APTIM COASTAL PLANNING & ENGINEERING OF NORTH CAROLINA, INC. SERVICES AGREEMENT FIXED PRICE BASIS

All in accordance with the following terms and conditions.

- 1. SCOPE OF SERVICES: APTIM COASTAL PLANNING & ENGINEERING OF NORTH CAROLINA, INC. ("APTIM") agrees to perform for the undersigned CLIENT, engineering and consulting ("Services") described in the attached Proposal and/or as follows:
 - Central Dare County Channel Maintenance and Dredge Material Management Permitting Project.
- 2. FEES, INVOICES AND PAYMENTS: The Services will be performed on a fixed price basis for One Hundred Sixty-Seven Thousand, Five Hundred Thirty-Five Dollars and 0/100 (\$167,535.00). Invoices will be submitted by APTIM no more frequently than every two weeks, with payment due upon CLIENT'S receipt of invoice. Payment shall be in U.S. Dollars. CLIENT shall be responsible for payments (without deduction or offset from the total invoice amount) of any and all sales, use, value added, gross receipts, franchise and like taxes, tariffs and duties levied against APTIM or its employees by any government or taxing authority. A service charge equal to one-half percent (1/2 %) per month, or the maximum rate permitted by law, whichever is less, will be added to all accounts which remain unpaid for more than thirty (30) calendar days beyond the date of the invoice. Should there be any dispute as payments to be made on a percent complete basis to any portion of an invoice, the undisputed portion shall be promptly paid.
- 3. CLIENTS COOPERATION: To assist APTIM in performing the Services, CLIENT shall (i) provide APTIM with relevant material, data, and information in its possession pertaining to the specific project or activity, (ii) consult with APTIM when requested, (iii) permit APTIM reasonable access to relevant project sites, (iv) ensure reasonable cooperation of CLIENT's employees in APTIM's activities, and (v) notify and report to all regulatory agencies as required by such agencies.
- 4. CONFIDENTIALITY: In the course of performing Services, to the extent that CLIENT discloses to APTIM, business or technical information that CLIENT clearly marks in writing as confidential or proprietary, APTIM will exercise reasonable efforts to avoid the disclosure of such information to others. Nonetheless, CLIENT shall treat as confidential all information and data furnished to it by APTIM in connection with this Agreement including, but not limited to, APTIM's technology, formulae, procedures, processes, methods, trade secrets, ideas, inventions, and/or computer programs; and

CLIENT shall not disclose such information to any third party.

Nothing herein is meant to prevent nor shall be interpreted as preventing either party from disclosing and/or using any information or data (i) when the information or data are actually known to the receiving party before being obtained or derived from the transmitting party, (ii) when information or data are generally available to the public without the receiving party's fault at any time before or after it is acquired from the transmitting party; (iii) where the information or data are obtained or acquired in good faith at any time by the receiving party from a third party who has the same in good faith and who is not under any obligation to the transmitting party in respect thereto; (iv) where a written release is obtained by the receiving party from the transmitting party; (v) three (3) years from the date of receipt of such information; or (vi) when required by process of law; or by North Carolina Public Records Law; provided, however, upon service of such process, the recipient thereof shall use reasonable efforts to notify the other party and afford it an opportunity to resist such process.

- 5. DELAYS AND CHANGES IN CONDITIONS: If APTIM is delayed or otherwise in any way hindered or impacted at any time in performing the Services by (i) an act, failure to act or neglect of CLIENT or CLIENT"'s employees or any third parties; (ii) changes in the scope of the work; (iii) unforeseen, differing or changed circumstances or conditions including differing site conditions, acts of force majeure (such as fires, floods, riots, and strikes); (iv) changes in government acts or regulations; (v) delay authorized by CLIENT and agreed to by APTIM; or (vi) any other cause beyond the reasonable control of APTIM, then 1) the time for completion of the Services shall be extended based upon the impact of the delay, and 2) APTIM shall receive an equitable compensation adjustment. Any such equitable adjustment shall be based on APTIM's then current Time and Material Rates, as may be provided in a Rate sheet attached hereto.
- 6. INSURANCE: APTIM is presently protected by Worker's Compensation Insurance as required by applicable law and by General Liability and Automobile Liability Insurance (in the amount of \$1,000,000 combined single limit) for bodily injury and property damage. Insurance certificates will be furnished to CLIENT on request. If the CLIENT requires further insurance coverage, APTIM will endeavor to obtain said coverage, and CLIENT shall pay any extra costs therefor.

