

**INTRODUCTION:**

The Applicant for the construction of accessory structures with solar arrays in the front yard of No. 629 Columbia Street (located on Coliseum Drive – Address to be determined) is DG Northeast Portfolio 2020, LLC, an indirect, wholly owned subsidiary of NextEra Energy Resources, LLC. The Owner of this site is Starlite Associates, LLC. The tenant is Ayco, a Goldman Sachs Company.

**DESCRIPTION OF EXISTING SITE:**

**PARCEL AREA**

The existing site is a 19.81 acre parcel created by subdivision map filed in the Office of the Clerk of Albany County as Plan No. 13622 on September 7, 2018. Site is currently under construction. Site will contain a 150,000 SF building and surface parking for 837 +/- vehicles.

An aerial photo of the site prior to start of construction is shown below.



Fig. No. 1 – Aerial Photo of Site

## PARCEL ZONING & VARIANCE GRANTED

The site lies entirely within the COR (Commercial Office Residential Zone). Accessory structures (like the carport created by the structural tee with the solar panels on the top) are not permitted in the front yard. An area variance was granted on July 18, 2019 by the Zoning Board of Appeals to permit these structures.

## WATERCOURSES

There is a protected watercourse which is a branch of the Salt Kill running east of the easterly property line. This is shown on a portion of the Protected Area Watercourse Map reproduced below. No change is proposed to this watercourse. No construction in connection with the installation of the solar arrays is proposed in the 100 foot buffer zone.



Fig No. 2 - Portion of Protected Area Watercourse Map

### EXISTING WETLANDS

There is a New York State Freshwater Wetlands (TN11) on or adjoining the site of No. 629 Columbia Street. 18.97 acres of the site. The project in connection with the installation of the solar arrays proposes no disturbance of either the wetland or buffer area.

### FLOOD PLAIN

The site of the installation of the solar arrays lies entirely within Zone X (Area of Minimal Flooding). A Portion of Flood Insurance Rate Map 360001 C0088D and adjoining panel is reproduced below.



Fig. No. 3 – Flood Plain Map of Existing Site

### **EXISTING SOILS**

The site had been graded to accommodate the building under construction, parking lot, utilities and landscaping. Rock excavation, including blasting, was necessary to remove rock primarily shale.

### **IMPACT ON ARCHEOLOGICAL PROPERTIES**

The area of the proposed installation of solar arrays is outside the areas mentioned in the letter from SHPO. See attached letter in Appendix 4.

### **EXISTING DRAINAGE**

The drainage from the areas to be impacted by the installation of the solar arrays is tributary to the Micropool Extended Detention Pond constructed in connection with the construction of the 150,000 SF building. The Micropool Extended Detention Pond is fully constructed and is operating at this time.

### **EXISTING WATER SYSTEM**

In conjunction with the construction of the Coliseum Drive a new 8" water main was constructed connecting the existing 24" water main running east of Old Loudon Road to the 8" water main in Columbia Street. Another 8" water main was constructed in a 30 foot wide utility easement granted to the Town of Colonie through the site from the 8" main newly constructed in Coliseum Drive connecting to the 8" water main in Columbia Street at the easterly entrance drive to the site. A private water service is connected from the water main to a building entrance on the west wall building under construction.

### **EXISTING SEWER SYSTEM**

In conjunction with the construction of the Coliseum Drive a new 8" PVC sewer main was connected to the existing 8" PVC sewer running in Old Loudon Road. A private sewer service is connected from the sewer main to a building entrance on the west wall building under construction.

### **EXISTING DEMOGRAPHICS**

The site lies within the North Colonie Central School District, which is served by Bought Hills Elementary School, Shaker Junior High School & Shaker High School. No increase in student enrollment will be the result of the installation of the solar arrays.

### **DESCRIPTION OF INTENDED SITE DEVELOPMENT AND USE**

Goldman Sachs is highly motivated by the ecological benefits of utilizing alternative power sources wherever possible. The Applicant under an agreement with Goldman Sachs proposes to install a 1.14 MW solar photovoltaic ("PV") carport based solar array to be installed at the subject property. The carport array will be split into eight individual sub-arrays – four on the south western portion of the parking lot – carport array W1 through W4 and another four on the north eastern portion of the parking lot – carport array E1 through E4. A total of 3,010 – 435Wp Sunpower PV modules will be installed on the eight carport structures. Since solar PV modules produce DC electricity, ten 60 kW string inverters will be installed to convert the DC electricity into AC electricity. All the energy generated by the solar PV arrays will be used to offset the daily energy demand of the office space currently under construction.

