Tax Map Parcel number.

MEGAWATT (MW) – A unit of power equal to 1,000 kW. The nameplate capacity of Solar Energy Systems may be described in terms of MW.

NAMEPLATE CAPACITY – A Solar Energy System’s maximum electric power output under optimal operating conditions. Nameplate Capacity may be expressed in terms of Alternating Current (AC) or Direct Current (DC).

NATIVE PERENNIAL VEGETATION – Native wildflowers, phorbs, and grasses that serve as habitat, forage, and migratory way stations for pollinators and shall not include any prohibited or regulated species as determined by the New York State Department of Environmental Conservation.

NEC – National Electric Code.

NFPA – National Fire Protection Association.

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NON-PARTICIPATING PROPERTY - Any lot that does not contain any portion of a facility area associated with a Solar Energy System and the owner of such lot does not obtain any payment of monetary compensation from the Solar Energy System.

NON-RESIDENTIAL PROPERTY – A lot which does not contain a residential dwelling.

PARTICIPATING PROPERTY – A Solar Energy System host lot or any real property that is the subject of an agreement that provides for the payment of monetary compensation to the landowner from the Solar Energy System owner or operator regardless of whether any part of a Solar Energy System is constructed on the lot.

POLLINATOR – bees, bird, bats, and other insects or wildlife that pollinate flowering plants, and includes both wild and managed insects.

PRIME FARMLAND – Land, designated as “Prime Farmland” in the NRCS’s Soil Survey Geographic SSURGO Database on Web Soil Survey; that has the best combination of physical and chemical characteristics for producing food, feed, forage, fiber, and oilseed crops and is also available for these land uses.

RESIDENTIAL DWELLING – A building containing a dwelling unit used for or intended to be used for residential occupancy.

RESIDENTIAL PROPERTY – Any lot which contains a residential dwelling.

ROOF-MOUNTED SOLAR ENERGY SYSTEM – A Solar Energy System located on the roof of any legally permitted building or structure that produces electricity for onsite or offsite consumption.

SITE PLAN REVIEW AND SITE PLAN REVIEW LAW – All references to Site Plan review refer to the Town of Hamden Site Plan Review Law, as amended.

SOLAR ACCESS – Space open to the sun and clear of overhangs or shade so as to permit the use of active and/or passive Solar Energy Systems on individual lots.

SOLAR ENERGY EQUIPMENT – Electrical material, hardware, inverters, conduit, storage devices, substations or other electrical and photovoltaic equipment associated with the production of electricity, including battery storage components.

SOLAR ENERGY SYSTEM – The components and subsystems required to convert solar energy into electric energy suitable for use. The term includes, but is not limited to, solar panels and solar energy equipment. A Solar Energy System is classified as Tier 1, Tier 2, Tier 3 or Tier 4 as follows:

Tier 1 – Any roof mounted, ground mounted, building mounted or building integrated System with a nameplate capacity of up to 25 kW AC and any System with a nameplate capacity of up to 30 kW AC which is accessory to an existing residential dwelling on a single lot.

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Tier 2 – A Tier 2 System includes: (1) any ground mounted, building mounted or building integrated System with a nameplate capacity of greater than 25 kW AC up to 100 kW AC; or (2) a ground mounted, building mounted or building integrated system with a nameplate capacity of greater than 30 kW AC and up to 100 kW AC which is accessory to an existing residential dwelling on a single lot.

Tier 3 – A ground mounted System with a nameplate capacity of greater than 100 kW AC and up to 5 MW AC.

Tier 4 – A ground mounted System with a nameplate capacity of 5 MW and larger.

SOLAR ENERGY SYSTEM PERMIT – A discretionary permit issued by the Town of Hamden Planning Board for all Tier 3 and Tier 4 Solar Energy Systems.

SOLAR PANEL – A photovoltaic device capable of collecting and converting solar energy into electricity.

UNIFORM CODE – the New York State Uniform Fire Prevention and Building Code adopted pursuant to Article 18 of the Executive Law, as currently in effect and as hereafter amended from time to time.

YARD, FRONT – An open space on the same lot with a building or structure extending across the principal street side of a lot measured between the side lot lines, constituting the distance between the street line and the principal building or structure on the lot.

YARD, REAR – An open space on the same lot with a building or structure extending across the rear side of a lot measured between the side lot lines, constituting the distance between the rear lot line and the principal building or structure on the lot.

YARD, SIDE – An open space on the same lot with a building or structure located between any lot line other than a street line or rear lot line lying between the front and rear yards, constituting the distance between the side lot line and the principal building or structure on the lot.

Section 4 Applicability

The requirements of this Solar Energy Systems Local Law shall apply to all Solar Energy Systems permitted, installed, or modified in the Town of Hamden after the effective date of this Local Law, excluding general maintenance and repair.

Solar Energy Systems constructed or installed prior to the effective date of this Local Law shall not be required to meet the requirements of this Local Law unless the system is modified.

Modifications to an existing Solar Energy System that increase the facility area by more than five percent (5%) of the original area (exclusive of moving fencing) shall be subject to this Local Law.

