



APPROVED

**TOWN OF DUCK
PLANNING BOARD
REGULAR MEETING
November 9, 2022**

The Planning Board for the Town of Duck convened at the Paul F. Keller Meeting Hall on Wednesday, November 9, 2022.

Present: Chair James Cofield, Vice-Chair Joe Blakaitis, Tim McKeithan, Marc Murray, and Randy Morton.

Absent: None.

Also present: Council Liaison Sandy Whitman, Senior Planner Sandy Cross, Director of Community Development Joe Heard, and Public Relations Administrative Assistant Betsy Trimble.

Others Present: Philip Ruckle of *The Coastland Times*, Sally Blakaitis, and Duke Geraghty of the Outer Banks Homebuilders Association.

Chair Cofield called to order the Regular Meeting of the Planning Board for November 9, 2022 at 6:30 p.m.

PUBLIC COMMENTS

Duke Geraghty of the Outer Banks Homebuilders Association was recognized to speak. Mr. Geraghty stated that he had sent some notes to Senior Planner Sandy Cross earlier in the day regarding the proposed text amendment and she had sent him the agenda the Friday before to make sure that he looked at it. Chairman Cofield stated that Duke Geraghty could wait to speak when the Board discusses the text amendment. Mr. Geraghty thanked Chair Cofield.

There being no one else wishing to speak, Chair Cofield closed Public Comments.

Member McKeithan moved that the Planning Board recognize the 10 years of service of Joe Blakaitis as Chairman of the Planning Board as well as his accomplishments. Member Murray seconded.

Motion carried 5-0.

Chair Cofield and the members of the Planning Board went on to present Vice Chair Blakaitis with a plaque for his 10 years of service as Chairman of the Planning Board.

OLD BUSINESS

Text Amendment Ordinance 22-10: Regulatory Standards for Dune Walkover Structures

Senior Planner Sandy Cross was recognized to speak. Senior Planner Cross reminded the Board that the text amendment for dune walkover structure elevations was discussed at their September 14, 2022 meeting, adding that she was planning to bring it back before the Board after the first of the year. She noted that since the agenda was light for this meeting and staff had their CAMA training, they decided it was relevant to have it on the agenda at this meeting. She pointed out that at the CAMA training, the question was posed to the Division of Coastal Management representatives to get their thoughts on elevating a dune walkover above the dune and, given their ambiguous language in the three sections of CAMA regulations. They indicated that their regulations were meant to be vague to allow the local permit officer to make the final determination on what is permissible in their locality, as it would allow them to appropriately handle dynamic situations in the environment.

Senior Planner Cross stated that the Town has had a regulation in place that has been a standard since 2013, but there is now a request for some flexibility given the different nature of dunes in different areas. She pointed out that she brought back the same ordinance that she had proposed previously, noting that she added a fourth option that speaks to the elevation of a dune and how the Town treats that in terms of dune walkway elevation. She added that you will often hear in CAMA regulations as well as Town's regulations the terms primary and frontal dunes. She stated that there was a distinct difference between the two in that the frontal dune was the first dune that provides a barrier or protective piece on the beachfront, whereas a primary dune does the same, but is quantifiable in that it is defined as the base flood elevation which may be VE11 or VE12 plus six feet. She explained that if a homeowner was in a VE12 zone, a primary dune would be one that has an elevation of 18 inches or more. She stated that the Town has situations like this in the Sanderling subdivision where they were dealing with primary dune elevations up to 18 to 22-23 feet and they are having build up. In these instances, the Town may consider allowing them to construct their new walkways directly on top of the sand. She stated that in the case of a frontal dune, which would be below that primary dune elevation, the homeowner would be required to elevate it 18 inches or an alternative number that the Planning Board could decide on.

