

# CENTRAL FLORIDA EXPRESSWAY AUTHORITY

## MEMORANDUM

**TO:** Authority Board Members

**FROM:** Claude Miller   
Director of Procurement

**DATE:** September 22, 2015

**RE:** Approval of Supplemental Agreement No. 6  
URS Corporation for  
S.R. 408/S.R. 417 Ultimate Interchange Improvements  
Project No. 253F; Contract No. 000818

Board approval is requested for Supplemental Agreement No. 6 with URS Corporation in the not-to-exceed amount of \$361,091.19 for post design services for the referenced project. Services will include shop drawing reviews, attendance at construction meetings, site visits, and responding to the contractor's requests for information.

This Supplemental Agreement will be a continuation of an agreement previously approved by the Authority for this project.

Original Contract Amount	\$5,000,000.00
Supplemental Agreement No. 1	\$ 550,000.00
Supplemental Agreement No. 2	\$ 0.00
Supplemental Agreement No. 3	\$ 259,048.79
Supplemental Agreement No. 4	\$ 0.00
Supplemental Agreement No. 5	\$ 0.00
This Supplemental Agreement No. 6	<u>\$ 361,091.19</u>
 Total Revised Contract Amount	 \$6,170,139.98

**SUPPLEMENTAL AGREEMENT NO. 6**  
**TO**  
**AGREEMENT FOR PROFESSIONAL SERVICES**  
**POST DESIGN SERVICES (253F – PHASE 1)**

**SR 408 / SR 417 ULTIMATE INTERCHANGE IMPROVEMENTS**

THIS SUPPLEMENTAL AGREEMENT is made and entered into this \_\_\_\_\_ day of \_\_\_\_\_, 2015, by and between the CENTRAL FLORIDA EXPRESSWAY AUTHORITY (F/K/A ORLANDO-ORANGE COUNTY EXPRESSWAY AUTHORITY), an agency of the State of Florida, hereinafter called the "AUTHORITY" and the consulting firm of URS CORPORATION SOUTHERN, of Orlando, Florida, hereinafter called the "CONSULTANT."

WHEREAS, Section 4.24 of Exhibit "A" of the Agreement for Professional Services between the AUTHORITY and the CONSULTANT, dated the 14<sup>th</sup> day of November 2011 provides that after completion of the services outlined in Exhibit "A" for Project Number 253F of the said Agreement for Professional Services, the AUTHORITY may negotiate with the CONSULTANT a Supplemental Agreement for Post Design Services and whereas, Articles 2.00 and 12.00 of the Agreement for Professional Services provide that in the event that the AUTHORITY shall change the amount of work of the said Agreement for Professional Services, the fees to be paid to the CONSULTANT shall be subject to adjustment as shall be mutually

agreed upon:

NOW, THEREFORE, BE IT RESOLVED THAT:

1. The AUTHORITY hereby authorizes the CONSULTANT to proceed with Post Design Services required as outlined in the CONSULTANT's correspondence to the AUTHORITY dated September 30, 2015 which is attached hereto and made a part of this Supplemental Agreement.

2. All invoices from the CONSULTANT for Post Design Services shall be submitted to the AUTHORITY with complete documentation. Invoices for Post Design Services shall not be a continuation of the original CONSULTANT's contract amount for final design services and shall only be for those services as outlined in this Supplemental Agreement. Compensation for Post Design Services shall be invoiced to the AUTHORITY at an hourly rate, inclusive of overhead, profit and expenses (exclusive of travel). The hourly rate shall be calculated using the employee's actual direct salary and the negotiated Post Design Services multiplier, as outlined in the CONSULTANT's correspondence to the AUTHORITY dated September 30, 2015. Direct expenses will be reimbursed for local travel only (per mile). The maximum fee for Post Design Services shall be \$359,932.06

3. Section 4.24 of the original Agreement for Professional Services is revised as outlined in Exhibit "A," which is attached hereto and made a part of this Supplemental Agreement.

4. Any supplemental agreements for Post Design Services shall be in accordance with

the appropriate Articles within the original CONSULTANT Agreement for Professional Services.

All provisions of said Agreement for Professional Services, or any Supplements thereto, not modified by the above, shall remain in full force and effect, the same as if they had been set forth herein. In the event of a conflict between the provisions of this Supplemental Agreement and of the said Agreement for Professional Services, or any Supplements thereto, the provisions of this Supplemental Agreement, to the extent such provision is reasonable, shall take precedence.

IN WITNESS WHEREOF, the parties hereto have caused these presents to be executed, in triplicate, the day and year first above written.

CENTRAL FLORIDA  
EXPRESSWAY AUTHORITY

Witness: \_\_\_\_\_  
Assistant Secretary

By: \_\_\_\_\_  
Director of Procurement

URS CORPORATION SOUTHERN

Witness: \_\_\_\_\_  
Print Name:  
Title:

By: \_\_\_\_\_  
Print Name:  
Title:

## **Exhibit "A"**

### **Project 253F (Phase 1 Construction) SR 408 / SR 417 Ultimate Interchange Improvements Post-Design Scope of Services (Section 4.24)**

#### **4.24 Post Design Services**

##### **A. Compensation**

The Consultant's compensation for post-design services may be added by supplemental agreement and shall be at an hourly rate, inclusive of overhead, profit and expenses, and exclusive of travel. No compensation will be made for correction of errors and omissions or clarifications.

##### **B. General Support**

The Consultant shall support the post-design process as follows:

- a) Answer questions relative to the plans, typical sections, quantities and special provisions.
- b) Make any necessary corrections to the plans, typical sections, quantities, notes, etc. as may be required.
- c) Attend pre-award meeting with Contractor, the Authority, and the Authority's CEI.

##### **C. Pre-bid Conference**

The Consultant shall, prior to the pre-bid conference, be prepared to walk the project with the assigned Authority Resident Construction Engineer to discuss the plans and details. The Consultant shall be prepared to attend the pre-bid conference and respond to questions related to the plans, details, and special provisions.

##### **D. Addenda**

The Consultant shall prepare any addenda required to clarify the work included in the contract documents. Addenda may be required based on the project inspection with the assigned Authority Resident Construction Engineer, or questions developed in the pre-bid conference, or conditions discovered by bidders during the bid period.

##### **E. Field Visits**

The Consultant shall be available to respond to questions in the field that may arise relative to the plans, details or special provisions during construction. The Consultant will periodically visit the project site to observe the progress of construction. This visit will not make the place of formal construction inspection by the Authority's Construction Manager and their inspection team. Rather, it is intended to provide the opportunity for members of the design team to observe whether work by the Contractor is being performed in general conformance with the project plans. Written memos of all such field visits shall be submitted to the Authority and their Construction Manager within five business days of the trip.

## **F. Shop Drawing Reviews**

The Consultant shall review and approve shop drawings from the Contractor for roadway, utilities, structural, lighting, FON, signing and drainage elements. This work will include the erection procedure plans, review proposals for substitutions, development of supplemental agreements, and assistance with other engineering services required to facilitate construction of the project. Reviews will be conducted and returned within two weeks from receipt of information.

## **G. Post-Design Contact**

The Consultant shall appoint a responsible member of the firm to be the contact person for all post-design services. This person shall be continually available during the course of construction for review of design plans.

## **H. Timeliness**

The Consultant shall make every reasonable effort to process any material presented for review in a prompt manner recognizing a construction contract is underway.

## **I. Meetings**

The Consultant shall attend partnering meetings as requested by the Authority. The Consultant will also attend progress / coordination meetings as requested by the Authority including, but not limited to, the Notice to Proceed meeting.

## **J. Bridge Load Ratings**

Approved design bridge load ratings were obtained by the Consultant under the final design phase of this contract. The Contractor shall be responsible for revising and resubmitting the load ratings if changes to the bridge design occur during construction. Otherwise, the Consultant shall provide written correspondence to FDOT when construction is complete that the bridges were constructed in accordance with the plans and the design load ratings still apply.

## **K. Geotechnical Engineering**

The Consultant shall provide geotechnical engineering services as needed by the Authority, relative to pile driving, earthwork, embankment and MSE wall construction.

## **L. Utilities**

The Consultant shall provide utility consulting services as needed by the Authority, relative to proposed utility adjustments within the project limits.

## **M. Record Drawings**

Based on information provided by the Contractor, the Contractor's surveyor and the Authority's Construction Manager, the Consultant will prepare record drawings reflecting improvements built for this project. This scope assumes surveys will be undertaken by a registered surveyor by the Contractor.

