



TOWN OF SOUTHERN SHORES
TOWN COUNCIL REGULAR MEETING
5375 N. Virginia Dare Trail, Southern Shores, NC 27949
Phone 252-261-2394 / Fax 252-255-0876
www.southernshores-nc.gov
PITTS CENTER
Tuesday, October 05, 2021 at 5:30 PM

MINUTES

Call Meeting to Order

Pledge of Allegiance
Moment of Silence

PRESENT

Mayor Tom Bennett
Mayor pro tem Elizabeth Morey
Council Member Jim Conners
Council Member Leo Holland
Council Member Matt Neal

Amendments to / Approval of Agenda

Motion made by Council Member Holland to approve the agenda as presented, Seconded by Council Member Conners. The motion passed unanimously (5-0).

Voting Yea: Mayor Bennett, Mayor pro tem Morey, Council Member Conners, Council Member Holland, Council Member Neal

Consent Agenda

The consent agenda consisted of the following:

1. Joint Beach Nourishment Easements with Town of Duck
2. Updates to Town's Emergency Management Plan
3. Minutes- Regular Mtg. 9/7, Workshop Mtg. 8/17, 5/18, and Closed Session 7/6 (not in packet)

Motion made by Council Member Conners to approve the consent agenda as presented, Seconded by Council Member Holland. The motion passed unanimously (5-0).

Voting Yea: Mayor Bennett, Mayor pro tem Morey, Council Member Conners, Council Member Holland, Council Member Neal

Presentations

4. Introduction of Department Interns

Town Manager Ogburn stated the administration department intern for the current year is First Flight High School junior and Southern Shores resident Hunter Braithwaite.

Fire Chief Limbacher introduced his department's intern, First Flight High School Senior and Southern Shores resident Nick Gardill.

Police Chief David Kole introduced his department's intern, Joseph Krieg, a First Flight High School senior and Southern Shores resident.

5. FY2020-21 Annual Audit Presentation-Teresa Osborne, Dowdy & Osborne

Teresa Osborne presented the annual audit report and financial highlights:

- The town has received an unqualified/unmodified opinion on its financial statements, which is the best opinion that you can receive.
- The assets and deferred outflows of resources of the Town of Southern Shores exceeded its liabilities and deferred inflows of resources at the close of the fiscal year by \$ 17,123,282 (net position).
- The government's total net position increased by \$ 895,496, due to a combination of factors including revenues over expenses in the governmental funds of \$ 1,119,775 adjusted by several factors to convert to the full accrual basis of accounting. These adjustments include capitalization of assets (net of depreciation and disposals) in the current year amount of \$ 24,222 full accrual revenue adjustments of (\$ 30,609) and long-term debt adjustments of (\$ 217,892).
- As of the close of the current fiscal year, the Town of Southern Shores' governmental funds reported combined ending fund balances of \$ 8,330,476, an increase of \$1,119,775 over the prior year. Approximately 22% of this total amount or \$ 3,141,360 is non-spendable, restricted, committed or assigned.
- At the end of the current fiscal year, unassigned fund balance for the General Fund was \$5,189,116 or 82% of total general fund expenditures for the fiscal year.
- Total property valuation increased \$ 254,095,003 (18%) from \$ 1,384,046,468 in fiscal year 2020 to \$ 1,638,141,471 in fiscal year 2021.
- The general fund budget for the year was adopted with a revenue neutral tax rate of 19.58 cents per \$ 100 of assessed valuation. Estimated appeals from revaluation came in less than 5% budgeted so the current year net tax levy excluding motor vehicle taxes came in \$ 149,720 more than the prior year.

Teresa Ogburn stated a copy of the full audit will be available on the Town's website once LGC approval is received.

6. Exploratory Committee for A Potential Branch Library -Update

Michael Fletcher and Liliias Morrison presented an update of the progress of the Potential Branch Library Committee. The committee has presented their findings to Dare County Commissioners and have been trying to make progress with the Dare County Library board. Both Mr. Fletcher and Ms. Morrison stated that they are extremely frustrated by the lack of communication and transparency with the Dare County Library Board, as well as Dare County Commissioner and Southern Shores representative Steve House. Two members of the Southern Shores Potential Branch Library Committee have even submitted applications to fill the County Library Board vacancies. They have received no response or communication. The Exploratory Committee for A Potential Branch Library if to continue, would like more Council support and backing with the Library Board and Dare County.

Mayor Bennett stated from individual talks with some of the County Commissioners there seems to be little support and no desire to move forward.

Town Manager Ogburn stated that sometimes no answer is an answer and the feeling he has gotten from the county is that they have libraries where they need them and the will to move forward is just not there.

Council Members Connors stated Mike Fletcher and the committee members deserve an answer from the county, regardless of the answer.

Michael Fletcher stated he is still determined to have a library.

Council Member Neal asked Mr. Fletcher and Ms. Morrison if they felt it was worth it? Michael Fletcher stated yes, and there may be other options to pursue.

Staff Reports

7. Deputy Town Manager/Planning Director Wes Haskett presented the Planning Department's monthly report for September. The Planning Board's next scheduled meeting is October 18th at 5:00 pm. consisting of further discussions on ZTA-21-08, produce stands, and maximum allowable lot coverage Section 36-202 (d6).

Police Chief Kole presented his department's monthly report for September.

Fire Chief Limbacher presented a monthly report for September.

Town Manager Ogburn reported on the following operational highlights:

- Beach nourishment update on the savings from the beach nourishment project. Bids came in under budget with an overall project savings of 3,777,498. The Town's portion of payment for the project has always been the equivalent of 7.82 cents on our levy. The county was paying 38.11 % of the project. Because the county was holding Southern Shores at the 7.82, they were contributing a large amount of that debt service to the project to make up the difference of the expected cost. When the bids came in underestimate, the county's debt service dropped from 2.4 million to 75,000. This eliminated the county's debt service plus generated a saving to the Town in the amount of \$100,019.00.
- BRIC grant- The letter of interest was submitted last week, and staff should hear back by October 15th if it was approved to move on to the next stage of funding.
- The Tourism Grant for more traffic analysis was submitted. The time frame to hear back is uncertain.
- Some property owners in Town may receive a safety protocol letter from the US Army Corps of Engineers regarding the former practice aircraft training area in Southern Shores which existed in the 1940s. The US Army Corps of Engineers is notifying property owners of safety protocols. USACE will provide landowners on a FUDS MRS a notification letter and a site-specific safety guide at least once every five years. The concern level is low as an inspection is not to be done until the earliest, 2041.

General Public Comment

None

Old Business

8. Update on SEPI Pavement Conditions Study & Capital Improvement Plan

Town Manager Ogburn addressed a third option for the CIP plan discussed by Council at its' August 17, 2021 workshop meeting. The agenda summary read as; the Town has received the final Pavement Conditions Study & Capital Improvement Plan. The report contains two options for implementing the CIP:

Option 1 (\$675K) includes work on 38 miles of road and improves the system from approximately 27% Good/Excellent to 53% Good/Excellent. This improvement mostly comes from the conversion of fair roads to good. Some fair fall into Poor (20%) with this option at the end of the plan due to a funding shortfall.

Option 2 includes work on 57 miles of road and improves the system to 99% Good/Excellent. A similar approach as Option 1 is utilized but the increased budget allows for more extensive rehabilitation and a resulting higher performance.

Previously, the Town Council discussed a third option which would fall between the two options presented in the SEPI Report and would include roughly \$800,000 in road improvements. If the Town committed \$1million in yearly funding, approximately \$200,000 would be available for construction or could be carried forward in a Capital Reserve Fund. Staff has received a quote of \$4,000 to perform the analysis to produce this option.

Staff recommends the Town Council consider funding the third option and provide staff with direction on how to proceed. If the Council chooses to fund the third option, SEPI has stated that they could have the report completed by October 15, 2021.

Town Manager Ogburn stated the \$4000 to do the extra analysis can come from the current budget for the Hillcrest Drive project. Council can discuss at the October 19th workshop meeting how to move forward with this plan.

Council Member Connors asked if it was necessary to keep the Capital Improvement Committee? Town Manager Ogburn stated citizen input is always good to have but for now the SEPI Plan should be followed. The committee's charge would need to be drastically changed.

Mayor pro tem Morey stated the Town has so many roads that need attention. We are already behind with improvements and feels it is important for the Council to refocus and accept that we need to do things a little differently from the way we have done in the past. Having SEPI as the framework to work from and modify it if necessary. Council needs to give it a try and she fully supports it.

Council Member Connors agreed and supports the plan as well. The Capital improvement Committee needs to be brought up to speed.

Council Member Neal asked if the first-year renewed analysis would increase from \$675,000 to this year's appropriated expenditures? Town Manager Ogburn stated he would ask SEPI to do that.

Council Member Neal **moved** to authorize the Town Manager to enter a contract with SEPI Engineering in an amount not to exceed \$4,000 to provide additional analyses, Seconded by Council Member Conners. The motion passed unanimously (5-0).

Voting Yea: Mayor Bennett, Mayor pro tem Morey, Council Member Conners, Council Member Holland, Council Member Neal

New Business

9. Beach Nourishment

A Resolution Providing for the Issuance of Special Obligation Bond, Series, 2021A & Consideration of Beach Nourishment Interlocal Agreement

Town Manager Ogburn explained the resolution follows the bond order adopted at the September Regular Town Council meeting. It establishes the terms and conditions of the bond issuance.

The Towns and the County are entering into this Interlocal Agreement to cooperate in the construction of the respective beach nourishment projects by having the County enter the contracts for each project to achieve overall savings on the construction costs. This Interlocal Agreement sets forth the terms under which the County will enter the contracts for the projects and each Towns understanding as to the administration of the construction process, the financing of the projects and the liabilities associated with the construction of the Projects.

Council Member Neal asked if the bond would be sold to a secondary buyer when it goes into effect? Town Manager Ogburn stated he was not sure of that answer but could certainly find out.

Motion made by Mayor Bennett to approve the Resolution of the Town Council of the Town of Southern Shores Providing for the Issuance of a Special Obligation Bond, Series 2021A, Seconded by Council Member Holland. The motion passed unanimously (5-0).

Voting Yea: Mayor Bennett, Mayor pro tem Morey, Council Member Conners, Council Member Holland, Council Member Neal

Motion made by Council Member Conners to approve the Interlocal Agreement as presented, Seconded by Mayor pro tem Morey. The motion passed unanimously (5-0).

Voting Yea: Mayor Bennett, Mayor pro tem Morey, Council Member Conners, Council Member Holland, Council Member Neal

10. Consideration of TCA 21-07-Combustible Materials

Deputy Town Manager/Planning Director Wes Haskett presented the agenda summary reading as follows: In August Southern Shores Volunteer Fire Department Chief Limbacher contacted Town Staff to see if the Kitty Hawk Elementary School could be allowed to have a bonfire as part of the school's Fall Carnival on November 5, 2021. Town Code Section 14-65 defines a bonfire as an outdoor fire having a total fuel area of more than three feet in diameter and two feet or more in height used for ceremonial purposes. Town Code Section 14-68 (8) states that it shall be unlawful for any person to start or set a bonfire. In an effort to allow the school to have a bonfire at the Fall Carnival, Town Staff is proposing to amend Section 14-68 (8) so that bonfires held by Kitty Hawk

Elementary School under the supervision of the Southern Shores Volunteer Fire Department or other fire protection official(s) are allowed. Town Staff recommends approval of the proposed TCA. A Planning Board recommendation is not required.

Council Member Neal stated he just wanted to be transparent by stating his wife is on the school PTA board who is behind this request.

Motion made by Council Member Conners to approve TCA-21-07, Seconded by Mayor pro tem Morey. The motion passed unanimously (5-0).

Voting Yea: Mayor Bennett, Mayor pro tem Morey, Council Member Conners, Council Member Holland, Council Member Neal

11. Adjustments to Police Officer Salary Schedule

Town Manager Ogburn stated the most recent opening in the Police Department went unfilled for nearly one year. This opening was partly due to a limited candidate pool, which is the norm across the country, as well as starting salary. After making comparisons to other departments in the Dare County, the Town has fallen behind by nearly \$3,000 as compared to the top two departments in starting salaries. What was also more evident was how far behind our Sergeants had become comparatively.

Staff recommends that the Town remove the sworn law enforcement positions from the Police Department, not including the Deputy Chief and Chief, from the existing pay plan and administer a separate plan. This is a strategy taking place across the state. Having Police Officers in a stand-alone plan gives us the opportunity to quickly address market changes and adjust grade ranges as necessary without disrupting or effecting the pay plan for the rest of the town staff. The Town's Attorneys have considered and agree with this recommendation. Nothing prohibits us from having a separate plan for different categories or classifications of employees. Having a separate classification for law-enforcement employees is sensible, since there may be a more competitive market for them, particularly in light of the shortage of law-enforcement officers across the state.

This recommendation not only recognizes the need to increase starting salaries for Police Officers but also the importance of retaining our current officers with a competitive salary for the Corporal and Sergeant positions. It's important to note that these revisions place us at the top of starting salaries, not actual salaries paid. The additions do increase actual salaries while maintaining our middle position compared to other departments in our area. Retention of good officers saves money and the invaluable benefit of experience in our Town.

Rather than make this recommendation based on the existing pay plan and placing Police Officers in pre-determined grades, staff recommends establish the salary ranges based on the need to be competitive within our area. The impact on the current fiscal year from this increase if incorporated November 1, 2021 is \$36,943. A full year of implementation is an increase of \$55,514

Police Chief Kole addressed the Council. He stated the salaries do not need to be the highest, but they need to be competitive. Very few officers' actual start at the starting salary figure. This challenge is not unique, the issue is everywhere. The starting salary of a sergeant in the Town of Duck or Kitty Hawk range from \$58,000 to \$64,000.

Mayor pro tem Morey asked if a temporary housing allowance has been considered as an incentive. Police Chief Kole stated he would like to entertain the idea and see if it is feasible, while keeping the current officers in mind as well.

Finance Officer Bonnie Swain stated she just returned from a conference and the issue of recruiting police officers, and the retention of good officers, was discussed thoroughly. Many municipalities are having the same issue, and many have moved to a separate pay scale which can be adjusted to the times. The cost to adjust the salaries as proposed would be approximately \$36-37 thousand, which includes FICA and retirement.

Motion made by Council Member Neal to approve a separate pay scale for law enforcement officers and approve a budget amendment in the amount of \$36,943 for police salaries adjustment, Seconded by Mayor pro tem Morey. The motion passed unanimously (5-0).

Voting Yea: Mayor Bennett, Mayor pro tem Morey, Council Member Conners, Council Member Holland, Council Member Neal

General Public Comment

None

Council Business

Council Member Holland provided a Tourism Board report for the month of July; occupancy was up 5% for July, 54% year to date and meals were up 49% for July, 75% year to date. The Red Cross will be hosting a blood drive at Holy Redeemer Catholic Church in Kitty Hawk October 12th and 13th. He also thanked Finance Officer Bonnie Swain for her work in ensuring a good audit.

Mayor pro tem Morey thanked all first responders for all their hard work, fire, police, and EMT.

Council Member Conners stated On October 23, 2021 the Town of Southern Shores will be planting 3,000 milkweed plants in order to establish the Town as a Monarch Waystation. We will become participants in efforts throughout the United States to create, enhance or preserve critical habitat for the annual Monarch Butterfly migration. Volunteers to help plant would be greatly appreciated. We will meet at the Hillcrest Beach parking lot at 9:00 AM on Saturday, October 23. Please email himself or Emily Gould to sign up and learn further details about this critical national effort to sustain and increase the Monarch Butterfly populations. More info will be in the Town's newsletter.

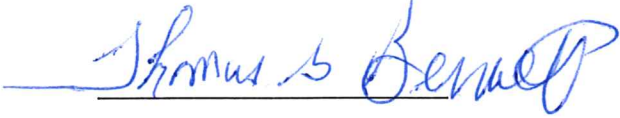
Council Member Neal stated he feels the library committee is due more support and they left before he could process his thoughts. The Town should try to apply pressure to the County so that the committee has an answer, either way. Council needs to try harder to give more support.

Adjourn

Hearing no other business, Mayor Bennett called for a motion to adjourn.

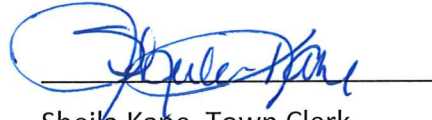
Motion made by Council Member Holland to adjourn the meeting at 7:28 p.m., Seconded by Mayor pro tem Morey. The motion passed unanimously (5-0).

ATTEST:

A handwritten signature in blue ink, reading "Thomas G. Bennett", written over a horizontal line.

Thomas G. Bennett, Mayor

Respectfully submitted,

A handwritten signature in blue ink, reading "Sheila Kane", written over a horizontal line.

Sheila Kane, Town Clerk

The attached documents are incorporated herewith and are hereby made a part of these minutes.

Presentation To

The Dare County Library Board on DD Month YYYY



“Northern
•Dare
Library”

- Kill Devil
- Hills Library

Manteo
Library

Hatteras
Library

PROPOSAL FOR A DARE COUNTY LIBRARY BRANCH IN LEGISLATIVE DISTRICT 3 TO EXTEND LIBRARY SERVICES INTO NORTHERN DARE COUNTY



LIBRARY BRANCH DISTRIBUTION

Item 6.

- **District 1 (Roanoke Island, Dare County Mainland): Manteo Branch**
- **District 2 (Nags Head, Colington, Kill Devil Hills): Kill Devil Hills Branch**
- **District 3 (Kitty Hawk, Southern Shores, Duck): None**
- **District 4 (Hatteras Island): Hatteras Branch**
- **District 5 (At large): None**

***By Dare County Legislative District**



DISTRICT 3 ACCESS TO SERVICES

Item 6.

- **Degraded District 3 physical access to Kill Devil Hills Library Branch**
 - **Traffic congestion and delays on travel arteries (NC 12, NC 158)**
 - Near-capacity Dare and Currituck OBX tourist/visitor density
 - Longer tourism peak/shoulder seasons
 - Distance/Time (north Duck to KDH Branch): 17 miles/1½ hours (in season)
 - **Lack of convenient alternative (public) transportation**
 - **Lengthy and dangerous bicycle/pedestrian access from north of NC 158**
- **Expanding resident population**
 - **County grew by 8.8% over past decade (2020 Census); 1.6% annual growth**
 - **District 3 has more than 19% of Dare County's resident population***

* Kitty Hawk: 3,666 Southern Shores: 3,022 Duck: 400 Unincorporated (Martin's Point): ~385 homes



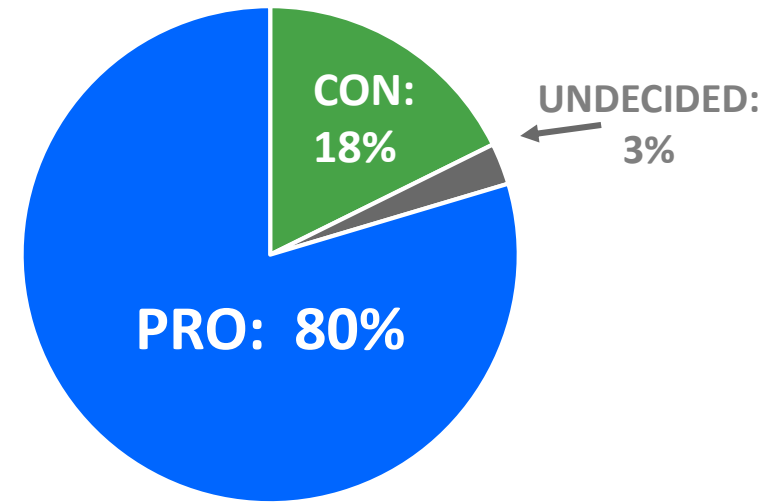
DISTRICT 3 SURVEY (2019)

KEY FINDINGS:

- 91% found a Northern Branch important for essential library services
- 80% support a Northern Branch
- 75% would use library more if a branch were located in Southern Shores
- Most desired services:
 - Browse/check out/return books (91%)
 - Adult & childrens' programs (82% combined)
 - Read news/periodicals (43%)
 - Computer access and education

* Survey was voluntary and available on <https://www.southernshores-nc.gov/exploratory-committee-potential-branch-library/>

INTEREST IN HAVING LIBRARY BRANCH IN SOUTHERN SHORES



SURVEY RESPONSES: 403

SOUTHERN SHORES	237	(59%)
DUCK	37	(9%)
KITTY HAWK	51	(13%)
MARTIN'S POINT	21	(5%)
OTHER DARE COUNTY	8	(2%)
HOMEOWNER (NON-RES)	40	(10%)
NON-DARE COUNTY	9	(2%)

(Percentage of total responses)



PROPOSED LOCATION

Item 6.



Current Dare County-owned facilities in District 3 are inadequate for library branch use

Appropriate commercial space is available

- **Centrally located in District 3 at 6 Juniper Lane, Southern Shores**
- **2570 sq. ft. part of a TowneBank- owned building**
- **Size comparable to Hatteras Library Branch**
- **Convenient to high traffic shopping and errand locations (MarketPlace/Walmart / Home Depot)**
- **Physical space modification required for library use**
- **TowneBank offering 10-year lease at one dollar per year**



PROJECTED COST

Item 6.

- **Lease:** **\$1/year(10 years)**
- **Construction/compliance:** **\$150-200K**
- **Collection/equipment:** **\$150-175K**
- **Annual operating cost: \$150-200K**
- **Potential grants available to reduce County expense**

BOARD ACTION REQUESTED



• **“Northern Dare Library”**

- Kill Devil
- Hills

Manteo Library
Library

Hatteras Library

ENDORSE DISTRICT 3 LIBRARY BRANCH PROPOSAL AND SUBMIT TO DARE COUNTY BOARD OF COMMISSIONERS WITH NEXT DARE COUNTY LIBRARY BUDGET



AGENDA ITEM SUMMARY

Item # 8

MEETING DATE: October 5, 2021

ITEM TITLE: Update on SEPI Pavement Conditions Study & Capital Improvement Plan

ITEM SUMMARY:

The Town has received the final Pavement Conditions Study & Capital Improvement Plan.

The report contains two options for implementing the CIP:

Option 1 (\$675K) includes work on 38 miles of road and improves the system from approximately 27% Good/Excellent to 53% Good/Excellent. This improvement mostly comes from the conversion of fair roads to good. Some fair fall into Poor (20%) with this option at the end of the plan due to a funding shortfall.

Option 2 includes work on 57 miles of road and improves the system to 99% Good/Excellent. A similar approach as Option 1 is utilized but the increased budget allows for more extensive rehabilitation and a resulting higher performance.

Previously, the Town Council discussed a third option which would fall between the two options presented in the SEPI Report and would include roughly \$800,000 in road improvements. If the Town committed \$1million in yearly funding, approximately \$200,000 would be available for construction or could be carried forward in a Capital Reserve Fund. Staff has received a quote of \$4,000 to perform the analyze to produce this option.

STAFF RECOMMENDATION:

Staff recommends the Town Council consider funding the third option and provide staff with direction on how to proceed. If the Council chooses to fund the third option, SEPI has stated that they could have the report completed by October 15, 2021.

REQUESTED ACTION:

A motion to authorize the Town Manager to enter a contract with SEPI Engineering in an amount not to exceed \$4,000 to provide additional analyses.

ATTACHMENTS: Final Report - SEPI Pavement Conditions Study & Capital Improvement Plan



Town of Southern Shores

PAVEMENT CONDITION SURVEY & CAPITAL IMPROVEMENT PLAN

September 21, 2021

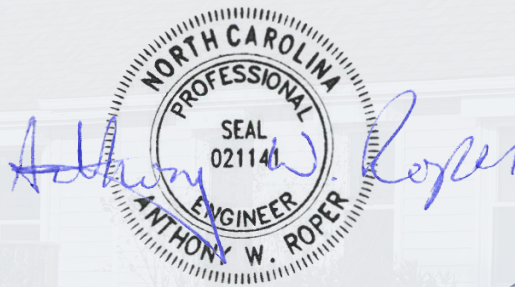


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 C | Alphabetical List of Segments

 D | Ranked List of Segments

 E | Southern Shores Maps_PCI

 F | Distress Types_Extent Definitions

SECTION 1 – EXECUTIVE SUMMARY

The Town of Southern Shores retained SEPI Engineering and Construction, Inc. (SEPI) to perform a Pavement Condition Survey on the Town's Street system and develop maintenance recommendations for treatments on each street. The Town also wanted recommendations for Capital Improvement Plan funding options.

SEPI conducted a visual pavement condition survey in March and April and one hundred-sixty-three (163) street segments were created and evaluated. The SEPI staff performed the pavement condition survey of the town streets by collecting distress data in accordance with FHWA-RD-03-031, Distress Identification Manual for the Long-Term Pavement Performance Project (June 2003)

The assessment of the Town's streets found that 12% of the Town's Street network is in Excellent condition, 15% is in Good condition and 73% is in Fair condition. No roads sections were rated as Poor or Failed.

Consequently, most of the Town's Street system falls into the average category and is well suited for overlays and mill and fill operations with limited structural deficiencies that will require reconstruction. To accomplish the goals of improving the overall condition of Town roads, SEPI recommends a mix of rehabilitation and preventative maintenance activities. SEPI has developed 2 Capital Improvement Plan (CIP) Options for 2 budgetary levels.

Option 1 (\$675K) includes work on 38 miles of road and improves the system from approximately 27% Good/Excellent to 53% Good/Excellent. This improvement mostly comes from the conversion of fair roads to good. Some fair fall into Poor (20%) with this option at the end of the plan due to a funding shortfall.

Option 2 includes work on 57 miles of road and improves the system to 99% Good/Excellent. A similar approach as Option 1 is utilized but the increased budget allows for more extensive rehabilitation and a resulting higher performance.

SECTION 2 – INTRODUCTION

2.1 PAVEMENT MANAGEMENT SYSTEM

A municipality’s pavement network allows residents and commerce to move from place to place, provides for efficient response time during emergencies, and offers safe bus routes to get children to school. Paved roads are often a municipality’s primary mode of transportation. For this reason, maintaining and preserving the condition of the pavement should be a top priority.

What is a pavement management system? A pavement management system is a long-term, formalized approach to gathering information about a municipality’s roadway network. The system is used to measure a municipality’s entire road network, evaluate its road conditions, and log this data in a comprehensive database. The data is then analyzed and used to develop several important tracking metrics, including the average Pavement Condition Index (PCI). The backlog of needs is expressed in both miles and dollars. The idea is to take a comprehensive, long-range view of a municipality’s roadway assets. Decision makers then can use the data to make informed roadway repair and maintenance decisions, prioritizing work to ensure the best return on investment.

When used effectively, a pavement management system is a cost-effective tool for improving pavement conditions and maximizing the limited roadway repair and reinvestment dollars available to municipalities (see Figure 1 below). A pavement management system can also help to build a case for additional funding for roadway infrastructure. The SEPI Team developed this report to assist Southern Shores staff to build a pavement management system that provides the level of service desired by the Town.

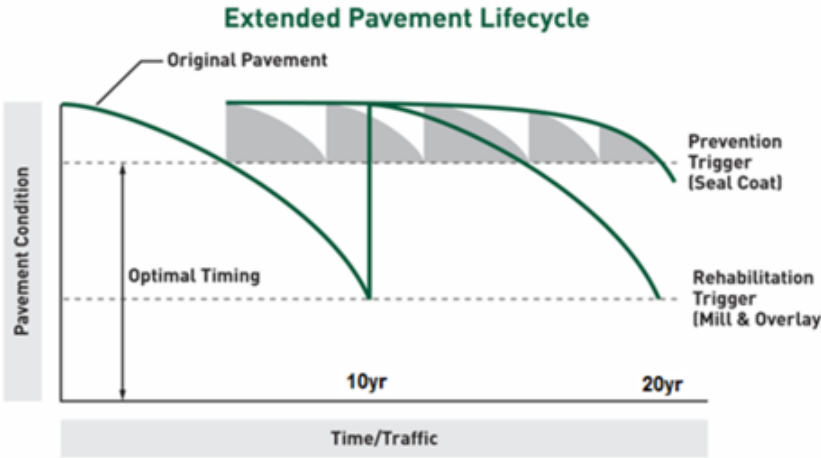


Figure 2

Figure 1 above demonstrates how pavement deteriorates over time to the point rehabilitation is necessary at a high cost. However, if treated earlier and more frequently in its life, pavement condition is maintained at a higher level and less expensive cost overall.

2.2 PAVEMENT CONDITION SURVEY

In March 2021 the Town of Southern Shores retained SEPI to perform a Pavement Condition Survey on the Town’s Street system and to develop pavement maintenance treatment options along with the associated estimated treatment costs. Town staff indicated that no previous pavement condition study results were available for historical or comparative purposes.

In accordance with the latest Town Powell Bill map, the Town of Southern Shores maintains approximately 37 miles of paved and unpaved roadways. The Town’s roadway network predominantly serves residential and rental (tourist) traffic along with some heavy-duty trucks such as delivery, sanitation, and construction vehicles. The Town provided SEPI with a list of streets and SEPI conducted a visual pavement condition survey in April and May of 2021. Our condition assessment included collecting street properties i.e., street name, to/from descriptions, block number, length, width, type of pavement, whether sidewalks or curb and gutter were present and asphalt pavement distresses. There was also an element to evaluate a parking area and walking path along NC 12.

2.3 PAVEMENT CONDITION SURVEY METHODOLOGY

SEPI’s pavement management system utilizes observed distresses collected in accordance with FHWA-RD-03-031, Distress Identification Manual for the Long-Term Pavement Performance Project (June 2003), and ASTM D6433-18 for calculating a pavement condition index (PCI). Each street segment is ridden and observed for the following pavement distresses: fatigue cracking, transverse cracking, block cracking, reflective cracking, rutting and roughness, raveling and oxidation, and potholes and patching. Each distress level is measured for severity and extent according to the LTPP Method for conducting a Pavement Condition Survey (distress definitions are included in Section 2.4). The quantity of a distress type at each severity level is used to determine deduct values for each distress type and severity level combination. This is done by assessing the quantity and severity of a distress against deduct value curves for each distress/severity. Examples of deduct value curves can be found in ASTM D6433-18. The result is a deduction in PCI value for each distress and an overall PCI value for each road segment.

The data from the observations on the rated streets is entered into SEPI’s pavement management program which generates a Pavement Condition Index (PCI) for each street segment. Streets are listed based on Pavement Condition Index (PCI) assigned as the "SEPI PCI" attribute within the database. Figure 2 represents the numerical ranges and categories for street segments.

PCI CATEGORIES	
100-90	Excellent
89-70	Good
69-45	Fair
44-20	Poor
<20	Failed

Figure 2

The PCI is a numerical indicator that rates the surface condition of the pavement. The PCI provides a measure of the present condition of the pavement based on the distress observed on the surface of the pavement. It provides an objective and rational basis for determining maintenance and repair needs and priorities. Continuous monitoring of the PCI is used to establish the rate of pavement deterioration, which permits early identification of major rehabilitation needs. The PCI provides feedback on pavement performance for validation or improvement of current maintenance procedures.

2.4 PAVEMENT DISTRESSES

The following distress definitions are related to all pavements and were the basis of our pavement condition survey.

Fatigue Cracking: A load associated structural failure due to excessive deflections or bending of the HMA layer. This type of failure is generally full depth and extends from the bottom of the pavement upwards. Fatigue cracking is typically observed along wheel paths initially and may present as intermittent longitudinal cracking at low severity. Two primary things must occur for Fatigue Cracking to develop. First, excessive traffic loading and second, deficient pavement system strength. Poor drainage and infiltration of water can exasperate fatigue cracking by weakening the underlying base or subgrade. As fatigue cracking becomes higher in intensity, cracks usually become an interconnected system resembling alligator skin or chicken wire. If left unresolved, fatigue cracking typically progresses from low to high severity unless the primary causes of distress are addressed. The rate of progression is entirely dependent upon the scale and frequency of loading versus the thickness and strength of pavement and subgrade in place. See figures 3 & 4 below for an example of moderate to high intensity fatigue cracking.



Figures 3 & 4: Fatigue Cracking as seen on First Avenue and Mizzen Mast

Transverse and Block Cracking: Transverse cracking (Figure 5) is a distress associated with shrinkage and daily temperature cycling. Transverse cracks develop across a road segment and are not load associated but generally extend through the full depth of the pavement. Transverse cracking can become block cracking (Figure 6) as a pavement ages and becomes less able to resist dimensional changes without cracking. Transverse cracks become closer together and more frequent while also being broken into smaller longitudinal sections or blocks. The initiation and further development of Transverse and Block cracking is a factor of the asphalt mixture characteristics, level of oxidation, and intensity of climate cycles. This type of distress is usually relatively slow in its progression but can develop into fatigue cracking or potholes due to water infiltration especially in thin pavement sections with poor drainage or bird baths.



Figures 5 & 6: Block Cracking and Transverse Cracking as seen on Ocean Boulevard and Ginguite Trail

Patching and Potholes: Patching is indicated on a street when the surface of the existing pavement has been repaired by replacing or covering up part of the old asphalt with new asphalt. This can be done by surface patching or full depth (dig out) patching. The quality and condition of the patch are considered in evaluating patching—*failing patches* (Figures 7 & 8) are the only ones evaluated. If not done carefully and properly, patching can lead to a rougher riding road.

Potholes are failures in the pavement resulting in an open hole in the pavement. They are caused by various issues, and care to determine the root cause is essential to choosing the correct repair method. The size and frequency of potholes are considered when evaluating the streets.



Figures 7 & 8: Patching that is failing (patches sinking and cracking)

Surface Distresses

Raveling and Oxidation: Raveling is the surface distress known as the partial or total loss of the pavement wearing surface caused by the loss of asphalt binder, aggregate, or fines. Raveling is seen more often on AST or BST streets or slurry seal type streets than on plant mix asphalt surfaces. Raveling leads to rougher riding streets and the loss of skid resistance due to loose particles on the surface. Raveling can lead to water intrusion into the underlying pavement layers and subgrade if not properly repaired.

The surface distress known as oxidation (Figure 9) is the hardening and aging of the asphalt cement or binder. Visually the asphalt turns from a black color to a lighter gray color with time as the asphalt weathers. The surface binder has been worn away by traffic to expose the aggregate. The pavement stiffens and becomes more brittle. This weathering of the asphalt usually covers the entire surface and pitting can become evident. Oxidation can be seen where the asphalt has turned a much lighter gray than when first placed.



Figure 9: Oxidation versus newer pavement (top of picture)

Rutting and Roughness: Rutting is a depression type failure normally found in the wheel path(s) resulting from consolidation or lateral movement of any of the pavement layers or the subgrade under traffic loads. It is caused by insufficient pavement thickness; lack of proper compaction of the asphalt, stone base or subgrade; improper asphalt mix types; or weakening of the pavement system due to moisture infiltration. Pavement uplift and shearing can occur in more serious rutting instances. Rutting can present safety concerns due to trapping water on the roadway and should be evaluated carefully to determine the root cause.

Roughness (Figure 10) is what the public perceives as the rideability of a street. One of the most important aspects of a street to the traveling public, roughness is also sometimes referred to as smoothness and is first controlled by the initial construction quality. An initially smooth street tends to stay smooth longer, and deteriorate more slowly, than an initially bumpy street. The street should be properly maintained and repaired to prevent rough riding roads. Special attention to the smoothness of patching and crack sealing, and timely repair of potholes is important, or the public will observe the street as a poor or bumpy road.



Figure 10: Tree roots affecting ride quality on E. Holly Trail

SECTION 3 – GENERAL OBSERVATIONS

3.1 ROAD CONDITION OVERVIEW

The results of the pavement condition survey indicate that Southern Shores' street system is in a fair but aging condition and is well suited for preservation and minor rehabilitation repair treatments. The assessment found that 12% (4.41 miles) of the Town's street network is in Excellent condition and 15% (5.47 miles) is in Good condition and 73% (26.81 miles) is in Fair condition. The remaining portion of the network is rated as 0% Poor and 0% Failed. Figure 11 below provides a summary of the PCI results.

PCI Category	PCI Range	Powell Bill Streets		
		# of Sections	Length (miles)	% of Miles
Excellent	100 to 90	25	4.41	12
Good	89 to 70	30	5.44	15
Fair	69 to 45	107	26.81	73
Poor	44 to 20	0	0	0
Failed	<20	0	0	0
TOTALS				

Figure 11: PCI Summary-Total Street System

The top three distresses observed and recorded during the pavement assessment were fatigue cracking, surface distresses, and transverse cracking. These three distresses reflect the natural aging process of pavements that have not been part of a pavement maintenance program. These aging roads are also naturally becoming less flexible due to oxidation and stiffening of the asphalt liquid that holds the roads together. Failure to timely treat these distresses may ultimately lead to structural failures and more costly repairs. Table 1 provides an overall summary and breakdown of each distress type measured, the frequency of occurrence and severity.

Distress Items	Class A		Class B		Class C		Total Street System	
	Miles	% of Miles	Miles	% of Miles	Miles	% of Miles	Miles	% of Miles
Fatigue Cracking (FC)								
A. High	1.04	10.26%	0.49	2.05%	0.07	2.39%	1.59	4.34%
B. Medium	6.39	63.28%	17.61	73.98%	1.80	65.26%	25.80	70.38%
C. Low	2.03	20.09%	2.41	10.12%	0.33	11.94%	4.77	13.00%
D. None	0.64	6.37%	3.30	13.84%	0.56	20.42%	4.50	12.28%
<i>Total</i>	<i>10.09</i>	<i>100.00%</i>	<i>23.81</i>	<i>100.00%</i>	<i>2.75</i>	<i>100.00%</i>	<i>36.66</i>	<i>100.00%</i>
Transverse Cracking (TC)								
A. High	0.00	0.00%	3.00	12.62%	0.52	18.88%	3.52	9.61%
B. Medium	7.41	73.36%	14.56	61.15%	0.80	28.98%	22.76	62.10%
C. Low	2.15	21.28%	1.61	6.74%	0.43	15.47%	4.18	11.40%
D. None	0.54	5.36%	4.64	19.49%	1.01	36.67%	6.19	16.89%
<i>Total</i>	<i>10.09</i>	<i>100.00%</i>	<i>23.81</i>	<i>100.00%</i>	<i>2.75</i>	<i>100.00%</i>	<i>36.66</i>	<i>100.00%</i>
Surface Defects (SD)								
A. High	0.00	0.00%	0.92	3.88%	0.12	4.23%	1.04	2.84%
B. Medium	6.44	63.77%	15.75	66.16%	1.12	40.68%	23.31	63.59%
C. Low	3.01	29.86%	3.69	15.51%	1.19	43.09%	7.89	21.54%
D. None	0.64	6.37%	3.44	14.44%	0.33	12.01%	4.41	12.04%
<i>Total</i>	<i>10.09</i>	<i>100.00%</i>	<i>23.81</i>	<i>100.00%</i>	<i>2.75</i>	<i>100.00%</i>	<i>36.66</i>	<i>100.00%</i>
Patch Deterioration/Potholes (PP)								
A. High	0.87	8.63%	2.37	9.94%	0.22	7.93%	3.46	9.43%
B. Medium	2.46	24.36%	5.64	23.69%	0.15	5.34%	8.25	22.50%
C. Low	4.05	40.12%	5.10	21.41%	0.48	17.43%	9.63	26.26%
D. None	2.71	26.89%	10.70	44.95%	1.91	69.30%	15.33	41.81%
<i>Total</i>	<i>10.09</i>	<i>100.00%</i>	<i>23.81</i>	<i>100.00%</i>	<i>2.75</i>	<i>100.00%</i>	<i>36.66</i>	<i>100.00%</i>
Rutting/Roughness (RR)								
A. High	1.04	10.26%	2.56	10.77%	0.23	8.52%	3.84	10.46%
B. Medium	1.43	14.12%	6.22	26.14%	0.48	17.59%	8.13	22.19%
C. Low	0.83	8.26%	2.02	8.47%	0.30	10.81%	3.15	8.59%
D. None	6.80	67.35%	13.00	54.62%	1.74	63.08%	21.54	58.76%
<i>Total</i>	<i>10.09</i>	<i>100.00%</i>	<i>23.81</i>	<i>100.00%</i>	<i>2.75</i>	<i>100.00%</i>	<i>36.66</i>	<i>100.00%</i>
Block Cracking (BC)								
A. High	0.00	0.00%	0.00	0.00%	0.00	0.00%	0.00	0.00%
B. Medium	8.20	81.28%	18.09	75.98%	1.32	48.02%	27.62	75.34%
C. Low	0.43	4.22%	0.69	2.88%	0.00	0.00%	1.11	3.03%
D. None	1.46	14.51%	5.03	21.14%	1.43	51.98%	7.93	21.63%
<i>Total</i>	<i>10.09</i>	<i>100.00%</i>	<i>23.81</i>	<i>100.00%</i>	<i>2.75</i>	<i>100.00%</i>	<i>36.66</i>	<i>100.00%</i>
Reflective Cracking (RC)								
A. High	0.00	0.00%	0.00	0.00%	0.00	0.00%	0.00	0.00%
B. Medium	0.00	0.00%	0.00	0.00%	0.00	0.00%	0.00	0.00%
C. Low	0.00	0.00%	0.00	0.00%	0.00	0.00%	0.00	0.00%
D. None	10.09	100.00%	23.81	100.00%	2.75	100.00%	36.66	100.00%
<i>Total</i>	<i>10.09</i>	<i>100.00%</i>	<i>23.81</i>	<i>100.00%</i>	<i>2.75</i>	<i>100.00%</i>	<i>36.66</i>	<i>100.00%</i>

Table 1: Pavement Condition Survey Distress Summary

SECTION 4 – MAINTENANCE RECOMMENDATIONS

4.1 STRATEGIC APPROACH

Studies have shown that the right treatment on the right road at the right time is the best use of limited maintenance dollars. However, for most public agencies there are typically more maintenance needs than funds available. Therefore, maintenance activities need to be prioritized to maximize available funding. **One strategy is to allocate funds and plan maintenance activities that focus on keeping the good roads good. Keeping good roads good with cost effective and proactive treatments is the general concept of pavement preservation.**

SEPI has seen great success with a mixed pavement maintenance program often heavily utilizing pavement preservation. Pavement preservation is a planned system of treating pavements to maximize their useful life. All pavements require some form of maintenance due to the effects of traffic and the environment on the exposed pavement materials over time. For example, applying a relatively low-cost surface treatment to a pavement with light to moderate distresses can efficiently increase the life of a pavement.

The most obvious benefit of pavement preservation is the extended service life of the pavement. Other benefits of a pavement preservation program are the ability to impact significant portions of the system by utilizing lower cost treatments, better forecasting of maintenance cost demands, fewer premature pavement failures, keeping good roads good, and reduced user inconveniences due to construction.