Senior Planner Cross stated that she also took one piece out of the ordinance. She pointed out that the language stated as follows: "...and shall extend east of the seaward vegetation line..." She explained that when the Town put this regulation in place in 2013, it was the result of a huge storm that took out a lot of dune walkways that were extended beyond the top of the dune and 5-20 feet out onto the beach. She pointed out that they were huge obstructions and liabilities for people as a result of the storms. She stated that since the Town put the ordinance in place, staff sees most dune steps stopping at the eastern edge of the vegetation which helps to protect the structures and keeps them from being damaged. She noted that if the structures could be kept at the line of vegetation or within a few feet, she thought it would further limit the potential for obstruction on the beach, would decrease the likelihood of damage to dune walkways and steps, and was overall better for the dune system.

Senior Planner Cross stated that the last item was how the Town defines grade. She stated that she approached Building Inspector Steve McMurray and asked him where he measured from when talking about grade on a dune walkway with regard to the 30-inch elevation which triggers the building code. She explained that when she talks about private, residential beach walkways and stairs, the Town does not require the full extent of the building code because sand needs to pass

through it. She stated that the Town does not require the pickets or the horizontal rails to be within that four-inch sphere requirement, adding that the Town only requires a top, middle, and bottom rail and the Town doesn't require kicks on the steps. She stated that the less structures on the beach, the less potential for impacts. She went on to show the Planning Board and audience how Building Inspector McMurray measures for the 30 inches.

Member Morton clarified that the lower part of the sketch was the existing walkway. Senior Planner Cross stated he was correct. Member Morton clarified that when the sand comes in from the northeast wind blowing, it fills up and shovels off to the side. Senior Planner Cross stated he was correct. She explained that her policy, as a CAMA Local Permit Officer, which was separate from the ordinance, was that if a homeowner could not maintain their walkway and it fills up more than 18 inches, then they needed to think about building up and over. She added that the question becomes, if they need to build up, if it was up 18 inches or right to the grade. She added that one could argue that building up the 18 inches would give a homeowner a couple of years, but it depended on the condition at the property. She noted that if it was left at grade, the homeowner may find they will have to constantly remove sand. She stated that the Town's ultimate goal was to preserve the dune, adding that the current regulations have worked for the past nine years.

Chair Cofield clarified that homeowners were not allowed to shovel off the walkway. Senior Planner Cross stated that they could remove up to 18 inches of sand, adding that once they go past 18 inches, the integrity of the dune that is developing could be impacted. She noted that it was a policy that she has had in place since she became a CAMA Local Permit Officer because she needed something consistent.

Member Murray clarified that when Senior Planner Cross measures horizontally 36 inches, she would allow the applicant to go 18 to 30 inches above that under the current ordinance. Senior Planner Cross stated he was correct, adding that she would not require applicants to elevate 18 inches unless they were installing a new walkway. Member Murray clarified that, for a repair, the applicant could opt to build it on top of the old walkway. Senior Planner Cross stated that if it was less than 50%, that would be correct.

Member Murray clarified that Option 4 in the draft ordinance retains the status quo for construction of an access walkover on a frontal dune but allows for the walkway over the primary dune to not have the 18-inch requirement. Senior Planner Cross stated he was correct, adding that staff would need some kind of documentation to support that they meet the elevation of a primary frontal dune, which could be a current contour map or spot elevations. Member Murray clarified that that language was included in the option. Senior Planner Cross stated he was correct. Member Murray pointed out that he did not see the 30-inch maximum included in the option. He asked if it needed to be put in the draft ordinance or if it was elsewhere in the ordinance. Senior Planner Cross stated that it was in Section 156.124. Member Murray pointed out that the language says primary dune. He asked if frontal dune should be in the language as well since the 30-inch maximum applied to both the primary and frontal dune. Senior Planner Cross stated he was correct. Member Murray clarified that that "and/or frontal" would be added. Senior Planner Cross stated he was correct.