©APTIM Coastal Planning & Engineering of North Carolina, Inc. All Rights Reserved 7. INDEMNITIES: APTIM shall defend, indemnify and hold harmless CLIENT and its officers and employees from and against loss or damage to tangible property, or injury to persons, to the extent arising from the negligent acts or omissions or willful misconduct of APTIM, its borrowed servants and their employer and its subcontractors, and their respective employees and agents acting in the course and scope of their employment. CLIENT shall defend, indemnify and save harmless APTIM (including its borrowed servants and their employers and its officers, and employees) from and against, any loss or damage to tangible property, or injury to persons, to the extent arising from the negligent acts or omissions or willful misconduct of CLIENT, its officers and employees

8. LIMITATIONS OF LIABILITY:

- GENERAL LIMITATION CLIENT'S SOLE AND EXCLUSIVE REMEDY FOR ANY ALLEGED BREACH OF WARRANTY BY APTIM SHALL BE TO REQUIRE APTIM TO RE-PERFORM ANY DEFECTIVE SERVICES. APTIM'S LIABILITY AND CLIENT'S REMEDIES FOR ALL CAUSES OF ACTION ARISING HEREUNDER WHETHER BASED IN CONTRACT, WARRANTY, NEGLIGENCE, , OR ANY OTHER CAUSE OF ACTION, SHALL NOT EXCEED EXCEPT FOR THE INDEMNIFICATIONS SET FORTH IN SECTION 7 ABOVE. IN THE CUMULATIVE AGGREGATE (INCLUDING ANY INSURANCE PROCEEDS) WITH RESPECT TO ALL CLAIMS ARISING OUT OF OR RELATED TO THIS AGREEMENT, WHATEVER MINIMUM AMOUNT MAY BE REQUIRED BY LAW OR, IF NONE, THE AMOUNT OF COMPENSATION FOR SUCH SERVICES,
- b. CONSEQUENTIAL DAMAGES: FURTHER AND REGARDLESS OF ANY OTHER PROVISION HEREIN, APTIM SHALL NOT BE LIABLE FOR ANY INCIDENTAL, INDIRECT, OR CONSEQUENTIAL DAMAGES (INCLUDING LOSS OF PROFITS, DECLINE IN PROPERTY VALUE, REGULATORY AGENCY FINES, LOST PRODUCTION OR LOSS OF USE) INCURRED BY CLIENT OR FOR WHICH CLIENT MAY BE LIABLE TO ANY THIRD PARTY OCCASIONED BY THE SERVICES OR BY APPLICATION OR USE OF REPORTS OR OTHER WORK PERFORMED HEREUNDER.
- GOVERNING LAWS: This Agreement shall be governed and construed in accordance with the laws of the State of North Carolina.
- 10. TERMINATION: Either party may terminate this Agreement with or without cause upon forty five (45) days' written notice to the other party. Upon such termination, CLIENT shall pay APTIM for all Services performed hereunder up to the date of such termination. In addition, if CLIENT terminates, CLIENT shall pay APTIM all reasonable costs and expenses incurred by APTIM in effecting the termination, including, but not

limited to non-cancelable commitments and demobilization costs.

11. ASSIGNMENT: Neither APTIM nor CLIENT shall assign any right or delegate any duty under this Agreement without the prior written consent of the other, which consent shall not be unreasonably withheld. Notwithstanding the foregoing, APTIM may, upon notice to CLIENT, assign, pledge or otherwise hypothecate the cash proceeds and accounts receivable resulting from the performance of any Services or sale of any goods pursuant to this Agreement.

12. MISCELLANEOUS:

- a. ENTIRE AGREEMENT. PRECEDENCE. ACCEPTANCE MODIFICATIONS: The terms and conditions set forth herein constitute the entire understanding of the Parties relating to the provisions of the Services by APTIM to the CLIENT. All previous proposals, offers, and other communications relative to the provisions of these Services by APTIM, oral or written, are hereby superseded, except to the extent that they have been expressly incorporated by reference herein. In the event of conflict, the three pages of this Agreement shall govern. CLIENT may accept these terms and conditions by execution of this Agreement or by authorizing APTIM to begin work. Any modifications or revision of any provisions hereof or any additional provisions contained in any purchase acknowledgement or other document issued by the CLIENT is hereby expressly objected to by APTIM and shall not operate to modify the Agreement.
- b. **DISPUTES**, **ATTORNEY FEES** Any dispute regarding this Agreement or the Services shall be resolved first by exchange of documents by senior management of the parties, who may be assisted by counsel. Any thereafter unresolved disputes shall be litigated in the state whose law governs under Section 9 hereunder. In any litigation, the Prevailing Party shall be entitled to receive, as part of any award or judgment, eighty percent (80%) of its reasonable attorneys' fees and costs incurred in handling the dispute. For these purposes, the "Prevailing Party" shall be the party who obtains a litigation result more favorable to it than its last formal written offer (made at least twenty calendar days prior to the formal trial) to settle such litigation.
- c. WAIVER OF TERMS AND CONDITIONS The failure of APTIM or CLIENT in any one or more instances to enforce one or more of the terms or conditions of this Agreement or to exercise any right or privilege in the Agreement or the waiver by APTIM or CLIENT of any breach of the terms or conditions of this Agreement shall not be construed as thereafter waiving any such terms, conditions, rights, or privileges, and the same shall continue and remain in force and effect as if no such failure to enforce had occurred.

APTIM Coastal P	lanning & Eng	ineering of Nor	th
Carolina, Inc.			

