

CENTRAL FLORIDA EXPRESSWAY AUTHORITY

AGENDA
CENTRAL FLORIDA EXPRESSWAY AUTHORITY
BOARD MEETING
April 13, 2017
11:00 a.m.

Meeting location: Osceola Heritage Park
Exhibition Building
Kissimmee A Meeting Room
1901 Chief Osceola Trail
Kissimmee, FL 34744

**** PLEASE NOTE LOCATION AND TIME CHANGE ****

A. CALL TO ORDER / PLEDGE OF ALLEGIANCE

B. PUBLIC COMMENT

Pursuant to Rule 1-1.011, the governing Board for CFX has set aside at least 15 minutes at the beginning of each regular meeting for citizens to speak to the Board on any matter of public interest under the Board's authority and jurisdiction, regardless of whether the public interest is on the Board's agenda, but excluding pending procurement issues. Each speaker shall be limited to 3 minutes.

C. APPROVAL OF MARCH 9, 2017 BOARD MEETING MINUTES (action Item)

D. APPROVAL OF CONSENT AGENDA (action Item)

E. REPORTS

1. Chairman's Report
2. Treasurer's Report
3. Executive Director's Report

F. REGULAR AGENDA ITEMS

1. **PRESENTATION OF DRAFT FY 2018 OPERATIONS, MAINTENANCE & ADMINISTRATION BUDGET AND DRAFT FY 2018-FY 2022 FIVE-YEAR WORK PLAN** – *Lisa Lumbard, CFO and Glenn Pressimone, Director of Engineering* (info. item)

CENTRAL FLORIDA EXPRESSWAY AUTHORITY

2. LEGISLATIVE UPDATE – *Michelle Maikisch, Chief of Staff/Public Affairs Officer* (info. item)

G. BOARD MEMBER COMMENT

H. ADJOURNMENT

This meeting is open to the public.

Section 286.0105, Florida Statutes states that if a person decides to appeal any decision made by a board, agency, or commission with respect to any matter considered at a meeting or hearing, he or she will need a record of the proceedings, and that, for such purpose, he or she may need to ensure that a verbatim record of the proceedings is made, which record includes the testimony and evidence upon which the appeal is to be based.

In accordance with the Americans with Disabilities Act (ADA), if any person with a disability as defined by the ADA needs special accommodation to participate in this proceeding, then not later than two (2) business days prior to the proceeding, he or she should contact the Central Florida Expressway Authority at 407-690-5000.

Persons who require translation services, which are provided at no cost, should contact CFX at (407) 690-5000 x5317 or by email at Iranetta.dennis@CFXway.com at least three business days prior to the event.

C.

APPROVAL OF

3/9/17

BOARD MEETING MINUTES

CENTRAL FLORIDA EXPRESSWAY AUTHORITY

**MINUTES
CENTRAL FLORIDA EXPRESSWAY AUTHORITY
BOARD MEETING
March 9, 2017**

**Location: Central Florida Expressway Authority
4974 ORL Tower Road
Orlando, FL 32807
Board Room**

Board Members Present:

Mayor Buddy Dyer, City of Orlando (Chairman)
Commissioner Fred Hawkins, Jr., Osceola County (Vice Chairman)
Jay Madara, Gubernatorial Appointment (Treasurer)
Commissioner Brenda Carey, Seminole County
Andria Herr, Gubernatorial Appointment
S. Michael Scheeringa, Gubernatorial Appointment
Commissioner Jennifer Thompson, Orange County

Board Member Participating by Phone:

Commissioner Sean Parks, Lake County

Board Member Not Present:

Mayor Teresa Jacobs, Orange County

Non-Voting Advisor Not Present:

Diane Gutierrez-Scaccetti, Florida's Turnpike Enterprise

Staff Present at Dais:

Laura Kelley, Executive Director
Joseph L. Passiatore, General Counsel
Darleen Mazzillo, Executive Assistant/Recording Secretary

A. CALL TO ORDER

The meeting was called to order at 9:00 a.m. by Chairman Buddy Dyer.

B. PUBLIC COMMENT

1) Linda Chapin made comments about the Osceola Parkway Eastern Extension.

- 2) Deborah Green, representing Orange Audubon Society, made comments relating to the Osceola Parkway Eastern Extension going through Split Oak Forest.
- 3) Valerie Anderson made comments relating to the Osceola Parkway Eastern Extension and Split Oak.
- 4) Mary Wilson made comments relating to the Osceola Parkway Eastern Extension and Split Oak.
- 5) Crissy Fogelsong, Executive Director of the ETC, thanked CFX for calling attention to issues relating to the Turnpike's SR 528 expansion project at International Drive. ETC is meeting with the Executive Director of the Turnpike, Diane Scacetti on March 10. Commissioner Carey suggested that a CFX staff member attend that meeting and report back to the CFX Board members.

C. APPROVAL OF MINUTES

A motion was made by Commissioner Hawkins and seconded by Commissioner Thompson to approve the February 9, 2017 Board Meeting Minutes as presented. The motion carried unanimously with eight (8) members voting AYE by voice vote; Mayor Jacobs was not present.

D. APPROVAL OF CONSENT AGENDA

The Consent Agenda was presented for approval.

ACCOUNTING/FINANCE

1. Authorization to advertise for Financial Advisor Services

CONSTRUCTION

2. Authorization to advertise for construction bids for CFX Headquarter Renovations – Project 599-413/Contract No. 001296

ENGINEERING

3. Authorization to award contract to CH2M Hill, Inc. for Concept, Feasibility & Mobility Study for the Osceola Parkway Extension Project 599-221/Contract No. 001248 (Agreement value: Not to exceed \$1,141,000)
4. Authorization to award contract to Inwood Consulting Engineers, Inc. for Concept, Feasibility & Mobility Study for the Northeast Connector Expressway Project 599-222/Contract No. 001249 (Agreement value: Not to exceed \$1,438,000)
5. Authorization to award contract to RS&H, Inc. for Concept, Feasibility & Mobility Study for the Southport Connector Expressway Project 599-223/Contract No. 001250 (Agreement value: Not to exceed \$1,156,000)
6. Authorization to award contract to Kimley-Horn & Associates, Inc. for Concept, Feasibility & Mobility Study for the Poinciana Parkway Extension/I-4 Connector Project 599-224/Contract No. 001251 (Agreement value: Not to exceed \$1,271,000)

7. Approval of Walker Parking Consultants as a Subconsultant to the General Engineering Consultant Services Contract with Dewberry Engineers, Inc. – Contract No. 001145

INFORMATION TECHNOLOGY (IT)

8. Approval of Purchase Order to Convergent Technologies for upgrades and installation of Headquarters Security System (P.O. amount: \$66,975.00)
9. Approval of Renewal of Agreement with Computer Aid, Inc. for Information Technology Services – Contract No. 000939 (Agreement value: \$0)
10. Authorization to negotiate with the Orlando Venues and Orlando Magic for E-PASS Services in the Amway Parking Garage

LEGAL

11. Approval of settlement in the amount of \$205,000 for Parcel 135 (Orange County, FL) - Wekiva Parkway Project 429-202
12. Approval of settlement in the amount of \$772,250.00 for Parcel 158 Parts A & B (Shirley Merrill and S&L Nurseries) – Wekiva Parkway Project 429-202
13. Approval of settlement in the amount of \$310,000 for Parcel 255 (Khoi Nguyen & Thuynhan Huynh) – Wekiva Parkway Project 429-204
14. Approval of settlement offer for Klepzig Easement Interest in the amount of \$2,500 for Parcel 168 (Simmons) – Wekiva Parkway Project 429-203

MAINTENANCE

15. Approval of Supplemental Agreement No. 2 to Kisinger Campo & Associates for bridge inspection services – Contract No. 001127 (Agreement value: \$82,635.15)

TRAFFIC OPERATIONS

16. Authorization to advertise for Letters of Interest for design services for the Network Phase II Project – Contract No. 001292/Project 599-524
17. Approval of Purchase Order to Carousel Industries for service support for Extreme Networks Internet Protocol (IP) Network Equipment (P.O. amount: \$56,810.04)

Consent Agenda Items #3 and #4 were pulled for further discussion.

A motion was made by Commissioner Carey and seconded by Commissioner Thompson to approve the Consent Agenda with the exception of items #3 and #4. The motion carried unanimously with eight (8) members voting AYE by voice vote; Mayor Jacobs was not present.

Item #3: Commissioner Thompson requested that the language within Exhibit A-Scope of Services, items 7.3 and 7.4 be more inclusive to the needs of Orange County and citizen participation. Under item 7.3 she requested an additional meeting in Orange County. Under item 7.4 she requested that a presentation be made to the Orange County Board of County Commissioners.

In addition, Ms. Kelley commented that the subconsultant scope includes a Public Involvement Manager. She requested that the line item be deleted from the contract.

A motion was made by Commissioner Thompson and seconded by Commissioner Carey to approve Consent Agenda Item #3 with amendments as stated above. The motion carried unanimously with eight (8) members voting AYE by voice vote; Mayor Jacobs was not present.

Item #4: Ms. Herr stated that she will abstain from voting on this item because she has a client that is a subcontractor on this contract. (Form 8B Memorandum of Voting Conflict, attached as Exhibit A)

Ms. Kelley requested that the Secretary/Clerical Position on the Geotechnical Contract be re-classified before the contract is executed.

A motion was made by Commissioner Thompson and seconded by Commissioner Carey to approve Consent Agenda Item #4 with the amendment as requested by Ms. Kelley. The motion carried with seven (7) members voting AYE by voice vote; Ms. Herr abstained from voting and Mayor Jacobs was not present.

E. REPORTS

1. Chairman's Report

Chairman Dyer reported on his meeting with Governor Scott regarding the purchase of portions of FDOT/FTE expressways.

Chairman Dyer reported that the next CFX Board meeting will be held in Osceola County in conjunction with the opening of the ICAMR facility.

2. TREASURER'S REPORT

Mr. Madara reported that toll revenues for January were \$33.5 million, which is 9% above projections and 11% above prior year. Total operating expenses were under budget for the month. Net cash flow exceeded budget for the month as well as year-to-date.

Mr. Madara gave a follow up to the "customer first" toll policy. No negative news has come from the rating agencies or bondholders. We should know more in June, after the rating agencies do their annual updates in May.

3. **EXECUTIVE DIRECTOR'S REPORT**

Laura Kelley provided the Executive Director's Report in written form.

In addition, Ms. Kelley mentioned the following items:

- Ms. Kelley will be going to Washington, DC next week to speak with legislative members and discuss funding.
- The bill designating the Arnold Palmer Expressway passed in the Senate yesterday.

F. **REGULAR AGENDA ITEMS**

1. **FDOT'S PRESENTATION OF THE I-4 ULTIMATE PROJECT'S PROPOSAL TO TEMPORARILY CLOSE S.R. 408 ORANGE AVENUE OFF-RAMP**

Loreen Bobo, FDOT I-4 Ultimate Construction Program Manager, presented FDOT's plan to temporarily close the eastbound S.R. 408 Orange Avenue exit ramp for 140 days in the May to July 2018 time frame. Ms. Bobo also explained the plan to detour the traffic to the S.R. 408 eastbound exit ramp to Mills Avenue.

The Board members asked questions and made comments.

A motion was made by Ms. Herr and seconded by Commissioner Carey to approve the concept as presented to temporarily close the S.R. 408 eastbound exit ramp to Orange Avenue and detour the traffic to the S.R. 408 eastbound exit ramp to Mills Avenue for a period of 140 days beginning in May of 2018 with the understanding that FDOT will reimburse CFX for tolls at the Mills Avenue exit while the detour is in place and such reimbursement will be in accordance with a future amendment to the executed I-4/SR 408 Interlocal Agreement between CFX and FDOT that will be presented to the CFX Board in April 2017 for consideration. The motion carried unanimously with eight (8) members voting AYE by voice vote; Mayor Jacobs was not present.

2. **DISCUSSION REGARDING ADDITION OF BREVARD COUNTY TO CFX BOARD**

Executive Director Laura Kelley reported that there are bills moving through the House and Senate to add a Brevard County seat to the CFX Board.

Curt Smith, Chairman of the Brevard County Board of County Commissioners, talked about the advantages of having Brevard County on the CFX Board.

The Board members asked questions and made comments.

A motion was made by Commissioner Hawkins and seconded by Commissioner Carey to adopt a resolution in support of legislation that would add Brevard County to the CFX Board and to send the resolution to members that are sponsoring the legislation. The motion carried unanimously with eight (8) members voting AYE by voice vote; Mayor Jacobs was not present.

3. UPDATE ON INTEROPERABILITY AGREEMENT

Executive Director Laura Kelley reported that, although we received a 180 day termination notice from Florida's Turnpike Enterprise in January, they have not provided us with a proposed draft interoperability agreement. Ms. Kelley has been unsuccessful in setting up a meeting with the Executive Director of Florida's Turnpike, Diane Scaccetti to discuss the terms of a new interoperability agreement.

Ms. Kelley has a meeting scheduled with FDOT Secretary Cone on March 20 to discuss the interoperability agreement and other issues. She will update the Board on those discussions following that meeting.

The Board members made comments and asked questions, which were answered by Ms. Kelley and CFO Lisa Lombard.

(This item was for discussion only. No action was taken by the Board.)

4. AMENDMENT OF 2040 MASTER PLAN FOR INCLUSION OF MULTIMODAL POLICY AND RECOMMENDATIONS

Director of Engineering Glenn Pressimone explained that when the 2040 Master Plan was adopted in May 2016, inclusion of a policy statement pertaining to multimodal projects was deferred until after the Multimodal Investment Study was finalized by the Center for Urban Transportation Research (CUTR). CUTR completed the final multimodal report in January and the recommendations were accepted by the CFX Board in February.

Recommended Policy Profile for Multimodal Projects:

- Two types of multimodal initiatives:
 - Projects with direct benefits to CFX toll users – "Cost Equals User Benefits"
 - Projects meeting financial or revenue tests but not of direct benefit to CFX toll users – "Cost Equals Revenue"

Recommended Multimodal Policy Statement:

Fund or partner on multimodal initiatives where revenue generated from the investment equals the project cost or where toll user benefits are equal to or exceed the project cost. Candidate projects must comply with CFX's Master Bond Resolution and CFX's enabling legislation.

A motion was made by Mr. Scheeringa and seconded by Mr. Madara to adopt the 2040 Master Plan Amendment to include a Multimodal Policy Statement and amended Policy Profile. The motion carried unanimously with eight (8) members voting AYE by voice vote; Mayor Jacobs was not present.

5. AWARD OF CONTRACT NO. 001151 FOR ROADWAY AND BRIDGE MAINTENANCE ON S.R. 408, S.R. 417, S.R. 528 AND S.R. 551

Director of Maintenance Claude Miller requested Board approval to award the Roadway and Bridge Maintenance Services for SR 408, SR 417, SR 528 and SR 551 to Jorgensen Contract Services, LLC for an initial five year term in the amount of \$17,483,700 with five one-year options.

A Maintenance Department Quick Fact Sheet was provided to the Board members showing a broad overview of CFX's transportation network and the activities and achievements by the Maintenance Department in FY 2015/2016.

A motion was made by Commissioner Carey and seconded by Commissioner Thompson to award the contract for Roadway and Bridge Maintenance Services for SR 408, SR 417, SR 528 and SR 551 to Jorgensen Contract Services, LLC for an initial five year term in the amount of \$17,483,700 with five one-year options. The motion carried unanimously with eight (8) members voting AYE by voice vote; Mayor Jacobs was not present.

6. WEKIVA PARKWAY CONSTRUCTION UPDATE

Resident Engineer/Sr. Project Manager Don Budnovich, P.E. gave an update on the status of the Wekiva Parkway construction projects.

The first section of the Wekiva Parkway (from Connector Road to Kelly Park Road) is scheduled to open in mid-2017. The remainder of the project is scheduled to open in early 2018.

Mary Brooks of Quest Corporation of America narrated a video of the construction activities.

(This item was for information only. No action was taken by the Board.)

G. BOARD MEMBER COMMENT

There were no comments from the Board members.

H. **ADJOURNMENT**

Chairman Dyer adjourned the meeting at 10:25 a.m.

Buddy Dyer
Chairman
Central Florida Expressway Authority

Darleen Mazzillo
Recording Secretary/Executive Assistant
Central Florida Expressway Authority

Minutes approved on _____, 2017.

Pursuant to the Florida Public Records Law and CFX Records Management Policy, audio tapes of all Board and applicable Committee meetings are maintained and available upon request to the Records Management Liaison Officer at publicrecords@CFXWay.com or 4974 ORL Tower Road, Orlando, FL 32807. Additionally, video tapes of Board meetings commencing July 25, 2012 are available at the CFX website, www.expresswayauthority.com

D.

Consent Agenda

CENTRAL FLORIDA EXPRESSWAY AUTHORITY

CONSENT AGENDA

April 13, 2017

ACCOUNTING/FINANCE

1. Authorization to renew agreement with Wells Fargo Bank, N.A. – Contract No. 001015 (Agreement value: \$1,373,300)
2. Approval of award contract for Investment Advisor Services to PFM Asset Management, LLC (Agreement Value: Not-to-Exceed \$665,000)

ADMINISTRATIVE SERVICES

3. Approval to reallocate money in Administrative Services' FY 2017 Budget

COMMUNICATIONS AND MARKETING

4. Authorization to advertise Request for Proposals for Public Information Services – Contract No. 001298
5. Approval of Supplemental Agreement No. 2 with Day Communications, Inc. for Communications and Marketing Consultant Services – Contract No. 001002 (Agreement value: \$550,000)
6. Authorization to advertise Request for Proposals for Public Outreach Education and Communications Consultant Services – Contract No. 001299

CONSTRUCTION

7. Approval of Amendment No. 1 to the Fiber Optic Reimbursement Agreement with Sprint – Project No. 528-131 (Amendment value: Not-to-Exceed \$594,334.17)
8. Approval of Construction Contract Modifications on the following projects:
 - a. Project No. 417-625 Traffic Control Devices, Inc. (\$5,000.00)
 - b. Project No. 429-739 The Lane Construction Co. \$12,924.37
 - c. Project No. 417-733 Ranger Construction Ind. \$17,160.90
 - d. Project No. 429-202 Prince Contracting, LLC \$122,162.16
 - e. Project No. 429-203 Superior Construction Co. SE, LLC \$0
 - f. Project No. 429-204 Southland Construction, Inc. \$769,686.29
 - g. Project No. 429-206 GLF Construction Corp. (\$82,104.90)
 - h. Project No. 408-127 The Lane Construction Co. \$114,920.01
 - i. Project No. 528-313 The Lane Construction Co. \$98,141.11
 - j. Project No. 599-624 Traffic Control Devices, Inc. (\$32,126.81)

CENTRAL FLORIDA EXPRESSWAY AUTHORITY

9. Authorization to advertised for construction bids for SR 528/SR 417 Interchange LED Lighting Conversion – Contract No. 001304/Project No. 599-137A
10. Authorization to advertise for construction bids for SR 408 and SR 429 Toll Plaza Air Conditioner Replacements – Contract No. 001247/Project No. 599-732A

ENGINEERING

11. Authorization to advertise for Letters of Interest for Traffic and Earnings Consultant – Contract No. 001300
12. Approval to award contract to United Signs & Signals for Systemwide Logo Panel Replacement & Service Signage – Contract No. 001238/Project No. 599-626 (Agreement value: \$363,415)
13. Approval of Supplemental Agreement No. 8 with URS Corporation Southern, Inc. for Post Design Consultant Services on SR 408/SR 417 Ultimate Interchange Improvements, Phase II – Contract No. 000818/Project No. 253F (Agreement value: Not-to-Exceed \$781,357.45)
14. Approval of Supplemental Agreement No. 1 with Dewberry Engineers, Inc. for SR 417 Widening from Econlockhatchee Trail to Seminole County Line – Contract No. 001153/Project No. 417-134 (Agreement value: Not-to-Exceed \$416,197.12)
15. Approval of Reimbursement Agreement with Florida's Turnpike Enterprise for SR 417 Widening from Econlockhatchee Trail to the Seminole County Line – Contract No. 001153/Project No. 417-134 (Agreement value: \$416,197.12)

INFORMATION TECHNOLOGY (IT)

16. Approval of Contract with Carousel Industries for annual maintenance on the IT Extreme Network Switches in the Data Center and Floor Stacks (Agreement value: \$53,558.90)
17. Approval of Contract with Avaya for Maintenance Support on the CFX Phone System (Agreement value: \$310,393.08)

INTERNAL AUDIT

18. Acceptance of the following Internal Audit Reports:
 - a. Prior Audit Recommendations: Semi-Annual Follow-up
 - b. Procurement and Contract Billing Audit
 - c. Call Center Staffing Model Development
 - d. Vendor Security Review

CENTRAL FLORIDA EXPRESSWAY AUTHORITY

MAINTENANCE

19. Approval to award contract for Roadway and Bridge Maintenance Services to HDR/ICA – Contract No. 001152 (Agreement value: \$9,271,953)

RECORDS MANAGEMENT

20. Approval of Records & Information Management Program Policy and Resolution

TOLL OPERATIONS

21. Approval of Extension of Interlocal Agreement between CFX and UCF for the Wrong-Way Driving Phase 3 Study – Contract No. 001143 (Agreement value: \$225,000)


CONSENT AGENDA ITEM

#1

CENTRAL FLORIDA EXPRESSWAY AUTHORITY

MEMORANDUM

TO: CFX Board Members

FROM: Aneth Williams 
Director of Procurement

DATE: March 22, 2017


RE: Authorization to Renew Agreement with
Wells Fargo Bank, N.A.
Contract No. 001015

Board approval is requested for the first renewal of the referenced contract with Wells Fargo Bank, in the amount of \$1,373,300.00 for a one year period beginning June 1, 2017 and ending May 31, 2018, at the same rates currently being charged by Wells Fargo under the original contract.

The original contract is for three years with two one-year renewals.

Original Contract Amount	\$4,119,913.00
First Renewal	<u>\$1,373,300.00</u>
Total	\$5,493,213.00

The service to be performed by Wells Fargo Bank under this renewal is to provide commercial banking services.

Reviewed by: 
Michael Carlisle
Director of Accounting and Finance



CENTRAL FLORIDA EXPRESSWAY AUTHORITY
CONTRACT RENEWAL AGREEMENT
CONTRACT NO. 001015

THIS CONTRACT RENEWAL AGREEMENT (the "Renewal Agreement"), made and entered into this 13th day of April, 2017, by and between Central Florida Expressway Authority, hereinafter called "CFX" and Wells Fargo Bank, N.A., hereinafter called the "Bank".

WITNESSETH

WHEREAS, CFX and the Bank entered into a Contract Agreement (the "Original Agreement") dated June 1, 2014, whereby CFX retained the Bank to provide banking services; and

WHEREAS, pursuant to Section 8 of the Original Agreement, CFX and Bank wish to renew the Original Agreement for a period of one (1) year;

NOW, THEREFORE, for and in consideration of the mutual benefits to flow each to the other, CFX and Bank agree to a first renewal of said Original Agreement beginning the 1st day of June, 2017 and ending the 31st day of May, 2018 at the cost of \$1,373,300.00, which amount restates the amount of the Original Agreement.

Bank states that, upon its receipt and acceptance of Final Payment for Services rendered under the Original Contract renewal ending May 31, 2017, the Bank shall execute a 'Certificate of Completion of the Original Contract and Acceptance of Final Payment' that waives all future right of claim for additional compensation for services rendered under the Original Contract ending May 31, 2017.

All terms and conditions of said Original Agreement and any supplements and amendments thereto shall remain in full force and effect during the full term of this Renewal Agreement.

IN WITNESS WHEREOF, the parties have executed this Renewal Agreement by their duly authorized officers on the day, month and year set forth above.

WELL FARGO BANK, N.A.

CENTRAL FLORIDA EXPRESSWAY AUTHORITY

BY: _____
Authorized Signature

BY: _____
Director of Procurement

Title: _____

ATTEST: _____ (SEAL)
Secretary or Notary

If Individual, furnish two witnesses:

Witness (1) _____

LEGAL APPROVAL: _____
AS TO FORM General Counsel for CFX

Witness (2) _____

CONTRACT DOCUMENTS

**ORLANDO-ORANGE COUNTY EXPRESSWAY AUTHORITY
AND
WELL FARGO BANK, NA**

**BANKING SERVICES
CONTRACT NO. 001015**

**CONTRACT DATE: APRIL 23, 2014
CONTRACT AMOUNT: \$4,119,913.00**



**ORLANDO-ORANGE COUNTY
EXPRESSWAY AUTHORITY**

CONTRACT DOCUMENTS

FOR

BANKING SERVICES

CONTRACT NO. 001015

APRIL 2014

Members of the Board

Walter A. Ketcham, Jr., Chairman
R. Scott Batterson, P.E., Vice Chairman
Teresa Jacobs, Secretary/Treasurer
Noranne B. Downs, P.E., Ex-Officio Member
Marco Peña, Member

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Addendum No. 2 (Not required for the Contract Documents)	
Addendum No. 3	

Attached compact disk contains the following and are incorporated herein

Technical Proposal	1 to 514
Price Proposal	1 to 13

MASTER BANKING SERVICE AGREEMENT

THIS AGREEMENT (the "Agreement") is made and entered into by and between Orlando-Orange County Expressway Authority (Authority), and Wells Fargo Bank N.A., National Association a national banking association (the "Bank"), executed on the date (s) shown on the signature page hereof.

WITNESSETH:

WHEREAS, Authority issued its Requests for Proposals for Banking Services on March 3, 2014 (the "RFP"), to solicit proposals to serve as the Authority's primary relationship bank; and

WHEREAS, the Bank responded to the RFP by submitting its Technical and Price Proposal for Banking Services dated March 28, 2014 (the "Proposal"), which Proposal was duly accepted by the Authority as the most favorable proposal submitted; and

WHEREAS, the Bank shall be providing banking services to the Authority under the terms of this Agreement, the Scope of Services and the Proposal (hereinafter sometimes collectively called the "Contract").

WHEREAS, although the Scope of Services and the Proposal address in some detail the banking services to be provided, there are a number of operational issues not addressed by either the Scope of Services or the Proposal which the parties desired to address;

NOW, THEREFORE, in consideration of the foregoing premises and other good and valuable consideration, the receipt and adequacy of which are hereby acknowledged, the Authority and the Bank hereby covenant and agree as follows:

Section 1. Purpose and Effect of this Agreement: Delineation of Banking Services

The banking services to be provided to the Authority by the Bank shall consist of:

- (a) Each of the specific requirements, terms and conditions set forth in the Scope of Services and any addenda thereto, which are hereby incorporated by reference in its entirety; and
- (b) Each of the services, terms and conditions set forth in the Proposal, which is hereby incorporated by reference in its entirety; and
- (c) Unless the context requires otherwise, all references to "this Agreement," and use of the terms "herein," "hereby," "hereof," "hereto," "hereunder" and the like shall be deemed to include the Scope of Services, the Proposal, this Agreement and addenda.

