

**TOWN OF DUCK
PLANNING BOARD
REGULAR MID- MONTH MEETING
February 24, 2010**

The Planning Board for the Town of Duck convened at the Duck Municipal Offices at 6:30 p.m. on Wednesday, February 24, 2010.

Present were Chairman Jon Britt, Vice Chair Joe Blakaitis, Ron Forlano, and John Fricker.

Absent: Randy Gilbreath.

Also present were Director of Community Development Andy Garman, Council Liaison Chuck Burdick and Permit Coordinator Sandy Cady.

Others Present: Paul Keller of 125 Wiroans Court.

Absent: None.

Chairman Britt called to order the Regular Meeting of the Planning Board for February 24, 2010 at 6:30 p.m.

PUBLIC COMMENTS

Paul Keller of 125 Wiroans Court was recognized to speak. Mr. Keller stated that he was happy with what the Planning Board was doing. He thought Duck was more of a coastal village than any of the other communities.

OLD BUSINESS

Continuation of Wind Turbine Ordinance Discussion from February 10, 2010

Director Garman stated that the staff report explained what he had accomplished since the February 10, 2010 meeting. He stated that the Board had a lengthy discussion and came up with a lot of good information, which he compiled into a draft ordinance. He stated that the draft ordinance allowed a wind turbine or wind energy facility to be located in most all of the zoning districts in Town, but would be limited to either small wind energy facilities or rooftop energy facilities. He added that the wind energy facilities could not be a principal use structure and would have to be an accessory use to another type of principal use structure.

Director Garman stated that the Board discussed various use guidelines and thought the draft ordinance was consistent with the Board's discussion. He stated that the height limits existing in each district would stay the same and would also apply to wind turbines. He explained that where thirty-five (35) foot height limits were in place, it would apply to wind turbines, however in residential districts an additional five (5) feet would apply to other structures such as cupolas and wind turbines. He stated that in the RS-2 District, which allowed a fifty-two (52) foot height

limit, it would allow a wind turbine making the height limit at fifty-seven (57) feet. He stated it would also apply to roof top turbines in residential districts.

Director Garman noted that commercial districts would have a different procedure for allowing some sort of variance to the existing height limitation and would go before the Board of Adjustment. He added that it would be a more cumbersome procedure but would allow more flexibility. He stated that the additional five (5) foot for residential districts would be an administrative process approved by staff. He stated that the variance for Commercial Districts would not be limited to any specific number. He noted that in the staff report that the Board may want to discuss parameters for standards when dealing with variance requests.

Council Liaison Burdick noted that four (4) feet was referenced in the draft ordinance. Chairman Britt noted that the Board had already discussed the issue. Director Garman stated that it was referring to parapet walls and not wind turbines. Council Liaison Burdick thought it was referring to everything in the list. Director Garman thought Council Liaison Burdick was reading the ordinance differently than it has been administered. He stated that the parapet walls were the only thing that was limited to four (4) feet above roof level. Council Liaison Burdick suggested adding a semi-colon before parapet. Director Garman stated he would adjust it.

Member Fricker stated he had the same difficulty with the language. Director Garman stated that the intent of the ordinance was to imply the four (4) foot limitation of parapet walls. He stated that he would adjust the ordinance.

Director Garman stated that the following basic premises applied to the ordinance: height, included details on aesthetics, type of tower that would have to be used, exterior finish, lighting, communications antennas, how it would have to be designed to meet wind zone requirements, procedures for decommissioning and what would have to be included in the permit application. He noted that the ordinance was designed to be a permitted use without having to go before the Planning Board or Town Council. He pointed out that the draft ordinance as written would limit these to one (1) wind energy facility per lot and thought it would be a good point for the Board to discuss. He added that the biggest discussion point for the Board would be the noise issue and a procedure would need to be put in place to deal with it.

Chairman Britt suggested that the Board start at the beginning of the draft ordinance and work their way through it. He noted that the Board should comment on any language or specific parts of the ordinance.

Council Liaison Burdick asked why there were meteorological towers in the definition portion of the draft ordinance. Director Garman stated it was a definition taken from the model wind ordinance and was a commonly used term.