- d. **NOTICES** Any notices required hereunder may be sent by orally confirmed US Mail, courier service (e.g. FedEx), orally confirmed telecopy (fax) or orally confirmed email (further confirmed by US Mail) to the addresses set forth below.
- e. SEVERABILITY AND SURVIVAL Each provision of this Agreement is severable from the others. Should any provision of this Agreement be found invalid or unenforceable, such provision shall be ineffective only to the extent required by law, without invalidating the remainder of such provision or the remainder of this Agreement.

Further, to the extent permitted by law, any provision found invalid or unenforceable shall be deemed automatically redrawn to the extent necessary to render it valid and enforceable consistent with the parties' intent. The terms and conditions set forth herein shall survive the termination of this Agreement.

CLIENT and APTIM agree to the foregoing (INCLUDING THE LIMITATIONS ON LIABILITY IN SECTIONS herein) and have caused this Agreement to be executed by their duly authorized representatives as of the date set forth below.

Executed on	. 2019.

APTIM COASTAL PLANNING & ENGINEERING OF NORTH CAROLINA, INC.

DARE COUNTY

By (Sign):	By (Sign):
Print Name:	Print Name:
Title:	Title:
Address:	Address:
Phone:	Phone:
Fax:	Fax:
E-mail:	E-mail:

Aptim Coastal Planning & Engineering of North Carolina, Inc. (APTIM) will provide project management, planning, environmental, geotechnical and engineering services to the County of Dare (COUNTY) to facilitate maintenance dredging events within the federally authorized Manteo (Shallowbag) Bay navigation project and the Stumpy Point navigation channel. As described below, the same services will be applied to yet-to-be-determined non-federal navigation channels as well. Descriptions of the federal navigation channels included in this scope of work are provided below and shown in Figures 1 through 4:

- A channel -10 feet MLW (+2 feet overdepth) and 100 feet wide extending 1.6 miles from southern Albemarle Sound to the confluence of Roanoke Sound and the eastern portion of Shallowbag Bay
- A channel -12 feet MLW (+2 feet overdepth) and 100 feet wide extending 1.5 miles from a basin in front of the town of Manteo extending through Shallowbag Bay to Roanoke Sound
- A channel -12 feet MLW (+2 feet overdepth) and 100 feet wide extending 17.1 miles to and through Roanoke Sound and Old House Channel, to the 12-foot contour in Pamlico Sound
- A channel -12 feet MLW (+2 feet overdepth) and 100 feet wide extending 0.8 miles from Roanoke Sound to a basin at the town of Wanchese A channel -10 feet MLW (+2 feet overdepth) and 100 feet wide extending 5.2 miles from Pamlico Sound into Stumpy Point Bay

The goal of this scope of work is to obtain permits for 1) the dredging of the listed channels and 2) the establishment of sufficient dredge material management options to satisfy the long-term needs to maintain these channel projects. Furthermore, APTIM will coordinate with local stakeholders to determine additional channel maintenance and dredge disposal needs within the Project Area and incorporate additional needs into this permitting effort at the request of the COUNTY. As shown in Figure 4, the Project area includes a portion of the Outer Banks, Roanoke Island, and mainland Dare County from the southern portion of Albemarle Sound to the northwestern portion Pamlico Sound.

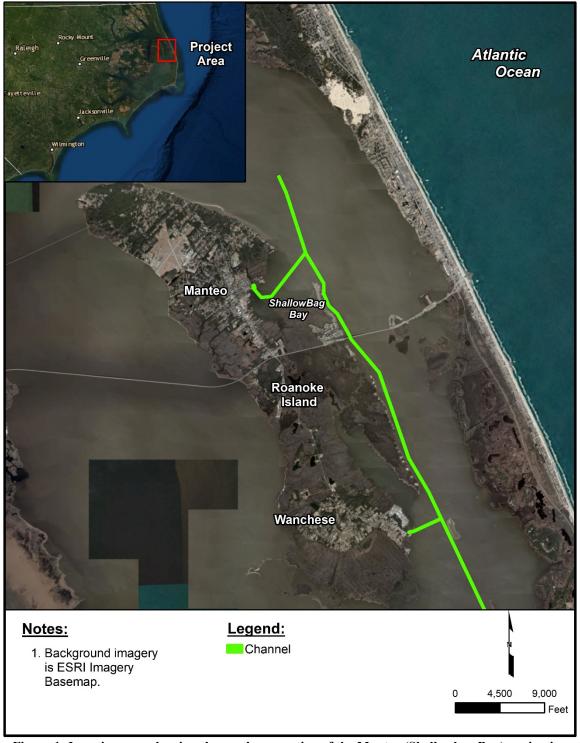


Figure 1: Location map showing the northern portion of the Manteo (Shallowbag Bay) navigation channel project.



Figure 2: Location map showing the southern portion of the Manteo (Shallowbag Bay) navigation channel project.

