Town of North Topsail Beach

Joann M. McDermon, Mayor Mike Benson, Mayor Pro Tem

Aldermen: Richard Grant Tom Leonard Susan Meyer



William Younginer/Police Chief Town Manager

> Sherrie L. Hancock Town Clerk

# **Board of Aldermen**

Special Meeting Agenda North End Fire Station, 2049 New River Inlet Road Saturday, May 15, 2021, 9 a.m.

- I. Call to Order
- II. Approval of Agenda
- III. Public Hearing: Proposed Beach Nourishment Municipal Service Districts
- IV. ATM Professional Services Agreement (PSA) Change Order No. 4
- V. Adjournment

Notice to citizens who wish to speak: As a courtesy to others, a citizen speaking on an agenda item or making a petition is normally limited to three minutes. If you are unable to attend and would like your comments read into the record at the meeting, please email them to <a href="townclerk@ntbnc.org">townclerk@ntbnc.org</a> by 5pm FRIDAY MAY 14, 2021. If you wish to address the Board this morning, please go to the table set up outside of the Fire Station and sign in. The Board may also change the order in which agenda items are presented.

**Note:** next Board of Aldermen regular meeting will be held on June 3, 2021 at North End Fire Station, 2049 New River Inlet Road

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William Younginer Acting Town Manager/Police Chief

> Sherrie L. Hancock Town Clerk

### NOTICE

Board of Aldermen Special Meeting North End Fire Station, 2049 New River Inlet Road May 15, 2021 **9:00 a.m.** 

NOTICE is hereby given that on Saturday, May 15, 2021 at 9:00 AM at the North Fire Station, 2049 New River Inlet Road, North Topsail Beach, the North Topsail Beach Board of Aldermen will hold a public hearing:

1. To consider the establishment of two Municipal Service Districts related to the Town of North Topsail Beach's beach erosion control and flood and hurricane protection works project. In preparation for this public hearing, a report has been prepared which includes information on the proposed beach nourishment project and the proposed Municipal Service Districts.

Specifically, the report contains the following:

Map of the proposed Beach Nourishment Municipal Service District;

Statement regarding the service proposed to be provided within the Municipal Service District; and,

Plan for providing the proposed service.

A copy of the Beach Nourishment Project Report is available for public inspection at the Town Hall, in the Office of the Town Clerk, 1000 Hwy 210, Sneads Ferry, NC 28460, during normal business hours, 8 am – 4:30 pm.

As a result of this hearing, substantial changes may be made in the report as advertised to reflect objections, debate and discussion at the hearing. Any persons desiring to be heard on any of the proposals as stated above should appear at the time and place specified above.

Originally Posted the 1st day of May, 2021. Sherrie Hancock Town Clerk

Posted the 12st day of May, 2021 to include:

2. To consider the approval of the proposed addendum identified as Change Order No. 4 to the existing Professional Services Agreement (PSA) between ATM and the Town of North Topsail Beach, dated October 12, 2018. Change Order No. 4 is proposed to continue the Town's comprehensive beach management program.

Deborah J. Hill MPA AICP CFM CZO Planning Director

# Storm Damage Mitigation Project Report Establishment of Municipal Service Districts For beach erosion control and flood and hurricane protection works in accordance with NCGS 160A-535 & 160A-544

1) The attached maps identify the proposed Municipal Service Districts

The total project length for the initial storm damage mitigation project, and future renourishment cycles over the 50 year life of the project in North Topsail Beach is approximately 4 miles. The area to be protected begins at the border with Surf City and extends northward to the beginning of the Coastal Barrier Resources area. The total project is expected to initially place 12 million square yards of sand in the project area, building a new protective dune that is projected to be 25' wide and 14' high. In addition the project will widen the beach with a 6' high, 300' wide berm.