Member Fricker asked if the first definition in the last line should read; "...or building integrated roof mounted systems..." He pointed out that the first definition of wind energy facilities specifically excluded roof mounted systems. Director Garman suggested striking the sentence from the ordinance. Member Fricker wasn't sure it should be stricken. He thought how the term was defined would affect how it would be interpreted. Director Garman clarified that he did not touch the definition. He added that he did not intend to exempt roof mounted systems from the

ordinance. Member Fricker noted that if it was excluded by the language that was drafted, it meant that a permit would not be needed to install a roof mounted turbine. He thought the definition should be included in the ordinance. Director Garman suggested deleting the last sentence of the first definition for wind energy facilities.

Council Liaison Burdick pointed that the 20kw limitation would limit what commercial properties could use. He wondered why the limitation was there and thought it did not fit the uses people may want to use. Director Garman thought it would be ambitious for someone to think that they would meet their entire energy demand with a wind turbine, especially with the height limitations the Board had discussed.

Member Fricker thought the reply to Council Liaison Burdick's comment was on Page 3 of the ordinance under wind energy facilities in subparagraph B. He noted that the last sentence read: "...wind energy facilities – total rated capacity greater than 20kw would be considered to be incompatible with development patterns in the Town of Duck and therefore prohibited..." He stated that the Board was not trying to afford every residential homeowner the ability to totally provide their home energy through wind turbines. He noted that the ordinance stated that wind turbines were designed to supplement other electrical sources. Director Garman stated that that was the key to the ordinance in that turbines were designed as a supplement. He stated that it was a tiered structure that was developed by the model ordinance. He added that anything greater than 20kw would result in other issues.

Chairman Britt asked if the Board even needed to have the numbers with all the other limitations that they were looking to place on owners. He wondered if the Board was putting rules in the ordinance that were not needed. He thought the Board was not trying to control how much could be kicked back into the system, but the effects on the neighboring properties. He thought maybe the language could be stricken from the ordinance. Vice Chair Blakaitis agreed with Chairman Britt's comments. He added that 20kw would be more than enough to handle a house. Director Garman suggested that he could put in a definition of a medium and large wind energy system and note that they would be incompatible.

Member Forlano stated that he looked at the last sentence as the ordinance would eliminate the possibility for a large wind facility in Duck, and particularly with regard to commercial entities. Director Garman stated he was correct and that it would be on a utility scale. Member Forlano clarified that something on a utility scale would fall in with the first definition. He further clarified that it would pertain to a large commercial facility. Director Garman stated it would only pertain to a general description of a facility. Member Forlano asked if the ordinance would be eliminating the possibility of a commercial facility in Duck. Director Garman stated it was the intent of the ordinance.

Vice Chair Blakaitis asked what would happen if a commercial business owner came in wanting to put in a wind facility halfway between the beach and the road where only the top of the turbine would be seen. He thought if it did happen; the Planning Board would need to revisit the ordinance while letting the turbine be installed.

Member Fricker asked if it was known what the impacts would be if the Town allowed wind turbines with a capacity greater than 20kw. Chairman Britt stated that there was language in

place that addressed height, noise and concerns of the community with regard to the effect on the neighbors. He added that he did not understand why a definition was needed as to what could be generated. Director Garman stated it could be taken out of the ordinance. Member Fricker suggested calling the wind turbines a supplemental wind energy facility. It was *consensus* to have the change made to the ordinance.

Vice Chair Blakaitis stated that he had a problem with a deck-mounted turbine in that the structural requirements would have to be much stronger. Chairman Britt stated that the issue was covered in the ordinance. Director Garman and the Board went on to discuss roof mounted systems. Director Garman stated he would rework language in the ordinance with regard to roof mounted systems.

Member Forlano noted that on Page 3-3, it referenced a maximum of one (1) wind energy facility for roof mounted systems. He asked if it addressed multiple roofs. Member Fricker stated that it was inconsistent with the definition as originally drafted of a roof top wind energy facility. Council Liaison Burdick asked if there was any reason to limit them to the roof tops. Member Fricker stated that there was if the turbine was free-standing. He added that a distinction could be made that there could be multiple roof top turbines. Member Forlano suggested adding the distinction. Vice Chair Blakaitis agreed. Chairman Britt noted that roof top mounted turbines were not of any concern regarding falling as it was considered part of the entire structure. He added that he interpreted the ordinance to read if an owner put in a roof mounted system, they would not be able to put in a free-standing one as well.

Member Forlano asked if the ordinance could limit an owner to one (1) free-standing wind facility. Chairman Britt stated it could be done. Member Fricker suggested limiting multiple roof mounted facilities. Vice Chair Blakaitis stated that he was fine with multiple roof mounted turbines as well as a free-standing one. Member Forlano noted that all of these issues may be objectionable, but the Board needed to be cognizant of property rights. Chairman Britt noted that the ordinances do not address aesthetic issues in any of the other residential rules.

