



TOWN OF KILL DEVIL HILLS

Land Where Flight Began

MEMORANDUM

October 14, 2024

TO: Mayor and Board of Commissioners

FROM: Debora P. Díaz, Town Manager

REF: New Business

1. Street Improvement Recommendation 2025-26 Fiscal Year (FY) and 2026-27 Fiscal Year (Plan Year) (Attached NB-1)

At its September 23, 2024, meeting, the Street Improvement and Special Projects Committee (SISPC) met with Town Engineers Pete Burkheimer and Patrick Lewis of American Engineering to review the annual update of the Street Conditions Rating Study and to discuss the street project recommendations for the 2025-2026 Fiscal Year and the 2026-2027 Plan Year.

The Planning Department's meeting memorandum highlights the recommendations, along with Mr. Lewis' memorandum, past project highlights, and listing of the remaining streets categorized as "Poor."

The SISPC recommendations are as follows:

2025-2026 Fiscal Year Project

West Martin Street (with sidewalk and sidewalk on Swan Street from West Martin to Baum Street:

- Street and drainage improvements on West Martin Street from US158 to Ninth Ave, including a detached sidewalk along the north side of the right-of-way and a detached sidewalk on the west side of Swan Street from Martin Street to Baum Street. The sidewalks are included in the recommendation as alternatives based on grant funding.
- Staff recommends applying for a grant that would include the entire sidewalk project in conjunction with the street project.
- Estimated cost: \$792,000 for street and drainage and \$496,000 for sidewalks for a total project cost of \$1,288,000.
- West Ocean Acres Drive - Spring project for pavement replacement along West Ocean Acres Drive from Gunas Drive to Burns Drive to address pavement categorized as

“poor.” There is no drainage or waterline work proposed in the project. Total project cost for West Ocean Acres repaving is \$210,000.

2025-2026 West Martin St Project	Streets & Drainage	Sidewalks	Engineer	Total
West Martin Street + sidewalks (grant dependent)	\$792,000	\$496,000	-	\$1,288,000
West Ocean Acres Drive (spring)	\$210,000	-	-	\$ 210,000
Project Design, Engineering & Bidding	-	-	118,040	\$ 118,040
Grand Total				\$1,616,040

2026-2027 Fiscal Year Project

East and West First Street (including detached sidewalks):

- Waterline replacement and pavement resurfacing and drainage improvements.
- The detached sidewalk included on the westside is from Publix to Canal Drive connecting to the multi-use path and on the eastside is from US158 to NC12.
- Estimated cost: \$554,000 for streets drainage, \$612,000 for water funding, and \$396,000 for sidewalks for a total project cost of \$1,562,000.

2026-2027 East & West First St Project	Streets & Drainage	Water	Sidewalks	Total
West Martin Street + sidewalks	\$554,000	\$612,000	\$396,000	\$1,562,000
Grand Total				\$1,562,000

Through consensus by email, the Board of Commissioners authorized staff to apply for a Tourism Impact Grant through the Dare County Visitors Bureau for the sidewalk portion of the West Martin Street and Swan Street Project. The grant application was submitted on September 27, 2024 and the Town will be notified about the grant in late November/early December.

Staff concurs with the SISPC and Town Engineers on the projects above, and if the Board of Commissioners agrees with these recommendations, a motion will be in order to approve the following:

- **2025-2026 Fiscal Year Project**
 - West Martin Street (with sidewalk and sidewalk on Swan Street from West Martin to Baum Street)
 - West Ocean Acres Drive (Spring project) for pavement replacement along West Ocean Acres Drive from Gunas Drive to Burns Drive.

- **2026-2027 Fiscal Year Project**
 - East and West First Street (including detached sidewalks), to allow Staff to pursue grant funding for sidewalk portion.

- **Engineering, Design & Bidding**
 - Authorization for the Town Manager to execute the attached contract with American Engineering Associates – Southwest PA, Inc for design, engineer and bidding of the 2025-26 Fall and Spring Project, in the amount of \$118,040, as outlined above and the execution of necessary budget amendments for these projects.

A motion will be in order.

Director of
Planning and Inspections
MEREDITH GUNS

Building Inspector
MARTY SHAW
CHARLES THUMAN

Code Enforcement Officer
JORDAN BLYTHE



Assistant Director of
Planning and Inspections
CAMERON RAY

Senior Planner
RYAN LANG

Zoning Administrator
DONNA ELLIOTT

THE TOWN OF KILL DEVIL HILLS
NORTH CAROLINA

PLANNING DEPARTMENT

October 14, 2024

Memorandum

To: Debbie Diaz, Town Manager

From: Meredith Guns, Planning Director 

Subject: Street Improvement Recommendation 2025-26 Fiscal Year (FY) and 2026-27 Plan Year

Attached is a memorandum and spreadsheet dated September 17, 2024 from Town Engineer Patrick Lewis, P.E., of American Engineering. The spreadsheet outlines street recommendations for 2025-26 Fiscal Year, 2026-27 Plan Year and beyond. Additionally, the accompanying spreadsheet summarizes the past several years of projects and the remaining Poor Streets.

The 2025-26 Fall recommendation is **West Martin Street with sidewalk and sidewalk on Swan Street from West Martin to Baum Street** (page 5 of the attached memo). The 2025-26 project will include street and drainage improvements on West Martin Street from US158 to Ninth Ave including a detached sidewalk along the north side of the right-of-way and a detached sidewalk on the west side of Swan Street from Martin street to Baum Street. The sidewalks are included in the recommendation as alternatives based on grant funding. Staff recommends applying for a grant that would include the entire sidewalk project in conjunction with the street project. Estimated cost of the project is \$792,000 for street and drainage and \$496,000 for sidewalks for a total project cost of \$1,288,000.

Additionally, the recommendation for 2025-26 includes a **spring project** for pavement replacement along **West Ocean Acres Drive** from Gunas Drive to Burns Drive. The pavement in this area has fallen to poor condition. There is no drainage or waterline work proposed in the project. Total project cost for West Ocean Acres repaving is \$210,000.

The 2026-27 plan year includes **East and West First Street including detached sidewalks (page 6)**. The project includes waterline replacement and pavement resurfacing and drainage improvements. The detached sidewalk included on the westside is from Publix to Canal Drive connecting to the multi-use path and on the eastside is from US158 to NC12. Estimated project cost is \$1,562,000 (\$554,000 streets drainage, \$612,000 water funding, and \$396,000 sidewalk funding).

Page 2:
Street Recommendation

On September 23, 2024, the Street Improvement/Special Project Subcommittee forwarded the following to the Board of Commissioners recommending approval:

- The 2025-26 Fall street recommendation for West Martin Street including sidewalks on Martin and Swan Street (grant dependent);
- The 2025-26 Spring street recommendation for mill and fill project on West Ocean Acres Drive;
- The 2026-27 Plan Year recommendation, East and West First Street including sidewalks to allow staff to pursue grant funding for the sidewalk portion.

The Board of Commissioners, through consensus via email, authorized staff to apply for a Tourism Impact Grant through the Dare County Visitors Bureau for the sidewalk portion of the West Martin Street and Swan Street Project. Staff submitted the grant application on September 27, 2024 and the Town will be notified about the grant in late November/early December. Staff recommends completing the design work for the sidewalk portions of the project.

Staff recommends authorizing the Town Manager to execute the attached contract with American Engineering Associates – Southwest PA, Inc for design, engineer and bidding of the 2025-26 Fall and Spring Project, in the amount of \$118,040, as outlined above and the necessary budget amendments.



