

Shutesbury Planning Board Meeting Minutes  
November 23, 2015 Shutesbury Town Hall

Planning Board members present: Deacon Bonnar/Chair, Jon Thompson, Jim Aaron, Jeff Lacy, and Ralph Armstrong. Steve Bressler joins the meeting at 7:25pm.

Planning Board members absent: Linda Rotondi

Staff present: Linda Avis Scott/Administrative Secretary

Guests: Mickey Marcus and Kevin MacCaffery/NEE, Jean Christy/Tighe & Bond, Michael Pill/Attorney for Lake Street Development Partners, Donna MacNicol/Town Counsel, Penny Jaques/Shutesbury Conservation Commission, Miriam DeFant and Robert Kibler/74 Pratt Corner Road, Andrea Cummings/69 Pratt Corner Road, and Genny Beemyn/113 West Pelham Road. Michael DeChiara/56 Pratt Corner Road joined the meeting at 7:56pm.

Bonnar/Chair calls the meeting to order at 7:06 pm.

Planning Board Meeting Minutes:

Minutes for the 10.5.15 meeting are unanimously approved as presented.

Minutes for the 11.9.15 meeting are unanimously approved as presented.

Solar Bylaw Petition Warrant Article:

Lacy: both petition warrant articles are flawed; the moratorium article is worded in such a way that the Attorney General's office will not approve it; the solar bylaw is written in too rigid a manor. Lacy states he disfavors both and recommends taking the subject up with the full Board and suggests the Board not recommend either of the articles to the Select Board. Lacy suggests listing the criteria the Planning Board can regulate via a special permit based on what we've learned from this process thus far. All agree to carryover the deliberation to the 12.14.15 meeting. DeFant/74 Pratt Corner Road: some of us wondered if the Planning Board would consider including a group of interested citizens in the process of developing a solar bylaw. Bonnar: the Board will consider DeFant's suggestion in the future.

Master Plan Working Group: Bonnar: the Planning Board will meet with the Select Board on 12.15.15 at 7:00pm for the purpose of appointing volunteers to the working group. -

7:30pm: Continue Public Hearing for the Zoning Special Permit for Light Industrial Use: Six Megawatt Solar Array

Bonnar: the Planning Board is in receipt of a newly revised proposal; invites NEE to explain the revised proposal followed by comment from Christy/Tighe & Bond, questions and comments from the Planning Board then public comment.

Mickey Marcus/NEE representing Lake Street Development: Lebovits/Lake Street is unable to attend due to a flight delay; introduces Kevin MacCaffery/NEE civil engineer.

Presentation by Marcus: After listened to the Planning Board, public testimony, and the Tighe & Bonds review, NEE has modified the project. Access will be via a new driveway into the site, the project has been moved away from wetlands, the driveway is less than 1000 ft. long and has less than a 15% slope; future logging access roads are shown on the new plan. The project is about 995 ft. from Pratt Corner Road; the commercial solar seed mix was modified to add more forbs and wildflowers. NEE thought that Emily Stockman/Stockman Associates (Conservation Commission third party reviewer) looked at everything, however she has yet to finish the verification of wetlands; the plan is to keep everything more than 100' from all wetlands. NEE received a letter from Tighe & Bond today indicating that some site plan changes may be required. Because Tighe & Bond's comments/recommendations cannot be addressed tonight, NEE recommends a continuation of the public hearing. Solar arrays need sunshine; the plan shows a cutting management area; to the south of the project, the plan is to cut the tall trees that would shade the panels and leave the herbaceous layer; at 100' away from the array, 40' trees can remain; on the east and west sides of the array, the trees can be taller; shade management is a long term project.

MacCaffery/NEE: additional site data includes a strategy for managing stormwater during construction and through the life of the project; additional topography has been gathered; when the project is built, from the southern high point, the water works east, west and to the north; drainage channels circle the site; roads will have open drainage with roadside ditches; maximum slope on the road is 15%; per DEP, solar panels are treated as impervious and because vegetated cover under the panels will take time to establish, they have modeled stormwater conservatively. The plan is to come in new access road first, establish drainage swales, then circle east and establish drainage swales and basins.