Having a successfully implemented program of yearly preservation treatments is the goal of most pavement management plans if funding is available. Given the current conditions of the system in Southern Shores (mostly Fair) the strategic approach of this plan is to first make more good roads hopefully at a rate faster than the currently Fair roads deteriorate. If this can be accomplished, then ultimately pavement preservation will phase into being the majority of the work. For cases where an owner organization does not have enough money to make more good roads, preservation can still be utilized to slow the rate of deterioration. The main concept here is that preservation is mostly intended to keep good roads good, and rehabilitation (structural treatments) generally help create more good roads. The 2 options of CIP's presented below will show how different funding levels utilize similar but different fixes to maximize the future predicted conditions of the system.

4.2 PAVEMENT TREATMENT OPTIONS

The exclusive purpose of the SEPI pavement management plan is to preserve pavements, delay future deterioration, and improve overall conditions cost-effectively and efficiently. Since SEPI determined that the overall system health of the Town's roads was majority fair, the main goal of the recommended treatment options is to raise the overall condition of the Town's network by applying cost-effective treatments to correct pavement deficiencies. In accordance with our discussions with Southern Shores staff and their expectations for level of service and aesthetics along with balancing risk of treatment success, we have selected 5 treatment type options:

1. *Full Depth Patching*

Full Depth Patching (FDP) is accomplished by removing the existing pavement generally a minimum of 7 feet wide through its "full depth". Depths of 6 to 8 inches are anticipated for use in these CIP options. The existing material is removed utilizing a milling machine for expedited construction and clean "cuts". New asphalt is placed back into the excavation in compacted lifts, reconstructing the pavement. If unstable subgrade conditions are encountered, this can be mitigated by undercutting the excavation and adding additional asphalt, graded aggregate base or open graded stone, dependent on conditions and contract specifications. FDP extends the useful life of the pavement by focusing on rehabilitating isolated structural failures. This treatment is frequently utilized on areas of fatigue cracking and potholes but may also be effective on rutting and isolated cracking or high intensity transverse cracking. FDP is not intended to rebuild the entire roadway and alternative methods of rehabilitation or reconstruction should be considered once FDP quantities exceed 25 – 50% of the roadway.

2. *Rehabilitation Minor – Overlay*

Rehabilitation with a minor overlay consists of first leveling and patching the roadway. Patching is as described above and may include some shallower (surface) patching if distresses are present and are located primarily in the near surface (2 inches) of the pavement. Surface patching should not be utilized to fix structural deficiencies. Leveling consists of placing a relatively thin but variable thickness, of typically sand asphalt, to fill in depressions or correct localized drainage issues (bird baths). Patching and leveling is then covered with a 1.25 to 1.5 inch thick overlay to improve the condition of the roadway, provide additional structure and increase remaining service life. Overlays are utilized on pavements in the good and fair categories that do not have excessive amounts or high intensity cracking present. Overlays with patching and leveling are a cost effective way to make more "Good" and "Excellent" roads from fair candidates.

3. *Rehabilitation Major – Mill and Fill 2in*

Rehabilitation Major Mill and Fill of 2 inches is an adaptation of the overlay treatment. This method of rehabilitation includes patching but eliminates leveling and surface patching due to the removal of the entire pavement surface in a uniform 2in cut with a milling machine. Milling removes the weathered and cracked asphalt surface course which is replaced with new materials. Milling allows for tying into existing grades and has less complications when working in curb and gutter areas or locations with lots of driveways. Mill and fill 2in operations are suited for higher traffic volume pavements in fair condition and lower traffic volume pavements in fair and poor condition. This type of treatment is necessary to rehabilitate distresses that are to severe or more frequently occurring than a minor overlay would be suitable for.

4. Rehabilitation Major – Mill and Fill 2in with Buildup

Rehabilitation Major Mill and Fill 2in with Buildup includes all aspects of a typical mill and fill 2in but adds the additional structure of another course of asphalt. This will effectively increase the structural capacity of the roadway, help to resist any reflective cracking and provide a like new roadway appearance and ride quality. This type of treatment is utilized on pavements on the lower end of the Fair scale and into the Poor category.

5. Thin Lifts

Asphalt Thin Lifts are a relatively thin application of typically sand asphalt intended to be placed on roads in the bottom of the good category to keep them good. Thin lifts provide very little structural improvement and as such are not intended to fix structural deficiencies. Thin lifts can be utilized to seal minor/low intensity cracking and provide increased pavement life.

It should be noted that reconstruction is typically a 6th category that is included in a treatment option menu. This category is for roads that have failed and require the complete replacement of the pavement structure with a new equivalent structure. Although some streets in the Town’s network could benefit from reconstruction, the number of candidates is small, and the relatively low volume of traffic further minimizes the mandatory candidates and allows most of those streets to be repaired and repaved rather than reconstructed.

		MAINTENANCE TIER	REPAIR TYPES
100-90	Excellent	Do Nothing	None
89-70	Good	Preservation	FDP, Surface Patching, Thin Lifts
69-45	Fair	Minor Rehabilitation	FDP, Overlays, Mill and Fill 2in, Mill and Fill 2in with Buildup
44-20	Poor	Major Rehabilitation	Mill and Fill 2in, Mill and Fill 2in with Buildup, Increased Patching and Leveling
<20	Failed	Reconstruction	Reconstruction Varies after Evaluating the Individual Street Failure Types

Maintenance Treatment Matrix

4.3 CAPITOL IMPROVEMENT PLAN (CIP) METHODOLOGY

SEPI developed recommended options for the CIP based on funding levels of \$675,000 and \$1,000,000 yearly budget targets. The general concept of the plans is to improve the system to the greatest extent possible for each funding level utilizing the treatment options identified in section 4.2. The current condition of all Town owned streets was rated in accordance with Sections 2 and 3 of this report and then further each roadway was categorized into one (1) of three (3) groups, Category A, Category B and Category C. For prioritizing street repairs, the Category A streets were given more importance, followed by Category B and then Category C. These groups were created with the help of Southern Shores staff to

help classify local importance by amount of traffic volume, presence of trucks, connectivity of the community and resilience of the system. A simple description for each street category follows:

- Class A - Major Residential Collectors & Through Streets
- Class B - Roads with 10 or more properties abutting
- Class C - Less than 10 properties abutting

The optional CIP plans gave particular attention to Category A streets then Category B then Category C, attempting to never let Category A go to poor. Heavier rehabilitation treatments were used on Category A than Category B than Category C to allow for appropriate levels of project risk during construction and future performance predictions. Roadway segments were selected as “worst first” when possible, but this does not always allow for touching the necessary number or length of roads. More roads must be touched/rehabilitated/preserved resulting in improvements than the number of roads that are deteriorating in order to have improvement in the end for the entire system. Rate of deterioration further impacts this as generally bad roads deteriorate faster than good roads. These plans attempt to assign a mix of fixes that equals overall improvement at the end of the analysis term. The following describes specifically how treatments were selected during the development of the plan.

Category A/B/C Roads (Good):

- Thin Lift

Category A Roads (Fair):

- If PCI less than 60 = Mill and Fill 2in with Build up
- If PCI >= 60 and Fair = Mill and Fill 2in
- FDP if conditions warrant

Category B/C Roads (Fair):

- If PCI >= 60 and Fair = Overlay
- If PCI < 60 and Fair = Mill and Fill 2in
- FDP if conditions warrant

Category A/B Roads(Poor):

- Mill and Fill 2in with Build up
- FDP if conditions warrant

Category C Roads (Poor):

- Mill and Fill 2in
- FDP if conditions warrant

Unit costs utilized for each of these treatments are below in Table 2.

Maintenance	Cost
Full Depth Patching	\$100.00/SY
Rehab Minor - Overlay	\$22.00/SY
Rehab Major – Mill and Fill 2in	\$28.00/SY
Rehab Major – Mill and Fill 2in w/ Buildup	\$46.00/SY
Thin Lift	\$15.00/SY

Table 2

For Fair and good pavements, one alternative treatment that has proven to be very successful both regionally and nationally is microsurfacing. Microsurfacing (also known as a type of slurry seal) is a mixture of asphalt emulsion and fine aggregate that is applied uniformly to the pavement with specialized equipment. Microsurfacing is a preventative maintenance treatment that less expensive (approximately \$9.00/SY) than Thin Lift. It provides a relatively low-cost treatment that is similar in appearance to Hot Mix Asphalt and can be utilized in lieu of aggregate surface treatments. As more good roads are produced in the system it will be crucial to keep them good. Lower cost treatments that can cover more area are key to accomplishing this. Microsurfacing may be more appropriate for the Category A, moderate volume, moderate speed applications than an aggregate surface treatment due to its differences in surface characteristics. Please see figure 18 below for a picture of typical microsurfacing.



Figure 18: Typical Microsurfacing Paving Crew

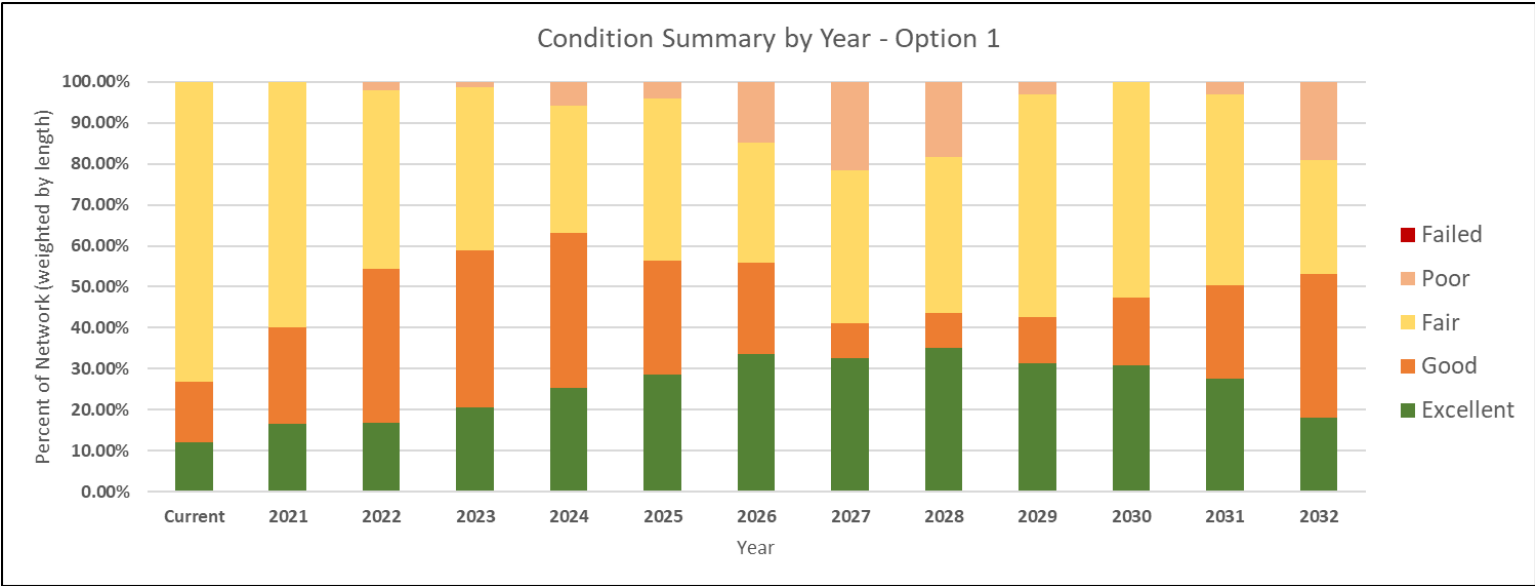
It should be noted that due to the specialty nature of microsurfacing, sufficient contract quantities would be necessary to generate contractor interest and project viability. Our conversations with the industry indicate that contract quantities including a minimum five (5) miles of microsurfacing would be preferred for mobilization of the equipment and to keep costs reasonable. If the Town is interested in learning more about this type of treatment, we will be prepared to provide additional information when requested.

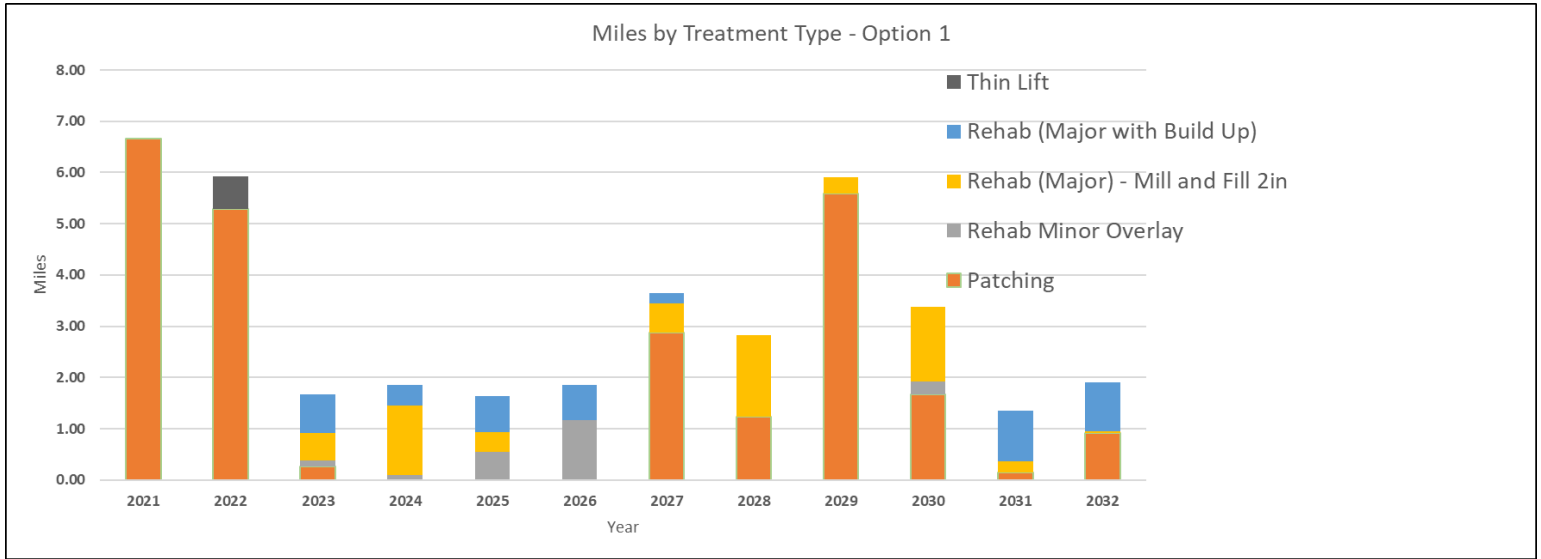
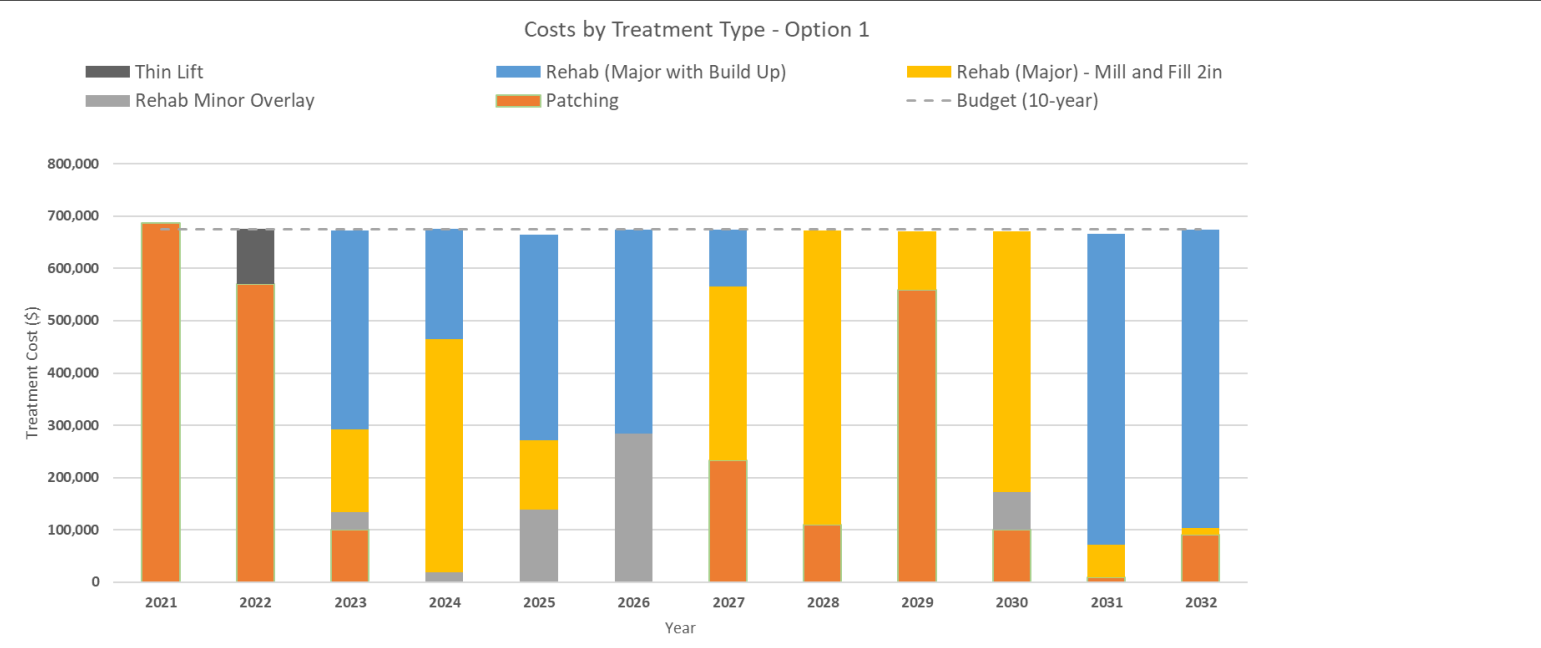
4.4 CIP PLAN DETAILS AND DISCUSSION

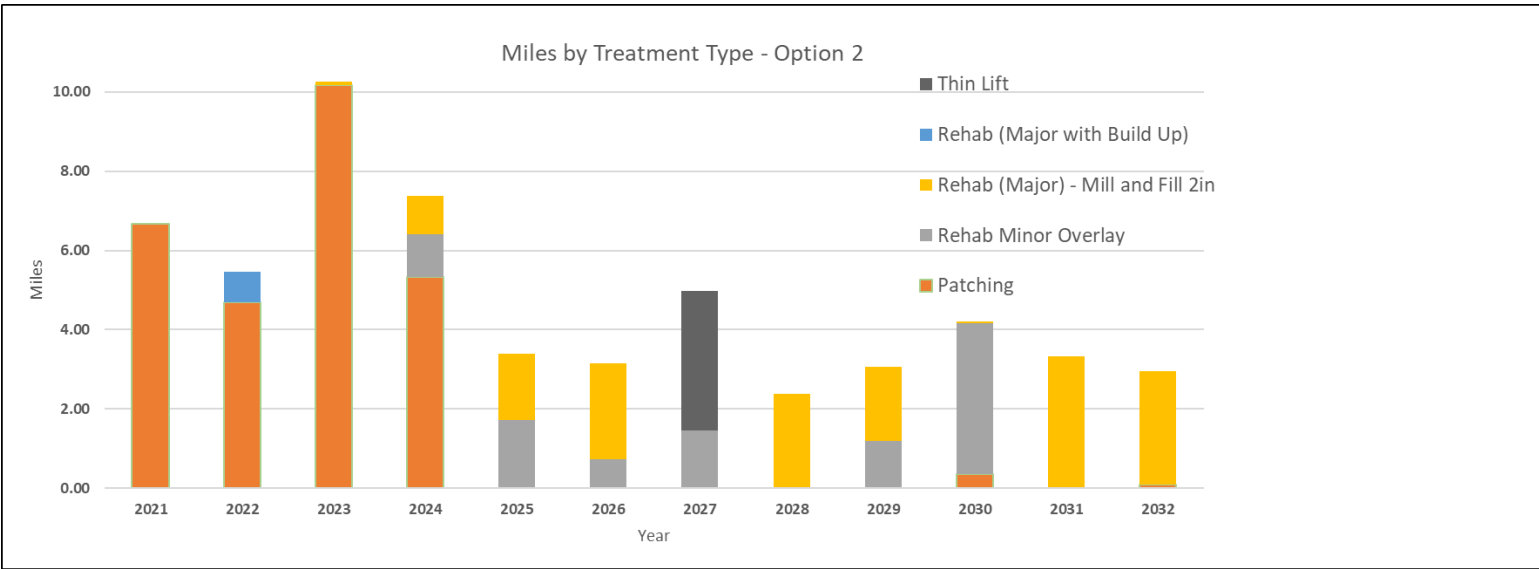
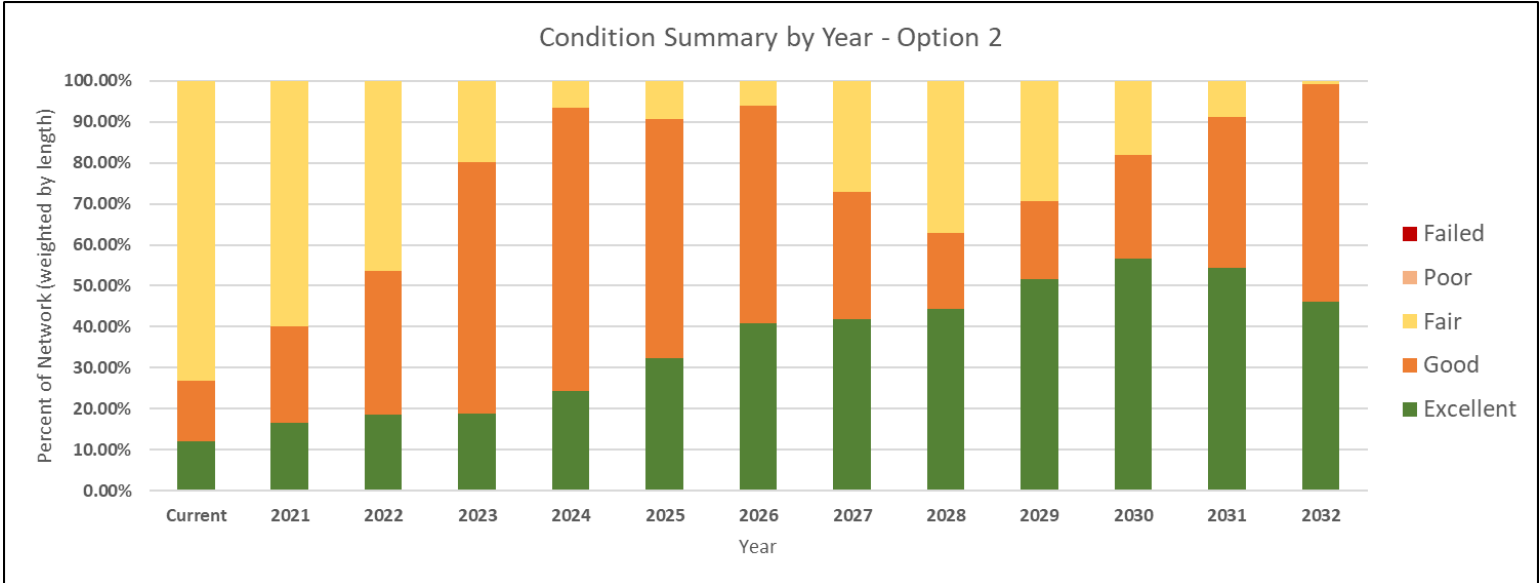
Key highlights of the options are as follows:

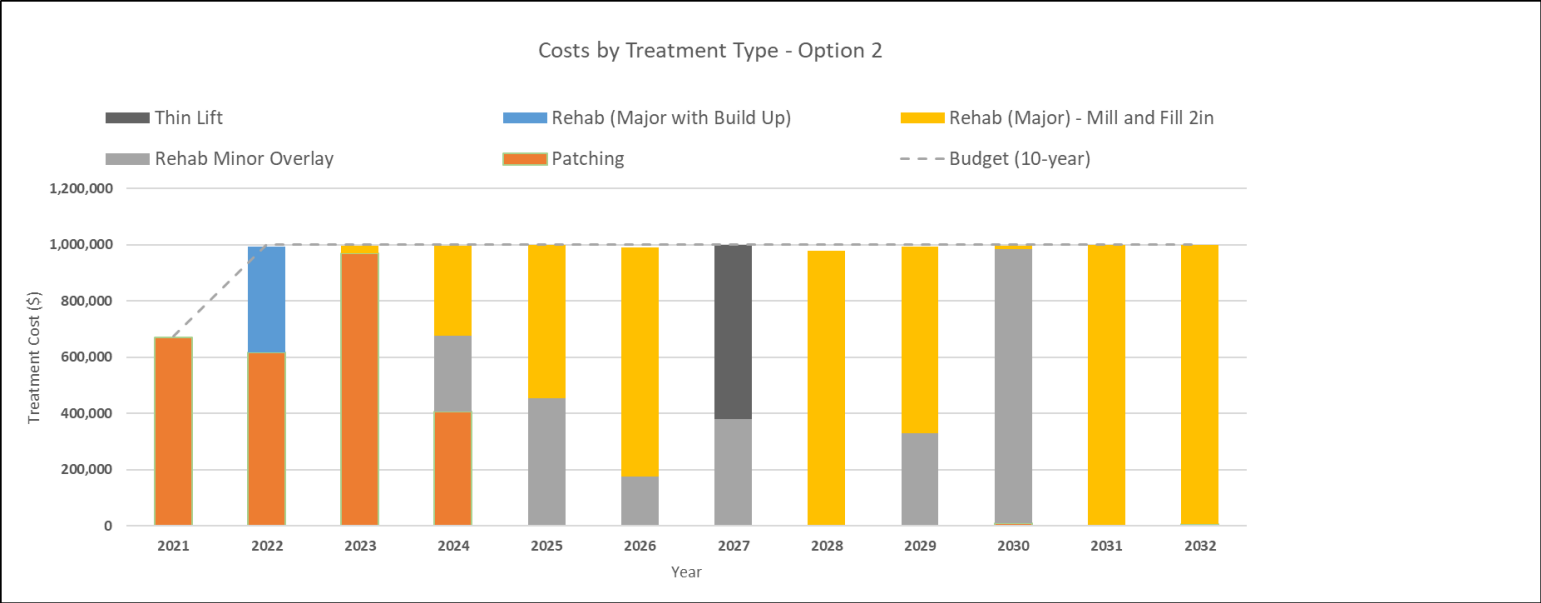
- 1. Full Depth Patching (FDP) in the first 2 years of the plan accomplishes several goals upfront. Elimination of high intensity fatigue cracking and potholes. Touches significant mileage in the system. Creates attractive winter work contracts for local contractors with adequate quantities for acceptable unit price contracts. Verifies unit prices early in the program. Brings all but 1 Category A road into the Good condition reducing maintenance requests for the Town.
- 2. Groups similar work activities together yearly in an attempt to create favorable contracting conditions.
- 3. Option 1 (\$675K) includes work on 38 miles of road and improves the system from approximately 27% Good/Excellent to 53% Good/Excellent. This improvement mostly comes from the conversion of fair roads to good. Some fair roads fall into the Poor (20%) category late in the plan due to a funding shortfall
- 4. Option 2 includes work on 57 miles of road and improves the system to 99% Good/Excellent. Similar approach as Option 1 but and increased budget allows for more extensive rehabilitation and resulting increased performance.

Summaries of the plans, Options 1 and 2, along with the predicted performance, cost and types of treatments are presented in the following figures. Detailed listing of each road segment and treatment type by year and Optional plan are presented in the report Appendix:









We understand that implementation of Option 2 would require the Town of Southern Shores to significantly increase funding for this “catch-up” scenario. We recommend the work be done under the supervision of certified inspectors. Certified inspectors play a vital role in municipalities getting the product they are paying for on the ground, within specifications, and with cost efficiency.

Further, SEPI encourages that the Town implement the recommended pavement maintenance strategy in phases and organize needed contracts in the following order:

- Patching – Since the Capital Plan calls for a great deal of prep work such as patching, we recommend patching be done in one of two ways: 1) Partner with the local NCDOT office with to have their crews review the streets and patch the areas of need; or 2) Let a contract to patch areas under the supervision of a certified inspector. The inspector and their engineer can mark the areas to be patched in the field prior to letting the contract. The contract can be properly managed through inspection for both quality and quantity control.
- Asphalt Paving – Since there are various roads that need leveling prior to preservation, an asphalt paving contract should follow the patching contract. Consideration could be given to let the two contracts together if desired. This contract would include the leveling plus any resurfacing or milling and filling with asphalt.
- As mentioned previously, given the number of relatively short sections of roadways within this system, it would also be beneficial to consider letting contracts with like type roads requiring the same treatments. This will help to establish better prices through an economy of scale.
- Meet with local contractors to discuss upcoming work opportunities and give an outlook of work to come in this plan.
- Determine methods and procedures for contract preparation and construction management.

- Consider holding back a percentage of budget yearly to account for change order contingencies. 5 to 10 percent of the total contract amount is typically sufficient.

After implementation of the preferred CIP Option, SEPI recommends that the Town of Southern Shores continue to follow the pavement preservation philosophy outlined in this report. The Town's approach should combine traditional medium to long-term strategies (reconstruction and resurfacing) with short-term preventative maintenance strategies to achieve the highest level of service while maximizing available funds each year. The experienced SEPI Team is available to assist the Town with future planning if desired.

Lastly, SEPI recommends that the Town of Southern Shores plan for future pavement condition surveys on regular five (5) year intervals so that the status of the road system can be monitored, and maintenance plans altered as necessary.

In addition to the pavement preservation practices referenced above, the SEPI team also identified a need for drainage improvements on the shoulders and the ditches in Southern Shores. High shoulders should be cut down and shaped to direct the water into the ditches. There are places where the ditches are not draining properly which can create issues in the road subgrade. We recommend some funding be set aside to address the drainage issues prior to pavement improvements.

Confirmation of these recommendations should be done in the field prior to developing a project or yearly program activities. The recommended repairs are best judgements given the current pavement conditions and projected performance, but other needs such as utility repairs, conditions of curb and gutter, drainage, and traffic volume may dictate a variation of the activity.

Field observations by an engineer are highly recommended prior to project development because of the ever-changing characteristics associated with pavement maintenance. **This final evaluation prior to letting a contract is vital to ensuring the right treatment on the right road at the right time and will help to ensure forecasted budgetary needs are as accurate as they can be.**

SECTION 5 – MULTI-USE PATH / CHICAHAUK TRAIL PARKING LOT

Multi-use Path along NC12

SEPI assessors also reviewed the 3.7 mile multi-use path along NC 12 for condition and pavement distresses. The path appears to be in fair condition and is routinely utilized daily. The path appears to be older pavement, with little to no maintenance work done throughout its life.

The asphalt is oxidizing, becoming less flexible, leading to transverse cracking (Figure A) present throughout the length of the path. There are also various areas of edge cracking (Figure B) particularly where the edge of the asphalt is unsupported (low shoulders) by gravel or earthen material.

If left unrepaired, these types of failures will increase, cracks will become wider, there will be more water intrusion, and the likelihood of further issues also increases. We recommend a crack sealing program for the transverse cracking. If the cracks are significant (greater than ½ inch), we recommend the use of mastic sealant which has been utilized successfully by NCDOT in the Eastern part of the State.

The edge cracking will likely require removal and replacement via patching. Once the areas are repaired, all low shoulder areas should also be remediated by bringing in earthen material to provide edge support. Seeding will be required to prevent erosion and stabilize the area. Low shoulders in other areas where edge cracking has not yet occurred should be repaired the same way as they can create a hazard for pedestrians and cycling traffic.



Figure A - Transverse Cracking



Figure B – Edge Cracking

There are several other issues present on the path. Right now, the greatest area of concern is the cracking and buckling of the pavement (Figures C & D) due to tree root intrusion, particularly in the more northern reaches of the path where the shaded road canopy is located. The cracks will worsen with time and become larger and thereby higher and more likely to create issues such as a tripping hazard to foot traffic or a very bumpy, uneven ride for bike traffic. SEPI recommends milling the asphalt in these areas and removing the roots as soon as funds are available. The area can be patched back to its original elevation with two (2”) inches of surface course asphalt.



Figure C – Root intrusion cracks

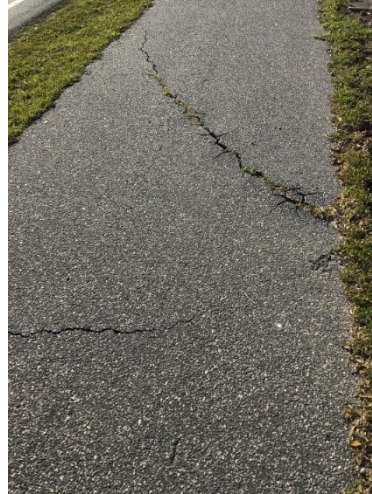


Figure D – More cracking due to roots

Another prevalent issue, particularly on the southern end of the path, is the raveling of asphalt (Figure E) from the edges. These areas are narrowing the path and grasses (Figure F) in some cases have covered parts of the path due to this problem. This could be a workmanship issue, but staff are suspicious that it could have happened during home construction where materials were stored beside the road and wear and tear of equipment use could have created the problem. While not a dangerous issue for users, these areas should be monitored and plans for future repair considered.



Figure E – Raveling of asphalt edges



Figure F – Grasses spreading across path

Additionally, there are several areas where the ADA ramp crossings (raised domes) have edges missing or broken off due to use of heavier equipment on the path. These should also be noted and monitored on a yearly basis to ensure they are not worsening to the point of not functioning properly.

In conclusion, in its current condition the path is functioning as intended and is certainly an asset to the

Town. Planning and budgeting for repairs should begin before areas deteriorate to unsafe situations. The greatest concern is the root buckling because it can create an unsafe situation for all users. SEPI recommends the Town consultant with an arborist to help make recommendations on the most effective practices in tree root removal as a part of the multi-use path repair strategy.

Timeline Recommendations for Repair

- Fund repairs for root intrusion as soon as possible because these areas present the biggest hazard to those using the path. Plan to spray areas of grass intrusion (see Figure F) also.
- Repair areas of low shoulders as soon as possible to correct the hazard for users and to prevent edge cracking of unsupported pavement.
- Fund repairs for sealing cracks larger than ¼" to prevent water intrusion and further asphalt deterioration. This should be done as quickly as possible but no more than 1-3 years.
- Plan to repave (minimum of 1 ¼" overlay) the entire path-after making repairs-in the next 5-7 years. Spray all areas of grass intrusion and kill weeds and grasses prior to repaving. Add earthen material to edges of pavement for lateral support. Seed to establish grasses to stabilize material.

Chicahauk Beach Access Trail Parking Lot

The current condition of the asphalt parking lot with porous parking areas is fair and typical of an aging low volume car parking area. Parking lots in general are highly susceptible to transverse cracking, oxidation and localized drainage issues all leading to problem spots in the pavement. This parking area is serviceable but in need of a plan to keep issues that are currently serviceable from becoming more significant problems. The types of failures present suggest that the parking area is not significantly deficient in structure as most of the cracking is random in nature other than in areas where drainage appears to be an issue. We recommend the following as a plan for rehabilitation.

- FDP and level as necessary to address isolated failures and drainage issues.
- Perform crack sealing
- Remove thermoplastic pavement markings
- Seal the surface of the pavement with a slurry seal
- Replace thermoplastic pavement markings

SECTION 6 – ACKNOWLEDGEMENTS

SEPI Engineering and Construction would like to thank the Town of Southern Shores for this opportunity. The Town staff was professional, conscientious, knowledgeable, and very supportive of the SEPI Team. The background information and open discussions with staff provided also helped ensure a very successful project. It would be a pleasure to work with Southern Shores again should our services be needed.

The SEPI team has a wide range of expertise, offering unique solutions to our clients across North Carolina and the Southeast. SEPI staff is prepared to offer engineering solutions to our clients in most all Civil Engineering disciplines. Our goal is not just to meet the needs of our clients, but also to exceed them. SEPI offers sustainable, earnest, practical, and innovative service lines to a wide range of clients. We have offices in Raleigh, Charlotte, and Wilmington in North Carolina; Charleston and Beaufort in South Carolina; and Palmetto and Fort Lauderdale in Florida.

APPENDIX A

TOWN OF SOUTHERN SHORES CAPITAL IMPROVEMENT PLAN_OPTION 1

Year 2021 Option 1						
SectionID	Street Name	BEG_DESC	END_DESC	Treatment (2021)	Cost 2021	Class
51	HILLCREST DR	SEA OATS TRL	HICKORY TRL	Patching	\$97,367	A
128	TRINITIE TRL	CHICHAUK TRL	EAGLES NEST LN	Patching	\$55,332	A
90	HILLCREST DR	HICKORY TRL	E DOGWOOD TRL	Patching	\$51,494	A
153	S DOGWOOD TRL	GINGUITE TRL	TEAL CT	Patching	\$12,233	A
26	SEA OATS TRL	SOUNDVIEW TRL	NC 12	Patching	\$25,932	A
111	S DOGWOOD TRL	YAUPON TRL	FAIRWAY DR	Patching	\$53,383	A
130	S DOGWOOD TRL	FAIRWAY DR	GINGUITE TRL	Patching	\$106,851	A
95	S DOGWOOD TRL	E DOGWOOD TRL	YAUPON TRL	Patching	\$7,782	A
11	HAPPY INDIAN LN	HIGH DUNE LOOP	DEAD END	Patching	\$3,592	B
33	SOUNDVIEW TRL	SEA OATS TRL	NORTH DUNE LOOP	Patching	\$22,737	B
54	6TH AVE	NC 12	6TH AVE	Patching	\$80,840	B
12	HIGH DUNE LOOP	SPINDRIFT TRL	SPINDRIFT TRL	Patching	\$60,981	B
58	4TH AVE	NC 12	4TH AVE	Patching	\$16,000	B
29	12TH AVE	NC 12	12TH AVE	Patching	\$18,784	B
53	6TH AVE	DEAD END	DEAD END	Patching	\$4,745	B
50	7TH AVE	NC 12	7TH AVE	Patching	\$18,244	B
121	FAIRWAY DR	S DOGWOOD TRL	EOM	Patching	\$13,635	B
142	GRAVEY POND LN	DEAD END	DEAD END	Patching	\$5,267	B
126	TURTLE POND CT	POTESKEET TRL	DEAD END	Patching	\$9,735	C
81	WOODLAND DR	E DOGWOOD TRL	N WOODLAND DR	Patching	\$16,065	C
92	MIZZENMAST LN	SEA OATS LN	DEAD END	Patching	\$6,578	C
					\$687,577	Yearly Total

Town of Southern Shores Year 2021 Treatments - Option 1

Item 8.



Legend


Treatment (2021)

 Patching

Currituck Sound

Atlantic Ocean

0 0.25 0.5 0.75 1 Miles



Year 2022 Option 1						
SectionID	Street Name	BEG_DESC	END_DESC	Treatment (2022)	Cost 2022	Class
71	HICKORY TRL	HILLCREST DR	WAX MYRTLE TRL	Patching	\$16,217	A
69	HICKORY TRL	WAX MYRTLE TRL	NC 12	Patching	\$12,210	A
84	E DOGWOOD TRL	BAYBERRY TRL	WAX MYRTLE TRL	Patching	\$67,693	A
125	CHICAHAWK TRL	CLAM SHELL TRL	SPINDRIFT TRL	Patching	\$238,628	A
38	SEA OATS TRL	SOUNDVIEW TRL	HILLCREST DR	Patching	\$32,675	A
82	E DOGWOOD TRL	N DOGWOOD TRL	BAYBERRY TRL	Patching	\$14,095	A
86	SEA OATS TRL	HICKORY TRL	E DOGWOOD TRL	Patching	\$50,011	A
68	SEA OATS TRL	HILLCREST DR	HICKORY TRL	Patching	\$19,835	A
157	S DOGWOOD TRL	TEAL CT	CROATAN HWY	Patching	\$15,117	A
47	HILLCREST DR	SEA OATS TRL	NC 12	Patching	\$4,929	A
5	BAYBERRY TRL	E DOGWOOD TRL	SCUPPERNONG LN	Patching	\$28,231	B
16	TALL CLIFF LN	HIGH DUNE LOOP	DEAD END	Patching	\$4,267	B
110	W HOLLY TRL	HOLLY TRL	DEAD END	Patching	\$13,219	B
66	PURPLE MARTIN LN	OCEAN BLVD	DEAD END	Patching	\$4,038	B
48	8TH AVE	NC 12	8TH AVE	Patching	\$5,768	B
37	11TH AVE	SEA OATS TRL	NC 12	Patching	\$16,936	B
35	11TH AVE	NC 12	11TH AVE	Patching	\$19,998	B
44	9TH AVE	NC 12	DEAD END	Patching	\$5,883	B
33	SOUNDVIEW TRL	SEA OATS TRL	NORTH DUNE LOOP	Thin Lift	\$45,924	B
54	6TH AVE	NC 12	6TH AVE	Thin Lift	\$32,656	B
122	TWISTED TREE CT	POTESKEET TRL	DEAD END	Thin Lift	\$9,773	C
151	YUCCA LN	CYPRESS LN	JUNIPER TRL	Thin Lift	\$17,472	C
					\$675,572	Yearly Total

Town of Southern Shores Year 2022 Treatment - Option 1

Item 8.



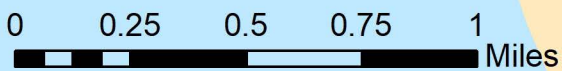
Legend

Treatment (2022)

-  Patching
-  Thin Lift

Currituck Sound

Atlantic Ocean



Year 2023 Option 1						
SectionID	Street Name	BEG_DESC	END_DESC	Treatment (2023)	Cost 2023	Class
65	HICKORY TRL	NC 12	DEAD END	Patching	\$100,946	A
64	1ST AVE	NC 12	1ST AVE	Rehab (Major with Build Up)	\$121,384	B
74	CIRCLE DR	HICKORY TRL	HICKORY TRL	Rehab (Major with Build Up)	\$259,916	B
11	HAPPY INDIAN LN	HIGH DUNE LOOP	DEAD END	Rehab Minor Overlay	\$32,235	B
55	5TH AVE	DEAD END	DEAD END	Rehab (Major) - Mill and Fill 2in	\$8,448	B
60	3RD AVE	NC 12	3RD AVE	Rehab (Major) - Mill and Fill 2in	\$68,689	B
59	3RD AVE	DEAD END	DEAD END	Rehab (Major) - Mill and Fill 2in	\$7,919	B
32	SOUNDVIEW TRL	NORTH DUNE LOOP	SEA OATS TRL	Rehab (Major) - Mill and Fill 2in	\$18,446	B
13	OCEAN VIEW LOOP	OCEANVIEW LOOP	NC 12	Rehab (Major) - Mill and Fill 2in	\$28,490	B
124	GOOSE FEATHER LN	CHICHAUK TRL	DEAD END	Rehab (Major) - Mill and Fill 2in	\$26,409	C
					\$672,881	Yearly Total





Town of Southern Shores Year 2023 Treatment - Option 1

Item 8.