Section 2. Controlling Provisions

Except as otherwise specifically provided in Section 6 hereof, in the event of any conflict between the specific provisions of this Agreement or any of the Exhibits hereto, and the requirements or provisions of the Scope of Services and/or Proposal, the requirements or provisions of the latter documents shall control. In circumstances of a conflict between the Proposal and Scope of Services, the Scope of Services shall prevail. Wherever possible, the provisions of all documents shall be construed in such a manner as to avoid conflicts between provisions of the various documents. It is the intention of the parties that the Exhibits hereto set forth the day-to-day operational procedures to be complied with in connection with the Authority's ordering of and the Bank's provision of specific banking services covered by the Proposal. If the Authority elects to use any of the Bank's services not set forth in the Proposal, or the Bank, in the normal course of its business, develops specific service agreements in the future for banking services requested by the Authority (in addition to those covered by the Exhibits hereto), the parties will execute specific service agreements with respect thereto in form and substance reasonably acceptable to the parties. Such agreements shall be deemed to be part of and subject to this Master Banking Services Agreement, whether or not so stated in such service agreement.

Section 3. Services to be Rendered

(a) The Bank shall provide the Authority with the banking services set forth in the Proposal, as more fully defined herein. With respect to the Authority's depository demand deposit accounts, Authority funds collected daily shall be deposited in the accounts as described in the Scope of Services on the same day. Checks deposited shall be available as outlined in the Bank's Proposal if deposited in the Bank before it normally closes its transactions for the day, which is currently 2:00 p.m.

(b) The Authority will attempt to limit the number of bank accounts maintained with the Bank; however, where legal requirements dictate, separate bank accounts will be maintained with the Bank. If the Authority uses services not requested in the Scope of Services, the Bank reserves the right to charge for those services in accord with its current published charges for said services.

(c) In rendering the services requested in the Scope of Services, the Bank shall be responsible for compliance with all licensing agreements and the payment of all costs for licensing fees and royalties for all software, intellectual property and other protected or copyrighted materials or hardware used or provided in connection with its performance under this Agreement, and shall be further responsible for any costs, damages, claims or liabilities arising from the violation of any license agreement, copyright, trademark or other protection of property. The Bank shall not be responsible for any of the aforementioned costs, damages,

claims or liabilities to the extent they are caused by the negligence, breach or willful misconduct of the Authority.

(d) If, during the life of this Agreement and any renewals hereof, the Bank desires to subcontract any portion(s) of the services to a subcontractor that was not disclosed by the Bank to the Authority at the time that the contract was originally awarded, and such subcontract would, standing alone or aggregated with prior subcontracts awarded to the proposed subcontractor, equal or exceed twenty five thousand dollars (\$25,000.00), the Bank shall first submit a request to the Authority's Chief Financial Officer for authorization to enter into such subcontract. Except in the case of an emergency, as determined by the Authority's Executive Director or his/her designee, no such subcontract shall be executed by the Bank until it has been approved by the Authority Board. In the event of a designated emergency, the Bank may enter into such a subcontract with the prior written approval of the Authority's Executive Director or his/her designee, but such subcontract shall contain a provision that provides that it shall be automatically terminated if not approved by the Authority Board at its next regularly scheduled meeting. The parties acknowledge and agree that this subclause (d) is limited to subcontractors hired specifically by the Bank for services for the Authority.

Section 4. Compensation For Services

The not-to-exceed contract amount for the initial three-year term of this Agreement will be \$4,119,913.00. The Bank will prepare a monthly billing for services rendered in accordance with the Method of Compensation and Price Proposal. No other charges will be billed to the Authority without prior and specific written authorization from the Authority's Chief Financial Officer or Executive Director.

Section 5. Representations, Warranties and Covenants

(a) The Bank represents and warrants to the Authority it has full power and authority to enter into this Agreement and fully perform its obligations hereunder without the need for any further corporate or governmental consents or approvals, and that the persons executing this Agreement are authorized to execute and deliver it. Assuming the due authorization, execution, delivery, legality and enforceability hereof by or against the Authority when executed and delivered by the parties, this Agreement will constitute a valid and binding agreement of the Bank, enforceable against it in accordance with its terms, subject only to the application of general principles of equity and limitations arising from bankruptcy, insolvency, moratorium and other similar laws affecting the rights of creditors generally.

(b) The Bank has not employed or retained any person employed by the Authority to solicit or secure this Agreement and it has not offered to pay, paid, or agreed to pay any person employed by the Authority any fee, commission

percentage, brokerage fee, or gift of any kind contingent upon or resulting from the award of this Agreement.

(c) The Bank is aware of the conflict of interest laws and policies of the Authority, and the State of Florida, and covenants the Bank will fully comply in all material respects with the terms thereof.

(d) The Authority represents and warrants to the Bank it has full power and authority to enter into and perform all of its obligations under this Agreement without the need for any further bids, notices or other actions by Board or any other governmental authority. When executed and delivered by the parties, this Agreement will constitute a valid and binding agreement of the Authority, enforceable against it in accordance with its terms, subject only to the application of general law and principles of equity and limitations arising from bankruptcy, insolvency, moratorium and other similar laws affecting the rights of creditors generally. The Authority further represents and warrants to the Bank it has authorized the Authority's Executive Director, Chief Financial Officer or persons designated by them in writing, to execute and deliver documents to the Bank as necessary hereunder or reasonably deemed appropriate by such officials to effect the transactions contemplated hereby. The Authority acknowledges and agrees the Bank is fully authorized and directed to accept orders, requests and authorizations from such officials on the Authority's behalf in connection with the implementation or provision of any of the banking services covered by the Proposal. Such authorization and direction shall not be deemed to prohibit or preclude the Bank from relying upon actions or requests of other Authority personnel so long as the Bank reasonably believes, in good faith, that such persons have been authorized in writing to act on behalf of the Authority or by any of such officials.

(e) At the request of the Bank, the Authority agrees to cause its designated officials or their designees to execute such signature cards and other signature and identification verification documents as the Bank deems reasonably necessary for purposes of establishing appropriate security measures in connection with the banking services to be provided hereunder.

Section 6. Indemnification

(a) During the term of the contract, the Bank will indemnify, defend and hold harmless the Authority and its officers, directors, employees, agents and assigns (the "Indemnified Parties") from and against all claims, losses, demands, liability, judgments, awards, interest, attorney's fees and costs (collectively, "Losses") arising out of, resulting from or relating to the performance of the services provided hereunder which are, in each case, directly caused in whole or in part by the negligent or intentional acts or omissions of the Bank or any of its officers, directors, employees, agents, subcontractors or assigns, except to the extent such Losses are caused by the negligence or intentional misconduct of any Indemnified Party. In no event will the Bank be liable for any indirect, special, consequential

or punitive damages, whether or not the likelihood of such damages was known to the Bank, and regardless of the form of the claim or action or the legal theory on which it is based. The Bank further agrees to indemnify and save harmless the Authority, its agents or employees against any claims or liability directly related to the services provided by the Bank and provided, that such claims/liability are not caused by the negligence or willful misconduct of the Authority, its agents or employees, arising from or based upon the violation of any federal, state, or county laws, by-laws, ordinances or regulations by the Bank, its agents, servants or employees.

(b) To the extent of the monetary limits allowed pursuant to Section 768.28(5), Florida Statutes, the Authority shall indemnify and save harmless the Bank, (its directors, officers, employees and agents) from or on account of any losses or damages resulting from any breach of this Agreement by the Authority, or arising from the negligent acts or omissions of the Authority or its employees acting within the scope of their employment.

(c) If the Authority desires to invoke the foregoing indemnity provisions (the "Indemnitee") against the Bank (the "Indemnitor"), the Indemnitee shall provide written notice to the Indemnitor within a reasonable time after discovery of the facts allegedly entitling it to indemnification hereunder, specifying in such notice the relevant facts and circumstances and requesting indemnification as provided herein. The Indemnitor shall pay for the defense of, any and all claims of liability in all suits and action of every kind and description that may be brought against the Indemnitee which may result from the negligent actions or omissions under this Agreement by the Indemnitor, its employees or agents, as described in subsection (a).

Section 7. Limitation of Liability

Notwithstanding any other term or provision of this Agreement, neither the Authority nor the Bank shall in any event be liable to the other for any amount in excess of the actual loss sustained by the injured party, and in no event shall either the Authority or the Bank ever be liable hereunder or in any action in tort arising out of the services or relationship to be provided or established hereunder for any indirect, special, incidental, punitive or consequential loss or damage of any kind, including lost profits or opportunities or damage to reputation (whether or not advised of the possibility thereof) arising or allegedly arising therefrom. Actual loss shall include associated lost interest earnings calculated at the then applicable Federal Funds Rate.

Section 8. Term and Termination

(a) This Agreement shall have a term of three (3) years, commencing as of June 1, 2014 and ending at 11:59 p.m., on May 31, 2017. The Authority shall have the right to exercise a maximum of two (2) additional one-year renewals to the term of this Agreement by providing written notice to the Bank. The

Authority may give written notice to the Bank prior to the expiration of the then current term of its election not to have this Agreement so renewed.

(b) The Bank agrees to maintain the banking relationship with the Authority in accord with the terms of the Agreement or any extension for a period of six months from the date of expirations of the Agreement or of any extension period or upon written notice by the Authority to close the Authority's remaining accounts, whichever comes first. During this six month period following the expiration of the Agreement or any extension period, the Authority shall pay a monthly service charge for banking services based upon the pricing for banking services contained in the Proposal or made applicable to any extension period.

(c) Either party may terminate this Agreement upon one hundred twenty (120) days advance written notice to the other, which notice must be signed by an authorized officer of the terminating party.

(d) If either party does not comply with terms of this Agreement, non-defaulting party may give written notice of default to the defaulting party of the specific default. If the default(s) is/are not corrected within thirty (30) days, this Agreement (including the Scope of Services and Proposal) may be terminated thirty (30) days from the written notice of default, by the non-defaulting party.

(e) In event of a termination under paragraphs (c) or (d) above, the Bank shall only be entitled to applicable fees and charges through the effective date of such termination. Termination of this Agreement, with or without cause, shall result in the simultaneous termination of all other banking services agreements referred to in Section 2 herein. However, any individual service agreement may be terminated separately and severally without affecting the continued enforceability of provisions of this Agreement or any non-terminated service agreements.

Section 9. Changes

(a) The Authority may, from time to time, request changes in the scope of services performed by the Bank hereunder. Such changes, which are mutually agreed upon by the Authority and the Bank, shall be incorporated in written amendments to this Agreement.

(b) The parties agree to undertake and annual review of the armored car component of the Scope of Services to determine if services can be provided more economically. The parties specifically agree that no later than thirty (30) days prior to the expiration of each one year anniversary of the term of this Agreement, the Authority shall have the option to amend, delete or replace the provider armored car component of the Scope of Services. The Bank shall include this provision in any subcontract for armored car services.

(c) The fees and charges set forth for the services to be provided to the Authority will begin on the date the Agreement is signed, shall not be increased for a period of three (3) years after commencement of the term of this Agreement. After the three-year period, the Bank will give the Authority four (4) months prior written notice before increasing or adding any fees; provided, however, fees in years four and five may not be increased by an amount greater than the Consumer Price Index (CPI) for all urban consumers over the last year of the initial three-year period.

Section 10. Equal Employment Opportunity; Non-discrimination

The Bank will not discriminate against any employee or an applicant for employment because of race, color, religion, sex, national origin or handicap. The Bank shall take affirmative action to ensure that applicants are employed (and that employees are treated fairly during employment) without regard to race, color, religion, sex, national origin or handicap.

Such action shall include, but not be limited, to the following: employment, upgrading, demotions or transfers, recruitment or recruitment advertising; layoff or terminations; rates of pay or other forms of compensation; selection for training including apprenticeship; and participation in recreational and educational activities.

The Bank shall keep such records and submit such reports concerning racial and ethnic origin of applicants for employment and employees as the Secretary of Labor of the United States requires. The Bank agrees to comply with such rules, regulations and guidelines as the Secretary may issue to implement these requirements. Both Parties shall comply with all applicable laws, ordinances and codes of Federal, State and local governments applicable to that Party.

Section 11. Waiver

No waiver of a breach of any provision of this Agreement shall constitute a waiver of any subsequent breach of the same or any other provision hereof, and no waiver shall be effective unless made in writing.

Section 12. Severability

If any provisions, paragraphs, sentences, words or phrases contained in this Agreement are determined by a court of competent jurisdiction to be invalid, illegal or otherwise unenforceable under the laws of the State of Florida, such provisions, paragraphs, sentences, words or phrases shall be deemed modified to the extent necessary to conform with such laws, and to the extent they cannot be so modified, then same shall be deemed severable. In either event, the remaining terms and provisions in the Agreement shall remain unmodified and in full force and effect.

Section 13. Governing Law

This Agreement shall be construed and enforced according to the Laws of the State of Florida.

Section 14. Attachments

The following documents are attached hereto and incorporated by reference herein:

- A. Scope of Services
- B. Method of Compensation
- C. Technical Proposal
- D. Price Proposal

Additional service agreements may be added from time to time as mutually agreed upon by the parties.

Section 15. Notices

All written notices, demands and other communications required or provided for under this Agreement shall be sent by certified mail, return receipt requested, postage prepaid, in the case of mailing, or by overnight or same day courier, or by electronic transmission producing a written record, or hand delivered to the following address and person bearing the following title for each party hereto or such other addressee or person as shall be designated by a party in a written notice given in the manner required hereby:

Orlando-Orange County Expressway Authority
Chief Financial Officer
4974 ORL Tower Road
Orlando, FL 32807

Wells Fargo Bank, N.A. (Bank)
800 North Magnolia Avenue, 7th Floor
MAC Z0244-084
Orlando, FL 32803

All notices shall be deemed delivered when received.

Section 16. Force Majeure

The Authority agrees the Bank shall have no responsibility or liability for delay in its performance under this Agreement or any losses arising out of delays and/or interruptions of business due to acts of God, acts of government authority, acts of public enemy of war, riots, civil disturbances, power failure, telecommunications failure, severe adverse weather conditions or other causes beyond the Bank's reasonable control. This time, if

any, required for such performance under this Master Agreement shall be automatically extended during the period of such delay or interruption.

Section 17. Assignment

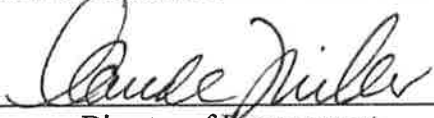
Neither party shall assign this Agreement or any interest herein, or delegate any of its duties hereunder, without the other party's prior written consent. It is agreed by the Authority, with the consent of the Authority, that the Bank may delegate certain services to be provided through independent contractors.

Section 18. Jurisdiction

The parties hereto agree that the state or federal courts located in the State of Florida shall have the exclusive jurisdiction over the parties and the subject matter of any litigation between the parties arising hereunder. Venue shall lie solely in Orange County, Florida.

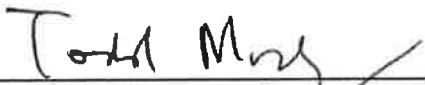
IN WITNESS WHEREOF, the parties have executed this Agreement as of the day and year written below.

ORLANDO-ORANGE COUNTY EXPRESSWAY AUTHORITY

By: 
Director of Procurement

Date: 5/28/14

BANK

By: 


Print Name: Todd Morley

Title: Senior Vice President

Attest: 

Date: MAY 23, 2014

Approved as to form and execution, only.


General Counsel for the Authority


CONSENT AGENDA ITEM

#2

CENTRAL FLORIDA EXPRESSWAY AUTHORITY

MEMORANDUM

TO: CFX Board Members

FROM: Aneth Williams
Director of Procurement 

DATE: March 22, 2017

RE: Approval of Contract Award for Investment Advisor Services to
PFM Asset Management, LLC
Contract No. 001244

Request for Proposals (RFP) from qualified firms to provide investment advisor services was advertised on January 22, 2017. Responses were received from three (3) firms by the February 23, 2017, deadline for submittal of Technical Proposals. Those firms were Chandler Asset Management, PFM Asset Management and Public Trust Advisors.

The Evaluation Committee met on March 2, 2017, and after reviewing the Technical Proposals shortlisted all three firms. The Committee unanimously agreed to waive the interview process. Opening of the Fee Proposal and Final Ranking was held on March 10, 2017.

The combined scores for the Technical Proposals and Fee Proposals as submitted by each firm were calculated and the result is shown below:

<u>Firm</u>	<u>Total Points</u>	<u>Ranking</u>
PFM Asset Management, LLC	85.86	1
Public Trust Advisors	80.75	2
Chandler Asset Management	76.30	3

The Audit Committee at its April 3, 2017 meeting accepted the ranking and recommended PFM Asset Management, LLC to be awarded the contract.

Board award of the contract to PFM Asset Management, LLC with a not to exceed amount of \$665,000.00 for an initial term of three (3) years is requested.

Reviewed by:


Lisa Lumbarc
Chief Financial Officer

RFP-001244 Committee Meeting March 2, 2017 Minutes

Evaluation Committee for Investment Advisor Services; RFP-001244, held a duly noticed meeting on Thursday, March 2, 2017, commencing at 10:03 a.m. in the Starling Conference Room at the CFX Administrative Bldg., Orlando, Florida.

Committee Members:

Lisa Lombard, CFO
Michael Carlisle, Director of Accounting and Finance
Emily Rouse, Accounting Supervisor
Stephen Koontz, Chairman, Finance Committee

Other Attendees:

Aneth Williams, Director of Procurement

Discussion and Motions:

Aneth explained that today's meeting was to shortlist the firms, open the price proposals, if the Committee so desires, and finalize the evaluation, and make a recommendation to be presented to the Finance Committee for recommendation to the Board.

Evaluation Portion:

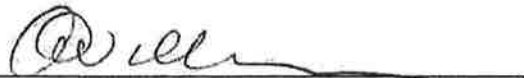
The committee members individually scored the technical proposals and submitted them to Aneth. Aneth then tallied the score sheets utilizing the raw scores assigned by each committee member and averaged the raw scores for each Proposal received. Below are the results:

<u>Proposer</u>	<u>Total Raw Points</u>	<u>Average Points</u>
Chandler Asset Management	248	62
PFM Asset Management, LLC	272	68
Public Trust Advisors	243	60.75

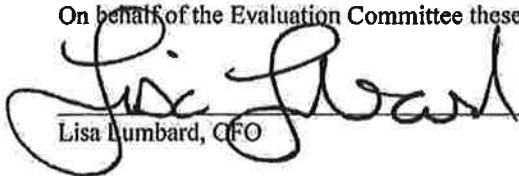
The Committee unanimously agreed to waive the interview process. Opening of the Fee Proposal and Final Ranking will be held on Friday, March 10, 2017 at 9 a.m. in the Pelican Conference Room at the CFX Administrative Bldg., Orlando, Florida.

There being no further business to come before the Committee, the meeting was adjourned at 10:30 a.m. These minutes are considered to be the official minutes of the Shortlist meeting by the Evaluation Committee held on Thursday, March 2, 2017.

Submitted by:


Aneth Williams, Director of Procurement

On behalf of the Evaluation Committee these minutes have been review and approved by:


Lisa Lombard, CFO

CENTRAL FLORIDA EXPRESSWAY AUTHORITY
 TECHNICAL AND PRICE PROPOSAL SCORING SUMMARY
 INVESTMENT ADVISOR SERVICES; Contract No. 001244

EVALUATOR	CHANDLER ASSET MANAGEMENT		PFM		PUBLIC TRUST ADVISORS					
	TECHNICAL	PRICE	TECHNICAL	PRICE	TECHNICAL	PRICE	TECHNICAL	PRICE	TECHNICAL	PRICE
Lisa Lombard	63		70		63					
Michael Carlisle	63		68		59					
Emily Rouse	67		69		67					
Stephen Koontz	55		65		54					
TOTAL	248		272		243		0			
AVG. TECH. POINTS	62.00		68.00		60.75		#DIV/0!			

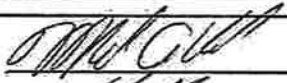
PRICE PROPOSAL SUMMARY

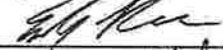
PROPOSER	PROPOSAL AMOUNT	POINT VALUE
CHANDLER ASSET MGMT		#DIV/0!
PFM		#DIV/0!
PUBLIC TRUST ADVISORS		#DIV/0!


POINT TOTALS AND FINAL RANKING


PROPOSER	TECHNICAL POINTS	PRICE POINTS	TOTAL POINTS	FINAL RANKING
CHANDLER ASSET MGMT	62.00	#DIV/0!	#DIV/0!	#DIV/0!
PFM	68.00	#DIV/0!	#DIV/0!	#DIV/0!
PUBLIC TRUST ADVISORS	60.75	#DIV/0!	#DIV/0!	#DIV/0!

Committee Members:









3/2/2017
 3/2/2017
 3/2/2017
 3/2/2017

RFP-001244 Final Ranking Committee Meeting March 10, 2017 Minutes

Evaluation Committee for Investment Advisor Services; RFP-001244, held a duly noticed meeting on Friday, March 10, 2017, commencing at 9:05 a.m. in the Pelican Conference Room at the CFX Administrative Bldg., Orlando, Florida.

Committee Members:

Lisa Lombard, CFO
Michael Carlisle., Director of Accounting and Finance
Emily Rouse, Accounting Supervisor
Stephen Koontz, Chairman, Finance Committee

Other Attendees:

Aneth Williams, Director of Procurement

Discussion and Motions:

Aneth explained that today's meeting was to open the price proposals and finalize the evaluation, and make a recommendation to be presented to the Finance Committee for recommendation to the Board.

Pricing

Aneth opened the pricing proposals and scored the pricing proposals in accordance with the RFP requirements.

<u>Proposer</u>	<u>Total Price</u>	<u>Points</u>
Chandler Asset Management	\$831,000.00	14.30
PFM Asset Management, LLC	\$665,000.00	17.86
Public Trust Advisors	\$594,000.00	20.00


Total Points and Rankings

<u>Proposer</u>	<u>Tech. Points</u>	<u>Pricing Points</u>	<u>Total Points</u>	<u>Ranking</u>
Chandler Asset Management	62	14.30	76.30	3
PFM Asset Management, LLC	68	17.86	85.86	1
Public Trust Advisors	60.75	20.00	80.75	2

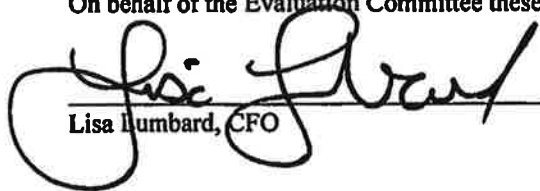
The Committee will make a recommendation to the Finance Committee at its next meeting on April 3, 2017, to approve the ranking and recommend award of the Contract to the top ranked Proposer, PFM Asset Management LLC. If the top ranked firm is unable to execute a Contract the recommendation of award will go to the second ranked Proposer.

There being no further business to come before the Committee, the meeting was adjourned at 9:30 a.m. These minutes are considered to be the official minutes of the opening of the Price Proposals and final evaluation by the Evaluation Committee at its meeting held Friday, March 10, 2017.)

Submitted by:


Aneth Williams, Director of Procurement

On behalf of the Evaluation Committee these minutes have been review and approved by:


Lisa Lombard, CFO

CENTRAL FLORIDA EXPRESSWAY AUTHORITY
 TECHNICAL AND PRICE PROPOSAL SCORING SUMMARY
 INVESTMENT ADVISOR SERVICES; Contract No. 001244

EVALUATOR	CHANDLER ASSET MANAGEMENT		PFM		PUBLIC TRUST ADVISORS					
	TECHNICAL	PRICE	TECHNICAL	PRICE	TECHNICAL	PRICE	TECHNICAL	PRICE	TECHNICAL	PRICE
Lisa Lumbar	63		70		63					
Michael Carlisle	63		68		59					
Emily Rouse	67		69		67					
Stephen Koontz	55		65		54					
TOTAL	248		272		243		0			
AVG. TECH. POINTS	62.00		68.00		60.75		#DIV/0!			

PRICE PROPOSAL SUMMARY

PROPOSER	PROPOSAL AMOUNT	POINT VALUE
CHANDLER ASSET MGMT	\$831,000.00	14.30
PFM	\$665,000.00	17.86
PUBLIC TRUST ADVISORS	\$594,000.00	20.00

POINT TOTALS AND FINAL RANKING

PROPOSER	TECHNICAL POINTS	PRICE POINTS	TOTAL POINTS	FINAL RANKING
CHANDLER ASSET MGMT	62.00	14.30	76.30	3
PFM	68.00	17.86	85.86	1
PUBLIC TRUST ADVISORS	60.75	20.00	80.75	2

Committee Members:

[Handwritten signatures]

3/10/2017
 3/10/2017
 3/10/2017
 3/10/2017

EXHIBIT "A"
INVESTMENT ADVISOR SERVICES
SCOPE OF SERVICES
CONTRACT NO. 001244

This Scope of Services describes the investment advisory services required by CFX for its short-term, medium-term and long-term investment portfolio. The Investment Advisor shall be registered with the Securities and Exchange Commission (SEC) under the Investment Advisor's Act of 1940 who will act in a fiduciary capacity. The Investment Advisor shall manage the funds in accordance with the laws of the State of Florida and the investment policies and procedures established by CFX. The Investment Advisor will not provide custodial services or security safekeeping.

Specific responsibilities of the Investment Advisor include, but are not necessarily limited to, the following:

- A. Manage on a daily basis CFX's separate investment portfolios pursuant to the specific, stated investment objectives. Obtain and place all orders for the purchase and sale of securities, communicate settlement information to CFX's staff and assist in coordinating security settlement, all in accordance with CFX's Investment Policies and Procedures.
- B. Serve as a general resource to CFX's staff for information, providing advice and training regarding fixed income securities, investments, and treasury management and operations.
- C. Work with CFX's staff to review and update as needed CFX's Investment Policies and Procedures.
- D. Work with CFX's staff to develop cash flow projections to ensure that the investment strategy is consistent with CFX's cash requirements.
- E. Make available daily information on investment activity and the value of portfolios.
- F. Provide weekly reports that show the current market value of the investment portfolio, including cash and money market accounts, along with a detailed description of all the investment holdings at a minimum.
- G. Provide monthly statements on investment activity, earnings and valuation of the investment portfolio. The reports shall include mark-to-market valuations as required by GASB 31 and 40. The Investment Advisor shall also provide monthly reports of investments, including the diversity of investments, duration and compliance with applicable investment policies of CFX and State of Florida statutes.
- H. Provide quarterly investment reports including a description of market conditions, investment strategies employed, performance benchmark data and suggested changes to investment strategy.