September 30, 2024

Ms. Debbie Diaz, Town Manager
Town of Kill Devil Hills
P. O. Box 1719
Kill Devil Hills, NC 27948
By email to steve@kdhnc.com

V23026 – Fall 2025-26 West Martin Street Infrastructure Improvements and Spring 2025-26 Ocean Acres Pavement Improvements Project

Dear Ms. Diaz:

American Engineering Associates – Southeast, P. A., Inc (American) is pleased to offer this proposal for professional services in connection with this project pursuant to the recommendations of the Street Improvements and Special Projects Committee at its September 23, 2024 meeting. Our Design Phase work will consist of the following:

Fall 2025-26 West Martin Street Infrastructure Improvements Project

This project includes the following infrastructure improvements:

- 3" Pavement overlay on West Martin Street from US 158 to 9th Avenue, approximately 2,900 linear feet.
- Sidewalk construction along West Martin Street from US 158 to 9th Avenue, approximately 2,900 linear feet.
- Widening of West Martin Street along the Walgreens property at the intersection of US 158 to facilitate better traffic flow, approximately 200 linear feet.
- Sidewalk construction along Swan Street from West Martin to Baum Street, approximately 1,700 linear feet.

Along West Martin Street, curb and gutter will be constructed at intersections along with stormwater drainage improvements as needed. Approximately 1,200 linear feet of 12" "sock-drain" HDPE storm drain pipe will be constructed from US 158 westward to the drainage high point. Cross-street solid-wall HDPE pipes will be constructed at intersections where needed. Topographic survey is included for these plans.

Spring 2025-26 Ocean Acres Drive Paving Improvements Project

This project includes a 2.5" mill-and-fill pavement resurfacing on Ocean Acres Drive from Gunas Drive to Burns Drive, approximately 3,000 linear feet.

Deliverables

Topographic survey data will be collected on 50' sections, with supplemental shots. The data will be collected within a corridor that extends approximately 35 feet outside of the edge of pavement on West Martin Street and Swan Street and approximately 50 feet past each intersection at the ends of the work area. Existing condition sheets will be prepared and included in each set.

American Engineering will contact North Carolina 811 to mark out existing utilities prior to field survey activities. Locations of utilities marked by North Carolina 811 will be picked up by our surveyors and shown on the construction plans. Subsurface investigation of utilities by American Engineering is not included within this scope of work.

The construction plans format will be 1" = 20', 24" x 36" plan and profile sheets, supplemented with overall sheet, cover sheet, existing condition sheets, detail sheet(s) as required to describe the work fully.

Plans and contract documents will be formatted to allow separate bids to be received on each component street/segment, to the extent feasible. The contract documents (General Conditions, Technical Specifications, etc.) will be developed using most recent documents as bases.

Design Meetings

For the above-referenced project segments, we will produce Pre-Final Design and Final Design documents and submit them to the Town for review. Within 14 days of each of these submittals, and after the Town has completed their review, we will have a meeting with Town staff to discuss comments on the submittals.

At the completion of the Pre-Final design meeting, we will incorporate Town comments into the Final Design. At the completion of the Final Design meeting, we will incorporate any comments into the set of Contract Documents to be submitted to permitting agencies for review and approval.

Permitting

The Spring 2025-26 Ocean Acres Paving Improvements Project will not require any permitting as there is no 'disturbed area' of soils.

The Fall 2025-26 West Martin Street Infrastructure Improvements project will have less than one acre of disturbed area and therefore will not require permits from NC DEQ related to E&S or stormwater.

The West Martin Street project includes the widening of West Martin Street at the intersection of US 158. This widening will require an Encroachment Agreement to be filed with NC DOT for their approval. There is no permit fee associated with this process.

Fall and Spring 2025-26 Infrastructure Improvements Design Proposal

October 3, 2024

Page 3 of 7

Bid Phase

We will prepare the bid documents as either a single bid, bid with alternate, or two separate projects at the convenience of the Town.

After that determination, we will prepare Bid Set Contract Documents for release for public bids.

This includes preparation of contract documents, coordinating newspaper advertising, arranging, and conducting pre-bid meeting(s), responding to Requests for Information, including preparation of addenda, conducting the bid opening, preparing and presenting the recommendation for award to the Board, and coordinating the execution of the contract agreement by the parties to the contract.

Upon completion of our work on this project, the Town of Kill Devil Hills will own and have the right to copy and re-use such drawings on future projects without separate compensation to American Engineering, its subconsultants, or anyone else; provided, however, that the engineer designing and sealing any such plans for a future project assumes responsibility for the complete design of that future project, including any design elements re-used from this project, and—further—the Town agrees that neither we nor our subconsultant would have any professional responsibility for the design resulting from any such re-use. Accordingly, in any such future copying and re-use by others, the seals, signatures, and title blocks of American Engineering and/or its subconsultant must be removed. However, such removal shall not in any way negate American Engineering's responsibility for the design of the original project.

Our preliminary estimate of total project cost is \$1,498,000.00 (\$1,002,000 drainage/street funding, and \$496,000 in sidewalk funding).

	Sidewalk Funding	Drainage/Street Funding	Total Construction Cost
West Martin Street Infrastructure Improvements	\$496,000.00	\$792,000.00	\$1,288,000.00
Ocean Acres Pavement Improvements		\$210,000.00	\$210,000.00
Total	\$496,000.00	\$1,002,000.00	\$1,498,000.00

The **Lump Sum Fee** for all the design services as described above is **\$118,040.00**, which is about 8% of the total anticipated construction cost. Below is a breakdown of the hours required to design each construction set.

Fall and Spring 2025-26 Infrastructure Improvements Design Proposal

October 3, 2024

Page 4 of 7

West Martin Street Infrastructure Improvements Project			
Staff Classification	Hours	Rate per Hour	Extension
Senior Consultant (W. P. Burkheimer, Jr.)	35	\$190.00	\$6,650.00
Senior Project Engineer (Patrick Lewis)	40	\$165.00	\$6,600.00
Project Engineer (Emily Zeltmann)	148	\$140.00	\$20,720.00
Staff Engineer (Staff)	180	\$110.00	\$19,800.00
CADD Operator (Engineering)	120	\$ 100.00	\$12,000.00
CADD Operator (Survey)	72	\$ 100.00	\$7,200.00
Licensed Surveyor	24	\$165.00	\$3,960.00
Survey Party Chief w/Robotic Instrument	120	\$140.00	\$16,800.00
Clerical	8	\$70.00	\$560.00
Duplication Costs	Lump Sum:		\$1,375.00
Lump Sum Fee:			\$95,665.00
Streets/Drainage Funding: \$58,825.00		Sidewalk Funding: \$36,840.00	

Ocean Acres Drive Paving Improvements Project			
Staff Classification	Hours	Rate per Hour	Extension
Senior Consultant (W. P. Burkheimer, Jr.)	12	\$190.00	\$2,280.00
Senior Project Engineer (Patrick Lewis)	16	\$165.00	\$2,640.00
Project Engineer (Emily Zeltmann)	24	\$140.00	\$3,360.00
Staff Engineer (Staff)	64	\$110.00	\$7,040.00
CADD Operator (Engineering)	32	\$ 100.00	\$3,200.00
Clerical	4	\$70.00	\$280.00
Duplication Costs	Lump Sum:		\$775.00
Pavement Core Costs	7 cores @ \$400.00/core		\$2,800.00
Lump Sum Fee:			\$22,375.00
Streets/Drainage Funding: \$22,375.00			

Additional Services

Any work not covered within the scope outlined above shall be performed at our hourly rates noted below (through June 30, 2025). Our hourly rates for the term of this proposal, which will be the basis for calculating lump sum fees and the basis of billing hourly work, are set forth below:

Staff Categories	Hourly Rates
Principal Professional /Engineer.....	\$180.00
Senior Consultant (W. P. Burkheimer, Jr.).....	\$190.00
Senior Project Engineer or Licensed Surveyor (Patrick Lewis).....	\$165.00
Project Engineer (Emily R. Zeltmann)	\$140.00
Staff Engineer.....	\$110.00
Engineering or Surveying Technician	\$100.00
4 Person Survey Party	\$175.00
3 Person Survey Party	\$160.00
2 Person Survey Party/Party Chief w/Robotic Instrument	\$140.00
CADD Operator	\$100.00
Clerical	\$70.00

