GREENWICH TOWNSHIP BOARD OF ADJUSTMENT

PUBLIC MEETING MINUTES

June 10, 2010, 7:30 p.m.

CALL TO ORDER and PUBLIC NOTICE

Chairman Ray Buckwalter called the meeting to order at 7:30 p.m. Ms. Oldford said this is a regular meeting of the Board of Adjustment of the Township of Greenwich. Adequate notice of this meeting has been given in accordance with the Open Public Meetings Act in that a Notice was published in *The Express Times.* Notice was posted on the municipal bulletin board in the Township Municipal Building in Greenwich Township, New Jersey, and notice was filed with the Township Clerk.

FLAG SALUTE

ROLL CALL

Present: Ray Buckwalter, Michael Black, Robert Vetrecin, Angelo Faillace, Dan Detore, Tom Strozeski

Absent: Dawn Marie Kondas, Jeanne Zander, Steve Babula

Professionals: Jonathan Drill, Esq.; Michael Finelli, P.E., Lisa Specca, P.P.

APPROVAL OF MINUTES

Approval of minutes of meeting of May 13, 2010. Tabled to July meeting.

RESOLUTIONS

Resolution No. 2010-04 - Phillipsburg-Easton Honda, Application #2010-01
Block 25, Lot 2.01

C2 variance to permit additional signage.

Members eligible to vote: Michael Black, Dawn Marie Kondas, Thomas Strozeski, Robert Vetrecin, Ray Buckwalter.

Michael Selvaggi, Esq., attorney for the applicant, requested a correction. He indicated a letter was supposed to have been received in the Board office. Ms. Oldford confirmed the letter had not been received. Further, the escrow account is deficient at this time. Mr. Selvaggi requested the resolution be carried to July and indicated the applicant would agree to extend the time. Mr. Drill observed the approval had been made in March.

Mr. Buckwalter said Board should vote on the resolution in its present form.

Motion to adopt was made by Michael Black and seconded by Robert Vetrecin.

Members in favor: Michael Black, Thomas Strozeski, Robert Vetrecin, Ray Buckwalter.

Resolution No. 2010-05 – ***Robert Falvey***, Application #2010-01
Block 64, Lot 23.08
1520 Megan Circle

C(1) variance to permit construction of an attached deck encroaching into the rear yard setback area.

Members eligible to vote: Ray Buckwalter, Michael Black, Robert Vetrecin, Dawn Marie Kondas, Jeanne Zander, Steve Babula, Tom Strozeski

This was an application for a rear yard setback variance. The property is located in Greenwich Chase where any expansion requires a variance.

Motion to grant was made by Michael Black and seconded by Robert Vetrecin.

Members in favor: Ray Buckwalter, Michael Black, Robert Vetrecin, Tom Strozeski

PUBLIC HEARINGS

Warren Solar, Application #2009-03
Block 15, Lot 1; Block 17, Lots 1 & 2; Block 13, Lot 3; Block 19, Lot 1; Block 16, Lot 6; Block 14, Lot 10

Applicant seeks approval for "d(1)" use variance and site plan approval for a solar power generating facility. A "d(3)" conditional use variance, conditional use approval and site plan approval may be the relief ultimately required if the Township adopts an Alternative Energy Ordinance which is being considered by the Township Committee.

Mr. Buckwalter explained for members of the public this is similar to a courtroom process. Mr. Selvaggi will make a case and introduce evidence and testimony. Questions will be invited when testimony is complete. At the end of the hearing public testimony will be invited.

Mr. Buckwalter observed that communication regarding the application has been circulating. He confirmed Board members are not allowed to discuss the application. Mr. Buckwalter emphasized there should be no direct communication with Board members.

He asked how many Board members received email? It appears only one member,

namely, Mr. Buckwalter, and one professional, Michael Finelli had received email. Both confirmed they were not prejudiced.

Requisite fees having been paid and jurisdiction established, Michael Selvaggi, Esq., introduced himself on behalf of Warren Solar.

Mr. Selvaggi indicated 11 years ago he was here for an applicant proposing a cell tower, which was then new.

Similarly, solar energy is an emerging technology. He noted how important renewable energy is to the environment, citing the gulf oil spill. He described the inherently beneficial aspect of renewable energy.