Section 5 General Requirements for Solar Energy Systems

- 1) A Town of Hamden building permit shall be required prior to construction of any Solar Energy System.
- 2) Prior to the issuance of a building permit or final review of the Planning Board, construction and/or Site Plan documents must be signed and stamped by a New York State Licensed Professional Engineer, New York State Licensed Professional Landscape Architect, or New York State Registered Architect for all Solar Energy Systems.
- 3) The Town of Hamden Code Enforcement Officer shall have the authority to issue building permits in conjunction with and in furtherance of all applications under this Solar Energy Systems Local Law. Prior to the issuance of a building permit, with the exception of Tier 1 Systems, review and approval by the Planning Board of the Site Plan will be required. Additionally, prior to the issuance of a building permit for a Tier 3 or Tier 4 Solar Energy System, review and approval by the Planning Board of a Solar Energy System Permit shall be required.
- 4) All ground-mounted Solar Energy Systems must be located in the side yard or rear yard of lots and shall be prohibited in the front yard.
- 5) Issuance of approvals hereunder shall include review pursuant to the State Environmental Quality Review Act, Environmental Conservation Law Article 8 and its implementing regulations at 6 NYCRR Part 617 (“SEQRA”).
- 6) All Solar Energy Systems shall be designed, erected, and installed in accordance with all applicable codes, regulations, and industry standards as referenced in the Uniform Code, the Energy Code, and the laws of the Town of Hamden.
- 7) The Planning Board shall have the authority to waive any provisions contained in this Solar Energy Systems Local Law for projects that require Planning Board review when the

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Planning Board determines that waiver is consistent with the health, safety and welfare of the residents of the Town of Hamden so long as such waiver does not waive provisions otherwise required by law. Should the Planning Board grant a waiver, the Board may impose reasonable conditions associated with such waiver.

- 8) Any lot owner or operator of a Solar Energy System meeting the requirements under Real Property Tax Law Section 487, must notify the Town of Hamden Supervisor via certified mail of the owner or operator's intent to construct a Solar Energy System.
- 9) Solar Energy System project components shall not contain hazardous materials that could contaminate soils or the air by their release (units shall not contain cadmium, lead or any other hazardous substances). MSD (Material Safety Data) sheets for all materials shall be provided to the Town of Hamden Planning Board for review.
- 10) If battery storage components are included as part of a Solar Energy System, they must be placed in a secure container or enclosure per the requirements of the Uniform Code. In addition, the Solar Energy System site must include a sufficient quantity of water to address a battery based fire emergency. When no longer in use, all components shall be disposed of properly in accordance with all applicable laws and regulations.

Section 6 Permitting Requirements for Tier 1 Solar Energy Systems

Tier 1 Solar Energy Systems include roof mounted, ground mounted, building mounted or building integrated Systems with a nameplate capacity of up to 25 kW AC and any System with a nameplate capacity of up to 30 kW AC which is accessory to an existing residential dwelling on a single lot. All Tier 1 Solar Energy Systems shall require a building permit and shall be exempt from Site Plan review and from the requirement to obtain a Solar Energy System Permit in accordance with this Solar Energy Systems Local Law. All Tier 1 Systems shall be approved upon issuance of a building permit subject to meeting the following requirements set forth in Section 6 herein:

- 1) **Roof-Mounted Solar Energy Systems shall incorporate the following design requirements:**
 - a. Solar panels on pitched roofs shall be mounted with a maximum distance of eight (8) inches between the roof surface to the highest edge of the Systems.
 - b. Solar panels on pitched roofs shall be installed parallel to the roof surface on which they are mounted or attached.
 - c. Solar panels on pitched roofs shall not extend higher than the highest point of the roof surface on which they are mounted or attached.

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- d. Solar panels on flat roofs shall not extend above the top of the surrounding parapet, or more than twenty-four (24) inches above the flat roof surface of the roof, whichever is higher.
- 2) **All Tier 1 Solar Energy Systems shall incorporate the following design requirements:**
- a. Glare: All solar panels shall have anti-reflective coating.
 - b. Screening and Visibility:
 - i. All ground mounted Solar Energy Systems shall be limited to a maximum height of 18' above existing grade.
 - ii. Solar Energy Systems and solar energy equipment shall be located and constructed in such a manner that minimizes the visual impact to neighboring properties.
 - iii. Solar Energy Systems and solar energy equipment shall be located in such a manner to avoid the shading of adjacent properties and interference with said adjacent properties' solar access.

Section 7 Permitting Requirements for Tier 2 Solar Energy Systems

All Tier 2 Solar Energy Systems shall be subject to Site Plan review and approval by the Town of Hamden Planning Board as required by the Town of Hamden Site Plan Review Law. All requirements and procedures set forth in the Site Plan Review Law shall be required for all Tier 2 Solar Energy Systems and in the event of a conflict between this Solar Energy Systems Local Law and the Town Site Plan Review Law, this Local Law shall govern.