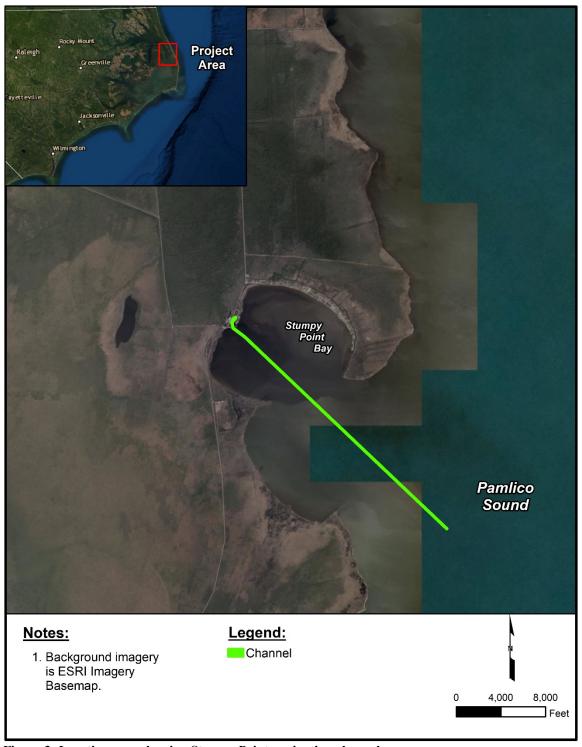


Figure 3: Location map showing Stumpy Point navigation channel

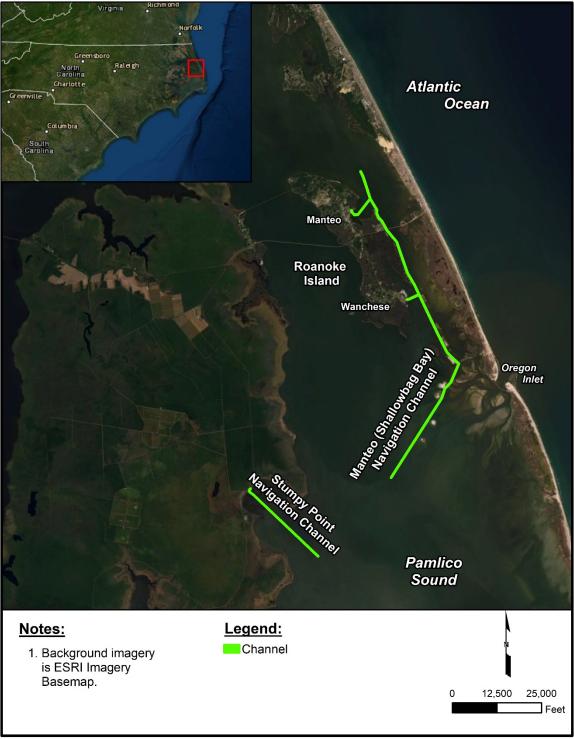


Figure 4: Location map showing Project Area

A detailed description of each of the services to be provided by APTIM as part of this Scope of Services follows.

PROJET MANAGEMENT

The APTIM project manager will be responsible for project administration of the program with assistance from other senior staff as appropriate. Administration includes coordination with the client and APTIM team, providing progress and status updates, maintaining budget control, scheduling, planning, internal meetings, and other associated management tasks required to complete the project according to the scope in a timely manner. APTIM's project manager will provide the COUNTY, with a one (1) page monthly summary of activities completed, upcoming milestones, and any anticipated changes to the scope or schedule.

TASK 1 – NEEDS ASSESSMENT

Based on communications with the US Army Corps of Engineers (USACE) Wilmington District, the COUNTY is already aware of dredge material management needs associated with the maintenance of the channels listed above. However, the COUNTY also desires to determine additional interests with regards to navigation maintenance and dredge material management within other areas of the southern portion of the COUNTY. It is the COUNTY's intention to identify these needs and move forward with the permitting of such navigation maintenance projects and dredge material management strategies.

APTIM will develop a geographic information system (GIS) that contains all federal and non-federal maintained navigation channels within the project area, which is shown in Figure 4. Using dredge records from the USACE and other entities engaged in actively maintaining navigation channels in the COUNTY, APTIM will 1) quantify the volume of material anticipated to be placed in dredge disposal sites over a pre-determined timeframe; and 2) determine the quality of material to be removed from the channels (i.e. sand, sand silt mix, mud, etc.).

APTIM will submit Freedom of Information Act (FOIA) requests to the USACE for available sediment data to assess sediment quality. Typically, the USACE does not require fees to process such requests; however, depending on the level of effort required by the USACE staff to compile the records, they may charge the COUNTY a fee of \$48/hour plus duplication costs (\$.15/page and \$5.00/DVD). This contract does not include additional fees to be paid to the USACE for this information. Should fees be required, the COUNTY will be provided a cost estimate and instructions on how to remit payment directly to the USACE.

APTIM will use data provided by the USACE through the FOIA request and other sources to assess the quality and sediment characteristics of material dredged from channels. The assessment of sediment quality does not include field collection of any additional geotechnical data. APTIM will also use data provided by the USACE to identify the type

and size of dredge equipment likely to be used to maintain each dredge project and to determine if existing dredge disposal sites could be modified to increase capacity.

