

Local Law #6 of 2019 of the Town of Berne

§xxx-1 Title.

This article may be cited as the “Industrial Scale Solar Energy Facilities Law” of the Town of Berne, New York.

§xxx-2 Purpose.

The purpose of this Industrial Scale Solar Energy Facilities Law is to plan for well-sited industrial scale solar projects, in accordance with the Town of Berne Comprehensive Plan, and to protect and promote the health, safety, and welfare of the community. The objectives include:

- A. To allow Town of Berne residents, landowners, farms, and government to take advantage of solar energy resources in a way that is consistent with the nature and character of the Town in accordance with the Town of Berne Comprehensive Plan.
- B. To protect and promote the farmland and agricultural economy and culture.
- C. To ensure farmland, agricultural land and forested land are put to their highest and best use.
- D. To protect and promote scenic and environmental resources by minimizing Industrial Scale Solar Energy Facilities’ impacts on Berne’s scenic and environmental resources as outlined in the Berne Comprehensive Plan: including, but not limited to flood plains, historic sites, conservation easements, trails, parklands, wetlands, wildlife, and scenery, and areas for recreational and outdoor activities.
- E. To protect the property values of those properties neighboring and within the viewshed of an Industrial Scale Solar Energy Facility.

§xxx-3 Authority.

The Town Board of the Town of Berne enacts this Industrial Scale Solar Energy Facilities Law under the authority granted by:

- A. Article IX of the New York State Constitution, § 2(c)(6) and (10).
- B. New York Statute of Local Governments, § 10, Subdivisions 1 and 7.
- C. New York Municipal Home Rule Law, § 10, Subdivision 1(i) and (ii), Subdivision 1a(6), (11), (12), and (14), and Subdivision 1d(3).

- D. New York Town Law § 130, Subdivisions 1 (Building code), 3 (Electrical code), 5 (Fire prevention), 7 (Use of streets, highways, sidewalks and public places), 7-a (Location and construction of driveways), 11 (Peace, good order and safety), 15 (Promotion of public welfare), 15-a (Excavated lands), 16 (Unsafe buildings and collapsed structures), 19 (Trespass), and 25 (Building lines).
- E. New York Town Law § 64, Subdivisions 17-a (Protection of aesthetic interests), and 23 (General powers).
- F. New York Town Law § 263, (Accordance with comprehensive plan; Promote health and general welfare; Accommodation of solar energy systems so far as conditions may permit; Facilitate practice of forestry; Consideration of character of district, suitability for particular uses, conserving value of buildings, and most appropriate use of land)
- G. New York Real Property Tax Law § 487.

§xxx-4 Findings.

The Town Board of the Town of Berne hereby finds and declares that:

- A. Regulation of the siting and installation of solar facilities is necessary for protecting the health, safety, and welfare of neighboring property owners and the general public.
- B. As the State of New York has enacted Article 10 of the Public Service Law, which could allow for construction of industrial scale solar energy facilities, it is necessary to provide for reasonable, substantive development standards to protect the health, safety and welfare of the residents of the Town of Berne.
- C. While solar energy is considered a renewable energy resource there are significant impacts to be considered including glint and glare, erosion, loss of land suitable for growing crops and trees for forestry, aesthetic impacts, and property values, such that the potential benefits must be balanced against potential impacts.
- D. The Constitution of the State of New York, Article XIV § 4 states: “The policy of the state shall be to conserve and protect its natural resources and scenic beauty and encourage the development and improvement of its agricultural lands for the production of food and other agricultural products.”
- E. Any local law enacted by the Town of Berne must be in accordance with the Town of Berne Comprehensive Plan. Town Law § 263.
- F. The first three Goals of the Town of Berne Comprehensive Plan are as follows:
 - (1) Preserve and enhance Berne’s community character and its small-town rural quality.
 - (2) Conserve, maintain the town’s open spaces and natural resources.

(3) Maintain farmlands and promote agricultural activities.

- G. The Town of Berne Comprehensive Plan's Vision Statement makes it clear that that the Town values and intends to maintain its rural character: "Berne's natural beauty and rural character remain a hallmark of our Town, and views and scenic areas in Town are preserved and protected. Berne practices a land use policy that conserves and protects the natural and human environment."
- H. Industrial scale solar energy facilities have the potential to cause significant aesthetic impacts because of the number of contiguous acres covered by such a facility.
- I. The Town of Berne has many areas with significant viewshed (*Appendix A.1 Viewshed Map*) which would be significantly impaired if the viewshed included industrial scale solar energy facilities.
- J. Due to the hill and valley topography of the Town of Berne, the likelihood of viewshed impacts as well as glint and glare issues are greater in Berne than in areas in New York State with flatter topography.
- K. An Industrial Scale Solar Energy Facility would be the largest contiguous built environment in the Town of Berne. There is no other industrial development in the Town. Therefore, if placed in an area visible from anywhere in the Town, the visual impact would be substantial in both physical size and its difference from any other development or use in the surrounding area.
- L. The Town of Berne highly values its historic resources. The first portion of Goal 6 of the Town of Berne Comprehensive Plan reads, "Protect Berne's historical resources." Full appreciation of these resources requires that the setting remain the rural landscape in which they were built. Construction of industrial scale solar energy facilities in the Town would have a significant adverse impact on such settings.
- M. The State Historic Preservation Office (SHPO) supports the use of solar panels in renovation projects, a use that is provided for in the Town of Berne Small Scale Solar Law.
- N. While the Town of Berne Comprehensive Plan survey results showed a preference for solar over other types of alternative energy, results also showed "a substantial rejection of large industrial development in the town, and large banks of solar panels could be included in that category." (Part I, Implement Solar Policies).
- O. The generation of electricity from properly sited small scale solar can be a mechanism for reducing on-site electric costs, with a minimum of environmental and aesthetic impacts. In 2018, the Town of Berne enacted a law which allows for the siting of small-scale solar facilities in the Town.

