

CENTRAL FLORIDA EXPRESSWAY AUTHORITY

MEMORANDUM

TO: CFX Board Members

FROM: Ben Dreiling, P.E.
Director of Construction 

DATE: April 25, 2017

SUBJECT: Consent Agenda
Construction Contract Modifications

Authorization is requested to execute the following Construction Contract Modifications. Supporting detailed information for each of the proposed Construction Contract Modifications is attached.

Project No.	Contractor	Contract Description	Original Contract Amount (\$)	Previous Authorized Adjustments (\$)	Requested (\$) May 2017	Total Amount (\$) to Date*
599-526B	Sice, Inc.	Wrong Way Driving Vehicle Detection & Countermeasures Equipment Installation	\$ 1,232,916.63	\$ -	\$ (31,301.91)	\$ 1,201,614.72
429-206	GLF Construction Corp.	SR 453, Lake County Line to SR 46	\$49,482,671.93	\$ 31,829.31	\$ 68,998.09	\$ 49,583,499.33
429-202	Prince Contracting, LLC	SR 429, US 441 to North of Ponkan Rd.	\$56,152,429.00	\$ 523,509.27	\$ 115,330.85	\$ 56,791,269.12
528-313	The Lane Construction Corp.	SR 528 / Innovation Way Interchange	\$62,452,032.01	\$ (912,172.69)	\$ 30,437.14	\$ 61,570,296.46
TOTAL					\$ 183,464.17	

* Includes Requested Amount for this current month.

** No Time Increase or Decrease

Contract 599-526B: Wrong Way Driving Vehicle Detection & Countermeasures Equipment Installation
Sice, Inc.
SA 599-526B-0517-02

Adjustments for Contract Items

Adjust the following contract quantities to reflect the quantities required to complete the work contemplated.

INCREASE THE FOLLOWING PAY ITEMS:

Fencing, Type B, 6.1-7.0', Standard	\$	588.20
Fiber Optic Cable, Single Mode, 12 Fiber, F&I	\$	459.90
Small Fiber Optic Pull Box, F&I	\$	1,293.98
Fiber Optic Conduit, 2-1" HDPE/SDR 11, Trench or Plow	\$	807.24
Fiber Optic Conduit, 2-1" HDPE/SDR 11, Directional Bore	\$	2,346.75
Fiber Optic Conduit, 1-2" HDPE/SDR 11, Trench or Plow	\$	2,704.70
Fiber Optic Conduit, 2-2" HDPE/SDR 11, Trench or Plow	\$	692.55
Fiber Optic Conduit, 1-2" & 1-1" HDPE/SDR 11, Trench or Plow	\$	112.96
Fiber Optic Conduit, 2-1" & 1-2" HDPE/SDR 11, Bore	\$	6,867.21
Fiber Optic Conduit, 2-1" & 2-2" or 3-1" & 1-2" HDPE/SDR 11, Trench or Plow	\$	788.04
Fiber Optic Conduit, 2-1" & 2-2" or 3-1" & 1-2" HDPE/SDR 11, Bore	\$	246.48
Fiber Optic Conduit, 3-1" & 2-2" HDPE/SDR 11, Trench or Plow	\$	224.00
Fiber Optic Conduit, 6" HDPE Outer Duct w/ 1-2" HDPE/SDR 11, Bore	\$	1,615.32
Fiber Optic Conduit, 6" HDPE Outer Duct w/ 1-2" & 1-1" HDPE/SDR 11, Bore	\$	2,066.25
Fiber Optic Conduit, 8" HDPE Outer Duct w/ 3-1" & 3-2" HDPE/SDR 11, Bore	\$	1,986.95
Ethernet Switch, F&I	\$	2,236.75
Single Post Sign, F&I Ground Mount, 21 to 30 SF	\$	4,589.41
Conductors, F&I, Insulated, #10	\$	2,056.56
Conductors, F&I, Insulated, #2	\$	3,277.50
	\$	34,960.75

DECREASE THE FOLLOWING PAY ITEMS:

Pull Box, F&I	\$	(1,236.94)
Fiber Optic Conduit, 1-2" HDPE/SDR 11, Bore	\$	(3,538.08)
Fiber Optic Conduit, 1-2" & 1-1" HDPE/SDR 11, Bore	\$	(4,804.25)
Fiber Optic Conduit, 2-1" & 1-2" HDPE/SDR 11, Trench or Plow	\$	(773.53)
Fiber Optic Conduit, 6" HDPE Outer Duct w/ 2-2" HDPE/SDR 11, Bore	\$	(272.30)
Fiber Optic Conduit, 6" HDPE Outer Duct w/ 2-1" & 1-2" HDPE/SDR 11, Bore	\$	(342.60)
Fiber Optic Conduit, 6" HDPE Outer Duct w/ 2-1" & 2-2" HDPE/SDR 11, Bore	\$	(3,667.92)
Electrical Service Disconnect, Remove	\$	(141.18)
Power Service Entrance Power Panel, F&I	\$	(1,180.59)
Ethernet Media Converter, F&I	\$	(804.00)
Post Sign, F&I Ground Mount, 12 to 20 SF	\$	(4,586.53)
Conductors, F&I, Insulated, #1	\$	(2,473.38)
Conduit, F&I – Surface Mount, RGS	\$	(233.00)
Tubular Route Markers, Power	\$	(108.71)
Allowance for Disputes Review Board	\$	(10,000.00)
Work Order Allowance	\$	(32,112.79)
	\$	(66,275.80)