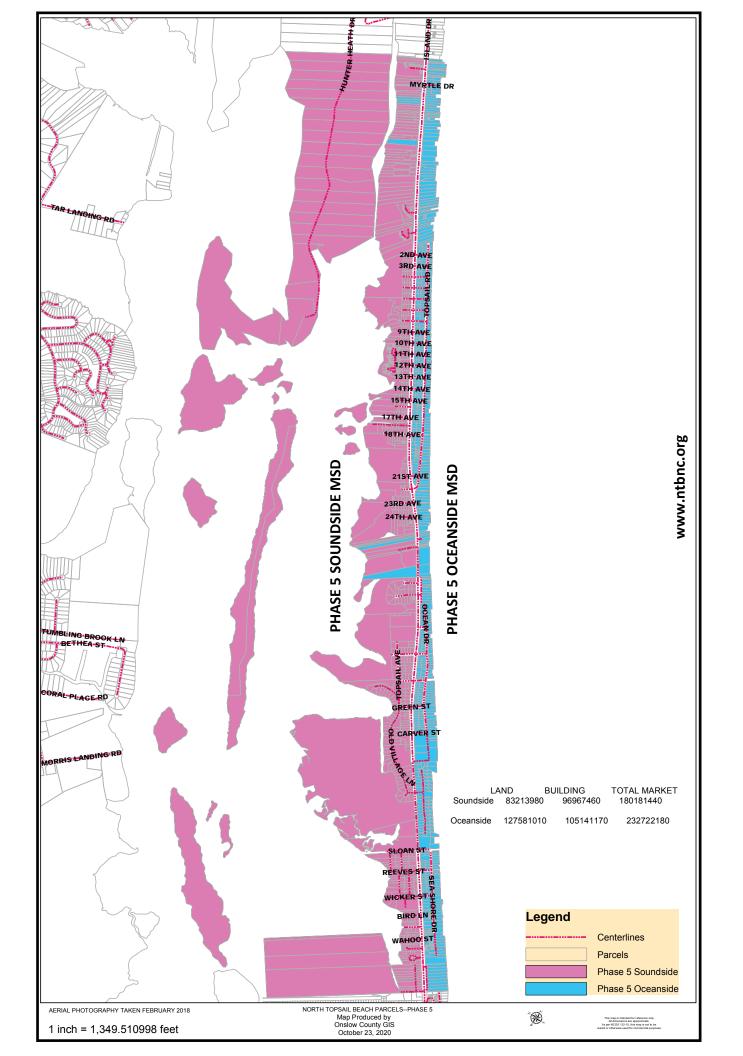
2) Statement indicating that services are needed in the district to a demonstrably greater extent than the rest of the town.

While North Topsail Beach encompasses approximately 11 miles of beachfront, only the southernmost 4 miles, the area proposed for the MSD's, will benefit from the dramatically increased protection provided by the storm damage mitigation project. The Town's staff and the Board of Aldermen have determined that the proposed districts need the services provided by the USACE beach erosion control and flood and hurricane protection works project to a demonstrably greater extent that the rest of the Town. In order to maintain the aesthetic, environmental, protective, and physical value of the beach, the North Topsail Beach Board of Aldermen has determined that the creation of two municipal service districts for erosion control and flood and hurricane protection would benefit both public and private property owners. One district, Phase 5 East, would include properties on the ocean side of Island Drive. The second would include properties on the ICW side of Island Drive. Once established, these districts will enable the town to allocate the project costs within the area that will benefit from the Storm Damage Mitigation Project.

The proposed districts are in need of this project (meeting the standards of NCGS 160A-537(a)) and will benefit to a demonstrably greater extent than the remainder of the Town.

3) Plan for providing proposed services in the Municipal Service District

The US Army Corps of Engineers has developed the specifics of the Surf City//North Topsail Beach Storm Damage Mitigation project over the last two decades. This project is scheduled to begin in late 2021 at the southern border of Surf City, and proceed north through North Topsail Beach. This project will add 12 million square yards of sand, build a 14' dune, and reshape the beach berm. The 4 mile MSD area will be the only portion of Town to benefit from this project, and will be protected for the next 50 years.





POST OFFICE BOX 20336 CHARLESTON, SC 29413-0336 (843) 884-8750 FAX (843) 884-8935 www.appliedtm.com

April 21, 2021

Mr. Dave Gilbride Town Manager 2008 Loggerhead Court North Topsail Beach, NC 28460

RE: Proposal for Coastal Engineering Services related to Dorian

Dear Mr. Gilbride:

ATM has developed the following scope of services for the Town of North Topsail Beach to continue with Hurricane Dorian mitigation.

It is ATM's understanding that the Town of North Topsail Beach wishes to proceed with design, permitting and construction for the Town's FEMA Category G ("engineered beach") Dorian mitigation projects. The Dorian Category G project is planned to be performed at the same time as the Florence Category G project. The ATM team will build upon its previous studies and data analysis for this effort.



Figure 1: Hurricane Dorian model image.

The FEMA Category G Dorian project is for the Phase 1 (15,007 cy) and Phase 5 (30,727 cy) shoreline reaches.

