



Town of Oak Island Brunswick County, NC

The Town of Oak Island will preserve, protect, and enhance the quality of the natural and cultural environment of the community. In order to achieve this goal, the Town will improve the quality of its waterways, natural environment, beaches, dunes, water access and residential areas. The Town will maintain a unique scale and character that fosters a sense of community to make the Town a desirable place to live, work and call home, and a family vacation destination. The Town will also develop efficient sidewalks, bikeways, and roadway systems to protect its attractiveness in the future. The Town will also expand its recreational opportunities for residents of all ages and abilities. The Town will balance social and commercial needs and objectives for economic vitality.

Planning Board Meeting Agenda December 19, 2019 • 10:30 AM Town Hall • Council Chambers

I. START-UP

1. **Call to Order:**
2. **Additions or corrections to the agenda**
3. **Approval of the Minutes:** (11-21-2019)
4. **Public Comment:** Please state your name and address for the record.

II. OLD BUSINESS

1. **Text Amendment - Lighting**

III. NEW BUSINESS

1. **Zoning District Designation**

2. REPORTS/UPDATES

1. **Board Member Reports**
2. **Staff Report**

3. OTHER

Future Meetings: 1-16-20
Adjournment



MINUTES
PLANNING BOARD
November 21, 2019 – 10:30 a.m.
COUNCIL CHAMBERS – TOWN HALL

Present: Chairman Bob Carpenter, Vice-Chairman Willie Williams, members Cathy Bowes, Michael Brown, Mike Defeo, and Lynn McDowell, Planning and Zoning Administrator Jake Vares, and Town Clerk Lisa P. Stites, MMC. Chairman Carpenter noted that Ms. Vickers was unable to attend the meeting.

Chairman Carpenter called the meeting to order at 10:30 a.m. and led the Pledge of Allegiance to the flag.

Chairman Carpenter added a New Business item, Discussion of Text Amendment Impact Analysis Statements. **Mr. Williams made a motion to approve the agenda as amended. Mr. Defeo seconded the motion and it passed unanimously.**

Mr. Williams made a motion to approve the October 17, 2019 Minutes as amended to fix a typo, Mr. Defeo seconded the motion and it passed unanimously.

Public Comments: There were none.

New Business:

1. Lighting text amendment: Mr. Vares said the proposed amendments were citizen-initiated (Pine Forest Plantation). He said these amendments would make the Town's regulations similar to those Brunswick County uses, and that they would only apply to the mainland. Clayton Rivenbark, engineer with BEMC, spoke about the calculations done to plan for lighting. He said that with the amendments, they could raise the poles and use fewer lights. Under the current regulations, it would take 48 20-foot poles to light the outside perimeter/parking for the project. With the amendments, that number would be 27 30-foot poles. He said the lumens level could be kept consistent. Ms. McDowell asked about the maximum illumination table, which does not exist at all now. She asked what on the island would compare to that. Mr. Vares said that the proposed amendments would apply only to the mainland. He said there were BEMC pole lights on the island, and also commercial pole lights which are compliant with the existing ordinance, such as those at Food Lion. Ms. McDowell said she was really asking about the illumination levels, as she couldn't know just from the numbers what a reasonable level would be. Mr. Rivenbark said that Oak Island's ordinances did not currently have a maximum number. Ms. Bowes asked if the sea turtle people should review this; Ms. McDowell said that typically these poles are not on the beach. Ms. McDowell asked if the number in 10.44.6.1 should be 30 feet instead of 40 feet. Chairman Carpenter said that the ordinance would match Brunswick County's ordinance, which is 40 feet, though this particular project would only use 30-foot poles. Ms. Bowes asked if the ordinance should be more specifically defined if it is supposed to be for the entire mainland area. She said there may be property on the mainland that doesn't fit into one of the categories covered. Mr. Vares said he thought there were only a couple of houses on the mainland that weren't already part of a major subdivision. He said if the Board wanted to add something as Ms. Bowes suggested, it could state what areas the ordinance applied to. Ms. McDowell said that wouldn't that mean that someone could build a house on the mainland and put in a 40-foot light pole. Mr. Defeo asked if there was any reason these proposed changes couldn't apply to the island as well. Mr. Vares said that the island and mainland had different needs, just as commercial districts have different needs than residential districts. He also said he likes the current lighting regulations for the island portion of town and that he didn't think poles higher than 25 feet would be wanted on the island. Mr. Vares said that typically, rules for the island are more restrictive, it's more built out, with higher density. Mr. Defeo said that if someone on the mainland is allowed to have a 30 or 40-

foot pole for a business and he wants to put one in, he doesn't want anyone telling him he couldn't do it because he is on the island; if it is good for the mainland, then it should be good for the island. He also said that he didn't have a problem with the modification, just how it applies. Mr. Rivenbark said they had done a couple of projects at churches on the island, and that he thinks they used 25 or 30-foot poles in order to reduce the number of poles for those facilities. Mr. Rivenbark also said that 40-foot poles would not really be appropriate for residential. The goal of the ordinance is to make sure light is kept on the property. Mr. Defeo said that he was talking about equality, because these changes would allow 40-foot poles in South Harbour as well. He said that there should be one, consistent set of standards that applied to the whole town. He said that there will be other new developments and that having different lighting rules for each one of them, it would be a nightmare. Ms. Bowes said she would rather hear from someone with the turtle program about the potential impact on turtles before making a decision about changing the rules for the island. She said she didn't have enough information to consider a change for the island side. Mr. Defeo said that he didn't have the information to make a decision, because he wants to understand the impact. He said that he doesn't like two sets of standards unless he is shown that there are significant issues with the proposed amendments applying to the whole island. Mr. Brown asked about 10.44.7, suggesting changing the maximum height to 30 feet; then this section would allow a higher pole in certain circumstances. Mr. Williams said that he didn't like "cut and paste." He also said that he thought there should be different standards for on and off island. He said that in some places the staff title used is sometimes Planning Director, and other times it is something else. Mr. Williams asked if Sec. 10.45 applied to the whole town, including the island. He said that section and the following one needed to be amended if they were intended to apply to the mainland only. Mr. Williams also noted that 10.41.7 needed to be indexed, along with 10.37.4. Chairman Carpenter said he had asked for a chart for wattage, lumens and foot candles, so that when they are looking at these, and when Council is looking at it, they'll be able to make comparisons and know what they're talking about. He also said that last month they were asked to do a text amendment for signs for Pine Forest. Now, they're making another request and they are again referencing Brunswick County. He said that we don't know what went into making decisions for the Brunswick County ordinances; they might have higher buildings and need higher light poles. Chairman Carpenter said that Pine Forest can't come here on a monthly basis and ask for a text amendment change because this is what Brunswick County does; there is a reason why we do our own UDO. Chairman Carpenter recommended getting together separately from a Planning Board meeting, just like was done for drafting the UDO, and just hash out the UDO topic, looking at what we have currently and the changes they want to make and see how they can adapt them so they work for everyone. He said that this is basically piecemeal. He said that there should be easy to understand standards, because he can't tell if these amendments would make things brighter and if they are brighter and higher, does that make it brighter overall or is it diffused by being higher. Chairman Carpenter said this was devolving into substantially changing the UDO, and there are some members of Council who don't like having different rules for the mainland, so if we're going to venture in there, we should make sure it's easy for the Council and the public to understand the rationale for the Planning Board's decision. He said that rushing this through with edits of what was a cut and paste job was not an effective way to develop a tool that is useful for the Town. Ms. Bowes said that this proposed amendment was very much a Pine Forest thing, and there are other areas, like South Harbour, that this will affect, and we can't be doing things piecemeal. She said that if they are going to adopt rules for the mainland, it has to be consistent with every single type of building that may occur on the mainland. Mr. Vares said he disagreed with a lot of what was being said. He said that he wouldn't consider this a devolving of the UDO. He also said that it is not rushing the process, that this is the process. Someone applies for a text amendment, it goes to the Planning Board, maybe it gets tabled, and then to Council, and that is the process. He said it's the process that has been done here for many years, that it is the process used across the State, and that we once had more than 30