In order to create solar field with enough area (76,262 +/- SF) to generate power to meet a substantial per centage of the power demand for Phase 1 of the Goldman Sachs (Ayco) building, it is necessary to utilize the front yard parking area for 30,532 +/-

SF of rooftop panels. It is estimated that the solar arrays will supply 60% of the electric needs of the building.

## **IMPACTS OF PROPOSED DEVELOPMENT**

### **TRAFFIC**

With the exception of construction traffic installers and for delivery of structural supports and solar panels there will be no impact on traffic due to the installation of the solar arrays.

### **VISUAL**

As requested at the sketch plan meeting the Applicant intends to provide a row of fourteen Eastern redbud trees (*Cercis canadensis*) in the four foot decorative fence row adjoining the west edge of the parking lot. These trees will replace boxwoods originally specified in the fence row.

### **COMMUNICATIONS**

There will be no impact on existing or proposed telecommunications lines due to the installation of the solar arrays.

### **GAS & ELECTRIC**

There will be no impact on existing or proposed gas mains or electric services due to the installation of the solar arrays. The wires and conduits connecting between light poles in the parking lot will be rerouted to the underside of the roof of the carport where necessary.

## **SEWER**

There will be no increase in sewer generation due to the installation of the solar arrays. There will be no impact on recently placed public sewer although the private sewer lateral will be crossed by a power feed connecting the solar arrays to the building. This crossing will take place at right angles to the sewer lateral.

## **WATER**

There will be no increase in water use due to the installation of the solar arrays. A conduit had been placed within the 30 foot wide water easement which would have accommodated a power feed connecting the solar arrays to the building. The Latham Water Division would not permit this so a new cable will be placed which will run beneath the public water main when it crosses the easement at right angles.

## **FIRE PROTECTION**

No new fire protection is proposed for the solar arrays. The lowest point on the support structure under the solar arrays will be in excess of 14 feet above finish grade of the parking lot and would not interfere with any fire truck access to the site.

## **SOLID WASTE**

There will be no increase in solid waste generation due to the installation of the solar arrays other than construction debris generated during installation. This waste will be disposed of at proper landfills.

## **DRAINAGE**

The existing drainage pattern and discharge point will be retained. Roof leaders and downspouts will direct stormwater to islands with landscaping and stone

mulch. The original HydroCAD, the existing catch basins, piping and the sizing of the Bioretention Basin, Micropool Extended Detention Basin will not be impacted. Where any disturbance of ground takes place attention will be paid to sedimentation and erosion control. The standards in *Erosion and Sediment Control Guidelines for New Development* promulgated by New York State Department of Environmental Conservation will be met.

### **HAZARDOUS MATERIALS**

There will be no hazardous materials introduced into the site due to the installation of the solar arrays.

### **NOISE**

During construction, noise will be generated by construction equipment due to the installation of the solar arrays. All contracts will require that all work be accomplished at times and hours conducive to good neighborhood relationships. Once completed, the solar arrays will result in no additional noise being generated.

### **DUST**

During construction, dust will be limited due to the installation of the solar arrays utilizing dust suppression methods approved by the Town of Colonie. All contracts will require that all work be accomplished in a manner to significantly limit fugitive dust. Once completed the installation of the solar arrays will not result in the generation of any dust.



## **PARKING LOT LIGHTING**

Light poles in the areas where car ports will be built will be removed. Lights will be placed beneath the roofs of the car ports which will provide lighting to the parking surface as well as adequate lighting to the driving aisles adjoining the car ports. A photometric plan will be provided.

## **APPROVALS**

The proposed project will require review by local, county and state agencies. A list of required approvals and submittals identified to date follows:

### Town of Colonie Planning Board

SEQRA Review

Site Plan Approval

(Various Departments must approve applications)

### Town of Colonie Zoning Board of Appeals

SEQRA Review, Negative Declaration issued July 18, 2019

Area Variance approved on July 18, 2019

### Town of Colonie Building Department

Building Permit

### Albany Country Planning Board

§239 Submittal - Deferred to local action at their meeting of July 18, 2019

**CONCLUSION:**

The proposed project will be designed to minimize the impact of items addressed herein. It is the engineer's conclusion that this project can be completed with minimum impact on the environment or on surrounding properties. This project will require a review pursuant to State Environmental Quality Review Act (SEQRA).



A handwritten signature in black ink, appearing to read "D. Hershberg", written over a horizontal line.

Prepared by:       HERSHBERG & HERSHBERG  
                          Daniel R. Hershberg, P.E. & L.S.

DRH/dan/NarrRep20190124CONCEPT72919.doc