


CENTRAL FLORIDA EXPRESSWAY AUTHORITY

MEMORANDUM

TO: CFX Board Members

FROM: Claude Miller 
Director of Procurement

DATE: November 17, 2015

RE: Supplemental Agreement No. 6 for Atkins North America, Inc.,
Post Design Services for S. R. 429 (Wekiva Parkway) Systems Interchange
Project No. 429-204, Contract No. 000858

Board approval is requested for Supplemental Agreement No. 6 with Atkins North America, Inc., in the amount of \$1,115,000.00 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 CFX for this project.

| | |
|--|------------------------|
| Original Contract Amount | \$ 5,150,000.00 |
| Amount of Supplemental Agreement No. 1 | \$ 145,000.00 |
| Amount of Supplemental Agreement No. 2 | \$ 790,000.00 |
| Amount of Supplemental Agreement No. 3 | \$ 0.00 |
| Amount of Supplemental Agreement No. 4 | \$ 0.00 |
| Amount of Supplemental Agreement No. 5 | \$ 0.00 |
| Amount of This Supplemental Agreement | <u>\$ 1,115,000.00</u> |
| Total Revised Contract Amount | \$ 7,200,000.00 |

SUPPLEMENTAL AGREEMENT NO. 6
TO
AGREEMENT FOR PROFESSIONAL SERVICES
POST DESIGN SERVICES (FOR 429-204)

S.R. 429 (Wekiva Parkway) Systems Interchange

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 HNTB CORPORATION, hereinafter called the "CONSULTANT."

WHEREAS, Section 4.27 of Exhibit "A" of the Agreement for Professional Services between the AUTHORITY and the CONSULTANT, dated the 27th day of June 2012 provides that after completion of the services outlined in Exhibit "A" for Project Number 429-204 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 Wekiva Parkway Corridor Consultant's correspondence to the AUTHORITY dated November 17, 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 Wekiva Parkway Corridor Consultant's correspondence to the AUTHORITY dated November 17, 2015. Direct expenses will be reimbursed for local travel only (per mile). The maximum fee for Post Design Services shall be \$1,115,000.00. This maximum fee includes an Allowance of \$2,705.18 to be approved for use by the CONSULTANT at the sole discretion of the AUTHORITY.

3. Section 4.27 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 quadruplicate, the day and year first above written.

CENTRAL FLORIDA
EXPRESSWAY AUTHORITY

Witness: _____
Assistant Secretary

By: _____
Director of Procurement

ATKINS NORTH AMERICA, INC.

Witness: _____
Print Name:
Title:

By: _____
Print Name:
Title:

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.

Exhibit "A"

Project 429-204

S.R. 429 (Wekiva Parkway) Systems Interchange Post-Design Scope of Services (Section 4.27)

4.27 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.



CH2M
225 E. Robinson St
Suite 505
Orlando, FL 32801
www.ch2m.com

Mr. Glenn Pressimone
Central Florida Expressway Authority
4974 ORL Tower Road
Orlando, FL 32807

November 17, 2015

Subject: Wekiva Parkway
Contract No. 000858
Project No. 429-204
Post-Design Services Supplemental Agreement

Dear Mr. Pressimone:

As the project transitions from Design to Construction, we have requested and received a Post-Design Services proposal for the above referenced contract. The consultant, Atkins North America (Atkins), has submitted a Post-Design Services amendment package to address the post-design services required since the Bid Package was submitted.

We have reviewed the attached proposal from Atkins, and have determined the proposal is consistent with the original contract terms, category rates and post design services multipliers. Atkins and their subconsultants have elected to request new billing rates consistent with current employee rates and their employee rosters are included with the package. The amendment addresses all anticipated scope of work.

The package submitted and reviewed is requesting a fee of \$1,112,294.82. It is our recommendation an amount of \$1,115,000.00 be submitted for approval to the Board in order to account for a contingency amount.

If you should have any questions or need additional information, please do not hesitate to contact me.

Regards,
CH2M HILL

A handwritten signature in black ink, appearing to read 'Scott L. Bear', written over the printed name.

Scott L. Bear
Project Manager

cc: File (w/attached)

Atkins

Prime Consultant
Wekiva Section 429-204
Post Design Fee Proposal

Date: 11/17/2015

Total Fee: \$1,112,294.82

PRIME CONSULTANT: Adkins

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Wekiva Parkway 429-204
Central Florida Expressway Authority

POST DESIGN SERVICES

Activity C: Pre-Bid Conference

| Task | Basis of Estimate | Number of Units | Hours per Unit | Number of Sheets | Total Hours | CADD Hours | Remarks |
|-------------------------------|-------------------|-----------------|----------------|------------------|-------------|------------|-------------------------------------|
| 1. Attend pre-bid conference | EA | 1 | 10 | | 10 | | 3-4 Atkins attendees (2.5 hrs each) |
| 2. Walk project site with CEI | EA | 1 | 4 | | 4 | | 2 persons (2 hrs each) |
| 3. | | | | | | | |
| 4. | | | | | | | |
| 5. | | | | | | | |
| 6. | | | | | | | |
| 7. | | | | | | | |
| 8. | | | | | | | |
| 9. | | | | | | | |
| 10. | | | | | | | |
| Subtotal: | | | | 0 | 14 | 0 | |
| 11. Quality Control | 5% | | N/A | N/A | N/A | 0 | |
| 12. Supervision | 5% | | N/A | N/A | N/A | 0 | |
| Totals: | | | | 0 | 14 | 0 | |

Wekiva Parkway 429-204
Central Florida Expressway Authority

POST DESIGN SERVICES

Activity D: Addenda

| Task | Basis of Estimate | Number of Units | Hours per Unit | Number of Sheets | Total Hours | CADD Hours | Remarks |
|---------------------|-------------------|-----------------|----------------|------------------|-------------|------------|--|
| 1. Addenda | EA | 2 | 30 | | 60 | | Assume 2 addenda, 30 hours per each (plans, quantities, etc..) |
| 2. | | | | | | | |
| 3. | | | | | | | |
| 4. | | | | | | | |
| 5. | | | | | | | |
| 6. | | | | | | | |
| 7. | | | | | | | |
| 8. | | | | | | | |
| 9. | | | | | | | |
| 10. | | | | | | | |
| Subtotal: | | | | 0 | 60 | 0 | |
| 11. Quality Control | 5% | | N/A | N/A | 3 | 0 | |
| 12. Supervision | 5% | | N/A | N/A | N/A | 0 | |
| Totals: | | | | 0 | 63 | 0 | |

POST DESIGN SERVICES

Activity E: Field Visits

| Task | Basis of Estimate | Number of Units | Hours per Unit | Number of Sheets | Total Hours | CADD Hours | Remarks |
|-----------------------------------|-------------------|-----------------|----------------|------------------|-------------|------------|---|
| 1. Field Visits | EA | 24 | 4 | | 96 | | 3 hours per visit plus documentation and travel - 4 hours per visit |
| 2. Aesthetics coord (site visits) | EA | 4 | 4 | | 16 | | |
| 3. | | | | | | | |
| 4. | | | | | | | |
| 5. | | | | | | | |
| 6. | | | | | | | |
| 7. | | | | | | | |
| 8. | | | | | | | |
| 9. | | | | | | | |
| 10. | | | | | | | |
| Subtotal: | | | | 0 | 112 | 0 | |
| 11. Quality Control | 5% | | N/A | N/A | N/A | 0 | |
| 12. Supervision | 5% | | N/A | N/A | N/A | 0 | |
| Totals: | | | | 0 | 112 | 0 | |

POST DESIGN SERVICES

Activity F: Shop Drawing Reviews

| Task | Basis of Estimate | Number of Units | Hours per Unit | Number of Sheets | Total Hours | CADD Hours | Remarks |
|--|-------------------|-----------------|----------------|------------------|--------------|------------|--|
| 1. Roadway | LS | 1 | 150 | N/A | 150 | 0 | See activity F breakdwon |
| 2. Drainage | LS | 1 | 242 | N/A | 242 | 0 | See activity F breakdwon |
| 3. Fiber Optic Network & Related Items | LS | 1 | 117 | N/A | 117 | 0 | See activity F breakdwon |
| 4. Signing and Marking | LS | 1 | 12 | N/A | 12 | 0 | Atkins back check WBQ |
| 5. Structures | LS | 1 | 3644 | N/A | 3,644 | 0 | See activity F breakdwon |
| 6. Lighting | LS | 1 | 45 | N/A | 45 | 0 | See activity F breakdwon |
| 7. Utilities | LS | 1 | 4 | N/A | 4 | 0 | Primarily WBQ efforts, Atkins efforts for coord and processing only |
| 8. Aesthetic Elements | EA | 1 | 51 | N/A | 51 | 0 | |
| 9. Geotechnical Elements | LS | 1 | 8 | N/A | 8 | 0 | Geotech proposals, Atkins efforts for coordination and processing only |
| 10. | | | | | | | |
| Subtotal: | | | | 0 | 4,273 | 0 | |
| 11. Quality Control | | | N/A | N/A | | 0 | included in individual line items |
| 12. Supervision | | | N/A | N/A | | 0 | " |
| Totals: | | | | 0 | 4,273 | 0 | |