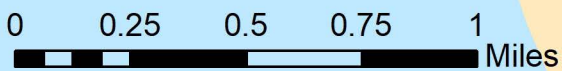
Legend

Treatment (2023)

-  Patching
-  Rehab Minor Overlay
-  Rehab (Major) - Mill and Fill 2in
-  Rehab (Major with Build Up)

Currituck Sound

Atlantic Ocean



Year 2024 Option 1						
SectionID	Street Name	BEG_DESC	END_DESC	Treatment (2024)	Cost 2024	Class
80	OCEAN BLVD	PERIWINKLE PL	E DOGWOOD TRL	Rehab (Major with Build Up)	\$125,010	B
77	PERIWINKLE PL	NC 12	OCEAN BLVD	Rehab (Major with Build Up)	\$86,716	B
6	OCEAN BLVD	DOLPHIN RUN	PORPOISE RUN	Rehab (Major) - Mill and Fill 2in	\$76,461	B
108	OCEAN BLVD	PORPOISE RUN	NC 12	Rehab (Major) - Mill and Fill 2in	\$79,903	B
79	SANDFIDDLER CT	NC 12	DEAD END	Rehab (Major) - Mill and Fill 2in	\$38,743	B
14	SPINDRIFT TRL	HIGH DUNE LOOP	DEAD END	Rehab (Major) - Mill and Fill 2in	\$164,443	B
9	PORPOISE RUN	WAX MYRTLE TRL	NC 12	Rehab (Major) - Mill and Fill 2in	\$23,640	B
8	PORPOISE RUN	NC 12	OCEAN BLVD	Rehab Minor Overlay	\$19,653	B
61	2ND AVE	DEAD END	DEAD END	Rehab (Major) - Mill and Fill 2in	\$6,169	B
36	10TH AVE	DEAD END	DEAD END	Rehab (Major) - Mill and Fill 2in	\$10,912	B
150	HAPPY INDIAN CT	HAPPY INDIAN LN	DEAD END	Rehab (Major) - Mill and Fill 2in	\$10,164	C
103	BRIGHT LANTERN LN	SEA OATS LN	DEAD END	Rehab (Major) - Mill and Fill 2in	\$18,196	C
172	KINGFISHER CT	KINGFISHER TRL	DEAD END	Rehab (Major) - Mill and Fill 2in	\$15,967	C
					\$675,976	Yearly Total




Town of Southern Shores Year 2024 Treatment - Option 1

Item 8.



Legend

Treatment (2024)

-  Rehab Minor Overlay
-  Rehab (Major) - Mill and Fill 2in
-  Rehab (Major with Build Up)

Currituck Sound

Atlantic Ocean

0 0.25 0.5 0.75 1 Miles

Year 2025 Option 1						
SectionID	Street Name	BEG_DESC	END_DESC	Treatment (2025)	Cost 2025	Class
65	HICKORY TRL	NC 12	DEAD END	Rehab Minor Overlay	\$60,372	A
26	SEA OATS TRL	SOUNDVIEW TRL	NC 12	Rehab Minor Overlay	\$79,080	A
63	1ST AVE	DEAD END	DEAD END	Rehab (Major with Build Up)	\$20,422	B
127	CLAM SHELL TRL	CHICHAUK TRL	OTTER SLIDE LN	Rehab (Major with Build Up)	\$373,302	B
43	KINGFISHER TRL	SOUNDVIEW TRL	SEA OATS TRL	Rehab (Major) - Mill and Fill 2in	\$87,495	C
120	OYSTER BED LN	POTESKEET TRL	DEAD END	Rehab (Major) - Mill and Fill 2in	\$27,564	C
119	BENT OAK CT	POTESKEET TRL	DEAD END	Rehab (Major) - Mill and Fill 2in	\$16,278	C
					\$664,513	Yearly Total




Town of Southern Shores Year 2025 Treatment - Option 1

Item 8.



Legend

Treatment (2025)

-  Rehab Minor Overlay
-  Rehab (Major) - Mill and Fill 2in
-  Rehab (Major with Build Up)

Currituck Sound

Atlantic Ocean

0 0.25 0.5 0.75 1 Miles



Year 2026 Option 1						
SectionID	Street Name	BEG_DESC	END_DESC	Treatment (2026)	Cost 2026	Class
51	HILLCREST DR	SEA OATS TRL	HICKORY TRL	Rehab Minor Overlay	\$179,849	A
45	HILLCREST DR	NC 12	DEAD END	Rehab Minor Overlay	\$57,079	A
133	PUDDING PAN LN	SPINDRIFT TRL	DEAD END	Rehab (Major with Build Up)	\$213,151	B
1	SEA OATS LN	E DOGWOOD TRL	DEAD END	Rehab (Major with Build Up)	\$177,766	B
81	WOODLAND DR	E DOGWOOD TRL	N WOODLAND DR	Rehab Minor Overlay	\$29,675	C
149	POINT COMFORT LN	GINGUITE TRL	DEAD END	Rehab Minor Overlay	\$17,095	C
					\$674,614	Yearly Total

Town of Southern Shores Year 2026 Treatment - Option 1

Item 8.



Legend

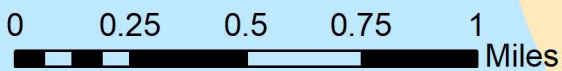
Treatment (2026)

 Rehab Minor Overlay

 Rehab (Major with Build Up)

Currituck Sound

Atlantic Ocean



Year 2027 Option 1						
SectionID	Street Name	BEG_DESC	END_DESC	Treatment (2027)	Cost 2027	Class
71	HICKORY TRL	HILLCREST DR	WAX MYRTLE TRL	Rehab (Major) - Mill and Fill 2in	\$38,106	A
69	HICKORY TRL	WAX MYRTLE TRL	NC 12	Rehab (Major) - Mill and Fill 2in	\$28,690	A
84	E DOGWOOD TRL	BAYBERRY TRL	WAX MYRTLE TRL	Rehab (Major) - Mill and Fill 2in	\$265,108	A
56	5TH AVE	NC 12	5TH AVE	Rehab (Major with Build Up)	\$108,373	B
171	OTTER SLIDE LN	CLAM SHELL TRL	CHICHAUK TRL	Patching	\$22,608	B
155	WILD PONY LN	SPINDRIFT TRL	DEAD END	Patching	\$8,139	B
49	7TH AVE	DEAD END	DEAD END	Patching	\$3,085	B
18	OCEAN VIEW LOOP	DEAD END	DEAD END	Patching	\$24,360	B
129	SPINDRIFT TRL	CHICHAUK TRL	HIGH DUNE LOOP	Patching	\$54,999	B
134	CROOKED BACK LOOP	CHICHAUK TRL	PUDDING PAN LN	Patching	\$49,759	B
85	WAX MYRTLE TRL	HICKORY TRL	E DOGWOOD TRL	Patching	\$49,973	B
89	POMPANO CT	OCEAN BLVD	DEAD END	Patching	\$4,605	B
57	4TH AVE	DEAD END	DEAD END	Patching	\$2,744	B
31	11TH AVE	DEAD END	DEAD END	Patching	\$3,016	B
28	12TH AVE	DEAD END	DEAD END	Patching	\$2,592	B
46	8TH AVE	DEAD END	DEAD END	Patching	\$4,786	B
107	E HOLLY TRL	HOLLY TRL	DEAD END	Patching	\$2,736	B
					\$673,679	Yearly Total




Town of Southern Shores Year 2027 Treatment - Option 1

Item 8.



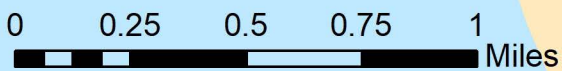
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Treatment (2027)

-  Patching
-  Rehab (Major) - Mill and Fill 2in
-  Rehab (Major with Build Up)

Currituck Sound

Atlantic Ocean



Year 2028 Option 1						
SectionID	Street Name	BEG_DESC	END_DESC	Treatment (2028)	Cost 2028	Class
125	CHICHAUK TRL	CLAM SHELL TRL	SPINDRIFT TRL	Rehab (Major) - Mill and Fill 2in	\$188,657	A
38	SEA OATS TRL	SOUNDVIEW TRL	HILLCREST DR	Rehab (Major) - Mill and Fill 2in	\$129,163	A
128	TRINITIE TRL	CHICHAUK TRL	EAGLES NEST LN	Rehab (Major) - Mill and Fill 2in	\$220,891	A
87	OCEAN BLVD	E DOGWOOD TRL	DOLPHIN RUN	Patching	\$23,463	B
34	NORTH DUNE LOOP	SOUNDVIEW TRL	SOUNDVIEW TRL	Patching	\$37,153	B
40	9TH AVE	DEAD END	DEAD END	Patching	\$3,001	B
158	SKYLINE RD	NC 12	DEAD END	Patching	\$46,690	B
139	LAND FALL LOOP	SPINDRIFT TRL	SPINDRIFT TRL	Rehab (Major) - Mill and Fill 2in	\$23,806	C
					\$672,823	Yearly Total

Town of Southern Shores Year 2028 Treatment - Option 1


Item 8.



Legend

Treatment (2028)

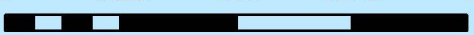
 Patching

 Rehab (Major) - Mill and Fill 2in

Currituck Sound

Atlantic Ocean

0 0.25 0.5 0.75 1 Miles



Year 2029 Option 1						
SectionID	Street Name	BEG_DESC	END_DESC	Treatment (2029)	Cost 2029	Class
39	10TH AVE	NC 12	10TH AVE	Patching	\$19,960	B
138	TEA PLANT CT	PUDDING PAN LN	DEAD END	Patching	\$8,030	B
100	WAX MYRTLE TRL	E DOGWOOD TRL	PORPOISE RUN	Patching	\$38,785	B
70	WAX MYRTLE TRL	HILLCREST DR	HICKORY TRL	Patching	\$109,458	B
24	13TH AVE	DEAD END	DEAD END	Patching	\$3,452	B
99	DOLPHIN RUN	WAX MYRTLE TRL	NC 12	Patching	\$6,626	B
52	N DOGWOOD TRL	E DOGWOOD TRL	DEAD END	Patching	\$104,278	B
21	DUCK WOODS DR	CROATAN HWY	DEAD END	Patching	\$139,471	B
78	N WOODLAND DR	DEAD END	DEAD END	Patching	\$33,402	B
94	DOLPHIN RUN	NC 12	OCEAN BLVD	Patching	\$14,271	B
23	GINGUITE TRL	PINTAIL TRL	S DOGWOOD TRAIL	Patching	\$81,775	B
154	TEAL CT	S DOGWOOD TRL	DEAD END	Rehab (Major) - Mill and Fill 2in	\$14,783	C
104	TROUT RUN	NC 12	OCEAN BLVD	Rehab (Major) - Mill and Fill 2in	\$33,625	C
145	LAST HUNT LN	HIGH DUNE LOOP	DEAD END	Rehab (Major) - Mill and Fill 2in	\$22,846	C
160	WOOD DUCK CT	S DOGWOOD TRL	DEAD END	Rehab (Major) - Mill and Fill 2in	\$14,905	C
159	BLUE PETE CT	S DOGWOOD TRL	DEAD END	Rehab (Major) - Mill and Fill 2in	\$13,416	C
27	SEA OATS CT	SEA OATS TRL	DEAD END	Rehab (Major) - Mill and Fill 2in	\$11,582	C
					\$670,666	Yearly Total



Town of Southern Shores Year 2029 Treatment - Option 1

Item 8.



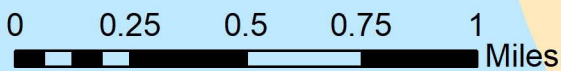
Legend

Treatment (2029)

-  Patching
-  Rehab (Major) - Mill and Fill 2in

Currituck Sound

Atlantic Ocean



Year 2030 Option 1						
SectionID	Street Name	BEG_DESC	END_DESC	Treatment (2030)	Cost 2030	Class
33	SOUNDVIEW TRL	SEA OATS TRL	NORTH DUNE LOOP	Rehab Minor Overlay	\$72,637	B
171	OTTER SLIDE LN	CLAM SHELL TRL	CHICAHAUK TRL	Patching	\$23,241	B
155	WILD PONY LN	SPINDRIFT TRL	DEAD END	Patching	\$8,368	B
49	7TH AVE	DEAD END	DEAD END	Patching	\$3,172	B
18	OCEAN VIEW LOOP	DEAD END	DEAD END	Rehab (Major) - Mill and Fill 2in	\$93,495	B
129	SPINDRIFT TRL	CHICAHAUK TRL	HIGH DUNE LOOP	Rehab (Major) - Mill and Fill 2in	\$211,086	B
87	OCEAN BLVD	E DOGWOOD TRL	DOLPHIN RUN	Rehab (Major) - Mill and Fill 2in	\$89,216	B
39	10TH AVE	NC 12	10TH AVE	Rehab (Major) - Mill and Fill 2in	\$75,202	B
138	TEA PLANT CT	PUDDING PAN LN	DEAD END	Rehab (Major) - Mill and Fill 2in	\$30,253	B
62	2ND AVE	NC 12	2ND AVE	Patching	\$20,628	B
67	OCEAN BLVD	HICKORY TRL	PERIWINKLE PL	Patching	\$22,569	B
42	9TH AVE	NC 12	9TH AVE	Patching	\$6,790	B
25	13TH AVE	NC 12	13TH AVE	Patching	\$7,030	B
41	10TH AVE	NC 12	DEAD END	Patching	\$7,800	B
					\$671,486	Yearly Total




Town of Southern Shores Year 2030 Treatment - Option 1

Item 8.



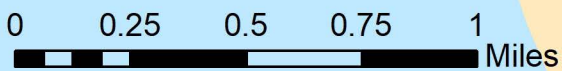
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Treatment (2030)

-  Patching
-  Rehab Minor Overlay
-  Rehab (Major) - Mill and Fill 2in

Currituck Sound

Atlantic Ocean



Year 2031 Option 1						
SectionID	Street Name	BEG_DESC	END_DESC	Treatment (2031)	Cost 2031	Class
90	HILLCREST DR	HICKORY TRL	E DOGWOOD TRL	Rehab (Major with Build Up)	\$347,098	A
153	S DOGWOOD TRL	GINGUITE TRL	TEAL CT	Rehab (Major with Build Up)	\$247,375	A
58	4TH AVE	NC 12	4TH AVE	Rehab (Major) - Mill and Fill 2in	\$62,359	B
53	6TH AVE	DEAD END	DEAD END	Patching	\$5,215	B
30	12TH AVE	NC 12	DEAD END	Patching	\$3,343	B
					\$665,390	Yearly Total




Town of Southern Shores Year 2031 Treatment - Option 1

Item 8.



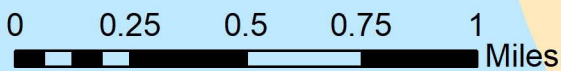
Legend

Treatment (2031)

-  Patching
-  Rehab (Major) - Mill and Fill 2in
-  Rehab (Major with Build Up)

Currituck Sound

Atlantic Ocean



Year 2032 Option 1						
SectionID	Street Name	BEG_DESC	END_DESC	Treatment (2032)	Cost 2032	Class
112	CHICHAUK TRL	CLAMSHELL TRL	DEAD END	Rehab (Major with Build Up)	\$250,019	A
134	CROOKED BACK LOOP	CHICHAUK TRL	PUDDING PAN LN	Rehab (Major with Build Up)	\$319,448	B
85	WAX MYRTLE TRL	HICKORY TRL	E DOGWOOD TRL	Patching	\$52,309	B
34	NORTH DUNE LOOP	SOUNDVIEW TRL	SOUNDVIEW TRL	Patching	\$38,529	B
162	WIDGEON CT	S DOGWOOD TRL	DEAD END	Rehab (Major) - Mill and Fill 2in	\$13,514	C
					\$673,818	Yearly Total




Town of Southern Shores Year 2032 Treatment - Option 1

Item 8.



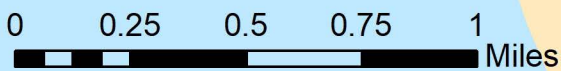
Legend

Treatment (2032)

-  Patching
-  Rehab (Major) - Mill and Fill 2in
-  Rehab (Major with Build Up)

Currituck Sound

Atlantic Ocean



APPENDIX B

TOWN OF SOUTHERN SHORES CAPITAL IMPROVEMENT PLAN_OPTION 2

Year 2021 Option 2						
SectionID	Street Name	BEG_DESC	END_DESC	Treatment (2021)	Cost 2021	Class
51	HILLCREST DR	SEA OATS TRL	HICKORY TRL	Patching	\$97,367	A
128	TRINITIE TRL	CHICAHAIK TRL	EAGLES NEST LN	Patching	\$55,332	A
90	HILLCREST DR	HICKORY TRL	E DOGWOOD TRL	Patching	\$51,494	A
153	S DOGWOOD TRL	GINGUITE TRL	TEAL CT	Patching	\$12,233	A
26	SEA OATS TRL	SOUNDVIEW TRL	NC 12	Patching	\$25,932	A
111	S DOGWOOD TRL	YAUPON TRL	FAIRWAY DR	Patching	\$53,383	A
130	S DOGWOOD TRL	FAIRWAY DR	GINGUITE TRL	Patching	\$106,851	A
95	S DOGWOOD TRL	E DOGWOOD TRL	YAUPON TRL	Patching	\$7,782	A
11	HAPPY INDIAN LN	HIGH DUNE LOOP	DEAD END	Patching	\$3,592	B
33	SOUNDVIEW TRL	SEA OATS TRL	NORTH DUNE LOOP	Patching	\$22,737	B
54	6TH AVE	NC 12	6TH AVE	Patching	\$80,840	B
12	HIGH DUNE LOOP	SPINDRIFT TRL	SPINDRIFT TRL	Patching	\$60,981	B
58	4TH AVE	NC 12	4TH AVE	Patching	\$0	B
29	12TH AVE	NC 12	12TH AVE	Patching	\$18,784	B
53	6TH AVE	DEAD END	DEAD END	Patching	\$4,745	B
50	7TH AVE	NC 12	7TH AVE	Patching	\$18,244	B
121	FAIRWAY DR	S DOGWOOD TRL	EOM	Patching	\$13,635	B
142	GRAVEY POND LN	DEAD END	DEAD END	Patching	\$5,267	B
126	TURTLE POND CT	POTESKEET TRL	DEAD END	Patching	\$9,735	C
81	WOODLAND DR	E DOGWOOD TRL	N WOODLAND DR	Patching	\$16,065	C
92	MIZZENMAST LN	SEA OATS LN	DEAD END	Patching	\$6,578	C
					\$671,577	Yearly Total

Town of Southern Shores Year 2021 Treatment - Option 2

Item 8.



Legend


Treatment (2021)

 Patching

Currituck Sound

Atlantic Ocean

0 0.25 0.5 0.75 1 Miles



Year 2022 Option 2						
SectionID	Street Name	BEG_DESC	END_DESC	Treatment (2022)	Cost 2022	Class
65	HICKORY TRL	NC 12	DEAD END	Patching	\$99,966	A
71	HICKORY TRL	HILLCREST DR	WAX MYRTLE TRL	Patching	\$16,217	A
69	HICKORY TRL	WAX MYRTLE TRL	NC 12	Patching	\$12,210	A
84	E DOGWOOD TRL	BAYBERRY TRL	WAX MYRTLE TRL	Patching	\$67,693	A
125	CHICHAUK TRL	CLAM SHELL TRL	SPINDRIFT TRL	Patching	\$238,628	A
38	SEA OATS TRL	SOUNDVIEW TRL	HILLCREST DR	Patching	\$32,675	A
82	E DOGWOOD TRL	N DOGWOOD TRL	BAYBERRY TRL	Patching	\$14,095	A
86	SEA OATS TRL	HICKORY TRL	E DOGWOOD TRL	Patching	\$50,011	A
68	SEA OATS TRL	HILLCREST DR	HICKORY TRL	Patching	\$19,835	A
157	S DOGWOOD TRL	TEAL CT	CROATAN HWY	Patching	\$15,117	A
47	HILLCREST DR	SEA OATS TRL	NC 12	Patching	\$4,929	A
64	1ST AVE	NC 12	1ST AVE	Rehab (Major with Build Up)	\$120,206	B
74	CIRCLE DR	HICKORY TRL	HICKORY TRL	Rehab (Major with Build Up)	\$257,392	B
80	OCEAN BLVD	PERIWINKLE PL	E DOGWOOD TRL	Patching	\$19,990	B
77	PERIWINKLE PL	NC 12	OCEAN BLVD	Patching	\$13,867	B
63	1ST AVE	DEAD END	DEAD END	Patching	\$3,235	B
11	HAPPY INDIAN LN	HIGH DUNE LOOP	DEAD END	Patching	\$3,627	B
55	5TH AVE	DEAD END	DEAD END	Patching	\$3,735	B
					\$993,427	Yearly Total

Town of Southern Shores Year 2022 Treatment - Option 2


Item 8.



Legend

Treatment (2022)

 Patching

 Rehab (Major with Build Up)

Currituck Sound

Atlantic Ocean

0 0.25 0.5 0.75 1 Miles



Year 2023 Option 2						
SectionID	Street Name	BEG_DESC	END_DESC	Treatment (2023)	Cost 2023	Class
60	3RD AVE	NC 12	3RD AVE	Patching	\$30,665	B
133	PUDDING PAN LN	SPINDRIFT TRL	DEAD END	Patching	\$33,769	B
127	CLAM SHELL TRL	CHICHAUK TRL	OTTER SLIDE LN	Patching	\$59,705	B
1	SEA OATS LN	E DOGWOOD TRL	DEAD END	Patching	\$28,163	B
59	3RD AVE	DEAD END	DEAD END	Patching	\$2,121	B
56	5TH AVE	NC 12	5TH AVE	Patching	\$28,348	B
171	OTTER SLIDE LN	CLAM SHELL TRL	CHICHAUK TRL	Patching	\$21,762	B
32	SOUNDVIEW TRL	NORTH DUNE LOOP	SEA OATS TRL	Patching	\$4,941	B
155	WILD PONY LN	SPINDRIFT TRL	DEAD END	Patching	\$7,835	B
49	7TH AVE	DEAD END	DEAD END	Patching	\$2,970	B
6	OCEAN BLVD	DOLPHIN RUN	PORPOISE RUN	Patching	\$33,806	B
108	OCEAN BLVD	PORPOISE RUN	NC 12	Patching	\$35,328	B
79	SANDFIDDLER CT	NC 12	DEAD END	Patching	\$17,130	B
14	SPINDRIFT TRL	HIGH DUNE LOOP	DEAD END	Patching	\$43,624	B
18	OCEAN VIEW LOOP	DEAD END	DEAD END	Patching	\$23,450	B
129	SPINDRIFT TRL	CHICHAUK TRL	HIGH DUNE LOOP	Patching	\$52,943	B
87	OCEAN BLVD	E DOGWOOD TRL	DOLPHIN RUN	Patching	\$22,377	B
9	PORPOISE RUN	WAX MYRTLE TRL	NC 12	Patching	\$6,271	B
8	PORPOISE RUN	NC 12	OCEAN BLVD	Patching	\$11,059	B
134	CROOKED BACK LOOP	CHICHAUK TRL	PUDDING PAN LN	Patching	\$47,899	B
85	WAX MYRTLE TRL	HICKORY TRL	E DOGWOOD TRL	Patching	\$48,105	B
34	NORTH DUNE LOOP	SOUNDVIEW TRL	SOUNDVIEW TRL	Patching	\$35,433	B
61	2ND AVE	DEAD END	DEAD END	Patching	\$2,728	B
36	10TH AVE	DEAD END	DEAD END	Patching	\$2,895	B
39	10TH AVE	NC 12	10TH AVE	Patching	\$18,861	B
40	9TH AVE	DEAD END	DEAD END	Patching	\$2,862	B
158	SKYLINE RD	NC 12	DEAD END	Patching	\$44,528	B
138	TEA PLANT CT	PUDDING PAN LN	DEAD END	Patching	\$7,588	B
100	WAX MYRTLE TRL	E DOGWOOD TRL	PORPOISE RUN	Patching	\$36,650	B
70	WAX MYRTLE TRL	HILLCREST DR	HICKORY TRL	Patching	\$103,433	B
24	13TH AVE	DEAD END	DEAD END	Patching	\$3,262	B
99	DOLPHIN RUN	WAX MYRTLE TRL	NC 12	Patching	\$6,262	B
52	N DOGWOOD TRL	E DOGWOOD TRL	DEAD END	Patching	\$98,538	B
62	2ND AVE	NC 12	2ND AVE	Patching	\$19,315	B
67	OCEAN BLVD	HICKORY TRL	PERIWINKLE PL	Patching	\$21,133	B
89	POMPANO CT	OCEAN BLVD	DEAD END	Patching	\$4,433	B
124	GOOSE FEATHER LN	CHICHAUK TRL	DEAD END	Rehab (Major) - Mill and Fill 2in	\$26,409	C
					\$996,598	Yearly Total



Town of Southern Shores Year 2023 Treatment - Option 2

Item 8.



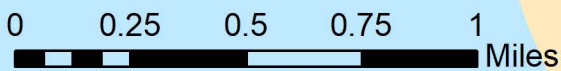
Legend

Treatment (2023)

-  Patching
-  Rehab (Major) - Mill and Fill 2in

Currituck Sound

Atlantic Ocean



Year 2024 Option 2						
SectionID	Street Name	BEG_DESC	END_DESC	Treatment (2024)	Cost 2024	Class
80	OCEAN BLVD	PERIWINKLE PL	E DOGWOOD TRL	Rehab Minor Overlay	\$59,788	B
77	PERIWINKLE PL	NC 12	OCEAN BLVD	Rehab Minor Overlay	\$41,473	B
63	1ST AVE	DEAD END	DEAD END	Rehab Minor Overlay	\$9,674	B
55	5TH AVE	DEAD END	DEAD END	Rehab Minor Overlay	\$6,702	B
60	3RD AVE	NC 12	3RD AVE	Rehab Minor Overlay	\$54,494	B
133	PUDDING PAN LN	SPINDRIFT TRL	DEAD END	Rehab Minor Overlay	\$100,018	B
13	OCEAN VIEW LOOP	OCEANVIEW LOOP	NC 12	Patching	\$12,842	B
21	DUCK WOODS DR	CROATAN HWY	DEAD END	Patching	\$133,073	B
42	9TH AVE	NC 12	9TH AVE	Patching	\$6,419	B
57	4TH AVE	DEAD END	DEAD END	Patching	\$2,667	B
78	N WOODLAND DR	DEAD END	DEAD END	Patching	\$31,869	B
31	11TH AVE	DEAD END	DEAD END	Patching	\$2,932	B
28	12TH AVE	DEAD END	DEAD END	Patching	\$2,519	B
46	8TH AVE	DEAD END	DEAD END	Patching	\$4,652	B
25	13TH AVE	NC 12	13TH AVE	Patching	\$6,646	B
94	DOLPHIN RUN	NC 12	OCEAN BLVD	Patching	\$13,617	B
23	GINGUITE TRL	PINTAIL TRL	S DOGWOOD TRAIL	Patching	\$78,024	B
5	BAYBERRY TRL	E DOGWOOD TRL	SCUPPERNONG LN	Patching	\$28,784	B
16	TALL CLIFF LN	HIGH DUNE LOOP	DEAD END	Patching	\$4,351	B
110	W HOLLY TRL	HOLLY TRL	DEAD END	Patching	\$13,478	B
66	PURPLE MARTIN LN	OCEAN BLVD	DEAD END	Patching	\$4,117	B
107	E HOLLY TRL	HOLLY TRL	DEAD END	Patching	\$2,660	B
48	8TH AVE	NC 12	8TH AVE	Patching	\$5,882	B
72	SAND PIPER LN	OCEAN BLVD	DEAD END	Rehab (Major) - Mill and Fill 2in	\$16,632	B
37	11TH AVE	SEA OATS TRL	NC 12	Patching	\$17,268	B
41	10TH AVE	NC 12	DEAD END	Patching	\$7,375	B
35	11TH AVE	NC 12	11TH AVE	Patching	\$20,390	B
44	9TH AVE	NC 12	DEAD END	Patching	\$5,998	B
150	HAPPY INDIAN CT	HAPPY INDIAN LN	DEAD END	Rehab (Major) - Mill and Fill 2in	\$10,164	C
103	BRIGHT LANTERN LN	SEA OATS LN	DEAD END	Rehab (Major) - Mill and Fill 2in	\$18,196	C
172	KINGFISHER CT	KINGFISHER TRL	DEAD END	Rehab (Major) - Mill and Fill 2in	\$15,967	C
43	KINGFISHER TRL	SOUNDVIEW TRL	SEA OATS TRL	Rehab (Major) - Mill and Fill 2in	\$86,661	C
120	OYSTER BED LN	POTESKEET TRL	DEAD END	Rehab (Major) - Mill and Fill 2in	\$27,302	C
119	BENT OAK CT	POTESKEET TRL	DEAD END	Rehab (Major) - Mill and Fill 2in	\$16,123	C
139	LAND FALL LOOP	SPINDRIFT TRL	SPINDRIFT TRL	Rehab (Major) - Mill and Fill 2in	\$22,925	C
149	POINT COMFORT LN	GINGUITE TRL	DEAD END	Rehab (Major) - Mill and Fill 2in	\$21,347	C
154	TEAL CT	S DOGWOOD TRL	DEAD END	Rehab (Major) - Mill and Fill 2in	\$14,105	C
104	TROUT RUN	NC 12	OCEAN BLVD	Rehab (Major) - Mill and Fill 2in	\$32,083	C
160	WOOD DUCK CT	S DOGWOOD TRL	DEAD END	Rehab (Major) - Mill and Fill 2in	\$14,221	C
159	BLUE PETE CT	S DOGWOOD TRL	DEAD END	Rehab (Major) - Mill and Fill 2in	\$12,801	C
27	SEA OATS CT	SEA OATS TRL	DEAD END	Rehab (Major) - Mill and Fill 2in	\$11,050	C
					\$997,287	Yearly Total

Town of Southern Shores Year 2024 Treatment - Option 2

Item 8.



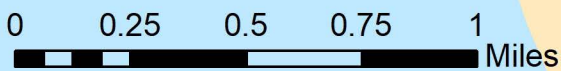
Legend

Treatment (2024)

- Patching
- Rehab Minor Overlay
- Rehab (Major) - Mill and Fill 2in

Currituck Sound

Atlantic Ocean



Year 2025 Option 2						
SectionID	Street Name	BEG_DESC	END_DESC	Treatment (2025)	Cost 2025	Class
65	HICKORY TRL	NC 12	DEAD END	Rehab (Major) - Mill and Fill 2in	\$76,837	A
51	HILLCREST DR	SEA OATS TRL	HICKORY TRL	Rehab (Major) - Mill and Fill 2in	\$226,739	A
90	HILLCREST DR	HICKORY TRL	E DOGWOOD TRL	Rehab (Major) - Mill and Fill 2in	\$199,857	A
127	CLAM SHELL TRL	CHICHAUK TRL	OTTER SLIDE LN	Rehab Minor Overlay	\$178,536	B
1	SEA OATS LN	E DOGWOOD TRL	DEAD END	Rehab Minor Overlay	\$84,217	B
59	3RD AVE	DEAD END	DEAD END	Rehab Minor Overlay	\$6,343	B
56	5TH AVE	NC 12	5TH AVE	Rehab Minor Overlay	\$50,862	B
33	SOUNDVIEW TRL	SEA OATS TRL	NORTH DUNE LOOP	Rehab Minor Overlay	\$69,336	B
171	OTTER SLIDE LN	CLAM SHELL TRL	CHICHAUK TRL	Rehab Minor Overlay	\$65,076	B
145	LAST HUNT LN	HIGH DUNE LOOP	DEAD END	Rehab (Major) - Mill and Fill 2in	\$22,008	C
122	TWISTED TREE CT	POTESKEET TRL	DEAD END	Rehab (Major) - Mill and Fill 2in	\$18,779	C
					\$998,588	Yearly Total

Town of Southern Shores Year 2025 Treatment - Option 2


Item 8.



Legend

Treatment (2025)

 Rehab Minor Overlay

 Rehab (Major) - Mill and Fill 2in

Currituck Sound

Atlantic Ocean

0 0.25 0.5 0.75 1 Miles



Year 2026 Option 2						
SectionID	Street Name	BEG_DESC	END_DESC	Treatment (2026)	Cost 2026	Class
128	TRINITIE TRL	CHICHAUK TRL	EAGLES NEST LN	Rehab (Major) - Mill and Fill 2in	\$216,801	A
153	S DOGWOOD TRL	GINGUITE TRL	TEAL CT	Rehab (Major) - Mill and Fill 2in	\$143,793	A
26	SEA OATS TRL	SOUNDVIEW TRL	NC 12	Rehab (Major) - Mill and Fill 2in	\$101,606	A
112	CHICHAUK TRL	CLAMSHELL TRL	DEAD END	Rehab (Major) - Mill and Fill 2in	\$144,033	A
45	HILLCREST DR	NC 12	DEAD END	Rehab (Major) - Mill and Fill 2in	\$72,646	A
15	TRINITIE TRL	DEER PATH LN	SWEETGUM LN	Rehab (Major) - Mill and Fill 2in	\$71,148	A
32	SOUNDVIEW TRL	NORTH DUNE LOOP	SEA OATS TRL	Rehab Minor Overlay	\$14,915	B
155	WILD PONY LN	SPINDRIFT TRL	DEAD END	Rehab Minor Overlay	\$70,958	B
54	6TH AVE	NC 12	6TH AVE	Rehab (Major) - Mill and Fill 2in	\$63,349	B
49	7TH AVE	DEAD END	DEAD END	Rehab Minor Overlay	\$8,965	B
53	6TH AVE	DEAD END	DEAD END	Rehab Minor Overlay	\$8,765	B
115	TALL PINE LN	TALL PINE LN	S DOGWOOD TRL	Rehab Minor Overlay	\$13,806	B
126	TURTLE POND CT	POTESKEET TRL	DEAD END	Rehab Minor Overlay	\$17,982	C
81	WOODLAND DR	E DOGWOOD TRL	N WOODLAND DR	Rehab Minor Overlay	\$29,675	C
92	MIZZENMAST LN	SEA OATS LN	DEAD END	Rehab Minor Overlay	\$12,150	C
					\$990,589	Yearly Total

Town of Southern Shores Year 2026 Treatment - Option 2

Item 8.



Legend

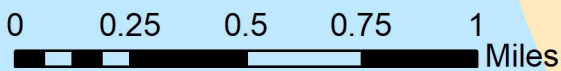
Treatment (2026)

 Rehab Minor Overlay

 Rehab (Major) - Mill and Fill 2in

Currituck Sound

Atlantic Ocean



Year 2027 Option 2						
SectionID	Street Name	BEG_DESC	END_DESC	Treatment (2027)	Cost 2027	Class
134	CROOKED BACK LOOP	CHICHAUK TRL	PUDDING PAN LN	Thin Lift	\$99,517	B
85	WAX MYRTLE TRL	HICKORY TRL	E DOGWOOD TRL	Thin Lift	\$99,947	B
34	NORTH DUNE LOOP	SOUNDVIEW TRL	SOUNDVIEW TRL	Thin Lift	\$73,617	B
61	2ND AVE	DEAD END	DEAD END	Thin Lift	\$3,400	B
36	10TH AVE	DEAD END	DEAD END	Thin Lift	\$6,014	B
39	10TH AVE	NC 12	10TH AVE	Thin Lift	\$39,188	B
158	SKYLINE RD	NC 12	DEAD END	Thin Lift	\$92,515	B
100	WAX MYRTLE TRL	E DOGWOOD TRL	PORPOISE RUN	Thin Lift	\$76,147	B
70	WAX MYRTLE TRL	HILLCREST DR	HICKORY TRL	Thin Lift	\$128,940	B
12	HIGH DUNE LOOP	SPINDRIFT TRL	SPINDRIFT TRL	Rehab Minor Overlay	\$189,505	B
58	4TH AVE	NC 12	4TH AVE	Rehab Minor Overlay	\$47,230	B
29	12TH AVE	NC 12	12TH AVE	Rehab Minor Overlay	\$58,372	B
50	7TH AVE	NC 12	7TH AVE	Rehab Minor Overlay	\$56,695	B
30	12TH AVE	NC 12	DEAD END	Rehab Minor Overlay	\$28,357	B
					\$999,444	Yearly Total

Town of Southern Shores Year 2027 Treatment - Option 2

Item 8.



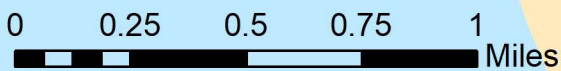
Legend

Treatment (2027)

- Thin Lift
- Rehab Minor Overlay

Currituck Sound

Atlantic Ocean



Year 2028 Option 2						
SectionID	Street Name	BEG_DESC	END_DESC	Treatment (2028)	Cost 2028	Class
69	HICKORY TRL	WAX MYRTLE TRL	NC 12	Rehab (Major) - Mill and Fill 2in	\$28,959	A
84	E DOGWOOD TRL	BAYBERRY TRL	WAX MYRTLE TRL	Rehab (Major) - Mill and Fill 2in	\$267,585	A
125	CHICAHIAUK TRL	CLAM SHELL TRL	SPINDRIFT TRL	Rehab (Major) - Mill and Fill 2in	\$188,657	A
38	SEA OATS TRL	SOUNDVIEW TRL	HILLCREST DR	Rehab (Major) - Mill and Fill 2in	\$129,163	A
82	E DOGWOOD TRL	N DOGWOOD TRL	BAYBERRY TRL	Rehab (Major) - Mill and Fill 2in	\$167,147	A
86	SEA OATS TRL	HICKORY TRL	E DOGWOOD TRL	Rehab (Major) - Mill and Fill 2in	\$197,692	A
					\$979,202	Yearly Total

Town of Southern Shores Year 2028 Treatment - Option 2

Item 8.



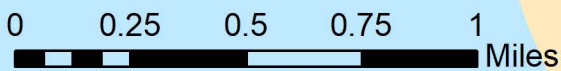
Legend

Treatment (2028)

 Rehab (Major) - Mill and Fill 2in

Currituck Sound

Atlantic Ocean



Year 2029 Option 2						
SectionID	Street Name	BEG_DESC	END_DESC	Treatment (2029)	Cost 2029	Class
71	HICKORY TRL	HILLCREST DR	WAX MYRTLE TRL	Rehab (Major) - Mill and Fill 2in	\$38,818	A
68	SEA OATS TRL	HILLCREST DR	HICKORY TRL	Rehab (Major) - Mill and Fill 2in	\$237,392	A
157	S DOGWOOD TRL	TEAL CT	CROATAN HWY	Rehab (Major) - Mill and Fill 2in	\$180,931	A
47	HILLCREST DR	SEA OATS TRL	NC 12	Rehab (Major) - Mill and Fill 2in	\$58,994	A
75	HICKORY TRL	HILLCREST DR	E DOGWOOD TRL	Rehab (Major) - Mill and Fill 2in	\$146,109	A
11	HAPPY INDIAN LN	HIGH DUNE LOOP	DEAD END	Rehab Minor Overlay	\$34,113	B
6	OCEAN BLVD	DOLPHIN RUN	PORPOISE RUN	Rehab Minor Overlay	\$62,965	B
108	OCEAN BLVD	PORPOISE RUN	NC 12	Rehab Minor Overlay	\$65,799	B
79	SANDFIDDLER CT	NC 12	DEAD END	Rehab Minor Overlay	\$31,905	B
14	SPINDRIFT TRL	HIGH DUNE LOOP	DEAD END	Rehab Minor Overlay	\$135,417	B
					\$992,442	Yearly Total

Town of Southern Shores Year 2029 Treatment - Option 2

Item 8.



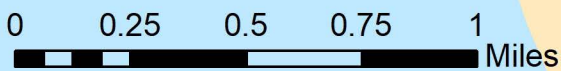
Legend

Treatment (2029)

- Rehab Minor Overlay
- Rehab (Major) - Mill and Fill 2in

Currituck Sound

Atlantic Ocean



Year 2030 Option 2						
SectionID	Street Name	BEG_DESC	END_DESC	Treatment (2030)	Cost 2030	Class
40	9TH AVE	DEAD END	DEAD END	Rehab (Major) - Mill and Fill 2in	\$11,410	B
94	DOLPHIN RUN	NC 12	OCEAN BLVD	Rehab Minor Overlay	\$25,348	B
23	GINGUITE TRL	PINTAIL TRL	S DOGWOOD TRAIL	Rehab Minor Overlay	\$242,075	B
5	BAYBERRY TRL	E DOGWOOD TRL	SCUPPERNONG LN	Rehab Minor Overlay	\$89,304	B
16	TALL CLIFF LN	HIGH DUNE LOOP	DEAD END	Rehab Minor Overlay	\$40,495	B
110	W HOLLY TRL	HOLLY TRL	DEAD END	Rehab Minor Overlay	\$41,815	B
66	PURPLE MARTIN LN	OCEAN BLVD	DEAD END	Rehab Minor Overlay	\$12,772	B
107	E HOLLY TRL	HOLLY TRL	DEAD END	Rehab Minor Overlay	\$24,754	B
48	8TH AVE	NC 12	8TH AVE	Rehab Minor Overlay	\$54,744	B
37	11TH AVE	SEA OATS TRL	NC 12	Rehab Minor Overlay	\$53,574	B
73	MOCKINGBIRD LN	OCEAN BLVD	DEAD END	Rehab Minor Overlay	\$13,846	B
41	10TH AVE	NC 12	DEAD END	Rehab Minor Overlay	\$22,880	B
35	11TH AVE	NC 12	11TH AVE	Rehab Minor Overlay	\$63,262	B
44	9TH AVE	NC 12	DEAD END	Rehab Minor Overlay	\$18,611	B
164	FERN LN	JUNIPER TRL	CYPRESS LN	Patching	\$5,168	B
152	CYPRESS LN	SWEETGUM LN	FERN LN	Patching	\$5,885	B
151	YUCCA LN	CYPRESS LN	JUNIPER TRL	Rehab Minor Overlay	\$27,635	C
97	BIRCH LN	HOLLY TRL	DEAD END	Rehab Minor Overlay	\$21,579	C
22	PINTAIL TRL	GINGUITE TRL	S DOGWOOD TRL	Rehab Minor Overlay	\$41,869	C
3	LIVE OAK LN	HOLLY TRL	DEAD END	Rehab Minor Overlay	\$16,267	C
88	LOBLOLLY LN	HOLLY TRL	DEAD END	Rehab Minor Overlay	\$12,067	C
136	OLD PASSAGE LN	POTESKEET TRL	TRINITIE TRL	Rehab Minor Overlay	\$30,012	C
148	EAGLES NEST LN	TRINITIE TRL	DEAD END	Rehab Minor Overlay	\$27,981	C
162	WIDGEON CT	S DOGWOOD TRL	DEAD END	Rehab Minor Overlay	\$10,429	C
17	SWEETGUM LN	CYPRESS LN	TRINITIE TRL	Rehab Minor Overlay	\$22,753	C
98	SASSAFRAS LN	S DOGWOOD TRL	DEAD END	Rehab Minor Overlay	\$10,425	C
76	REDBAY LN	HICKORY TRL	DEAD END	Rehab Minor Overlay	\$35,698	C
163	PINTAIL CT	PINTAIL TRL	DEAD END	Rehab Minor Overlay	\$13,783	C
					\$996,443	Yearly Total

Town of Southern Shores Year 2030 Treatment - Option 2

Item 8.