- P. The Town of Berne does not have a mapped industrial zone.
- Q. Nearby urban and suburban communities that are within the same National Grid load zone as Berne (see Appendix B), have industrial zones and areas where industrial solar facilities would be in keeping with their community character.
- R. Solar panels placed on the flat rooftops of shopping centers and office buildings of nearby urban and suburban areas would easily outstrip the amount of energy potentially produced from solar energy facilities placed in the few areas of the Town of Berne with available three-phase power lines.
- S. Sufficient areas with industrial zones exist in New York State for the placement of any needed industrial scale solar energy facilities. Industrial scale solar energy facilities have and are being constructed in adjacent and nearby towns.
- T. In its Solar Briefing Paper *Recycling Land for Solar Energy Development* (<https://www.planning.org/publications/document/9148299/>), the American Planning Federation states that “recycling land for solar energy is consistent with sustainable development principles” and “large-scale [solar] reuse projects provide an alternative to developing greenfield sites, and solar redevelopment at all scales is well positioned to take advantage of existing infrastructure and public services”
- U. Nearby urban and suburban municipalities have areas such as brownfields, closed landfills, previously developed but abandoned or demolished building sites, developed sites in foreclosure and other areas that are not suitable for agriculture of any kind now or in the foreseeable future. These areas are better suited for large scale solar installations than undeveloped properties in the Town of Berne which could be suitable for agriculture or forestry now and into the future. If environmental concerns are, indeed, the reason for increasing the number of industrial scale solar facilities in New York State, then recycling these formerly developed, now abandoned, properties for solar use is much more in keeping with that goal than taking forested or cleared, arable lands out of use for wildlife and food production for the life of the solar facility and possibly beyond.
- V. Trees act as a carbon sink, reducing atmospheric carbon dioxide and helping to mitigate the effect of burning fossil fuels. “New York’s forests contribute greatly to the sequestration of carbon dioxide due to increases in tree biomass.” (USDA New York Forests 2012, 2015 https://www.fs.fed.us/nrs/pubs/rb/rb_nrs98.pdf)
- W. Carbon continues to be stored in wood that is harvested for manufactured products. (New York’s Forest Resource Assessment & Strategy 2015 https://www.dec.ny.gov/docs/lands_forests_pdf/fras070110.pdf)
- X. Excavation and grading on steep slopes create a high potential for environmental damage. The Town of Berne Comprehensive Plan states, “Residential, commercial and

industrial development of the steeply sloped areas throughout the town should be discouraged due to the high potential for slope failure, slides, erosion, and associated negative impacts to water quality” (Part II, Soil Constraints).

- Y. Installation of industrial scale solar energy facilities can create drainage problems through erosion and lack of sediment control for the facility itself and access roads, irreparably harming farmland, even after decommissioning and restoration of the site.
- Z. Large tracts of land fenced off for siting of industrial scale solar energy facilities disrupts wildlife corridors.
- AA. The Albany County Agricultural and Farmland Protection Plan 2018 Update states, “Albany County does not have large consolidated blocks of Prime and Productive soils making protection of these soils an important consideration if farming is to remain viable.” (pg 35).
- BB. The Town of Berne has mapped Agricultural Class parcels, Prime Farmland, Prime Farmland if Drained and Farmland of Statewide Importance within the Town (Appendix A.2 *Farmland Map*) and assigned values to parcels according to the Land Evaluation and Site Assessment (LESA) system (Appendix A.3 *LESA Map*). Many of these properties are currently being used for agricultural purposes. Whether in current use or not, it is in accordance with the Town of Berne Comprehensive Plan that these properties be protected from industrial scale development so that they may be utilized for agriculture.
- CC. The recent, rapid development and subsequent loss of prime farmlands for food production in the adjacent Town of New Scotland and nearby Town of Bethlehem is cause for concern and may in the future lead to an increased need for arable, undeveloped land in more outlying areas such as the Town of Berne.
- DD. Because of aesthetic impacts, industrial scale solar energy facilities may present risks to the property values of adjoining and nearby properties, and properties within its viewshed.
- EE. Solar panels contain significant amounts of toxic and carcinogenic heavy metals such as lead, cadmium, and antimony. A 2018 study from the Stuttgart Institute for Photovoltaics (<https://www.welt.de/wirtschaft/article176294243/Studie-Umweltrisiken-durch-Schadstoffe-in-Solarmodulen.html>) shows that pollutants used in photovoltaic technologies are water soluble and “can be almost completely washed out of the fragments of solar modules over a period of several months.”
- FF. If broken during a natural event such as a tornado, hailstorm, or earthquake, these toxic and carcinogenic substances could leach into the soil or run off into streams or neighboring properties. Due to the relatively shallow soil and bedrock underlayment types in the Town of Berne, any such leaching or runoff would likely end up in aquifers which supply residents’ drinking water.

- GG. At present, there is no recycling plan for solar panels in New York State. Large scale solar energy facilities hold thousands of panels which, at the end of a 20 to 30-year life span, will need to be removed and disposed of, creating a risk of improper disposal within the Town and therefore present a potential risk to the health, safety, and welfare of Berne residents.
- HH. Current industry standards utilize herbicides to control plant growth under and around industrial scale solar facilities. Given the acreage requiring plant growth control, the quantity of herbicides that must be applied on a yearly basis, and the relatively shallow soil and bedrock underlayment types in the Town of Berne, any such leaching or runoff would likely end up in aquifers which supply residents' drinking water.
- II. Interim Policy, FAA Review of Solar Energy System Projects on Federally Obligated Airports 78 FR 63276 (<https://www.gpo.gov/fdsys/granule/FR-2013-10-23/2013-24729>) states, "In conjunction with the United States Department of Energy (DOE), the FAA has determined that glint and glare from solar energy systems could result in an ocular impact to pilots and/or air traffic control (ATC) facilities and compromise the safety of the air transportation system. While the FAA supports solar energy systems on airports, the FAA seeks to ensure safety by eliminating the potential for ocular impact to pilots and/or air traffic control facilities due to glare from such projects."
- JJ. New York Power Authority transmission lines traverse the Town of Berne and rely on helicopters for inspection and maintenance. LifeNet and NYS Police helicopters travel throughout the town for EMS and search and rescue services. Improperly installed banks of solar panels could cause glint, glare and flash blindness issues detrimental to pilots of these helicopters.

§xxx-5 Definitions

APPLICANT – The individual/individuals or entity/entities that apply for any state or local government permit or permission for the installation of an Industrial Scale Solar Energy Facility.

AGRICULTURAL CLASS PARCEL – Parcels of land that were, could be or currently are being used for the production of crops or livestock.

BROWNFIELD – Any vacant or underused real property where redevelopment or reuse is complicated by the presence of contamination.

COMMUNITY NET METERING (COMMUNITY SOLAR) – A system which allows utility customers to subscribe to and receive credits for electricity generated by an off-site renewable energy facility.

dB(A) – The A-weighted sound pressure level in decibels. A measure of overall sound pressure level designed to reflect the response of the human ear, which does not respond equally to all frequencies. It is used to describe sound in a manner representative of the

human ear's response. It reduces the effects of low frequencies and emphasizes frequencies centered around 1,000 Hz. The resultant sound level is said to be "weighted," and the units are "dB(A)." Sound-level meters have an A-weighting network for measuring A-weighted sound levels [dB(A)] meeting the characteristics and weighting specified in ANSI Specifications for Integrating Averaging Sound Level Meters, 51.43-1997 for Type 1 instruments. In this article, "dB(A)" means " $L(A)_{eq}$ " unless specified otherwise.

dB(C) – The C-weighted sound pressure level in decibels; similar in concept to the A-weighted sound level dB(A) but C-weighting emphasizes sound frequencies between 20 and 200 Hz and does not de-emphasize the frequencies below 200 Hz as A-weighting does. dB(C) is used for measurements that must include the contribution of low frequencies in a single number representing the entire frequency spectrum. Sound-level meters have a C-weighting network for measuring C-weighted sound levels [dB(C)] meeting the characteristics and weighting specified in ANSI SI.43-1997 Specifications for Integrating Averaging Sound Level Meters for Type 1 instruments. In this article, "dB(C)" means " L_{EQ} " unless specified otherwise.