Member Morton clarified that Member Murray's suggestion applied to Option 4. Member Murray stated he was correct. Member McKeithan pointed out that Option 4 had "nothing" in it. Member

Murray pointed out that Option 4 was under Chapter 94.04. Member McKeithan asked if both Option 4 and Option 2 would need to be picked. Senior Planner Cross thought Option 1 in Part 2 was part of Section 156.124 in that it speaks to the underside of the primary across the frontal dune shall be a minimum of 18 inches and a maximum of 30 inches. She added that the underside of the dune walkover across a primary dune shall be a maximum of 30 inches above grade. She noted that it did not state that it has to be elevated at all but cannot be more than 30 inches.

Member McKeithan clarified that in the recommendation, the Board could go with Option 4 and under Part 2, choose Option 1. Senior Planner Cross stated he was correct.

Chair Cofield clarified that none of the other towns have implemented this procedure. Senior Planner Cross thought Duck was the only town that has regulations with regard to dune walkovers, but discovered that the Town of Southern Shores has similar regulations. Member Murray pointed out that the towns that do not have a standard of their own usually defer to the CAMA guidelines because a CAMA waiver would be issued. Senior Planner Cross also noted that Currituck County's regulations had the following language: "...use of piles and elevation of crossovers or other development at least two feet above the sand dune..." Chair Cofield asked Member Murray if he found it problematic as a builder. Member Murray stated that he did not, adding that the CAMA guidelines were what the Towns of Southern Shores and Duck as well as Currituck County base their policy on. He thought they were fairly consistent.

Duke Geraghty stated that when he originally looked at the issue, the Homebuilders Association did not have a problem with it in that it sounded normal and gave a lot of leeway. He wasn't sure about building codes because he thought there were some exceptions to walkways and piers with regard to handrails and stairs. He knew of other exceptions to how girder systems are attached to pilings in that one doesn't have to notch them and can bolt them from the outside.

Duke Geraghty stated that his concern was that no two dunes were alike, adding that the grades could change every quarter mile on the beach. He stated that the dunes could change on a new construction from the time construction starts on the house and again when the construction is finished. He thought there would be more protection if the dune was more spread out.

Duke Geraghty thought the Planning Department should have some flexibility, adding that it can't be enforced without it because it will be subjective and there will be problems. He wasn't sure if Duck was having problems or not and thought if there weren't any problems and if there were three to five oceanfront houses being built per year, it was a lot of time invested in the ordinance that may not be an issue at all. He agreed that the 18 inches was needed to protect the dune; however, it may be too much. He added that he did not have any suggestions for the Planning Board except that the Planning Department should have some flexibility on what to do because there could be short distances between the primary and frontal dunes. He noted that he had not had a chance to talk to the legislative code committee, but they would be meeting on November 10, 2022. He reiterated that there should be some rules and that there should not be walkways at a high elevation, adding that people do not want to rebuild their walkways.

Member McKeithan stated that he liked the proposal with Option 4 on Part 1 and Option 1 on Part 2 as it gave the flexibility that the Board has been trying to get in all of their discussions. Vice

Chair Blakaitis agreed with Member McKeithan's comments, adding that the flexibility was there but no one knows what will happen in the future. He thought Option 4 in the first section was the most comprehensive in the sense that it delineates between the primary and frontal dune. He asked if it dealt with the concern that was originally raised by Chair Cofield. He thought the Bias Shores example and the walkway that sits at grade was in the primary and not the frontal dune. Chair Cofield stated he was correct. Vice Chair Blakaitis pointed out that it hasn't changed in many years. Member Murray agreed. He asked Chair Cofield if it addressed his concern. Chair Cofield thought there was a distinct difference between the primary and the frontal dune. He thought the Board had seen issues related to the frontal dune. He stated that his primary concern was the primary dune and not the frontal dune as he didn't see the need to implement a regulation as it related to the primary dune and not the frontal dune. Member Murray pointed out that it has been done. Chair Cofield asked what would happen if someone wanted to reconstruct the entire walkway. Senior Planner Cross explained that if it was a primary dune and the entire walkway was reconstructed, it could be put at grade; however, documentation would need to be provided indicating that it was a primary dune.

