### 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:

February 24, 2015

RE:

Consent Agenda Item

**Construction Contract Modifications** 

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

Contract No.	Name	Contract Description	Original Contract Amount (\$)	Previous Authorized Adjustments (\$)	Requested (\$) March 2015	Total Amount (\$) to Date*	Time Increase or Decrease
599-725	Ranger Construction Industries	Asphalt Friction Course Repairs	2,760,731.10	0.00	(354,693.94)	2,406,037.16	2
417-301C	SEMA Construction	SR 417/Boggy Creek Rd. Interchange Improvements Phase III	70,900,000.00	210,731.90	664,207.00	71,774,938.90	0

TOTAL

\$309,513.06

BD/ek

cc:

Joe Berenis, P.E.

<sup>\*</sup> Includes Requested Amount for current month.

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

#### Contract 599-725: Asphalt Friction Course Repairs Ranger Construction Industries SA 599-725-0315-001

#### **Guardrail Revisions**

The Authority requested that the guardrail be changed from cable guardrail to standard guardrail roadway, per Plan Revision 1.

#### ADD THE FOLLOWING ITEM:

Guardrail Roadway

\$69,197.25

#### DELETE THE FOLLOWING ITEM:

Cable Guardrail

(\$71,100.00)

**Sub-Total: Guardrail Revisions** 

(\$1,902.75)

#### **Striping Modifications**

The Authority requested that striping on SR 417 (plan sheets 417-8 through 417-14) be revised from PPRT to thermoplastic due to future widening work in this area. Additionally a repair to damaged existing striping was required at the Hiawassee Ramp utilizing materials for which there was no contract pay item.

#### ADD THE FOLLOWING ITEMS:

Traffic Stripe Dotted (Thermo, White, 6")	\$30.80
Traffic Stripe Skip (Thermo, White, 6", 10'-30')	\$5,984.00
Traffic Stripe Solid (PPRT, White, 6")	<u>\$308.00</u>
	\$6,322.80

#### DECREASE THE FOLLOWING ITEM:

Traffic Stripe Skip (PPRT, White/Black, Contrast, 9", 10'-30')

**Sub-Total: Striping Modifications** 

(\$10,813.20)

(\$17,136.00)

#### Composite Pay Factor Adjustments

The Authority wishes to add the following items to allow for Composite Pay Factor adjustments in accordance with Standard Specification 337-12.3. This specification provides for a pay adjustment on asphalt placed with calculated pay factors for proximity to target for characteristics including asphalt binder content and gradation.

#### ADD THE FOLLOWING ITEMS:

Lot 1 CPF Adjustment (CPF .95)	(\$25,160.10)
Lot 4 CPF Adjustment (CPF .98)	<u>(\$6,053.94)</u>
	(\$31,214.04)

#### Time for Cold Weather

The Authority wishes to add 2 non-compensatory days to the contract for a time extension for cold weather (FC-5). Paving was affected by inclement weather on October 5, 2014 and October 6, 2014. Per specification 6.7.3.1 item #7, Contractor is entitled to a time extension at no additional cost.

#### INCREASE SCHEDULE BY 2 DAYS (NON-COMPENSABLE)

#### Paradi Lane Revision

This change is as requested by the Authority. The plan depicted the Paradi Lane cul-de-sac to be entirely reconstructed. A redline plan revision was issued to widen the cul-de-sac. Also, the limit of FC 9.5 was increased to match the adjacent construction project on Valencia College Lane.

#### **DECREASE THE FOLLOWING ITEMS:**

Regular Excavation	(\$1,260.00)
Embankment	(\$806.25)
Type B Stabilization	(\$6,699.20)
Base Group 7, Soil Cement	(\$16,132.50)
Turn Out Construction	(\$7,216.21)
Superpave Asphalt Concrete, TLC	(\$6,721.13)
Asphalt Concrete Friction Course, TLC	(\$9,293.26)
Performance Turf Sod	<u>(\$2,036.72)</u>
	(\$31,578.75)

#### Base Repair Deletion SR 417

This change is as requested by the Authority. Due to upcoming work on SR 417, the Authority requested the work shown on plan sheets 417-5, 417-6 and 417-7 be deleted and to change FC-5 to FC-9.5 on plan sheet 417-12 (SB off ramp SR 417 to EB SR 408).

#### DECREASE THE FOLLOWING ITEMS:

Milling Existing Asphalt (3/4" Avg)	(\$15,844.54)
Milling Existing Asphalt (2 ¾" Avg)	(\$15,607.77)
Milling Existing Asphalt (6 3/4" Avg)	(\$14,303.89)
Asphalt Concrete Friction Course (3/4") (PMA)	(\$47,886.62)
Optional Base Group 01	(\$20,459.44)
Traffic Stripe Solid (PPRT, White, 8")	(\$719.25)
Traffic Stripe Solid (PPRT, White/Black, Contrast 9")	(\$12,397.50)
Retro Reflective Pavement Marker (White/Red)	(\$39.05)
	(\$127.258.06)

#### Added Repair Site SR 417

This change is as requested by the Authority. Unforeseen additional repair area added at SR 417 between Mainline Toll Plaza and Curry Ford Road as shown on the as-build plan sheet 417-7a.