- I. When requested, conduct all aspects of the investment program in compliance with the arbitrage and rebate requirements of the U.S. treasury, currently described in Section 148 of the Internal Revenue Code of 1986 as amended and of the related Code of Federal Regulations.
- J. When requested, provide annual and “computation date” calculations of arbitrage earnings for each outstanding bond issue and to keep CFX appraised of any change in arbitrage compliance regulations that may occur during the term of the contract.
- K. Perform services related to investment agreements or structured products, including, but not limited to:
 - 1. Work with CFX to determine appropriate investment opportunities and draw schedules;
 - 2. Create investment agreement or structured product bid specification sheets incorporating CFX’s requirements;
 - 3. When necessary, obtain bond counsel sign-off for nonconforming bidding terms including in the bid specification sheet;
 - 4. Conduct the bidding process;
 - 5. Summarize bid results for the appropriate decision makers among the transaction working group;
 - 6. Facilitate the selection of the winning provider with appropriate team members;
 - 7. Review investment agreement or structured product documents to ensure compliance with term sheet and CFX’s requirements; and
 - 8. Facilitate timely delivery of final document for signature while obtaining specific approval from CFX for any exceptions or waivers of standard policies in the final agreement.

End of Scope of Services

EXHIBIT "B"

**CENTRAL FLORIDA EXPRESSWAY AUTHORITY
INVESTMENT ADVISOR SERVICES
CONTRACT NO. 1244**

THIS AGREEMENT (the "Agreement"), is made upon the date of the last party's execution below ("Effective Date") by and between the Central Florida Expressway Authority, a body politic and corporate and agency of the State of Florida hereinafter the "CFX"), and _____, a _____ corporation, registered and authorized to conduct business in the State of Florida, whose principal address is _____ and who is duly authorized hereinafter the "INVESTMENT ADVISOR."

WITNESSETH

WHEREAS, CFX has funds available for investment purposes (the "Initial Funds") for which it intends to conduct an investment program; and

WHEREAS, CFX desires to avail itself of the experience, sources of information, advice, assistance and facilities available to the INVESTMENT ADVISOR; to have the INVESTMENT ADVISOR undertake certain duties and responsibilities; and to perform certain services as INVESTMENT ADVISOR on behalf of CFX, as provided herein; and

WHEREAS, the INVESTMENT ADVISOR is willing to provide such services on the terms and conditions hereinafter set forth and as presented in the proposal dated _____, 2017.

NOW, THEREFORE, in consideration of the premises and mutual covenants herein contained, it is agreed as follows:

1. SERVICES OF ADVISOR

(a) The INVESTMENT ADVISOR will provide investment management of the Initial Funds, earnings on the Initial Funds, and such other funds as CFX may from time to time be assigned by written notice to the INVESTMENT ADVISOR (collectively the "Managed Funds"). In connection therewith, the INVESTMENT ADVISOR will provide investment research and supervision of CFX's Managed Funds and conduct a continuous program of investment, evaluation and, when appropriate, sale and reinvestment of CFX's Managed Funds. The INVESTMENT ADVISOR shall continuously monitor investment opportunities and evaluate investments of CFX's Managed Funds. The INVESTMENT ADVISOR shall furnish CFX with monthly reports, which include statistical information and the immediately preceding month's results from investments of the Managed Funds. The INVESTMENT ADVISOR shall place all orders for the purchase, sale, loan or exchange of portfolio securities for CFX's account with brokers or dealers recommended by the INVESTMENT ADVISOR or CFX (unless instructed by CFX otherwise), and to that end the INVESTMENT ADVISOR is authorized as agent of CFX to give instructions to the depository designated by CFX as its custodian as to deliveries of securities and payments of cash for the account of CFX. Significant changes to the Managed Funds shall be subject to prior consultation with and approved in writing by CFX before being made by the INVESTMENT ADVISOR. In connection with the selection of such brokers and dealers and the placing of such orders, the INVESTMENT ADVISOR is directed to seek for CFX the most favorable execution and price, the determination of which may take into account, subject to any applicable laws, rules and regulations, whether statistical, research and other information or services have been or will be furnished to the INVESTMENT ADVISOR by such brokers and dealers. The depository designated by CFX shall have custody of cash, assets and securities of CFX. The INVESTMENT ADVISOR shall not take possession of or act

as custodian for the cash, securities or other assets in the Managed Funds and shall have no responsibility in connection therewith. Authorized investments shall include only those investments, which are currently authorized by the State of Florida, CFX's Investment Policy and bond covenants and as supplemented by such other written instructions as may from time to time be provided by CFX to the INVESTMENT ADVISOR. The INVESTMENT ADVISOR shall be entitled to rely upon CFX's written advice with respect to anticipated drawdowns of Managed Funds. The INVESTMENT ADVISOR will observe the instructions of CFX with respect to broker/dealers who are approved to execute transactions involving CFX's Managed Funds and in the absence of such instructions will engage broker/dealers, which the INVESTMENT ADVISOR reasonably believes to be reputable, qualified and financially sound.

(b) The INVESTMENT ADVISOR will evaluate and advise CFX on the economic aspects of structured investments such as guaranteed investment contracts, forward delivery agreements, and refunding escrow portfolios. At the direction of CFX to be evidenced by a written supplement or work order, the INVESTMENT ADVISOR shall advise CFX on the financial terms of any such structured investment product; shall assist CFX in pricing the product and shall provide its fairness opinion related thereto.

(c) **Exhibit "A"** to CFX's Request for Proposal, entitled "Scope of Services," is attached hereto and incorporated herein by reference.

2. **COMPENSATION**

(a) For services provided by the INVESTMENT ADVISOR pursuant to Paragraph 1(a) of this Agreement, CFX shall pay the INVESTMENT ADVISOR a monthly fee for the Operating and Reserve Funds based on the average daily Managed Funds under management for such month at an annual rate of ___ basis points (___%) for the first \$__ million; ___ basis points (___%) for the next \$__ million; and ___ basis points (___%) over \$__ million. For

services provided by the INVESTMENT ADVISOR pursuant to Paragraph 1(a) of this Agreement, CFX shall pay the INVESTMENT ADVISOR a monthly fee for the Bond Funds based on the average daily Managed Funds under management for such month at the rate of: first \$___ million, __ basis points (____%); over \$___ million, __ basis points (____%).

(b) Fees for any structured investment services provided pursuant to Paragraph 1(b) of this Agreement shall be as agreed to in writing prior to the INVESTMENT ADVISOR undertaking any specific engagement.

(c) The INVESTMENT ADVISOR will bill CFX monthly for service performed under this Agreement, said bill to include a statement indicating the basis upon which the fee was calculated. CFX shall pay to the INVESTMENT ADVISOR the amount payable pursuant to this Agreement in accordance with the Prompt Payment Act. See Section 218.70, Florida Statutes. The INVESTMENT ADVISOR shall have a documented invoice procedure.

(d) Assets invested by the INVESTMENT ADVISOR under the terms of this Agreement may from time to time be invested in a money market mutual fund or local government investment pool managed by the INVESTMENT ADVISOR (either a "Pool"), or in individual securities. Average daily net assets subject to the fees described in this section shall not take into account any funds invested in the Pool. Expenses of the Pool, including compensation for the INVESTMENT ADVISOR and the Pool custodian, are described in the relevant prospectus or information statement and are paid from the Pool.

(e) If and to the extent that CFX shall request the INVESTMENT ADVISOR to render services other than those to be rendered by the INVESTMENT ADVISOR hereunder, such additional services shall be compensated separately on terms to be agreed upon between the INVESTMENT ADVISOR and CFX.

3. EXPENSES.

(a) The INVESTMENT ADVISOR shall furnish at its own expense all necessary administrative services, office space, equipment, clerical personnel, telephone and other communication facilities, investment advisory facilities, and executive and supervisory personnel for managing the investments.

(b) Except as expressly provided otherwise herein, CFX shall pay all of its own expenses including, without limitation, taxes, commissions, fees and expenses of CFX's independent auditors and legal counsel, if any, brokerage and other expenses connected with the execution of portfolio security transactions, insurance premiums, fees and expenses of the custodian of the Managed Funds including safekeeping of funds and securities and the keeping of books and accounts.

(c) The INVESTMENT ADVISOR shall pay all travel or expense charges.

(d) There is no minimum annual fee.

4. RESPONSIBILITY OF INVESTMENT ADVISOR

The INVESTMENT ADVISOR hereby represents it is a registered INVESTMENT ADVISOR under the Investment Advisors Act of 1940. The INVESTMENT ADVISOR shall immediately notify CFX if at any time during the term of this Agreement it is not so registered or if its registration is suspended. The INVESTMENT ADVISOR agrees to perform its duties and responsibilities under this Agreement with reasonable care an appropriate level of care and duty generally acceptable to investment advisors performing similar services. The federal securities laws impose penalties under certain circumstances on persons who are required to act in good faith. Nothing herein shall in any way constitute a waiver or limitation of any rights which CFX or the INVESTMENT ADVISOR may have under any federal securities laws. CFX hereby authorizes the INVESTMENT ADVISOR to sign I.R.S. Form W-9 on behalf of CFX and to

deliver such form to broker-dealers or others from time to time as required in connection with securities transactions pursuant to this Agreement.

5. CONFLICT OF INTEREST

CFX understands that the INVESTMENT ADVISOR performs investment advisory services for various other clients, which may include investment companies, commingled trust funds and individual portfolios. CFX agrees that the INVESTMENT ADVISOR, in the exercise of its professional judgment, may give advice or take action with respect to any of its other clients which may differ from advice given or the timing or nature of action taken with respect to CFX's Managed Funds accounts, so long as it is the policy of the INVESTMENT ADVISOR, to the extent practical, to allocate investment opportunities to this account over a period of time on a fair and equitable basis relative to other clients. The INVESTMENT ADVISOR shall not have any obligation to purchase, sell or exchange any security for CFX's Managed Funds solely by reason of the fact that the INVESTMENT ADVISOR, its principals, affiliates, or employees may purchase, sell or exchange such security for the account of any other client or for itself or its own accounts.

6. TERM AND TERMINATION

The term of this Agreement shall be for three (3) years from the Effective Date. There shall be two renewal options of one (1) year each. The options to renew are at the sole discretion and election of CFX. Renewals will be based, in part, on a determination by CFX that the value and level of service provided by the INVESTMENT ADVISOR are satisfactory and adequate for CFX's needs. If a renewal option is exercised, CFX will provide the INVESTMENT ADVISOR with written notice of its intent at least sixty (60) days prior to the expiration of the term of the Agreement and subsequent renewal period.

This Agreement may be terminated by CFX in the event of any material breach of its terms immediately upon notice by certified mail, return receipt requested. This Agreement may be terminated by CFX without cause, on not less than thirty (30) days prior written notice to the INVESTMENT ADVISOR. The INVESTMENT ADVISOR may terminate this Agreement immediately upon any material breach of its terms by CFX, or at any time after one year upon sixty (60) days prior written notice.

7. FORCE MAJEURE.

The INVESTMENT ADVISOR shall have no liability for any losses arising out of the delays in performing or inability to perform the services which it renders under this Agreement which result from events beyond its control, including interruption of the business activities of the INVESTMENT ADVISOR or other financial institutions due to acts of God, acts of governmental authority, acts of war, terrorism, civil insurrection, riots, labor difficulties, or any action or inaction of any carrier or utility/.

8. SUSPENSIONS, COMPLAINTS

The INVESTMENT ADVISOR shall promptly notify CFX in writing of any complaints or disciplinary actions filed against it, or any investment professional employed by it, who has performed any service with respect to CFX's account in the twenty-four (24) preceding months, by the Securities and Exchange Commission or any other agency or department of the United States, the New York Stock Exchange, any registered securities exchange, the NASD, any Attorney General or any regulatory agency or authority of any State.

9. INDEPENDENT CONTRACTOR

The INVESTMENT ADVISOR, its employees, officers and representatives, shall not be deemed to be employees, agents (except as described in Section 1 hereof), partners, servants, or

joint ventures of CFX by virtue of this Agreement or any actions or services rendered under this Agreement.

10. BOOKS; AUDIT

The INVESTMENT ADVISOR shall maintain appropriate records of all its activities hereunder and made available upon request to CFX at all times during the period of this Agreement and for five (5) years after final payment is made. Copies of these documents and records shall be furnished to CFX upon request. The INVESTMENT ADVISOR shall provide CFX with a monthly statement showing deposits, withdrawals, purchases and sales (or maturities) of investments, earnings received, the value of Managed Funds held on the last business day of the month and the average daily balance of Managed Funds for such month. The statement shall be in the format and manner that is mutually agreed upon by the INVESTMENT ADVISOR and CFX.

11. INVESTMENT ADVISOR'S DISCLOSURE STATEMENT

The INVESTMENT ADVISOR warrants that it has delivered to CFX, at least five business days prior to the execution of this Agreement, the INVESTMENT ADVISOR's current Securities and Exchange Commission Form ADV, Part II (the INVESTMENT ADVISOR's disclosure statement).

12. DISADVANTAGED/MINORITY AND WOMEN'S BUSINESS ENTERPRISES

CFX has adopted a program to provide opportunities for small business, including Disadvantaged/Minority Business Enterprises ("D/MBEs") and Women's Business Enterprises ("WBEs"). Under CFX's program, INVESTMENT ADVISOR is encouraged to grant small businesses the maximum opportunity to participate in the provision of the Services with respect to the operation and maintenance of the System. INVESTMENT ADVISOR shall provide information regarding its employment of such businesses and the percentage of payments made

to such businesses and others. INVESTMENT ADVISOR shall provide an annual report to CFX on or before each anniversary of the Effective Date hereof and throughout the Term, regarding use of small business D/MBEs and WBEs and the percentage of payments made to enterprises falling within such categories. Such report shall consolidate the information contained in INVESTMENT ADVISOR's invoices, and shall be in a form reasonably acceptable to CFX.

13. PUBLIC RECORDS

Notwithstanding the Section entitled "Press Releases," INVESTMENT ADVISOR acknowledges that CFX is a body politic and corporate, an agency of the State of Florida, and is subject to the Public Records Act codified in Chapter 119, Florida Statutes. To the extent that the INVESTMENT ADVISOR is in the possession of documents that fall within the definition of public records subject to the Public Records Act, which public records have not yet been delivered to CFX, INVESTMENT ADVISOR agrees to comply with the Public Records Act.

IF THE INVESTMENT ADVISOR HAS QUESTIONS REGARDING THE APPLICATION OF CHAPTER 119, FLORIDA STATUTES, TO THE INVESTMENT ADVISOR'S DUTY TO PROVIDE PUBLIC RECORDS RELATING TO THIS CONTRACT, CONTACT THE CUSTODIAN OF PUBLIC RECORDS AT Phone: 407-690-5000, e-mail: publicrecords@cfxway.com, and address: Central Florida Expressway Authority, 4974 ORL Tower Road, Orlando, FL. 32807.

An excerpt of Section 119.0701, Florida Statutes, is below.

(1)(a) "Contractor" means an individual, partnership, corporation, or business entity that enters into a contract for services with a public agency and is acting on behalf of the public agency as provided under s. 119.011(2).

(2)(b). . . . [T]he contractor [shall] comply with public records laws, specifically to:

1. Keep and maintain public records required by the public agency to perform the service.

2. Upon request from the public agency's custodian of public records, provide the public agency with a copy of the requested records or allow the records to be inspected or copied within a reasonable time at a cost that does not exceed the cost provided in this chapter or as otherwise provided by law.

3. Ensure that public records that are exempt or confidential and exempt from public records disclosure requirements are not disclosed except as authorized by law for the duration of the contract term and following completion of the contract if the contractor does not transfer the records to the public agency.

4. Upon completion of the contract, transfer, at no cost, to the public agency all public records in possession of the contractor or keep and maintain public records required by the public agency to perform the service. If the contractor transfers all public records to the public agency upon completion of the contract, the contractor shall destroy any duplicate public records that are exempt or confidential and exempt from public records disclosure requirements. If the contractor keeps and maintains public records upon completion of the contract, the contractor shall meet all applicable requirements for retaining public records. All records stored electronically must be provided to the public agency, upon request from the public agency's custodian of public records, in a format that is compatible with the information technology systems of the public agency.

Upon receipt of any request by a member of the public for any documents, papers, letters, or other material subject to the provisions of Chapter 119, Florida Statutes, made or received by the INVESTMENT ADVISOR in conjunction with this Agreement, INVESTMENT ADVISOR shall immediately notify the CFX. In the event the INVESTMENT ADVISOR has public records in its possession that are subject to Chapter 119, INVESTMENT ADVISOR shall comply with the Public Records Act. Failure by the INVESTMENT ADVISOR to grant such

public access to public records shall be grounds for immediate unilateral cancellation of this Agreement by CFX or enforcement remedies at CFX's option.

The obligations in this Section shall survive the expiration or termination of this Agreement and continue in full force and effect until all public records are transferred to CFX or the end of the longest applicable retention periods.

14. PRESS RELEASES

The INVESTMENT ADVISOR agrees that it shall make no statements, press releases or publicity releases concerning this Agreement or its subject matter or otherwise disclose or permit to be disclosed any of the data or other information obtained or furnished in compliance with this Agreement, or any particulars thereof, during the term of the Agreement, without first notifying CFX and securing its consent in writing, except as required by law. The INVESTMENT ADVISOR also agrees that it shall not publish, copyright or patent any of the data, documents, reports, or other written or electronic materials furnished in compliance with this Agreement, it being understood that such data or information is the property of CFX.

15. INSURANCE

The INVESTMENT ADVISOR shall carry and keep in force during the period of this Agreement, the required amount of coverage as stated below. All insurance must be underwritten by insurers that are qualified to transact business in the State of Florida and that have been in business and have a record of successful and continuous operations for at least five (5) years. Each shall carry a rating of "A-" (excellent) and a financial rating of Class XII, as defined by A.M. Best and Company's Key Rating Guide and must be approved by CFX. The INVESTMENT ADVISOR shall carry and keep in force the following insurance coverage, and provide CFX with correct certificates of insurance (ACORD forms) upon Agreement execution:

1. Commercial General Liability Insurance having a minimum coverage of One Million Dollars (\$1,000,000.00) per occurrence of bodily injury or property damage and a minimum of Two Million Dollars (\$2,000,000.00) annual aggregate for both General and Products and Completed Operations. Liability insurance shall be current ISO simplified form including products and completed operations coverage. The contractual liability insurance coverage shall include coverage for responsibilities and liabilities assumed by INVESTMENT ADVISOR under this Agreement.

2. Business Automobile Liability (for bodily injury, death and property damage) having a minimum coverage of One Million Dollars (\$1,000,000.00) for each accident;

3. Workers' Compensation Insurance Coverage, including all coverage required under the laws of the state of Florida (as amended from time to time hereafter);

4. Unemployment Insurance Coverage in amounts and forms required by Florida law, as it may be amended from time to time hereafter.

5. Professional Liability (Errors & Omissions) Insurance Coverage shall have limits of not less than Ten Million Dollars (\$10,000,000) Combined Single Limit (CSL) or its equivalent, protecting the selected firm or individual against claims of CFX for negligence, errors, mistakes or omissions in the performance of services to be performed and furnished by the INVESTMENT ADVISOR.

6. Commercial Crime Insurance having a minimum coverage of Ten Million Dollars (\$10,000,000.00) per occurrence and a minimum of Ten Million Dollars (\$10,000,000.00) annual aggregate.

7. Fiduciary Liability Insurance having a minimum coverage of Ten Million Dollars (\$10,000,000.00) per occurrence and a minimum of Ten Million Dollars (\$10,000,000.00) annual aggregate.

Such insurance policies shall be without co-insurance, and shall (a) include CFX, and such other applicable parties CFX shall designate, as additional insureds, (b) be primary insurance, (c) include contractual liability for commercial general liability, and (d) provide that the insurer waives any right of subrogation against CFX, to the extent allowed by law and to the extent the same would not void primary coverage for applicable insurance policies. The INVESTMENT ADVISOR shall be responsible for any deductible it may carry. The INVESTMENT ADVISOR asserts that it will not materially alter any of the insurance policies in force and will not reduce any coverage amount below the limits specified herein. At least fifteen (15) days prior to the expiration of any such policy of insurance required to be carried by the INVESTMENT ADVISOR hereunder, the INVESTMENT ADVISOR shall deliver insurance certificates to CFX evidencing a renewal or new policy to take the place of the one expiring. Compliance with these insurance requirements shall not relieve or limit the INVESTMENT ADVISOR's liabilities and obligations under this Agreement. Failure of CFX to demand such certificate or evidence of full compliance with these insurance requirements or failure of CFX to identify a deficiency from evidence provided will not be construed as a waiver of the INVESTMENT ADVISOR's obligation to maintain such insurance.

The acceptance of delivery by CFX of any certificate of insurance evidencing the required coverage and limits does not constitute approval or agreement by CFX that the insurance requirements have been met or the insurance policies shown in the certificates of insurance are in compliance with the requirements.

If the INVESTMENT ADVISOR fails to obtain the proper insurance policies or coverages, or fails to provide CFX with certificates of same, CFX may obtain such policies and coverages at the INVESTMENT ADVISOR's expense and deduct such costs from the INVESTMENT ADVISOR payments. The requirement of insurance shall not be deemed a waiver of sovereign immunity by CFX.

Any insurance carried by CFX in addition to the INVESTMENT ADVISOR's policies shall be excess insurance, not contributory.

16. CONFLICT OF INTEREST AND STANDARDS OF CONDUCT

The INVESTMENT ADVISOR warrants that it has not employed or retained any entity or person, other than a bona fide employee working solely for the INVESTMENT ADVISOR, to solicit or secure this Agreement, and that the INVESTMENT ADVISOR has not paid or agreed to pay any person, company, corporation, individual or firm any fee, commission, percentage, gift or any other consideration, contingent upon or resulting from the award or making of this Agreement. It is understood and agreed that the term "fee" shall also include brokerage fee, however denoted.

The INVESTMENT ADVISOR acknowledges that CFX officials and employees are prohibited from soliciting and accepting funds or gifts from any person who has, maintains, or seeks business relations with CFX in accordance with CFX's Code of Ethics. The INVESTMENT ADVISOR acknowledges that it has read CFX's Code of Ethics and, to the extent applicable, the INVESTMENT ADVISOR will comply with CFX's Code of Ethics in connection with performance of the Agreement.

In the performance of the Agreement, the INVESTMENT ADVISOR shall comply with all applicable local, state, and federal laws and regulations and obtain all permits necessary to provide the contracted services.

The INVESTMENT ADVISOR covenants and agrees that it and its employees, officers, agents, and subcontractors shall be bound by the standards of conduct provided in Florida Statutes, Section 112.313 as it relates to work performed under this Agreement, which standards will be reference be made a part of this Agreement as though set forth in full.

17. NONDISCRIMINATION

INVESTMENT ADVISOR, its employees, officers, agents, and subcontractors shall not discriminate on the grounds of race, color, religion, sex, national origin, or other protected class, in the performance of work or selection of personnel under this Agreement. Pursuant to Section 287.134(2)(a), Florida Statutes, “an entity or affiliate who has been placed on the discriminatory vendor list may not submit a bid, proposal, or reply on a contract to provide any goods or services to a public entity; may not submit a bid, proposal, or reply on a contract with a public entity for the construction or repair of a public building or public work; may not submit bids, proposals, or replies on leases of real property to a public entity; may not be awarded or perform work as a contractor, supplier, subcontractor, or consultant under a contract with any public entity; and may not transact business with any public entity.”

18. NOTIFICATION OF CRIMES; PUBLIC ENTITY CRIME INFORMATION

INVESTMENT ADVISOR shall notify CFX if any of INVESTMENT ADVISOR’s personnel who are directly involved with CFX accounts shall be charged with or convicted of any crime, whether state or federal, or felony or misdemeanor of any degree. Such notification

shall be made no later than thirty (30) days after the charge or conviction, regardless of whether such conviction is appealed.

Pursuant to Section 287.133(2)(a), Florida Statutes, “a person or affiliate who has been placed on the convicted vendor list following a conviction for a public entity crime may not submit a bid, proposal, or reply on a contract to provide any goods or services to a public entity; may not submit a bid, proposal, or reply on a contract with a public entity for the construction or repair of a public building or public work; may not submit bids, proposals, or replies on leases of real property to a public entity; may not be awarded or perform work as a contractor, supplier, subcontractor, or consultant under a contract with any public entity; and may not transact business with any public entity in excess of the threshold amount provided in s. 287.017 for CATEGORY TWO (\$35,000) for a period of 36 months following the date of being placed on the convicted vendor list.”

19. MODIFICATION

This Agreement shall not be changed, modified, terminated or discharged in whole or in part, except by an instrument in writing signed by both parties hereto, or their respective successors or assigns.

20. SUCCESSORS AND ASSIGNS

The provisions of this Agreement shall be binding on the INVESTMENT ADVISOR and its respective successors and assigns, provided, however, that the rights and obligations of the INVESTMENT ADVISOR may not be assigned without prior written consent of CFX.

21. APPLICABLE LAW; DISPUTE RESOLUTION

This Agreement shall be construed, enforced, and administered according to the laws of the State of Florida and any question regarding its validity, construction, enforcement, or performance shall be governed by Florida law. The INVESTMENT ADVISOR and CFX agree

that, should a disagreement arise as to the terms or enforcement of any provision of this Agreement, each party will in good faith attempt to resolve said disagreement prior to filing a lawsuit.

22. EXECUTION AND SEVERABILITY

Each party to this Agreement represents and warrants that the person or persons signing this Agreement on behalf of such party is authorized and empowered to sign and deliver this Agreement for such party. The invalidity in whole or in part of any provision of this Agreement shall not void or affect the validity of any other provision.

23. JURISDICTIONAL MATTERS; WAIVER OF JURY TRIAL

(a) The parties consent to the *exclusive* jurisdiction of the courts located in Orange County, Florida.

(b) The parties hereto hereby irrevocably waive trial by jury, and irrevocably waive any objection, including, without limitation any objection to the laying of venue or based on the grounds of forum non conveniens, which they may now or hereafter have to the bringing on any such actions or proceeding in Orange County, Florida.

24. HEADINGS DESCRIPTIVE; ENTIRE AGREEMENT

The headings of the several sections and subsections of the Agreement are inserted for convenience only and shall not in any way affect the meaning or construction of any provision of the Agreement. This Agreement constitutes the entire agreement among the parties hereto regarding the subject matters hereof and thereof and supersedes all prior agreements, representations and understanding related to such subject matters. The Agreement may not be amended except in writing.

25. DOCUMENTED ALIENS

The INVESTMENT ADVISOR warrants that all persons performing work for CFX under this Agreement, regardless of the nature or duration of such work, shall be United States citizens or properly authorized and documented aliens. The INVESTMENT ADVISOR shall comply with all federal, state and local laws and regulations pertaining to the employment of unauthorized or undocumented aliens at all times during the performance of this Agreement and shall indemnify and hold CFX harmless for any violations of the same. Furthermore, if CFX determines that INVESTMENT ADVISOR has knowingly employed any unauthorized alien in the performance of this Agreement, CFX may immediately and unilaterally terminate this Agreement for cause.

