

VANCE COUNTY BOARD OF ADJUSTMENTS

The Vance County Board of Adjustments met at a regular and duly advertised meeting on January 14, 2016 at 4:00 p.m. in the Commissioners Meeting Room of the Vance County Administrative Building at 122 Young Street in Henderson, NC.

MEMBERS PRESENT

Phyllis Stainback – Vice Chairperson
Ruth Brummitt
Alvin Johnson, Jr.
Agnes Harvin

ALTERNATES PRESENT

Ruxton Bobbitt

STAFF PRESENT

Jordan McMillen, Planning Director
Jonathan Care, County Attorney

MEMBERS ABSENT

Thomas Shaw – Chairperson
Blake Haley

Vice Chairperson Stainback called the meeting of the Board of Adjustment to order and asked for a review of the minutes from the December 10, 2015 meeting. The minutes were approved with corrections noted by Ms. Stainback. All present were in favor. VOTES: 5-0

Vice Chairperson Stainback introduced the first case explaining the order of business and gave an opportunity for board members to express any conflicts. Ms. Stainback declared the hearing opened for the following case:

BOA CASE NO. 20160114-1; Twyla Jean Southerland (property owner); Southerland Farm, LLC (Applicant) – Conditional Use Permit to allow a 5 MW Solar farm at 571 Gillburg Road (Tax Parcel 0459 01002).

Vice Chairperson Stainback swore in witnesses. Witnesses sworn in include Mr. Jordan McMillen, Ms. Beth Trahos, Mr. Brent Niemann, Mr. Tom Hester, Mr. Gerry Dudzik, and Mr. Tommy Cleveland. Mr. McMillen presented the staff report and reviewed the draft findings of facts as follows:

Description of Conditional Use Permit Request:

The applicant is requesting a conditional use permit to allow construction of a 5 MW solar farm under the use category of “Solar Energy System, Large Scale”.

Findings of Fact

1. The request is for a conditional use permit to allow a 5 MW solar farm on a parcel zoned (A-R) Agricultural Residential.
2. The property is owned by Twyla Jean Southerland.
3. The property is located at 571 Gillburg Road, approximately 300 feet south of the Bearpond Road/Gillburg Road Intersection.
4. The property consists of 121 acres of which approximately 31 acres will be the array footprint. The applicant plans to clear 18 acres.
5. The application requesting a conditional use permit was filed on December 17, 2015.
6. The adjoining property owners were notified on December 31, 2015.
7. The property was posted on January 4, 2016.

Staff Comments

Mr. McMillen stated that the applicant is requesting a conditional use permit to construct a 5 MW solar farm. As proposed, the solar farm would be leased from the current property owner and cover 31 acres. The site plan calls for an 8 ft. fence with 3 strands of barbed wire.

The property includes an area that was previously clear-cut within the center portion of the parcel. The majority of the solar arrays will be within this area. Existing trees are located along Gillburg Road and along the southern portion of the parcel. The property slopes down from a high elevation of 478 feet Above Sea Level (ASL) near Gillburg Road to Gills Little Mill Creek at the back (eastern side of the

property) at approximately 390 feet ASL. The applicant does intend to clear approximately 18 acres of woodland and intends to leave a 30 foot wooded area along Gillburg Road and along the southern property boundary. It is anticipated that the use of existing vegetation within these areas will provide adequate buffers for the western and southern boundary lines. It is worth noting that the applicant does intend to leave a significant amount of existing vegetation in the southeastern corner of the property. On the eastern side Gill Little Mill Creek runs north to south near the property boundary adjacent to the Gillburg Country Village Subdivision. Due to the neighboring subdivision and lack of vegetation on the eastern property boundary, it will most likely be necessary for the applicant to include an area of new evergreen vegetation in this area. The plantings will need to be sufficient to create an opaque evergreen screening with a minimum buffer width of 30 feet wide. Also it is not clear as to which vegetation will remain in the northwestern corner adjacent to the Pecan Grove Mobile Home Park. It will be necessary to maintain a vegetative buffer in this area as well.