text amendments in one year. He said that the UDO is a living document and that it will have to be changed from time to time. Chairman Carpenter said that as the Town is growing and we have to make more decisions for the mainland, it is significant for the citizens of Oak Island. He said that if they are going to do this, it should be done at an open meeting (Ms. Stites interjected that this was an open meeting) and ask the turtle group to attend, ask Mr. Rivenbark to come back. Chairman Carpenter said they should sit down and discuss watts, lumens and foot candles and make sure that as they go through each section, they are consistent as they are explaining it so there won't have to be interpretation. He said that he is concerned about looking out and seeing stars and not seeing a glow on the other side of the island. Chairman Carpenter said he would be more comfortable having a "full-throated" discussion about the island and the mainland. He said this was rushing it considering the Board got the agenda less than a week before the meeting, and having a separate meeting for this topic would allow members to have time to do their research. Ms. Stites said that that's what the regular Planning Board meetings were for, so they could table this item to another meeting if needed. Chairman Carpenter said that he wanted another meeting to get more information because there was a lack of analysis on this product. Mr. Defeo asked if they could ask for a separate meeting. Ms. Stites said that she was trying to discourage them from having additional meetings since that's what their meetings are for. She said if their problem with this item was that they didn't have enough time to review it, calling a separate meeting before the meeting next month would not be helpful. Mr. Defeo said they also wanted to ask people to participate in the meeting. Ms. Stites said that could be done at the next regular meeting. **Ms. Bowes made a motion to table this to the next meeting and to invite some people to come, like the turtle people, and others who Board members may want to invite.** Mr. Vares said that it sounded like the Board members didn't understand the proposed amendments or think they had enough time to review them and have their questions ready. He said that Planning Board meetings have gone until 2 p.m. sometimes, and if they have questions or concerns, they should let staff know at this meeting so they can be prepared for the next meeting and so the applicant can also be prepared to respond. Chairman Carpenter said he thought they did express their concerns. Ms. Bowes said that she would like to have someone present from the sea turtle project so they can ask about the impact on turtles. She said that they need to look at everything on the mainland and make sure that all the areas are identified. Mr. Defeo said that they don't have any idea how this would affect South Harbour. Ms. Bowes said there were trailers and single-family homes on Long Beach Road, and she wanted to know what the impact would be on them. Mr. Brown said that his concern was the 40-foot limit. Mr. Rivenbark said the proposed amendment did not address single-family homes, that it was for commercial development. He also said that wattage was not being used much as a measurement anymore. Chairman Carpenter said that he still wanted a comparison to lumens.

Mr. Vares said that Pine Forest is a large development, 3,000-5,000 acres. He said it was totally normal and natural for a development of that size to have several amendments. He said the fact that they applied shouldn't put them at a disadvantage. Chairman Carpenter said he was not looking to put them at a disadvantage, but that when they were looking for a change, they were pulling it from Brunswick County ordinances. Mr. Defeo said this was presented as a change for the mainland, and that if they wanted to give Pine Forest different rules for lighting, they should set up a Pine Forest section for lighting in the UDO, and have one for South Harbour, one for the island, etc. He said that this was presented as a change for the mainland, beyond Pine Forest. Mr. Vares said that earlier, Mr. Defeo said that the rules should be the same for the mainland and the island and now he was suggesting different rules for every development. Mr. Defeo said if that was the direction they wanted to go, they should change the UDO to reflect that.

Mr. Defeo seconded the motion and it passed 5-1 with Chairman Carpenter and members Bowes, Brown, Defeo, and McDowell in favor and member Williams opposed.

Mr. Vares said that there was an expert here who could illuminate all the various questions they might have. Chairman Carpenter said that the turtle people weren't here or any other stakeholders. Mr. Vares said that he wasn't sure how a lighting amendment for the mainland would affect sea turtles. Chairman Carpenter said if they discussed having consistent rules for the mainland and the island, it could. Mr. Vares said that one of the big differences between what is proposed and the current ordinance is the height allowance for the pole. He said he thought 20 was a good cap for the island and he thought 40 would be too much. He asked the Board members to visualize a 40-foot light pole at Publix, or if their neighbor wanted a 40-foot light pole. Mr. Defeo said that he didn't see the difference. Mr. Vares said the difference is the amount of light that would spread out to his property but also to the surrounding properties. Mr. Defeo said the same would be true for mainland properties and somebody would still be impacted. He said that having differences for the mainland and the island was very disturbing to him. Mr. Vares said he supported private property rights and continuity of ordinances, but also ensuring that ordinances don't allow negatives impacts for surrounding properties as well. Chairman Carpenter said that what he was looking at was the brightness of the lights. Mr. Vares said that having different ordinances for the island and mainland did not complicate enforcement. He also said that commercial parking and commercial stormwater regulations were very different than residential, and that we have zoning districts with different regulations.

2. Driveways text amendment: Mr. Vares spoke about the proposed text amendment, a requirement that driveways be made flush with the road. Mr. Vares said this is something they look for when they do driveway inspections. Ms. McDowell asked Mr. Vares why this was a problem. Mr. Vares said it's something that has come up in the past, and this would ensure it doesn't continue happening. Ms. McDowell asked why the driveway had to be flush with the road. Mr. Vares said that stormwater runoff is supposed to go into the right-of-way area, sloping down from the center of the road. If the driveway is not properly installed, it will deflect water. Mr. Defeo asked if this was for driveways that meet the street, where the driveway is paved through the right-of-way. Chairman Carpenter and Ms. Bowes said that was correct. Mr. Defeo asked if staff would not issue the c/o in this case; Mr. Vares said if there is nothing in the ordinance to make it a violation, there would be no reason to withhold the c/o. Chairman Carpenter said that that the repaving being done on side streets would make ordinance violations, because they are not making the roads flush with the driveways. He said that this ordinance amendment would put the burden on homeowners to fix something they didn't cause. Mr. Vares said that this ordinance amendment would be triggered with new driveway permits. Chairman Carpenter said that was not what the ordinance amendment said. He said it would be different if the words "When a driveway is installed..." were added. Mr. Vares said that language could be added. Chairman Carpenter said that he wouldn't adopt the amendment since it wouldn't be enforced anyway and that he hated to think of the Town having "driveway police." Mr. Vares said staff did not go out to existing driveways and make sure they are flush with the road. He said that this would apply when someone asked for a driveway permit. Chairman Carpenter asked what would happen if a neighbor got upset with him and made a complaint about his driveway not being flush with the road; Mr. Vares said that he would mark that complaint unfounded, because there is nothing illegal about having a driveway that was permitted and then made nonconforming. Mr. Defeo said that was not what the proposed amendment said. Mr. Vares said that the amendment would apply to new driveways. Mr. Defeo said that he didn't see where it talked about new driveways. Ms. McDowell said the whole section was titled Driveway Construction, Permit Required Prior to Construction or Reconstruction. Ms. Bowes asked if we need to start stating it when rules apply to both the island and the mainland; Chairman Carpenter said if it is silent, it applies to both. **Ms. Bowes made a motion to approve the amendment and to adopt the plan consistency statement, and Mr. Brown seconded the motion.** Mr. Williams suggested adding the word "new" so it would read "...the end