- 1) **Submitted Plans for Building Mounted and Building Integrated Solar Energy Systems shall:**
- a. Include the location and layout of all building mounted and building integrated Solar Energy Systems, including equipment specifications.
- 2) **Submitted Plans for Ground-Mounted Solar Energy Systems shall:**
- a. Include the location and layout of all ground mounted Solar Energy Systems, including equipment specifications.
 - b. Height: All ground mounted Solar Energy Systems shall be limited to a maximum height of 18' above existing grade.
 - c. Glare: All solar panels shall have anti-reflective coating.

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- d. Setbacks: Tier 2 Solar Energy Systems shall meet the setback requirements in the Appendix, Table 2. Fencing and collection lines shall not occur within the boundary line setback. Access roads which provide access or egress to a public road shall be excluded from the setback requirements.
- e. System Location: All ground-mounted Solar Energy Systems shall only be installed in the side or rear yards.

3) All Tier 2 Solar Energy Systems shall meet the following requirements:

- a. All standards and requirements established for Tier 1 Solar Energy Systems (see Section 6).
- b. Application Materials. Applications for Tier 2 Solar Energy Systems shall include the following:
 - i. Name, address, and contact information of proposed Solar Energy System installer. Contact information of the final system installer shall be submitted prior to the issuance of a Solar Energy System Permit.
 - ii. Name, address and contact information of the project applicant, lot owner and where applicable, project operator. The lot owner must provide written consent to the application and the proposed use of the property.
 - iii. Nameplate capacity of the Solar Energy System (as expressed in kW or MW).
 - iv. Property lines and physical features, including roads, for the project site.
 - v. Adjacent land uses on contiguous lots, within two hundred feet (200') of the site boundary.
 - vi. Identification of proposed changes to the landscape of the site, including site grading, vegetation clearing and planting, the removal of any large trees (6" d.b.h. and above), access roads, exterior lighting, signage, fencing, landscaping, and screening.
 - vii. A one- or three-line electrical diagram detailing the entire Solar Energy System layout, including the number of solar panels in each ground-mount array, solar collector installation, associated

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components, inverters, electrical interconnection methods, and utility meter, with all National Electrical Code compliant disconnects and overcurrent devices. The diagram shall describe the location and layout of all system components and should include applicable setbacks.

- viii. A preliminary equipment specification sheet that identifies in detail all proposed solar panels, system components, mounting systems, racking systems, inverters, and battery storage components that are to be installed. A final equipment specification sheet shall be submitted prior to the issuance of a building permit.

c. Screening and Visibility:

- i. Tier 2 Solar Energy Systems and solar energy equipment shall be located and constructed in such a manner that minimizes the visual impact to neighboring properties.
- ii. Tier 2 Solar Energy Systems and solar energy equipment shall be located in such a manner to avoid the shading of adjacent properties and interference with said adjacent properties' solar access.

d. Environmental Resources

- i. Tree-cutting. Removal of existing trees six (6) inches d.b.h. or larger should be minimized.
- ii. Tier 2 Solar Energy System owners/operators shall utilize and maintain native perennial vegetation to provide foraging habitat for pollinators in all appropriate areas within the facility area.
- iii. The owner/operator shall use integrated pest management practices to refrain from pesticide use for long-term operation and site maintenance. Blanket application of herbicides is prohibited except as approved by the Planning Board for spot applications related to invasive species management.

Section 8 Permitting Requirements for Tier 3 Solar Energy Systems

All Tier 3 Solar Energy Systems shall be permitted by a Solar Energy System Permit issued pursuant to this Solar Energy Systems Local Law in addition to Site Plan review and approval as required by the Town of Hamden Site Plan Review Law. All requirements and procedures set forth in the Site Plan Review Law shall be required for Tier 3 Solar Energy Systems and in the event of a conflict between this Solar Energy Systems Local Law and the Town Site Plan Review Law, this Local Law shall govern.

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The Town Board of the Town of Hamden appoints the Planning Board of the Town of Hamden as the Board responsible for the administration of the Town's Solar Energy Systems Local Law, including the review of Solar Energy System Permit applications, and the decision whether to approve such applications. Approval of Solar Energy System Permits shall be subject to the requirements set forth in this Local Law.

The Planning Board shall have the authority to impose such reasonable conditions and restrictions as are directly related to and incidental to the proposed Solar Energy System Permit.

Any person aggrieved by a decision of the Planning Board to approve, approve with modifications, or deny a Solar Energy System Permit may apply to the New York State Supreme Court for review by a proceeding under Article seventy-eight of the Civil Practice Law and Rules.

1) Applicants for a Tier 3 Solar Energy System Permit must submit a Solar Energy System Permit application in addition to an application for Site Plan review which shall be:

- a. Subject to the review of the Town of Hamden Planning Board. Applications must be submitted no later than ten (10) days prior to the Planning Board's regularly scheduled meeting. The Planning Board will review the submissions for completeness and shall notify the applicant within ten (10) business days after the next monthly meeting of any deficiencies that must be resolved. Upon receipt of a complete application, the Planning Board will notify the applicant that the application is deemed complete. Planning Board review shall not commence until an application is deemed complete.
- b. Subject to a public hearing. A public hearing will be held within sixty-two (62) days of receipt of a Site Plan application and Solar Energy System Permit application which has been deemed complete by the Planning Board. The applicant shall mail notice, via certified mail of the public hearing to all adjoining properties and all properties within five hundred (500) feet of the lot or lots containing any portion of the facility area at least fifteen (15) days prior to the public hearing. The Planning Board shall publish public notice of the public hearing in the official newspaper of the Town at least five (5) days prior to the date of the hearing. The Planning Board shall render a decision on the application within sixty-two (62) days of the closure of the public hearing. The time in which to render a decision may be extended by mutual consent of the applicant and the Planning Board.
- c. Subject to referrals to other agencies such as the Delaware County Planning Board pursuant to General Municipal Law Sec. 239-m, if required.
- d. Subject to SEQR.

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2) Application & Site Plan Review Requirements. Applications for Tier 3 Solar Energy System Permits, including materials for Site Plan review, shall be subject to the following requirements:

- a. Name, address, and contact information of proposed Solar Energy System installer. Contact information of the final system installer shall be submitted prior to the issuance of a Solar Energy System Permit.
- b. Name, address and contact information of the project applicant, lot owner and where applicable, project operator. The lot owner must provide written consent to the application and the proposed use of the property.
- c. Nameplate Capacity of the proposed Solar Energy System (as expressed in kW or MW).
- d. All Property lines and existing physical features of the subject lot including roads, watercourses, vegetation, stone walls, outcroppings, etc.
- e. Map (s) of Mineral Soil Groups 1-4 and active agricultural lands on the subject lot(s) and adjacent lots.
- f. Adjacent land uses on contiguous lots within five hundred (500) feet. Examples include residential, commercial, industrial, agriculture, etc.
- g. All proposed changes to the existing landscape of the site, including grading, vegetation removal and planting, the removal of any trees larger than six (6) inches d.b.h., access roads, exterior lighting, signage, fencing, landscaping, screening, etc.
- h. Vegetation Management Plan shall be used both as a baseline for returning the soil to a healthy state after decommissioning, and as the basis for vegetation establishment and management throughout the project life. Vegetation Management Plan shall include:
 - i. Chemical soil testing for nutrient status.
 - ii. A soil health assessment conducted by the Cornell Soil Health Testing Laboratory (or equivalent).
 - iii. Type of vegetation to be established to achieve at least 75% ground cover (with minimal bare soil areas) of any disturbed areas.
 - iv. Method of vegetation maintenance, inspection schedule and reporting program:

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1. Owner/operator shall at its own expense provide to the Town of Hamden annually; a site vegetation inspection report and the results of the chemical soil testing for nutrient status performed by a qualified, independent third party. Said report shall address any required nutrient additions, the method of how they will be applied, any weed or invasive plant control measures needed, the percentage ground cover and if less than seventy-five (75) percent a remediation plan.
 - i. Soil compaction and amelioration plan shall include:
 - i. Method used to determine compaction after construction.
 - ii. Method of compaction amelioration after construction.
 - j. NRCS's Web Soil Survey maps showing suitability and limitation ratings for solar array ballast anchor systems, and solar array soil-based anchor systems.
 - k. Erosion and sediment control and stormwater management plans prepared to NYS Department of Environmental Conservation standards, if applicable, and to such standards as may be established by the Planning Board of the Town of Hamden, including:
 - i. Runoff Rate: pre-development and post development runoff rates shall be the same.
 - l. A one- or three-line electrical diagram detailing the entire Solar Energy System layout, including the number of solar panels in each ground-mount array, solar collector installation, associated components, inverters, electrical interconnection methods, and utility meter, with all National Electrical Code compliant disconnects and overcurrent devices. The diagram should describe the location and layout of all battery energy storage system components if applicable and should include applicable setback and size requirements.
 - m. A preliminary equipment specification sheet that identifies in detail all proposed solar panels, system components, mounting systems, racking systems, inverters, and battery storage components that are to be installed. A final equipment specifications sheet shall be submitted prior to the issuance of a building permit.

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- n. A property operation and maintenance plan that describes continuing site maintenance, anticipated dual-use, and property upkeep, such as mowing and trimming, snow removal, etc.
- o. For all battery storage component systems, a water storage plan must be submitted which quantifies the on-site water storage capacity requirements to adequately manage potential battery fires. The plan should include battery sizing, quantity and type as well as the stored water location and method of access. If the site is unable to handle water storage requirements a battery storage component system is prohibited. The water storage plan must be prepared by a New York licensed professional engineer and shall be submitted by the applicant to the Town of Hamden for approval.
- p. A decommissioning plan signed by the owner/operator of the Solar Energy System, prepared by a New York licensed professional engineer.
- q. Underground requirements:
 - i. All on-site utility lines shall be placed underground to the greatest extent feasible and permissible by the serving utility, except for the main service connection and integral interconnection equipment.
- r. Vehicular Access:
 - i. Vehicular access within the site shall be identified on the Site Plan and designed to minimize rutting and soil compaction while minimizing the usage of impervious material.
- s. Signage:
 - i. No signage or graphic content shall be displayed on the Solar Energy System except the manufacturer's name, equipment specification information, safety information, and 24-hour emergency contact information. Said information shall be depicted within an area no more than eight (8) square feet.
 - ii. As required by National Electric Code (NEC), disconnect and other emergency shutoff information shall be clearly displayed on a light reflective surface. A clearly visible warning sign concerning voltage shall be placed at the base of all pad-mounted transformers and substations.
- t. Glare:
 - i. All solar panels shall have an anti-reflective coating.

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- u. Lighting:
 - i. Lighting of the Solar Energy System shall be limited to that minimally required for safety and operational purposes and shall be reasonably shielded, downcast and directed away from abutting properties. The lighting shall remain off at all times unless required for servicing.

- v. Noise:
 - i. The project shall be shown to not have adverse or unreasonable noise impacts on surrounding homes or other sensitive receptors. The one-hour daytime average noise generated from the Solar Energy System components and associated ancillary equipment shall not exceed a noise level, as measured at the outside wall of any non-participating, residential dwelling of forty (40) dBA.

- w. Multiple Lots:
 - i. At the discretion of the Planning Board where a facility area of a Tier 3 Solar Energy System comprises multiple lots (regardless of ownership by an individual or multiple participating landowners), the combined lots may be treated as a single lot for the purpose of applying standards and requirements.

- x. Lot size:
 - i. The property on which the Tier 3 Solar Energy System is placed shall meet the lot size requirements in the Appendix, Table 1.

- y. Setbacks:
 - i. The Tier 3 Solar Energy System shall meet the setback requirements in the Appendix, Table 2. Fencing and collection lines shall not occur within the boundary line setback. Access roads which provide access or egress to a public road shall be excluded from the setback requirements.

- z. Fencing:
 - i. All mechanical equipment, including any structure for battery storage system components, shall be enclosed by a seven (7) foot high fence, as required by NEC, with a self-locking gate to prevent unauthorized access. Wildlife friendly fencing shall be incorporated where allowable/practicable.

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aa. Screening and Visibility:

- i. Height: All ground mounted Solar Energy Systems shall be limited to a maximum height of 18' above existing grade.
- ii. Solar Energy Systems with a facility area smaller than ten (10) acres shall have views minimized from adjacent properties using architectural features, earthen berms, landscaping, or other screening methods that will harmonize with the character of the property and the surrounding area.
- iii. Solar Energy Systems with a facility area larger than ten (10) acres shall be required to:
 1. Conduct a visual assessment, which at a minimum shall require a line-of-sight profile. The Planning Board may require a computerized photographic simulation to simulate and assess the visual impacts of the Solar Energy System on public roadways and adjacent properties. Depending upon the scope and potential significance of the visual impacts, additional impact analyses may be required to be submitted by the applicant.
 2. Submit a screening and landscaping plan to show adequate measures to screen through landscaping, grading, or other means so that views of solar panels and Solar energy equipment shall be minimized as reasonably practical from public roadways and adjacent properties to the extent feasible. The Screening and Landscaping Plan:
 - Shall specify the locations, elevations, height, plant species, and/or materials that will comprise the structures, landscaping, and/or grading used to screen and/or mitigate any adverse aesthetic effects of the System.
 - Shall include a minimum of evergreen trees, at least [6] feet high at time of planting and supplemental shrubs at the reasonable discretion of the Planning Board. The landscaped screening shall contain species identified as expected to thrive in the hardiness zone for the project area as identified in the most recent United States Department of Agriculture Hardiness Zone Map. Existing vegetation may be used to satisfy all or a portion of the required landscaped screening.

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- The Planning Board may elect to waive certain screening and landscaping requirements in select locations based on an applicant’s demonstration of non-impact or acceptable impact mitigation.

bb. Environmental Resources:

- i. Tree removal: Removal of existing trees six (6) inches d.b.h. or larger should be minimized. The applicant shall submit an inventory which identifies all trees six (6) inches d.b.h. or larger being considered for removal.
- ii. As a condition of approval, Tier 3 Solar Energy System owners/operators shall develop, implement, and maintain native vegetation pursuant to a vegetation management plan by providing native perennial vegetation and foraging habitat beneficial to game birds, songbirds, and pollinators. When establishing perennial vegetation and beneficial foraging habitat, the owners/operators shall use native plant species and seed mixes and seed all appropriate areas within the facility area.

Any project which is designed to incorporate agricultural or farm-related activities or uses within the facility area may be excluded from this requirement based on the amount of space occupied by the agricultural use(s). This exclusion will only be allowed based on the Planning Board determination that these lands are being used for actual agricultural uses.

- iii. The owner/operator shall use integrated pest management practices to refrain from pesticide use for long-term operation and site maintenance. Blanket application of herbicides is prohibited. Spot applications of herbicides may be allowed for invasive species management only if the product and application rate is specified in the vegetation management plan.

cc. Agricultural Resources:

- i. Tier 3 Solar Energy Systems for which the facility area includes lands consisting of Mineral Soil Groups (“MSG”) 1-4 shall adhere to the following requirements:
 1. Tier 3 Solar Energy System components, equipment, and associated impervious surfaces shall occupy no more than fifty (50) percent of the area of MSG 1-4 within the facility area.

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2. A Tier 3 Solar Energy System may exceed the fifty (50) percent MSG 1-4 coverage threshold only if the project incorporates an onsite activity or program which provides for the use of the land as a farm operation. A farm operation classification shall be determined by the Planning Board based upon the applicant's submission in order to exceed the coverage threshold.
 3. Subject to discretion of the Planning Board, if the applicant/owner/operator demonstrates that notwithstanding the classification as MSG 1-4 the land cannot be profitably employed for agriculture, the land may be excluded from the calculation required by this section.
 4. Tier 3 Solar Energy Systems located on lands classified as MSG 1-4 shall be constructed, monitored, and decommissioned in accordance with the NYS Department of Agriculture and Markets' *"Guidelines for Solar Energy Projects – Construction Mitigation for Agricultural Lands."*
- dd. Abandonment/Decommissioning/Security
- i. Every Solar Energy System and any associated accessory structures shall be dismantled and removed from the site by the applicant/owner/operator and the site shall be reclaimed when it has been inoperative or abandoned for twelve (12) consecutive months. As a condition of project approval, the applicant/owner/operator shall be required to enter into a decommissioning agreement with the Town of Hamden pursuant to which: (1) the applicant/owner/operator is fully liable and responsible for removal and reclamation of the site; and (2) the applicant/owner/operator shall indemnify the Town for the cost of removal and reclamation should the applicant/owner/operator not fully and adequately decommission the site. The decommissioning agreement shall be fully executed prior to issuance of a building permit. Prior to issuance of a building permit, the applicant/owner/operator shall also be required to post security as provided herein to fully cover the costs associated with decommissioning. The security shall be no less than 150% of the current cost of removal and reclamation and shall be renewed every five years in the amount adjusted by the Planning Board. The cost estimate shall not include credit for salvage value of any components of the system.
 - ii. In the case of active agricultural land or lands having Prime Farmland or Farmland of Statewide importance, the decommissioning agreement shall expressly incorporate the standards of NYS Department of Agriculture and Markets and *"Guidelines for Solar Energy Projects – Construction Mitigation for Agricultural Lands."*

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- iii. Decommissioning security shall consist of one or more of the following:
 - 1. Certified or bank funds from a nationally licensed bank of the United States with a credit rating of “A” or better; or
 - 2. A surety bond issued by an insurance company, certified by the U.S. Department of Treasury, with an AM best rating of A or better and total assets exceeding \$100 billion; or
 - 3. A standby letter of credit issued by a nationally licensed bank of the United States with credit rating of “A” or better and total assets exceeding \$100 billion.
 - iv. The applicant/owner/operator shall satisfy the security for decommissioning by making the respective deposit or filing of said security bond or execution of said standby letter of credit with the Town of Hamden, said respective deposits, execution or filing shall be made prior to issuance of a Building Permit.
 - v. The Town of Hamden shall deposit all security funds issued by the applicant/owner/operator in an interest-bearing trust account located at a federally insured, nationally licensed U.S. bank with a credit rating of “A” or better and total assets exceeding \$100 billion, naming said bank as “Trustee” of said funds.
- ee. Liability Insurance
- i. Prior to issuance of a Building Permit for construction of the Solar Energy System, the applicant/owner/operator shall agree to secure and maintain for the duration of construction and the life of the project, liability insurance as follows:
 - 1. Commercial general liability covering personal injuries, death, pollution and property damage: \$5,000,000 per occurrence (\$10,000,000 aggregate) which shall specifically include the Town of Hamden and its officers, Boards, employees, attorneys, agents and consultants as additional named insured;
 - 2. Umbrella coverage: \$10,000,000.
 - ii. Insurance Company:

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The insurance policies shall be issued by an agent or representative of an insurance company licensed to do business in the state of New York and with at least a Best's rating of "A".

iii. Insurance policy cancellation:

The insurance policies shall contain an endorsement obligating the insurance company to furnish the Town of Hamden with at least thirty (30) days prior written notice in advance of cancellation.

iv. Insurance policy renewal:

Renewal or replacement policies shall be delivered to the Town of Hamden at least fifteen (15) days before the expiration of the current insurance policies.

v. Copies of insurance policy:

Prior to issuance of a building permit, the Permit holder shall deliver to the Town of Hamden a copy of each of the policies or certificates representing the required insurance policies in the required amounts.

vi. Indemnification:

As a condition of project approval, the applicant/owner/operator shall be required to enter into a decommissioning agreement with the Town of Hamden which shall contain an indemnification provision. The indemnification provision shall require the applicant/owner/operator to at all times defend, indemnify, protect, save, hold harmless and exempt the Town of Hamden and its officers, Boards, employees, attorneys, agents and consultants from any and all penalties, damages, costs or charges arising out of any and all claims, suits, demands, causes of action or award of damages whether compensatory or punitive, or expenses arising therefrom either at law or in equity which might arise out of or are caused by the placement, construction, erection, modification, location, performance, use, operation, maintenance, repair, installation, replacement, removal, or restoration of said Solar Energy System, excepting however, any portion of such claims, suits, demands, causes of action or award of damages as may be attributable to the negligent or intentional acts or omissions of the Town of Hamden or its employees or agents. With respect to the penalties, damages, or changes referenced herein, reasonable attorneys' fees, consultants' fees and expert witness fees are included in those costs that are recoverable by the Town of Hamden.