#### INCREASE THE FOLLOWING ITEMS:

Milling Existing Asphalt (2 3/4" Avg)	\$3,847.50
Asphalt Concrete Friction Course (3/4") (PMA)	\$2,286.00
Superpave Asphalt Concrete	<u>\$2,065.38</u>
	\$8,198.88

#### Adjustments for Completed Contract 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.

#### **OVERRUN THE FOLLOWING ITEMS:**

Variable Message Sign (Temporary)	\$1,642.50
Optional Base, Base Group 01 (2" Limerock) or Base Group	
01, Type B 12.5 (2")	\$5,948.48
Milling Existing Asphalt Pavement (1" Avg Depth)	\$17,970.86
Milling Existing Asphalt Pavement (2 3/4" Avg Depth)	\$14,500.97
Milling Existing Asphalt Pavement (3/4" Avg Depth)	\$36,207.74

Milling Existing Asphalt Pavement & Base (6 3/4" Avg Depth)	\$4,616.48
Superpave Asphaltic Concrete, Traffic C	\$27,096.39
Asphalt Concrete Friction Course incl. BIT (3/4") (FC-5) (PG	
76-22) (PMA)	\$81,371.44
Asphalt Concrete Friction Course, Traffic C (FC-9.5)	\$30.98
Asphalt Concrete Friction Course, Traffic C (1") (FC-9.5)	
(PG 76-22) (PMA)	\$44,167.92
Miscellaneous Asphalt Concrete	\$13,313.07
Furnish & Install Conduit (1" Galvanized) (Surface Mount)	\$11.40
Delineator (Flexible Tubular)	\$228.00
Retro Reflective Pavement Marker (White/Red)	\$340.80
Retro Reflective Pavement Marker (Yellow/Red)	\$31.95
Traffic Stripe Solid (Thermoplastic) (White) (6")	\$452.20
Traffic Stripe Solid (Thermoplastic) (White) (12")	\$3,180.45
Traffic Stripe Solid (Thermoplastic) (White) (24")	\$832.65
Pavement Marking (Thermoplastic) (White) (Arrow)	\$136.75
Traffic Stripe Solid (PPRT) (White) (8")	\$301.40
Traffic Stripe Solid (PPRT) (White) (18")	\$906.30
Traffic Stripe Solid (PPRT) (Yellow) (6")	<u>\$894.90</u>
	\$254,183.63
UNDERRUN THE FOLLOWING ITEMS:	
Erosion Control	(\$3,880.00)
Superpave Asphalt Concrete, Traffic C (PG 76-22) (PMA)	(\$76,287.00)
Traffic Stripe Solid (Thermoplastic) (White) (8")	(\$574.00)
Traffic Stripe Solid (Thermoplastic) (White) (18")	(\$5.15)
Traffic Stripe Solid (Thermoplastic) (White) (12") (3'-12')	(\$1,302.40)
Pavement Marking (Thermoplastic) (White) (Message)	(\$341.85)
Traffic Stripe Solid (Thermoplastic) (Yellow) (6")	(\$1,433.10)
Traffic Stripe Solid (Thermoplastic) (Yellow) (18")	(\$56.65)
Traffic Stripe Solid (PPRT) (White) (12")	(\$22.80)
Traffic Stripe Skip (PPRT) (White) (12") (3'-12')	(\$4,327.05)
Traffic Stripe Solid (PPRT) (White/Black) (Contrast) (9")	(\$504.45)
Traffic Stripe Skip (PPRT) (White/Black) (Contrast) (9")	· · ·
(10'-30')	(\$66,420.90)
Furnish & Install Conductors #2 (Insulated)	(\$554.30)
Pavement Core (20")	(\$3,600.00)
Allowance for Disputes Review Board	(\$5,000.00)
Work Order Allowance	(\$250,000.00)
	(\$414,309.65)
Sub-Total: Adjustments for Completed Contract Items	(\$160,126.02)
TOTAL AMOUNT FOR PROJECT 599-725	<u>(\$354,693.94)</u>

# Contract 417-301C: SR 417/Boggy Creek Rd. Interchange Improvements Phase III SEMA Construction SA 417-301C-0315-002

#### Piling Overrun

Additional lineal footage of 24" prestressed concrete piling was required for test piles and production piles due to the significant variability in the subsurface geotechnical conditions for the foundation of Ramps G, H, I and J. The CEI will perform a time impact analysis in the future in order to determine any time related to this issue.

#### INCREASE THE FOLLOWING ITEMS:

Prestressed Concrete Piling (24" sq)	\$540,240.00
Test Piles Prestressed Concrete (24" sq)	<u>\$104,000.00</u>
	\$644.240.00

#### Ramp H, Pier 11 – Pile Acceptance

On Ramp H, Pier 11, the production piles end of drive tip elevations were significantly higher than the elevations of the intended/anticipated bearing layer, as developed during the test pile program. Drive logs indicated an acceptable rebound at end of drive for most piles in the pier. Due to the subsurface geotechnical conditions, a larger hammer (Delmag D62-42) was required to perform the installation of some of the several production piles to the recommended tip elevation. Given that the Contractor had met the requirements of the pile driving criteria, but testing indicated the piles did not meet capacity, the Authority directed the use of the larger pile hammer and agreed to appropriate compensation.

## ADD THE FOLLOWING ITEM: Ramp H, Pier 11 Pile Acceptance

\$19,967.00

#### **TOTAL AMOUNT FOR PROJECT 417-301C**

\$644,207.00