



CITY OF NEW BEDFORD

JONATHAN F. MITCHELL, MAYOR

OFFICE OF THE CITY CLERK
NEW BEDFORD, MA

2025 SEP -4 AM 11:17

CITY CLERK

September 3, 2025

City Council President Shane Burgo and
Honorable Members of the City Council
City of New Bedford
133 William Street
New Bedford, MA 02740

Re: Solar Zoning Ordinance

Dear Council President Burgo and Honorable Members of the Council:

I am submitting for your consideration a zoning ordinance amendment for solar energy systems. The ordinance will establish a specific permitting process and design standards for the development, installation, and maintenance of solar energy systems. Currently, New Bedford's zoning ordinance is silent on solar systems, which makes the process unclear for homeowners and developers. The Planning Department has been collaborating with the Southeastern Region Planning and Economic Development District (SRPEDD) under a technical assistance grant to craft a solar ordinance for New Bedford.

The proposed ordinance covers all types of solar energy systems from panels mounted on a home rooftop to large-scale arrays. The design standards and use categories included in the amendment ensure that solar energy systems are developed at a scale that is sensitive to the surrounding neighborhood. Further, the ordinance gives the Planning Board special permit granting authority for large-scale solar arrays and all parking canopy systems, which gives the City more discretion and control over siting of system elements and screening to mitigate visual impact.

In addition to outlining clear standards and zoning districts for constructing solar arrays, the ordinance also considers the eventual decommissioning of these systems, which have an estimated operational life of 30 years. In doing so, the proposed ordinance requires any solar project appearing before the Planning Board to provide a decommissioning plan and a financial surety to fund the dismantling and cleanup of the solar array in the event of the abandonment or foreclosure.

I look forward to your consideration of this ordinance, which is designed to encourage investment in solar energy by providing clear standards and processes for its development in our city.

Sincerely,

Jonathan F. Mitchell
Mayor

Enclosed:

- Proposed Solar Ordinance Amendment
- Solar Ordinance Info sheet

TABLED.

IN CITY COUNCIL, September 11, 2025

Dennis W. Farias, City Clerk

IN CITY COUNCIL, September 25, 2025

Remove from the TABLE.

Referred to the Committee on Ordinances and the Planning Board.

Dennis W. Farias, City Clerk

a true copy attests

Dennis W. Farias
City Clerk



CITY OF NEW BEDFORD

In the Year Two Thousand and Twenty-Five

AN ORDINANCE

Amending Chapter 9, Comprehensive Zoning

31- 509

Be it ordained by the City Council of the City of New Bedford as follows:—

SECTION 1.

Chapter 9, of the New Bedford Code of Ordinances, Comprehensive Zoning, Section 4000, is hereby amended to insert the following after Section 4200B:

SECTION 4200D. – SOLAR ENERGY SYSTEMS

4210D. Purpose.

The purpose of this section is to provide standards and guidelines for the installation of solar photovoltaic and thermal systems in appropriate locations throughout New Bedford, while protecting public health and safety and minimizing any adverse visual and environmental impacts.

4220D. Applicability

This ordinance applies to all new installations of Ground-Mounted and Roof-Mounted Solar Energy Systems and to physical modifications that materially alter the type, configuration, or size of these facilities or related equipment.

4221D(i) Site Plan Review. For the purposes of this section, all Medium- and Large-Scale Non-Residential Ground-Mounted Solar Energy System projects (including Ground-Mounted Parking Canopies) shall undergo Site Plan Review pursuant to Section 5400.

4222D. Special Permit Granting Authority. For the purposes of this section, the Planning Board shall serve as the Special Permit Granting Authority (SPGA).

4223D. Residential Roof-Mounted Solar Energy Systems. Nothing in this section should be construed to prevent or require Site Plan Review or a Special Permit for the installation of Residential Roof-Mounted Solar Energy Systems. Residential Roof-Mounted Solar Energy Systems may be installed in applicable zoning districts so long as the applicant has obtained a building permit, conforms to the requirements of Sections 4230D and 4240D, and all other applicable local, state, and federal permitting requirements.