Subtotal: Adjustments for Contract Items \$ (31,315.05)

Adjustment of Unit Prices for Rounding Error

The unit prices submitted in the original bid were carried out beyond 2 decimal places. In order to account for the difference between the 2 decimal unit prices used for calculating the overrun/underrun amounts on the Supplemental Agreement and the actual unit prices used to establish the original contract amount, an adjustment of \$13.14 is necessary.

Adjustment Due to Unit Prices	\$	13.14
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<u>TOTAL AMOUNT FOR PROJECT 599-526B</u>	\$	<u>(31,301.91)</u>
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Contract 429-206: SR 453, Lake County Line to SR 46
GLF Construction Corp.
SA 429-206-0517-04

Plan Revision #1 & Upgrade to LED Roadway & Sign Lighting

Upgrade the roadway lighting luminaires specified on this contract from high pressure sodium to LED. LED luminaires have become the standard on all new projects and CFX desires to incorporate this new technology as part of this construction contract. This item represents the cost difference for the materials to implement this change. While LEDs require a more significant capital outlay, the savings in electrical consumption and service life/maintenance has been determined to conservatively provide a break even return in seven (7) years.

This item also reflects the upgrade of the overhead sign lights to Phillips Hadco LED fixtures. This upgrade will allow the use of a remote driver box and maintains a UL rating. Both of these items were incorporated into this project as part of Plan Revision #1 which also incorporated other minor quantity changes as indicated below.

ADD THE FOLLOWING PAY ITEM:

Light Pole Complete, Special Design, F&I, Double Arm Shoulder Mount, Alum., 45'	\$	15,396.54
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INCREASE THE FOLLOWING PAY ITEMS:

Conduit, F&I, Open Trench	\$	562.50
Lighting Conductors, F&I, #8 to #6	\$	156.40
Lighting Conductors, F&I, #4 to #2	\$	3,568.50
Fiber Optic Fusion Splice	\$	444.00
	\$	<u>4,731.40</u>

DECREASE THE FOLLOWING PAY ITEMS:

Lighting Conductors, F&I, #1 to #0	\$	(5,069.70)
Light Pole Complete, Special Design, F&I, Single Arm Shoulder Mount, Alum., 45'	\$	<u>(10,000.00)</u>
	\$	(15,069.70)

ADD THE FOLLOWING ITEMS:

Upgrade of Highway Lighting to LED Fixtures	\$	18,490.93
Upgrade of LED Sign Lighters	\$	<u>45,448.92</u>
	\$	63,939.85

Subtotal: Plan Revision #1 & Upgrade to LED Roadway & Sign Lighting	\$	68,998.09
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<u>TOTAL AMOUNT FOR PROJECT 429-206</u>	<u>\$ 68,998.09</u>
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Contract 429-202: SR 429, US 441 to North of Ponkan Rd.
Prince Contracting, LLC
SA 429-202-0517-06

Plan Revision #16, AET E6 Cabinet and Conduit Change

Furnish and install an additional E6 cabinet. Plan Revision #16 detailed conduit and panel adjustments associated with the acquired E6 cabinet. This item resolves compensation for the additional work associated with installation of the E6 cabinet, conduit and panel adjustments requested.

ADD THE FOLLOWING ITEM:

Plan Revision #16, E6 Cabinet Conduit, Panels and Enclosures	\$	24,083.46
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INCREASE THE FOLLOWING ITEM:

Performance Turf Sod	\$	84.00
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Subtotal: Plan Revision #16, AET E6 Cabinet and Conduit Change	\$	24,167.46
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RK&K RFI #096 Median Crossover

The median cross over North of Yothers Road was being constructed per plan. In order to improve the safety aspects related to this item, staff requested a redesign. This item compensates for all work, including drainage, stabilization, base, regrading and sod required for this owner directed modification.

ADD THE FOLLOWING ITEM:

RK&K RFI #096 Median Crossover Adjusted Details	\$	34,201.77
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RFI #067 Installation of Signal Cabinet

The existing signal cabinet operating the Connector Rd./SR 429 signals is located in close proximity to the curbing of the SR 429 NB exit ramp to Connector Road. The cabinet has been struck a couple of times during construction and a replacement cabinet has been previously authorized to be procured by the contractor. This item provides compensation for the installation of the signal cabinet.