As part of the needs assessment, APTIM will also conduct interviews with representatives from the North Carolina Department of Transportation (NCDOT), COUNTY public works departments, National Parks Services (NPS), and representatives from private industry to determine the needs for the beneficial use of dredged material. Specifically, APTIM will determine the needs for the different types of sediments (sand, sand silt mix, etc.) dredged from navigation channels. This information will be used in the development of the project alternatives, specifically to determine how sediment can be beneficially used.

TASK 2 – CONCEPT ALTERNATIVE DEVELOPMENT

Upon completion of Task 1, APTIM will work with the COUNTY and other stakeholders to identify the up to ten (10) dredge material management facilities to be used for the identified channel maintenance projects. The siting of these locations will consider:

- Proximity of the facility to the channel(s) requiring maintenance;
- Cost to acquire land;
- Potential for environmental impacts;
- Ease of access for interested parties to transport spoil material from the sites for beneficial uses:
- Potential opportunities for dual purpose of dredge disposal sites for public use (i.e. coastal resilience, camp grounds, water access, educational outreach, habitat improvement, etc.)

Through the process of identifying potential sites, APTIM will coordinate with land owners and user groups (i.e. Dare County Waterways Commission, North Carolina Coastal Federation, local recreational and commercial fishing interests, etc.) to assess the feasibility of these sites based on the criteria listed above. Once initial site alternatives have been identified by ATPIM and these user groups, APTIM will then develop a conceptual plan for each site with appropriate detail to allow for discussions with resource and permitting agencies to determine the feasibility from their perspectives.

APTIM will then arrange an interagency scoping meeting with representatives from state and federal environmental resources agencies, state regulatory agencies, the USACE, and local governmental representatives. The purpose of the meeting will be to identify any concerns these entities may have regarding each site identified through the process described above. In addition, the meeting will serve to determine the most appropriate permitting approach and National Environmental Policy Act (NEPA) documentation requirements. A project narrative and concept plan will be provided to meeting attendees by APTIM prior to the interagency meeting. Meeting minutes from the interagency

meeting will be drafted and disseminated to all meeting participants within 1 week following the meeting date.

APTIM will utilize information gained through the needs assessment, interviews with stakeholders, and resource/regulatory agency feedback from the interagency scoping meeting to develop recommended dredge material management facilities to be permitted under Task 3.

For each of the recommended dredge material management facilities, APTIM will also provide to the COUNTY the following information:

- Estimated volume anticipated to be removed from the identified navigation channels over the next 20 years
- Location and description of the recommended dredge material placement facilities
- Cost associated with the design, permitting and land acquisition for the recommended dredge material placement facilities
- Recommendations for cost-sharing partners
- A schedule for the design, permitting, and land acquisition required to develop the recommended dredge material placement facilities

A letter report will be prepared by APTIM to include this information. A draft of the letter report will be provided to the COUNTY within six (6) months following receipt of written authorization to proceed. Once comments have been received from the COUNTY regarding the alternatives, APTIM will address comments and provide both digital and hard copies of the document to the COUNTY as a deliverable.

TASK 3- ENVIROMENAL SERVICES

The scope of work and cost associated with both Task 3 and 4 assume the following stipulations:

- Permitting of the projects will follow the process described in the "Permitting" section below
- Completion of Task 3 and 4 will not require field investigations (collection of vibracore samples, analysis of sediments, field investigations of natural resources, etc.).
- Bathymetric data collected by the USACE will be provided to APTIM and will be sufficient to support the permit requests
- Publically available LiDAR data available through NOAA, the USGS, and the USACE, will be sufficient to support the permit requests
- Upon request by APTIM, the USACE will provide previous environmental documentation to support federally authorized channels included in the permitting requests.

• Upon request by APTIM, the USACE will provide existing boring data previously obtained from within the federally authorized channels in the vicinity of Rollinson Channel.

Task 3 is based on preliminary discussions with the United States Army Corps of Engineers (USACE), North Carolina Division of Coastal Management (DCM), and the COUNTY.

Permitting

APTIM will convene a second interagency scoping meeting where the resolution to any issues identified during the first interagency meeting will be presented by APTIM. Likewise, the scope and nature of the navigation projects that will be included within the permitting effort will be described. This will include the type(s) of dredge plant to be used, estimated dredged volumes, and the attributes of the proposed dredged disposal sites. APTIM will also ensure agreement from all meeting participants in regards to the proposed permitting approach and the anticipated environmental documentation requirements.

