TOWN OF ROTTERDAM LOCAL LAW NO.<u>13</u> OF THE YEAR 2024 A LOCAL LAW RELATING TO SOLAR ENERGY FACILITIES IN THE TOWN OF ROTTERDAM

SECTION 1 - TITLE

This Local Law shall be referred to as "A Local Law Relating to Solar Energy Facilities in the Town of Rotterdam".

SECTION 2 – PURPOSE AND INTENT

Solar energy is a renewable and non-polluting resource that can prevent fossil fuel emissions and reduce a municipality's energy load. The use of solar energy equipment for the purpose of providing energy is a priority and is a necessary component of the Town of Rotterdam's current and long-term sustainability needs. This Local Law aims to accommodate solar energy systems and equipment, to balance the potential impact of such systems and equipment on neighbors, and to preserve the rights of property owners to install such solar energy systems and equipment without excess regulation.

SECTION 3 - DEFINITIONS

Chapter 270, § 270-5 of the Town Code of the Town of Rotterdam is hereby amended to add the following definitions of terms:

BUILDING-INTEGRATED PHOTOVOLTAIC (BIPV) SYSTEMS

A solar energy system that consists of integrating photovoltaic modules into the building materials comprising the structure, such as the roof material or the façade material, and which does not constitute a Rooftop or Building-Mounted Solar System.

FLUSH-MOUNTED SOLAR PANEL

A photovoltaic panel or tile that is installed flush to the surface of a roof and which cannot be angled or raised.

FREESTANDING OR GROUND-MOUNTED SOLAR ENERGY SYSTEM

A solar energy system that is directly installed in the ground and is not attached or affixed to an existing structure. Pole-mounted solar energy systems shall be considered Freestanding or Ground-Mounted Solar Energy Systems.

PHOTOVOLTAIC (PV) SYSTEMS

A solar energy system that produces electricity by the use of semiconductor devices, called photovoltaic cells that generate electricity whenever light strikes them.

QUALIFIED SOLAR INSTALLER

A person who has skills and knowledge related to the construction and operation of solar electrical equipment and installation and has received safety training on the hazards

involved. Persons who are on the list of eligible photovoltaic installers maintained by the New York State Energy Research and Development Authority (NYSERDA), or who are certified as a solar installer by the North American Board of Certified Energy Practitioners (NABCEP), shall be deemed to be qualified solar installers for the purposes of this definition. Persons who are not on NYSERDA's list of eligible installers or NABCEP's list of certified installers may be deemed to be qualified solar installers if the Town Building Inspector/Code Enforcement Officer or such other Town officer or employee as the Town Board designates determines such persons have had adequate training to determine the degree and extent of the hazard and the personal protective equipment and job planning necessary to perform the installation safely. Such training shall include the proper use of special precautionary techniques and personal protective equipment, as well as the skills and techniques necessary to distinguish exposed energized parts from other parts of electrical equipment and to determine the nominal voltage of exposed live parts.

ROOFTOP OR BUILDING-MOUNTED SOLAR SYSTEM

A solar energy system in which solar panels are mounted on top of the structure of a roof either as a flush-mounted system or as modules fixed to frames.

SMALL-SCALE SOLAR

Solar photovoltaic systems or solar-thermal systems which serve only the building to which they are attached, or the building or buildings located on the same lot as such system. The Building Inspector/Code Enforcement Officer shall be authorized to require any applicant to submit proof of the last twelve months of electricity usage for such lot or building, or in the case where twelve months of electricity usage data cannot be produced, proof of the projected electricity usage for such lot or building, for purposes of determining whether an applicant's proposed solar energy system constitutes a Small-Scale Solar energy system.

SOLAR COLLECTOR

A solar photovoltaic cell, panel, or array, or solar hot air or water collector device, which relies upon solar radiation as an energy source for the generation of electricity or transfer of stored heat.

SOLAR ENERGY EQUIPMENT/SYSTEM

Solar collectors, controls, energy storage devices, heat pumps, heat exchangers, and other materials, hardware or equipment necessary to the process by which solar radiation is collected, converted into another form of energy, stored, protected from unnecessary dissipation and distributed. Solar systems include solar thermal, photovoltaic and concentrated solar. A solar energy system does not include any solar energy system of four square feet in size or less.

SOLAR FARM OR SOLAR POWER PLANT

Energy generation facility or area of land principally used to convert solar energy to electricity, whether by photovoltaics, concentrating solar thermal devices or various experimental solar technologies, with the primary purpose of wholesale or retail sales of electricity or off-site consumption.