Wekiva Parkway 429-204
Central Florida Expressway Authority

POST DESIGN SERVICES

Activity G: Requests for Information

| Task | Basis of Estimate | Number of Units | Hours per Unit | Number of Sheets | Total Hours | CADD Hours | Remarks |
|--|-------------------|-----------------|----------------|------------------|-------------|------------|---|
| 1. Roadway | EA | 72 | 3 | N/A | 216 | 0 | 3 per month |
| 2. Drainage | EA | 48 | 3 | N/A | 144 | 0 | 2 per month |
| 3. Fiber Optic Network & Related Items | EA | 20 | 3 | N/A | 60 | 0 | assumed number of RFIs for FON work and testing requirements |
| 4. Signing and Marking | EA | | | N/A | 0 | 0 | WBQ |
| 5. Structures | EA | 70 | 3 | N/A | 210 | 0 | Assumed 10 per bridge, except Ramp K assumed 20; (5 x 10 = 50 + 20 = 70) |
| 6. Lighting | EA | 6 | 3 | N/A | 18 | 0 | |
| 7. Utilities | EA | | | N/A | 0 | 0 | WBQ |
| 8. Aesthetic Elements | EA | 6 | 3 | N/A | 18 | 0 | |
| 9. Geotechnical Elements | EA | | | N/A | 0 | 0 | GEC, Ardaman, Antillian |
| 10. | | | | | | | |
| Subtotal: | | | | 0 | 666 | 0 | |
| 11. Quality Control | 5% | | N/A | N/A | 33 | 0 | |
| 12. Supervision | 5% | | N/A | N/A | 33 | 0 | |
| Totals: | | | | 0 | 733 | 0 | |

Wekiva Parkway 429-204
Central Florida Expressway Authority

POST DESIGN SERVICES

Activity H: Meetings

| Task | Basis of Estimate | Number of Units | Hours per Unit | Number of Sheets | Total Hours | CADD Hours | Remarks |
|-----------------------------|-------------------|-----------------|----------------|------------------|-------------|------------|---|
| 1. Construction NTP Meeting | EA | 1 | 6 | | 6 | | 2 attendees - PM & 1 key discipline (3 hrs each) |
| 2. Construction Meetings | EA | 15 | 3 | | 45 | | once per month, plus 2 extra. |
| 3. Partnering Meetings | EA | 8 | 4 | | 32 | | assumed quarterly, attended by PM or other delegate |
| 4. Pre-award meeting | EA | 1 | 12 | | 12 | | up to 4 attendees - PM, rdwy, drng, and structures (3 hrs each) |
| 5. | | | | | | | |
| 6. | | | | | | | |
| 7. | | | | | | | |
| 8. | | | | | | | |
| 9. | | | | | | | |
| 10. | | | | | | | |
| Subtotal: | | | | 0 | 95 | 0 | |
| 11. Quality Control | 5% | | N/A | N/A | N/A | 0 | |
| 12. Supervision | 5% | | N/A | N/A | N/A | 0 | |
| Totals: | | | | 0 | 95 | 0 | |

Wekiva Parkway 429-204
Central Florida Expressway Authority

POST DESIGN SERVICES

Activity I: Plan Revisions

| Task | Basis of Estimate | Number of Units | Hours per Unit | Number of Sheets | Total Hours | CADD Hours | Remarks |
|--|-------------------|-----------------|----------------|------------------|-------------|------------|---|
| 1. Roadway | EA | 8 | 20 | N/A | 160 | | |
| 2. Drainage | EA | 6 | 12 | N/A | 72 | | |
| 3. Fiber Optic Network & Related Items | EA | 4 | 16 | N/A | 64 | | |
| 4. Signing and Marking | EA | | | N/A | 0 | | WBQ |
| 5. Structures | EA | 20 | 15 | N/A | 300 | | Assume 2 sheet revisions per bridge, except Ramp K at 10. (2 x 5 = 10 + 10 = 20) |
| 6. Lighting | EA | | | N/A | 0 | | |
| 7. Utilities | EA | | | N/A | 0 | | N/A |
| 8. Aesthetic Elements | EA | 1 | 4 | N/A | 4 | | |
| 9. Geotechnical Elements | EA | | | N/A | 0 | | Subs only |
| 10. | | | | | | | |
| Subtotal: | | | | 0 | 600 | | |
| 11. Quality Control | 5% | | N/A | N/A | 30 | | |
| 12. Supervision | 5% | | N/A | N/A | 30 | | |
| Totals: | | | | 0 | 660 | | |

Wekiva Parkway 429-204
Central Florida Expressway Authority

POST DESIGN SERVICES

Activity J: Bridge Load Ratings

| Task | Basis of Estimate | Number of Units | Hours per Unit | Number of Sheets | Total Hours | CADD Hours | Remarks |
|---------------------|-------------------|-----------------|----------------|------------------|-------------|------------|---------|
| 1. Bridge 750867 | EA | 1 | 24 | N/A | 24 | 0 | |
| 2. Bridge 750863 | EA | 1 | 36 | N/A | 36 | 0 | |
| 3. Bridge 750864 | EA | 1 | 36 | N/A | 36 | 0 | |
| 4. Bridge 750868 | EA | 17 | 27.5 | N/A | 468 | 0 | |
| 5. Bridge 750869 | EA | 1 | 24 | N/A | 24 | 0 | |
| 6. Bridge 750865 | EA | 1 | 24 | N/A | 24 | 0 | |
| 7. Bridge 750866 | EA | 1 | 24 | N/A | 24 | 0 | |
| 8. Bridge 750870 | EA | 1 | 24 | N/A | 24 | 0 | |
| 9. | EA | | | N/A | 0 | 0 | |
| 10. | | | | | | | |
| Subtotal: | | | | 0 | 660 | 0 | |
| 11. Quality Control | 5% | | N/A | N/A | 33 | 0 | |
| 12. Supervision | 5% | | N/A | N/A | 33 | 0 | |
| Totals: | | | | 0 | 726 | 0 | |

POST DESIGN SERVICES

Activity K: Geotechnical Services

| Task | Basis of Estimate | Number of Units | Hours per Unit | Number of Sheets | Total Hours | CADD Hours | Remarks |
|---------------------|-------------------|-----------------|----------------|------------------|-------------|------------|--------------|
| 1. | EA | | | N/A | 0 | 0 | Sub services |
| 2. | EA | | | N/A | 0 | 0 | |
| 3. | EA | | | N/A | 0 | 0 | |
| 4. | EA | | | N/A | 0 | 0 | |
| 5. | EA | | | N/A | 0 | 0 | |
| 6. | EA | | | N/A | 0 | 0 | |
| 7. | EA | | | N/A | 0 | 0 | |
| 8. | EA | | | N/A | 0 | 0 | |
| 9. | EA | | | N/A | 0 | 0 | |
| 10. | | | | | | | |
| Subtotal: | | | | 0 | 0 | 0 | |
| 11. Quality Control | 5% | | N/A | N/A | 0 | 0 | |
| 12. Supervision | 5% | | N/A | N/A | 0 | 0 | |
| Totals: | | | | 0 | 0 | 0 | |

Wekiva Parkway 429-204
Central Florida Expressway Authority

POST DESIGN SERVICES

Activity L: Utilities

| Task | Basis of Estimate | Number of Units | Hours per Unit | Number of Sheets | Total Hours | CADD Hours | Remarks |
|---------------------|-------------------|-----------------|----------------|------------------|-------------|------------|--------------|
| 1. | EA | | | N/A | 0 | 0 | WBQ proposal |
| 10. | | | | | | | |
| Subtotal: | | | | 0 | 0 | 0 | |
| 11. Quality Control | 5% | | N/A | N/A | 0 | 0 | |
| 12. Supervision | 5% | | N/A | N/A | 0 | 0 | |
| Totals: | | | | 0 | 0 | 0 | |

Wekiva Parkway 429-204
Central Florida Expressway Authority

POST DESIGN SERVICES

Activity M: Record Drawings

| Task | Basis of Estimate | Number of Units | Hours per Unit | Number of Sheets | Total Hours | CADD Hours | Remarks |
|------------------------------|-------------------|-----------------|----------------|------------------|-------------|------------|---|
| 1. Roadway | LS | 1 | 100 | N/A | 100 | | |
| 2. Drainage | LS | 1 | 60 | N/A | 60 | | |
| 3. Fiber Optic Network | LS | 1 | 40 | N/A | 40 | | |
| 4. Signing and Marking | | | | N/A | 0 | | WBQ efforts |
| 5. Structures | LS | 1 | 100 | N/A | 100 | | |
| 6. Lighting | LS | 1 | 24 | N/A | 24 | | |
| 7. Utility Adjustment sheets | LS | 1 | 30 | N/A | 30 | | |
| 8. Aesthetic Elements | LS | 1 | 2 | N/A | 2 | | |
| 9. | | | | | | | |
| 10. | | | | | | | |
| Subtotal: | | | | 0 | 356 | | |
| 11. Quality Control | 5% | | N/A | N/A | 18 | | |
| 12. Supervision | 5% | | N/A | N/A | 18 | | |
| Totals: | | | | 0 | 392 | | 1150 Atkins sheets in the set +/-Dollars!C368 |

Wekiva Parkway 429-204
Central Florida Expressway Authority

POST DESIGN SERVICES

Activity N: Project Management

| Task | Basis of Estimate | Number of Units | Hours per Unit | Number of Sheets | Total Hours | CADD Hours | Remarks |
|--|-------------------|-----------------|----------------|------------------|-------------|------------|---------|
| 1. Monthly progress reports & invoices | Month | 24 | 2 | | 48 | | |
| 2. Subconsultant coordination | Month | 24 | 2 | | 48 | | |
| 3. Project documentation | Week | 104 | 1.5 | | 156 | | |
| 4. | | | | | | | |
| 5. | | | | | | | |
| 6. | | | | | | | |
| 7. | | | | | | | |
| 8. | | | | | | | |
| 9. | | | | | | | |
| 10. | | | | | | | |
| Subtotal: | | | | 0 | 252 | 0 | |
| 11. Quality Control | 5% | | N/A | N/A | 13 | 0 | |
| 12. Supervision | 5% | | N/A | N/A | 13 | 0 | |
| Totals: | | | | 0 | 278 | 0 | |