Vice Chair Blakaitis asked if the ordinance could limit roof top wind generators to a certain number, but still allow a free-standing one. He wondered if it would be better aesthetically. Member Fricker noted that there may be industry standards that were self limiting. Chairman Britt stated that at the Board's last meeting, they decided that they did not want to stand in the way of wind energy, but did not want to make exceptions to height. He thought there could be more than one wind turbine if they fit on the property as it was in the spirit of where the Board was going with regard to the ordinance. Member Forlano and Chairman Britt thought #3 on Page 3 should be eliminated from the ordinance. Vice Chair Blakaitis clarified that the problem with multiple roof mounted and free-standing turbines was resolved. Chairman Britt stated that he was correct.

Council Liaison Burdick thought aesthetics was a concern of the Town Council. Member Forlano stated that the Board could not regulate aesthetics. Chairman Britt agreed with Member Forlano's comments. Member Forlano thought the Board should be concerned about safety. Chairman Britt stated that the Board wanted to allow turbines within the Town's existing regulations as it was the spirit of what the Board wanted at their last meeting. He stated that the

Board would send the ordinance forward as a recommendation and if Council wants to add aesthetic values in it, then so be it. Member Forlano agreed.

Council Liaison Burdick stated that his question was not from an aesthetic value, but thought there were there some safety standards that would be written into the ordinance that would preclude the problem. He thought the only item in the ordinance was the one regarding noise. Chairman Britt stated that the issues were in the ordinance. He suggested that #3 be stricken from the ordinance. Vice Chair Blakaitis stated he was undecided with regard to striking #3. Member Fricker stated that he was opposed to striking it and did not accept the premise that it was not for the Board to legislate aesthetics. He thought the entire Town of Duck reflected that the Board was very conscious of aesthetics. He stated that he knew of no reason why the thirty-five (35) foot height limit was required on buildings. He stated that it was an aesthetic value the Town had legislated when the Town was incorporated. He thought it remained an issue and was opposed to striking #3 from the ordinance. Member Forlano thought the issue should be debated. Chairman Britt suggested that #3 stay in the ordinance and that the Board would further discuss it at their March 10, 2010 meeting.

Chairman Britt directed the Board to discuss noise in the ordinance. Vice Chair Blakaitis noted that there were two (2) noise options in the ordinance. He clarified that the second option was taken from an ordinance from California. Director Garman stated that second option was taken from the Pine Knoll Shores' ordinance and the first option was pulled from an ordinance from Charlotte, North Carolina. Council Liaison Burdick thought the distinction with regard to day and night noise was something that stood out to him. Director Garman pointed out that dwellings were designed to attenuate a certain type of noise. Member Fricker noted that there wasn't a real standard on noise or how to measure noise. Chairman Britt agreed and noted that it was very difficult on the Outer Banks because it's very windy. He stated that he liked the idea of a specific test that would not tax Town staff. Member Fricker stated that it appeared that there wasn't an industry standard. He stated that the variable of noise was not something the Board had to regulate, such as output or the number of units on a property, because everything that would be regulated was going to be controlled. He added that the noise was not an issue the Board would be able to regulate because it was soft and there wasn't a standard. Chairman Britt agreed and stated it was a prominent gray area in the ordinance.

Member Forlano liked the suggestion on the ordinance where it stated that the applicant would be required to have tests performed according to industry approved methods. He added that the homeowner would have to have an anemometer on the wind turbine for one (1) year. He asked if there was an ability to test what the turbine would put out with regard to noise. He further asked if it could not be a requirement before an owner can obtain a permit. Director Garman thought that was what he was suggesting. He stated that the manufacturer should have some sort of model that could be run. He stated that the property owner should be reasonably assured that they would meet the standard. Member Forlano asked if the ordinance could state that anything over 10 decibels over ambient sound would not be allowed and the property owner would have to show the noise that the turbine would put out. Director Garman stated that the owner would have to show staff their model and should be reasonably assured that the facility will meet the standard. He added that more specific parameters would have to be defined and would need more research.