4224D Inclusionary Uses. Small Accessory or Ornamental Solar Products which do not generate

electricity for use in a dwelling or structure are exempt from the provisions of this section.

4230D. Definitions

For the purposes of this Section 4200D, the following definitions shall apply. Terms not defined herein shall have the meanings given under Section 1200. – DEFINITIONS, or under M.G.L. c. 40A, if not otherwise defined.

1. **Rate Nameplate Capacity:** The maximum rated output of electrical power production of a photovoltaic system in watts of Direct Current (DC).
2. **Solar Collector:** A device, structure, or a part of a device or structure for which the primary purpose is to transform solar radiant energy into thermal, mechanical, chemical, or electrical energy. It is typically used to generate renewable energy for residential, commercial, or utility purposes.
3. **Photovoltaic System:** An Active Solar Energy System that converts solar energy directly into electricity.
4. **Solar Energy:** Radiant energy received from the sun that can be collected in the form of heat or light by a solar collector.
5. **Accessory Solar Product:** (Also called “Ornamental Solar Product”) A solar product used primarily for decorative, landscaping, and lighting purposes that does not supply power to a property or the grid.
6. **Solar Energy System:** A device or structural design feature, a substantial purpose of which is to provide daylight for interior lighting or provide for the collection, storage, and distribution of solar energy for space heating or cooling, electricity generation, or water heating.
7. **Solar Energy System, Active:** A solar energy system whose primary purpose is to harvest energy by transforming solar energy into another form of energy or transferring heat from a collector to another medium using mechanical, electrical, or chemical means.
8. **Solar Energy System, Grid-Intertie:** A photovoltaic system that is connected to an electric circuit served by an electric utility.
9. **Solar Energy System, Off-Grid:** A photovoltaic solar energy system in which the circuits energized by the solar energy system are not electrically connected in any way to electric circuits that are served by an electric utility provider.
10. **Solar Energy System, Residential:** A Solar Energy System installed on residential property, designed to supply electricity or heat primarily for on-site use.
11. **Solar Energy System, Non-Residential:** A Solar Energy System installed on commercial, industrial, or other non-residential properties, intended to meet the energy needs of the facility or supply power to the grid.
12. **Solar Energy System, Ground-Mounted:** An Active Solar Energy System that is structurally mounted to the ground and is not roof-mounted; may be of any size (small-, medium-, or large-scale).
13. **Solar Energy System, Ground-Mounted Parking Canopy:** A special application of a Ground-Mounted Solar Energy System that is installed on top of a parking surface or paved surface that maintains the function of the area beneath the canopy; may be of any size (small-, medium-, or large-scale).

14. **Solar Energy System, Roof-Mounted:** An Active Solar Energy System that is structurally mounted to the roof of a building or structure; may be of any size (small-, medium-, or large-scale).
15. **Solar Energy System, Small-Scale:** An Active Solar Energy System that occupies 1,750 square feet of surface area or less (equivalent to a rated nameplate capacity of about 10 kW DC or less).
16. **Solar Energy System, Medium-Scale:** An Active Solar Energy System that occupies more than 1,750 square feet but less than 40,000 square feet of surface area (equivalent to a rated nameplate capacity of about 10 – 250 kW DC).
17. **Solar Energy System, Large-Scale:** An Active Solar Energy System that occupies more than 40,000 square feet of surface area (equivalent to a rated nameplate capacity of about 250 kW DC or greater).
18. **Wall-Mounted Equipment:** Any equipment associated with a Solar Energy System that is structurally mounted to the exterior wall(s) of a building, including, but not limited to, battery storage, interceptors, conduits, inverters, and meters.

