

EXPLANATION OF CONSENT AGENDA ITEM E.2.c.(6) March 23, 2016

ITEM:

Change Order # 5 to increase Purchase Order P14964 to Dutra Dredging Company for removal of additional dredge material beyond what was included in the original contract estimate in an amount not to exceed \$2,043,756. (Crowe)

EXPLANATION:

The contract bid form used by the Canaveral Port Authority in the 2013 contracting process for the Canaveral Harbor Deepening and Widening, Dredging Works package clearly states that the 2.9 Million Cubic Yard (CY) bid quantity was an estimate at the time and was to be used to establish the unit rate(s) to be used for the duration of the contract. The contract bid form also clearly acknowledges between the Port Authority and the Contractor that this estimated quantity will be adjusted up or down based on the final quantity of dredge material removed by the dredger. The dredge quantity removed is continuously tracked and verified by our Engineer of Record (CH2m) and project Hydrographic Surveyor of Record (Arc Surveying). The monthly evaluations from CH2m and Arc surveying are used in support of monthly contractor application for payment verification. The original survey that was used for the purpose of estimating dredge quantities for the project bid documents was an Army Corps of Engineers (ACOE) survey which utilized a cost-effective, albeit limited "resolution", method for hydrographic surveying. The technique utilized by this project, as required in the project specifications, is a high-resolution multi-beam survey system which has revealed additional material to be removed beyond the original estimate. It should also be noted that complete removal of all material above the design depth "template" is a requirement for ACOE acceptance of maintenance responsibility.

Funding Review by Finance (Pat Poston):

The total NTE amount of \$2,043,756 will exceed the FY16 Capital Budget. If approved the Capital Budget will increase by \$2,020,750. [Budget item 2127 - WTB Phase 1 Widen & Deepen]

Staff Recommends Approval

Prepared by: Bill Crowe, P.E.





**CANAVERAL PORT AUTHORITY
CANAVERAL HARBOR 44 FT CHANNEL PROJECT
PACKAGE 2 (CN-1-8-10-12-014B)
DUTRA DREDGING COMPANY
CHANGE ORDER # 5**

Contract Total To Date **FROM: \$ 31,282,784.65**
Accounting Code: JL 2127-14080-200 P14964

Removal of additional dredge material beyond what
was included in the original contract estimate –
ITEM 1 NTE **ADD: \$ 2,043,756.00**

TOTAL ADD: \$ 2,043,756.00

NEW CONTRACT TOTAL TO: \$ 33,326,540.65

NET INCREASE: \$ 2,043,756.00

GENERAL: No changes other than those listed above are authorized.

IN WITNESS WHEREOF, the parties here to set their hands and seals this 23rd day of March 2016.

Inclusion of the Change Order #5 is recommended by:

Bill Crowe, P.E., Senior Director Facilities, Construction & Engineering

CANAVERAL PORT AUTHORITY

DUTRA DREDGING COMPANY

BY: _____
Jerry W. Allender
Chairman

BY: _____

Attest: _____
Thomas W. Weinberg
Secretary/Treasurer

Attest: _____



February 13, 2016

Via Email to bcrowe@portcanaveral.com

Bill Crowe, P.E.
Director, Civil Engineering & Construction
Port Canaveral
445 Challenger Road, Suite 301
Cape Canaveral, FL 32920

Re: Memo: Contract No. 1-8-10-12-014B
Canaveral 44 Foot Channel Project – Package 2
Current Volumes and Projected end of Project Volumes

Dear Mr. Crowe:

Below is our best estimate of completion volumes and contract values. Dredging volumes can be highly variable, and predicted completion volumes are uncertain, and subject to change.

1. Contract Estimated Vs. Surveyed Volumes
 - a. Bid Item #2: 0+00 – 161+00
 - i. Contract Estimated Volume: 1,683,000 CY @ \$7.79/CY = \$13,110,570
 - ii. Contract Pay Volume Completed to Date: 1,721,808 CY
 - iii. Contract Cost Completed to Date: \$13,412,884
 - iv. Contract Estimated Finish Date: July 15, 2015
 - v. Remaining Volume: 424,125 CY
 - vi. Remaining Volume Finish Date: April 12, 2016
 - vii. Additional Funds Needed: \$3,303,934
 - b. Bid Item #3: 161+00 – 287+50
 - i. Contract Estimated Volume: 1,312,000 CY @ 7.25 = \$9,512,000
 - ii. Contract Pay Volume Completed to Date: 1,066,970 CY
 - iii. Contract Cost Completed to Date: \$7,735,533
 - iv. Contract Estimated Finish Date: February 13, 2016
 - v. Remaining Volume: 124,000 CY
 - vi. Remaining Volume Finish Date: February 13, 2016
 - vii. Funds Remaining At Completion: \$1,445,974
 - c. Bid Item #2 & #3 Original Completion
 - i. Contract Estimated Cumulative Volume: 2,995,000 CY

THE DUTRA GROUP

- ii. Contract Pay Volume Completed to Date: 2,788,778 CY
 - iii. Contract Cost Completed to Date: \$21,724,581
 - iv. Contract Estimated Cumulative Cost: \$22,622,570
 - v. Contract Estimated Cumulative Finish Date: March 11, 2016
- d. Bid Items #2 & #3 Adjusted Completion
- i. Volume Remaining To Complete: 238,506 CY
 - ii. Contract Volume Total at Completion: 3,233,506 CY
 - iii. Funds Needed to Complete: \$1,857,962
 - iv. Contract Total Funds Bid Items 2 & 3 at Completion: \$24,480,532
 - v. Finish Date With Extra Funds: April 12, 2016

*Note: Finish dates are based on percentages of volume previously dredged in completed areas of Bid Item 2 & 3.

Additional 10% contingency of \$185,796. Total proposal \$2,043,756.