Reimbursable Expenses

Reimbursable expenses are those which are associated with professional services performed on a time and materials basis and include out-of-pocket expenditures advanced in the interest of the project. Almost all printing and copying are done in-house and are invoiced at the unit rates specified, except they are included in lump-sum project fees. The reimbursable expenses we anticipate will be incurred on this project are:

Copies of maps, plats, deeds, plans, data, etc.	cost +10%
Long distance/Conference phone calls	cost +10%
Overnight delivery (UPS, FedEx)	cost +10%
Mileage	\$0.585 / mile
Prints/Copies on:	
Bond	\$0.20/square foot
Vellum	\$1.50/square foot
Mylar	\$3.00/square foot
Color Prints on Bond	
Letter	\$1.00/copy
Legal	\$2.00/copy
12" x 24"	\$3.00/copy
Large Scale	\$1.50/square foot
Specialty Printing/Plotting/Mounting	cost +10%
Printing/copying/mounting by others	cost +10%

Fall and Spring 2025-26 Infrastructure Improvements Design Proposal

October 3, 2024

Page 6 of 7

CLOSING

Thank you for your time and consideration in reviewing this proposal. Please note that our standard Terms and Conditions, included with our May 23, 2024 General Services proposal are an integral part of this proposal. American Engineering looks forward to working with you on this project. Please feel free to contact me with any questions or comments you may have.

Sincerely,

American Engineering Associates – Southeast, PA, Inc.



Patrick W. Lewis, P.E., ENV SP
Senior Project Engineer



Emily R. Zeltmann
Project Engineer

Fall and Spring 2025-26 Infrastructure Improvements Design Proposal

October 3, 2024

Page 7 of 7

ACCEPTANCE

IN WITNESS WHEREOF, the parties have executed this Agreement by their authorized representatives to be effective as of the day and year first mentioned above.

American Engineering Associates
– Southeast, PA, Inc.

Town of Kill Devil Hills, NC

By: _____

By: _____

Name: _____

Name: _____

Title: _____

Title: _____

Date: _____

Date: _____

STANDARD TERMS AND CONDITIONS

Shall be as set forth in our May 23, 2024 General Services proposal to you.



September 17, 2024

The Kill Devil Hills Street Improvement and Special Projects Committee,
c/o Ms. Meredith Guns, Planning Director
Ms. Debora P. Diaz, Town Manager
P. O. Box 1719
Kill Devil Hills, NC 27948

By **e-mail**

Subject: **Project ID V23200 – 2025/26 (and beyond) Street/Drainage
Projects Recommendations**

Dear Committee Members, Ms. Diaz and Ms. Guns:

This is our annual update on your capital projects program and our recommendation looking forward. This year, it also includes a focus on Storm Drainage/Stormwater Management.

In the following points, we'll recap some recent accomplishments and note some other points that are influencing our thinking for the future.

What have we been doing since last meeting?

1. 2023 and 2024 have been productive years:

- a. **2023-24 Project: Seminole, Indian, and Apache Streets:** This project, which replaced the existing 6" asbestos-cement (AC) water main on Seminole south of West Third Street and Indian Drive, providing upgraded storm drainage/stormwater management for the entire length of Seminole, portions of Indian, and Apache Street from Indian to West Third, was an important continuation of the drainage improvements in the West Third area as well as resurfacing poor streets. Approximately 1,800 linear feet of water main were replaced and approximately 2,500 linear feet of storm drainage improvements were constructed.

This project was completed in March 2024.

- b. **2024-25 Project: Wrightsville Boulevard Phase 1 and 2:** This project includes the portion of pavement replacement from Goddard Street south to Carolyn Drive. To improve stormwater drainage 30-inch "sock drain" is being installed. Approximately 60% of the water main is being upgraded from 2-inch pipes to 6-inch pipes to improve water service and quality in this area. The 30-inch "sock drain" is being installed from Goddard to E. Dean Street; 24-inch "sock drain" is being installed from E. Dean south to Neptune Drive; and 15-inch "sock drain" is being installed from Neptune to Carolyn Drive. The

total cost for this project is \$4,032,500, of which \$2,850,000 is street and drainage funding and the remaining \$1,182,500 is water funding.

This project is expected to be completed in Spring 2025.

- c. **Southeast Area Watermain Replacement**: This project includes the 6- and 8-inch asbestos cement water mains on Neptune, E. Atlantic, E. Clark, and E. Baum streets. Sidewalk is being constructed on Neptune Drive near the intersection of Virginia Dare Trail. Roads would be patched in this area as the streets are mostly Fair 2 to Good and would be expected to be re-surfaced later in the Poor Streets upgrade program. The total cost for this project is \$964,750, of which \$9,750 is sidewalk funding and the remaining \$955,000 is water funding.

This project is expected to be completed in Spring 2025.

- d. **Other projects not tracked through the SISPC Process**: Although SISPC is not directly involved in these, several other capital projects have been recently completed or are under way:
- Work to restore and enhance Meekins Field, which had to be taken out of service for the Tank project, was completed. The splash pad, restroom building, and all other features were in use at the beginning of the 2024 summer season.
 - Sidewalk construction along the west side of US 158 between West Landing Drive and Collington Road was completed in the summer of 2023. Improvements included NCDOT completing and paying for a lengthening of the right turn lane onto Collington Road from US 158, incorporating design changes needed to complete the sidewalk project.
 - The parking lot resurfacing at Aviation Park and paving of the 18 gravel parking spaces at the Oregon Avenue Beach Access were completed.

What are the goals and principles of our capital projects?

1. As we always note in these reports, our long-held goal of is to fix our Poor streets. Over the next few years, we expect to complete more and more resurfacing of streets and less total reconstruction, as we bring the older streets up to a more durable standard of construction. After that, streets will be resurfaced right when they need it; in other words, there won't be any more Poor streets, or they won't be on the Poor list very long. Street Condition Ratings were completed in 2023; the next time they will be completed is in 2027.
2. Another goal, as noted before, is the gradual replacement of asbestos-cement (AC) water mains throughout town. In the 2021 Water System Master Plan update, we included a multi-year recommended program in

increments of about \$2 million at intervals of 2 or 3 years for AC main replacement, as well as considerable funding for above-ground work at our two water storage and pumping facilities. Future street and drainage projects will include looking for the opportunity to replace AC water mains at the same time, which is more cost effective and causes less overall disruption to residents. This “holistic” approach to improvement projects will be evident in subsequent portions of this report.

Especially over the last 17 years, we have made great progress in improving storm drainage and stormwater management in a number of areas. There are still many areas with drainage challenges. The 2015 project was a giant step on our ongoing Memorial Boulevard Backbone effort, and the Wrightsville project that is just beginning construction is the second part of that effort. Elsewhere, when we do a street project, we strive to include drainage work, using our “sock drain” strategy in most cases.

We also prepared a separate report, entitled “**Limited, Interim Update** to the Kill Devil Hills, NC **Master Stormwater Plan.**” It provides context for the potential projects for subsequent years.

3. Considering the goals noted above, we reiterate the following points made in previous year’s reports, which lay out our strategic goals and factors summarize what drives our recommendations with respect to future street and drainage projects:
 - a. We recommend continuing to repair poor streets as noted below, as well as smaller-scale pedestrian projects and stormwater/drainage work.
 - b. Fixing our Poor streets before they deteriorate to where a moderately-expensive overlay becomes an expensive reconstruction is just good stewardship. Your staff completed a re-inspection of Town-maintained road and streets in 2023. These inspections occur about every 5 years, with the next one due in 2027. The rating system is based on a point system, considering pavement condition and storm drainage service (or the lack of it). The rating categories are Excellent, Good, Fair1, Fair2, Fair3 and Poor. Before the 2017 rating, we only had about 2.6 miles of the Town’s 63 miles of road in Poor Condition. Per the 2017 inspection, another 3.77 miles dropped to Poor, bringing the Poor total up to 6.4 miles. The work of the last several years, plus what will be completed this fall, has lowered the Poor street total to 3.20 miles, approximately half of the length in the last inspection.
 - c. We have, as noted, been making great progress in renewing our Poor streets, and we still have done so in recent years. However, inflation has eroded our buying power significantly over the last couple of years. The Board of Commissioners has recognized this and supported increased funding levels in recent years. This inflationary trend has appeared to moderate but we need to be cognizant of the higher prices that remain so that we can make the best decisions for our residents.