DECIBEL (dB) – A dimensionless unit describing the amplitude of sound and denoting the ratio between two quantities that are proportional to power, energy, or intensity. One of these quantities is equal to 20 times the logarithm to the base 10 of the ratio of the measured pressure to the reference pressure, which is 20 micropascals.

DECOMMISSIONING – The process of making a solar facility completely inoperable, removal and proper disposal of all components, and remediating the land upon which it was sited.

EAF – The full environmental assessment form used in the implementation of the SEQRA as that term is defined in Part 617 of Title 6 of the New York Codes, Rules and Regulations.

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 importance for the production of food, feed, fiber, forage, and oilseed crops as determined by the appropriate state agency or agencies, including the areas in the Town depicted on the Map annexed as Appendix A.2 to this law (*also available at <http://berneny.org/comprehensive-plan-review-committee/>*).

FLASH BLINDNESS – Generally, a temporary visual interference effect that persists after the source of illumination has ceased, as defined by FAA Order 7400.2f.

GLARE – The effect produced by light reflecting off a solar panel with an intensity sufficient to cause annoyance, discomfort, or loss in visual performance and visibility, sustained over a period of time.

GLINT – A momentary reflection of light from a solar panel with an intensity sufficient to cause annoyance, discomfort, or loss in visual performance and visibility.

GROUND-MOUNTED SOLAR ENERGY SYSTEM – 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.

GREENFIELD – Any farmland, forested, or open area where there has been no prior industrial or commercial development.

INDUSTRIAL SCALE SOLAR ENERGY APPLICANT (APPLICANT) – Any person, firm, corporation or any other entity submitting an application to the Town of Berne for a Site Plan Review and Special Use Permit for an Industrial Scale Solar Energy Facility.

INDUSTRIAL SCALE SOLAR ENERGY FACILITY (ISSEF) – Solar energy system that supplies electricity to the grid primarily for the purpose of offsite sale. This term includes, but is not limited to, community solar projects and any system sited under the authority of Public Service Law, Article 10. For the purposes of this chapter such a facility shall be considered a primary use.

LAND EVALUATION AND SITE ASSESSMENT (LESA) – A method of grading the value of a site for agriculture which combines land evaluation and site assessment to facilitate identification of important agricultural land, including the areas in the Town depicted on the Map annexed as Appendix A.1 to this law (*also available at <http://berneny.org/comprehensive-plan-review-committee/>*).

MATURE FOREST – A mature forest is any unimproved land in excess of one acre with trees that are predominantly 6 inches in diameter or more.

NAMEPLATE RATING – The maximum electrical output of an ISSEF

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

NON-DESIGNATED FARMLAND – Land used for agricultural purposes but not designated as Prime Farmland, Prime Farmland If Drained, or Farmland of Statewide Importance.

PAYMENT IN LIEU OF TAXES (PILOT) – A tax incentive granted to the applicant by the governing authority.

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

PRIME FARMLAND, PRIME FARMLAND IF DRAINED – Land meeting the national parameters for “Prime Farmland” and “Prime Farmland if Drained” as described in the then current guidelines set forth in the National Soil Survey Handbook § 622.3 Farmland Classification, as amended from time to time, including the areas in the Town depicted on the Map annexed as Appendix A.2 to this law (*also available at <http://berneny.org/comprehensive-plan-review-committee/>*).

PROJECT SITE – The physical area needed for a Solar Energy System including any setbacks, buffers, fencing, roads, screening, support facilities, interconnection equipment, and Solar Energy System.

REMOTE NET METERING – An arrangement with the electric utility that allows the kilowatt hours (kWh) generated from a solar energy system located at a specific site to be credited towards kWh of consumption at a different location.

SOLAR ACCESS – The access of a solar energy system to direct sunlight.

SOLAR ARRAY – Any number of Solar Panels, that are connected electrically and grouped into a freestanding unit, including any racking and support structure.

SOLAR EASEMENT – A document recorded pursuant to NYS Real Property Law § 335-b, the purpose of which is to secure the right to receive sunlight across real property of another for continued access to sunlight necessary to operate a Solar Energy System.

SOLAR ENERGY EQUIPMENT – Electrical material, hardware, inverters, conduit, storage devices, or other electrical and photovoltaic equipment associated with the production, storage or transmission of electricity produced from solar energy.

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. This term does not include battery energy storage systems.

STRATEGIC VANTAGE POINT – A vantage point is considered strategic if the public can be expected to congregate there for educational or civic purposes, religious observance; enjoyment of historic or cultural resources; or for recreation whereby the enjoyment of the natural environment is a key aspect of the recreational activity. Strategic vantage points include both public and private venues. Some examples include: schools, golf courses, churches, public buildings, historically significant structures, parks, museums and cemeteries. Additionally, roads and highways are considered strategic vantage points.

SOLAR PANEL – A photovoltaic device capable of collecting and converting solar energy into electricity. Also known as a solar module.

STORAGE BATTERY – A device that stores energy and makes it available in an electrical form.

TOWN OF BERNE COMPREHENSIVE PLAN (COMPREHENSIVE PLAN) – The Town of Berne Comprehensive Plan Part I and Part II May 16, 2011, adopted April 12, 2017, *available at <http://berneny.org/comprehensive-plan-review-committee/>*.

VANTAGE POINT – A location from which the proposed ISSEF is visible or potentially visible.

WILDLIFE CORRIDOR – An area of habitat connecting wildlife populations separated by human activities or structures.

§xxx-6 Applicability

- A. This law shall apply to all ISSEF proposed, constructed, operated or modified, all or a portion of in the Town of Berne after the effective date of this law.
- B. This law does not apply to general maintenance or repair of existing ISSEF.
- C. The procedural and substantive components of this law shall apply regardless of any contract, easement, or license that may exist between the applicant and any landowner in the Town of Berne.
- D. The procedural and substantive components of this law shall apply to all industrial scale solar energy systems in the Town of Berne regardless of whether siting approval is granted by the Town, State, or Federal government, or any other governing jurisdiction.

§xxx-7 Industrial scale solar energy system special use permit.