ADD THE FOLLOWING ITEM:

RFI #067 Install Replacement Signal Cabinet	\$	3,043.35
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Plan Revision #15 Toll Gantry Adjustments

The toll equipment mounting brackets on the Toll Plaza gantry accommodated downstream traffic flow equipment mounts over the travel lanes and median shoulder. Equipment mounting bars were missing for the outside shoulder and future widened shoulder. CFX requested the gantry be modified to accommodate equipment installation over the outside shoulder and future inside shoulder. This item provides compensation for fabrication, factory applied finish and field installation of modifications requested. Pending is resolution of field applied paint to welds and painting of the wire ways which will be covered in a future item.

ADD THE FOLLOWING ITEM:

Plan Revision #15 AET Toll Gantry Equipment Mount Adjustments	\$	47,354.27
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Final Quantities for Pay Items of Work Completed

The following are adjustments to Pay Item Quantities to reflect Final Quantities for pay items of completed work.

INCREASE THE FOLLOWING ITEMS:

Pipe Culvert, Other Shape, 18" Side Drain	\$ 324.00
Sidewalk Concrete, 6" Thick	\$ 6,240.00
	\$ 6,564.00

<u>TOTAL AMOUNT FOR PROJECT 429-202</u>	<u>\$ 115,330.85</u>
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Contract 528-313: SR 528 / Innovation Way Interchange
The Lane Construction Corp.
SA 528-313-0417-05

Toll Plaza Harmonization

To achieve a functional connection with the proposed design-build ramp toll plazas, adjustments to the proposed roadway and drainage features are required to harmonize with the ramp toll plaza at the designed ramp locations.

INCREASE THE FOLLOWING ITEMS:

Embankment	\$	4,484.00
Type B Stabilization	\$	546.25
Optional Base, Base Group 06	\$	403.00
Pipe Culvert, RCP, Round, 18" S/CD	\$	19,045.00
Concrete Curb & Gutter, Type D	\$	425.00
Guardrail, Roadway	\$	4,471.00
	\$	<u>29,374.25</u>

DECREASE THE FOLLOWING ITEMS:

Regular Excavation	\$	(2,200.80)
Optional Base, Base Group 01	\$	(1,952.00)
Concrete Curb & Gutter, Type F	\$	(480.00)
Shoulder Gutter, Concrete	\$	<u>(289.00)</u>
	\$	(4,921.80)

Subtotal: Toll Plaza Harmonization \$ 24,452.45

Type B Fencing

This change is requested by CFX. To maintain continuity with the existing fence and construct the proposed ditch, additional Type B fencing is required.

INCREASE THE FOLLOWING ITEM:

Fencing, Type B, 5.1-6.0' with Black Vinyl Coating	\$	9,687.60
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LED Luminaire Fixtures

Upgrade the high pressure sodium fixtures for roadway, sign and underdock lighting specified in the contract to LED fixtures. LED luminaires are now, due to pricing, the standard in the industry and on all new CFX project. It is desired to incorporate this upgrade as part of the current construction contract. This item represents the cost difference for the materials to implement this change as well as necessary adjustments to existing pay item.

INCREASE THE FOLLOWING ITEMS:

Conduit, F&I, Open Trench	\$	999.60
Lighting Conductors, F&I, #10 or Less	\$	451.00
Lighting Conductors, F&I, #8 to #6	\$	<u>99,933.85</u>
	\$	101,384.45

DECREASE THE FOLLOWING ITEMS:

Conduit, F&I, Directional Bore	\$	(55.50)
Lighting Conductors, F&I, #4 to #2	\$	(158,979.85)
Lighting Conductors, F&I, #1 to #0	\$	<u>(66,848.40)</u>
	\$	(225,883.75)

ADD THE FOLLOWING ITEMS:

LED Luminaire for Light Pole Complete, F&I, 130 MPH, 45'	\$	80,993.96
LED Luminaire, F&I, Underdeck, Pedant Hung	\$	5,414.76
LED Luminaire for Light Pole Complete, Special Design, F&I, SGL Arm Wall Mount, AL, 45'	\$	1,711.14
LED Luminaire for Light Pole Complete, Special Design, F&I, SGL Arm Wall Mount, AL, 45'	\$	1,711.14
LED Luminaire Sign Lighters for Existing Sign Panel, F&I	\$	30,965.39
	\$	120,796.39

Subtotal: LED Luminaire Fixtures	\$	(3,702.91)
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<u>TOTAL AMOUNT FOR PROJECT 528-313</u>	\$	<u>30,437.14</u>
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