

CENTRAL FLORIDA EXPRESSWAY AUTHORITY

MEMORANDUM

TO: Members of the Board
Central Florida Expressway Authority
4974 ORL Tower Road
Orlando, Florida 32807

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

DATE: July 29, 2014

RE: Consent Agenda Item
Construction Contract Modifications

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

Contract No.	Name	Contract Description	Original Contract Amount (\$)	Previous Authorized Adjustments (\$)	Requested (\$) August 2014	Total Amount (\$) to Date*	Time Increase or Decrease
599-728	McShea Contracting, LLC	Retroreflective Pavement Markers Replacement	70,276.40	0.00	(11,007.00)	59,269.40	0
417-304	Southland Construction, Inc.	SR 417 / Turnpike Interchange	30,876,393.69	506,499.03	(69,322.21)	31,313,570.51	0
417-110	Masci General Contractor, Inc.	SR 417 Widening, Curry Ford Rd. to Lake Underhill Rd.	10,109,586.09	0.00	106,842.21	10,216,428.30	+ 3
429-518	Traffic Control Devices, Inc.	John Land Apopka Expressway ITS Phase II	4,192,950.00	17,026.50	(114,343.23)	4,095,633.27	0
TOTAL					(\$87,830.23)		

* Includes Requested Amount for current month.

BD/cb/ek

cc: Joe Berenis, P.E.

The following is a proposed Construction Contract Modification along with the detailed information:

Contract 599-728: Retroreflective Pavement Markers Replacement
McShea Contracting, LLC
SA 599-728-0814-01

Quantity Adjustments for Completed Pay Items

The Authority wishes to adjust quantities for completed pay items in the Contract. This will adjust the contract quantities to reflect the actual authorized quantities installed under the Contract.

INCREASE THE FOLLOWING PAY ITEM:

Retroreflective Pavement Markers	\$ 3,993.00
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DECREASE THE FOLLOWING PAY ITEMS:

Work Order Allowance	(\$10,000.00)
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Allowance for Disputes Review Board	<u>(\$ 5,000.00)</u>
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	(\$15,000.00)
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TOTAL AMOUNT FOR PROJECT 599-728

(\$ 11,007.00)

Contract 417-304: SR 417 / Turnpike Interchange
Southland Construction, Inc.
SA 417-304-0814-03

E-Pass Logos – Landstar Signs

This change is as requested by the Authority. The E-Pass logos on four signs for the Landstar Road exit were detailed by the plans to be within the area of the main sign panel. The Authority's standard is for the logo to be installed by separate panel above the main panel. The requested change occurred prior to the fabrication of the sign panels which resulted in this change being accommodated at no cost to the Authority.

Turnpike Traffic Shifts and Tapers

RFI 035 sought clarification to overbuild limits specified on PS 439 for the Turnpike shoulders and to accommodate the traffic shift towards the median for the outside widening. The RFI adjusted the limits of both the northbound and southbound shoulders overbuild to effectively lengthen the traffic shift taper lengths.

ADD THE FOLLOWING ITEM:

Turnpike TCP Shift Tapers Additional Overbuild	\$23,400.23
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SR 417 TCP Shoulder Overbuild

RFI 029 was initiated seeking clarification to the requirements of overbuild along the shoulders of 417 to accommodate the planned traffic shifts. The plans failed to depict the required overbuild prior to shifting of traffic. To avoid a cost increase of adding shoulder overbuild, the Authority explored ways to avoid the traffic shift. The shift could be avoided with adjustments to the permanent work related to drainage. The eliminated traffic shift then accommodated a reduction of mill and resurfacing along SR 417. Increased costs of this change relate to original drainage structures that had already been furnished as well as shoulder pavement repairs at locations of drainage structure installation at the adjusted locations. Overall, there is an estimated net decrease in the work required.