- A. An ISSEF Special Use Permit issued by the Planning Board is required before any construction, land clearing, road construction or preparatory work of any kind commences.
- B. No transfer of any ISSEF, or permit therefor, nor any sale of the entity owning such facility or holding such permit, including the sale of more than 30% of the stock of such entity (not counting sales of shares on a public exchange), shall occur without prior approval of the Town Board, which approval shall be granted upon 1) receipt of proof of the ability of the successor to meet all requirements of this article and 2) written acceptance of the transferee of the obligations of the transferor under this article. No transfer shall eliminate the liability of an applicant or any other party under this article.

§xxx-8 Fees.

ISSEF special use permits. The Town believes the review of building and electrical plans for ISSEFs requires specific expertise for those facilities. Accordingly, the permit fees for such facilities shall include:

- A. Administrative fee: \$500
- B. Consultant fee: The amount charged to the Town by the outside consultant(s) hired by the Town to review the plans and inspect the work. The Town and the applicant will agree to a fee arrangement and escrow agreement to pay for the costs of the review of

the plans.

- C. Special use permit fee: \$10 per kW of nameplate rating.
- D. Annual fee: \$8 per kW of nameplate rating. This fee shall be adjusted annually for inflation based on changes in the consumer price index as published by the United States Bureau of Labor Statistics.
- E. Escrow agreement. The agreement required under section must be executed and funded before any application is deemed complete. An Applicant shall deposit with the Town funds sufficient to reimburse the Town for all reasonable costs of professional services and consultant evaluation and consultation in connection with the review of any Application. An initial escrow deposit of \$1,500.00 (the "Initial Escrow Deposit") shall be filed with the Application. The Town will maintain a separate escrow account for all such escrow funds. The Town's consultants/experts/professional service providers shall invoice the Town for their services in reviewing the Application. If at any time during the process the escrow account has a balance of less than \$500.00, the Applicant shall immediately, upon notification by the Town, replenish said escrow account so that it has a balance of at least \$500.00. Such additional escrow funds shall be deposited with the Town before any further action or consideration is taken on the Application. In the event that the amount held in escrow by the Town is more than the amount of the actual invoicing at the conclusion of the project, the remaining balance shall be promptly refunded to the Applicant.

§xxx-9 PILOT; tax exemption opt-out.

The Town may exercise its right to opt out of the tax exemption provisions of Real Property Tax Law § 487, pursuant to the authority granted by Subdivision 8 of that law. No construction, road work, tree clearing or preparatory work of any kind may commence until the Town Board has either negotiated a PILOT agreement with the owner of the ISSEF or exercised its right to opt out of tax exemption provisions.

§xxx-10 Site plan application.

Site plan approval shall be required for all ISSEFs. Any site plan application shall include the following information:

- A. Property lines and physical features, including roads, for the project site.
- B. Proposed changes to the landscape of the site, grading, vegetation clearing and planting, exterior lighting, and screening vegetation or structures.
- C. A one- or three-line electrical diagram detailing the Solar Energy System layout, solar collector installation, associated components, and electrical interconnection methods, with all National Electrical Code compliant disconnects and over current devices.

- D. A preliminary equipment specification sheet that documents all proposed solar panels, significant components, mounting systems, and inverters that are to be installed. A final equipment specification sheet shall be submitted prior to the issuance of building permit.
- E. Name, address, and contact information of proposed or potential system installer and the owner and/or operator of the ISSEF. Such information of the final system installer shall be submitted prior to the issuance of building permit.
- F. Name, address, phone number, and signature of the project applicant, as well as all the property owners, demonstrating their consent to the application and the use of the property for the Solar Energy System.
- G. Zoning district designation for the parcel(s) of land comprising the project site.
- H. Property Operation and Maintenance Plan. Such plan shall describe
 - (1) Continuing photovoltaic maintenance.
 - (2) Property upkeep, such as mowing, trimming, and snow removal.
 - (3) Frequency of solar panel washing, source of water and additives used.
 - (4) Maintenance of screening and landscaping. This portion shall include a plan to ensure continued growth of trees, shrubs, etc. used for screening purposes and a replacement plan for any that fail to thrive. The Planning Board shall consult the Conservation Board for this portion of the maintenance plan.
- I. Erosion and sediment control and storm water management plans prepared to New York State Department of Environmental Conservation standards, if applicable, and to such standards as may be established by the Planning Board.
- J. Prior to the issuance of the special use permit by the Planning Board, but not required as part of the application, engineering documents must be signed and sealed by a New York State (NYS) Licensed Professional Engineer or NYS Registered Architect.

§xxx-11 Application review process.

- A. A preapplication meeting with the Planning Board is required.
- B. Six copies of the complete application for an Industrial Scale Solar Energy Facility shall be submitted to the Building Department. Payment of all application fees shall be made at the time of submission.
- C. The Planning Board shall, within 90 days of receipt, determine if all information required hereunder is included in the application. If the application is deemed incomplete, the applicant shall be provided with a written statement listing missing data. Upon submission of a complete application, the Planning Board shall proceed with its review.

- D. The Planning Board shall hold at least one public hearing on the application. Notice shall be published in the Town's official newspaper, not less than 10 days before any hearing, but, where any hearing is adjourned by the Planning Board to hear additional comments, no further publication shall be required. The public hearing may be combined with public hearings on any environmental impact statement. All property owners within 1,000 feet of the boundary line of the site of the proposed ISSEF shall be given notice of a public hearing via certified mail at the expense of the applicant.
- E. Notice of the project shall also be given to the Albany County Planning Board, as required by General Municipal Law § 239-m.
- F. Following receipt of the recommendation of the Albany County Planning Board (if applicable), the holding of the public hearing(s), and completion of the SEQRA process, the Planning Board may approve, approve with conditions, or deny ISSEF special use permit application, in accordance with the standards in this article. Any denial shall be in writing, setting forth competent reasons for such denial with references to relevant sections of this article.

§xxx-12 Design standards for Industrial Scale Solar Energy Facilities.

All ISSEFs, regardless of size, shall be subject to the following requirements:

- A. No ISSEF shall be larger than 10 acres.
- B. Location. ISSEFs shall not be located in the following areas:
 - (1) Prime Farmland, Prime Farmland if Drained, or Farmland of Statewide Importance.
 - (2) Areas including flood plains, historic sites, airports, conservation easements, trails, parklands, and wetlands as identified by the New York State Department of Environmental Conservation or the United States Army Corps of Engineers.
 - (3) Slopes greater than fifteen 15%, unless the applicant can demonstrate through engineering studies and to the satisfaction of the Town Engineer that the proposed development will cause no adverse environmental impact that will not be satisfactorily mitigated.
- C. Lot size. The property on which an ISSEF is placed shall meet the lot size requirements set forth in the Density Control Schedule.
- D. Lot coverage. Lot coverage of the ISSEF, as defined below, shall not exceed the maximum lot coverage requirement of the underlying zoning district. The following components of an ISSEF shall be included in the calculations for lot coverage requirements:
 - (1) The total number of square feet of solar arrays.