Legend

Treatment (2030)

- Patching
- Rehab Minor Overlay
- Rehab (Major) - Mill and Fill 2in

Currituck Sound

Atlantic Ocean

0 0.25 0.5 0.75 1 Miles



Year 2031 Option 2						
SectionID	Street Name	BEG_DESC	END_DESC	Treatment (2031)	Cost 2031	Class
18	OCEAN VIEW LOOP	DEAD END	DEAD END	Rehab (Major) - Mill and Fill 2in	\$94,345	B
129	SPINDRIFT TRL	CHICHAUK TRL	HIGH DUNE LOOP	Rehab (Major) - Mill and Fill 2in	\$213,005	B
13	OCEAN VIEW LOOP	OCEANVIEW LOOP	NC 12	Rehab (Major) - Mill and Fill 2in	\$30,703	B
87	OCEAN BLVD	E DOGWOOD TRL	DOLPHIN RUN	Rehab (Major) - Mill and Fill 2in	\$90,027	B
9	PORPOISE RUN	WAX MYRTLE TRL	NC 12	Rehab (Major) - Mill and Fill 2in	\$25,231	B
8	PORPOISE RUN	NC 12	OCEAN BLVD	Rehab (Major) - Mill and Fill 2in	\$26,696	B
24	13TH AVE	DEAD END	DEAD END	Rehab (Major) - Mill and Fill 2in	\$13,126	B
52	N DOGWOOD TRL	E DOGWOOD TRL	DEAD END	Rehab (Major) - Mill and Fill 2in	\$237,868	B
62	2ND AVE	NC 12	2ND AVE	Rehab (Major) - Mill and Fill 2in	\$77,710	B
67	OCEAN BLVD	HICKORY TRL	PERIWINKLE PL	Rehab (Major) - Mill and Fill 2in	\$85,023	B
89	POMPANO CT	OCEAN BLVD	DEAD END	Rehab (Major) - Mill and Fill 2in	\$17,834	B
42	9TH AVE	NC 12	9TH AVE	Rehab (Major) - Mill and Fill 2in	\$76,735	B
57	4TH AVE	DEAD END	DEAD END	Rehab (Major) - Mill and Fill 2in	\$10,625	B
					\$998,929	Yearly Total

Town of Southern Shores Year 2031 Treatment - Option 2

Item 8.



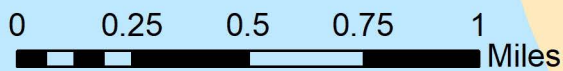
Legend

Treatment (2031)

 Rehab (Major) - Mill and Fill 2in

Currituck Sound

Atlantic Ocean



Year 2032 Option 2						
SectionID	Street Name	BEG_DESC	END_DESC	Treatment (2032)	Cost 2032	Class
99	DOLPHIN RUN	WAX MYRTLE TRL	NC 12	Patching	\$6,809	B
21	DUCK WOODS DR	CROATAN HWY	DEAD END	Rehab (Major) - Mill and Fill 2in	\$535,022	B
78	N WOODLAND DR	DEAD END	DEAD END	Rehab (Major) - Mill and Fill 2in	\$128,131	B
31	11TH AVE	DEAD END	DEAD END	Rehab (Major) - Mill and Fill 2in	\$11,786	B
28	12TH AVE	DEAD END	DEAD END	Rehab (Major) - Mill and Fill 2in	\$10,128	B
46	8TH AVE	DEAD END	DEAD END	Rehab (Major) - Mill and Fill 2in	\$18,705	B
25	13TH AVE	NC 12	13TH AVE	Rehab (Major) - Mill and Fill 2in	\$80,166	B
147	DEER PATH LN	DEAD END	DEAD END	Rehab (Major) - Mill and Fill 2in	\$57,576	B
161	PALMETTO LN	JUNIPER TRL	DEAD END	Rehab (Major) - Mill and Fill 2in	\$86,362	B
142	GRAVEY POND LN	DEAD END	DEAD END	Rehab (Major) - Mill and Fill 2in	\$65,416	B
					\$1,000,101	Yearly Total



Town of Southern Shores Year 2032 Treatment - Option 2

Item 8.



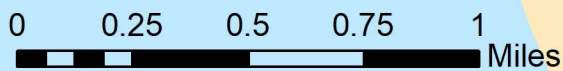
Legend

Treatment (2032)

-  Patching
-  Rehab (Major) - Mill and Fill 2in

Currituck Sound

Atlantic Ocean



APPENDIX C

2021 TOWN OF SOUTHERN SHORES
PAVEMENT CONDITION SURVEY
ALPHABETICAL LIST OF SEGMENTS

Appendix C - Alphabetical List of Segments

SectionID	Street Name	Class	BEG_DESC	END_DESC	Fatigue Cracking	Transverse Cracking	Patch Deterioration / Potholes	Surface Defects	Rutting / Roughness	Block Cracking	Length (ft)	Width (ft)	Square Yards	PCI	CURB	Sidewalk
36	10TH AVE	B	DEAD END	DEAD END	MEDIUM/5-10	MEDIUM/HIGH	NONE	MEDIUM/EXTREME	NONE	MEDIUM/5-10	210.78	16	374.71	64.65	False	None
39	10TH AVE	B	NC 12	10TH AVE	MEDIUM/5-10	MEDIUM/HIGH	NONE	MEDIUM/EXTREME	NONE	MEDIUM/5-10	1,373.41	16	2441.61	64.65	False	None
41	10TH AVE	B	NC 12	DEAD END	MEDIUM/5-10	MEDIUM/HIGH	NONE	LOW/EXTREME	NONE	MEDIUM/5-10	531.82	16	945.46	67.74	False	None
31	11TH AVE	B	DEAD END	DEAD END	MEDIUM/5-10	MEDIUM/MEDIUM	NONE	MEDIUM/EXTREME	NONE	MEDIUM/0-5	211.41	16	375.84	65.78	False	None
35	11TH AVE	B	NC 12	11TH AVE	MEDIUM/5-10	MEDIUM/HIGH	NONE	LOW/EXTREME	NONE	MEDIUM/5-10	1,307.06	18	2614.12	67.74	False	None
37	11TH AVE	B	SEA OATS TRL	NC 12	MEDIUM/5-10	MEDIUM/HIGH	MEDIUM/0-5	LOW/EXTREME	NONE	MEDIUM/5-10	996.22	20	2213.82	67.64	False	None
28	12TH AVE	B	DEAD END	DEAD END	MEDIUM/5-10	MEDIUM/MEDIUM	NONE	MEDIUM/EXTREME	NONE	MEDIUM/0-5	170.98	17	322.97	65.78	False	None
29	12TH AVE	B	NC 12	12TH AVE	LOW/5-10	MEDIUM/MEDIUM	HIGH/0-5	MEDIUM/EXTREME	NONE	MEDIUM/0-5	1,239.85	18	2479.7	65.85	False	None
30	12TH AVE	B	NC 12	DEAD END	LOW/0-5	MEDIUM/MEDIUM	NONE	LOW/EXTREME	MEDIUM/LOW	MEDIUM/0-5	542.08	20	1204.61	78.86	False	None
24	13TH AVE	B	DEAD END	DEAD END	MEDIUM/5-10	MEDIUM/HIGH	NONE	MEDIUM/EXTREME	NONE	LOW/0-5	190.04	20	422.32	64.90	False	None
25	13TH AVE	B	NC 12	13TH AVE	LOW/0-5	MEDIUM/MEDIUM	NONE	MEDIUM/EXTREME	NONE	MEDIUM/5-10	1,150.35	20	2556.33	65.99	False	None
63	1ST AVE	B	DEAD END	DEAD END	MEDIUM/5-10	HIGH/MEDIUM	NONE	HIGH/EXTREME	NONE	MEDIUM/10-25	211.41	18	422.81	50.44	FALSE	None
64	1ST AVE	B	NC 12	1ST AVE	MEDIUM/25-50	HIGH/MEDIUM	MEDIUM/5-10	HIGH/EXTREME	LOW/LOW	MEDIUM/10-25	1,280.96	18	2561.93	47.97	FALSE	None
61	2ND AVE	B	DEAD END	DEAD END	MEDIUM/10-25	MEDIUM/MEDIUM	NONE	MEDIUM/EXTREME	NONE	MEDIUM/10-25	119.17	16	211.85	64.53	FALSE	None
62	2ND AVE	B	NC 12	2ND AVE	MEDIUM/5-10	MEDIUM/MEDIUM	NONE	MEDIUM/EXTREME	NONE	MEDIUM/10-25	1,250.16	18	2500.31	65.11	FALSE	None
59	3RD AVE	B	DEAD END	DEAD END	MEDIUM/5-10	HIGH/HIGH	NONE	MEDIUM/EXTREME	NONE	MEDIUM/10-25	205.93	12	274.57	55.03	False	None
60	3RD AVE	B	NC 12	3RD AVE	MEDIUM/10-25	HIGH/HIGH	NONE	MEDIUM/EXTREME	NONE	MEDIUM/10-25	1,190.86	18	2381.72	54.50	FALSE	None
57	4TH AVE	B	DEAD END	DEAD END	MEDIUM/5-10	LOW/MEDIUM	NONE	MEDIUM/EXTREME	NONE	MEDIUM/10-25	192.30	16	341.87	65.58	False	None
58	4TH AVE	B	NC 12	4TH AVE	NONE	MEDIUM/MEDIUM	HIGH/0-5	MEDIUM/EXTREME	NONE	MEDIUM/10-25	1,128.59	16	2006.39	65.28	False	None
55	5TH AVE	B	DEAD END	DEAD END	MEDIUM/10-25	HIGH/HIGH	MEDIUM/0-5	MEDIUM/EXTREME	NONE	MEDIUM/10-25	219.70	12	292.93	54.40	False	None
56	5TH AVE	B	NC 12	5TH AVE	MEDIUM/10-25	HIGH/HIGH	LOW/0-5	MEDIUM/EXTREME	NONE	NONE	1,100.90	18	2201.81	55.13	False	None
53	6TH AVE	B	DEAD END	DEAD END	MEDIUM/10-25	MEDIUM/HIGH	HIGH/0-5	LOW/EXTREME	NONE	MEDIUM/5-10	281.88	12	375.84	66.81	False	None
54	6TH AVE	B	NC 12	6TH AVE	MEDIUM/25-50	MEDIUM/HIGH	HIGH/0-5	LOW/EXTREME	NONE	MEDIUM/10-25	1,129.97	17	2134.39	55.69	False	None
49	7TH AVE	B	DEAD END	DEAD END	MEDIUM/5-10	HIGH/HIGH	NONE	LOW/EXTREME	LOW/LOW	MEDIUM/10-25	288.33	12	384.44	56.04	False	None
50	7TH AVE	B	NC 12	7TH AVE	MEDIUM/5-10	MEDIUM/HIGH	HIGH/0-5	LOW/EXTREME	NONE	MEDIUM/5-10	1,204.22	18	2408.44	67.54	False	None
46	8TH AVE	B	DEAD END	DEAD END	MEDIUM/5-10	MEDIUM/MEDIUM	NONE	MEDIUM/EXTREME	NONE	LOW/0-5	335.50	16	596.45	65.82	False	None
48	8TH AVE	B	NC 12	8TH AVE	LOW/0-5	LOW/MEDIUM	NONE	MEDIUM/EXTREME	NONE	LOW/0-5	1,272.45	16	2262.13	66.90	False	None
40	9TH AVE	B	DEAD END	DEAD END	MEDIUM/5-10	MEDIUM/HIGH	NONE	MEDIUM/EXTREME	NONE	MEDIUM/5-10	208.38	16	370.45	64.65	False	None
42	9TH AVE	B	NC 12	9TH AVE	LOW/0-5	MEDIUM/HIGH	NONE	MEDIUM/EXTREME	NONE	LOW/0-5	1,388.79	16	2468.96	65.40	False	None
44	9TH AVE	B	NC 12	DEAD END	MEDIUM/5-10	MEDIUM/HIGH	LOW/0-5	LOW/EXTREME	NONE	LOW/0-5	432.58	16	769.03	67.95	False	None
5	BAYBERRY TRL	B	E DOGWOOD TRL	SCUPPERNONG LN	MEDIUM/5-10	LOW/LOW	MEDIUM/0-5	MEDIUM/EXTREME	MEDIUM/LOW	MEDIUM/5-10	1,845.13	18	3690.26	66.02	False	None
20	BEAR TRACK LN	C	TRINITIE TRL	DEAD END	NONE	NONE	NONE	NONE	NONE	NONE	256.58	22	627.2	100.00	False	None
105	BEECH TREE TRL	B	E DOGWOOD TRL	DEAD END	NONE	NONE	NONE	NONE	NONE	NONE	2,158.16	18	4316.31	100.00	False	None
119	BENT OAK CT	C	POTESKEET TRL	DEAD END	MEDIUM/10-25	MEDIUM/LOW	NONE	MEDIUM/EXTREME	MEDIUM/LOW	MEDIUM/0-5	249.15	20	553.67	65.28	False	None
97	BIRCH LN	C	HOLLY TRL	DEAD END	MEDIUM/5-10	NONE	NONE	LOW/EXTREME	HIGH/LOW	NONE	668.78	12	891.71	81.19	False	None
159	BLUE PETE CT	C	S DOGWOOD TRL	DEAD END	LOW/0-5	MEDIUM/LOW	NONE	MEDIUM/EXTREME	NONE	MEDIUM/0-5	197.82	20	439.6	67.26	False	None
103	BRIGHT LANTERN LN	C	SEA OATS LN	DEAD END	MEDIUM/5-10	HIGH/HIGH	MEDIUM/0-5	MEDIUM/EXTREME	NONE	MEDIUM/5-10	281.19	20	624.86	55.39	False	None
112	CHICAHUK TRL	A	CLAMSHELL TRL	DEAD END	MEDIUM/5-10	LOW/LOW	NONE	LOW/EXTREME	HIGH/LOW	NONE	2,183.78	20	4852.86	81.03	False	None
125	CHICAHUK TRL	A	CLAM SHELL TRL	SPINDRIFT TRL	LOW/25-50	MEDIUM/MEDIUM	MEDIUM/0-5	MEDIUM/EXTREME	NONE	MEDIUM/10-25	2,807.39	20	6238.64	64.51	False	Both Sides
74	CIRCLE DR	B	HICKORY TRL	HICKORY TRL	MEDIUM/25-50	MEDIUM/MEDIUM	MEDIUM/5-10	HIGH/EXTREME	LOW/LOW	MEDIUM/10-25	2,742.88	18	5485.76	48.42	FALSE	None
123	CLAM SHELL TRL	B	OTTER SLIDE LN	CHICAHUK TRL	NONE	NONE	NONE	NONE	NONE	NONE	916.74	20	2037.21	100.00	FALSE	None
127	CLAM SHELL TRL	B	CHICAHUK TRL	OTTER SLIDE LN	MEDIUM/5-10	HIGH/HIGH	MEDIUM/0-5	MEDIUM/EXTREME	MEDIUM/LOW	MEDIUM/5-10	3,477.97	20	7728.83	54.99	False	None
134	CROOKED BACK LOOP	B	CHICAHUK TRL	PUDDING PAN LN	MEDIUM/5-10	MEDIUM/HIGH	LOW/0-5	MEDIUM/EXTREME	NONE	MEDIUM/10-25	2,790.21	20	6200.46	64.16	False	None
152	CYPRESS LN	B	SWEETGUM LN	FERN LN	MEDIUM/0-5	NONE	NONE	LOW/EXTREME	LOW/LOW	NONE	963.00	20	2139.99	82.25	FALSE	None
146	DEER PATH LN	B	DEER PATH LN	TRINITIE TRL	MEDIUM/0-5	NONE	NONE	LOW/EXTREME	NONE	NONE	364.04	20	808.97	82.75	False	None

Appendix C - Alphabetical List of Segments

SectionID	Street Name	Class	BEG_DESC	END_DESC	Fatigue Cracking	Transverse Cracking	Patch Deterioration / Potholes	Surface Defects	Rutting / Roughness	Block Cracking	Length (ft)	Width (ft)	Square Yards	PCI	CURB	Sidewalk
147	DEER PATH LN	B	DEAD END	DEAD END	MEDIUM/0-5	LOW/LOW	MEDIUM/0-5	LOW/EXTREME	NONE	NONE	869.67	19	1835.98	82.38	False	None
93	DEWBERRY LN	C	BAYBERRY TRL	DEAD END	NONE	NONE	NONE	NONE	NONE	NONE	174.82	18	349.65	100.00	True	None
94	DOLPHIN RUN	B	NC 12	OCEAN BLVD	MEDIUM/10-25	MEDIUM/LOW	NONE	LOW/EXTREME	NONE	MEDIUM/25-50	589.18	16	1047.44	66.01	False	None
99	DOLPHIN RUN	B	WAX MYRTLE TRL	NC 12	MEDIUM/5-10	MEDIUM/MEDIUM	MEDIUM/0-5	MEDIUM/EXTREME	MEDIUM/LOW	MEDIUM/5-10	455.94	16	810.57	65.07	False	None
21	DUCK WOODS DR	B	CROATAN HWY	DEAD END	MEDIUM/5-10	MEDIUM/LOW	LOW/0-5	MEDIUM/EXTREME	MEDIUM/LOW	MEDIUM/10-25	7,677.29	20	17060.64	65.38	False	None
82	E DOGWOOD TRL	A	N DOGWOOD TRL	BAYBERRY TRL	MEDIUM/0-5	MEDIUM/MEDIUM	NONE	MEDIUM/EXTREME	MEDIUM/LOW	MEDIUM/10-25	2,487.30	20	5527.34	64.97	False	One Side
83	E DOGWOOD TRL	A	NC 12	OCEAN BLVD	NONE	NONE	NONE	NONE	NONE	NONE	700.48	18	1400.96	100.00	False	One Side
84	E DOGWOOD TRL	A	BAYBERRY TRL	WAX MYRTLE TRL	MEDIUM/5-10	MEDIUM/HIGH	LOW/0-5	MEDIUM/EXTREME	NONE	MEDIUM/10-25	1,990.96	40	8848.73	64.16	True	One Side
107	E HOLLY TRL	B	HOLLY TRL	DEAD END	LOW/0-5	NONE	MEDIUM/0-5	MEDIUM/EXTREME	HIGH/LOW	NONE	575.39	16	1022.91	66.54	False	None
148	EAGLES NEST LN	C	TRINITIE TRL	DEAD END	MEDIUM/0-5	NONE	NONE	LOW/EXTREME	LOW/LOW	NONE	650.37	16	1156.22	82.25	False	None
121	FAIRWAY DR	B	S DOGWOOD TRL	EOM	HIGH/5-10	MEDIUM/MEDIUM	NONE	LOW/EXTREME	MEDIUM/LOW	MEDIUM/10-25	900.00	18	1800	77.66	False	None
164	FERN LN	B	JUNIPER TRL	CYPRESS LN	MEDIUM/0-5	MEDIUM/LOW	NONE	LOW/EXTREME	MEDIUM/LOW	NONE	939.72	18	1879.44	81.57	False	None
101	FOX GRAPE LN	B	BAYBERRY TRL	N FOX GRAPE LN	NONE	NONE	NONE	NONE	NONE	NONE	540.53	18	1081.05	100.00	False	None
23	GINGUITE TRL	B	PINTAIL TRL	S DOGWOOD TRAIL	MEDIUM/5-10	MEDIUM/LOW	MEDIUM/0-5	LOW/EXTREME	HIGH/LOW	MEDIUM/25-50	4,501.40	20	10003.1	66.02	False	None
124	GOOSE FEATHER LN	C	CHICHAUK TRL	DEAD END	MEDIUM/5-10	HIGH/HIGH	NONE	HIGH/EXTREME	NONE	MEDIUM/5-10	457.86	18	915.72	49.74	False	None
142	GRAVEY POND LN	B	DEAD END	DEAD END	HIGH/0-5	NONE	NONE	LOW/EXTREME	NONE	NONE	1,042.99	18	2085.98	82.50	False	None
143	GRAVEY POND LN	B	TRINITIE TRL	GRAVEY POND LN	NONE	NONE	NONE	NONE	NONE	NONE	334.07	20	742.38	100.00	False	None
113	GRAY SQUIRREL LN	C	POTESKEET LOOP	CHICHAUK TRL	NONE	NONE	NONE	NONE	LOW/LOW	NONE	499.61	20	1110.25	93.00	False	None
150	HAPPY INDIAN CT	C	HAPPY INDIAN LN	DEAD END	MEDIUM/0-5	MEDIUM/LOW	NONE	HIGH/EXTREME	MEDIUM/LOW	MEDIUM/0-5	157.07	20	349.04	52.50	False	None
11	HAPPY INDIAN LN	B	HIGH DUNE LOOP	DEAD END	HIGH/0-5	MEDIUM/MEDIUM	LOW/0-5	HIGH/EXTREME	NONE	MEDIUM/0-5	640.14	20	1422.54	51.97	False	None
65	HICKORY TRL	A	NC 12	DEAD END	MEDIUM/25-50	MEDIUM/MEDIUM	MEDIUM/0-5	MEDIUM/EXTREME	NONE	MEDIUM/10-25	1,383.62	17	2613.5	55.51	False	None
69	HICKORY TRL	A	WAX MYRTLE TRL	NC 12	MEDIUM/10-25	MEDIUM/HIGH	LOW/0-5	MEDIUM/EXTREME	NONE	MEDIUM/5-10	430.93	20	957.62	64.01	False	None
71	HICKORY TRL	A	HILLCREST DR	WAX MYRTLE TRL	MEDIUM/10-25	MEDIUM/HIGH	MEDIUM/0-5	MEDIUM/EXTREME	NONE	MEDIUM/10-25	602.47	19	1271.89	63.57	False	None
75	HICKORY TRL	A	HILLCREST DR	E DOGWOOD TRL	LOW/0-5	NONE	MEDIUM/0-5	LOW/EXTREME	NONE	NONE	2,154.29	20	4787.3	82.69	False	None
12	HIGH DUNE LOOP	B	SPINDRIFT TRL	SPINDRIFT TRL	MEDIUM/5-10	MEDIUM/MEDIUM	HIGH/0-5	MEDIUM/EXTREME	HIGH/LOW	MEDIUM/0-5	3,622.65	20	8050.34	64.91	False	None
45	HILLCREST DR	A	NC 12	DEAD END	LOW/0-5	LOW/MEDIUM	NONE	LOW/EXTREME	NONE	LOW/0-5	1,376.79	16	2447.63	81.90	False	One Side
47	HILLCREST DR	A	SEA OATS TRL	NC 12	LOW/0-5	MEDIUM/MEDIUM	NONE	MEDIUM/EXTREME	NONE	LOW/0-5	869.84	20	1932.97	66.32	False	None
51	HILLCREST DR	A	SEA OATS TRL	HICKORY TRL	MEDIUM/10-25	MEDIUM/HIGH	MEDIUM/0-5	MEDIUM/EXTREME	NONE	MEDIUM/25-50	3,856.10	18	7712.21	62.78	True	None
90	HILLCREST DR	A	HICKORY TRL	E DOGWOOD TRL	MEDIUM/5-10	MEDIUM/MEDIUM	HIGH/0-5	MEDIUM/EXTREME	NONE	MEDIUM/5-10	3,059.03	20	6797.85	65.37	False	None
137	HOLLOW BEACH CT	C	OLD PASSAGE LN	DEAD END	NONE	NONE	NONE	NONE	NONE	NONE	320.29	18	640.58	100.00	False	None
2	HOLLY TRL	B	E DOGWOOD TRL	HOLLY TRL	NONE	NONE	NONE	NONE	NONE	NONE	2,748.20	20	6107.1	100.00	False	None
4	HONEYSUCKLE LN	B	BAYBERRY TRL	DEAD END	NONE	NONE	NONE	NONE	NONE	NONE	746.06	18	1492.13	100.00	False	None
19	JUNIPER TRL	A	SWEETGUM LN	CROATAN HWY	NONE	LOW/LOW	NONE	NONE	NONE	NONE	2,693.16	22	6583.27	96.00	False	One Side
172	KINGFISHER CT	C	KINGFISHER TRL	DEAD END	MEDIUM/5-10	HIGH/HIGH	LOW/0-5	MEDIUM/EXTREME	NONE	MEDIUM/5-10	246.74	20	548.3	55.45	True	None
43	KINGFISHER TRL	C	SOUNDVIEW TRL	SEA OATS TRL	MEDIUM/5-10	HIGH/HIGH	LOW/0-5	MEDIUM/EXTREME	NONE	MEDIUM/5-10	1,339.20	20	2976.01	55.45	True	None
139	LAND FALL LOOP	C	SPINDRIFT TRL	SPINDRIFT TRL	LOW/5-10	MEDIUM/MEDIUM	NONE	MEDIUM/EXTREME	MEDIUM/LOW	MEDIUM/0-5	354.26	20	787.25	65.57	False	None
145	LAST HUNT LN	C	HIGH DUNE LOOP	DEAD END	MEDIUM/0-5	MEDIUM/LOW	NONE	MEDIUM/EXTREME	NONE	MEDIUM/0-5	336.85	20	748.56	67.17	False	None
3	LIVE OAK LN	C	HOLLY TRL	DEAD END	LOW/0-5	LOW/LOW	NONE	LOW/EXTREME	MEDIUM/LOW	NONE	355.87	17	672.19	81.82	False	None
88	LOBLOLLY LN	C	HOLLY TRL	DEAD END	LOW/0-5	NONE	NONE	LOW/EXTREME	MEDIUM/LOW	NONE	249.31	18	498.63	82.03	False	None
7	MISTLETOE LN	C	BAYBERRY TRL	DEAD END	NONE	NONE	NONE	NONE	NONE	NONE	495.20	17	935.38	100.00	False	None
92	MIZZENMAST LN	C	SEA OATS LN	DEAD END	MEDIUM/10-25	MEDIUM/MEDIUM	HIGH/0-5	MEDIUM/EXTREME	NONE	MEDIUM/5-10	234.45	20	520.99	64.70	False	None
73	MOCKINGBIRD LN	B	OCEAN BLVD	DEAD END	NONE	LOW/LOW	NONE	MEDIUM/EXTREME	NONE	NONE	343.29	15	572.15	67.67	False	None
52	N DOGWOOD TRL	B	E DOGWOOD TRL	DEAD END	MEDIUM/10-25	MEDIUM/LOW	LOW/0-5	MEDIUM/EXTREME	MEDIUM/LOW	MEDIUM/5-10	5,740.06	12	7653.41	65.09	False	None
96	N FOX GRAPE LN	B	FOX GRAPE LN	DEAD END	NONE	NONE	NONE	NONE	NONE	NONE	352.42	18	704.84	100.00	False	None
78	N WOODLAND DR	B	DEAD END	DEAD END	MEDIUM/5-10	MEDIUM/LOW	LOW/0-5	MEDIUM/EXTREME	HIGH/LOW	MEDIUM/5-10	2,298.27	16	4085.81	65.64	False	None

Appendix C - Alphabetical List of Segments

SectionID	Street Name	Class	BEG_DESC	END_DESC	Fatigue Cracking	Transverse Cracking	Patch Deterioration / Potholes	Surface Defects	Rutting / Roughness	Block Cracking	Length (ft)	Width (ft)	Square Yards	PCI	CURB	Sidewalk
34	NORTH DUNE LOOP	B	SOUNDVIEW TRL	SOUNDVIEW TRL	MEDIUM/5-10	MEDIUM/HIGH	LOW/0-5	MEDIUM/EXTREME	LOW/LOW	MEDIUM/5-10	2,064.04	20	4586.76	64.39	True	None
6	OCEAN BLVD	B	DOLPHIN RUN	PORPOISE RUN	MEDIUM/10-25	MEDIUM/MEDIUM	NONE	MEDIUM/EXTREME	NONE	MEDIUM/25-50	1,312.86	18	2625.72	63.46	False	None
67	OCEAN BLVD	B	HICKORY TRL	PERIWINKLE PL	MEDIUM/5-10	MEDIUM/MEDIUM	NONE	MEDIUM/EXTREME	NONE	MEDIUM/10-25	1,231.03	20	2735.63	65.11	False	None
80	OCEAN BLVD	B	PERIWINKLE PL	E DOGWOOD TRL	MEDIUM/5-10	MEDIUM/LOW	NONE	MEDIUM/EXTREME	NONE	MEDIUM/50-75	1,306.55	18	2613.09	49.49	False	None
87	OCEAN BLVD	B	E DOGWOOD TRL	DOLPHIN RUN	MEDIUM/5-10	MEDIUM/MEDIUM	NONE	MEDIUM/EXTREME	NONE	MEDIUM/25-50	1,372.09	19	2896.64	63.94	False	None
108	OCEAN BLVD	B	PORPOISE RUN	NC 12	MEDIUM/10-25	MEDIUM/MEDIUM	NONE	MEDIUM/EXTREME	NONE	MEDIUM/25-50	1,234.76	20	2743.91	63.46	False	None
13	OCEAN VIEW LOOP	B	OCEANVIEW LOOP	NC 12	MEDIUM/10-25	MEDIUM/LOW	MEDIUM/0-5	MEDIUM/EXTREME	NONE	MEDIUM/25-50	444.54	20	987.86	63.86	False	None
18	OCEAN VIEW LOOP	B	DEAD END	DEAD END	MEDIUM/5-10	MEDIUM/MEDIUM	LOW/0-5	MEDIUM/EXTREME	MEDIUM/LOW	MEDIUM/25-50	1,366.00	20	3035.56	63.54	False	None
136	OLD PASSAGE LN	C	POTESKEET TRL	TRINITIE TRL	NONE	NONE	NONE	LOW/EXTREME	MEDIUM/LOW	NONE	558.07	20	1240.16	82.08	False	None
131	OSPREY LN	B	OSPREY LN	S DOGWOOD TRL	NONE	NONE	NONE	NONE	NONE	NONE	213.11	18	426.23	100.00	False	None
132	OSPREY LN	B	DEAD END	DEAD END	NONE	NONE	NONE	NONE	NONE	NONE	1,009.50	18	2019.01	100.00	False	None
171	OTTER SLIDE LN	B	CLAM SHELL TRL	CHICAHOUK TRL	MEDIUM/5-10	HIGH/HIGH	MEDIUM/0-5	MEDIUM/EXTREME	NONE	MEDIUM/5-10	1,267.71	20	2817.14	55.39	False	None
120	OYSTER BED LN	C	POTESKEET TRL	DEAD END	MEDIUM/5-10	HIGH/HIGH	NONE	MEDIUM/EXTREME	NONE	MEDIUM/5-10	421.90	20	937.57	55.49	False	None
161	PALMETTO LN	B	JUNIPER TRL	DEAD END	NONE	NONE	NONE	LOW/EXTREME	LOW/LOW	NONE	1,376.94	18	2753.88	82.42	False	None
77	PERIWINKLE PL	B	NC 12	OCEAN BLVD	MEDIUM/5-10	MEDIUM/LOW	NONE	MEDIUM/EXTREME	NONE	MEDIUM/50-75	815.68	20	1812.62	49.49	False	None
163	PINTAIL CT	C	PINTAIL TRL	DEAD END	LOW/0-5	NONE	NONE	LOW/EXTREME	NONE	NONE	256.30	20	569.56	82.92	True	None
22	PINTAIL TRL	C	GINGUITE TRL	S DOGWOOD TRL	MEDIUM/5-10	MEDIUM/LOW	LOW/0-5	LOW/EXTREME	NONE	MEDIUM/5-10	778.55	20	1730.11	81.45	False	None
149	POINT COMFORT LN	C	GINGUITE TRL	DEAD END	MEDIUM/5-10	LOW/LOW	NONE	MEDIUM/EXTREME	NONE	MEDIUM/5-10	366.53	18	733.05	66.61	False	None
89	POMPANO CT	B	OCEAN BLVD	DEAD END	MEDIUM/5-10	MEDIUM/MEDIUM	NONE	MEDIUM/EXTREME	MEDIUM/LOW	MEDIUM/5-10	368.87	14	573.8	65.16	False	None
8	PORPOISE RUN	B	NC 12	OCEAN BLVD	MEDIUM/10-25	MEDIUM/LOW	NONE	MEDIUM/EXTREME	NONE	MEDIUM/25-50	483.16	16	858.95	63.96	True	None
9	PORPOISE RUN	B	WAX MYRTLE TRL	NC 12	MEDIUM/5-10	MEDIUM/MEDIUM	NONE	MEDIUM/EXTREME	NONE	MEDIUM/25-50	456.64	16	811.8	63.94	False	None
116	POTESKEET LOOP	B	GRAY SQUIRREL LN	POTESKEET LOOP	NONE	NONE	NONE	NONE	NONE	NONE	384.89	18	769.79	100.00	False	None
117	POTESKEET LOOP	B	GRAY SQUIRRL LN	POTESKEET TRL	NONE	NONE	NONE	NONE	LOW/LOW	NONE	1,490.66	18	2981.32	93.00	False	None
118	POTESKEET TRL	B	POTESKEET LOOP	OLD PASSAGE LN	LOW/0-5	NONE	NONE	NONE	NONE	NONE	2,799.87	20	6221.94	99.00	False	None
144	POTESKEET TRL	B	OLD PASSAGE LN	TRINITIE TRL	LOW/0-5	NONE	NONE	NONE	NONE	NONE	1,145.21	20	2544.92	99.00	False	None
133	PUDDING PAN LN	B	SPINDRIFT TRL	DEAD END	MEDIUM/5-10	HIGH/HIGH	MEDIUM/0-5	MEDIUM/EXTREME	NONE	MEDIUM/10-25	1,967.14	20	4371.42	54.93	False	None
66	PURPLE MARTIN LN	B	OCEAN BLVD	DEAD END	MEDIUM/5-10	LOW/LOW	MEDIUM/0-5	MEDIUM/EXTREME	NONE	MEDIUM/5-10	339.29	14	527.78	66.51	FALSE	None
76	REDBAY LN	C	HICKORY TRL	DEAD END	MEDIUM/0-5	NONE	NONE	LOW/EXTREME	NONE	NONE	780.95	17	1475.14	82.75	False	None
95	S DOGWOOD TRL	A	E DOGWOOD TRL	YAUPON TRL	MEDIUM/0-5	MEDIUM/MEDIUM	LOW/0-5	LOW/EXTREME	LOW/LOW	MEDIUM/0-5	1,459.90	19	3082.02	78.98	False	One Side
111	S DOGWOOD TRL	A	YAUPON TRL	FAIRWAY DR	MEDIUM/10-25	MEDIUM/LOW	LOW/0-5	LOW/EXTREME	NONE	MEDIUM/0-5	2,114.18	18	4228.36	77.08	False	One Side
130	S DOGWOOD TRL	A	FAIRWAY DR	GINGUITE TRL	MEDIUM/10-25	LOW/LOW	LOW/0-5	LOW/EXTREME	NONE	MEDIUM/0-5	4,009.00	19	8463.43	77.24	True	One Side
153	S DOGWOOD TRL	A	GINGUITE TRL	TEAL CT	HIGH/0-5	MEDIUM/MEDIUM	MEDIUM/0-5	MEDIUM/EXTREME	NONE	MEDIUM/5-10	2,180.16	20	4844.79	65.68	False	One Side
157	S DOGWOOD TRL	A	TEAL CT	CROATAN HWY	MEDIUM/0-5	MEDIUM/MEDIUM	LOW/0-5	MEDIUM/EXTREME	NONE	MEDIUM/5-10	2,667.73	20	5928.29	65.87	False	One Side
102	S FOX GRAPE LN	B	FOX GRAPE LN	DEAD END	NONE	NONE	NONE	NONE	NONE	NONE	247.66	18	495.31	100.00	True	None
72	SAND PIPER LN	B	OCEAN BLVD	DEAD END	NONE	MEDIUM/LOW	MEDIUM/0-5	MEDIUM/EXTREME	NONE	MEDIUM/5-10	342.70	15	571.16	66.90	False	None
79	SANDFIDDLER CT	B	NC 12	DEAD END	MEDIUM/10-25	MEDIUM/MEDIUM	NONE	MEDIUM/EXTREME	NONE	MEDIUM/25-50	598.71	20	1330.48	63.46	False	None
98	SASSAFRAS LN	C	S DOGWOOD TRL	DEAD END	LOW/0-5	LOW/LOW	NONE	LOW/EXTREME	NONE	NONE	323.10	12	430.79	82.61	False	None
10	SCUPPERNONG LN	B	BAYBERRY TRL	NC 12	NONE	NONE	NONE	NONE	NONE	MEDIUM/5-10	396.24	20	880.52	93.00	False	None
27	SEA OATS CT	C	SEA OATS TRL	DEAD END	MEDIUM/5-10	MEDIUM/HIGH	LOW/0-5	LOW/EXTREME	NONE	MEDIUM/5-10	170.77	20	379.48	67.70	False	None
1	SEA OATS LN	B	E DOGWOOD TRL	DEAD END	MEDIUM/5-10	HIGH/HIGH	MEDIUM/0-5	MEDIUM/EXTREME	MEDIUM/LOW	MEDIUM/5-10	1,640.58	20	3645.74	54.99	False	None
26	SEA OATS TRL	A	SOUNDVIEW TRL	NC 12	MEDIUM/5-10	MEDIUM/HIGH	HIGH/0-5	LOW/EXTREME	MEDIUM/LOW	MEDIUM/10-25	1,540.52	20	3423.37	66.74	False	None
38	SEA OATS TRL	A	SOUNDVIEW TRL	HILLCREST DR	MEDIUM/5-10	MEDIUM/HIGH	LOW/0-5	MEDIUM/EXTREME	NONE	MEDIUM/5-10	1,922.06	20	4271.25	64.62	False	None
68	SEA OATS TRL	A	HILLCREST DR	HICKORY TRL	LOW/0-5	MEDIUM/MEDIUM	LOW/0-5	MEDIUM/EXTREME	MEDIUM/LOW	MEDIUM/5-10	3,500.21	20	7778.24	65.45	False	None
86	SEA OATS TRL	A	HICKORY TRL	E DOGWOOD TRL	MEDIUM/5-10	MEDIUM/MEDIUM	NONE	MEDIUM/EXTREME	LOW/LOW	MEDIUM/5-10	2,941.84	20	6537.43	65.34	False	None
158	SKYLINE RD	B	NC 12	DEAD END	MEDIUM/5-10	MEDIUM/HIGH	NONE	MEDIUM/EXTREME	NONE	MEDIUM/5-10	2,882.09	18	5764.17	64.65	False	None

Appendix C - Alphabetical List of Segments

SectionID	Street Name	Class	BEG_DESC	END_DESC	Fatigue Cracking	Transverse Cracking	Patch Deterioration / Potholes	Surface Defects	Rutting / Roughness	Block Cracking	Length (ft)	Width (ft)	Square Yards	PCI	CURB	Sidewalk
32	SOUNDVIEW TRL	B	NORTH DUNE LOOP	SEA OATS TRL	MEDIUM/5-10	HIGH/HIGH	MEDIUM/0-5	MEDIUM/EXTREME	NONE	MEDIUM/5-10	287.81	20	639.58	55.39	True	None
33	SOUNDVIEW TRL	B	SEA OATS TRL	NORTH DUNE LOOP	MEDIUM/5-10	HIGH/HIGH	HIGH/0-5	MEDIUM/EXTREME	NONE	MEDIUM/5-10	1,350.70	20	3001.55	55.29	False	None
14	SPINDRIFT TRL	B	HIGH DUNE LOOP	DEAD END	MEDIUM/5-10	MEDIUM/HIGH	HIGH/0-5	MEDIUM/EXTREME	HIGH/LOW	MEDIUM/10-25	2,541.18	20	5647.07	63.49	False	None
129	SPINDRIFT TRL	B	CHICAHIAUK TRL	HIGH DUNE LOOP	MEDIUM/5-10	MEDIUM/HIGH	MEDIUM/0-5	MEDIUM/EXTREME	MEDIUM/LOW	MEDIUM/10-25	3,084.05	20	6853.44	63.74	False	None
17	SWEETGUM LN	C	CYPRESS LN	TRINITIE TRL	NONE	NONE	NONE	LOW/EXTREME	LOW/LOW	NONE	423.10	20	940.22	82.42	False	None
16	TALL CLIFF LN	B	HIGH DUNE LOOP	DEAD END	MEDIUM/0-5	MEDIUM/MEDIUM	NONE	MEDIUM/EXTREME	NONE	MEDIUM/0-5	753.00	20	1673.33	66.17	False	None
114	TALL PINE LN	B	DEAD END	DEAD END	LOW/0-5	NONE	NONE	LOW/EXTREME	NONE	NONE	795.40	12	1060.54	82.92	False	None
115	TALL PINE LN	B	TALL PINE LN	S DOGWOOD TRL	LOW/0-5	NONE	NONE	LOW/EXTREME	LOW/LOW	NONE	444.01	12	592.01	82.36	False	None
138	TEA PLANT CT	B	PUDDING PAN LN	DEAD END	MEDIUM/5-10	MEDIUM/HIGH	NONE	MEDIUM/EXTREME	NONE	MEDIUM/5-10	442.00	20	982.23	64.65	False	None
154	TEAL CT	C	S DOGWOOD TRL	DEAD END	NONE	MEDIUM/LOW	NONE	MEDIUM/EXTREME	NONE	MEDIUM/5-10	242.18	18	484.36	67.03	False	None
15	TRINITIE TRL	A	DEER PATH LN	SWEETGUM LN	MEDIUM/0-5	LOW/LOW	NONE	LOW/EXTREME	NONE	MEDIUM/0-5	1,078.73	20	2397.17	82.42	False	One Side
128	TRINITIE TRL	A	CHICAHIAUK TRL	EAGLES NEST LN	HIGH/5-10	MEDIUM/LOW	LOW/0-5	MEDIUM/EXTREME	HIGH/LOW	MEDIUM/10-25	3,287.07	20	7304.61	64.89	False	One Side
104	TROUT RUN	C	NC 12	OCEAN BLVD	MEDIUM/0-5	MEDIUM/LOW	MEDIUM/0-5	MEDIUM/EXTREME	NONE	NONE	495.78	20	1101.74	67.13	False	None
126	TURTLE POND CT	C	POTESKEET TRL	DEAD END	HIGH/10-25	LOW/LOW	HIGH/0-5	MEDIUM/EXTREME	MEDIUM/LOW	MEDIUM/0-5	346.99	20	771.1	63.28	False	None
122	TWISTED TREE CT	C	POTESKEET TRL	DEAD END	MEDIUM/10-25	LOW/LOW	NONE	LOW/EXTREME	MEDIUM/LOW	NONE	287.43	20	638.73	76.81	False	None
110	W HOLLY TRL	B	HOLLY TRL	DEAD END	MEDIUM/5-10	NONE	MEDIUM/0-5	MEDIUM/EXTREME	MEDIUM/LOW	MEDIUM/0-5	777.56	20	1727.91	66.34	False	None
70	WAX MYRTLE TRL	B	HILLCREST DR	HICKORY TRL	MEDIUM/10-25	LOW/MEDIUM	NONE	MEDIUM/EXTREME	NONE	MEDIUM/10-25	3,615.13	20	8033.61	64.86	False	None
85	WAX MYRTLE TRL	B	HICKORY TRL	E DOGWOOD TRL	MEDIUM/5-10	MEDIUM/HIGH	LOW/0-5	MEDIUM/EXTREME	NONE	MEDIUM/10-25	2,802.24	20	6227.2	64.16	False	None
100	WAX MYRTLE TRL	B	E DOGWOOD TRL	PORPOISE RUN	MEDIUM/5-10	MEDIUM/MEDIUM	MEDIUM/0-5	MEDIUM/EXTREME	MEDIUM/LOW	MEDIUM/10-25	2,668.69	16	4744.34	64.65	False	None
162	WIDGEON CT	C	S DOGWOOD TRL	DEAD END	MEDIUM/0-5	MEDIUM/LOW	NONE	LOW/EXTREME	NONE	NONE	193.92	20	430.94	82.25	False	None
155	WILD PONY LN	B	SPINDRIFT TRL	DEAD END	LOW/0-5	HIGH/HIGH	NONE	MEDIUM/EXTREME	MEDIUM/LOW	MEDIUM/0-5	1,369.26	20	3042.8	55.61	False	None
140	WILD SWAN LN	B	WILD SWAN LN	S DOGWOOD TRL	NONE	NONE	NONE	NONE	NONE	NONE	326.31	18	652.62	100.00	False	None
141	WILD SWAN LN	B	DEAD END	DEAD END	NONE	NONE	NONE	NONE	NONE	NONE	741.52	16	1318.25	100.00	False	None
160	WOOD DUCK CT	C	S DOGWOOD TRL	DEAD END	MEDIUM/0-5	MEDIUM/LOW	NONE	MEDIUM/EXTREME	NONE	MEDIUM/0-5	231.33	19	488.37	67.17	False	None
81	WOODLAND DR	C	E DOGWOOD TRL	N WOODLAND DR	MEDIUM/10-25	MEDIUM/MEDIUM	HIGH/0-5	MEDIUM/EXTREME	NONE	MEDIUM/10-25	572.62	20	1272.49	64.33	False	None
106	YAUPON TRL	B	S DOGWOOD TRL	DEAD END	NONE	NONE	NONE	NONE	NONE	NONE	1,604.95	14	2496.6	100.00	False	None
151	YUCCA LN	C	CYPRESS LN	JUNIPER TRL	MEDIUM/5-10	LOW/LOW	NONE	LOW/EXTREME	HIGH/LOW	NONE	570.98	18	1141.95	81.03	False	None