Council Liaison Burdick noted that he had experience in industrial settings where the Environmental Protection Agency regulated noise. He stated that there were pre-set limits for noise and noise protection was dependant on the limits. He stated that he didn't see any reason why the Board could not come up with a standard test that would need to be performed with a set limit above ambient with regard to day or night noise. Director Garman noted that industrial settings had machinery that had to be controlled and the test gave a certain reading so one would know whether anything needed to be completed to get the noise level lowered. He added that with wind, the test could be taken when the wind was blowing 15mph southwest and give one reading, but if the test was taken again with more than 25mph winds out of the northeast it would give a different reading. He cautioned the Board that wind would be tricky.

Vice Chair Blakaitis stated that noise was a real sticky subject as there could be a house in a quiet area and unnecessarily restricting the decibel level would not be right. Member Forlano agreed and stated that was what the ordinance would protect. Chairman Britt stated that the Board wanted to be serious regarding the effects on neighboring properties. He suggested that Director Garman look into it some more. Director Garman stated that he would.

Chairman Britt directed the Board to discuss aesthetics. He asked if there were any comments or changes to the ordinance. It was *consensus* of the Board that the aesthetics portion of the ordinance was fine.

Chairman Britt directed the Board to discuss structural requirements. Member Fricker thought Paragraph 1 in Section D needed to be reworked. He stated that the introductory phrase; "...wind turbine structures..." was not used anywhere else within Section D. He added that every place else in the ordinance referred to "wind energy system". He proposed the following language: "All wind energy systems shall be designed..." He further proposed the following language: "All wind energy systems shall be designed to meet, and be certified by a North Carolina licensed structural engineer..." Director Garman stated that the proposed language could not be put in the ordinance. Member Fricker changed the language to read: "...by a professional engineer that the system does meet the design requirements..." Vice Chair Blakaitis stated that if a certified engineer was stamping the drawings, he would be saying what Member Fricker was proposing. Member Fricker disagreed. Vice Chair Blakaitis noted that that was what the language was implying. Member Fricker suggested making it "express". Vice Chair Blakaitis stated that the engineer was licensed. Member Fricker thought that because Vice Chair Blakaitis assumed what Member Fricker meant was really not what he meant. Vice Chair Blakaitis stated that when a professional engineer puts his stamp on plans, he was saying that it meets the requirements.

Vice Chair Blakaitis clarified that Member Fricker wanted not only a stamp, but also a statement on the plans. Member Fricker stated that he wanted the code to say that the Town understands the steps. Vice Chair Blakaitis stated it could be done.

Chairman Britt stated that he had a comment regarding the sentence that stated: "...including the ability to withstand the force exerted by 130mph three (3) second wind gusts..." He asked why the language was in the ordinance. Director Garman stated that it was right from the mouth of Building Inspector Cory Tate and the North Carolina Building Code.

Member Fricker asked why “a licensed structural engineer” could not be language that could be used in the ordinance. Director Garman stated that he had talked to engineers. He stated that they get tested to be a professional engineer and then work in a certain expertise for a certain number of years. He stated that it was understood in the profession that engineers were not supposed to stamp or certify things that they were not qualified to stamp. He stated that whenever a person has a problem with something another person did where plans were stamped from an engineer who was not qualified to do so, it becomes an issue with their board and a complaint could be filed. He stated that it was how the trade governed itself. He stated that there was no such thing as a structural engineer, only an emphasis in structural engineering.

Member Forlano asked for an explanation of industry standards. He thought there weren't any standards set up yet for wind turbines. Director Garman stated that they were being worked on.

Chairman Britt directed the Board to discuss decommissioning. Member Fricker stated that Subparagraph 1, five lines down in the ordinance read: “...given 45 days from receipt of said notice...” He stated that Subparagraph 2, towards the end read: “...shall give written notice by registered mail...” He suggested that the language be changed from “registered mail” to “certified mail”.

Chairman Britt asked if there were any issues with Subparagraph 3. Member Fricker suggested adding the following language to 2B in Subparagraph 3: “...certifying that drawings conform to all structural requirements established by law or industry standards...” Chairman Britt stated that the engineer's seal meant that. Vice Chair Blakaitis agreed but adding the extra language would make more sense to him. It was *consensus* of the Board to add the additional language to the ordinance.

Chairman Britt stated that the Board had discussed taking out the language regarding capacity from the ordinance. He asked if C was needed. Council Liaison Burdick thought the manufacturer's specifications would be needed. Vice Chair Blakaitis noted that Section H had the same language that was in Section B. It was *consensus* of the Board to strike Section H from the ordinance.