POST DESIGN SERVICES

Activity F: Shop Drawing Reviews - Roadway

| Task | Basis of Estimate | Number of Units | Hours per Unit | Number of Sheets | Total Hours | CADD Hours | Remarks |
|-----------------------------|-------------------|-----------------|----------------|------------------|-------------|------------|---------|
| 1. Fence & gates | EA | 1 | 6 | N/A | 6 | 0 | |
| 2. Asphalt Mix Design | EA | 1 | 4 | N/A | 4 | 0 | |
| 3. Concrete Mix Design | EA | 1 | 3 | N/A | 3 | 0 | |
| 4. Base Mix Design | EA | 1 | 2 | N/A | 2 | 0 | |
| 5. Gravity Wall | EA | 1 | 4 | N/A | 4 | 0 | |
| 6. Guardrail | EA | 1 | 7 | N/A | 7 | 0 | |
| 7. Attenuator | EA | 1 | 2 | N/A | 2 | 0 | |
| 8. Concrete traffic barrier | EA | 1 | 4 | N/A | 4 | 0 | |
| 9. Surcharge | EA | 1 | 8 | N/A | 8 | 0 | |
| 10. MOT | EA | 1 | 40 | N/A | 40 | 0 | |
| 11. Misc/unknown | EA | 1 | 60 | N/A | 60 | 0 | |
| 12. | EA | | | N/A | 0 | 0 | |
| Subtotal: | | | | | 140 | 0 | |
| 21. Quality Control | 5% | | N/A | N/A | 7 | 0 | |
| 22. Supervision | 2% | | N/A | N/A | 3 | 0 | |
| Totals: | | | | | 150 | 0 | |

POST DESIGN SERVICES

Activity F: Shop Drawing Reviews - Drainage

| Task | Basis of Estimate | Number of Units | Hours per Unit | Number of Sheets | Total Hours | CADD Hours | Remarks |
|---------------------------------|-------------------|-----------------|----------------|------------------|-------------|------------|--|
| 1. Steel encased pipe- | EA | 2 | 4 | N/A | 8 | 0 | |
| 2. Trench Drain | EA | 2 | 4 | N/A | 8 | 0 | |
| 3. Chimney Drain | EA | 2 | 4 | N/A | 8 | 0 | |
| 4. Type 5b underdrain, modified | EA | 2 | 4 | N/A | 8 | 0 | |
| 5. Wall gutter outlet | EA | 2 | 4 | N/A | 8 | 0 | |
| 6. Miscellaneous structures | EA | 50 | 3 | N/A | 150 | 0 | Assume that dwgs submitted for 25% of structures |
| 7. Outfalls | EA | 6 | 2 | N/A | 12 | 0 | |
| 8. Misc/unknown | EA | 1 | 24 | N/A | 24 | 0 | |
| Subtotal: | | | | | 226 | 0 | |
| 21. Quality Control | 5% | | N/A | N/A | 11 | 0 | |
| 22. Supervision | 2% | | N/A | N/A | 5 | 0 | |
| Totals: | | | | | 242 | 0 | |

POST DESIGN SERVICES

Activity F: Shop Drawing Reviews - Fiber Optic Network & Related Items (1 of 2)

| Task | Basis of Estimate | Number of Units | Hours per Unit | Number of Sheets | Total Hours | CADD Hours | Remarks |
|----------------------------------|-------------------|-----------------|----------------|------------------|-------------|------------|--|
| 1. Conduit | EA | 6 | 1 | N/A | 6 | 0 | HDPE fiber Conduit and electrical conduit, fittings, elbows, sweeps and glue |
| 2. RS 485 - Communication Wire | EA | 2 | 2 | N/A | 4 | 0 | |
| 3. Fiber Optic Cable 12 count | EA | 1 | 1.5 | N/A | 1.5 | 0 | |
| 4. Fiber Optic Cable 24 count | EA | 1 | 1.5 | N/A | 1.5 | 0 | |
| 5. Fiber Optic Cable 72 Count | EA | 1 | 1.5 | N/A | 1.5 | 0 | |
| 6. Fiber Patch panel | EA | 1 | 2 | N/A | 2 | 0 | |
| 7. UPS system | EA | 1 | 2 | N/A | 2 | 0 | |
| 8. UPS Batteries | EA | 1 | 2 | N/A | 2 | 0 | |
| 9. ITS Cabinet | EA | 1 | 3 | N/A | 3 | 0 | |
| 10. NEMA Enclosure | EA | 1 | 2 | N/A | 2 | 0 | |
| 11. Ethernet Switch | EA | 1 | 2 | N/A | 2 | 0 | |
| 12. ITS Commander | EA | 1 | 2 | N/A | 2 | 0 | |
| 13. APT Surge Protection Devices | EA | 1 | 3 | N/A | 3 | 0 | |
| 14. Splice Enclosure | EA | 1 | 2 | N/A | 2 | 0 | |
| 15. Splice Tray | EA | 1 | 1 | N/A | 1 | 0 | |
| 16. Fiber Pullbox | EA | 1 | 2 | N/A | 2 | 0 | |
| 17. Electrical Pullbox | EA | 1 | 2 | N/A | 2 | 0 | |
| 18. FOMH 4x4x4 | EA | 1 | 3 | N/A | 3 | 0 | |
| 19. FOMH 4x6.5x6.5 | EA | 1 | 3 | N/A | 3 | 0 | |
| 20. BPGF Conduit | EA | 1 | 2 | N/A | 2 | 0 | |

POST DESIGN SERVICES

Activity F: Shop Drawing Reviews - Fiber Optic Network & Related Items (2 of 2)

| Task | Basis of Estimate | Number of Units | Hours per Unit | Number of Sheets | Total Hours | CADD Hours | Remarks |
|--------------------------------------|-------------------|-----------------|----------------|------------------|-------------|------------|---------|
| 21. Bridge Hangers | EA | 1 | 2 | N/A | 2 | 0 | |
| 22. PVC Conduit | EA | 1 | 2 | N/A | 2 | 0 | |
| 23. Radar Devices | EA | 1 | 2 | N/A | 2 | 0 | |
| 24. Device Servers | EA | 1 | 2 | N/A | 2 | 0 | |
| 25. Wire harnesses for Radar Devices | EA | 1 | 2 | N/A | 2 | 0 | |
| 26. DCS devices | EA | 1 | 3 | N/A | 3 | 0 | |
| 27. Antennae for DCS devices | EA | 1 | 3 | N/A | 3 | 0 | |
| 28. Enclosures for DCS Readers | EA | 1 | 3 | N/A | 3 | 0 | |
| 29. Reader Units for DCS | EA | 1 | 2 | N/A | 2 | 0 | |
| 30. Coaxial Cable for DCS units | EA | 1 | 2 | N/A | 2 | 0 | |
| 31. Electrical Transformers | EA | 1 | 4 | N/A | 4 | 0 | |
| 32. Electrical Load Centers | EA | 1 | 4 | N/A | 4 | 0 | |
| 33. Electrical Disconnects | EA | 1 | 4 | N/A | 4 | 0 | |
| 34. Ground Rods | EA | 1 | 1 | N/A | 1 | 0 | |
| 35. Lightning Arrestors | EA | 1 | 1 | N/A | 1 | 0 | |
| 36. Rigid Galvanized Steel Conduits | EA | 1 | 1 | N/A | 1 | 0 | |
| 37. Misc/unknown | EA | 1 | 24 | N/A | 24 | 0 | |
| 38. | EA | | | N/A | 0 | 0 | |
| Subtotal: | | | | | 110 | 0 | |
| 39. Quality Control | 5% | | N/A | N/A | 5 | 0 | |
| 40. Supervision | 2% | | N/A | N/A | 2 | 0 | |
| Totals: | | | | | 117 | 0 | |

Wekiva Parkway 429-204
Central Florida Expressway Authority

POST DESIGN SERVICES

Activity F: Shop Drawing Reviews - Signing

| Task | Basis of Estimate | Number of Units | Hours per Unit | Number of Sheets | Total Hours | CADD Hours | Remarks |
|--|-------------------|-----------------|----------------|------------------|-------------|------------|---------|
| 1. Backcheck of WBQ for guide signs only | LS | 1 | 12 | N/A | 12 | 0 | |
| 2. | EA | | | N/A | 0 | 0 | |
| Subtotal: | | 1 | 12 | | 12 | 0 | |
| 21. Quality Control | 5% | | N/A | N/A | N/A | 0 | |
| 22. Supervision | 5% | | N/A | N/A | N/A | 0 | |
| Totals: | | | | | 12 | 0 | |

POST DESIGN SERVICES

Activity F: Shop Drawing Reviews - Structures B1 Ramp J Over Ondich Road

| Task | Basis of Estimate | Number of Units | Hours per Unit | Number of Sheets | Total Hours | CADD Hours | Remarks |
|---|-------------------|-----------------|----------------|------------------|-------------|------------|---|
| 1. Mix design | EA | 6 | 2 | N/A | 12 | 0 | Included separately for each bridge, allowing for changes in suppliers during construction. |
| 2. SIP Forms | EA | 1 | 20 | N/A | 20 | 0 | |
| 3. Bearings | EA | 2 | 8 | N/A | 16 | 0 | |
| 4. Girders - Reinforcing Steel and Prestressing | EA | 2 | 24 | N/A | 48 | 0 | Design plans call for complete submittal of reinforcing steel for haunched modified Florida U-48 girders. |
| 5. Expansion Joints | EA | 1 | 4 | N/A | 4 | 0 | |
| 6. Pile Installation plan | EA | 1 | 16 | N/A | 16 | 0 | |
| 7. Fiber Optic Conduit Attachment | EA | 1 | 8 | N/A | 8 | 0 | |
| 8. Underdeck lighting | EA | 1 | 8 | N/A | 8 | 0 | |
| 9. Out of pile tolerance | EA | 2 | 16 | N/A | 32 | 0 | Review of EOR submittal for pile placed out of tolerance. Will require rerun of our analysis. |
| 10. Girder bracing | EA | 1 | 8 | N/A | 8 | 0 | Shop drawings |
| 11. | EA | | | N/A | 0 | 0 | |
| 12. | EA | | | N/A | 0 | 0 | |
| 13. | EA | | | N/A | 0 | 0 | |
| 14. | EA | | | N/A | 0 | 0 | |
| 15. | EA | | | N/A | 0 | 0 | |
| 16. | EA | | | N/A | 0 | 0 | |
| Subtotal: | | | | | 172 | 0 | |
| 17. Quality Control | 5% | | N/A | N/A | 9 | 0 | |
| 18. Supervision | 2% | | N/A | N/A | 3 | 0 | |
| Totals: | | | | | 184 | 0 | |