- (2) Foundation systems.
 - (3) All mechanical equipment of the ISSEF, including but not limited to switchboard, transformers, and buildings housing mechanical equipment.
- E. Setbacks.
 - (1) ISSEFs shall be set back no less 500 feet on all sides from any adjoining parcel not included in the solar energy system.
 - (2) ISSEFs shall be set back no less than 500 feet from floodplains, wetlands, streams, ponds, lakes and water wells.
- F. Height. ISSEFs shall not exceed a height of 15 feet from the highest natural grade below each solar panel.
- G. Grading. ISSEFs shall follow the topography of the land upon which it is installed. Topography shall not be altered by any substantial amount by grading or bringing in fill.
- H. Sound. The equivalent level (L_{EQ}) generated by any part of an ISSEF shall not exceed 25 dB(A) or 43 dB(C) when measured at the nearest lot line. If the A-weighted background sound pressure level, without the ISSEF, is within five dB of 25 dB or exceeds 25 dB, then the A-weighted criterion to be applied to the system shall be the A-weighted background level plus five dB.
- I. Lighting. Any outdoor lighting shall be shielded and downcast to minimize the effect on any person, property, structure, road, vehicle, business, leisure activity, agriculture, parkland, sensitive resource, commercial or transportation activity, night sky, or any other entity or activity identified by the Planning Board. Motion-activated or staff-activated security lighting on or around the project site or accessory structure entrance shall not project off the project site and shall only be activated when the fenced perimeter has been entered.
- J. Parking. Equipment and vehicles not used in direct support, renovations, addition, or repair of the ISSEF shall not be stored or parked on the site.
- K. Access. A locked gate at the intersection of the access way and a public road shall be required to prevent unauthorized vehicle entry. Such gate shall be located entirely upon the lot and not on a public right-of-way. Adequate emergency access shall be provided, as determined by the Planning Board after consultation with the applicant, for relevant law enforcement and first responder agencies.
- L. Fencing. ISSEFs shall be surrounded by fencing sufficient to protect the public and prevent unauthorized access, and high enough to be visible in deep snow cover. Fencing shall have warning signs with the owner's or operator's name and emergency contact information, which shall be placed on any project site access point and on the perimeter fencing as deemed appropriate by the Planning Board. All gates shall be self-locking. The Planning Board shall consult with the Conservation Board and require wildlife corridors if the Conservation Board deems them appropriate for the project.
- M. Screening and visibility. All ISSEFs shall be required to:

- (1) Shield views from adjacent properties and properties within the system's viewshed using architectural features, earth berms, landscaping, or other screening methods that will harmonize with the character of the property and surrounding area as determined by the Planning Board.
- (2) Submit a landscape and screening plan which shall specify the locations, elevations, height, plant species, and/or materials that will comprise the structures, landscaping, and/or grading used to screen the system. The landscaped screening shall be comprised of evergreen trees, at least 6 feet high at time of planting, plus native, non-invasive shrubs at the discretion of the Planning Board. Existing vegetation may be used to satisfy all or a portion of the required landscaped screening. A list of suitable evergreen tree and shrub species shall be provided by the Conservation and/or Planning Boards.
- (3) Submit the following assessments:
 - (a) A comprehensive computer modeled glint and glare assessment which shall determine the impact of the proposed project on all roadways and properties which could be affected by glint and/or glare from the project. The study shall be conducted by an independent third party who shall be approved by the Town of Berne Planning Board prior to the study being conducted. The assessment shall consider all times of the day and every day of the year. The assessment shall include projected impacts on all viewers including property owners, including both developed and undeveloped properties, motorists, aviation personnel, hiking trail travelers, farm equipment operators, and domestic livestock.
 - (b) A comprehensive computer modeled viewshed assessment which shall assess the visual impact of the proposed project on all property and roadways within the town from which the project is visible or is potentially visible, with the following requirements:
 - i. The assessment shall include photographs of the proposed site from all said viewshed points.
 - ii. If photographs are taken during months in which deciduous leaves are intact, the study shall include computer modeled mock-ups of viewsheds during the winter months.
 - iii. Viewshed mock-ups shall include comparative views of project with and without mitigation in place.
 - iv. If plantings of trees and/or shrubs are included in the mitigation plans, viewshed mock-ups must reflect their height at the time of planting, as well as at 5- and 10-years expected growth post planting.
 - (c) Any other assessment which the Planning Board, Zoning Board of Appeals, or Albany County Planning Board shall require.
 - (d) The applicant shall pay for all assessments required in this section.

N. Project site maintenance.

- (1) the project site shall be maintained in a safe, neat and orderly condition. Grass and other vegetation shall be mowed and trimmed to prevent the appearance of overgrowth. Alternately, livestock such as goats and sheep may be used to keep grass and underbrush in check.
- (2) The use of any glyphosate-containing herbicides is prohibited.
- (3) During construction as needed, upon completion of the installation of the project, at any time during the life of the project and as part of the decommissioning plan, all disturbed or bare soil shall be seeded with non-invasive, native perennial vegetation.
 - (a) The use of genetically modified seed or plants is prohibited.
 - (b) Proof of seed and plant varieties to be used shall be provided to the Building and Zoning Department and require approval by the Planning Board, with consultation of the Conservation Board, before each seeding or planting takes place.
 - (c) Penalties for non-compliance. The use of genetically modified seed or plants shall require the removal of said seeding or plants and shall result in the revocation of the special use permit and/or a fine as determined by the Town Board.
- (4) Snow shall be removed from all access ways both to and within the project site to facilitate emergency access.
- (5) All landscape and screening elements shall be maintained, including removal and replacement of any trees, shrubs or other screening plantings that fail to survive on a yearly basis. Landscape and screening shall be maintained throughout the life of the facility until such time as decommissioning is completed.
- (6) Solar panel washing additives shall be non-toxic and bio-degradable.

O. Vehicular Paths. Vehicular paths within the site shall be designed to minimize the extent of impervious materials, soil compaction and erosion.

P. Electrical transmission lines and cables shall be buried underground, and the erection of new utility poles minimized to the greatest extent possible.

Q. Guy wires shall not be used to support any component of any ISSEF.

R. Signage. No signage or graphic content shall be displayed on the ISSEF except the owner's name, equipment specification information, safety information, and 24-hour emergency contact information, and any other information required by the Planning Board. Said information shall be depicted within an area no more than 8 square feet and be located on or next to the main gate of the facility.

- S. 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.
 - (1) All Solar Panels shall have anti-reflective coating(s).
 - (2) Any glare produced shall not impair or make unsafe the use of adjacent or nearby properties and their structures, vehicles on or off the road, air traffic, or uses by other possible impacted entities as determined by the Planning Board.
- U. Tree-cutting. Removal of existing trees larger than 6 inches in diameter shall be minimized to the greatest extent possible.
- V. Reimbursement for review of Application for a Certificate of Environmental Compatibility and Public Need Pursuant to Article 10 Public Service Law. The applicant shall reimburse the Town for any fee or expense incurred in hiring subject matter experts and attorneys to review whether an ISSEF proposed for siting pursuant to Article 10 of the New York Public Service Law complies with this law's substantive provisions.
- W. Solar access. The approval of a special use permit for an ISSEF is not intended to confer on the permittee any additional property rights as against any adjoining or nearby property owners, such as easements of necessity, etc.

