

CONSULTING SERVICE AUTHORIZATION

DATE: January 11, 2018

SERVICE AUTHORIZATION NO. 4

CITY P.O. NO. _____ CITY EXPENSE CODE

TITLE: **2018 City of Delray Beach, Fifth Beach Renourishment & FCCE Projects, Services for Project Administration, Five Year Post-Construction Physical Monitoring, Evaluation and Reporting**

This Service Authorization, when executed, shall be incorporated in and shall become an integral part of the contract between **APTIM ENVIRONMENTAL & INFRASTRUCTURE, INC.** and the **CITY OF DELRAY BEACH** dated August 26, 2015.

Aptim Environmental & Infrastructure, Inc. (APTIM) will provide the required engineering services for the post-construction phase of the project and will be performed under the terms and conditions of the existing Agreement for Coastal Engineering Consulting Services between the City and Aptim Environmental & Infrastructure, Inc. dated August 26, 2015.

SCOPE OF SERVICES:

The following tasks are included in this scope of services:

1. **Project Administration:** Project administration includes State and Federal agency coordination and reporting, City meetings as required, and other associated assistance specific to the project.
2. **Five Year Post-Construction Physical Monitoring Survey:** In accordance with BBCS Monitoring Standards for Beach Erosion Control Projects, topographic (onshore) and bathymetric (offshore) surveys of the beach and offshore in Delray Beach will be conducted during the summer of 2018. The monitoring data will be used to assess, with quantitative measurements, the performance of the beach replenishment projects. The monitoring data will provide the City and the Florida Department of Environmental Protection information necessary to plan for the next renourishment project, evaluate the beach performance and optimize the design of the next beach renourishment project.

The five-year post-construction monitoring event will consist of topographic and bathymetric surveys of the beach to include both the 2013 and 2014 beach replenishment areas, and to approximately one mile north and south of the combined project limits.

A. Topographic & Bathymetric Surveys (Beach Offshore Profile Surveys):

The five-year post construction topographic and bathymetric profile surveys of the beach and offshore will be conducted in the summer of 2018. The monitoring surveys will include published FDEP beach profile lines (referenced monuments) within the Delray Beach fill area and will include twenty-two (22) FDEP profile lines from R-171 to R-192. All profile surveys will extend offshore a minimum of 3,000 feet or to the -30ft (NAVD) contour.

All work activities and deliverables shall be conducted in accordance with the March 2014 BBCS Monitoring Standards for Beach Erosion Control Projects, Sections 01000 and 01100.

3. **Five Year Post-Construction Engineering Performance Evaluation and Report:** We will develop and submit the post-construction engineering report to the FDEP within 90 days following completion of the five year post-construction survey. The engineering report will address the 2018 physical monitoring results, will summarize and discuss the project performance since completion of the beach renourishment projects, and will be a useful tool for project planning.

BUDGET:

The fee to provide the service contained in this proposal is \$78,482.60 as set forth in Exhibit "A" attached hereto.

COMPLETION DATE: December 2018

ATTEST:

APTIM ENVIRONMENTAL & INFRASTRUCTURE, INC.

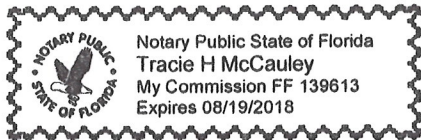
Tara Brenner
Tara Brenner, P.G., P.E.

By: Jeffrey Andrews
Jeffrey Andrews, PSM, Director

STATE OF FLORIDA

COUNTY OF Palm Beach

The foregoing instrument was acknowledged before me this 21 day of March, 2018, by Jeffrey Andrews (name of officer or agent, title of officer or agent) of Aptim Environmental Infrastructure (name of corporation acknowledging), a State (state or place of incorporation) corporation, on behalf of the corporation. He/She is personally known to me or has produced _____ (type of identification) as identification and did (did not) take an oath.



Tracie H McCauley
Signature of Notary Public - State
of Florida

ATTEST:

CITY OF DELRAY BEACH, FLORIDA

Katerri Johnson, City Clerk

By: _____
Shelly Petrolia, Mayor

Approved as to Form and
Legal Sufficiency:

R. Max Loman, City Attorney