

# 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

# AGENDA

#### **Call Meeting to Order**

Pledge of Allegiance Moment of Silence

#### Amendments to / Approval of Agenda

#### **Consent Agenda**

- 1. Easements-Town of Duck, Easements for 14 properties within Southern Shores Beach Nourishment Project Taper. page 2
- Emergency Management Plan-Update page 9
- 3. Minutes- Regular Mtg. 9/7, Workshop Mtg. 8/17, 5/18, and Closed Session 7/6 (not in packet) page 19

#### Presentations

- 4. Introduction of Department Interns
- 5. FY2020-21 Annual Audit Presentation-Teresa Osborne, Dowdy & Osborne
- 6. Exploratory Committee For A Potential Branch Library -Update page 43

#### **Staff Reports**

- Deputy Town Manager/Planning Director Police Chief
  - Fire Chief

Town Manager

- o Beach Nourishment
- **Town Attorney**

#### General Public Comment (Limit: 3 minutes per speaker.)

#### **Old Business**

8. SEPI Plan - Pavement Conditions Study & CIP Plan-Additional Options page 54

#### **New Business**

- <u>9.</u> Town Adopts Approving Resolution, and Bond Order & Interlocal Agreement (Beach Nourishment) page 148 UPDATED 10/1/21
- 10. Consideration of TCA 21-07-Combustible Materials page 182
- 11. Discussion of Police Department Salaries page 187

#### General Public Comment (Limit: 3 minutes per speaker.)

#### **Council Business**

Adjourn



# AGENDA ITEM SUMMARY Item # 1

MEETING DATE: October 5, 2021

**ITEM TITLE:** Joint Beach Nourishment Easements with Town of Duck

#### **ITEM SUMMARY:**

The Town's beach nourishment project northern tapper extends into the Town of Duck (map attached). Easements will be required from the property owners in the tapper area. At the September 1, 2021 Duck Town Council meeting, the taper area easement form was approved, as was acceptance of easements jointly with the Town of Southern Shores for the taper area. Further, the Duck Town Manager and Town Attorney were authorized to negotiate and approve changes that owners ask the Town of Southern Shores to make.

#### **STAFF RECOMMENDATION:**

Staff recommends the Town Council approve the request to accept easements jointly with the Town of Duck as required as a condition of the 2022 Beach Nourishment project.

#### **REQUESTED ACTION:**

A motion to approve the easement form and to authorize the Town Manager and Town Attorney to negotiate changes before accepting the easements.

**ATTACHMENTS:** Joint Easement

Map of tapper area into the southern section of the Town of Duck

ltem 1.

Space Above This Line For Recording Data

#### EASEMENT

Note to the Register of Deeds: Please return this Easement to the Town of Southern Shores (see address below) after recording.

Excise Tax: \$-0- Transfer Tax: \$-0- Parcel #: \_\_\_\_\_

North Carolina, Dare County

THIS EASEMENT, dated \_\_\_\_\_\_, 20\_\_\_, by and between \_\_\_\_\_, whose mailing address is \_\_\_\_\_\_ (the "Owner"), and the TOWN OF SOUTHERN SHORES, a North Carolina municipal corporation, 5375 N. Virginia Dare Trail, Southern Shores, NC 27949 ("Town of Southern Shores"), and the TOWN OF DUCK, a North Carolina municipal corporation, PO Box 8369, Duck, NC 27949 ("Town of Duck"). The Town of Southern Shores and the Town of Duck may be collectively referred to herein as the "GRANTEE."

Owner is the owner in fee simple of certain real property, situated in the Town of Duck, Atlantic Township, Dare County, North Carolina and more particularly described as follows:
Property Address: \_\_\_\_\_\_\_, Duck, NC 27949; and
Described in that certain deed to the Owner recorded in Book/Page \_\_\_\_\_\_, Dare County
Registry; OR
Other Description: \_\_\_\_\_\_

(the "Property"), and Owner desires to grant an easement to the GRANTEE for the Term and purposes stated below, and the GRANTEE has agreed to accept such easement from Owner.

The principal purpose of the easement granted herein is to facilitate the maintenance of the Ocean Beach within the Town of Duck, including the area of the easement, via beach nourishment and renourishment.

This Easement may be used by the Town of Duck for the purposes set forth herein as part of a Project conducted by the Town of Duck. This Easement may also be used by the Town of Southern Shores for the purposes set forth herein as part of a Project constructed by the Town of Southern Shores when part of the defined Project area includes properties located in the Town of Duck, such as a taper area. This Easement may also be used jointly by the Town of Duck and the Town of Southern Shores for Project(s) conducted simultaneously by both Towns.

NOW, THEREFORE, for a valuable consideration, including the benefits Owner may derive therefrom, the receipt of which is hereby acknowledged, Owner has dedicated, bargained and conveyed and by these presents does hereby dedicate, grant and convey to the GRANTEE, its successors and assigns, a

nonexclusive, irrevocable and assignable ambulatory easement and right-of-way in, on, over, through and across the hereinafter described land for use by the GRANTEE, its representatives, agents, employees, officials, engineers, consultants, surveyors, contractors, subcontractors, permittees, assignees, and invitees, for the Term set forth below. The easement area shall be that portion of the Property located between (1) the mean high water mark of the Atlantic Ocean, and (2) the landward toe or the Frontal Dune or Primary Dune. In the absence of a discernable Frontal Dune or Primary Dune, the easement area shall be that portion of the Property located between (3) the mean high water mark of the Atlantic Ocean, and (4) the waterward edge of any Permanent Structure located on the Property as of the date of this Easement. In the absence of a discernable Frontal Dune or Primary Dune or a Permanent Structure, the easement area shall be that portion of the Property located between (5) the mean high water mark of the Atlantic Ocean, and (6) a northern and/or southern extension of the western boundary of the easement area for the property or properties adjoining the Property on the north and/or south whose comparable easement areas have been established using either the Frontal Dune of Primary Dune or a Permanent Structure located on such adjoining property (the "Easement Area"). Owner also grants and conveys to the GRANTEE a nonexclusive pedestrian only access easement across any portion of the Property that is reasonably necessary for the purpose of permitting the GRANTEE'S inspection and, if necessary, observation and surveying of the GRANTEE'S work and activities within the Easement Area, for the Term set forth below (the "Access Easement"). Other than the limited nature of the Access Easement, the use of and access to the Easement Area shall be from the Ocean Beach or Atlantic Ocean adjacent to the Easement Area and not the uplands of the Property.

TO HAVE AND HOLD the said easement unto the GRANTEE, its successors and assigns, for the Term set forth below. The GRANTEE shall have the right to temporarily or permanently assign this easement to the federal, state, or county governments, or any agencies or department thereof or any governmental authority formed to implement beach nourishment, renourishment and/or stabilization on the Ocean Beach in the GRANTEE, but only for the purposes set forth in this easement agreement. This easement shall be binding on the Owner, Owner's heirs, successors and assigns, and shall run with the title of the Property. The terms, uses, conditions and restrictions of the Easement are as follows:

1. GRANTEE may use the Easement Area to evaluate, survey, inspect, construct, preserve, patrol, protect, operate, maintain, repair, rehabilitate, and replace a public Ocean Beach, a dune system, and other erosion control and storm damage reduction measures, including the right to (a) deposit sand; (b) accomplish any alterations of contours on said land; construct berms and dunes; (c) nourish and renourish periodically; (d) move, store and remove equipment and supplies; (e) erect and remove temporary structures; (f) perform any other work necessary and incident to the construction, periodic renourishment and maintenance of the Project; (g) plant vegetation on said dunes and berms; (h) erect, maintain and remove silt screens, sand fences and other sand collection measures; (i) facilitate preservation of dunes and vegetation through the limitation of access to dune areas; and (j) trim, cut, fell, and remove from said land all trees, underbrush, debris, obstructions, and any other vegetation, structures and obstacles within the boundaries of the Easement Area. GRANTEE will not engage in any of the foregoing activities in the Easement Area without holding a permit to do so, to the extent a permit for such activity or activities is required by law.

2. THERE IS RESERVED, HOWEVER, to the Owner, Owner's heirs, successors and assigns, the right to construct an Improved Dune Walkover Access structure within the Easement Area in accordance with any applicable Federal, State or local laws or regulations, provided that such structures shall not violate the integrity of the dune in shape, dimension or function, that same are consistent with applicable zoning, and that prior approval of the plans and specifications for such structure is obtained from the Town of Duck. Such structure shall be subordinate to the construction, operation, maintenance, repair, rehabilitation and replacement of the work authorized herein. There is further reserved to the Owner, Owner's heirs, successors and assigns all such rights and privileges as may be used and enjoyed without interfering with or abridging the rights and easements hereby acquired.

3. Owner becomes the owner of any sand deposited into the Easement Area by GRANTEE at the time of the deposit. Owner acknowledges and agrees that use of the Ocean Beach is subject to traditional public trust rights. GRANTEE, its officers, employees, and agents may enter the Easement Area and the Access Easement whenever reasonably necessary for the purpose of inspecting same to determine compliance herewith, to maintain as may be necessary or convenient thereto. Owner shall in all other respects remain the fee owner of the Property and Easement Area, subject to any existing traditional public trust rights, and may make all lawful uses of the Property not inconsistent with the easements described and conveyed herein. Nothing in this easement shall hinder or impair the Owner's littoral and riparian rights associated with the Owner's Property. The designations Owner and GRANTEE shall include the parties, their heirs, successors and assigns.

4. The existence of this Easement shall not prevent Owner from applying for permits from the Town of Duck or any other agency to repair or replace a Permanent Structure, to the extent applicable ordinances or the rules or regulations of any other permitting agency would not otherwise prohibit the proposed repair or replacement for other reasons, and provided that such structure does not violate the integrity of the dune in shape, dimension or function, and provided further that such structures are subordinate to the construction, operation, maintenance, repair, rehabilitation and replacement of the Project.

5. Definitions. The following capitalized terms as used in this Agreement shall have the following meanings:

<u>Accessory Building</u>: A subordinate Building consisting of walls and a roof, the use of which is clearly incidental to that of a Principal Building on the same lot.

<u>Building</u>: Any structure enclosed and isolated by exterior walls and constructed or used for a residence or business. The word Building includes the word Structure.

<u>Frontal Dune</u>: The first mound of sand located landward of the Ocean Beach having sufficient vegetation, height, continuity and configuration to offer protective value.

<u>Improved Dune Walkover Access</u>: A raised walkway constructed for the purpose of providing access to the Ocean Beach from points landward of the dune system.

<u>Ocean Beach</u>: The lands located seaward of the natural indicators of the landward extent of the State's ocean beaches which include, but are not limited to, the first line of stable, natural vegetation; the toe of the frontal dune; and the storm trash line. Ocean Beach includes those lands located above the mean high water mark that may be publicly or privately owned and, for the purposes of this easement, those publicly owned lands located below the mean high water mark out to the three (3) nautical mile extension of State waters. Owner: The owner of the Property as identified on page 1 of this Easement.

<u>Permanent Structure</u>: A Building, including a Principal Building and any Accessory Building(s), covered decks, swimming pool, and improvements associated with a swimming pool, but not including any uncovered decks or any Improved Dune Walkover Access or any associated gazebos or other improved portions of an Improved Dune Walkover Access.

<u>Primary Dune</u>: The first mound of sand located landward of the Ocean Beach having an elevation equal to the mean flood level (in a storm having a one percent chance of being equaled or exceeded in any given year) for the area plus six feet. The primary dune extends landward to the lowest elevation in the depression behind that same mound of sand (commonly referred to as the dune toe).

Principal Building: A Building in which is conducted the principal use of the lot on which it is located.

<u>Property</u>: The real property described on page 1 of this Easement.

Project: The GRANTEE'S Beach Nourishment Project.

<u>Term</u>: The term of this Easement is perpetual.

IN WITNESS WHEREOF, Owner has executed this instrument, the day and year first above written.

(signatures begin on the following page)

#### EXECUTION AND NOTARY CERTIFICATE FOR AN OWNER WHO IS AN INDIVIDUAL

|          | Owner:  |         |
|----------|---|---------|
|          |   | (SEAL)  |
|          |   | (SEAL)  |
| State of | , County or City of   |         |
|          | rson personally appeared before me this day, each acknowledg<br>ned the foregoing document for the purpose stated therein and |         |
|          | [type pr print na   | ame(s)] |
| Date:    | , 20  |         |
|          |   |         |
|          | Signature of Notary Public  |         |
|          | Typed or printed name of Notary   | Public  |
|          | My commission expires:  |         |

Affix Notary Seal Inside This Box

#### EXECUTION AND NOTARY CERTIFICATE FOR AN OWNER WHO IS A CORPORATION, LIMITED LIABILITY COMPANY, TRUST, PARTNERSHIP OR OTHER ENTITY

Owner:

Typed or printed name of Owner-Entity

BY: Signature of authorized officer or manager

Typed or printed name of person signing

Typed or printed title of person signing

State of , County or City of

I certify that the following person personally appeared before me this day, each acknowledging to me that he or she voluntarily signed the foregoing document for the purpose stated therein and in the capacity indicated:

[type or print name of person signing]

Date: \_\_\_\_\_, 20\_\_\_\_\_.

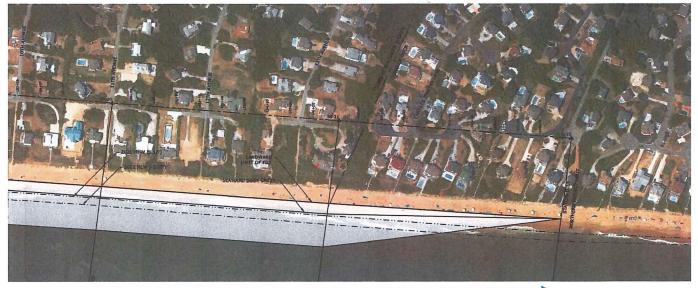
Signature of Notary Public

Typed or printed name of Notary Public

My commission expires:

Affix Notary Seal Inside This Box

# Easements



Duck Town Council approved the taper area easement form, approved acceptance of easements (jointly with TOSS) for the taper area.

12 parcels in Duck are included in the northern tapper of our project



# AGENDA ITEM SUMMARY Item # 2

MEETING DATE: October 5, 2021

ITEM TITLE: Updates to Town's Emergency Management Plan

#### **ITEM SUMMARY:**

Town staff, including the Town Manager, Deputy Town Manager, Police Chief, Fire Chief and Public Works Director, went through a process of reviewing the current Emergency Management Plan. The process was facilitated by Billy Winn with NEX Disaster Services.

Town Code Section Sec. 12-6. - Emergency management plan. (d) states that Amendments to these plans shall be submitted to the Town Manager. If approved, the Town Manager will then submit the amendments to the Town Council with his recommendation for their approval. Such amendments shall take effect from the date of approval.

These revisions are generally non-substantive and have little impact on the overall plan. One revision of note is that in the present plan the Mayor is the sole source of information to media and general public. While the Mayor is likely to be interviewed by the media in a major event and will share information, Town staff felt for consistency's sake the Incident Commander or his replacement in his absence should communicate the actualities of the incident. For larger events, the County activates a Joint Information Group (JIG) which the town is a part of. The Mayor as sole source leaves no opportunity for staff to communicate information to the JIG.

Additionally, a Logistics position is created and included in the Emergency Management Team Organization Chart. The chart no longer assigns permanent staff to role assignment. While staff will fill their usual roles in most circumstances, the organization chart contains positions to address the incident and staff should fill the role as necessary.

Other revisions are included to reflect current practice and terms.

Deletions are indicated with a strike through, and additions are typed in red.

**STAFF RECOMMENDATION:** Staff recommends the Town Council approve the revisions as presented.

**REQUESTED ACTION:** A motion to approve the revisions as presented.

ATTACHMENTS: Draft updates to the Emergency Management Plan



# EMERGENCY MANAGEMENT PLAN

2021



# **Town of Southern Shores**

5375 N. Virginia Dare Trail, Southern Shores, NC 27949 Phone 252-261-2394 / Fax 252-255-0876 <u>info@southernshores-nc.gov</u>

www.southernshores-nc.gov

# DIRECTIVE – June 2021 EMERGENCY MANAGEMENT PLAN

During an emergency, certain Town employees are required to perform responsibilities consistent with their position as defined within the emergency management plan.

The following definitions are provided:

**ESSENTIAL PERSONNEL:** Are those emergency service professionals and other employees whose presence on-site is necessary for the continuity of Town operations, protection of people & property, and to recover from a disaster. The following are defined as essential personnel and are required to be on-site as directed:

ADMINISTRATION - Town Manager

POLICE – All police personnel as directed by incident command.

FIRE – All fire personnel as directed by incident command.

PUBLIC WORKS – Public Works Director and public works personnel as directed by incident command.

CODE ENFORCEMENT – Town Planner/Code Enforcement Officer and code enforcement personnel as directed by incident command.

**ESSENTIAL VEHICLES:** Vehicles equipped, maintained, and operated by police, fire, and public works personnel required to be on-site during an emergency or directed by incident command to respond to an emergency situation as determined or directed by incident command, Dare County 911, or the Town Police and Fire Departments.

**CRITICAL FUNCTION PERSONNEL:** Are those employees who provide functions necessary for the business continuity of the Town and who protect certain town assets as defined within the emergency management plan. These personnel may be required to respond or to relocate with town assets as directed by the Town Manager or his designee.

TOWN CLERK - Emergency duties described in the plan.

FINANCE & PERSONNEL OFFICER - Emergency duties described in the plan.



# SOUTHERN SHORES EMERGENCY MANAGEMENT TEAM

The Town of Southern Shores utilizes National Incident Management System (NIMS) and an Incident Command System (ICS) in response to all emergencies regardless of size and complexity. The ICS is composed of paid staff and volunteers – ALL of whom are critically important to the provision of vital services to the public. The Incident Commander is responsible for preparing for all emergencies and coordinating the activities of the Emergency Management Team. The Emergency Management Team is expected to prepare for emergencies and be ready to manage their functional areas before, during and after an emergency.

#### Emergency Operations Centers (EOC):

Small Incidents (major traffic accidents and nuisance flooding): Town Hall Complex

**Major Incidents**: Town Hall Complex – contingent staging located at South Fire Station; second floor. Actual access to this EOC location shall be secured utilizing an authorized pass system, with individual entry mutually determined by the Incident Commander, Deputy Incident Commander, and the Fire Chief.

#### Functional Staging Areas (FSA):

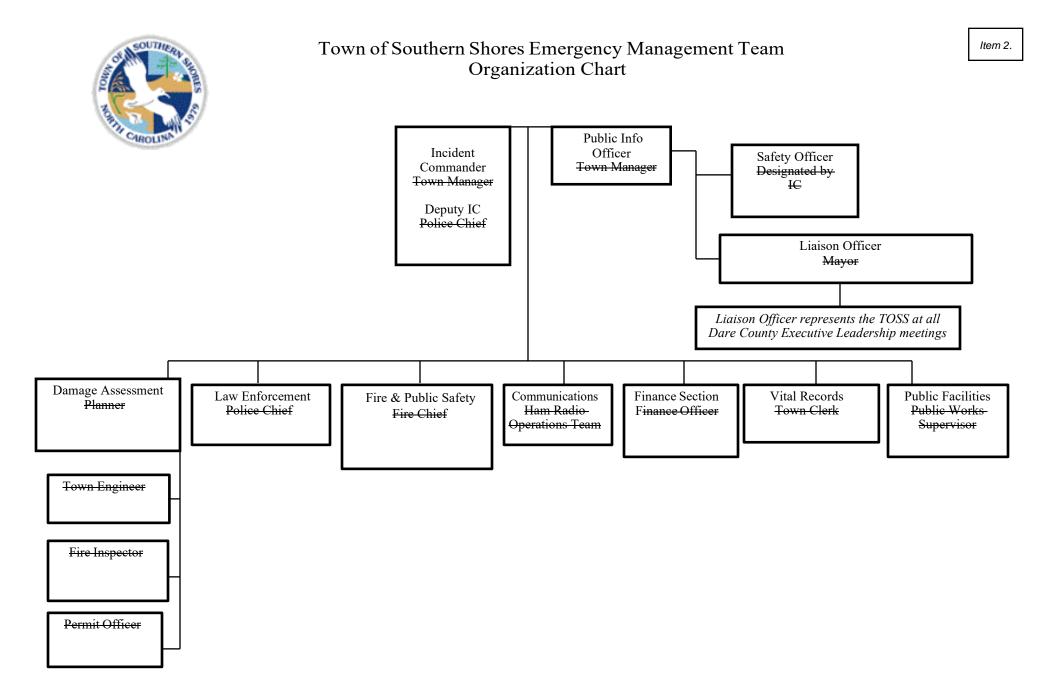
The Incident Commander may designate one or more FSAs to accommodate specific functions for management of the emergency and/or continuation of Town governmental functions. (Examples, general government meetings, volunteer coordination, public relief, etc.)

- <u>Incident Commander</u> Town Manager: Overall coordination of incident. Provide support, resources and coordination of activities, personnel and resources to prepare for, manage through, and commence restoration relating to any emergency incident. The Police Chief shall serve as Deputy IncidentCommander and shall serve as the Incident Commander in the absence or incapacity of the Incident Commander.
  - a. Administrative Specialist: Assist Incident Commander as needed with general administration. Coordinates volunteers and assigns as directed by Incident Commander. Work with Vital Records Officer to keep general log of incident. Serve as an EOC call taker. Organize relocation of computers to alternate EOC if needed.

2. <u>Public Information</u> – <u>Mayor; SOLE SOURCE of information to media and general public;</u> Town Manager or their designee is responsible for disseminating information to media and general public. Backed up by Mayor Pro Tem and available Council Members. Administrative support provided by Administrative Specialist.

- 3. <u>Liaisons</u> Town Council members stay in contact with and act as liaison with outside groups
  - a. Dare County Control Group Executive Leaders Mayor; backed up by Mayor Pro Tem and Town Council members. Coordinate with outside agencies, Dare County EOC, other municipalities, state, etc., coordinates their needs in our jurisdiction; determine what they can do to assist us.
  - b. Civic and Homeowner Associations & Outside Groups Appointed Council Member; backed up by other Council Members. Examples: SSCA, SSBC, CPOA, DWCC, Dare County Tourist-Board, Gov't Channel, etc.

- 4. <u>Damage Assessment</u> Town Planner/Code Enforcement Officer. Supervise resource arrangements a damage assessment. Provides Incident Command with information on all damage; reports damage t Item 2. and other appropriate authorities.
  - a. **Streets, Roads and Bridges** Town Engineer assess structural safety of roads, bridges and public buildings, monitor for sanitation problems.
  - b. Residential and Commercial Damage Town Planner/Code Enforcement Officer and Fire Inspector; canvas Town for damage to residential and commercial structures/property and utility systems.
  - c. **Restoration Permits** -Permit Officer; provides administrative support to damage assessment teams. Develops mapping and other information tools/materials for use by Damage Assessment, Public Information and Incident Command.
  - d. Administrative Support Administrative Specialist; provides administrative support to entire damage assessment team. Supervised by Damage Assessment Officer.
- 5. <u>Law Enforcement</u> Police Chief; Supervise law enforcement, traffic control and re-entry. Protect community from looting, assist public, and assist in search and rescue.
- 6. <u>Fire Suppression and General Public Safety</u> Fire Chief; Supervise alerting and evacuation of public. Supervise fire suppression and search and rescue. Liaison with emergency medical services. After emergency assist in street clearing for emergency vehicle access. <u>Coordinates for the provision of available lodging and food resources to authorized EOC personnel as needed.</u>
- 7. <u>Ham Radio Operations</u> Coordinator of ham radios will be coordinated at EOC and organization of Southern Shores Ham radio operators during emergency, check equipment and recommend improvements.
- 8. <u>Finance</u> Finance Officer Collects, maintains and reports on financial transactions, including possible reimbursable expenses. Advises Incident Command on financial resources available; manages banking and treasury functions; Reviews insurance and FEMA rules for possible reimbursement.
- <u>Vital Records</u> Town Clerk; Protects vital Town records both paper and digital media and contracts. Protects office equipment. Manages meeting arrangements of Town Council and keeps public records. Maintains public records and provides copies as needed. Maintains general historical record of incident.
- <u>Public Facilities</u> Public Works Director; Secures municipal facilities pre-storm and post-storm; Works with Damage Assessment Team Leader in assessing public facilities post-storm. Re-opens public facilities and supplies equipment for post-storm activities. Provide support with emphasis on clearing streets and restoring damaged municipal facilities. Maintenance Workers provide backup and support.
- 11. <u>Logistics</u> Coordinates for the provision of available lodging, food and other resources for authorized EOC personnel as needed.



#### EMERGENCY MANAGEMENT PLAN SCOPE OF OPERATIONS

Item 2.

#### Introduction

The primary purpose of the Emergency Management Plan for the Town of Southern Shores, in any emergency, is to prepare for those first hours immediately after the emergency when the Town must largely care for itself until we re-connect to the outside world.

#### Specific Goals

- 1. Preserve law and order.
- 2. Provide fire response.
- 3. Locate and rescue those in danger.
- 4. Provide first aid to those in dire need.
- 5. Evaluate and preserve structural safety immediately after the emergency.
- 6. Document carefully, and in required ways, to obtain state and federal funds.

#### CRITICAL ASSUMPTIONS FOR THE TOWN OF SOUTHERN SHORES

- 1. All residents will not evacuate despite warnings.
- 2. Roads will be impassable. Power and phone service will be down, eliminating contact with and assistance from outside of Southern Shores for 24 to 72 hours, (perhaps longer) after the storm. Water may be turned off.
- 3. Immediate "pre" and "post" emergency management will likely have to come from within the town boundaries, or immediately contiguous to those boundaries.
- 4. All requests for assistance from within the town, whether emergency, urgent, or necessary in priority, will in all likelihood be responded to by available resources within the town. These requests could entail need for law enforcement, fire suppression, rescue, medical assistance, and help with structural repair, etc.
- 5. Routine provisions, like shelter, food, water, sanitary necessities, and minor first aid care and supplies will become a town concern.
- 6. Small staff will be over taxed and some staff and council members will be unavailable.
- Because of small staff and elected officials who may be out of town during a major storm, few people will have to do the job of many and may have to be augmented by additional volunteers.
   Summary

#### We must plan our activities well in advance of the emergency, and implement all actions necessary to carry out the plan as soon as possible. This Scope of Operations serves as a checklist to assist those who are charged with hands-on provision of services during extraordinary times.

The Scope of Operations addresses everything from securing Town Buildings to preparing an emergency package of vital records to take away from Town Hall so that, in the event Town Hall is demolished, operations can be set up elsewhere on a minimal basis.

Telephone directory has been compiled for critical contact to be made during the emergency; a rally point may be designated for critical staff who may have evacuated prior to the storm for their return to assist after the storm.

Agreements have been made with providers for critical supplies (if needed). Arrangements for certain heavy equipment may be made for movement into Town after an event. Diesel fuel and gasoline supplies and pumping capability have been arranged. Agreements with different vendors have been made to have access to their businesses and services.

The EOC has necessary equipment and food to provide shelter for our emergency team. The Code Enforcement Department will head up damage assessment, and start the mitigation plan after the storm has passed.

We will hold a plan review at least once annually and follow-up evaluations will take place after any storm generating significant damage.

#### SCOPE OF OPERATIONS - HURRICANE

<u>Scenario</u>: Under ideal circumstances, tracking begins days before landfall of a major storm in Southern Shores. Landfall meaning the arrival of winds at speeds of 34 knots, or 40 miles per hour or more. The National Hurricane center will attempt to issue evacuation recommendations 72 hours prior to landfall.

#### ACTIVE RESPONSE BEGINS AT:

48-72 hours to landfall (OR when the county EMC EOC is operational).

- Southern Shores Emergency Management Team meets to review activity schedules. (See EM Team and organization chart)
- Town Personnel field-test radios, flashlights, generators, and distribute first aid kits.
- Town passes logged and distributed. Ensure Essential personnel have Dare County Priority 1 pass.
- Supply resources alerted; agreements <u>may</u> be activated.
- Town Planner/Code Enforcement Officer canvasses town for unsecured construction debris.
- Mayor contacts council members.
- Make preparations to control traffic to allow only residents and property owners onto Southern Shores' streets.
- Conduct evacuation when Dare County orders.

#### 24 hours to landfall.

- Town EOC is activated.
- Mayor notifies county EMC EOC that town is on standby has activated its EOP.
- Resource suppliers are contacted to verify access to supplies and equipment.
- All vehicle gas tanks are topped off.
- Prepare emergency data pack to take from office to out of area. Increase cash on hand.
- Prepare town offices internally.
- Activate control of Town web site at contingent staging location-if needed.
- Council watch schedule established.
- Review status of staging area, contracted services, and goods.