Mr. Selvaggi indicated he had seen the flyers and understood that a big concern is the aesthetic impact. He explained it is important to understand how the technology works. Property is zoned RCD, and it is now being actively farmed. Mr. Selvaggi indicated that this will be a bifurcated application, and applicant will deal with the use variance and site planning separately. Mr. Selvaggi said there are 2 witnesses this evening, Steve Petridis, 3355 Timmons Lane, Houston, Texas, Vice President of Engineering, and John Madden, P.P., of Maser Consulting.

On behalf of the Board, testimony will be received from Lisa Specca, P.P., planning expert, and Michael Finelli, P.E., engineering expert.

All witnesses were duly sworn.

Mr. Petridis cited his education credentials. He does not have a Professional Engineers License issued in the United States. Mr. Petridis has been employed with Element Markets for 2 years. He works on design and implementation of systems. Mr. Drill noted an issue could be raised as to his lack of Professional Engineer's licensure. His expertise is in solar technology. Mr. Petridis has been involved for 2 years. He has not testified before other Boards. Mr. Petridis said he is familiar with electricity generated by solar energy. He has designed and managed 4-5 projects.

Mr. Petridis has designed, installed and operates a roof mounted system in Mission Viejo, California. There are 17,500 sq. ft. of panels (1,200) within that system. There is a handful of solar power generating systems currently operating in the U.S. Mr. Petridis explained this is his company's first project in NJ and it will be one of the largest installations in the United States.

Mr. Petridis said his company had designed others which were not yet built. He said the issue is space and connection to the grid or host. Cables and conduits are elements of the design.

Mr. Finelli asked about experience with a ground mounted system or is there very little difference. Mr. Petridis said the ground mounted system is simpler than a rooftop

system. Basic engineering is comparable. His experience is in rooftop mounted system. Mr. Selvaggi suggested that Mr. Petridis will testify as a company representative as to the suitability of the site, and not as an expert in solar energy. He said site selection is part of the design process. Mr. Petridis has worked with the supplier of panels and the builder to develop the project.

The output at this site will be 20 mega watts. Mr. Petridis pointed out that JCP&L has indicated that this site is within its capacity.

Mr. Buckwalter confirmed that Mr. Petridis would be testifying as a company representative and not as an expert witness. His credentials were thus accepted as a representative of the company.

Mr. Petridis testified as to the benefits of solar energy. He noted there are no emissions and no impact on the environment, and it is renewable. The primary components are modules, which accept the light.

Mr. Petridis introduced and had marked in evidence Exhibit A-1: 4 photos. He described the exhibit. Mr. Petridis testified that solar panels respond to light rather than heat. DC power goes into an inverter and comes out as AC. Racks hold the panels. There is a depiction of panels on a rack. The inverter box is approximately 6' high. The picture on the exhibit is the largest possibility.

Exhibit A-2 was introduced and marked. Mr. Petridis explained this is product information for the Sat Com prism1 medium volt solution. He testified the box is 7.5' high. Two inverters were submitted as considerations for the project.

Exhibit A-3 was introduced and marked. According to Mr. Petridis this is PV is product information for the inverter. He contended these are standard in the industry.

Several types of panels are used. Mr. Petridis described the differences. Panels in this project will be fixed so as to avoid anything mechanical. Panels will face south. Panels are no hotter than the windshield of a car. There is minimal light reflection, comparable to a windshield of a car. The only maintenance required is washing. Washing is with water and/or a biodegradable component to prevent sticking.

Exhibit A-4 was introduced and marked. According to Mr. Petridis, Exhibit A-4 demonstrates a project built in Hackettstown on the M&M Mars Company property and is identified as a solar garden. There are 5 photos. Mr. Petridis observed there is no damage to the ground. Mr. Petridis testified that the photos represent the appearance of the facility proposed for here in Greenwich. He explained that the primary difference is that the solar facility at M&M Mars generates power for the Mars plant whereas the proposed facility in Greenwich will generate power for the grid.

In response to questions about whether the steel supports for the panels will be driven into the ground like those shown in the M&M Mars photos, Mr. Petridis testified that

they are hoping to do that but that a soil analysis will have to be completed to ascertain the method of installation. It is possible that concrete foundations could be required depending on the soil conditions.