- d. Even though we need to press hard on the core mission of repairing Poor streets, while doing so we should continue bringing drainage relief to problem areas and to move toward the very successful program of sock drain and roadside swales.
- e. Where feasible, we should combine road improvement, drainage improvement and water main replacement into one project. This “holistic” approach saves money and disturbs our citizens less.
- f. To continue with the progress made during the last 19 years in renewing our streets and improving our drainage systems, we will need to sustain levels of street and drainage funding at \$1.3 million to \$1.5 million per year, at least until we have all of our streets brought up to sound structural condition and provided with a proper stormwater management system. These recommended funding levels are over and above water system funding and sidewalk funding which may be applicable. For comparison’s sake, once all of our poor streets have been brought to modern standards, all water lines have been replaced with modern materials and all areas have effective drainage installed, street maintenance will become essentially milling and overlaying 2.5 to 3 miles of street every year, about \$700,000 to \$775,000 at current prices.

What is recommended for the next two years?

With those guiding principles established, we offer the following project-specific recommendations on the attached spreadsheet. Let’s consider the various portions of this spreadsheet:

Page 1: This contains the most important information. (The Seminole/Indian/Apache project awarded in 2023 and completed in 2024, and the currently-awarded Wrightsville Phase 1&2 and Southeast Area Water Improvements Projects are shown on Page 2 under Completed Projects.)

FY 2025-26: We recommend the design and bidding of both a Fall and Spring project.

The Fall project would be on West Martin Street from US 158 to 9th Avenue, including reconstruction of the pavement, addition of sidewalk from US 158 to Swan Street, and stormwater improvements along that same section. The pavement replacement section represents approximately 0.6 miles or 20% of the remaining poor-rated streets in the Town’s inventory. Alternates to construct sidewalk along Swan Street and also the remainder of West Martin Street will be designed and their construction will be completed dependent on whether grant funding can be secured.

The Spring project would be mill-and-fill of Ocean Acres Drive from Gunas to Burns. This section of Ocean Acres Drive represents approximately 0.6 miles or 20% of the remaining poor-rated streets in the Town’s inventory.

West Martin Street: This project includes the portion of pavement replacement from US 158 to 9th Avenue. West Martin Street would also be widened from US 158 to a point approximately halfway along the Walgreens parcel. 12-inch “sock drain” would be installed from US 158 to 9th Avenue. Sidewalk would be added from US 158 to Swan Street. Additional sidewalk will be designed from Swan Street to 9th Avenue and on Swan Street from West Martin to Baum Street. The Additional sidewalk will only be constructed if the Town is able to receive a construction grant. The total cost for this project is anticipated to be \$1,288,000, of which \$792,000 is street and drainage funding and the remaining \$496,000 is sidewalk funding.

Ocean Acres: This project includes the pavement replacement Gunas Drive to Burns Drive to facilitate the removal of Poor-rated streets from the Town’s inventory. The total cost for this project is anticipated to be \$210,000, all of which is street and drainage funding.

These projects should be given a high priority to further improve road conditions and improve stormwater drainage in the West Martin Street area.

FY 2026 and beyond: We are presenting you with a list of two projects that meet the requirements of this program and should be considered for completion in FY 2026-27 and FY 2027-2028. Before doing so, we reiterate that most of these include a specific amount of AC Water Main Replacement work, resulting in a “holistic” project that minimizes the number of times in a generation that we inconvenience a neighborhood and enables the Water Fund to share in some of the common costs, such as pavement patching and overlay, driveway reworks, etc. As noted above, this approach is also reflected in the current Water System Master Plan’s Capital Projects planning effort. Both projects include sidewalk connections between major signaled intersections on US 158 and Bay Drive.

The order and timing of these projects will be influenced by the availability of funding, as determined by the Board of Commissioners.

FY 2026-27 E. First Street and W. First Street: This project will replace a total of 2,500 linear feet of asbestos cement water mains. While water work is being completed, approximately 3,000 linear feet of Fair2 and Fair3 rated streets can be resurfaced, preventing them from becoming Poor-rated at future street condition ratings. Small-diameter “sock drain” will be installed, helping to “manage” the groundwater elevations, so that dry sand is able to soak up most of the runoff from a heavy, intense rain event. Approximately 3,500 linear feet of sidewalk will be constructed in this area to facilitate pedestrian movement and access. The estimated total cost of this project is **\$1,562,000**, of which \$554,000 is street and drainage funding; \$396,000 is sidewalk funding; and the remaining \$612,000 is water funding.

FY 2027-28 W. Fifth Street: This project will replace approximately 3,200 linear feet of asbestos water main from the Truist Bank parcel westward to Bay Drive. While the water work is being completed, the street will be resurfaced, so that this Fair2-rated street will not become Poor in subsequent condition ratings.

Approximately 2,900 linear feet of sidewalk will be constructed to allow pedestrians in this area to connect to the sidewalk on US 158. The estimated total cost of this project is **\$1,283,000**, of which \$256,000 is street and drainage funding; \$257,000 is sidewalk funding; and the remaining \$770,000 is water funding.

Potential projects that are located farther out than FY 2028 are listed below this section of the spreadsheet, including project construction lengths and anticipated costs in 2025 dollars.

Pages 2 through 4: This is a recap of the accomplishments of the last 18 years' projects. It is provided to help the Committee and others see our recommendation in its historical context.

Bottom of Page 4:

In the **Drainage Only** sections, we note past projects completed in the past 19 years.

In the block after that is a list of drainage projects still remaining from the Town's 2005 Multi-Year Drainage Plan.

In the final block, **POOR Streets Remaining**, we note the streets with a condition rating of 50 or lower, making them "Poor." This is a relatively short list, which will no doubt increase with the 2027 Street Inspection Report, as noted above. Those which are recommended to be done in this suggested capital improvements program are shaded with the color to match each year's recommendations.

September 17, 2024

Page 7

Thank you for your careful consideration of our recommendations. We'll see you at the September 23, 2024 SISPC meeting, at 12:30 p.m. in the Board of Commissioners' Meeting Room.

Very truly yours,

AMERICAN ENGINEERING ASSOCIATES, P.A.



Patrick W. Lewis, P.E, ENV SP



W. P. Burkheimer, Jr., P. E., Senior Consultant

Cc: Mr. Steve Albright, Public Services Director
Ms. Meredith Guns, Planning Director

KILL DEVIL HILLS -- Street and Drainage Improvements Recommendations

September 17, 2024

Presented to the KDH Street Improvement and Special Projects Committee on September 20, 2024

American Engineering Associates

NOTE: Costs listed are in 2025-2026 Dollars to compare magnitude of future projects to current projects.

