Agenda Report



2725 Judge Fran Jamieson Way Viera, FL 32940

Consent

F.5. 10/22/2024

Subject:

Approval RE: Construction Change Order 1 for the Sea Ray Drive Bridge Replacement - District 2

Fiscal Impact:

Construction Change Order 1, in the amount of \$245,700, is within the FY25 Board-approved Capital Improvement Program. Funding consists of Gas Taxes and 20 percent of Merritt Island Redevelopment Agency General Fund Tax Increment Financing funds adopted by Ordinance No. 20-15.

Dept/Office:

Public Works Department/Finance and Contracts Administration

Requested Action:

It is requested the Board of County Commissioners 1) approve and authorize the Chair to execute Construction Change Order 1 for the Sea Ray Drive Bridge Replacement, and 2) authorize the County Manager to approve any necessary Budget Change Requests associated with this action and all subsequent change orders on this project.

Summary Explanation and Background:

The County authorized Jacobs Engineering Group, Inc. to perform engineering design services for the Sea Ray Drive Bridge Replacement. Upon completion of the design, the project was competitively bid and awarded to SEMA Construction, Inc. The length of pile needed for the replacement bridge is determined at two times, once during design and then again after the test piles are driven. During construction, it was determined that the length of piles needed for the replacement bridge would be significantly greater than what was estimated during design. Data from the test pile process, which was analyzed by a 3rd-party geotechnical and testing firm, determined that 12 of the production piles in the Sykes Creek channel should be 130' in length; 6 of 12 production piles in the creek's shoreline should be 90' in length, and the remaining 6 of 12 should be 89' long. The design team calculated production pile length at 99' long in the channel; 62' at the shoreline, hence the sizable difference in quantity. The difference between the design lengths and actual lengths is borne from differences in presumed and actual soil behaviors. SEMA's proposed unit cost per linear foot is below the 6-month FDOT average pile cost. Additional costs will also be incurred by the use of a larger crane with the capability of moving the heavier pilings. This Change Order will result in an increase of \$245,700 to the contract, but no additional contract time is needed.

In accordance with Board Policy BCC-27, Construction Change Orders over the thresholds established by Board Policy BBC-25, "Procurement", which is currently at \$200,000, require Board approval.

Clerk to the Board Instructions:

Please return the fully executed Construction Change Order 1 to the Public Works Department.



FLORIDA'S SPACE COAST

Kimberly Powell, Clerk to the Board, 400 South Street • P.O. Box 999, Titusville, Florida 32781-0999

Telephone: (321) 637-2001 Fax: (321) 264-6972 Kimberly.Powell@brevardclerk.us



October 23, 2024

MEMORANDUM

TO: Marc Bernath, Public Works Director

RE: Item F.5., Approval for Construction Change Order 1 for the Sea Ray Drive Bridge

Replacement

The Board of County Commissioners, in regular session on October 22, 2024, approved and authorized the Chair to execute Construction Change Order 1 for the Sea Ray Drive Bridge Replacement; and authorized the County Manager to approve any necessary Budget Change Requests associated with this action and subsequent change orders on this project. Enclosed is the fully-executed Change Order.

Your continued cooperation is always appreciated.

Sincerely,

BOARD OF COUNTY COMMISSIONERS

RACHEL M/SADOFF, CLERK

Kimberly Powell, Clerk to the Board

Encl. (1)

cc: Finance

Budget

Public Works Department



2725 Judge Fran Jamieson Way Building A, Room 201 Viera Florida 32940

Change Order #1

Contract Number: 10590 Originating Department: Public Works Department

Project Title: Sea Ray Bridge Replacement Project #2020014

Original Contract Amount: \$9,670,000.00

List Previous Contract Modifications by Number and Price: \$0.00

Proposed Contract Change Order Cost: \$245,700.00

Proposed New Contract Total \$9,915,700

RFI #02 was generated by the County asking SEMA (the Contractor) to reevaluate the unit cost for production piles. A sizable increase in the quantity of piling needed to effectively construct the substructure of the bridge occurred. After considering this request, the Contractor declined to reduce the Contract unit cost for this project for a variety of reasons.

The length of pile needed is determined at two times, once during design and then again after the test piles are driven. Data from the test pile process, which is analyzed by a 3rd-party Geotech firm, provides a better understanding of soil bearing deep beneath the surface vs. criteria used during design. For the Sea Ray Bridge, the 4 test pile lengths were 130' to 135' as determined by the design team. The Geotech team analyzed the test pile results and determined that 12 of the production piles in the Sykes Creek channel should be 130' in length; 6 of 12 production piles in the creek's shoreline should be 90' in length, and the remaining 6 of 12 should be 89' long. The design team calculated production pile length at 99' long in the channel; 62' at the shoreline, hence the sizable difference in quantity.

The Contractor's unit cost at \$350/LF is below the 6-month FDOT average pile cost of \$388/LF and was further below the 2nd bidder's proposed pile cost of \$414/LF. The added weight (nearly 20,000 lbs.) of the 130' piles driven in the channel (the furthest reach) necessitated use of a costly appropriate-sized crane.

In consideration of this Change Order being executed by the Parties, the Contractor hereby waives any claims against the County arising from or relating to the subject matter of this Change Order, including, but not limited to, any time delays not specifically addressed herein and any damages of whatever kind that are incurred by the Contractor. The Contractor acknowledges that specific consideration has been given and received for this waiver. The terms and conditions of the Contract, and any other amendments or modifications made thereto, incorporated herein by this reference, shall remain in full force and effect, unless otherwise modified herein.

This Contract Change Order #1 will result in a net increase of \$245,700.00 to the contract amount. The Parties agree that the Contract time remains the same.

Signature page for Change Order #1, Contract Number 10590

Velvet Bridges Velvet Bridges, P.E. Jacobs Engineering Group, Inc.	Rachel Gerena, P.E. Engineering Program Manager
Attest:	Brevard County, Florida
Rachel Sadoff, Clerk	By: Jason Steele, Chair As approved by Board on: OCT 22 2024
Reviewed for legal form solely for Brevard County:	SEMA Construction, Inc. CONTRACTOR
Deputy County Attorney	By: Justin Oakes, Southeast Vice President Sema Construction, Inc.
ACKNOWLEDGMENT	v
STATE OF Florida	
COUNTY OF Drange	
The foregoing instrument was acknowledged before me by means on the day of the corporation of the corporatio	sident of SEMA Construction, Inc., a corporation on. He is personally known to the or has produced Notary Public Signature Jennifer Finne More
MY COMMISSION EXPIRES 6-19-2028	Name, typed, printed or stamped My Commission Expires: