



Memorandum

To: Planning Board
Cc: Town Board
From: David Sprout, Planning Department
Subject: Delaware River Solar - Carpenter Farm, Dryden Rd Tax ID # 47.-1-7.3
Date: December 14, 2017

Delaware River Solar (DRS) has applied for a Special Use Permit (SUP) for two (2) large-scale, ground-mounted solar energy systems, located on the Evan Carpenter Farm, Tax Parcel ID #47.-1-7.3.

The Planning Board is charged with reviewing the application and offering recommendations to the Town Board regarding the Site Plan. I began an application review of this project several months ago. Since then, there have been plan revisions. T. G. Miller is conducting the SEQR review. This memo provides the Planning Department review of required Site Plan Review elements.

Site Plan Review includes consideration of stormwater management, SEQR, the Commercial Development Guidelines, and other elements integral to the proposed development (#28, below).

No review of the SWPPP or the FEAF are included in this report. Errors in the original FEAF were corrected by DRS and TG Miller has conducted thorough SEQR and SWPPP reviews of the projects.

Site Plan Checklist (Zoning Law § 1103)

1. Title of drawing, including name and address of applicant and person responsible for preparation of the drawing. **Complies – See Site Plan - Sheet C130 and Plans 04.1, 2, 3, 4 in Attachment F-Project Summary**
2. Boundaries of the property, plotted to scale, and including north arrow, scale and date. **Complies- Sheet C130, Attachment M –Topographic and Boundary Survey**
3. Identification of public highways. **Attachment M –Topographic and Boundary Survey, Attachment F, Plan # 04.1**
4. Existing watercourses and wetlands. **Complies – Sheet C130**
5. Grading and drainage plan showing existing and proposed contours. **Complies – Sheet C130**
6. Location, design and type of construction, proposed use and exterior dimensions of all buildings. **No buildings are proposed.**
7. Location, design and type of construction of all parking and truck loading areas showing ingress and egress to the public highway. **Access is via an existing farm lane that will be improved, temporarily, to accommodate construction and supply vehicles. No permanent parking or truck loading areas are proposed. Section 503.1.1, of the NYS Fire Code, allows the fire code official (in Dryden, the Code Enforcement Officer) to exempt fire apparatus access roads for solar photovoltaic power generation facilities. Code Enforcement Officials believe this exemption is appropriate. However, emergency vehicle access is explicitly required in the Town Zoning Law (§1312-F.4.c.xii). Temporary improvements to the existing lane should be constructed to accommodate large delivery vehicles (including concrete trucks) and should be sufficient to safely accommodate ambulances and other similarly sized**

emergency vehicles. Future development – different facilities or the construction of any non-agricultural use buildings – will require access that meets Fire Code, State Law, and Town standards

8. Provisions for pedestrian access including sidewalks along public highways. Pedestrian facilities shall be ADA (Americans with Disabilities Act) compliant. Sidewalks must be constructed continuously across all driveways. **No pedestrian facilities are proposed**
9. Provisions for bicycle parking, such as bicycle racks or bicycle lockers as appropriate. All bicycle parking devices shall be provided in accordance with guidelines published by the Association of Pedestrian and Bicycle Professionals (APBP). Some portion of bicycle parking should be provided in a covered area protected from the weather. **No bicycle facilities are proposed**
10. Location, type and screening details of waste disposal containers and outdoor storage areas. **See Attachment F, section 2.1.15. No waste disposal containers or outdoor storage areas are proposed (post construction)**
11. Location, design and construction materials of all existing or proposed site improvements, including drains, culverts, retaining walls and fences. **Deer fencing will surround the facilities**
12. Description of the method of sewage disposal and location. **None proposed**
13. Description of the method of securing potable water and location, design and construction materials of such facilities. **None proposed**
14. Location of fire and other emergency zones, including the location of fire hydrants. **A first aid station will be provided during construction. No fire or emergency zones are proposed, no fire hydrants are in the vicinity of the proposed facilities**
15. Location, design, and construction materials of all energy distribution facilities, including electrical, gas and solar energy. **Complies – Sheet C130, Attachment F (Project Summary)**
16. Location, height, size, materials, and design of all proposed signage. **No business signs are proposed, only warning/safety signs.**
17. Identification of street number(s) in accordance with any applicable 911 numbering system, and method for ensuring that building identification numbers are installed in a manner that will be visible to emergency responders during the day and night. **A temporary address of 2243 Dryden Road was assigned to the project site(s). Code Enforcement Officers will assign a Ferguson Road address for each facility**
18. Location and proposed development of all buffer areas, including existing vegetation cover. **See Sheet C130 (see TG Miller planting recommendation 12/11/17)**
19. Location and design of outdoor lighting facilities. **According to the SUP worksheet, lighting will be limited to [illuminate] electrical equipment and directed to provide minimal visual disturbance.**
20. Direction of illumination and methods to eliminate glare onto adjoining properties. **See above**
21. Location, height, intensity, and bulb type of all external lighting fixtures. **See #19**
22. Identification of the location and amount of building area proposed for retail sales or similar commercial activity. **Not applicable- no retail or commercial buildings are proposed.**
23. Proposed limit of clearing showing existing vegetation. Individual trees with a diameter at breast height (DBH) of 12 inches or greater within the clearing line shall also be shown, if the Board finds that there are uniquely beneficial species on the site and/or exceptionally mature trees. **The sites are open farm fields, there are no existing trees to consider and grading will be minimal. Attachment F, section 3.5**
24. Landscaping plan and planting schedule. **Provided – Sheet C130 (see TG Miller planting recommendation 12/11/17)**
25. Record of application for and approval status of all necessary permits from state and county agencies. **Addressed in Town Standard Conditions of Approval. Construction activity**