APPENDIX D

2021 TOWN OF SOUTHERN SHORES
PAVEMENT CONDITION SURVEY
RANKED LIST OF SEGMENTS

Appendix D - Ranked List of Segments

SectionID	Street Name	Class	BEG_DESC	END_DESC	Fatigue Cracking	Transverse Cracking	Patch Deterioration / Potholes	Surface Defects	Rutting / Roughness	Block Cracking	Length (ft)	Width (ft)	Square Yards	PCI	CURB	Sidewalk
20	BEAR TRACK LN	C	TRINITIE TRL	DEAD END	NONE	NONE	NONE	NONE	NONE	NONE	256.58	22	627.2	100.00	False	None
105	BEECH TREE TRL	B	E DOGWOOD TRL	DEAD END	NONE	NONE	NONE	NONE	NONE	NONE	2,158.16	18	4316.31	100.00	False	None
123	CLAM SHELL TRL	B	OTTER SLIDE LN	CHICHAUK TRL	NONE	NONE	NONE	NONE	NONE	NONE	916.74	20	2037.21	100.00	False	None
93	DEWBERRY LN	C	BAYBERRY TRL	DEAD END	NONE	NONE	NONE	NONE	NONE	NONE	174.82	18	349.65	100.00	True	None
83	E DOGWOOD TRL	A	NC 12	OCEAN BLVD	NONE	NONE	NONE	NONE	NONE	NONE	700.48	18	1400.96	100.00	False	One Side
101	FOX GRAPE LN	B	BAYBERRY TRL	N FOX GRAPE LN	NONE	NONE	NONE	NONE	NONE	NONE	540.53	18	1081.05	100.00	False	None
143	GRAVEY POND LN	B	TRINITIE TRL	GRAVEY POND LN	NONE	NONE	NONE	NONE	NONE	NONE	334.07	20	742.38	100.00	False	None
137	HOLLOW BEACH CT	C	OLD PASSAGE LN	DEAD END	NONE	NONE	NONE	NONE	NONE	NONE	320.29	18	640.58	100.00	False	None
2	HOLLY TRL	B	E DOGWOOD TRL	HOLLY TRL	NONE	NONE	NONE	NONE	NONE	NONE	2,748.20	20	6107.1	100.00	False	None
4	HONEYSUCKLE LN	B	BAYBERRY TRL	DEAD END	NONE	NONE	NONE	NONE	NONE	NONE	746.06	18	1492.13	100.00	False	None
7	MISTLETOE LN	C	BAYBERRY TRL	DEAD END	NONE	NONE	NONE	NONE	NONE	NONE	495.20	17	935.38	100.00	False	None
96	N FOX GRAPE LN	B	FOX GRAPE LN	DEAD END	NONE	NONE	NONE	NONE	NONE	NONE	352.42	18	704.84	100.00	False	None
131	OSPREY LN	B	OSPREY LN	S DOGWOOD TRL	NONE	NONE	NONE	NONE	NONE	NONE	213.11	18	426.23	100.00	False	None
132	OSPREY LN	B	DEAD END	DEAD END	NONE	NONE	NONE	NONE	NONE	NONE	1,009.50	18	2019.01	100.00	False	None
116	POTESKEET LOOP	B	GRAY SQUIRREL LN	POTESKEET LOOP	NONE	NONE	NONE	NONE	NONE	NONE	384.89	18	769.79	100.00	False	None
102	S FOX GRAPE LN	B	FOX GRAPE LN	DEAD END	NONE	NONE	NONE	NONE	NONE	NONE	247.66	18	495.31	100.00	True	None
140	WILD SWAN LN	B	WILD SWAN LN	S DOGWOOD TRL	NONE	NONE	NONE	NONE	NONE	NONE	326.31	18	652.62	100.00	False	None
141	WILD SWAN LN	B	DEAD END	DEAD END	NONE	NONE	NONE	NONE	NONE	NONE	741.52	16	1318.25	100.00	False	None
106	YAUPON TRL	B	S DOGWOOD TRL	DEAD END	NONE	NONE	NONE	NONE	NONE	NONE	1,604.95	14	2496.6	100.00	False	None
118	POTESKEET TRL	B	POTESKEET LOOP	OLD PASSAGE LN	LOW/0-5	NONE	NONE	NONE	NONE	NONE	2,799.87	20	6221.94	99.00	False	None
144	POTESKEET TRL	B	OLD PASSAGE LN	TRINITIE TRL	LOW/0-5	NONE	NONE	NONE	NONE	NONE	1,145.21	20	2544.92	99.00	False	None
19	JUNIPER TRL	A	SWEETGUM LN	CROATAN HWY	NONE	LOW/LOW	NONE	NONE	NONE	NONE	2,693.16	22	6583.27	96.00	False	One Side
113	GRAY SQUIRREL LN	C	POTESKEET LOOP	CHICHAUK TRL	NONE	NONE	NONE	NONE	LOW/LOW	NONE	499.61	20	1110.25	93.00	False	None
117	POTESKEET LOOP	B	GRAY SQUIRRL LN	POTESKEET TRL	NONE	NONE	NONE	NONE	LOW/LOW	NONE	1,490.66	18	2981.32	93.00	False	None
10	SCUPPERNONG LN	B	BAYBERRY TRL	NC 12	NONE	NONE	NONE	NONE	NONE	MEDIUM/5-10	396.24	20	880.52	93.00	False	None
163	PINTAIL CT	C	PINTAIL TRL	DEAD END	LOW/0-5	NONE	NONE	LOW/EXTREME	NONE	NONE	256.30	20	569.56	82.92	True	None
114	TALL PINE LN	B	DEAD END	DEAD END	LOW/0-5	NONE	NONE	LOW/EXTREME	NONE	NONE	795.40	12	1060.54	82.92	False	None
146	DEER PATH LN	B	DEER PATH LN	TRINITIE TRL	MEDIUM/0-5	NONE	NONE	LOW/EXTREME	NONE	NONE	364.04	20	808.97	82.75	False	None
76	REDBAY LN	C	HICKORY TRL	DEAD END	MEDIUM/0-5	NONE	NONE	LOW/EXTREME	NONE	NONE	780.95	17	1475.14	82.75	False	None
75	HICKORY TRL	A	HILLCREST DR	E DOGWOOD TRL	LOW/0-5	NONE	MEDIUM/0-5	LOW/EXTREME	NONE	NONE	2,154.29	20	4787.3	82.69	False	None
98	SASSAFRAS LN	C	S DOGWOOD TRL	DEAD END	LOW/0-5	LOW/LOW	NONE	LOW/EXTREME	NONE	NONE	323.10	12	430.79	82.61	False	None
142	GRAVEY POND LN	B	DEAD END	DEAD END	HIGH/0-5	NONE	NONE	LOW/EXTREME	NONE	NONE	1,042.99	18	2085.98	82.50	False	None
161	PALMETTO LN	B	JUNIPER TRL	DEAD END	NONE	NONE	NONE	LOW/EXTREME	LOW/LOW	NONE	1,376.94	18	2753.88	82.42	False	None
17	SWEETGUM LN	C	CYPRESS LN	TRINITIE TRL	NONE	NONE	NONE	LOW/EXTREME	LOW/LOW	NONE	423.10	20	940.22	82.42	False	None
15	TRINITIE TRL	A	DEER PATH LN	SWEETGUM LN	MEDIUM/0-5	LOW/LOW	NONE	LOW/EXTREME	NONE	MEDIUM/0-5	1,078.73	20	2397.17	82.42	False	One Side
147	DEER PATH LN	B	DEAD END	DEAD END	MEDIUM/0-5	LOW/LOW	MEDIUM/0-5	LOW/EXTREME	NONE	NONE	869.67	19	1835.98	82.38	False	None
115	TALL PINE LN	B	TALL PINE LN	S DOGWOOD TRL	LOW/0-5	NONE	NONE	LOW/EXTREME	LOW/LOW	NONE	444.01	12	592.01	82.36	False	None
152	CYPRESS LN	B	SWEETGUM LN	FERN LN	MEDIUM/0-5	NONE	NONE	LOW/EXTREME	LOW/LOW	NONE	963.00	20	2139.99	82.25	False	None
148	EAGLES NEST LN	C	TRINITIE TRL	DEAD END	MEDIUM/0-5	NONE	NONE	LOW/EXTREME	LOW/LOW	NONE	650.37	16	1156.22	82.25	False	None
162	WIDGEON CT	C	S DOGWOOD TRL	DEAD END	MEDIUM/0-5	MEDIUM/LOW	NONE	LOW/EXTREME	NONE	NONE	193.92	20	430.94	82.25	False	None
136	OLD PASSAGE LN	C	POTESKEET TRL	TRINITIE TRL	NONE	NONE	NONE	LOW/EXTREME	MEDIUM/LOW	NONE	558.07	20	1240.16	82.08	False	None
88	LOBLOLLY LN	C	HOLLY TRL	DEAD END	LOW/0-5	NONE	NONE	LOW/EXTREME	MEDIUM/LOW	NONE	249.31	18	498.63	82.03	False	None
45	HILLCREST DR	A	NC 12	DEAD END	LOW/0-5	LOW/MEDIUM	NONE	LOW/EXTREME	NONE	LOW/0-5	1,376.79	16	2447.63	81.90	False	One Side
3	LIVE OAK LN	C	HOLLY TRL	DEAD END	LOW/0-5	LOW/LOW	NONE	LOW/EXTREME	MEDIUM/LOW	NONE	355.87	17	672.19	81.82	False	None
164	FERN LN	B	JUNIPER TRL	CYPRESS LN	MEDIUM/0-5	MEDIUM/LOW	NONE	LOW/EXTREME	MEDIUM/LOW	NONE	939.72	18	1879.44	81.57	False	None
22	PINTAIL TRL	C	GINGUITE TRL	S DOGWOOD TRL	MEDIUM/5-10	MEDIUM/LOW	LOW/0-5	LOW/EXTREME	NONE	MEDIUM/5-10	778.55	20	1730.11	81.45	False	None
97	BIRCH LN	C	HOLLY TRL	DEAD END	MEDIUM/5-10	NONE	NONE	LOW/EXTREME	HIGH/LOW	NONE	668.78	12	891.71	81.19	False	None
112	CHICHAUK TRL	A	CLAMSHELL TRL	DEAD END	MEDIUM/5-10	LOW/LOW	NONE	LOW/EXTREME	HIGH/LOW	NONE	2,183.78	20	4852.86	81.03	False	None

Appendix D - Ranked List of Segments

SectionID	Street Name	Class	BEG_DESC	END_DESC	Fatigue Cracking	Transverse Cracking	Patch Deterioration / Potholes	Surface Defects	Rutting / Roughness	Block Cracking	Length (ft)	Width (ft)	Square Yards	PCI	CURB	Sidewalk
151	YUCCA LN	C	CYPRESS LN	JUNIPER TRL	MEDIUM/5-10	LOW/LOW	NONE	LOW/EXTREME	HIGH/LOW	NONE	570.98	18	1141.95	81.03	False	None
95	S DOGWOOD TRL	A	E DOGWOOD TRL	YAUPON TRL	MEDIUM/0-5	MEDIUM/MEDIUM	LOW/0-5	LOW/EXTREME	LOW/LOW	MEDIUM/0-5	1,459.90	19	3082.02	78.98	False	One Side
30	12TH AVE	B	NC 12	DEAD END	LOW/0-5	MEDIUM/MEDIUM	NONE	LOW/EXTREME	MEDIUM/LOW	MEDIUM/0-5	542.08	20	1204.61	78.86	False	None
121	FAIRWAY DR	B	S DOGWOOD TRL	EOM	HIGH/5-10	MEDIUM/MEDIUM	NONE	LOW/EXTREME	MEDIUM/LOW	MEDIUM/10-25	900.00	18	1800	77.66	False	None
130	S DOGWOOD TRL	A	FAIRWAY DR	GINGUITE TRL	MEDIUM/10-25	LOW/LOW	LOW/0-5	LOW/EXTREME	NONE	MEDIUM/0-5	4,009.00	19	8463.43	77.24	True	One Side
111	S DOGWOOD TRL	A	YAUPON TRL	FAIRWAY DR	MEDIUM/10-25	MEDIUM/LOW	LOW/0-5	LOW/EXTREME	NONE	MEDIUM/0-5	2,114.18	18	4228.36	77.08	False	One Side
122	TWISTED TREE CT	C	POTESKEET TRL	DEAD END	MEDIUM/10-25	LOW/LOW	NONE	LOW/EXTREME	MEDIUM/LOW	NONE	287.43	20	638.73	76.81	False	None
44	9TH AVE	B	NC 12	DEAD END	MEDIUM/5-10	MEDIUM/HIGH	LOW/0-5	LOW/EXTREME	NONE	LOW/0-5	432.58	16	769.03	67.95	False	None
41	10TH AVE	B	NC 12	DEAD END	MEDIUM/5-10	MEDIUM/HIGH	NONE	LOW/EXTREME	NONE	MEDIUM/5-10	531.82	16	945.46	67.74	False	None
35	11TH AVE	B	NC 12	11TH AVE	MEDIUM/5-10	MEDIUM/HIGH	NONE	LOW/EXTREME	NONE	MEDIUM/5-10	1,307.06	18	2614.12	67.74	False	None
27	SEA OATS CT	C	SEA OATS TRL	DEAD END	MEDIUM/5-10	MEDIUM/HIGH	LOW/0-5	LOW/EXTREME	NONE	MEDIUM/5-10	170.77	20	379.48	67.70	False	None
73	MOCKINGBIRD LN	B	OCEAN BLVD	DEAD END	NONE	LOW/LOW	NONE	MEDIUM/EXTREME	NONE	NONE	343.29	15	572.15	67.67	False	None
37	11TH AVE	B	SEA OATS TRL	NC 12	MEDIUM/5-10	MEDIUM/HIGH	MEDIUM/0-5	LOW/EXTREME	NONE	MEDIUM/5-10	996.22	20	2213.82	67.64	False	None
50	7TH AVE	B	NC 12	7TH AVE	MEDIUM/5-10	MEDIUM/HIGH	HIGH/0-5	LOW/EXTREME	NONE	MEDIUM/5-10	1,204.22	18	2408.44	67.54	False	None
159	BLUE PETE CT	C	S DOGWOOD TRL	DEAD END	LOW/0-5	MEDIUM/LOW	NONE	MEDIUM/EXTREME	NONE	MEDIUM/0-5	197.82	20	439.6	67.26	False	None
145	LAST HUNT LN	C	HIGH DUNE LOOP	DEAD END	MEDIUM/0-5	MEDIUM/LOW	NONE	MEDIUM/EXTREME	NONE	MEDIUM/0-5	336.85	20	748.56	67.17	False	None
160	WOOD DUCK CT	C	S DOGWOOD TRL	DEAD END	MEDIUM/0-5	MEDIUM/LOW	NONE	MEDIUM/EXTREME	NONE	MEDIUM/0-5	231.33	19	488.37	67.17	False	None
104	TROUT RUN	C	NC 12	OCEAN BLVD	MEDIUM/0-5	MEDIUM/LOW	MEDIUM/0-5	MEDIUM/EXTREME	NONE	NONE	495.78	20	1101.74	67.13	False	None
154	TEAL CT	C	S DOGWOOD TRL	DEAD END	NONE	MEDIUM/LOW	NONE	MEDIUM/EXTREME	NONE	MEDIUM/5-10	242.18	18	484.36	67.03	False	None
48	8TH AVE	B	NC 12	8TH AVE	LOW/0-5	LOW/MEDIUM	NONE	MEDIUM/EXTREME	NONE	LOW/0-5	1,272.45	16	2262.13	66.90	False	None
72	SAND PIPER LN	B	OCEAN BLVD	DEAD END	NONE	MEDIUM/LOW	MEDIUM/0-5	MEDIUM/EXTREME	NONE	MEDIUM/5-10	342.70	15	571.16	66.90	False	None
53	6TH AVE	B	DEAD END	DEAD END	MEDIUM/10-25	MEDIUM/HIGH	HIGH/0-5	LOW/EXTREME	NONE	MEDIUM/5-10	281.88	12	375.84	66.81	False	None
26	SEA OATS TRL	A	SOUNDVIEW TRL	NC 12	MEDIUM/5-10	MEDIUM/HIGH	HIGH/0-5	LOW/EXTREME	MEDIUM/LOW	MEDIUM/10-25	1,540.52	20	3423.37	66.74	False	None
149	POINT COMFORT LN	C	GINGUITE TRL	DEAD END	MEDIUM/5-10	LOW/LOW	NONE	MEDIUM/EXTREME	NONE	MEDIUM/5-10	366.53	18	733.05	66.61	False	None
107	E HOLLY TRL	B	HOLLY TRL	DEAD END	LOW/0-5	NONE	MEDIUM/0-5	MEDIUM/EXTREME	HIGH/LOW	NONE	575.39	16	1022.91	66.54	False	None
66	PURPLE MARTIN LN	B	OCEAN BLVD	DEAD END	MEDIUM/5-10	LOW/LOW	MEDIUM/0-5	MEDIUM/EXTREME	NONE	MEDIUM/5-10	339.29	14	527.78	66.51	FALSE	None
110	W HOLLY TRL	B	HOLLY TRL	DEAD END	MEDIUM/5-10	NONE	MEDIUM/0-5	MEDIUM/EXTREME	MEDIUM/LOW	MEDIUM/0-5	777.56	20	1727.91	66.34	False	None
47	HILLCREST DR	A	SEA OATS TRL	NC 12	LOW/0-5	MEDIUM/MEDIUM	NONE	MEDIUM/EXTREME	NONE	LOW/0-5	869.84	20	1932.97	66.32	False	None
16	TALL CLIFF LN	B	HIGH DUNE LOOP	DEAD END	MEDIUM/0-5	MEDIUM/MEDIUM	NONE	MEDIUM/EXTREME	NONE	MEDIUM/0-5	753.00	20	1673.33	66.17	False	None
5	BAYBERRY TRL	B	E DOGWOOD TRL	SCUPPERNONG LN	MEDIUM/5-10	LOW/LOW	MEDIUM/0-5	MEDIUM/EXTREME	MEDIUM/LOW	MEDIUM/5-10	1,845.13	18	3690.26	66.02	False	None
23	GINGUITE TRL	B	PINTAIL TRL	S DOGWOOD TRAIL	MEDIUM/5-10	MEDIUM/LOW	MEDIUM/0-5	LOW/EXTREME	HIGH/LOW	MEDIUM/25-50	4,501.40	20	10003.1	66.02	False	None
94	DOLPHIN RUN	B	NC 12	OCEAN BLVD	MEDIUM/10-25	MEDIUM/LOW	NONE	LOW/EXTREME	NONE	MEDIUM/25-50	589.18	16	1047.44	66.01	False	None
25	13TH AVE	B	NC 12	13TH AVE	LOW/0-5	MEDIUM/MEDIUM	NONE	MEDIUM/EXTREME	NONE	MEDIUM/5-10	1,150.35	20	2556.33	65.99	False	None
157	S DOGWOOD TRL	A	TEAL CT	CROATAN HWY	MEDIUM/0-5	MEDIUM/MEDIUM	LOW/0-5	MEDIUM/EXTREME	NONE	MEDIUM/5-10	2,667.73	20	5928.29	65.87	False	One Side
29	12TH AVE	B	NC 12	12TH AVE	LOW/5-10	MEDIUM/MEDIUM	HIGH/0-5	MEDIUM/EXTREME	NONE	MEDIUM/0-5	1,239.85	18	2479.7	65.85	False	None
46	8TH AVE	B	DEAD END	DEAD END	MEDIUM/5-10	MEDIUM/MEDIUM	NONE	MEDIUM/EXTREME	NONE	LOW/0-5	335.50	16	596.45	65.82	False	None
31	11TH AVE	B	DEAD END	DEAD END	MEDIUM/5-10	MEDIUM/MEDIUM	NONE	MEDIUM/EXTREME	NONE	MEDIUM/0-5	211.41	16	375.84	65.78	False	None
28	12TH AVE	B	DEAD END	DEAD END	MEDIUM/5-10	MEDIUM/MEDIUM	NONE	MEDIUM/EXTREME	NONE	MEDIUM/0-5	170.98	17	322.97	65.78	False	None
153	S DOGWOOD TRL	A	GINGUITE TRL	TEAL CT	HIGH/0-5	MEDIUM/MEDIUM	MEDIUM/0-5	MEDIUM/EXTREME	NONE	MEDIUM/5-10	2,180.16	20	4844.79	65.68	False	One Side
78	N WOODLAND DR	B	DEAD END	DEAD END	MEDIUM/5-10	MEDIUM/LOW	LOW/0-5	MEDIUM/EXTREME	HIGH/LOW	MEDIUM/5-10	2,298.27	16	4085.81	65.64	False	None
57	4TH AVE	B	DEAD END	DEAD END	MEDIUM/5-10	LOW/MEDIUM	NONE	MEDIUM/EXTREME	NONE	MEDIUM/10-25	192.30	16	341.87	65.58	False	None
139	LAND FALL LOOP	C	SPINDRIFT TRL	SPINDRIFT TRL	LOW/5-10	MEDIUM/MEDIUM	NONE	MEDIUM/EXTREME	MEDIUM/LOW	MEDIUM/0-5	354.26	20	787.25	65.57	False	None
68	SEA OATS TRL	A	HILLCREST DR	HICKORY TRL	LOW/0-5	MEDIUM/MEDIUM	LOW/0-5	MEDIUM/EXTREME	MEDIUM/LOW	MEDIUM/5-10	3,500.21	20	7778.24	65.45	False	None
42	9TH AVE	B	NC 12	9TH AVE	LOW/0-5	MEDIUM/HIGH	NONE	MEDIUM/EXTREME	NONE	LOW/0-5	1,388.79	16	2468.96	65.40	False	None
21	DUCK WOODS DR	B	CROATAN HWY	DEAD END	MEDIUM/5-10	MEDIUM/LOW	LOW/0-5	MEDIUM/EXTREME	MEDIUM/LOW	MEDIUM/10-25	7,677.29	20	17060.64	65.38	False	None
90	HILLCREST DR	A	HICKORY TRL	E DOGWOOD TRL	MEDIUM/5-10	MEDIUM/MEDIUM	HIGH/0-5	MEDIUM/EXTREME	NONE	MEDIUM/5-10	3,059.03	20	6797.85	65.37	False	None
86	SEA OATS TRL	A	HICKORY TRL	E DOGWOOD TRL	MEDIUM/5-10	MEDIUM/MEDIUM	NONE	MEDIUM/EXTREME	LOW/LOW	MEDIUM/5-10	2,941.84	20	6537.43	65.34	False	None
119	BENT OAK CT	C	POTESKEET TRL	DEAD END	MEDIUM/10-25	MEDIUM/LOW	NONE	MEDIUM/EXTREME	MEDIUM/LOW	MEDIUM/0-5	249.15	20	553.67	65.28	False	None

Appendix D - Ranked List of Segments

SectionID	Street Name	Class	BEG_DESC	END_DESC	Fatigue Cracking	Transverse Cracking	Patch Deterioration / Potholes	Surface Defects	Rutting / Roughness	Block Cracking	Length (ft)	Width (ft)	Square Yards	PCI	CURB	Sidewalk
58	4TH AVE	B	NC 12	4TH AVE	NONE	MEDIUM/MEDIUM	HIGH/0-5	MEDIUM/EXTREME	NONE	MEDIUM/10-25	1,128.59	16	2006.39	65.28	False	None
89	POMPANO CT	B	OCEAN BLVD	DEAD END	MEDIUM/5-10	MEDIUM/MEDIUM	NONE	MEDIUM/EXTREME	MEDIUM/LOW	MEDIUM/5-10	368.87	14	573.8	65.16	False	None
62	2ND AVE	B	NC 12	2ND AVE	MEDIUM/5-10	MEDIUM/MEDIUM	NONE	MEDIUM/EXTREME	NONE	MEDIUM/10-25	1,250.16	18	2500.31	65.11		None
67	OCEAN BLVD	B	HICKORY TRL	PERIWINKLE PL	MEDIUM/5-10	MEDIUM/MEDIUM	NONE	MEDIUM/EXTREME	NONE	MEDIUM/10-25	1,231.03	20	2735.63	65.11	False	None
52	N DOGWOOD TRL	B	E DOGWOOD TRL	DEAD END	MEDIUM/10-25	MEDIUM/LOW	LOW/0-5	MEDIUM/EXTREME	MEDIUM/LOW	MEDIUM/5-10	5,740.06	12	7653.41	65.09	False	None
99	DOLPHIN RUN	B	WAX MYRTLE TRL	NC 12	MEDIUM/5-10	MEDIUM/MEDIUM	MEDIUM/0-5	MEDIUM/EXTREME	MEDIUM/LOW	MEDIUM/5-10	455.94	16	810.57	65.07	False	None
82	E DOGWOOD TRL	A	N DOGWOOD TRL	BAYBERRY TRL	MEDIUM/0-5	MEDIUM/MEDIUM	NONE	MEDIUM/EXTREME	MEDIUM/LOW	MEDIUM/10-25	2,487.30	20	5527.34	64.97	False	One Side
12	HIGH DUNE LOOP	B	SPINDRIFT TRL	SPINDRIFT TRL	MEDIUM/5-10	MEDIUM/MEDIUM	HIGH/0-5	MEDIUM/EXTREME	HIGH/LOW	MEDIUM/0-5	3,622.65	20	8050.34	64.91	False	None
24	13TH AVE	B	DEAD END	DEAD END	MEDIUM/5-10	MEDIUM/HIGH	NONE	MEDIUM/EXTREME	NONE	LOW/0-5	190.04	20	422.32	64.90	False	None
128	TRINITIE TRL	A	CHICHAUK TRL	EAGLES NEST LN	HIGH/5-10	MEDIUM/LOW	LOW/0-5	MEDIUM/EXTREME	HIGH/LOW	MEDIUM/10-25	3,287.07	20	7304.61	64.89	False	One Side
70	WAX MYRTLE TRL	B	HILLCREST DR	HICKORY TRL	MEDIUM/10-25	LOW/MEDIUM	NONE	MEDIUM/EXTREME	NONE	MEDIUM/10-25	3,615.13	20	8033.61	64.86	False	None
92	MIZZENMAST LN	C	SEA OATS LN	DEAD END	MEDIUM/10-25	MEDIUM/MEDIUM	HIGH/0-5	MEDIUM/EXTREME	NONE	MEDIUM/5-10	234.45	20	520.99	64.70	False	None
36	10TH AVE	B	DEAD END	DEAD END	MEDIUM/5-10	MEDIUM/HIGH	NONE	MEDIUM/EXTREME	NONE	MEDIUM/5-10	210.78	16	374.71	64.65	False	None
39	10TH AVE	B	NC 12	10TH AVE	MEDIUM/5-10	MEDIUM/HIGH	NONE	MEDIUM/EXTREME	NONE	MEDIUM/5-10	1,373.41	16	2441.61	64.65	False	None
40	9TH AVE	B	DEAD END	DEAD END	MEDIUM/5-10	MEDIUM/HIGH	NONE	MEDIUM/EXTREME	NONE	MEDIUM/5-10	208.38	16	370.45	64.65	False	None
158	SKYLINE RD	B	NC 12	DEAD END	MEDIUM/5-10	MEDIUM/HIGH	NONE	MEDIUM/EXTREME	NONE	MEDIUM/5-10	2,882.09	18	5764.17	64.65	False	None
138	TEA PLANT CT	B	PUDDING PAN LN	DEAD END	MEDIUM/5-10	MEDIUM/HIGH	NONE	MEDIUM/EXTREME	NONE	MEDIUM/5-10	442.00	20	982.23	64.65	False	None
100	WAX MYRTLE TRL	B	E DOGWOOD TRL	PORPOISE RUN	MEDIUM/5-10	MEDIUM/MEDIUM	MEDIUM/0-5	MEDIUM/EXTREME	MEDIUM/LOW	MEDIUM/10-25	2,668.69	16	4744.34	64.65	False	None
38	SEA OATS TRL	A	SOUNDVIEW TRL	HILLCREST DR	MEDIUM/5-10	MEDIUM/HIGH	LOW/0-5	MEDIUM/EXTREME	NONE	MEDIUM/5-10	1,922.06	20	4271.25	64.62	False	None
61	2ND AVE	B	DEAD END	DEAD END	MEDIUM/10-25	MEDIUM/MEDIUM	NONE	MEDIUM/EXTREME	NONE	MEDIUM/10-25	119.17	16	211.85	64.53	FALSE	None
125	CHICHAUK TRL	A	CLAM SHELL TRL	SPINDRIFT TRL	LOW/25-50	MEDIUM/MEDIUM	MEDIUM/0-5	MEDIUM/EXTREME	NONE	MEDIUM/10-25	2,807.39	20	6238.64	64.51	False	Both Sides
34	NORTH DUNE LOOP	B	SOUNDVIEW TRL	SOUNDVIEW TRL	MEDIUM/5-10	MEDIUM/HIGH	LOW/0-5	MEDIUM/EXTREME	LOW/LOW	MEDIUM/5-10	2,064.04	20	4586.76	64.39	True	None
81	WOODLAND DR	C	E DOGWOOD TRL	N WOODLAND DR	MEDIUM/10-25	MEDIUM/MEDIUM	HIGH/0-5	MEDIUM/EXTREME	NONE	MEDIUM/10-25	572.62	20	1272.49	64.33	False	None
134	CROOKED BACK LOOP	B	CHICHAUK TRL	PUDDING PAN LN	MEDIUM/5-10	MEDIUM/HIGH	LOW/0-5	MEDIUM/EXTREME	NONE	MEDIUM/10-25	2,790.21	20	6200.46	64.16	False	None
84	E DOGWOOD TRL	A	BAYBERRY TRL	WAX MYRTLE TRL	MEDIUM/5-10	MEDIUM/HIGH	LOW/0-5	MEDIUM/EXTREME	NONE	MEDIUM/10-25	1,990.96	40	8848.73	64.16	True	One Side
85	WAX MYRTLE TRL	B	HICKORY TRL	E DOGWOOD TRL	MEDIUM/5-10	MEDIUM/HIGH	LOW/0-5	MEDIUM/EXTREME	NONE	MEDIUM/10-25	2,802.24	20	6227.2	64.16	False	None
69	HICKORY TRL	A	WAX MYRTLE TRL	NC 12	MEDIUM/10-25	MEDIUM/HIGH	LOW/0-5	MEDIUM/EXTREME	NONE	MEDIUM/5-10	430.93	20	957.62	64.01	False	None
8	PORPOISE RUN	B	NC 12	OCEAN BLVD	MEDIUM/10-25	MEDIUM/LOW	NONE	MEDIUM/EXTREME	NONE	MEDIUM/25-50	483.16	16	858.95	63.96	True	None
87	OCEAN BLVD	B	E DOGWOOD TRL	DOLPHIN RUN	MEDIUM/5-10	MEDIUM/MEDIUM	NONE	MEDIUM/EXTREME	NONE	MEDIUM/25-50	1,372.09	19	2896.64	63.94	False	None
9	PORPOISE RUN	B	WAX MYRTLE TRL	NC 12	MEDIUM/5-10	MEDIUM/MEDIUM	NONE	MEDIUM/EXTREME	NONE	MEDIUM/25-50	456.64	16	811.8	63.94	False	None
13	OCEAN VIEW LOOP	B	OCEANVIEW LOOP	NC 12	MEDIUM/10-25	MEDIUM/LOW	MEDIUM/0-5	MEDIUM/EXTREME	NONE	MEDIUM/25-50	444.54	20	987.86	63.86	False	None
129	SPINDRIFT TRL	B	CHICHAUK TRL	HIGH DUNE LOOP	MEDIUM/5-10	MEDIUM/HIGH	MEDIUM/0-5	MEDIUM/EXTREME	MEDIUM/LOW	MEDIUM/10-25	3,084.05	20	6853.44	63.74	False	None
71	HICKORY TRL	A	HILLCREST DR	WAX MYRTLE TRL	MEDIUM/10-25	MEDIUM/HIGH	MEDIUM/0-5	MEDIUM/EXTREME	NONE	MEDIUM/10-25	602.47	19	1271.89	63.57	False	None
18	OCEAN VIEW LOOP	B	DEAD END	DEAD END	MEDIUM/5-10	MEDIUM/MEDIUM	LOW/0-5	MEDIUM/EXTREME	MEDIUM/LOW	MEDIUM/25-50	1,366.00	20	3035.56	63.54	False	None
14	SPINDRIFT TRL	B	HIGH DUNE LOOP	DEAD END	MEDIUM/5-10	MEDIUM/HIGH	HIGH/0-5	MEDIUM/EXTREME	HIGH/LOW	MEDIUM/10-25	2,541.18	20	5647.07	63.49	False	None
6	OCEAN BLVD	B	DOLPHIN RUN	PORPOISE RUN	MEDIUM/10-25	MEDIUM/MEDIUM	NONE	MEDIUM/EXTREME	NONE	MEDIUM/25-50	1,312.86	18	2625.72	63.46	False	None
108	OCEAN BLVD	B	PORPOISE RUN	NC 12	MEDIUM/10-25	MEDIUM/MEDIUM	NONE	MEDIUM/EXTREME	NONE	MEDIUM/25-50	1,234.76	20	2743.91	63.46	False	None
79	SANDFIDDLER CT	B	NC 12	DEAD END	MEDIUM/10-25	MEDIUM/MEDIUM	NONE	MEDIUM/EXTREME	NONE	MEDIUM/25-50	598.71	20	1330.48	63.46	False	None
126	TURTLE POND CT	C	POTESKEET TRL	DEAD END	HIGH/10-25	LOW/LOW	HIGH/0-5	MEDIUM/EXTREME	MEDIUM/LOW	MEDIUM/0-5	346.99	20	771.1	63.28	False	None
51	HILLCREST DR	A	SEA OATS TRL	HICKORY TRL	MEDIUM/10-25	MEDIUM/HIGH	MEDIUM/0-5	MEDIUM/EXTREME	NONE	MEDIUM/25-50	3,856.10	18	7712.21	62.78	True	None
49	7TH AVE	B	DEAD END	DEAD END	MEDIUM/5-10	HIGH/HIGH	NONE	LOW/EXTREME	LOW/LOW	MEDIUM/10-25	288.33	12	384.44	56.04	False	None
54	6TH AVE	B	NC 12	6TH AVE	MEDIUM/25-50	MEDIUM/HIGH	HIGH/0-5	LOW/EXTREME	NONE	MEDIUM/10-25	1,129.97	17	2134.39	55.69	False	None
155	WILD PONY LN	B	SPINDRIFT TRL	DEAD END	LOW/0-5	HIGH/HIGH	NONE	MEDIUM/EXTREME	MEDIUM/LOW	MEDIUM/0-5	1,369.26	20	3042.8	55.61	False	None
65	HICKORY TRL	A	NC 12	DEAD END	MEDIUM/25-50	MEDIUM/MEDIUM	MEDIUM/0-5	MEDIUM/EXTREME	NONE	MEDIUM/10-25	1,383.62	17	2613.5	55.51	False	None
120	OYSTER BED LN	C	POTESKEET TRL	DEAD END	MEDIUM/5-10	HIGH/HIGH	NONE	MEDIUM/EXTREME	NONE	MEDIUM/5-10	421.90	20	937.57	55.49	False	None
172	KINGFISHER CT	C	KINGFISHER TRL	DEAD END	MEDIUM/5-10	HIGH/HIGH	LOW/0-5	MEDIUM/EXTREME	NONE	MEDIUM/5-10	246.74	20	548.3	55.45	True	None
43	KINGFISHER TRL	C	SOUNDVIEW TRL	SEA OATS TRL	MEDIUM/5-10	HIGH/HIGH	LOW/0-5	MEDIUM/EXTREME	NONE	MEDIUM/5-10	1,339.20	20	2976.01	55.45	True	None
103	BRIGHT LANTERN LN	C	SEA OATS LN	DEAD END	MEDIUM/5-10	HIGH/HIGH	MEDIUM/0-5	MEDIUM/EXTREME	NONE	MEDIUM/5-10	281.19	20	624.86	55.39	False	None

Appendix D - Ranked List of Segments

SectionID	Street Name	Class	BEG_DESC	END_DESC	Fatigue Cracking	Transverse Cracking	Patch Deterioration / Potholes	Surface Defects	Rutting / Roughness	Block Cracking	Length (ft)	Width (ft)	Square Yards	PCI	CURB	Sidewalk
171	OTTER SLIDE LN	B	CLAM SHELL TRL	CHICAHAUK TRL	MEDIUM/5-10	HIGH/HIGH	MEDIUM/0-5	MEDIUM/EXTREME	NONE	MEDIUM/5-10	1,267.71	20	2817.14	55.39	False	None
32	SOUNDVIEW TRL	B	NORTH DUNE LOOP	SEA OATS TRL	MEDIUM/5-10	HIGH/HIGH	MEDIUM/0-5	MEDIUM/EXTREME	NONE	MEDIUM/5-10	287.81	20	639.58	55.39	True	None
33	SOUNDVIEW TRL	B	SEA OATS TRL	NORTH DUNE LOOP	MEDIUM/5-10	HIGH/HIGH	HIGH/0-5	MEDIUM/EXTREME	NONE	MEDIUM/5-10	1,350.70	20	3001.55	55.29	False	None
56	5TH AVE	B	NC 12	5TH AVE	MEDIUM/10-25	HIGH/HIGH	LOW/0-5	MEDIUM/EXTREME	NONE	NONE	1,100.90	18	2201.81	55.13	False	None
59	3RD AVE	B	DEAD END	DEAD END	MEDIUM/5-10	HIGH/HIGH	NONE	MEDIUM/EXTREME	NONE	MEDIUM/10-25	205.93	12	274.57	55.03	False	None
127	CLAM SHELL TRL	B	CHICAHAUK TRL	OTTER SLIDE LN	MEDIUM/5-10	HIGH/HIGH	MEDIUM/0-5	MEDIUM/EXTREME	MEDIUM/LOW	MEDIUM/5-10	3,477.97	20	7728.83	54.99	False	None
1	SEA OATS LN	B	E DOGWOOD TRL	DEAD END	MEDIUM/5-10	HIGH/HIGH	MEDIUM/0-5	MEDIUM/EXTREME	MEDIUM/LOW	MEDIUM/5-10	1,640.58	20	3645.74	54.99	False	None
133	PUDDING PAN LN	B	SPINDRIFT TRL	DEAD END	MEDIUM/5-10	HIGH/HIGH	MEDIUM/0-5	MEDIUM/EXTREME	NONE	MEDIUM/10-25	1,967.14	20	4371.42	54.93	False	None
60	3RD AVE	B	NC 12	3RD AVE	MEDIUM/10-25	HIGH/HIGH	NONE	MEDIUM/EXTREME	NONE	MEDIUM/10-25	1,190.86	18	2381.72	54.50	FALSE	None
55	5TH AVE	B	DEAD END	DEAD END	MEDIUM/10-25	HIGH/HIGH	MEDIUM/0-5	MEDIUM/EXTREME	NONE	MEDIUM/10-25	219.70	12	292.93	54.40	False	None
150	HAPPY INDIAN CT	C	HAPPY INDIAN LN	DEAD END	MEDIUM/0-5	MEDIUM/LOW	NONE	HIGH/EXTREME	MEDIUM/LOW	MEDIUM/0-5	157.07	20	349.04	52.50	FALSE	None
11	HAPPY INDIAN LN	B	HIGH DUNE LOOP	DEAD END	HIGH/0-5	MEDIUM/MEDIUM	LOW/0-5	HIGH/EXTREME	NONE	MEDIUM/0-5	640.14	20	1422.54	51.97	False	None
63	1ST AVE	B	DEAD END	DEAD END	MEDIUM/5-10	HIGH/MEDIUM	NONE	HIGH/EXTREME	NONE	MEDIUM/10-25	211.41	18	422.81	50.44	FALSE	None
124	GOOSE FEATHER LN	C	CHICAHAUK TRL	DEAD END	MEDIUM/5-10	HIGH/HIGH	NONE	HIGH/EXTREME	NONE	MEDIUM/5-10	457.86	18	915.72	49.74	False	None
80	OCEAN BLVD	B	PERIWINKLE PL	E DOGWOOD TRL	MEDIUM/5-10	MEDIUM/LOW	NONE	MEDIUM/EXTREME	NONE	MEDIUM/50-75	1,306.55	18	2613.09	49.49	False	None
77	PERIWINKLE PL	B	NC 12	OCEAN BLVD	MEDIUM/5-10	MEDIUM/LOW	NONE	MEDIUM/EXTREME	NONE	MEDIUM/50-75	815.68	20	1812.62	49.49	FALSE	None
74	CIRCLE DR	B	HICKORY TRL	HICKORY TRL	MEDIUM/25-50	MEDIUM/MEDIUM	MEDIUM/5-10	HIGH/EXTREME	LOW/LOW	MEDIUM/10-25	2,742.88	18	5485.76	48.42	FALSE	None
64	1ST AVE	B	NC 12	1ST AVE	MEDIUM/25-50	HIGH/MEDIUM	MEDIUM/5-10	HIGH/EXTREME	LOW/LOW	MEDIUM/10-25	1,280.96	18	2561.93	47.97	False	None

APPENDIX E

2021 TOWN OF SOUTHERN SHORES
PAVEMENT CONDITION SURVEY
SOUTHERN SHORES MAPS_PCI

Town of Southern Shores Current Conditions

Item 8.