26. E-VERIFY CLAUSE

The INVESTMENT ADVISOR shall utilize the U.S. Department of Homeland Security's E-Verify System to verify the employment eligibility of all new employees hired by the INVESTMENT ADVISOR during the term of the Agreement. INVESTMENT ADVISOR shall require all of its subconsultants to verify the employment eligibility of all new employees hired by the subconsultants during the term of the Agreement.

27. INSPECTOR GENERAL

The INVESTMENT ADVISOR agrees to comply with Section 20.055(5), Florida Statutes, and agrees to cooperate with the inspector general in any investigation, audit, inspection, review, or hearing pursuant to this section. The INVESTMENT ADVISOR agrees to incorporate in all subcontracts the obligation to comply with Section 20.055(5). The obligations in this paragraph shall survive the expiration or termination of this Agreement and continue in full force and effect.

28. NOTICE

All notices required pursuant to the terms hereof shall be sent by First Class United States Mail. Unless prior written notification of an alternate address for notices is sent, all notices shall be sent to the following addresses:

To CFX: Central Florida Expressway Authority
4974 ORL Tower Road
Orlando, FL 32807
Attn: Chief Financial Officer

Central Florida Expressway Authority
4974 ORL Tower Road
Orlando, FL 32807
Attn: General Counsel

To INVESTMENT ADVISOR: _____

Attn: _____

Attn: _____

IN WITNESS WHEREOF, the authorized signatures named below have executed this Agreement on behalf of the parties as of the day and year first above written. This Agreement was awarded by CFX’s Board of Directors at its meeting on _____, 2017.

INVESTMENT ADVISOR

By: _____

Print Name: _____

Title: _____

Date: _____

ATTEST: _____(Seal)

CENTRAL FLORIDA EXPRESSWAY AUTHORITY

By: _____
Director of Procurement

Print Name: _____

Date: _____

Approved as to form and execution, only.

General Counsel for CFX

Attachments:

- A. Exhibit “A” to CFX’s Request for Proposal, entitled “Scope of Services”
- B. CFX Investment Policy

CONSENT AGENDA ITEM

#3

CENTRAL FLORIDA EXPRESSWAY AUTHORITY

MEMORANDUM

TO: CFX Board Members

FROM: Laura Kelley, Executive Director

DATE: March 17, 2017

SUBJECT: Reallocation of Budgeted Funds



Board approval is requested to transfer \$10,000 from other Administrative Services' budget line items to travel in the Fiscal Year 2017 OM&A Budget. Per CFX's Travel and Budget Policies, no department is allowed to exceed its travel budget without board approval of an amendment to the department's travel budget in advance of any over-budget travel expenditures. This transfer will not change the overall budget amount in Administrative Services.

Administrative Services' travel budget covers all travel for executive staff and Board members. Fiscal year 2017 was the first full year that Administrative Service's was fully staffed under the new organizational structure. CFX originally budgeted \$17,000 for travel and the transfer of \$10,000 will bring that line item total to \$27,000.


CONSENT AGENDA ITEM

#4

CENTRAL FLORIDA EXPRESSWAY AUTHORITY

MEMORANDUM

TO: CFX Board Members

FROM: Aneth Williams 
Director of Procurement

DATE: March 22, 2017

RE: Request for Authorization to Advertise
Request for Proposals for Public Information Services
Contract No. 001298

Board authorization is requested to advertise for Request for Proposals from qualified firms to provide public information services. The current contract with Quest Corporation of America, Inc., for these services expires on November 27, 2017 and cannot be renewed.

Services to be provided under the new contract will include: coordinating responses to public inquiries; providing necessary support to CFX for public meetings, events and meetings with elected officials or public agencies; assisting in the identification and execution of community outreach opportunities related to project included in the Five-Year Work Plan.

This contract will be budgeted for in the Five-Year Work Plan.

Reviewed by: 

Angela Melton
Manager of Communications




CONSENT AGENDA ITEM

#5

CENTRAL FLORIDA EXPRESSWAY AUTHORITY

MEMORANDUM

TO: CFX Board Members

FROM: Aneth Williams 
Director of Procurement

DATE: March 28, 2017

SUBJECT: Approval of Supplemental Agreement No. 2 for the Communications and Marketing Consultant Services Contract with Day Communications, Inc. Contract No. 001002

Board approval is requested for Supplemental Agreement No. 2 with Day Communications, Inc. in the amount of \$550,000.00 for the referenced Agreement. Hourly rates will remain the same. The funding requested will continue the services throughout the first renewal period ending December 2017.

The marketing and communication services contract held by Day Communications, Inc. was competitively procured through the Small Sustainable Business Enterprise (SSBE) program in December 2013. When the contract was scoped and awarded, the services requested and hours were based on initiatives under the previous agency.

Day Communications and the team of subcontractors support staff in optimizing marketing and communication initiatives and platforms to achieve goals set forth in CFX's Strategic Business Plan. Those services include the development and execution of marketing strategies, message definition and development, market research, brand building, advertising, media buying and tracking, digital and social media, web design and development, creative, multimedia production, collateral material production, CAFR production, earned media, special events, outreach, employee communications, tracking and sustaining marketing impact.

The contract, based on an estimated projection of man-hours, has been utilized as a task driven professional services labor contract. The contract award was for three years with two one year renewal options.

The creation and transition into the Central Florida Expressway Authority with the adoption of the strategic plan has required marketing, outreach and communications tasks, such as rebranding the agency and E-PASS marketing. Because of this, staff shall revisit the 2013 original scope and recommend going out for bid for marketing communications services in FY18.

Approval is requested for Supplemental Agreement 2 in the amount of \$550,000 for continued communication services through December 2017 to support ongoing and new initiatives.

This Supplemental Agreement will be a continuation of an Agreement previously approved by CFX for these services.

Original Contract Amount	\$ 987,625.00
Amount of Supplemental Agreement No.1	\$ 987,625.00
Renewal No.1	\$ 0.00
Amount of Supplemental Agreement No.2	<u>\$ 550,000.00</u>
Total Revised Contract Amount	\$2,525,250.00

Reviewed by:



Angela Melton, Manager of Communication



**CENTRAL FLORIDA EXPRESSWAY AUTHORITY
SUPPLEMENTAL AGREEMENT NO. 2
TO
AGREEMENT FOR COMMUNICATIONS AND MARKETING CONSULTANT
SERVICES
CONTRACT NO. 001002**

This Supplemental Agreement No. 2 (“Supplemental Agreement”) is entered into this 13th day of April 2017, by and between the Central Florida Expressway Authority (“CFX”) and Day Communications, Inc. (“Consultant”).

WITNESSETH:

WHEREAS, CFX and the Consultant on December 12, 2013, entered into an Agreement whereby CFX retained the Consultant to communications and marketing services; and

WHEREAS, CFX has determined it necessary to increase the Contract amount by \$550,000.00 in order to continue the required services through the term of the Contract; and,

WHEREAS, the Consultant hereby agrees to the increase in the Contract amount and will continue provide the required services with no change in the fees and rates included in the original Contract dated December 12, 2013;

NOW, THEREFORE, for and in consideration of the mutual benefits to flow each to the other, the parties agree that the Consultant shall provide the required services as detailed in the Scope of Services included in the original Contract and CFX shall increase the amount of the Contract by \$550,000.00 which shall make the total not-to-exceed amount of the Contract \$2,525,250.00.

CFX and Consultant agree that this Supplemental Agreement No.2 shall not alter or change in any manner the force and effect of the original Contract except insofar as the same is altered and amended by this Supplemental Agreement No.2; that acceptance of this Supplemental Agreement No. 2 signifies the Consultant’s waiver of all future rights for additional compensation which is not already defined herein.

IN WITNESS THEREOF, the parties hereto have caused these presents to be executed on the day and year first written above. This Supplemental Agreement No. 2 was approved by CFX Board of Directors on April 13, 2017.

CENTRAL FLORIDA EXPRESSWAY AUTHORITY

By: _____
Director of Procurement

DAY COMMUNICATIONS, INC.

By: _____

Title: _____

Attest: _____ (Seal)

Approved as to form and execution, only.

General Counsel for CFX

**CENTRAL FLORIDA EXPRESSWAY AUTHORITY
CONTRACT RENEWAL AGREEMENT
CONTRACT NO. 001002**

THIS CONTRACT RENEWAL AGREEMENT (the "Renewal Agreement"), made and entered into this 13th day of October, 2016, by and between the Central Florida Expressway Authority, hereinafter called "CFX" and Day Communications, Inc., herein after called the "Contractor."

WITNESSETH

WHEREAS, CFX and the Contractor entered into a Contract Agreement (the "Original Agreement") dated December 12, 2013, with a Notice to Proceed date of December 20, 2013, whereby CFX retained the Contractor to provide communications and marketing services; and

WHEREAS, pursuant to Article 2 of the Original Agreement, CFX and Contractor wish to renew the Original Agreement for a period of one (1) year;

NOW, THEREFORE, for and in consideration of the mutual benefits to flow each to the other, CFX and Contractor agree to a first renewal of said Original Agreement beginning the 30th day of December, 2016 and ending the 29th day of December, 2017 with no increase in the Contract amount.

Contractor states that, upon its receipt and acceptance of Final Payment for Services renders under the Original Contract ending December 29, 2016, the Contractor shall execute a "Certificate of Completion of the Original Contract and Acceptance of Final Payment" that waives all future right of claim for additional compensation for services rendered under the Original Contract ending December 29, 2016.

All terms and conditions of said Original Agreement and any supplements and amendments thereto shall remain in full force and effect during the full term of this Renewal Agreement.

IN WITNESS WHEREOF, the parties have executed this Renewal Agreement by their duly authorized officers on the day, month and year set forth above.

DAY COMMUNICATIONS, INC.

BY: *[Signature]*
Authorized Signature

Title: *President*

ATTEST: *[Signature]* (SEAL)
Secretary or Notary

If Individual, furnish two witness:

Witness (1) *Vanessa Terline*
Witness (2) *Keller Brewer*

CENTRAL FLORIDA EXPRESSWAY AUTHORITY

BY: *[Signature]*
Director of Procurement



Legal Approval as to Form

[Signature]
General Counsel for CFX

317 MAY '15 10:11 AM

**CENTRAL FLORIDA EXPRESSWAY AUTHORITY
SUPPLEMENTAL AGREEMENT NO. 1
TO
AGREEMENT FOR COMMUNICATIONS AND MARKETING CONSULTANT
SERVICES
CONTRACT NO. 001002**

This Supplemental Agreement No. 1 ("Supplemental Agreement") is entered into this 14th day of April 2016, by and between the Central Florida Expressway Authority ("CFX") and Day Communications, Inc. ("Consultant").

WITNESSETH:

WHEREAS, CFX and the Consultant on December 12, 2013, entered into an Agreement whereby CFX retained the Consultant to communications and marketing services; and

WHEREAS, CFX has determined it necessary to increase the Contract amount by \$987,625.00 in order to continue the required services through the term of the Contract; and,

WHEREAS, CFX will utilize any funds not expended during the initial term as funding for the anticipated first renewal period commencing December 12, 2016; and,

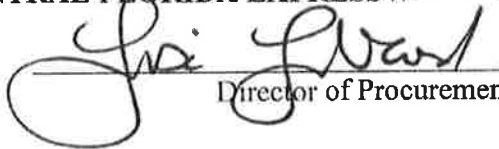
WHEREAS, the Consultant hereby agrees to the increase in the Contract amount and will continue provide the required services with no change in the fees and rates included in the original Contract dated December 12, 2013;

NOW, THEREFORE, for and in consideration of the mutual benefits to flow each to the other, the parties agree that the Consultant shall provide the required services as detailed in the Scope of Services included in the original Contract and CFX shall increase the amount of the Contract by \$987,625.00 which shall make the total not-to-exceed amount of the Contract \$1,975,250.00.

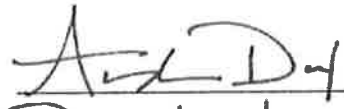
CFX and Consultant agree that this Supplemental Agreement No.1 shall not alter or change in any manner the force and effect of the original Contract except insofar as the same is altered and amended by this Supplemental Agreement No.1; that acceptance of this Supplemental Agreement No.1 signifies the Consultant's waiver of all future rights for additional compensation which is not already defined herein.

IN WITNESS THEREOF, the parties hereto have caused these presents to be executed on the day and year first written above. This Supplemental Agreement No. 1 was approved by CFX Board of Directors on April 14, 2016.

CENTRAL FLORIDA EXPRESSWAY AUTHORITY

By: 
Director of Procurement


DAY COMMUNICATIONS, INC.

By: 
Title: President

Attest: _____ (Seal)

Approved as to form and execution, only.

General Counsel for CFX



CONTRACT

**ORLANDO-ORANGE COUNTY EXPRESSWAY AUTHORITY
AND
DAY COMMUNICATIONS, INC.**

**COMMUNICATIONS AND MARKETING
CONSULTANT SERVICES**

CONTRACT NO. 001002

CONTRACT DATE: DECEMBER 12, 2013

CONTRACT AMOUNT: \$987,625.00



**ORLANDO-ORANGE COUNTY
EXPRESSWAY AUTHORITY**

**CONTRACT, SCOPE OF SERVICES, METHOD OF
COMPENSATION, TECHNICAL PROPOSAL, PRICE
PROPOSAL**

**CONTRACT, SCOPE OF SERVICES, METHOD OF COMPENSATION,
TECHNICAL PROPOSAL, PRICE PROPOSAL**

FOR

COMMUNICATIONS AND MARKETING CONSULTANT SERVICES

CONTRACT NO. 001002

December 2013

Members of the Board

**Walter A. Ketcham, Jr., Chairman
R. Scott Batterson, P.E., Vice Chairman
Teresa Jacobs, Secretary/Treasurer
Noranne B. Downs, P.E., Ex-Officio Member
Marco Peña, Board Member**

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CONTRACT

This Contract No. 001002 (the "Contract" as defined herein below), is made this 12th day of December, 2013, between the ORLANDO-ORANGE COUNTY EXPRESSWAY AUTHORITY, a body politic and agency of the State of Florida, hereinafter called the AUTHORITY and DAY COMMUNICATIONS, INC., 501 South New York Avenue, Suite 200, Winter Park, Florida 32789, hereinafter the CONSULTANT:

WITNESSETH:

WHEREAS, the AUTHORITY was created by statute and is charged with acquiring, constructing, operating and maintaining a system of limited access roadways known as the Orlando-Orange County Expressway System; and,

WHEREAS, the AUTHORITY has been granted the power under Section 348.754(2)(m) of Florida Statutes, "to do all acts and things necessary or convenient for the conduct of its business and the general welfare of the authority, in order to carry out the powers granted to it (by state law);" and,

WHEREAS, the AUTHORITY has determined that it is necessary and convenient in the conduct of its business to retain the services of a consultant to perform communications and marketing services and related tasks as may be assigned to the CONSULTANT by the AUTHORITY and identified as Contract No. 001002; and,

WHEREAS, on or about October 13, 2013, the AUTHORITY issued a Request for Proposals seeking qualified consultants to perform such tasks; and,

WHEREAS, CONSULTANT was the successful one of four qualified firms that responded to the Request for Proposals and was ultimately selected; and,

NOW THEREFORE, in consideration of the mutual covenants and benefits set forth herein and other good and valuable consideration, the receipt and sufficiency of which being hereby acknowledged by each party to the other, the parties hereto agree as follows:

1. SERVICES TO BE PROVIDED

The CONSULTANT shall, for the consideration herein stated and at its cost and expense, do all the work and furnish all the materials, equipment, supplies and labor necessary to perform this Contract in the manner and to the full extent as set forth in the Contract Documents all of which are hereby adopted and made part of this Contract as completely as if incorporated herein. The Contract shall be performed and services provided to the satisfaction of the duly authorized representatives of the AUTHORITY, who shall have at all times full opportunity to evaluate the services provided under this Contract.

The services to be provided under this Contract include providing communication and marketing services as detailed in the Contract Documents and any amendments, supplements, or modifications thereto.

The AUTHORITY does not guarantee that all of the services described in the Scope of Services will be assigned during the term of the Contract. Further, the CONSULTANT is providing these services on a non-exclusive basis. The AUTHORITY, at its option, may elect to have any of the services set forth herein performed by other contractors or AUTHORITY staff.

The Contract Documents, in order of precedence, consist of:

- 1.1 The Contract, including insurance policies,
- 1.2 The Scope of Services,
- 1.3 The Method of Compensation,
- 1.4 The Technical Proposal submitted by CONSULTANT, and
- 1.5 The Price Proposal submitted by CONSULTANT,

(collectively, the "Contract").

2. TERM AND NOTICE

The initial term of the Contract will be three (3) years from the date indicated in the Notice to Proceed from the AUTHORITY. There shall be two renewal options of one (1) year each. The options to renew are at the sole discretion and election of the AUTHORITY. Renewals will be based, in part, on a determination by the AUTHORITY that the value and level of service provided by the CONSULTANT are satisfactory and adequate for the AUTHORITY's needs. If a renewal option is exercised, the AUTHORITY will provide the CONSULTANT with written notice of its intent at least 90 days prior to the expiration of the initial three-year Contract Term.

The AUTHORITY shall have the right to terminate or suspend the Contract, in whole or in part, at any time with 10 days notice for convenience or 15 days with cure notice for cause for CONSULTANT's material failure to perform the provisions of the Contract. Under no circumstances shall a properly noticed termination by the AUTHORITY (with or without cause) constitute a default by the AUTHORITY. In the event of a termination for convenience or without cause, AUTHORITY shall notify CONSULTANT (in writing) of such action with instructions as to the effective date of termination or suspension, in accordance with the time frames set forth hereinabove. CONSULTANT will be paid for all work performed prior to termination and any reasonable, documented, direct, normal, and ordinary termination expenses. CONSULTANT will not be paid for special, indirect, consequential, or undocumented termination expenses. Payment for work performed will be based on Contract prices, which prices are deemed to include profit and overhead. No profit or overhead will be allowed for work not performed, regardless of whether the termination is for cause.

If CONSULTANT: (i) fails to perform the Contract terms and conditions; (ii) fails to begin the work under the Contract within the time specified in the "Notice to Proceed"; (iii) fails to perform the work with sufficient personnel or with sufficient materials to assure the prompt

performance of the work items covered by the Contract; (iv) fails to comply with the Contract, or (v) performs unsuitably or unsatisfactorily in the opinion of AUTHORITY reasonably exercised, or for any other cause whatsoever, fails to carry on the work in an acceptable manner, the AUTHORITY will give notice in writing to the CONSULTANT of such delay, neglect or default. If the Contract is declared in default, the AUTHORITY may take over the work covered by the Contract.

If CONSULTANT (within the curative period, if any, described in the notice of default) does not correct the default, AUTHORITY will have the right to remove the work from CONSULTANT and to declare the Contract in default and terminated.

Upon declaration of default and termination of the Contract, AUTHORITY will have the right to appropriate or use any or all materials as the AUTHORITY determines, and may retain others for the completion of the work under the Contract, or may use other methods which in the opinion of AUTHORITY are required for Contract completion. All costs and charges incurred by AUTHORITY because of, or related to, the CONSULTANT's default (including the costs of completing Contract performance) shall be charged against the CONSULTANT. If the expense of Contract completion exceeds the sum which would have been payable under the Contract, the CONSULTANT shall pay the AUTHORITY the amount of the excess. If, after the default notice curative period has expired, but prior to any action by AUTHORITY to complete the work under the Contract, CONSULTANT demonstrates an intent and ability to cure the default in accordance with AUTHORITY's requirements, AUTHORITY may, but is not obligated to, permit CONSULTANT to resume work under the Contract. In such circumstances, any costs of AUTHORITY incurred by the delay (or from any reason attributable to the delay) will be deducted from any monies due or which may become due CONSULTANT under the Contract. Any such costs incurred by AUTHORITY which exceed the remaining amount due on the Contract shall be reimbursed to AUTHORITY by CONSULTANT. The financial obligations of this paragraph, as well as any other provision of the Contract which by its nature and context survives the expiration of earlier termination of the Contract, shall survive the expiration or earlier termination of the Contract.

AUTHORITY shall have no liability to CONSULTANT for expenses or profits related to unfinished work on a Contract terminated for default.

AUTHORITY reserves the right to terminate or cancel this Contract in the event the CONSULTANT shall be placed in either voluntary or involuntary bankruptcy or an assignment is made for the benefit of creditors. Such termination shall be deemed a termination for default.

3. CONTRACT AMOUNT AND COMPENSATION FOR SERVICES

3.1 The Contract Amount for the Contract term is \$987,625.00.

3.2 AUTHORITY agrees to pay CONSULTANT for services performed in accordance with the Method of Compensation.

4. AUDIT AND EXAMINATION OF RECORDS

4.1 Definition of Records:

(i) "Contract Records" shall include, but not be limited to, all information, communications and data, whether in writing or stored on a computer, computer disks, microfilm, writings, working papers, drafts, computer printouts, field notes, charts or any other data compilations, books of account, photographs, videotapes and audiotapes supporting documents, any other papers or preserved data in whatever form, related to the Contract or the CONSULTANT's performance of the Contract determined necessary or desirable by the AUTHORITY for any purpose. Proposal Records shall include, but not be limited to, all information and data, whether in writing or stored on a computer, writings, working papers, computer printouts, charts or other data compilations that contain or reflect information, data or calculations used by CONSULTANT in determining labor, unit price, or any other component of a bid submitted to the AUTHORITY.

(ii) "Proposal Records" shall include, but not be limited to, any material relating to the determination or application of equipment rates, home and field overhead rates, related time schedules, labor rates, efficiency or productivity factors, arithmetic extensions, quotations from subcontractors, or material suppliers, profit contingencies and any manuals standard in the industry that may be used by CONSULTANT in determining a price.

AUTHORITY reserves and is granted the right (at any time and from time to time, for any reason whatsoever) to review, audit, copy, examine and investigate in any manner, any Contract Records (as herein defined) or Proposal Records (as hereinafter defined) of the CONSULTANT or any subcontractor. By submitting a response to the Request for Proposal, CONSULTANT or any subcontractor submits to and agree to comply with the provisions of this section.

If the AUTHORITY requests access to or review of any Contract Documents or Proposal Records and CONSULTANT refuses such access or review, CONSULTANT shall be in default under its Contract with AUTHORITY, and such refusal shall, without any other or additional actions or omissions, constitute grounds for suspension or disqualification of CONSULTANT. These provisions shall not be limited in any manner by the existence of any CONSULTANT claims or pending litigation relating to the Contract. Disqualification or suspension of the CONSULTANT for failure to comply with this section shall also preclude the CONSULTANT from acting in the future as a subcontractor of another CONSULTANT doing work for the AUTHORITY during the period of disqualification or suspension. Disqualification shall mean the CONSULTANT is not eligible for and shall be precluded from doing future work for the AUTHORITY until reinstated by the AUTHORITY.

Final Audit for Project Closeout: The CONSULTANT shall permit the AUTHORITY, at the AUTHORITY'S option, to perform or have performed, an audit of the records of the CONSULTANT and any or all subcontractors to support the compensation paid the CONSULTANT. The audit will be performed as soon as practical after completion and acceptance of the contracted services. In the event funds paid to the CONSULTANT under the Contract are subsequently determined to have been inadvertently paid by the AUTHORITY because of accounting errors or charges not in conformity with the Contract, the CONSULTANT

agrees that such amounts are due to the AUTHORITY upon demand. Final payment to the CONSULTANT shall be adjusted for audit results.

CONSULTANT shall preserve all Proposal Records and Contract Records for the entire term of the Contract and for a period of five (5) years after the later of: (i) final acceptance of the project by the AUTHORITY, (ii) until all claims (if any) regarding the Contract are resolved, or (iii) expiration of the Proposal Records and Contract Records' status as public records, as and if applicable, under Chapter 119, Florida Statutes.

5. MINORITY AND WOMEN'S BUSINESS ENTERPRISES

AUTHORITY has adopted a program to provide opportunities for small business, including Minority Business Enterprises ("MBEs") and Women's Business Enterprises ("WBEs"). Under the AUTHORITY'S program, CONSULTANT is encouraged to grant small businesses the maximum opportunity to participate in the provision of the Services.

6. CONSULTANT INSURANCE

CONSULTANT shall carry and keep in force during the period of this Contract, the required amount of coverage as stated below. All insurance must be underwritten by insurers that are qualified to transact business in the State of Florida and that have been in business and have a record of successful and continuous operations for at least five (5) years. Each shall carry a rating of "A-" (excellent) and a financial rating of Class XII, as defined by A.M. Best and Company's Key Rating Guide and must be approved by the AUTHORITY. CONSULTANT shall carry and keep in force the following insurance coverage, and provide the AUTHORITY with correct certificates of insurance (ACORD forms) upon Contract execution:

6.1 Commercial General Liability Insurance having a minimum coverage of One Million Dollars (\$1,000,000.00) per occurrence of bodily injury or property damage. The contractual liability insurance coverage shall include coverage for responsibilities and liabilities assumed by CONSULTANT under this Agreement.

6.2 Business Automobile Liability (for bodily injury, death and property damage) having a minimum coverage of One Million Dollars (\$1,000,000.00) for each accident;

6.3 Workers' Compensation Insurance Coverage, including all coverage required under the laws of the state of Florida (as amended from time to time hereafter);

6.4 Unemployment Insurance Coverage in amounts and forms required by Florida law, as it may be amended from time to time hereafter.

Such insurance policies shall be without co-insurance, and shall (a) include the AUTHORITY, and such other applicable parties the AUTHORITY shall designate, as additional insureds for commercial general liability and business automobile liability, (b) be primary insurance, (c) include contractual liability for commercial general liability, (d) provide that the policy may not be canceled or materially changed without at least thirty (30) days prior written notice to the AUTHORITY from the company providing such insurance, and (e) provide that the insurer

waives any right of subrogation against AUTHORITY, to the extent allowed by law and to the extent the same would not void primary coverage for applicable insurance policies. CONSULTANT shall be responsible for any deductible it may carry. At least fifteen (15) days prior to the expiration of any such policy of insurance required to be carried by CONSULTANT hereunder, CONSULTANT shall deliver insurance certificates to AUTHORITY evidencing a renewal or new policy to take the place of the one expiring. Procurement of insurance shall not be construed to limit CONSULTANT's obligations or liabilities under the Contract. The requirement of insurance shall not be deemed a waiver of sovereign immunity by AUTHORITY.

Any insurance carried by the AUTHORITY in addition to CONSULTANT's policies shall be excess insurance, not contributory.

If CONSULTANT fails to obtain the proper insurance policies or coverages, or fails to provide AUTHORITY with certificates of same, the AUTHORITY may obtain such policies and coverages at CONSULTANT's expense and deduct such costs from CONSULTANT payments.