• Activate call sheet and track whereabouts and plans of council and town staff. Remind them of out rally points if personal plans are to evacuate.

#### 12 hours to landfall and landfall.

- Evaluate need to issue proclamations for Municipal State of Emergency.
- Warning to visitors and residents to seek safe shelter.

#### \*\*\*LANDFALL\*\*\*

#### 2 to 4 hours AFTER landfall.

- The Team meets at EOC
- Critical staff assembles at EOC.
- Activate damage assessment team; conduct initial survey, and develop review plan.
- Submit initial situation/damage report to county.
- Fire and police (as possible) and contractors begin immediate street clearing and search and rescue operations.
- Fire and Public Works begin clearing streets for emergency travel.
- Engineer to inspect bridges.
- Staff compiles tracking reports for missing persons, damage expenditure and other pertinent record keeping.
- Initiate public information program. Re-evaluate need for proclamations for municipal State of Emergency.

#### 4 to 6 hours after landfall.

- The Team meets communicates every 2 hours as necessary to evaluate damage, make assignments, and adjust decisions.
- Continue damage assessment field work, prepare reports.
- Evaluate sanitation, safety situation needs.
- Assess critical supplies: grocery, pharmacy, hardware, etc.
- Activate debris location. Debris to be picked up according to sectors already established

#### 6 to 8 hours after landfall.

• Activate mitigation ordinance.

Item 2.

#### **KEY LOCATIONS**

Emergency Operations Center (EOC) Town Hall Complex Southern Shores Fire Station

Functional Staging Areas (FSA) to be determined by IC

Rally Points (for critical staff and council) To be determined by County

Debris Sites Duck Woods County Club

Holding Area (for donated goods) Marketplace

#### TOWN OF SOUTHERN SHORES EMERGENCY COMMUNICATION

EMC and Essential Personnel:

800 MHz radios (base and portable) Ham radios Cell phones PIO/ JIC (Joint Information Center) E Newsletter Social Media TOSS Website Item 2.



## 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, September 07, 2021 at 5:30 PM

# MINUTES

- 1 Call Meeting to Order
- 2 Pledge of Allegiance
- 3 Moment of Silence
- 4 Present
- 5 Mayor pro tem Elizabeth Morey
- 6 Council Member Jim Conners
- 7 Council Member Leo Holland
- 8 Council Member Matt Neal
- 9

#### 10 Absent

- 11 Mayor Tom Bennett
- 12

18

#### 13 Amendments to / Approval of Agenda

- 14 Town Manager Ogburn requested Council remove and table Resolution 2021-09-02 *Resolution*
- 15 Opposing US Fish and Wildlife Service's Proposed Designation of Critical Habitat for the Rufa Red Knot
- 16 from the consent agenda.

#### 17 Consent Agenda

- 1. Minutes- May 4, 2021 & August 3, 2021
- Consideration of Resolution opposing US Fish & Wildlife Service's proposed designation of
   critical habitat for the Rufa Red Knot
- Resolution 2021-09-03 Awarding Badge and Service Weapon -Police Sergeant George M.
   Farrow. NCGS 20-187.2
- 23 **Motion** made by Council Member Holland to remove item #2 from the consent agenda (Resolution
- Rufa Red Knot) and approve items #1 and #3 on the consent agenda, Seconded by Council Member
- 25 Conners. Motion passed unanimously (4-0).
- Voting Yea: Mayor pro tem Morey, Council Member Conners, Council Member Holland, CouncilMember Neal
- 28 Council approved the agenda as amended by **Consensus.**
- 29

#### 30 Presentations

- 31 4. Service Award- 20 Years of Service, Deputy Chief Jonathan Slegel
- 32 Police Chief David Kole recognized Deputy Chief Slegel for his 20 years of service.

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#### 34 Staff Reports

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- 35 Deputy Town Manager/Planning Director Wes Haskett presented his department's monthly report
- 36 for August. He announced the Southern Shores Planning Board will hold a Special Meeting on September
- 3714, 2021 at 5:30 p.m. in the Pitts Center. The purpose of the special meeting is for the board to participate
- in an online UNC School of Government legislative zoning decisions workshop. The Planning Board will hold
   a regular meeting on September 20<sup>th</sup> at 5:00 p.m.
- 40 Police Chief David Kole presented his department's monthly report for August.
- 41 Fire Chief Limbacher presented his department's monthly report for August.
- 42 Town Manager Ogburn provided a summary of the following operational highlights:
- Beach Nourishment Update- On September 2, 2021 Dare County received 3 bids 43 44 from dredge contractors in response to its solicitation for bids for the Town of Duck, Town of Southern Shores, Town of Kitty Hawk, and the Town of Kill Devil 45 46 Hills beach nourishment projects. Weeks Marine, Inc. submitted the low bid 47 based on the Base Bid and the Additive Bid, which totaled \$27,932,500 for all four 48 projects. There are still several steps to take with obtaining permits. The town 49 rate is in line with this budget. Town Manager Ogburn will be seeking easements 50 for 12 parcels in the Town of Duck included in the northern tapper once he presents the easements to Council for approval. 51
  - Traffic-Town Manager Ogburn recommends citizens send letters or emails to Congressman Greg Murphy in hopes of getting more attention to the Mid-Currituck Bridge. Summer traffic numbers do seem to show that the no left turn barricades had some merit. He also recommended meeting with the Town of Duck in the near future.
- Tax Bills-Town Manager Ogburn provided a detailed explanation of how beach
   nourishment will be displayed on a resident's tax bill. Beach nourishment is taxed
   on real estate and vehicle tax.
  - The electric vehicle charger which was installed August 19<sup>th</sup> and has been used five times so far.
  - The October meeting should include the SEPI plan with possible construction costs. He would also like to discuss Police salaries; salaries have fallen behind and it has had an impact. Even though a study was done and implemented, a year later police salaries are about \$4,000 behind the starting salary of other jurisdictions.
  - Town Manager Ogburn requested Council consider moving the Wednesday, November 3, 2021 Council meeting to the following Tuesday, November 9th at 5:30 PM. The manager and two Council Members will be attendees at the NCBIWA conference which conflicts with the original council meeting date.
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- 72 Motion made by Council Member Conners to reschedule the November 3, 2021 regular Council
- meeting for Tuesday, November 9, 2021 at 5:30 PM, Seconded by Council Member Neal. The motion
   passed unanimously (4-0).

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

76 Member Neal

77

#### 78 General Public Comment (Limit: 3 minutes per speaker.)

Public Comment-Ed Kuszmar-174 Duck Rd-would like Council to consider installing a sidewalk along the
 east side of NC12 in front of his property, it is a safety issue.

81 Public Comment-Vince Ferretti-296 Wax Myrtle Trail-commends Council for transparency of the beach

82 nourishment taxes but does see a problem with vehicles being taxed for beach nourishment. Vehicles

83 do not go up in value like property does, vehicles depreciate. NCGS needs to be changed when it

- comes to beach nourishment and should not apply to vehicles.
- Public Comment-Andy Ward- 147 Bayberry Trail- The Planning Board will be taking up the temporary
   sign ordinance. He encouraged election candidates to follow the temporary sign rules.
- 87
- 88 Old Business
- 89 None
- 90

#### 91 New Business

- 92 5. <u>Public Hearing- SPA-21-01, a Site Plan Amendment application submitted by Aston Properties to</u>
   93 amend the site plan for the Marketplace Shopping Center
- 94 Town Attorney Gallop opened the public hearing.

Deputy Town Manager/Planning Director Wes Haskett presented the staff report, which read 95 96 as, the applicant seeks an amendment to the site plan for the Marketplace shopping center by 97 demolishing a portion of one building and construction of a new 24,000 sq. ft. Marshalls, a new 6,000 sq. ft. retail space for a business to be determined, and parking lot modifications. The 98 proposed parking lot modifications include the use of permeable pavers in order to be eligible for 99 100 a maximum lot coverage of 67% instead of 60%. Currently, the proposed lot coverage is 67.1%. As of September 1, 2021, we have not received enough documentation to determine the 101 102 permeability of the proposed pavers which could affect the square footage of permeable pavers 103 required.

104

105The proposed signage for Marshalls includes three wall signs, one under canopy sign, and one106name plate on the freestanding sign which are in compliance with the Town's sign requirements.107There are 150 proposed parking spaces with 102 of them being permeable and a total of 613108parking spaces for the site which are in compliance with the Town's parking requirements. A109lighting plan and required documentation have also been provided that demonstrate compliance110with the Town's outdoor lighting requirements.

111 The Land Use Plan identifies this area as Commercial in the C, General Commercial zoning district 112 which is consistent with the improvements proposed in the application. All applicable regulations 113 of the Town Zoning Ordinance and all of Town Staff's concerns that are applicable to this 114 application have been identified or are addressed in the recommended conditions. Town Staff 115 recommends conditional approval of the application and the Town Planning Board unanimously

- (5-0) recommended conditional approval of the application at the August 16, 2021 Planning Board 116
- 117 meeting. Both recommend the following conditions:

- 1. The following approvals shall be issued prior to submittal of a Building Permit application: 119 120 a. Soil Erosion Sedimentation Control Plan Permit for land disturbance over 1 acre as 121 issued by the NCDEQ;
- b. Stormwater Management Permit as issued by the NCDEQ; 122
- 123 c. Wastewater approval by the Dare County Health Dept. (tentative approval received 124 from the Dare County Health Dept. and the N.C. Dept. of Health and Human Services).
- d. Review and approval of potable water distribution system modifications or 125 126
  - extensions by the Dare County Water Dept. (tentative approval received).
- 127 2. Lot coverage shall be reduced to not exceed 67% prior to submittal of a Building Permit 128 application.
- 129 3. Documentation showing the proposed permeable paver product and its permeability shall be submitted prior to submittal of a Building Permit application. 130
- 131 4. The applicant must strictly abide by all requirements of the Town Code and must also 132 strictly comply with all other applicable local, State, and Federal requirements.
- 5. Prior to issuance of a Building Permit, the Town Engineer and the applicant's representative 133
- 134 shall evaluate the existing stormwater system for glaring deficiencies and address them. 135
- Councilman Neal asked how "glaring conditions" are determined in condition #5. Town Engineer 136 Joe Anlauf stated condition number 5 is to basically make sure there is no failure. 137
- 138 Councilman Conners asked the Town Engineer what he thought the state would say about the 139 storm water system being built so many years ago. Mr. Anlauf stated it would probably be eligible 140 for an exemption and that the storm water system appears to be in good shape and most likely there will be no need for drastic re-work. 141
- Councilman Holland asked Karen Partee from Aston Properties how flexible Marshalls was about 142 the trees in the front? Ms. Partee stated Marshalls was not flexible in that area at all. There is no 143 144 visibility to the stores.
- Town Attorney Gallop called for comment and the following citizens provided comment: 145
- Public Comment-Brian Hedrick-17 Palmetto Dr-concerned with the noise and construction 146 147 debris. Was hoping for better noise abatement than a fence. Concerned with dumpsters being 148 serviced so early in the morning.
- 149 Public Comment-Ann Sjoerdsma-232 N Dogwood Trl-The Planning Board was very thorough, 150 and she is hesitant to say anything. Not consistent with the Land Use Plan Vision Statement of 2008; community served by small commercial district. Opposed to the removal of the grove in 151 the parking lot, 6000 square foot store with no tenant, the land use goals and policies of 2008 152 stated no big box retailers. 153
- Public Comment-Karen Partee, Aston Properties-we will abide by all requirements and 154 construction requirements. She will talk to the property manager about the servicing of the 155 156 dumpsters in the early morning. Marshalls is a Jr. box, not a big box store. This will be an 157 opportunity to revitalize the Marketplace Shopping Center, a turning point. The tree removal is not a parking space issue, it is a visibility issue. Tenants need to be visible, and signage 158

- needs to be visible. CVS's lease is coming up for renewal and Aston properties is hoping to 159 160 keep them as a tenant. Would hope the Council will join in helping revitalize the commercial 161 community.
- Public Comment-Lilias Morrison-43 Fairway Drive- remember that the Daniels Department 162 Store used to be in the Marketplace. She remembers it being larger than the 163
- proposed Marshalls. There was also a Cinema and two upscale restaurants, and a dress shop. 164 There was not enough business to keep the restaurants going. The impact of Marshalls will be 165 beneficial. She hates to see the trees go but understands the visibility. The Town will be better 166 167 once again.
- 168 Public Comment-Patricia (Trisha) Farinholt, 69 Ocean Blvd.-you cannot see all the stores in Duck, yet they are busy. Council has the ability to change the terms. 169
- 170
- Hearing no other comments, Town Attorney Gallop closed the public hearing and called on Council 171 for their consideration. 172
- 173 Councilman Conners stated the big box store comment was interesting, as Food Lion is that large.
- 174 The trees that are being removed are sweetgums and pines and will be replaced with other trees
- in other areas. There is essentially no "local" business in the Marketplace now, as it is made up of a 175 Starbucks, Jersey Mikes, Verizon, CVS, Dollar Store and Food Lion. He stated he is in favor of 176 approving the site plan with the proposed Planning Board conditions. 177
- 178 Councilman Neal asked Planning Director Haskett if Council had any jurisdiction on the building 179 itself, esthetics. Mr. Haskett stated the Town did not. Councilman Neal stated he had no questions.
- Councilman Holland stated he likes his trees but understands that Marshalls is not flexible in that 180 181 area. We need a viable commercial area. The Marketplace is on life support, and we do not want it to look like the current empty Kmart. 182
- Mayor pro tem Morey thanked Lilias Morrison for the reminder of previous establishments in the 183 Marketplace. The Marketplace has really struggled and in general we are getting something the 184 185 Town needs.
- 186 Motion made by Council Member Conners to approve SPA-21-01 as submitted with conditions 1-5 187 as recommended by the Planning Board, Seconded by Council Member Holland. The motion 188 passed unanimously (4-0).
- Voting Yea: Mayor pro tem Morey, Council Member Conners, Council Member Holland, Council 189 190 Member Neal
- 191
- 192 Mayor pro tem Morey called for a short recess at 6:54 p.m. Council reconvened at 7:03 p.m.
- 193
- 194 6. Financial Advisory Agreement and Budget Amendment #11
- Town Manager Ogburn addressed agenda items #6 and #7 simultaneously. 195
- 196 The Financial Advisory Agreement details the services provided by DEC Associates, INC for financial 197
  - closing of the Town's Beach Nourishment/Shoreline Protection project. Prior to this agreement,

- 198 the Town previously contracted with DEC Associates for planning purposes. The amount of the 199 financial agreement is \$30,000 plus an additional \$2500 for incidentals.
- Town Manager Ogburn stated budget amendment #11 covers the financial agreement plus
   incidentals, and an additional \$12,500 for Local Government Commission Fees, for a total of
   \$45,000.
- Motion made by Mayor pro tem Morey to approve the Financial Advisory Agreement with DEC
   Associates, Seconded by Council Member Conners. The motion passed unanimously (4-0).
- Voting Yea: Mayor pro tem Morey, Council Member Conners, Council Member Holland, CouncilMember Neal
- Motion made by Council Member Holland to approve the associated budget amendment #11,
   Seconded by Councilman Conners. The motion passed unanimously (4-0).
- Voting Yea: Mayor pro tem Morey, Council Member Conners, Council Member Holland, CouncilMember Neal
- 211
- Southern Shores Beach Nourishment Projects Initial Resolution #2021-09-01 Directing the
   Application to the Local Government Commission for Approval of a Special Obligation Bond;
   Requesting Local Government Commission Approval of The Town's Special Obligation Bond; and
   certain related matters
- State law G.S. 120 157.1 157.4 adopted and effective on June 24, 2011 requires that certain capital projects to be financed with debt in an amount exceeding \$1,000,000 be reported to the Joint Legislative Committee on Local Government and to the Fiscal Research Division of the North Carolina General Assembly.
- Resolution 2021-09-01 required a "findings" resolution directing the application for 2021 Special
   Obligation Bonds to the Local Government Commission for approval.
- Motion made by Council Member Conners to approve Resolution 2021-09-01, Seconded by Mayor
   pro tem Morey. The motion passed unanimously (4-0).
- Voting Yea: Mayor pro tem Morey, Council Member Conners, Council Member Holland, CouncilMember Neal
- 226

#### 227 8. <u>Consideration of Dare County Tourism Impact Grant</u>

Town Manager Ogburn provided a summary which stated staff is requesting authorization to apply 228 229 to the Dare County Tourism Board for a Tourism Impact Grant. The grant request would be for 230 funding to secure traffic data that will be instrumental in helping the Town better evaluate and 231 understand the impacts that tourism related traffic generates. Further funding may be requested 232 to purchase equipment used to mitigate the impacts of tourism generated traffic. The town has 233 contracted in previous summers to place signage and barricades along US 158 at South Dogwood to prohibit left hand turns on to South Dogwood. The grant request would be in an amount not to 234 235 exceed \$50,000 and requires no match. The information collected is likely useful on a county wide 236 level.

- Companies such as Streelight Data, collect location records from smart phones and navigation
   devices in connected cars and trucks. Data is derived from navigation-GPS data and Location Based Services (LBS) data. Adding context from numerous other sources like parcel data and
   digital road network data, they can develop a view into traffic patterns in Southern Shores as well
   as all of Dare County.
- This data can help to better understand where the traffic that cuts through the residential streets of Southern Shores originates from including from within the county or out. We can determine the volume of traffic that uses Southern Shores as a cut through by either turning off US 158 or NC
- 12, and where it exits the residential streets including the turning movements in general. This
   information would be on a platform that we can access and analyze data to see the routes taken
- to and through the Town.
- 248 Mayor pro tem Morey stated perhaps this will provide some resources to deal with the impact of 249 tourism.
- 250 Councilman Holland stated the traffic counts numbers have been shared with the Tourism Board.
- Motion made by Council Member Neal to authorize the Town Manager to apply for a DCTB
   Tourism Impact Grant, Seconded by Council Member Holland. The motion passed unanimously (4 0).
- Voting Yea: Mayor pro tem Morey, Council Member Conners, Council Member Holland, Council
   Member Neal
- 256
- 257 9. <u>Consideration of FEMA Building Resilient Infrastructure and Communities (BRIC) Grant and Budget</u>
   258 <u>Amendment</u>

The Building Resilient Infrastructure and Communities (BRIC) Program, is funded by FEMA and
administered through a partnership with the North Carolina Division of Emergency Management
(NCEM). NCEM has the authority and responsibility for developing and maintaining a State
Standard Hazard Mitigation Plan, reviewing the Building Resilient Infrastructure and Communities
Program sub-applications, recommending technically feasible and cost-effective sub-applications
to FEMA and providing pass-thru funding for FEMA-approved and awarded project grants to
eligible sub-applicants. Letters of Interest are due no later than October 1, 2021 at 5:00 pm.

266

The proposed project areas are included in the NC 12 Drainage Study completed by VHB 267 Engineering in cooperation with the Town of Duck, and NCDOT, to address potential solutions to 268 269 flooding throughout the roadway corridor. Staff submitted a Letter of Interest for funding in 2020 270 for the identified solution at the Sea Oats project and was invited to submit a full application for 271 FEMA's consideration. However, staff was unable to pull together the required documentation 272 and meet the pre-application planning requirements in time to submit a full application. Attached 273 is a contract provided by VHB Engineering NC, P.C. for grant application assistance to better 274 position the town to submit a full and competitive application. The application will require predesign level of refinement of the initial concepts included in the 2006 report in order to develop 275 276 construction cost estimates, address potential right-of-way impacts, address grading and drainage 277 issues, and confirm environmental compliance and permitting requirements. However, the 278 preliminary engineering, final design, construction documents, environmental compliance

- documents and permitting of the drainage projects will be accomplished under a separate contractpending the actual grant award.
- 281

The NC12 corridor in Southern Shores has inadequate drainage or stormwater infrastructure in 282 283 place to provide conveyance of roadway drainage to adequate receiving systems. Instead, the 284 sandy soils within the corridor provide for infiltration of stormwater runoff from the roadway and 285 contributing runoff from public side streets. The roadway floods frequently from storm events of various intensities due to the lack of drainage infrastructure and periods of saturated soils. This 286 situation caused extensive flooding in the lowest areas along the corridor, negatively impacting 287 288 residents, tourists, and emergency personnel. Although an extreme, this was indicative of substandard drainage conditions, and helped reinforce the need for improvements along NC12, 289 290 thereby leading to this request.

- 291 Councilman Neal asked the Town Manager if American Rescue Plan Act Funds (ARP) could be used 292 towards the grant. Town Manager Ogburn stated it could not.
- 293 Mayor pro tem Morey inquired if there was a state fund for BRIC. Town Manager Ogburn replied 294 yes.
- Motion made by Council Member Neal to approve the Budget Amendment #12 and authorize the
   Town Manager to sign the grant application contract with VHB Engineering NC, Seconded by
   Mayor pro tem Morey. The motion passed unanimously (4-0).
- Voting Yea: Mayor pro tem Morey, Council Member Conners, Council Member Holland, CouncilMember Neal
- 300
- 301 General Public Comment

302 None

303

#### 304 Council Business

Councilman Holland provided the monthly Tourism Board report. Occupancy for the month of June
was up 24%, 103% year to date. Meals were up 37%, 88% year to date.

307 Councilman Neal thanked Police Sergeant George Farrow for his 25 plus years of service and asked

308 Chief Kole if Sgt. Farrow would be in attendance before his official retirement, so that Council could

- 309 formally thank him and wish him well in his retirement. Police Chief David Kole stated Sergeant Farrow
- 310 will be in attendance at a future meeting.
- 311 Councilman Conners provided an update on the Monarch Flyway, stating planting will start in late
- 312 October. He also stated the Government Access Committee will be meeting soon for their regular
- 313 meeting and the Room at the Inn homeless shelter program recently provided mental health training
- and resources.
- 315 Mayor pro tem Morey thanked the residents for attending and asked everyone to please remain
- 316 vigilant with virus mitigation efforts.
- 317
- 318 Adjourn

- Hearing no further business, **Motion** made by Council Member Holland to adjourn the meeting at 7:36
- p.m., Seconded by Council Member Conners. The motion passed unanimously.
- Voting Yea: Mayor pro tem Morey, Council Member Conners, Council Member Holland, Council
- 322 Member Neal
- 323





## TOWN OF SOUTHERN SHORES TOWN COUNCIL WORKSHOP 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, August 17, 2021 at 9:00 AM

# MINUTES

#### 1 Call to Order

- 2 Pledge of Allegiance
- 3 Moment of Silence
- 4 PRESENT
- 5 Mayor pro tem Elizabeth Morey
- 6 Council Member Jim Conners
- 7 Council Member Leo Holland
- 8 Council Member Matt Neal
- 9 Mayor Tom Bennett
- 10

#### 11 Amendments to / Approval of Agenda

- 12 Motion made by Council Member Holland to approve the agenda as presented, Seconded by Council
- 13 Member Conners. The motion passed unanimously (5-0).
- 14 Voting Yea: Mayor pro tem Morey, Council Member Conners, Council Member Holland, Council
- 15 Member Neal, Mayor Bennett
- 1617 General Public Comment
- 18 None
- 19 Business Items
  - 1. Pavement Conditions Study & Capital Improvement Plan-SEPI
- 20 21

Anthony Roper with SEPI provided Council with a PowerPoint presentation (Exhibit A) and executive
 summary/report (Exhibit B) which read as, 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.

- 27
- 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).
- 32

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

35 or failed.

37 Consequently, most of the Town's Street system falls into the average category and is well suited for 38 overlays and mill and fill operations with limited structural deficiencies that will require reconstruction. 39 To accomplish the goals of improving the overall condition of Town roads, SEPI recommends a mix of 40 rehabilitation and preventative maintenance activities. SEPI has developed 2 Capital Improvement Plan 41 42 (CIP) Options for 2 budgetary levels. 43 44 Option 1 and 2 over a 10-year CIP plan Option 1 = \$675,000 45 Option 1 (\$675K) includes work on 38 miles of road and improves the system from approximately 27% 46 Good/Excellent to 53% Good/Excellent. This improvement mostly comes from the conversion of fair 47 48 roads to good. Some fair fall into Poor (20%) with this option at the end of the plan due to a funding 49 shortfall. 50 Option 2 = \$1,000,000 51 Option 2 includes work on 57 miles of road and improves the system to 99% Good/Excellent. A similar 52 53 approach as Option 1 is utilized but the increased budget allows for more extensive rehabilitation and 54 a resulting higher performance. 55 56 Councilman Neal said under option one, the year 2032 pavement conditions map tells a whole story. 57 He asked Mr. Roper if SEPI could prepare a similar graphic if we were to proceed along our current 58 path; half mile a year, 10-million-dollar expenditure over ten years. How much of the roads would 59 deteriorate? 60 Anthony Roper stated he would work with the Town Manager to work that request out. 61 62 63 Mayor pro tem Morey asked Mr. Roper if he felt the cost estimates were realistic. Mr. Roper stated 64 costs plus inflation came from Southern Shores current projects and DOT projects. 65 Mayor pro tem Morey asked about the bidding process, lump sum, or unit price? Mr. Roper stated unit 66 pricing is more of the standard and more effective. 67 68 69 Councilman Holland inquired about having an inspector on the projects. Mr. Roper stated it was important to have an inspector for all the projects, independently contracted. 70 71 72 **PUBLIC COMMENT** 73 Mark Martin- great presentation. Some of the heavier traveled roads will need to be addressed sooner. 74 75 Anthony Roper stated option 2 will address all the roads within the next 10 years. 76 77 Mayor Bennett called for a 10-minute recess 78 Council reconvened at 10:43 a.m. 79 80 Town Manager Ogburn stated Council could decide to move forward with the budgeted street project 81 for this year (Hillcrest Dr.) or start the SEPI process as laid out. He felt it was important to hear form 82 the Town Engineer.