Following the second scoping meeting and based on the assumption that the project will be designed to allow for the most expeditious permitting approach, APTIM will assist the COUNTY in obtaining the necessary permits and approvals from all relevant state and federal agencies. At this time, it is understood that the following state permits and approvals will be required:

- North Carolina Division of Coastal Management (NCDCM), Coastal Area Management Act (CAMA) Major Permit.
- NC Division of Water Resources (NCDWR) General Water Quality Certification.
- NC State Historic Preservation Office's concurrence.
- NC Division of Energy, Mineral, and Land Resources (NCDEMLR) Erosion and Sediment Control Permit (only applicable for upland dredge disposal alternatives)
- NC Department of Environmental Quality (NCDEQ) Construction General Permit (NCG01) (only applicable for upland dredge disposal alternatives)

Federal permits and approvals will include:

- Department of Army (DOA) USACE Individual Permit in compliance with Section 10 of the Rivers and Harbors Act and Section 404 of the Clean Water Act.
- U.S. Fish and Wildlife Service (USFWS) and National Marine Fisheries Service (NMFS) concurrence with Section 7 of the Endangered Species Act (ESA).
- NMFS concurrence with the Magnuson-Stevens Fishery Conservation and Management Act.

- U.S. Environmental Protection Agency (USEPA) concurrence with the Clean Water Act (CWA).
- National Park Service (NPS) Special Use Permit

In order to receive the aforementioned permits and approvals, APTIM will develop and submit the DCM CAMA Major Permit application on behalf of the COUNTY within 120 days following the second interagency scoping meeting. The CAMA Major Permit application package will include the required Major Permit forms along with plan drawings and adequate additional information that will serve to satisfy the agency review process. The CAMA Major Permit application serves as an application for several other state and federal permits, such as the Water Quality Certification, Stormwater Management Permit and is reviewed by ten (10) state and four (4) federal agencies before a decision is made.

APTIM engineers will develop preliminary designs for the proposed disposal site(s) in order to provide sufficient details for the permit drawings. The permit application will also include information pertaining to the characteristics of the disposal site(s), threatened and endangered species (marine and terrestrial), essential fish habitat, and other natural resource concerns. Four (4) hard copies and ten (10) CDs of the NCDCM application, project drawings, and other attachments will be produced and provided to NCDCM for dissemination to the resource agencies for review. The submittal of a "complete" NCDCM Major Permit application and attachments will serve as an intermediate project deliverable.

The USACE Regulatory Program involves the regulating of discharges of dredged or fill material into waters of the United States and structures or work in navigable waters of the United States, under section 404 of the Clean Water Act and section 10 of the Rivers and Harbors Act of 1899. Because this proposed project includes construction and dredging within the Nation's navigable waters, it will also require a USACE permit. An individual, or standard permit, is issued when projects have more than minimal individual or cumulative impacts, are evaluated using additional environmental criteria, and involve a more comprehensive public interest review. At this time, and for the purposes of this proposal, it is assumed that the COUNTY will need to obtain an Individual Permit (IP) from the Department of Army, administered through the USACE. APTIM will develop and submit the DCM CAMA Major Permit application on behalf of the COUNTY within 120 days following the second interagency scoping meeting.

Should dredged material be placed on the oceanfront shoreline along Hatteras Island, a NPS Permit will be required. Special Use Permits are issued for activities that provide a benefit to an individual, group, or organization, and for activities that require the use of a designated park location for a specific purpose and length of time. The NPS only permits activities which are appropriate to the purpose for which the park was established, and for activities which can be sustained without causing unacceptable impacts to park resources. The environmental documentation developed in support of the USACE IP will be submitted to the NPS along with a standard Special Use Permit application within 120 days following the second interagency scoping meeting.

Throughout the permitting process, APTIM proposes to participate in up to three (3) additional meetings with the various agencies/stakeholders coordinating the permit application's development and review. Additional coordination with resource agencies/stakeholders will be conducted via telephone and email correspondences as needed.

If following the interagency meeting the permitting approach described above requires modification, a change order will be prepared and presented to the COUNTY. Furthermore, in the event a state or federal agency solicits a Request for Additional Information (RAI) in response to the permit applications, an additional task order proposal will be submitted to COUNTY under a modified SOW.

Environmental Documentation

A Biological Assessment (BA) entitled "Use of Sidecast Dredges Fry, Merritt, Schwezer, and the Split-Hull Dredge Currituck in Coastal United States Waters" dated July 1998 was prepared by the USACE and provides relevant information. In addition, the Environmental Assessment (EA) prepared by the USACE entitled "Use of Government Plant to Dredge in Federally Authorized Navigation Projects in North Carolina", dated March 2004, the Environmental Impact Statement (EIS) prepared by the USAC entitled "Manteo (Shallowbag) Bay North Carolina FEIS", dated July 1977, and the Final EIS prepared by the USACE entitled "Final Supplement to the FEIS Manteo (Shallowbag) Bay Project, Dare County, North Carolina, dated August 1980also provides relevant information. These, along with other environmental documents previously developed by the USACE will be utilized to support the development of the environmental documents needed for this proposed project.

At this time, it is envisioned that the development of additional environmental documents would be required to satisfy the National Environmental Protection Act (NEPA). These include the development of a new BA and Essential Fish Habitat (EFH) assessment to satisfy consultation under the Endangered Species Act and the Magnuson-Stevens Fishery Conservation and Management Act, respectively. In addition, since it is anticipated that the nature of the proposed activities would result in a Finding of No Significant Impact (FONSI), an EA would be developed, using the above-mentioned documents for reference, to satisfy NEPA requirements. APTIM will propose these documentation approaches during the interagency pre-application meeting.