cannot begin until five (5) to ten (10) days after DEC receives applicant's Notice of Intent and Town's Acceptance Letter.

26. Estimated project construction schedule. **Complies. See SUP worksheet section D and FEAF Part 1 section D2. Approximately 3 month construction time, operating hours M-F, 7AM-7PM**
27. Identification of any state or county permits required for the project. **Complies, see Attachment J –FEAF**
28. Other elements integral to the proposed development as considered necessary by the Board. **No comment**
29. Stormwater Management Plan as required by LL#4-2007 Stormwater Management, Erosion & Sediment Control Law. **Mostly complies. SWPPP was revised October 31 (see TG Miller report 12/11/17)**
30. Full Environmental Assessment Form or draft Environmental Impact Statement as determined by the Board at the sketch plan conference. **Complies, see Attachment J –FEAF, (see TG Miller report 12/11/17)**

Site Plan Review Board Checklist (Zoning Law § 1104)

1. Location, arrangement, size, design, and general site compatibility of buildings, lighting, and signs;
2. Adequacy and arrangement of vehicular traffic access and circulation, including intersections, road widths, pavement surfaces, dividers, and traffic controls;
3. Location, arrangement, appearance, and sufficiency of off-street parking and loading;
4. Adequacy and arrangement of pedestrian traffic access and circulation, walkway Structures, control of intersections with vehicular traffic, and overall pedestrian convenience;
5. Adequacy of stormwater and drainage facilities;
6. Adequacy of water supply and sewage disposal facilities;
7. Adequacy, type, and arrangement of trees, shrubs and other landscaping constituting a visual and/or noise buffer between the applicant's and adjoining lands, including the maximum retention of existing vegetation;
8. Adequacy of fire lanes and other emergency zones and the provision of fire hydrants;
9. Adequacy of the site's ability to support the proposed use given the physical and environmental constraints on the site, or portions of the site;
10. Special attention to the adequacy and impact of Structures, roadways and landscaping in areas susceptible to ponding, flooding and/or erosion;
11. Conformance with the Town's Residential and Commercial Design Guidelines to the maximum extent practicable;
12. Completeness of the application and detailed site plan in light of the Board's requirements following the sketch plan conference.

Commercial Development Design Guidelines

The intent of the Commercial Development Design Guidelines is to help implement the recommendations of the Town of Dryden Comprehensive Plan. Specifically, the design guidelines envision commercial development in the town that:

- Respects and complements the town's unique and largely rural character;
- Strengthens a "sense of place" in areas of the town where there is an established or emerging concentration of activity;
- Utilizes shared parking lots and interconnected service drives to reduce curb-cuts and maintain road safety and function; and
- Results in well-planned, consistent design and landscaping for a cohesive look and feel, while allowing for creativity and expression on individual project sites.