of a new driveway.” **Ms. Bowes amended her motion accordingly, Mr. Brown seconded the amended motion, and it passed unanimously.**

3. Discussion of Text Amendment Impact Analysis Statements: Chairman Carpenter said that we have had a few text amendments and his question is always what the impact is on other similarly situated properties. He said he had asked Mr. Vares for text amendment memos to include such an analysis statement. He also asked that updated UDO pages provided to the Planning Board have the date ordinance amendments were made so that when future amendments are considered, Council can see how many times it was amended. He said that he writes the dates on his, but that people don’t see that online. Ms. Stites noted that the Town’s ordinances, hosted online at Municode, do include the amendment dates. Chairman Carpenter said that he would appreciate it if their copies would have that same information. Mr. Vares that there are times when preparing an impact analysis would not be feasible. He used the driveways agenda item as an example, saying that doing an impact analysis would involve looking at every single driveway in town and figuring out how many were raised, etc. Chairman Carpenter said he was talking about situations where the impact could be significant, such as the sign ordinance amendment for Pine Forest, having information on the impact for other commercial areas, if commercial has a requirement that is less than what was being created for residential, etc. He said when he did an impact analysis on the electronic signs, he studied the timing of the signs, and he commented on every impacted sign and adjusted what was proposed to add that the signs couldn’t be within 200 feet of a traffic light. Chairman Carpenter said when he goes to Council meetings, he knows he hears the same questions from Council members that they themselves often ask at the Planning Board meetings, and if they could have an impact analysis statement, it might help streamline any questions that people may have. Mr. Vares said he could do that whenever it would be useful and was feasible to do. Chairman Carpenter said he understood there would be times when it was not feasible. Mr. Vares gave another example, saying there was no way he could know how a change in the lighting ordinance would affect as yet undeveloped tracts such as the Williamson property. Mr. Defeo said that if he would document that as an answer to an impact analysis, that would be sufficient in that circumstances. Mr. Defeo said that in addition to an impact analysis, he wanted a justification statement when something is initiated by staff. Mr. Defeo also asked for specific references as to how a proposed action is consistent with the Land Use Plan. **Mr. Defeo made a motion to adopt this new rule, that they have a documented impact analysis, a justification statement and land use plan references. After additional discussion, Mr. Defeo amended his motion to direct staff to prepare amendments to the Planning Board Rules of Procedure consistent with what was discussed today. Ms. McDowell seconded the motion and it passed unanimously.**

Staff Reports:

Mr. Vares said that the community gardens amendment was approved by Council. The electronic signs and monument signs amendments were approved. There was no action taken on the accessory structures in the CB district amendment. The next Planning Board meeting is December 19.

Mr. Williams made a motion to adjourn at 11:49 a.m. Mr. Defeo seconded and the motion passed unanimously.

Bob Carpenter, Chairman

Attested: _____
Lisa P. Stites, MMC
Town Clerk

**TOWN OF OAK ISLAND
PLANNING BOARD
AGENDA ITEM MEMO**

Agenda Item: Old Business No. 1

Date: 12/11/2019



Issue: Mainland Lighting – Text Amendment

Department: Planning & Zoning Administrator

Presented by: Jake Vares

Presentation: None

Estimated Time for Discussion: 30 Minutes

Subject Summary:

The proposed text amendment is citizen initiated. The applicant submitted a permit for the multi-family portion of the Pine Forest tract and part of the plans were not compliant with the lighting section of the Oak Island UDO; hence the text amendment application. The applicants proposed wording is the language the Brunswick County UDO uses. Many other municipalities in Brunswick County also mirror Brunswick County’s lighting ordinance for continuity. The ordinance is also worded to apply only to the mainland side of Oak Island. The current lighting regulations is carry over from past Zoning Ordinance and was written for island side only needs.

The below lighting ordinance explains when the lighting ordinance is applicable; for commercial projects, multi-family, major subdivisions, and expansion and alterations of existing lighting infrastructure. The lighting exemptions are also codified to exclude: lighting for temporary events, maintenance, repairs, and damaged lighting up to a specified benchmark. The proposed ordinance and mandates when a lighting plan requirement is triggered. Like the existing lighting ordinance the new wording regulates skycaps and shields on fixtures to prevent up-lighting and light trespass, and also sets a height limit on pole lighting. Continuity in lighting is included in the ordinance and requires that the same light source type must be used for the same or similar types of lighting on any one site throughout any development. The preferred and prohibited light source type is also outlined. The mounting of lighting fixtures must be done in a manner to contain the cone of light on-site and to ensure maximum illumination levels off-site are not excessive.

A foot-candle is a unit of illuminance or light intensity. One foot-candle represents the illuminance cast on a surface by a one-candela source one foot away. This unit is commonly used throughout the United States. The word “lumen” is the standard term used to describe light output. 1 Lumen per square foot is equivalent to 1 foot-candle inversely one foot-candle is equal to one lumen per square foot.

The first table below sets a minimum and maximum lumen levels measured on the pavement within the lighted area and average level (the overall generalized ambient light level). This is incorporated in ensure uniformity in lighting. The second table specifies the maximum illumination allowed and measured at the street and property line. If the adjacent property is commercial then the number of lumens can be greater. The ordinance is designed for safety, aesthetics, to reduce light pollution, and to contain the light on site. BEMC (i.e. Brunswick Electric) handles the power infrastructure within Oak Island's jurisdiction and will work with the town to ensure compliance as they are the entity that also reviews lighting plans before installing the infrastructure.

From the past meeting staff has codified all the questions asked from the audio here in this staff report. Staff also emailed out a request for any additional questions not covered in the past Planning Board meeting, one email came in and those questions and responses are also codified here.