§xxx-13 Additional standards.

All ISSEFs shall:

- A. Conform with all federal and state laws and all applicable rules and regulations promulgated by any federal or state agencies having jurisdiction.
- B. Comply with all other requirements of the Town of Berne Code and applicable guidelines unless expressly superseded by this law.
- C. Conform with all adopted plans of the Town of Berne.
- D. Be built, operated, and maintained to acceptable industry standards, including the most recent, applicable standards of the Institute of Electric and Electronic Engineers ("IEEE") and the American National Standards Institute ("ANSI").
- E. Emergency services.
 - (a) Project site access shall be maintained, including snow removal at a level acceptable to the local fire department and Helderberg Ambulance Squad

- (b) Owner/operator shall provide a copy of the project summary, electrical schematic and site plan to the local Fire Chief. All means of shutting down the facility shall be clearly marked.
- (c) Owner/operator shall cooperate with emergency services in developing an emergency response plan.
- (d) Owner/operator shall provide and pay for firefighter response and safety training for a potential fire incident at the ISSEF

§xxx-14 Decommissioning.

- A. ISSEFs that have been abandoned and/or not producing electricity for a period of 6 months shall be removed at the owner's and/or operator's expense, which at the owner's/operator's option may come from any security made with the Town of Berne as set forth in Section xxx-15 herein.
- B. A decommissioning agreement (see Appendix C) signed by the owner and/or operator of the ISSEF shall be submitted by the applicant, addressing the following:
 - (1) The cost of removing the ISSEF.
 - (2) The time required to decommission and remove the ISSEF and any ancillary structures.
 - (3) The time required to repair any damage caused to the property by the installation and removal of the ISSEF.
 - (4) Removal of all operator-owned equipment, concrete, conduits, structures, fencing, and foundations to a depth of 36 inches below the soil surface.
 - (5) Removal of any solid and hazardous waste caused by the Facility in accordance with local, state and federal waste disposal regulations.
 - (4) Removal of all graveled areas and access roads unless the landowner requests in writing for it to remain.

§xxx-15 Security.

- A. Decommissioning fund. The permittee, or successors, shall continuously maintain a financial assurance mechanism for the costs of decommissioning and removal of all ISSEFs on site and the remediation of all disturbed areas of land sufficient to assure no discharge of sediments or other pollutants following decommissioning (decommissioning, removal and remediation) in a form approved by the Town, for the period of the life of the facility. The financial assurance mechanisms must ensure that funds will be available in a timely fashion when needed and shall not include the future value, if any, of scrap. If a bond is posted to meet this requirement, the bond issuing

company must have a current A.M. Best rating of A- or higher. All decommissioning, removal and remediation fund requirements shall be fully funded before a special use permit is issued.

- B. In the event of default upon performance of such conditions, after proper notice and expiration of any cure periods, the cash deposit, bond, or security shall be forfeited to the Town of Berne, which shall be entitled to maintain an action thereon. The cash deposit, bond, or security shall remain in full force and effect until restoration of the property as set forth in the decommissioning plan is completed.
- C. In the event of default or abandonment of the ISSEF, the system shall be decommissioned as set forth in Section xxx-14 and Appendix C herein.

§xxx-16 Permit time frame and abandonment.

- A. The special use permit and site plan approval for an ISSEF shall be valid for a period of 18 months, provided that a building permit is issued for construction. In the event construction is not completed in accordance with the final site plan, as may have been amended and approved, as required by the Planning Board, within 18 months after approval, the applicant may, upon approval of the Planning Board, extend the time to complete construction for an additional 60 days. If the owner and/or operator fails to perform substantial construction after 20 months, the approvals shall expire, the facility shall be considered abandoned, and decommissioning of any construction that has been completed shall commence.
- B. The owner and/or operator of an ISSEF shall provide the Building and Zoning Department and the Town Board with bi-annual reports of system electricity generation.
- C. Upon cessation of electricity generation of an ISSEF on a continuous basis for 6 months, the owner and/or operator will notify the Town and implement the decommissioning plan. The decommissioning plan must be completed within 360 days of notification.
- D. If the owner and/or operator fails to comply with decommissioning upon any abandonment, the Town Board may, at its discretion, utilize the bond and/or security for the removal of the ISSEF and restoration of the site in accordance with the decommissioning plan.

§xxx-17. Enforcement; penalties for offenses; remedies for violations.

- A. Staff. The Town Board shall appoint such Town staff or outside consultants as it sees fit to enforce this article.
- B. Any person owning, controlling or managing any building, structure or land who shall construct or operate an ISSEF in violation of this article or in noncompliance with the