SOLAR PANEL

A device for the direct conversion of solar energy into electricity.

SOLAR STORAGE BATTERY

A device that stores energy from the sun and makes it available in an electrical form.

SOLAR-THERMAL SYSTEMS

Solar thermal systems directly heat water or other liquid using sunlight. The heated liquid is used for such purposes as space heating and cooling, domestic hot water, and heating pool water.

SECTION 4 - AMENDMENT OF § 270-15

Chapter 270, § 270-15 of the Town Code of the Town of Rotterdam is hereby amended by adding a new subparagraph (E), as follows:

E. Small-Scale Solar. In the case of Small-Scale Solar energy systems or devices, to the extent the foregoing provisions are inconsistent with the provisions of Article XXVIII, the provisions of Article XXVIII shall apply.

<u>SECTION 5 - ADDITION OF SOLAR FARMS AND SOLAR POWER PLANTS AS</u> <u>SPECIAL PERMIT USE IN A – AGRICULTURAL DISTRICT</u>

Chapter 270, § 270-18 of the Town Code of the Town of Rotterdam is hereby amended by adding a new subparagraph (M), as follows:

M. Solar Farms and Solar Power Plants in accordance with § 270-153.

<u>SECTION 6 - ADDITION OF SOLAR FARMS AND SOLAR POWER PLANTS AS</u> SPECIAL PERMIT USE IN I-1 – LIGHT INDUSTRIAL DISTRICT

Chapter 270, § 270-73 of the Town Code of the Town of Rotterdam is hereby amended by adding a new subparagraph (O), as follows:

O. Solar Farms and Solar Power Plants in accordance with § 270-153.

<u>SECTION 7 - ADDITION OF SOLAR FARMS AND SOLAR POWER PLANTS AS</u> <u>SPECIAL PERMIT USE IN I-2 – HEAVY INDUSTRIAL DISTRICT</u>

Chapter 270, § 270-84 of the Town Code of the Town of Rotterdam is hereby amended by adding a new subparagraph (G), as follows:

G. Solar Farms and Solar Power Plants in accordance with § 270-153.

SECTION 8 - AMENDMENT OF § 270-138

Chapter 270, § 270-138 of the Town Code of the Town of Rotterdam is hereby amended by adding a new subparagraph (D), as follows:

D. Small-Scale Solar. In the case of Small-Scale Solar energy systems or devices, to the extent the foregoing provisions are inconsistent with the provisions of Article XXVIII, the provisions of Article XXVIII shall apply.

SECTION 9 - AMENDMENT OF § 270-143

Chapter 270, § 270-143 of the Town Code of the Town of Rotterdam is hereby amended by adding a new subparagraph (G), as follows:

G. Exception for Solar Farms and Solar Power Plants. The provisions of this section shall not apply to fences enclosing Solar Farms and Solar Power Plants.

SECTION 10 - SOLAR FARMS AND SOLAR POWER PLANTS

Chapter 270 of the Town Code of the Town of Rotterdam is hereby amended by adding a new section, § 270-153, as follows:

§ 270-153. Solar Farms

- A. Solar Farms and Solar Power Plants are permissible in the A Agricultural, I-1 Light Industrial, and I-2 Heavy Industrial Zoning Districts in the Town of Rotterdam upon issuance of a special use permit and site plan approval by the Planning Board.
- **B.** In addition to the information and materials required under Article XVII (Site Plan Approval) and Article XIX (Special Use Permits), all applications for Solar Farms or Solar Power Plants shall include the following, except to the extent waived by the Planning Board:
 - (1) Plans and drawings of the solar energy system installation signed by a professional engineer registered in New York State showing the proposed layout of the entire solar energy system along with a description of all components, whether on site or off site, existing vegetation and proposed clearing and grading of all sites involved. Clearing and/or grading activities are subject to review by the Planning Board and shall not commence until the issuance of site plan approval.
 - (2) An electrical diagram detailing the solar energy system installation, associated components, and electrical interconnection methods, with all disconnects and over-current devices identified.