- Do we know how the island side of the town compares with the Maximum illumination table on Section 10.45.2? – There are pole lights on the island such as street lights and commercial pole lights. No, staff has stood next to every single pole light on the island to measure the illumination levels and compared it to table 10.45.2. Clayton, from BEMC, then began answering and said the current Oak Island lighting ordinance does not have a similar table that establishes a cap of lumens allowed. It should be noted Section 10.42 of the current UDO, which is carry-over language from the past zoning ordinance, does set a foot-candle of 0.3.
- How are the sea turtles effected by the lighting ordinance? – The proposed text amendment is written to apply to the mainland side only so there would be no effect by this ordinance. If the ordinance was modified to include the both mainland and island side and the proposed height cap changed then that would negatively affect the ocean-front lighting infrastructure with regard to sea turtles. There is still one property on the island side of Oak Island that could be a major subdivision and it is by the beach. Section 10.41 in the existing ordinance does address lighting in regards to sea turtles. That ordinance section says in order to protect sea turtles any lighting within 300 feet from a frontal dune shall be designed with cut off fixtures, shields, skycaps, and height limits so as to not shine on the front dune. To implement and enforce this ordinance staff checks the development building plans for compliance when reviewing and inspecting ocean-front construction. Clayton then answered that when BEMC receives a request to install lighting close to the beach they work with the town to be compliant and follow their codes.
- Section 10.44.6.1 says that a pole light may be 40 feet but the 30 feet was stated for your project during discussion? – Yes the proposed ordinance allows 40 feet, but for this specific project inside this part of Pine Forest they are planning to have 30 foot light poles. Clayton then responded that on the mainland side where you can have some taller

building and large facilities up to 40 to 45 feet high; if you have a 40 foot pole by a structure that is also that high then you can cast the light further which reduces the number of poles needed.

- Section 10.44 called mainland exterior lighting details the scenarios where the ordinance is applicable, what about the situations that are not applicable? Should there be a statement defining that is covers the whole mainland? If it is called mainland exterior lighting would the ordinance cover the scenario of somebody is building a house on the mainland? – The proposed ordinance says it is applicable if it is a major subdivision and planned unit development which have single family residential homes in them as well as other type of residential structures. There are only a few homes on the mainland, some off 211 and a few off Long Beach Road that are not a part of a major subdivision. To be even more clear; under the part of the ordinance that says Applicability, 10.44.2, wording could be added in that says “and other residential developments/structures.” However, if such wording is added in then any individual residential lot could have a 40 foot pole which may not be desirable and it could cause light pollution on adjoining lots. This is not recommended. If a permit to install lighting on the mainland is not applicable pursuant to Section 10.44.2, then the current existing island side lighting ordinance would have to be adhered to. The below answer expands into this concept further. The important thing to remember is that the applicability section of the ordinance specifies for new subdivisions, so existing residential areas not under construction/plan review would have to adhere to the existing ordinance standards.
- How would South Harbor Village be impacted for example? – The applicability section of the proposed ordinance is for new major subdivisions and planned developments. Meaning the ordinance would not be applicable to South Harbor Village or any other pre-existing similar development. Those areas would still have to comply with the current lighting ordinance. However if the South Harbor Village, for example, were to apply for permit to expand or modify their lighting colors and number of fixtures then they would have to comply with the lighting ordinance and the illumination table in Section 10.45.1, meant to ensure uniform light distribution.
- Is there any compelling reason the proposed ordinance could not also apply to the island? – The mainland has different needs and characteristics than the island. In the same way commercial zoning districts have differing regulations from residential, industrial, open-space, etc.... zoning districts all have various ordinance standards due to the differences in those zones. Additionally, ocean-front properties and properties next to major water features have additional CAMA and flood plain regulations that apply to them that do not apply elsewhere due to their proximity to environmentally sensitive land are proclivity to flood. The current lighting ordinance is carry over from our past zoning ordinance which was written before the mainland side of Oak Island’s jurisdiction existed. It was designed specifically for the island and in such a way to account for high density, build out, close neighbors, and to attempt to limit light trespass on adjacent properties to avoid causing a

nuisance to surrounding residents. This is the primary reason the ordinance was drafted to set a 20 (residential pole lights) to 25 (commercial pole lights) height limit. As mentioned before the reason for high mainland lighting pole limits in the text amendment is because that reduces the need for the quantity of light poles to be as numerous because the higher the pole the greater the dispersion of light. In a high density area with small lots and close neighbors a 40 foot light pole would emit light well beyond the confines of one single residential parcel and would cause a great amount of light trespass onto un-wanting neighbors. If the goal is to have equality, then allowing greater pole height on the island side would create an inequality due to the light trespass that would happen to surrounding properties.

- What would the impact of lights be on the lots for sale behind Publix? – As written there would be no impact because it would apply to the mainland side only. If the text amendment were to be changed, as suggested, to apply across the entire town boundary then yes there could be a harmful impact to sea turtles.
- Should not the title Planning Director change? – The planner position title has changed over the years and may change again in the future. New wording is now inserted to address this.
- Section 10.45 and Section 10.46 titles do not specify mainland? – A very good point and the needed modification has been made making that clear. The revision has been made red to easily view.
- Shouldn't Section 10.41.7 and Section 10.37.4 be indexed? That correction has been made.
- Impact analysis? As explained at the last Planning Board, drafting an impact analysis is not feasible due to the many unknown variables. This text amendment would not only apply to Pine Forest alone but also to all of the mainland areas (pursuant to the applicability section). The lighting needs/plans for other mainland tracts is unknown. Perhaps a consulting firm could put together a report that may cost tens of thousands of dollars that would be a starting point; but not every possible lighting placement, number and height scenario could be covered. Pine Forest did provide a lighting plan for their specific site that shows the pole location, height, lumens, and a buffer around each pole showing the light distribution. The plan was intentionally left out of the Planning Board agenda packet because this text amendment is not site specific but would apply to all the mainland that meets the Applicability part, 10.44.2, of the code. One cannot tell exactly where every light pole might be placed, if any at all, what the exact pole height for each light may be, and the numbers of every possible lighting pole/size is innumerable. The same would be true if the ordinance were modified and adopted to apply to the island-side as well because there are a plethora of light pole locations at multi-family and commercial sites where lighting could be added in multiple different ways which would affect the illumination. There may be only one island-side parcel left that could be

subdivided to qualify as a new major subdivision, thus the applicability of the proposed lighting ordinance, if made jurisdictional wide would apply at that site, at all multi-family/commercial sites, and to existing poles requesting an increase.

- What modifications to existing code is necessary to align with the new standards? Several portions of the existing code would need to be revised if the proposed ordinance amendment were to be changed to apply across all of Oak Island's jurisdiction. The ordinance sections about lighting pole height limits would need to change or just be removed altogether. Much of the ordinance language regarding commercial lighting would need to be replaced or incorporated into the new ordinance. Some ordinance sections such as the lighting signage and sea turtle section should remain and it doesn't overlap or those regulations would want to be kept. Since the applicant never applied to tweak the existing ordinance language but opted to create additional sections this answer was not provided in the original staff report since it was outside the scope of what the applicant was requesting.
- Section 10.44.3.1.3.2 and 10.44.3.1.3.3 - it has been my understanding that damages up to 75% can be fixed without permit or variance? – Article 9 of the UDO does cover nonconformities and sets benchmarks for damage/repair value before a nonconformity has to be brought up to code. Nonconformities are allowed if something were permitted validly in compliance with the regulations at the time but as regulations change over time some structures are then made nonconforming. Such nonconformities do not have to be immediately removed when an ordinance changes but they do not last forever. When extensive repairs are needed or damage is done to a nonconformity if the damage or work amount exceeds the ordinance benchmark then it must be brought back into conformance. The wording in this ordinance covers this topic but is specific to lighting. What the referenced ordinance sections say is that a nonconforming light may have minor repairs and improvement made to it but if it were every severely damaged to an extent between 25% to 75% of its value then at that point it would need a variance to obtain a permit. If the extent of damage is below 25% then obtaining a permit for repairs is permissible so long as the light is still in the same place and the dimensional requirements are not violated. When it comes to mainland lighting infrastructure this section is applicable.
- Section 10.44.7 - not sure if this statement is needed? The Planning Board as a whole can vote to recommend a change to this sections wording or can request that the applicant modify their application to incorporate an alteration to this section. Section 10.44.7 reads “The Town Manager or his/her designee may allow fixtures above this height to provide internal lighting for stadiums, arenas, and similar facilities.” Staff recommends this wording remain because it allows some flexibility for unique situations.
- Discretion of the Planning Director section? – The applicable sections are Section 10.44.7, Section 10.44.9 and Section 10.45.1. That revision has been made and is in red. The planner position title has changed over the years and may change again in the future,

