



**COASTAL PROTECTION ENGINEERING OF NORTH CAROLINA, INC**

4038 MASONBORO LOOP ROAD

WILMINGTON, NC 28409

910-399-1905

September 28, 2020

Cliff Ogburn

Town Manager

Town of Southern Shores

5375 N. Virginia Dare Trail

Southern Shores, NC 27949

**Re: Invoice for August 2020 and Project Update**

Dear Mr. Ogburn:

This letter serves as an update to you and your staff on our progress with regards to task orders on which Coastal Protection Engineering of North Carolina, Inc. (CPE) is currently providing services to the Town of Southern Shores. Along with this update letter, please find attached the following Invoices:

**Southern Shores 2020 Annual Monitoring and Initial Permitting Coordination**

- **Invoice 465 – September 11, 2020**

**Southern Shores 2022 Permitting and Design**

- **Invoice 460 – September 11, 2020**

Southern Shores 2020 Annual Monitoring and Initial Permitting Coordination:

This work is associated with the agreement executed on May 7, 2020 between CPE and the Town of Southern Shores. Invoice 465 reflects services completed through August 30, 2020. Task 1 services are associated with data acquisition for the 2020 annual monitoring surveys. As previously reported, as of June 15, all the beach profile data had been collected, and by early July, data had been post-processed. In early August, the data acquisition report was completed. This report details data acquisition methods and includes beach profile cross sections and plan view survey charts as well as survey control information and survey field notes. It is our intention to provide this report as an appendix to the annual monitoring report upon completion of Task 2. If you would like for us to provide a digital copy of the data acquisition report, please let me know.

On August 21, CPE received written notice to proceed on Task 2, which includes data analysis and the annual monitoring report. Throughout the latter part of August and into September, CPE staff worked on the assessment and developing the draft monitoring report in which updated shoreline and volumetric changes are provided. At present, the shoreline and volumetric change analysis has been completed and the draft report is undergoing internal review. We anticipate providing the draft report by the end of October.

As previously reported, Task 3 services are 100% complete.



Design and Environmental Permitting Services, 2022 Beach Nourishment Project:

This work is associated with the agreement executed on July 13, 2020 between CPE and the Town of Southern Shores. Invoice #460 reflects services completed through August 30, 2020. Task 1 services are associated with the development of environmental documents. Throughout August and into September, CPE staff continued the development of environmental documents, which are being developed in cooperation for the Towns of Duck, Southern Shores, Kitty Hawk and Kill Devil Hills.

Regarding Task 2, setup of the numerical model, which will be used in combination with the other Towns, continued throughout August and into September. Calibration of the wave and water level model is nearing completion and detailed grids are being developed for the calibration of the morphology model. The draft engineering report is also in the process of being developed. This report will provide engineering justification for any project modifications proposed and will support the Town's permit application.

No additional work on Task 3 was conducted in the month of August. At present, the survey vessel Rachel K. Goodwin has mobilized to Norfolk, VA and is being setup for offshore operations. Surveys are expected to begin later this week, weather dependent.

Regarding Tasks 4 and 5, as previously reported, CPE staff conducted the native beach sampling described in Task 4 and the rock clast surveys described in Task 5 of the scope of services in June 2020. In late August and throughout September, the native beach samples underwent sieve analysis to determine grain size characteristics. As of the date of this letter sieve analysis has been completed for all of the samples and grain size composites are being developed. Furthermore, the data obtained during the rock clast survey were compiled and will be incorporated into the borrow area design and sediment compatibility report include in Task 3.

Please let me know if you have questions or comments on the invoice or project status.

Sincerely,

A handwritten signature in black ink, appearing to read "Ken Willson".

Ken Willson

Senior Program Manager  
Coastal Protection Engineering of North Carolina, Inc.

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