- (3) Documentation of access to the project site(s), including location of all access roads, gates, and parking areas.
- (4) Plan for clearing and/or grading of site.
- (5) A stormwater pollution prevention plan as per NYSDEC requirements to detail stormwater runoff management and erosion control plans for the site.
- (6) Documentation of utility notification, including an electric service order number.
- (7) Decommissioning plan and description of financial surety that satisfies the Town that all required improvements shall be made for Solar Farms or Solar Power Plants. For all such systems, the applicant shall submit a decommissioning plan for review and approval as part of the special use permit application. The decommissioning plan shall identify the anticipated life of the project, method and process for removing all components of the solar energy system and returning the site to its preexisting condition, and estimated decommissioning costs, including any salvage value.
- (8) The Town shall require any applicant to pay all associated costs for any application review, including but not limited to engineering, legal, environmental, planning, and the review required under SEQRA. When the Planning Board determines that a review will require engineering, legal, environmental, or planning costs, they shall provide an estimate to the applicant. Subsequently, such payment shall be made prior to commencement of any further Planning Board review.
- (9) Photo simulations shall be included showing the proposed solar energy system in relation to the building/site, along with elevation views and dimensions, and manufacturer's specifications and photographs of the proposed solar energy system, solar collectors, and all other components.
- (10) Part I of the Environmental Assessment Form completed and signed.
- (11) Details of the proposed noise that may be generated by inverter fans. The Planning Board may require a noise analysis to determine potential adverse noise impacts.
- (12) Any other information or documentation as may be reasonably required by the Planning Board.
- **C.** All applications for Solar Farms or Solar Power Plants shall be reviewed and determined in accordance with the procedures and standards set forth in Article XVII (Site Plan Approval) and Article XIX (Special Use Permits) of this Chapter. In addition, the following provisions shall apply:

- (1) All such systems shall adhere to all applicable Town of Rotterdam building, plumbing, electrical, and fire codes.
- (2) Development and operation of a solar energy system shall not have a significant adverse impact on fish, wildlife, or plant species or their critical habitats, or other significant habitats identified by the Town of Rotterdam or other federal or state regulatory agencies. Lands which have the highest ecological values as evidenced by large, contiguous areas of forest, undisturbed drainage areas, wetlands, or NYSDEC identified critical habitats or rare plant and animals' populations shall be avoided.
- (3) With the exception of transmission lines and related structures necessary for transmitting electricity generated by the solar energy system for off-site distribution and/or consumption, there shall be a minimum 100 foot buffer between any component of the solar energy system and the parcel boundary line. The Planning Board is authorized to increase the width of this buffer after analysis of site conditions and adjacent land uses.
- (4) Any site containing such solar energy system shall be enclosed by perimeter fencing to restrict unauthorized access at a height of 8 ½ feet or such other height determined by the Planning Board.
- (5) Previously cleared or disturbed areas are preferred locations for solar panel arrays. The clearing of additional lands to accommodate a proposed utility-scale solar energy facility may be permitted, provided the percentage of newly cleared land on any parcel does not exceed 30% of the existing woodlands on that parcel.
- (6) Native grasses and vegetation shall be maintained below the arrays.
- (7) A berm, landscape screen, natural vegetation, or any combination thereof acceptable to the Planning Board capable of screening the site, shall be provided. The solar facility, including any proposed off-site infrastructure, shall be located, and screened in such a way as to avoid or minimize visual impacts as viewed from:
 - (a) Publicly dedicated roads and highways; and
 - (b) Existing residential dwellings located on contiguous parcels.
- (8) The design, construction, operation, and maintenance of any solar energy system shall prevent the misdirection and/or reflection of solar rays onto neighboring properties, public roads, and public parks in excess of that which already exists.

- (9) All structures and devices used to support solar collectors shall be non-reflective and/or painted a subtle or earth-tone color to aid in blending the facility into the existing environment.
- (10) All transmission lines and wiring associated with a solar energy system shall be buried and include necessary encasements in accordance with the National Electric Code and Town requirements. The Planning Board may recommend waiving this requirement if sufficient engineering data is submitted by the applicant to demonstrate that underground transmission lines are not feasible or practical. The applicant is required to show the locations of all proposed overhead and underground electric utility lines, including substations and junction boxes and other electrical components for the project on the site plan. All transmission lines and electrical wiring shall be in compliance with the utility company's requirements for interconnection.
- (11) Artificial lighting of solar energy systems shall be limited to lighting required for safety purposes and shall be shielded from all neighboring properties and public roads.
- (12) The manufacturers or installer's identification and appropriate warning signage shall be posted at the entry to the site and clearly visible; provided, however, that total area of such signage shall not exceed twenty-four square feet.
- (13) The height of the solar panel arrays shall not exceed twenty-five feet.
- (14) The Planning Board shall require security in an amount and form acceptable to the Town for the purposes of ensuring that the system is removed and the site is restored as required under § 270-153 (D) of this Chapter. The amount shall be determined by an estimate of total cost of removal of the solar energy system and restoration of the site. Acceptable forms of security shall include, in order of preference: cash or letter of credit, or a combination thereof.
- (15) Following construction of a large-scale or utility-scale ground-mounted solar energy system, all disturbed areas where soil has been exposed shall be reseeded with grass and/or planted with low-level vegetation capable of preventing soil erosion and airborne dust, which grass and vegetation shall be reasonably maintained.
- (16) Special use permits granted for utility-scale solar energy systems shall be assignable or transferable to future landowners of that system on the approved parcel so long as they are in full compliance with this Chapter and all conditions of the special use permit, and the Building Inspector/Code