which is why the wording specifies designee to cover all bases. It is not unusual to have wording such as this in ordinances. Similar language exists in other sections of the UDO.

- Section 10.46.1 - last sentence? The ordinance states “Lighting within any lot that unnecessarily illuminates and substantially interferes with the use or enjoyment of any other property is prohibited. Lighting unnecessarily illuminates another lot if it exceeds the requirements of this Section”. The second sentence rephrases what the first sentence already says. It does not harm anything but it would clean it up if the second sentence were struck. If the Planning Board votes and/or the applicant agrees then that modification can be made.
- Is this consistent with the Comprehensive Land Use Plan? – The Land Use Plan does not delve into the topic of mainland lighting. There is an implementing action about protecting sea turtles from harmful lights and an implementing action about commercial building consistency with lighting and signage (I.108).

Wattage is being done away with and is not proposed nor used in the text amendment. The current, not proposed, UDO does mention wattage in Section 10.39.1 where it limits watts for residential lighting. The applicants lighting plan would need to include many more light poles that are shorter if the existing ordinance were not amended. The greater height a light pole is allowed to be the greater the foot-candle and dispersion of light can be, restrictive height limitations of pole lights mandate a need for additional poles to be scattered across an area of land to obtain the needed light coverage. Attached is the proposed wording, the text amendment application, and the applicant’s narrative.

Attachments: Proposed Ordinance Amendment, Application, Applicant Narrative

Recommendation/Action Needed:

Suggested Motion: I make a motion to approve or deny the proposed text amendment and to adopt the associated plan consistency statement.

Planning Board Recommendation: TBD

Funds Needed: \$0.00

Follow Up Action Needed: Forward recommendation to Town Council

Attachments

ARTICLE 10. PERFORMANCE STANDARDS

PART V. LIGHTING

SECTION 10.36 PURPOSE.

This division sets forth criteria for the installation of exterior lighting and lighting visible from the exterior of buildings and structures, the purposes of which are as follows:

- 10.36.1.** Preserve and enhance public safety;
- 10.36.2.** Protect drivers from disabling glare and thereby enhance traffic safety;
- 10.36.3.** Enhance the Town's nighttime character;
- 10.36.4.** Shield neighboring properties from nuisance glare;
- 10.36.5.** Reduce light pollution;
- 10.36.6.** Protect sea turtle hatchlings from disorienting light; and
- 10.36.7.** Promote energy conservation through efficient light design and operation.

SECTION 10.37 COMMERCIAL PARKING LOTS AND DRIVEWAYS.

Lighting for parking lots and driveways shall be designed to provide the minimum lighting necessary to ensure adequate public safety, to control excessive glare onto adjacent streets and properties, and to prevent light trespass onto adjoining properties. Light fixtures for parking lots may also illuminate structures served by the parking lot.

- 10.37.1.** All lighting fixtures used for the purpose of illuminating parking lots and driveways shall be cutoff fixtures.
- 10.37.2.** Directional or floodlighting fixtures must be shielded and properly aimed so that they control glare, do not produce uplighting, and contain light so that it does not encroach on neighboring properties and rights-of-way.
- 10.37.3.** The maximum mounting height for pole-mounted fixtures intended to illuminate parking lots is twenty-five (25) feet measured from the base of the pole.
- 10.37.4.** Special design areas may require the use of lighting fixtures of a particular period or architectural style. In such areas, fixtures that are not cut off, as defined by IESNA, are permitted provided that the maximum initial lumens generated by each lamp shall not exceed 9,500 lumens; the fixtures meet the requirements for sea turtle protection in Section 10.41; and post top fixtures are fitted with a solid top and open-bottom and dusk-to-dawn lights are fitted with skycap aluminum reflectors to control uplighting and reduce glare.
- 10.37.5.** Temporary lighting is permitted if it meets the requirements for sea turtle protection in Section 10.41.

SECTION 10.38 ILLUMINATION OF COMMERCIAL BUILDINGS.

Buildings may be lighted with lighting equipment mounted in front, at ground level, or with wall-mounted down lighting fixtures provided that:

10.38.1. Light fixtures are properly aimed and shielded to confine the light to the area of the building being lighted and to prevent light from encroaching on neighboring properties and adjoining public rights-of-way.

10.38.2. Building mounted light fixtures may not be mounted more than twenty (20) feet in height above grade. These fixtures must be shielded and aimed in a manner that controls uplighting.

10.38.3. Ground-mounted fixtures must control uplighting.

10.38.4. Bare light sources (including but not limited to incandescent, fluorescent, high intensity discharge, and neon) used to outline property lines, open sales areas, rooflines, doors, windows, the edges of walls or any other area of the building or property visible from outside the building are prohibited, except for holiday lighting permitted from Thanksgiving through January 15 of the new year.

SECTION 10.39 RESIDENTIAL AREAS (INCLUDING PRIVATE DOCKS AND PIERS).

10.39.1. Fixtures using lamps (bulbs) of 100 watts or less (or equivalent), such as typical porch lights, may be installed at any location in residentially zoned areas except those located within sea turtle protection areas.

10.39.2. Unshielded floodlights installed for security and activated by motion sensors are permitted. All other floodlight fixtures must have top and side shields capable of containing light below the roofline of the house and reducing light trespass on adjoining properties.

10.39.3. Area lights, or dusk-to-dawn lights are permitted. These lights must be equipped with a skycap to control glare and to prevent uplighting.

10.39.3.1. If pole-mounted, the fixture mounting height may be no more than twenty (20) feet above grade at the base of the pole.

10.39.3.2. If wall-mounted, the fixture mounting height may be no more than sixteen (16) feet above grade, or sixteen (16) feet above any deck or porch of houses constructed on pilings.

SECTION 10.40 SIGNS.

10.40.1. Lighting fixtures used to illuminate on-premises or off-premises outdoor commercial signs must be mounted at the top of the sign structure.

10.40.2. The sign lighting fixture(s) must be shielded to control glare, to prevent encroachment on neighboring properties and rights-of-way and to contain light so that it is projected below a horizontal plane extending through the fixture.