The FEMA Category G Florence project is estimated at 607,059 cubic yards (cy) for Phase 5 only.

For Florence Phase 1 shoreline mitigation, recall that storm losses were analyzed using both Cat. B and Cat. G FEMA loss calculations and found Cat. B losses to be larger, and therefore went with the Cat. B mitigation process. This is not the case for Dorian and Phase 1 losses were calculated using the Cat. G process.

It is assumed that upland truck haul and sand mine borrow areas will be used for this project given the current lack of a permitted offshore borrow area. Note that FEMA mitigation also includes equipment mobilization and other project-related costs and that a Dorian cost estimate has been developed and approved by FEMA.

Provided herein is a scope of services and cost estimate for the following tasks:

- 1. Project design
- 2. Project permit application development
- 3. Permitting support and coordination
- 4. Final fill and template design
- 5. Bid package development
- 6. Bidding support and analysis
- 7. Meetings and coordination.

Additional information on each task is discussed below.

### TASK 1.1 -PROJECT DESIGN AND UPLAND BORROW SITE ANALYSIS

ATM will update the Florence Phase 5 Cat. G project design to include both the Dorian Phase 1 and Phase 5 volumes. Some additional analysis and design will be required for the Phase 1 shoreline as this area recently had material placed and only 15,007 cy qualified for Dorian mitigation. ATM will work with the Town to develop a preferred design in the Phase 1 shoreline reach.

Additionally, while the upland borrow areas have successfully been used for dune haul projects, limited geotechnical analysis is required by the State for borrow area permitting. ATM will summarize the results of the field investigation and analysis for inclusion into the permit application package. Geotechnical analysis and associated laboratory fees are included in this task.

# TASK 1.2 - PROJECT PERMIT MODIFICATION APPLICATION

This task is required to update the Town's existing state and federal permits. It is anticipated that a major modification of the Town's existing permits will be required for this effort. ATM will develop a comprehensive permit modification application that includes:

- Permit modification forms
- Beach fill design
- Borrow area information
- Project summary
- Alternatives analysis
- Permit drawings of beach fill design

This task includes services through submittal of the application. Once submittal occurs and the project is placed on public notice, the level of effort required following public notice and agency review can vary significantly. ATM believes that the existing permit mechanism (including the

comprehensive 2009 Final EIS) should be adequate for several items including Essential Fish Habitat (EFH) and cumulative impacts analysis. However this cannot be ruled out and any items identified during this process will be handled in Task 1.3.

# TASK 1.3 - PERMIT REGULATORY REQUESTS AND COORDINATION

Once the permit modification application submittal has occurred, the project will go out on public notice and will be sent to reviewing agencies (e.g., US Fish & Wildlife, NC Wildlife Resources Commission, National Marine Fisheries Service, NC Division of Water Quality, etc.). This project permitting will adhere to all NEPA and SEPA procedures.

The State or the USACE may request additional data or studies at any point in the permitting process, and any permitting requests for additional information (RAIs) will be addressed in scope and costs as they occur. As such, the effort required for this task remains to-be-determined (TBD).

### TASK 1.4 - FINAL FILL AND TEMPLATE DESIGN

Following permit modification issuance, ATM will develop the final project design based upon the results of the permitting and most recent beach survey (just prior to construction). Changes to the fill template or fill footprint due to recent wave/weather events may also occur.

# TASK 1.5 - BID PACKAGE DEVELOPMENT

This task includes finalization of the project plans, volumes, typical sections, and construction details based on the most recent site conditions, permit conditions. If timing and scheduling allow, updated surveys of the beach will be incorporated. Otherwise, the most recent surveys will be used for bidding purposes and plans will be updated immediately prior to construction (i.e., following the pre-project survey under that task).

One bid packages will be developed and issued that includes both the Phase 1 and Phase 5 components. Note that the Phase 5 volume (607,059 cy Florence + 30,727 cy Dorian) is considerably larger than the Phase 1 volume (15,007 cy).

Project plans, specifications, and bid documents for construction of the Category G sections of beach will be developed in coordination with the Town, to include:

- Aerial photography overlays with project details
- Construction baseline and dune vegetation line
- Staging and access area(s)
- Beach fill template (plan and typical section views, including construction berms and toe of fill locations)
- Technical and environmental protection specifications
- Permits
- Bidding instructions, draft Contract Document, and supplementary conditions

It is assumed that the Town will provide requirements for the "front-end" documentation including the Form of Contract Document, insurance, bonding, supplementary conditions and other legal requirements, critical milestones, and any liquidated damage requirements. In addition, it is assumed that the Town's legal counsel will review the bid package prior to dispersal of the final bid documents. Finally, it is assumed that the Town will obtain any easements required for (1) construction along the beachfront and (2) access to/from the beach at reasonable locations for the Contractor.