Member Morton agreed with Option 4 in Chapter 94 as well as Section 156.124 Option 1 as he thought it gave the flexibility that was needed. He pointed out that if a walkway was not impacted with sand or from a disaster, to build a new walkway would not require anything. He thought it matched everything the Board had been discussing.

Chair Cofield thanked Senior Planner Cross for incorporating the differences that were flagged in the last few weeks.

Member McKeithan moved to recommend approval of Ordinance 22-10, incorporating Option 4 of Part 1 Chapter 94.04 and Part 2 Subsection 156.124(c)(1)(b), using Option 1. Member Murray added that it was consistent with the Land Use Plan. Member Morton seconded.

Motion carried 5-0.

NEW BUSINESS

Text Amendment Discussion: Section 156.002 – Definition of Lot Coverage

Director of Community Development Joe Heard was recognized to speak. Director Heard reminded the Board that they had discussed these allowances for stormwater management recently and Council had adopted some changes to clarify lot coverage allowances and what was necessary to receive additional coverage allowances. He stated that the Planning Board had before them a spin-off of the changes, adding that staff was looking at issues regarding what types of surfaces were considered to be permeable, including pavers and artificial turf.

Director Heard stated that staff completed some research on how different communities on the Outer Banks were dealing with the issue. He added that staff has some questions for the Planning Board, noting that it was not at the point of being a proposal, but he wants to know what the Board members wanted staff to include in the proposal if they decide it is worthy of moving forward.

Director Heard stated that the questions for the Board were as follows:

1. What is the driving force behind our lot coverage limitations?
2. Do permeable pavers and/or artificial turf have impacts to coverage, stormwater, density?
3. Should these items be looked at separately?
4. The Town's ordinance does not presently define permeable pavement, porous pavement, or artificial turf. Should we start there?

Chair Cofield stated that the intensity of the development was how he previously looked at the main issue for lot coverage and not stormwater runoff. He thought that was the way most people look at it in that they look at how much of the lot was covered by building, etc. He reiterated that that was how he looked at it.

Member McKeithan clarified that the way the Planning Board has been interpreting it was if one was looking at just the intensity, it was limited to only 30% lot coverage and the additional 5% for stormwater management could not be considered. Director Heard thought by asking the general question, it looks at the Town's approach. He asked if the Board wants something that only benefits stormwater management to increase the allowable intensity of development. He pointed out that there is currently no interpretation involved and these types of allowances are already in the ordinance. He explained that the Town has an incentive – 5% greater intensity for people who add in stormwater management into their development.

Chair Cofield clarified that this would not take away that incentive. Director Heard stated that staff are not proposing anything but are asking the Board if they feel it is an appropriate approach to use. Chair Cofield clarified that that was what the Town was currently doing. Member Murray stated he was correct.

Member Murray thought the general sense was with municipalities that took a stormwater management approach to their lot coverage versus municipalities that take an intensity development approach was that the consensus was that high intensity stormwater management through conventional retention areas or through low impact development was not really necessary on a property that has 30% or less impervious surface. He pointed out that different municipalities have different definitions of what is or is not impervious, which creates variability from community to community. He thought the consensus was that one did not need aggressive stormwater management as long as the property stayed under 30% as 70% of the lot was essentially absorbing water or the lot was already on a hill and the water was flowing to a neighboring property and was not changing. He thought the consensus was that whenever a property went over that, they would need some stormwater management mitigation. He felt it was both in so many of the surrounding communities and has been both in the Town. He thought if staff wants to move forward with making changes, it would be consistent with how the ordinance has been interpreted to stay with that approach. Chair Cofield agreed.

Member Morton clarified that the Town would be using both approaches. Member Murray agreed and explained that the assumption would be that under 30%, not much harm could be done stormwater-wise when there was 70% permeable soil. He added that Currituck County was kind of moving in the same direction in that they were requiring stormwater mitigation for lots that do not go over the lot coverage requirements but happen to be higher than the neighboring lot. He stated that from a contractor's perspective, he felt it was unnecessary.