10.40.3. The height of the sign lighting fixture shall be no greater than the maximum permitted height of the sign.

SECTION 10.41 SEA TURTLE PROTECTION.

The purpose of this section is to protect the threatened and endangered sea turtles that nest along the beaches of the Town by safeguarding egg-laying females and hatchlings from sources of artificial light that deter nesting and cause disorientation and subsequent death. To the maximum extent feasible and consistent with requirements for public safety, it is the policy of the Town that no artificial light shall directly or indirectly illuminate the Town's ocean beach and that the sources of lighting in the sea turtle protection area. To comply with this policy, outdoor lighting installed or upgraded within 300 feet of the frontal dune after the effective date of this division shall meet the following requirements:

10.41.1. Streetlights shall utilize cutoff fixtures and the fixtures shall be mounted no more than twenty-five (25) feet above grade.

10.41.2. Streetlight fixtures shall be shielded and/or utilize lenses to create a light pattern that contains light landward of the frontal dune.

10.41.3. Where it is impractical to contain light from streetlight fixtures on the landward side of the frontal dune, colored lenses that modify light so that it is not disruptive to sea turtle hatchlings shall be employed.

10.41.4. Pole-mounted light fixtures installed on private property shall be cutoff fixtures and shall be shielded in such a manner as to contain light on the landward side of the frontal dune. The fixture mounting height may be no more than twenty (20) feet above grade at the base of the pole.

10.41.5. Wall-mounted light fixtures shall be fitted with shields and hoods to contain light on the landward side of the frontal dune.

10.41.6. Floodlights installed for security purposes and operated by motion sensors are permitted. To the maximum extent feasible, these fixtures shall be mounted and aimed in a manner to contain light on the landward side of the frontal dune.

10.41.7. Where possible, the source(s) of light within the 300-foot zone must not be visible from the seaward side of the frontal dune.

SECTION 10.42 OFF-SITE ILLUMINATION.

Increases in illumination on off-site property shall not result in lighting levels in excess of 0.3 foot-candles, measured at ground level. Where existing ambient off-site lighting levels are in excess of 0.3 foot-candles, no increase in measurable off-site lighting levels will be allowed as a result of outdoor lighting in the development.

SECTION 10.43 IMPLEMENTATION; COMPLIANCE.

Building, electrical, and/or sign permits will state that the applicant must comply with the requirements of this division, and the requirements of this division must be met prior to the final inspection on the permit.

SECTION 10.44 MAINLAND EXTERIOR LIGHTING.

10.44.1 Purpose and Intent Nonresidential and multifamily buildings and projects, including outparcels, shall be designed to provide safe, convenient, and efficient lighting for pedestrians and vehicles. Lighting shall be designed in a consistent and coordinated manner for the entire site. The lighting and lighting fixtures shall be integrated and designed so as to enhance the visual impact of the project on the community and/or should be designed to blend into the surrounding landscape. Lighting design and installation shall ensure that lighting accomplishes on-site lighting needs without intrusion on adjoining properties.

10.44.2 Applicability

The requirements of this Section shall apply to:

10.44.2.1 All nonresidential or multifamily development;

10.44.2.2 Lighting provided in conjunction with new subdivisions or planned developments;

10.44.2.3 Modification of an existing lighted area where the lamp color will change or where the number of light fixtures or foot-candles (fc) are increased; and

10.44.2.4 Expansion of areas that are increasing in size and in doing so will exceed the illumination levels in Section 10.45.1.

10.44.3 Exempt

10.44.3.1. The following activities are exempt from the requirements of this Section.

10.44.3.1.1 Outdoor lights used for a temporary event; permitted through a Temporary Use Permit.

10.44.3.1.2 Outdoor lights used exclusively for recreational activities, concerts, plays or other outdoor events that are open to the public, provided that the event or function meets all other applicable Ordinance requirements. Such lighting shall be located at least 50 feet from any adjoining residential district or use.

10.44.3.1.3 Fixtures may be replaced with like fixtures that meet requirements of Section 10.44.5.1. Maintenance and repairs (excluding replacement of fixtures, modifications or expansions as defined in Section 10.44.5.1 like parts such as lamps, photo controls, lens and ballast may be performed.

10.44.3.1.4. Nonconforming Outdoor Lighting damaged by fire or other causes consistent with the following requirements:

10.44.3.1.3.1 In the event of damage by fire or other causes to an extent exceeding 75% of its value, reconstruction of a nonconforming structure shall be permitted only in compliance with the dimensional provisions of this Ordinance.

10.44.3.1.3.2 In the event of damage by fire or other causes to an extent of between 25% and 75% of its value, reconstruction of a nonconforming structure shall be permitted with the issuance of a variance by the Board of Adjustment.

10.44.3.1.3.3 In the event of damage by fire or other causes to an extent of below 25% of its value, reconstruction of a nonconforming structure shall be permitted provided it is:

10.44.3.1.3.3.1 In the same location and up to the same dimensions as original existed; or

10.44.3.1.3.3.2 In compliance with the current dimensional requirements.

10.44.3.2. Outdoor lighting exempt from the Section shall only be illuminated while the activity takes place and during high traffic periods immediately before and after the event.

10.44.4 Lighting Plan

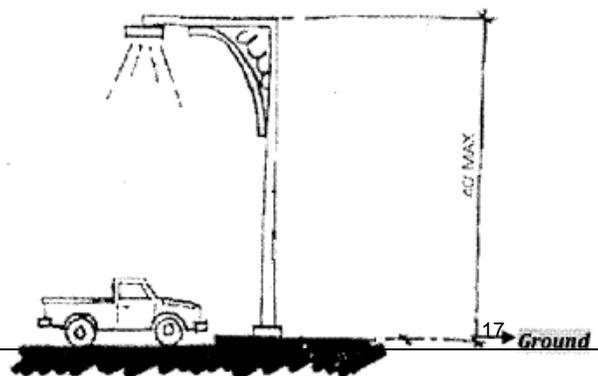
A site lighting plan shall be required as part of the application review for all areas proposed for illumination that exceed 40,000 square feet in area. Projects with multiple areas proposed to be illuminated (such as separate parking lots) shall submit a site lighting plan if the sum of the multiple areas exceeds 40,000 square feet.

10.44.5. Site Lighting Design Requirements

Lighting shall be used to provide safety while accenting key architectural elements and to emphasize landscape features. Light fixtures shall be designed as an integral design element that complements the design of the project. This can be accomplished through style, material or color. All lighting fixtures designed or placed so as to illuminate any portion of a site shall meet the following requirements:

10.44.5.1 Fixture (Luminaire)

10.44.5.1 The light source shall be completely concealed behind an opaque surface and recessed within an opaque housing and shall not be visible from any street right-of-way or adjoining properties. Overhead lighting fixtures shall be designed to prevent light from emitting upwards towards the sky.



10.44.5.2 Under canopy lighting fixtures should be completely recessed within the canopy.

10.44.6. Fixture Height

10.44.6.1. Lighting fixtures may not exceed 40 feet in height (as measured from the ground to the top of the pole) and illumination levels shall comply with Section 10.45.1.

10.44.7. The **Town Manager or his/her designee** may allow fixtures above this height to provide internal lighting for stadiums, arenas, and similar facilities.