Council Liaison Burdick noted that the ordinance referenced \$500,000 for homeowner's insurance. He noted that the standard was \$300,000. Vice Chair Blakaitis stated that most homeowners had an umbrella policy. Council Liaison Burdick disagreed. Chairman Britt asked where the \$500,000 liability insurance came from. Director Garman stated he had taken it from the Pine Knolls Shores' ordinance. Chairman Britt stated that he would like the Town Attorney's opinion if the \$500,000 insurance should be left in the ordinance. Director Garman stated he would research the issue further.

Chairman Britt directed the Board to discuss variances. Member Forlano asked why there were four (4) feet on commercial and five (5) feet on residential. Director Garman stated that was clarified at the beginning of the meeting, and the four (4) feet referred to parapet walls. Member Fricker asked if something needed to be added at the end of Section A in Paragraph 6 that could state: “...provided, however, that the Board of Adjustment makes findings of fact that the variance will be in harmony with...” He asked if it needed to be in the ordinance. Chairman Britt stated that his interpretation on variances was that it was a difficult thing to prove if the

rules were read the way they were supposed to be read and that there could be no other option. He stated that he didn't see how any wind turbine could fall under a variance. Council Liaison Burdick asked if there was a reason to differentiate that from the five (5) foot additional restriction. Director Garman stated that it would only apply if there wasn't a limit in place for commercial areas. Chairman Britt stated that variances were very difficult by the definition to grant. He added that there could not be any other option. He stated that he didn't see how the owner could obtain one. Member Fricker asked if Chairman Britt's comments were true, it should be written into the language of the ordinance. He stated that he understood that if a person was seeking a variance from the Board of Adjustment, the Board of Adjustment had to make findings of fact, but noted that the issue with Sunset Grill had nothing in the underlying ordinance to tell the Board what the findings of fact were that they were supposed to make. He asked if the Planning Board should help the Board of Adjustment by stating in this section that they needed to make findings of fact to include findings with the general purpose, intent of the chapter, not injurious to neighboring properties, otherwise detrimental to the public, and due to having no other options. He wondered if it should be in the ordinance.

Chairman Britt wondered if there was another avenue the Board could pursue. He thought the point was to try to give the commercial district some flexibility. Director Garman noted that the variance section of the code read that there were a series of findings that the Board of Adjustment would have to make in order to grant the variance. He stated that he had a problem with it as the Board would be getting into a larger issue with the section. He thought the spirit was to allow flexibility for height limits for cupolas or an ornamental tower or dome. Chairman Britt thought the Board should not be doing it with a variance. Director Garman agreed.

Chairman Britt asked if the Board was saying that there needed to be an avenue for commercial landowners to go above thirty-five (35) feet. He asked if the Board wanted to go in that direction. Vice Chair Blakaitis stated that he wanted to go in that direction. Member Forlano agreed and stated that he wanted to allow flexibility in commercial areas to go higher. He noted that there would be other self limiting factors. Director Garman stated that if the goal was to allow the same height allowance that was applied to residential areas, which was five (5) feet, it could be taken out of the variance section completely and include it in the wind turbine section of the ordinance under height and state that the turbines shall not exceed five (5) feet above the maximum height limit for the district.

Member Fricker asked if the Board would want to allow turbine heights to extend any farther above the roof of a commercial building or the roof of a residential building. Member Forlano stated he would not. He didn't see why it should be allowed. He thought it would be easy to legislate if the turbine were five (5) feet above and no higher. Chairman Britt stated he was pro alternative energy, but thought height was going to be an issue. Director Garman stated he would change Section C1 to allow for five (5) feet above the limit for the district height limit.

Chairman Britt stated that the Board would need to discuss at their next meeting the number of wind turbines per lot. He added that Director Garman would be doing some work on the noise issue and come back with something that the Board would be happy with.

Member Forlano asked Paul Keller what his feeling was regarding an owner putting in a wind turbine next to his property or seeing wind turbines in the Commercial District. Paul Keller

stated that he wrote down consider wind turbine restrictions in subdivisions covenants. He stated that he would not want one in the direct line of vision between his home and the ocean. He thought the lower height for wind turbines was a good option.

NEW BUSINESS

None.

APPROVAL OF MINUTES

None.

OTHER BUSINESS

None.

STAFF COMMENTS

None.

BOARD COMMENTS

Chairman Britt noted that he will not be in attendance at the March 10, 2010, but that Vice Chair Blakaitis would chair the meeting.

ADJOURNMENT

Chairman Britt moved to adjourn the meeting.

Motion carried 5-0.

The time was 8:21 p.m.

Approved: _____
/s/ Joe Blakaitis, Vice-Chair