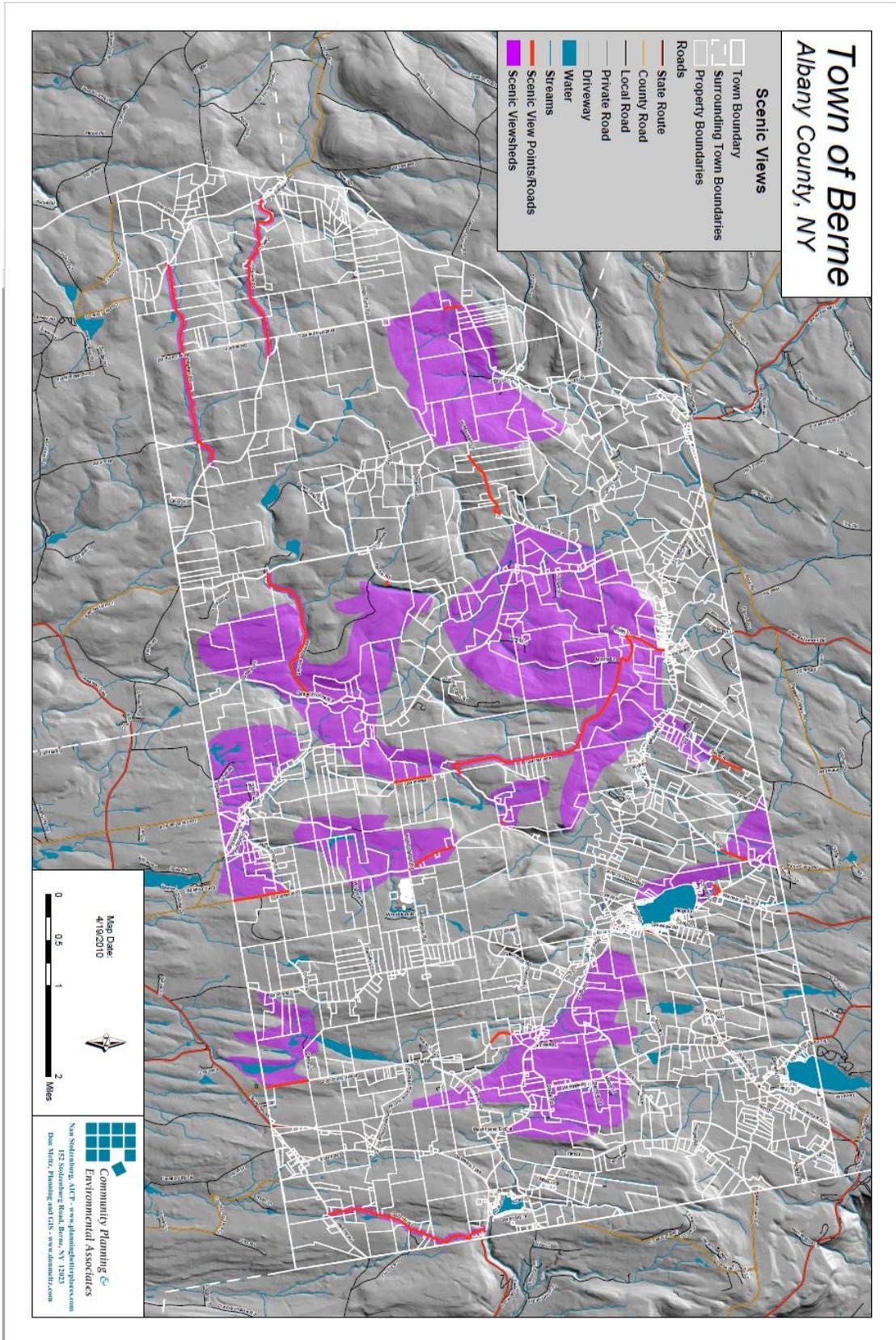
terms and conditions of any permit issued pursuant to this article, or any order of the Code Enforcement Officer, and any person who shall assist in so doing, shall be guilty of an offense and subject to a fine of not more than \$350 or to imprisonment for a period of not more than six months. Every such person shall be deemed guilty of a separate offense for each week such violation shall continue. The Town may institute a civil proceeding to collect civil penalties in the amount of \$350 for each violation, and each week said violation continues shall be deemed a separate violation.

- C. In case of any violation or threatened violation of any of the provisions of this article, including the terms and conditions imposed by any permit issued pursuant to this article, in addition to other remedies and penalties herein provided, the Town may institute any appropriate action or proceeding to prevent such unlawful erection, structural alteration, reconstruction, moving and/or use, and to restrain, correct or abate such violation to prevent the illegal act.
- D. Any violation of this Solar Energy Law shall be subject to the same enforcement requirements, including the civil and criminal penalties, provided for in the Laws of the State of New York, or in the zoning or land use regulations of The Town of Berne.

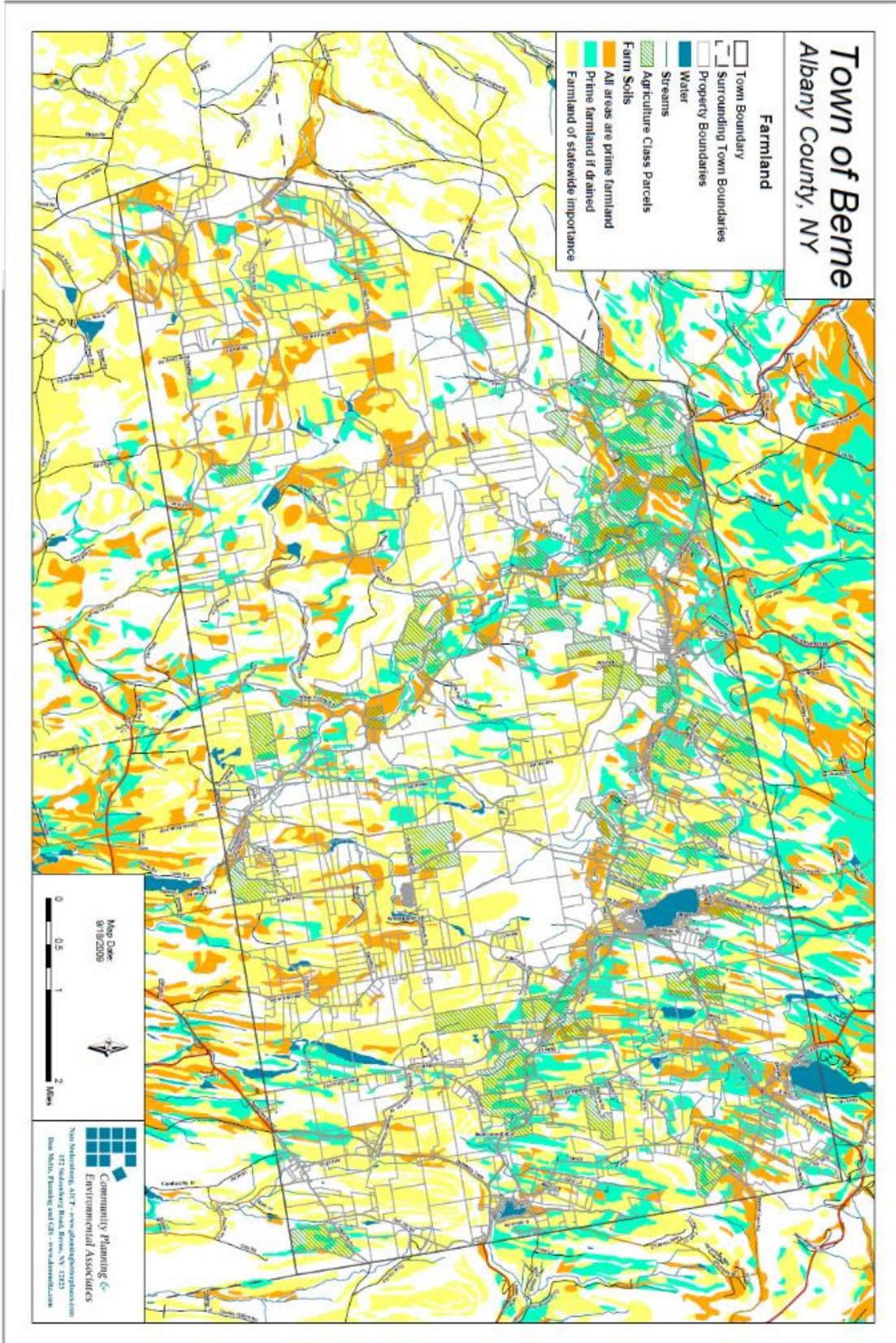
§xxx-18. Severability.