Jean Christy/Tighe & Bond comments: the plan is to work five acres at a time, stabilizing as they go. She has looked at the plan and reviewed the original recommendations; the project has been pulled away from the buffer zone so there are fewer concerns about stormwater management. Planning Board members receive from Christy the 11.23.15 Tighe & Bond "Peer Review Services Ground Mount Solar Array, Pratt Corner Road" report. Christy reviews the report in the context of the public hearing (see file). Lacy, referring to #3a-b, are these retention or detention basins? MacCaffery: they are designed to be dry before the next storm hits. Lacy: can the size of the basins be reduced? Christy: culvert calculations are referred to in #3c-e. A question is asked about the roadside swales and how much water will be coming down the access road. Christy, referring to #4: as the project is laid out now, it is not subject to Mass Stormwater Management Standards; NEE has gone through each standard to show how they are complying; if some of the pipe velocities are too fast, flow can cause erosion. Christy notes that the access road will not be frequently traveled.

Christy recommends NEE/Lake Street provide information on their experience/approach to constructing on steeper slopes. Lacy: most of the slope is under 15%; concerned that the area of steep slope running in a north-south band could be problematic. Genny Beemyn/113 West Pelham Road states concern about roads that may be open to the public and access to drainage basins.

Lacy: asks for confirmation that meeting the state stormwater standards is not required. Christy: NEE has designed for best management practices; they have met the bulk of the

intent of the stormwater standards. Lacy: we need to know that the soils and ground water levels are right. Christy agrees that additional data is needed. Jaques/Conservation Commission: our wetland consultant has yet to verify the revised wetland delineations; her next site visit is scheduled for 12.7.15. MacCaffery: once the delineation is agreed on, the site plan will be revised. DeFant: if it hasn't been done, is there intent to do soil sampling; are there different series of wetlands? MacCaffery: "x" and "c" are the same. DeFant: on which side of the road will the trench be located? Marcus: all the wires from the solar panels run underground to the inverters; there will be a buried conduit in the road, 18" below the surface, that comes out of the ground at the poles located where the road is 18' wide. DeFant: stabilization will be done using hydro seeding; tackifying agents have chemical constituents -are they polymers, do they degrade, is there a half-life? DeFant also asks what the distance is from the fence to the arrays; is this the way the driveway was adjusted to be less than 1000' in length? DeFant: Patrick Garner suggests the Planning Board hire a third party monitor who will visit the construction site on a weekly basis or more often during a storm event.

Marcus: NEE will consider comments and try to address them.

Michael DeChiara/56 Pratt Corner Road states he is representing only himself and recommends the Planning Board keep the public hearing open to allow further collection of information; states that he thinks it is bad process to close and not allow additional comment; if the designer moved the fence to comply with driveway distance limits, there needs to be an independent review that the fence was not moved just to comply with the distance limits; the Planning Board was against that. DeChiara asks that the scope of the contract be modified to allow Tighe & Bond to test soils; in terms of outstanding matters, the Stockman report is pending. DeChiara: the first proposal was very incomplete, the design has been shifted, and there is value in having a thorough process. Lacy informs DeChiara that NEE has already requested a continuation.

Rob Kibler/74 Pratt Corner Road: there is a wetland near the access road. Marcus: wetlands far enough away from the project scope have been looked at; Stockman will be ensuring that she is satisfied with the delineations. DeChiara: in the last design, there was question as to whether the hydrology for the wetlands was captured. MacCaffery: there are several wetlands more than 100' downslope from the project, they are separate and will not be affected; they will remain just as they are today. DeFant: we need to get a larger picture of the area. Lacy: we can assume that these wetlands continue, flow into streams, and so on; we don't need mapping to know that the wetlands will flow downhill; the first question though, is whether there are any wetlands on the other side of Pratt Corner Road. Kibler: there is a long narrow wetland running along Pratt Corner Road on the side opposite the access road entrance. Jaques: is that the stream that crosses the road? Kibler: yes, there is going to be some water flow that is not captured. MacCaffery: the flow will go due east. Marcus: no runoff to the south is anticipated. MacCaffery: no more than there is now. Kibler asks Marcus if he has learned anything about the makeup of the abandoned AT&T underground cable that goes through the property. Marcus: has yet to obtain any information. Andrea Cummings/69 Pratt Corner Road: it seems like a lot to do 5 acres at a time, only 2 acres at a time should be done; wants more discussion about the phasing. DeFant: 5 acres is not that uncommon; given the fact that there are some steep grades and some wetlands, is there a rationale for going to a smaller number of acres? Christy: does not have a problem with 5 acres as long as there is no major earthwork; if