- Item 3.
- Town Engineer Joe Anlauf stated he did not want to bias any decision Council goes with; Council does not need to continue with the old process of doing road projects. Technology is better today, so estimating jobs can be better. The process of an inspector would need to be added to the plan. The Town is at a crossroads, either jump in or continue with the traditional way. It will take about 5-7 years to see the true benefit of the SEPI plan. He stated his opinion is to try the SEPI recommendation. The plan carries the dollars further, so Council should try it.
- Anthony Roper, SEPI, reiterated that this is a maintenance plan, a plan that was asked for. This is not a
  rebuild/ reconstruction plan. It covers the edge of the pavement to the edge of the pavement, asphalt
  only.
- Councilman Conners stated Mr. Roper has given us a master plan, how do we implement it?
- Town Engineer Anlauf stated if Council wants to address more than just the asphalt pavement, a hybrid
  plan would need to be created. There would be a maintenance and construction part of the plan.
- 100 Councilman Neal stated the SEPI plan was patching the first one to two years.
- Town Manager Ogburn stated Council could do year one of the maintenance, work with the TownEngineer for any additional planning as needed.
- Councilman Neal requested a graphic/chart showing the amount of eight hundred thousand as an
   option and the ratio of good and fair roads in 2032. Then contribute another 200 thousand for
   engineered storm water planning. That seems like a good trade off.
- 108
- Town Manager Ogburn stated he would need to get a construction number from the Town Engineer to
  supply SEPI the costs to create a new funding scenario for consideration. It could it be 200 or 300
  hundred thousand in construction costs a year. That would then have to be taken off the million-dollar
  number, leaving approximately 700-800 thousand for maintenance. He can work with the town
  engineer to get some costs, look at the areas that will need additional engineering and with SEPI's plan
- as the basis, bring that hybrid plan back to Council.
- 115

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- 116 Mayor pro tem Morey stated if you were going to touch a road, you need to address the width for 117 safety and stormwater.
- 118
- 119 Councilman Conners agreed with Mayor pro tem Morey's statement.
- 120
- 121 Adjourn
- 122 Hearing no further business, Mayor Bennett called for a motion to adjourn.
- 123 **MOTION:** Councilman Holland moved to adjourn the meeting at 11:19 a.m., Seconded by Councilman
- 124 Conners. The motion passed unanimously (5-0).
- 125 Voting Yea: Mayor pro tem Morey, Council Member Conners, Council Member Holland, Council
- 126 Member Neal, Mayor Bennett
- 127
- 128

- 129 The attached documents are incorporated herewith and are hereby made a part of these
- 130 *minutes.*
- 131
- 132



## **TOWN OF SOUTHERN SHORES** TOWN COUNCIL WORKSHOP 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, May 18, 2021 at 9:00 AM

# **MINUTES**

| 1              | Cal | l to Order  |
|----------------|-----|---|
| 2<br>3         |     | Pledge of Allegiance<br>Moment of Silence   |
| 4              | Am  | endments to / Approval of Agenda  |
| 5              | Ge  | neral Public Comment (Limit: 3 minutes per speaker.)  |
| 6<br>7         |     | Public Comment-Paul Borzellino-understands MSD requirement, although the overlay is a bit confusing. Thanked Council for all their effort with the beach nourishment project. |
| 8<br>9         |     | Public Comment-Kenneth Rogers & Dianne Pitts (email)-oppose Town Manager's proposed MSD tax rate.   |
| 10             |     | Public Comment- Van and Karen Price (email) oppose MSD and method to pay for project.   |
| 11             |     |   |
| 12             | Bus | siness Items  |
| 13<br>14       | 1.  | Presentation-College of the Albemarle New Facility & Program Update-President Jack Bagwell &<br>Tim Sweeney   |
| 15<br>16       |     | Dare County Dean Tim Sweeney presented a new campus update and course offerings of College of the Albemarle   |
| 17             |     | [PowerPoint attached]   |
| 18             |     |   |
| 19<br>20<br>21 | 2.  | <b>Beach Nourishment Project Design Update-Ken Willson</b><br>Ken Willson CPE-NC presented a beach nourishment project design update.<br>[PowerPoint presentation attached]   |
| 22             |     | Highlights from Ken Willson's beach nourishment project update included:  |
| 23             |     | Project Goals   |
| 24             |     | 1. Provides a reasonable level of storm damage reduction to public and private development  |
| 25<br>26       |     | 2.Mitigates long-term erosion that could threaten public and private development, recreational opportunities, and biological resources  |
| 27<br>28       |     | 3.Maintains a healthy beach that provides sufficient useable beach and supports valuable shorebird and sea turtle nesting habitat   |

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- 32 Storm Damage Reduction
  - Evaluate storm vulnerability along project area
- 34 •SBEACH model
- •2018 Vulnerability Analysis –Used to develop the Beach Fill Options in the Beach
   Management Plan
- •2020-2021 Design Study –Looked at higher resolution of wave data for Southern Shores
- •Running the SBEACH Model with the new wave data and 2020 conditions –Indicates greater
   vulnerability than the initial analysis
- 40 •Evaluated a variety of berm widths:
  - 20-foot berm
  - 35-foot berm
    - •50-foot berm
  - •Evaluated a dune and "storm berm" to evaluate the sensitivity of the model setup to fill configuration.
- •Following initial screening, a 27-foot berm, which aligns with the design fill density proposed
  in the Beach Maintenance Plan, was also evaluated.

| Option       | Number of<br>Structures Impacted | Percent of Structures Impacted<br>Relative to No Action |
|--------------|----------------------------------|---|
| No Action    | 27                               | 100.0   |
| 20-foot Berm | 17                               | 63.0  |
| 27-foot Berm | 15                               | 55.6  |
| 35-foot Berm | 14                               | 51.9  |
| 50-foot Berm | 11                               | 40.7  |

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- 50 Mitigating Long-Term Erosion
  - •North Section –Average volume change rate of +6.1 cy/ft./yr. (Dec. 2017 to June 2020)
- •Central Section –Average volume change rate of -0.3 cy/ft./yr(Dec. 2017 to June 2020) and
   +2.7 cy/ft./yr(Oct. 2006 to June 2020)
- South Sections –Average volume change rate of -15.3 cy/ft./yr(Dec. 2017 to June 2020) and
   +0.3 cy/ft./yr(Oct. 2006 to June 2020) Note: Includes beach nourishment
- •Overall Average along Central and South Section was -5.2 cy/ft./yr, an increase from -3
   cy/ft./yrreported in 2019.

| PROFILE                               | Oct. 2006 to<br>June 2020<br>(CY/LF/YR) | Sep. 2013 to<br>June 2020<br>(CY/LF/YR) | Dec. 2017 to<br>June 2020<br>(CY/LF/YR) | May 2019 to<br>June 2020<br>(CY/LF/YR) |   |
|---------------------------------------|---|---|---|--|---|
| -197+12                               |   | 0.8                                     | 1.3                                     | -17.2                                  | ] |
| -187+14                               |   | -0.7                                    | 2.3                                     | 16.5                                   |   |
| -177+13                               |   | -0.8                                    | 2.3                                     | -21.8                                  |   |
| -170+56                               |   |   | 17.3                                    | 41.7                                   |   |
| -163+99                               |   |   | 2.1                                     | -11.7                                  |   |
| -157+41                               |   |   | 18.8                                    | 50.0                                   |   |
| -150+00                               | 2.9                                     |   | -1.2                                    | -8.4                                   |   |
| -140+00                               | 8.2                                     |   | 13.4                                    | 20.2                                   |   |
| -130+00                               | 2.3                                     |   | -10.1                                   | -56.2                                  |   |
| -120+00                               | 0.7                                     |   | -8.8                                    | -19.3                                  |   |
| -110+00                               | 2.4                                     |   | 4.1                                     | -1.1                                   |   |
| -100+00                               | 2.1                                     |   | 6.7                                     | -6.2                                   |   |
| -90+00                                | 0.9                                     |   | 1.8                                     | -9.9                                   |   |
| -80+00                                | 4.3                                     |   | 3.7                                     | 37.0                                   |   |
| -70+00                                | 0.6                                     |   | 0.5                                     | -4.5                                   |   |
| -60+00                                | 1.5                                     |   | -0.6                                    | -10.0                                  |   |
| -50+00                                | 3.7                                     |   | -13.2                                   | -16.8                                  |   |
| -40+00                                | 1.3                                     |   | -11.3                                   | 8.6                                    |   |
| -30+00                                | -1.8                                    |   | -18.8                                   | -35.6                                  | Г |
| -20+00                                | -2.7                                    |   | -20.8                                   | -8.3                                   |   |
| -10+00                                | 1.2                                     |   | -19.6                                   | 2.3                                    |   |
| 0+00                                  | - <b>0</b> .3                           |   | -8.2                                    | -14.1                                  |   |
| TOTAL AVERAGE                         | 1.7                                     | -0.2                                    | -1.7                                    | -2.9                                   |   |
| NORTHERN AREA<br>(-197+12 to -150+00) | N/A                                     | N/A                                     | 6.1                                     | 7.0                                    |   |
| CENTRAL AREA<br>(-150+00 to -50+00)   | 2.7                                     | N/A                                     | -0.3                                    | -6.8                                   |   |
| SOUTHERN AREA<br>(-50+00 to 0+00)     | 0.3                                     | N/A                                     | -15.3                                   | -10.6                                  | ] |

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Table 5 –2020 Beach Assessment Report

#### 60 Volume Change (Update -2021)

- •North Section –Average volume change rate of +5.4 cy/ft./yr. (Dec. 2017 to April 2021)
- •Central Section –Average volume change rate of -0.2 cy/ft./yr(Dec. 2017 to April 2021)
- •South Sections –Average volume change rate of -6.1 cy/ft./yr(Dec. 2017 to April 2021)
- •Overall Average along Central and South Section was -2.1 cy/ft./yr, a decrease from -5.2
   cy/ft./yr reported in 2020.
- 66
- 67 Maintain/Provide Sufficient Useable Beach

68 Table from Beach Management Plan Addendum A

| Beach Section  | Profile Stations   | Average Useable Beach<br>Width |
|--|--------------------|--------------------------------|
| Town of Southern Shores from 3rd<br>Avenue South to Southern Town Limit                | -150+00 to 0+00    | 84                             |
| 2017 Sand Placement Area (Skyline Road to Asheville Street)                            | -20+00 to 320+05   | 103                            |
| Northern Section of Southern Shores<br>from 5th Avenue North to Northern Town<br>Limit | -197+12 to -157+41 | 57                             |

#### 70

#### 71 Updated numbers based on June 2020 Data

| Beach Section   | Profile Stations   | Average Useable Beach<br>Width |
|---|--------------------|--------------------------------|
| Town of Southern Shores from 3rd<br>Avenue South to Southern Town Limit       | -150+00 to 0+00    | 69                             |
| Northern Section of Southern Shores<br>from 5th Avenue North to Northern Town | -197+12 to -157+41 | 69                             |
| Limit   |                    |                                |

#### 72 73

#### /5

#### 74 Updated numbers based on June 2021 Data

|                | Beach Section  | Profile Stations   | Average Useable Beach<br>Width   |
|----------------|--|--------------------|----------------------------------|
|                | Town of Southern Shores from 3rd<br>Avenue South to Southern Town Limit  | -150+00 to 0+00    | 68                               |
|                | Northern Section of Southern Shores<br>from 5th Avenue North to Northern Town  | -197+12 to -157+41 | 64                               |
| 5              | Limit  |                    |                                  |
| 6              |  |                    |                                  |
| 7              | Design Considerations  |                    |                                  |
| '8             | •North Section:  |                    |                                  |
| 79<br>80<br>81 | <ul> <li>Widen Berm by ~20 Feet</li> <li>Requires an average fill dens</li> <li>Does not include any advance</li> </ul>          | -                  |                                  |
| 32             | •Central and Southern Section:   |                    |                                  |
| 33<br>34<br>35 | <ul> <li>Establish a 27-foot wide desi</li> <li>Requires an average fill dens</li> <li>Additional 19 CY/FT to account</li> </ul> | ity of 30 CY/FT.   | and background erosion           |
| 36             | -  |                    | lune at the time of construction |

- 88 Northern Section: Fill Density of approximately 22 CY/FT. at Station -170+56
- 89 Central Section: Fill Density of approximately 49 CY/FT. at Station -110+00
- 90 Southern Section: Fill Density of approximately 49 CY/FT. at Station -10+00

#### Updated Project Volumes: Reflective of Design Considerations Presented May 18, 2021

| Design                          | Design<br>Volume      | Diffusion<br>Loss Volume | Advanced Fill Volume<br>(Background Erosion | Taper Volume | Total Volume | Avg. Fill Density |
|---------------------------------|-----------------------|--------------------------|---|--------------|--------------|-------------------|
| Option 4                        | 591,400               | 54,400                   | 225,000                                     | 7,500        | 878,300      | 44                |
| Updated Design                  |                       |                          |   |              |              |                   |
| Total Updated<br>Design         | 556,100               | 62000                    | 229,500                                     | 15,000       | 862,600      | 43                |
| Northern Section                | 97, <mark>1</mark> 00 | 0                        | 0   | N/A          | 97,100       | 22                |
| Central and<br>Southern Section | 459,000               | 62,000                   | 229,500                                     | N/A          | 750,500      | 49                |

#### Updated Project Costs: Reflective of Design Considerations Presented May 18, 2021

| Options                      | Permitting/<br>Design Soft<br>Cost | Volume<br>(CY) | Construction<br>Cost | Construction<br>Soft Cost | Construction<br>Env.<br>Monitoring<br>Costs | Contingency<br>Cost (10%) | Total Cost   |
|------------------------------|------------------------------------|----------------|----------------------|---------------------------|---|---------------------------|--------------|
| 4                            | \$435,000                          | 878,300        | \$12,505,000         | \$241,500                 | \$232,700                                   | \$1,341,400               | \$14,755,600 |
| May 2021<br>Design<br>Update | \$339,034                          | 862,600        | \$11,552,000         | \$241,500                 | \$232,700                                   | \$1,236,500               | \$13,601,734 |

#### 

#### 99 <u>Schedule</u>

| Milestone  | Start Date     | Completion<br>Date | Number of<br>Months |
|--|----------------|--------------------|---------------------|
| Project Initiation / Interagency Meeting           | April 2020     | April 2020         | 1                   |
| Borrow Area Development                            | May 2020       | January 2021       | 9                   |
| Engineering Design                                 | June 2020      | June 2021          | 13                  |
| Federal Permitting                                 | April 2020     | July 2021          | 16                  |
| State Permitting                                   | February 2021* | July 2021*         | 6                   |
| Development of Construction Plans & Specifications | April 2021     | July 2021          | 4                   |
| Solicitation of Bids                               | July 2021      | August 2021        | 1.5                 |
| Award Construction Contract                        | August 2021    | September 2021     | 1.5                 |
| Construction                                       | May 2022       | October 2022       | 5                   |

#### 103 3. Town Code Amendment -21-05 Noises Prohibited

- 104At the April 13, 2021 Town Council meeting, Council tabled consideration of the proposed105amendments to the Town's Noise Ordinance in TCA-21-02 so that Councilmembers Holland106and Neal could meet with Town Staff to review and discuss it. TCA-21-05 is a revised TCA that107incorporates the comments received during discussion.
- 108Police Chief David Kole stated a lot of unnecessary language has been removed and what is109before Council is a trimmed down version.
- Mayor pro tem Morey asked Chief Kole if he was satisfied with the amendment as written.Chief Kole replied that he was satisfied.
- 112Motion made by Council Member Neal to adopt TCA-21-05 Noises Prohibited, Seconded by113Council Member Holland. The motion passed unanimously (5-0).
- 114 Voting Yea: Mayor pro tem Morey, Council Member Conners, Council Member Holland,115 Council Member Neal, Mayor Bennett
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#### 120 4. Bike & Pedestrian Safety-NC12 Speed Limit Reduction Request-Councilman Conners

- Councilman Conners provided a narrative to explain the impetus and intent of the resolution.
   Councilman Conners recommended reducing the speed limit all yearlong along the
   NC12/Duck Road "corridor" which consists of 18 crosswalks and increasing the signage for
   safety.
- 125Police Chief David Kole provided accident data from 2013 to present and recommended126sensor flashing lights at the crosswalks.
- 127 Councilman Neal stated the speed limit is currently reduced for the summer and would like 128 Council to get through the budget process and revisit this at a later time.
- 129 By **Consensus**, Council tabled the agenda item and agreed that NCDOT should be involved 130 with discussions.

#### Council recessed the meeting at 11:36 a.m. for lunch. Mayor Bennett reconvened the meeting at 1:00 p.m.

- 135 5. FY 21-22 Budget Workshop Discussion Items
- 136 Town Manager Ogburn presented budget items for discussion/direction.
- 137 1. Use of Fund Balance
- 138The estimated numbers for the current fiscal year will come in close to the same as1396/30/20 for encumbrances and accounts receivables. The amount currently used for140budget amendments in the current fiscal year is \$1,281,688. Town Staff is confident we141will not need to use the full amount currently budgeted due to revenues coming in higher142than originally budgeted, but for planning purposes, that needs to be taken into143consideration when trying to determine the amount of UFB available. The amount

144 145 146 recommended to be used to fund beach nourishment and balance the FY 22 budget is \$1,223,392. After these 2 deductions, a balance of \$490,466 is remaining, in addition to the \$3,000,000 which is required by Council policy.

#### Town of Southern Shores

Analysis of Unassigned Fund Balance 6-30-20

| Stabilization by State Statute: | <u>6/30/2019</u> | CY Revenues<br>over Expenses | Other<br><u>Changes</u> | <u>6/30/2020</u> |
|---------------------------------|------------------|------------------------------|-------------------------|------------------|
| Accounts receivable             | 544.646          |                              | 02.257                  | 638.003          |
|                                 | 544,646          | -                            | 83,357                  | 628,003          |
| Encumbrances                    | 29,017           |                              | 35,092                  | 64,109           |
|                                 | 573,663          | -                            | 118,449                 | 692,112          |
| Prepaid expenses                | 5,566            | -                            | 14,563                  | 20,129           |
| Capital reserve fund            | 164,114          | -                            | 23,279                  | 187,393          |
| Drug enforcement                | 9,459            | 32                           | -                       | 9,491            |
| Subsequent year's budget        | 1,325,614        | -                            | (1,325,614)             | -                |
| LEOSSA                          | 236,891          | 8,040                        | -                       | 244,931          |
| Unassigned                      | 4,173,321        | 629,623                      | 1,192,602               | 5,995,546        |
| Total GF fund balance           | 6,488,628        | 637,695                      | 23,279                  | 7,149,602        |

Unassigned fund balance Working capital/fund balance policy To Balance FY 20-21 Amended Budget Balance FY 21-22 Budget 5,995,546 (3,000,000) (1,281,688) (1,223,392) 490,466

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2. Revenue Projections – The Finance Officer explained rationale used in recommending revenues. Many local governments budgeted extremely conservatively while reducing anticipated revenues due to the overall assumption that Covid-19 would have a dramatic budget impact. Health concerns and restrictions were anticipated to decimate sales and occupancy taxes, which make up a large portion of the town's revenues. In some respects, the opposite affect was realized. According to the North Carolina League of Municipalities, the economic outlook at the time of their annual revenue forecast is largely focused on the recovery from COVID and a transition to a post-COVID era. It appears, that at least in the near term we have reason to be optimistic that our recovery will continue. Town staff recognizes that the increase in sales, occupancy, and land transfer taxes that we are currently experiencing, will eventually start to level out. With this in mind, the amounts for the shared revenues for FY 2021-2022, are budgeted more conservatively than what the Town will receive in the current FY.

- 162One cent in ad valorem taxes generates \$162,852. While a tax increase for General Fund163Expenditures is not recommended at this time, a tax increase will likely be part of the FY1642022-2023 recommended budget.
- 1663. Department Budgets Town Manager Ogburn and Finance Officer Bonnie Swain167reviewed each department's budget requests. Department Heads were in attendance for168any questions.

169Town Manager Ogburn notified Council that a request has come forward from Mark170Fletcher with Atlantic Tree for an increase in his contract. He is in the third year of a four-171year contract. An increase mid contract is very rare, but Mr. Fletcher has requested an172increase (approximately \$20,000 to \$25,000) due to increases in dump fees, diesel,173workman comp and general liability, employee wages, and increase in brush volume174(more residents and construction). The Town Manager wanted Council to be aware of the175request and will come back with a recommendation.

176Councilman Holland stated besides the use of diesel, Mr. Fletcher has no control over the177other increases.

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4. Health Insurance -The Town will see an approximate 10% increase to the medical premiums for employees. Small groups medical insurance renewal rates are based on statewide claims for the year of all small groups.

|      | Health Insurance |
|------|------------------|
| 2022 | +10%             |
| 2021 | -9%              |
| 2020 | +.05%            |
| 2019 | +1%              |
| 2018 | +6%              |

The below shows rate adjustments since 2017.

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5. State Retirement Contributions – State Retirement System employer rates. Mandatory Town contributions to the State Retirement System are anticipated to increase from 10.2% to 11.39% for general employees, while increasing from 10.95% to 12.05% for law enforcement officers.

|      | SR general | Rate  | SR LEO | Rate  |  |  |
|------|------------|-------|--------|-------|--|--|
| 2022 | +1.19      | 11.39 | +1.09  | 12.05 |  |  |
| 2021 | +1.22      | 10.2  | +1.25  | 10.95 |  |  |
| 2020 | +1.23      | 8.98  | +1.20  | 9.7   |  |  |
| 2019 | +0.25      | 7.75  | +0.25  | 8.5   |  |  |
| 2018 | +0.25      | 7.5   | +0.25  | 8.25  |  |  |

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Mayor Bennett called a five-minute recess at 2:25 p.m. Council reconvened the meeting at 2:30 p.m.

6. Pay and Classification Study Results – The Council directed a Pay and Classification Study that was presented in February of 2020. Due to the study coinciding with the

Town of Southern Shores Council Workshop 2021-05-18 | pg. 8

- beginning of the pandemic, implementation of the study was put on hold. The Town 196 197 Manager recommended in this budget implementation of new pay plan at a total cost of \$89,729. This plan makes one time locally compared market adjustments, brings 198 199 employees with 8 years of service to the midpoint of their salary range while also recognizing all employees' years of service. The timing of this increased expenditure is 200 met with the need for a tax increase for Beach Nourishment, but it is also met with a 201 need to retain experienced employees and remain competitive with other Dare County 202 municipalities. To keep employees on track going forward, it is recommended that an 203 204 employee is moved up within their grade 2% each year to keep up with the cost of living. Merit increases are recommended to be given each year with annual evaluations. Also 205 206 included in the plan are job reclassifications, adoption of new job descriptions and new pay scale. 207
- 208Finance Officer Bonnie Swain added that she is seeking to update the personnel policy as209several policies have been added since it was last updated in 2013. There is currently210extra money in the current budget's travel line and will move that those funds to211contracted services to cover the approximate \$7000 cost. The final document will be212brought to Council for approval.
- 2147. Street Improvements The recommended amount for street improvements is a large215portion of the budget. This funding may serve as an earmark until Council can review the216results of the Pavement Conditions Study and CIP. The amount budgeted is equal to the217cost estimate for the next street improvement listed on the 2019 Capital Infrastructure218Improvement Plan, Hillcrest Drive. The Council previously directed the Town Engineer to219design the improvements to extend the project all the way to NC 12 from the Hickory220Trail intersection.
  - 8. Seasonal Cut Thru Traffic Funds are recommended to conduct eight "no-left turn" events at the US 158 and South Dogwood intersection beginning the weekend of June 26 and 27.
  - Councilman Neal asked Town Manager Ogburn to find out if the town could borrow barricades from other municipalities to try the "local traffic only" signs with barricades along the four through streets (Hickory, Hillcrest, Sea Oats, and Wax Myrtle).
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- 9. Beach Nourishment Tax Rates FY 2021-2022 marks the first of five debt service
  payments for the planned spring 2022 beach nourishment project. Funding for this
  project consists of Dare County Occupancy Tax for Beach Nourishment at \$7,714,375,
  Department of Environmental Quality Grant Award of \$1,408,247 and Town contribution
  of \$6,123,873. The Town will have to raise taxes to generate its portion of funding the
  project. The recommended increase would bring the current town wide tax rate from
  \$0.1958 to \$0.23, an increase of \$0.0342.
- 236Two Municipal Service Districts are anticipated to be created to fund the beach237nourishment project. The tax rate for MSD 1 is recommended at \$0.12, the tax rate for

- MSD 2 is recommended at \$0.03 and the town wide rate is recommended at \$0.0342, 238 bringing the Total town tax rate to \$0.23. A \$750,000 transfer from Undesignated Fund 239 Balance to the Capital Reserve Fund to be combined with a \$250,000 previous transfer is 240 241 recommended to pay down the beach nourishment debt with a \$200,000 year allocation, which will lower the tax rate necessary in each MSD as well as the Town wide rate. One 242 cent in MSD 1 generates \$29,021 and one cent in MSD 2 generates \$56,475. 243 Town Manager Ogburn stated the Town Council has many options to consider when 244 applying the beach nourishment tax rates. The rates can be set in any manner that 245 246 generates the required revenue to cover the debt service for the project. 247 Councilman Neal asked if the \$30,000 special assessment (Pelican Watch) could be absorbed so that the Pelican watch property owners will not have the special assessment 248 249 and the MSD tax rate assessment together. 250 Finance Officer Bonnie Swain said she had contacted the UNC School of Government and 251 that would not be allowed, the Town cannot absorb the special assessment. 252 Town Manager Ogburn stated Council could perhaps extend the years of the Pelican 253 Watch special assessment. Councilman Conners stated all of Council wants to be fair and equitable as we all benefit. 254 We all moved here because of the beaches. 255 256 Mayor pro tem Morey was in favor of hearing from the residents at the public hearing June 1<sup>st</sup> and then set the MSD rates following the hearing. 257 258 Councilman Neal stated it would be wise to have some baselines numbers, options, rather than asking the Town Manager to manipulate the spreadsheet during the next meeting. 259 260 261 262 263 264 265 Action Items
- By Consensus, the Town Manager was directed to see if the remainder of the Pelican Watch
  assessment (one year) be extended, and balance broken out to another five years. Town Manager
  Ogburn stated you are especially amending the resolution. Some property owners may have paid
  the full amount due in the beginning but amending the resolution could defer the last payment
  amount over an additional number of years determined by Council. Town Manager Ogburn told
  Council he would have to look into the process to see what is required and to make sure they can
  do what they want to do.
- 273
- By Consensus, Council asked for three scenarios of MSD rates to be advertised and feedback
   sought prior to the budget public hearing date of June 1, 2021.
- 276 1) option 1-Town Manager's proposed rate

| 277        | 2) option 2- MSD One 9  |
|------------|---|
| 278        | MSD Two 2   |
| 279        | Town Wide 4   |
| 280        | 3) option 3- MSD One 7.5  |
| 281        | MSD Two 3 .0  |
| 282        | Town Wide 4.0   |
| 283        |   |
| 284        | Adjourn   |
| 285<br>286 | <b>Motion</b> made by Mayor pro tem Morey to adjourn the meeting at 3:37 p.m., Seconded by Council Member Holland. The motion passed unanimously (5-0). |
| 287<br>288 | Voting Yea: Mayor pro tem Morey, Council Member Conners, Council Member Holland, Council<br>Member Neal, Mayor Bennett                                  |
| 289        |   |
|            |   |

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

Item 3.

| From:        | Mike Fletcher  |
|--------------|--|
| То:          | Sheila Kane  |
| Cc:          | Cynthia Mills  |
| Subject:     | Library Committee Read-file docs for town council meeting      |
| Date:        | Wednesday, September 29, 2021 9:57:23 AM                       |
| Attachments: | timeline.pdf   |
|              | Presentation to Dare County Library Board V3 KVW 20210912.pptx |

Here are the materials. To be clear, the presentation is a draft (note no date on slide) of the one that we wanted to, and may yet give to the Library Board. I think we will like to show the presentation. While many have seen a different version of our presentation before, a brief refresher seems in order given the time that has passed since the last time we presented it. (and COVID).

Michael E. Fletcher

#### Southern Shores Library Committee September 2021

#### TIMELINE

- 2019 November SS Library Committee inaugurated by the Town.
  - December Committee meets. Guest speaker, County Librarian Jonathon Wark. Jonathon W. In favor of North Beach Branch, so long as it does not impact present Library Budget.
- 2020 January Committee explores feasibility Searches for premises. Develops Capital Budget and Operational Budget.
  - February Committee puts together Questionnaire and sends to all residents of Kitty, Hawk, Southern Shores and Duck.
     Response to Questionnaire is substantial.
     Majority of responses very positive. A pie diagram evolves.
  - March. Suitable premises on Juniper Trail are offered by Towne Bank. To cost \$1.00 per year. Jonathon Wark visits premises and gives details of Library requirements. for compliance with protocols. Also states that Book and computer upfit will cost +/-150,000. Representatives of the Committee made presentations to the Towns of Kitty Hawk ,Southern Shores and Duck asking for their support. Southern Shores and Duck were supportive.
  - April Committee makes presentation to Dare County Commissioners with slide show and brochure showing results of questionnaire, budgets and picture of premises.
     Commissioners ask Librarian Jonathon Wark to give them a Budget proposal for operating a Southern Shores branch. Jonathon W. indicated informally to the committee that this was about \$175,000, in line with the estimate of the Committee.
     (The Committee discovered later that this was never presented to the Commissioners)
  - MAY Representatives of the Committee went to the scheduled County Commissioners meeting. It had been cancelled because of Covid 19 issues. Dare County became focused on containment of Covid. Meetings and activities of the Committee were put on hold.

Cont'd page 2.

SS Library Committee contd.

2021 July The Committee reconvened.

The Towne Bank continuing offer of premises was confirmed. Jonathon Wark came to the Meeting and confirmed his support providing new costs did not affect the present library budget. The Committee asked for names and contact information for both the Dare County Library Board and the Dare County Library Foundation. After some time, he provided names only. The Committee learned that there were several vacancies on the DC Library Board. Two members of the Committee timely applied for appointment to the DC Library Board.

The Lib'y Committee presented an update report to the TOS Shores. Representatives of the Committee also presented an update to the Dare County Commissioners during Public comment time, confirming the continuity of the Towne Bank offer of premises.

There was no response of any kind to the July County presentation. In the meantime, the SSh Lib. Comm. had identified opportunities for grant funds to enable construction compliance and book collection set up. Application and receipt of a grant required a non profit 501(c)3 entity to be the sponsor. The Dare Library Foundation, a 501(c)3, was the appropriate entity.

August S. Sh. Lib Committee members who had applied for appointment to the Library Board, enquired of the County Librarian as to the status. Jonathon Wark told them that he had not had time to address the matter of appointments to the Board. He provided information as to members of the two boards but not contact information. The Secretary of the SS Library Committee requested Dare County Clerk to the Commissioners, Cheryl Anby, for contact information for the current members of the Library Board and Foundation. This was refused on the grounds that it confidential. Considering contact with the Board and Foundation vital to the progress for grant funding of a Northern Beach Library Branch, the Secretary of the Committee was able to obtain contact formation from elsewhere for the two Boards. The Chairman of the Library Foundation lives in Southern Shores. Repeated attempts by phone and email got no response. The Committee decided to and sent regular US mail letters to the County Librarian, the chairman of the Library Boar and Library Foundation and the County Commissioner assigned to the Library

Board requesting a presentation at their October meeting.