POST DESIGN SERVICES

Activity F: Shop Drawing Reviews - Structures B2 SR 429 Over Ramp M and Ondich Road

| Task | Basis of Estimate | Number of Units | Hours per Unit | Number of Sheets | Total Hours | CADD Hours | Remarks |
|---|-------------------|-----------------|----------------|------------------|-------------|------------|---|
| 1. Mix design | EA | 6 | 2 | N/A | 12 | 0 | |
| 2. SIP Forms | EA | 4 | 20 | N/A | 80 | 0 | Two spans, spacing varies |
| 3. Bearings | EA | 8 | 4 | N/A | 32 | 0 | Design calculations, detailed shop drawings showing all components, materials, dimensions are in conformance with the plans and CFX specifications. |
| 4. Girders - Reinforcing Steel and Prestressing | EA | 12 | 12 | N/A | 144 | 0 | Design plans call for complete submittal of reinforcing steel for haunched modified Florida U-63 girders. Some repetition in shop drawing. |
| 5. Expansion Joints | EA | 1 | 4 | N/A | 4 | 0 | |
| 6. Pile installation plan | EA | 4 | 16 | N/A | 64 | 0 | For NBR values, installation plan for each |
| 7. Fiber Optic Conduit Attachment | EA | 1 | 8 | N/A | 8 | 0 | |
| 8. Underdeck lighting | EA | 1 | 8 | N/A | 8 | 0 | |
| 9. Out of pile tolerance | EA | 2 | 16 | N/A | 32 | 0 | Review of EOR submittal for pile placed out of tolerance. Will require rerun of our analysis. |
| 10. Girder bracing | EA | 4 | 8 | N/A | 32 | 0 | Shop drawings |
| 11. | EA | | | N/A | 0 | 0 | |
| 12. | EA | | | N/A | 0 | 0 | |
| 13. | EA | | | N/A | 0 | 0 | |
| 14. | EA | | | N/A | 0 | 0 | |
| 15. | EA | | | N/A | 0 | 0 | |
| 16. | EA | | | N/A | 0 | 0 | |
| Subtotal: | | | | | 416 | 0 | |
| 17. Quality Control | 5% | | N/A | N/A | 21 | 0 | |
| 18. Supervision | 2% | | N/A | N/A | 8 | 0 | |
| Totals: | | | | | 445 | 0 | |

POST DESIGN SERVICES

Activity F: Shop Drawing Reviews - Structures B3 Ramp K Flyover

| Task | Basis of Estimate | Number of Units | Hours per Unit | Number of Sheets | Total Hours | CADD Hours | Remarks |
|---------------------------------------|-------------------|-----------------|----------------|------------------|--------------|------------|---|
| 1. Mix design | EA | 6 | 2 | N/A | 12 | 0 | |
| 2. SIP Forms | EA | 5 | 20 | N/A | 100 | 0 | Varying grider spacing with tangent and curved segments. Includes calculation review. |
| 3. Pot Bearings | EA | 36 | 4 | N/A | 144 | 0 | Multi-rotational bearings, design calculations, signed and sealed by a Specialty Engineer, confirming that all components are in conformance with the plans and Specifications. |
| 4. Post-tensioning System | EA | 10 | 10 | N/A | 100 | 0 | Post tension system review for both bottom tendons & continuous strands. Review includes post-tensioning hardware, working drawings, manuals, & signed and sealed PT related shop drawings & supporting calculations designed by the Contractor's Engineer of Record. Complete stress & camber calculations in each erection stage will be reviewed. Per Unit $2 \times 5 = 10$. |
| 5. Expansion Joints and cover plates. | EA | 6 | 4 | N/A | 24 | 0 | Flexible strip seal system & cover plates as detailed in the plan set. |
| 6. Erection Plan | EA | 5 | 40 | N/A | 200 | 0 | Includes, schedule, temporary falsework, and shoring designs signed and sealed shop drawings and calculations by Contractor's Specialty Engineer. Review supporting calculations indicate that the design unit stresses have not been exceeded. See specification 460-7.1.3 for list of included items. Erection plan for each of the 5 Units |
| 7. Interior Lighting/Conduits | EA | 10 | 4 | N/A | 40 | 0 | Layout per U-Beam Unit $5 \times 2 = 10$ |
| 8. Integrated Segment Shop Drawings | EA | 58 | 20 | N/A | 1,160 | 0 | Total number segments = Unit 1: $7 \times 2 = 14$; Unit 2: $7 \times 2 = 14$; Unit 3: $5 \times 2 = 10$; Unit 4: $5 \times 2 = 10$; Unit 5: $5 \times 2 = 10$. 58 total segments to review mild & post tension layout & supporting calculations |
| 9. Drainage Scuppers | EA | 2 | 8 | N/A | 16 | 0 | Two conditions, full shop drawings requested in coordination with precast segments. |
| 10. Out of pile tolerance | EA | 6 | 16 | N/A | 96 | 0 | Review of EOR submittal for pile placed out of tolerance. Will require rerun of our analysis. |
| 11. Girder bracing | EA | 10 | 4 | N/A | 40 | 0 | Shop drawings |
| 12. | EA | | | N/A | 0 | 0 | |
| Subtotal: | | | | | 1,932 | 0 | |
| 13. Quality Control | 5% | | N/A | N/A | 97 | 0 | |
| 14. Supervision | 2% | | N/A | N/A | 39 | 0 | |
| Totals: | | | | | 2,067 | 0 | |

POST DESIGN SERVICES

Activity F: Shop Drawing Reviews - Structures B4 Ramp L Over Plymouth Sorrento Road

| Task | Basis of Estimate | Number of Units | Hours per Unit | Number of Sheets | Total Hours | CADD Hours | Remarks |
|---|-------------------|-----------------|----------------|------------------|-------------|------------|---|
| 1. Mix design | EA | 6 | 2 | N/A | 12 | 0 | |
| 2. SIP Forms | EA | 1 | 20 | N/A | 20 | 0 | |
| 3. Bearings | EA | 2 | 8 | N/A | 16 | 0 | |
| 4. Girders - Reinforcing Steel and Prestressing | EA | 2 | 24 | N/A | 48 | 0 | Design plans call for complete submittal of reinforcing steel for haunched modified Florida U-72 girders. |
| 5. Expansion Joints | EA | 1 | 4 | N/A | 4 | 0 | |
| 6. Pile installation plan | EA | 1 | 16 | N/A | 16 | 0 | |
| 7. Fiber Optic Conduit Attachment | EA | 1 | 8 | N/A | 8 | 0 | |
| 8. Underdeck lighting | EA | 1 | 8 | N/A | 8 | 0 | |
| 9. Out of pile tolerance | EA | 2 | 16 | N/A | 32 | 0 | Review of EOR submittal for pile placed out of tolerance. Will require rerun of our analysis. |
| 10. Girder bracing | EA | 1 | 8 | N/A | 8 | 0 | Shop drawings |
| 11. | EA | | | N/A | 0 | 0 | |
| 12. | EA | | | N/A | 0 | 0 | |
| 13. | EA | | | N/A | 0 | 0 | |
| 14. | EA | | | N/A | 0 | 0 | |
| 15. | EA | | | N/A | 0 | 0 | |
| 16. | EA | | | N/A | 0 | 0 | |
| Subtotal: | | | | | 172 | 0 | |
| 17. Quality Control | 5% | | N/A | N/A | 9 | 0 | |
| 18. Supervision | 2% | | N/A | N/A | 3 | 0 | |
| Totals: | | | | | 184 | 0 | |

Wekiva Parkway 429-204
Central Florida Expressway Authority

POST DESIGN SERVICES

Activity F: Shop Drawing Reviews - Structures B5 SR 429 Over Plymouth Sorrento Road

| Task | Basis of Estimate | Number of Units | Hours per Unit | Number of Sheets | Total Hours | CADD Hours | Remarks |
|---|-------------------|-----------------|----------------|------------------|-------------|------------|---|
| 1. Mix design | EA | 6 | 2 | N/A | 12 | 0 | |
| 2. SIP Forms | EA | 1 | 20 | N/A | 20 | 0 | |
| 3. Bearings | EA | 4 | 8 | N/A | 32 | 0 | |
| 4. Girders - Reinforcing Steel and Prestressing | EA | 6 | 12 | N/A | 72 | 0 | Design plans call for complete submittal of reinforcing steel for haunched modified Florida U-72 girders. Some repetition in shop drawing |
| 5. Expansion Joints | EA | 1 | 4 | N/A | 4 | 0 | |
| 6. Pile installation plan | EA | 1 | 16 | N/A | 16 | 0 | |
| 7. Fiber Optic Conduit Attachment | EA | 1 | 8 | N/A | 8 | 0 | |
| 8. Underdeck lighting | EA | 1 | 8 | N/A | 8 | 0 | |
| 9. Out of pile tolerance | EA | 2 | 16 | N/A | 32 | 0 | Review of EOR submittal for pile placed out of tolerance. Will require rerun of our analysis. |
| 10. Girder bracing | EA | 2 | 8 | N/A | 16 | 0 | Shop drawings |
| 11. | EA | | | N/A | 0 | 0 | |
| 12. | EA | | | N/A | 0 | 0 | |
| 13. | EA | | | N/A | 0 | 0 | |
| 14. | EA | | | N/A | 0 | 0 | |
| 15. | EA | | | N/A | 0 | 0 | |
| 16. | EA | | | N/A | 0 | 0 | |
| Subtotal: | | | | | 220 | 0 | |
| 17. Quality Control | 5% | | N/A | N/A | 11 | 0 | |
| 18. Supervision | 2% | | N/A | N/A | 4 | 0 | |
| Totals: | | | | | 235 | 0 | |