CENTRAL FLORIDA EXPRESSWAY AUTHORITY												URS Corporation	
Project Number: 253F												CFX Contract No.: 000818	
DESCRIPTION: SR 408/SR 417 Ultimate Interchange (CONTRACT AMENDMENT NO. 6)													
SUMMARY FEE SHEET													
CONTRACT SECTION	ACTIVITY MANHOURS	Project Manager	Deputy PM	Senior Engineer	Engineer	Sr. Roadway Technician	Roadway Technician	Clerical	Sr. Surveyor & Mapper	Surveyor & Mapper	Survey Technician	Total Manhours	Total Cost
402 & 409	Governmental Agencies & Public Meetings	0	0	0	0	0	0	0	0	0	0	0	\$0.00
403	Preliminary Design Report-Review	0	0	0	0	0	0	0	0	0	0	0	\$0.00
404	Surveys and Mapping	0	0	0	0	0	0	0	0	0	0	0	\$0.00
405	Geotechnical Investigation	0	0	0	0	0	0	0	0	0	0	0	\$0.00
406	Contamination Impact Analysis	0	0	0	0	0	0	0	0	0	0	0	\$0.00
407	Pavement Design	0	0	0	0	0	0	0	0	0	0	0	\$0.00
408	Borrow Pits	0	0	0	0	0	0	0	0	0	0	0	\$0.00
410	Environmental Permits	0	0	0	0	0	0	0	0	0	0	0	\$0.00
411	Utilities	0	0	0	0	0	0	0	0	0	0	0	\$0.00
412	Roadway Design	0	0	0	0	0	0	0	0	0	0	0	\$0.00
413	Structures Design	0	0	0	0	0	0	0	0	0	0	0	\$0.00
414	Drainage Design	0	0	0	0	0	0	0	0	0	0	0	\$0.00
415	Roadway Lighting	0	0	0	0	0	0	0	0	0	0	0	\$0.00
416	Traffic Engineering	0	0	0	0	0	0	0	0	0	0	0	\$0.00
417 & 418	Signal & Pav't Marking Plans	0	0	0	0	0	0	0	0	0	0	0	\$0.00
419	Right-of-Way Surveys	0	0	0	0	0	0	0	0	0	0	0	\$0.00
420	Cost Estimates	0	0	0	0	0	0	0	0	0	0	0	\$0.00
421	Speical Provisions and Specifications	0	0	0	0	0	0	0	0	0	0	0	\$0.00
422	Fiber Optic Network (FON)	0	0	0	0	0	0	0	0	0	0	0	\$0.00
423	Toll Plazas	0	0	0	0	0	0	0	0	0	0	0	\$0.00
424	Post Design Services	86	377	343	360	257	206	86	0	0	0	1,715	\$87,463.78
700	Administration	0	0	0	0	0	0	0	0	0	0	0	\$0.00
TOTAL MANHOURS		86	377	343	360	257	206	86	0	0	0	1,715	\$87,463.78
WAGE RATES		\$93.60	\$61.88	\$63.88	\$38.91	\$39.66	\$35.06	\$32.00	\$0.00	\$0.00	\$0.00	N/A	N/A
TOTAL DIRECT COSTS		\$8,049.60	\$23,328.76	\$21,910.84	\$14,007.60	\$10,192.62	\$7,222.36	\$2,752.00	\$0.00	\$0.00	\$0.00	N/A	\$87,463.78

#### Salary Related Costs

Total Activity Salary Costs	\$87,463.78
Post Design Labor Multiplier 156.80%	\$137,143.21
<b>Subtotal Salary Related Costs (Limiting Amount)</b>	<b>\$224,606.99</b>

#### Subconsultants

Design Survey (URS)	\$0.00
Ardaman & Associates	\$6,336.13
Nadic Engineering Services	\$6,687.18
RS&H	\$47,672.77
C3TS (Stantec)	\$25,426.97
WBQ	\$50,361.15
Southeastern Survey	\$0.00
<b>Subtotal Subconsultants (Limiting Amount)</b>	<b>\$136,484.20</b>

**GRAND TOTAL (Maximum Limiting Amount) \$361,091.19**

**CENTRAL FLORIDA EXPRESSWAY AUTHORITY****URS Corporation**

Project Number: 253F

CFX Contract No.: 000818

**DESCRIPTION: SR 408/SR 417 Ultimate Interchange (CONTRACT AMENDMENT NO. 6)**

County

**HIGHWAY TASK LIST**

Task No.	Task Description	Units	Number of Units	Hours per Unit	Total Hours	Comments
24.1 Pre-Bid Activities						
24.1.1	Pre-Bid Meeting	LS	1	2	2	
24.1.2	Addendum Preparation	LS	1	4	4	
24.1 Pre-Bid Activities Subtotal					6	
24.2 Request for Information						
24.2.1	Roadway	EA	30	3	90	
24.2.2	Drainage	EA	30	3	90	
24.2.3	Lighting	EA	6	3	18	
24.2.4	ITS	EA	10	4	40	
24.2.5	Structures	EA	34	6	204	4 per bridge (3) + 1 per wall (14) + 1 per sound wall (2) + 4 for soundwall architecure + 5 misc.
24.2 Request for Information Subtotal					442	
24.3 Shop Drawing Review						
24.3.1	Roadway	EA	10	3	30	
24.3.2	Drainage	EA	132	3	396	134 str (incl resubmittals) + 4 misc
24.3.3	Lighting	EA	20	3	60	Includes equipment reviews
24.3.4	ITS	EA	20	3	60	Includes equipment reviews
24.3.5	Structures	EA	30	8	240	5 per bridge (3) + 1 per wall (14) + 1 per sound wall (2) + 4 for soundwall architecure + 5 misc.
24.3 Shop Drawing Review Subtotal					786	
24.4 Plan Revisions						
24.4.1	Plan Revisions	EA	4	32	128	
24.4.2	As-Built and Record Drawing	LS	1	120	120	801 shts (roadway, structures, lighting, ITS)
24.4 Plan Revisions Subtotal					248	
24.5 Management and Meetings						
24.5.1	Coordination	LS	1	32	32	
24.5.2	Field Visits	LS	1	136	136	1 per month (16), 2 people x 4 hours + visit with CEI (8hrs)
24.5.3	Meetings	EA	16	4	64	1 per month (16), 2 people x 2 hours
24.5 Management and Meetings Subtotal					232	
					1,714	



# ESTIMATE OF WORK EFFORT AND COST - PRIME CONSULTANT

Name of Project: SR 408 / SR 417 Interchange  
 County: Orange  
 FPN: 253F  
 FAP No.:

Consultant Name: Ardaman  
 Consultant No.:  
 Date: 9/30/2015  
 Estimator: Zan Bates

Staff Classification	Total Staff Hours From "SH Summary -	Senior Engineer	Project Engineer	Engineering Intern	CADD/Computer Technician	Secretary/Clerical	Staff Classification 6	Staff Classification 7	Staff Classification 8	Staff Classification 9	Staff Classification 10	Staff Classification 11	Staff Classification 12	SH By Activity	Salary Cost By Activity	Average Rate Per Task
24. Post Design Services	0	13	13	23	7	4	0	0	0	0	0	0	0	60	\$6,336	\$105.60
Total Staff Hours	0	13	13	23	7	4	0	0	0	0	0	0	0	60		
Total Staff Cost		\$1,937.65	\$1,644.24	\$2,085.87	\$478.17	\$190.20	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00		\$6,336.13	\$105.60

Survey Field Days by Subconsultant  
 4 - Person Crew:

SALARY RELATED COSTS:  
 OVERHEAD: 0.00% \$6,336.13  
 OPERATING MARGIN: 0.00% \$0.00  
 FCCM (Facilities Capital Cost Money): 0.000% \$0.00  
 EXPENSES: 0.00% \$0.00  
 Survey (Field - if by Prime) 4-man crew \$ - / day \$0.00  
 days @  
 SUBTOTAL ESTIMATED FEE: \$6,336.13

## Notes:

1. This sheet to be used by Prime Consultant to calculate the Grand Total fee.
2. Manually enter fee from each subconsultant. Unused subconsultant rows may be hidden.

**CENTRAL FLORIDA EXPRESSWAY AUTHORITY****Ardaman & Associates****Project Number: 253F****CFX Contract No.: 000818****DESCRIPTION: SR 408/SR 417 Ultimate Interchange (CONTRACT AMENDMENT NO. 6)****County****HIGHWAY TASK LIST**

Task No.	Task Description	Units	Number of Units	Hours per Unit	Total Hours	Comments
24.1 Pre-Bid Activites						
24.1.1	Pre-Bid Meeting	LS			0	
24.1.2	Addendum Preparation	LS			0	
24.1 Pre-Bid Activites Subtotal					0	
24.2 Request for Information						
24.2.1	Roadway - Geotech	EA	5	4	20	
24.2.2	Drainage	EA			0	
24.2.3	Lighting	EA			0	
24.2.4	ITS	EA			0	
24.2.5	Structures - Geotech	EA	5	4	20	
24.2 Request for Information Subtotal					40	
24.3 Shop Drawing Review						
24.3.1	Roadway	EA			0	
24.3.2	Drainage	EA			0	
24.3.3	Lighting	EA			0	
24.3.4	ITS	EA			0	
24.3.5	Structures	EA			0	
24.3 Shop Drawing Review Subtotal					0	
24.4 Plan Revisions						
24.4.1	Plan Revisions	EA			0	
24.4.2	As-Built and Record Drawings	LS			0	
24.4 Plan Revisions Subtotal					0	
24.5 Management and Meetings						
24.5.1	Coordination	LS	1	6	6	
24.5.2	Field Visits	LS	1	8	8	
24.5.3	Meetings	EA	2	3	6	
24.5 Management and Meetings Subtotal					20	
					60	

# ESTIMATE OF WORK EFFORT AND COST - SUBCONSULTANT

Name of Project: SR 408/SR 417 Systems Interchange Construction  
 County: Orange  
 FPN: 253F  
 FAP No.: 1/0/1900

Consultant Name: AECOM/Nadic  
 Consultant No.: R11033  
 Date: 9/28/2015  
 Estimator: Godwin Nnadi