Legend

Current Conditions

- Excellent
- Good
- Fair

Currituck Sound

Atlantic Ocean

0 0.25 0.5 0.75 1 Miles



Town of Southern Shores Year 2032 Conditions - Option 1

Item 8.



Legend

Conditions (2032)

- Excellent
- Good
- Fair
- Poor

Currituck Sound

Atlantic Ocean

0 0.25 0.5 0.75 1 Miles



Town of Southern Shores Year 2032 Conditions - Option 2

Item 8.



Legend

Condition Category (2032)

- Excellent
- Good
- Fair

Currituck Sound

Atlantic Ocean

0 0.25 0.5 0.75 1 Miles



APPENDIX F

2021 Town of Southern Shores
DISTRESS TYPES_EXTENT DEFINITIONS

Distress Severity/Extent Definitions Flexible Pavement (P)						
Distress	Rating Level		Rating Level		Rating Level	
	SEV	EXT	SEV	EXT	SEV	EXT
FATIGUE CRACKING / DEFECTS (FC)	LOW/0-5	0-5%	MEDIUM/0-5	0-5%	HIGH/0-5	0-5%
	LOW/5-10	5-10%	MEDIUM/5-10	5-10%	HIGH/5-10	5-10%
	LOW/10-25	10-25%	MEDIUM/10-25	10-25%	HIGH/10-25	10-25%
	LOW/25-50	25-50%	MEDIUM/25-50	25-50%	HIGH/25-50	25-50%
	LOW/50-75	50-75%	MEDIUM/50-75	50-75%	HIGH/50-75	50-75%
	LOW/75-100	75-100%	MEDIUM/75-100	75-100%	HIGH/75-100	75-100%
TRANSVERSE CRACKING (TC)	SEV	EXT	SEV	EXT	SEV	EXT
	LOW/LOW	>100'	MEDIUM/LOW	>100'	HIGH/LOW	>100'
	LOW/MEDIUM	100'-50'	MEDIUM/MEDIUM	100'-50'	HIGH/MEDIUM	100'-50'
	LOW/HIGH	50'-25'	MEDIUM/HIGH	50'-25'	HIGH/HIGH	50'-25'
BLOCK CRACKING (BC)	SEV	EXT	SEV	EXT	SEV	EXT
	LOW/0-5	0-5%	MEDIUM/0-5	0-5%	HIGH/0-5	0-5%
	LOW/5-10	5-10%	MEDIUM/5-10	5-10%	HIGH/5-10	5-10%
	LOW/10-25	10-25%	MEDIUM/10-25	10-25%	HIGH/10-25	10-25%
	LOW/25-50	25-50%	MEDIUM/25-50	25-50%	HIGH/25-50	25-50%
	LOW/50-75	50-75%	MEDIUM/50-75	50-75%	HIGH/50-75	50-75%
PATCH DETERIORATION / POTHoles (PP)	SEV	EXT	SEV	EXT	SEV	EXT
	LOW/0-5	0-5%	MEDIUM/0-5	0-5%	HIGH/0-5	0-5%
	LOW/5-10	5-10%	MEDIUM/5-10	5-10%	HIGH/5-10	5-10%
	LOW/10-25	10-25%	MEDIUM/10-25	10-25%	HIGH/10-25	10-25%
	LOW/25-50	25-50%	MEDIUM/25-50	25-50%	HIGH/25-50	25-50%
	LOW/50-75	50-75%	MEDIUM/50-75	50-75%	HIGH/50-75	50-75%
SURFACE DEFECTS (SD)	SEV	EXT	SEV	EXT	SEV	EXT
	LOW/LOW	<25%	MEDIUM/LOW	<25%	HIGH/LOW	<25%
	LOW/MEDIUM	25-50%	MEDIUM/MEDIUM	25-50%	HIGH/MEDIUM	25-50%
	LOW/HIGH	50-75%	MEDIUM/HIGH	50-75%	HIGH/HIGH	50-75%
RUTTING/ROUGHNESS (RR)	SEV	EXT	SEV	EXT	SEV	EXT
	LOW/LOW	<25%	MEDIUM/LOW	<25%	HIGH/LOW	<25%
	LOW/MEDIUM	25-50%	MEDIUM/MEDIUM	25-50%	HIGH/MEDIUM	25-50%
	LOW/HIGH	50-75%	MEDIUM/HIGH	50-75%	HIGH/HIGH	50-75%
RUTTING/ROUGHNESS (RR)	SEV	EXT	SEV	EXT	SEV	EXT
	LOW/EXTREME	75-100%	MEDIUM/EXTREME	75-100%	HIGH/EXTREME	75-100%



TOWN OF SOUTHERN SHORES
TOWN HALL

SEPI

1 Glenwood Avenue, Suite 600
Raleigh, NC 27603
919.789.9977



AGENDA ITEM SUMMARY

Item # 9

MEETING DATE: October 5, 2021

ITEM TITLE: Beach Nourishment

1. A Resolution Providing for the Issuance of Special Obligation Bond, Series, 2021A &
2. Consideration of Beach Nourishment Interlocal Agreement

ITEM SUMMARY:

1. The resolution follows the bond order adopted at the September Regular Town Council meeting. It establishes the terms and conditions of the bond issuance.
2. The Towns and the County are entering into this Interlocal Agreement to cooperate in the construction of the respective beach nourishment projects by having the County enter the contracts for each project to achieve overall savings on the construction costs. This Interlocal Agreement sets forth the terms under which the County will enter the contracts for the projects and each Towns understanding as to the administration of the construction process, the financing of the projects and the liabilities associated with the construction of the Projects.

STAFF RECOMMENDATION:

These documents have been produced with input and approval from Town staff, the bond attorneys, County staff and our financial advisors. Staff recommends approval of both documents as presented.

REQUESTED ACTION:

A motion to approve the Resolution of the Town Council of the Town of Southern Shores Providing for the Issuance of a Special Obligation Bond, Series 2021A.

A motion to approve Interlocal Agreement as presented.

ATTACHMENTS: Special Obligation Bond

Interlocal agreement

A RESOLUTION OF THE TOWN COUNCIL OF THE TOWN OF SOUTHERN SHORES, NORTH CAROLINA PROVIDING FOR THE ISSUANCE OF A SPECIAL OBLIGATION BOND (TOWN PORTION), SERIES 2021A

WHEREAS, the Town of Southern Shores, North Carolina (the “Town”) is authorized by Article 7A of Chapter 159 of the General Statutes of North Carolina (the “Applicable Statute”) to issue its special obligation bonds for beach erosion control and flood and hurricane works provided in a municipal service district; and

WHEREAS, the Town Council of the Town (the “Town Council”) has created two Municipal Service Districts (the “Districts”), in accordance with Article 23 of Chapter 160A of the North Carolina General Statutes, in which the Town has determined to construct certain beach erosion control and flood and hurricane protection works (the “Current Project”); and

WHEREAS, a portion of the Current Project will be funded by the Town (the “Town Portion”) and a portion of the Current Project will be funded from other sources;

WHEREAS, the County of Dare (the “County”) will also fund a portion of the Town’s beach erosion and control needs pursuant to an Interlocal Agreement ~~to be dated October 13, 2021~~ (the “Interlocal”) between the Town, the County and three other towns located in the County;

WHEREAS, the Town Council adopted a “Bond Order Authorizing the Issuance of Special Obligation Bonds of the Town of Southern Shores, North Carolina (Town Portion)” (the “Town Portion Bond Order”) on October 5, 2021 providing for the issuance of Special Obligations Bonds to be secured by the sources set forth in the Town Portion Bond Order; and

WHEREAS, the Town Council has determined that it is necessary and advisable at this time to issue the Town’s Special Obligation Bond (Town Portion), Series 2021A (the “2021A Bond”) in an aggregate principal amount not to exceed \$8,028,300 to (1) pay the costs of the Town Portion of the Current Project and (2) pay the costs of issuing the 2021A Bond; and

WHEREAS, PNC Bank, National Association (the “Purchaser”), has agreed to purchase the 2021A Bond as set forth in its Term Sheet, dated August 31, 2021 (the “Term Sheet”); and

WHEREAS, the Town has applied to the Local Government Commission of North Carolina (the “Commission”) for approval of its application relating to the 2021A Bond as required by Section 159-146(i) of the Applicable Statute and of the issuance and private sale of the 2021A Bond, ~~which approvals are expected to be granted at the Commission’s meeting on October 5, 2021~~ (the “Commission Approval”); and

WHEREAS, the Town Council now desires to provide for the terms, form and issuance of the 2021A Bond in an amount not to exceed \$8,028,300; and

WHEREAS, the Town Council has determined that the Town will issue the 2021A Bond ~~on or about October 13, 2021~~ pursuant to a Bond Purchase Agreement, to be dated its date of delivery ~~on or about October 13, 2021~~ (the “Purchase Agreement”), between the Commission and the Purchaser and approved by the Town; and

WHEREAS, the Town Council desires to incorporate in this Resolution, to the extent applicable and unless manifestly inappropriate, the provisions of the Town Portion Bond Order, including definitions;

NOW, THEREFORE, BE IT RESOLVED BY THE TOWN COUNCIL OF THE TOWN OF SOUTHERN SHORES, NORTH CAROLINA, IN ACCORDANCE WITH THE FINAL COMMISSION APPROVAL AS SET FORTH ABOVE AND ANY CONDITIONS, TERMS AND OTHER CONTINGENCIES THAT MAY BE SET FORTH THEREIN, AS FOLLOWS:

Section 1. Acceptance of Term Sheet, Issuance of Bond. The Town hereby accepts and approves the Term Sheet offered by the Purchaser; provided, however, such Term Sheet shall not represent the final terms of the transaction, which shall be only in the Town Portion Bond Order, this Resolution, the 2021A Bond and any closing documents. The Term Sheet is not incorporated herein. The Town shall issue in accordance with and pursuant to the Applicable Statute, the Town Portion Bond Order, and this Resolution, its 2021A Bond in an aggregate principal amount not to exceed \$8,028,300 for the purpose of providing funds, together with other available funds, to (1) pay the costs of the Town Portion of the Current Project and (2) pay the costs of issuing the 2021A Bond. The period of usefulness of the capital projects to be financed by the issuance of the 2021A Bond is not less than five years, computed from the date of the issuance of the 2021A Bond. The Town will set forth the final aggregate principal amount of the 2021A Bond in a closing certificate delivered upon the execution and delivery of the 2021A Bond.

Section 2. Form of Bond. The 2021A Bond shall be issued in fully registered form. The 2021A Bond shall be issued as a single bond, shall be substantially in the form set forth in Exhibit A attached hereto and made a part hereof, with such appropriate variations, omissions and insertions as are permitted or required by this Resolution. The Finance Officer, or her designee, is hereby appointed to be the registrar of the 2021A Bond (the “*Registrar*”) and is hereby directed to maintain the appropriate registration records with respect thereto.

Section 3. Details of Bond. (a) The 2021A Bond shall be dated the date of its issuance, shall bear interest at a fixed rate ~~of 1.78%~~not to exceed 3.00% per annum until its payment and shall be stated to mature (subject to the right of prior redemption) ~~on December 15, 2026~~no later than 62 months from the date of issuance of the 2021A Bond.

If a Determination of Taxability or Event of Taxability occurs with respect to the 2021A Bond, as such terms are hereinafter defined, the fixed rate of interest shall be increased to and be calculated at the rate which will provide to the Purchaser the effective yield which it would have received if there had not been a Determination of Taxability or an Event of Taxability, such rate to be determined by the Purchaser (the “*Alternative Rate of Interest*”), and shall be payable from the Date of Taxability to such time as the 2021A Bond is paid in full. In such event, the Town also shall be required to pay to the Purchaser all amounts, if any, which may be necessary to reimburse the Purchaser for any interest, penalties or other charges assessed by the Internal Revenue Service and the Department of Revenue of the State of North Carolina against the Purchaser by reason of the Purchaser’s failure to include the interest on the 2021A Bond in its gross income for income tax purposes. The Town shall pay to the Purchaser the above mentioned Alternative Rate of Interest notwithstanding any transfer by the Purchaser or payment or redemption by the Town prior to the date such Determination of Taxability was made.

“*Event of Taxability*” shall mean any event, occurrence or situation, resulting from an action, or failure to act, by the Town, the effect of which is to cause the interest on the 2021A Bond to be includible in the gross income of the Purchaser for federal income tax purposes. A “*Determination of Taxability*” shall mean a determination that the interest on the 2021A Bond is included in gross income of the Purchaser for federal income tax purposes, which determination shall be deemed to have been made upon the occurrence of the first to occur of the following: (a) the date on which the Purchaser is advised in writing by the Commissioner or any District Director of the Internal Revenue Service that, as a consequence of an Event of Taxability, the interest on the 2021A Bond is included in the gross income of the Purchaser for federal income tax purposes; (b) the date on which the Town receives notice from the Purchaser that the Purchaser has been advised in writing that the Internal Revenue Service has issued a statutory notice of

deficiency or similar notice to the Purchaser which asserts, in effect, that interest on the 2021A Bond received by the Purchaser is included in the gross income of the Purchaser for federal income tax purposes, as a result of an Event of Taxability; (c) the day on which the Town is advised in writing by the Commissioner or any District Director of the Internal Revenue Service that there has been issued a public or private ruling of the Internal Revenue Service that the interest on the 2021A Bond is included in the gross income of the Purchaser for federal income tax purposes as a result of an Event of Taxability; or (d) the day on which the Town is advised in writing by counsel to the Purchaser that a final determination, from which no further right of appeal exists, has been made by a court of competent jurisdiction in the United States of America in a proceeding with respect to which the Town has been given written notice and an opportunity to participate and defend that interest on the 2021A Bond is included in the gross income of the Purchaser for federal income tax purposes, as a result of an Event of Taxability.

“*Date of Taxability*” shall mean the first date upon which interest on the 2021A Bond is included in the gross income of the Purchaser for federal income tax purposes as a result of an Event of Taxability or a Determination of Taxability.

(b) The 2021A Bond is subject to mandatory redemption before maturity as set forth in a closing certificate delivered upon the execution and delivery of the 2021A Bond.

(c) The 2021A Bond shall be subject to optional redemption prior to its stated maturity at the option of the Town in whole (but not in part) on any date upon giving the Purchaser not less than 15 Business Days prior written notice thereof and as provided in this subsection (c). The redemption price of such 2021A Bond shall be equal to 100% of the principal amount of the 2021A Bond, plus interest accrued to the redemption date, plus, if so required by the Purchaser as compensation for the costs of the 2021A Bond being redeemed, an amount equal to the Cost of Redemption. “*Cost of Redemption*” means an amount equal to the present value, if positive, of the product of (a) the difference between (i) the yield, on the beginning date of the applicable interest period, of a U.S. Treasury obligation with a maturity similar to the applicable interest period, minus (ii) the yield on the redemption date, of a U.S. Treasury obligation with a maturity similar to the remaining maturity of the applicable interest period, and (b) the principal amount to be redeemed, and (c) the number of years, including fractional years, from the redemption date to the end of the applicable interest period. The yield on any U.S. Treasury obligation shall be determined by reference to Federal Reserve Statistical Release H.15 (519) “*Selected Interest Rates*.” For purposes of making present value calculations, the yield to maturity of a similar maturity U.S. Treasury obligation on the redemption date shall be deemed the discount rate. A “*Business Day*” shall mean any day other than a Saturday or Sunday or a legal holiday on which commercial lenders are authorized or required to be closed for business in Raleigh, North Carolina.

The Purchaser shall provide the Town with a written statement explaining the calculation of the Cost of Redemption due, if any, which statement shall, in absence of manifest error, be conclusive and binding on the Town.

(d) Interest on the outstanding principal amount of the 2021A Bond shall be payable on December 15, 2021 and on each June 15 and December 15 thereafter until maturity. Interest on the 2021A Bond shall be calculated on the basis of a 360-day year consisting of twelve 30-day months. In the event of a late payment, interest shall continue to accrue on the principal balance outstanding at the interest rate applicable to the 2021A Bond. If any payment of interest on the 2021A Bond is more than five days late, or any payment of principal is not paid when due, or upon the occurrence of any other Event of Default by the Town hereunder, then interest shall accrue at the Default Rate described below until the default is cured. “*Event of Default*” means the occurrence of any of the following: (a) failure to make a payment of principal of the 2021A Bond when due; (b) failure to make a payment of interest on the 2021A Bond when due; or (c) the Town shall default in the due and punctual performance of any other of the covenants, conditions, agreements and provisions contained in the 2021A Bond, the Bond Order or this Resolution on the part of

the Town to be performed, and such default shall continue for 30 days after written notice specifying such default and requiring same to be remedied shall have been given to the Town by the Purchaser.

(e) Principal of, premium, if any, and interest on the 2021A Bond shall be payable to the registered owner appearing on the registration records of the Registrar by wire transfer or by check, mailed to such registered owner at its address as it appears on such registration books and shall be received by the registered owner on the date such payment is due.

(f) If the Town defaults on its obligation to pay principal of and interest on the 2021A Bond, all amounts due on the 2021A Bond will bear interest at the Default Rate until the default is cured. The “*Default Rate*” shall be the greater of (A) the Prime Rate plus 300 basis points (3.00%), (B) the sum of the Overnight Bank Funding Rate plus 350 basis points (3.50%), and (C) 7.00%; provided that in no event shall the Default Rate exceed 20% per annum or the maximum allowable legal interest rate. The “*Overnight Bank Funding Rate*” shall mean, for any day, the rate comprised of both overnight federal funds and overnight Eurocurrency borrowings by U.S.-managed banking offices of depository institutions, as such composite rate shall be determined by the Federal Reserve Bank of New York (“*NYFRB*”), as set forth on its public website from time to time, and as published on the next succeeding Business Day as the overnight bank funding rate by the NYFRB (or by such other recognized electronic source (such as Bloomberg) selected by the Purchaser for the purpose of displaying such rate); provided, that if such day is not a Business Day, the Overnight Bank Funding Rate for such day shall be such rate on the immediately preceding Business Day; provided, further, that if such rate shall at any time, for any reason, no longer exist, a comparable replacement rate determined by the Purchaser at such time (which determination shall be conclusive absent manifest error). If the Overnight Bank Funding Rate determined as above would be less than zero, then such rate shall be deemed to be zero. The rate of interest charged shall be adjusted as of each Business Day based on changes in the Overnight Bank Funding Rate without notice to the Town. “*Prime Rate*” shall mean the rate publicly announced by the Purchaser from time to time as its prime rate. The Prime Rate is determined from time to time by the Purchaser as a means of pricing some loans to its borrowers. The Prime Rate is not tied to any external rate of interest or index, and does not necessarily reflect the lowest rate of interest actually charged by the Purchaser to any particular class or category of customers. If and when the Prime Rate or the Overnight Bank Funding Rate changes, the Default Rate will change automatically without notice to the Town.

(g) The Town shall set forth the final interest rate and maturity date of the 2021A Bond and, with the consent of the Purchaser, may modify the provisions of this Section 3 pursuant to a closing certificate delivered in connection with the execution and delivery of the 2021A Bond ~~with the consent of the Purchaser.~~

Section 4. Security for the Bond. The 2021A Bond shall be a special obligation of the Town and the principal of, redemption premium and interest on the 2021A Bond shall be payable solely from the sources identified in the Town Portion Bond Order and as set forth in the 2021A Bond. The uses of the sources set forth in the Town Portion Bond Order and the 2021A Bond do not constitute a pledge of the Town’s taxing power and the Town is not obligated to pay the principal of, interest, or any premium on, the 2021A Bond except from the sources identified in the Town Portion Bond Order and the 2021A Bond.

NEITHER THE FAITH AND CREDIT NOR THE TAXING POWER OF THE TOWN ARE PLEDGED FOR THE PAYMENT OF THE PRINCIPAL OF, OR INTEREST OR ANY PREMIUM ON, THE 2021A BOND, AND NO OWNER OF THE 2021A BOND HAS THE RIGHT TO COMPEL THE EXERCISE OF THE TAXING POWER OF THE TOWN IN CONNECTION WITH ANY DEFAULT THEREON.

Section 5. Application of the Bond Proceeds. On the date of the initial issuance of the 2021A Bond, the Purchaser shall deliver the 2021A Bond proceeds to any account identified by the Town in a closing certificate delivered upon the execution and delivery of the 2021A Bond and the Town shall invest,

or cause to be invested, such proceeds until used only in investments authorized by Section 159-30 of the General Statutes of North Carolina. Such 2021A Bond proceeds shall be applied solely as follows: (1) as soon as practicable, for the costs of the Town Portion of the Current Project, and (2) within 60 days of the date of initial issuance, for payment of issuance costs related to the issuance of the 2021A Bond.

Section 6. Execution of the Bond. The 2021A Bond, issued as a single bond, shall be executed in the name of the Town by facsimile or manual signatures of the Town's Mayor or Town Manager and the Town Clerk and the Certificate of Approval of the Commission shall bear a facsimile or manual signature of the Secretary of the Commission or her designated assistant.

Section 7. Private Sale of Bond. The Town Council requests that the Commission sell the 2021A Bond at private sale without advertisement to the Purchaser in the form of a single registered bond bearing interest at 1.78% per annum and containing such provisions as set forth above and in the Purchase Agreement. The Town hereby approves the draft of the Purchase Agreement presented at this meeting and hereby authorizes and directs the Town's Mayor, the Town Manager, the Finance Officer, and the Town Clerk (collectively, the "*Authorized Officers*"), individually or collectively, as appropriate, to execute and deliver such Purchase Agreement in such final form that they, with the advice of counsel, deem appropriate.

Section 8. Authorization for Delivery of Bond. The Authorized Officers, individually or collectively, are hereby authorized and directed to cause the 2021A Bond to be prepared and, when it shall have been duly sold by the Commission, to execute the 2021A Bond and deliver the same to the Purchaser.

Section 9. Arbitrage and Tax Covenants. The Town covenants that it will not take or permit, or omit to take or cause to be taken, any action that would adversely affect the exclusion from gross income of the recipient thereof for federal income tax purposes of interest on the 2021A Bond and, if it should take or permit, or omit to take or cause to be taken, any such action, the Town will take or cause to be taken all lawful actions within its power necessary to rescind or correct such actions or omissions promptly upon having knowledge thereof. The Town acknowledges that the continued exclusion of the 2021A Bond from the owner's gross income for federal income tax purposes depends, in part, on compliance with the arbitrage limitations imposed by Section 148 of the Code.

The Town covenants that it will comply with all the requirements of Section 148 of the Code, including the rebate requirements, and that it will not permit at any time any of the proceeds of the 2021A Bond or other funds under its control to be used, directly or indirectly, to acquire any asset or obligation, the acquisition of which would cause the 2021A Bond to be "*arbitrage bonds*" for purposes of Section 148 of the Code. The Town covenants that it will comply with the investment instructions in the Tax Certificate executed and delivered on the date hereof with respect to the 2021A Bond.

Section 10. Financial Covenant. The Town shall maintain on its books a "Beach Nourishment Fund." As of December 1 of each fiscal year, the Town will maintain an amount in the Beach Nourishment Fund at least equal to the greater of (A) the amount of taxes collected from the special tax assessed only in the Districts in the immediately preceding fiscal year and (B) \$1,000,000.

Section 11. Authorization for Other Acts. The Authorized Officers, individually or collectively, are further authorized and directed to take such action and to execute and deliver any such documents, deeds, certificates, undertakings, agreements or other instruments as they, with the advice of counsel, may deem necessary and appropriate to effect the transactions contemplated by the Town Portion Bond Order and this Resolution. The Town approves the form and content of the Purchase Agreement and the Interlocal, and the Purchase Agreement and the Interlocal are in all respects authorized, approved and confirmed. The Authorized Officers are hereby authorized, empowered and directed to execute and deliver the Purchase Agreement and the Interlocal, including necessary counterparts, in substantially the form and content of the Purchase Agreement and Interlocal made available to the Town Council, but with such

changes, modifications, additions or deletions therein as they may deem necessary, desirable or appropriate, their execution thereof to constitute conclusive evidence of the Town's approval of any and all changes, modifications, additions or deletions therein from the form and content of the Purchase Agreement and the Interlocal made available to the Town Council. Such officers are hereby directed to take all actions necessary to effectuate the transaction set forth above, including taking any such actions or making any such changes as may be required by the Commission Approval, as may be necessary to carry out and comply with the provisions of the Purchase Agreement and the Interlocal as executed, and for the on-going administration of the Town Portion Bond Order, this Resolution and the 2021A Bond.

Section 12. Transfer Restrictions. Notwithstanding any other provisions of the Town Portion Bond Order or this Resolution to the contrary, the 2021A Bond shall not be transferred to any person other than a bank, insurance company or similar financial institution unless such transfer has been previously approved by the Commission.

The Purchaser or its assignees may assign or reassign all or any part of the 2021A Bond, including the assignment or reassignment of any partial interest through the use of certificates evidencing participation interests in the 2021A Bond, or making the 2021A Bond part of a pool of obligations without the consent of the Commission, so long as such assignment or reassignment is to (i) a bank, insurance company or similar institution or any other entity approved by the Commission; or (ii) a trustee for the purpose of issuing certificates of participation or other forms of certificates evidencing an undivided interest in the 2021A Bond, provided such certificates are sold only to a bank, insurance company or similar financial institution or other entity approved by the Commission.

Any reference to the Purchaser in this Resolution will include its successors or assigns made in accordance herewith.

The provisions of this paragraph may not be amended without the prior written consent of the Commission.

Section 13. Reporting Requirements for the Town. The Town hereby covenants to provide to the Purchaser at the same time the Town provides its annual audited financial statements to the Commission, but in no event later than 210 days after the end of the Town's fiscal year, (i) the Town's annual audited financial statements and (ii) a certification from the Town Manager or Finance Officer, or their respective designee, evidencing compliance with the covenant in Section 10 hereof. The Town shall also provide such other financial information and operating reports as may be reasonably requested by the Purchaser.

Section 14. Qualified Tax-Exempt Obligation. The Town designates the 2021A Bond as a "qualified tax-exempt obligation" eligible for the exception from the disallowance of the deduction of interest by financial institutions allocable to the cost of carrying tax-exempt obligations in accordance with the provisions of Section 265(b)(3) of the Code. The Town hereby represents that it reasonably expects that the Town, all entities issuing obligations on behalf of the Town and all subordinate entities of the Town will not issue in the aggregate more than \$10,000,000 of tax-exempt obligations (not counting private activity bonds except for qualified 501(c)(3) bonds as defined by the Code during calendar year 2021. The Town will not designate more than \$10,000,000 of qualified tax-exempt obligations pursuant to such Section 265(b)(3) during calendar year 2021.

Section 15. Supplemental Resolutions; Additional Parity Indebtedness. The Town may adopt resolutions supplemental hereto; provided, however, the Purchaser's prior written consent shall be required for any supplemental resolution that affects the terms or tax treatment of the 2021A Bond. The Town may not issue indebtedness that is on parity with the 2021A Bond without the Purchaser's prior written consent.

Section 16. Governing Law. This Resolution and the 2021A Bond are governed by and to be construed in accordance with the laws of the State of North Carolina.

Section 17. Dispute Resolution.

(a) *Arbitration of Disputes.* The Town and the Purchaser shall submit any and all disputes arising out of or relating to the 2021A Bond, a default thereunder or an Event of Default under this Resolution (a “Dispute”) to binding arbitration pursuant to and in accordance with the AAA Commercial Arbitration Rules and, where applicable, the Supplementary Rules for Large, Complex Commercial Disputes, and judgment upon the award rendered by the arbitrator may be entered in any court having jurisdiction thereof. Such arbitration shall be conducted in a mutually acceptable location. Except as expressly set forth below, the procedures specified herein shall be the sole and exclusive procedures for the resolution of Disputes; provided, however, that the Town or the Purchaser may seek provisional or ancillary remedies, such as preliminary injunctive relief, from a court having jurisdiction, before, during or after the pendency of any arbitration proceeding. The institution and maintenance of any action for such judicial relief, or pursuit of provisional or ancillary remedies, shall not constitute a waiver of the right or obligation of any party to submit any claim or dispute to arbitration. Nothing herein shall in any way limit or modify any remedies available to the Purchaser under this Resolution or the 2021A Bond or otherwise at law or in equity.

(b) *Motion Practice.* In any arbitration hereunder, the arbitrator(s) shall decide any pre-hearing motions which are substantially similar to pre-hearing motions to dismiss for failure to state a claim or motions for summary adjudication.

(c) *Discovery.* Discovery shall be limited to the pre-hearing exchange of all documents which the Town and the Purchaser intend to introduce at the hearing and any expert reports prepared by any expert who will testify at the hearing.

(d) *Sequential Hearing Days.* At the administrative conference conducted by the American Arbitration Association (the “AAA”), the Town and the Purchaser and the AAA shall determine how to ensure that the hearing is started and completed on sequential hearing days. Potential arbitrators shall be informed of the anticipated length of the hearing and they shall not be subject to appointment unless they agree to abide by the parties’ intent that, absent exigent circumstances, the hearing shall be conducted on sequential days.

(e) *Award.* The award of the arbitrator(s) shall be accompanied by a statement of the reasons upon which such award is based.

(f) *Fees and Expenses.* The Town and the Purchaser shall each bear equally all fees and costs and expenses of the arbitration, and each shall bear its own legal fees and expenses and the costs of its experts and witnesses; provided, however, that if the arbitration panel shall award to a party substantially all relief sought by such party, then, notwithstanding any applicable governing law provisions, the other party shall pay all costs, fees and expenses incurred by the prevailing party and such costs, fees and expenses shall be included in such award.

(g) *Confidentiality of Disputes.* The entire procedure shall be confidential and none of the parties nor arbitrator(s) may disclose the existence, content, or results of any arbitration hereunder without the written consent of all parties to the Dispute, except (i) to the extent disclosure is required to enforce any applicable arbitration award or may otherwise be required by law and (ii) that either party may make such disclosures to its regulators, auditors, accountants, attorneys and insurance representatives. No conduct, statements, promises, offers, views, or opinions of any party involved in an arbitration hereunder shall be discoverable or admissible for any purposes in litigation or other proceedings involving the parties to the Dispute and shall not be disclosed to anyone not an agent, employee, expert, witness, or representative for

any of such parties.

(h) *CLASS ACTION WAIVER.* THE TOWN HEREBY WAIVES, WITH RESPECT TO ANY DISPUTE: (I) THE RIGHT TO PARTICIPATE IN A CLASS ACTION, PRIVATE ATTORNEY GENERAL ACTION OR OTHER REPRESENTATIVE ACTION IN COURT OR IN ARBITRATION, EITHER AS A CLASS REPRESENTATIVE OR CLASS MEMBER; AND (II) THE RIGHT TO JOIN OR CONSOLIDATE CLAIMS WITH CLAIMS OF ANY OTHER PERSON. The foregoing waiver is referred to herein as the “class action waiver”. The Purchaser and the Town agree that no arbitrator shall have authority to conduct any arbitration in violation of the class action waiver or to issue any relief that applies to any person or entity other than the Town and/or the Purchaser individually. The parties acknowledge that this class action waiver is material and essential to the arbitration of any claims and is non-severable from this Dispute Resolution section. If the class action waiver is voided, found unenforceable, or limited with respect to any claim for which the Town seeks class-wide relief, then this Dispute Resolution section (except for this sentence) shall be null and void with respect to such claim, subject to the right to appeal the limitation or invalidation of the class action waiver. However, this Dispute Resolution section shall remain valid with respect to all other claims and Disputes. The parties acknowledge and agree that under no circumstances will a class action be arbitrated.

(i) *Applicability of Federal Arbitration Act.* The 2021A Bond and related documents, including the Purchase Agreement, evidence transaction(s) in interstate commerce, and thus the Federal Arbitration Act governs the interpretation and enforcement of this Dispute Resolution section.

Section 18. Repealer. All orders and resolutions and parts of orders and resolutions in conflict with this Resolution, if any, excluding the Town Portion Bond Order, shall be and the same are hereby repealed to the extent the conflict exists.

Section 19. Effectiveness of Resolution. This resolution shall be effective immediately upon its adoption by the Town Council.

STATE OF NORTH CAROLINA)
)
COUNTY OF DARE) SS:

I, *Sheila Kane*, Town Clerk of the Town of Southern Shores, North Carolina, ***DO HEREBY CERTIFY*** that the foregoing is a true and exact copy of a resolution entitled “**A RESOLUTION OF THE TOWN COUNCIL OF THE TOWN OF SOUTHERN SHORES, NORTH CAROLINA PROVIDING FOR THE ISSUANCE OF A SPECIAL OBLIGATION BOND (TOWN PORTION), SERIES 2021A**” adopted by the Town Council of the Town of Southern Shores, North Carolina, at a meeting held on the 5th day of October, 2021.

WITNESS my hand and the corporate seal of the Town of Southern Shores, North Carolina, this the ____ day of October, 2021.

[Seal]

Sheila Kane
Town Clerk
Town of Southern Shores, North Carolina

APPENDIX A

FORM OF 2021A BOND

THIS BOND IS SUBJECT TO CERTAIN TRANSFER RESTRICTIONS AS DESCRIBED HEREIN.

No. RA-1

\$ _____

UNITED STATES OF AMERICA
STATE OF NORTH CAROLINA
TOWN OF SOUTHERN SHORES, NORTH CAROLINA

SPECIAL OBLIGATION BOND (TOWN PORTION), SERIES 2021A

INTEREST RATE	MATURITY DATE	DATED DATE
1.78%	December 15, <u>2026</u> , <u>20</u>	October <u>13</u> , 2021

REGISTERED OWNER: PNC BANK, NATIONAL ASSOCIATION

PRINCIPAL SUM: _____ AND NO/100 DOLLARS

THE TOWN OF SOUTHERN SHORES, NORTH CAROLINA (the “Town”) acknowledges itself indebted and for value received hereby promises to pay to the Registered Owner named above, on the Maturity Date specified above, on surrender hereof, the Principal Sum shown above and to pay to the Registered Owner hereof interest thereon from the date of this Bond until it shall mature at the Interest Rate per annum specified above, payable on December 15, 2021 and on each June 15 and December 15 thereafter until the Maturity Date. Interest on this Bond shall be calculated on the basis of a 360-day year consisting of twelve 30-day months. In the event of a late payment, interest shall continue to accrue on the principal balance outstanding at the applicable interest rate per annum set forth in the issuance resolution adopted by the Town Council on October 5, 2021 and effective on the date of its adoption related to this Bond (the “*Issuance Resolution*”). If any payment of interest on this Bond is more than five days late, or any payment of principal is not paid when due, or upon the occurrence of any other Event of Default by the Town under the Issuance Resolution, then interest shall accrue at the Default Rate described below until the default is cured. Principal of and interest on this Bond are payable in immediately available funds to the Registered Owner. All capitalized terms used in this Bond and not otherwise defined herein has the definition assigned to it in the Issuance Resolution.

The Default Rate shall be the greater of (A) the Prime Rate plus 300 basis points (3.00%), (B) the sum of the Overnight Bank Funding Rate plus 350 basis points (3.50%), and (C) 7.00%; provided that in no event shall the Default Rate exceed 20% per annum or the maximum allowable legal interest rate. The “*Overnight Bank Funding Rate*” shall mean, for any day, the rate comprised of both overnight federal funds and overnight Eurocurrency borrowings by U.S.-managed banking offices of depository institutions, as such composite rate shall be determined by the Federal Reserve Bank of New York (“*NYFRB*”), as set forth on its public website from time to time, and as published on the next succeeding Business Day as the overnight bank funding rate by the NYFRB (or by such other recognized electronic source (such as

Bloomberg) selected by the Purchaser for the purpose of displaying such rate); provided, that if such day is not a Business Day, the Overnight Bank Funding Rate for such day shall be such rate on the immediately preceding Business Day; provided, further, that if such rate shall at any time, for any reason, no longer exist, a comparable replacement rate determined by the Purchaser at such time (which determination shall be conclusive absent manifest error). If the Overnight Bank Funding Rate determined as above would be less than zero, then such rate shall be deemed to be zero. The rate of interest charged shall be adjusted as of each Business Day based on changes in the Overnight Bank Funding Rate without notice to the Town. “*Prime Rate*” shall mean the rate publicly announced by the Purchaser from time to time as its prime rate. The Prime Rate is determined from time to time by the Purchaser as a means of pricing some loans to its borrowers. The Prime Rate is not tied to any external rate of interest or index, and does not necessarily reflect the lowest rate of interest actually charged by the Purchaser to any particular class or category of customers. If and when the Prime Rate or the Overnight Bank Funding Rate changes, the Default Rate will change automatically without notice to the Town.

This Bond is issued in accordance with the Registered Public Obligations Act, Chapter 159E of the General Statutes of North Carolina, and pursuant to the Article 7A of Chapter 159 of the General Statutes of North Carolina, a “Bond Order Authorizing the Issuance of Special Obligation Bonds of the Town of Southern Shores, North Carolina (Town Portion), Series 2021A” (the “*Town Portion Bond Order*”) adopted by the Town Council of the Town (the “*Town Council*”) on October 5, 2021 and effective on the date of its adoption and an issuance resolution (the “*Issuance Resolution*”) adopted by the Town Council on October 5, 2021 and effective on the date of its adoption. This Bond is being issued to provide funds to finance a portion of the construction of certain beach erosion control and flood and hurricane protection works in the Districts (as defined in the Issuance Resolution) and to pay issuance costs relating to this Bond.

If a Determination of Taxability or Event of Taxability occurs with respect to this Bond, as such terms are hereinafter defined, the fixed rate of interest shall be increased to and be calculated at the rate which will provide to the Purchaser the effective yield which it would have received if there had not been a Determination of Taxability or an Event of Taxability, such rate to be determined by the Purchaser (the “*Alternative Rate of Interest*”), and shall be payable from the Date of Taxability to such time as this Bond is paid in full. In such event, the Town also shall be required to pay to the Purchaser all amounts, if any, which may be necessary to reimburse the Purchaser for any interest, penalties or other charges assessed by the Internal Revenue Service and the Department of Revenue of the State of North Carolina against the Purchaser by reason of the Purchaser’s failure to include the interest on this Bond in its gross income for income tax purposes. The Town shall pay to the Purchaser the above mentioned Alternative Rate of Interest notwithstanding any transfer by the Purchaser or payment or redemption by the Town prior to the date such Determination of Taxability was made.

“*Event of Taxability*” shall mean any event, occurrence or situation, resulting from an action, or failure to act, by the Town, the effect of which is to cause the interest on this Bond to be includible in the gross income of the Purchaser for federal income tax purposes. A Determination of Taxability shall mean a determination that the interest on this Bond is included in gross income of the Purchaser for federal income tax purposes, which determination shall be deemed to have been made upon the occurrence of the first to occur of the following: (a) the date on which the Purchaser is advised in writing by the Commissioner or any District Director of the Internal Revenue Service that, as a consequence of an Event of Taxability, the interest on this Bond is included in the gross income of the Purchaser for federal income tax purposes; (b) the date on which the Town receives notice from the Purchaser that the Purchaser has been advised in writing that the Internal Revenue Service has issued a statutory notice of deficiency or similar notice to the Purchaser which asserts, in effect, that interest on this Bond received by the Purchaser is included in the gross income of the Purchaser for federal income tax purposes, as a result of an Event of Taxability; (c) the day on which the Town is advised in writing by the Commissioner or any District Director of the Internal Revenue Service that there has been issued a public or private ruling of the Internal Revenue Service that

the interest on this Bond is included in the gross income of the Purchaser for federal income tax purposes as a result of an Event of Taxability; or (d) the day on which the Town is advised in writing by counsel to the Purchaser that a final determination, from which no further right of appeal exists, has been made by a court of competent jurisdiction in the United States of America in a proceeding with respect to which the Town has been given written notice and an opportunity to participate and defend that interest on this Bond is included in the gross income of the Purchaser for federal income tax purposes, as a result of an Event of Taxability.

“*Date of Taxability*” shall mean the first date upon which interest on this Bond is included in the gross income of the Purchaser for federal income tax purposes as a result of an Event of Taxability or a Determination of Taxability.

This Bond is subject to mandatory redemption before maturity in part at the redemption price of 100% of the principal amount to be redeemed, without premium, on each December 15 in the years and in the amounts as follows:

YEAR	PRINCIPAL PAYMENT
2022	\$
2023	
2024	
2025	
2026*	

*Maturity

This Bond shall be subject to optional redemption prior to its stated maturity at the option of the Town in whole (but not in part) on any date upon giving the Purchaser not less than 15 Business Days prior written notice thereof and as provided in this paragraph. The redemption price of such Bond shall be equal to 100% of the principal amount of this Bond, plus interest accrued to the redemption date, plus, if so required by the Purchaser as compensation for the costs of this Bond being redeemed, an amount equal to the Cost of Redemption. “*Cost of Redemption*” means an amount equal to the present value, if positive, of the product of (a) the difference between (i) the yield, on the beginning date of the applicable interest period, of a U.S. Treasury obligation with a maturity similar to the applicable interest period, minus (ii) the yield on the redemption date, of a U.S. Treasury obligation with a maturity similar to the remaining maturity of the applicable interest period, and (b) the principal amount to be redeemed, and (c) the number of years, including fractional years, from the redemption date to the end of the applicable interest period. The yield on any U.S. Treasury obligation shall be determined by reference to Federal Reserve Statistical Release H.15 (519) “*Selected Interest Rates.*” For purposes of making present value calculations, the yield to maturity of a similar maturity U.S. Treasury obligation on the redemption date shall be deemed the discount rate. A “*Business Day*” shall mean any day other than a Saturday or Sunday or a legal holiday on which commercial lenders are authorized or required to be closed for business in Raleigh, North Carolina.