POST DESIGN SERVICES

Activity F: Shop Drawing Reviews - Structures Structures B6 Ramp M Over Plymouth Sorrento Road

| Task | Basis of Estimate | Number of Units | Hours per Unit | Number of Sheets | Total Hours | CADD Hours | Remarks |
|---|-------------------|-----------------|----------------|------------------|-------------|------------|---|
| 1. Mix design | EA | 6 | 2 | N/A | 12 | 0 | |
| 2. SIP Forms | EA | 1 | 20 | N/A | 20 | 0 | |
| 3. Bearings | EA | 2 | 8 | N/A | 16 | 0 | |
| 4. Girders - Reinforcing Steel and Prestressing | EA | 3 | 12 | N/A | 36 | 0 | Design plans call for complete submittal of reinforcing steel for haunched modified Florida U-72 girders. Some repetition in shop drawing |
| 5. Expansion Joints | EA | 1 | 4 | N/A | 4 | 0 | |
| 6. Pile installation plan | EA | 1 | 16 | N/A | 16 | 0 | |
| 7. Fiber Optic Conduit Attachment | EA | 1 | 8 | N/A | 8 | 0 | |
| 8. Underdeck lighting | EA | 1 | 8 | N/A | 8 | 0 | |
| 9. Out of pile tolerance | EA | 2 | 16 | N/A | 32 | 0 | Review of EOR submittal for pile placed out of tolerance. Will require rerun of our analysis. |
| 10. Girder bracing | EA | 1 | 8 | N/A | 8 | 0 | Shop drawings |
| 11. | EA | | | N/A | 0 | 0 | |
| 12. | EA | | | N/A | 0 | 0 | |
| 13. | EA | | | N/A | 0 | 0 | |
| 14. | EA | | | N/A | 0 | 0 | |
| 15. | EA | | | N/A | 0 | 0 | |
| 16. | EA | | | N/A | 0 | 0 | |
| Subtotal: | | | | | 160 | 0 | |
| 17. Quality Control | 5% | | N/A | N/A | 8 | 0 | |
| 18. Supervision | 2% | | N/A | N/A | 3 | 0 | |
| Totals: | | | | | 171 | 0 | |

POST DESIGN SERVICES

Activity F: Shop Drawing Reviews - Structures MSE Walls and Miscellaneous Structures

| Task | Basis of Estimate | Number of Units | Hours per Unit | Number of Sheets | Total Hours | CADD Hours | Remarks |
|-----------------------------|-------------------|-----------------|----------------|------------------|-------------|------------|--------------------------------|
| 1. Permanent MSE Walls | EA | 13 | 10 | N/A | 130 | 0 | |
| 2. Overhead Sign Structures | EA | 8 | 8 | N/A | 64 | 0 | 2 cantilever, 6 span structure |
| 3. MOT elements protection | LS | 1 | 40 | N/A | 40 | 0 | |
| 4. Unknown | LS | 1 | 100 | N/A | 100 | 0 | |
| 5. | EA | | | N/A | 0 | 0 | |
| Subtotal: | | | | | 334 | 0 | |
| 17. Quality Control | 5% | | N/A | N/A | 17 | 0 | |
| 18. Supervision | 2% | | N/A | N/A | 7 | 0 | |
| Totals: | | | | | 357 | 0 | |

Wekiva Parkway 429-204
Central Florida Expressway Authority

POST DESIGN SERVICES

Activity F: Shop Drawing Reviews - Lighting

| Task | Basis of Estimate | Number of Units | Hours per Unit | Number of Sheets | Total Hours | CADD Hours | Remarks |
|--------------------------|-------------------|-----------------|----------------|------------------|-------------|------------|---------|
| 1. LED for signs | EA | 1 | 4 | N/A | 4 | 0 | |
| 2. LED for underdeck | EA | 1 | 4 | N/A | 4 | 0 | |
| 3. Underdeck overall | EA | 1 | 2 | N/A | 2 | 0 | |
| 4. light poles | EA | 6 | 2 | N/A | 12 | 0 | |
| 5. conduits/conductors | EA | 6 | 2 | N/A | 12 | 0 | |
| 6. load centers/switches | EA | 2 | 4 | N/A | 8 | 0 | |
| | EA | | | N/A | 0 | 0 | |
| Subtotal: | | | | | 42 | 0 | |
| 21. Quality Control | 5% | | N/A | N/A | 2 | 0 | |
| 22. Supervision | 2% | | N/A | N/A | 1 | 0 | |
| Totals: | | | | | 45 | 0 | |

POST DESIGN SERVICES

Activity F: Shop Drawing Reviews - Utility Relocation Packages

| Task | Basis of Estimate | Number of Units | Hours per Unit | Number of Sheets | Total Hours | CADD Hours | Remarks |
|-------------------------|-------------------|-----------------|----------------|------------------|-------------|------------|--------------------------------|
| 1. Coord and processing | EA | | | N/A | 4 | 0 | Atkins coord only, rest by WBQ |
| | EA | | | N/A | 0 | 0 | |
| | EA | | | N/A | 0 | 0 | |
| Subtotal: | | | | | 4 | 0 | |
| 21. Quality Control | 5% | | N/A | N/A | N/A | 0 | |
| 22. Supervision | 5% | | N/A | N/A | N/A | 0 | |
| Totals: | | | | | 4 | 0 | |

POST DESIGN SERVICES

Activity F: Shop Drawing Reviews - Aesthetic Elements

| Task | Basis of Estimate | Number of Units | Hours per Unit | Number of Sheets | Total Hours | CADD Hours | Remarks |
|-----------------------------|-------------------|-----------------|----------------|------------------|-------------|------------|---------|
| 1. Paint, formliners, misc. | LS | 1 | 48 | N/A | 48 | 0 | |
| 2. | EA | | | N/A | 0 | 0 | |
| 19. | EA | | | N/A | 0 | 0 | |
| 20. | EA | | | N/A | 0 | 0 | |
| Subtotal: | | | | | 48 | 0 | |
| 21. Quality Control | 5% | | N/A | N/A | 2 | 0 | |
| 22. Supervision | 2% | | N/A | N/A | 1 | 0 | |
| Totals: | | | | | 51 | 0 | |

Wekiva Parkway 429-204
Central Florida Expressway Authority

POST DESIGN SERVICES

Activity F: Shop Drawing Reviews - Geotechnical Elements

| Task | Basis of Estimate | Number of Units | Hours per Unit | Number of Sheets | Total Hours | CADD Hours | Remarks |
|--------------------------------|-------------------|-----------------|----------------|------------------|-------------|------------|---------------------------------------|
| 1. coordination and processing | EA | | | N/A | 8 | 0 | All by subs, Atkins coordination only |
| | EA | | | N/A | 0 | 0 | |
| Subtotal: | | | | | 8 | 0 | |
| 21. Quality Control | 5% | | N/A | N/A | N/A | 0 | |
| 22. Supervision | 5% | | N/A | N/A | N/A | 0 | |
| Totals: | | | | | 8 | 0 | |

Ardaman & Associates, Inc

Subconsultant
Wekiva Section 429-204
Post Design Fee Proposal

Fee: \$68,888.22

Central Florida Expressway Authority
Post Design Services Summary Fee Sheet
Wekiva Parkway, Section 429-204