4240D. Use Regulations

Principal Use	RA	RB	RC	RAA	MUB	IA	IB	IC	WI
Medium-Scale Ground-Mounted Solar Energy System	N	N	N	N	Y	Y	Y	Y	N
Large-Scale Ground-Mounted Solar Energy System	N	N	N	N	N	PB	PB	PB	N

Accessory Use	RA	RB	RC	RAA	MUB	IA	IB	IC	WI
Small-Scale Ground-Mounted Solar Energy System	Y	Y	Y	Y	Y	Y	Y	Y	N
Medium-Scale Ground-Mounted Solar Energy System	N	Y	Y	N	Y	Y	Y	Y	N
Ground-Mounted Parking Canopy	N	N	N	N	PB	PB	PB	PB	PB
Roof-Mounted Solar Energy System	Y	Y	Y	Y	Y	Y	Y	Y	Y

4230D. Dimensional Standards

All Solar Energy Systems shall conform with the requirements of the Massachusetts Building Code, National Fire Protection Association, and International Building Code, as applicable. The following dimensional standards shall apply to all Solar Energy Systems:

4231D Setbacks

Roof-Mounted Systems: For all Roof-Mounted Photovoltaic Systems occupying $\leq 33\%$ of the plan view total roof area, a rooftop setback of not less than eighteen inches (18") wide is required on both sides of a horizontal ridge. For all Roof-Mounted Photovoltaic Systems occupying $> 33\%$ of the plan view total roof area, a setback of not less than thirty-six inches (36") wide is required on both sides of the horizontal ridge.

Ground-Mounted Systems: For all Ground-Mounted Systems abutting a residential use, there shall be a minimum setback of ten feet (10') from the lot line of the residential use. In instances where the underlying zoning district requires a setback that conflicts with this section, the greater setback distance shall apply.

4232D Height

Roof-Mounted Systems: The maximum height of a Roof-Mounted Solar Energy System shall be not more than one foot (1') above the roof surface. The top-most points of the Collectors shall not exceed two feet (2') measured perpendicular to the roof surface.

Ground-Mounted Systems: The maximum height of a standard, non-Parking Canopy Ground-Mounted Solar Energy System shall be eight feet (8'), measured as the vertical distance from the grade to the highest point of the Collector. For Ground-Mounted Parking Canopies, the maximum height of the System shall be eighteen feet (18'), measured as the vertical distance from the grade to the highest point of the Collector.

4240D. General Requirements and Standards for Solar Energy Systems

The following general requirements and standards shall apply to all Solar Energy Systems:

4241D. Building Permit

No Solar Energy System shall be erected, constructed, installed, or modified as provided by this section without first obtaining a building permit pursuant to Section 6-29 of the New Bedford Code of Ordinances and obtaining an Electrical Permit pursuant to Section 2-191 of the New Bedford Code of Ordinances.

4242D. Utility Notification

No Grid-Intertie Solar Energy System shall be installed until evidence has been given to the Building Inspector that the utility company has received notice of the customer's intent to install an interconnected customer-owned system and has accepted this intent. Off-grid systems are exempt from this requirement.

4243D. Design Standards

Roof-Mounted Systems: Roof-Mounted Systems located in a Historic District established under M.G.L.A. c. 40C shall adhere to the guidelines of the New Bedford Historical Commission published under the provisions of Sec. 2-154.

Ground-Mounted Systems: All Ground-Mounted Solar Energy Systems are encouraged to conform to the contours of the existing terrain, where possible. Applicants are encouraged to utilize non-reflective and earth-toned materials to limit the environmental and visual impact of the Solar Energy System, where possible.

Wall-Mounted Equipment: Wall-Mounted Equipment shall be installed on the rear facade of a building, and if not possible, on the rear portion of a building's side facade. Wall-Mounted Equipment shall not be installed on the front facade of a building.