A temporary construction entrance and permanent site access will be located off Gillburg Road, approximately 300 feet south of the intersection of Bearpond Road and Gillburg Road. The applicant's site plan shows the temporary laydown yard and construction staging area to be located outside of the Gillburg Road Right-of-way. Due to previous issues with construction vehicles being located within the ROW, it is recommended that a condition be placed on the permit excluding vehicles from the ROW area.

The applicant has submitted an NCDOT driveway permit, approved E-911 address, and NC DEQ Erosion and Sedimentation Control Plan approval. The applicant has applied for the interconnection agreement with Duke Energy Progress and the point of interconnection is shown on the site plan near the site entrance. Staff would recommend discussing the interconnection pole locations to ensure they are better protected from the neighboring mobile home park to the north.

Overall the site plan appears to meet the county's setback requirements of 100 feet on the front and 50 feet on the sides for all equipment and fences. The screening may need some additional input and changes in the northwestern corner as well as the eastern side. No lighting is proposed for the site and the applicant states that noise levels will not exceed fifty (50) decibels as per the zoning ordinance. The solar panels will have no moving parts and will have a relatively low profile with a height of 9-10 feet (ordinance requires less than 25 feet). The applicant also states that solar components will have a UL listing and will be designed with anti-reflective coatings while being designed to prevent glare toward any inhabited buildings on adjacent properties and street right-of ways. Also, the applicant states that safety signs will be placed at least every 100 feet surrounding the site.

Mr. McMillen mentioned a safety concern with the great distance between the site entrance and the entrance gate, which will create a hidden area behind the existing trees near the entrance. He recommended the board consider an entrance gate or other impediment to eliminate this area of concern.

Mr. McMillen also mentioned a concern if the existing evergreen trees along the road are limbed up. This would eliminate the branches at the bottom and would cause the buffer to fall out of compliance as it may not screen the solar farm adequately.

Ms. Harvin questioned Mr. McMillen's recommendation to provide a gate near the entrance from Gillburg Road. She questioned whether a locked gate would prevent access to the cemetery located on the same property. Mr. McMillen suggested discussing the gate location with the applicant to ensure that access was not impeded to the cemetery.

THOSE SPEAKING FOR THE REQUEST

Beth Trahos – Smith, Moore, Leatherwood Attorneys at law, 434 Fayetteville Street, Suite 2800, Raleigh, NC 27601 - (Attorney representing Applicant) – Ms. Trahos addressed the board and presented a packet of information (background information and affidavits from those testifying) and requested that it be included as evidence. She reviewed the request noting that solar farms are good neighbors as they are quiet, produce green energy, do not use government services, are low to the ground and do not produce

dust, noise or odor. She mentioned that the proposed site is appropriate as the solar farm is able to have substantial setbacks and buffering. She responded to a previous question mentioning that an access gate is proposed close to the array which is setback a distance from the main roadway, but that a separate gate near Gillburg Road is not currently proposed.

Mr. Brent Niemann (Civil Engineer with Strata Solar) - Mr. Niemann addressed the board and responded to the staff recommendation that a secondary, locked gate be located near Gillburg Road at the site entrance. Ms. Harvin questioned how access would be granted to those visiting the cemetery. Mr. Niemann responded that a sign with call-in information could be provided at the gate if the board felt the secondary gate was necessary. The board did not feel this was adequate for providing access to the cemetery and determined that the staff recommendation for a secondary gate near Gillburg Road would not be necessary. The board determined that the existing access gate would be adequate which will allow continual access to the cemetery. Ms. Harvin also questioned if the site entrance would be adequate to accommodate service vehicles turning in during construction. Mr. Niemann responded that NCDOT has provided a driveway permit and the construction entrance would be adequate in width to accommodate vehicles turning into the property. Mr. Bobbitt questioned whether additional vegetation would be adequate on the eastern side and whether PVC slates within the fencing would suffice in place of Vegetation. Mr. McMillen responded that PVC slates would be acceptable; however vegetation would still be required. The board determined that screening will be necessary on the eastern side and requested that staff work with the applicant to ensure an adequate evergreen buffer is planted along the eastern fence line as a part of construction. Mr. Niemann confirmed that in his professional opinion all requirements of issuing the conditional use permit have been met, the proposed use will not endanger the public health or safety and the use will not be detrimental to adjoining or abutting properties. He continued by stating that in his professional opinion that the development will comply with all required regulations of the zoning ordinance.