Mr. Selvaggi referenced Exhibit A-1. Mr. Petridis testified panels are joined as a string of 12. The light hits the panels and DC power is generated which goes to the inverter for conversion to AC. Wires transport the power to the inverter.

Exhibit A-5 was introduced and marked. Mr. Petridis described the proposed solar power site layout, including location of panels, inverter box, wires and fencing. Three hundred thousand (300,000) panels are proposed with 40 inverters. The site will have a substation. Wires to the substation are located underground. The connections do not emit anything – no odors, no noise. Inverters have fan coolers, which emit some sound.

Noise analysis will be provided.

Mr. Selvaggi asked about the buffer which is proposed. This question was deferred to the planning expert.

Mr. Petridis testified that fencing would be installed to protect the facility. Landscape screening and existing hedgerows will be incorporated. Mr. Petridis explained maintenance visits would occur semi-annually. Emergency visits would be conducted as required.

Exhibit A-6 was introduced and marked. Mr. Petridis explained this shows the Solar Garden project from a different angle. There is very little disturbance to the ground. Grass beneath the panels is allowed to grow. Inverters are maintained remotely.

Mr. Petridis testified total capacity from the site would be 20 mega watts DC or 10% less AC. Total output is 7.6 mega watts.

This property was selected to allow for the maximum output. The property is relatively flat, and there is a substation on the site allowing for connection to the grid. Mr. Petridis testified the demand for power changes and peak capacity is usually during the day. Solar power increases the capacity for the power company.

Mr. Petridis testified that this form of energy generation is expensive. Utilities choose to buy the renewable energy where it is most needed. This technology is offered incentives by the State of NJ. He observed the State believes producing renewable energy is critical. From the company's point of view, the renewable energy incentive makes the project realistic. Mr. Petridis observed that government incentives make this project viable.

Mr. Petridis said the power generated from the system will not specifically benefit the neighbors. The utility companies sell the power to individual homeowners.

The fence around the project will be shielded by plantings. Mr. Petridis testified if someone should touch a panel, there is no charge and it is safe. Wires are not exposed.

Mr. Buckwalter asked about the total output of 7.6 mega watts. How many houses could be supplied? Mr. Petridis testified 500 houses could be supplied. Asked about how long the solar garden had been in existence, Mr. Petridis testified it is approximately 1 year old.

Asked about soil erosion, Mr. Petridis testified that some light does reach the ground because of the angle of the panels. Clean up and maintenance is conducted twice per year according to Mr. Petridis.

Mr. Vetrecin asked about the heat generated by the panel. Does it get hot enough to fry an egg? Mr. Petridis acknowledged you could, in fact, fry an egg. Mr. Vetrecin asked about concern for ambient heat in the area. Mr. Petridis explained the panels are subject to air flow, and therefore, ambient heat is not an issue.

Mr. Black asked the height of the fence. Mr. Petridis indicated the fence would be 6' high located approximately 2" above the ground. Would the fence be higher than the inverters? Mr. Petridis said he did not expect the inverters to be seen.

Exhibit A-7 was introduced and marked to demonstrate the visual impact. Shelters were constructed over the inverters although that is not proposed for this installation.

Mr. DeTore asked about the location of panels. Mr. Petridis said some of the panels could be moved to create more or a buffer. Asked about the Morris Canal path, Mr. Selvaggi noted the path would not be affected. As to panel orientation, Mr. DeTore asked whether there was reflection from the panels. Mr. Petridis testified the panels are black and do not reflect. Are you aware that houses will overlook the panels? Mr. Petridis testified there would be no reflection.

Mr. Strozeski asked whether damage to panels could cause damage to the ground. Mr. Petridis said no. Mr. Strozeski asked about detail for the screening. Mr. Selvaggi said another witness would testify as to the screening.

Exhibit A-8 was introduced and marked. Mr. Petridis testified it depicts computer simulated site view.

Mr. Strozeski requested photos from the site looking out.

Mr. Drill asked about ground mounted or underground mounted cables. Mr. Petridis indicated cable would go through conduit underground. Distance to the substation is approximately 300'. What is the maximum distance? Mr. Petridis said he would have to make a study. Mr. DeTore asked about the energy credits. Mr. Petridis said credits come from the utility company. Where does the utility company get the money to pay? Mr. Petridis said the money comes from the electric rates.