Chair Cofield asked with regard to the sidewalk the Town installed between South Snow Geese Lane and North Snow Geese Lane, if Currituck County would consider it impermeable material. Senior Planner Cross explained that Currituck County would require an engineer to certify it. Chair Cofield clarified that it was possible, but they would need a certification.

Member Murray asked what material the sidewalk was in Town. Director Heard stated that the Snow Geese section was permeable concrete. Member Murray asked if Currituck County required a maintenance program. Senior Planner Cross did not believe they did. Director Heard added that staff were not aware if they did. Senior Planner Cross stated that it depended on what product the Board was discussing, adding that it was necessary for permeable concrete and highly likely for permeable pavement, but artificial turf was a different situation. She stated that these were three different products that the Town was being asked to consider without much background information.

Chair Cofield asked for an example where artificial turf was being used and suggested as a permeable material. Senior Planner Cross stated that artificial turf is being installed around in-ground swimming pools at a high rate. Chair Cofield asked what kind of surface would be under it. Senior Planner Cross explained that it was usually four to eight inches of rock, which was permeable, but she wasn't sure at what level the rock had to be in order to be considered 100% permeable.

Member Morton asked if an engineer would be required in that situation to make a determination of the permeability. Director Heard stated that Currituck County requires it. He noted that the Town of Nags Head looks at the manufacturer's specifications, which is also what Duck does. Member Morton clarified that the manufacturer has specifications to say that a certain percentage of permeability could be achieved. He asked how Duck would make sure that the developer does that. Director Heard stated that it could be part of the ordinance. He stated that staff may need to put something in a proposal if the Board wanted to move forward with something that explained how it would be done.

Member Murray pointed out that for engineered lumber, all the engineers were doing were reading the manufacturer's specifications and were absolving the building inspector of responsibility for the proper installation. He noted that there was a cost associated with that, adding that he would be more inclined to encourage an inspection of the subbase to show that it was installed as per the manufacturer's instructions and allow the manufacturer's specifications to carry forward unless staff was stating that the specifications they were receiving were inadequate in some way or unclear. He stated that putting the products in or having a subcontractor install them, the product does matter because there was a vast difference in performance between a quality product and a low-quality product as well as proper and improper installation. He knew that the Town could not

specify product by brand and that they change quickly but relying on the manufacturer's specifications and coming up with a workable way to verify they were being installed per the inspections that wasn't burdensome to the Town was key.

Chair Cofield thought it was the easier question. He thought the more difficult question was the maintenance. Senior Planner Cross agreed, adding that the question would be if a maintenance plan would be required.

Member Murray explained that, in his experience, the permeable interlocking pavers and the artificial turf, if they were installed correctly, required very little maintenance because there was such a deep rock base with no way for material to get in there aside from abuse. He added that permeable concrete was totally useless in a sandy environment unless it was vacuumed regularly. Director Heard stated that the Town vacuums its permeable sidewalks. Member Murray asked what the cleaning interval was. Senior Planner Cross stated that it was completed biannually. Member Murray pointed out that anything that was close to the water table would have plant growth in the cavities, so keeping them clean becomes more important.

Member McKeithan thought if the permeable pavement was not maintained or periodically cleaned, then it gives up the advantage of the permeability and creates a problem due to sediment and debris. He wasn't sure how it could be inspected but he thought it was critical if the Town was going to give the builder the lot coverage allowances. He added that they would have to be maintained or else he was not in favor of doing it.

Director Heard confirmed that the Planning Board wished to continue with a hybrid approach and create allowances for some of the newer products that were not defined in the Town's ordinance. He noted that the importance was that they were being sold per manufacturer's specifications and there should be some means of verifying the subbase. He stated that there should be maintenance standards put in place for those types of products that would be required to be maintained with regard to the permeability. He asked if the Board had anything else they wanted to add.