Staff Classification	Total Staff Hours From "SH Summary Firm"	Project Manager	Chief Engineer	Senior Engineer	Project Engineer	Staff Engineer	Cadd/Computer Tech	Sr. Engineer Tech	Secretary	Staff Classification 9	Staff Classification 10	Staff Classification 11	Staff Classification 12	SH By Activity	Salary Cost By Activity	Average Rate Per Task
3. Project General and Project Common Tasks	0	0	0	0	0	0	0	0	0	0	0	0	0	0	\$0	#DIV/0!
4. Roadway Analysis	0	0	0	0	0	0	0	0	0	0	0	0	0	0	\$0	#DIV/0!
5. Roadway Plans	0	0	0	0	0	0	0	0	0	0	0	0	0	0	\$0	#DIV/0!
6a. Drainage Analysis	0	0	0	0	0	0	0	0	0	0	0	0	0	0	\$0	#DIV/0!
6b. Drainage Plans	0	0	0	0	0	0	0	0	0	0	0	0	0	0	\$0	#DIV/0!
7. Utilities	0	0	0	0	0	0	0	0	0	0	0	0	0	0	\$0	#DIV/0!
8. Environmental Permits, Compliance & Clearances	0	0	0	0	0	0	0	0	0	0	0	0	0	0	\$0	#DIV/0!
9. Structures - Misc. Tasks, Dwgs, Non-Tech.	0	0	0	0	0	0	0	0	0	0	0	0	0	0	\$0	#DIV/0!
10. Structures - Bridge Development Report	0	0	0	0	0	0	0	0	0	0	0	0	0	0	\$0	#DIV/0!
11. Structures - Temporary Bridge	0	0	0	0	0	0	0	0	0	0	0	0	0	0	\$0	#DIV/0!
12. Structures - Short Span Concrete Bridge	0	0	0	0	0	0	0	0	0	0	0	0	0	0	\$0	#DIV/0!
13. Structures - Medium Span Concrete Bridge	0	0	0	0	0	0	0	0	0	0	0	0	0	0	\$0	#DIV/0!
14. Structures - Structural Steel Bridge	0	0	0	0	0	0	0	0	0	0	0	0	0	0	\$0	#DIV/0!
15. Structures - Segmental Concrete Bridge	0	0	0	0	0	0	0	0	0	0	0	0	0	0	\$0	#DIV/0!
16. Structures - Movable Span	0	0	0	0	0	0	0	0	0	0	0	0	0	0	\$0	#DIV/0!
17. Structures - Retaining Walls	0	0	0	0	0	0	0	0	0	0	0	0	0	0	\$0	#DIV/0!
18. Structures - Miscellaneous	0	0	0	0	0	0	0	0	0	0	0	0	0	0	\$0	#DIV/0!
19. Signing & Pavement Marking Analysis	0	0	0	0	0	0	0	0	0	0	0	0	0	0	\$0	#DIV/0!
20. Signing & Pavement Marking Plans	0	0	0	0	0	0	0	0	0	0	0	0	0	0	\$0	#DIV/0!
21. Signalization Analysis	0	0	0	0	0	0	0	0	0	0	0	0	0	0	\$0	#DIV/0!
22. Signalization Plans	0	0	0	0	0	0	0	0	0	0	0	0	0	0	\$0	#DIV/0!
23. Lighting Analysis	0	0	0	0	0	0	0	0	0	0	0	0	0	0	\$0	#DIV/0!
24. Lighting Plans	29	17	0	0	12	0	0	0	0	0	0	0	0	29	\$1,489	\$51.36
25. Landscape Architecture Analysis	0	0	0	0	0	0	0	0	0	0	0	0	0	0	\$0	#DIV/0!
26. Landscape Architecture Plans	0	0	0	0	0	0	0	0	0	0	0	0	0	0	\$0	#DIV/0!
27. Survey (Field & Office Support)	0	0	0	0	0	0	0	0	0	0	0	0	0	0	\$0	#DIV/0!
28. Photogrammetry	0	0	0	0	0	0	0	0	0	0	0	0	0	0	\$0	#DIV/0!
29. Mapping	0	0	0	0	0	0	0	0	0	0	0	0	0	0	\$0	#DIV/0!
30. Terrestrial Mobile LIDAR	0	0	0	0	0	0	0	0	0	0	0	0	0	0	\$0	#DIV/0!
31. Architecture Development	0	0	0	0	0	0	0	0	0	0	0	0	0	0	\$0	#DIV/0!
32. Noise Barriers Impact Design Assessment	0	0	0	0	0	0	0	0	0	0	0	0	0	0	\$0	#DIV/0!
33. Intelligent Transportation Systems Analysis	0	0	0	0	0	0	0	0	0	0	0	0	0	0	\$0	#DIV/0!
34. Intelligent Transportation Systems Plans	0	0	0	0	0	0	0	0	0	0	0	0	0	0	\$0	#DIV/0!
35. Geotechnical	0	0	0	0	0	0	0	0	0	0	0	0	0	0	\$0	#DIV/0!
<b>Total Staff Hours</b>	29	17	0	0	12	0	0	0	0	0	0	0	0	29		
<b>Total Staff Cost</b>		\$947.07	\$0.00	\$0.00	\$542.28	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00		\$1,489.35	\$51.36

Check = \$1,489.35

## Notes:

- This sheet to be used by Subconsultant to calculate its fee.

## SALARY RELATED COSTS:

OVERHEAD:	349%	\$5,197.83
OPERATING MARGIN:	0%	\$0.00
FCCM (Facilities Capital Cost Money):	0.00%	\$0.00
EXPENSES:	0.00%	\$0.00
<b>SUBTOTAL ESTIMATED FEE:</b>		<b>\$6,687.18</b>
Survey (Field)	0	\$0.00
Geotechnical Field and Lab Testing	4-man crew da \$ - / day	\$0.00
<b>SUBTOTAL ESTIMATED FEE:</b>		<b>\$6,687.18</b>
Optional Services		\$0.00
<b>GRAND TOTAL ESTIMATED FEE:</b>		<b>\$6,687.18</b>

## 24. Lighting Plans

Estimator: Godwin Nnadi

SR 408/SR 417 Systems Interchange Construction  
253F

Representing	Print Name	Signature / Date
CFX		
Nadic Engineering Services, Inc.	Godwin Nnadi	

NOTE: Signature Block is optional, per District preference

Task No.	Task	Scale	Units	No. of Units	Hours/ Unit	No. of Units	Total Hours	Comments
24.1	Pre-Bid Meeting		LS	1	2	1	2	
24.2	Addendum Preparation		LS	0	0	0	0	
24.3	Request for Information		LS	3	4	3	12	
24.4	Shop Drawing Reviews		LS	3	3	3	9	
24.5	Plans Revisions		LS	0	0	0	0	
24.6	Coordination		LS	0	0	0	0	
24.7	Field Review		LS	1	3	1	3	
24.8	Meetings		LS	1	3	1	3	
Geotechnical Technical Subtotal						9	29	
24.13	Quality Assurance/Quality Control		LS	%	0%		0	
24.14	Supervision		LS	%	0%		0	
24. Geotechnical Post Design Total						9	29	

**Master Summary - Estimate of Work Effort & Fee Proposal**

Consultant: RS&H, Inc.  
Date Prepared: September 30, 2015

Job Description: SR 408/SR417 Project 253F Phase I - POST DESIGN SERVICES

Work Element / Activity	Project Manager		Chief Engineer		Senior Engineer		Engineer		Engineering Intern		Clerical		Total Man Hours	Salary Cost By Activity
	Man Hours	Hourly Rate	Man Hours	Hourly Rate	Man Hours	Hourly Rate	Man Hours	Hourly Rate	Man Hours	Hourly Rate	Man Hours	Hourly Rate		
Request for Information	1	\$69.32	5	\$67.37	15	\$57.44	17	\$39.33	9	\$28.92	1	\$22.04	48	\$2,218.70
Pre-Bid Conference	0	\$69.32	0	\$67.37	0	\$57.44	0	\$39.33		\$28.92	0	\$22.04	0	\$0.00
Addenda	0	\$69.32	0	\$67.37	0	\$57.44	0	\$39.33		\$28.92	0	\$22.04	0	\$0.00
Pre-Construction Conference	0	\$69.32	0	\$67.37	0	\$57.44	0	\$39.33		\$28.92	0	\$22.04	0	\$0.00
Shop Drawing Reviews	11	\$69.32	22	\$67.37	65	\$57.44	76	\$39.33	39	\$28.92	4	\$22.04	217	\$10,183.38
Plan Revisions	1	\$69.32	3	\$67.37	8	\$57.44	10	\$39.33	5	\$28.92	1	\$22.04	28	\$1,290.89
Coordination	0	\$69.32	1	\$67.37	2	\$57.44	3	\$39.33	1	\$28.92	0	\$22.04	7	\$329.16
Field Visits	2	\$69.32	1	\$67.37	4	\$57.44	4	\$39.33	2	\$28.92	0	\$22.04	13	\$650.93
Meetings	0	\$69.32	1	\$67.37	2	\$57.44	2	\$39.33	1	\$28.92	0	\$22.04	6	\$289.83
Partnering	0	\$69.32	0	\$67.37	0	\$57.44	0	\$39.33		\$28.92	0	\$22.04	0	\$0.00
Totals	15	\$ 69.32	33	\$ 67.37	96	\$ 57.44	112	\$ 39.33	57	\$ 28.92	6	\$ 22.04	319	\$14,962.89
Total Burdened Salary Costs By Activity														
Request for Information \$7,055.47														
Pre-Bid Conference \$0.00														
Addenda \$0.00														
Pre-Construction Conference \$0.00														
Shop Drawing Reviews \$32,383.15														
Plan Revisions \$4,105.03														
Coordination \$1,046.73														
Field Visits \$2,069.96														
Meetings \$921.66														
Partnering \$0.00														
*TOTAL \$47,582.00														
Subconsultants														
Total Subconsultant Fees \$0.00														
Total Contract Fee Computations														
Total Activity Salary Costs \$14,962.89														
1.) Post Design Labor Multiplier 3.1800														
*Subtotal (Burdened Salaries + Operating Margin) \$47,581.99														
2.) Allowable Travel Expenses \$90.78														
Subtotal (Burdened Salaries + Operating Margin + Allowable Travel Expenses) \$47,672.77														
3.) Subconsultant Fees Total \$0.00														
TOTAL MAXIMUM LIMITING FEE \$47,672.77														