September As of September 22, no acknowledgement, no response, from any.

Item 6.



The Dare County Library Board on DD Month YYYY

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

**Presentation To** 

Hatteras Library

Northern

• Kill Devil • Hills Library

•Dare Library"

Manteo

Library

47



# LIBRARY BRANCH DISTRIBUTION"

- 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

- 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)
  - **o** Lack of convenient alternative (public) transportation
  - $\circ$  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\*

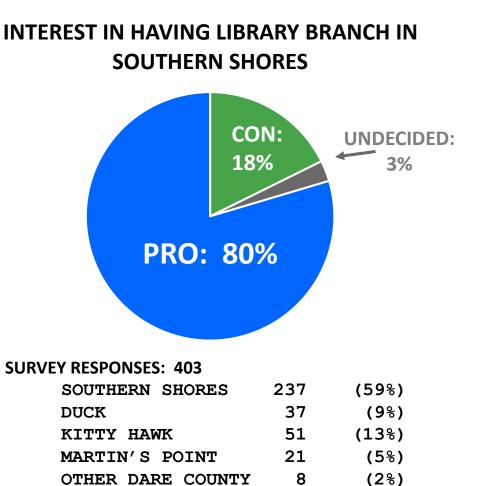
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# **DISTRICT 3 SURVEY (2019)**

### **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 <u>https://www.southernshores-nc.gov/exploratory-committee-potential-branch-library/</u>



HOMEOWNER (NON-RES)

(Percentage of total responses)

NON-DARE COUNTY

50

(10%)

(2%)

40

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Item 6.



## **PROPOSED LOCATION**



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

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### **PROJECTED COST**

- 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



#### Kill Devil • Hills Manteibrary Library

Dare Library

# **BOARD ACTION REQUESTED**

Item 6.

53

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

Hatteras Library



### 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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HALL

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Item 8.

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#### 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.

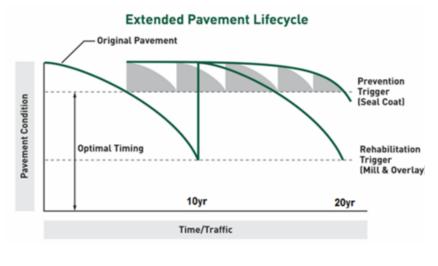


Figure 2

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

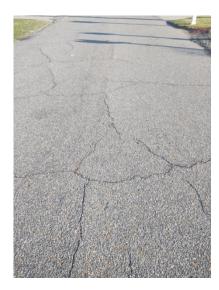
The following distress definitions are related to all pavements and were the basis of our pavement condition survey.

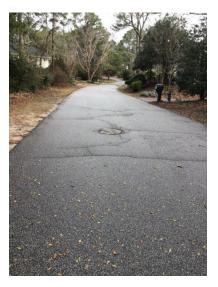
**Fatigue Cracking:** A load associated structural failure due to excessive deflections or bending of the HMA layer. This type of failure is generally full depth and extends from the bottom of the pavement upwards. Fatigue cracking is typically observed along wheel paths initially and may present as 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 age 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.

|              |           |               | Powell Bill Streets |               |  |  |
|--------------|-----------|---------------|---------------------|---------------|--|--|
| PCI Category | PCI Range | # of Sections | Length<br>(miles)   | % of<br>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.

| Distance Itoms                    |       | Class A    |       | Class B    |       | Class C    |       | Total Street System |  |
|-----------------------------------|-------|------------|-------|------------|-------|------------|-------|---------------------|--|
| Distress Items                    | 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%              |  |
| Total                             | 10.09 | 100.00%    | 23.81 | 100.00%    | 2.75  | 100.00%    | 36.66 | 100.00%             |  |
| 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%              |  |
| Total                             | 10.09 | 100.00%    | 23.81 | 100.00%    | 2.75  | 100.00%    | 36.66 | 100.00%             |  |
| 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%              |  |
| Total                             | 10.09 | 100.00%    | 23.81 | 100.00%    | 2.75  | 100.00%    | 36.66 | 100.00%             |  |
| 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%              |  |
| Total                             | 10.09 | 100.00%    | 23.81 | 100.00%    | 2.75  | 100.00%    | 36.66 | 100.00%             |  |
| 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%              |  |
| Total                             | 10.09 | 100.00%    | 23.81 | 100.00%    | 2.75  | 100.00%    | 36.66 | 100.00%             |  |
| 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%              |  |
| Total                             | 10.09 | 100.00%    | 23.81 | 100.00%    | 2.75  | 100.00%    | 36.66 | 100.00%             |  |
| 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%             |  |
| Total                             | 10.09 | 100.00%    | 23.81 | 100.00%    | 2.75  | 100.00%    | 36.66 | 100.00%             |  |

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<br>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<br>Buildup, Increased Patching and Leveling |
| <20    | Failed    | Reconstruction       | Reconstruction Varies afterEvaluating 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.

| Cost        |
|-------------|
| \$100.00/SY |
| \$22.00/SY  |
| \$28.00/SY  |
| \$46.00/SY  |
| \$15.00/SY  |
|             |

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

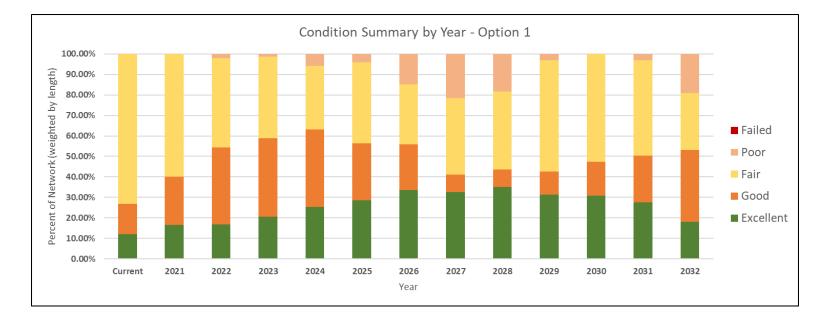
It should be noted that due to the specialty nature of microsurfacing, sufficient contract quantities would be necessary to generate contractor interest and project viability. Our conversations with the industry indicate that contract quantities including a minimum five (5) miles of microsurfacing would 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.

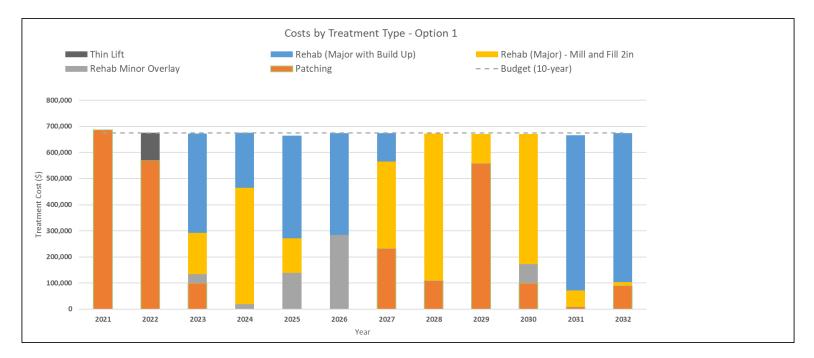
#### 4.4 CIP PLAN DETAILS AND DISCUSSION

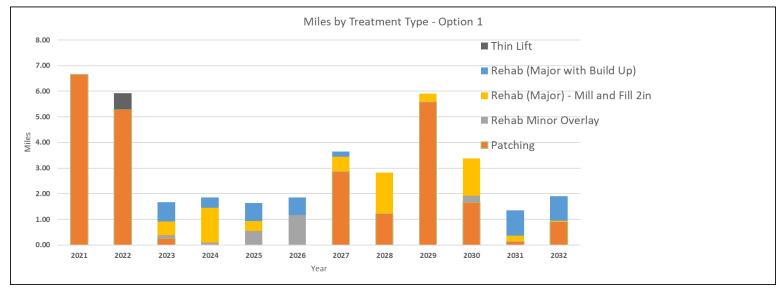
Key highlights of the options are as follows:

- 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.
- 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
- 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.

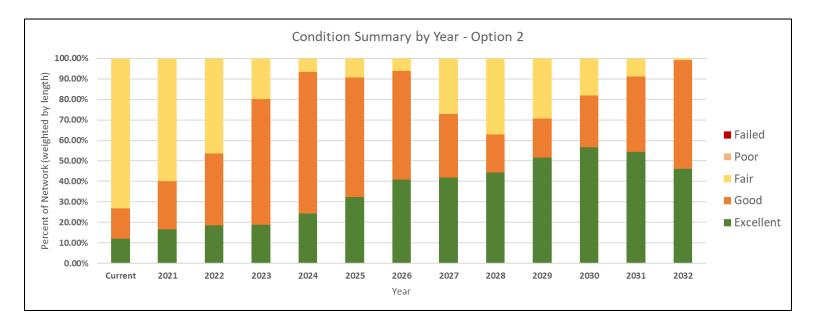
Summaries of the plans, Options 1 and 2, along with the predicted performance, cost and types of treatments are presented in the following figures. Detailed listing of each road segment and treatment type by year and Optional plan are presented in the report Appendix:

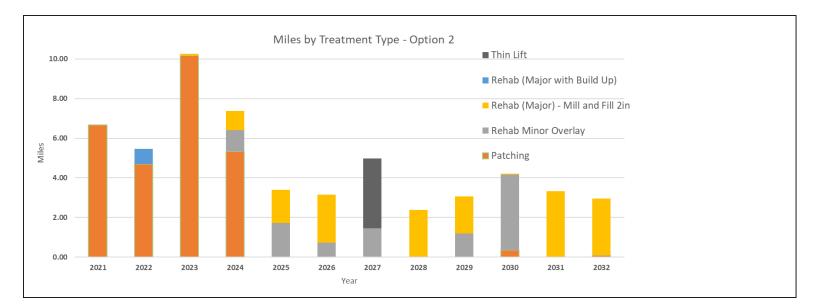


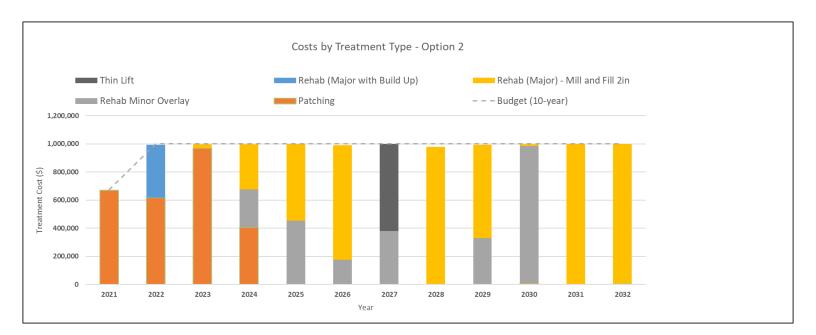




#### Item 8.







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 letthe 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**

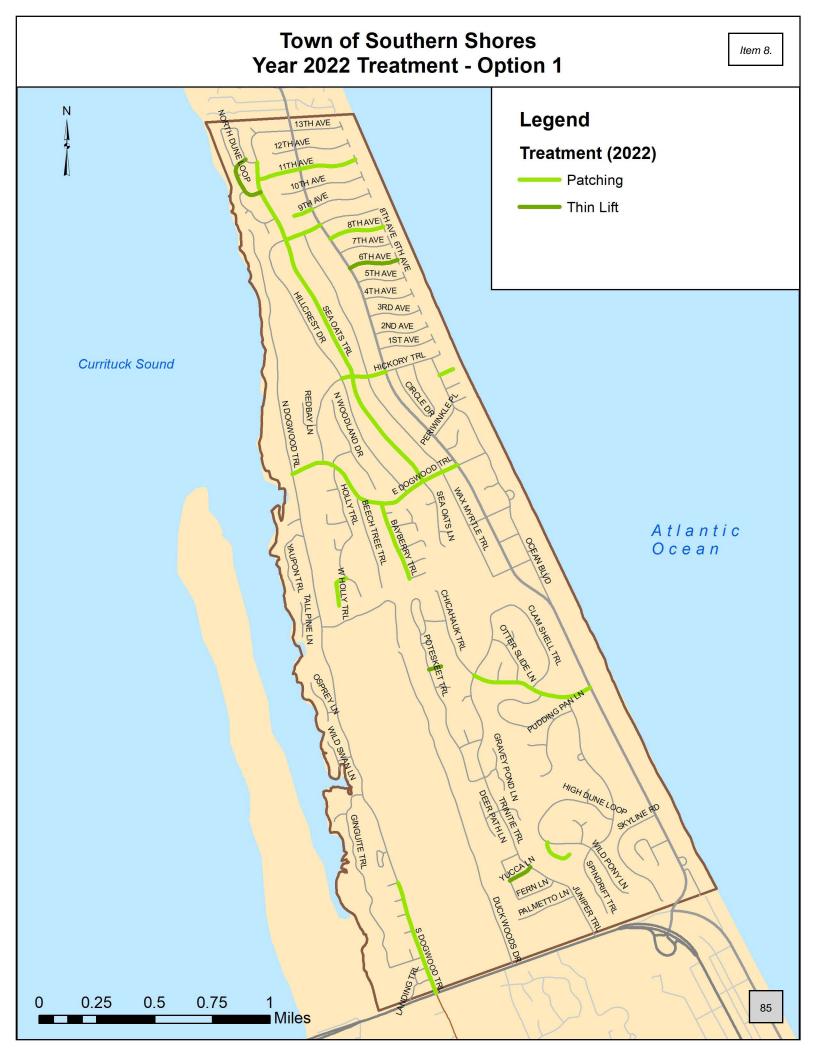
# TOWN OF SOUTHERN SHORES CAPITAL IMPROVEMENT PLAN\_OPTION 1

| 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  | А           |
| 128       | TRINITIE TRL    | CHICAHAUK TRL  | EAGLES NEST LN  | Patching         | \$55,332  | А           |
| 90        | HILLCREST DR    | HICKORY TRL    | E DOGWOOD TRL   | Patching         | \$51,494  | А           |
| 153       | S DOGWOOD TRL   | GINGUITE TRL   | TEAL CT         | Patching         | \$12,233  | А           |
| 26        | SEA OATS TRL    | SOUNDVIEW TRL  | NC 12           | Patching         | \$25,932  | А           |
| 111       | S DOGWOOD TRL   | YAUPON TRL     | FAIRWAY DR      | Patching         | \$53,383  | A           |
| 130       | S DOGWOOD TRL   | FAIRWAY DR     | GINGUITE TRL    | Patching         | \$106,851 | А           |
| 95        | S DOGWOOD TRL   | E DOGWOOD TRL  | YAUPON TRL      | Patching         | \$7,782   | А           |
| 11        | HAPPY INDIAN LN | HIGH DUNE LOOP | DEAD END        | Patching         | \$3,592   | В           |
| 33        | SOUNDVIEW TRL   | SEA OATS TRL   | NORTH DUNE LOOP | Patching         | \$22,737  | В           |
| 54        | 6TH AVE         | NC 12          | 6TH AVE         | Patching         | \$80,840  | В           |
| 12        | HIGH DUNE LOOP  | SPINDRIFT TRL  | SPINDRIFT TRL   | Patching         | \$60,981  | В           |
| 58        | 4TH AVE         | NC 12          | 4TH AVE         | Patching         | \$16,000  | В           |
| 29        | 12TH AVE        | NC 12          | 12TH AVE        | Patching         | \$18,784  | В           |
| 53        | 6TH AVE         | DEAD END       | DEAD END        | Patching         | \$4,745   | В           |
| 50        | 7TH AVE         | NC 12          | 7TH AVE         | Patching         | \$18,244  | В           |
| 121       | FAIRWAY DR      | S DOGWOOD TRL  | EOM             | Patching         | \$13,635  | В           |
| 142       | GRAVEY POND LN  | DEAD END       | DEAD END        | Patching         | \$5,267   | В           |
| 126       | TURTLE POND CT  | POTESKEET TRL  | DEAD END        | Patching         | \$9,735   | С           |
| 81        | WOODLAND DR     | E DOGWOOD TRL  | N WOODLAND DR   | Patching         | \$16,065  | С           |
| 92        | MIZZENMAST LN   | SEA OATS LN    | DEAD END        | Patching         | \$6,578   | С           |
|           |                 |                |                 |                  | \$687,577 | Yearly Tota |

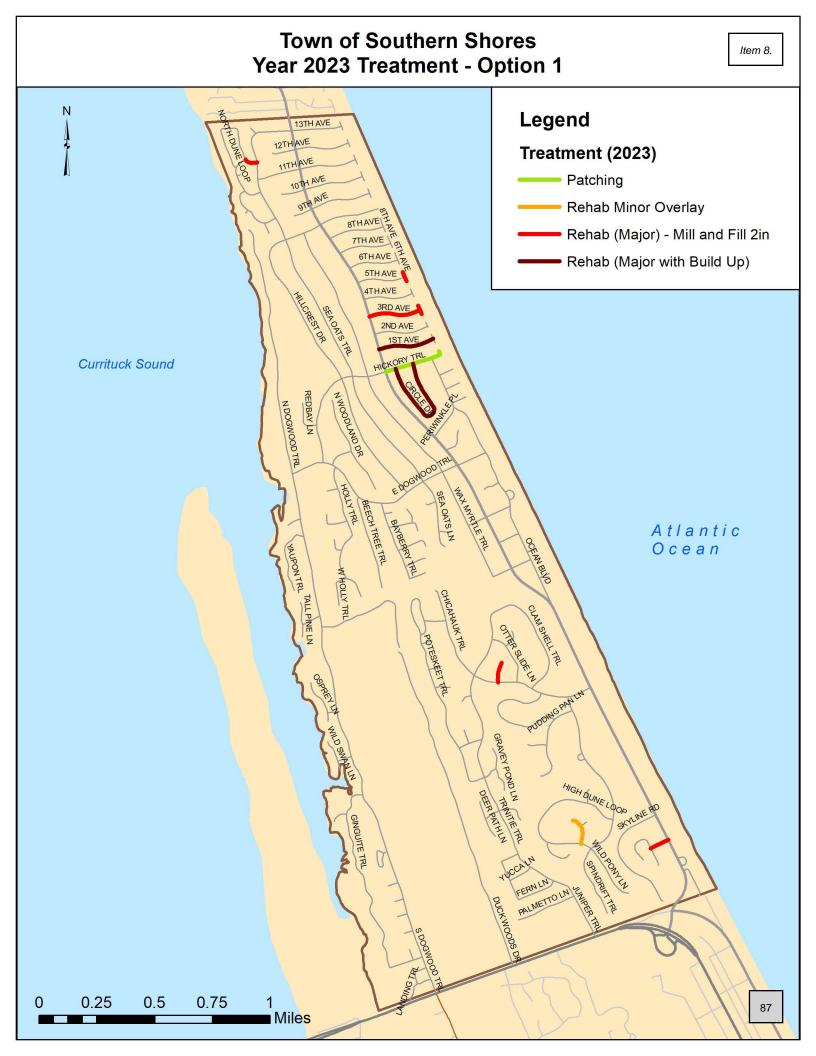




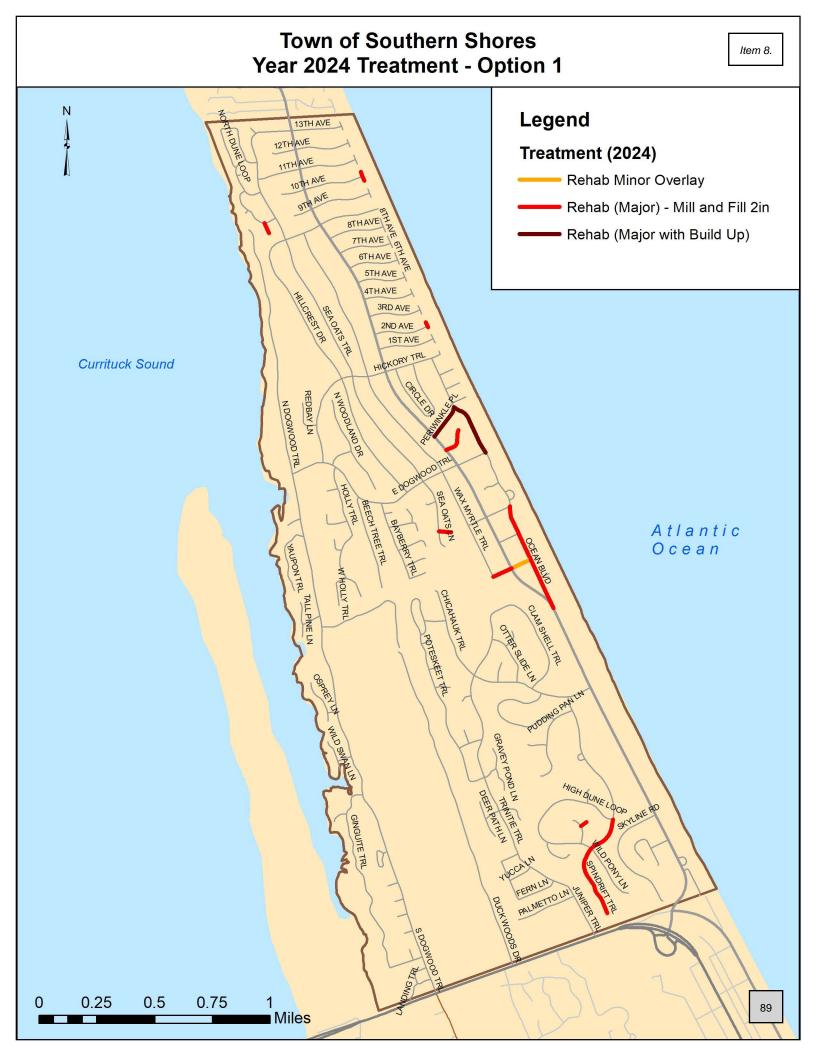
| Year 2022 | Option 1         |                |                 |                  |                   |             |
|-----------|------------------|----------------|-----------------|------------------|-------------------|-------------|
| SectionID | Street Name      | BEG_DESC       | END_DESC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



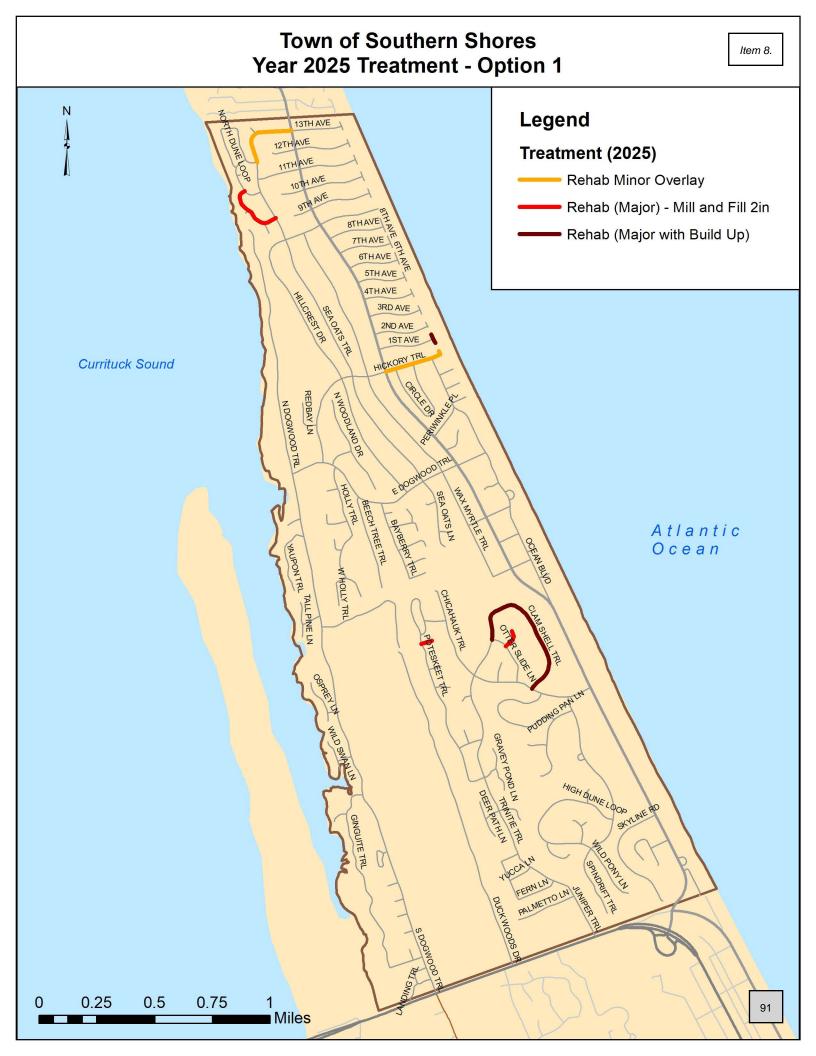
| Year 2023 | Option 1         |                 |              |                                   |           |              |
|-----------|------------------|-----------------|--------------|-----------------------------------|-----------|--------------|
| SectionID | Street Name      | BEG_DESC 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



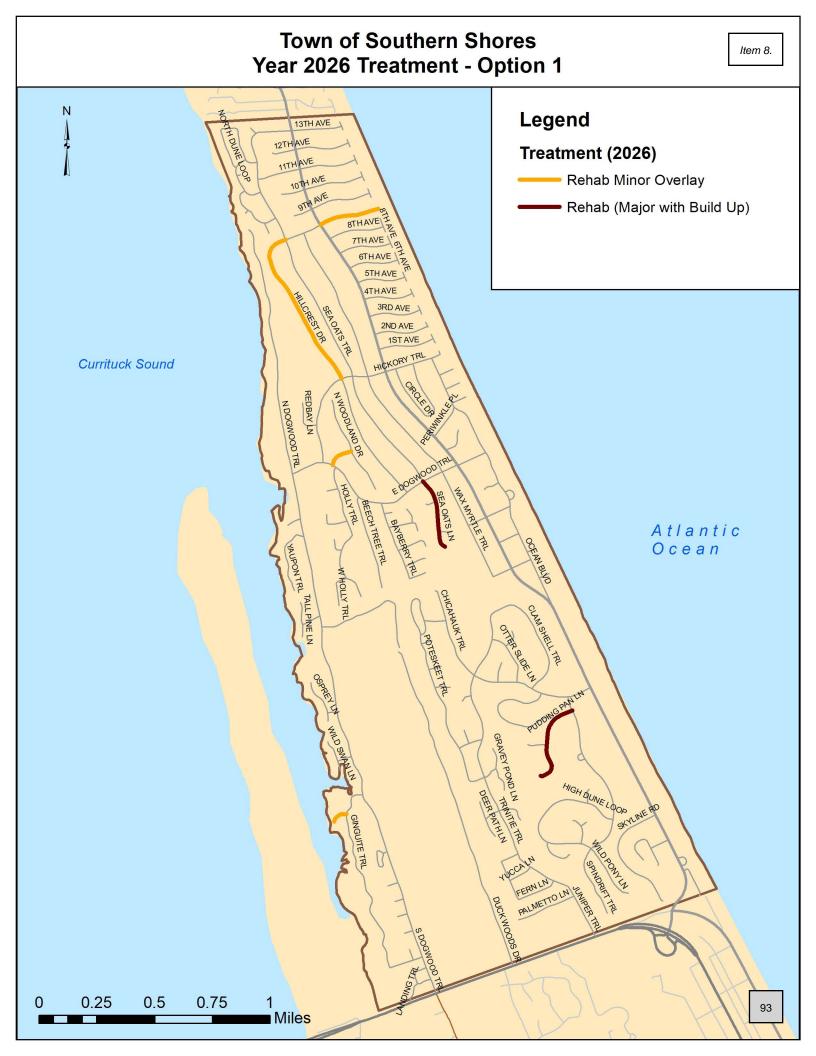
| Year 2024 | Option 1          |                 |               |                                   |           |              |
|-----------|-------------------|-----------------|---------------|-----------------------------------|-----------|--------------|
| SectionID | Street Name       | BEG_DESC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



| 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  | Α            |
| 26        | SEA OATS TRL   | SOUNDVIEW TRL | NC 12          | Rehab Minor Overlay               | \$79,080  | А            |
| 63        | 1ST AVE        | DEAD END      | DEAD END       | Rehab (Major with Build Up)       | \$20,422  | В            |
| 127       | CLAM SHELL TRL | CHICAHAUK TRL | OTTER SLIDE LN | Rehab (Major with Build Up)       | \$373,302 | В            |
| 43        | KINGFISHER TRL | SOUNDVIEW TRL | SEA OATS TRL   | Rehab (Major) - Mill and Fill 2in | \$87,495  | С            |
| 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  | С            |
|           |                |               |                |                                   | \$664,513 | Yearly Total |