Ms. Harvin questioned why the interconnect poles could not be located parallel along Gillburg Road as typical electric poles. Mr. Niemann responded that the electric company is the controlling entity regarding the interconnection pole locations and that their circuits are different than typical electric poles. Mr. Niemann proposed and the board accepted a proposal to relocate the temporary construction parking to allow vegetation on the southern side of the interconnection poles. Additionally this would include realigning the driveway to use more of the existing driveway and leave greater vegetation between the interconnect poles and the mobile home park to the north.

Mr. Tom Hester (Real Estate Appraiser) – 228 Fayetteville Street, Raleigh – Mr. Hester addressed the board and reviewed his research of solar farms relative to sales prices. He mentioned that he has found through research that there is no effect on sales prices caused by solar farms located adjacent to property. He stated that in his professional opinion, the proposed use will not have any effect on adjacent properties, will not change the pattern of development or uses in the area and will be in harmony with the neighborhood.

Mr. Tommy Cleveland - (Engineer/ NC State Clean Energy Technology Center) - Mr. Cleveland addressed the board and stated that in his professional opinion, the site will have no negative health or safety impacts. He mentioned that nothing would be omitted from the system and that there is nothing that is toxic. He mentioned that some EMF radiation is emitted at the invertors which are central to the site, but that the electromagnetic fields decline quickly. He mentioned that at the fenced area the EMF readings would not be different than a regular environment.

Mr. Gerry Dudzik (Partner with Carolina Solar Energy/Co-developer of Strata Solar on Project) – Mr. Dudzik addressed the board and reviewed the proposed solar farm. He stated it would be an approximately 5MW solar farm that encompasses approximately 40 acres. He stated that they would have a 15 year renewable power purchase agreement with Duke Energy Progress and that they estimate the site will generate 10,585,000 KW hours on an annual basis. He mentioned that this could power 750-850 average NC homes. He stated that based upon his experience and professional opinion, the solar

farm will be operated and maintained so that it will not materially endanger the public health or safety. Additionally he mentioned based on his experience and the testimony of Mr. Tom Hester that the site will be in harmony with the surrounding area and will be in conformity with the general plan of the county's land use plan.

Ms. Trahos closed on behalf of the applicant and asked for an opportunity to provide rebuttal if necessary to any comments that are made.

Mr. Bobbitt questioned whether vegetation will need replanted if it were to die. Mr. McMillen mentioned that the solar farm operator and the property owner would be responsible to replant and bring the buffer into compliance if an issue arises with the vegetation.

OTHER INTERESTED INDIVIDUALS OR THOSE SPEAKING AGAINST THE REQUEST

None

BOARD DISCUSSION

Ms. Stainback went through the conditional use permit check-list with the board and entertained a motion.

DECISION: Mr. Bobbitt made a motion to approve findings of facts as presented and to approve the conditional use permit subject to the following conditions: (1) submittal of an executed interconnection agreement (2) staff will be permitted to approve the vegetation to be planted along the eastern boundary of the solar farm abutting Gillburg County Village Subdivision (3) The temporary construction parking area is to be moved and the entrance drive is to be relocated to follow more of the existing drive to allow additional vegetation between the site and the Mobile Home Park to the North. Ms. Harvin seconded the motion. VOTES: 5-0.

ADJOURNMENT: There being no further business, Vice-Chair Stainback declared the meeting adjourned.