



**AGENDA MEMORANDUM**  
Action Item for the City Council Meeting of March 16, 2021

---

**DATE:** March 16, 2021

**TO:** Peter Zaroni, City Manager

**FROM:** Jeff H. Edmonds, P. E., Director of Engineering Services  
[jeffrey@cctexas.com](mailto:jeffrey@cctexas.com)  
(361) 826-3851

Richard Martinez, Director of Public Works  
[richardm5@cctexas.com](mailto:richardm5@cctexas.com)  
(361) 826-3419

Heather Hurlbert, Director of Finance  
[heatherh3@cctexas.com](mailto:heatherh3@cctexas.com)  
(361) 826-3227

<p><b><u>Professional Services Amendment 1</u></b> <b>North Beach Navigable Canal</b></p>
---

**CAPTION:**

Motion awarding Amendment Number 1 to Lockwood, Andrews & Newnam, Inc., Corpus Christi, Texas, to provide additional preliminary design services to develop three drainage solution options for North Beach drainage [navigable canal, open channel, and closed conduit], located in Council District 1, in an amount of \$123,745.00 for a total amount not to exceed \$632,733.00, with FY 2021 funding available from the Storm Water Capital Fund.

**SUMMARY:**

This motion awards Amendment No. 1 to Lockwood, Andrews & Newnam, Inc., (LAN) to provide additional preliminary design services to furnish cost estimates to develop three drainage solution options for North Beach to include a navigable canal, open channel, and closed conduit system.

**BACKGROUND AND PURPOSE:**

North Beach has been a tourist destination for over 100 years. Located on the far north end of Corpus Christi, North Beach provides access to beaches, boat launches, shopping, restaurants, and popular tourist attractions such as the Texas State Aquarium and USS Lexington.

North Beach experiences frequent flooding during high tide events. The high tide flooding causes ponding in low-lying areas and impedes drainage from modest rainfall events. The ponding and poor drainage has a negative impact on the area's economic development. The North Beach Drainage Assessment Report prepared by Urban Engineering has indicated that the construction of a navigable canal could help mitigate the flooding issue. On June 23, 2020, Council authorized

a Professional Services Agreement with LAN for Phase I of the project. The phase I scope of services was to define the navigable canal's layout and project limits, determining if the navigable canal would be functional for its intended uses of being navigable and providing drainage relief in North Beach. Additional tasks included traffic impact analysis, water quality analysis, regulatory permit considerations, real estate requirements review and the preparation of a final report.

On January 26, 2021, LAN briefed City Council on the results investigating the navigable canal's scope and project limits. There were several major findings presented. One of the major findings presented by LAN stated that after 85% of the peninsula is raised a minimum of six and a half feet in certain areas, and on average up to two to three feet, the canal could improve drainage for up to a 50-year rainfall event. The canal would not improve drainage from a tidal surge of three and a half feet or greater. The report stated that the canal could make tidal flooding surge worse by having a body of water in the middle of a peninsula. A storm surge from a strong tropical storm or Category 1 hurricane would put 95% of the peninsula under water without having the peninsula elevated with fill.

A second significant finding is that the storm sewer system on the eastern part of the peninsula would have to be replaced and re-directed toward the canal rather than the current north and south conveyance in place. Numerical modeling was conducted to evaluate water quality conditions that may occur in the canal under various design layouts. Traffic pattern assessments done as part of the Phase I study reveal that the proposed canal would cut off traffic from east to west across the project entire area. Side streets that typically carried traffic from US181 to key destinations would be cut-off, and traffic would have to be routed to bridged access point(s) depending on the final design of the canal.

At the meeting, staff received policy direction from City Council to have LAN develop cost estimates for three drainage solution options for North Beach to include a navigable canal, open channel, and closed conduit system. This item will authorize the contract amendment and budget for those services to be provided by LAN.

### **PROJECT TIMELINE:**

The preliminary probable cost estimate work is expected to begin in March 2021 with estimated completion in May 2021.

### **COMPETITIVE SOLICITATION PROCESS**

The Contracts and Procurement Department issued a Request for Qualifications for the engineering services for North Beach Navigable Canal. LAN was the only firm that submitted their qualifications. A technical evaluation was performed by the selection committee. The technical evaluation team consisted of seven team members including staff from the City Manager's Office, Engineering Department, Nueces County, Texas State Aquarium, and an external Engineer. LAN was recommended as technically qualified to perform the work. This contract amendment is for Phase II services that were contemplated under the original solicitation but not included in the Phase I scope of work.

### **ALTERNATIVES:**

The alternative is not to authorize the amendment which will cause the project to be on hold.

### **FISCAL IMPACT:**

The fiscal impact in FY2021 is an amount of \$123,745.00 with funding available from the Storm Water Capital Fund. Specifically, available funding is in the North Beach Navigable Canal Project

budget. Currently, the FY 2021 Capital Improvement Program (CIP) does not have funds budgeted for the additional design work. The CIP will be revised to show the additional design expenditures in an amount of \$123,745.00 for FY 2021.

**FUNDING DETAIL:**

Fund: Storm Water 2015 (Fund 4530)  
Mission Elem: Storm Water Drainage (043)  
Project: North Beach Navigable Canal (Project No. 20277)  
Account: Outside Consultants (550950)  
Activity: 20277-4530-EXP  
Amount: \$123,745.00

**RECOMMENDATION:**

Staff recommends approval of Amendment No. 1 for the North Beach Navigable Canal project in an amount not to exceed of \$123,745.00.

**LIST OF SUPPORTING DOCUMENTS:**

Location Maps  
Contract