Ms. Specca asked about the new substation up-grades. Ms. Specca requested a graphic depiction of the up-grades. Mr. Petridis said they could produce something.

Mr. Finelli asked the basis for the choice of the property? Utilities are pressuring for maximum mega watts. Applicant studied how to produce 20 mega watts on the property. Mr. Petridis emphasized that the panels can be moved around to minimize impact.

Mr. Buckwalter asked about the change in panel technology. Newer panels involve more space.

Mr. Buckwalter asked the applicant to proceed with an environmental impact study in advance of the site plan. Mr. Selvaggi and Mr. Drill agreed to the relevant section of the impact study that would need to be done.

Mr. Buckwalter invited members of the public to question the witness.

Robert Marciello, 1137 Monroe Drive, asked about reflectivity. Addressing A-4, Mr. Marcello asked whether the sky and clouds are reflected? Mr. Petridis testified that the reflection would not be intrusive. Mr. Marcello asked whether there were any hazardous materials association with 40 inverter stations. Mr. Petridis testified there are not.

Elizabeth Morris, 103 Washington St., asked what would be planted so that the water does not wash down the hill. Mr. Selvaggi said this would be addressed by the engineer. Ms. Morris asked for more simulated site views. She asked about the wildlife habitat? Mr. Petridis noted the EIS would address this matter.

Rich Trover, 513 Pequest Road, asked whether the installation would affect the aquifer. Mr. Petridis said there would be no pollution. Further, the rain would reach the ground according to Mr. Petridis. Regarding 40 inverters, what would be the noise level? Mr. Petridis indicated a study would be provided.

Stephen Hart, 412 Thomas Stewart Way, asked whether any studies had been conducted on the effects on plant and wildlife. Mr. Petridis said he did not know. Asked whether nano technology is used Mr. Petridis said it was not.

Dan Perez, 624 S. Main St., asked what benefits this facility would bring to the Township. Mr. Petridis said the land will remain farmland and will revert in the future. Taxes will be assessed on the land. What happens if a panel is damaged by a baseball? Mr. Petridis noted the panels are very strong and the company is insured. If the company goes out of business, who removes the panels? Mr. Petridis explained the panels are assets, which could be sold. There are contractual agreements with the landowner.

Marilyn Brant, Herleman Road, requested a decibel range study. As to Exhibit A-5, she asked whether there is a guarantee that nothing is proposed for the lower right hand corner. Mr. Petridis agreed.

Donna Doras, 200 Arbor Drive, asked whether members of the public were aware that the executives of Element Markets are former Enron executives. Mr. Selvaggi stated that these particular executives had not been accused of anything.

Mike Kahteer, Washington Street asked whether the outside area is going to be farmed. Where farming can be done practically, it will continue according to Mr. Selvaggi.

Eric Schnorreusch, 138 Washington Street asked whether there are any facilities operating in commercial zones or residential areas. Mr. Petridis said operations are mixed – some residential and some commercial – not concentrated in zones. What type of metal are the stakes? Mr. Petridis will find the answer.

Greg Cuzzonino, 213 Aldin Road, asked whether the JCP&L substation and wire would need to be modified. Mr. Petridis testified that JCP&L indicated there would be no significant impact.

Andy Powers, 525 Dory Street, asked how many people will be employed. Mr. Petridis said it becomes a function of scheduling. Mr. Petridis suggested 40 – 50 people may be employed. Asked about the duration of construction, Mr. Petridis said construction could be 3 – 6 months depending upon product availability.

Cathy Schnorreusch, 138 Washington Street asked whether there would be any topsoil removed. Mr. Petridis answered there would not be topsoil removed. What about flooding? This issue will be addressed by an engineer. How long the construction? Will panels be ready at the same time? Mr. Petridis testified it will be built in phases. What about taxes? The planner will address tax issues.

Change of venue was requested to accommodate approximately 150 people. Chairman Buckwalter stated that a change of venue would be investigated as to the August meeting but that the July meeting would have to be held at the municipal building or the applicant would have to re-notice.

This hearing is continued to July 8 at the Municipal Building.

OLD BUSINESS

NEW BUSINESS

ADJOURNMENT

The meeting was adjourned at 10:55 pm.