To the extent practicable, the project conforms to the Commercial Development Design Guidelines in that:

- There is only one driveway/access point
- Natural features will be respected – grading will be minimal
- Natural features will be protected through the implementation of a SWPPP
- Only required safety/warning signs are proposed
- Only equipment lighting is proposed
- Landscaping will provide screening
- Facilities will be separated from roadways and residential uses by hundreds of feet

Specific Standards for Solar Energy Systems (Zoning Law §1312-F.4.c)

- i. Name, address and phone number of the person preparing the reports. **Complies, multiple preparers.**
- ii. Postal address and Tax Map parcel number of the property. **Provided - Sheet C130 (for parent parcel only. Property requires subdivision approval)**
- iii. Zoning district in which the property is situated. **Provided - Sheet C130**
- iv. The exact location including geographic coordinates of the proposed Ground-Mounted Large-Scale Solar Energy System including any solar arrays, equipment and anchors, if applicable. **Complies. Attachment M (Topographic and Boundary Survey)**
- v. Identification on site plans of areas of potential environmental sensitivity, including onsite or nearby Unique Natural Areas, slopes greater than 15%, flood plains, historic sites, airports, other government lands, conservation easements, trails, parkland, prime soils, and wetlands as identified by Tompkins County Planning Department mapping services, the New York State Department of Environmental Conservation, or the United States Army Corps of Engineers. **Complies. Attachment I (Wetland Review), Attachment F (Project Summary), Attachment S (SHPO Findings Letter), SWPPP**
- vi. The maximum height of the proposed Solar Energy System, including all appurtenances. **Modules will be a maximum height of nine (9) feet. Fencing height is eight (8) feet**

- vii. A detail of solar collector type including but not limited to equipment specification sheets for all photovoltaic panels and collectors, significant components, mounting systems, and inverters that are to be installed; and proposed solar energy production capacity design level proposed for the Solar Energy System and the basis for the calculations of the area of the Solar Energy System's capacity. **Complies. Attachment F (Project Summary),**
- viii. The location, type and intensity of any lighting on the site. **Limited security fencing may be installed but is not shown in plans. Equipment lighting is proposed. Verify lighting is night-sky compliant.** *DRS letter, dated 12/13/17, to Ray Burger states that no lighting will be installed.
- ix. Property boundaries and names of all adjacent landowners. **Complies. Attachment M (Topographic and Boundary Survey)**
- x. If the real property for the proposed project is to be leased, legal consent between all parties, specifying the use(s) of the land for the duration of the project, including easements and other agreements, shall be submitted. A document must be submitted that clearly delineates the party responsible for decommissioning at the end of the life of the system and in the event the owner of the system abandons the system for any reason. Examples of such a document are a Lease, Memorandum of Lease or Letter of Agreement. **Complies. (Attachment P)**
- xi. The location of other structures on the property. **Complies. Attachment L (Site Plan), Attachment M (Topographic and Boundary Survey)**
- xii. The system shall be designed to accommodate emergency vehicle access. The design may include, but not be limited to, items such as the height, access ways for vehicles, firefighting capabilities, and other prominent features. **As is allowed in the NYS Fire Code, Code Enforcement Officials will not require a permanent fire apparatus access road by at this time (FC Section 503.1.1). However, temporary improvements to the existing farm lane should be sufficient to accommodate delivery trucks (including concrete trucks), ambulances, and other similarly sized emergency vehicles. A Knox box or other means of entry should be provided to emergency response personnel**
- xiii. Blueprints and a site plan showing the layout of the Ground-Mounted Large-Scale Solar Energy System, which must bear the seal of a design professional licensed to practice in New York State. **Topographic and Boundary Map (Attachment M) is stamped, SWPPP is stamped with NYS seal. Delaware River plans are not stamped.**
- xiv. Description of continuing Solar Energy System maintenance and property upkeep, such as mowing and trimming. **Complies. Attachment F (Project Summary), sections 3.11, 3.11.2**
- xv. The location, nature and extent of any proposed fencing, landscaping and screening. **Complies. Attachment L (Site Plan), Attachment F (Project Summary)**
- xvi. The location and nature of any proposed utility easements and access roads or drives. **Complies. Attachment L (Site Plan)**
- xvii. A glare assessment survey and any mitigation efforts that may be utilized to minimize glare on contiguous parcels of land. **Complies. Attachment N (Glare Assessment)**
- xviii. A Decommissioning plan as set forth in the below provisions titled "Abandonment and Decommissioning". **Attachment G - Draft plan**