\* THESE AMOUNTS SHOULD BE EQUAL(+/- \$0.05)

Representing	Print Name	Signature / Date
CFX RS&H, Inc.	Renato Gonzalez, PE	

**NOTE: Signature Block is optional, per District preference**

Task No.	Task	Units	No of Units	Hours/ Unit	Total Hours	Comments
<b>24.1 Pre-Bid Activities</b>						
24.1.1	Pre-Bid Meeting	LS	1	0	0	
24.1.2	Addendum Preparation	LS	1	0	0	
<b>24.2 Requests for Information</b>						
24.2.1	Requests for Information (Sign Structures)	EA	10	4	40	1 per overhead sign structure (4 total), 1 per special foundation (3 total), 1 per barrier/wall mounted sign (3 total)
24.2.2	Requests for Information (Sign Panels)	EA	3	3	9	Based on 5 RFI's
<b>24.3 Shop Drawing Review</b>						
24.3.1	Shop Drawings Reviews (Sign Structures)	EA	36	4	144	First submittal span signs (2 at 8 sheets each = 16), Second submittal span signs (2 at 3 sheets each = 6), Foundations for future signs (2 at 1 sheet each = 2), Barrier/Wall mounted signs (3 at 4 sheets each = 12)
24.3.2	Shop Drawings Reviews (Sign Panels)	EA	12	6	72	Sign panel details and calculations (2 RCM, 1 Gore, 9 Guide Signs)
<b>24.4 Plan Revision</b>						
24.4.1	Plans Revisions	EA	1	12	12	Revise plans and calculations, QAQC plans revision, sign and seal plans revision
24.4.2	As-Builts and Record Drawings	LS	1	16	16	Includes updating cad files and printing official record drawings
<b>24.5 Management and Meetings</b>						
24.5.1	Coordination	LS	1	8	8	Coordination with URS
24.5.1	Field Visits	LS	1	12	12	6 Visits at 2 hours each
24.5.3	Meetings	EA	3	2	6	2 for Sign Structures, 1 for Sign Panels
<b>24. Post Design Services Tasks Total</b>					<b>319</b>	

	PM		Chief Eng	Sr Eng	Eng	El	Clerical	Total per Task
	5%		10%	30%	35%	18%	2%	
RFI	1.00		5.00	15.00	17.00	9.00	1.00	48
Pre-Bid								
Pre-Const								
Addenda								
Shp Dwg	11.00		22.00	65.00	76.00	39.00	4.00	217
Plan Rev	1.00		3.00	8.00	10.00	5.00	1.00	28
Coordination	0.00		1.00	2.00	3.00	1.00	0.00	7
Field Visits	2.00		1.00	4.00	4.00	2.00	0.00	13
Meetings	0.00		1.00	2.00	2.00	1.00	0.00	6
Total	15.00		33.00	96.00	112.00	57.00	6.00	319

CENTRAL FLORIDA EXPRESSWAY AUTHORITY												Stantec	
Project Number: 253F												CFX Contract No.: 000818	
DESCRIPTION: SR 408/SR 417 Ultimate Interchange (CONTRACT AMENDMENT NO. 6)													
SUMMARY FEE SHEET													
CONTRACT SECTION	ACTIVITY MANHOURS	Project Manager	Chief Engineer	Senior Engineer	Project Engineer	Senior Technician	Technician	Clerical	Sr. Surveyor & Mapper	Surveyor & Mapper	Survey Technician	Total Manhours	Total Cost
402 & 409	Governmental Agencies & Public Meetings	0	0	0	0	0	0	0	0	0	0	0	\$0.00
403	Preliminary Design Report-Review	0	0	0	0	0	0	0	0	0	0	0	\$0.00
404	Surveys and Mapping	0	0	0	0	0	0	0	0	0	0	0	\$0.00
405	Geotechnical Investigation	0	0	0	0	0	0	0	0	0	0	0	\$0.00
406	Contamination Impact Analysis	0	0	0	0	0	0	0	0	0	0	0	\$0.00
407	Pavement Design	0	0	0	0	0	0	0	0	0	0	0	\$0.00
408	Borrow Pits	0	0	0	0	0	0	0	0	0	0	0	\$0.00
410	Environmental Permits	0	0	0	0	0	0	0	0	0	0	0	\$0.00
411	Utilities	0	0	0	0	0	0	0	0	0	0	0	\$0.00
412	Roadway Design	0	0	0	0	0	0	0	0	0	0	0	\$0.00
413	Structures Design	0	0	0	0	0	0	0	0	0	0	0	\$0.00
414	Drainage Design	0	0	0	0	0	0	0	0	0	0	0	\$0.00
415	Roadway Lighting	0	0	0	0	0	0	0	0	0	0	0	\$0.00
416	Traffic Engineering	0	0	0	0	0	0	0	0	0	0	0	\$0.00
417 & 418	Signal & Pav't Marking Plans	0	0	0	0	0	0	0	0	0	0	0	\$0.00
419	Right-of-Way Surveys	0	0	0	0	0	0	0	0	0	0	0	\$0.00
420	Cost Estimates	0	0	0	0	0	0	0	0	0	0	0	\$0.00
421	Speical Provisions and Specifications	0	0	0	0	0	0	0	0	0	0	0	\$0.00
422	Fiber Optic Network (FON)	0	0	0	0	0	0	0	0	0	0	0	\$0.00
423	Toll Plazas	0	0	0	0	0	0	0	0	0	0	0	\$0.00
424	Post Design Services	0	38	43	47	56	0	4	0	0	0	188	\$8,336.71
700	Administration	0	0	0	0	0	0	0	0	0	0	0	\$0.00
TOTAL MANHOURS		0	38	43	47	56	0	4	0	0	0	188	\$8,336.71
WAGE RATES			\$72.49	\$53.63	\$33.60	\$30.30						N/A	N/A
TOTAL DIRECT COSTS		\$0.00	\$2,754.62	\$2,306.09	\$1,579.20	\$1,696.80	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	N/A	\$8,336.71
		0.0%	20.2%	22.9%	25.0%	29.8%	0.0%	2.1%	0.0%	0.0%	0.0%	100.0%	

#### Salary Related Costs

Total Activity Salary Costs	\$8,336.71
Post Design Labor Multiplier	205.00%
Subtotal Salary Related Costs (Limiting Amount)	\$25,426.97

\$44.34  
3.05  
\$135.25  
  
\$135.25

#### Subconsultants

Design Survey (URS)	\$0.00
Ardaman & Associates	\$0.00
Nadic Engineering Services	\$0.00
RS&H	\$0.00
C3TS (Stantec)	\$25,426.97
WBQ	\$0.00
Southeastern Survey	\$0.00
Subtotal Subconsultants (Limiting Amount)	\$25,426.97

**GRAND TOTAL (Maximum Limiting Amount) \$25,426.97**



**CENTRAL FLORIDA EXPRESSWAY AUTHORITY****Stantec****Project Number: 253F****CFX Contract No.: 000818****DESCRIPTION: SR 408/SR 417 Ultimate Interchange (CONTRACT AMENDMENT NO. 6)****County****HIGHWAY TASK LIST**

Task No.	Task Description	Units	Number of Units	Hours per Unit	Total Hours	Comments
<b>24.1 Pre-Bid Activites</b>						
24.1.1	Pre-Bid Meeting	LS	0	0	0	
24.1.2	Addendum Preparation	LS			0	
<b>24.1 Pre-Bid Activites Subtotal</b>					<b>0</b>	
<b>24.2 Request for Information</b>						
24.2.1	Roadway	EA			0	
24.2.2	Drainage	EA			0	
24.2.3	Lighting	EA			0	
24.2.4	ITS	EA			0	
24.2.5	Structures	EA	10	4	40	
<b>24.2 Request for Information Subtotal</b>					<b>40</b>	
<b>24.3 Shop Drawing Review</b>						
24.3.1	Roadway	EA			0	
24.3.2	Drainage	EA			0	
24.3.3	Lighting	EA			0	
24.3.4	ITS	EA			0	
24.3.5	Structures	EA	12	4	48	SIP 3, MSE 4, Sheetpile 2, temporary bracings 3
<b>24.3 Shop Drawing Review Subtotal</b>					<b>48</b>	
<b>24.4 Plan Revisions</b>						
24.4.1	Plan Revisions	EA	8	4	32	
24.4.2	As-Built and Record Drawing	LS	1	20	20	
<b>24.4 Plan Revisions Subtotal</b>					<b>52</b>	
<b>24.5 Management and Meetings</b>						
24.5.1	Coordination	LS	1	12	12	project coordinations
24.5.2	Field Visits	LS	1	16	16	4 visits at 4 hrs
24.5.3	Meetings	EA	5	4	20	team meetings
<b>24.5 Management and Meetings Subtotal</b>					<b>48</b>	
					<b>188</b>	

State Road 417  
Orange  
417-253F

Date: 9/30/2015  
Estimator: Troy Vargas

Check = \$15,053.85

<b>GRAND TOTAL ESTIMATED FEE:</b>	<b>Post Design Multiplier 3.35</b>	<b>\$50,361.15</b>
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9/30/2015 2:16 PM

**CENTRAL FLORIDA EXPRESSWAY AUTHORITY**

WBQ Design &amp; Engineering, Inc.