### TASK 1.6 - BIDDING SUPPORT AND ANALYSIS

ATM will assist North Topsail Beach with bidding to determine suitable contractors for the nourishment project. ATM will coordinate and attend one pre-bid meeting with North Topsail Beach staff and interested bidders.

During the bidding period, ATM shall communicate frequently with North Topsail Beach staff regarding receipt of prospective Contractor written inquiries seeking interpretation of the Bid Documents. Should ATM and North Topsail Beach receive such information within the stipulated time in advance of the advertised bid due date, ATM shall assist North Topsail Beach with preparation of bid addenda as appropriate by providing technical responses to items under ATM's charge. Such items could include minor changes or clarifications to the contract drawings, specifications, or other construction-related issues as appropriate. It is assumed for budgeting purposes that no more than one (1) addendum will be required.

Once the bidding period closes, ATM will obtain copies of bids from North Topsail Beach and review them for accuracy, completeness and Contractor qualifications. ATM will provide a written recommendation for award to the Town of North Topsail Beach based on ATM's review of the bid submittals.

This task is costed as an allowance. If the Town of North Topsail Beach requests negotiations with bidders following the bid period, rebidding, or additional addenda, such services will be completed on a time and materials basis.

# TASK 1.7 - MEETINGS AND COORDINATION

This task is required for ATM to continue coordination with anticipated Town representatives and consultants (as required), general project management, and for requested project-related meetings. Specific items included in this task are:

- Regular contact and communications with Federal (e.g., USFWS, USACE, NMFS), State (e.g., DCM, DWR, WRC, NC Archeology Office), and Local/Private interests (e.g., environmental organizations, island residents) as necessary
- Provide information as requested and advise Town of any additional studies or documentation required for consultant's review
- Attendance at meetings with Town and/or regulatory agencies
- Responses to storms and other significant erosion events.

This task is presented as an allowance amount, based on an estimated minimum effort (as described above), which will be expended as required/requested. ATM will provide the Town with the status of this task through our invoicing process, so that if and when additional ATM

participation is required, extensions to the allowance can be made via incremental work authorizations.

# SUMMARY ESTIMATE OF PROFESSIONAL LABOR FEES

Table 1 presents the fee estimates for the described scope of services.

Table 1: ATM Professional Fee Estimate

Task	Description	ATM Professional Fee Estimate <sup>1</sup>
1.1	Project Design	\$12,500
1.2	Project Permit Application Development and Submittal	\$28,000
1.3	Permit Application Processing	TBD
1.4	Final Fill and Template Design	\$7,500
1.5	Bid Package Development	\$29,400
1.6	Bidding Support and Analysis (Allowance)	\$13,000
1.7	Meetings and Coordination (Allowance)	\$10,000

<sup>1.</sup> Fee estimate includes labor and field equipment charges only, at ATM's 2021 Standard Rates.

The anticipated professional services associated with this addendum shall be billed to the Town on a time and materials basis. Professional services will be billed by the hour according to ATM's 2021 rate sheet.

This addendum serves as Change Order No. 4 to the existing Professional Services Agreement (PSA) between ATM and the Town of North Topsail Beach, dated October 12, 2018. Change Order No. 4 is proposed to continue the Town's comprehensive beach management program.

Reimbursable expenses as defined in the October 12, 2018 PSA shall be billed in addition to professional labor indicated in the above table. Reimbursable expenses (i.e., printing, travel, phone, mail, subcontractor administration, etc.) are billed at cost plus 10%.

If additional site visits, data collection, analysis, or meetings are needed, ATM will notify the Town to receive authorization prior to executing the additional work.

Except where noted herein, all conditions of the October 12, 2018 PSA remain in place.

To execute this work, please authorize Change Order No. 4 by signing two originals, returning one to our office, and retaining the other original for your records.

ACCE	PTED BY:		
APPLIED TECHNOLOGY AND MANAGEMENT		TOWN OF NORTH TOPSAIL BEACH	
Ву	Sam Phlegar, President	By	
		(Type Name and Title)	
Date	4/21/2021	Date	