SUB CONSULTANT: Ardaman

| POST DESIGN ACTIVITY DESCRIPTION | | Chief Engineer | | Senior Engineer | | Project Engineer | | Engineering Intern | | CADD Operator | | Sr. Engineering Tech | | Secretary/ Clerical | | TOTAL | | | | |
|--|--------------------------|----------------|----------------------|-----------------|----------------------|------------------|----------------------|--------------------|---|---------------|----------------------|----------------------|----------------------|---------------------|----------------------|-------------------|----------------------------|------------------|--------------------------|--|
| | | Rate/Hr. | 48.08 | Rate/Hr. | 47.10 | Rate/Hr. | 33.22 | Rate/Hr. | 23.79 | Rate/Hr. | 21.10 | Rate/Hr. | 19.44 | Rate/Hr. | 15.73 | | | | | |
| | | MAN HRS. | Cost by Pos & Act | MAN HRS. | Cost by Pos & Act | MAN HRS. | Cost by Pos & Act | MAN HRS. | Cost by Pos & Act | MAN HRS. | Cost by Pos & Act | MAN HRS. | Cost by Pos & Act | MAN HRS. | Cost by Pos & Act | MH BY ACTIVITY | SALARY COST BY ACTIVITY | AVG HRLY RATE | | |
| C. | Pre-Bid Conference | | \$0.00 | | \$0.00 | | \$0.00 | | \$0.00 | | \$0.00 | | \$0.00 | | \$0.00 | 0 | \$0.00 | #DIV/0! | | |
| D. | Addenda | | \$0.00 | | \$0.00 | | \$0.00 | | \$0.00 | | \$0.00 | | \$0.00 | | \$0.00 | 0 | \$0.00 | #DIV/0! | | |
| E. | Field Visits | | \$0.00 | | \$0.00 | | \$0.00 | | \$0.00 | | \$0.00 | | \$0.00 | | \$0.00 | 0 | \$0.00 | #DIV/0! | | |
| F. | Shop Drawing Reviews | | \$0.00 | | \$0.00 | | \$0.00 | | \$0.00 | | \$0.00 | | \$0.00 | | \$0.00 | 0 | \$0.00 | #DIV/0! | | |
| | Roadway | | \$0.00 | | \$0.00 | | \$0.00 | | \$0.00 | | \$0.00 | | \$0.00 | | \$0.00 | 0 | \$0.00 | #DIV/0! | | |
| | Drainage/Permits | | \$0.00 | | \$0.00 | | \$0.00 | | \$0.00 | | \$0.00 | | \$0.00 | | \$0.00 | 0 | \$0.00 | #DIV/0! | | |
| | Fiber Optic Network | | \$0.00 | | \$0.00 | | \$0.00 | | \$0.00 | | \$0.00 | | \$0.00 | | \$0.00 | 0 | \$0.00 | #DIV/0! | | |
| | Signing and Marking | | \$0.00 | | \$0.00 | | \$0.00 | | \$0.00 | | \$0.00 | | \$0.00 | | \$0.00 | 0 | \$0.00 | #DIV/0! | | |
| | Structures | | \$0.00 | | \$0.00 | | \$0.00 | | \$0.00 | | \$0.00 | | \$0.00 | | \$0.00 | 0 | \$0.00 | #DIV/0! | | |
| | Lighting | | \$0.00 | | \$0.00 | | \$0.00 | | \$0.00 | | \$0.00 | | \$0.00 | | \$0.00 | 0 | \$0.00 | #DIV/0! | | |
| | Utilities | | \$0.00 | | \$0.00 | | \$0.00 | | \$0.00 | | \$0.00 | | \$0.00 | | \$0.00 | 0 | \$0.00 | #DIV/0! | | |
| | Aesthetic Elements | | \$0.00 | | \$0.00 | | \$0.00 | | \$0.00 | | \$0.00 | | \$0.00 | | \$0.00 | 0 | \$0.00 | #DIV/0! | | |
| | Geotechnical Elements | | \$0.00 | | \$0.00 | | \$0.00 | | \$0.00 | | \$0.00 | | \$0.00 | | \$0.00 | 0 | \$0.00 | #DIV/0! | | |
| G. | Requests for Information | | \$0.00 | | \$0.00 | | \$0.00 | | \$0.00 | | \$0.00 | | \$0.00 | | \$0.00 | 0 | \$0.00 | #DIV/0! | | |
| H. | Meetings | | \$0.00 | | \$0.00 | | \$0.00 | | \$0.00 | | \$0.00 | | \$0.00 | | \$0.00 | 0 | \$0.00 | #DIV/0! | | |
| I. | Plan Revisions | | \$0.00 | | \$0.00 | | \$0.00 | | \$0.00 | | \$0.00 | | \$0.00 | | \$0.00 | 0 | \$0.00 | #DIV/0! | | |
| J. | Bridge Load Ratings | | \$0.00 | | \$0.00 | | \$0.00 | | \$0.00 | | \$0.00 | | \$0.00 | | \$0.00 | 0 | \$0.00 | #DIV/0! | | |
| K. | Geotechnical Services | 12 | \$576.96 | 140 | \$6,594.00 | | \$0.00 | 190 | \$4,520.10 | | \$0.00 | 510 | \$9,914.40 | 8 | \$125.84 | 860 | \$21,731.30 | \$25.27 | | |
| L. | Utilities | | \$0.00 | | \$0.00 | | \$0.00 | | \$0.00 | | \$0.00 | | \$0.00 | | \$0.00 | 0 | \$0.00 | #DIV/0! | | |
| M. | Record Drawings | | \$0.00 | | \$0.00 | | \$0.00 | | \$0.00 | | \$0.00 | | \$0.00 | | \$0.00 | 0 | \$0.00 | #DIV/0! | | |
| N. | Project Management | | \$0.00 | | \$0.00 | | \$0.00 | | \$0.00 | | \$0.00 | | \$0.00 | | \$0.00 | 0 | \$0.00 | #DIV/0! | | |
| | | | | | | | | | | | | | | | | | | | | |
| | TOTALS: | 12 | \$576.96 | 140 | \$6,594.00 | 0 | \$0.00 | 190 | \$4,520.10 | 0 | \$0.00 | 510 | \$9,914.40 | 8 | \$125.84 | 860 | \$21,731.30 | \$25.27 | | |
| DISTRIBUTION OF COST ELEMENTS TO BASIC ACTIVITIES: | | | | | | | | | TOTAL CONTRACT FEE COMPUTATIONS: | | | | | | | | | | | |
| | | | | | | | | | TOTAL ACTIVITY SALARY COSTS: Multiplier - 3.17 | | | | | | | | | | \$21,731.30 | |
| | | | | | | | | | | | | | | | | | | | \$68,888.22 | |
| | | | | | | | | | | | | | | | | | | | \$0.00 | |
| | | | | | | | | | | | | | | | | | | | \$0.00 | |
| | | | | | | | | | | | | | | | | | | | Ardaman FEE: \$68,888.22 | |

Wekiva Parkway 429-204
Central Florida Expressway Authority

POST DESIGN SERVICES

Activity K: Geotechnical Services

| Task | Basis of Estimate | Number of Units | Hours per Unit | Number of Sheets | Total Hours | CADD Hours | Remarks |
|--|-------------------|-----------------|----------------|------------------|-------------|------------|--------------|
| 1. General Consulting Services | EA | 1 | 83 | N/A | 83 | 0 | Sub services |
| 2. Services Relative to Monitoring of Deep Injection Grouting and Surcharge Settlement | EA | 1 | 777 | N/A | 777 | 0 | |
| 3. | EA | | | N/A | 0 | 0 | |
| 4. | EA | | | N/A | 0 | 0 | |
| | | | | | | | |
| Subtotal: | | | | 0 | 860 | 0 | |
| 11. Quality Control | 0 | | N/A | N/A | 0 | 0 | |
| 12. Supervision | 0 | | N/A | N/A | 0 | 0 | |
| Totals: | | | | 0 | 860 | 0 | |

Geotechnical and Environmental Consultants, Inc (GEC)

Subconsultant
Wekiva Section 429-204
Post Design Fee Proposal

Fee: \$9,350.06

SUB CONSULTANT: GEC

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Wekiva Parkway 429-204
Central Florida Expressway Authority

POST DESIGN SERVICES

Activity H: Meetings

| Task | Basis of Estimate | Number of Units | Hours per Unit | Number of Sheets | Total Hours | CADD Hours | Remarks |
|---------------------|-------------------|-----------------|----------------|------------------|-------------|------------|---------|
| 1. Other Meetings | EA | 4 | 4 | | 16 | | |
| 2. | | | | | 0 | | |
| 3. | | | | | 0 | | |
| 4. | | | | | 0 | | |
| | | | | | | | |
| Subtotal: | | | | 0 | 16 | 0 | |
| 11. Quality Control | 0% | | N/A | N/A | N/A | 0 | |
| 12. Supervision | 0% | | N/A | N/A | N/A | 0 | |
| Totals: | | | | 0 | 16 | 0 | |

Wekiva Parkway 429-204
Central Florida Expressway Authority

POST DESIGN SERVICES

Activity K: Geotechnical Services

| Task | Basis of Estimate | Number of Units | Hours per Unit | Number of Sheets | Total Hours | CADD Hours | Remarks |
|--------------------------|-------------------|-----------------|----------------|------------------|-------------|------------|---|
| 1. Geotechnical Services | EA | 1 | 62 | N/A | 62 | 0 | Consult on Pile Driving and Problematic Soil Issues |
| 2. | EA | | | N/A | 0 | 0 | |
| 3. | EA | | | N/A | 0 | 0 | |
| 4. | EA | | | N/A | 0 | 0 | |
| | | | | | | | |
| Subtotal: | | | | 0 | 62 | 0 | |
| 11. Quality Control | 5% | | N/A | N/A | 3 | 0 | |
| 12. Supervision | 5% | | N/A | N/A | 3 | 0 | |
| Totals: | | | | 0 | 68 | 0 | |

Wekiva Parkway 429-204
Central Florida Expressway Authority

POST DESIGN SERVICES

Activity N: Project Management

| Task | Basis of Estimate | Number of Units | Hours per Unit | Number of Sheets | Total Hours | CADD Hours | Remarks |
|-------------------------------|-------------------|-----------------|----------------|------------------|-------------|------------|---------|
| 1. General Project Management | EA | 1 | 8 | | 8 | | |
| 2. | EA | | | | 0 | | |
| 3. | EA | | | | 0 | | |
| 4. | | | | | | | |
| | | | | | | | |
| Subtotal: | | | | 0 | 8 | 0 | |
| 11. Quality Control | 0% | | N/A | N/A | 0 | 0 | |
| 12. Supervision | 0% | | N/A | N/A | 0 | 0 | |
| Totals: | | | | 0 | 8 | 0 | |

Antillian Engineering Associates, Inc.