**Project Number: 253F****CFX Contract No.: 000818****DESCRIPTION: SR 408/SR 417 Ultimate Interchange (CONTRACT AMENDMENT NO. 6)****County****HIGHWAY TASK LIST**

Task No.	Task Description	Units	Number of Units	Hours per Unit	Total Hours	Comments
24.1 Pre-Bid Activities						
24.1.1	Pre-Bid Meeting	LS			0	
24.1.2	Addendum Preparation	LS			0	
24.1 Pre-Bid Activities Subtotal					0	
24.2 Request for Information						
24.2.1	Roadway - MOT	EA	14	4	56	
24.2.2	Drainage	EA			0	
24.2.3	Lighting	EA			0	
24.2.4	ITS	EA			0	
24.2.5	Structures	EA			0	
24.2 Request for Information Subtotal					56	
24.3 Shop Drawing Review						
24.3.1	Roadway	EA	4	4	16	
24.3.2	Drainage	EA			0	
24.3.3	Lighting	EA			0	
24.3.4	ITS	EA			0	
24.3.5	Structures	EA			0	
24.3 Shop Drawing Review Subtotal					16	
24.4 Plan Revisions						
24.4.1	Plan Revisions	EA	4	20	80	
24.4.2	As-Built and Record Drawings	LS			0	
24.4 Plan Revisions Subtotal					80	
24.5 Management and Meetings						
24.5.1	Coordination	LS	1	15	15	
24.5.2	Field Visits	LS	6	8	48	
24.5.3	Meetings	EA	4	8	32	2 people at 4 hrs
24.5 Management and Meetings Subtotal					95	
					247	

**SUPPLEMENTAL AGREEMENT NO. 5**  
**TO**  
**AGREEMENT FOR PROFESSIONAL SERVICES**  
**FINAL DESIGN**  
**SR 408 / SR 417 ULTIMATE INTERCHANGE IMPROVEMENTS**

THIS SUPPLEMENTAL AGREEMENT is made and entered into this 16<sup>th</sup> day of September, 2015, by and between the CENTRAL FLORIDA EXPRESSWAY AUTHORITY (F/K/A ORLANDO-ORANGE COUNTY EXPRESSWAY AUTHORITY), an agency of the State of Florida, hereinafter called the "AUTHORITY" and the consulting firm of URS CORPORATION SOUTHERN. of Orlando, Florida, hereinafter called the "CONSULTANT".

WHEREAS, Articles 2.00 and 12.0 of the Agreement for Professional Services between the AUTHORITY and the CONSULTANT, dated the 14th Day of November 2011, provides that in the event that the AUTHORITY shall change the amount of work in Exhibit A of the said Agreement for Professional Services, the fees to be paid to the CONSULTANT shall be subject to adjustment as shall be mutually agreed upon:

NOW, THEREFORE, BE IT RESOLVED THAT:

1. The AUTHORITY hereby authorizes the CONSULTANT to proceed with additional services as outlined in the CONSULTANT'S October 20, 2014 correspondence to the AUTHORITY, which is attached hereto and made a part of this Supplemental Agreement.
2. Exhibit "B", Article 2.00 of the Agreement for Professional Services is amended as follows:
  - a. The Salary related costs are adjusted upwards by \$30,748.92 to \$3,565,078.07.
  - b. Direct Expenses remain unchanged at \$108,894.65.
  - c. The Field Survey costs remain unchanged at \$173,943.53.
  - d. The Subcontract Items remain unchanged at \$1,961,132.54.
  - e. The Allowance is adjusted downward to \$0.
  - f. The total Maximum Limiting Amount remains unchanged at \$5,809,048.79.
3. All provisions of said Agreement for Professional Services, or any Supplements thereto, not modified by the above, shall remain in full force and effect, the same as if they had been set forth herein. In the event of a conflict between the provisions of this Supplemental Agreement and of the said Agreement for Professional Services, or any Supplements thereto, the provisions of this Supplemental Agreement, to the extent such provision is reasonable, shall take precedence.

IN WITNESS WHEREOF, the parties hereto have caused these presents to be executed, in triplicate, the day and year first above written.

CENTRAL FLORIDA EXPRESSWAY AUTHORITY

Attest: *Barbara Mazzullo*  
Assistant Secretary

By: *Carl Kubi*  
Director of Procurement

URS CORPORATION SOUTHERN

Attest: *G. L. Foster*  
Print Name: GARFIELD L. FOSTER

By: *Robert M. ...*  
Title: VICE PRESIDENT

Approved as to form and execution only.

*Joseph J. ...*  
General Counsel for the AUTHORITY



October 20, 2014

Mr. Glenn Pressimone, P.E.  
CFX Project Manager  
Central Florida Expressway Authority  
4974 ORL Tower Road  
Orlando, FL 32807

**RE: SR 417/SR 408 Ultimate Interchange Improvements  
CFX Project # 253F  
Contract # 000818  
Contract Amendment No. 3 Request – Additional Information**

Dear Glenn:

Per your request, I am providing additional information pertaining to the Contract Amendment No. 3 request.

A summary of the remaining fees on this contract and those being requested for CA No. 3 can be found on the attached CA No. 3 Fee Estimate. In review of the remaining fees to complete the Phase 1 Final plans, URS and WBQ will require addition funds. All other subs will have minor to no additional effort. RS&H does have a moderate amount of work to produce these plans. I have attached their fee estimate to produce the Phase 1 plans which is within their remaining fee.

I have also attached a revised request for Contract Amendment No. 3 Fee estimate which deducts the remaining labor fees for URS and WBQ.

Should you have any questions, please do not hesitate to contact me at (407) 422-0353.

Sincerely,  
URS Corporation

A handwritten signature in black ink, appearing to read "Stephen Noppinger".

Stephen Noppinger, P.E.  
Project Manager

Enclosures

# CENTRAL FLORIDA EXPRESSWAY AUTHORITY

Project Number: 253F

DESCRIPTION: SR 408/SR 417 Ultimate Interchange (CONTRACT AMENDMENT NO. 3)  
Orange County

URS Corporation

CFX Contract No.: 000818

9/16/15  
*[Signature]*

SA#3 Assumed USE OF  
Contract Allowance. Final SA#3 did not  
transfer Allowance to URS.

## Summary of Remaining Fees and Contract Amendment Fee

Firm	Contract Fee	Invoiced	Fee Remaining	Phase 1 Cost	CA #3 Request	Comment
URS (Labor only without survey)	\$3,376,515.85	\$3,333,940.09	\$42,575.76	\$222,738.42	\$180,162.66	
WBQ	\$685,768.16	\$678,379.36	\$7,388.80	\$84,702.68	\$77,313.88	
RS&H	\$279,304.38	\$252,592.73	\$26,711.65	\$18,322.75	\$0.00	Phase 1 Effort to be completed within remaining fee.
Stantec (C3TS)	\$455,002.80	\$429,247.75	\$25,755.05		\$0.00	Phase 1 Effort to be completed within remaining fee.
Nadic	\$221,049.39	\$208,824.13	\$12,225.26		\$0.00	Phase 1 Effort to be completed within remaining fee.
Southeastern	\$56,963.26	\$50,749.01	\$6,214.25		\$0.00	Phase 1 Effort to be completed within remaining fee.
Ardaman	\$178,638.96	\$177,168.32	\$1,470.64		\$0.00	Phase 1 Effort to be completed within remaining fee.
				Subtotal	\$257,476.54	
Expenses (URS)					\$1,572.25	
				TOTAL	\$259,048.79	



18 AUG 15 PM 12:54

**SUPPLEMENTAL AGREEMENT NO. 4**  
**TO**  
**AGREEMENT FOR PROFESSIONAL SERVICES**  
**FINAL DESIGN**  
**SR 408 / SR 417 ULTIMATE INTERCHANGE IMPROVEMENTS**

THIS SUPPLEMENTAL AGREEMENT is made and entered into this 11<sup>th</sup> day of August, 2015, by and between the CENTRAL FLORIDA EXPRESSWAY AUTHORITY (F/K/A ORLANDO-ORANGE COUNTY EXPRESSWAY AUTHORITY), an agency of the State of Florida, hereinafter called the "AUTHORITY" and the consulting firm of URS CORPORATION SOUTHERN. of Orlando, Florida, hereinafter called the "CONSULTANT".

