



# CARVER CONSERVATION COMMISSION MINUTES OF DECEMBER 6, 2017 MEETING

Present: Chairman Jim Nauen, Tim Dempsey and Savery Moore were present. Also present: Brooke Monroe, Environmental Scientist, Agent, and Marianne MacLeod, Recording Secretary.

Mr. Nauen opened the meeting at 7:02 P.M.

### **APPOINTMENTS:**

Certificate of Appreciation for Kyle Rizzuto, Troop 48. He did a lot of work on the Cole Property, such as clearing trails, cutting logs, placing benches, etc. Mr. Nauen thanked Kyle for all his hard work and on behalf of the Commission Kyle was presented with a Certificate of Appreciation. Mr. Moore also thanked Kyle for meeting them on Saturday and taking them around.

### **MINUTES:**

To be read and approved for November 15, 2017. Savery Moore made a motion to accept the minutes of November 15, 2017 as correct, seconded by Tim Dempsey. Voted and passed unanimously.

## **UPDATE:**

A site walk was done on November 27, 2017 with John Woods, Deputy Director of Operations and Maintenance, to inspect the Tremont Street Dam at the request of DCR. This is an inspection that is conducted every five years.

#### **NEW HEARINGS:**

7:15 – 0 Purchase Street

**RDA** 

Notice is hereby given, in accordance with the Massachusetts Wetlands Protection Act (M.G.L. Chapter 131, Section 40) and the Carver Wetlands Protection Bylaw, that a public hearing will be held at 7:15 p.m. on Wednesday, December 6, 2017 in Meeting Room 1 at the Carver Town Hall to hear the Request for Determination of Applicability, submitted by Victor Stolt-Nielsen Holten, for the installation of a small floating solar

array on the reservoir/tail water recovery pond located north of Purchase Street and west of Great Meadow Drive. The RDA is to determine: (a) whether the area depicted on plan(s) and/or map(s) referenced is an area subject to jurisdiction of the Wetlands Protection Act; (b) not applicable; (c) whether the work depicted on plan(s) referenced is subject to the Wetlands Protection Act; and (d) whether the area and/or work depicted on plan(s) referenced is subject to the jurisdiction of any municipal wetlands ordinance or bylaw of the Town of Carver depicted on referenced plans. The project is located at 0 Purchase Street, Carver, MA, Map 55, Lot 1. All interested parties are invited to attend. Copies of all plans, filings, and pertinent documents are available at the Conservation Commission Office.

Mr. Stolt-Nielsen Holten presented before the Commission. He gave a background about floating solar. He explained that they were looking for a man-made operational body of water that services agricultural or industrial function and does not have many natural features. He described the panels, floats and installation process. He explained that they piece it together onshore and push it out onto the water and then attach the anchoring points.

He then answered many questions from the Commission:

Savery Moore asked if there were other locations in Carver that they looked at? Answer: No.

Savery Moore asked on this pond there is some flow-through. How does the covering of water with panels – 50% of the surface area – what would the effects of water temperature be and the effect down stream if water temperature were to drop? Have studies been done?

Answer: There may be studies underway. As for water evaporation, they have worked with water agencies. One key benefit is that it will potentially reduce evaporation, because they are near roads and a lot of the run-off would be warmer. Each site requires its own analysis and if it becomes a concern he said it would be addressed.

Tim Dempsey asked if the Commission authorized this project and it was successful, and you came back with an NOI, would you have the answers regarding the Commission's questions that are being asked tonight?

Answer: It is definitely something we would try to address.

Tim Dempsey asked if under normal circumstances, what percentage would be array? Answer: We would never go above 50%.

Tim Dempsey asked for clarification that they would never go above 50% coverage. Answer: In Massachusetts, we are bound by the program at 50%.

Tim Dempsey then said that he is concerned that, at 50% coverage, what would the issues be for everything that lives underneath the panels due to the lack of sunlight?

Answer: This goes to what we are look at for sites – man-made operational water body and if there were concerns about what would happen to natural life, we would want to avoid that issue altogether.

Tim Dempsey asked if the area has tall trees surrounding the body of water, do they cut them down to make the solar work?

Answer: It would be site-dependent. Hopefully they wouldn't have to do this, but it could be a consideration.

Mr. Holten then explained that one of the key benefits about floating solar is that doesn't involve any clearing of land.

Brooke Monroe asked if they have to hook the panel array up, would you require poles to be installed which would require other activity?

Answer: Yes.

Savery Moore asked if there are currently limits on how much solar power the utility has to buy?

Answer: Yes, this new solar incentive program set a new target for how much Massachusetts will develop and that number is 800 megawatts.

Savery Moore asked – so that would be another equation you would use and if you cannot sell it, you're not going to put it in?

Answer: Yes, that's a very important consideration.

Savery Moore made a Motion to close the Hearing on 0 Purchase Street for the demonstration power array, seconded by Tim Dempsey, voted and passed 3-0. Savery Moore made a Motion to issue a negative determination of applicability, with conditions by the agent, which is that it is for just this project located at 0 Purchase Street, Jim Nauen seconded, voted and passed unanimously.

Fred Paris was also present. His regional solar company is taking delivery of the equipment at this time. He said they have many projects in the Carver/Middleboro area.

Tim Dempsey asked how long the testing will be?

Answer: Mr. Paris said probably through the winter. They will be taking temperature readings, looking at ice formation and there will be cameras on site. He thinks by Spring the testing of conditions of the winter will be over.

Tim Dempsey then asked, when the ice forms, do the panels actually pop up above the ice?

Answer: Yes, the ice surrounds it and the panels sit right on top of it.

Brooke Monroe asked how long they will be at the site put the panels in place?

Answer: Mr. Paris said he believes it will be a couple of days. Everything needs to be set up; the cameras will be solar-powered as well since there is no electricity on-

site. He explained some of the different testing that will take place, including scales that will weigh the snow on top of the panels, cameras checking measuring rules for the height of the water and conditions.

Savery Moore made a Motion to adjourn at 7:49 p.m., seconded by Tim Dempsey, voted and passed unanimously.

Next meeting will be on December 20, 2017.

Respectfully submitted,

Marianne MacLeod, Recording Secretary