4344D. Maintenance

The Solar Energy System owner or operator shall maintain the facility in proper and good working condition. Maintenance shall include, but shall not be limited to, adequate and timely structural repairs, painting as needed, and updates or additions to current security measures. Site maintenance shall be in line with the standards of the local Fire Chief, Emergency Management Director, Emergency Medical Services, Building Inspector, Conservation Agent, and the Director of City Planning. Maintenance of surrounding associated environments (such as shrubland, screening landscaping and vegetation, stormwater and erosion control measures, or accessory structures) shall be routine and occur as is necessary to maintain integrity and health of such environments. The Solar Energy System owner or operator shall be responsible for the cost of maintaining the solar energy system, any associated stormwater and erosion control infrastructure, and access road(s), unless accepted as a public way.

4344D. Monitoring

The Solar Energy System owner or operator shall regularly monitor the system to ensure optimal performance and compliance with all safety regulations. Solar Energy System owners are responsible for providing access to performance data when requested by the City.

4345D. Safety and Environmental Standards

Glare: Solar Energy System Collectors and accompanying equipment shall be placed and arranged such that reflected Solar Energy or glare shall not be directed onto adjacent properties, roadways, rail lines, and other rights of way. Applicants shall provide a landscaped or artificial buffer with a minimum height of six feet (6') when arrangements of the Solar Energy System or designated setbacks are insufficient for limiting glare. These buffers shall not extend minimum setback requirements and are subject to review by the Building Inspector and the Planning Board, as applicable. Solar Energy System owners/developers shall provide a glare analysis when requested by the City or the Planning Board.

Chemicals and Cleaners: The Solar Energy System owner or operator shall provide a list to the Building Inspector of all chemicals and cleaners that will be used on site to clean either the System and/or any associated equipment.

Environmental Mitigation: Where possible, Ground-Mounted Solar Energy Systems should be placed on previously disturbed land in lieu of land that would require clearcutting or environmental disturbance. Impacts to native wetlands and other habitats, forested areas, and soil quality are only permissible where necessary for the installation, operation, and maintenance of the system, shall be contained within reasonable means of the proposed project, and are subject to all applicable environmental regulations and permits.

Stormwater Management: All Solar Energy Systems are subject to the provisions of Article VIII. – Stormwater Management. All applicants proposing land alterations shall not do so without having obtained a stormwater management permit.

4250D. Requirements and Standards for Non-Residential Solar Energy Systems

The following standards shall apply to all Medium- and Large-Scale Non-Residential Solar Energy Systems:

A. Site Plan Document Requirements

Pursuant to the Site Plan Review process (Section 5400), the applicant shall provide the following documents, as deemed applicable by the Planning Board:

1. A Site Plan showing the following:
 - a. All required contents described within Section 5450;
 - b. Blueprints or drawings of the Solar Energy System signed by a professional engineer licensed to practice in the Commonwealth of Massachusetts showing the proposed layout of the system, any potential shading from nearby structures, the distance between the proposed solar collector and all property lines and existing on-site buildings and structures, and the tallest finished height of the Solar Collector;
 - c. One- or three-line electrical diagram detailing the solar photovoltaic installation, associated components, and electrical interconnection methods, with all Massachusetts Electric Code (527 CMR 12.00) compliant disconnects and overcurrent devices;
 - d. Documentation of the major system components to be used, including the panels, mounting system, and inverter;
2. Documentation of actual or prospective access and control of the project site sufficient to allow for construction and operation of the proposed Solar Energy System;
3. Documentation that the project complies with all requirements of the Federal Aviation Administration and City of New Bedford, including but not limited to lighting and airport approach zone encroachments;
4. Name, address, phone number, and signature of any agents representing the applicant; and
5. Proof of liability insurance.
6. To verify the suitability of emergency access and site circulation, the Planning Board, at its discretion, may require a vehicle turning plan be submitted as part of Site Plan Review.

B. Emergency Services

An applicant shall submit an Emergency Response Plan to the New Bedford Fire Department prior to the issuance of a building permit. This plan shall contain the following:

1. Protocols for safe shutdown of the system in case of fire or other emergencies;
2. Site-specific hazards, including high-voltage components and battery storage (if applicable); and
3. A clearly marked map of the facility, identifying key components, shut-off points, and access paths for emergency personnel.