FY 2025-26 FALL							Preliminary Cost (Including design and construction administration. All costs in \$000.)				
	Condition	Rating	Length	Comments		Street	Drainage	Sidewalk	WM	Total	
W. Martin St											
US 158 to 9th Ave - Pavement Overlay	Poor	50.0	2,900	3" overlay and sidewalk (CG 250')		\$348			\$0	\$1,288	
US 158 to Swan St - Sidewalk			1,300	Sidewalk, 250' C&G and Storm			\$50.	\$140		\$190	
Widening from US 158 to midway thru Walgreens			200			\$150				\$150	
Alternate A - Sidewalk on Swan St, from W Martin St north to Baum St			1,200	12" HDPE Adj to SW and low point			\$240			\$240	
Alternate B - Sidewalk on W Martin St, from Swan St to Ninth Ave			1,700	Sidewalk, 250' C&G and Storm			\$4	\$183		\$187	
			1,600	Sidewalk, 250' C&G and Storm				\$173		\$173	
<i>Street & Drainage Funding Required (Total above, minus WM & SW):</i>										\$792	

FY 2025-26 SPRING							Preliminary Cost (Including design and construction administration. All costs in \$000.)				
	Condition	Rating	Length	Comments		Street	Drainage	Sidewalk	WM	Total	
Ocean Acres											
Ocean Acres Dr, Gunas to Burns - Mill and Fill	Poor	45.6	3,000	2" mill-and-fill		\$210	\$0	\$0	\$0	\$210	
<i>Street & Drainage Funding Required (Total above, minus WM):</i>										\$210	

FY 2026-27							Preliminary Cost (Including design and construction administration. All costs in \$000.)				
	Condition	Rating	Length	Comments		Street	Drainage	Sidewalk	WM	Total	
E. First St and W. First St.											
US 158 to Canal Dr (W) - SW			2,400	Sidewalk				\$216		\$216	
Canal Dr (E) to Canal Dr (W) -Pavement Overlay	Fair2	64.4	1,950			\$234			\$446	\$234	
Canal Dr (E) to Canal Dr (W) - WM			1,850	Replace 6" AC WM						\$446	
US 158 to VA DareTrail	Fair3	58.0	1,000	Sidewalk, C&G, Storm, 1.5" M & F		\$120	\$200	\$180		\$500	
Princess Anne Rd to VA DareTrail - WM			690	Replace 6" AC WM					\$166	\$166	
<i>Street & Drainage Funding Required (Total above, minus WM & SW):</i>										\$554	

FY 2027-28							Preliminary Cost (Including design and construction administration. All costs in \$000.)				
	Condition	Rating	Length	Comments		Street	Drainage	Sidewalk	WM	Total	
W. Fifth St											
W. of Truist Bank to Bay Drive - SW			2,850	Sidewalk				\$257		\$257	
US 158 to Bay Drive - WM			3,200	Replace 6" AC WM					\$770	\$770	
US 158 to Bay Drive - Pavement Overlay	Fair 2	71.8	3,200	Mill and Fill		\$256	\$0	\$257	\$770	\$1,283	
<i>Street & Drainage Funding Required (Total above, minus WM and SW):</i>										\$256	

Potential Projects for Subsequent Years are Presented Below In No Particular Priority Order.
Their Order May Be Influenced By the Results of the 2027 Street Condition Ratings

							Preliminary Cost (Including design and construction administration. All costs in \$000.)				
	Condition	Rating	Length	Comments		Street	Drainage	Sidewalk	WM	Total	
Southeast Virginia Dare Shores											
US 158, Sportsman to Hayman	Total Length		7,350			\$0	\$798		\$2,559	\$3,358	
Palmetto St, US 158 to Lee	Excellent	92.4	1,230	6" AC WM to PVC; 12" sock			\$135		\$473	\$473	
Eden St, US 158 to Lee	Good	87.2	1,230	6" AC WM to PVC; 12" sock			\$135		\$372	\$507	
Aycock St, US 158 to Lee	Good	83.8	1,230	6" AC WM to PVC; 12" sock			\$135		\$345	\$480	
Walker St, US 158 to Lee	Good	90.2	1,230	6" AC WM to PVC; 12" sock			\$135		\$345	\$480	
Archdale St, US 158 to Lee	Good	87.8	1,230	6" AC WM to PVC			\$77		\$345	\$422	
Lee Avenue, Bickelt to Archdale	Excellent	91.8	1,200	6" AC WM to PVC; 15" sock			\$180		\$336	\$516	
			0	0.00 miles Poor							
<i>Street & Drainage Funding Required (Total above, minus WM):</i>										\$798	

							Preliminary Cost (Including design and construction administration. All costs in \$000.)				
	Condition	Rating	Length	Comments		Street	Drainage	Sidewalk	WM	Total	
W Sportsman Drive/W Avalon Drive											
W Sportsman, replace AC WM, 12" sock	Poor	46.0	6,097	6" PVC WM, tie to Avalon @ 407		\$1,064	\$761		\$1,455	\$3,280	
W Avalon, replace AC WM, 15" sock	Fair1	71.7	3,100	replace AC WM with PVC		\$465	\$402		\$735	\$1,602	
			2,997	0.57 miles Poor							
<i>Street & Drainage Funding Required (Total above, minus WM):</i>										\$1,825	

							Preliminary Cost (Including design and construction administration. All costs in \$000.)				
	Condition	Rating	Length	Comments		Street	Drainage	Sidewalk	WM	Total	
Clamshell Dr & Cross Streets											
Clamshell, 200' S of Seminole to Sioux	Fair1	74.1	820	6" AC to PVC, 12" sock		\$111	\$90		\$230	\$431	
Clamshell, Upper Dune to Bay	Fair1	74.1	1,030	6" AC to PVC, 12"/15" sock		\$139	\$129		\$289	\$558	
Clamshell, remainder	Fair1	74.1	1,230	6" AC to PVC		\$166			\$345	\$511	
Seminole, W Third to Clamshell	Fair1	80.4	520	2" PVC to 6" PVC, 12" sock		\$70	\$57		\$146	\$273	
Sioux, W Third to Indian	Fair1	75.1	920	12" sock, tie old sys @ 1707		\$124	\$101		\$258	\$483	
Wyandotte, W Third to Indian	Fair2	70	920	2" PVC to 6" PVC, 12" sock		\$124	\$101		\$258	\$483	
Upper Dune, W Third to Indian	Excellent	94.2	920	2" to 6" PVC N 400', 12" sock		\$124	\$101		\$258	\$359	
Virginia, W Third to Indian	Fair2	68.4	920	2" PVC to 6" PVC, 12" sock		\$124	\$101		\$258	\$483	
Sunset, W Third to Indian	Fair1	72.4	920	2" to 6" PVC S 500', 12" sock		\$124	\$101		\$258	\$483	
			0	0.00 miles Poor							
<i>Street & Drainage Funding Required (Total above, minus WM):</i>										\$1,765	

Probably don't overlay Upper Dune if still Good or better.

KILL DEVIL HILLS -- Street and Drainage Improvements Recommendations

September 17, 2024

	Condition	Rating	Length	Comments	Preliminary Cost (Including design and construction administration. All costs in \$000.)				
					Street	Drainage	Sidewalk	WM	Total
Delray Beach	Total Length		5,010		\$349	\$340		\$812	\$1,502
US 158, N of Second St to First St				Extend 24"/18" Sock		\$228			\$228
Princess Ann Rd, Camellia to Second	Good	87.0	940		\$85	\$77		\$196	\$358
Sir Walter Rd, E Landing to Second	Good	89.6	2,000		\$180			\$560	\$740
E Landing Dr, US 158 to NC12	Good	81.6	940	Repl 6"AC SW-NC12; thin OL	\$85	\$35		\$56	\$176
Yardarm Dr, E Landing to S end	Fair1	79.8	380		\$34	\$52		\$106	\$193
Cove Court, E Landing to Yardarm	Good	83.8	750		\$68			\$210	\$278
			0	0.00 miles Poor-ish					
Thin Overlay, all Town streets (most rebuilt or overlaid 2006)									Street & Drainage Funding Required (Total above, minus WM): \$689