7. CONSULTANT RESPONSIBILITY

CONSULTANT shall comply with, and shall cause its employees, agents, officers and subcontractors and all other persons for whom CONSULTANT may be legally or contractually responsible to comply with, applicable laws, ordinances, rules, regulations, orders of public authorities, sound business practices, including without limitation:

- (i) those relating to the safety of persons and property and their protection from damage, injury or loss, and
- (ii) all workplace laws, regulations, and posting requirements, and
- (iii) implementation of a drug-free workplace policy at least of a standard comparable to, and in compliance with, AUTHORITY'S Drug-Free Workplace Policy; And
- (iv) compliance with the public records laws of Chapter 119, Florida Statutes.

8. INDEMNITY

The CONSULTANT shall indemnify, defend and hold harmless AUTHORITY and all of its respective officers, CONSULTANT's or employees from actual suits, actions, claims, demands, costs as defined elsewhere herein, expenses (including reasonable attorneys' fees as defined elsewhere herein), judgments, liabilities of any nature whatsoever (collectively, "Claims") arising out of, because of, or due to breach of the Contract by the CONSULTANT (its subcontractors, officers, agents or employees) or due to any negligent or intentional act or occurrence of omission or commission of the CONSULTANT (its subcontractors, officers, agents or employees), including without limitation any misappropriation or violation of third party copyright, trademark, patent, trade secret, publicity, or other intellectual property rights or other third party rights of any kind by or arising out of any one or more of the following:

8.1 violation of same by CONSULTANT, its subcontractors, officers, agents or employees,

8.2 AUTHORITY's use or possession of the CONSULTANT Property or CONSULTANT Intellectual Property (as defined herein below),

8.3 AUTHORITY's full exercise of its rights under any license conveyed to it by CONSULTANT,

8.4 CONSULTANT's violation of the confidentiality and security requirements associated with the AUTHORITY Property and AUTHORITY Intellectual Property (as defined herein below),

8.5 CONSULTANT's failure to include terms in its subcontracts as required by this Contract,

8.6 CONSULTANT's failure to ensure compliance with the requirements of the Contract by its employees, agents, officers, or subcontractors, or

8.7 CONSULTANT's breach of any of the warranties or representations contained in this Contract.

CONSULTANT will not be liable for damages arising out of injury or damage to persons or property directly caused or resulting from the sole negligence of the AUTHORITY or any of its officers, agents or employees. The parties agree that 1% of the total compensation to the CONSULTANT for performance of each task authorized under the Contract is the specific consideration from AUTHORITY to CONSULTANT for CONSULTANT's indemnity and the parties further agree that the 1% is included in the amount negotiated for each authorized task.

9. PUBLIC RECORDS

Upon receipt of any request by a member of the public for any documents, papers, letters, or other material subject to the provisions of Chapter 119, Florida Statutes, made or received by CONSULTANT in conjunction with this Contract (including without limitation CONSULTANT Records and Proposal Records, if and as applicable), CONSULTANT shall immediately notify the AUTHORITY. Thereafter, CONSULTANT shall follow AUTHORITY'S instructions with regard to such request. To the extent that such request seeks non-exempt public records, the AUTHORITY shall direct CONSULTANT to provide such records for inspection and copying in compliance with Chapter 119. A subsequent refusal or failure by CONSULTANT to timely grant such public access will be grounds for immediate, unilateral cancellation of the Contract by AUTHORITY.

10. PRESS RELEASES

CONSULTANT shall make no statements, press releases or publicity releases concerning the Contract or its subject matter, or otherwise disclose or permit to be disclosed any of the data or other information obtained or furnished under the Contract, or any particulars thereof, including

without limitation AUTHORITY Property and AUTHORITY Intellectual Property, without first notifying AUTHORITY and securing its consent in writing.

11. OWNERSHIP OF MATERIALS AND INTELLECTUAL PROPERTY RIGHTS

AUTHORITY is and shall be and remain the sole owner of all rights, title, and interest in, to, and associated with all plans, documents, software in all forms, hardware, programs, procedures, specifications, drawings, brochures pamphlets, manuals, flyers, models, photographic or design images, negatives, videos and film, tapes, work product, information, data and other items (all whether in preliminary, draft, master, final, paper, electronic, or other form), along with the media on which they reside and with which they interface for function or aesthetics, that are generated or developed with respect to and in connection with this Contract and the performance thereof (collectively, the "AUTHORITY Property"). AUTHORITY's ownership of the AUTHORITY Property includes without limitation all common law, statutory and other rights, title, and interest in, to, and associated with trademark, service mark, copyright, patent, trade secret, and publicity (collectively, the "AUTHORITY Intellectual Property"). CONSULTANT, its employees, agents, officers, and subcontractors acknowledge that E-PASS® is the AUTHORITY's registered trademark name for the AUTHORITY's electronic toll collection system, and comprises a portion of the AUTHORITY Intellectual Property.

CONSULTANT, its employees, agents, officers, and subcontractors may not use the AUTHORITY Property or AUTHORITY Intellectual Property in any way, other than in performance of its services under the terms of this Contract, without the prior written consent of AUTHORITY, which may be granted or denied in the AUTHORITY's sole discretion. CONSULTANT, its employees, agents, officers, and subcontractors' access to and/or use of the AUTHORITY Property and AUTHORITY Intellectual Property is without any warranty or representation by AUTHORITY regarding same.

For all materials listed hereinabove that are not generated or developed under this Contract or performance hereof, but rather are brought in, provided, or installed by CONSULTANT (collectively, the "CONSULTANT Property"), and the intellectual property rights associated therewith (collectively, the "CONSULTANT Intellectual Property"), CONSULTANT (its employees, officers, agents, and subcontractors, which for purposes of this section shall collectively be referred to as "CONSULTANT") warrants and represents the following:

11.1 CONSULTANT was and is the sole owner of all right, title and interest in and to all CONSULTANT Property and CONSULTANT Intellectual Property; **OR**

11.2 CONSULTANT has obtained, and was and is the sole holder of one or more freely assignable, transferable, non-exclusive licenses in and to the CONSULTANT Property and CONSULTANT Intellectual Property, as necessary to provide and install the CONSULTANT Property and/or to assign or grant corresponding to AUTHORITY all licenses necessary for the full performance of this Contract; and that the CONSULTANT is current and will remain current on all royalty payments due and payable under any license where CONSULTANT is licensee; **AND**

11.3 CONSULTANT has not conveyed, and will not convey, any assignment, security interest, exclusive license, or other right, title, or interest that would interfere in any way with the AUTHORITY's use of the CONSULTANT Property or any license granted to AUTHORITY for use of the CONSULTANT Intellectual Property rights; **AND**

11.4 Subject to Chapter 119, Florida Statutes (Florida Public Records Act), CONSULTANT shall maintain the AUTHORITY Property and AUTHORITY Intellectual Property in strictest confidence and may not transfer, disclose, duplicate, or otherwise use the AUTHORITY Property or AUTHORITY Intellectual Property in any way, other than in performance of its services under the terms of this Contract, without the prior written consent of AUTHORITY, which may be granted or denied in the AUTHORITY's sole discretion. CONSULTANT shall not publish, copyright, trademark, service mark, patent, or claim trade secret, publicity, or other rights of any kind in any of the Property. In ensuring the confidentiality and security of the AUTHORITY Property and AUTHORITY Intellectual Property, CONSULTANT shall utilize the same standards of protection and confidentiality that CONSULTANT uses to protect its own property and confidential information, but in no instance less than reasonable care plus the standards set forth anywhere in this Contract.

CONSULTANT further warrants and represents that there are no pending, threatened, or anticipated Claims against CONSULTANT, its employees, officers, agents, or subcontractors with respect to the CONSULTANT Property or CONSULTANT Intellectual Property.

The provisions of this Section shall survive the term of this Contract for the longer of:

11.5 The statute of limitations on any action arising out of either party's conduct relating to this section, whether such action may be brought by AUTHORITY, CONSULTANT, or a third party; or

11.6 AUTHORITY's continued use (notwithstanding any temporary suspension of use) of any CONSULTANT Property or CONSULTANT Intellectual Property; **and**

11.7 Notwithstanding sections 11.5 and 11.6, the confidentiality and security provisions contained herein shall survive the term of this Contract for ten (10) years beyond 11.5 and 11.6.

12. PERMITS, LICENSES, ETC.

Throughout the Term of the Contract, the CONSULTANT shall procure and maintain, at its sole expense, all permits and licenses that may be required in connection with the performance of Services by CONSULTANT; shall pay all charges, fees, royalties, and taxes; and shall give all notices necessary and incidental to the due and lawful prosecution of the Services. Copies of required permits and licenses shall be furnished to AUTHORITY upon request.

13. CONFLICT OF INTEREST AND STANDARDS OF CONDUCT

CONSULTANT warrants that it has not employed or retained any entity or person, other than a bona fide employee working solely for the CONSULTANT, to solicit or secure this Contract, and that CONSULTANT has not paid or agreed to pay any person, company, corporation, individual or firm any fee, commission, percentage, gift or any other consideration, contingent upon or resulting from the award or making of this Contract. It is understood and agreed that the term "fee" shall also include brokerage fee, however denoted.

CONSULTANT acknowledges that AUTHORITY officials and employees are prohibited from soliciting and accepting funds or gifts from any person who has, maintains, or seeks business relations with the AUTHORITY in accordance with the AUTHORITY's Ethics Policy. CONSULTANT acknowledges that it has read the Ethics Policy and, to the extent applicable, CONSULTANT will comply with the aforesaid Ethics Policy in connection with performance of the Contract.

In the performance of the Contract, CONSULTANT shall comply with all applicable local, state, and federal laws and regulations and obtain all permits necessary to provide the Contract services.

CONSULTANT covenants and agrees that it and its employees, officers, agents, and subcontractors shall be bound by the standards of conduct provided in Florida Statutes 112.313 as it relates to work performed under this Contract, which standards will be reference be made a part of this Contract as though set forth in full.

14. NONDISCRIMINATION

CONSULTANT, its employees, officers, agents, and subcontractors shall not discriminate on the grounds of race, color, religion, sex, national origin, or other protected class, in the performance of work or selection of personnel under this Contract.

15. SUBLETTING AND ASSIGNMENT

AUTHORITY has selected CONSULTANT to perform the Services based upon characteristics and qualifications of CONSULTANT and its employees. Therefore, CONSULTANT shall not sublet, sell, transfer, assign, delegate, subcontract, or otherwise dispose of this Contract or any portion thereof, or of the CONSULTANT's right, title, or interest therein without the written consent of the AUTHORITY, which may be withheld in the AUTHORITY'S sole and absolute discretion. Any attempt by CONSULTANT to dispose of this Contract as described above, in part or in whole, without AUTHORITY'S written consent shall be null and void and shall, at AUTHORITY's option, constitute a default under the Contract.

If, during the term of the Contract, CONSULTANT desires to subcontract any portion(s) of the work to a subcontractor that was not disclosed by the CONSULTANT to the AUTHORITY at the time that the Contract was originally awarded, and such subcontract would, standing alone or aggregated with prior subcontracts awarded to the proposed subcontractor, equal or exceed

twenty five thousand dollars (\$25,000.00), the CONSULTANT shall first submit a request to the AUTHORITY's Director of Procurement for authorization to enter into such subcontract. Except in the case of an emergency, as determined by the Executive Director or his/her designee, no such subcontract shall be executed by the CONSULTANT until it has been approved by the AUTHORITY Board. In the event of a designated emergency, the CONSULTANT may enter into such a subcontract with the prior written approval of the Executive Director or his/her designee, but such subcontract shall contain a provision that provides that it shall be automatically terminated if not approved by the AUTHORITY Board at its next regularly scheduled meeting.

16. DISPUTES

All services shall be performed by the CONSULTANT to the reasonable satisfaction of the AUTHORITY's Executive Director (or his delegate), who shall decide all questions, difficulties and disputes of any nature whatsoever that may arise under or by reason of this Contract, the prosecution and fulfillment of the services described and the character, quality, amount and value thereof. The Executive Director's decision upon all claims, questions and disputes shall be final agency action. Adjustments of compensation and Contract time, because of any major changes in the work that may become necessary or desirable as the work progresses shall be left to the absolute discretion of the Executive Director (and the AUTHORITY Board if amendments are required) and supplemental agreement(s) of such nature as required may be entered into by the parties in accordance herewith.

17. PREVAILING PARTY ATTORNEY'S FEES

If any contested claim arises hereunder or relating to the Contract (or CONSULTANT's work hereunder), and either party engages legal counsel, the prevailing party in such dispute, as "prevailing party" is hereinafter defined, shall be entitled to recover reasonable attorneys' fees and costs as defined herein, from the non-prevailing party.

In order for CONSULTANT to be the prevailing party, CONSULTANT must receive an adjusted judgment or adjusted award equal to at least eighty percent (80%) of its contested claims filed with AUTHORITY, failing which AUTHORITY will be deemed the prevailing party for purposes of this Contract.

Should this section be judged void, unenforceable or illegal, in whole or in substantial part, by a court of competent jurisdiction, this section shall be void in its entirety and each party shall bear its own attorneys' fees and costs.

18. OTHER SEVERABILITY

If any section of this Contract, other than the immediately preceding Prevailing Party Attorneys' Fees section, be judged void, unenforceable or illegal, then the illegal provision shall be, if at all possible, interpreted or re-drafted into a valid, enforceable, legal provision as close to the parties' original intention, and the remaining portions of the Contract shall remain in full force and effect

and shall be enforced and interpreted as closely as possible to the parties' intention for the whole of the Contract.

19. GOVERNING LAW

This Contract shall be governed by and construed in accordance with the laws of Florida. Venue of any legal or administrative proceedings arising out of this Contract shall be exclusively in Orange County, Florida.

In consideration of the foregoing premises, AUTHORITY agrees to pay CONSULTANT for work performed and materials furnished at the prices submitted with the Proposal.

20. RELATIONSHIPS

CONSULTANT acknowledges that no employment relationship exists between AUTHORITY and CONSULTANT or CONSULTANT's employees. CONSULTANT shall be responsible for all direction and control of its employees and payment of all wages and salaries and other amounts due its employees. CONSULTANT shall be responsible for all reports and obligations respecting such employees, including without limitation social security tax and income tax withholding, unemployment compensation, workers compensation, and employment benefits.

CONSULTANT shall conduct no act or omission that would lead CONSULTANT's employees or any legal tribunal or regulatory agency to believe or conclude that CONSULTANT's employees would be employees of the AUTHORITY.

Any approval by AUTHORITY of a subcontract or other matter herein requiring AUTHORITY approval for its occurrence shall not be deemed a warranty or endorsement of any kind by AUTHORITY of such subcontract, subcontractor, or matter.

21. INTERPRETATION

For purposes of this Contract, the singular shall include the plural, and the plural shall include the singular, unless the context clearly requires otherwise. Except for reference to women's business enterprises and matters relating thereto, reference to one gender shall include all genders. Reference to statutes or regulations include all statutory or regulatory provisions consolidating, amending, or replacing the stated statute or regulation. Words not otherwise defined and that have well-known technical, industry, or legal meanings, are used in accordance with such recognized meanings, in the order stated. References to persons include their respective permitted successors and assigns and, in the case of governmental persons, persons succeeding to their respective functions and capacities. If CONSULTANT discovers any material discrepancy, deficiency, or ambiguity in this Contract, or is otherwise in doubt as to the meaning of any provision of the Contract, CONSULTANT may immediately notify AUTHORITY and request clarification of AUTHORITY's interpretation of the Contract. The Contract Documents, together with and including all exhibits, comprise the entire agreement of the parties and supersedes and nullifies all prior and contemporaneous negotiations,

representations, understandings, and agreements, whether written or oral, with respect to the subject matter hereof.

21. WAGE RATES AND TRUTH-IN-NEGOTIATIONS CERTIFICATE

The CONSULTANT hereby certifies, covenants and warrants that wage rates and other factual unit costs as shown in attached documentation supporting the compensation are accurate, complete and current as of the date of this Contract. It is further agreed that said price shall be adjusted to exclude any significant sums where the AUTHORITY shall determine the price was increased due to inaccurate, incomplete or non-current wage rates and other factual unit costs. All such adjustments shall be made within one year following the date of final billing or acceptance of the work by the AUTHORITY, whichever is later.

22. SURVIVAL OF EXPIRATION OR TERMINATION

Any clause, sentence, paragraph, or section providing for, discussing or relating to any of the following shall survive the expiration or earlier termination of the Contract:

22.1 Trademarks, service marks, patents, trade secrets, copyrights, publicity, or other intellectual property rights, and terms relating to the ownership, security, protection, or confidentiality thereof; and

22.2 Payment to CONSULTANT for satisfactory work performed or for termination expenses, if applicable; and

22.3 Prohibition on non-competition agreements of CONSULTANT's employees with respect to any successor of CONSULTANT; and

22.4 Obligations upon expiration or termination of the Contract; and

22.5 Any other term or terms of this Contract which by their nature or context necessarily survive the expiration or earlier termination of the Contract for their fulfillment.

23. OBLIGATIONS UPON EXPIRATION OR TERMINATION OF CONTRACT

23.1 Immediately upon expiration or termination of this Contract CONSULTANT shall submit to AUTHORITY, upon request, a report containing the last known contact information for each subcontractor or employee of CONSULTANT who performed work under the Contract; and

23.2 CONSULTANT shall initiate settlement of all outstanding liabilities and claims, if any, arising out of the Contract and any subcontracts or vending agreements to be canceled. All settlements shall be subject to the approval of AUTHORITY.

IN WITNESS WHEREOF, the authorized signatures named below have executed this Contract on behalf of the parties as of the day and year first above written. This Contract was awarded by the Authority's Board of Directors at its meeting on December 12, 2013.

ORLANDO-ORANGE COUNTY EXPRESSWAY AUTHORITY

By: 
Director of Procurement

Print Name: Claude Miller


DAY COMMUNICATIONS, INC.

By: 

Print Name: Amanda Day
President
Title

ATTEST:  (Seal)

Approved as to form and execution, only.


General Counsel for the AUTHORITY

CONSENT AGENDA ITEM

#6

CENTRAL FLORIDA EXPRESSWAY AUTHORITY

MEMORANDUM

TO: CFX Board Members

FROM: Aneth Williams
Director of Procurement

DATE: March 22, 2017

RE: Request for Authorization to Advertise
Request for Proposals for Public Outreach Education and Communications
Consultant Services
Contract No. 001299

Board authorization is requested to advertise for Request for Proposals from qualified firms to provide public outreach education and communications consultant services. The current contract with Day Communication, Inc. for these services expires on December 29, 2017.

We have identified these services and the resulting contract as appropriate for our Small Sustainable Business Enterprise (SSBE) program. Only those firms who are registered with CFX for SSBE status will be allowed to participate.

This contract will be budgeted for in the OM&A Budget.

Reviewed by:



Angela Melton
Manager of Communications



CONSENT AGENDA ITEM

#7

CENTRAL FLORIDA EXPRESSWAY AUTHORITY

MEMORANDUM

TO: CFX Board Members

FROM: Aneth Williams 
Director of Procurement

DATE: March 27, 2017

SUBJECT: Sprint Fiber Optic Reimbursement Agreement – Amendment No. 1
Project No. 528-131 SR 528 Bridges Over Econlockhatchee River

CFX and Sprint Communication Company L.P. has a Fiber Optic Conduit License Agreement for the lease of CFX's Fiber Optic Conduit System along the north side of SR 528. Currently CFX has two projects, SR 528 Innovation Way Interchange Project and SR 528 Bridge Replacement over the Econ River, that require the relocation of the fiber optic conduit system. The license agreement allows CFX to address relocation at the sole cost to CFX.

In August 2016, CFX and Sprint entered into a Reimbursement Agreement for a not-to-exceed amount of \$244,215.23 to compensate Sprint for the necessary FON relocation related to CFX's construction of the new SR 528 Innovation Way Interchange.

With the SR 528 Econlockhatchee River Bridge Replacement recently commencing, it is necessary to relocate CFX's fiber optic conduit system to avoid the new bridge foundations and this in turn will require Sprint's relocation. In lieu of a new agreement, Sprint has requested amending the above referenced reimbursement agreement to include this additional SR 528 fiber optic relocation by Sprint. This amendment will increase the reimbursement by a not-to-exceed amount of \$350,118.94.

Board approval is requested to amend the Reimbursement Agreement with Sprint for a not-to-exceed amount of \$594,334.17 to reimburse Sprint for the cost of performing the Sprint fiber relocation. Sprint will only be paid for the actual costs incurred as confirmed by CFX's representatives on these construction projects.

This project is in the current Five-Year Work Plan.

Reviewed by: 

Ben Dreiling, PE
Director of Construction

4974 ORL TOWER RD. ORLANDO, FL 32807 | PHONE: (407) 690-5000 | FAX: (407) 690-5011

AMENDMENT NO. 1 TO REIMBURSEMENT AGREEMENT

This Amendment No. 1 (“Amendment No. 1”) to the Reimbursement Agreement (“Agreement”) effective March _____, 2017 (“Amendment No. 1 Effective Date”) is between Sprint Communications Company L.P., a Delaware limited partnership, and its successors and assigns (“Sprint”), and Central Florida Expressway Authority (“CFX”). Except as otherwise indicated, defined terms in this Amendment have the same meaning as in the Agreement.

I. Background

- A. The parties entered into the Agreement on August 23, 2016.
- B. Previous amendments to the Agreement are as follows: N/A.
- C. The parties agree to modify the Agreement as set forth in this Amendment No. 1.

The parties agree as follows:

II. Amendment

- A. The Agreement is amended by deleting Section B on page 1 in its entirety and replacing it as follows: “CFX desires to construct new on/off ramps at Innovation Way and widen the Econlockhatchee River Bridge along SR 528 (Beachline) on the route of the CFX right of way (“Project”). Sprint owns fiber optic cable and other equipment within the aforementioned right of way as a result of a License Agreement with CFX; and”
- B. The Agreement is amended by deleting Section C on page 1 in its entirety and replacing it as follows: “As a result of the construction for the Project, it is necessary for Sprint to temporarily relocate approximately 17,488 linear feet of fiber optic cable and permanently relocate approximately 36,933 linear feet of fiber optic cable, in accordance with and as more particularly described in the attached **Exhibit A-1** and **Exhibit A-2** (“Scope of Work”) incorporated herein; and,”
- C. The Agreement is amended by deleting Section 2 on page 2 in its entirety and replacing it as follows: “Sprint will perform the necessary installation work in accordance with the attached **Exhibit A-1** and **Exhibit A-2** (“Relocation Work”) subject to the terms and provisions of this Agreement. CFX agrees that **Exhibit A-1** and **Exhibit A-2** accurately represent the Scope of Work requested of Sprint.”
- D. The Agreement is amended by deleting the first sentence of Section 5 on page 2 and replacing it as follows: “The total cost of the Relocation Work is estimate to be **Five Hundred Sixteen Thousand Eight Hundred Twelve and 32/100ths Dollars (\$516,812.32)**, as set forth in **Exhibit A-1** and **Exhibit A-2**.”
- E. The Agreement is amended by deleting **Exhibit A** in its entirety and replacing it with **Exhibit A-1** and **Exhibit A-2**, which are attached hereto and incorporated by this reference.

III. General

- A. Other than as set forth above, the Agreement remains unchanged and in full force and effect.
- B. If there is a conflict between the terms of the Agreement, any previous Amendment(s) and this Amendment No. 1, this Amendment No. 1 will control unless otherwise stated in this Amendment No. 1.

The parties have caused this Amendment No. 1 to be executed by their proper duly authorized officials as of the dates indicated below. This Amendment was approved by the CFX's Board of Directors at its meeting on _____.

SPRINT COMMUNICATIONS COMPANY L.P.

BY: _____

NAME: _____

TITLE: _____

DATE: _____

**CENTRAL FLORIDA EXPRESSWAY AUTHORITY,
a body politic and corporate, and an agency of the state,
under the laws of the State of Florida**

ATTEST:

Name: _____

Title: _____

BY: _____

NAME: _____

TITLE: _____

DATE: _____

APPROVED AS TO FORM AND LEGALITY for the use and reliance by the Central Florida Expressway Authority only.

BY: _____

DATE: _____

EXHIBIT A-1
SCOPE OF WORK AND COST ESTIMATE

PID: 92766E88
FL Orlando SR 528 & Innovation Way

06/02/2016

Original Scope and Estimate (Phase 1)

The Scope of Work for this project is the relocation of approximately 19,706 feet of 108 FOC, due to construction of New On/Off Ramps at Innovation way on SR 528 (Beeline) to a new permanent location to avoid conflict. 19,705 feet will be placed in a new & existing duct leased from CFX (Central Florida Expressway) and approx. 7,927 LF of new 1" HDPE – SOR 11 conduit leased from CFX (Central Florida Expressway). CFX will build the 7,927 Lf new conduit run. This project is 100% reimbursable from CFX (Central Florida Expressway). The project is located on as-built numbers: 246-00-000-885-00018-1 of 1 to 0004 1-1 of 1.

Attached drawings and plans are hereby incorporated herein.

Sprint Material	\$35,587.49
Sprint Labor	\$11,383.50
Contract Material	\$5,689.84
Contract Labor	\$81,254.98
Contract Splicing Labor	\$7,500.00
Engineering & Inspection Labor	\$67,900.00
PROJECT TOTAL	\$209,215.81
G & A Rate of 27.63%	\$3,145.26
GRAND TOTAL	\$212,361.07

Plus 15% as per Agreement



Exhibit A-2
SPRINT PROJECT COST ESTIMATE
PID: 92766EXX
FL Orlando SR 528 Econlockhatchee River Bridge

01/27/2017

Amendment Scope and Estimate (Phase 2)

This project is located in the City of Florida in Orange County, FL area on SR 528 in the North ROW from the West Bound on ramp at Dallas Blvd to 6,091 Feet West of ICP Blvd in the North ROW. The Scope of Work for this project will have a Temporary & Permanent relocation. Temporary relocation will be approximately 17,488 LF of 108 FOC, permanent relocation will be approximately 17,288 LF. This work is required to remove the 108 FOC in a leased conduit from CFX (Central Florida Expressway) that is attached to the Econlockhatchee River Bridge in the North ROW. This is due to the widening of the Econlockhatchee River Bridge on SR528.

The construction of the temporary & permanent conduit will be work by the road contractor that is award the project from CFX (Central Florida Expressway). The construction of the conduits will place 1ea. 2-inch HDPE SDR 11 Conduit for Sprint along with 8ea. 1-inch conduits for Central Florida Expressway.