there is some flattening out of slopes, she would recommend smaller portions of these areas be worked at a time. Marcus: there may be some minor changes to grade. Christy recommends more detail on proposed changes to grade. Lacy asks if only clearing and grubbing will be done; we need to fully understand what needs to be done to prepare the land for the panel installation; imagines all the phases will be completed before panel installation starts, i.e. stabilization, especially in the steep areas; we need to know how it will be established that it is okay to move on to a new area; these details are needed. Marcus: site contractors, EPA, and other contractors all use 5 acres - cut, stump, erosion control, and move on; will get correct information from contractors including operation and cleaning of solar panels; does not believe there will be additional fill, other than gravel for the road, however, will verify this; once site is done, there will be a lot less traffic; he will find out what will be put down to protect the surface from traffic. Thompson: what happens to the trees? Marcus: will find out what is planned; before construction, a permit is filed with EPA; they have their specific practices and required monthly reports will be filed in a construction trailer. Marcus: the only work along the periphery is the maintenance cutting; there is no other work beyond the fence line. Lacy: is sheet 5.1 a representation of what the site will look like? Marcus: yes, this is a project we did with a wildflower mix to provide a more diverse habitat. Lacy: if mowed only once a year, some of the plants may get more than 3' high; in order to establish habitat, mowing needs to be done only once per year in the fall. Marcus: the plan is to mow only once per year; area may need to be mowed more often. Lacy: the Board could condition the permit to allow only once/year mowing. DeFant: Rolf Cachat offered testimony about the timing of mowing to protect nesting animals; seems like we have a lot of questions about construction; could a contractor representative come to the public hearing? Attorney Michael Pill/representing Lake Street: the goal is to see if there is enough information for the applicable permit criteria standards. DeChiara: there is a value to the questions that make a better product; does the Planning Board want to expand the scope in order for Tighe & Bond to test the soils; also, was the fence adjusted to meet the driveway length requirement. Attorney Donna MacNicol/Town Counsel: Marcus has offered to get detailed phasing/construction information; obtaining EPA reports could be part of the third party monitoring, however, cannot be required as part of the special permit. Marcus: we did show the location of a security gate across the entrance, or at some other location, so people don't drive up the road; the array site is fenced. Lacy: we haven't thought about that; we did want to see the access for Cows and continued public access, as has been in the past, to the rest of the parcel. Thompson: some kind of a gate at the end of the road is needed. Marcus suggests locating the fence where the access road changes from 18-12feet. Lacy: the Planning Board is not invested in the public being able to drive all the way in. Bressler: agrees with locating the fence at the width change. Bressler: would it be of benefit to scale back the project to stay off the slope? Marcus: contractors have put panels on up to 20% slope; they have opted to not put panels on high slope areas. Bressler: it may be worth considering limiting the project to lower slopes. Marcus: the contractor may choose to keep panels off these areas; all the panels connect in the back above ground and go under ground at the end of the rows. Bressler: no panel connections from one row to the next row? Marcus: each row is independent; each group (string) of panels in connected. Lacy: points out greater slopes on map; what would be

the effect of having fewer panels? Marcus: less output on site; the contractors can choose to not put panels in a particular area of the site; any trenching in these areas would be shallow or laid on the surface. Beemyn: is there an emergency entrance near Reed Road? Marcus: Reed Road will not be used and expects that to be a condition of the permit; the access gate will be used in case of emergency. DeChiara: as a follow-up to slope issue, states concern about the cutting of so many trees for putting up solar and suggests there could be a pathway of trees left through the whole project. Marcus: there will not be any trees left on the (array) site. DeFant: the gate is 995' from the road, what is the distance to the panels? Marcus: the project was moved closer to Pratt Corner Road. Marcus draws a green line to show the boundary of the interior (array site) of the project; there is a gap where there are 4 strings; everything is in units/strings; there are the same number of panels in every plan iteration; invertors are sized for the number of panels. Lacy: did not want to see any gross gerrymandering of the design; this plan passes the "straight face" test. Marcus: we have pushed the panels closer to the road. Kibler notes that he can see the plan has been modified; the straight face test works for him. Cummings: how do you know you can move on to the next phase? Marcus states that he will provide more narrative for the Board and Tighe & Bond; the plan is to remove trees, remove stumps, install erosion control, stormwater management – drainage swales and temporary stormwater drainage; there are different crews for each task; regarding tackifiers, the seeding can be done by hand cranks or hydro seeding trucks; the hydro seed contains seed, fertilizers, mulch, and tackifier (sticky substance) that keeps the ground moist until seed germinates. DeFant: previously, they were told the hydro seed would contain only seeds and water. Marcus: tackifier holds seed in place; could be conditioned to only use hand cranks; it is all biodegradable – you want the vegetation to grow and you want 90% ground cover.