Subconsultant
Wekiva Section 429-204
Post Design Fee Proposal

Fee: \$13,021.67

SUB CONSULTANT: Antillian

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Wekiva Parkway 429-204
Central Florida Expressway Authority

POST DESIGN SERVICES

Activity E: Field Visits

| Task | Basis of Estimate | Number of Units | Hours per Unit | Number of Sheets | Total Hours | CADD Hours | Remarks |
|---------------------|-------------------|-----------------|----------------|------------------|-------------|------------|--------------------------|
| 1. Field Visits | EA | 2 | 4 | | 8 | | 2 people at 4 hours each |
| 2. | | | | | 0 | | |
| 3. | | | | | | | |
| 4. | | | | | | | |
| | | | | | | | |
| Subtotal: | | | | 0 | 8 | 0 | |
| 11. Quality Control | 0% | | N/A | N/A | N/A | 0 | |
| 12. Supervision | 0% | | N/A | N/A | N/A | 0 | |
| Totals: | | | | 0 | 8 | 0 | |

Wekiva Parkway 429-204
Central Florida Expressway Authority

POST DESIGN SERVICES

Activity F: Shop Drawing Reviews

| Task | Basis of Estimate | Number of Units | Hours per Unit | Number of Sheets | Total Hours | CADD Hours | Remarks |
|--------------------------|-------------------|-----------------|----------------|------------------|-------------|------------|---------|
| 1. Geotechnical Elements | LS | 1 | 12 | N/A | 12 | 0 | |
| 2. | LS | | | N/A | 0 | 0 | |
| 3. | LS | | | N/A | 0 | 0 | |
| 4. | LS | | | N/A | 0 | 0 | |
| | | | | | | | |
| Subtotal: | | | | 0 | 12 | 0 | |
| 11. Quality Control | | | N/A | N/A | | 0 | |
| 12. Supervision | | | N/A | N/A | | 0 | |
| Totals: | | | | 0 | 12 | 0 | |

Wekiva Parkway 429-204
Central Florida Expressway Authority

POST DESIGN SERVICES

Activity G: Requests for Information

| Task | Basis of Estimate | Number of Units | Hours per Unit | Number of Sheets | Total Hours | CADD Hours | Remarks |
|--------------------------|-------------------|-----------------|----------------|------------------|-------------|------------|---------|
| 1. Geotechnical Elements | EA | 1 | 14 | N/A | 14 | 0 | |
| 2. | EA | | | N/A | 0 | 0 | |
| 3. | EA | | | N/A | 0 | 0 | |
| 4. | EA | | | N/A | 0 | 0 | |
| | | | | | | | |
| Subtotal: | | | | 0 | 14 | 0 | |
| 11. Quality Control | 0% | | N/A | N/A | 0 | 0 | |
| 12. Supervision | 0% | | N/A | N/A | 0 | 0 | |
| Totals: | | | | 0 | 14 | 0 | |

Wekiva Parkway 429-204
Central Florida Expressway Authority

POST DESIGN SERVICES

Activity H: Meetings

| Task | Basis of Estimate | Number of Units | Hours per Unit | Number of Sheets | Total Hours | CADD Hours | Remarks |
|---------------------|-------------------|-----------------|----------------|------------------|-------------|------------|---------|
| 1. Project Meetings | EA | 1 | 16 | | 16 | | |
| 2. | EA | | | | 0 | | |
| 3. | EA | | | | 0 | | |
| 4. | EA | | | | 0 | | |
| | | | | | | | |
| Subtotal: | | | | 0 | 16 | 0 | |
| 11. Quality Control | 0% | | N/A | N/A | N/A | 0 | |
| 12. Supervision | 0% | | N/A | N/A | N/A | 0 | |
| Totals: | | | | 0 | 16 | 0 | |

POST DESIGN SERVICES

Activity K: Geotechnical Services

| Task | Basis of Estimate | Number of Units | Hours per Unit | Number of Sheets | Total Hours | CADD Hours | Remarks |
|--------------------------|-------------------|-----------------|----------------|------------------|-------------|------------|---|
| 1. Geotechnical Services | EA | 1 | 32 | N/A | 32 | 0 | Review Pile Testing Reports and Pile Driving Criteria |
| 2. | EA | | | N/A | 0 | 0 | |
| 3. | EA | | | N/A | 0 | 0 | |
| 4. | EA | | | N/A | 0 | 0 | |
| | | | | | | | |
| Subtotal: | | | | 0 | 32 | 0 | |
| 11. Quality Control | 0% | | N/A | N/A | 0 | 0 | |
| 12. Supervision | 0% | | N/A | N/A | 0 | 0 | |
| Totals: | | | | 0 | 32 | 0 | |

AECOM Technical Services, Inc. (AECOM/ URS)

Subconsultant
Wekiva Section 429-204
Post Design Fee Proposal

Fee: \$6,791.96

Central Florida Expressway Authority
Post Design Services Summary Fee Sheet
Wekiva Parkway, Section 429-204

SUB CONSULTANT: AECOM/ URS

| POST DESIGN ACTIVITY DESCRIPTION | | Project Manager | | Senior Engineer | | Project Engineer | | Senior Technician | | Secretary/ Clerical | | Sr Surveyor & Mapper | | Survey Technician | | TOTAL | | | | |
|--|--------------------------|-----------------|----------------------|-----------------|----------------------|------------------|----------------------|---|----------------------|---------------------|----------------------|----------------------|----------------------|-------------------|----------------------|-------------------|----------------------------|------------------|------------|--|
| | | Rate/Hr. | 71.98 | Rate/Hr. | 61.43 | Rate/Hr. | 40.22 | Rate/Hr. | 34.33 | Rate/Hr. | 28.56 | Rate/Hr. | 53.48 | Rate/Hr. | 31.76 | | | | | |
| | | MAN HRS. | Cost by Pos & Act | MAN HRS. | Cost by Pos & Act | MAN HRS. | Cost by Pos & Act | MAN HRS. | Cost by Pos & Act | MAN HRS. | Cost by Pos & Act | MAN HRS. | Cost by Pos & Act | MAN HRS. | Cost by Pos & Act | MH BY ACTIVITY | SALARY COST BY ACTIVITY | AVG HRLY RATE | | |
| C. | Pre-Bid Conference | | \$0.00 | | \$0.00 | | \$0.00 | | \$0.00 | | \$0.00 | | \$0.00 | | \$0.00 | 0 | \$0.00 | #DIV/0! | | |
| D. | Addenda | | \$0.00 | | \$0.00 | | \$0.00 | | \$0.00 | | \$0.00 | | \$0.00 | | \$0.00 | 0 | \$0.00 | #DIV/0! | | |
| E. | Field Visits | | \$0.00 | | \$0.00 | | \$0.00 | | \$0.00 | | \$0.00 | | \$0.00 | | \$0.00 | 0 | \$0.00 | #DIV/0! | | |
| F. | Shop Drawing Reviews | | \$0.00 | | \$0.00 | | \$0.00 | | \$0.00 | | \$0.00 | | \$0.00 | | \$0.00 | 0 | \$0.00 | #DIV/0! | | |
| | Roadway | | \$0.00 | | \$0.00 | | \$0.00 | | \$0.00 | | \$0.00 | | \$0.00 | | \$0.00 | 0 | \$0.00 | #DIV/0! | | |
| | Drainage/Permits | | \$0.00 | | \$0.00 | | \$0.00 | | \$0.00 | | \$0.00 | | \$0.00 | | \$0.00 | 0 | \$0.00 | #DIV/0! | | |
| | Fiber Optic Network | | \$0.00 | | \$0.00 | | \$0.00 | | \$0.00 | | \$0.00 | | \$0.00 | | \$0.00 | 0 | \$0.00 | #DIV/0! | | |
| | Signing and Marking | | \$0.00 | | \$0.00 | | \$0.00 | | \$0.00 | | \$0.00 | | \$0.00 | | \$0.00 | 0 | \$0.00 | #DIV/0! | | |
| | Structures | | \$0.00 | | \$0.00 | | \$0.00 | | \$0.00 | | \$0.00 | | \$0.00 | | \$0.00 | 0 | \$0.00 | #DIV/0! | | |
| | Lighting | | \$0.00 | | \$0.00 | | \$0.00 | | \$0.00 | | \$0.00 | | \$0.00 | | \$0.00 | 0 | \$0.00 | #DIV/0! | | |
| | Utilities | | \$0.00 | | \$0.00 | | \$0.00 | | \$0.00 | | \$0.00 | | \$0.00 | | \$0.00 | 0 | \$0.00 | #DIV/0! | | |
| | Aesthetic Elements | | \$0.00 | | \$0.00 | | \$0.00 | | \$0.00 | | \$0.00 | | \$0.00 | | \$0.00 | 0 | \$0.00 | #DIV/0! | | |
| | Geotechnical Elements | | \$0.00 | | \$0.00 | | \$0.00 | | \$0.00 | | \$0.00 | | \$0.00 | | \$0.00 | 0 | \$0.00 | #DIV/0! | | |
| G. | Requests for Information | | \$0.00 | | \$0.00 | | \$0.00 | | \$0.00 | | \$0.00 | 50 | \$2,674.00 | 0 | \$0.00 | 50 | \$2,674.00 | \$53.48 | | |
| H. | Meetings | | \$0.00 | | \$0.00 | | \$0.00 | | \$0.00 | | \$0.00 | | \$0.00 | | \$0.00 | 0 | \$0.00 | #DIV/0! | | |
| I. | Plan Revisions | | \$0.00 | | \$0.00 | | \$0.00 | | \$0.00 | | \$0.00 | | \$0.00 | | \$0.00 | 0 | \$0.00 | #DIV/0! | | |
| J. | Bridge Load Ratings | | \$0.00 | | \$0.00 | | \$0.00 | | \$0.00 | | \$0.00 | | \$0.00 | | \$0.00 | 0 | \$0.00 | #DIV/0! | | |
| K. | Geotechnical Services | | \$0.00 | | \$0.00 | | \$0.00 | | \$0.00 | | \$0.00 | | \$0.00 | | \$0.00 | 0 | \$0.00 | #DIV/0! | | |
| L. | Utilities | | \$0.00 | | \$0.00 | | \$0.00 | | \$0.00 | | \$0.00 | | \$0.00 | | \$0.00 | 0 | \$0.00 | #DIV/0! | | |
| M. | Record Drawings | | \$0.00 | | \$0.00 | | \$0.00 | | \$0.00 | | \$0.00 | | \$0.00 | | \$0.00 | 0 | \$0.00 | #DIV/0! | | |
| N. | Project Management | | \$0.00 | | \$0.00 | | \$0.00 | | \$0.00 | | \$0.00 | | \$0.00 | | \$0.00 | 0 | \$0.00 | #DIV/0! | | |
| TOTALS: | | 0 | \$0.00 | 0 | \$0.00 | 0 | \$0.00 | 0 | \$0.00 | 0 | \$0.00 | 50 | \$2,674.00 | 0 | \$0.00 | 50 | \$2,674.00 | \$53.48 | | |
| DISTRIBUTION OF COST ELEMENTS TO BASIC ACTIVITIES: | | | | | | | | TOTAL CONTRACT FEE COMPUTATIONS: | | | | | | | | | | | | |
| | | | | | | | | TOTAL ACTIVITY SALARY COSTS: Multiplier - 2.54 | | | | | | | | | | | \$2,674.00 | |
| | | | | | | | | | | | | | | | | | | | \$6,791.96 | |
| | | | | | | | | | | | | | | | | | | | | |
| | | | | | | | | | | | | | | | | | | | | |
| | | | | | | | | | | | | | | | | | | | | |
| | | | | | | | | AECOM/ URS FEE: | | | | | | | | | | | \$6,791.96 | |

