

Whately Planning Board  
Minutes of Virtual Meeting  
November 29, 2022

Present: Members Don Sluter, Judy Markland, Sara Cooper, Tom Litwin, Brant Cheikes  
Members Absent: none

The meeting was held remotely, via Zoom.

Virtual Guests:

Ethan Haslett

Mike and Lisa Moore

Chris Chamberland, Berkshire Design

John Hanmer, DMCTC

Jared Glanz-Berger DMCTC

I. Call to Order, 5:00 p.m.

The meeting was recorded.

II. 5:05 pm Public Hearing, continued, for site plan review of DMCTC's application to install horticultural lighting for indoor cultivation in its greenhouses at 7 River Road.

Brant noted that the two items of concern for tonight's hearing session are the driveway and the project's energy plan. Project engineer Chris Chamberland screen-shared the latest revision of the plan, 11/17/2022 Revised Driveway & Screening, noting that the apron area needed asphalt instead of gravel and that the driveway needed a 20-ft setback from the property line. He said the updated plan was submitted to the Town Clerk today and that both issues have been fixed.

Mr. Chamberland referred to abutter Tim Smith's previously stated concern that tall screen plantings like river birch and American holly would shade his crops, and said Berkshire Design is no longer planning to use either of those and is researching a mix of shorter evergreen and deciduous species like red cedar arborvitae, which also looks less formal.

He said an updated energy plan dated November 21, 2022 had been submitted last week and that its points include these:

1) With a greenhouse grow, some portion of the horticultural energy required is sourced from direct sunlight and the remainder is provided as an electrical input through artificial lighting, with the electrical energy portion either being sourced from on-site (e.g., solar panels) or from off-site.

2) Each plant grown by DMCTC will go through an approximately 3-month life cycle, with one month spent in a "vegetative" phase when light is required 18 hours per day, followed by a two month "flowering" phase when light is required 12 hours per day.

2.

3) On average, crops through the year spend about 4 months in the flowering state and 8 months in the vegetative state. Based on this schedule, DMCTC's greenhouse crops will require 4,704 hours of light per year. This required lighting input will be provided solely through natural sunlight during approximately 2,128 hours, and during the remaining 2,576 hours artificial lighting will be used. A diagram illustrates the usage.

4) Total lighting input required: 4,704 hours x 196.2 Kilowatts = 923,000 kWh.

Required lighting input provided by sunlight: 2,128 hours x 196.2 Kilowatts = 417,500 kWh

Artificial lighting input: 2,576 hours x 196.2 Kilowatts = 505,400 kWh

Based on these figures, approximately 45% of lighting energy required by the plants is provided by direct sunlight. ( $417,500 \text{ kWh} / 923,000 \text{ kWh} = 45.2\%$ )

5) The existing site includes a 10 kW ground-mounted solar panel array. A US Department of Energy calculator was used to estimate the total annual energy supplied by this array ([pvwatts.nrel.gov](http://pvwatts.nrel.gov)). The estimated energy output of 12,500 kWh per year represents approximately 1.4% of total lighting energy in the greenhouses.

6) DMCTC has also proposed to install rooftop solar on the existing farmhouse, if it is determined that this can be done without significant structural modification. Based on the same DOE application, Berkshire Design Group estimates that this array would be up to 10 kW in size, representing an additional 1.4% of potential on-site electrical production.

7) Therefore, under the current proposal, they estimate approximately 48% of light energy input would be sourced from on-site, inclusive of direct sunlight.

8) A greenhouse marijuana grow uses about half the energy used by growing the crop inside a regular, non-glass building. Mechanical energy will be used for cooling (necessary due to the heat from the lights) as well as for heating in cold weather (the heat from the lights will be useful for that). In this case as well, greenhouse growing uses about half the energy needed to grow in ordinary, non-glass buildings. Judy thanked him for presenting a very impressive, very helpful set of data.