WHEREAS, Articles 2.00 and 12.0 of the Agreement for Professional Services between the AUTHORITY and the CONSULTANT, dated the 14th Day of November 2011, provides that in the event that the AUTHORITY shall change the amount of work in Exhibit A of the said Agreement for Professional Services, the fees to be paid to the CONSULTANT shall be subject to adjustment as shall be mutually agreed upon:

NOW, THEREFORE, BE IT RESOLVED THAT:

1. The AUTHORITY hereby authorizes the CONSULTANT to proceed with additional services as outlined in the CONSULTANT'S August 11, 2015 correspondence to the AUTHORITY, which is attached hereto and made a part of this Supplemental Agreement.
2. Exhibit "B", Article 2.00 of the Agreement for Professional Services is amended as follows:
  - a. The Salary related costs are adjusted upwards by \$8,399.56 to \$3,534,329.15.
  - b. Direct Expenses remain unchanged at \$108,894.65.
  - c. The Field Survey costs are adjusted downward by \$15,491.27 to \$173,943.53.
  - d. The Subcontract Items are adjusted upward by \$7,091.71 to \$1,961,132.54.
    - WBQ \$2,334.35
    - RS&H \$4,757.36
  - e. The Allowance remains unchanged at \$30,748.92.
  - f. The total Maximum Limiting Amount remains unchanged at \$5,809,048.79.
3. All provisions of said Agreement for Professional Services, or any Supplements thereto, not modified by the above, shall remain in full force and effect, the same as if they had been set forth herein. In the event of a conflict between the provisions of this Supplemental Agreement and of the said Agreement for

Professional Services, or any Supplements thereto, the provisions of this Supplemental Agreement, to the extent such provision is reasonable, shall take precedence.

IN WITNESS WHEREOF, the parties hereto have caused these presents to be executed, in triplicate, the day and year first above written.

CENTRAL FLORIDA EXPRESSWAY AUTHORITY

Attest: *Regla Lamante*  
Assistant Secretary  
*Regla Lamante*

By: *Paul Miller*  
Director of Procurement

URS CORPORATION SOUTHERN

Attest: *Harriet H. Storms*  
Print Name: *Harriet H. Storms*

By: *Stephen Noppinger*  
Title: *VICE PRESIDENT*  
*STEPHEN NOPPINGER*

Approved as to form and execution only.

*Joseph J. Cassione*  
General Counsel for the AUTHORITY



August 11, 2015

Mr. Glenn Pressimone, P.E.  
CFX Project Manager  
Central Florida Expressway Authority  
4974 ORL Tower Road  
Orlando, FL 32807

**RE: SR 417/SR 408 Ultimate Interchange Improvements**  
**CFX Project # 253F**  
**Contract # 000818**  
**Contract Amendment No. 4 Request – Bid Set Update - REVISED**

Dear Glenn:

This is a request for a zero dollar contract amendment to incorporate the most current CFX design standards within the Bid Set. This effort includes:

1. Including shoulder gutter at those locations where only guardrail had been called out. Based on conversations with you and Scott Kamien, only the location along SR 417 (right) from station 460+40 to 467+92.5 will be modified. Other locations are to cost prohibited or are temporary conditions. This item will include the revision of the drainage system, cross sections, plan views, quantities, and drainage structure and sections.
2. Revise traffic control plans to reflect change in construction above.
3. Include pavement arrow markings at approaches to ramp exits.
4. Revised sign panels to include the Toll Shield (yellow/black) on appropriate signs.

Attached is the Fee Estimate for this activity. It is requested that funding from URS survey be re-allocated as shown below.

Firm	Contract Amend 4
URS	\$8,399.56
WBQ	\$2,334.35
RS&H	\$4,757.36
Total	\$15,491.27

Should you have any questions, please do not hesitate to contact me at (407) 422-0353.

Sincerely,  
URS Corporation

Stephen Noppinger, P.E.  
Project Manager

URS Corporation  
315 East Robinson Street, Suite 245  
Orlando, FL 32801-1949  
Tel: 407.422.0353  
Fax: 407.423.2695

**CENTRAL FLORIDA EXPRESSWAY AUTHORITY**

Project Number: 253F

DESCRIPTION: SR 408/SR 417 Ultimate Interchange (CONTRACT AMENDMENT NO. 4)

URS Corporation  
CFX Contract No.: 000818

**SUMMARY FEE SHEET**

CONTRACT SECTION	ACTIVITY MANHOOURS	Project Manager	Deputy PM	Senior Engineer	Project Engineer	Engineer	Senior Technician	Clerical	Sr. Surveyor & Mapper	Surveyor & Mapper	Survey Technician	Total Manhours	Total Cost	Avg. Rate
402 & 409	Governmental Agencies & Public Meetings	0	0	0	0	0	0	0	0	0	0	0	\$0.00	
403	Preliminary Design Report-Review	0	0	0	0	0	0	0	0	0	0	0	\$0.00	
404	Surveys and Mapping	0	0	0	0	0	0	0	0	0	0	0	\$0.00	
405	Geotechnical Investigation	0	0	0	0	0	0	0	0	0	0	0	\$0.00	
406	Contamination Impact Analysis	0	0	0	0	0	0	0	0	0	0	0	\$0.00	
407	Pavement Design	0	0	0	0	0	0	0	0	0	0	0	\$0.00	
408	Borrow Pits	0	0	0	0	0	0	0	0	0	0	0	\$0.00	
410	Environmental Permits	0	0	0	0	0	0	0	0	0	0	0	\$0.00	
411	Utilities	0	0	0	0	0	0	0	0	0	0	0	\$0.00	
412	Roadway Design	2	2	7	11	7	5	3	0	0	0	37	\$1,654.59	\$44.72
413	Structures Design	0	0	0	0	0	0	0	0	0	0	0	\$0.00	
414	Drainage Design	2	2	6	11	8	8	1	0	0	0	38	\$1,681.24	\$44.24
415	Roadway Lighting	0	0	0	0	0	0	0	0	0	0	0	\$0.00	
416	Traffic Engineering	0	0	0	0	0	0	0	0	0	0	0	\$0.00	
417 & 418	Signal & Pav't Marking Plans	0	0	0	0	0	0	0	0	0	0	0	\$0.00	
419	Right-of-Way Surveys	0	0	0	0	0	0	0	0	0	0	0	\$0.00	
420	Cost Estimates	0	0	0	0	0	0	0	0	0	0	0	\$0.00	
421	Speical Provisions and Specifications	0	0	0	0	0	0	0	0	0	0	0	\$0.00	
422	Fiber Optic Network (FON)	0	0	0	0	0	0	0	0	0	0	0	\$0.00	
423	Toll Plazas	0	0	0	0	0	0	0	0	0	0	0	\$0.00	
424	Post Design Services	0	0	0	0	0	0	0	0	0	0	0	\$0.00	
700	Administration	0	0	0	0	0	0	0	0	0	0	0	\$0.00	
<b>TOTAL MANHOOURS</b>		<b>4</b>	<b>4</b>	<b>13</b>	<b>22</b>	<b>15</b>	<b>13</b>	<b>4</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>75</b>		
<b>WAGE RATES</b>		<b>\$86.24</b>	<b>\$55.36</b>	<b>\$61.78</b>	<b>\$41.40</b>	<b>\$30.11</b>	<b>\$37.92</b>	<b>\$27.72</b>	<b>\$52.16</b>	<b>\$30.80</b>	<b>\$30.80</b>	<b>N/A</b>		
<b>TOTAL DIRECT COSTS</b>		<b>\$344.96</b>	<b>\$221.44</b>	<b>\$803.14</b>	<b>\$910.80</b>	<b>\$451.65</b>	<b>\$492.96</b>	<b>\$110.88</b>	<b>\$0.00</b>	<b>\$0.00</b>	<b>\$0.00</b>	<b>N/A</b>	<b>\$3,335.83</b>	

**Salary Related Costs**

Total Activity Salary Costs	\$3,335.83
Overhead Activities	124.82%
Subtotal Salary Related Costs (Limiting Amount)	\$7,499.61

Operating Margin (Fixed Fee) 12.00% \$899.95

**Expenses**

Direct Reimbursables (Out-of-Pocket)	\$0.00
Permit Fees	\$0.00
Subtotal Expenses (Lump Sum)	\$0.00
Subtotal URS	\$8,399.56

**Subconsultants**

WBQ	\$2,334.35
RS&H	\$4,757.36
Subtotal Subconsultants (Limiting Amount)	\$7,091.71

Fee Estimate for Amendment 4 \$15,491.27

Remaining URS Survey Fee

**GRAND TOTAL (Maximum Limiting Amount) \$15,491.27**

CENTRAL FLORIDA EXPRESSWAY AUTHORITY						URS Corporation	
Project Number: 253F						CFX Contract No.: 000818	
DESCRIPTION: SR 408/SR 417 Ultimate Interchange (CONTRACT AMENDMENT NO. 4)							
Orange County							
HIGHWAY TASK LIST							
Governmental Agencies & Public Meetings							
Section 402 & 409							
Task	Basis of Estimate	Number of Units	Hours per Unit	Number of Sheets	Total Hours	CADD Hours %	Remarks
1. Coordination w/ FDOT	LS			N/A	0		
2. Coordination w/ City of Orlando	LS			N/A	0		
3. Coordination w/ Orange County	LS			N/A	0		
4. Coordination w/ SJWMD	LS			N/A	0		
5. FDEP	LS			N/A	0		
6. Public Meetings	EA			N/A	0		
7. Neighborhood Assoc. Meetings	EA			N/A	0		
8. Authority Meetings	EA			N/A	0		
9. City of Orlando Meetings	EA			N/A	0		
10. Orange County Meetings	EA			N/A	0		
11. Preparation of Rdway/Bridge Exhibits	EA			N/A	0		
12. Other Agency Coordination & Meeting	LS			N/A	0		
TOTAL					0		

