

HOPKINTON CONSERVATION COMMISSION

One Town House Road

Hopkinton, RI 02833

April 30, 2021

Mr. Al DiOrio, Chairman, Hopkinton Planning Board

One Town House Road, Hopkinton, RI 02833

Re: Comolli Solar Plat 2 Lot 73 Project Summary

Dear Mr. DiOrio:

The Conservation Commission has been involved with this property in various ways for about 20 years. Initially, we were interested in working with Perry Motors which was here in business prior to any zoning in Hopkinton to bring their junkyard and secondhand dealer operation into the 21st century. The business was in the Groundwater and Wellhead Protection Primary Protection Zone and in violation of various RIDEM regulations. We had a list of reasonable operation improvements that we felt would allow this much needed recycling business to continue. Richard Grills came along at this time and bought the property for a million dollars. He removed thousands of junk cars and visually cleaned the site to gain a nice view out his front window in one of the oldest houses in Hopkinton. Maybe 5 years ago, a previous Town Council, looking to balance the budget, suggested the Land Trust put solar panels on one of their properties to provide operational income. All of the Land Trust properties were tied up with various easements that excluded anything like this. I looked at potential purchases and suggested Unit 2 of Plat 2 Lot 73 would be ideal for this purpose. It is a brownfield not in view of Chase Hill Road and with no visual impact on neighbors. Plus, it is adjacent to Grills Wildlife Preserve already owned by HLT. This purchase did not happen and today we have a private owner looking to make money with a solar project on this brownfield. This is pretty close to the ideal site for a utility scale solar development in Hopkinton.

The Conservation Commission has previously provided you the notes from our 3-29-21 site walk of Unit 2. Three members of the Planning Board were in attendance. We held a special meeting with the applicant's representatives on 4-29-21 as a follow up to the site walk to update our research into the project and provide you this Project Summary ahead of your 5-5-21 Hearing. The summary is organized into broad topics.

BROWNFIELD

Jason Gold agreed it is possible to screen much of the existing glass, metal and plastic from the upper soil where it remains from junk yard days. He said RIDEM is recently asking 6" minimum of topsoil be provided in a solar development and this is a combination of existing and added topsoil. He did not know how much is now present but expects topsoil will be brought in to meet this standard. He agreed the thicker topsoil layer and scarifying will aid absorption and infiltration of precipitation. It appears much of the original topsoil was removed and/or mixed with subsoils when the junk cars were removed. The soil surface is quite bare in those areas and seems incapable of supporting a thriving ecosystem.

They have done no investigations for contamination of the soil by the applicant. They expressed no plans to do so and it is unclear if there is any RIDEM requirement for them to do so. Former owner Richard Grills had said years ago that some level of contamination investigation was conducted after removing the junk cars so there may be a written report from back then.

Recommendations:

Have the applicant locate any existing contamination investigation report for the record; verify any requirements that exist for future contamination investigation; explain how the existing topsoil thickness will be determined in the various parts of the development; require some level of screening to remove the majority of the considerable amount of residual metal, plastic, and glass from the soil; scarify the ground within the limits of disturbance (LOD) after the solar arrays are installed; require 6" of new topsoil in the previously disturbed areas and a total of 6" topsoil elsewhere; and, establish a healthy wildflower and grass mix within the limits of disturbance.

WETLANDS

The northern detention basin is shallow and will blend with the landscape when not full. It discharges into the existing wetlands that drain east and form a stream onto Grills Wildlife Sanctuary. A wildflower mix will be planted in the detention basin. Jason says there is no requirement for any kind of stormwater detention for the sheet flow from the majority of the areas to be disturbed because these south flowing areas are already cleared and there should be no increase of surface flow. A good part of this area is south of the lawful non-conforming junk yard use (the former property line) and into the quarry area. There seems to have been considerable new quarrying there in the past few years where the solar arrays and solar shading cuts will occur. Jason identified that all this south drainage reaches the adjacent wetlands prior to leaving Unit 2. We asked if it would be desirable but beyond RIDEM regulations to utilize a rain garden or detention basin before discharging to the wetlands? They did not provide an answer.

Recommendations:

Determine whether the recent quarrying or other recent modifications on Unit 2 even when located outside the newly proposed LOD would have increased south runoff and whether some method to intercept and process this increased flow should be required.