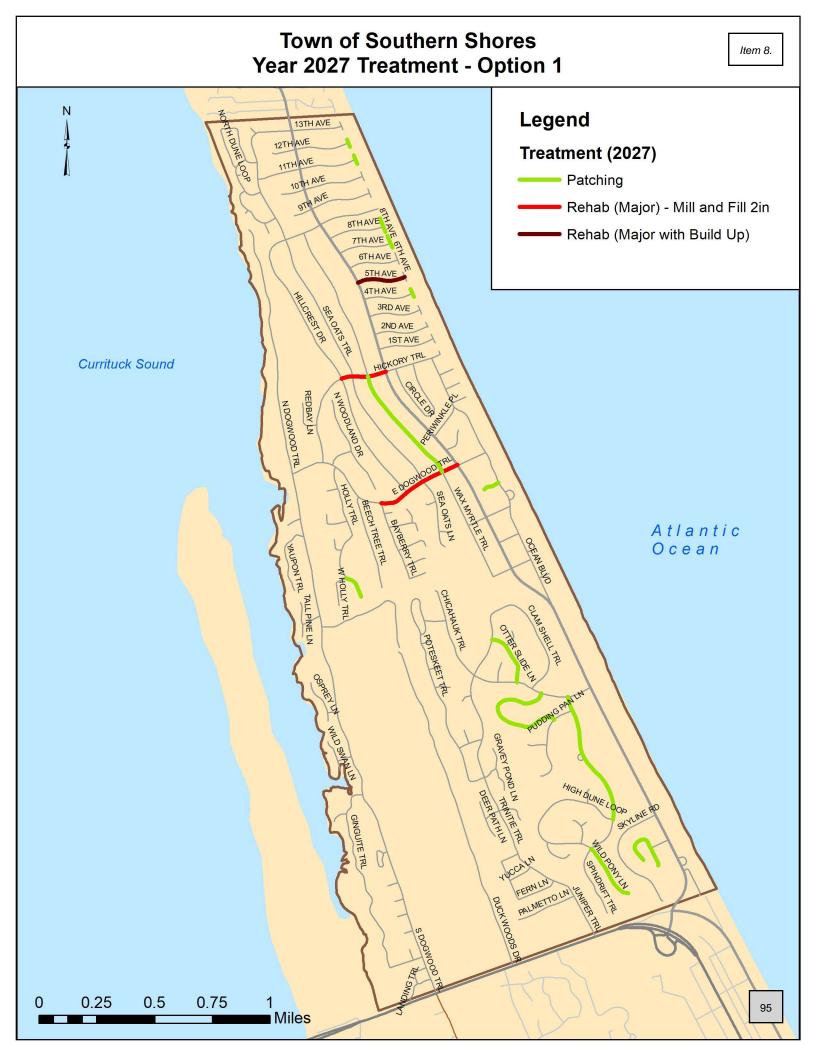


| Year 2026 | Option 1         |               |               |                             |           |              |
|-----------|------------------|---------------|---------------|-----------------------------|-----------|--------------|
| SectionID | Street Name      | BEG_DESC      | END_DESC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

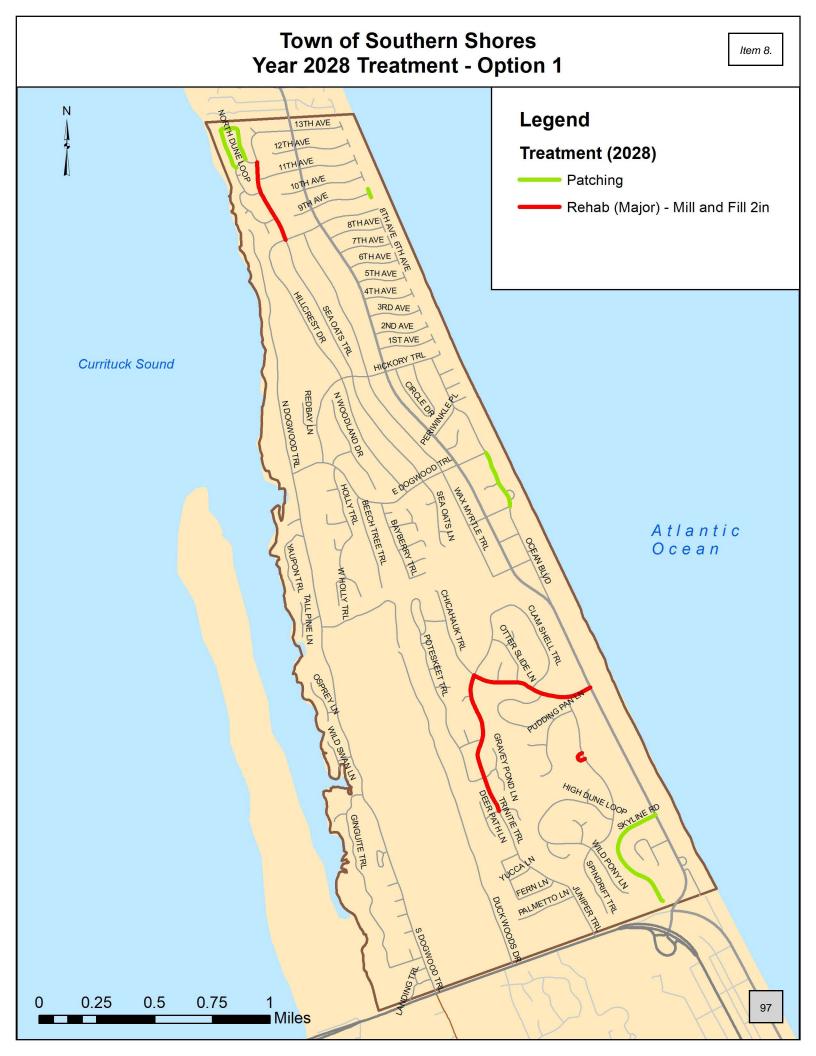


| Year 2027 | Option 1          |                |                |                                   |                  |              |
|-----------|-------------------|----------------|----------------|-----------------------------------|------------------|--------------|
| SectionID | Street Name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

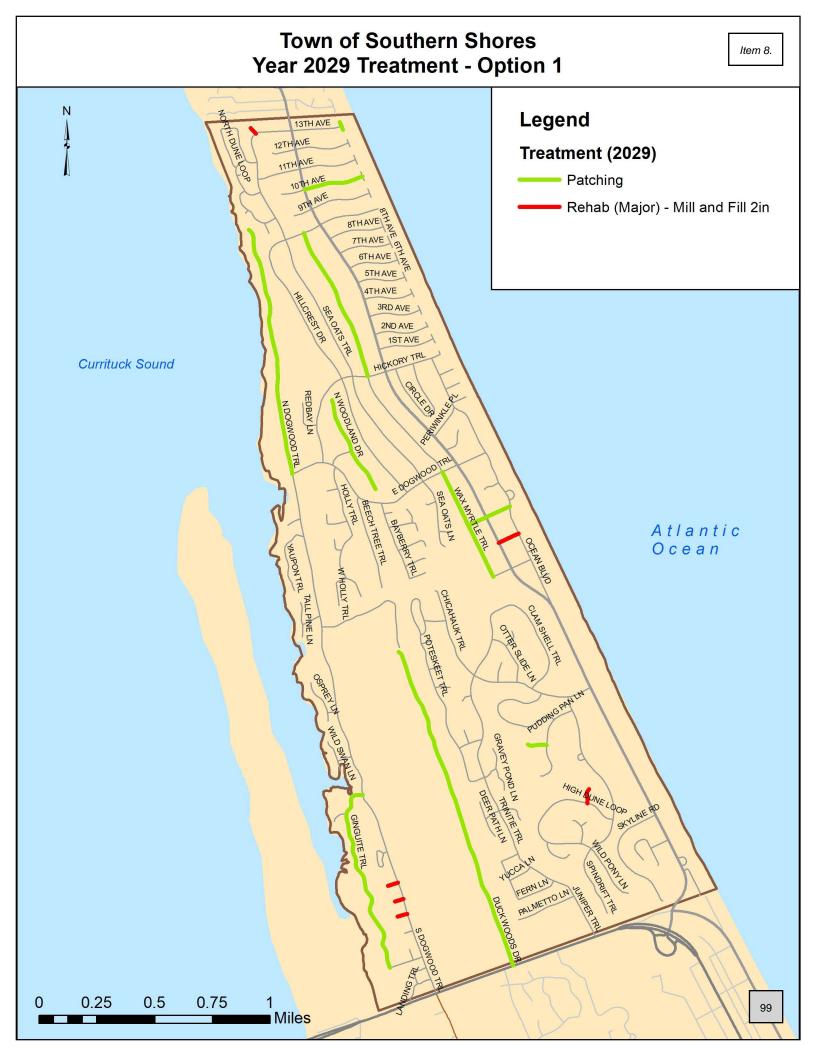
94



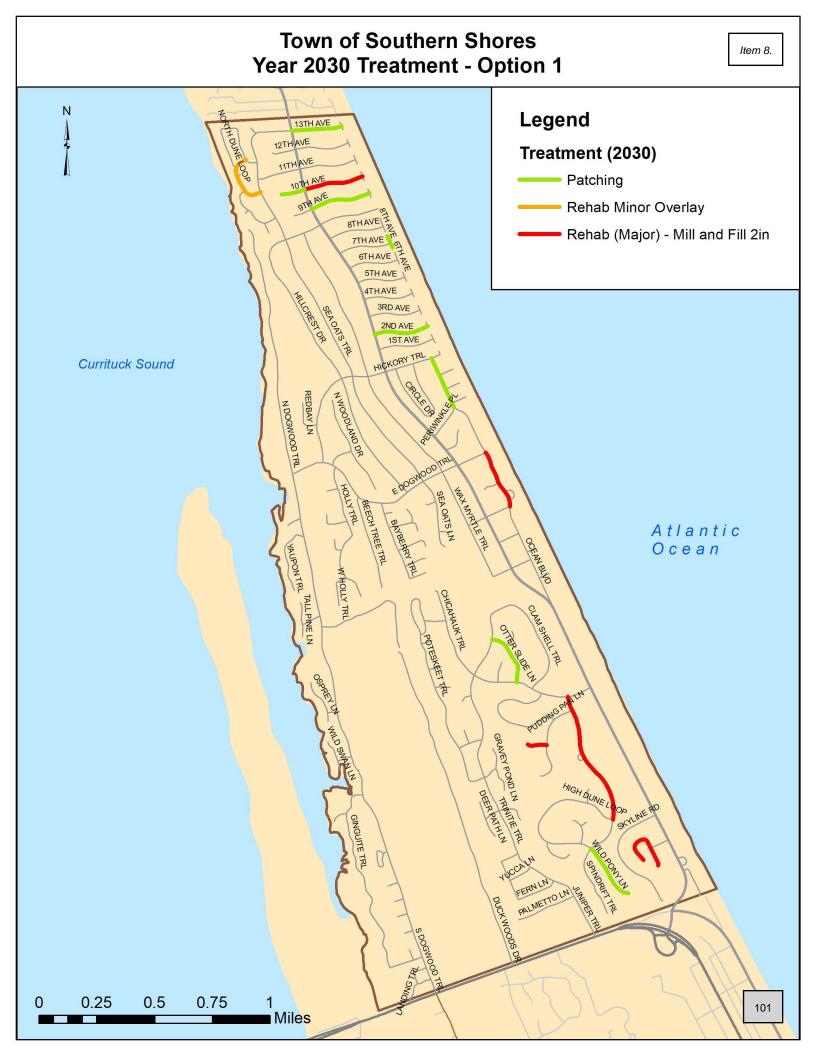
| Year 2028 | Option 1        |                |                |                                   |           |              |
|-----------|-----------------|----------------|----------------|-----------------------------------|-----------|--------------|
| SectionID | Street Name     | BEG_DESC  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



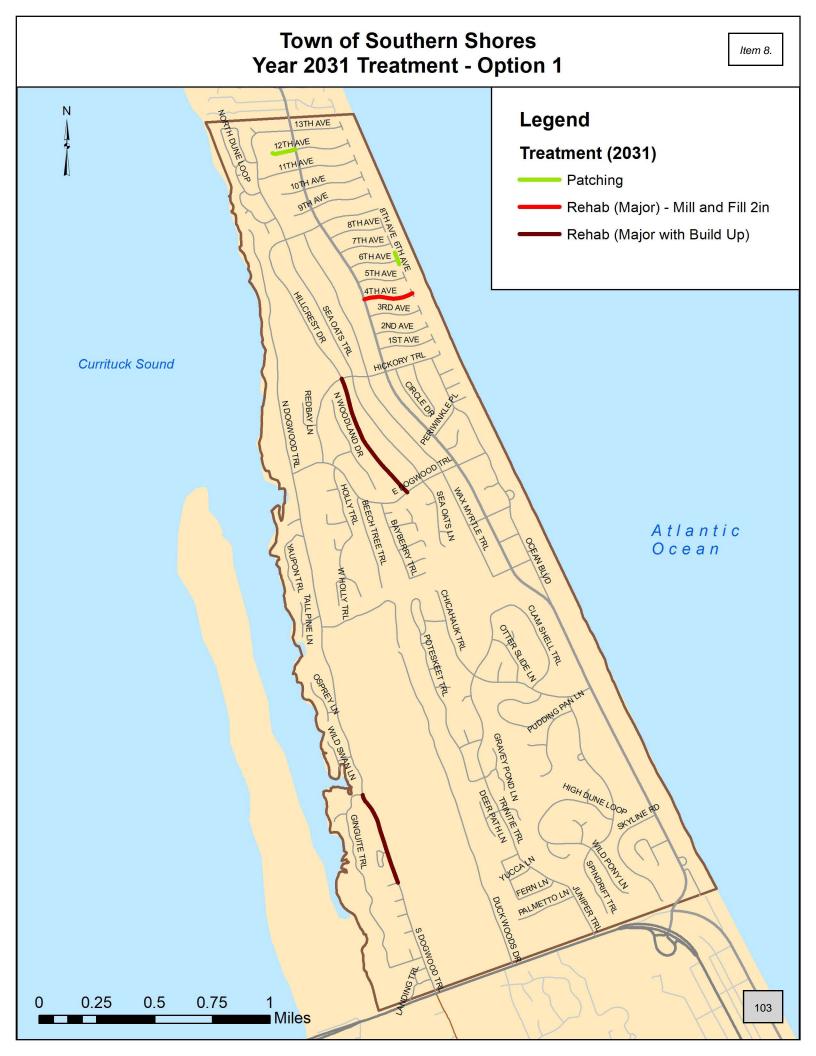
| Year 2029 | Option 1       |                |                 |                                   |                   |              |
|-----------|----------------|----------------|-----------------|-----------------------------------|-------------------|--------------|
| SectionID | Street Name 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



| 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          | В            |
| 171       | OTTER SLIDE LN  | CLAM SHELL TRL | CHICAHAUK TRL   | Patching                          | \$23,241          | В            |
| 155       | WILD PONY LN    | SPINDRIFT TRL  | DEAD END        | Patching                          | \$8,368           | В            |
| 49        | 7TH AVE         | DEAD END       | DEAD END        | Patching                          | \$3,172           | В            |
| 18        | OCEAN VIEW LOOP | DEAD END       | DEAD END        | Rehab (Major) - Mill and Fill 2in | \$93 <i>,</i> 495 | В            |
| 129       | SPINDRIFT TRL   | CHICAHAUK TRL  | HIGH DUNE LOOP  | Rehab (Major) - Mill and Fill 2in | \$211,086         | В            |
| 87        | OCEAN BLVD      | E DOGWOOD TRL  | DOLPHIN RUN     | Rehab (Major) - Mill and Fill 2in | \$89,216          | В            |
| 39        | 10TH AVE        | NC 12          | 10TH AVE        | Rehab (Major) - Mill and Fill 2in | \$75,202          | В            |
| 138       | TEA PLANT CT    | PUDDING PAN LN | DEAD END        | Rehab (Major) - Mill and Fill 2in | \$30,253          | В            |
| 62        | 2ND AVE         | NC 12          | 2ND AVE         | Patching                          | \$20,628          | В            |
| 67        | OCEAN BLVD      | HICKORY TRL    | PERIWINKLE PL   | Patching                          | \$22,569          | В            |
| 42        | 9TH AVE         | NC 12          | 9TH AVE         | Patching                          | \$6,790           | В            |
| 25        | 13TH AVE        | NC 12          | 13TH AVE        | Patching                          | \$7,030           | В            |
| 41        | 10TH AVE        | NC 12          | DEAD END        | Patching                          | \$7,800           | В            |
|           |                 |                |                 |                                   | \$671,486         | Yearly Total |

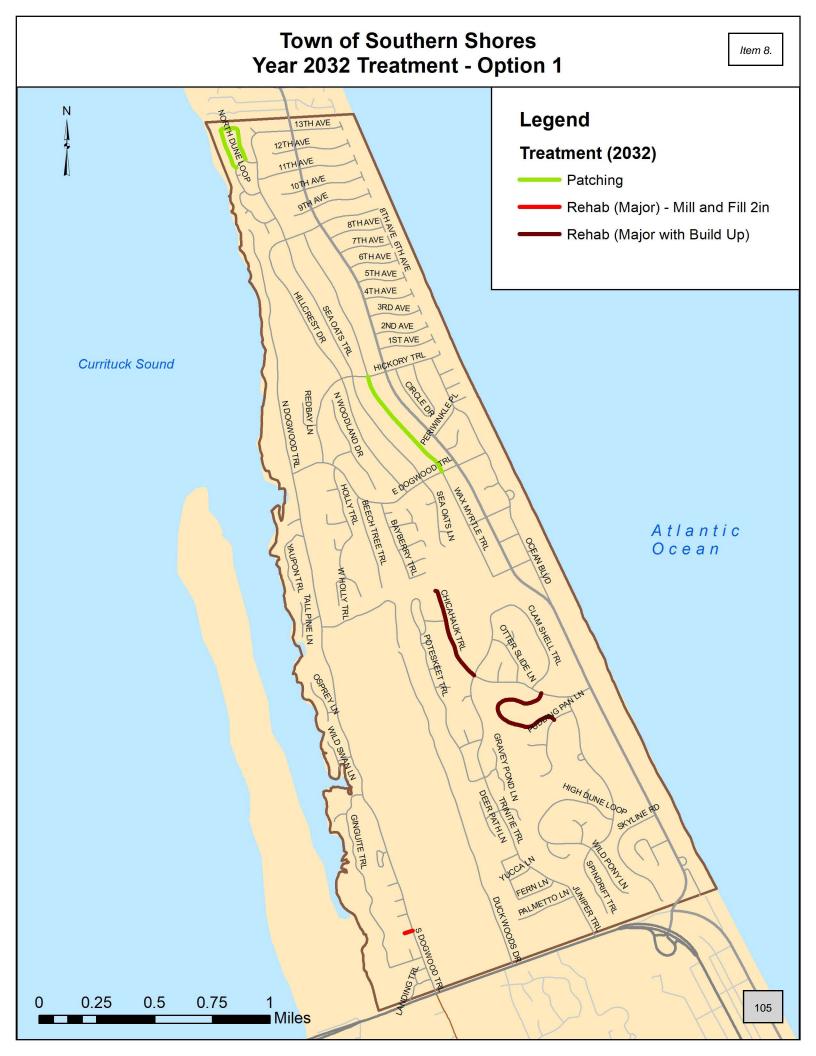


| Year 2031 | Option 1      |              |               |                                   |           |              |
|-----------|---------------|--------------|---------------|-----------------------------------|-----------|--------------|
| SectionID | Street Name   | BEG_DESC     | END_DESC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



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

A-1



## **APPENDIX B**

# TOWN OF SOUTHERN SHORES CAPITAL IMPROVEMENT PLAN\_OPTION 2

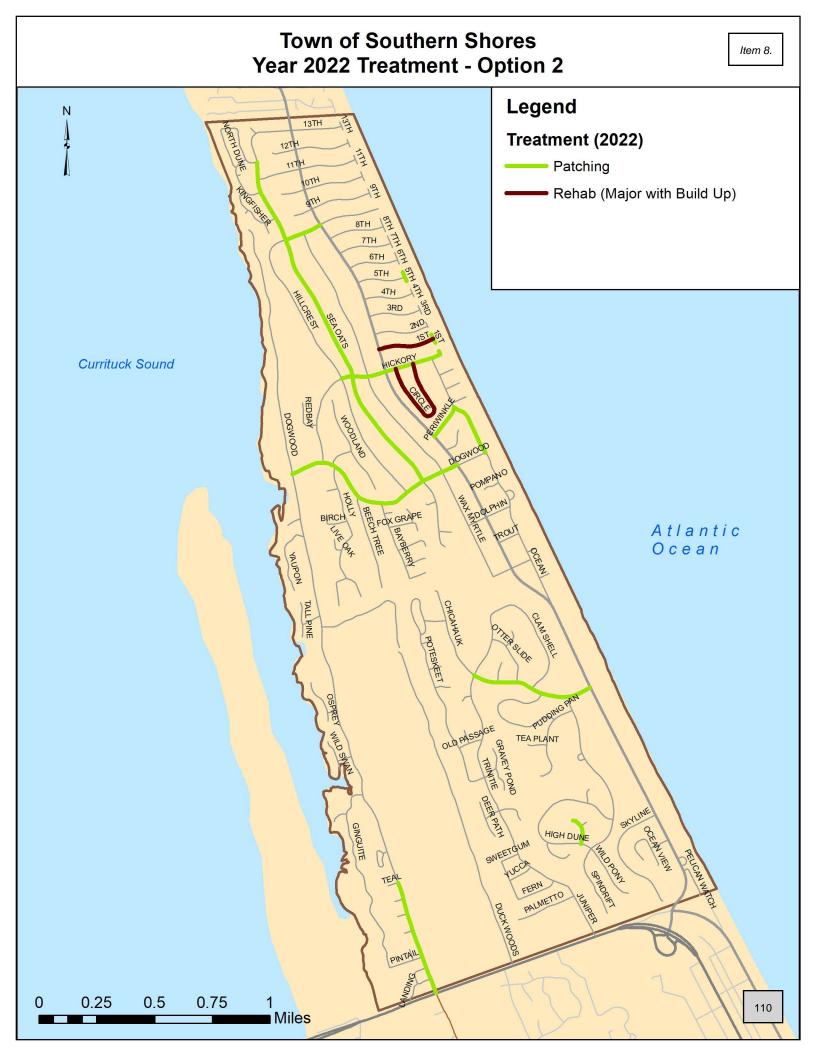
| Year 2021 | Option 2        |                |                 |                  |           |              |
|-----------|-----------------|----------------|-----------------|------------------|-----------|--------------|
| SectionID | Street Name     | BEG_DESC       | END_DESC        | Treatment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

**B-**2

### Town of Southern Shores Year 2021Treatment - Option 2

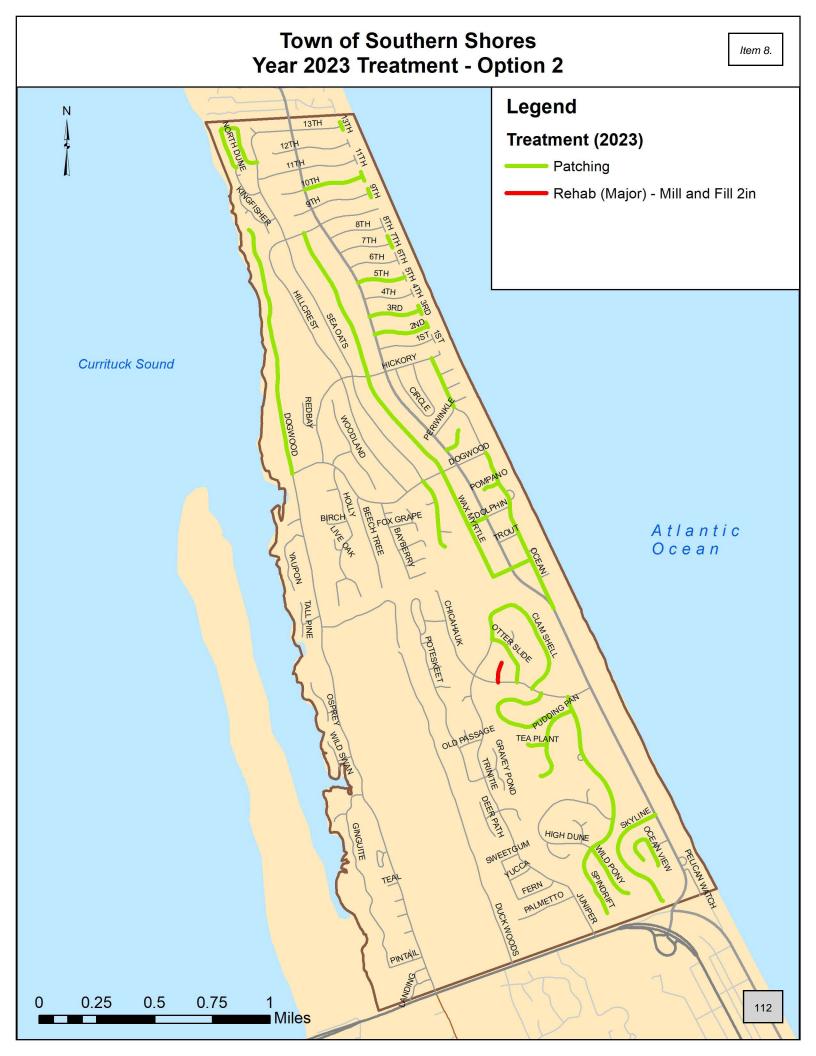


| Year 2022 | Option 2        |                |                |                             |           |             |
|-----------|-----------------|----------------|----------------|-----------------------------|-----------|-------------|
| SectionID | Street Name     | BEG_DESC       | END_DESC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