	Condition	Rating	Length	Comments	Preliminary Cost (Including design and construction administration. All costs in \$000.)				
					Street	Drainage	Sidewalk	WM	Total
Ocean Acres	Total Length		10,467		\$1,338	\$236		\$2,490	\$4,064
Ocean Acres Dr, US 158 to Gunas	Fair2	77.4	281		\$42			\$84	\$126
Burns Dr, Ocean Acres to Ocean Acres	Poor	33.4	3,700		\$444	\$175		\$750	\$1,369
Ocean Acres Dr, Burns to end of pvmnt	Fair1	78.2	558		\$84			\$156	\$240
Ocean Acres Dr., end pvmnt to Wood Duck Ln	gravel		2,013		\$181			\$564	\$745
Gunas Dr, OA to Bell	Fair3	53.4	1,765		\$265			\$494	\$759
Harrington Ave, Gunas to Burns	Fair1/Good	73/85	615		\$92			\$92	\$92
Bell Ave, Lake to Burns	Fair3	57.4	555		\$83	\$61		\$167	\$311
Copley Dr, OA to OA	Fair2	65.4	980		\$147			\$275	\$422
			9,602	1.82 miles Poor-ish					
Street & Drainage Funding Required (Total above, minus WM): \$1,574									

	Condition	Rating	Length	Comments	Preliminary Cost (Including design and construction administration. All costs in \$000.)				
					Street	Drainage	Sidewalk	WM	Total
West Avalon neighborhood (excl. W Avalon, W Sportsman, E end W Durham)	Total Length		18,900	Total Length					
Suffolk St	Fair3	59.8	2,450						
Dock Street	Poor	26.6	550						
W Durham St, NNews to 30' E of Bay	Fair3	52	2,300						
Elizabeth City St	Fair3	58	1,400						
Norfolk St	Fair1	75.8	1,200						
Newport News St	Fair1	79.8	1,200						
Smithfield St	Fair3	58	1,200						
Franklin St	Good	82.8	1,200						
Yorktown St	Fair2	62	1,200						
Highview St	Fair3	56.4	1,200						
Phoebus St	Fair2	68.4	1,200						
Hampton St	Fair2	61.4	1,200						
Portsmouth St	Fair1	73.8	1,200						
Edenton St	Fair3	57.7	1,400						
			2,850	0.54 miles Poor-ish					
Costs for this far-future project are estimated to be approximately \$6 million.									

	Condition	Rating	Length	Comments	Preliminary Cost (Including design and construction administration. All costs in \$000.)				
					Street	Drainage	Sidewalk	WM	Total
Wright Avenue					\$120	\$0	\$0	\$0	\$120
US 158 to Virginia Dare Trl - Mill and Fill	Fair2	66.2	950	2" mill-and-fill	\$120				\$120
Street & Drainage Funding Required (Total above, minus WM): \$120									

Blocks Below Summarize Previous Years' Projects

Note: Older project printed small to save space; more recent ones larger on next page.

FY 2024-25 A: Wrightsville Blvd Phase 1					Cumulative Length, Poor Streets Fixed
Condition (2022 Rating)	Rating	Length	Status/Comments	Poor Streets Fixed This Season: 2,970 ft	
Goddard to Boundary; overlay, 30" sock drain; upgrade 60% of WM	Poor	2,970	Construction to begin Fall 2024	78,765	14.92 miles
		2,970	0.56 miles Poor		

FY 2024-25 B: Wrightsville Blvd Phase 2					Cumulative Length, Poor Streets Fixed
Condition (2022 Rating)	Rating	Length	Status/Comments	Poor Streets Fixed This Season: 2,370 ft	
Boundary to Carolyn; overlay, 30" and 24" sock drain; upgrade 50% of WM	Poor	2,370	Construction to begin Fall 2024	75,795	14.36 miles
		2,370	0.45 miles Poor		

FY 2024-25 C: Southeast Area WM					Cumulative Length, Poor Streets Fixed
Condition (2022 Rating)	Rating	Length	Status/Comments	Poor Streets Fixed This Season: 940 ft	
Neptune Drive, replace AC WM, 6"	Fair3	57.4	940	Construction to begin Fall 2024	73,425
E Atlantic Street, replace AC WM, 8"	Good	81.4	940	Construction to begin Fall 2024	13.91 miles
E Clark Street, replace AC WM, 8"	Fair1	73.4	950	Construction to begin Fall 2024	
E Baum Street, replace AC WM, 6"	Fair2	61.0	590	Construction to begin Fall 2024	
		940	0.18 miles Poor-ish		

FY 2023-24: Seminole St, Indian Dr & Apache St (drainage)					Cumulative Length, Poor Streets Fixed
Condition (2022 Rating)	Rating	Length	Status/Comments	Poor Streets Fixed This Season: 2,090 ft	
Indian Dr (Seminole-Apache), St, Dr, WM	Fair3	58.0	1,160		72,485
Seminole St (W Third-Indian) St, Dr, WM	Poor	38.0	930		13.73 miles
Apache St (Indian - W Third), drainage only			930		
		2,090	0.40 miles Poor-ish		

FY 2022-23: W. Durham, US 158, and W. Fifth Street					Cumulative Length, Poor Streets Fixed
Condition (2022 Rating)	Rating	Length	Status/Comments	Poor Streets Fixed This Season: 760 ft	
US 158 Drainage (W Third-W Durham)			pipe ditch w/36" & 30"; 6" PVC WM	1,830 LF of drainage replaced	70,395
W Durham St (US 158-Newport News St)	Fair3	52.0	760	18"/15" sock	13.33 miles
		760	0.14 miles Poor-ish		

FY 2021-22: West Third Street					Cumulative Length, Poor Streets Fixed
Condition (2017 Rating)	Rating	Length	Status/Comments	Poor Streets Fixed This Season: 3,781 ft	
W Third St (US 158 to Bay Drive)					69,635
drainage, overlay, WM, SW (158-Creek)	Poor	43.3	1,194		13.19 miles

KILL DEVIL HILLS -- Street and Drainage Improvements Recommendations

September 17, 2024

drainage, overlay, WM, SW (Creek-Bay)

Fair3

58.6

2,587

3,781

0.72 miles Poor-ish

KILL DEVIL HILLS -- Street and Drainage Improvements Recommendations

September 17, 2024

Previous Years' Projects (continued from previous page)