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ff. Ownership Changes:

The applicant/owner/operator of the Solar Energy System shall give written notice to the Hamden Town Board of any proposed change in ownership or change in operation not later than ninety (90) days prior to the change in ownership or operation. When the owner or operator of the Solar Energy System changes or the owner of the host property changes, the Solar Energy System Permit shall remain in effect, provided that successor owner or operator assumes in writing all of the obligations of said Permit, Site Plan approval, and any agreements entered into with the Town of Hamden.

gg. Fees:

All fees including application fees for Solar Energy Systems shall be determined and approved by the Hamden Town Board, by resolution.

hh. Expenses:

In addition to any fee that may be established by the Hamden Town Board for Solar Energy System applications, the Planning Board shall require the applicant to pay all the Planning Board's associated costs incurred in connection with the review of an application.

- i. The Town of Hamden Planning Board may incur expenses to properly review documents or conduct special studies in connection with the Solar Energy System application. These costs may include, but are not limited to, the cost of the Planning Board's engineering review, legal review, environmental, planning consultants, or any other expenses incurred in connection with the review of the Solar Energy System application. All expenses incurred for application review shall be charged to the applicant. The Planning Board will make a reasonable estimate of expenses and will require this amount to be deposited in escrow with the Town Clerk prior to commencing the review of any application. The applicant and the Town Board shall enter into an escrow agreement that provides for payment of the Planning Board's expenses incurred in reviewing the application which shall be funded by the applicant. If the applicant fails to replenish the escrow account as provided for in the escrow agreement or there are unpaid amounts for which the applicant is responsible, the Planning Board may suspend review of the application, until such amounts are paid. In no event shall any Solar Energy System application be approved until such expenses have been paid in full.

Section 9 Permitting Requirements for Tier 4 Solar Energy Systems

All Tier 4 Solar Energy Systems shall be permitted pursuant to this Solar Energy Systems Local Law pursuant to the same application requirements and procedures set forth in Section 8 for Tier 3 Solar Energy Systems for Site Plan approval and a Solar Energy System Permit, both subject to review and approval by the Planning Board of the Town of Hamden. The substantive requirements and procedures set forth in Section 8 herein shall apply to all Tier 4 Solar Energy System Permit applications. Applicants for Tier 4 Systems shall also be required to comply with all substantive requirements and procedures set forth in Section 9 herein. Should there be a conflict between Section 8 and Section 9 related to substantive requirements or procedures for Tier 4 Systems, the provisions of Section 9 shall govern.

1) All applications for Tier 4 Solar Energy Systems shall include the following:

- a. All the information and requirements required for a Tier 3 System as provided in Section 8 herein.
- b. Submittal of an Agricultural Impact Statement (AIS) to determine the impact to agriculture in the Town of Hamden. The AIS will address the methods that the System will utilize to avoid and/or mitigate adverse impacts to important resources identified in the Plans. In addition, the applicant should demonstrate, in a narrative, how the proposed project is consistent with the goals and objectives contained in those plans.

The Planning Board shall work with the applicant to finalize the requirements of this statement. At a minimum, the AIS will include whether the farmland is active, how long it has been farmed, and if it is leased. If leased, include the impact on the lessee and other farm leases the lessee may have.

2) Pre-Application Meeting:

- a. At least sixty (60) days prior to the submission of an application, the applicant shall conduct a pre-application meeting with the Town of Hamden Supervisor and the Planning Board to ensure all parties have clear expectations regarding any Town of Hamden requirements applicable to the proposed Solar Energy System. A written request for this purpose shall be sent to the Town of Hamden Supervisor and the Town Planning Board. At the pre-application meeting, the applicant must provide the following:
 - i. A brief description of the proposed Solar Energy System and its environmental setting.
 - ii. A map of the proposed facility area showing project components.

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- iii. The proposed Solar Energy System’s anticipated impacts.
- iv. A designated contact person with mailing address, telephone number, and email address from whom information will be available going forward.
- v. An anticipated application submission date.
- vi. Application fee.

3) Solar Energy System Permit Standards:

- a. Setbacks: Tier 4 Solar Energy Systems shall meet the setback requirements in the Appendix, Table 2. Fencing and collection lines shall not occur within the boundary line setback. Access roads which provide access or egress to a public road shall be excluded from the front setback requirements only.
- b. Height: All ground mounted Solar Energy Systems shall be limited to a maximum height of 18’ above existing grade.
- c. Agricultural Resources: Tier 4 Solar Energy Systems for which the facility area includes active agricultural lands shall adhere to the following requirements:
 - i. Tier 4 Solar Energy System components, equipment, and associated impervious surfaces shall occupy no more than fifty percent [50%] of the active agricultural lands within the facility area.
 - ii. Tier 4 Solar Energy Systems located on active agricultural lands shall be constructed, monitored, and decommissioned in accordance with the NYS Department of Agriculture and Markets’ “*Guidelines for Solar Energy Projects – Construction Mitigation for Agricultural Lands*” unless a waiver is granted by the Planning Board.