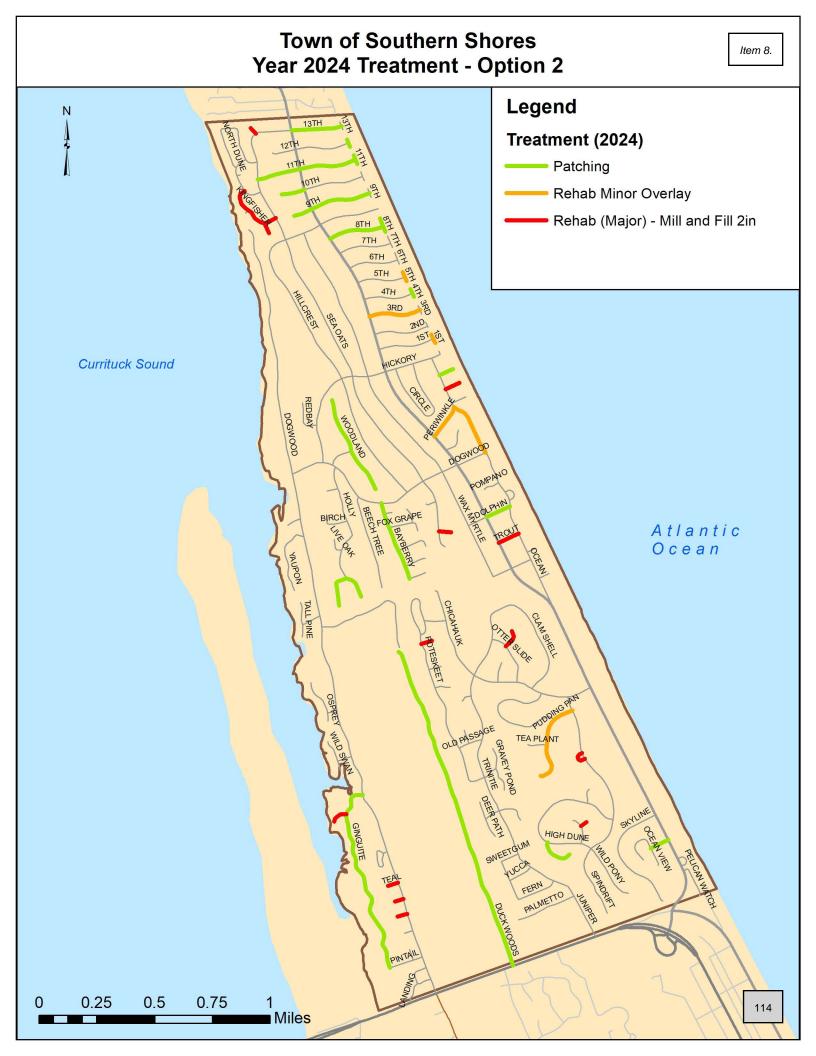


| /ear 2023 | Option 2          |                 |                |                                   |           |           |
|-----------|-------------------|-----------------|----------------|-----------------------------------|-----------|-----------|
| SectionID | Street Name       | BEG_DESC        | END_DESC       | Treatment (2023)                  | Cost 2023 | Class     |
| 60        | 3RD AVE           | NC 12           | 3RD AVE        | Patching                          | \$30,665  | В         |
| 133       | PUDDING PAN LN    | SPINDRIFT TRL   | DEAD END       | Patching                          | \$33,769  | В         |
| 127       | CLAM SHELL TRL    | CHICAHAUK TRL   | OTTER SLIDE LN | Patching                          | \$59,705  | В         |
| 1         | SEA OATS LN       | E DOGWOOD TRL   | DEAD END       | Patching                          | \$28,163  | В         |
| 59        | 3RD AVE           | DEAD END        | DEAD END       | Patching                          | \$2,121   | В         |
| 56        | 5TH AVE           | NC 12           | 5TH AVE        | Patching                          | \$28,348  | В         |
| 171       | OTTER SLIDE LN    | CLAM SHELL TRL  | CHICAHAUK TRL  | Patching                          | \$21,762  | В         |
| 32        | SOUNDVIEW TRL     | NORTH DUNE LOOP | SEA OATS TRL   | Patching                          | \$4,941   | В         |
| 155       | WILD PONY LN      | SPINDRIFT TRL   | DEAD END       | Patching                          | \$7,835   | В         |
| 49        | 7TH AVE           | DEAD END        | DEAD END       | Patching                          | \$2,970   | В         |
| 6         | OCEAN BLVD        | DOLPHIN RUN     | PORPOISE RUN   | Patching                          | \$33,806  | В         |
| 108       | OCEAN BLVD        | PORPOISE RUN    | NC 12          | Patching                          | \$35,328  | В         |
| 79        | SANDFIDDLER CT    | NC 12           | DEAD END       | Patching                          | \$17,130  | В         |
| 14        | SPINDRIFT TRL     | HIGH DUNE LOOP  | DEAD END       | Patching                          | \$43,624  | В         |
| 18        | OCEAN VIEW LOOP   |                 |                | \$23,450                          | В         |           |
| 129       | SPINDRIFT TRL     | CHICAHAUK TRL   | HIGH DUNE LOOP | Patching                          | \$52,943  | В         |
| 87        | OCEAN BLVD        | E DOGWOOD TRL   | DOLPHIN RUN    | Patching                          | \$22,377  | В         |
| 9         | PORPOISE RUN      | WAX MYRTLE TRL  | NC 12          | Patching                          | \$6,271   | В         |
| 8         | PORPOISE RUN      | NC 12           | OCEAN BLVD     | Patching                          | \$11,059  | В         |
| 134       | CROOKED BACK LOOP | CHICAHAUK TRL   | PUDDING PAN LN | Patching                          | \$47,899  | В         |
| 85        | WAX MYRTLE TRL    | HICKORY TRL     | E DOGWOOD TRL  | Patching                          | \$48,105  | В         |
| 34        | NORTH DUNE LOOP   | SOUNDVIEW TRL   | SOUNDVIEW TRL  | Patching                          | \$35,433  | В         |
| 61        | 2ND AVE           | DEAD END        | DEAD END       | Patching                          | \$2,728   | В         |
| 36        | 10TH AVE          | DEAD END        | DEAD END       | Patching                          | \$2,895   | В         |
| 39        | 10TH AVE          | NC 12           | 10TH AVE       | Patching                          | \$18,861  | В         |
| 40        | 9TH AVE           | DEAD END        | DEAD END       | Patching                          | \$2,862   | В         |
| 158       | SKYLINE RD        | NC 12           | DEAD END       | Patching                          | \$44,528  | В         |
| 138       | TEA PLANT CT      | PUDDING PAN LN  | DEAD END       | Patching                          | \$7,588   | В         |
| 100       | WAX MYRTLE TRL    | E DOGWOOD TRL   | PORPOISE RUN   | Patching                          | \$36.650  | В         |
| 70        | WAX MYRTLE TRL    | HILLCREST DR    | HICKORY TRL    | Patching                          | \$103,433 | В         |
| 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        |                   |                 | Patching       | \$21,133                          | B         |           |
| 89        | POMPANO CT        | OCEAN BLVD      | DEAD END       | Patching                          | \$4,433   | B         |
| 124       | GOOSE FEATHER LN  | CHICAHAUK TRL   | DEAD END       | Rehab (Major) - Mill and Fill 2in | \$26,409  | C         |
|           |                   |                 |                |                                   | \$996,598 | Yearly To |

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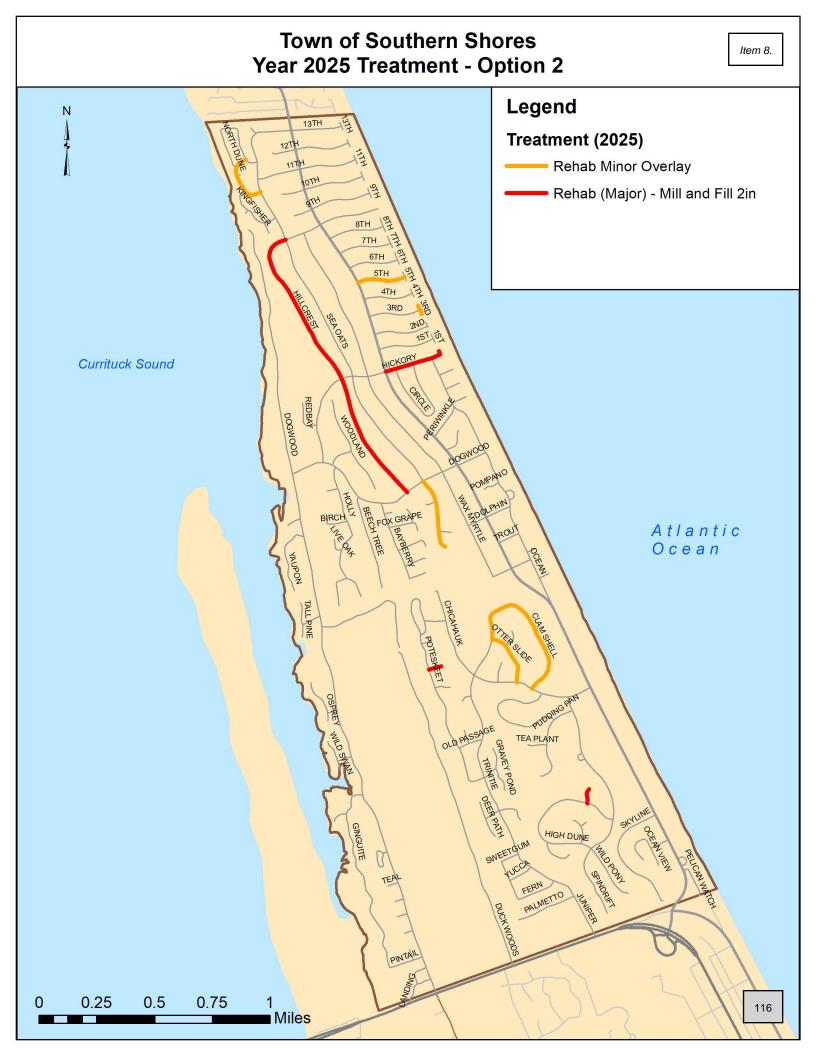


| Year 2024 | Option 2          |  |  |                                   |           |          |
|-----------|-------------------|--|--|-----------------------------------|-----------|----------|
| SectionID | Street Name       | BEG_DESC   | END_DESC                                   | Treatment (2024)                  | Cost 2024 | Class    |
| 80        | OCEAN BLVD        | PERIWINKLE PL                                      | E DOGWOOD TRL                              | Rehab Minor Overlay               | \$59,788  | В        |
| 77        | PERIWINKLE PL     | NC 12  | OCEAN BLVD                                 | Rehab Minor Overlay               | \$41,473  | В        |
| 63        | 1ST AVE           | DEAD END   | DEAD END                                   | Rehab Minor Overlay               | \$9,674   | В        |
| 55        | 5TH AVE           | DEAD END   | DEAD END                                   | Rehab Minor Overlay               | \$6,702   | В        |
| 60        | 3RD AVE           | NC 12  | 3RD AVE                                    | Rehab Minor Overlay               | \$54,494  | В        |
| 133       | PUDDING PAN LN    | SPINDRIFT TRL                                      | DEAD END                                   | Rehab Minor Overlay               | \$100,018 | В        |
| 13        | OCEAN VIEW LOOP   | OCEANVIEW LOOP                                     | NC 12                                      | Patching                          | \$12,842  | В        |
| 21        | DUCK WOODS DR     | CROATAN HWY  | DEAD END                                   | Patching                          | \$133,073 | В        |
| 42        | 9TH AVE           | NC 12  | 9TH AVE                                    | Patching                          | \$6,419   | В        |
| 57        | 4TH AVE           | DEAD END   | DEAD END                                   | Patching                          | \$2,667   | В        |
| 78        | N WOODLAND DR     | DEAD END   | DEAD END                                   | Patching                          | \$31,869  | В        |
| 31        | 11TH AVE          | DEAD END   | DEAD END                                   | Patching                          | \$2,932   | В        |
| 28        | 12TH AVE          | DEAD END   | DEAD END                                   | Patching                          | \$2,519   | В        |
| 46        | 8TH AVE           | DEAD END   | DEAD END                                   | Patching                          | \$4,652   | В        |
| 25        | 13TH AVE          | NC 12  | 13TH AVE                                   | Patching                          | \$6,646   | В        |
| 94        | DOLPHIN RUN       | NC 12  | OCEAN BLVD                                 | Patching                          | \$13,617  | В        |
| 23        | GINGUITE TRL      |  |  |                                   |           |          |
| 5         | BAYBERRY TRL      | E DOGWOOD TRL                                      | SCUPPERNONG LN                             | Patching                          | \$28,784  | В        |
| 16        | TALL CLIFF LN     | HIGH DUNE LOOP                                     | DEAD END                                   | Patching                          | \$4,351   | В        |
| 110       | W HOLLY TRL       | HOLLY TRL  | DEAD END                                   | Patching                          | \$13,478  | В        |
| 66        | PURPLE MARTIN LN  | OCEAN BLVD   | DEAD END                                   | Patching                          | \$4,117   | В        |
| 107       | E HOLLY TRL       | HOLLY TRL  | DEAD END                                   | Patching                          | \$2,660   | В        |
|           | 8TH AVE           | NC 12  | 8TH AVE                                    | Patching                          | \$5,882   | В        |
| 72        | SAND PIPER LN     | OCEAN BLVD   | DEAD END                                   | Rehab (Major) - Mill and Fill 2in | \$16,632  | В        |
| 37        | 11TH AVE          | SEA OATS TRL                                       | NC 12                                      | Patching                          | \$17,268  | В        |
| 41        | 10TH AVE          | NC 12  | DEAD END                                   | Patching                          | \$7,375   | В        |
| 35        | 11TH AVE          | NC 12  | 11TH AVE                                   | Patching                          | \$20,390  | В        |
| 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        |
|           | BRIGHT LANTERN LN | SEA OATS LN  | DEAD END                                   | Rehab (Major) - Mill and Fill 2in | \$18,196  | C        |
|           | KINGFISHER CT     | KINGFISHER TRL                                     | DEAD END                                   | Rehab (Major) - Mill and Fill 2in | \$15,967  | C        |
|           | 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 C      |
| 119       | BENT OAK CT       | POTESKEET TRL                                      | DEAD END                                   | Rehab (Major) - Mill and Fill 2in | \$16,123  | C C      |
| 139       | LAND FALL LOOP    | SPINDRIFT TRL                                      | SPINDRIFT TRL                              | Rehab (Major) - Mill and Fill 2in | \$22,925  | C C      |
|           | POINT COMFORT LN  | GINGUITE TRL                                       | DEAD END                                   | Rehab (Major) - Mill and Fill 2in | \$21,347  | C C      |
| 154       | TEAL CT           | S DOGWOOD TRL                                      |  |                                   | \$14,105  | C C      |
| 104       | TROUT RUN         | NC 12 OCEAN BLVD Rehab (Major) - Mill and Fill 2in |  | \$32,083                          | C C       |          |
| 160       | WOOD DUCK CT      | S DOGWOOD TRL                                      | DEAD END Rehab (Major) - Mill and Fill 2in |                                   | \$14,221  | C C      |
|           | BLUE PETE CT      |  |  | Rehab (Major) - Mill and Fill 2in | \$12,801  | C<br>C   |
|           | SEA OATS CT       | SEA OATS TRL                                       | DEAD END                                   | Rehab (Major) - Mill and Fill 2in | \$11,050  | C<br>C   |
| £1        | SERVICIONIS CI    |  |  |                                   | ,000      | <u> </u> |

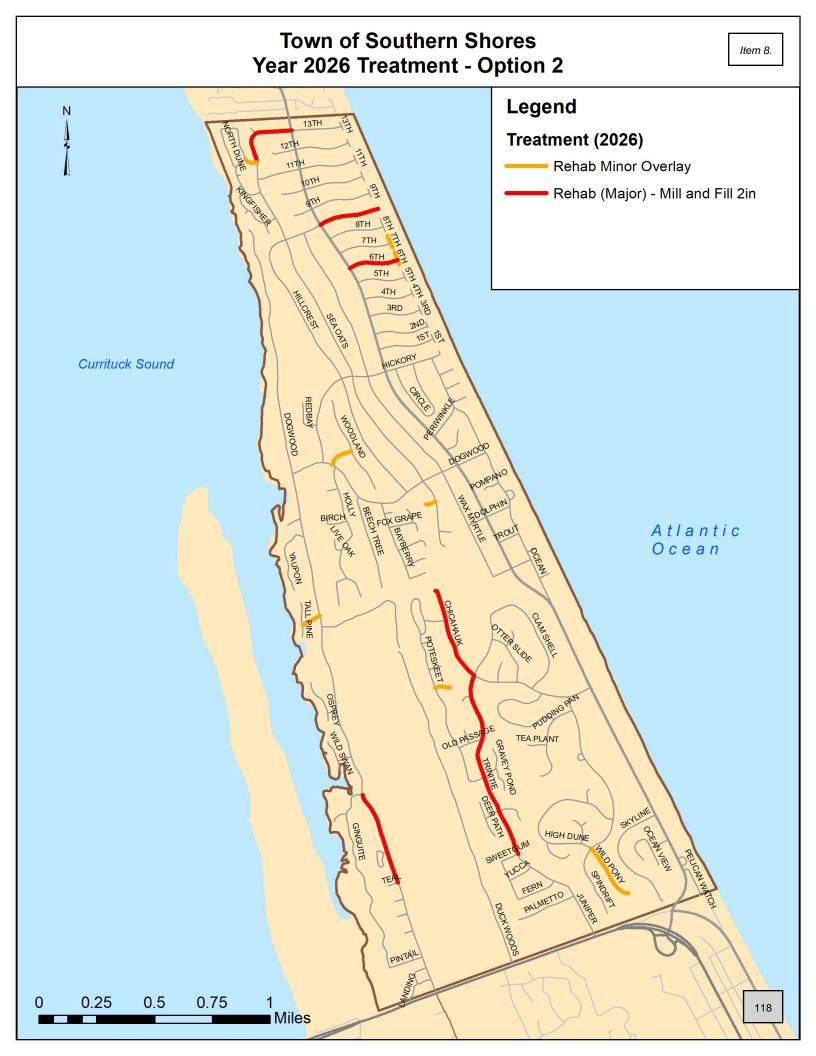


| Year 2025 | Option 2   |                |                                   |                                   |                   |              |
|-----------|--|----------------|-----------------------------------|-----------------------------------|-------------------|--------------|
| SectionID | 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          | А            |
| 51        | HILLCREST DR SEA OATS TRL HI   |                | HICKORY TRL                       | Rehab (Major) - Mill and Fill 2in | \$226,739         | А            |
| 90        | HILLCREST DR HICKORY TRL E   |                | E DOGWOOD TRL                     | Rehab (Major) - Mill and Fill 2in | \$199,857         | А            |
| 127       | CLAM SHELL TRL   | CHICAHAUK TRL  | OTTER SLIDE LN                    | Rehab Minor Overlay               | \$178,536         | В            |
| 1         | SEA OATS LN  | E DOGWOOD TRL  | DEAD END                          | Rehab Minor Overlay               | \$84,217          | В            |
| 59        | 3RD AVE  | DEAD END       | DEAD END                          | Rehab Minor Overlay               | \$6,343           | В            |
| 56        | 5TH AVE  | NC 12          | 5TH AVE                           | Rehab Minor Overlay               | \$50,862          | В            |
| 33        | SOUNDVIEW TRL  | SEA OATS TRL   | NORTH DUNE LOOP                   | Rehab Minor Overlay               | \$69 <i>,</i> 336 | В            |
| 171       | OTTER SLIDE LN   | CLAM SHELL TRL | CHICAHAUK TRL                     | Rehab Minor Overlay               | \$65,076          | В            |
| 145       | LAST HUNT LN   | HIGH DUNE LOOP | DEAD END                          | Rehab (Major) - Mill and Fill 2in | \$22,008          | С            |
| 122       | TWISTED TREE CT POTESKEET TRL DEAD END Rehab (Major) - Mill and Fill 2in |                | Rehab (Major) - Mill and Fill 2in | \$18,779                          | C                 |              |
|           |  |                |                                   |                                   | \$998,588         | Yearly Total |

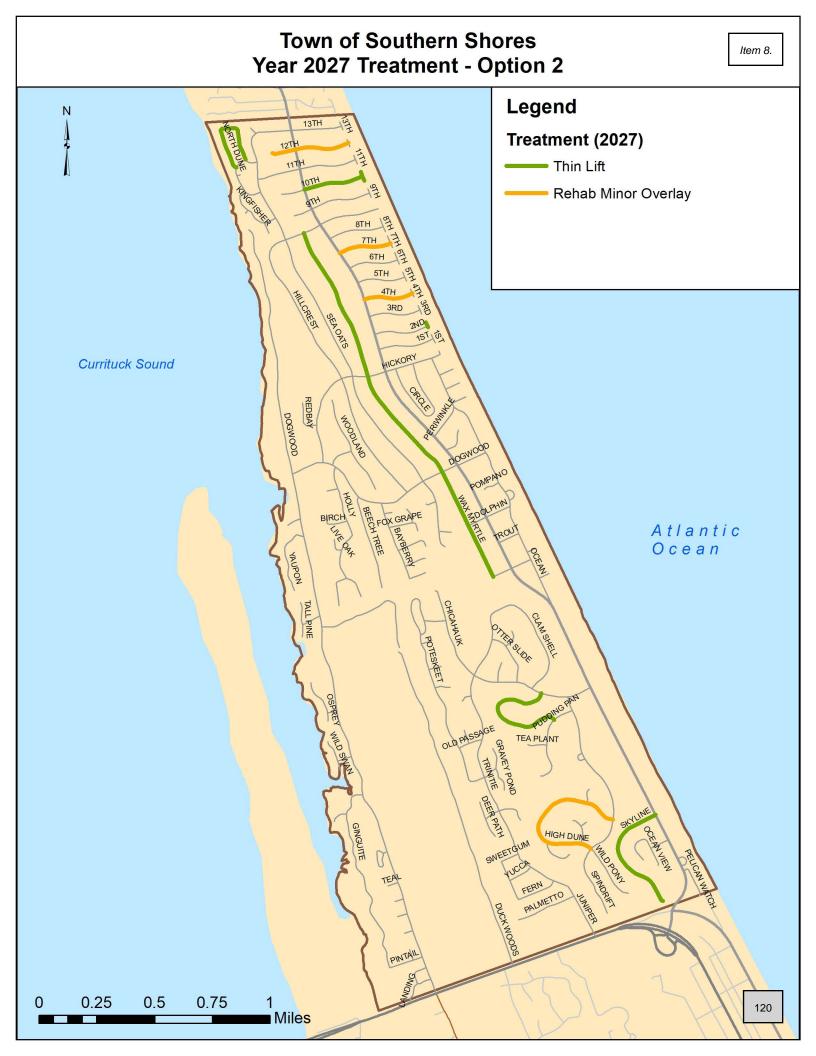
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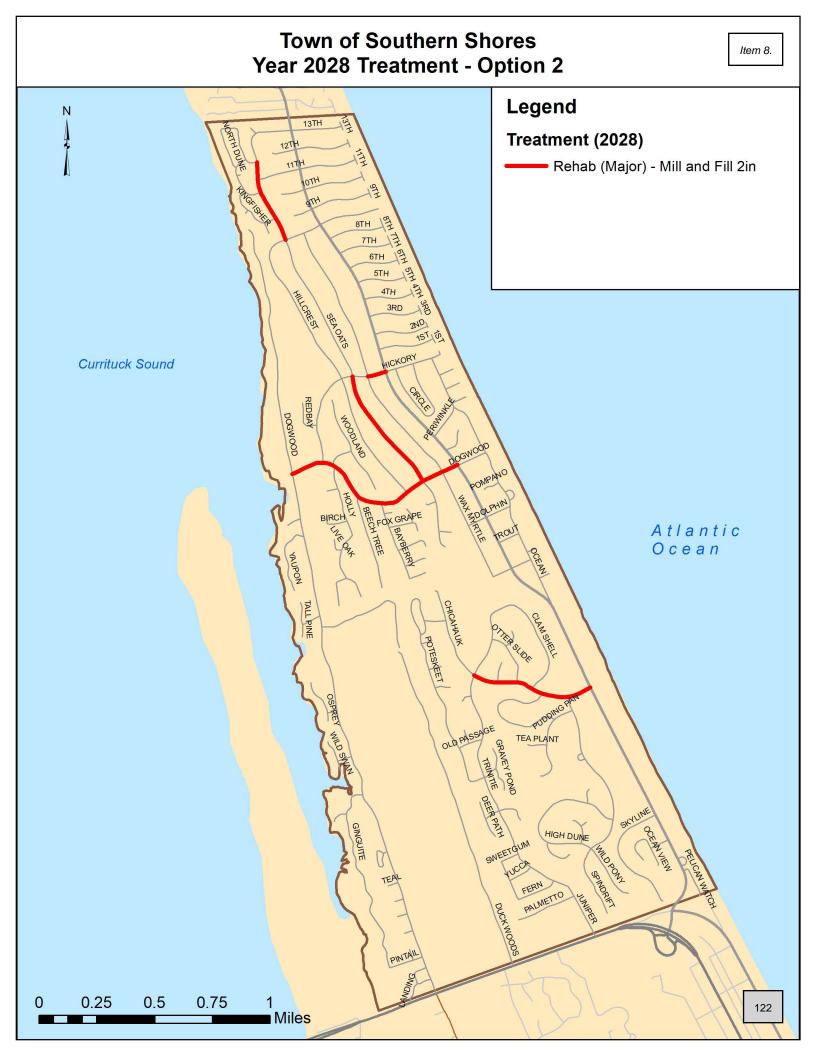
| Year 2026 | Option 2       |                 |                |                                   |                   |              |
|-----------|----------------|-----------------|----------------|-----------------------------------|-------------------|--------------|
| SectionID | Street Name 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



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

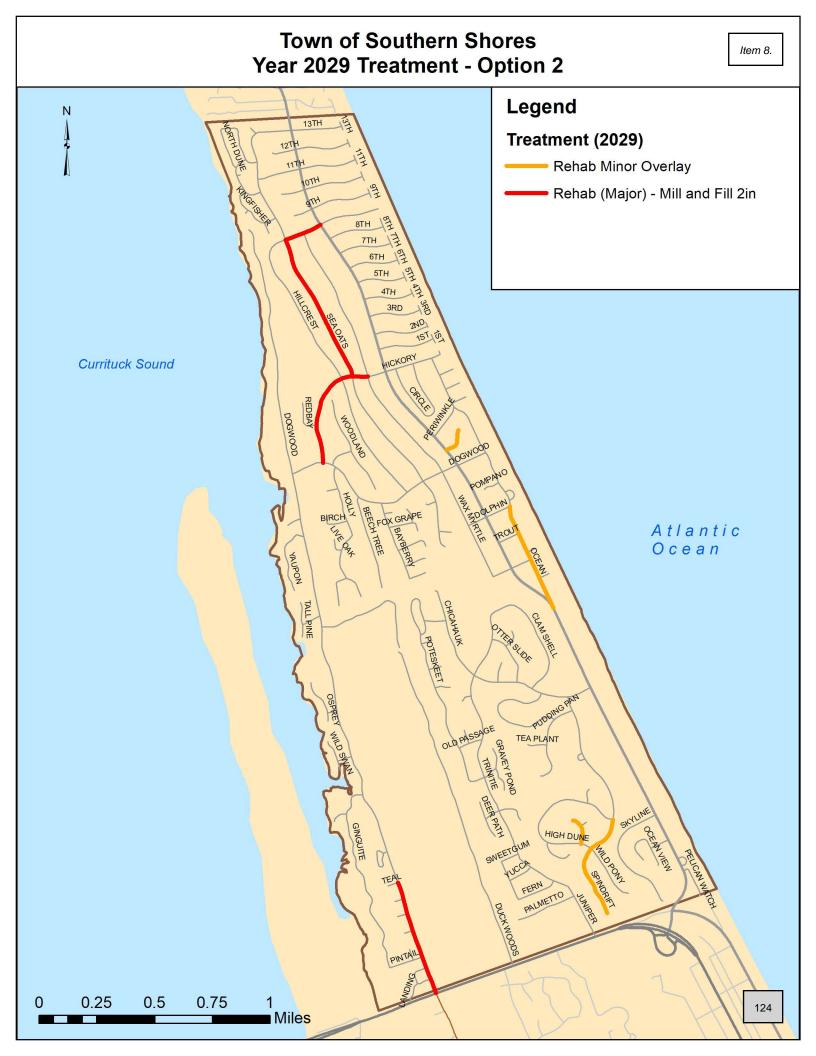


| Year 2028 | Option 2      |                |                |                                   |           |              |
|-----------|---------------|----------------|----------------|-----------------------------------|-----------|--------------|
| SectionID | Street Name   | BEG_DESC       |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

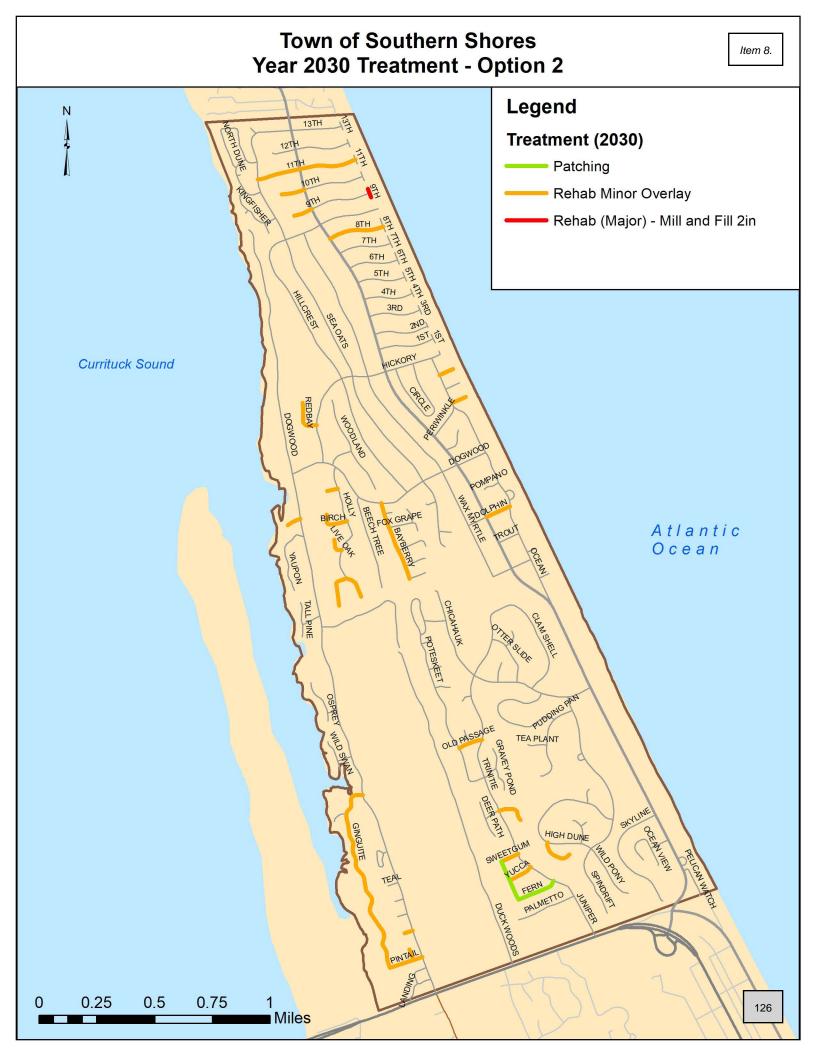


| Year 2029 | Option 2        |                      |                |                                   |           |              |
|-----------|-----------------|----------------------|----------------|-----------------------------------|-----------|--------------|
| SectionID | Street Name     |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