APTIM will acquire and evaluate available biological resource and human-interest factor data to determine the nature and extent of those resources that may be affected by project construction. This information will pertain to the nearshore marine, estuarine, and terrestrial habitats within and adjacent to the project areas. APTIM does not anticipate the need for field studies to collect any additional environmental data; therefore, this cost proposal does not reflect any additional field studies. If in the event it is determined that such studies are necessary, a change order will be requested within a separate SOW.

TASK 4- GEOTECHNICAL SERVICES

The proposed project aims to conduct maintenance dredging events within numerous federally authorized channels and boat basins and has the potential to include other non-federally authorized channels. As previously stated, APTIM will coordinate with staff from the USACE Wilmington District to obtain existing boring data which will be used to characterize the material within these channels. This characterization will determine how the dredged material should be managed and stored/utilized. In addition to determining the limits of how the material can be used, this characterization will also assist with determining the volume of material that may be deemed compatible for beach placement in accordance with the State Sediment Criteria Rule (15A NCAC 07H .0312).

APTIM will use available data to develop a sediment analysis report to be submitted as part of the NEPA documentation and CAMA Major Permit application. This report will provide information on sediment characteristics within the identified channel to be maintained under the permit, including grain size, percent fines, and description of sediment. The report will also include project maps showing channel locations and sediment sample locations. If available, such parameters such as color, mineralogy, shell content, percent gravel, percent granular, etc. will also be included. The report will also clearly document the sources of the data. This report will be included as an appendix to both the NEPA Documentation and the CAMA Major Permit Application. APTIM will also provide the COUNTY with up to two (2) hardcopies and two (2) digital copies of the report. Furthermore, the sediment data will be available for inclusion into any subsequent construction plans and specifications to be developed for future construction projects not included as part of this proposal.

ADDITIONAL SERVICES NOT INCLUDED:

As previously stated, the goal of this scope of work is to obtain permits for 1) the dredging of the listed channels and 2) the establishment of sufficient dredge material management options to satisfy the long-term needs to maintain these channel projects. Furthermore, the COUNTY aims to identify strategic permit disposal options for additional channel maintenance projects based on the results of Task 1 and 2. Given the fact that the specific channels and dredge material management options have not yet been determined, and the fact that APTIM is not yet aware of the amount of data and documentation currently available through the USACE and other entities in regards to the characteristics of the material within these channels, additional services may be required to complete the permitting process.

The following list is not necessarily comprehensive, but rather, a list of possible additional services that may arise as project details are established:

- Development and submittal of an Erosion and Sediment Control Permit(s) to NCDEMLR
- Additional environmental documentation (i.e. Environmental Impact Statement)
- Biological resource investigations
- Analysis to determine safe use of dredge materials that may contain contaminants
- Vibracore/Geo-Probe borings of channels and/or existing dredge material management facilities
- Grab samples of potential disposal areas including beaches, shallow water areas proposed for island establishment, current dredge material management facilities
- Sieve analysis of vibracore/Geo-probe boring samples and/or grab samples
- Contaminant testing of sediment samples
- Hydrographic/Topographic surveys of channels and proposed dredge material management facilities
- Submerged cultural resource surveys
- Detailed engineering design of dredge containment facilities that include such aspects as containment dikes, water control structures, dock or pier structures, etc.

The costs associated with completing the scope of work, as outlined above, for the Central Dare County Channel Maintenance and Dredge Material Management Permitting Project is predicated on the notion that the APTIM will work concurrently to develop a similar set of deliverables to support channel maintenance and dredge material management permitting for the southern portion of Dare County. Additional costs may be realized should these two efforts be conducted independently.

The information contained in this proposal is confidential commercial information and shall not be used or disclosed, except for evaluation purposes, provided that if a contract is awarded to APTIM as a result of or in connection with the submission of this proposal, the requester shall have the right to use or disclose the data to the extent provided in the contract. This restriction does not limit the requester's right to use or disclose any technical data obtained from another source without restriction.

EXHIBIT B: BREAKDOWN OF COSTS

DARE COUNTY, NORTH CAROLINA

CENTRAL DARE COUNTY CHANNEL MAINTENANCE AND DREDGE MATERIAL MANAGEMENT PERMITTING PROJECT

Table 1. Breakdown of the total cost of the environmental permitting, engineering design, and bidding assistance associated with the Central Dare County Channel Maintenance and Dredge Material Permitting Project.

TASK	DESCRIPTION	Cost
1	Needs Assessment	\$13,875
2	Concept Alternative Development	\$40,750
3	Permitting and Environmental Documentation	\$104,070
4	Sediment Compatibility	\$8,840
	TOTAL:	\$167,535

The costs associated with completing Tasks 1-4 is predicated on the notion that the APTIM will work concurrently to develop a similar set of deliverables to support channel maintenance and dredge material management permitting for the central portion of Dare County. Additional costs will be realized should these two efforts be conducted independently.