ADD THE FOLLOWING ITEM:

SR 417 TCP Adjustment	\$19,267.06
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INCREASE THE FOLLOWING ITEMS:

Manholes (P-8) (<10')	\$7,274.08
Concrete Pipe Culvert (SS)(Class III)(18")	\$933.93

DECREASE THE FOLLOWING ITEMS:

Removal of Existing Concrete Pavement	(\$147.71)
Milling Exist Asph. Pav't (1 1/2" Avg. Depth)	(\$1,694.73)
Milling Exist Asph. Pav't (2 1/4" Avg. Depth)	(\$9,448.13)
Superpave Asph. Conc. (TL C)(PG 76-22)(1.5" & 5")	(\$49,275.62)
Asph. Conc. Friction Course (3/4") (FC-5) (PG 76-22)	(\$27,311.68)
Shoulder Gutter, Concrete	(\$654.91)
Rumble Strips (Ground-in) (16" Min. Width)	(\$1,469.27)
Retro-reflective Pavement Marker	(\$138.50)
Preformed Tape, HP, Yellow, Solid, 6"	(\$6,959.84)
Preformed Tape, HP, White/Blk. Contrast, Solid, 9"	(\$4,572.17)
Preformed Tape, HP, White/Blk. Contrast, Skip, 9"	(\$2,861.98)

Sub-Total: 417 TCP Shoulder Overbuild	(\$77,059.47)
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Type B Stabilization, LBR 20 (12" Thick)

The (4,194) SY decrease of Type B Stabilization, LBR 40 (12" thick) is consistent with the requirements of Article 7.3.2.1, Error in Plan Quantity, which stipulates when a plan quantity is in error by 5% or \$5,000, then the plan quantity will be adjusted. The variance is attributed to stabilization beneath moment slabs not being required.

DECREASE THE FOLLOWING ITEMS:

Type B Stabilization, LBR 40 (12" Thick)	(\$13,001.40)
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Auger Cast Piles, Low Strength Cement Grout Pay Adjustment

Article 455-43 for low strength cement grout requires a pay reduction when grout compressive strengths are less than 10% from specified. Three lots failed by less than 10%, therefore, pay adjustments are required.

ADD THE FOLLOWING ITEM:

ACP Low Compressive Strength Pay Adjustment	(\$1,659.24)
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Adjustment to Authority and FTE Splicing Details

This change is as requested by the Authority. On 4/2/14 the CEI transmitted to the Contractor field adjustments to PS IT-12, IT-38, FO-21, FO-30 and FO-31. The red lines adjusted the splicing connection between the FTE fiber and the Authority fiber.

DECREASE THE FOLLOWING ITEMS:

Fiber Optic Splice Enclosure (72 Splice) (F&I)	(\$835.25)
Fiber Optic Fusion Splice	(\$83.54)
ITS Fiber Optic Con. (Install) (Splice)	(\$83.54)
	(\$1,002.33)

TOTAL AMOUNT FOR PROJECT 417-304

(\$69,322.21)

**Contract 417-110: SR 417 Widening, Curry Ford Rd. to Lake Underhill Rd.
Masci General Contractor, Inc.
SA 417-110-0814-001**

Emergency Roadway Repairs for Multiple Base Failures on 5/2/14 – 5/5/14

This change is requested by the Authority. Emergency roadway repairs were necessary at multiple locations due to base failures caused by high moisture content in the existing base and subgrade materials in the inside and outside lanes on northbound SR 417 from STA 398+50 to 403+35. The scope of work under this contract includes only milling and resurfacing in the existing lanes. Due to high moisture content in the existing base and subgrade, the existing base failed causing subsequent pavement failure in the new pavement following the milling and resurfacing operations in this area. Emergency repairs were made as directed by the CEI over multiple days in a manner attempting to minimize the overall impact to expressway customers. This necessitated a temporary patch placed during the day on 5/2 which was removed and repaired in a permanent manner on the nights of 5/4 and 5/5. Minor maintenance on the temporary patch was required on 5/3. Permanent repairs included fully removing the base material and a portion of the compromised subgrade material and replacing with aggregate base and asphalt. The Contractor's schedule was impacted by this extra work. The mainline milling and resurfacing activities are on the critical path and the Contractor was actively pursuing these activities at the time of these incidents. The Contractor planned to work on critical path milling and paving activities on 5/2, 5/4 and 5/5 and is therefore entitled to a 3 calendar day time extension in association with the extra work performed.