10.44.8 Light Source (Lamp)

10.44.8.1 The light emitted by Light Emitting Diodes (LEDs) and fiber optics is preferred. Light emitted by incandescent, metal halide, or color corrected high-pressure sodium is acceptable. Non color corrected high-pressure sodium lamps are prohibited.

10.44.8.2 The same light source type must be used for the same or similar types of lighting on any one site throughout any development.

10.44.9 Mounting

Fixtures shall be mounted in such a manner that the cone of light is contained on-site and maximum illumination levels off-site does not exceed those found in Section 10.45.1 and not conflict with excessive illumination requirements found in Section 10.44.5.1.

10.44.9 Limit Lighting to Periods of Activity

The use of sensor technologies, timers or other means to activate lighting during times when it will be needed may be required by the **Town Manager or his/her designee** to conserve energy, provide safety, and promote compatibility between different land uses.

SECTION 10.45 Mainland Illumination Levels

10.45.1. To ensure uniform light distribution, all site lighting shall be designed so that the level of illumination as measured in foot-candles (fc) at any one point meets the standards in the table below with minimum and maximum levels measured on the pavement within the lighted area and average level (the overall generalized ambient light level), measured as a not-to-exceed value calculated using only the area of the site intended to receive illumination. The **Town Manager or his/her designee** may make reasonable adjustments to accommodate the specific lighting needs of the interior areas of projects; however, the measurements for the Maximum Illumination Levels pertaining to the project boundaries as outlined in the table below under item B, shall not be exceeded.

LIGHT LEVEL (foot-candles)			
Type of Lighting	Minimum	Average	Maximum
Architectural Lighting	0.0	1.0 – 1.5	5.0
Canopy Area Lighting	2.0	10.0 – 20.0	20.0
Multifamily Parking Lot	0.2	1.0 – 1.5	8.0
Nonresidential and Multifamily Entrances	1.0	2.5 - 5.0	15.0
Nonresidential Parking Lot	0.2	1.5 – 2.0	10.0
Storage Area (security lighting)	0.2	1.0 – 1.5	10.0
Vehicle Sales and Display	0.2	3.0	15.0
Walkways, Landscape or Decorative Lighting	0.2	1 – 1.5	5.0

10.45.2. All outdoor lighting shall be designed and located such that maximum illumination measured in foot-candles comply with those in the following table:

MAXIMUM ILLUMINATION LEVELS (foot-candles)	
Lighting Measured at:	Maximum Illumination (foot-candles)
Street	5.0
Property Line Next to Residential Use or Residential District	0.2
Property Line Next to Commercial Use or Commercial District	0.5

SECTION 10.46 Mainland Excessive Illumination

10.46.1 Lighting within any lot that unnecessarily illuminates and substantially interferes with the use or enjoyment of any other property is prohibited. Lighting unnecessarily illuminates another lot if it exceeds the requirements of this Section.

10.46.2 Lighting shall not be oriented so as to direct glare or excessive illumination onto streets in a manner that may distract or interfere with the vision of drivers on such streets.

10.46.3 Fixtures used to accent architectural features, landscaping or art shall be located, aimed or shielded to minimize light spill into the night sky.

10.46.4 Blinking or flashing lights shall be prohibited unless the lights are required as a safety feature (e.g. beacons on towers) or shall be permitted as part of a sign in accordance with Article 10, Sign Regulations.

TEXT AMENDMENT APPLICATION

TOWN OF OAK ISLAND
Planning Department
4601 E. Oak Island Drive
Oak Island, NC 28465



Date: 10-30-19

Fee: _____

Project Name (if applicable): Hawthorne @ Pine Forest

Any application for an amendment shall be filed with the department of development services at least 45 days prior to the date on which it is to be introduced to the planning board. Each application shall be signed by the property owner or the property owner's agent and be in triplicate. (Sec. 18-335).

PROCESS

This is a legislative decision, anyone can appeal since a text amendment applies to the whole town. A council member cannot vote on a text amendment if there is a conflict of interest. A public hearing is required, notice of hearing and Planning Board review is mandatory, governing board cannot act on an amendment without written recommendation from Planning Board or on a text amendment. Can appeal for up to 6 months to a year afterward. The application first goes to the Planning Board for recommendation and then to Council for final approval. A written statement by Council or the Board of Commissioners is required for adoption or rejection of all zoning text amendments.

The Planning Board and Town Council may consider consistency with the Land Use Plan as well as any unintended consequences while deciding.

SECTION 1: APPLICANT INFORMATION

Petitioner Name: Hawthorne @ Pine Forest Apartment LLC

Mailing Address: 806 Green Valley Rd Suite 311
Greensboro NC 27406

Phone: 336-291-1527 Email: BDLoniak@hrpliving.com

SECTION 2: PROPERTY OWNER INFORMATION (IF DIFFERENT THAN ABOVE)

Owner Name(s): Same

Mailing Address:

Phone: _____ Email: _____

SECTION 3: STATEMENT OF JUSTIFICATION (APPROX. 1 PAGE)

Is the proposed zoning consistent with the Land Use Plan? (Please Check One): Yes No

Please describe why the Board should vote in your favor. As well as why this change would be advantageous for the Town of Oak Island.

(Attach separate sheet if necessary). *Note: The Oak Island Land Use Plan and all maps can be found online at <http://www.oakislandnc.com/General-Info.aspx>

See attached

SECTION 4: APPLICANT/OWNER SIGNATURE

In filing this text amendment application, I hereby certify that I am authorized to submit this application and that all of the information presented in this application is accurate to the best of my knowledge, information, and belief.

Signature: 

Date: 10-30-19

11/7/19

Hawthorne Construction

For: Hawthorne at Pine Forest
Highway 211
Oak Island, NC

Regarding: Text Addendum Change for Site Lighting

We are asking for the Town of Oak Island to adopt the same lighting standards that Brunswick County, Leland, St. James, Ocean Isle and most surrounding areas have already adopted.

This would include:

1. 30' street light poles in lieu of the 20' poles now in the Town of Oak Island standard.

The benefits of 30' tall street light poles would be:

1. The amount of poles on our site alone would be reduced by 1/3.
2. The taller poles increase the coverage of the light.
3. By reducing the amount of poles it is aesthetically more appealing.
4. By adopting Brunswick County standards, it would give the Town of Oak Island a lighting standard to follow.

Brunswick Electric Engineer, Clayton Rivenbark, Jr., has designed the site lighting for Hawthorne at Pine Forest with both 20' street light poles and 30' street light poles for your review. Jake Vares, Planning & Zoning Administrator, has the engineered drawings.