Enforcement Officer is notified of the property transfer at least 15 days prior thereto.

- (17) Any post-construction changes or alterations to the solar energy system except for repairs, replacements, and upgrades of existing equipment shall be done only by amendment to the special use permit and site plan approval and subject to the requirements of this Chapter.
- (18) After completion of a utility-scale solar energy system, the applicant shall provide a post-construction certification from a professional engineer registered in New York State that the project complies with applicable codes and industry practices and has been constructed and is operating according to the design plans. The applicant shall further provide certification from the utility that the facility has been inspected and connected.
- **D.** Abandonment or Decommissioning. Solar Farms or Solar Power Plants which have not been in active and continuous service for a period of one year shall be deemed abandoned and shall be removed at the owner's or operator's expense. Decommissioning shall include removal of all energy facilities, structures and equipment including any subsurface wires and footings from the parcel. Any access roads created for building or maintaining the systems shall also be removed and re-planted with vegetation. In the event that the facility is not removed within six months of abandonment, and the site restored as required, the Town may cause the same to be removed and the site restored using the security posted as required by § 270-153 (C) (14) of this Chapter.

SECTION 11 - SMALL-SCALE SOLAR

Chapter 270 of the Town Code of the Town of Rotterdam is hereby amended by adding a new Article XXVIII, as follows:

Article XXVIII – Small-Scale Solar

§ 270-220 – Permits Required for Small-Scale Solar Energy Systems

- **A.** The provisions of this Article apply to Small-Scale Solar energy systems. No Small Scale solar energy system or device shall be installed or operated in the Town except in compliance with this Article.
- **B.** Rooftop and Building-Mounted Solar Collectors. Rooftop and building-mounted solar collectors that constitute Small-Scale Solar energy systems are permitted in all zoning districts in the Town subject to the following conditions:
 - 1. Building permits shall be required for installation of all rooftop and buildingmounted solar collectors.

- 2. Rooftop and building-mounted solar collectors shall not exceed the maximum allowed height of the principal use in any zoning district.
- 3. All rooftop and building-mounted solar collectors shall meet all applicable standards set forth in the New York State Uniform Fire Prevention and Building Code.
- C. Building-Integrated Photovoltaic (BIPV) Systems: BIPV systems that constitute Small-Scale Solar energy systems are permitted in all zoning districts and shall be shown on the plans submitted for the building permit application for the building containing the system. All BIPV systems shall meet all applicable standards set forth in the New York State Uniform Fire Prevention and Building Code.
- **D.** Freestanding or Ground-Mounted Solar Energy Systems: Freestanding or ground-mounted solar collectors that constitute Small-Scale Solar energy systems are permitted as accessory structures in all zoning districts of the Town subject to the following conditions:
 - 1. Building permits are required for the installation of all ground-mounted and freestanding solar collectors.
 - 2. All ground-mounted or freestanding solar collectors shall be setback from the property line by the greater of (i) 20 feet or (ii) the otherwise applicable setback in the subject zoning district. No ground-mounted or freestanding solar collectors shall be permitted on any lot which is less than ½ acre in size.
 - 3. The height of the solar collector and any mounts shall not exceed 20 feet when oriented at maximum tilt.
 - 4. Solar energy equipment shall not be sited within any required buffer area.
 - 5. The total surface area of all ground-mounted and freestanding solar collectors on a lot shall not exceed the area of the ground covered by the building structure of the largest building on the lot measured from the exterior walls, excluding patios, decks, balconies, screened and open porches and attached garages, provided that non-residential placements exceeding this size may be approved by the Planning Board, subject to site plan review pursuant to Article XVII of this Chapter.
 - 6. The area beneath ground-mounted and freestanding solar collectors shall be included in calculating whether the lot meets maximum permitted Lot Coverage requirements for the applicable District as if the ground-mounted and freestanding solar collectors were deemed to be principal or accessory buildings for purposes of the definition of the term "Lot Coverage"; and
 - 7. The installation of ground-mounted and freestanding solar collectors shall be considered a land development activity for purposes of Article XXVI of this Chapter.