Bonnar: is it time to continue the public hearing? MacNicol: the Board needs to determine if soil testing and the balloon (view) test are to be done. Bressler: the balloon test needs to be done to determine site lines. Thompson: it is a good time of year to do so. Lacy: we are looking for vantage points from the west; the Board could ask NEE to make a case that the site cannot be seen from any habituated view. MacCaffery: we could do a habituated view shed. Christy: we have seen this for other sites and it is acceptable. Lacy: agrees to the need for soils testing to determine if ground water will be hit when digging detention basins. Christy: deep-hole tests would need to be done. Marcus: we think we have a design that works and have no objections to doing deep-hole tests/soil pit data. DeFant: the ConCom third party reviewer recommended soil sampling, is this different soil testing, could this option be pursued? Lacy: we want to test to see if the soils are right for infiltration basins. DeFant: array post installation could have an impact on soils around the panels. DeChiara: all we have are State soils, it seems that having "on the ground" soils testing would be good. Lacy: sometimes you do soil testing to clear up a wetland issue. Marcus: prior to construction, the site contractor will do "pull tests" with either a pile driver or auger to determine how deep the posts have to go; typically, deep-hole testing is done for septic systems, these will be done for the detention basins though there is no need to traverse the site. Christy: outside of the wetland issue, the concern is related to the detention basins; there is no concern about soils within the site. Cummings states she is really concerned about soil depth to bedrock; notes need to know how much water is running off and if they may get water in their basements in the future. DeChiara:

site-specific soils are needed. Christy: in general engineering practice, we use Natural Resources Conservation Services (NRCS) soils; if there is any question, we do on site testing; for the purposes of stormwater, she would not recommend further testing. DeChiara: per Rolf Cachat, soil mapping is random and not reliable. Kibler suggests a compromise and suggests picking ten to twelve sites for soils to be tested. Cummings: this due diligence needs to be done for the safety and welfare for those who live around site. MacCaffery: it is State protocol to dig some test pits by hand for initial stormwater sites, these tests all lined up with NRCS soils; we can talk with the wetland folks to see if any of their tests varied; what he has seen on site, thus far, all matches; can do the same for the new layout. Lacy, speaking to the Board, suggests the applicant put time and energy into the things the Board sees as important; if they are going to be out doing test pits that will take them around the site, they could take some soil tests up-gradient from each pit – once additional test per pit. MacCaffery: we will be testing infiltration. Christy: all you need is soil texture which can be dug mostly by hand; the presence of fines and denseness, will govern what data is put into HydroCAD to determine infiltration rates. MacNicol suggests three soils tests be done above detention basins within the array site. Cummings: it is important that infiltration be tested; will runoff affect their well water? Lacy: this is not needed, though, could be done as compromise. Armstrong affirms compromise. Marcus agrees to do three tests up gradient. MacCaffery: will define viewshed based on terrain and will pick probable locations where there will be site lines and then do photo assessments. Marcus: their initial view assessment was not satisfactory. At 9:33pm, all members of the Planning Board and applicant representatives agree to continue the public hearing to 1.4.16 at 7:00pm.

List of Documents and Other Items Used at the Meeting:

1. 11.18.15 NEE memo re: revised site plans
2. 11.18.15 NEE revised site plan packet
3. 11.18.15 NEE revised stormwater report
4. 11.23.15 Tighe & Bond Peer Review Services report

Meeting adjourned at 9:34pm.

Respectfully submitted,

Linda Avis Scott

Administrative Secretary