The invalidity or unenforceability of any section, subsection, paragraph, sentence, clause, provision, or phrase of the aforementioned sections, as declared by the valid judgment of any court of competent jurisdiction to be unconstitutional, shall not affect the validity or enforceability of any other section, subsection, paragraph, sentence, clause, provision, or phrase, which shall remain in full force and effect.

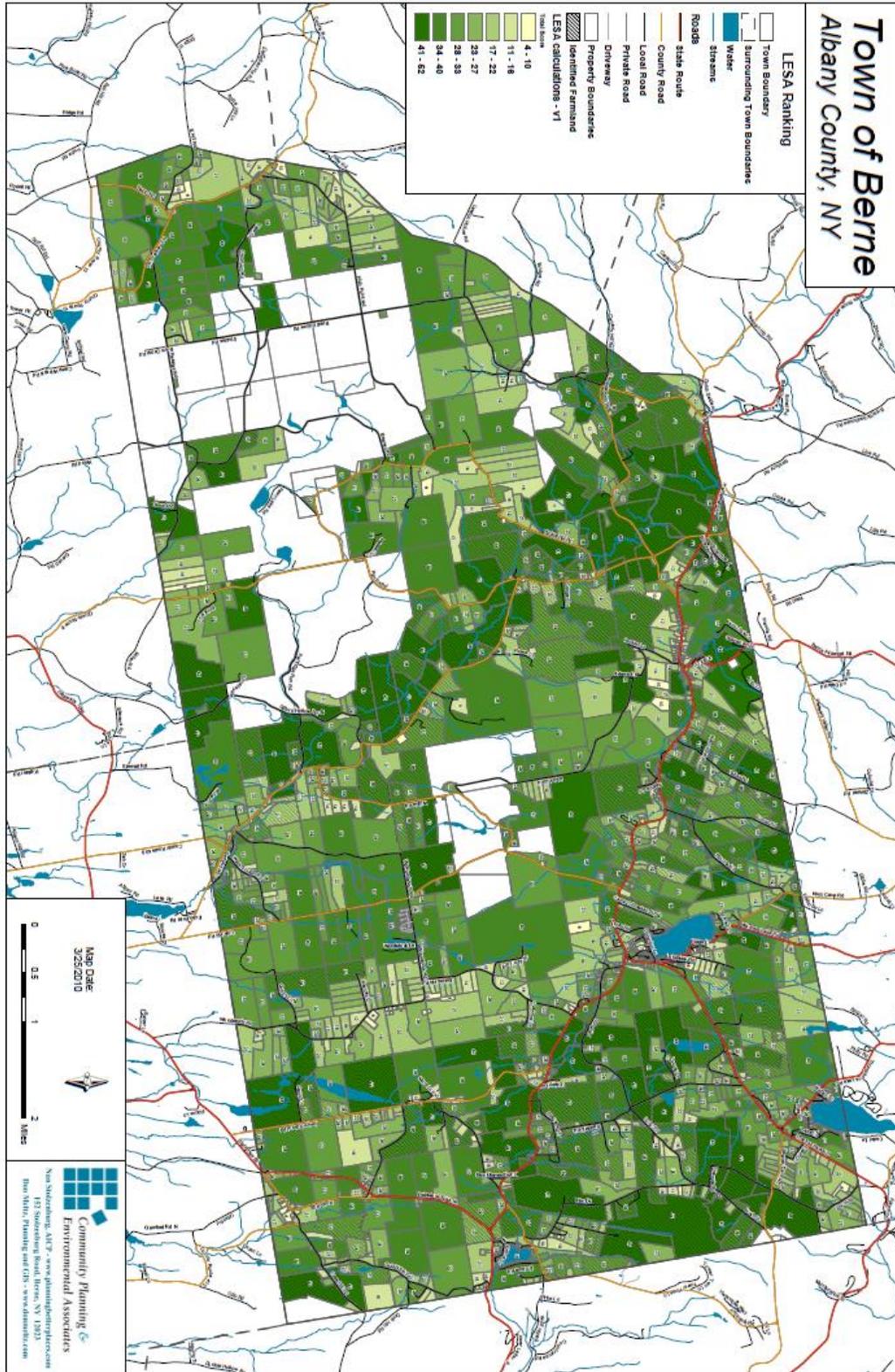
APPENDIX A.1



APPENDIX A.2



APPENDIX A.3



APPENDIX B



Load Zones

The table below provides a general geographical description of each load zone in our Service Territory. Each load zone is broken down by region and city. This breakdown will provide the majority of customers with the correct information to determine which prices are applicable to them.

Load Zone	Sub-Zone	Regions(s)	Cities
A	1	West	Buffalo, Niagara Falls, Olean , Angola, Lakewood, Dunkirk
B	29	Genesee	Batavia, Brockport, Medina, Albion
C	2	Central	Syracuse, Fulton, Oswego, Pulaski, Cortland
D	31	North	Lake Placid, Malone, Saranac Lake
E	3	Mohawk V	Utica, Rome, Herkimer, Oneida, Watertown, Lowville, Potsdam, Ogdensburg
F	4	East	Albany, Schenectady, Troy, Hudson, Cobleskill, Amsterdam, Gloversville, Saratoga, Glens Falls, Ticonderoga

For a more detailed description of our load zones (broken down by county, towns, and hamlets), please go to the PSC No. 220 Electricity tariff.

APPENDIX C

Decommissioning Agreement

Decommissioning Agreement for _____ located at:

Prepared and Submitted by _____, the owner of

As required The Town of Berne, _____ presents this
decommissioning Agreement for _____ (the "Facility").

Decommissioning will occur as a result of any of the following conditions:

1. Construction is not completed within 20 months.
2. The land lease, if any, ends.
3. The system does not produce power for 6 months.
4. The system is damaged and will not be repaired or replaced.

The owner of the Facility, as provided for in its lease with the landowner, shall restore the property to its condition as it existed before the Facility was installed, pursuant to which shall include the following:

1. The cost of removing the ISSEF.
2. The time required to decommission and remove the ISSEF and any ancillary structures.
3. The time required to repair any damage caused to the property by the installation and removal of the ISSEF.
4. Removal of all operator-owned equipment, concrete, conduits, structures, fencing, and foundations to a depth of 36 inches below the soil surface.
5. Removal of any solid and hazardous waste caused by the Facility in accordance with local, state and federal waste disposal regulations.
6. Removal of all graveled areas and access roads unless the landowner requests in writing for it to remain.

All said removal and decommissioning shall occur within 6 months of the Facility ceasing to produce power for sale.

The owner of the Facility, currently _____, is responsible for this decommissioning.

Should the current owner wish to transfer ownership, the prospective owner is required to enter into a new Decommissioning Contract with the Town of Berne prior to transfer of ownership.

Facility Owner Signature: _____ Date: _____