This Bond shall be a special obligation of the Town and the principal of, and interest and premium on, such Bond shall be secured solely by the sources set forth in the Town Portion Bond Order (such sources being defined herein as the “*Pledged Sources*”), which are as follows:

- (i) that portion of the 3% Room Occupancy Tax authorized by House Bill 882, 2001 Session, General Assembly of North Carolina, effective August 29, 2001, distributed by Dare County, North Carolina (the “*County*”) to the Town;

(ii) that portion of the 1% local option sales and use tax levied by the County pursuant to Article 39 of Chapter 105 of the General Statutes of North Carolina which are distributed to the Town;

(iii) that portion of the 1/2% local option sales and use tax levied by the County pursuant to Article 40 of Chapter 105 of the General Statutes of North Carolina which are distributed to the Town;

(iv) that portion of the two 1/2% local option sales and use tax levied by the County pursuant to Article 42 of Chapter 105 of the General Statutes of North Carolina which are distributed to the Town;

(v) the annual contributions distributed from the County to the Town to pay debt service under Section 4.3 of the Interlocal Agreement dated October 13, 2021 among the County, the Town, the Town of Kill Devil Hills, North Carolina, the Town of Kitty Hawk, North Carolina, and the Town of Duck, North Carolina; and

(vi) one or more additional sources of funds identified by the Town Council in future proceedings of the Town Council, so long as (i) the pledge of such sources does not constitute a pledge of the taxing power of the Town and (ii) the pledge of such sources is first approved by the Local Government Commission of North Carolina as set forth in Article 7A of Chapter 159 of the General Statutes of North Carolina.

The uses of the Pledged Sources do not constitute a pledge of the Town's taxing power and the Town is not obligated to pay the principal of, or interest or any premium on, this Bond except from the sources set forth in the Town Portion Bond Order and above.

NEITHER THE FAITH AND CREDIT NOR THE TAXING POWER OF THE TOWN ARE PLEDGED FOR THE PAYMENT OF THE PRINCIPAL OF, OR INTEREST OR ANY PREMIUM ON, THIS BOND, AND NO OWNER OF THIS BOND HAS THE RIGHT TO COMPEL THE EXERCISE OF THE TAXING POWER OF THE TOWN IN CONNECTION WITH ANY DEFAULT THEREON.

It is hereby certified and recited that all conditions, acts and things required by the Constitution or statutes of the State of North Carolina to exist, be performed or happen precedent to or in the issuance of this Bond, exist, have been performed and have happened.

This Bond is not valid or obligatory for any purpose until the certification hereon has been signed by an authorized representative of the Local Government Commission.

This Bond shall not be transferred to any person other than a bank, insurance company or similar financial institution unless such transfer is permitted pursuant to the Issuance Resolution.

IN WITNESS WHEREOF, the Town has caused this Bond to bear the original or facsimile of the signatures of the Mayor and the Town Clerk of the Town, each acting on behalf of the Town and this Bond to be dated as of the Dated Date above.

Sheila Kane
Town Clerk

Tom Bennett
Mayor

Date of Execution: ~~October 13~~ , 2021

The issue hereof has been approved by of Local Government Commission pursuant to Section 159-146(k) of the General Statutes of North Carolina, as amended.

Secretary of the Local Government Commission

FORM OF ASSIGNMENT

ASSIGNMENT

FOR VALUE RECEIVED the undersigned hereby sells, assigns and transfers unto

(Please print or typewrite Name and Address,
including Zip Code, and Federal Taxpayer Identification or
Social Security Number of Assignee)

the within Bond and all rights thereunder, and hereby irrevocably constitutes and appoints

Attorney to register the transfer of the within Bond on the records kept for registration thereof,
with full power of substitution in the premises.

Dated: _____

Signature guaranteed by:

NOTICE: Signature must be guaranteed by
a Participant in the Securities Transfer
Agent Medallion Program ("*Stamp*") or
similar program.

NOTICE: The signature to this assignment must
correspond with the name as it appears on the
face of the within Bond in every particular,
without alteration, enlargement or any change
whatever.

TRANSFER FEE MAY BE REQUIRED

A RESOLUTION OF THE TOWN COUNCIL OF THE TOWN OF SOUTHERN SHORES, NORTH CAROLINA PROVIDING FOR THE ISSUANCE OF A SPECIAL OBLIGATION BOND (TOWN PORTION), SERIES 2021A

WHEREAS, the Town of Southern Shores, North Carolina (the “Town”) is authorized by Article 7A of Chapter 159 of the General Statutes of North Carolina (the “Applicable Statute”) to issue its special obligation bonds for beach erosion control and flood and hurricane works provided in a municipal service district; and

WHEREAS, the Town Council of the Town (the “Town Council”) has created two Municipal Service Districts (the “Districts”), in accordance with Article 23 of Chapter 160A of the North Carolina General Statutes, in which the Town has determined to construct certain beach erosion control and flood and hurricane protection works (the “Current Project”); and

WHEREAS, a portion of the Current Project will be funded by the Town (the “Town Portion”) and a portion of the Current Project will be funded from other sources;

WHEREAS, the County of Dare (the “County”) will also fund a portion of the Town’s beach erosion and control needs pursuant to an Interlocal Agreement to be dated October 13, 2021 (the “Interlocal”) between the Town, the County and three other towns located in the County;

WHEREAS, the Town Council adopted a “Bond Order Authorizing the Issuance of Special Obligation Bonds of the Town of Southern Shores, North Carolina (Town Portion)” (the “Town Portion Bond Order”) on October 5, 2021 providing for the issuance of Special Obligations Bonds to be secured by the sources set forth in the Town Portion Bond Order; and

WHEREAS, the Town Council has determined that it is necessary and advisable at this time to issue the Town’s Special Obligation Bond (Town Portion), Series 2021A (the “2021A Bond”) in an aggregate principal amount not to exceed \$8,028,300 to (1) pay the costs of the Town Portion of the Current Project and (2) pay the costs of issuing the 2021A Bond; and

WHEREAS, PNC Bank, National Association (the “Purchaser”), has agreed to purchase the 2021A Bond as set forth in its Term Sheet, dated August 31, 2021 (the “Term Sheet”); and

WHEREAS, the Town has applied to the Local Government Commission of North Carolina (the “Commission”) for approval of its application relating to the 2021A Bond as required by Section 159-146(i) of the Applicable Statute and of the issuance and private sale of the 2021A Bond, which approvals are expected to be granted at the Commission’s meeting on October 5, 2021 (the “Commission Approval”); and

WHEREAS, the Town Council now desires to provide for the terms, form and issuance of the 2021A Bond in an amount not to exceed \$8,028,300; and

WHEREAS, the Town Council has determined that the Town will issue the 2021A Bond on or about October 13, 2021 pursuant to a Bond Purchase Agreement, to be dated its date of delivery on or about October 13, 2021 (the “Purchase Agreement”), between the Commission and the Purchaser and approved by the Town; and

WHEREAS, the Town Council desires to incorporate in this Resolution, to the extent applicable and unless manifestly inappropriate, the provisions of the Town Portion Bond Order, including definitions;

NOW, THEREFORE, BE IT RESOLVED BY THE TOWN COUNCIL OF THE TOWN OF SOUTHERN SHORES, NORTH CAROLINA, IN ACCORDANCE WITH THE FINAL COMMISSION APPROVAL AS SET FORTH ABOVE AND ANY CONDITIONS, TERMS AND OTHER CONTINGENCIES THAT MAY BE SET FORTH THEREIN, AS FOLLOWS:

Section 1. Acceptance of Term Sheet, Issuance of Bond. The Town hereby accepts and approves the Term Sheet offered by the Purchaser; provided, however, such Term Sheet shall not represent the final terms of the transaction, which shall be only in the Town Portion Bond Order, this Resolution, the 2021A Bond and any closing documents. The Term Sheet is not incorporated herein. The Town shall issue in accordance with and pursuant to the Applicable Statute, the Town Portion Bond Order, and this Resolution, its 2021A Bond in an aggregate principal amount not to exceed \$8,028,300 for the purpose of providing funds, together with other available funds, to (1) pay the costs of the Town Portion of the Current Project and (2) pay the costs of issuing the 2021A Bond. The period of usefulness of the capital projects to be financed by the issuance of the 2021A Bond is not less than five years, computed from the date of the issuance of the 2021A Bond. The Town will set forth the final aggregate principal amount of the 2021A Bond in a closing certificate delivered upon the execution and delivery of the 2021A Bond.

Section 2. Form of Bond. The 2021A Bond shall be issued in fully registered form. The 2021A Bond shall be issued as a single bond, shall be substantially in the form set forth in Exhibit A attached hereto and made a part hereof, with such appropriate variations, omissions and insertions as are permitted or required by this Resolution. The Finance Officer, or her designee, is hereby appointed to be the registrar of the 2021A Bond (the “*Registrar*”) and is hereby directed to maintain the appropriate registration records with respect thereto.

Section 3. Details of Bond. (a) The 2021A Bond shall be dated the date of its issuance, shall bear interest at a fixed rate of 1.78% per annum until its payment and shall be stated to mature (subject to the right of prior redemption) on December 15, 2026.

If a Determination of Taxability or Event of Taxability occurs with respect to the 2021A Bond, as such terms are hereinafter defined, the fixed rate of interest shall be increased to and be calculated at the rate which will provide to the Purchaser the effective yield which it would have received if there had not been a Determination of Taxability or an Event of Taxability, such rate to be determined by the Purchaser (the “*Alternative Rate of Interest*”), and shall be payable from the Date of Taxability to such time as the 2021A Bond is paid in full. In such event, the Town also shall be required to pay to the Purchaser all amounts, if any, which may be necessary to reimburse the Purchaser for any interest, penalties or other charges assessed by the Internal Revenue Service and the Department of Revenue of the State of North Carolina against the Purchaser by reason of the Purchaser’s failure to include the interest on the 2021A Bond in its gross income for income tax purposes. The Town shall pay to the Purchaser the above mentioned Alternative Rate of Interest notwithstanding any transfer by the Purchaser or payment or redemption by the Town prior to the date such Determination of Taxability was made.

“*Event of Taxability*” shall mean any event, occurrence or situation, resulting from an action, or failure to act, by the Town, the effect of which is to cause the interest on the 2021A Bond to be includible in the gross income of the Purchaser for federal income tax purposes. A “*Determination of Taxability*” shall mean a determination that the interest on the 2021A Bond is included in gross income of the Purchaser for federal income tax purposes, which determination shall be deemed to have been made upon the occurrence of the first to occur of the following: (a) the date on which the Purchaser is advised in writing by the Commissioner or any District Director of the Internal Revenue Service that, as a consequence of an Event of Taxability, the interest on the 2021A Bond is included in the gross income of the Purchaser for federal income tax purposes; (b) the date on which the Town receives notice from the Purchaser that the Purchaser has been advised in writing that the Internal Revenue Service has issued a statutory notice of deficiency or similar notice to the Purchaser which asserts, in effect, that interest on the 2021A Bond

received by the Purchaser is included in the gross income of the Purchaser for federal income tax purposes, as a result of an Event of Taxability; (c) the day on which the Town is advised in writing by the Commissioner or any District Director of the Internal Revenue Service that there has been issued a public or private ruling of the Internal Revenue Service that the interest on the 2021A Bond is included in the gross income of the Purchaser for federal income tax purposes as a result of an Event of Taxability; or (d) the day on which the Town is advised in writing by counsel to the Purchaser that a final determination, from which no further right of appeal exists, has been made by a court of competent jurisdiction in the United States of America in a proceeding with respect to which the Town has been given written notice and an opportunity to participate and defend that interest on the 2021A Bond is included in the gross income of the Purchaser for federal income tax purposes, as a result of an Event of Taxability.

“*Date of Taxability*” shall mean the first date upon which interest on the 2021A Bond is included in the gross income of the Purchaser for federal income tax purposes as a result of an Event of Taxability or a Determination of Taxability.

(b) The 2021A Bond is subject to mandatory redemption before maturity as set forth in a closing certificate delivered upon the execution and delivery of the 2021A Bond.

(c) The 2021A Bond shall be subject to optional redemption prior to its stated maturity at the option of the Town in whole (but not in part) on any date upon giving the Purchaser not less than 15 Business Days prior written notice thereof and as provided in this subsection (c). The redemption price of such 2021A Bond shall be equal to 100% of the principal amount of the 2021A Bond, plus interest accrued to the redemption date, plus, if so required by the Purchaser as compensation for the costs of the 2021A Bond being redeemed, an amount equal to the Cost of Redemption. “*Cost of Redemption*” means an amount equal to the present value, if positive, of the product of (a) the difference between (i) the yield, on the beginning date of the applicable interest period, of a U.S. Treasury obligation with a maturity similar to the applicable interest period, minus (ii) the yield on the redemption date, of a U.S. Treasury obligation with a maturity similar to the remaining maturity of the applicable interest period, and (b) the principal amount to be redeemed, and (c) the number of years, including fractional years, from the redemption date to the end of the applicable interest period. The yield on any U.S. Treasury obligation shall be determined by reference to Federal Reserve Statistical Release H.15 (519) “*Selected Interest Rates*.” For purposes of making present value calculations, the yield to maturity of a similar maturity U.S. Treasury obligation on the redemption date shall be deemed the discount rate. A “*Business Day*” shall mean any day other than a Saturday or Sunday or a legal holiday on which commercial lenders are authorized or required to be closed for business in Raleigh, North Carolina.

The Purchaser shall provide the Town with a written statement explaining the calculation of the Cost of Redemption due, if any, which statement shall, in absence of manifest error, be conclusive and binding on the Town.

(d) Interest on the outstanding principal amount of the 2021A Bond shall be payable on December 15, 2021 and on each June 15 and December 15 thereafter until maturity. Interest on the 2021A Bond shall be calculated on the basis of a 360-day year consisting of twelve 30-day months. In the event of a late payment, interest shall continue to accrue on the principal balance outstanding at the interest rate applicable to the 2021A Bond. If any payment of interest on the 2021A Bond is more than five days late, or any payment of principal is not paid when due, or upon the occurrence of any other Event of Default by the Town hereunder, then interest shall accrue at the Default Rate described below until the default is cured. “*Event of Default*” means the occurrence of any of the following: (a) failure to make a payment of principal of the 2021A Bond when due; (b) failure to make a payment of interest on the 2021A Bond when due; or (c) the Town shall default in the due and punctual performance of any other of the covenants, conditions, agreements and provisions contained in the 2021A Bond, the Bond Order or this Resolution on the part of

the Town to be performed, and such default shall continue for 30 days after written notice specifying such default and requiring same to be remedied shall have been given to the Town by the Purchaser.

(e) Principal of, premium, if any, and interest on the 2021A Bond shall be payable to the registered owner appearing on the registration records of the Registrar by wire transfer or by check, mailed to such registered owner at its address as it appears on such registration books and shall be received by the registered owner on the date such payment is due.

(f) If the Town defaults on its obligation to pay principal of and interest on the 2021A Bond, all amounts due on the 2021A Bond will bear interest at the Default Rate until the default is cured. The “*Default Rate*” shall be the greater of (A) the Prime Rate plus 300 basis points (3.00%), (B) the sum of the Overnight Bank Funding Rate plus 350 basis points (3.50%), and (C) 7.00%; provided that in no event shall the Default Rate exceed 20% per annum or the maximum allowable legal interest rate. The “*Overnight Bank Funding Rate*” shall mean, for any day, the rate comprised of both overnight federal funds and overnight Eurocurrency borrowings by U.S.-managed banking offices of depository institutions, as such composite rate shall be determined by the Federal Reserve Bank of New York (“*NYFRB*”), as set forth on its public website from time to time, and as published on the next succeeding Business Day as the overnight bank funding rate by the NYFRB (or by such other recognized electronic source (such as Bloomberg) selected by the Purchaser for the purpose of displaying such rate); provided, that if such day is not a Business Day, the Overnight Bank Funding Rate for such day shall be such rate on the immediately preceding Business Day; provided, further, that if such rate shall at any time, for any reason, no longer exist, a comparable replacement rate determined by the Purchaser at such time (which determination shall be conclusive absent manifest error). If the Overnight Bank Funding Rate determined as above would be less than zero, then such rate shall be deemed to be zero. The rate of interest charged shall be adjusted as of each Business Day based on changes in the Overnight Bank Funding Rate without notice to the Town. “*Prime Rate*” shall mean the rate publicly announced by the Purchaser from time to time as its prime rate. The Prime Rate is determined from time to time by the Purchaser as a means of pricing some loans to its borrowers. The Prime Rate is not tied to any external rate of interest or index, and does not necessarily reflect the lowest rate of interest actually charged by the Purchaser to any particular class or category of customers. If and when the Prime Rate or the Overnight Bank Funding Rate changes, the Default Rate will change automatically without notice to the Town.

(g) The Town may modify the provisions of this Section 3 pursuant to a closing certificate in connection with the execution and delivery of the 2021A Bond with the consent of the Purchaser.

Section 4. Security for the Bond. The 2021A Bond shall be a special obligation of the Town and the principal of, redemption premium and interest on the 2021A Bond shall be payable solely from the sources identified in the Town Portion Bond Order and as set forth in the 2021A Bond. The uses of the sources set forth in the Town Portion Bond Order and the 2021A Bond do not constitute a pledge of the Town’s taxing power and the Town is not obligated to pay the principal of, interest, or any premium on, the 2021A Bond except from the sources identified in the Town Portion Bond Order and the 2021A Bond.

NEITHER THE FAITH AND CREDIT NOR THE TAXING POWER OF THE TOWN ARE PLEDGED FOR THE PAYMENT OF THE PRINCIPAL OF, OR INTEREST OR ANY PREMIUM ON, THE 2021A BOND, AND NO OWNER OF THE 2021A BOND HAS THE RIGHT TO COMPEL THE EXERCISE OF THE TAXING POWER OF THE TOWN IN CONNECTION WITH ANY DEFAULT THEREON.

Section 5. Application of the Bond Proceeds. On the date of the initial issuance of the 2021A Bond, the Purchaser shall deliver the 2021A Bond proceeds to any account identified by the Town in a closing certificate delivered upon the execution and delivery of the 2021A Bond and the Town shall invest, or cause to be invested, such proceeds until used only in investments authorized by Section 159-30 of the General Statutes of North Carolina. Such 2021A Bond proceeds shall be applied solely as follows: (1) as

soon as practicable, for the costs of the Town Portion of the Current Project, and (2) within 60 days of the date of initial issuance, for payment of issuance costs related to the issuance of the 2021A Bond.

Section 6. Execution of the Bond. The 2021A Bond, issued as a single bond, shall be executed in the name of the Town by facsimile or manual signatures of the Town’s Mayor or Town Manager and the Town Clerk and the Certificate of Approval of the Commission shall bear a facsimile or manual signature of the Secretary of the Commission or her designated assistant.

Section 7. Private Sale of Bond. The Town Council requests that the Commission sell the 2021A Bond at private sale without advertisement to the Purchaser in the form of a single registered bond bearing interest at 1.78% per annum and containing such provisions as set forth above and in the Purchase Agreement. The Town hereby approves the draft of the Purchase Agreement presented at this meeting and hereby authorizes and directs the Town’s Mayor, the Town Manager, the Finance Officer, and the Town Clerk (collectively, the “*Authorized Officers*”), individually or collectively, as appropriate, to execute and deliver such Purchase Agreement in such final form that they, with the advice of counsel, deem appropriate.

Section 8. Authorization for Delivery of Bond. The Authorized Officers, individually or collectively, are hereby authorized and directed to cause the 2021A Bond to be prepared and, when it shall have been duly sold by the Commission, to execute the 2021A Bond and deliver the same to the Purchaser.

Section 9. Arbitrage and Tax Covenants. The Town covenants that it will not take or permit, or omit to take or cause to be taken, any action that would adversely affect the exclusion from gross income of the recipient thereof for federal income tax purposes of interest on the 2021A Bond and, if it should take or permit, or omit to take or cause to be taken, any such action, the Town will take or cause to be taken all lawful actions within its power necessary to rescind or correct such actions or omissions promptly upon having knowledge thereof. The Town acknowledges that the continued exclusion of the 2021A Bond from the owner’s gross income for federal income tax purposes depends, in part, on compliance with the arbitrage limitations imposed by Section 148 of the Code.

The Town covenants that it will comply with all the requirements of Section 148 of the Code, including the rebate requirements, and that it will not permit at any time any of the proceeds of the 2021A Bond or other funds under its control to be used, directly or indirectly, to acquire any asset or obligation, the acquisition of which would cause the 2021A Bond to be “*arbitrage bonds*” for purposes of Section 148 of the Code. The Town covenants that it will comply with the investment instructions in the Tax Certificate executed and delivered on the date hereof with respect to the 2021A Bond.

Section 10. Financial Covenant. The Town shall maintain on its books a “Beach Nourishment Fund.” As of December 1 of each fiscal year, the Town will maintain an amount in the Beach Nourishment Fund at least equal to the greater of (A) the amount of taxes collected from the special tax assessed only in the Districts in the immediately preceding fiscal year and (B) \$1,000,000.

Section 11. Authorization for Other Acts. The Authorized Officers, individually or collectively, are further authorized and directed to take such action and to execute and deliver any such documents, deeds, certificates, undertakings, agreements or other instruments as they, with the advice of counsel, may deem necessary and appropriate to effect the transactions contemplated by the Town Portion Bond Order and this Resolution. The Town approves the form and content of the Purchase Agreement and the Interlocal, and the Purchase Agreement and the Interlocal are in all respects authorized, approved and confirmed. The Authorized Officers are hereby authorized, empowered and directed to execute and deliver the Purchase Agreement and the Interlocal, including necessary counterparts, in substantially the form and content of the Purchase Agreement and Interlocal made available to the Town Council, but with such changes, modifications, additions or deletions therein as they may deem necessary, desirable or appropriate, their execution thereof to constitute conclusive evidence of the Town’s approval of any and all changes,

modifications, additions or deletions therein from the form and content of the Purchase Agreement and the Interlocal made available to the Town Council. Such officers are hereby directed to take all actions necessary to effectuate the transaction set forth above, including taking any such actions or making any such changes as may be required by the Commission Approval, as may be necessary to carry out and comply with the provisions of the Purchase Agreement and the Interlocal as executed, and for the on-going administration of the Town Portion Bond Order, this Resolution and the 2021A Bond.

Section 12. Transfer Restrictions. Notwithstanding any other provisions of the Town Portion Bond Order or this Resolution to the contrary, the 2021A Bond shall not be transferred to any person other than a bank, insurance company or similar financial institution unless such transfer has been previously approved by the Commission.

The Purchaser or its assignees may assign or reassign all or any part of the 2021A Bond, including the assignment or reassignment of any partial interest through the use of certificates evidencing participation interests in the 2021A Bond, or making the 2021A Bond part of a pool of obligations without the consent of the Commission, so long as such assignment or reassignment is to (i) a bank, insurance company or similar institution or any other entity approved by the Commission; or (ii) a trustee for the purpose of issuing certificates of participation or other forms of certificates evidencing an undivided interest in the 2021A Bond, provided such certificates are sold only to a bank, insurance company or similar financial institution or other entity approved by the Commission.

Any reference to the Purchaser in this Resolution will include its successors or assigns made in accordance herewith.

The provisions of this paragraph may not be amended without the prior written consent of the Commission.

Section 13. Reporting Requirements for the Town. The Town hereby covenants to provide to the Purchaser at the same time the Town provides its annual audited financial statements to the Commission, but in no event later than 210 days after the end of the Town's fiscal year, (i) the Town's annual audited financial statements and (ii) a certification from the Town Manager or Finance Officer, or their respective designee, evidencing compliance with the covenant in Section 10 hereof. The Town shall also provide such other financial information and operating reports as may be reasonably requested by the Purchaser.

Section 14. Qualified Tax-Exempt Obligation. The Town designates the 2021A Bond as a "qualified tax-exempt obligation" eligible for the exception from the disallowance of the deduction of interest by financial institutions allocable to the cost of carrying tax-exempt obligations in accordance with the provisions of Section 265(b)(3) of the Code. The Town hereby represents that it reasonably expects that the Town, all entities issuing obligations on behalf of the Town and all subordinate entities of the Town will not issue in the aggregate more than \$10,000,000 of tax-exempt obligations (not counting private activity bonds except for qualified 501(c)(3) bonds as defined by the Code during calendar year 2021. The Town will not designate more than \$10,000,000 of qualified tax-exempt obligations pursuant to such Section 265(b)(3) during calendar year 2021.

Section 15. Supplemental Resolutions; Additional Parity Indebtedness. The Town may adopt resolutions supplemental hereto; provided, however, the Purchaser's prior written consent shall be required for any supplemental resolution that affects the terms or tax treatment of the 2021A Bond. The Town may not issue indebtedness that is on parity with the 2021A Bond without the Purchaser's prior written consent.

Section 16. Governing Law. This Resolution and the 2021A Bond are governed by and to be construed in accordance with the laws of the State of North Carolina.

Section 17. Dispute Resolution.

(a) *Arbitration of Disputes.* The Town and the Purchaser shall submit any and all disputes arising out of or relating to the 2021A Bond, a default thereunder or an Event of Default under this Resolution (a “Dispute”) to binding arbitration pursuant to and in accordance with the AAA Commercial Arbitration Rules and, where applicable, the Supplementary Rules for Large, Complex Commercial Disputes, and judgment upon the award rendered by the arbitrator may be entered in any court having jurisdiction thereof. Such arbitration shall be conducted in a mutually acceptable location. Except as expressly set forth below, the procedures specified herein shall be the sole and exclusive procedures for the resolution of Disputes; provided, however, that the Town or the Purchaser may seek provisional or ancillary remedies, such as preliminary injunctive relief, from a court having jurisdiction, before, during or after the pendency of any arbitration proceeding. The institution and maintenance of any action for such judicial relief, or pursuit of provisional or ancillary remedies, shall not constitute a waiver of the right or obligation of any party to submit any claim or dispute to arbitration. Nothing herein shall in any way limit or modify any remedies available to the Purchaser under this Resolution or the 2021A Bond or otherwise at law or in equity.

(b) *Motion Practice.* In any arbitration hereunder, the arbitrator(s) shall decide any pre-hearing motions which are substantially similar to pre-hearing motions to dismiss for failure to state a claim or motions for summary adjudication.

(c) *Discovery.* Discovery shall be limited to the pre-hearing exchange of all documents which the Town and the Purchaser intend to introduce at the hearing and any expert reports prepared by any expert who will testify at the hearing.

(d) *Sequential Hearing Days.* At the administrative conference conducted by the American Arbitration Association (the “AAA”), the Town and the Purchaser and the AAA shall determine how to ensure that the hearing is started and completed on sequential hearing days. Potential arbitrators shall be informed of the anticipated length of the hearing and they shall not be subject to appointment unless they agree to abide by the parties’ intent that, absent exigent circumstances, the hearing shall be conducted on sequential days.

(e) *Award.* The award of the arbitrator(s) shall be accompanied by a statement of the reasons upon which such award is based.

(f) *Fees and Expenses.* The Town and the Purchaser shall each bear equally all fees and costs and expenses of the arbitration, and each shall bear its own legal fees and expenses and the costs of its experts and witnesses; provided, however, that if the arbitration panel shall award to a party substantially all relief sought by such party, then, notwithstanding any applicable governing law provisions, the other party shall pay all costs, fees and expenses incurred by the prevailing party and such costs, fees and expenses shall be included in such award.

(g) *Confidentiality of Disputes.* The entire procedure shall be confidential and none of the parties nor arbitrator(s) may disclose the existence, content, or results of any arbitration hereunder without the written consent of all parties to the Dispute, except (i) to the extent disclosure is required to enforce any applicable arbitration award or may otherwise be required by law and (ii) that either party may make such disclosures to its regulators, auditors, accountants, attorneys and insurance representatives. No conduct, statements, promises, offers, views, or opinions of any party involved in an arbitration hereunder shall be discoverable or admissible for any purposes in litigation or other proceedings involving the parties to the Dispute and shall not be disclosed to anyone not an agent, employee, expert, witness, or representative for

any of such parties.

(h) *CLASS ACTION WAIVER.* THE TOWN HEREBY WAIVES, WITH RESPECT TO ANY DISPUTE: (I) THE RIGHT TO PARTICIPATE IN A CLASS ACTION, PRIVATE ATTORNEY GENERAL ACTION OR OTHER REPRESENTATIVE ACTION IN COURT OR IN ARBITRATION, EITHER AS A CLASS REPRESENTATIVE OR CLASS MEMBER; AND (II) THE RIGHT TO JOIN OR CONSOLIDATE CLAIMS WITH CLAIMS OF ANY OTHER PERSON. The foregoing waiver is referred to herein as the “class action waiver”. The Purchaser and the Town agree that no arbitrator shall have authority to conduct any arbitration in violation of the class action waiver or to issue any relief that applies to any person or entity other than the Town and/or the Purchaser individually. The parties acknowledge that this class action waiver is material and essential to the arbitration of any claims and is non-severable from this Dispute Resolution section. If the class action waiver is voided, found unenforceable, or limited with respect to any claim for which the Town seeks class-wide relief, then this Dispute Resolution section (except for this sentence) shall be null and void with respect to such claim, subject to the right to appeal the limitation or invalidation of the class action waiver. However, this Dispute Resolution section shall remain valid with respect to all other claims and Disputes. The parties acknowledge and agree that under no circumstances will a class action be arbitrated.

(i) *Applicability of Federal Arbitration Act.* The 2021A Bond and related documents, including the Purchase Agreement, evidence transaction(s) in interstate commerce, and thus the Federal Arbitration Act governs the interpretation and enforcement of this Dispute Resolution section.

Section 18. Repealer. All orders and resolutions and parts of orders and resolutions in conflict with this Resolution, if any, excluding the Town Portion Bond Order, shall be and the same are hereby repealed to the extent the conflict exists.

Section 19. Effectiveness of Resolution. This resolution shall be effective immediately upon its adoption by the Town Council.

STATE OF NORTH CAROLINA)
)
COUNTY OF DARE) SS:

I, *Sheila Kane*, Town Clerk of the Town of Southern Shores, North Carolina, ***DO HEREBY CERTIFY*** that the foregoing is a true and exact copy of a resolution entitled “**A RESOLUTION OF THE TOWN COUNCIL OF THE TOWN OF SOUTHERN SHORES, NORTH CAROLINA PROVIDING FOR THE ISSUANCE OF A SPECIAL OBLIGATION BOND (TOWN PORTION), SERIES 2021A**” adopted by the Town Council of the Town of Southern Shores, North Carolina, at a meeting held on the 5th day of October, 2021.

WITNESS my hand and the corporate seal of the Town of Southern Shores, North Carolina, this the ____ day of October, 2021.

[Seal]

Sheila Kane
Town Clerk
Town of Southern Shores, North Carolina

APPENDIX A

FORM OF 2021A BOND

THIS BOND IS SUBJECT TO CERTAIN TRANSFER RESTRICTIONS AS DESCRIBED HEREIN.

No. RA-1

\$ _____

UNITED STATES OF AMERICA
STATE OF NORTH CAROLINA
TOWN OF SOUTHERN SHORES, NORTH CAROLINA

SPECIAL OBLIGATION BOND (TOWN PORTION), SERIES 2021A

<u>INTEREST RATE</u>	<u>MATURITY DATE</u>	<u>DATED DATE</u>
1.78%	December 15, 2026	October 13, 2021

REGISTERED OWNER: PNC BANK, NATIONAL ASSOCIATION

PRINCIPAL SUM: _____ AND NO/100 DOLLARS

THE TOWN OF SOUTHERN SHORES, NORTH CAROLINA (the "Town") acknowledges itself indebted and for value received hereby promises to pay to the Registered Owner named above, on the Maturity Date specified above, on surrender hereof, the Principal Sum shown above and to pay to the Registered Owner hereof interest thereon from the date of this Bond until it shall mature at the Interest Rate per annum specified above, payable on December 15, 2021 and on each June 15 and December 15 thereafter until the Maturity Date. Interest on this Bond shall be calculated on the basis of a 360-day year consisting of twelve 30-day months. In the event of a late payment, interest shall continue to accrue on the principal balance outstanding at the applicable interest rate per annum set forth in the issuance resolution adopted by the Town Council on October 5, 2021 and effective on the date of its adoption related to this Bond (the "Issuance Resolution"). If any payment of interest on this Bond is more than five days late, or any payment of principal is not paid when due, or upon the occurrence of any other Event of Default by the Town under the Issuance Resolution, then interest shall accrue at the Default Rate described below until the default is cured. Principal of and interest on this Bond are payable in immediately available funds to the Registered Owner. All capitalized terms used in this Bond and not otherwise defined herein has the definition assigned to it in the Issuance Resolution.

The Default Rate shall be the greater of (A) the Prime Rate plus 300 basis points (3.00%), (B) the sum of the Overnight Bank Funding Rate plus 350 basis points (3.50%), and (C) 7.00%; provided that in no event shall the Default Rate exceed 20% per annum or the maximum allowable legal interest rate. The "Overnight Bank Funding Rate" shall mean, for any day, the rate comprised of both overnight federal funds and overnight Eurocurrency borrowings by U.S.-managed banking offices of depository institutions, as such composite rate shall be determined by the Federal Reserve Bank of New York ("NYFRB"), as set forth on its public website from time to time, and as published on the next succeeding Business Day as the overnight bank funding rate by the NYFRB (or by such other recognized electronic source (such as Bloomberg) selected by the Purchaser for the purpose of displaying such rate); provided, that if such day is not a Business Day, the Overnight Bank Funding Rate for such day shall be such rate on the immediately

preceding Business Day; provided, further, that if such rate shall at any time, for any reason, no longer exist, a comparable replacement rate determined by the Purchaser at such time (which determination shall be conclusive absent manifest error). If the Overnight Bank Funding Rate determined as above would be less than zero, then such rate shall be deemed to be zero. The rate of interest charged shall be adjusted as of each Business Day based on changes in the Overnight Bank Funding Rate without notice to the Town. “Prime Rate” shall mean the rate publicly announced by the Purchaser from time to time as its prime rate. The Prime Rate is determined from time to time by the Purchaser as a means of pricing some loans to its borrowers. The Prime Rate is not tied to any external rate of interest or index, and does not necessarily reflect the lowest rate of interest actually charged by the Purchaser to any particular class or category of customers. If and when the Prime Rate or the Overnight Bank Funding Rate changes, the Default Rate will change automatically without notice to the Town.

This Bond is issued in accordance with the Registered Public Obligations Act, Chapter 159E of the General Statutes of North Carolina, and pursuant to the Article 7A of Chapter 159 of the General Statutes of North Carolina, a “Bond Order Authorizing the Issuance of Special Obligation Bonds of the Town of Southern Shores, North Carolina (Town Portion), Series 2021A” (the “Town Portion Bond Order”) adopted by the Town Council of the Town (the “Town Council”) on October 5, 2021 and effective on the date of its adoption and an issuance resolution (the “Issuance Resolution”) adopted by the Town Council on October 5, 2021 and effective on the date of its adoption. This Bond is being issued to provide funds to finance a portion of the construction of certain beach erosion control and flood and hurricane protection works in the Districts (as defined in the Issuance Resolution) and to pay issuance costs relating to this Bond.

If a Determination of Taxability or Event of Taxability occurs with respect to this Bond, as such terms are hereinafter defined, the fixed rate of interest shall be increased to and be calculated at the rate which will provide to the Purchaser the effective yield which it would have received if there had not been a Determination of Taxability or an Event of Taxability, such rate to be determined by the Purchaser (the “Alternative Rate of Interest”), and shall be payable from the Date of Taxability to such time as this Bond is paid in full. In such event, the Town also shall be required to pay to the Purchaser all amounts, if any, which may be necessary to reimburse the Purchaser for any interest, penalties or other charges assessed by the Internal Revenue Service and the Department of Revenue of the State of North Carolina against the Purchaser by reason of the Purchaser’s failure to include the interest on this Bond in its gross income for income tax purposes. The Town shall pay to the Purchaser the above mentioned Alternative Rate of Interest notwithstanding any transfer by the Purchaser or payment or redemption by the Town prior to the date such Determination of Taxability was made.

“Event of Taxability” shall mean any event, occurrence or situation, resulting from an action, or failure to act, by the Town, the effect of which is to cause the interest on this Bond to be includible in the gross income of the Purchaser for federal income tax purposes. A Determination of Taxability shall mean a determination that the interest on this Bond is included in gross income of the Purchaser for federal income tax purposes, which determination shall be deemed to have been made upon the occurrence of the first to occur of the following: (a) the date on which the Purchaser is advised in writing by the Commissioner or any District Director of the Internal Revenue Service that, as a consequence of an Event of Taxability, the interest on this Bond is included in the gross income of the Purchaser for federal income tax purposes; (b) the date on which the Town receives notice from the Purchaser that the Purchaser has been advised in writing that the Internal Revenue Service has issued a statutory notice of deficiency or similar notice to the Purchaser which asserts, in effect, that interest on this Bond received by the Purchaser is included in the gross income of the Purchaser for federal income tax purposes, as a result of an Event of Taxability; (c) the day on which the Town is advised in writing by the Commissioner or any District Director of the Internal Revenue Service that there has been issued a public or private ruling of the Internal Revenue Service that the interest on this Bond is included in the gross income of the Purchaser for federal income tax purposes as a result of an Event of Taxability; or (d) the day on which the Town is advised in writing by counsel to

the Purchaser that a final determination, from which no further right of appeal exists, has been made by a court of competent jurisdiction in the United States of America in a proceeding with respect to which the Town has been given written notice and an opportunity to participate and defend that interest on this Bond is included in the gross income of the Purchaser for federal income tax purposes, as a result of an Event of Taxability.

“Date of Taxability” shall mean the first date upon which interest on this Bond is included in the gross income of the Purchaser for federal income tax purposes as a result of an Event of Taxability or a Determination of Taxability.

This Bond is subject to mandatory redemption before maturity in part at the redemption price of 100% of the principal amount to be redeemed, without premium, on each December 15 in the years and in the amounts as follows:

YEAR	PRINCIPAL PAYMENT
2022	\$
2023	
2024	
2025	
2026*	

*Maturity

This Bond shall be subject to optional redemption prior to its stated maturity at the option of the Town in whole (but not in part) on any date upon giving the Purchaser not less than 15 Business Days prior written notice thereof and as provided in this paragraph. The redemption price of such Bond shall be equal to 100% of the principal amount of this Bond, plus interest accrued to the redemption date, plus, if so required by the Purchaser as compensation for the costs of this Bond being redeemed, an amount equal to the Cost of Redemption. “Cost of Redemption” means an amount equal to the present value, if positive, of the product of (a) the difference between (i) the yield, on the beginning date of the applicable interest period, of a U.S. Treasury obligation with a maturity similar to the applicable interest period, minus (ii) the yield on the redemption date, of a U.S. Treasury obligation with a maturity similar to the remaining maturity of the applicable interest period, and (b) the principal amount to be redeemed, and (c) the number of years, including fractional years, from the redemption date to the end of the applicable interest period. The yield on any U.S. Treasury obligation shall be determined by reference to Federal Reserve Statistical Release H.15 (519) “Selected Interest Rates.” For purposes of making present value calculations, the yield to maturity of a similar maturity U.S. Treasury obligation on the redemption date shall be deemed the discount rate. A “Business Day” shall mean any day other than a Saturday or Sunday or a legal holiday on which commercial lenders are authorized or required to be closed for business in Raleigh, North Carolina.

This Bond shall be a special obligation of the Town and the principal of, and interest and premium on, such Bond shall be secured solely by the sources set forth in the Town Portion Bond Order (such sources being defined herein as the “Pledged Sources”), which are as follows:

- (i) that portion of the 3% Room Occupancy Tax authorized by House Bill 882, 2001 Session, General Assembly of North Carolina, effective August 29, 2001, distributed by Dare County, North Carolina (the “County”) to the Town;

(ii) that portion of the 1% local option sales and use tax levied by the County pursuant to Article 39 of Chapter 105 of the General Statutes of North Carolina which are distributed to the Town;

(iii) that portion of the 1/2% local option sales and use tax levied by the County pursuant to Article 40 of Chapter 105 of the General Statutes of North Carolina which are distributed to the Town;

(iv) that portion of the two 1/2% local option sales and use tax levied by the County pursuant to Article 42 of Chapter 105 of the General Statutes of North Carolina which are distributed to the Town;

(v) the annual contributions distributed from the County to the Town to pay debt service under Section 4.3 of the Interlocal Agreement dated October 13, 2021 among the County, the Town, the Town of Kill Devil Hills, North Carolina, the Town of Kitty Hawk, North Carolina, and the Town of Duck, North Carolina; and

(vi) one or more additional sources of funds identified by the Town Council in future proceedings of the Town Council, so long as (i) the pledge of such sources does not constitute a pledge of the taxing power of the Town and (ii) the pledge of such sources is first approved by the Local Government Commission of North Carolina as set forth in Article 7A of Chapter 159 of the General Statutes of North Carolina.

The uses of the Pledged Sources do not constitute a pledge of the Town’s taxing power and the Town is not obligated to pay the principal of, or interest or any premium on, this Bond except from the sources set forth in the Town Portion Bond Order and above.

NEITHER THE FAITH AND CREDIT NOR THE TAXING POWER OF THE TOWN ARE PLEDGED FOR THE PAYMENT OF THE PRINCIPAL OF, OR INTEREST OR ANY PREMIUM ON, THIS BOND, AND NO OWNER OF THIS BOND HAS THE RIGHT TO COMPEL THE EXERCISE OF THE TAXING POWER OF THE TOWN IN CONNECTION WITH ANY DEFAULT THEREON.

It is hereby certified and recited that all conditions, acts and things required by the Constitution or statutes of the State of North Carolina to exist, be performed or happen precedent to or in the issuance of this Bond, exist, have been performed and have happened.

This Bond is not valid or obligatory for any purpose until the certification hereon has been signed by an authorized representative of the Local Government Commission.

This Bond shall not be transferred to any person other than a bank, insurance company or similar financial institution unless such transfer is permitted pursuant to the Issuance Resolution.

IN WITNESS WHEREOF, the Town has caused this Bond to bear the original or facsimile of the signatures of the Mayor and the Town Clerk of the Town, each acting on behalf of the Town and this Bond to be dated as of the Dated Date above.

Sheila Kane
Town Clerk

Tom Bennett
Mayor

Date of Execution: October 13, 2021

The issue hereof has been approved by of Local Government Commission pursuant to Section 159-146(k) of the General Statutes of North Carolina, as amended.