**TOWN OF OAK ISLAND
PLANNING BOARD
AGENDA ITEM MEMO**

Agenda Item: New Business No.2

Date: December 11, 2019



Issue: Zoning District Designation

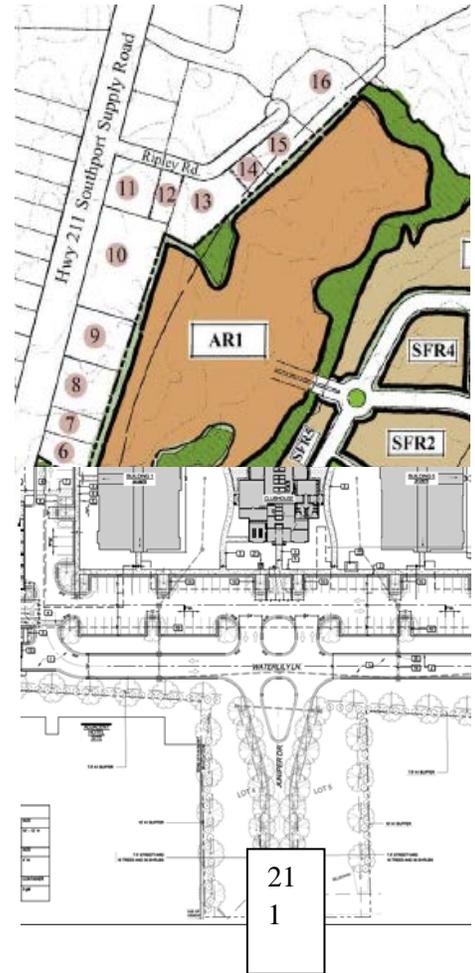
Department: Planning & Zoning Administrator

Presented by: Jake Vares

Estimated Time for Discussion: 30 Minutes

Subject Summary:

The purpose of this agenda item memo is to obtain a recommendation vote from the Planning Board to set a zoning district designation for a property to be annexed by Oak Island. The parcel number is 20300023 and 20300024; the map showing the area is attached below. This property is off highway 211 and is part of the Pine Forest tract. Pine Forest recently acquired the property adjacent to their AR1 phase and highway 211 next to the Holiday Inn hotel. The AR1 portion of the Pine Forest tract is the area of land that is designated for multi-family development within their phased development plan. The Pine Forest tract has multiple phases and the particular phase that applies to this development is a multi-family apartment complex project. The property is currently part of Brunswick County's jurisdiction and is in their C-LD zoning district. The appended maps help explain this. The proposed Oak Island zoning district designation is C-LD (Commercial Low Density). All of the surrounding area within the town's jurisdiction is also zone C-LD.



The developers for this particular phase at Pine Forest intend to install an access off 211 called Juniper Drive. This is the newly acquired property by Pine Forest and is intended to be annexed voluntarily into Oak Island. Therefore it is in need of having an Oak Island zoning district established. The proposed land use for this property is already planned with permits. The town can review the zoning designation for an upcoming annexation contemporaneously. The Planning Board vote is for an advisory recommendation. The annexation and subsequently the zoning designation will go before Town Council for official adoption or denial.

Attachments: Map, General Site Map

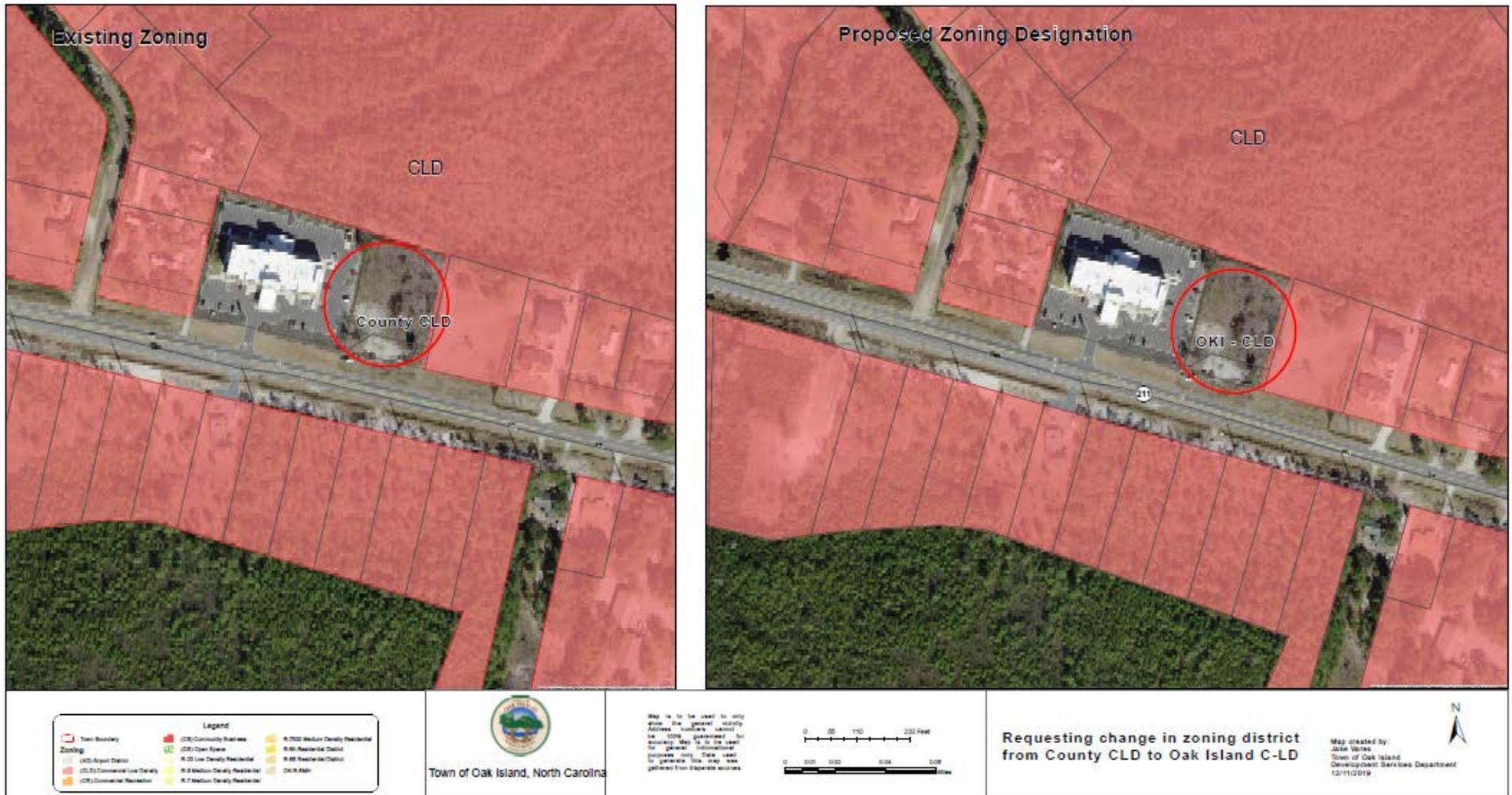
Recommendation/Action Needed: Approval

Suggested Motion: Motion to recommend zoning designation with plan consistency statement

Funds Needed: \$0.00

Follow-up Action Needed: Forward recommendation to Town Council

Attachments



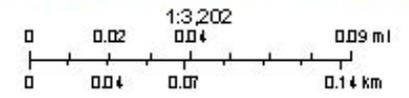
Brunswick County GIS Data Viewer



12/11/2019 1:35:33 PM

County Boundary	Parcel	US Hwy	State Road	Addresses	Green: Band_2
Condo	Interstate	NC Hwy	Minor	Blue: Band_3	Red: Band_1

2016 Orthoimagery



Brunswick County GIS
Brunswick County GIS