This project is 100% reimbursable from CFX (Central Florida Expressway). The project is located on as-built numbers: NTRK246-00-000-885-00018 – 1 of 1 to NTRK246-00-000-885-00041 – 1 of 1

Sprint Material	\$117,209.80
Sprint Labor	\$19,731.40
Contract Material	\$0.00
Contract Labor	\$153,658.26
Contract Splicing Labor	\$0.00
Engineering & Inspector Labor	\$8,400.00
Phase 2 Project Costs	\$298,999.46
G & A Rate of 27.63%	\$5,451.79
Phase 2 Estimate Total	\$304,451.25
Combined Phase 1 and Phase 2 Total:	\$516,812.32

**REIMBURSEMENT AGREEMENT
BETWEEN
CENTRAL FLORIDA EXPRESSWAY AUTHORITY
AND
SPRINT COMMUNICATIONS COMPANY L.P.**

THIS REIMBURSEMENT AGREEMENT ("Agreement") is made and entered into effective the last day of execution below, by and between Sprint Communications Company L.P., a Delaware limited partnership, and its successors and assigns (hereinafter referred to as "Sprint"), whose mailing address is 6391 Sprint Parkway, Overland Park, Kansas 66251, Mail Stop: KSOPHT0101-Z2040, and who is registered and authorized to conduct business in the State of Florida, and Central Florida Expressway Authority (hereinafter referred to as "CFX") as successor to OOCEA whose mailing address is 4974 ORL Tower Rd. Orlando, FL 32807.

BACKGROUND:

A. On or about May 31, 2001, Sprint and CFX entered into that certain Fiber Optic Conduit License Agreement (the "License Agreement"), as amended, by which Sprint was granted a license to install fiber optic cable owned and maintained by Sprint in CFX's conduit located within a defined license area along the north side of State Road (SR) 408 near the Delaney Avenue exit, going easterly to SR 417, continuing southerly on the east side of SR 417 to SR 528, then continuing easterly on the north side of SR 528 to Dallas Boulevard; and,

B. CFX desires to construct new on/off ramps at Innovation Way along SR 528 (Beachline) on the route of the CFX right of way ("Project"). Sprint owns fiber optic cable and other equipment within the aforementioned right of way as a result of a License Agreement with CFX; and,

C. As a result of the construction for the Project, it is necessary for Sprint to relocate approximately 19,705 linear feet of fiber optic cable, in accordance with and as more particularly described in the attached **Exhibit A** ("Scope of Work") incorporated herein; and,

D. In accordance with section 14.04 of the License Agreement, CFX has the right to relocate Sprint's fiber optic cable upon 120-days written notice to Sprint; and,

E. The parties hereto agree that it is in their mutual best interest to have Sprint protect and relocate its fiber optic cable; and,

F. Sprint, under the terms hereinafter stated, is willing to relocate its fiber optic cable and equipment within the CFX right of way, and to accommodate CFX's work if CFX reimburses Sprint for all of its actual costs, both direct and indirect, in making the modifications.

AGREEMENT

In consideration of the promises and mutual covenants contained herein, and other good and valuable consideration the receipt and sufficiency of which is acknowledged, Sprint and CFX agree as follows:

1. The recitals under the Background heading above are true and correct and incorporated herein by reference.
2. Sprint will perform the necessary installation work in accordance with the attached **Exhibit A** ("Relocation Work") subject to the terms and provisions of this Agreement. CFX agrees that **Exhibit A** accurately represents the Scope of Work requested of Sprint.
3. Sprint agrees to coordinate all work hereunder with CFX and CFX agrees that it shall, at its own expense, inspect any construction by Sprint hereunder, to assure itself that Sprint work is being performed in accordance with the Scope of Work and in compliance with the needs of CFX. Sprint further agrees that, excluding delays that are not reasonably within Sprint's control, Sprint shall substantially complete the permanent relocation of the fiber optic cable as quickly as reasonably possible and in no event later than 81 days after receipt of the CFX's notice requiring Sprint to perform the permanent relocation.
4. CFX will bear and be responsible for and pay in accordance herewith all direct and indirect costs incurred by Sprint relating to the Relocation Work, including, but not limited to, labor, materials, construction, damages, administrative overhead, engineering review work, taxes and legal fees.
5. The total cost of the Work is estimated to be **Two Hundred Twelve Thousand Three Hundred Sixty-One and 07/100s (\$212,361.07)**, as set forth in **Exhibit A**. Final actual costs may be more or less than the estimate, which will not be construed as a limitation of costs for the Relocation Work. Sprint will promptly provide notice to CFX if it becomes obvious to Sprint that the final actual costs will exceed the estimate by more than fifteen percent (15%).
6. Within a reasonable period of time after Sprint pays all of the invoices associated with the Relocation Work and the as-built drawings are complete, Sprint will furnish an accounting of final actual costs and provide CFX an invoice of the same. CFX must pay the full amount of such invoice within thirty (30) days after receipt. Payments shall be sent to:

UMB Bank
Sprint
P.O. Box 871197
Kansas City, MO 64187
7. All operations and work performed by CFX above or adjacent to the fiber optic cable location must be performed in a workmanlike and safe manner and in conformance with

all applicable industry standards and government regulations, and in accordance with any restrictions and conditions that may be imposed by Sprint from time to time. Inasmuch as work on the Project is located in areas of the right-of-way that do not conflict with the location of Sprint's fiber optic cable, CFX shall be permitted to proceed with its work on the Project during the relocation process. However, CFX shall coordinate its work schedule on the Project with Sprint's schedule.

8. Exclusive of Saturday, Sunday and legal holidays, notice must be given to Sprint by CFX, at least 48 hours in advance of commencement of any work on or adjacent to the fiber optic cable. The notice shall be given to Sprint at telephone number 1-800-521-0579.

9. Insofar as it legally may, each party agrees to indemnify, defend, and hold the other party, its officers directors, agents and employees harmless from all loss, claims, liability and costs incurred by the indemnified party, including, without limitation, losses resulting from claims for damages to property or injuries to or death of persons, judgments, court costs and attorneys' fees, which arise out of or are claimed to have arisen out of the acts or omissions of the indemnifying party, its contractors, subcontractors, representatives, agents, or employees with respect to the Project, including, but not limited to, the construction, maintenance, presence on the right of way, or other operations or activities of indemnifying party. Nothing herein shall be construed to extend the limits of liability of CFX beyond that provided in Section 768.28, Florida Statutes. Nothing herein is intended as a waiver of CFX's sovereign immunity under Section 768.28, Florida Statutes. All of CFX's obligations under this indemnity clause are limited to the payment of no more than the amount limitation per person and in the aggregate contained in Section 768.28, Florida Statutes, even if the sovereign immunity limitations of that statute are not otherwise applicable to the matters as set forth herein.

12. It is expressly understood by the parties that this Agreement does not modify the respective rights of the parties hereto pursuant to the License Agreement as amended by paragraph 2 above.

13. It is expressly understood by the parties that there is a shortage in the availability of fiber optic cable due a reduction in supply. Sprint shall not be held responsible for Project delays due to delays in the availability of fiber optic cable or other components.

14. Except as otherwise specifically provided in this Agreement, neither party shall be in default under this Agreement if and to the extent that any failure or delay in a party's performance of one or more of its obligations hereunder, excepting CFX's obligation to make payments required hereunder, is caused by any of the following conditions, and such party's performance of such obligation or obligations shall be excused and extended for and during the period of any such delays: unforeseen act of God; fire; flood; fiber, cable, conduit or other material shortages or unavailability or other delay in delivery not resulting from the responsible party's failure to timely place orders therefore; lack of or delay in transportation not resulting from the responsible party's act or omission to act; government codes, ordinances, laws, rules, regulations or restrictions; war or civil disorder; any other cause beyond the reasonable control of such party (each a "Force Majeure Event"). The

party claiming relief of a Force Majeure Event must promptly notify the other in writing of the existence of the event relied on and the cessation or termination of the event.

15. With the exception of the License Agreement, this Agreement supersedes every antecedent or concurrent oral and/or written declaration and/or understanding pertaining to the fiber optic cable modification work by and between Sprint and CFX.

16. The terms of this Agreement shall be binding and inure to the benefits of the parties hereto and their successors and assigns.

17. Notwithstanding anything to the contrary contained herein, Sprint will not be required to perform any cable modification work contemplated by this Agreement during the period of November 15th of any year through January 2nd of the following year.

The parties have caused this Agreement to be executed by their proper duly authorized officials as of the dates indicated below. This Agreement was approved by the CFX's Board of Directors at its meeting on July 14, 2016.

[SIGNATURES TO FOLLOW]

**SPRINT COMMUNICATIONS
COMPANY L.P.**

BY: _____

TITLE: _____

DATE: _____

**CENTRAL FLORIDA EXPRESSWAY
AUTHORITY, a body politic and
corporate, and an agency of the state,
under the laws of the State of Florida**

By: _____

Welton Cadwell, Chairman

Date: _____, 2016

**APPROVED AS TO FORM AND
LEGALITY for the use and reliance by
the Central Florida Expressway Authority
only.**

By: _____

ATTEST:

Darleen Mazzillo
Darleen Mazzillo, Executive Secretary

EXHIBIT A

SCOPE OF WORK AND COST ESTIMATE

PID: 92766E88

FL Orlando SR 528 & Innovation Way

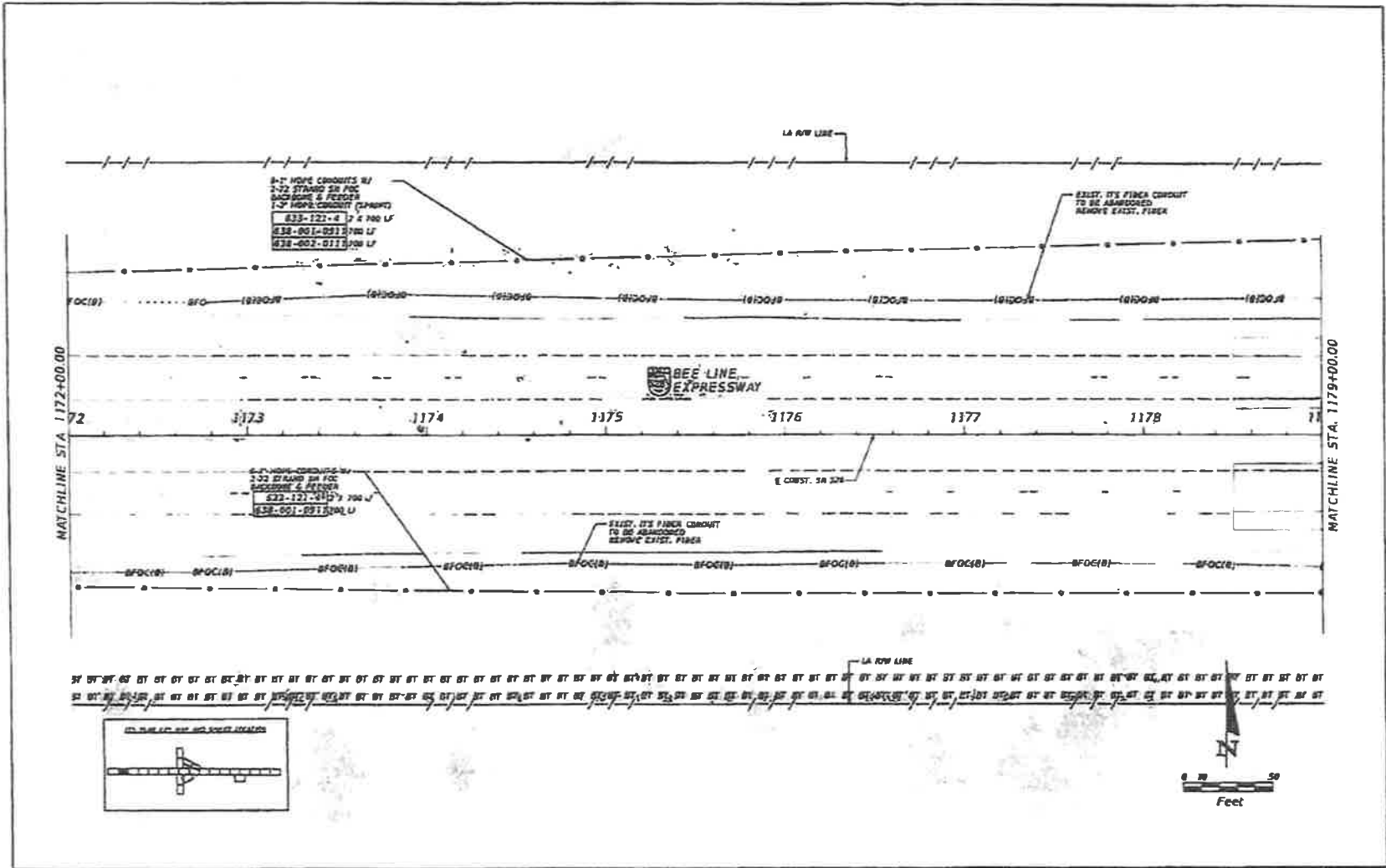
06/02/2016

The Scope of Work for this project is the relocation of approximately 19,705 feet of 108 FOC due to construction of New On/Off Ramps at Innovation Way on SR 528 (Boelwa) to a new permanent location to avoid conflict. 19,705 feet will be placed in new 8' existing duct leased from CFX (Central Florida Expressway) and approx 7,927 LF of new 1" HDPE - SDR 11 conduit will be placed to accommodate 108F from existing Splice Points. 9,713 LF will be placed in existing 1-inch conduit leased from CFX (Central Florida Expressway). CFX will build the 7,927 LF new conduit run. This project is 100% reimbursable from CFX (Central Florida Expressway). The project is located on as-built numbers: 246-00-000-885-0001B-1 of 1 to 88841-1 of 1.

Sprint Material	\$35,587.49
Sprint Labor	\$11,383.50
Contract Material	\$5,689.84
Contract Labor	\$81,254.98
Contract Splicing Labor	\$7,500.00
Engineering & Inspector Labor	\$67,800.00
PROJECT TOTAL	\$209,215.81
G & A Rate of 27.63%	\$3,145.26
Grand Total	\$212,361.07

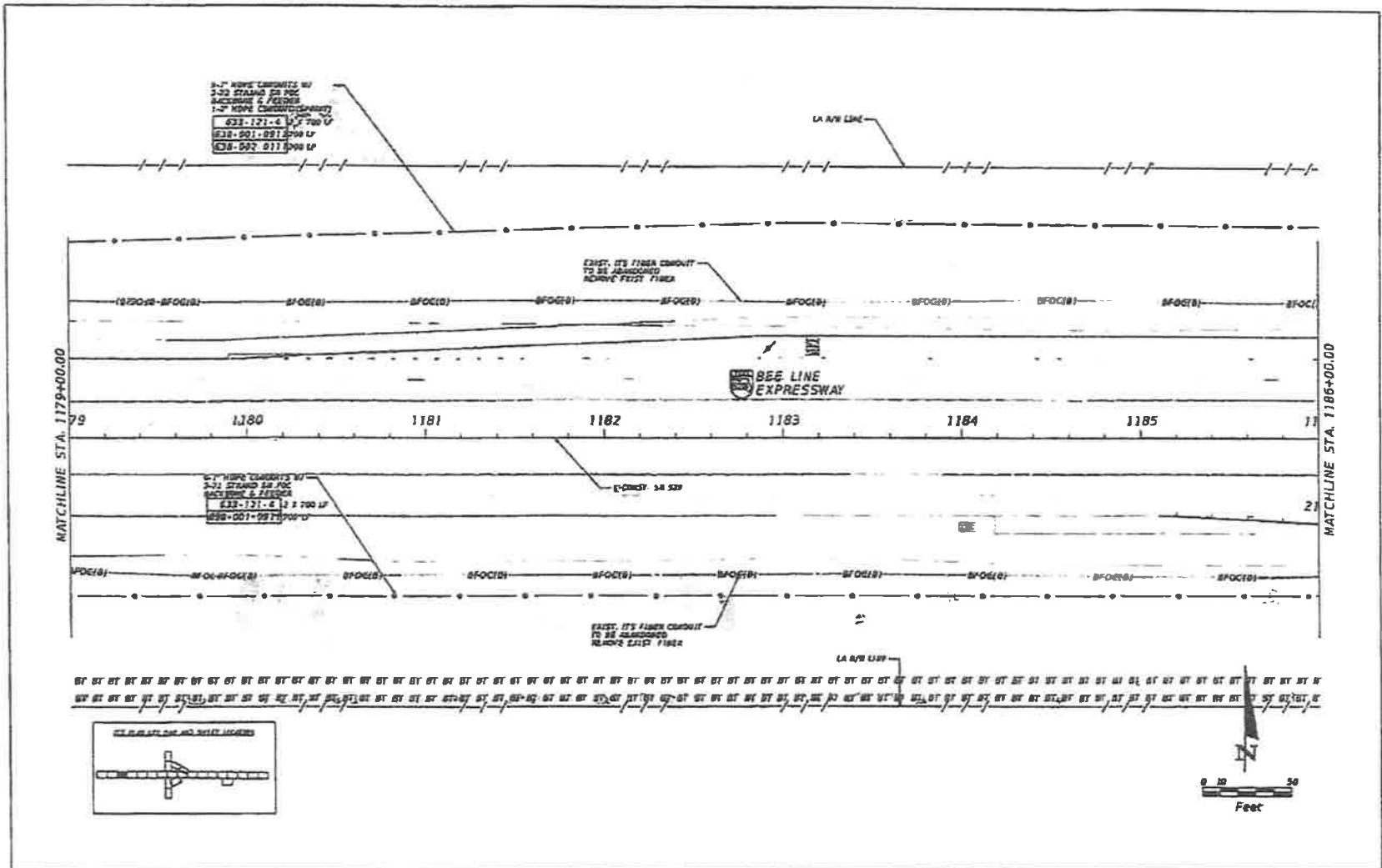
Plus 15% as per Agreement

PLANS TO FOLLOW



DATE	DESCRIPTION	DATE	DESCRIPTION

TYNOLDS ENGINEERING, INC. 17 HENRY ST. S.W., LANE 2011 APACAL CORPORAION ST. 3179 2011 225 E. ANDERSON ST., SUITE 200 TAMPA, FL 33604 (813) 241-1111 FAX (813) 241-1112 WWW.TYNOLDS-ENG.COM		CENTRAL FLORIDA EXPRESSWAY AUTHORITY SR 528 528-313	CENTRAL FLORIDA EXPRESSWAY AUTHORITY	ITS PLAN SHEET	SHEET NO. FO-10
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3-1" HDPE CONDUITS BY
 3-3/8 STRAND 28 FOC
 BACHMANN & PERLES
 1-2" HDPE CONDUIT COMPANY
 623-127-0 1" 700 LF
 623-201-0912 2" 500 LF
 623-592-2113 3" 500 LF

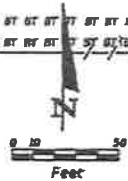
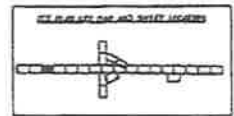
EXIST. ITS FIBER CONDUIT
 TO BE ABANDONED
 REMOVE EXIST FIBER

1" CONDUIT 34 529

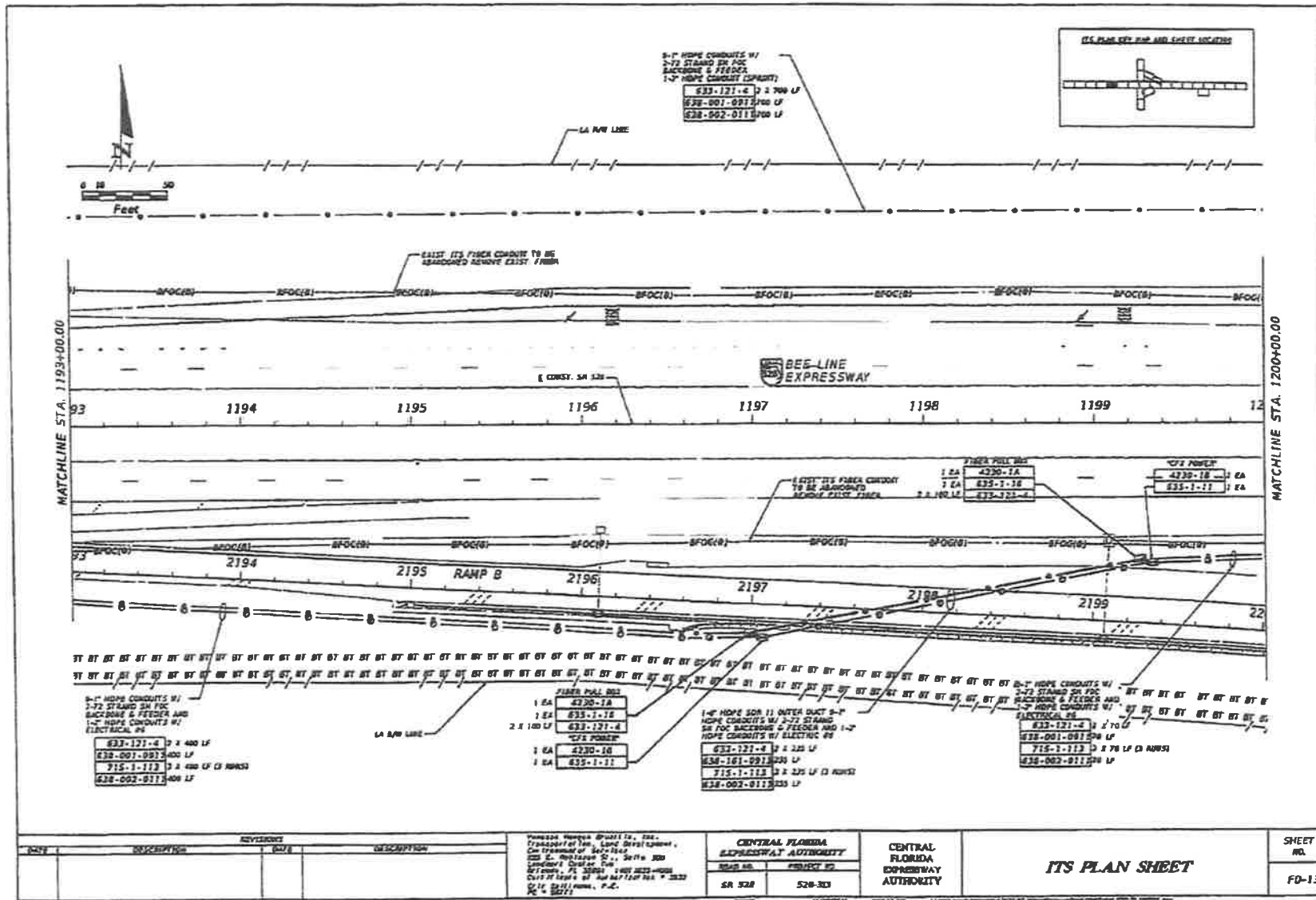
EXIST. ITS FIBER CONDUIT
 TO BE ABANDONED
 REMOVE EXIST FIBER

MATCHLINE STA. 1179+00.00

MATCHLINE STA. 1186+00.00

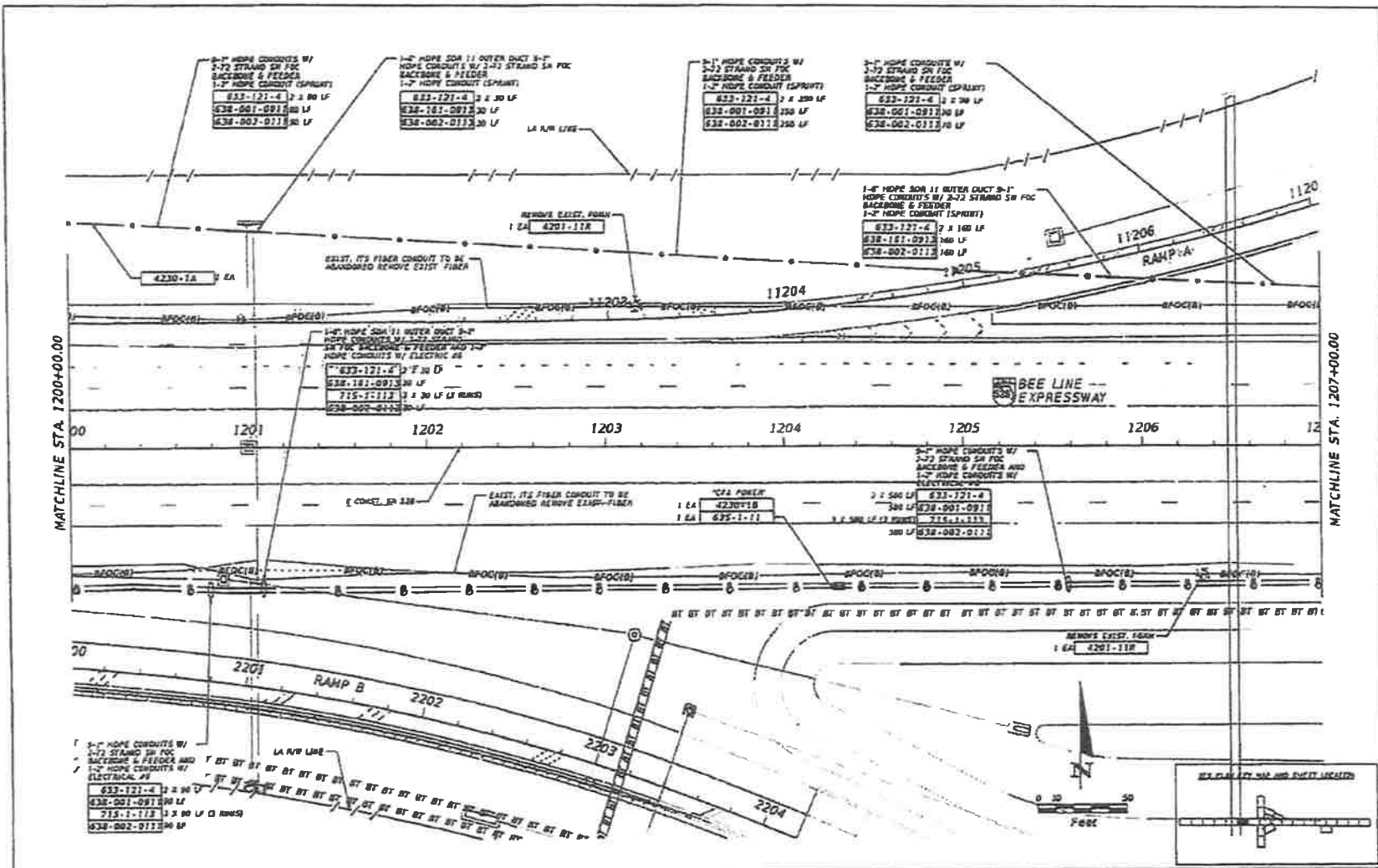


REVISIONS		DESCRIPTION	PERAZZA HUNGER BRADLEY, INC. TRANSPORTATION, LAND DEVELOPMENT, ENVIRONMENTAL & SURVEYING 225 S. PALM BLVD. SUITE 200 LORRAINE, FL 32084 (407) 453-4000 CARY D. PERAZZA, P.E. 404-881-1247 FAX: 407-453-4000 C. J. HUNGER, P.E. 407-453-4000	CENTRAL FLORIDA EXPRESSWAY AUTHORITY		CENTRAL FLORIDA EXPRESSWAY AUTHORITY	SHEET NO. FO-11
DATE	DESCRIPTION			DESIGN NO.	PROJECT NO.		
			SR 528	528-383	ITS PLAN SHEET		