FY 2020-21: Fall and Spring Bid Packages					Cumulative Length, Poor Streets Fixed
Poor Streets Fixed This Season: 7,030 ft					
Condition (2017 Rating)	Rating	Length	Status/Comments		
First Flight Village 3 / Landings 3					65,854
Cedar Dr, Captains La&Cir, Teakwood Ln	F3 - Poor	48.0	3,460		12.47 miles
Helga, Briggs, 4th, Martin, Dean					
Briggs St	Poor	47.8	1,030		
East Helga St	Poor	53.0	1,340	narrow width after water project	
East Fourth St	Fair1	74.0	200	bad drainage @ intersection	
East Martin St	Poor	50.1	900	22 w of Memorial	
East Dean St	Poor	50.0	300	0.06 miles Poor	
			7,030	1.33 miles Poor	
FY 2019-20: Hayman / Town Hall / Sixth					Cumulative Length, Poor Streets Fixed
Poor Streets Fixed This Season: 5,810 ft					
Condition (2017 Rating)	Rating	Length	Status/Comments		
Hayman Blvd & Plymouth Ave					58,824
Hayman Cir W to Bay; drainage; overlay	Poor	43.0	3,260		11.14 miles
Plymouth Ave, overlay	Poor	39.4	180		
Sixth Avenue & Town Hall Drive					
Town Hall Dr, overlay; drain	Poor	45.4	1,030		
Sixth Av (Airstrip to Baum), overlay & drain	Poor	46.6	1,340	overlay fabric	
			5,810	1.10 miles Poor	
FY 2018-19: Whispering Pines					Cumulative Length, Poor Streets Fixed
Poor Streets Fixed This Season: 6,990 ft					
Condition (2017 Rating)	Rating	Length	Status/Comments		
Pine Gove Trail					53,014
Quail Lane	Poor	46.3	2,170		10.04 miles
Goldie Street	Fair3	56.4	150		
Harrington Lane (Burns to Pine Grove)	Poor	38.3	510		
Shay Street (Quail to Dean)	Poor	41.0	320		
Pine Cone Court	Fair3	54.0	180		
Pine Needle Court	Poor	42.3	180		
Heather Lane	Poor	46.0	320		
			6,990	1.32 miles Poor	
FY 2017-18: Bay Drive Multi-Use Path, Phases 3 & 4					Cumulative Length, Poor Streets Fixed
Poor Streets Fixed This Season: 4,275 ft					
Condition (2012 Rating)	Rating	Length	Status/Comments		
Canal Dr, W First to Indian					46,024
Bay, Indian to Avalon	Fair3	58.2	4,275		8.72 miles
			4,275	0.81 miles Poor-ish	
FY 2016-17: Clark/Blue Jay St, Mustian St, Carlton Ave, Cooke Pl, Anchor Ct, Schooner Ct					Cumulative Length, Poor Streets Fixed
Poor Streets Fixed This Season: 3,963 ft					
Condition (2012 Rating)	Rating	Length	Status/Comments		
W Clark Street					41,749
Blue Jay Street	Poor	48.0	1,396	begin Dec 16, complete Apr 17	7.91 miles
Mustian Street	Poor	43.8	1,625	begin Dec 16, complete Apr 17	
W Carlton Ave	Poor	43.8	401		
Cooke Place	Poor	42.0	262	begin Dec 16, complete Apr 17	
Anchor Court	Poor	44.4	79	begin Dec 16, complete Apr 17	
Schooner Court	Fair3	56.4	200	begin Dec 16, complete Apr 17	
			3,963	0.75 miles Poor	
FY 2015-16: Northwest Area, Phase 3, Wrightsville, Memorial, Sioux Drainage and E & W Eighth					Cumulative Length, Poor Streets Fixed
Poor Streets Fixed This Season: 4,988 ft					
Condition (2012 Rating)	Rating	Length	Status/Comments		
Memorial Blvd. (Baum - halfway to Corrigan)					37,786
Wrightsville Blvd (Eighth to north end)	Poor	37.4	200		7.16 miles
Cameron Street	Poor	38.6	738		
Susan Drive	Poor	45.4	1,865		
E Eighth Street	Poor	48.4	1,160		
W Eighth St	Fair3	54.6	1,025	Nags Head 50% share: \$0	
	Fair2	67.0	1,417	Nags Head 50% share: \$100	
			4,988	0.94 miles Poor	
FY 2014-15 Project: N KHShores					Cumulative Length, Poor Streets Fixed
Poor Streets Fixed This Season: 2,910 ft					
Condition (2012 Rating)	Rating	Length	Status/Comments		
Memorial Blvd. (Wright-Woodmere)					32,798
Memorial Blvd. (48" pipe replacing ex. culverts)	Poor	29.2	1,965		6.21 miles
Aviation Avenue	Excellent	95.6	550	1,080' is part of 1,965'	
Pinehurst Avenue	Fair1	73.6	550		
Sutton Avenue	Good	81.4	550		
Carlow Avenue	Good	90.8	550		
Raleigh Avenue	Fair2	68.4	945	158 to NC12	
Baker Avenue	Excellent	95.6	550		
Ferris Avenue	Fair1	71.2	550		
			2,910	0.55 miles Poor	
FY 2013-14 Project: NW Area 2					Cumulative Length, Poor Streets Fixed
Poor Streets Fixed This Season: 6,083 ft					
Condition (2012 Rating)	Rating	Length	Status/Comments		
Nixonton Street					29,888
Bath Street	Poor	42.0	1,039		5.66 miles
Mary Hill Court	Poor	40.4	948		
Columbia Avenue	Poor	46.0	367		
Jean Court	Poor	37.4	777		
Shiloh Street	Poor	46.0	374		
Truxton Street	Poor	42.0	1,159		
Wilkinson St (Columbia to 158)	Poor	50.0	890		
Palmetto St (Lee to Bath)(Alternate?)	Fair1	73.0	725		
	Poor	22.0	529		
			6,083	1.15 miles Poor	
Spring FY 2012-13 Projects					Cumulative Length, Poor Streets Fixed
Poor Streets Fixed This Season: 1,015 ft					
Condition (2007 rating)	Rating	Length	Status/Comments		
Bay Drive Multi-Use Path, Phase 2					23,805
Bay Drive (Avalon to Wilkinson)	Good	86.2	2,555	full reconstr., first 2 blocks	4.51 miles
Bay Drive (Wilkinson to Nixonton)	Poor	41.7	415	overlay	
Raymond Ave (Arch to Town Line)	Fair 3	54.0	600		
			1,015	0.19 miles Poor	
Fall FY 2012-13 Project					Cumulative Length, Poor Streets Fixed
Poor Streets Fixed This Season: 2,224 ft					
Condition (2007 rating)	Rating	Length	Status/Comments		
Parkwood Area (road reconstruction & drainage)					22,790
Parkwood Dr	Poor	50.4	1,352	full reconstruction	4.32 miles
Maple Ct	Fair 2	70.0	223	overlay	
Myrtle Ct	Poor	48.4	227	overlay	
Elm Ct	Fair 3	52.4	245	overlay	
Telegraph Ct	Fair 3	52.4	400	overlay	
			2,224	0.42 miles Poor-ish	
Spring FY 2011-12 Project					Cumulative Length, Poor Streets Fixed
Poor Streets Fixed This Season: 1,252 ft					
Condition (2007 rating)	Rating	Length	Status/Comments		
Pirates Loop					20,566
Coral Drive	Poor	47.0	709	full reconstruction; grade change	3.9 miles
Harpoon Drive	Poor	48.4	302	full reconstruction	
	Poor	48.4	241	overlay	
			1,252	0.24 miles Poor	
Fall FY 2011-2012 Project					Cumulative Length, Poor Streets Fixed
Poor Streets Fixed This Season: 950 ft					
Condition (2007 rating)	Rating	Length	Status/Comments		
SW AREA (Ocean Acres) Stormwater, Phase 2					19,314
Ocean Acres Drive	Fair3	59.0	3,050	1.5" Overlay only	3.66 miles
Ocean Acres Drive	Poor	49.0	800	2" Overlay only	
Burns Drive	Fair3	60.4	900	stormwater only	
Harrington Ave (Burns-Gunas)	Fair2	67.0	250	stormwater only	
Gunas Drive	Fair1	75.0	700	stormwater only	
Copley Drive	Fair1	77.0	400	stormwater only	
Jones Court	Poor	43.0	150	2" Overlay only	

KILL DEVIL HILLS -- Street and Drainage Improvements Recommendations

September 17, 2024

Adjust WM and remove 9 "jumpers"

950 0.18 miles Poor

KILL DEVIL HILLS -- Street and Drainage Improvements Recommendations

September 17, 2024

Previous Years' Projects (continued from previous page)