TREE CUTTING / REFORESTATION

Jason walked us through the plans as to where trees will be cut and ledge and steep areas will be removed. He expects any removed material will be taken offsite. He had no quantities but described considerable ledge being removed near the quarry hill to accommodate the solar arrays. We asked if they would have a forester on the project the Land Trust could consult regarding reforestation and the Land Trust desire to have a wildflower meadow in at least a good portion of the property. They did not have an answer. We asked about Town Council Condition 10 to produce a plan designed to sustain the native species in and around the PSES during its operations. They have not done any work on this.

Recommendations:

Consider whether the native species in and around the PSES should be identified in conjunction with developing a plan to sustain them. Require a forester, landscape architect or other appropriate

professional consult the Land Trust regarding their desire to have a wildflower meadow and not just reforestation covering the entire disturbed area.

EASEMENT / OWNERSHIP

The applicant indicates they are in full agreement with the Land Trust on what is to be done for easements and ownership but none of this has been put into writing yet.

Recommendations:

Determine at what stage these agreements should be in writing.

ROADS AND TRAILS

They do not know if Unit 3 is developable or not but it is their understanding the owner of Unit 3 is in agreement with them that the only access for the owner of Unit 3 across Unit 2 will be the 8-foot-wide grass trail depicted on the plans along the east boundary and connecting to the existing woods road east of the quarry hill outside the LOD. The existing road from Unit 1 will be widened to 15 feet but will be reduced in width to minimize wetlands impact where it passes the wetlands to either side at the north end of the solar arrays. It was unclear what sort of permitting may be required.

Recommendations:

Look into any need to change the condo documents to reflect the very limited access now to be allowed to Unit 3.

SOLAR PERFORMANCE

The Master Plan Narrative Item 10 Energy Efficiency response merely states “The purpose of the proposed project is to provide renewable energy resources.” This does not address the Conservation Commission’s interest in how energy efficient will this project be compared to what is possible and to any industry standards. The Commission has been requesting information on solar project performance for several years and it seems that almost nothing is volunteered without us asking. (The recommended bidder for the Hopkinton Landfill Solar Project RFP provided helpful information on the system, components, and their efficiency and the expected annual energy production. Their panels are rated 460 W with module efficiency up to 20.9%. Project is 4.29 mW DC, 3.50 mw AC Inverter rating, and 5.060 gWh annual production.) Colleen Debenedetto stated a combination of panels will be used with one being rated at 345 watts and the other at 370-440 watts(?). It is not in Centrica’s business model to use tracking panels with 30% efficiency improvement and no financial downside as the additional cost is more than made up with added production per Lawrence Berkeley National Laboratory studies because Centrica doesn’t want to take on servicing labor for the trackers. They did not provide any specific product information or basic efficiency such as module efficiency or inverters.

Recommendations:

Require the applicant to do a presentation of energy efficiency of the project and components at Master Plan including how the project footprint could be reduced, if any, with the same production but using industry product standard efficiency and industry top of the line product efficiency such as tracking panels and high-performance modules. Provide the mWh annual production for all 3 (their system now, an industry standard system, and a top-of-the-line system using the existing footprint and footprints

designed to keep production the same by adjusting the footprint based on system performance). Request the Town's Engineer to review and comment on this presentation.

FENCE

They liked the farm style high-tensile fence and agree it is much better aesthetically. They referenced the RI Fire Code 11.12.3.3. Security Barriers (no copy was provided) as addressing the fence. They said the local Fire Chief has made a local code interpretation that the fence must not be climbable and that the proposed 6 inches on center stays with or without barbed wires above the fabric would constitute a climbable fence. They said they have this in writing but seemed hesitant to provide this when we requested it of them. There was discussion of using a farm or livestock fence with maybe 3 inches on center stays which would likely be considered non-climbable. The Conservation Commission would like to see every possible effort made to use something like the black vinyl coated farm fence and every possible effort to avoid the ugly industrial looking chain link fence.

Recommendations:

Obtain the exact wording of the RI Fire Code 11.12.3.3 and any applicable section regarding fencing of the National Electrical Code, or any other governing code document for solar fencing for the record. Obtain a copy of the above referenced written decision made by the Fire Chief for the record. Have the applicant search for any alternatives along the lines of the farm fence that do meet code requirements that will avoid using the ugly and industrial looking chain link fence.

DECOMMISSIONING

We asked if there is any part of the solar project components you will not remove upon decommissioning. They responded no. Barbara Capalbo asked if they would remove the poles on Unit 2 and Unit 1. Colleen said no, those would be left. After discussion, she said they would modify their "estimate" to include removal of the poles.

Recommendations:

Require removal of all solar project components including the poles.

Sincerely,

Harvey Buford, Chairman