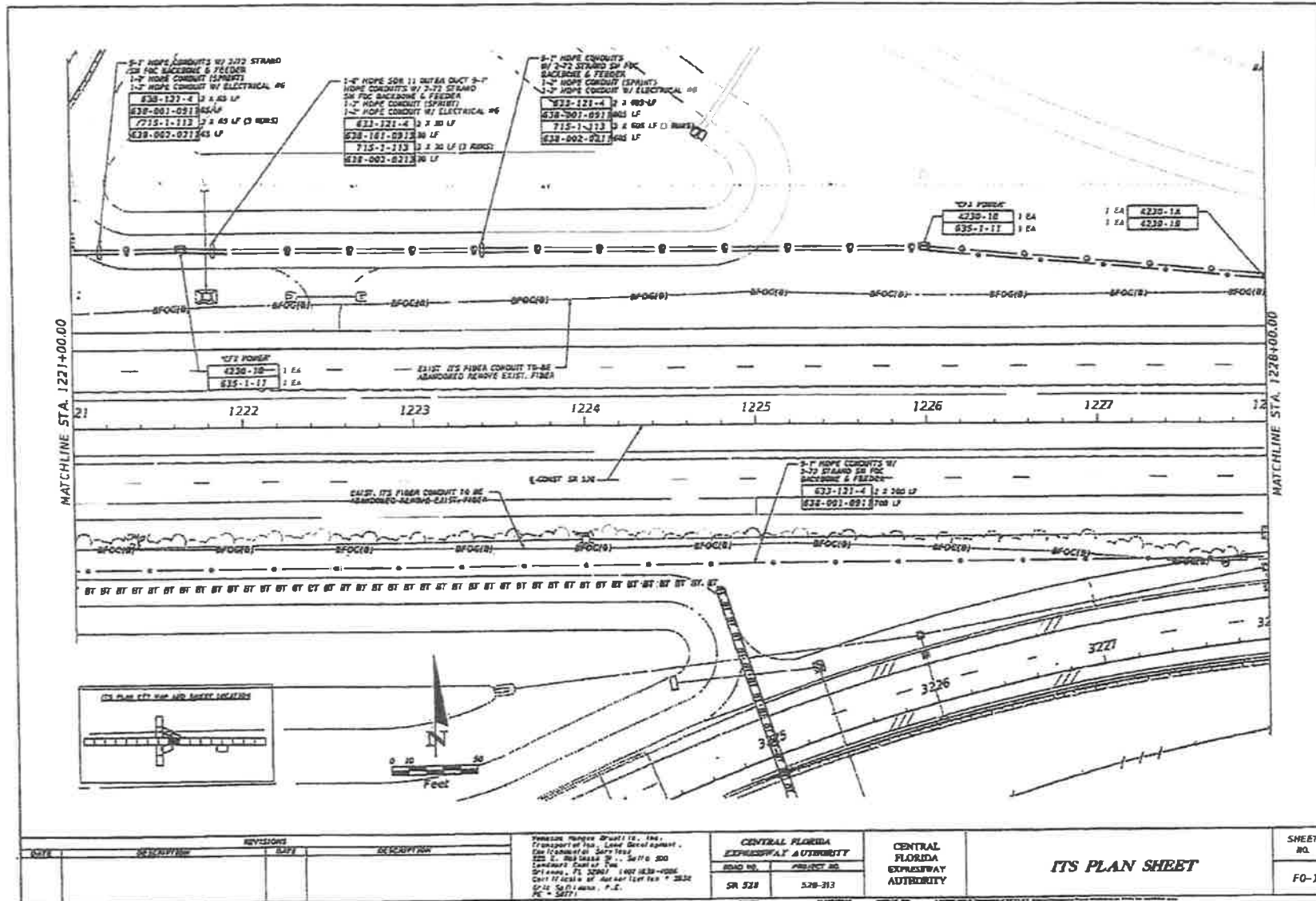
DATE	DESCRIPTION	REVISIONS	DESCRIPTION

PENNSA POWER GROUP, INC. TRANSPORTATION GROUP 200 E. WINDYWAY ST., SUITE 200 LORRAINE, FL 32051 (407) 253-1111 FAX (407) 253-1112		CENTRAL FLORIDA EXPRESSWAY AUTHORITY ROAD NO. 528 PROJECT NO. 528-303	CENTRAL FLORIDA EXPRESSWAY AUTHORITY	SHEET NO. FD-13
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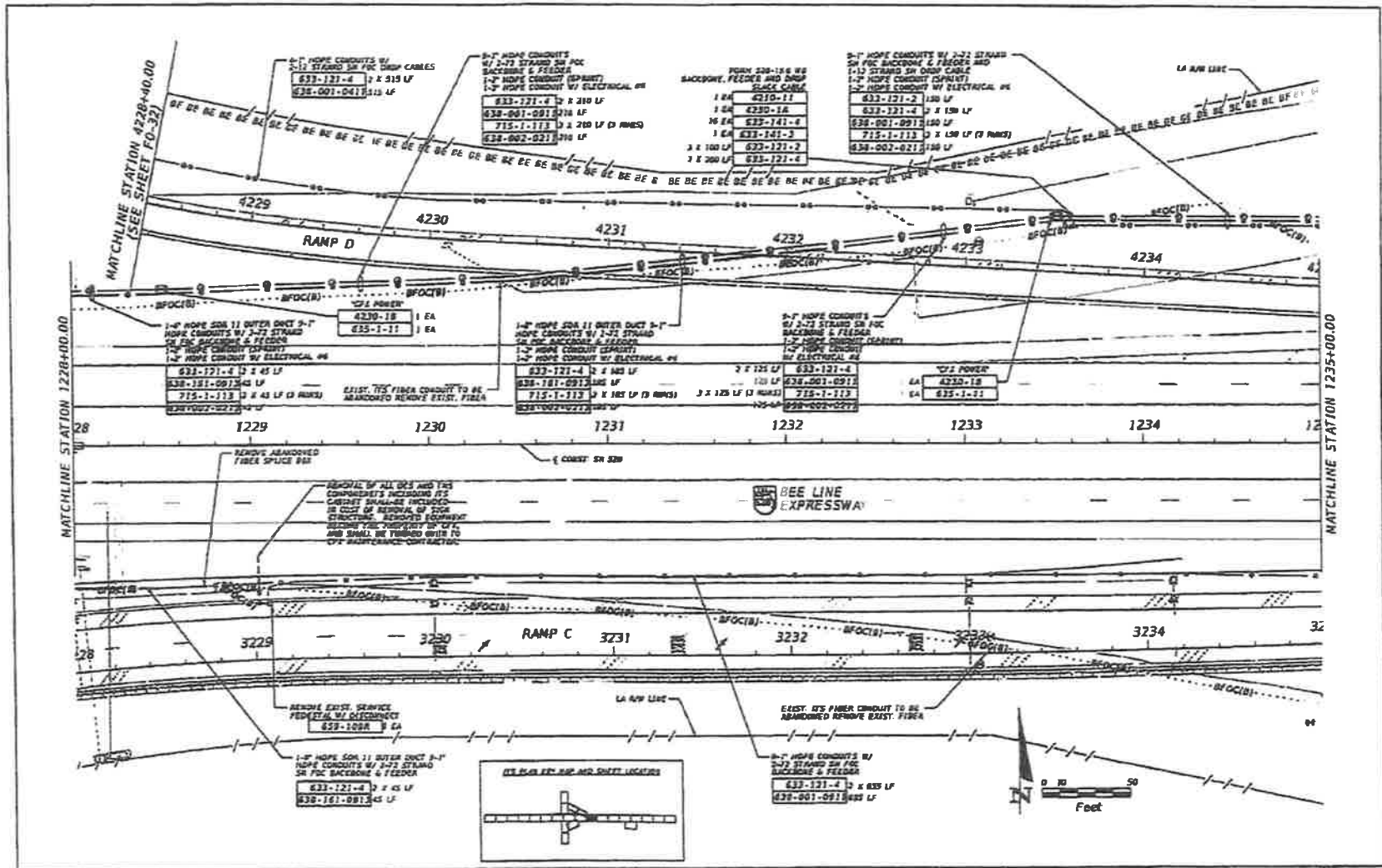
DATE	DESCRIPTION	REVISIONS	DATE	DESCRIPTION

PROJECT: Bee Line Expressway, I-4 CONTRACT NO. 104 - Lane Depart Control Construction of Lane Depart Control SR 528 - SR 528 CONTRACTOR: J. J. ... DATE OF CONTRACT: 10/20/2004 DATE OF ISSUE: 11/15/2004 DATE OF REVISION: 11/15/2004 PROJECT NO. 104 - Lane Depart Control CONTRACT NO. 104 - Lane Depart Control		CENTRAL FLORIDA EXPRESSWAY AUTHORITY ROAD NO. SR 528 PROJECT NO. 528-03	CENTRAL FLORIDA EXPRESSWAY AUTHORITY	ITS PLAN SHEET	SHEET NO. F0-14
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DATE	DESCRIPTION	REVISIONS	BY	DESCRIPTION

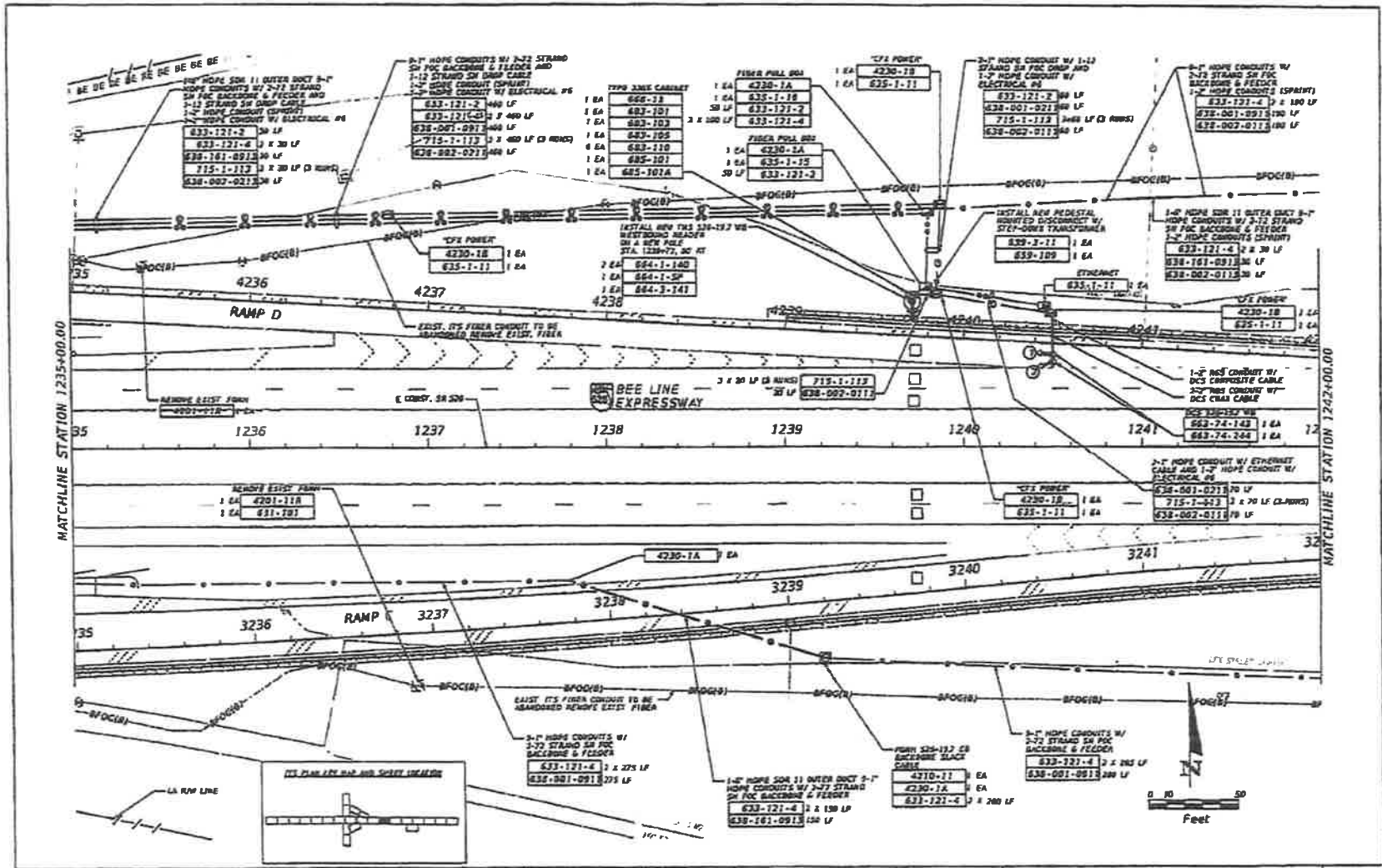
Thomas Hays & Associates, Inc. Transportation & Land Development 225 S. W. 10th St., Suite 200 Jacksonville, FL 32202 Phone: 904.241.1234 Fax: 904.241.1235 E-mail: thays@thays.com		CENTRAL FLORIDA EXPRESSWAY AUTHORITY ROAD NO. SR 528 PROJECT NO. 528-313	CENTRAL FLORIDA EXPRESSWAY AUTHORITY	ITS PLAN SHEET	SHEET NO. FG-17
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DATE	DESCRIPTION	BY	DESCRIPTION

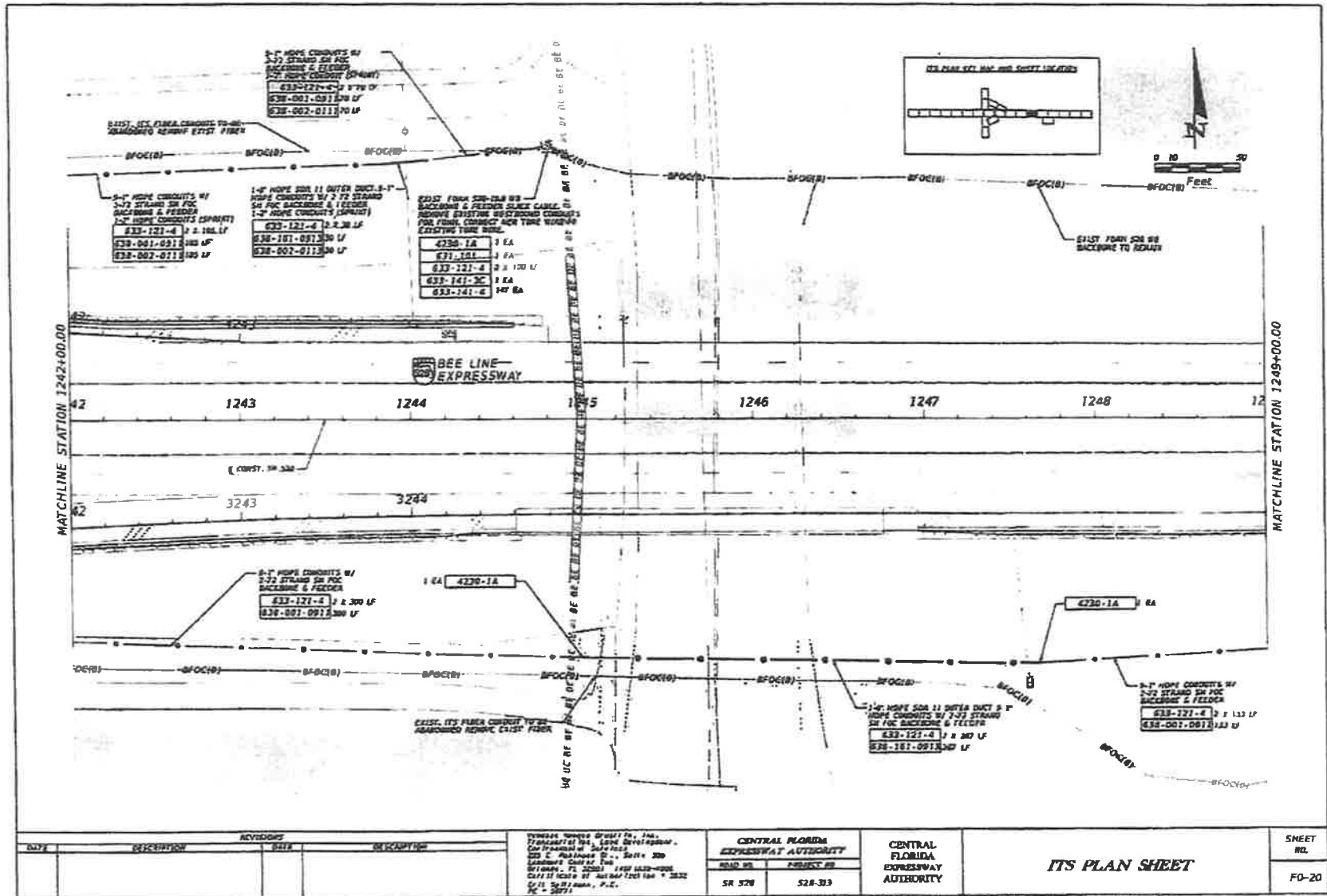
POISSON ENGINEERING, INC. 225 E. Robinson St., Suite 300 Orlando, FL 32801 407 823-0004 Civil & Survey Engineering, P.E. No. 12771		CENTRAL FLORIDA EXPRESSWAY AUTHORITY ROAD NO. SA 528 PROJECT NO. 528-313	CENTRAL FLORIDA EXPRESSWAY AUTHORITY	SHEET NO. FO-18
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ITS PLAN SHEET



DATE	DESCRIPTION	REVISIONS	DATE	DESCRIPTION

PROJECT NUMBER: SR 328-323 ROAD NO.: SR 328 PROJECT NO.: 328-323		CENTRAL FLORIDA EXPRESSWAY AUTHORITY	ITS PLAN SHEET SHEET NO. FO-19
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DATE	DESCRIPTION	REVISIONS	BY	DESCRIPTION

THORNTON ENGINEERING GROUP, INC. TRANSPORTATION & LAND DEVELOPMENT 200 C. PALMVIEW DRIVE, SUITE 200 TAMPA, FL 33601 813-282-2000 CELL PHONE: 813-282-2000 FAX: 813-282-2001		CENTRAL FLORIDA EXPRESSWAY AUTHORITY ROAD NO. SR 578 PROJECT NO. 528-313	CENTRAL FLORIDA EXPRESSWAY AUTHORITY	ITS PLAN SHEET	SHEET NO. FO-20
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CONSENT AGENDA ITEM

#8

CENTRAL FLORIDA EXPRESSWAY AUTHORITY

MEMORANDUM

TO: CFX Board Members

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

DATE: March 27, 2017

SUBJECT: Consent Agenda
Construction Contract Modifications

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

Project No.	Contractor	Contract Description	Original Contract Amount (\$)	Previous Authorized Adjustments (\$)	Requested (\$) April 2017	Total Amount (\$) to Date*	Time Increase or Decrease
417-625	Traffic Control Devices, Inc.	Lake Nona Sports District Supplemental Signing	\$ 51,301.00	\$ -	\$ (5,000.00)	\$ 46,301.00	0
429-739	The Lane Construction Corp.	SR 429 Seidel Rd. to CR 535 Milling & Resurfacing	\$ 9,775,561.71	\$ -	\$ 12,924.37	\$ 9,788,486.08	0
417-733	Ranger Construction Industries, Inc.	SR 417 Milling & Resurfacing, International Dr. to Moss Park Rd.	\$ 18,513,580.17	\$ 711,976.70	\$ 17,160.90	\$ 19,242,717.77	0
429-202	Prince Contracting, LLC	SR 429, US 441 to North of Ponkan Rd.	\$ 56,152,429.00	\$ 401,347.11	\$ 122,162.16	\$ 56,675,938.27	92
429-203	Superior Construction Co. Southeast, LLC	SR 429, North of Ponkan Rd. to North Kelly Park Rd.	\$ 46,617,017.39	\$ 253,999.05	\$ -	\$ 46,871,016.44	63
429-204	Southland Construction, Inc.	SR 429 Systems Interchange	\$ 79,625,302.60	\$ 1,975,702.97	\$ 769,686.29	\$ 82,370,691.86	5
429-206	GLF Construction Corp.	SR 453, Lake County Line to SR 46	\$ 49,482,671.93	\$ 31,829.31	\$ (82,104.90)	\$ 49,432,396.34	6
408-127	The Lane Construction Corp.	SR 408 Widening, Hiwassee Rd. to Good Homes Rd.	\$ 23,569,000.00	\$ -	\$ 114,920.01	\$ 23,683,920.01	0
528-313	The Lane Construction Corp.	SR 528 / Innovation Way Interchange	\$ 62,452,032.01	\$ (1,010,313.80)	\$ 98,141.11	\$ 61,539,859.32	0
599-624	Traffic Control Devices, Inc.	Systemwide E-Pass Signage Improvements	\$ 351,900.00	\$ -	\$ (32,126.81)	\$ 319,773.19	0
TOTAL					\$ 1,015,763.13		

* Includes Requested Amount for this current month.

Reviewed By: 
Joseph A. Berenis, P.E., Chief of Infrastructure

4974 ORL TOWER RD. ORLANDO, FL 32807 | PHONE: (407) 690-5000 | FAX: (407) 690-5011

**Contract 417-625: Lake Nona Sports District Supplemental Signing
Traffic Control Devices, Inc.
SA 417-625-0417-01**

Contract Contract Pay Item Quantity Adjustment

This change is to adjust contract quantities to reflect the actual expenditures on the project.

UNDERRUN THE FOLLOWING PAY ITEM:

Work Order Allowance	\$ (5,000.00)
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<u>TOTAL AMOUNT FOR PROJECT 417-625</u>	<u>\$ (5,000.00)</u>
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Contract 429-739: SR 429 Seidel Rd. to CR 535 Milling & Resurfacing
The Lane Construction Corp.
SA 429-739-0417-01

Plan Revision #01 Remove and Replace Avalon Road Exit Guide Sign

This change will add new pay items to compensate for the Avalon Road Exit signage added in plan revision #01.

ADD THE FOLLOWING PAY ITEMS:

Multi-Post Sign, F&I, Ground Mount, 100SF - 200SF	\$	15,322.82
Multi-Post Sign Remove	\$	<u>939.03</u>
	\$	16,261.85

Remove Polymer From Initial Asphalt Lift

CFX wishes to adjust the following pay items to account for the elimination of polymer modified asphalt in the first lift of asphalt.

DECREASE THE FOLLOWING PAY ITEM:

Superpave Asphaltic Concrete, Traffic D, PG 76-22, PMA	\$	(63,254.13)
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ADD THE FOLLOWING PAY ITEM:

Superpave Asphaltic Concrete, Traffic D	\$	59,916.65
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Subtotal: Remove Polymer from Initial Asphalt Lift	\$	(3,337.48)
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<u>TOTAL AMOUNT FOR PROJECT 429-739</u>	\$	<u>12,924.37</u>
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Contract 417-733: SR 417 Milling & Resurfacing, International Dr. to Moss Park Rd.
Ranger Construction Industries, Inc.
SA 417-733-0417-05

"R" Logo for Reload Lane at John Young Parkway Toll Plaza

CFX has added Reload Lanes on SR 417 at the John Young Mainline Toll Plaza in both the northbound and southbound directions. New "R" logo pavement markings are now required in the limits of this resurfacing project. As the final asphalt pavement layer is placed, these logos will be installed as part of this resurfacing project. This request is to add the furnish and install of 4 "R" Logo pavement markings for these new RE-Load Lanes.

ADD THE FOLLOWING PAY ITEM:

"R" Logos for Reload Lanes	\$	17,160.90
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<u>TOTAL AMOUNT FOR PROJECT 417-733</u>	\$	<u>17,160.90</u>
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Contract 429-202: SR 429, US 441 to North of Ponkan Rd.
Prince Contracting, LLC
SA 429-202-0417-05

Toll Plaza Conduit Routing

This item provides compensation for the extra work to reroute the power/HVAC conduit and conductors around the concrete pavement. This work was tracked on an actual cost (Time and Materials) basis.

ADD THE FOLLOWING ITEM:

Toll Plaza Conduit Routing	\$	11,923.19
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AET Plaza Loop Conduit Boxes

CFX requested adjustments to the AET conduit for power to the E6 cabinets, loop conduit in the concrete pavement and changes to the E6 cabinet itself. This item provides compensation for this change to the loop conduit. The plans provided for 6 pull boxes and associated conduit to the concrete pavement, 3 in each direction. CFX requested 5 boxes and loop conduit in each direction for a total of 10 boxes and associated conduit to the concrete pavement. This work was tracked on an actual cost (time and materials) basis.

ADD THE FOLLOWING ITEM:

Concrete Pavement Loop Conduit	\$	16,115.88
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ITS Power Conductor Size Change

This change is to up size the electrical conductors serving the Intelligent Traffic System (ITS). The upsize is from a #6 to a heavier #1 conductor.

ADD THE FOLLOWING ITEM:

Conductor #1 Insulated	\$	12,281.43
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DECREASE THE FOLLOWING ITEM:

Conductor #8 and #6 Insulated	\$	(6,852.30)
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Subtotal: ITS Power Conductor Size Change	\$	5,429.13
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Plan Revision 10 Paving Details

CFX adopted new guidelines for the location of transitioning from a highway pavement surface to a ramp pavement surface on CFX entrance and exit ramps. CFX wishes to revise this project in accordance with these guidelines and has memorialized those changes in Plan Revision 10. Other clarifications included adjustments to milling and resurface limits.

ADD THE FOLLOWING ITEM:

Asphalt Concrete FC, TL C, FC 12.5, PG 76-22	\$	174,496.00
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INCREASE THE FOLLOWING ITEMS:

Milling Existing Asphalt Pavement, 1 1/2" Avg. Depth	\$	5,416.00
Milling Existing Asphalt Pavement, 3/4" Avg. Depth	\$	790.00
Superpave Asphaltic Concrete, TL C	\$	29,986.00
	\$	36,192.00

DECREASE THE FOLLOWING ITEMS:

Superpave Asphaltic Concrete, TL C, PG 76-22	\$ (62,056.20)
Asphaltic Concrete FC, 3/4", FC-5, PG 76-22, Black Granite	\$ (20,069.20)
Asphaltic Concrete FC, TL C, FC-12.5, Rubber	\$ (132,708.80)
	\$ (214,834.20)

Subtotal: Plan Revision 10 Paving Details \$ (4,146.20)

Adding E6 Cabinet

CFX has requested the addition of an additional E6 cabinet to accommodate the new all electronic toll devices that were added in Plan Revision 16.

ADD THE FOLLOWING ITEM:

E6 Cabinet	\$ 37,770.81
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Belgian Deck Grades

The change is full and complete settlement to issues associated with NOI 14, Belgian Bridge Deck Grades and Beam Buildups. The Contractor was pursuing constructing Belgian Bridge deck when they discovered a discrepancy in the plans related to the anticipated beam buildups. Plan Revision 9 was published providing the required adjustments.

