

Zoning Board of Appeals – Town of Spencer

Minutes



Regular Zoning Board Meeting
Tuesday, July 13, 2010 at 7:15 PM
McCourt Social Hall
Memorial Town Hall

The meeting was called to order at 7:20 p.m.

Zoning Board Members Present: Chairman Allan Collette, Clerk Pamela Crawford, Joanne Backus, and Delores Kresco, alternate.

Zoning Board Member Absent: None.

Staff present: Michelle Buck, Town Planner.

New Business:

A. Continued Public Hearing - Special Permit, John Wentworth, owner, Spencer Renewable Energy, LLC c/o Alfred Magnone, applicant, for property located at 103 North Spencer Road (Assessor's Map R49/1/1). Mr. Collette opened the hearing at 7:20 p.m. At the previous hearing (6/22/2010), the Board requested addition information from the applicant and the drainage condition from the Utilities and Facilities Department.

Note: Mr. Alfred Magnone, Mr. Matthew Mrva and Mr. Morgan Helies, business associates, were present this evening.

Mr. Collette said that the Board already received the updated information from the applicant. Mr. Collette asked if the applicant has already selected the technology and the solar module for the project.

Mr. Mrva said the brochure from SunTech Solar System Company which the Board received contains all the information (measurement and size of components, installation, etc). He hopes that this will answer all questions the Board had from the previous meeting. He then went over the brochure with the Board.

The proposed project is the first solar energy project in Town. There was concern on the weight of the components with the wind-load. The solar system has been installed and used as the electricity power source in other towns and states. Thus, there must be information available on the components' weight associates with the wind-load. The Board then asked if the applicant has

any information that demonstrates the standard structure components in relation to the wind load/wind pressure.

Mr. Mrva said SunTech Solar System Company will manufacture the solar arrays and panels. Another company will handle the posts. He agreed that there must be information related to the components and the wind-load/wind-pressure. At the present time the applicant is trying to go through the special permit and the site plan review process, thus the requested information has yet to be established.

Mr. Collette made a comment that the applicant hasn't provided adequate information on the subject. The Board still doesn't know whether the component unit would be able to withstand the wind load/wind pressure in the area. This information is essential for the Building Inspector when reviewing the detailed plans of the construction to make sure that the components comply with the wind-load regulations.

Mr. Mrva said that the engineer will design the components applicable to the weight limitation and the wind-load provisions of the town, state, and the federal regulations. When the engineering plan becomes final it will be submitted to the Building Inspector for a building permit. Mr. Helies said that there is a 20-year 100% warranty on the products. Therefore the products would be designed in such a manner that they would be sustained throughout the duration of the warranty. The wind load speed depends on the geographical location, and typically it is about 100 miles per hour.

Ms. Kresco made a reference to the brochure from SunTech. It states that the solar module can withstand high wind loads; 2,400 Pascal, and snow loads; 5,400 Pascal.

Ms. Backus asked about the liability insurance, if there is any? (In an event the panel might get blown off by the high wind and damage an abutting property).

Mr. Helies said that there will be liability insurance.

Ms. Buck inquired as to the size and number of the solar panels and arrays. The arrays will be mounted/supported by the post. In addition, how many posts are required?

Mr. Mrva replied that each panel is approximately 3.25 feet by 6 feet; 5,000 – 7,000 panels. Each array contains 12 panels (2 sets of 6 panels attach side by side); the horizontal side (to the ground) is approximately 12 feet long, and the vertical side is about 18 feet in length. The arrays will be angled at 20 degree, not 90 degree. Mr. Helies explained that due to the topography of the site and the setback requirements, the number of arrays per post will not be equally distributed. The overall plan will be designed by the Engineer Firm. All detailed structural information will be finalized and submitted to the Building Inspector for the building permit application.

At this time there was discussion about the height of the array. Based on the above calculations it seemed that the amount lengthwise has been increased from the previous meeting. Increasing the length (on the vertical direction) would also increase the height of the array when it tilts at 20

degree. The glare reflection from panels/arrays could impair the vision of the motorists. Mr. Collette requested a clarification of the height and the glare.

Mr. Mrva explained the Engineer will take the glare factor under consideration when designing the components. When the array is tilted at 20 degree angle, the low-end will be 2 to 2.5 feet high from the ground and the high-end will be approximately 5-6 feet from the ground. The calculations given tonight were based on the general configuration, meaning that when doing an actual design the panels could be in a lesser numbers per array.

Mr. Helies said that the materials use for production of panels are composed with substance that purposely mitigates most of the glare, in addition, the setback in this zoning is 55 feet; it is enough of a distance from the road. Mr. Helies thought that motorists would not be affected by the glare from the panels.

The plan proposes a 6-foot chain link fence around the entire property. The Board reviewed the plan and made a recommendation to install an aggressive wiring material such as *bob wiring* on top of the 6-foot fence. This will help preventing anyone in attempting to climb up the fence and get into the solar system area.

Mr. Helies said that historically in the urban area the installation of 6-foot fencing around the property is a norm. He will take the Board suggestion under consideration.

Ms. Board asked whether the applicant will utilize the existing gravel access (on Alta Crest Road) or proposing a new access.

Mr. Helies responded that the plan is to utilize the existing gravel access.

Due to the lack of substantial information on the wind load associated with the weight of components, the Board expressed concern on the subject matter. The Board inquired as to the technology and the expertise of the manufacturing company that will manufacture the solar products for the project.

Mr. Helies said that technology and concept of the solar energy has been in existence for over 30-years. The installation and utilization of the solar system just started approximately 8-10 years ago. The solar products will be manufactured by SunTech Solar Company; it has many years of experience in the solar technology and industry. The products will be designed to meet the standards that regulate the town, both state and federal.

The plan submitted is considered a conceptual plan. Ms. Buck asked the Board whether a more of detailed/preliminary plan is required.

The Board explained that in general the detailed plan (such as building and house' plan) is required when submitting an application for a special permit. The proposed plan is a development project which needs a further "site plan review" from the Planning Board. The Board reviewed the screening, buffer, setbacks, impervious, and the legitimate use in the zoning district.

Mr. Collette said that an abutter was present at the previous meeting and raised an issue on the drainage. The Board directed Mr. William Scanlan to contact Utilities and Facilities Department.

Ms. Buck said Mr. Robert McNeil, Superintendent, Utilities and Facilities Department, responded via e-mail stating that there is water there, however, it has never reached the road level. He has also forwarded the concern to Highway Foreman for any comments. Mr. Eben Butler, Highway Foreman, indicated that the drainage was an existing issue for over a decade. The condition hasn't changed to the level that needs to be addressed.

Ms. Crawford commented on how this finding from Mr. McNeil and Mr. Butler can be documented to reveal if the condition changes over time or has remained as it is.

Mr. Collette said that when the Planning Board reviews the site plan this issue will be addressed in detail. The applicant shall present a plan or any documentation to verify that the proposed project will not create a worse drainage condition than what it already is at the present time.

Note: There were no abutters present for this hearing.

The Board addressed that the above concerns will be included as part of the condition in the certificate of a special permit.

With no further comments and questions from the Board, Ms. Backus made a motion to close the hearing at 8:00 p.m. Ms. Crawford seconded the motion and the vote was 4-0 in favor.

Mr. Collette announced the members sitting in the voting were Ms. Backus, Ms. Crawford, and himself.

Ms. Backus made a motion to grant a special permit to current owner, Mr. John Wentworth for the applicant, Mr. Alfred Magnone, Spencer Renewable Energy, LLC, to construct a 2-megawatt solar farm at 103 North Spencer Road. Ms. Crawford seconded the motion and the vote was 3-0 in favor. The following was included in the motion:

Findings: The Board determined that the proposed use met the requirements for a special permit in M.G.L. 40A, Section 9 and Section 7.2 of the Spencer Zoning Bylaw:

1. That the proposed use (major utility-renewable energy) is in harmony with the general purpose and intent of the Zoning Bylaw.
2. That the proposed use will not create undue traffic congestion nor unduly impair pedestrian safety.
3. That the proposed use will not impair the integrity or character of the district or adjoining zones, nor will it be detrimental to the health, or welfare of the neighborhood or the Town.

This approval is granted with the following *conditions*:

1. During and after construction, all attempts shall be made to mitigate glare onto Route 31 (North Spencer Road). If complaints are received after construction, the Applicant shall be responsible for rectifying the problem.
2. The project shall be enclosed on all sides by a 6 foot chain link fence.
3. There shall be evergreen plantings on North Spencer Road and Alta Crest Road, except in the location of the access drive.
4. The project shall meet applicable industry standards and federal, State, and local requirements for construction of solar arrays.
5. The project shall not increase run-off off-site.

Mr. Collette explained that once the decision has been filed with the Town Clerk, staff from ODIS will mail the copy of the decision along with the instructions to the applicant and to all abutters.

Approval of Minutes: For June 22, 2010.

Ms. Backus made a motion to accept the minutes for June 22, 2010. Ms. Crawford seconded the motion and the vote was 3-0 in favor with Ms. Kresco abstaining.

Other Discussion:

A. Election of the Officers.

Ms. Backus made a motion to nominate Ms. Crawford to be the Chairwoman. Mr. Collette seconded the motion and the vote was 4-0 in favor.

Mr. Collette made a motion to nominate Ms. Backus to be the Clerk. Ms. Crawford seconded the motion and the vote was 4-0 in favor.

With no further discussion, Ms. Crawford made a motion to adjourn the meeting at 8:15 p.m. Ms. Backus seconded the motion and the vote was 4-0 in favor.

Submitted By:

Bea Meehan, Senior Clerk, ODIS

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List of Documents and Media Used July 13, 2010

Attach to the Minutes

- Email from William Scanlan to Michelle Buck and Vipawan Meechan, subject FW: Spencer Solar – Plans, 7.02.10.
- Email from William Scanlan to Michelle Buck and Vipawan Meechan, subject, “A third message from Matt” (link to the Green Communities Act).
- Email from William Scanlan to Vipawan Meechan, subject, FW: Drainage, 7.08.10.
- Email from Matt Mrva to Vipawan Meechan, subject, RE: Solar Farm, 7.08.10.
- Email from Matt Mrva to Michelle Buck, subject, FW: Spencer Zoning Board PDF, Project_list.pdf; Green Communities Act – CHAPTER 169 OF THE ACTS OF 2008.pdf (consists of 62 pages), 7.08.10.

- Draft Minutes of 6.22.10.
- Adjudicatory Hearings Form signed by ZBA member, Delores Kresco, acknowledged that she read the minutes for June 22, 2010.