All systems shall be equipped with automated fire detection and monitoring systems for early warning of electrical malfunctions or fire hazards. These systems shall notify the New Bedford Fire Department in case of a fire or malfunction.

Ground-Mounted Parking Canopies: All Ground-Mounted Parking Canopies shall be designed to allow for emergency vehicle access. All Ground-Mounted Parking Canopy projects may be subject to review by the New Bedford Fire Chief.

C. Utility Connections

An applicant shall undertake reasonable efforts, as determined by the Planning Board, to place all utility connections from the Solar Energy System underground, depending on appropriate soil conditions, shape and topography of the site, and any requirements of the utility provider. Electrical transformers for utility interconnections may be above ground if required by the utility provider.

D. Lighting

Lighting of Ground-Mounted Solar Energy Systems shall be consistent with local, state, and federal law. Lighting of other parts of the installation, such as appurtenant structures, shall be limited to that required for safety and operational purposes, and shall be reasonably shielded from abutting properties. Where feasible, lighting of the Solar Energy System shall be directed downward and shall incorporate full cutoff fixtures to reduce light pollution.

E. Signage

A Solar Energy System project shall conform with Section 3200 – SIGN REGULATIONS of New Bedford's Zoning Ordinance. A sign consistent with Section 3200 shall also be required to identify the Solar Energy System owner and provide a 24-hour emergency contact phone number. Solar Energy System signage shall not be used for displaying any advertising, except for reasonable identification of the manufacturer or operator of the Solar Energy System.

F. Construction, Operation, and Maintenance

An applicant shall maintain that all Ground-Mounted Solar Energy Systems shall be designed, installed, and operated in compliance with the applicable provisions of the New Bedford Code of Ordinances, state regulations, and any other local codes that apply to safety, environmental protection, and land use.

Construction: Construction shall commence only after all necessary permits are obtained and must comply with the National Electric Code (NEC), applicable state building codes, and industry best practices for solar energy systems.

Operation and Maintenance: Solar Energy Systems must be maintained in good working condition throughout their operational lifespan. The following operational and maintenance standards shall apply:

1. Regular inspections shall be conducted by qualified personnel to ensure the system's structural integrity, electrical safety, and overall performance.
2. Solar Energy Systems must be cleaned as necessary to maintain efficiency, with all cleaning methods being environmentally safe and not causing runoff or chemical contamination.

3. The Solar Energy System owner or operator shall maintain a comprehensive log of maintenance activities, inspections, and repairs, which must be available for review by Inspectional Services and City authorities upon request.
4. Operation and Maintenance Plan: An applicant proposing any Large-Scale Ground-Mounted Solar Energy System shall submit an Operation and Maintenance Plan, which shall include measures for maintaining safe access to the installation, stormwater and erosion controls, and general procedures for operational maintenance of the installation.

G. Safety and Environmental Standards

Any clearing of forested areas for the purpose of constructing a Solar Energy System is limited to that which is necessary for the construction, operation, and maintenance of the System or otherwise prescribed by applicable laws, regulations, and ordinances. Large-scale clearing of forested areas to enable a Solar Energy System that exceeds what is necessary for construction, operation, maintenance, or otherwise, as determined reasonable by the applicant and the Planning Board, is prohibited. An applicant seeking a Special Permit for a Solar Energy System project must submit the following documentation to the Planning Board describing the anticipated impacts of the proposed project and associated mitigation measures:

1. Habitat Mitigation Plan: A plan describing the local vegetative features and surrounding wildlife prior to system installation, the extent of planned habitat alterations, old growth trees and sensitive habitats to be preserved, protection measures that will be installed to protect surrounding trees and habitat during construction, and documents outlining how the project will limit negative externalities on surroundings.
2. Erosion Mitigation Plan: A plan describing erosion risk and specific erosion control measures the Solar Energy System owner or operator will undertake at or surrounding the project site to prevent soil migration. The plan should include a maintenance schedule identifying responsible parties for monitoring erosion control measures to ensure functionality.