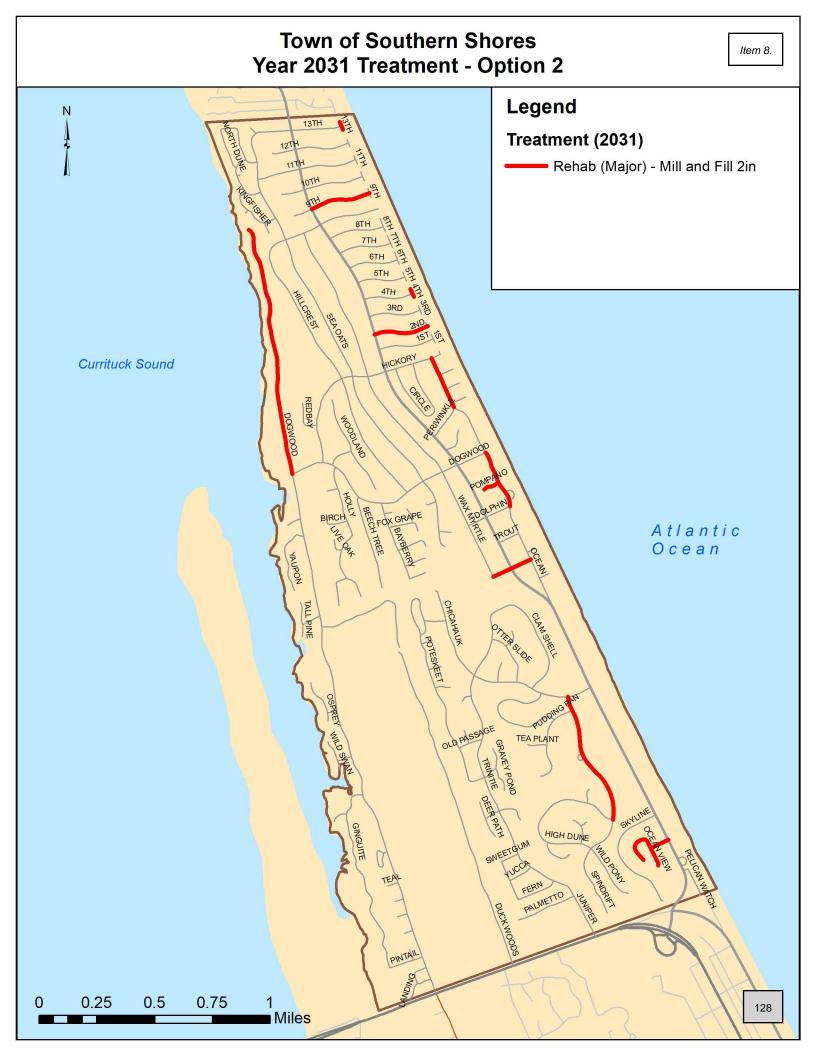
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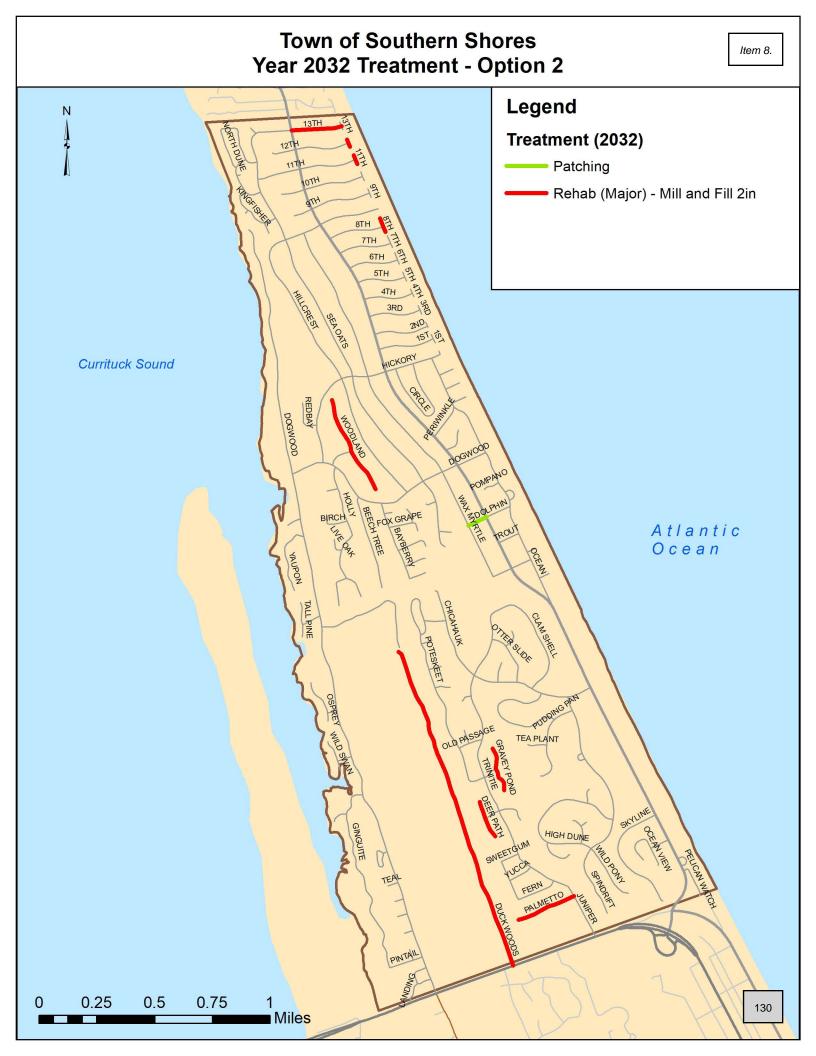
| Year 2030 | Option 2  |                |                     |                                   |           |              |
|-----------|---|----------------|---------------------|-----------------------------------|-----------|--------------|
| SectionID | Street Name                           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



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



| 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     | В            |
| 21        | DUCK WOODS DR  | CROATAN HWY    | DEAD END                          | Rehab (Major) - Mill and Fill 2in | \$535,022   | В            |
| 78        | N WOODLAND DR  | DEAD END       | DEAD END                          | Rehab (Major) - Mill and Fill 2in | \$128,131   | В            |
| 31        | 11TH AVE   | DEAD END       | DEAD END                          | Rehab (Major) - Mill and Fill 2in | \$11,786    | В            |
| 28        | 12TH AVE   | DEAD END       | DEAD END                          | Rehab (Major) - Mill and Fill 2in | \$10,128    | В            |
| 46        | 8TH AVE  | DEAD END       | DEAD END                          | Rehab (Major) - Mill and Fill 2in | \$18,705    | В            |
| 25        | 13TH AVE   | NC 12          | 13TH AVE                          | Rehab (Major) - Mill and Fill 2in | \$80,166    | В            |
| 147       | DEER PATH LN   | DEAD END       | DEAD END                          | Rehab (Major) - Mill and Fill 2in | \$57,576    | В            |
| 161       | PALMETTO LN  | JUNIPER TRL    | DEAD END                          | Rehab (Major) - Mill and Fill 2in | \$86,362    | В            |
| 142       | GRAVEY POND LN DEAD END DEAD END Rehab (Major) - Mill and Fill 2in |                | Rehab (Major) - Mill and Fill 2in | \$65,416                          | В           |              |
|           |  |                |                                   |                                   | \$1,000,101 | Yearly Total |



### **APPENDIX C**

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

|           |                   |       |                |                | Арр                                   | pendix C - Alph     | abetical Lis                         | t of Segments   |                        |                |             |            |                 |        |       |            |
|-----------|-------------------|-------|----------------|----------------|---------------------------------------|---------------------|--------------------------------------|-----------------|------------------------|----------------|-------------|------------|-----------------|--------|-------|------------|
| SectionID | Street Name       | Class | BEG_DESC       | END_DESC       | Fatigue Cracking                      | Transverse Cracking | Patch<br>Deterioration /<br>Potholes | Surface Defects | Rutting /<br>Roughness | Block Cracking | Length (ft) | Width (ft) | Square<br>Yards | PCI    | CURB  | Sidewalk   |
| 36        | 10TH AVE          | В     | 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          | В     | 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          | В     | 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          | В     | 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          | В     | 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          | В     | 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          | В     | DEAD END       | DEAD END       | MEDIUM/5-10                           |                     | NONE                                 | MEDIUM/EXTREME  | NONE                   | MEDIUM/0-5     | 170.98      | 17         | 322.97          | 65.78  | False | None       |
| 29        | 12TH AVE          | В     | 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          | В     | 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          | В     | 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          | В     | 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           | В     | 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           | В     | 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           | В     | 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           | В     | 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           | В     | 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           | В     | 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           | В     | 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           | В     | 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           | В     | 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           | В     | 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           | В     | 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           | В     | 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           | В     | 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           | В     | 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           | В     | 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           | В     | 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           | В     | 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           | В     | 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           | В     | 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      | В     | 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     | С     | TRINITIE TRL   | DEAD END       | NONE                                  | NONE                | NONE                                 | NONE            | NONE                   | NONE           | 256.58      | 22         | 627.2           | 100.00 | False | None       |
| 105       | BEECH TREE TRL    | В     | 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       | С     | 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          | С     | 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      | С     | 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 | С     | 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       | CHICAHAUK TRL     | Α     | 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       | CHICAHAUK TRL     | А     | 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         | В     | 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    | В     | OTTER SLIDE LN | CHICAHAUK TRL  | NONE                                  | NONE                | NONE                                 | NONE            | NONE                   | NONE           | 916.74      | 20         | 2037.21         | 100.00 | FALSE | None       |
| 127       | CLAM SHELL TRL    | В     | 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       |
| 134       | CROOKED BACK LOOP | В     | CHICAHAUK 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        | В     | SWEETGUM LN    | FERN LN        | · · · · · · · · · · · · · · · · · · · | NONE                | NONE                                 | LOW/EXTREME     | LOW/LOW                | NONE           | 963.00      | 20         | 2139.99         | 82.25  | FALSE | None       |
| 146       | DEER PATH LN      | В     | DEER PATH LN   | TRINITIE TRL   | MEDIUM/0-5                            | NONE                | NONE                                 | LOW/EXTREME     | NONE                   | NONE           | 364.04      | 20         | 808.97          | 82.75  | False | None       |

|           |                                |       |                         |                      | Арр                                   | pendix C - Alph                       | abetical Lis                          | t of Segments                  |                        |                            |                    |            |                   |                |                |          |
|-----------|--------------------------------|-------|-------------------------|----------------------|---------------------------------------|---------------------------------------|---------------------------------------|--------------------------------|------------------------|----------------------------|--------------------|------------|-------------------|----------------|----------------|----------|
| SectionID | Street Name                    | Class | BEG_DESC                | END_DESC             | Fatigue Cracking                      | Transverse Cracking                   | Patch<br>Deterioration /<br>Potholes  | Surface Defects                | Rutting /<br>Roughness | Block Cracking             | Length (ft)        | Width (ft) | Square<br>Yards   | PCI            | CURB           | Sidewalk |
| 147       | DEER PATH LN                   | В     | 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                    | С     | BAYBERRY TRL            | DEAD END             | NONE                                  | NONE                                  | NONE                                  | NONE                           | NONE                   | NONE                       | 174.82             | 18         | 349.65            | 100.00         | True           | None     |
| 94        | DOLPHIN RUN                    | В     | 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                    | В     | WAX MYRTLE TRL          | NC 12                |                                       | 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                  | В     | 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/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/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                    | В     | 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             |                                       | NONE                                  | NONE                                  | LOW/EXTREME                    | LOW/LOW                | NONE                       | 650.37             | 16         | 1156.22           | 82.25          | False          | None     |
| 121       | FAIRWAY DR                     | В     | 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                        | В     | 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                   | В     | 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/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     | 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     |
| 142       | GRAVEY POND LN                 | В     |                         | DEAD END             | HIGH/0-5                              | NONE                                  | NONE                                  |                                | NONE                   | NONE                       | 1,042.99           | 18         | 2085.98           | 82.50          | False          | None     |
| 143       | GRAVEY POND LN                 | B     |                         | GRAVEY POND LN       | NONE                                  | NONE                                  | NONE                                  | NONE                           |                        | NONE                       | 334.07             | 20         | 742.38            | 100.00         | False          | None     |
| 113       | GRAY SQUIRREL LN               | C     |                         | CHICAHAUK TRL        |                                       |                                       | NONE                                  | NONE                           |                        |                            | 499.61             | 20         | 1110.25           | 93.00          | False          | None     |
| 150       | HAPPY INDIAN CT                | C     | HAPPY INDIAN LN         | DEAD END<br>DEAD END |                                       |                                       | NONE                                  |                                | MEDIUM/LOW             | MEDIUM/0-5                 | 157.07             | 20<br>20   | 349.04            | 52.50          | False          | None     |
| 11<br>65  | HAPPY INDIAN LN<br>HICKORY TRL | B     | HIGH DUNE LOOP<br>NC 12 | DEAD END<br>DEAD END |                                       | MEDIUM/MEDIUM<br>MEDIUM/MEDIUM        | LOW/0-5<br>MEDIUM/0-5                 | HIGH/EXTREME<br>MEDIUM/EXTREME | NONE<br>NONE           | MEDIUM/0-5<br>MEDIUM/10-25 | 640.14<br>1,383.62 | <br>17     | 1422.54<br>2613.5 | 51.97<br>55.51 | False<br>False | None     |
| 69        | HICKORY TRL                    | A     | WAX MYRTLE TRL          | NC 12                | · · · · · · · · · · · · · · · · · · · | 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/HIGH                           | · · · · · · · · · · · · · · · · · · · | MEDIUM/EXTREME                 | NONE                   | MEDIUM/10-25               | 602.47             | 19         | 1271.89           | 63.57          | False          | None     |
| 71        | HICKORY TRL                    | A     | HILLCREST DR            | E DOGWOOD TRL        |                                       | 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                |                                       | MEDIUM/MEDIUM                         |                                       | MEDIUM/EXTREME                 | NONE                   | LOW/0-5                    | 869.84             | 20         | 1932.97           | 66.32          | False          | None     |
| 51        | HILLCREST DR                   |       | SEA OATS TRL            | HICKORY TRL          | MEDIUM/10-25                          | · · · · · · · · · · · · · · · · · · · |                                       |                                |                        | MEDIUM/25-50               | 3,856.10           | 18         | 7712.21           | 62.78          | True           | None     |
| 90        | HILLCREST DR                   | A     | HICKORY TRL             | E DOGWOOD TRL        |                                       |                                       |                                       |                                | 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                       | 320.29             | 18         | 640.58            | 100.00         | False          | None     |
| 2         | HOLLY TRL                      | В     | E DOGWOOD TRL           | HOLLY TRL            | NONE                                  | NONE                                  | NONE                                  | NONE                           | NONE                   | NONE                       | 2,748.20           | 20         | 6107.1            | 100.00         | False          | None     |
| 4         | HONEYSUCKLE LN                 | В     | BAYBERRY TRL            | DEAD END             | NONE                                  | NONE                                  | NONE                                  | NONE                           | NONE                   | NONE                       | 746.06             | 18         | 1492.13           | 100.00         | False          | None     |
| 19        | JUNIPER TRL                    | А     | SWEETGUM LN             | CROATAN HWY          | NONE                                  |                                       | NONE                                  | NONE                           | NONE                   | NONE                       | 2,693.16           | 22         | 6583.27           | 96.00          | False          | One Side |
| 172       | KINGFISHER CT                  | С     | 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                 | С     | SOUNDVIEW TRL           | SEA OATS TRL         |                                       | HIGH/HIGH                             |                                       |                                | NONE                   | MEDIUM/5-10                | 1,339.20           | 20         | 2976.01           | 55.45          | True           | None     |
| 139       | LAND FALL LOOP                 | С     | 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                   | С     | HIGH DUNE LOOP          | DEAD END             |                                       | MEDIUM/LOW                            | NONE                                  |                                | NONE                   | MEDIUM/0-5                 | 336.85             | 20         | 748.56            | 67.17          | False          | None     |
| 3         | LIVE OAK LN                    | С     | 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                    | С     | 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                   | С     | BAYBERRY TRL            | DEAD END             | NONE                                  | NONE                                  | NONE                                  | NONE                           | NONE                   | NONE                       | 495.20             | 17         | 935.38            | 100.00         | False          | None     |
| 92        | MIZZENMAST LN                  | С     | 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                 | В     | 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                  | В     | 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                 | В     | FOX GRAPE LN            | DEAD END             |                                       | NONE                                  | NONE                                  | NONE                           | NONE                   | NONE                       | 352.42             | 18         | 704.84            | 100.00         | False          | None     |
| 78        | N WOODLAND DR                  | В     | 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     |

|           |                  |       |                  |                | Арр                                   | pendix C - Alph     | abetical Lis                         | t of Segments                         |                        |                |             |            |                 |        |       |          |
|-----------|------------------|-------|------------------|----------------|---------------------------------------|---------------------|--------------------------------------|---------------------------------------|------------------------|----------------|-------------|------------|-----------------|--------|-------|----------|
| SectionID | Street Name      | Class | BEG_DESC         | END_DESC       |                                       | Transverse Cracking | Patch<br>Deterioration /<br>Potholes | Surface Defects                       | Rutting /<br>Roughness | Block Cracking | Length (ft) | Width (ft) | Square<br>Yards | PCI    | CURB  | Sidewalk |
| 34        | NORTH DUNE LOOP  | В     | 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       | В     | 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       | В     | 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       | В     | 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       | В     | 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       | В     | 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  | В     | 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  | В     | 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   | С     | POTESKEET TRL    | TRINITIE TRL   | NONE                                  | NONE                | NONE                                 | LOW/EXTREME                           | MEDIUM/LOW             | NONE           | 558.07      | 20         | 1240.16         | 82.08  | False | None     |
| 131       | OSPREY LN        | В     | OSPREY LN        | S DOGWOOD TRL  | NONE                                  | NONE                | NONE                                 | NONE                                  | NONE                   | NONE           | 213.11      | 18         | 426.23          | 100.00 | False | None     |
| 132       | OSPREY LN        | В     | DEAD END         | DEAD END       | NONE                                  | NONE                | NONE                                 | NONE                                  | NONE                   | NONE           | 1,009.50    | 18         | 2019.01         | 100.00 | False | None     |
| 171       | OTTER SLIDE LN   | В     | 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     |
| 120       | OYSTER BED LN    | С     | 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      | В     | 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    | В     | 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       | С     | 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      | С     | 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 | С     | 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       | В     | OCEAN BLVD       | DEAD END       |                                       | MEDIUM/MEDIUM       |                                      | MEDIUM/EXTREME                        | MEDIUM/LOW             | MEDIUM/5-10    | 368.87      | 14         | 573.8           | 65.16  | False | None     |
| 8         | PORPOISE RUN     | В     | NC 12            | OCEAN BLVD     | · · · · · · · · · · · · · · · · · · · | ,<br>MEDIUM/LOW     | NONE                                 | MEDIUM/EXTREME                        | NONE                   | MEDIUM/25-50   | 483.16      | 16         | 858.95          | 63.96  | True  | None     |
| 9         | PORPOISE RUN     | В     | 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   | В     | GRAY SQUIRREL LN | POTESKEET LOOP | NONE                                  | NONE                | NONE                                 | NONE                                  | NONE                   | NONE           | 384.89      | 18         | 769.79          | 100.00 | False | None     |
| 117       | POTESKEET LOOP   | В     | GRAY SQUIRRLE LN | POTESKEET TRL  | NONE                                  | NONE                | NONE                                 | NONE                                  | LOW/LOW                | NONE           | 1,490.66    | 18         | 2981.32         | 93.00  | False | None     |
| 118       | POTESKEET TRL    | В     | 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    | В     | 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   | В     | 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 | В     | 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        | С     | HICKORY TRL      | DEAD END       |                                       |                     | NONE                                 | LOW/EXTREME                           |                        | NONE           | 780.95      | 17         | 1475.14         | 82.75  | False | None     |
| 95        | S DOGWOOD TRL    | A     | E DOGWOOD TRL    | YAUPON TRL     |                                       |                     | LOW/0-5                              | LOW/EXTREME                           |                        | MEDIUM/0-5     | 1,459.90    | 19         | 3082.02         | 78.98  | False | One Side |
| 111       | S DOGWOOD TRL    | A     | YAUPON TRL       | FAIRWAY DR     | · · · · · · · · · · · · · · · · · · · | 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   |                                       | 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        |                                       |                     |                                      | -                                     |                        | MEDIUM/5-10    | 2,180.16    | 20         | 4844.79         | 65.68  | False | One Side |
| 157       | S DOGWOOD TRL    | A     | TEAL CT          | CROATAN HWY    |                                       |                     |                                      | · · · ·                               | -                      | 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       |                                       |                     |                                      | MEDIUM/EXTREME                        |                        | MEDIUM/5-10    | 342.70      | 15         | 571.16          | 66.90  | False | None     |
| 79        | SANDFIDDLER CT   | B     | NC 12            | DEAD END       |                                       |                     | NONE                                 | MEDIUM/EXTREME                        |                        | MEDIUM/25-50   | 598.71      | 20         | 1330.48         | 63.46  | False | None     |
| 98        | SASSAFRAS LN     | C     | S DOGWOOD TRL    | DEAD END       | LOW/0-5                               |                     | NONE                                 | LOW/EXTREME                           |                        | NONE           | 323.10      | 12         | 430.79          | 82.61  | False | None     |
| 10        | SCUPPERNONG LN   | B     | BAYBERRY TRL     | NC 12          | 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/HIGH         |                                      | LOW/EXTREME                           |                        | MEDIUM/5-10    | 170.77      | 20         | 379.48          | 67.70  | False | None     |
| 1         | SEA OATS LN      | B     | E DOGWOOD TRL    | DEAD END       |                                       | HIGH/HIGH           |                                      |                                       |                        | MEDIUM/5-10    | 1,640.58    | 20         | 3645.74         | 54.99  | False | None     |
| 26        | SEA OATS TRL     | A     | SOUNDVIEW TRL    | NC 12          |                                       | MEDIUM/HIGH         | HIGH/0-5                             | LOW/EXTREME                           |                        | MEDIUM/10-25   | 1,540.52    | 20         | 3423.37         | 66.74  | False | None     |
| 38        | SEA OATS TRL     | A     | SOUNDVIEW TRL    | HILLCREST DR   |                                       | MEDIUM/HIGH         |                                      |                                       |                        | MEDIUM/5-10    | 1,922.06    | 20         | 4271.25         | 64.62  | False | None     |
| 68        | SEA OATS TRL     | A     | HILLCREST DR     | HICKORY TRL    | · · · ·                               |                     | · · · ·                              | · · · · · · · · · · · · · · · · · · · |                        | MEDIUM/5-10    | 3,500.21    | 20         | 7778.24         | 65.45  | False | None     |
| 86        | SEA OATS TRL     | A     | HICKORY TRL      | E DOGWOOD TRL  |                                       | -                   |                                      | MEDIUM/EXTREME                        |                        | MEDIUM/5-10    | 2,941.84    | 20         | 6537.43         | 65.34  | False | None     |
| 158       | SKYLINE RD       |       | NC 12            | DEAD END       | · · · · · · · · · · · · · · · · · · · |                     |                                      | MEDIUM/EXTREME                        | · · · ·                | MEDIUM/5-10    | 2,882.09    | 18         | 5764.17         | 64.65  | False | None     |
| 150       |                  |       |                  |                |                                       |                     |                                      |                                       |                        |                | 2,002.05    | 10         | 5704.17         | 04.05  | iuise | Hone     |

|           |                 |       |                 |                 | App              | pendix C - Alph     | abetical Lis                         | t of Segments   |                        |                |             |            |                 |        |       |          |
|-----------|-----------------|-------|-----------------|-----------------|------------------|---------------------|--------------------------------------|-----------------|------------------------|----------------|-------------|------------|-----------------|--------|-------|----------|
| SectionID | Street Name     | Class | BEG_DESC        | END_DESC        | Fatigue Cracking | Transverse Cracking | Patch<br>Deterioration /<br>Potholes | Surface Defects | Rutting /<br>Roughness | Block Cracking | Length (ft) | Width (ft) | Square<br>Yards | PCI    | CURB  | Sidewalk |
| 32        | SOUNDVIEW TRL   | В     | 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   | В     | 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   | В     | 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   | В     | CHICAHAUK 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     | С     | 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   | В     | 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    | В     | 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    | В     | 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    | В     | 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         | С     | 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    | А     | 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    | А     | CHICAHAUK 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       | С     | 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  | С     | 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 | С     | 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     | В     | 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  | В     | 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  | В     | 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  | В     | 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      | С     | 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    | В     | 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    | В     | 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    | В     | DEAD END        | DEAD END        | NONE             | NONE                | NONE                                 | NONE            | NONE                   | NONE           | 741.52      | 16         | 1318.25         | 100.00 | False | None     |
| 160       | WOOD DUCK CT    | С     | 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     | С     | 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      | В     | S DOGWOOD TRL   | DEAD END        | NONE             | NONE                | NONE                                 | NONE            | NONE                   | NONE           | 1,604.95    | 14         | 2496.6          | 100.00 | False | None     |
| 151       | YUCCA LN        | С     | 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 |                  |       |                  |                |                                       |                     |                                      |                 |                        |                |             |            |                 |        |       | lter     |
|--------------------------------------|------------------|-------|------------------|----------------|---------------------------------------|---------------------|--------------------------------------|-----------------|------------------------|----------------|-------------|------------|-----------------|--------|-------|----------|
| SectionID                            | Street Name      | Class | BEG_DESC         | END_DESC       | Fatigue Cracking                      | Transverse Cracking | Patch<br>Deterioration /<br>Potholes | Surface Defects | Rutting /<br>Roughness | Block Cracking | Length (ft) | Width (ft) | Square<br>Yards | PCI    | CURB  | Sidewalk |
| 20                                   | BEAR TRACK LN    | С     | TRINITIE TRL     | DEAD END       | NONE                                  | NONE                | NONE                                 | NONE            | NONE                   | NONE           | 256.58      | 22         | 627.2           | 100.00 | False | None     |
| 105                                  | BEECH TREE TRL   | В     | 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   | В     | OTTER SLIDE LN   | CHICAHAUK TRL  | NONE                                  | NONE                | NONE                                 | NONE            | NONE                   | NONE           | 916.74      | 20         | 2037.21         | 100.00 | False | None     |
| 93                                   | DEWBERRY LN      | С     | BAYBERRY TRL     | DEAD END       | NONE                                  | NONE                | NONE                                 | NONE            | NONE                   | NONE           | 174.82      | 18         | 349.65          | 100.00 | True  | None     |
| 83                                   | E DOGWOOD TRL    | А     | NC 12            | OCEAN BLVD     | NONE                                  | NONE                | NONE                                 | NONE            | NONE                   | NONE           | 700.48      | 18         | 1400.96         | 100.00 | False | One Sid  |
| 101                                  | FOX GRAPE LN     | В     | 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   | В     | TRINITIE TRL     | GRAVEY POND LN | NONE                                  | NONE                | NONE                                 | NONE            | NONE                   | NONE           | 334.07      | 20         | 742.38          | 100.00 | False | None     |
| 137                                  | HOLLOW BEACH CT  | С     | OLD PASSAGE LN   | DEAD END       | NONE                                  | NONE                | NONE                                 | NONE            | NONE                   | NONE           | 320.29      | 18         | 640.58          | 100.00 | False | None     |
| 2                                    | HOLLY TRL        | В     | E DOGWOOD TRL    | HOLLY TRL      | NONE                                  | NONE                | NONE                                 | NONE            | NONE                   | NONE           | 2,748.20    | 20         | 6107.1          | 100.00 | False | None     |
| 4                                    | HONEYSUCKLE LN   | В     | BAYBERRY TRL     | DEAD END       | NONE                                  | NONE                | NONE                                 | NONE            | NONE                   | NONE           | 746.06      | 18         | 1492.13         | 100.00 | False | None     |
| 7                                    | MISTLETOE LN     | С     | BAYBERRY TRL     | DEAD END       | NONE                                  | NONE                | NONE                                 | NONE            | NONE                   | NONE           | 495.20      | 17         | 935.38          | 100.00 | False | None     |
| 96                                   | N FOX GRAPE LN   | В     | FOX GRAPE LN     | DEAD END       | 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           | 213.11      | 18         | 426.23          | 100.00 | False | None     |
| 132                                  | OSPREY LN        | B     | DEAD END         | DEAD END       | 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           | 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           | 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           | 326.31      | 18         | 652.62          | 100.00 | False | None     |
| 140                                  | WILD SWAN LN     | B     | DEAD END         | DEAD END       | 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           | 1,604.95    | 10         | 2496.6          | 100.00 | False | None     |
| 108                                  | POTESKEET TRL    | B     | POTESKEET LOOP   | OLD PASSAGE LN | LOW/0-5                               | NONE                |                                      | NONE            | NONE                   | NONE           | 2,799.87    | 20         | 6221.94         | 99.00  | False |          |
| 144                                  | POTESKEET TRL    | B     | OLD PASSAGE LN   | TRINITIE TRL   | · · · · · · · · · · · · · · · · · · · | NONE                |                                      | NONE            |                        | NONE           |             | 20         | 2544.92         | 99.00  | False | None     |
|                                      |                  |       |                  |                | LOW/0-5                               |                     |                                      |                 | NONE                   |                | 1,145.21    |            |                 |        |       | None     |
| 19                                   | JUNIPER TRL      | A     | SWEETGUM LN      | CROATAN HWY    | NONE                                  | LOW/LOW             |                                      | NONE            | NONE                   | NONE           | 2,693.16    | 22         | 6583.27         | 96.00  | False | One Sid  |
| 113                                  | GRAY SQUIRREL LN | C     | POTESKEET LOOP   |                | NONE                                  | NONE                |                                      | NONE            | LOW/LOW                | NONE           | 499.61      | 20         | 1110.25         | 93.00  | False | None     |
| 117                                  | POTESKEET LOOP   | В     | GRAY SQUIRRLE LN | POTESKEET TRL  | NONE                                  | NONE                |                                      | NONE            | LOW/LOW                | NONE           | 1,490.66    | 18         | 2981.32         | 93.00  | False | None     |
| 10                                   | SCUPPERNONG LN   | В     | BAYBERRY TRL     | NC 12          | 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     | В     | 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     | В     | DEER PATH LN     | TRINITIE TRL   | MEDIUM/0-5                            | 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                | · · · ·                              | 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   | В     | 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      | В     | 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      | С     | CYPRESS LN       | TRINITIE TRL   | NONE                                  | NONE                | NONE                                 | LOW/EXTREME     | LOW/LOW                | NONE           | 423.10      | 20         | 940.22          | 82.42  | False | None     |
| 15                                   | TRINITIE TRL     | А     | 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 Sid  |
| 147                                  | DEER PATH LN     | В     | 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     | В     | 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       | В     | 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   | С     | 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       | С     | 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   | С     | POTESKEET TRL    | TRINITIE TRL   | NONE                                  | NONE                | NONE                                 | LOW/EXTREME     | MEDIUM/LOW             | NONE           | 558.07      | 20         | 1240.16         | 82.08  | False | None     |
| 88                                   | LOBLOLLY LN      | С     | 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     | А     | 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 Sid  |
| 3                                    | LIVE OAK LN      | С     | HOLLY TRL        | DEAD END       | LOW/0-5                               | LOW/LOW             | NONE                                 | LOW/EXTREME     |                        | 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/EXTREME     | NONE                   | MEDIUM/5-10    | 778.55      | 20         | 1730.11         | 81.45  | False | None     |
| 97                                   | BIRCH LN         | C     | HOLLY TRL        | DEAD END       |                                       | NONE                | · · · ·                              | LOW/EXTREME     | HIGH/LOW               | NONE           | 668.78      | 12         | 891.71          | 81.19  | False | None     |
| 5.                                   | CHICAHAUK 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     |

