

**TOWN OF DUCK
TOWN COUNCIL
SPECIAL MEETING
April 6, 2022**

The Town Council for the Town of Duck convened at the Paul F. Keller Meeting Hall at 3:00 p.m. on Wednesday, April 6, 2022.

COUNCIL MEMBERS PRESENT: Mayor Don Kingston; Mayor Pro Tempore Monica Thibodeau; Councilor Sandy Whitman; Councilor Rob Mooney; and Councilor Tony Schiano.

COUNCIL MEMBERS ABSENT: None.

OTHERS PRESENT: Town Manager Drew Havens; Public Information and Events Director Christian Legner; Senior Planner Sandy Cross; Ken Willson and Adam Priest of Coastal Protection Engineering; James Ferguson and Joe Mazzarella of Weeks Marine; and Town Clerk Lori Ackerman.

OTHERS ABSENT: Director of Community Development Joseph Heard; Police Chief Jeffrey Ackerman; Fire Chief Donna Black; Town Attorney Robert Hobbs; and Human Resources Administrator Jessica Barnes.

Mayor Kingston called the meeting to order at 3:01 p.m. He welcomed the public to the meeting.

UPDATE ON BEACH RENOURISHMENT PROJECT

Ken Willson of Coastal Protection Engineering was recognized to speak. Mr. Wilson gave an update on the upcoming beach renourishment project to Council and the audience.

Mayor Pro Tempore Thibodeau clarified that the advanced fill was not sufficient over the last five years, since the project started, because of different forces. Ken Willson agreed. Mayor Pro Tempore Thibodeau pointed out that comparison wise, the calculations for the Kitty Hawk and Kill Devil Hills projects did perform within the estimates. She asked if that was correct. Ken Willson stated that the Kill Devil Hills project performed better than anticipated and the Kitty Hawk project performed less than anticipated.

Mayor Pro Tempore Thibodeau asked Ken Willson if he was concerned that the height of the dune that has been escarped would be a problem butting up against the flat beach. Ken Willson explained that another part of the design was to place sand fencing at the base of the dune. He anticipated that once the dry sand beach was there and the first winter comes through with blowing of the sand, the force of nature would be used to reestablish the bottom portion of the dune. He was not sure if there was only one row of

sand fencing in the contract but pointed out that there was the ability to add sand fencing as needed.

Senior Planner Sandy Cross was recognized to speak. Senior Planner Cross stated that there was one full row of sand fencing that would be installed by Weeks Marine. She thought the Town was putting in the budget a request for a second row of sand fencing as a supplement.

Ed Sadler of 161 Buffell Head Road was recognized to speak. Mr. Sadler asked how many cubic yards of sand was put on the beach for the 2017 project. Ken Willson stated that it was approximately one million cubic yards. He explained that he was talking about widening the beach greater than 120 feet wide. He added that if one went to the wet dry line today, the wet dry line would be about 120-130 feet further out into the water. He noted that the original project pushed that line out about 240 feet.

Ed Sadler clarified that it was half as much sand as the 2017 project. Ken Willson stated he was correct. He pointed out that one of the items that was in the Town's monitoring report was that every year the monitoring is completed, they discuss the percentage of sand that was placed on the beach back in 2017 that was still in place. He noted that 50% of the sand that was placed during the 2017 project remains in place to this day. Ed Sadler pointed out that the ocean floor was much better today than it was previously. Ken Willson agreed.

Mayor Pro Tempore Thibodeau asked if it mattered if the tide was high or low with regard to the wet dry line. Ken Willson stated that the line would change, adding that it depended on how big the waves were.

Patty Bossert of 102 Pelican Way was recognized to speak. Ms. Bossert asked how far north the sand fencing would go in the taper area. Ken Willson stated that he would have to check the quantities, adding that there was some discretion. He pointed out that the number in the bid document was an estimate but they could discuss whether it should go all the way through the taper area or stop where the design beach did. Ms. Bossert pointed out that the Town was getting 25,000 more cubic yards in the taper area. Ken Willson stated that it was in the southern area, adding that the fill was thinner on the northern end.