Wekiva Parkway 429-204
Central Florida Expressway Authority

POST DESIGN SERVICES

Activity G: Requests for Information

| Task | Basis of Estimate | Number of Units | Hours per Unit | Number of Sheets | Total Hours | CADD Hours | Remarks |
|---------------------|-------------------|-----------------|----------------|------------------|-------------|------------|--|
| 1. Survey | EA | 1 | 50 | N/A | 50 | 0 | Right of Way Support, OT Hearings, Expert Witness, Support Documentation, etc. |
| 2. | EA | | | N/A | 0 | 0 | |
| 3. | EA | | | N/A | 0 | 0 | |
| 4. | EA | | | N/A | 0 | 0 | |
| | | | | | | | |
| Subtotal: | | | | 0 | 50 | 0 | |
| 11. Quality Control | 0% | | N/A | N/A | 0 | 0 | |
| 12. Supervision | 0% | | N/A | N/A | 0 | 0 | |
| Totals: | | | | 0 | 50 | 0 | |

WBQ Design & Engineering, Inc. (WBQ)

Subconsultant
Wekiva Section 429-204
Post-Design Fee Proposal

Fee: \$47,484.81

SUB CONSULTANT: WBQ

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Wekiva Parkway 429-204
Central Florida Expressway Authority

POST DESIGN SERVICES

Activity E: Field Visits

| Task | Basis of Estimate | Number of Units | Hours per Unit | Number of Sheets | Total Hours | CADD Hours | Remarks |
|---------------------|-------------------|-----------------|----------------|------------------|-------------|------------|------------------------------------|
| 1. Field Visits | EA | 2 | 8 | | 16 | | 1 Every 12 Months out of 24 Months |
| 2. | EA | | | | 0 | | |
| 3. | | | | | | | |
| 4. | | | | | | | |
| | | | | | | | |
| Subtotal: | | | | 0 | 16 | 0 | |
| 11. Quality Control | 0% | | N/A | N/A | N/A | 0 | |
| 12. Supervision | 0% | | N/A | N/A | N/A | 0 | |
| Totals: | | | | 0 | 16 | 0 | |

Wekiva Parkway 429-204
Central Florida Expressway Authority

POST DESIGN SERVICES

Activity F: Shop Drawing Reviews

| Task | Basis of Estimate | Number of Units | Hours per Unit | Number of Sheets | Total Hours | CADD Hours | Remarks |
|------------------------|-------------------|-----------------|----------------|------------------|-------------|------------|-------------------|
| 1. Signing and Marking | LS | 2 | 60 | N/A | 120 | 0 | Assumes 2 Reviews |
| 2. | LS | | | N/A | 0 | 0 | |
| 3. | LS | | | N/A | 0 | 0 | |
| 4. | LS | | | N/A | 0 | 0 | |
| | | | | | | | |
| Subtotal: | | | | 0 | 120 | 0 | |
| 11. Quality Control | | | N/A | N/A | | 0 | |
| 12. Supervision | | | N/A | N/A | | 0 | |
| Totals: | | | | 0 | 120 | 0 | |

Wekiva Parkway 429-204
Central Florida Expressway Authority

POST DESIGN SERVICES

Activity G: Requests for Information

| Task | Basis of Estimate | Number of Units | Hours per Unit | Number of Sheets | Total Hours | CADD Hours | Remarks |
|------------------------|-------------------|-----------------|----------------|------------------|-------------|------------|-----------|
| 1. Utilities | EA | 6 | 4 | N/A | 24 | 0 | Assumes 6 |
| 2. Signing and Marking | EA | 6 | 4 | N/A | 24 | 0 | Assumes 6 |
| 3. | EA | | | N/A | 0 | 0 | |
| 4. | EA | | | N/A | 0 | 0 | |
| | | | | | | | |
| Subtotal: | | | | 0 | 48 | 0 | |
| 11. Quality Control | 0% | | N/A | N/A | 0 | 0 | |
| 12. Supervision | 0% | | N/A | N/A | 0 | 0 | |
| Totals: | | | | 0 | 48 | 0 | |

Wekiva Parkway 429-204
Central Florida Expressway Authority

POST DESIGN SERVICES

Activity H: Meetings

| Task | Basis of Estimate | Number of Units | Hours per Unit | Number of Sheets | Total Hours | CADD Hours | Remarks |
|---------------------|-------------------|-----------------|----------------|------------------|-------------|------------|---|
| 1. Meetings | EA | 2 | 2 | | 4 | | Assumes 2 Meetings Total Over 24 Months |
| 2. | EA | | | | 0 | | |
| 3. | EA | | | | 0 | | |
| 4. | EA | | | | 0 | | |
| | | | | | | | |
| Subtotal: | | | | 0 | 4 | 0 | |
| 11. Quality Control | 0% | | N/A | N/A | N/A | 0 | |
| 12. Supervision | 0% | | N/A | N/A | N/A | 0 | |
| Totals: | | | | 0 | 4 | 0 | |

Wekiva Parkway 429-204
Central Florida Expressway Authority

POST DESIGN SERVICES

Activity I: Plan Revisions

| Task | Basis of Estimate | Number of Units | Hours per Unit | Number of Sheets | Total Hours | CADD Hours | Remarks |
|------------------------|-------------------|-----------------|----------------|------------------|-------------|------------|---------------------|
| 1. Signing and Marking | EA | 2 | 16 | N/A | 32 | | Assumes 2 Revisions |
| 2. | EA | | | N/A | 0 | | |
| 3. | EA | | | N/A | 0 | | |
| 4. | EA | | | N/A | 0 | | |
| | | | | | | | |
| Subtotal: | | | | 0 | 32 | | |
| 11. Quality Control | 0% | | N/A | N/A | 0 | | |
| 12. Supervision | 0% | | N/A | N/A | 0 | | |
| Totals: | | | | 0 | 32 | | |

Wekiva Parkway 429-204
Central Florida Expressway Authority

POST DESIGN SERVICES

Activity L: Utilities

| Task | Basis of Estimate | Number of Units | Hours per Unit | Number of Sheets | Total Hours | CADD Hours | Remarks |
|---------------------------|-------------------|-----------------|----------------|------------------|-------------|------------|--|
| 1. Utilities Coordination | EA | 12 | 8 | N/A | 96 | 0 | 12 Months (8 hours per month) Out of 24 Months |
| 2. Misc Correspondence | EA | 1 | 10 | N/A | 10 | 0 | |
| | | | | | | | |
| Subtotal: | | | | 0 | 106 | 0 | |
| 11. Quality Control | 0% | | N/A | N/A | 0 | 0 | |
| 12. Supervision | 0% | | N/A | N/A | 0 | 0 | |
| Totals: | | | | 0 | 106 | 0 | |

Wekiva Parkway 429-204
Central Florida Expressway Authority

POST DESIGN SERVICES

Activity M: Record Drawings

| Task | Basis of Estimate | Number of Units | Hours per Unit | Number of Sheets | Total Hours | CADD Hours | Remarks |
|------------------------------|-------------------|-----------------|----------------|------------------|-------------|------------|---------|
| 1. Signing and Marking | LS | 1 | 4 | N/A | 4 | | |
| 2. Utility Adjustment sheets | LS | 1 | 4 | N/A | 4 | | |
| 3. | LS | | | N/A | 0 | | |
| 4. | | | | N/A | 0 | | |
| | | | | | | | |
| Subtotal: | | | | 0 | 8 | | |
| 11. Quality Control | 0% | | N/A | N/A | 0 | | |
| 12. Supervision | 0% | | N/A | N/A | 0 | | |
| Totals: | | | | 0 | 8 | | |

Wekiva Parkway 429-204
Central Florida Expressway Authority

POST DESIGN SERVICES

Activity N: Project Management

| Task | Basis of Estimate | Number of Units | Hours per Unit | Number of Sheets | Total Hours | CADD Hours | Remarks |
|---------------------|-------------------|-----------------|----------------|------------------|-------------|------------|-------------------|
| 1. Addenda | EA | 2 | 16 | | 32 | | Assumes 2 Addenda |
| 2. | EA | | | | 0 | | |
| 3. | EA | | | | 0 | | |
| 4. | | | | | | | |
| | | | | | | | |
| Subtotal: | | | | 0 | 32 | 0 | |
| 11. Quality Control | 0% | | N/A | N/A | 0 | 0 | |
| 12. Supervision | 5% | | N/A | N/A | 2 | 0 | |
| Totals: | | | | 0 | 34 | 0 | |