Environmental Permits Section 410:							
Task	Basis of Estimate	Number of Units	Hours per Unit	Number of Sheets	Total Hours	CADD Hours %	Remarks
1. Pre-App Coord with CFX & RS&H	LS			N/A	0		
2. Prepare ERP Application	LS			N/A	0		
3. RAI Response	LS			N/A	0		
4. Aerial Map	EA			0	0		
5. Prepare Local Permits	LS			N/A	0		
6. Landowner Addresses	LS			N/A	0		
7. Mitigation Plans	Sheet				0		
<b>SUBTOTAL</b>					<b>0</b>	<b>0</b>	
8. Quality Control	5%	1	N/A	N/A	0		
9. Supervision	5%	1	N/A	N/A	0		
10. Preliminary Field Review	EA	1	0	N/A	0		
11. Agency Field Review	EA	1	0	N/A	0		
12. Agency Pre-App Meeting	EA	1	0	N/A	0		
<b>TOTAL</b>					<b>0</b>	<b>0</b>	



CENTRAL FLORIDA EXPRESSWAY AUTHORITY
Project Number: 253F
DESCRIPTION: SR 408/SR 417 Ultimate Interchange (CONTRACT AMENDMENT NO. 4)
Orange County

URS Corporation
CFX Contract No.: 000818

HIGHWAY TASK LIST

Drainage Design
Section 414

Task	Basis of Estimate	Number of Units	Hours per Unit	Number of Sheets	Total Hours	CADD Hours %	Remarks
1. Determine Base Clearance Elev	Per Loc.	0	0	N/A	0		
2. Pond Siting Analysis & Report	Per Basin			N/A	0		
3. Design of Cross Drains	EA	1	8	N/A	8		Re-examine and revise calculations
4. Design of Roadway Ditches	Ditch/Mile	0.25	20	N/A	5		
5. Design of Outfalls	EA	0		N/A	0		
6. Design of Pond	EA			N/A	0		
7. Design of Ditch Treatment	Per System	0	0	N/A	0		
8. Design of Flood Plain Comp Area	EA	0	0	N/A	0		
9. Design of Storm Drains	EA	3	3	N/A	9		
10. Optional Culvert Material	LS	0	0	N/A	0		
11. French Drain Systems	Per 1K Ft	0	0	N/A	0		
12. Drainage Wells	EA	0	0	N/A	0		
13. Drainage Design Doc Report	LS	1	8	N/A	8		
14. Bridge Hydraulic Report	EA	0	0	N/A	0		





CENTRAL FLORIDA EXPRESSWAY AUTHORITY						URS Corporation	
Project Number: 253F						CFX Contract No.: 000818	
DESCRIPTION: SR 408/SR 417 Ultimate Interchange (CONTRACT AMENDMENT NO. 4)							
Orange County							
HIGHWAY TASK LIST							
Roadway Lighting							
Section 415							
Task	Basis of Estimate	Number of Units	Hours per Unit	Number of Sheets	Total Hours	CADD Hours %	Remarks
1. Lighting Justification Report	EA			N/A	0		
2. Voltage Drop Calculations	LS			N/A	0		Analysis and Voltage drop calculation for both feeder and branch circuits for Phase I.
3. Reference & Master Design Files	LS			N/A	0		Updating master Lighting design file to reflect Phase I design.
4. Temporary Lighting Analysis	LS			N/A	0		
5. Design Documentation	LS			N/A	0		includes compiling all design documentation on a CD ROM and providing with all Cad files for final submittal package. Includes hours for new lighting photometrics and print-outs.
6. Key Sheet	Sheet			0	0		Revise Key with new sheet numbers remove OOCEA reference, update CFB board members.
7. Summary of Pay Items	Sheet			0	0		
8. Tabulation of Quantities	Sheet			0	0		Revise and edit
9. General Notes/Pay Item Notes	Sheet			0	0		Revise and edit
10. Pole Data	Sheet			0	0		Remove and revise pole data notes to Phase I design.
11. Service Point Details	Sheet			0	0		Revise per Phase I design plus new detail
12. Project Layout	Sheet			0	0		NA
13. Plan Sheet	Sheet			0	0		Revise per Phase I design.
14. Special Details	Sheet			0	0		Ramp Flashing Beacon modification
15. Temporary Lighting Data & Detail	Sheet			0	0		NA
SUBTOTAL					0	0	0
16. Quality Control	5%	1	N/A	N/A	0		
17. Supervision	5%	1	N/A	N/A	0		
18. Field Review	EA			N/A	0		1 Field Visit - 1 person/8hrs.
19. Coordination with Utility Company	LS			N/A	0		
TOTAL					0	0	0

CENTRAL FLORIDA EXPRESSWAY AUTHORITY					URS Corporation		
Project Number: 253F					CFX Contract No.: 000818		
DESCRIPTION: SR 408/SR 417 Ultimate Interchange (CONTRACT AMENDMENT NO. 4)							
Orange County							
HIGHWAY TASK LIST							
Cost Estimates							
Section 420							
Task	Basis of Estimate	Number of Units	Hours per Unit	Number of Sheets	Total Hours	CADD Hours %	Remarks
1. Initial Setup	LS			N/A	0		
2. 30% Construction Cost Est.	LS			N/A	0		
3. 60% Construction Cost Est.	LS			N/A	0		
4. 90% Construction Cost Est.	LS			N/A	0		
5. 100% Construction Cost Est.	LS			N/A	0		
6. Pre-Bid Construction Cost Est.	LS			N/A	0		
7. Final Construction Cost Est.	LS			N/A	0		
SUBTOTAL					0	0	
6. Quality Control	5%	1	N/A	N/A	0		
7.. Supervision	5%	1	N/A	N/A	0		
TOTAL					0	0	

Special Provisions and Specifications							
Section 421							
Task	Basis of Estimate	Number of Units	Hours per Unit	Number of Sheets	Total Hours	CADD Hours %	Remarks
1. Roadway	LS			N/A	0		
2. Drainage	LS			N/A	0		
3. Structures	LS			N/A	0		
4. Signing & Pavement Marking	LS			N/A	0		
5. Signalization/FON	LS			N/A	0		
<b>SUBTOTAL</b>				0	0	0	
6. Quality Control	5%	1	N/A	N/A	0		
7. Supervision	5%	1	N/A	N/A	0		
<b>TOTAL</b>				0	0	0	

**CENTRAL FLORIDA EXPRESSWAY AUTHORITY**

Project Number: 253F

DESCRIPTION: SR 408/SR 417 Ultimate Interchange (CONTRACT AMENDMENT NO. 4)  
Orange County

URS Corporation

CFX Contract No.: 000818

**HIGHWAY TASK LIST**

Fiber Optic Network (FON)

Section 422

Task	Basis of Estimate	Number of Units	Hours per Unit	Number of Sheets	Total Hours	CADD Hours %	Remarks
1. ITS Analysis	LS			N/A	0		
2. Communications Plan Analysis	LS			N/A	0		
3. Lightning Protection Analysis	LS			N/A			
4. Power Subsystem	LS			N/A	0		
5. Voltage Drop Calculations	LS			N/A	0		
6. Design Documentation	LS			N/A	0		
7. Existing ITS System	LS			N/A	0		
8. Queue Analysis	LS			N/A	0		
9. Reference and Master ITS Design File	LS			N/A	0		
10. Reference and Master Communications Design File	LS			N/A	0		
11. Pole Elevation Analysis	LS			N/A	0		
12. Sign Panel Design Analysis	LS			N/A	0		
13. Quantities	LS				0		
14. Cost Estimate				N/A	0		
15. Technical Special Provisions				N/A	0		
16. Other ITS Analysis				N/A	0		
17. Key Sheet	Sheet			0	0		
19. Tabulation of Quantities	Sheet			0	0		
20. General Notes	Sheet			0	0		
21. Project Layout	Sheet			0	0		
22. Typical and Special Details	Sheet			0	0		

CENTRAL FLORIDA EXPRESSWAY AUTHORITY
Project Number: 253F
DESCRIPTION: SR 408/SR 417 Ultimate Interchange (CONTRACT AMENDMENT NO. 4)
Orange County

URS Corporation
CFX Contract No.: 000818

HIGHWAY TASK LIST

23. Plan Sheet	Sheet			0	0		
24. ITS Communications Plans	Sheet			0	0		
25. Fiber Optic Splice Diagrams	EA			0	0		
26. Lightning Protection Plans	EA			0	0		
27. Cross Sections	EA			0	0		
28. Guide Sign Work Sheet	EA			0	0		
29. Speical Service Point Details	EA			0	0		
30. Strain Pole Schedule	PI			0	0		
31.Overhead / Cantilever Sign Structures	EA			0	0		
32. Other Overhead Sign Structures (Long Span, Monotube, etc.)	EA			0	0		
33. Temporary FON	EA			0	0		
34. Interim Standards	LS			0			
SUBTOTAL				0	0		
35. Quality Control	5%	1	N/A	N/A	0		
36. Supervision	5%	1	N/A	N/A	0		
37. Power Company Coord.	LS			N/A	0		
38. Technical Meetings	EA			N/A	0		
39. Field Review	EA			N/A	0		
TOTAL				0	0		