Secretary of the Local Government Commission

FORM OF ASSIGNMENT

ASSIGNMENT

FOR VALUE RECEIVED the undersigned hereby sells, assigns and transfers unto

(Please print or typewrite Name and Address,
including Zip Code, and Federal Taxpayer Identification or
Social Security Number of Assignee)

the within Bond and all rights thereunder, and hereby irrevocably constitutes and appoints

Attorney to register the transfer of the within Bond on the records kept for registration thereof,
with full power of substitution in the premises.

Dated: _____

Signature guaranteed by:

NOTICE: Signature must be guaranteed by
a Participant in the Securities Transfer
Agent Medallion Program ("*Stamp*") or
similar program.

NOTICE: The signature to this assignment must
correspond with the name as it appears on the
face of the within Bond in every particular,
without alteration, enlargement or any change
whatever.

TRANSFER FEE MAY BE REQUIRED

BOND ORDER AUTHORIZING THE ISSUANCE OF SPECIAL OBLIGATION BONDS OF THE TOWN OF SOUTHERN SHORES, NORTH CAROLINA (TOWN PORTION)

WHEREAS, the Town Council (the “*Town Council*”) of the Town of Southern Shores, North Carolina (the “*Town*”) has determined to construct certain beach erosion control and flood and hurricane protection works now and from time to time in the future, and may also finance or refinance in the future any other project permitted to be financed or refinanced under Article 7A of Chapter 159 of the General Statutes of North Carolina (individually, a “*Project*” and collectively, the “*Projects*”);

WHEREAS, the Town Council has determined there is a present need to issue its Special Obligation Bonds pursuant to Article 7A of Chapter 159 of the General Statutes of North Carolina for a Project to be constructed in municipal service districts in the Town (the “*Current Project*”);

WHEREAS, a portion of the Current Project will be funded by the Town (the “*Town Portion*”) and a portion of the Current Project will be funded from other sources;

WHEREAS, the Town Council has determined to finance the Town Portion of the Current Project under this bond order;

WHEREAS, an application has been filed with the Secretary (the “*Secretary*”) of the Local Government Commission of North Carolina (the “*Commission*”) requesting Commission approval of an initial series of special obligation bonds in an amount not to exceed \$8,028,300 to be used for the Town Portion of the Current Project as required by Article 7A of Chapter 159 of the General Statutes of North Carolina, and the Secretary has notified the Town Council that the application has been accepted for submission to the Commission; and

WHEREAS, notwithstanding the current need to issue not to exceed \$8,028,300 aggregate principal amount of special obligation bonds to finance the Town Portion of the Current Project, the Town Council has determined that the aggregate principal amount of special obligation bonds for future Projects is not known at this time and therefore wishes to provide for the issuance of special obligation bonds from time to time under this bond order in amounts to be determined at the time of issuance and subject to Commission approval at such time to finance future Projects or refinance existing Projects.

NOW, THEREFORE, BE IT ORDERED BY THE TOWN COUNCIL OF THE TOWN OF SOUTHERN SHORES, NORTH CAROLINA, AS FOLLOWS:

Section 1. The Town Council has determined to construct the Current Project and from time to time in the future may also finance other Projects or refinance existing Projects.

Section 2. To raise the money required to pay the costs of the Projects as set forth above, Special Obligation Bonds of the Town are hereby authorized and shall be issued pursuant to Article 7A of Chapter 159 of the General Statutes of North Carolina. The maximum aggregate principal amount of such Special Obligation Bonds authorized by this bond order shall be unlimited.

Section 3. The Special Obligation Bonds shall be special obligations of the Town and the principal of, and interest and premium on, all such Special Obligation Bonds shall be on parity and shall be secured solely by the following sources:

- (a) that portion of the 3% Room Occupancy Tax authorized by House Bill 882, 2001 Session, General Assembly of North Carolina, effective August 29, 2001, distributed by Dare County, North Carolina (the “*County*”) to the Town;

(b) that portion of the 1% local option sales and use tax levied by the County pursuant to Article 39 of Chapter 105 of the General Statutes of North Carolina which are distributed to the Town;

(c) that portion of the 1/2% local option sales and use tax levied by the County pursuant to Article 40 of Chapter 105 of the General Statutes of North Carolina which are distributed to the Town;

(d) that portion of the two 1/2% local option sales and use tax levied by the County pursuant to Article 42 of Chapter 105 of the General Statutes of North Carolina which are distributed to the Town;

(e) the annual contributions distributed from the County to the Town to pay debt service under Section 4.3 of the Interlocal Agreement dated October 13, 2021 among the County, the Town, the Town of Kill Devil Hills, North Carolina, the Town of Kitty Hawk, North Carolina, and the Town of Duck, North Carolina; and

(f) one or more additional sources of funds identified by the Town Council in future proceedings of the Town Council, so long as (i) the pledge of such sources does not constitute a pledge of the taxing power of the Town and (ii) the pledge of such sources is first approved by the Local Government Commission of North Carolina as set forth in Article 7A of Chapter 159 of the General Statutes of North Carolina.

Section 4. The sources of payment identified in Section 3 so pledged and then held or hereafter received by the Town or any fiduciary thereof shall immediately be subject to the lien of the pledge without any physical delivery of the sources or further act.

Section 5. NEITHER THE FAITH AND CREDIT NOR THE TAXING POWER OF THE TOWN ARE PLEDGED FOR THE PAYMENT OF THE PRINCIPAL OF, OR INTEREST OR ANY PREMIUM ON, ANY SPECIAL OBLIGATION BONDS, AND NO OWNER OF SUCH SPECIAL OBLIGATION BONDS HAS THE RIGHT TO COMPEL THE EXERCISE OF THE TAXING POWER OF THE TOWN IN CONNECTION WITH ANY DEFAULT THEREON. The uses of the sources set forth in Section 3 do not constitute a pledge of the Town's taxing power and the Town is not obligated to pay the principal of, or interest or any premium on, any Special Obligation Bonds except from the sources set forth in Section 3.

Section 6. The issuance and details of any such Special Obligation Bonds shall be set forth in one or more separate proceedings of the Town Council. The initial series of Special Obligation Bonds to be issued under this bond order shall not exceed \$8,028,300 and is being issued pursuant to a separate resolution. Future issues or series of Special Obligation Bonds to be issued under this bond order shall be issued only by separate proceedings of the Town Council and with approval from the Local Government Commission of North Carolina as may be required by law.

Section 7. This bond order shall take effect on its adoption.

STATE OF NORTH CAROLINA)
)
COUNTY OF DARE) SS:

I, *Sheila Kane*, Town Clerk of the Town of Southern Shores, North Carolina, ***DO HEREBY CERTIFY*** that the foregoing is a true and exact copy of a bond order entitled “**BOND ORDER AUTHORIZING THE ISSUANCE OF SPECIAL OBLIGATION BONDS OF THE TOWN OF SOUTHERN SHORES, NORTH CAROLINA (TOWN PORTION)**” adopted by the Town Council of the Town of Southern Shores, North Carolina, at a meeting held on the 5th day of October, 2021.

WITNESS my hand and the corporate seal of the Town of Southern Shores, North Carolina, this the 5th day of October, 2021.

[Seal]

Sheila Kane
Town Clerk
Town of Southern Shores, North Carolina

INTERLOCAL AGREEMENT

This **INTERLOCAL AGREEMENT** dated as of _____, 2021 (the “*Interlocal Agreement*”) among the **COUNTY OF DARE, NORTH CAROLINA**, a political subdivision of the State of North Carolina (the “*County*”), the **TOWN OF DUCK, NORTH CAROLINA**, a municipal corporation organized under the laws of the State of North Carolina (“*Duck*”), the **TOWN OF KILL DEVIL HILLS, NORTH CAROLINA**, a municipal corporation organized under the laws of the State of North Carolina (the “*Kill Devil Hills*”), the **TOWN OF KITTY HAWK, NORTH CAROLINA**, a municipal corporation organized under the laws of the State of North Carolina (“*Kitty Hawk*”), and the **TOWN OF SOUTHERN SHORES, NORTH CAROLINA**, a municipal corporation organized under the laws of the State of North Carolina (“*Southern Shores*” and collectively with Duck, Kill Devil Hills and Kitty Hawk, the “*Towns*”);

WITNESSETH

WHEREAS, the Towns have each determined to undertake a beach nourishment project within its Town in 2022 or 2023 as they are authorized to do under North Carolina law;

WHEREAS, the County has determined to assist the Towns in financing the beach nourishment projects from the County’s beach nourishment fund;

WHEREAS, the Towns and the County have determined that they can achieve significant cost savings by cooperating to construct the beach nourishment projects by entering into a single construction contract for such projects;

WHEREAS, under Article 20 of Chapter 160A of the North Carolina General Statutes, as amended (the “*Interlocal Act*”), municipalities and counties are authorized to enter into interlocal cooperation undertakings with other local governments for the joint exercise of any power, function, public enterprise, right, privilege, or immunity of local governments in North Carolina;

WHEREAS, the parties to this Interlocal Agreement desire to set forth their agreement herein;

NOW THEREFORE, the parties hereto agree as follows:

ARTICLE I

DEFINITIONS

In addition to the terms defined above, the following terms have the meanings herein as set forth therefor, unless the context otherwise requires:

“**Beach Nourishment Fund**” means the fund held by the County from occupancy tax proceeds and dedicated to beach nourishment projects in the County.

“**Contracts**” means, collectively, the Dredge and Construction Contract and the Project Management Contract.

“**Construction Fund**” means the fund established under Section 4.2.

“County Contribution” means the amount that the County will pay from the Beach Nourishment Fund towards each Project as set forth Section 4.1.

“Dredge and Construction Contract” means the primary contract with the winning bidder for the construction of the Projects.

“Duck Project” means the portion of the Projects within the Town limits of Duck.

“Kill Devil Hills Project” means the portion of the Projects within the Town limits of Kill Devil Hills.

“Kitty Hawk Project” means the portion of the Projects within the Town limits of Kitty Hawk.

“Project Manager” means Coastal Protection Engineering of North Carolina.

“Project Management Contract” means contract with the Project Manager to monitor and manage the construction of the Projects on behalf of the Towns.

“Projects” means the beach nourishment projects in each of the Towns that will be described in detail in the Dredge and Construction Contract.

“Southern Shores Project” means the portion of the Projects within the Town limits of Southern Shores.

“Town Representatives” means the duly authorized representative of each Town authorized to execute all documents contemplated by this Interlocal Agreement and to administer this Interlocal Agreement on behalf of the Town.

ARTICLE II

STATEMENT OF PURPOSE

The Towns and the County are entering into this Interlocal Agreement under the Interlocal Act to cooperate in the construction of the Projects by having the County enter into the Contracts for the Projects to achieve overall savings on the construction costs. This Interlocal Agreement sets forth the terms under which the County will enter into the Contracts for the Projects and the parties understanding as to the administration of the construction process, the financing of the Projects and the liabilities associated with the construction of the Projects.

ARTICLE III

CONSTRUCTION AND ADMINISTRATION OF PROJECTS

Section 3.1. **Administration of Projects.** The County will enter into the Contracts for all of the Projects. The Projects are comprised of four parts, the Duck Project, the Kill Devil Hills Project, the Kitty Hawk Project and the Southern Shores Project. The Dredge and Construction Contract will set forth separately the plan, design and cost of the Duck Project, the Kill Devil Hills Project, the Kitty Hawk Project and the Southern Shore Project; or, if the Dredge and Construction Contract does not separate the costs associated with each Project, the Project Manager will do so based on its best professional

judgment. Duck will be solely responsible for the administration of the Duck Project. Kill Devil Hills will be solely responsible for the administration of the Kill Devil Hills Project. Kitty Hawk will be solely responsible for the administration of the Kitty Hawk Project. Southern Shores will be solely responsible for the administration of the Southern Shores Project. Each Town will designate a Town Representative or Representatives that are authorized by his or her respective Town to execute all documents contemplated by this Interlocal Agreement and to administer this Interlocal Agreement on behalf of the Town. The Project Manager will manage the Projects on a day-to-day basis on behalf of each Town under the Project Management Contract. The Project Manager will provide periodic updates to the Towns and the County on the Projects as required by the Project Management Contract.

Section 3.2. **Project Modifications.** Each Town shall have the right, power and authority to cause modifications to the design, scope, construction and other aspects of its Project (the “**Project Modifications**”). Each Town shall have the right to enact a Project Modification that increases the cost of its Project as long as the Town accepts in writing the sole responsibility for the additional cost of its Project unless the County and the Towns agree otherwise in an amendment to this Interlocal Agreement. Any Project Modifications shall be memorialized in writing and a copy of same shall be submitted by the Town implementing the Project Modification to the County and the other Towns at least ten (10) business days before the effective date of the Project Modification. In no event shall a Project Modifications (i) materially impact any of the other Projects without the applicable Town’s prior written consent or (ii) increase the County Contribution for such Project without the County’s prior written consent. The County agrees to sign any change order to the Contracts submitted in accordance with the terms of this Section 3.2.

Section 3.3. **Construction Meetings.** In addition to the construction meetings required in the Dredge and Construction Contract, the County may call joint meetings of the County and the Town Representatives to receive construction updates and to discuss matters pertaining to the Projects and this Interlocal Agreement.

Section 3.4. **Payment of Invoices.** All invoices submitted pursuant to the Contracts for the Projects will be reviewed by the Project Manager and submitted to each Town for approval. Once approved by the applicable Town, unless payment is to be made to the Project Manager, the Project Manager will submit the invoice on behalf of each of the Towns to the County for payment. Unless the County has been informed in writing by a Town Representative of an objection to paying a particular invoice, the County will promptly pay all invoices submitted and approved by the Project Manager in accordance with the instructions on the invoice. The County is not responsible for independently reviewing the validity of the invoices for payment under the Contracts. The County will make all reasonable efforts to effect the payment of the invoices in accordance with the Contracts.

With respect to the invoices submitted under the Dredge and Construction Contract, as part of its approval and submission to the County, the Project Manager will identify the Project with which the payment is associated, or if associated with multiple Projects, how the cost should be allocated among Projects. The County will allocate the Project costs under the Dredge and Construction Contract to each of the Projects as set forth in the Project Manager’s submission. The Project costs for invoices submitted under the Project Management Contract will be allocated among the Projects on pro-rata basis based on total costs of the Projects.

Section 3.5. **Insufficiency of Funds.** The County will account for the amount of Project costs that are allocable to each Project as set forth in Section 3.4. Notwithstanding anything herein, the County will not be responsible for paying Project Costs from the Construction Fund allocable to a particular Project if the County’s records show that there are insufficient funds available from the sources for

payment of that Project as set forth in Article IV. In such event, the Town for which funds are insufficient will be solely responsible for payment of such excess costs of the Project.

ARTICLE IV

FINANCING OF PROJECTS

Section 4.1. **Project Funding.** The County and the Towns will contribute the following amounts to the cost of the Projects:

Duck Project

Duck Contribution	\$ 5,159,523
County Contribution	796,572
NCDWR Grant	<u>1,450,921</u>
Total Project Cost	\$ 7,407,016

Kill Devil Hills Project

Kill Devil Hills Contribution	\$ 4,318,648
County Contribution	691,137
NCDWR Grant	<u>1,450,921</u>
Total Project Cost	\$ 6,460,706

Kitty Hawk Project

Kitty Hawk Contribution	\$ 5,387,682
County Contribution	2,854,815
NCDWR Grant	<u>1,408,247</u>
Total Project Cost	\$ 9,650,744

Southern Shores Project

Southern Shores Contribution	\$ 5,690,454
County Contribution	4,371,401
NCDWR Grant	<u>1,408,247</u>
Total Project Cost	\$ 11,470,102

Note: Amounts listed above assume that Duck and Kitty Hawk increase their cubic yardages. If they do, the mobilization allocation must be recalculated (since it is done on cubic yards of each project). If they do not, the amounts shown will be adjusted back to the bid amounts.

The County will pay its share of the Projects as set forth above from a limited obligation bond financing. Each Town will pay its share of the Projects as set forth above from a special obligation bond financing procured separately by each Town. Duck and Kill Devil Hills will each have two separate special obligation bond financings, one supported by Town funds and the other supported by FEMA reimbursements. The Duck and Kill Devil Hills contributions set forth above reflect amounts from both sources for their respective projects. Each Town will be assisted in its financings by Parker Poe Adams & Bernstein LLP, as bond counsel, and by DEC Associates Inc., as financial advisor. The Towns and the County will cooperate in seeking the approval of the North Carolina Local Government Commission for

the financings. Each Town will have received all required approvals and will close its financing on or before the date that the County signs the Dredge and Construction Contract.

Section 4.2. **Construction Fund.** The County will establish a Construction Fund to be held by a depository to be selected by the County. Upon the closing of the financings described in Section 4.1, each Town and the County will deposit the amount described in Section 4.1 as its contribution to its Project. Once each Town has deposited its funds into the Construction Fund, all costs of the Contracts will first be paid from and allocated to the bond proceeds (including investment earnings on the bond proceeds) deposited in the Construction Fund until depleted, then from the County funds. It is the intent of the parties hereto that each of the Towns will be required to pay their entire contribution towards the Projects as set forth in Section 4.1 and that any savings from the total Project costs will be retained by the County in the Beach Nourishment Fund.

Funds will be requisitioned from the Construction Fund as set forth in Article III. If funds in the Construction Fund are insufficient to complete a particular Project, the applicable Town will be solely responsible for any deficiency for such Project. If the actual costs of any of the Projects is less than the Total Project Cost as set forth in Section 4.1, then the excess funds will be retained by the County in the Beach Nourishment Fund.

Section 4.3. **County Contributions to the Towns to be used for Debt Service.** The County will transfer to Southern Shores the amounts and in the years as follows to be used towards the payment of debt service of its special obligation bonds issued to finance the Southern Shores Project:

<u>Fiscal Year</u> <u>ending June 30</u>	<u>Amount</u>
2023	\$52,017
2024	23,565

The County will transfer to Kitty Hawk the amounts and in the years as follows to be used towards the payment of debt service of its special obligation bonds issued to finance the Kitty Hawk Project:

<u>Fiscal Year</u> <u>ending June 30</u>	<u>Amount</u>
2023	\$ 256,545
2024	221,346
2025	186,148
2026	150,950
2027	115,752

ARTICLE V

DISPUTES AND MEDIATION

Section 5.1. **Agreement to Work Together to Settle Disputes.** This Interlocal Agreement shall be liberally construed in order to promote a harmonious relationship between the parties with regard to the completion of the Projects. The County and the Towns accept the relationship of trust and confidence established between each of the parties by this Interlocal Agreement. If a problem or dispute arises that this Interlocal Agreement does not directly or indirectly address, the County shall call a meeting with the Town Representatives to discuss and the County and the Towns covenant to work with one another in good faith to determine a mutually satisfactory solution.

Section 5.2. **Mediation.**

a. **Agreement to Mediate Dispute.** The County and the Towns will attempt to settle any dispute, claim or controversy arising out of this Interlocal Agreement through consultation and negotiation in good faith and in a spirit of mutual cooperation as set forth in Section 5.1. If those attempts fail, then the claim or dispute will be mediated by a mutually-acceptable mediator before any party resorts to court action. Mediation is a process in which parties attempt to resolve a dispute by submitting it to an impartial, neutral mediator who is authorized to facilitate the resolution of the dispute, but who is not empowered to impose a settlement on the parties.

b. **Demand for Mediation.** A demand for mediation must be submitted in writing to the other parties to this Interlocal Agreement. The demand for mediation shall proceed in advance of legal or equitable court proceedings, which shall be stayed pending mediation for a period of 60 days from the date of the demand for mediation, unless stayed for a longer period by agreement of the parties or by court order.

c. *Selection of Mediator.* The parties shall jointly select a mediator within 45 days after written notice by either party demanding mediation. The mediator shall be a member of the North Carolina State Bar and residing in the First Judicial District of North Carolina. Failing this joint action, the parties shall each separately designate a mediator and, within 15 days after their appointment, the two designated mediators shall jointly designate a third mediator. The third mediator shall then become the sole mediator for purposes of this paragraph. The failure of either party to appoint a mediator within the time allowed shall be deemed equivalent to appointing the mediator appointed by the other party. Each mediator shall be disinterested in the subject matter of this Interlocal Agreement.

d. *Mediation Procedure.* The mediation procedure shall be that which is contained in the Rules Implementing Statewide Mediated Settlement Conferences in Superior Court Civil Actions adopted pursuant to N.C. Gen. Stat. Sec. 7A-38.1 as same may be amended from time to time.

e. *Miscellaneous provisions.*

(1) The mediation fee, if any, shall be divided equally among the parties involved.

(2) Each party shall pay its own attorneys' fees and other costs.

(3) Before the mediation begins, the parties agree to sign a document limiting the admissibility in arbitration or any civil action of anything said, any admission made, and any documents prepared, in the course of the mediation.

(4) If any party commences a court action based on a dispute or claim to which this paragraph applies without first attempting to resolve the matter through mediation, then, in the discretion of the judge, that party shall not be entitled to recover attorney's fees even if they would otherwise be available to that party in any such court action. However, the filing of a judicial action to enable the recording of a notice of pending action, for order of attachment, receivership, injunction, or other provisional remedies, shall not in itself constitute a loss of the right to recover attorney's fees under this provision.

(5) The following matters are excluded from the requirement of mediation hereunder: (a) good faith efforts to resolve the dispute under these procedures have been unsuccessful, or (b) interim relief from a court is necessary to prevent serious and irreparable injury to one party or to others.

ARTICLE VI

LIABILITIES AND INDEMNIFICATION

Any liabilities arising from the Duck Project will be the sole responsibility of Duck. Any liabilities arising from the Kill Devil Hills Project will be the sole responsibility of Kill Devil Hills. Any liabilities arising from the Kitty Hawk Project will be the sole responsibility of Kitty Hawk. Any liabilities arising from the Southern Shores Project will be the sole responsibility of Southern Shores. Any liabilities arising from the Construction Contract or the Projects as a whole will be the responsibility of each of the Towns in proportion to the cost of its particular portion of the Projects to the overall costs of the Projects.

The Towns, in the same manner as set forth in the paragraph above with respect to their liabilities under this Interlocal Agreement, will indemnify, protect and save the County and any member of the governing body, officer, agent or employee thereof, acting in such capacity, harmless from all liability, obligations, losses, claims, damages, actions, suits, proceedings, costs and expenses, including reasonable attorneys’ fees, arising out of, connected with, or resulting, directly or indirectly, from the Projects or the Contracts, or from injuries to person or property occurring from or related to the Projects or the Contracts. The indemnification arising under this Article shall survive the termination of this Interlocal Agreement and continue in full force and effect notwithstanding the payment in full of all obligations under this Interlocal Agreement.

The Towns recognize that the County is entering into this Interlocal Agreement for the purpose of assisting the Towns in the execution and administration of the Contracts in order to achieve savings in the costs of the Projects. The County will indemnify, protect and save the Towns and any member of the governing body, officer, agent or employee thereof, acting in such capacity, harmless from all liability, obligations, losses, claims, damages, actions, suits, proceedings, costs and expenses, including reasonable attorneys’ fees, arising out of, connected with, or resulting, directly or indirectly the failure of the County to provide the funding and enter into the Contracts in accordance with the terms of this Interlocal Agreement and to pay the invoices under the Contracts in accordance with the terms of Section 3.4. The indemnification arising under this Article shall survive the termination of this Interlocal Agreement and continue in full force and effect notwithstanding the payment in full of all obligations under this Interlocal Agreement.

ARTICLE VII

PERFORMANCE OF GOVERNMENT FUNCTIONS

Nothing contained in this Interlocal Agreement shall be deemed or construed so as to in any way estop, limit, or impair the Towns or the County from exercising or performing any regulatory, policing, legislative, governmental, or other powers or functions pursuant to applicable law.

ARTICLE VIII

DEFAULTS AND REMEDIES

The County and the Towns, or any one of them, will be in default under this Interlocal Agreement if it fails to comply with the terms of this Interlocal Agreement.

If an event of default occurs as set forth in the preceding paragraph, and after following the procedures and requirements of Article V herein, each party hereto will have all remedies available at law

or in equity to enforce any of the terms and provisions hereof, including, but not limited to, or actions at law for damages and equitable actions seeking rescission of this Interlocal Agreement and/or injunctive relief (mandatory or prohibitory) to prevent the breach or threatened breach of any term or provision thereof or to enforce the performance of all terms and conditions of this Interlocal Agreement. All remedies are cumulative; the exercise of any one or more of them will not in any way alter or diminish the rights of the exercising party to any other remedy provided herein or at law or in equity. Action under this Interlocal Agreement will not be taken, however, until the non-defaulting party or parties gives the defaulting party or parties written notice of the event of default and a reasonable opportunity to cure the event of default.

**ARTICLE XIII
NOTICES**

Except as otherwise provided in this Interlocal Agreement, all notices, certificates, requests, requisitions, or other communications given pursuant to this Interlocal Agreement must be in writing and will be sufficiently given and will be deemed given when delivered by hand, mailed by certified mail, postage prepaid or by electronic mail with confirmation of receipt. The mailing addresses are as follows:

County: Attention County Manager
PO Box 1000
Manteo, NC 27954

Duck: Attention Town Manager
PO Box 8369
Duck, NC 27949

Kill Devil Hills: Attention Town Manager
PO Box 1719
Kill Devil Hills, NC 27948

Kitty Hawk: Attention Town Manager
PO Box 549
Kitty Hawk, NC 27949

Southern Shores: Attention Town Manager
5375 N. Virginia Dare Trail
Southern Shores, NC 27949

ARTICLE IX

MISCELLANEOUS

Section 9.1. **Amendment.** This Interlocal Agreement may be amended through a supplement approved in writing by the County, Duck, Kill Devil Hills, Kitty Hawk and Southern Shores.

Section 9.2. **Severability.** If any section of this Interlocal Agreement is deemed to be illegal or otherwise unenforceable, it is the intent of the parties hereto that all other provisions of this Interlocal Agreement shall remain in full force and effect.

Section 9.3. **Governing Law.** This Interlocal Agreement is to be governed by and interpreted in accordance with the laws of the State of North Carolina.

Section 9.4. **Time is of the Essence.** Time is of the essence in this Interlocal Agreement.

Section 9.5. **Execution in Multiple Counterparts.** This Agreement may be executed in any number of counterparts, by manual, facsimile, digital, electronic or .pdf file signatures, each of which will be deemed an original, but all of which taken together will constitute one and the same instrument. An executed copy of this Agreement delivered by facsimile, email, or other electronic means will be deemed to have the same legal effect as delivery of a manual signed copy of this Agreement. This Agreement and related documents may be sent and stored by electronic means.

Section 9.6. **Effective Date.** This Interlocal Agreement takes effect on its execution by the County and the Towns.

Section 9.7. **Termination.** This Interlocal Agreement shall terminate under either of the following two (2) circumstances: (1) when all of the following events have occurred: (a) the completion of all of the Projects as evidenced by certificates of completion issued to the County and the Towns by the Project Manager, (b) the balance in the Construction Fund is zero, and (c) all duties and responsibilities of the County and Towns set forth in this Interlocal Agreement have been completed or waived in writing by the parties; or (2) the date on which the County and Towns mutually agree to terminate this Interlocal Agreement by action of their respective governing boards or councils.

Section 9.8. **Public Information.** All public information related to the Projects shall be the responsibility of the applicable Town.

IN WITNESS WHEREOF, the Chairman of the Board of Commissioners of the County, the Mayor of Duck, the Mayor of Kill Devil Hills, the Mayor of Kitty Hawk and the Mayor of Southern Shores have each executed this Interlocal Agreement to evidence the agreement of the parties hereto and the respective Town Clerks and the Clerk to the Board of County Commissioners have affixed the seal of the Town and the County, as applicable, this Interlocal Agreement.

COUNTY OF DARE, NORTH CAROLINA

[SEAL]

By: _____
Chairman

Attest:

Clerk to the Board of County Commissioners

**This instrument has been preaudited
in the manner required by the Local
Government Budget and Fiscal Control Act.**

**Finance Officer
County of Dare, North Carolina**

[SIGNATURE PAGE TO 2021 INTERLOCAL AGREEMENT
AMONG THE COUNTY OF DARE, TOWN OF DUCK,
TOWN OF KILL DEVIL HILLS, TOWN OF KITTY HAWK
AND TOWN OF SOUTHERN SHORES RELATED TO BEACH NOURISHMENT PROJECTS]

TOWN OF DUCK, NORTH CAROLINA

[SEAL]

By: _____
Mayor

Attest:

Town Clerk

**This instrument has been preaudited
in the manner required by the Local
Government Budget and Fiscal Control Act.**

**Finance Officer
Town of Duck, North Carolina**

[COUNTERPART SIGNATURE PAGE TO 2021 INTERLOCAL AGREEMENT
AMONG THE COUNTY OF DARE, TOWN OF DUCK,
TOWN OF KILL DEVIL HILLS, TOWN OF KITTY HAWK
AND TOWN OF SOUTHERN SHORES RELATED TO BEACH NOURISHMENT PROJECTS]

TOWN OF KILL DEVIL HILLS, NORTH CAROLINA

[SEAL]

By: _____
Mayor

Attest:

Town Clerk

**This instrument has been preaudited
in the manner required by the Local
Government Budget and Fiscal Control Act.**

**Finance Officer
Town of Kill Devil Hills, North Carolina**

[COUNTERPART SIGNATURE PAGE TO 2021 INTERLOCAL AGREEMENT
AMONG THE COUNTY OF DARE, TOWN OF DUCK,
TOWN OF KILL DEVIL HILLS, TOWN OF KITTY HAWK
AND TOWN OF SOUTHERN SHORES RELATED TO BEACH NOURISHMENT PROJECTS]

TOWN OF KITTY HAWK, NORTH CAROLINA

[SEAL]

By: _____
Mayor

Attest:

Town Clerk

**This instrument has been preaudited
in the manner required by the Local
Government Budget and Fiscal Control Act.**

**Finance Officer
Town of Kitty Hawk, North Carolina**

[COUNTERPART SIGNATURE PAGE TO 2021 INTERLOCAL AGREEMENT
AMONG THE COUNTY OF DARE, TOWN OF DUCK,
TOWN OF KILL DEVIL HILLS, TOWN OF KITTY HAWK
AND TOWN OF SOUTHERN SHORES RELATED TO BEACH NOURISHMENT PROJECTS]

TOWN OF SOUTHERN SHORES, NORTH CAROLINA

[SEAL]

By: _____
Mayor

Attest:

Town Clerk

**This instrument has been preaudited
in the manner required by the Local
Government Budget and Fiscal Control Act.**

**Finance Officer
Town of Southern Shores, North Carolina**

[COUNTERPART SIGNATURE PAGE TO 2021 INTERLOCAL AGREEMENT
AMONG THE COUNTY OF DARE, TOWN OF DUCK,
TOWN OF KILL DEVIL HILLS, TOWN OF KITTY HAWK
AND TOWN OF SOUTHERN SHORES RELATED TO BEACH NOURISHMENT PROJECTS]



AGENDA ITEM SUMMARY FORM

MEETING DATE: October 5, 2021

ITEM TITLE: Consideration of TCA 21-07-Combustible Materials

ITEM SUMMARY:

In August, Southern Shores Volunteer Fire Department Chief Limbacher contacted Town Staff to see if the Kitty Hawk Elementary School could be allowed to have a bonfire as part of the school's Fall Carnival on November 5, 2021. Town Code Section 14-65 defines a bonfire as an outdoor fire having a total fuel area of more than three feet in diameter and two feet or more in height used for ceremonial purposes. Town Code Section 14-68 (8) states that it shall be unlawful for any person to start or set a bonfire. In an effort to allow the school to have a bonfire at the Fall Carnival, Town Staff is proposing to amend Section 14-68 (8) so that bonfires held by Kitty Hawk Elementary School under the supervision of the Southern Shores Volunteer Fire Department or other fire protection official(s) are allowed.

STAFF RECOMMENDATION:

Town Staff recommends approval of the proposed TCA. A Planning Board recommendation is not required.

REQUESTED ACTION:

Motion to approve TCA-21-07.

STAFF REPORT

To: Southern Shores Town Council
Date: October 5, 2021
Case: TCA-21-07
Prepared By: Wes Haskett, Deputy Town Manager/Planning Director

GENERAL INFORMATION

Applicant: Town of Southern Shores

Requested Action: Amendment of the Town Fire Prevention and Protection Ordinance by amending Section 14-68, Combustible Materials.

ANALYSIS

In August, Southern Shores Volunteer Fire Department Chief Limbacher contacted Town Staff to see if the Kitty Hawk Elementary School could be allowed to have a bonfire as part of the school's Fall Carnival on November 5, 2021. Town Code Section 14-65 defines a bonfire as an outdoor fire having a total fuel area of more than three feet in diameter and two feet or more in height used for ceremonial purposes. Town Code Section 14-68 (8) states that it shall be unlawful for any person to start or set a bonfire. In an effort to allow the school to have a bonfire at the Fall Carnival, Town Staff is proposing to amend Section 14-68 (8) so that bonfires held by Kitty Hawk Elementary School under the supervision of the Southern Shores Volunteer Fire Department or other fire protection official(s) are allowed.

RECOMMENDATION

Town Staff recommends approval of the proposed TCA. A Planning Board recommendation is not required.



Town of Southern Shores
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TCA-21-07

Ordinance 2021-10-01

AN ORDINANCE AMENDING THE CODE OF ORDINANCES
OF THE TOWN OF SOUTHERN SHORES, NORTH CAROLINA

ARTICLE I. Purpose(s) and Authority.

WHEREAS, pursuant to N.C.G.S. Chap. 160A, the Town has duly codified the Town’s Code of Ordinances (the “Town Code”); and

WHEREAS, pursuant to North Carolina General Statutes § 160A-174 the Town may enact and amend ordinances that define, prohibit, regulate, or abate acts, omissions, or conditions, detrimental to the health, safety, or welfare of its citizens and the peace and dignity of the Town, and may define and abate nuisances; and

WHEREAS, the Town further finds that in accordance with the findings above it is in the interest of and not contrary to the public's health, safety and general welfare for the Town to amend the Town Code of Ordinances as stated below.

ARTICLE II. Construction.

For purposes of this ordinance amendment, underlined words (underline) shall be considered as additions to existing Town Code language and strikethrough words (~~strikethrough~~) shall be considered deletions to existing language. Any portions of the adopted Town Code which are not repeated herein, but are instead replaced by an ellipses (“...”) shall remain as they currently exist within the Town Code.

ARTICLE III. Amendment of Town Code.

NOW, THEREFORE, BE IT ORDAINED by the Town Council of the Town of Southern Shores, North Carolina, that the Town Code shall be amended as follows:

PART I. That **Chapter 14 Sec. 14-68. Combustible materials.** be amended as follows:

1 **Sec. 14-68. Combustible materials.**

2
3 It shall be unlawful for any person to build or set an open fire in any location except
4 in the areas and under the conditions specified below:

- 5 (1) The occupant of a permanent dwelling may, with a permit, set an open fire to
6 burn small amounts of refuse, tree branches, brush and scrap lumber provided the
7 burning is conducted within 100 feet of such dwelling and is confined within a
8 cleared and protected area upon which a watch is maintained and which is
9 provided with adequate fire protection equipment at the immediate fire site.
10 Adequate fire protection equipment is considered to be a charged hose line,
11 shovel, rake, and loose sand or dirt with which to cover the fire.
- 12 (2) The occupant of a permanent dwelling may build or set a contained fire as
13 defined above.
- 14 (3) No fire of any type shall be built or set on unimproved property (any property
15 where a permanent dwelling or business unit does not exist) until the site has been
16 inspected and a permit issued by the fire inspector.
- 17 (4) All fires of the type described in this section must be attended by a competent
18 person 14 years of age or older who must remain in attendance at the fire until it
19 is completely extinguished.
- 20 (5) No open fire shall be built or set neither in a marina area or a picnic area nor in
21 any other area owned by a residential or civic or other owner's association without
22 a permit.
- 23 (6) House occupants or landowners starting or setting fires as permitted above are
24 responsible for assuring themselves that a prohibition against burning as stated in
25 G.S 14-139, is not in effect.
- 26 (7) Initial burning shall generally be allowed only between the hours of 9:00 a.m.
27 and 6:00 p.m. but no combustible materials shall be added to the fire after 3:00
28 p.m., except that under favorable meteorological conditions, deviations may be
29 granted by the fire inspector.
- 30 (8) It shall be unlawful for any person to start or set a bonfire other than bonfires
31 held by Kitty Hawk Elementary School under the supervision of the Southern
32 Shores Volunteer Fire Department or other fire protection official(s).
- 33 (9) It shall be unlawful for any person to start or set a recreational fire.

34
35 **ARTICLE IV. Severability.**

36
37 All Town ordinances or parts of ordinances in conflict with this ordinance amendment are
38 hereby repealed. Should a court of competent jurisdiction declare this ordinance
39 amendment or any part thereof to be invalid, such decision shall not affect the remaining

1 provisions of this ordinance amendment nor the Zoning Ordinance or Town Code of the
2 Town of Southern Shores, North Carolina which shall remain in full force and effect.

3

4 **ARTICLE V. Effective Date.**

5

6 This ordinance amendment shall be in full force and effect from and after the ____ day of
7 _____, 2021.

8

9

Tom Bennett, Mayor

10

11 ATTEST:

12

13

14 _____
Town Clerk

15

16

17 APPROVED AS TO FORM:

18

19

20 _____
Town Attorney

21

22 Date adopted:

23

24

25 _____
Motion to adopt by Councilmember:

26

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28 _____
Motion seconded by Councilmember:

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Vote: ___AYES___NAYS



AGENDA ITEM SUMMARY

ITEM # 11

MEETING DATE: October 5, 2021

ITEM TITLE: Adjustments to Police Officer Salary Schedule

ITEM SUMMARY: The most recent opening in the Police Department went unfilled for nearly one year. This opening was partly due to a limited candidate pool which is the norm across the country, as well as starting salary. After making comparisons to other departments in the Dare County, the Town has fallen behind by nearly \$3,000 as compared to the top two departments in starting salaries. What was also more evident was how far behind our Sergeants had become comparatively.

STAFF RECOMMENDATION: Staff recommends that the Town remove the sworn law enforcement positions from the Police Department, not including the Deputy Chief and Chief, from the pay plan and administer a separate plan. This is a strategy taking place across the state. Having Police Officers in a standalone plan gives us the opportunity to quickly address market changes and adjust grade ranges as necessary without disrupting or effecting the pay plan for the rest of the town staff. The Town's Attorneys have considered and agree with this recommendation. Nothing prohibits us from having a separate plan for different categories or classifications of employees. Having a separate classification for law-enforcement employees is sensible, since there may be a more competitive market for them, particularly in light of the shortage of law-enforcement officers across the state.

This recommendation not only recognizes the need to increase starting salaries for Police Officers but also the importance of retaining our current officers with a competitive salary for the Corporal and Sergeant positions. It's important to note that these revisions place us at the top of starting salaries, not actual salaries paid. The additions do increase actual salaries while maintaining our middle position compared to other departments in our area. Retention of good officers saves money and the invaluable benefit of experience in our Town.

Rather than make this recommendation based on the existing pay plan and placing Police Officers in pre-determined grades, staff recommends establish the salary ranges based on the need to be competitive within our area.

REQUESTED ACTION:

Staff requests the approval of a separate pay scale for law enforcement officers. The impact on the current fiscal year from this increase if incorporated November 1st, 2021 is \$36,943.

A full year of implementation is an increase of \$55,514

Salary		\$44,438	
FICA	7.65%	\$3,399.5	
Retirement	17.05%	\$7,576.7	(5% 401k + 12.05% NC Retirement)
		\$55,414	

	Grade		Minimum	Maximum
current	14	Police Officer	44,354	66,531
recommended	51		47,354	72,531
current	15	Corporal	46,572	69,857
recommended	52		52,000	78,000
current	17	Sergeant	51,345	77,017
recommended	54		60,000	90,000

Town of Southern Shores FY 21-22 Pay Scale	Grade	FLSA	Minimum	Midpoint	Maximum
Not Assigned	10	N	36,490	45,613	54,735
Maintenance Technician	11	N	38,315	47,893	57,472
Administrative Specialist	12	N	40,281	50,288	60,346
Police Administrative Assistant	13	N	42,241	52,802	63,362
Permit Officer	14	N	44,354	55,442	66,531
Community Resource Officer	14	N	44,354	55,442	66,531
Master Police Officer	14	N	44,354	55,442	66,531
Police Officer	14	N	44,354	55,442	66,531
School Resource Officer	14	N	44,354	55,442	66,531
Building Inspector	15	N	46,572	58,215	69,857
Police Corporal	15	N	46,572	58,215	69,857
Not Assigned	16	N	48,900	61,125	73,350
Police Sergeant	17	N	51,345	64,181	77,017
Public Works Supervisor	17	N	51,345	64,181	77,017
Town Clerk	18	N	53,912	67,391	80,868
Not Assigned	19	E	56,608	70,760	84,912
Not Assigned	20	E	59,439	74,298	89,158
Not Assigned	21	E	62,410	78,013	93,615
Police Deputy Chief	22	E	65,530	81,914	98,296
Public Works Director	23	E	68,807	86,009	103,211
Not Assigned	24	E	72,248	90,310	108,371
Not Assigned	25	E	75,860	94,825	113,790
Finance/Human Resources Officer	26	E	79,653	99,566	119,480
Police Chief	26	E	79,653	99,566	119,480
Not Assigned	27	E	83,636	104,545	125,454
Deputy Town Manager/Planning Director	28	E	87,818	109,772	131,726
Not Assigned	29	E	92,208	115,260	138,312
Not Assigned	30	E	96,818	121,024	145,228

<u>Town</u>		<u>Police Officer Starting Salary</u>	-	<u>Average Police Officer</u>	-	<u>Sgt Starting Salary</u>	-	<u>Average Sgt Salary</u>		Behind in PO starting salary	Behind in PO average salary	Behind in Sgt average salary
	RANK		RANK		RANK		RANK					
Recommended	1	47,354	4	52,905	1	60,000	5	62,372				
Kill Devil Hills	1	47,347	2	54,737	1	54,810	1	74,949		*2,993	*5,687	*16,421
Nags Head	2	47,213	1	55,803	2	54,656	2	71,263		*2,859	*6,753	*12,735
Southern Shores	3	44,354	4	49,050	3	53,912	5	58,528				
Manteo	4	42,784	5	47,237	4	52,095						
Duck	5	42,212	3	53,486	5	51,309	4	63,945			*4,436	*5,417
Kitty Hawk	6	39,274	6	45,396	6	47,738	3	68,135				*9,607

* Number indicates the amount of salary Southern Shores is presently behind in starting and average salaries for Police Officers and average salaries for Sergeants compared to other law enforcement agencies in Dare County.