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|          |                  |       |                |                 | I                                     | Appendix D - R                        | anked List o                         | of Segments                           |                        |                |             |            |                 |       |       | Ite      |
|----------|------------------|-------|----------------|-----------------|---------------------------------------|---------------------------------------|--------------------------------------|---------------------------------------|------------------------|----------------|-------------|------------|-----------------|-------|-------|----------|
| ectionID | Street Name      | Class | BEG_DESC       | END_DESC        | Fatigue Cracking                      | Transverse Cracking                   | Patch<br>Deterioration /<br>Potholes | Surface Defects                       | Rutting /<br>Roughness | Block Cracking | Length (ft) | Width (ft) | Square<br>Yards | PCI   | CURB  | Sidewall |
| 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    | Α     | 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         | В     | NC 12          | DEAD END        | LOW/0-5                               | •                                     | NONE                                 | LOW/EXTREME                           | MEDIUM/LOW             | MEDIUM/0-5     | 542.08      | 20         | 1204.61         | 78.86 | False | None     |
| 121      | FAIRWAY DR       | В     | 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    |                                       | 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/LOW                            | LOW/0-5                              | LOW/EXTREME                           | NONE                   | MEDIUM/0-5     | 2,114.18    | 18         | 4228.36         | 77.08 | False | One Sid  |
| 122      | TWISTED TREE CT  | C     | POTESKEET TRL  | DEAD END        |                                       | low/low                               | NONE                                 | LOW/EXTREME                           | MEDIUM/LOW             | NONE           | 287.43      | 20         | 638.73          | 76.81 | False | None     |
| 44       | 9TH AVE          | В     | NC 12          | DEAD END        |                                       | MEDIUM/HIGH                           | LOW/0-5                              | LOW/EXTREME                           | NONE                   | LOW/0-5        | 432.58      | 16         | 769.03          | 67.95 | False | None     |
| 41       | 10TH AVE         | В     | 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         | В     | 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   | В     | OCEAN BLVD     | DEAD END        | NONE                                  | LOW/LOW                               | NONE                                 | MEDIUM/EXTREME                        | NONE                   | NONE           | 343.29      | 15         | 572.15          | 67.67 | False | None     |
| 37       | 11TH AVE         | В     | SEA OATS TRL   | NC 12           |                                       | MEDIUM/HIGH                           | MEDIUM/0-5                           | LOW/EXTREME                           | NONE                   | MEDIUM/5-10    | 996.22      | 20         | 2213.82         | 67.64 | False | None     |
| 50       | 7TH AVE          | В     | 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                                 | · · · · ·                             | 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          | В     | 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    | В     | 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          | В     | DEAD END       | DEAD END        | · · · ·                               | 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/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      | В     | 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 | В     | OCEAN BLVD     | DEAD END        |                                       | LOW/LOW                               |                                      | -                                     | NONE                   | MEDIUM/5-10    | 339.29      | 14         | 527.78          | 66.51 | FALSE | None     |
| 110      | W HOLLY TRL      | В     | HOLLY TRL      | DEAD END        | MEDIUM/5-10                           |                                       |                                      | MEDIUM/EXTREME                        | -                      |                | 777.56      | 20         | 1727.91         |       | False | None     |
| 47       | HILLCREST DR     | A     | SEA OATS TRL   | NC 12           | LOW/0-5                               | · · · · · · · · · · · · · · · · · · · |                                      | MEDIUM/EXTREME                        | NONE                   | LOW/0-5        | 869.84      | 20         | 1932.97         | 66.32 | False | None     |
| 16       | TALL CLIFF LN    | В     | 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     | В     | E DOGWOOD TRL  | SCUPPERNONG LN  | MEDIUM/5-10                           | low/low                               |                                      | · · · · · · · · · · · · · · · · · · · | MEDIUM/LOW             | MEDIUM/5-10    | 1,845.13    | 18         | 3690.26         | 66.02 | False | None     |
| 23       | GINGUITE TRL     | В     | 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      | В     | NC 12          | OCEAN BLVD      | MEDIUM/10-25                          |                                       | NONE                                 | LOW/EXTREME                           | NONE                   | MEDIUM/25-50   | 589.18      | 16         | 1047.44         | 66.01 | False | None     |
| 25       | 13TH AVE         | В     | 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    | Α     | 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         | В     | NC 12          | 12TH AVE        | LOW/5-10                              |                                       |                                      | MEDIUM/EXTREME                        | NONE                   | MEDIUM/0-5     | 1,239.85    | 18         | 2479.7          | 65.85 | False | None     |
| 46       | 8TH AVE          | В     | DEAD END       | DEAD END        | MEDIUM/5-10                           | MEDIUM/MEDIUM                         |                                      | · · · · · · · · · · · · · · · · · · · | NONE                   | LOW/0-5        | 335.50      | 16         | 596.45          | 65.82 | False | None     |
| 31       | 11TH AVE         | В     | DEAD END       | DEAD END        | · · · ·                               |                                       |                                      | · · · ·                               | NONE                   | MEDIUM/0-5     | 211.41      | 16         | 375.84          | 65.78 | False | None     |
| 28       | 12TH AVE         | В     | 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    | А     | 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    | В     | DEAD END       | DEAD END        |                                       | MEDIUM/LOW                            |                                      | MEDIUM/EXTREME                        | HIGH/LOW               | MEDIUM/5-10    | 2,298.27    | 16         | 4085.81         | 65.64 | False | None     |
| 57       | 4TH AVE          | В     | DEAD END       | DEAD END        |                                       | LOW/MEDIUM                            |                                      |                                       | NONE                   | MEDIUM/10-25   | 192.30      | 16         | 341.87          | 65.58 | False | None     |
| 139      | LAND FALL LOOP   | С     | SPINDRIFT TRL  | SPINDRIFT TRL   | LOW/5-10                              | · · · · ·                             | NONE                                 | · · · · · · · · · · · · · · · · · · · | · · · · ·              | MEDIUM/0-5     | 354.26      | 20         | 787.25          | 65.57 | False | None     |
| 68       | SEA OATS TRL     | А     | 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          | В     | 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    | В     | CROATAN HWY    | DEAD END        | -                                     | 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     | А     | 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     | А     | HICKORY TRL    | E DOGWOOD TRL   | · · · · · · · · · · · · · · · · · · · |                                       | NONE                                 | MEDIUM/EXTREME                        | LOW/LOW                | MEDIUM/5-10    | 2,941.84    | 20         | 6537.43         | 65.34 | False | None     |
| 119      | BENT OAK CT      | С     | 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 |                   |        |                        |                |                  |                     |                                      |                                       |                        |                              |             |            |                 | ltem  |       |            |
|--------------------------------------|-------------------|--------|------------------------|----------------|------------------|---------------------|--------------------------------------|---------------------------------------|------------------------|------------------------------|-------------|------------|-----------------|-------|-------|------------|
| SectionID                            | Street Name       | Class  | BEG_DESC               | END_DESC       | Fatigue Cracking | Transverse Cracking | Patch<br>Deterioration /<br>Potholes | Surface Defects                       | Rutting /<br>Roughness | Block Cracking               | Length (ft) | Width (ft) | Square<br>Yards | PCI   | CURB  | Sidewalk   |
| 58                                   | 4TH AVE           | В      | 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        | В      | 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           | В      | 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        | В      | 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     | В      | 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       | В      | 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     | А      | 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    | В      | 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          | В      | 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      | А      | CHICAHAUK 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    | В      | 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     | С      | 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          | В      | 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          | В      | 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           | В      | DEAD END               | DEAD END       | MEDIUM/5-10      | ,<br>MEDIUM/HIGH    | NONE                                 | MEDIUM/EXTREME                        | NONE                   | MEDIUM/5-10                  | 208.38      | 16         | 370.45          | 64.65 | False | None       |
| 158                                  | SKYLINE RD        | В      | 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      | В      | 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    | В      | 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/MEDIUM       | NONE                                 | MEDIUM/EXTREME                        | NONE                   | MEDIUM/10-25                 | 119.17      | 16         | 211.85          | 64.53 | FALSE | None       |
| 125                                  | CHICAHAUK 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      | CHICAHAUK 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      |        | NC 12                  | OCEAN BLVD     | MEDIUM/10-25     | · · · · ·           | · · · ·                              | · · · ·                               | NONE                   | MEDIUM/25-50                 | 483.16      | 16         | 858.95          | 63.96 | True  | None       |
| 87                                   | OCEAN BLVD        | B      | E DOGWOOD TRL          | DOLPHIN RUN    | · · ·            | ,                   | NONE                                 |                                       | NONE                   | MEDIUM/25-50                 | 1,372.09    | 19         | 2896.64         | 63.94 | False | None       |
| 9                                    | PORPOISE RUN      | B      | WAX MYRTLE TRL         | NC 12          | -                |                     | NONE                                 |                                       | NONE                   | MEDIUM/25-50                 | 456.64      | 15         | 811.8           | 63.94 | False | None       |
| 13                                   | OCEAN VIEW LOOP   | B      | OCEANVIEW LOOP         | NC 12          | -                |                     |                                      | ·                                     | NONE                   | MEDIUM/25-50                 | 444.54      | 20         | 987.86          | 63.86 | False | None       |
| 129                                  | SPINDRIFT TRL     | B      | CHICAHAUK TRL          | HIGH DUNE LOOP | MEDIUM/5-10      | MEDIUM/HIGH         | MEDIUM/0-5                           |                                       | 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/HIGH         | · · · ·                              | · · · · ·                             | NONE                   | MEDIUM/10-25                 | 602.47      | 19         | 1271.89         | 63.57 | False | None       |
| 18                                   | OCEAN VIEW LOOP   | B      | DEAD END               | DEAD END       |                  | MEDIUM/MEDIUM       | LOW/0-5                              |                                       |                        | MEDIUM/25-50                 | 1,366.00    | 20         | 3035.56         | 63.54 | False | None       |
| 18                                   | SPINDRIFT TRL     | B      | HIGH DUNE LOOP         | DEAD END       | -                | MEDIUM/HIGH         | HIGH/0-5                             |                                       | HIGH/LOW               | MEDIUM/10-25                 | 2,541.18    | 20         | 5647.07         | 63.49 | False | None       |
|                                      | OCEAN BLVD        | B      | DOLPHIN RUN            | PORPOISE RUN   |                  | MEDIUM/MEDIUM       | NONE                                 |                                       | NONE                   | MEDIUM/25-50                 | 1,312.86    | 18         | 2625.72         | 63.46 | False | None       |
| 6<br>108                             | OCEAN BLVD        | B      | PORPOISE RUN           | NC 12          |                  |                     | NONE                                 |                                       | NONE                   | MEDIUM/25-50<br>MEDIUM/25-50 | 1,234.76    | 20         | 2743.91         | 63.46 | False | None       |
| 79                                   | SANDFIDDLER CT    | B      | NC 12                  | DEAD END       |                  |                     | NONE                                 |                                       | NONE                   | MEDIUM/25-50<br>MEDIUM/25-50 | 598.71      | 20         | 1330.48         | 63.46 | False | None       |
|                                      |                   | B<br>C | NC 12<br>POTESKEET TRL |                | -                |                     | HIGH/0-5                             |                                       |                        |                              |             |            |                 |       |       |            |
| 126<br>E1                            |                   | -      |                        |                | HIGH/10-25       |                     |                                      |                                       | 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/0-5                           |                                       |                        | MEDIUM/25-50                 | 3,856.10    | 18         | 7712.21         | 62.78 | True  | None       |
| 49<br>E4                             | 7TH AVE           | B      | DEAD END               |                |                  |                     |                                      |                                       | 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     |                     | HIGH/0-5                             |                                       |                        | 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          |                     |                                      |                                       | MEDIUM/LOW             | MEDIUM/0-5                   | 1,369.26    | 20         | 3042.8          | 55.61 | False | None       |
| 65                                   | HICKORY TRL       | A      | NC 12                  | DEAD END       | -                |                     |                                      | · · · · · · · · · · · · · · · · · · · | NONE                   | MEDIUM/10-25                 | 1,383.62    | 17         | 2613.5          | 55.51 | False | None       |
| 120                                  | OYSTER BED LN     | C      | POTESKEET TRL          | DEAD END       |                  | HIGH/HIGH           |                                      |                                       | 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                              |                                       | NONE                   | MEDIUM/5-10                  | 246.74      | 20         | 548.3           | 55.45 | True  | None       |
| 43<br>103                            | KINGFISHER TRL    | С      | SOUNDVIEW TRL          | SEA OATS TRL   | MEDIUM/5-10      | HIGH/HIGH           | LOW/0-5                              |                                       | NONE                   | MEDIUM/5-10                  | 1,339.20    | 20         | 2976.01         | 55.45 | True  | None       |
| 400                                  | BRIGHT LANTERN LN | С      | 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 |       |                 |                 |                  |                     |                                      |                 |                        |                |             |            |                 |       | Item  |          |
|-----------|--------------------------------------|-------|-----------------|-----------------|------------------|---------------------|--------------------------------------|-----------------|------------------------|----------------|-------------|------------|-----------------|-------|-------|----------|
| SectionID | Street Name                          | Class | BEG_DESC        | END_DESC        | Fatigue Cracking | Transverse Cracking | Patch<br>Deterioration /<br>Potholes | Surface Defects | Rutting /<br>Roughness | Block Cracking | Length (ft) | Width (ft) | Square<br>Yards | PCI   | CURB  | Sidewalk |
| 171       | OTTER SLIDE LN                       | В     | 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                        | В     | 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                        | В     | 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                              | В     | 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                              | В     | 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                       | В     | 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                          | В     | 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                       | В     | 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                              | В     | 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                              | В     | 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                      | С     | 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                      | В     | 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                              | В     | 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                     | С     | 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                           | В     | 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                        | В     | 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                            | В     | 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                              | В     | 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.



#### Town of Southern Shores Year 2032 Conditions - Option 1



#### Town of Southern Shores Year 2032 Conditions - Option 2



### **APPENDIX F**

# 2021 Town of Southern Shores DISTRESS TYPES\_EXTENT DEFINITIONS

|                                     |              | Severity/Exte<br>exible Paven | ent Definitions<br>nent (P) |          |              |          |
|-------------------------------------|--------------|-------------------------------|-----------------------------|----------|--------------|----------|
| Distress                            | Rating Level |                               | Rating Level                |          | Rating Level |          |
|                                     | 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%   |
| FATIQUE CRACKING / DEFECTS (FC)     | 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%  |
|                                     | 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' |
| TRANSVERSE CRACKING (TC)            | LOW/HIGH     | 50'-25'                       | MEDIUM/HIGH                 | 50'-25'  | HIGH/HIGH    | 50'-25'  |
|                                     | LOW/EXTREME  | <25'                          | MEDIUM/EXTREME              | <25'     | HIGH/EXTREME | <25'     |
|                                     | 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%   |
| BLOCK CRACKING (BC)                 | 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%  |
|                                     | 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%   |
| PATCH DETERIORATION / POTHOLES (PP) | 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%  |
|                                     | 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%   |
| SURFACE DEFECTS (SD)                | LOW/HIGH     | 50-75%                        | MEDIUM/HIGH                 | 50-75%   | HIGH/HIGH    | 50-75%   |
|                                     | LOW/EXTREME  | 75-100%                       | MEDIUM/EXTREME              | 75-100%  | HIGH/EXTREME | 75-100%  |
|                                     | SEV          | EXT                           | SEV                         | EXT      | SEV          | EXT      |
|                                     | LOW/LOW      | <25%                          | MEDIUM/LOW                  | <25%     | HIGH/LOW     | <25%     |
| RUTTING/ROUGHNESS (RR)              | LOW/MEDIUM   | 25-50%                        | MEDIUM/MEDIUM               | 25-50%   | HIGH/MEDIUM  | 25-50%   |
|                                     | LOW/HIGH     | 50-75%                        | MEDIUM/HIGH                 | 50-75%   | HIGH/HIGH    | 50-75%   |
|                                     | LOW/EXTREME  | 75-100%                       | MEDIUM/EXTREME              | 75-100%  | HIGH/EXTREME | 75-100%  |





OF SOUTHERN TOWN HALL

A & 4 11

SHORES

9

TOWN

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 <u>not</u> 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.

The 2021A Bond shall be subject to optional redemption prior to its stated maturity at the (c)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.

If the Town defaults on its obligation to pay principal of and interest on the 2021A Bond, (f) 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 <u>shall set forth the final interest rate and maturity date of the 2021A Bond and,</u> <u>with the consent of the Purchaser,</u> may modify the provisions of this Section 3 pursuant to a closing certificate <u>delivered</u> 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.

#### 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 | ) |     |
|-------------------------|---|-----|
|                         | ) | SS: |
| COUNTY OF DARE          | ) |     |

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,<br>2026<br>20 | October<br>13, 2021 |  |
| REGISTERED OWNE | R: PNC BA     | ANK, NATIONAL ASSO         | CIATION             |  |

**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 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 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 is advised in the gross income of the Purchaser is included in the gross income of the Purchaser is included in the gross income of 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<br>Payment |
|-------|----------------------|
| 2022  | \$                   |
| 2023  |                      |
| 2024  |                      |
| 2025  |                      |
| 2026* |                      |

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 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 <u>not</u> 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.

The 2021A Bond shall be subject to optional redemption prior to its stated maturity at the (c) 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.

If the Town defaults on its obligation to pay principal of and interest on the 2021A Bond, (f) 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. The Uses 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.

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 | ) |     |
|-------------------------|---|-----|
|                         | ) | SS: |
| COUNTY OF DARE          | ) |     |

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, 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 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<br>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 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)))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

Parker Poe Draft 9/15/21

## 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 ("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 Kitty Hawk 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. 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<br>County Contribution<br>NCDWR Grant<br>Total Project Cost | \$<br>\$ | 5,159,523<br>796,572<br><u>1,450,921</u><br>7,407,016 |
|---|----------|---|
| Kill Devil Hills Project  |          |   |
| Kill Devil Hills Contribution<br>County Contribution<br>NCDWR Grant           | \$       | 4,318,648<br>691,137<br><u>1,450,921</u>              |
| Total Project Cost  | \$       | 6,460,706   |
| Kitty Hawk Project  |          |   |
| Kitty Hawk Contribution<br>County Contribution<br>NCDWR Grant                 | \$       | 5,387,682<br>2,854,815<br><u>1,408,247</u>            |
| Total Project Cost  | \$       | 9,650,744   |
| Southern Shores Project   |          |   |
| Southern Shores Contribution<br>County Contribution<br>NCDWR Grant            | \$       | 5,690,454<br>4,371,401<br><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:

| Fiscal Year<br>ending June 30 | <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:

| Fiscal Year<br><u>ending June 30</u><br>2023<br>2024<br>2025<br>2026 | <u>1</u> | Amount  |
|--|----------|---------|
| 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.

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. . .

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<br>PO Box 1000<br>Manteo, NC 27954                        |
|-------------------|--|
| Duck:             | Attention Town Manager<br>PO Box 8369<br>Duck, NC 27949                            |
| Kill Devil Hills: | Attention Town Manager<br>PO Box 1719<br>Kill Devil Hills, NC 27948                |
| Kitty Hawk:       | Attention Town Manager<br>PO Box 549<br>Kitty Hawk, NC 27949                       |
| Southern          |  |
| Shores:           | Attention Town Manager<br>5375 N. Virginia Dare Trail<br>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**

| То:          | 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

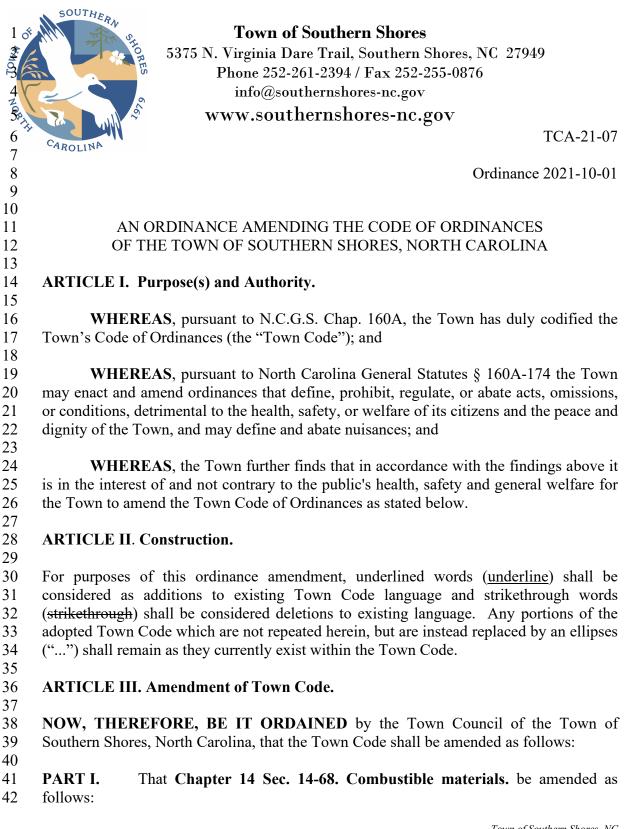
**Requested Action:** Amendment of the Town Fire Prevention and Protection Ordinance by amending Section 14-68, Combustible Materials.

## 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, NC TCA-21-07 Page 1 of 3 1 2

#### Sec. 14-68. Combustible materials.

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 as13 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.
- All fires of the type described in this section must be attended by a competent
   person 14 years of age or older who must remain in attendance at the fire until it
   is completely extinguished.
- (5) No open fire shall be built or set neither in a marina area or a picnic area nor in any other area owned by a residential or civic or other owner's association without a permit.
- (6) House occupants or landowners starting or setting fires as permitted above are
   responsible for assuring themselves that a prohibition against burning as stated in
   G.S 14-139, is not in effect.
- (7) Initial burning shall generally be allowed only between the hours of 9:00 a.m.
  and 6:00 p.m. but no combustible materials shall be added to the fire after 3:00
  p.m., except that under favorable meteorological conditions, deviations may be
  granted by the fire inspector.
- 30 (8) It shall be unlawful for any person to start or set a bonfire <u>other than bonfires</u>
   31 <u>held by Kitty Hawk Elementary School under the supervision of the Southern</u>
   32 <u>Shores Volunteer Fire Department or other fire protection official(s).</u>
- 33 (9) It shall be unlawful for any person to start or set a recreational fire.
- 34

# 35 ARTICLE IV. Severability.36

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

| ARTICLE V. Effective Date.                               |                                   |
|--|-----------------------------------|
| This ordinance amendment shall be in full for<br>, 2021. | ce and effect from and after thed |
| ATTEST:  | Tom Bennett, Mayor                |
| Town Clerk   |                                   |
| APPROVED AS TO FORM:                                     |                                   |
| Town Attorney  |                                   |
| Date adopted:  |                                   |
| Motion to adopt by Councilmember:                        |                                   |
| Motion seconded by Councilmember:                        |                                   |

Town of Southern Shores, NC TCA-21-07 Page 3 of 3



# 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 staring 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 1<sup>st</sup>, 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              | <mark>78,000</mark> |
| current     | 17              | Sergeant       | 51,345              | 77,017              |
| recommended | <mark>54</mark> |                | <mark>60,000</mark> | <mark>90,000</mark> |

| Town of Southern Shores FY 21-22 Pay<br>Scale | <u>Grade</u> | <u>FLSA</u> | <u>Minimum</u> | <u>Midpoint</u> | <u>Maximum</u> |
|---|--------------|-------------|----------------|-----------------|----------------|
| Not Assigned                                  | 10           | N           | 36,490         | 45,613          | 54,735         |
| Maintenance Technician                        | 11           | Ν           | 38,315         | 47,893          | 57,472         |
| Administrative Specialist                     | 12           | Ν           | 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         |
| Delice Coveraget                              | 17           | N           | F1 24F         | 64 101          | 77 017         |
| Police Sergeant                               |              | 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         |
| Net Accienced                                 | 21           |             | (2,410         | 70.010          | 02.015         |
| 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        |
|   |              |             |                |                 | 100/211        |
| 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        |
| Net Assigned                                  | 27           |             | 02.020         | 104 545         | 125 454        |
| 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                                  | 20           |             | 07 200         | 115 260         | 120 212        |
| Not Assigned                                  | 29           | E           | 92,208         | 115,260         | 138,312        |
| Not Assigned                                  | 30           | E           | 96,818         | 121,024         | 145,228        |

| Town             |      | <u>Police Officer</u><br><u>Starting</u><br><u>Salary</u> | -    | <u>Average</u><br><u>Police</u><br><u>Officer</u> | -    | <u>Sgt</u><br><u>Starting</u><br><u>Salary</u> | -    | <u>Average</u><br>Sgt Salary | Behind<br>in PO<br>starting<br>salary | Behind<br>in PO<br>average<br>salary | Behind<br>in Sgt<br>average<br>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 <i>,</i> 687                      | *16,421                               |
| Nags Head        | 2    | 47,213  | 1    | 55 <i>,</i> 803                                   | 2    | 54,656   | 2    | 71,263                       | *2,859                                | *6 <i>,</i> 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.