Member Morton asked if the maintenance associated with artificial turf was a requirement. He asked if it was different or if it was installed so deeply that it wouldn't need maintenance. Member Murray stated that he has not seen any problems with artificial turf. He explained that, from a maintenance perspective, the Town does not count bare sand in a yard as lot coverage. He added that if there was an eight-inch rock base with blowing sand, it would eventually fill the eight-inch rock base. He noted that it was no less permeable than undeveloped ground. He added that when artificial turf or permeable pavers are initially installed with the eight-inch gravel base, they were not more permeable, but were a storage facility of water because the space between the grains of gravel is more than the space between the grains of sand. He added that with concrete and asphalt surfaces, the material gets compacted into it resulting in standing water. He pointed out that several municipalities do not count the pool water. He felt if the Town put a freeboard requirement for it, it may be something the Board may want to look into. Director Heard stated that he did not get a sense from the Board that it would be something they would want an engineer to document. He clarified that the pool water would not be counted toward an exception. Member Murray thought if the ordinance was left as is, not counting the pool water, but adding the area of the pool water or 500 square feet of the pool water to the options that the engineer would have for stormwater

storage when the Town is giving the additional 5%. Director Heard asked for a scenario where it would not be included. Member Murray didn't think it would ever be included as a matter of course but would only be included if the engineer specified it as part of their stormwater storage. He pointed out that, currently, it is not listed as something that an engineer is allowed to use.

Director Heard thought the easiest way to address the issue would be to just indicate that there was a pool on the property, but that the water would have to get there. Member Murray thought that the engineer would not convey water to the pool, but the water that falls over that pool in a less than 1.5-inch rain event would not fill the pool. Director Heard pointed out that it would not be counted in the calculation. Member Murray agreed.

Chair Cofield stated that a pool should be able to carry four to five inches of water. Member Murray agreed. Vice Chair Blakaitis asked at what point that calculation would be made. He asked when the pool would be examined – when it was first filled or after a rainstorm. Member Murray explained that if someone wanted to obtain an additional 5% lot coverage and the approach they use would be to have an engineer sign off and indicate that the stormwater management installation that were put in to deal with the stormwater. He added that the Town has given a list of tools to be used in the ordinance that were allowed to be used. He stated that if an engineer was able to certify that in a rain event, they were performing calculations for, the pool would not overflow. He noted that if the water goes above the skimmers, they will have to pump the water out of the pool to make the skimmers work.

Director Heard stated that staff would incorporate Member Murray's suggestions into the draft ordinance for consideration. He added that he would bring it back before the Board at their December 14, 2022 meeting.

APPROVAL OF MINUTES

Minutes from the September 14, 2022 Meeting

Member Morton moved to approve the minutes as presented. Vice Chair Blakaitis seconded.

Motion carried 5-0.

STAFF COMMENTS

Summary of November 2, 2022 Regular Town Council Meeting

Director Heard thanked Senior Planner Cross for all of her work over the last few months during his absence. Chair Cofield stated that the Board recognizes the work that Senior Planner Cross has been doing over the last few months. He thanked Senior Planner Cross for her work.

Senior Planner Cross gave a short summary of the recent Town Council meeting.

PROJECT UPDATES

Director Heard and Senior Planner Cross gave updates on the projects in Town to the Board and audience.

BOARD COMMENTS

Vice Chair Blakaitis thanked the Board for considering him for the plaque he was presented with. He thought the plaque should go to Director Heard and Senior Planner Cross as well as anyone else that works with the Planning Board.

Chair Cofield thanked Vice Chair Blakaitis for his service and felt the plaque was well deserved. He thought staff felt equally impressed with his leadership over the years.

ADJOURNMENT

Chair Cofield adjourned the meeting. There was no second or vote.

The time was 7:52 p.m.

Approved: _____


James Cofield, Chairman