- **E.** Solar-Thermal Systems: Solar-thermal systems that constitute Small-Scale Solar energy systems are permitted in all zoning districts subject to the following conditions:
 - 1. Building permits are required for the installation of all solar-thermal systems;
 - 2. Ground-mounted and freestanding solar-thermal systems shall be subject to the same requirements set forth in Subsection D above as for ground-mounted and freestanding solar collectors.
- **F.** Solar energy systems and equipment that constitute Small-Scale Solar energy systems may be permitted only if they are determined not to present any unreasonable safety risks, including, but not limited to, related to the following:
 - 1. Weight load;
 - 2. Wind resistance;
 - 3. Ingress or egress in the event of fire or other emergency.
- **G.** Solar collectors and related equipment that constitute Small-Scale Solar energy systems shall be surfaced, designed and sited so as not to reflect glare onto adjacent properties and roadways.
- **H.** All Small-Scale Solar energy systems shall be designed to produce only so much energy as may be required on the lot or in the building to be served by the system. The Building Inspector/Code Enforcement Officer shall be authorized to require any applicant to submit proof of the last twelve months of electricity usage for such lot or building, or in the case where twelve months of electricity usage data cannot be produced, proof of the projected electricity usage for such lot or building. The Building Inspector/Code Enforcement Officer shall be authorized to deny any application that seeks to install a solar energy system that is designed to produce, or is capable of producing, energy in excess of the electricity usage data or projection for such building or lot.

§ 270-221 - Safety

- A. All solar collector installations must be performed by a qualified solar installer.
- **B.** Prior to operation, electrical connections must be inspected by The Building Inspector/Code Enforcement Officer and by an appropriate electrical inspection person or agency, as determined by the Town.
- C. Any connection to the public utility grid must be inspected by the appropriate public utility.
- **D.** Solar energy systems shall be maintained in good working order.

- **E.** If solar storage batteries are included as part of the solar collector system, they must be placed in a secure container or enclosure meeting the requirements of the New York State Building Code when in use and when no longer used shall be disposed of in accordance with the laws and regulations of the Town and other applicable laws and regulations.
- **F.** Solar energy systems and equipment shall be marked in order to provide emergency responders with appropriate warning and guidance with respect to isolating the solar electric system. Materials used for marking shall be weather resistant. For residential applications, the marking may be placed within the main service disconnect. If the main service disconnect is operable with the service panel closed, then the marking should be placed on the outside cover. For commercial applications, the marking shall be placed adjacent to the main service disconnect in a location clearly visible from the location where the lever is operated.

Modifications to Chapter 270-133.1

§ 270-137.1 Application and fees.

[Added 12-9-1992 by L.L. No. 37-1992; amended 8-8-2007 by L.L. No. 9-2007; 2-25-2009 by L.L. No. 1-2009]

<u>A.</u>

Except as noted below, all site plan applications shall be accompanied by a fee as affixed by the Rotterdam Town Board and designated in Chapter <u>126</u> of the Town Code, entitled "Fees."

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There shall be no fee required to accompany a site plan approval application for any person, firm, eorporation, association or partnership that has as the primary purpose of said application to install "green" energy production on improved property or if said application contains the construction or implementation of at least 10% of "green" energy production for the proposed site plan for any new construction. For purposes of this subsection, "green energy production" shall include but is not limited to power obtained through wind, solar, geothermal, hydroelectric, and/or solar voltaic (electric).

<u>B.</u>

Administrative fees. The costs incurred for the review of a site plan application by the Town Engineer, for consulting engineering fees or other consulting fees in conjunction with the Planning Board's review for a proposed application, including reviews required under the New York State Environmental Quality Review Act,¹¹¹ shall be charged to the applicant. The Planning Board shall obtain an estimate from any designated consultant for an amount sufficient to defray the costs of such services. The applicant shall enter into an escrow agreement with the Town of Rotterdam Planning Board, and said agreement shall be executed by the Rotterdam Planning Board Chairman, upon authorization from the Rotterdam Planning Board. The Rotterdam Planning Board Attorney shall prescribe the terms and appropriate form of the escrow agreement. Any portion of the estimated charges so collected by escrow agreement which is not expended by the Town shall be returned to the applicant.