Mr. Chamberland stated that at this point the project can claim 44% - 48% of new usage on-site energy savings. He said that reaching 50%, as the bylaw wants, is complicated by zoning restrictions. Agricultural land, he said, is not well suited to the installation of dual use solar arrays. He added that in other areas wetlands or historical restrictions in the Hatfield portion of the property curtail activities, while other land lies outside their leased area. He also said the farmhouse itself has problems – it is not up to modern codes and may have to be demolished because they can't commit to an expensive renovation; therefore it is not suitable for a rooftop solar array. He noted that although the site *may* eventually get a solar array, they can't commit to that.

Brant again referred to the chart showing energy use over each month of the year, and complimented the presentation as a remarkably well done piece of analysis, adding that the project better meets the spirit of the bylaw than does growing in a non-glass building.

Judy said a concern had been that energy consumption would be greatly increased by the project but that this analysis shows the on-site energy savings reaches *almost* 50%, and that she is very pleased to see that.

When the board asked about a plan for handling power failures, John Hanmer, of DMCTC, answered that they would rent a backup generator for production. He added that the security system is already protected by a generator, as required.

Don asked whether anyone other than board members had any questions. There were none, and Don closed the public hearing. The board discussed conditions of approval, and Brant completed the conditions of approval form onscreen during the discussion:

#### CONDITIONS OF APPROVAL

The site plan approval of November 24, 2020 remains in effect subject to the following amendments made on November 29, 2022:

- 1) The “as-built” site plan will be consistent with the site plan dated September 17, 2022 and including revisions submitted on November 17, 2022.
- 2) Horticultural lighting is permitted in all greenhouses.
- 3) Roof-mounted solar arrays are to be installed on the farmhouse if the structural integrity of the building permits.
- 4) The guardhouse is to be built only if required by the Whately police department.

Judy moved to grant Site Plan Approval subject to the approval conditions and Don seconded the motion. Sara, Brant, Tom, and Judy each voted Yes, and the motion carried by majority (Don had missed a portion of the hearing, so couldn’t vote). Don and Brant will work on document preparation and will let DMCTC know when the documents are ready for pickup.

#### III. 6:00 pm Public Hearing to discuss Proposed Revisions to the Whately Subdivision Regulations § 234-5. Plan believed not to require approval affecting ANR submittal requirements.

Brant had added amendments to this draft document just before tonight’s meeting, and that is the version the board discussed. Judy noted that there is also a section B, but that no changes have been proposed for that. Following the discussion, Judy moved to close the public hearing, Brant seconded the motion, and Don closed the hearing at 6:25 pm.

4.

Judy then moved to approve the draft document as amended and Brant seconded the motion. Don, Sara, Brant, Judy, and Tom each voted Yes, and the motion passed unanimously. At this point, Judy left the meeting to give a presentation at the special town meeting.

IV. Approval of minutes

Review of draft minutes for October 25, 2022

Brant moved to approve as amended and Don seconded the motion.

Brant, Don, Sara, and Tom each voted Aye, and the motion carried unanimously (Judy had left the meeting).

V. Items unanticipated

Concerned abutters Lisa and Mike Moore reported that 4,500 cubic yards of material have been recorded on camera going up the hill to the Baystate Blasting project. Lisa said she has the original Special Permit and that it makes no reference to what is going on there now. She said the town is working on this now but that there has been no “cease and desist” order from the building inspector. She said Mike works from home and witnesses all the activity from his office window. They have now established a website about this. Lisa thinks this situation is an isolated incident, unlikely to be repeated.

VI. Adjournment

At 6:45 pm Don moved to adjourn and Sara seconded the motion. Don, Brant, Sara, and Tom each voted Aye and the motion carried unanimously.

Documents Reviewed (kept in the Planning Board files)

1. A revised version of the site plan for DMCTC 7 River Rd., dated “11/17/2022 Revised Driveway & Screening
2. An updated energy plan narrative for DMCTC 7 River Rd., dated November 21, 2022
3. Conditions of Approval for DMCTC 7 River Rd., dated November 29, 2022
5. A draft of the Proposed Revisions to the Whately Subdivision Regulations § 234-5

Mary McCarthy  
Secretary, Planning Board  
Town of Whately, MA