				Poor Streets Fixed This Season: 0 ft	Cumulative Length, Poor Streets Fixed
2010-11 Project					
Phase 1A completed, stormwater only, on urgent basis (2007 rating)					
<u>Street</u>	<u>Condition</u>	<u>Length</u>	<u>Status/Comments</u>		
Ocean Acres Dr (158 to Copley W)	Fair3	59.0	2,800	Stormwater infiltration only	18,364
Harrington Lane (OA to Burns)	Good	89.0	260	Stormwater infiltration only	3.48 miles
Bell Avenue (OA to Burns)	Fair1	71.0	250	Stormwater infiltration only	
Gunas Dr (portion n of OA)	Fair1	75.0	135	Stormwater infiltration only	
Burns Dr (short portions)	Fair3	59.0	220	Stormwater infiltration only	
			0	0.00 miles Poor	
2009-10 Project					
Phase 1A completed, stormwater only, on urgent basis (2007 rating)					
<u>Street</u>	<u>Condition</u>	<u>Length</u>	<u>Status/Comments</u>		
W First St (Canal to Ketch)	Poor	50.6	566	wMP Trail; Completed	18,364
W First St (Ketch to Landing)	Excellent	97.1	1,764	wMP Trail; Completed	3.48 miles
W First St (Landing to south end)	Poor	46.1	1,796	wMP Trail; Completed	
			2,382	0.45 miles Poor	
2008-09 Project					
Phase 1A completed, stormwater only, on urgent basis (2007 rating)					
<u>Street</u>	<u>Condition</u>	<u>Length</u>	<u>Status/Comments</u>		
St. Louis St (Susan to Bay)	Poor	41.4	1,426	Completed	16,002
Wallace St (Susan to Lee)	Poor	22.6	717	Completed	3.03 miles
Truxton St (Lee to Bay)	Poor	43.8	744	Completed	
Wilkinson St (Lee to Bay)	Poor	44.4	1,253	Completed	
Lee Ave (Wilkinson to Cameron)	Fair3	54.0	2,342	Completed	
Palmetto St (Lee to Bath)	Poor	22.0	529	No Award Winter 08, built 2014	
	(also listed Drainage Only below)			Complete; New Bern Street portion not awarded Winter 08	
			6,482		
2007-08 Project					
Phase 1A completed, stormwater only, on urgent basis (2007 rating)					
<u>Street</u>	<u>Condition</u>	<u>Length</u>	<u>Status/Comments</u>		
Bay Dr (Nixonton to Town Line)	Poor	2,350		Includes Multi-Purpose Trail	9,520
Bay Dr (Hayman to Nixonton)(Drainage)	Good	1,300		Drainage only; future trail	1.8 miles
Various Drainage Projects	(also listed Drainage Only below)				
			2,350		
2007 Spring Project					
Phase 1A completed, stormwater only, on urgent basis (2007 rating)					
<u>Street</u>	<u>Condition</u>	<u>Length</u>	<u>Status/Comments</u>		
Seagate Ct	Poor	100		Completed	7,170
Sea Village La	Poor	500		Completed	1.36 miles
Sea Wing Ct	Poor	100		Completed	
Raymond Ave (Wilkinson to Arch)	Poor	1,625		Completed	
Raymond Ave (Arch to Town Line)	Fair 3	600		No Award Spring 07, built 2013	
E. Chowan St (NC 12 to Raymond)	Poor	595		Completed	
E. Sothel St (NC 12 to Raymond)	Poor	600		Completed	
			3,520		
2006 Fall Project					
Phase 1A completed, stormwater only, on urgent basis (May 2003 rating)					
<u>Street</u>	<u>Condition</u>	<u>Length</u>	<u>Status/Comments</u>		
Sir Walter Rd	Poor	1,920		Completed	3,650
Princess Anne Dr (Camellia to First)	Poor	720		Completed	.69 miles
Camellia Dr (Sir Walter to Princess Anne)	Poor	350		Completed	
East Landing Dr (Cove to US 158)	Poor	660		Completed; overlay	
			3,650		
2006 Spring Project					
Phase 1A completed, stormwater only, on urgent basis (May 2003 rating)					
<u>Street</u>	<u>Condition</u>	<u>Length</u>	<u>Status/Comments</u>		
West Baum St	Unimproved	600		No Award Spring 05, Fall 05, Spring 06	780
W. Fresh Pond/ W. Lake Drive Connector	Poor	380		Completed	.15 miles
Creek St (Third to Indian)	Drainage	600		Completed	
Cardinal St (800 Block)	Drainage	425		Completed	
			380	0.07 miles Poor	
2005 Fall Project					
Phase 1A completed, stormwater only, on urgent basis (May 2003 rating)					
<u>Street</u>	<u>Condition</u>	<u>Length</u>	<u>Status/Comments</u>		
Eighth Ave (Martin to Airstrip)	Semi-improved	450		Completed	400
Ninth Ave (Martin to Airstrip)	Poor	400		Completed	.08 miles
Culvert repairs	Not applicable			Completed	
			400	0.08 miles Poor	
Drainage Only Areas Completed (per Albemarle & Associates 2005 Multiyear Drainage Plan & Public Services' Post-Dorian Plan)					
<u>Street or Area</u>	<u>Nature of Problem</u>	<u>Status/Comments</u>			
06-07, East Avalon, Phase 1	Residential property Flooding	Avalon Street ONLY, not whole project; Completed Fall 04			
07-08, Cardinal St	Residential property Flooding	Completed Spring 06			
07-08, Creek St	Residential property Flooding	Completed Spring 06			
07-08, Cedar Dr	Residential property Flooding	Completed Spring 06			
06-07, East Avalon, Phase 2	Residential property Flooding	Completed Winter 07-08			
Second St / Princess Anne Dr	Residential property Flooding	Completed Winter 07-08			
Martin St / Blue Jay St	Commercial property flooding	Completed Winter 07-08			
Baum St / Memorial Ave	Failing CMP, roadway damage	Completed Winter 07-08			
East Fresh Pond Dr	Residential property Flooding	Completed Winter 07-08			
East Holly St	Open ditch; safety issues	Completed Winter 07-08			
08-09, East Avalon, Phase 3	Residential property Flooding	Completed Winter 08-09, except New Bern St			
10-11, Southwest Area, Phase 1A	Residential property Flooding	Completed Summer-10			
10-11, Southwest Area, Phase 2	Residential property Flooding	Completed Fall 11			
14-15, NKHS, Memorial Ditch Phase 1	Failing CMP; develop backbone	Completed Spring 15			
15-16, Sioux Street Drainage	Residential property Flooding	Completed Winter 15-16; owners provided easements			
18-19, Quail La / Shay / Dean St	Residential property Flooding	Completed w/Whispering Pines Project, 2019			
22-23, US 158 - W Third, W Durham	Res. property Flooding upstream	Completed w/Durham&Croatan project Spring 2023			
24-25, Wrightsville Blvd, Phases 1 & 2	Res. property Flooding upstream	Project under contract as of summer 2024, completion spring 2025			
07-08, denotes Plan Year (FY) per Albemarle & Assoc. 2005 Multiyear Drainage Plan					
Drainage Only Areas Remaining Assoc. 2005 Multiyear Drainage Plan & Public Services' Post-Dorian Plan)					
<u>Street or Area</u>	<u>Nature of Problem</u>	<u>Status/Comments</u>			
Memorial Ave Ditch, Phases 2 & 3	Flooding (Phase 1 done 14-15)	Wrightsville Blvd parallel route, U/C 24-25, will complete this work (future "drainage only" projects unlikely, instead holistic with streetwater efforts. Piping of open sections of Memorial ditch likely, may be integrated with pedestrian path development).			
Poor Streets Remaining (after completion of 2024/25 project)					
In "Poor Streets Remaining," streets highlighted with the following colors of shading are recommended on the first page for the following Fiscal Year:				FY 2025-2026	Type (Collector or Local Access)
Streets in BOLD TYPE below dropped to "Poor" with 2022 Rating				FY 2026-2027	
				FY 2027-2028 & beyond	
RANDOM ST (Concrete)	Poor	512			LA
W. SPORTSMAN DR	Poor	2,997			LA
DOCK ST (Concrete)	Poor	549			LA
SEALOFT CT	Poor	135			LA
W. ST. CLAIR ST	Poor	435			LA
W. MARTIN ST	Poor	3,106			C
W. OCEAN ACRES DR	Poor	3,000			LA
MEMORIAL BLVD (1228 S to Martin)	Poor	1,540			C
BURNS DR	Poor	3,660			LA
PROSPECT AVE	Poor	981			C
Poor (2022) Streets After 24-25 Project	3.20 miles	16,915 ft			
(added to "Poor" list with 2022 Rating)	0.88 miles	4,657 ft			