ORLANDO-ORANGE COUNTY EXPRESSWAY AUTHORITY												WBQ Design & Engineering		
Project Number: 253F												OOCEA Contract No.: 000818		
DESCRIPTION: SR 408/SR 417 Ultimate Interchange - Phase I														
SUMMARY FEE SHEET (SUBCONSULTANT - WBO)														
CONTRACT SECTION	ACTIVITY MANHOURS	Project Manager	Chief Engineer	Senior Engineer	Project Engineer	Engineer		Clerical	Sr. Surveyor & Mapper	Surveyor & Mapper	Survey Technician	Total Manhours	Total Cost	Avg. Rate
402 & 409	Governmental Agencies & Public Meetings	0	0	0	0	0	0	0	0	0	0	0	\$0.00	
403	Preliminary Design Report-Review	0	0	0	0	0	0	0	0	0	0	0	\$0.00	
404	Surveys and Mapping	0	0	0	0	0	0	0	0	0	0	0	\$0.00	
405	Geotechnical Investigation	0	0	0	0	0	0	0	0	0	0	0	\$0.00	
406	Contamination Impact Analysis	0	0	0	0	0	0	0	0	0	0	0	\$0.00	
407	Pavement Design	0	0	0	0	0	0	0	0	0	0	0	\$0.00	
408	Borrow Pits	0	0	0	0	0	0	0	0	0	0	0	\$0.00	
410	Environmental Permits	0	0	0	0	0	0	0	0	0	0	0	\$0.00	
411	Utilities	0	0	0	0	0	0	0	0	0	0	0	\$0.00	
412	Roadway Design	0	0	0	0	0	0	0	0	0	0	0	\$0.00	
413	Structures Design	0	0	0	0	0	0	0	0	0	0	0	\$0.00	
414	Drainage Design	0	0	0	0	0	0	0	0	0	0	0	\$0.00	
415	Roadway Lighting	0	0	0	0	0	0	0	0	0	0	0	\$0.00	
416	Traffic Engineering	1	2	5	4	4	0	0	0	0	0	16	\$697.78	\$43.61
417 & 418	Signal & Pav't Marking Plans	0	0	0	0	0	0	0	0	0	0	0	\$0.00	
419	Right-of-Way Surveys	0	0	0	0	0	0	0	0	0	0	0	\$0.00	
420	Cost Estimates	0	0	0	0	0	0	0	0	0	0	0	\$0.00	
421	Speical Provisions and Specifications	0	0	0	0	0	0	0	0	0	0	0	\$0.00	
422	Fiber Optic Network (FON)	0	0	0	0	0	0	0	0	0	0	0	\$0.00	
423	Toll Plazas	0	0	0	0	0	0	0	0	0	0	0	\$0.00	
424	Post Design Services	0	0	0	0	0	0	0	0	0	0	0	\$0.00	
700	Administration	0	0	0	0	0	0	0	0	0	0	0	\$0.00	
TOTAL MANHOURS		1	2	5	4	4	0	0	0	0	0	16	\$697.78	\$43.61
WAGE RATES		\$86.99	\$63.13	\$48.05	\$33.17	\$27.90	\$0.00	\$23.24	\$0.00	\$0.00	\$0.00	N/A	N/A	
TOTAL DIRECT COSTS		\$86.99	\$126.26	\$240.25	\$132.68	\$111.60	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	N/A	\$697.78	

Salary Related Costs		
Total Activity Salary Costs		\$697.78
Overhead Activities	209.04%	\$1,458.64
Subtotal Salary Related Costs (Limiting Amount)		\$2,156.42
Operating Margin (Fixed Fee) 25.50% **		
** (Equivalent Lump Sum for Operating Margin 8.26%)		\$177.93
Expenses		
Direct Reimbursables (Out-of-Pocket)		\$0.00
Permit Fees		\$0.00
Subtotal Expenses (Lump Sum)		\$0.00
Subconsultants		
		\$0.00
Subtotal Subconsultants (Limiting Amount)		\$0.00
WBQ TOTAL (Maximum Limiting Amount)		\$2,334.35

Traffic Engineering  
Section 416

Task	Basis of Estimate	Number of Units	Hours per Unit	Number of Sheets	Total Hours	CADD Hours %	Remarks
1. Traffic Data Collection	LS	0	0	N/A	0		
2. TCP Design Analysis	LS	0	0	N/A	0		
3. Temp Drainage Analysis	LS	0	0	N/A	0		
4. Master TCP Design Files	LS	0	0	N/A	0		
4. TCP Cross Sections (x-sections)	Sheet	4	0.25	1	1		
5. General Notes/Const. Sequence	Sheet	1	1	1	1		
6. MOT Details	Sheet	0	0	0	0		
7. Tabulation of Quantities & Cost Est.	Sheet	0	0	0	0		
8. TCP Plan Sheets	Sheet	4	3	4	12		
9. Phase Layout Detail	Sheet	0	0	0	0		
10. Temporary Signal	Sheet			0	0		
11. Detour Routing	LS	0	0	0	0		
<b>SUBTOTAL</b>				<b>6</b>	<b>14</b>	<b>0</b>	
13. Quality Control	5%	1	N/A	N/A	1		
14. Supervision	5%	1	N/A	N/A	1		
15. Bi-Weekly OOCEA meetings	LS	0	0	N/A	0		
16. Field Review	LS	0	0	N/A	0		
17. Coordination w/ City & County	LS	0	0	N/A	0		
18. Design Documentation	LS	0	0	N/A	0		
<b>TOTAL</b>				<b>6</b>	<b>16</b>	<b>0</b>	

Phase I S.A. #1 Fee Estimate  
Update S&PM Plans to Current CFX Standards

RS&H

SUMMARY FEE SHEET

CONTRACT SECTION	ACTIVITY MANHOURS	Project Manager	Chief Engineer	Senior Engineer	Engineer Designer	Engineering Intern	Roadway Technician	Clerical	Sr. Surveyor & Mapper	Surveyor & Mapper	Survey Technician	Total Manhours	Total Cost	Avg. Rate
402 & 409	Governmental Agencies & Public Meetings													
403	Preliminary Design Report-Review													
404	Surveys and Mapping													
405	Geotechnical Investigation													
406	Contamination Impact Analysis													
407	Pavement Design													
408	Borrow Pits													
410	Environmental Permits													
411	Utilities													
412	Roadway Design													
413	Structures Design													
414	Drainage Design													
415	Roadway Lighting													
416	Traffic Engineering													
417 & 418	Signal & Pavt Marking Plans	4	0	0	18	18	0	0	0	0	0	40	\$1,505.78	\$37.64
419	Right-of-Way Surveys													
420	Cost Estimates													
421	Speical Provisions and Specifications													
422	Fiber Optic Network (FON)													
423	Toll Plazas													
424	Post Design Services													
700	Administration													
TOTAL MANHOURS		4	0	0	18	18	0	0	0	0	0	40	\$1,505.78	\$37.64
WAGE RATES		\$69.32	\$67.37	\$57.44	\$39.33	\$28.92	\$0.00	\$22.04	\$0.00	\$0.00	\$0.00			
TOTAL DIRECT COSTS		\$277.28	\$0.00	\$0.00	\$707.94	\$520.56	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00		\$1,505.78	

Salary Related Costs

Total Activity Salary Costs	\$1,505.78
Overhead Activities	187.94%
Subtotal Salary Related Costs (Limiting Amount)	\$4,335.74

Operating Margin (Fixed Fee) 28.00% \$421.62

Expenses

Direct Reimbursables (Out-of-Pocket)	\$0.00
Permit Fees	\$0.00
Subtotal Expenses (Lump Sum)	\$0.00

GRAND TOTAL (Maximum Limiting Amount) \$4,757.36



**Project Activity 20: Signing and Pavement Marking Plans**

Estimator: Gonzalez, R

RS&H

Task No.	Task	Scale	Units	No of Units	Hours/ Unit	No. of Sheets	Total Hours	Comments
20.1	Key Sheet		Sheet	0	0	0	0	
20.2	Summary of Pay Items Including TRNS-Port Input		LS	0	0		0	
20.3	Tabulation of Quantities		LS	1	6		6	Update summary of quantities based on requested revisions
20.4	General Notes/Pay Item Notes		Sheet	0	0		0	
20.5	Project Layout		Sheet	0	0		0	
20.6	Plan Sheet		LS	1	24		24	Update plans to change from PPRT to Thermoplastic
20.7	Typical Details		EA	1	4		4	Update Pavement Markings (Arrows approaching ramps)
20.8	Guide Sign Worksheet(s)		EA	1	4		4	Overlays for TM2 Route Shields
20.9	Traffic Monitoring Site		EA	0	0		0	
20.10	Cross Sections		EA	0	0		0	
20.11	Special Service Point Details		EA	0	0		0	
20.12	Special Details		LS	0	0		0	
20.13	Interim Standards		LS	0	0		0	
<b>Signing and Pavement Marking Plans Technical Subtotal</b>						<b>0</b>	<b>38</b>	
20.14	Quality Assurance/Quality Control		LS	%	5%		2	
20.15	Supervision		LS	%	0%		0	
<b>20. Signing and Pavement Marking Plans Total</b>						<b>0</b>	<b>40</b>	