ADD THE FOLLOWING ITEM:

Emergency Roadway Repairs on 5/2/14 – 5/5/14	\$78,413.20
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Emergency Roadway Repairs for Multiple Base Failures on 5/19/14 and 5/20/14

This change is requested by the Authority. Emergency roadway repairs were necessary due to base failures caused by high moisture content in the existing base and subgrade materials in the outside shoulder on northbound SR 417 from STA 370+60 to 372+10 which is carrying traffic in a temporary configuration in accordance with the traffic control plans. The scope of work under this contract includes only milling and resurfacing in the existing lanes and overbuild on the existing shoulder. Due to high moisture content in the existing base and subgrade, the existing base failed causing subsequent pavement failure in the new pavement following the milling and resurfacing operations in this area. Emergency repairs were made as directed by the CEI in a manner attempting to minimize the overall impact to Expressway customers. Permanent repairs included fully removing the base material and a portion of the compromised subgrade material and replacing with aggregate base and asphalt.

ADD THE FOLLOWING ITEM:

Emergency Roadway Repairs on 5/19/14 and 5/20/14	\$28,429.01
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Increase Contract Time 3 Calendar Days

<u>TOTAL AMOUNT FOR PROJECT 417-110</u>	<u>\$106,842.21</u>
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Contract 429-518: John Land Apopka Expressway ITS Phase II
Traffic Control Devices, Inc.
SA 429-518-0814-02

Quantity Adjustments for Completed Pay Items

The Authority wishes to adjust quantities for completed Pay Items in this contract. This will adjust the contract quantities to reflect the actual field measured quantities installed throughout the contract.

INCREASE THE FOLLOWING PAY ITEMS:

Fiber Optic Splice Enclosure (72 Splice) (F&I)	\$1,164.00
Small Fiber Optic Pull Box (F&I)	\$1,920.00
Fiber Optic Conduit (2-1" HDPE/SDR 11) (Trench or Plow)	\$2,813.50
Fiber Optic Conduit (2-2" HDPE/SDR 11) (Trench or Plow)	\$6,050.55
Fiber Optic Conduit (4" PVC w/ 2-1" HDPE/SDR 11) (Trench or Plow)	\$1,607.20
Fiber Optic Patch Panel (12 Port) (F&I)	\$770.00
Conductors (F&I) (Insulated) (#6)	\$281.00
Conductors (F&I) (Insulated) (#2)	\$1,641.82
Conduit (F&I) (Underground) (2" Schedule 40 PVC)	\$5,415.70
Cable Anti-Theft Device, Existing Conduit (F&I)	<u>\$892.50</u>
	\$22,556.27

DECREASE THE FOLLOWING PAY ITEMS:

Miscellaneous Asphalt Pavement	(\$294.00)
Directional Bore (F&I)	(\$3,335.00)
Geolocation of ITS Equipment and Infrastructure	(\$11,465.00)
Fiber Optic Cable (12-Strand Fiber) (F&I)	(\$3,613.05)
Fiber Optic Cable (72-Strand Fiber) (F&I)	(\$7,501.95)
Fiber Optic Conduit (6" BSP w/ 4-1" HDPE/SDR 11) (Directional Bore)	(\$13,102.80)
Fiber Optic Conduit (6" Split BSP Sleeve) (Trench or Plow)	(\$1,472.00)
Conductors (F&I) (Insulated) (#1/0)	(\$68.67)
Conductors (F&I) (Insulated) (#2/0)	(\$60.75)
Conduit (F&I) – Surface Mount (2" RGS)	(\$2,849.00)
Allowance for Disputes Review Board	(\$9,000.00)
Work Order Allowance	(\$83,305.28)
Cable Anti-Theft Device, New Conduit (F&I)	<u>(\$832.00)</u>
	(\$136,899.50)

TOTAL AMOUNT FOR PROJECT 429-518

(\$114,343.23)