Roberta Graham of 104 North Snow Geese Drive was recognized to speak. Ms. Graham clarified that the dune will not be changing. Ken Willson stated she was correct. Ms. Graham clarified that the beach will be half the size it was after the 2017 project. Mr. Willson noted that some of the sand from the last project was still there, so it will be hard to compare.

Councilor Schiano asked how people would get to the beach from the top of the dune. Councilor Mooney thought that each of the accesses in the nourishment area would be graded. Senior Planner Cross stated that the grading was in process right now, adding that the beach changes daily due to the moving sand. She stated that the Town has tried

to maintain the walkability of the accesses over the past five years but it could change after the renourishment project. She pointed out that there will be some situations that the Town will need to look at closely with regard to accesses. Councilor Schiano thought that it was not good if the Town spends millions of dollars to preserve the beach that people cannot access. Mayor Pro Tempore Thibodeau agreed.

Roberta Graham suggested that Council be very agile about what homeowners are allowed to do when the time comes. She cautioned Council to reconsider making homeowners remove the posts and ropes if the contractor will not be going near that part of the dune.

Patty Bossert asked if a design storm was considered a Category One or Category Two hurricane. Ken Willson explained that he looks at storms that statistically has the potential of appearing every five or ten years. He added that he uses past data to figure out statistically what the chances were on any given year. He stated that when they first started looking at the project and budgets, they looked at a statistical analysis and found that the affordability for a reasonable amount of protection was in the 20–30-year storm range. He added that when they looked at Hurricane Isabel, they found it had a lot of the same characteristics of a 20- or 30-year storm. He noted that they specifically simulate the wave forces and water levels during Hurricane Isabel to figure out what the design level of protection was needed and over time they increased the water level and adjusted the level of protection.

Mayor Kingston asked what happened to the sand that was located off the coast of Duck. Ken Willson explained that most of the sand was used during the 2017 project.

Senior Planner Cross asked if Weeks Marine had planned to start working on the project from the north end and working south since this would get them back to their finish point or if they would work from the south end to the north. James Ferguson of Weeks Marine was recognized to speak. Mr. Ferguson stated that they have certain pump out locations planned in Town and would like to start on the south end, adding that the dredge is only able to pump a certain distance.

Mayor Kingston stated that Duck's project would be completed during prime hurricane season. He asked how much equipment would have to be taken off the beach if a hurricane was going to strike. He further asked if it was a big demobilization project. James Ferguson stated that depending on the size of the storm they have different levels of planning to go in based on the storm level. He explained that they would try to get as much as possible out. Mayor Kingston asked if consideration was made to reversing the plan and starting in Duck. Mr. Ferguson stated that it was based on the equipment that is available. He noted that access in Duck was hard in the vicinity of the project area. He stated that it also depended on what dredge capacity was available.

Mayor Pro Tempore Thibodeau asked when the next survey for the entire Town would be completed. Ken Willson stated that there would be four surveys completed – one within a month or two prior to the project at 500 foot spacing; one completed at 100 foot spacing during the project; one after constructing a particular part of the beach at 100 foot spacing; and the final one would be the post-construction survey.

Mayor Pro Tempore Thibodeau asked if construction was suspended due to storms, it would be transparent as to when the project restarts. James Ferguson stated she was correct.

Mayor Kingston asked if there would be any issue bringing in the equipment. James Ferguson stated that he did not anticipate any issues.

Mayor Kingston thanked Ken Willson and Weeks Marine for their presentation.

ADJOURNMENT

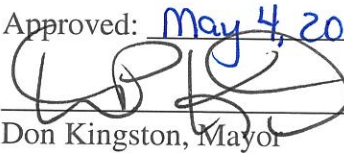
Councilor Whitman moved to adjourn the meeting.

Motion carried 5-0.

The time was 4:29 p.m.



Lofi A. Ackerman, Town Clerk

Approved: May 4, 2022


Don Kingston, Mayor