H. Visual Mitigation

Solar Energy System projects shall be designed to minimize visual impacts to the maximum extent practicable by both integrating into the natural landscape and through appropriate screening when integration is not possible. Screening may include fencing or other landscape features such as shrubs and trees.

View Shed Analysis: An applicant seeking a Special Permit for a Solar Energy System project must submit a View Shed Analysis to the Planning Board. This assessment shall include photographs of the existing area and renderings from at least four (4) perspectives, specified by the Planning Board, from the closest publicly accessible vantage points, with special emphasis on residential structures.

I. Appurtenant Structures

All appurtenant structures to a Solar Energy System shall be subject to the City of New Bedford's Zoning Ordinance requirements concerning the bulk of structures, setbacks, open space, parking, and building coverage requirements for the underlying zoning. All such appurtenant structures, including, but not limited to, equipment shelters, storage facilities, fencing, transformers, and substations, shall be architecturally compatible with each other. Structures shall be screened from view by vegetation and/or joined or clustered to avoid adverse visual impacts.

J. Abandonment and Decommissioning

An applicant seeking a Special Permit for a Solar Energy System project must submit a Decommissioning Plan to the Planning Board. This plan shall detail:

1. **Removal of Equipment:** All solar panels, support structures, inverters, foundations, and other facility components shall be removed from the site.
2. **Site Restoration:** The site shall be restored to its original pre-construction condition, to the extent feasible. Restoration efforts shall include, but are not limited to, soil stabilization, re-vegetation, and the removal of any impervious surfaces.
3. **Timeframe:** Decommissioning shall be completed within one hundred eighty (180) days of facility abandonment or the issuance of a decommissioning notice, whichever comes first.

Failure to comply with the decommissioning plan within the prescribed timeframe may result in enforcement action by the City, including but not limited to fines, penalties, and the use of financial assurance funds to complete decommissioning.

K. Financial Surety

An applicant seeking a Special Permit for a Solar Energy System project shall provide financial surety, in an amount and form acceptable to the Planning Board, but in no event to exceed more than 125% of the cost of removal and compliance with the additional requirements set forth herein. Such surety will not be required for municipally- or state-owned facilities. The applicant shall submit a fully inclusive estimate of the costs associated with removal and disposal, prepared by a qualified engineer. The amount shall include a mechanism for calculating increased removal and disposal costs due to inflation. The Planning Board may submit the applicant's estimate for peer review, at the cost of the applicant, prior to approving the amount of the surety.

4260D. Waivers

Submission Requirements: Where the Planning Board finds that, due to special circumstances of a particular Solar Energy System project, submittal of one or more submission requirements described within Section 4250D would cause an unnecessary hardship to the applicant, and granting the waiver would not be contrary to the intent of this ordinance, the Board may grant a waiver for such submission requirement(s).

Standards: Where the Planning Board finds that, due to special circumstances of a particular Solar Energy System project, one or more requirements of Section 4250D is not reasonable or necessary to protect the public health, safety, and general welfare, the Board may waive such requirements, subject to reasonable conditions. Where waivers are requested, the applicant shall provide detailed information about the evidence for the waiver and applicability of the requested waiver to the proposed plan. The applicant shall provide information to the Planning Board regarding whether the requested waiver will result in any impacts to abutting and nearby properties.

Waivers shall not have the effect of nullifying the intent and purpose of the City's Official Zoning Map, the Comprehensive Plan, the Code of Ordinances, or this Section.

IN CITY COUNCIL, September 11, 2025

TABLED.

Dennis W. Farias, City Clerk

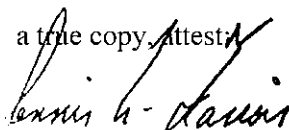
IN CITY COUNCIL, September 25, 2025

Remove from the TABLE.

Referred to the Committee on Ordinances and the Planning Board.

Dennis W. Farias, City Clerk

a true copy, attest:



City Clerk