4) Community Engagement Plan / Host Community Benefit Agreement:

- a. Applications for Tier 4 Solar Energy Systems shall include a Community Engagement Plan detailing the applicant’s proposed plans and strategies for ensuring adequate public awareness and encouraging community participation. Applicants are highly encouraged to discuss the contents and details proposed in this Plan with the Town of Hamden Supervisor prior to submission of a formal application.

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- b. In order to balance the interests of the community with the impacts of a proposed Tier 4 Solar Energy System, the Community Engagement Plan shall address whether a Host Community Benefit Agreement would assist in balancing such interests.

Section 10 Safety

- 1) Solar Energy Systems and solar energy equipment shall be certified under the applicable electrical and/or building codes as required.
- 2) Solar Energy Systems shall be maintained in good working order and in accordance with industry standards. Site access shall be maintained, including snow removal at a level acceptable to the local fire department and, if a Tier 3 or Tier 4 Solar Energy System is located in an ambulance district, to the local ambulance service.
- 3) If storage batteries are included as part of the Solar Energy System, batteries shall meet the requirements of this Local Law and any applicable fire prevention and building code when in use and when no longer used, shall be disposed of in accordance with the laws and regulations of the Town of Hamden and any applicable federal, state, or local laws and regulations.
- 4) The applicant/owner/operator shall ensure emergency access to the facility area for local first responders by installing an emergency lock box or similar device, in a location subject to approval by the fire chief.
- 5) Emergency Operations Plan: An emergency operations plan shall be provided to the local fire department and local building code official as well as the Town of Hamden Planning Board. The emergency operations plan shall include but not be limited to the following:
 - a. Procedures for emergency shutdown.
 - b. Procedures for inspection, testing of alarms, interlocks and controls.
 - c. Emergency procedures to be followed after an explosion, fire, release of liquids, vapors or other potentially dangerous conditions.
 - d. Complete listing and on-site location of MSD sheets.
 - e. Procedures for handling Solar Energy System components damaged in a fire or other emergency event.
 - f. Other procedures as identified by the Town of Hamden to provide for the safety of residents and emergency responders.

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- g. Procedures and schedules for conducting drills of these procedures and for training local first responders. Training of local first responders shall be done bi-annually. Classroom training to be completed in the winter with onsite training in the spring. Training will include local and mutual aid first responders.
- 6) All additional costs associated with necessary training and equipment for first responders, required to support the construction and operation of a Tier 3 or Tier 4 Solar Energy System, shall be reimbursed by the applicant/owner/operator/ of the Solar Energy System upon submission of appropriate documentation.

Section 11 Permit Time Frame

Any Solar Energy System Permit and/or Site Plan approval issued under this Local Law shall be valid for a period of thirty-six (36) months, provided construction is substantially complete within this time. In the event construction is not completed in accordance with the final approved Site Plan (as may have been amended) within thirty-six (36) months of issuance, the applicant/owner/operator may request to extend the time to complete construction for an additional twelve (12) months to the Town Planning Board. Approval of a request to extend the time to complete construction shall not be unreasonably withheld. If the applicant/owner/ operator fails to perform substantial construction within the stated timeframes, any approvals issued pursuant to this Local Law shall expire.

Section 12 Enforcement

Any violation of this Solar Energy Systems Local Law shall be subject to the same enforcement requirements, including the civil and criminal penalties, provided for in the local laws of the Town of Hamden.

Section 13 Severability

If any provision of this Solar Energy Systems Local Law is held by a court of competent jurisdiction to be invalid, void, or unenforceable, the remaining provisions shall nevertheless continue in full force and effect.

Section 14 Effective Date

This Local Law shall take effect immediately upon filing with the New York Department of State.

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Appendix

The following table displays the lot size requirements for ground-mounted Solar Energy Systems

Table 1: Lot Size Requirements for Solar Energy Systems

| | Tier 2 and 3 Solar Energy Systems | Tier 4 Solar Energy Systems |
|--|--------------------------------------|--------------------------------|
| | 5 or more acres | 10 or more acres |

The following table provides setback requirements of the lot for ground-mounted Solar Energy Systems: Tier 2, Tier 3, and Tier 4, to be permitted. Landscaping may occur within setback.

Table 2: Setback Requirements for Solar Energy Systems

| | Tier 2 | Tier 3 & Tier 4 |
|---|----------|-----------------|
| Non-participating, Residential Property Lines | 25 feet | 100 feet |
| Non-participating, Residential Dwelling | 100 feet | 500 feet |
| Non-participating, Non- Residential Property Lines | 25 feet | 100 feet |
| Public Road | 75 feet | 100 feet |