EXHIBIT C: LIST OF DELIVERABLES

DARE COUNTY, NORTH CAROLINA CENTRAL DARE COUNTY CHANNEL MAINTENANCE AND DREDGE MATERIAL MANAGEMENT PERMITTING PROJECT

The following items have been identified as deliverables for the completion of this scope of work.

- Monthly Progress Reports;
- Needs Assessment GIS Files;
- First Scoping Meeting Minutes;
- Concept Alternative Write Up;
- Second Scoping Meeting Minutes;
- NC Division of Coastal Management Major CAMA Permit and Dept. of the Army Individual Permit Applications;
- Sediment Analysis Report;

A detailed description and an individual schedule for each deliverable are provided below.

<u>Monthly Progress Reports:</u> APTIM will provide a 1-page summary of the project status via e-mail approximately every 30 days during the course of the anticipated 12-month contract period. The letter will describe activities completed throughout the month and update the anticipated schedule of milestones as appropriate.

Needs Assessment – GIS Files: APTIM will develop a geographic information system (GIS) that contains federal and non-federal maintained navigation channels within the project area. GIS files created and populated by APTIM will be provided to the County along with metadata. The channel files will include information on geographic locations of the channels, type of dredge used to maintain the channels, type of material historically removed from the channels, frequency/history of dredging and other information known about the type of material dredged from those channels. The dredge material management facilities files will also include geographic locations of the proposed facilities, current property owners, and estimated value. Barring any unforeseen circumstances, the GIS shapefiles and associated metadata will be provided within 150 days following written authorization to proceed.

<u>First Scoping Meeting:</u> As part of Task 2, APTIM will convene a scoping meeting within 120 days following written authorization to proceed. The purpose of the meeting will be to identify concerns that state and federal resource and regulatory agencies may have regarding potential dredge material management facilities and to determine the most appropriate permitting approach and National Environmental Policy Act (NEPA) documentation requirements. APTIM will prepare and distribute meeting minutes to all participants including Dare County. Barring any unforeseen circumstances, the meeting minutes will be provided to participants within two (2) weeks

EXHIBIT C: LIST OF DELIVERABLES

DARE COUNTY, NORTH CAROLINA CENTRAL DARE COUNTY CHANNEL MAINTENANCE AND DREDGE MATERIAL MANAGEMENT PERMITTING PROJECT

following the meeting. These meeting minutes will also be archived as an appendix to the Dredge Material Management Plan.

<u>Concept Alternative Development:</u> APTIM will develop a conceptual plan for up to eight (8) dredge disposal sites with appropriate detail to allow for discussions with resource and permitting agencies to determine the feasibility from their perspectives. For each of the recommended dredge material management facilities, APTIM will provide to the COUNTY the following information:

- Estimated volume anticipated to be removed from the identified navigation channels over the next 20 years
- Location and description of the recommended dredge material placement facilities
- Cost associated with the design, permitting, and land acquisition for the recommended dredge material placement facilities
- Recommendations for cost-sharing partners
- A schedule for the design, permitting, and land acquisition required to develop the recommended dredge material placement facilities

A letter report will be prepared by APTIM to include this information and will be submitted to the COUNTY. Barring any unforeseen circumstances, the letter report detailing the alternatives developed by APTIM will be provided within 150 days following written authorization to proceed.

Second Scoping Meeting: APTIM will utilize the information gleaned from the first scoping meeting to finalize Tasks 1 and Tasks 2. Upon finalization of Task 1 and Task 2, APTIM will develop draft a draft project narrative and project maps that will be presented at a second scoping meeting which will be held 90 days after the first scoping meeting. During this second scoping meeting, APTIM will also present a refined permitting approach and NEPA documentation requirements. Barring any unforeseen circumstances, the meeting minutes will be provided to participants within two (2) weeks following the meeting.

NC Division of Coastal Management Major CAMA Permit and Dept. of the Army Individual Permit Applications: The Scope of Professional Services includes the development and submittal of the complete Major CAMA permit and Dept. of the Army Individual permit applications directly to the NC Division of Coastal Management and US Army Corps of Engineers, respectively. Barring any unforeseen circumstances, these applications will be submitted to the appropriate agencies within 155 days following the conclusion of the Second Scoping Meeting.

<u>Sediment Analysis Report:</u> APTIM will develop a sediment analysis report to be submitted as part of the NEPA documentation and CAMA Major Permit application. The Sediment Analysis Report will be composed of a brief letter report describing sediment analysis methods, project setting maps showing the location of the sediment samples, and results of the sediment analysis. Barring

EXHIBIT C: LIST OF DELIVERABLES DARE COUNTY, NORTH CAROLINA CENTRAL DARE COUNTY CHANNEL MAINTENANCE AND DREDGE MATERIAL MANAGEMENT PERMITTING PROJECT

any unforeseen circumstances, the sediment analysis report will be provided within 150 days following written authorization to proceed.