ADD THE FOLLOWING ITEM:

Belgian Deck Grades and Buildup, Plan Revision 9 PS B6-25	\$ 6,984.85
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Increase Contract Time 22 Non-Compensable Calendar Days

Connector Rd. Bridge Plan Revision 11 Time Impacts

This time extension is the additional contract time required to overcome effects of issues associated with Connector Rd. Bridge rebar plan discrepancies that were memorialized in Plan Revision 11. This is resolution of the additional contract time impacts only; direct and indirect costs associated with this issue are pending resolution.

Increase Contract Time 70 Calendar Days

Tentative Final Quantities for Pay Items of Work Completed

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

INCREASE THE FOLLOWING ITEMS:

Flowable Fill	\$	450.00
Inlet Dt Bot, Ty B Jbot <10'	\$	9,200.00
Prestressed Concrete Piling	\$	85,605.00
Test Piles, Prestressed Concrete, 18" SQ	\$	15,540.00
Utility Pipe, F&I, PVC, Water/Sewer, 5-7.9"	\$	480.00
Utility Pipe, F&I, DI/CI, Water/Sewer, 8-19.9"	\$	9,605.00
Utility Pipe, F&I, PVC, Water/Sewer, 8-19.9"	\$	480.00
Utility Pipe, F&I, PVC, Water/Sewer, 8-19.9"	\$	3,552.00
Utility Fixtures, F&I, 2-4.9", BAC/AIR Assembly	\$	6,000.00
Double Water Service	\$	885.00
	\$	<u>131,797.00</u>

DECREASE THE FOLLOWING ITEMS:

Prestressed Beams, Special, Spliced U-Beams	\$	(60,900.00)
Piles, Polyethylene Sheeting	\$	(622.50)
Utility Pipe, F&I, PVC, Water/Sewer, 8-19.9"	\$	(1,600.00)
Utility Pipe, F&I, PVC, Water/Sewer, 8-19.9"	\$	(9,840.00)
Utility Fixtures, F&I, 5-7.9" Valve Assembly	\$	(2,000.00)
Utility Fixtures, F&I, 8-19.9" Valve Assembly	\$	(4,000.00)
Utility Pipe, F&I, DI/CI, Water/Sewer, 8-19.9"	\$	(3,700.00)
Utility Fixtures, F&I, 2-4.9", Backflow Assembly	\$	(1,050.00)
	\$	<u>(83,712.50)</u>

Subtotal: Tentative Final Quantities for Pay Items of Work Completed \$ 48,084.50

TOTAL AMOUNT FOR PROJECT 429-202 **\$ 122,162.16**

**Contract 429-203: SR 429, North of Ponkan Rd. to North of Kelly Park Rd.
Superior Construction Co. Southeast, LLC
SA 429-203-0417-003**

Contract Completion Time Extension

Add 63 Calendar Days of non- compensable Contract Time and adjust the Substantial Completion date to occur 7 Calendar Days prior to the expiration of Contract Time. This time extension is necessary as the Fiber Optic Network (FON) on the adjacent 429-202 project is not expected to be operational until May 15, 2017. This contract (429-203) contains a DMS sign and other ITS devices that need an operational FON network to allow for their completion. Concurrent with this time extension, Superior Construction has not yet completed other Contract Work that contractually provides for this to be a non-compensable time extension.

Increase Contract Time 63 Non-Compensable Calendar Days

TOTAL AMOUNT FOR PROJECT 429-203

0.00

Contract 429-204: SR 429 Systems Interchange
Southland Construction, Inc.
SA 429-204-0417-05

Time Extension - Hurricane Matthew

The Governor issued a State of Emergency for Orange County related to Hurricane Matthew (Executive Order 16-230 October 5, 2016). The project critical path was impacted a total of 5 days. As provided by the contract a non-compensable 5 calendar days are to be granted for this event.

Increase Contract Time 5 Non-Compensable Calendar Days

Plan Quantity Analysis

The CEI completed a plan quantity analysis and found variances in the following items. The CEI reviewed their findings with the EOR and agreed to the following plan quantity modifications were appropriate. These items are the result of computation errors during the design and plans preparation process causing the actual pay item quantities to be understated. The work is consistent with the original design and is therefore not considered a premium cost and will be paid for using Contract unit prices per the original bid.

MODIFY THE FOLLOWING ITEMS:

Excavation, Regular	\$	5,201.50
Embankment	\$	126,717.15
Class IV Concrete, Superstructure	\$	632,867.08
Piles, Polyethylene Sheeting	\$	9,340.38
Bridge Drainage Pipe	\$	<u>(4,439.82)</u>
	\$	769,686.29

TOTAL AMOUNT FOR PROJECT 429-204

\$ 769,686.29

Contract 429-206: SR 453, Lake County Line to SR 46
GLF Construction Corp.
SA 429-206-0417-02

Time Extension - Hurricane Hermine

The Governor issued a State of Emergency for Orange County related to Hurricane Hermine (Executive Order 16-205 August 31, 2016). The project critical path was impacted a total of 2 days by this event. As provided by the contract a non-compensable 2 calendar days are to be granted for this event.

Increase Contract Time 2 Non-Compensable Calendar Days

Time Extension - Hurricane Matthew

This change is requested by CFX. The Governor issued a State of Emergency for Orange County related to Hurricane Matthew (Executive Order 16-230 October 5, 2016). The project critical path was impacted a total of 4 calendar days by this event. As provided by the contract a non-compensable 4 calendar days are to be granted for this event.

Increase Contract Time 4 Non-Compensable Calendar Days

Credit for Silica Flume Deletion and Mass Concrete Monitoring

The Plans call for the concrete for the cast in-place retaining walls to contain silica flume for a highly aggressive subsoil condition. On site testing and the EOR have confirmed that the subsoil condition is moderately aggressive resulting in the concrete additive silica flume to be unnecessary. The deletion of the silica flume additive results in a credit. Similarly, new (2016) FDOT Specifications for Mass Concrete allow for reduced monitoring under certain circumstances. This project meets those requirements. Given this project was bid under the older 2014 Specification requirements, CFX is due a credit.

ADD THE FOLLOWING ITEMS:

Class IV Retaining Wall Concrete (Silica Flume Credit)	\$ (79,303.50)
Class IV Substructure Concrete (Mass Concrete Monitoring Credit)	\$ <u>(2,801.40)</u>
	\$ (82,104.90)

TOTAL AMOUNT FOR PROJECT 429-206 **\$ (82,104.90)**

Contract 408-127: SR 408 Widening, Hiawassee Rd. to Good Homes Rd.
The Lane Construction Corp.
SA 408-127-0417-02

Contract Plan Revision # 2 MOT on Ramp B

Plan revision # 2 required the furnishing and installation of 2 temporary crash cushions at Ramp B.

ADD THE FOLLOWING PAY ITEM:

Temporary Crash Cushions at Ramp B	\$	8,122.41
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Survey Existing Pavement

CFX requested the contractor perform a survey the existing pavement elevation of SR 408 due to resolve the deviations that were being encountered from design elevations.

ADD THE FOLLOWING PAY ITEM:

Survey Existing SR 408 EB and WB Pavement	\$	21,802.44
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Contract Plan Revision #4 MOT EB at Hiawassee

Plan revision #4 required the furnishing, installation and removal of a temporary crash cushion and temporary concrete barrier wall on SR 408 eastbound, Sta. 3669+59. This additional work was required to meet travel lane drop off criteria.

ADD THE FOLLOWING PAY ITEM:

Temporary Crash Cushions and Concrete Barrier Walls on SR 408 EB	\$	84,995.16
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TOTAL AMOUNT FOR PROJECT 408-127

\$ 114,920.01

Contract 528-313: SR 528 / Innovation Way Interchange
The Lane Construction Corp.
SA 528-313-0417-04

Sunbridge Parkway Signage

At the request of a project partner, Suburban Land Reserve, Inc., the proposed highway signage will be revised to accommodate the change in local road name, Innovation Way to Sunbridge Parkway south of SR 528.

ADD THE FOLLOWING ITEM:

Sunbridge Parkway Signage	\$	97,004.11
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INCREASE THE FOLLOWING ITEM:

Sign Panel, Remove, 201-300SF	\$	1,137.00
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TOTAL AMOUNT FOR PROJECT 528-313

\$ 98,141.11

**Contract 599-624: Systemwide E-PASS Signage Improvements
Traffic Control Devices, Inc.
SA 599-624-0417-01**

Contract Pay Item Quantity Adjustment

This change is to adjust contract quantities to reflect the actual expenditures on the project.

DECREASE THE FOLLOWING PAY ITEMS:

Sign Panel, Remove, 51-100 SF	\$	(3,075.00)
Allowance for Disputes Review Board	\$	(5,000.00)
Work Order Allowance	\$	<u>(35,000.00)</u>
	\$	(43,075.00)

Add Hospital Signage

The opening of a new hospital proximate to SR 429 necessitated additional signage.

ADD THE FOLLOWING PAY ITEM:

Hospital Signage on SR 429 at CR 535 Interchange, F&I	\$	10,948.19
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TOTAL AMOUNT FOR PROJECT 599-624 **\$ (32,126.81)**


CONSENT AGENDA ITEM

#9

CENTRAL FLORIDA EXPRESSWAY AUTHORITY

MEMORANDUM

TO: CFX Board Members

FROM: Aneth Williams 
Director of Procurement


DATE: March 27, 2017

SUBJECT: Authorization to Advertise for Construction Bids
S.R. 528 / S.R. 417 Interchange LED Lighting Conversion
Project 599-137A, Contract No. 001304

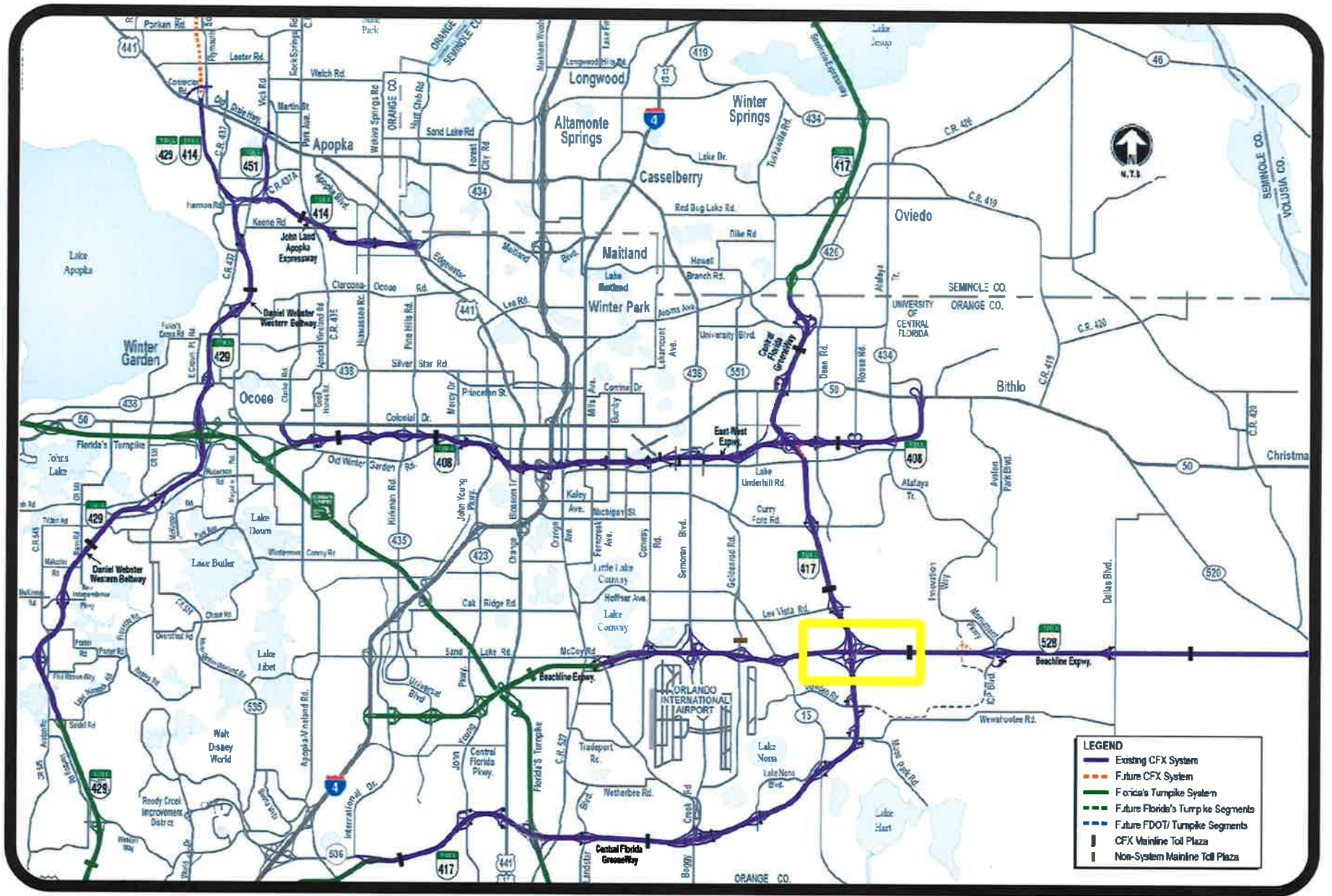
Board authorization is requested to advertise for construction bids for the LED lighting conversion at the S.R. 528 and S.R. 417 Interchange. Lighting at the interchange is currently provided by high mast style lights that have reached or exceeded their serviceable life and have proven increasingly difficult to maintain. As a result, this project will replace the existing high mast style lighting at the interchange as well as the existing lights extending to the Beachline Mainline Toll Plaza with conventional LED lighting.

This project is included in the current Five-Year Work Plan.

Reviewed by:


Glenn Pressimone, PE
Director of Engineering





Project Location Map for
S.R. 528 / S.R. 417 Interchange LED Lighting Conversion (599-137A)


CONSENT AGENDA ITEM

#10

CENTRAL FLORIDA EXPRESSWAY AUTHORITY

MEMORANDUM

TO: CFX Board Members

FROM: Aneth Williams 
Director of Procurement

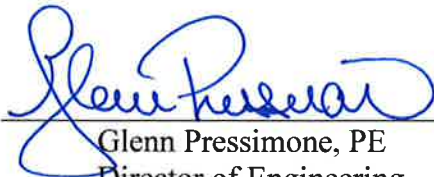
DATE: March 28, 2017

SUBJECT: Authorization to Advertise for Construction Bids
S.R. 408 & S.R. 429 Toll Plaza Air Conditioner Replacements
Project 599-732A, Contract No. 001247

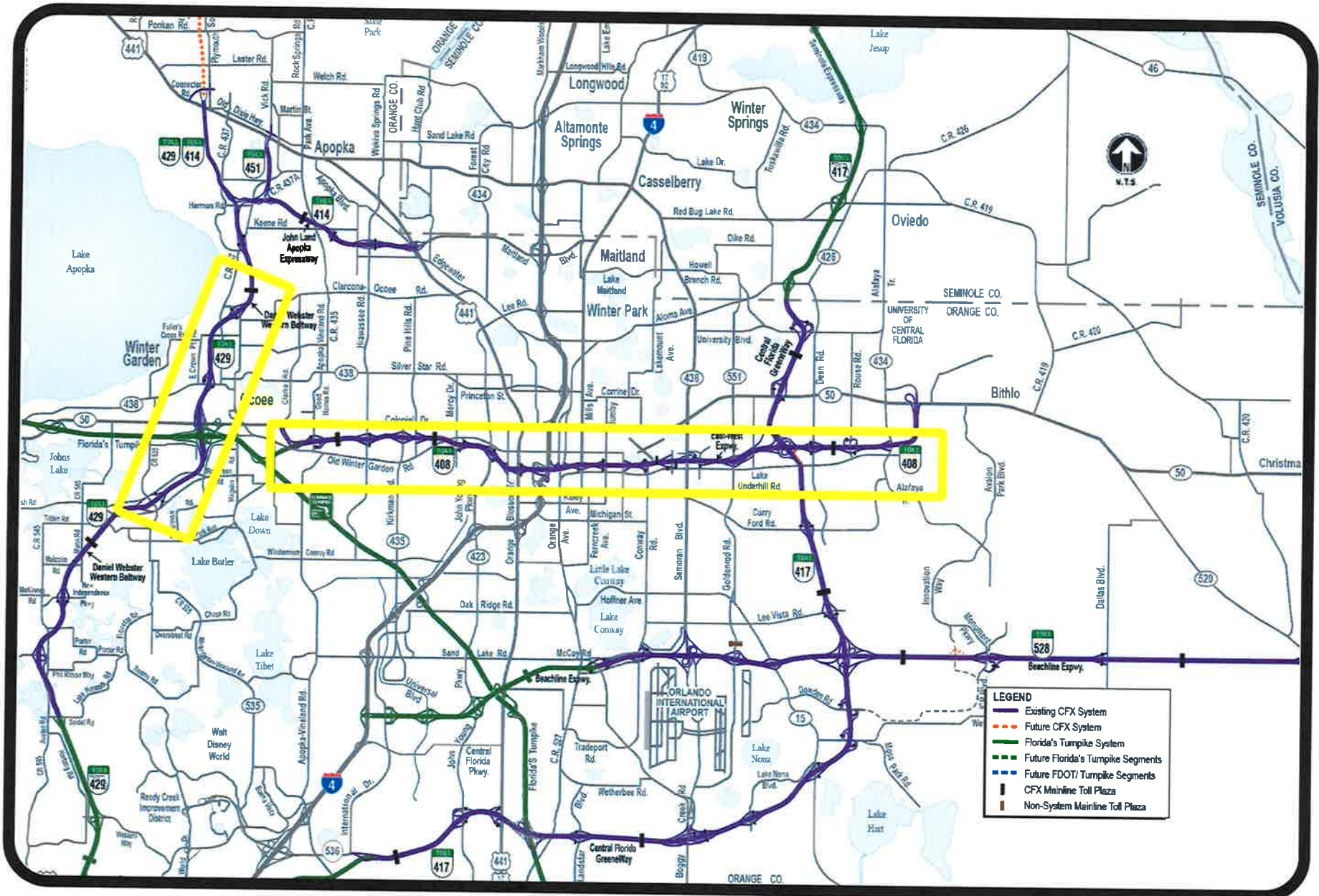
Board authorization is requested to advertise for construction bids to furnish and install new air conditioners at the toll plazas (mainlines and ramps) on S.R. 408 and S.R. 429.

This project is included in the current Five-Year Work Plan.

Reviewed by:


Glenn Pressimone, PE
Director of Engineering





Project Location Map for
 S.R. 408 & S.R. 429 Toll Plaza Air Conditioner Replacements (599-732A)


CONSENT AGENDA ITEM

#11

CENTRAL FLORIDA EXPRESSWAY AUTHORITY

MEMORANDUM

TO: CFX Board Members

FROM: Aneth Williams 
Director of Procurement

DATE: March 23, 2017

RE: Authorization to Advertise for Letters of Interest for
Traffic and Earnings Consultant
Contract No. 001300

Board authorization is requested to advertise for Letters of Interest from qualified firms to serve as CFX's Traffic and Earnings Consultant. The current contract with CDM Smith, Inc., for these services expires on September 22, 2017 and cannot be renewed.

Services to be provided under this contract include: review and analysis of revenues, special studies, traffic data collection and analysis forecasting, impact analysis, revenue projections, and financial/economic feasibility studies.

Reviewed by:



Joe Berenis, P.E.
Chief of Infrastructure


CONSENT AGENDA ITEM

#12

CENTRAL FLORIDA EXPRESSWAY AUTHORITY

MEMORANDUM

TO: CFX Board Members

FROM: Aneth Williams 
Director of Procurement

DATE: March 22, 2017

RE: Award of Contract to United Signs & Signals for
Systemwide Logo Panel Replacement & Service Signage
Project No. 599-626; Contract No. 001238

An Invitation to Bid for the referenced project was advertised on February 5, 2017. Responses to the Invitation were received from three (3) contractors by the March 13, 2017 deadline for submittal of bids.

Bid results were as follows:

	<u>Bidder</u>	<u>Bid Amount</u>
1.	United Signs & Signals	\$363,415.00
2.	Traffic Control Products of Florida	\$456,955.00
3.	Creative Signs Design	\$758,374.00

The Engineer's Estimate for this project is \$369,200.00.

The Engineer of Record for Project 599-626 has reviewed the low bid submitted by United Signs & Signals, and identified two (2) unbalanced bid items. Price uniformity between the two low bids received shows that the Engineer's Estimate significantly underestimated the unit price for Pay Item 700-1-60 (Single Post sign Assembly (Remove) and significantly overestimated the unit price for Pay Item 700-3-201A (Furnish & Install Sign Panel, Bridge Mount (Up to 12 SF), Logo L-2).

The Procurement Department has evaluated the bids and has determined the bid from United Signs & Signals, to be responsible and responsive to the bidding requirements. Award of the contract to United Signs & Signals in the amount of \$363,415.00 is recommended.

Reviewed by: 
Glenn Pressimone, PE
Director of Engineering




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CENTRAL FLORIDA EXPRESSWAY AUTHORITY

MEMORANDUM

TO: Joseph A. Berenis, P.E.
Chief of Infrastructure

FROM: Aneth Williams 
Director of Procurement

SUBJECT: Systemwide Logo Panel Replacement & Service Signage
Project No. 599-626; Contract No. 001238

DATE: March 14, 2017

The Procurement Department has reviewed the following bids (received and opened on March 13, 2017) for the subject project. We have determined that the low bid is responsive to the bidding requirements. Please perform a review of the unit prices in the low bid to identify any "unbalanced" items and to determine if the bid falls within the generally accepted tolerance threshold used by CFX for bids that are below the Engineer's Estimate. Please advise me of your findings.

	<u>Bidder</u>	<u>Bid Amount</u>
1.	United Signs & Signals	\$363,415.00
2.	Traffic Control Products of Florida	\$456,955.00
3.	Creative Signs Design	\$758,374.00

CFX PROJECT NO. 599-626; CONTRACT NO. 001238

SYSTEMWIDE LOGO PANEL REPLACEMENT & SERVICE SIGNAGE

BID TABULATION - BID OPENING MARCH 13, 2017, 1:30 PM

PAY ITEM NO.	ITEM DESCRIPTION	QUANTITY	UNIT	Creative Signs Design		United Signs & Signals		Traffic Control Products		Engineer's Estimate	
				UNIT PRICE	TOTAL COST	UNIT PRICE	TOTAL COST	UNIT PRICE	TOTAL COST	UNIT PRICE	TOTAL COST
101 - 1	Mobilization	1	LS	\$21,711.00	\$21,711.00	\$38,000.00	\$38,000.00	\$ 10,000.00	\$10,000.00	\$25,000.00	\$25,000.00
102 - 1	Maintenance of Traffic	1	LS	\$0.00	\$0.00	\$25,208.00	\$25,208.00	\$ 81,945.00	\$81,945.00	\$29,000.00	\$29,000.00
700-1-13	Furnish & Install Single Post Sign Assembly (21-30 SF)	4	AS	\$11,428.00	\$45,712.00	\$ 1,775.75	\$7,103.00	\$ 3,400.00	\$13,600.00	\$2,500.00	\$10,000.00
700-1-14	Furnish & Install Single Post Sign Assembly (31+ SF)	25	AS	\$12,348.00	\$308,700.00	\$ 5,330.60	\$133,265.00	\$ 6,500.00	\$162,500.00	\$4,300.00	\$107,500.00
700-1-60	Single Post Sign Assembly (Remove)	31	AS	\$2,441.00	\$75,671.00	\$ 604.00	\$18,724.00	\$ 600.00	\$18,600.00	\$150.00	\$4,650.00
700-1-60WM	Special Design Wall/Barrier Mount (Remove)	7	AS	\$1,035.00	\$7,245.00	\$ 760.00	\$5,320.00	\$ 500.00	\$3,500.00	\$300.00	\$2,100.00
700-1-74	Furnish & Install Special Design Wall/Barrier Mount Assembly (31+ SF)	6	AS	\$11,542.00	\$69,252.00	\$ 4,935.00	\$29,610.00	\$ 7,100.00	\$42,600.00	\$6,000.00	\$36,000.00
700-2-60	Multi-Post Sign Assembly (Remove)	1	AS	\$4,241.00	\$4,241.00	\$ 1,250.00	\$1,250.00	\$ 900.00	\$900.00	\$1,500.00	\$1,500.00
700-3-101	Furnish & Install Sign Panel Only (Up to 12 SF), Logo L-2, Signs 602 & 603	71	EA	\$747.00	\$53,037.00	\$ 240.00	\$17,040.00	\$ 300.00	\$21,300.00	\$200.00	\$14,200.00
700-3-102	Furnish & Install Sign Panel Only (Partial Overlay) (12-20 SF), Logo L-6 & L-6A	51	EA	\$1,208.00	\$61,608.00	\$ 354.00	\$18,054.00	\$ 400.00	\$20,400.00	\$500.00	\$25,500.00
700-3-103	Furnish & Install Sign Panel Only (21-30 SF), Signs 1 & 2	10	EA	\$1,792.00	\$17,920.00	\$ 767.00	\$7,670.00	\$ 500.00	\$5,000.00	\$800.00	\$8,000.00
700-3-201	Furnish & Install Sign Panel Overlay, Bridge Mount (Up to 12 SF), Logo L-2	104	EA	\$451.00	\$46,904.00	\$ 236.00	\$24,544.00	\$ 390.00	\$40,560.00	\$600.00	\$62,400.00
700-3-201A	Furnish & Install Sign Panel, Bridge Mount (Up to 12 SF), Logo L-2	1	EA	\$747.00	\$747.00	\$ 482.00	\$482.00	\$ 1,500.00	\$1,500.00	\$200.00	\$200.00
700-3-601	Sign Panel Only (Remove) (Up to 12 SF)	71	EA	\$186.00	\$13,206.00	\$ 85.00	\$6,035.00	\$ 50.00	\$3,550.00	\$150.00	\$10,650.00
700-3-603	Sign Panel Only (Remove) (21-30 SF)	10	EA	\$242.00	\$2,420.00	\$ 111.00	\$1,110.00	\$ 100.00	\$1,000.00	\$250.00	\$2,500.00
999 - 1	Allowance for Disputes to Review Board	--- NA ---	- NA -	- NA -	\$ 5,000.00	- NA -	\$ 5,000.00	- NA -	\$5,000.00	--- NA ---	\$5,000.00
999 - 2	Work Order Allowance	--- NA ---	- NA -	- NA -	\$ 25,000.00	- NA -	\$ 25,000.00	- NA -	\$25,000.00	--- NA ---	\$25,000.00
TOTAL BID					\$758,374.00		\$363,415.00		\$456,955.00		\$369,200.00

BID ANALYSIS
SYSTEMWIDE LOGO PANEL REPLACEMENT & SERVICE SIGNAGE
PROJECT NO. 599-626; CONTRACT NO. 001238
Bid Opening: March 13, 2017
Engineer's Estimate: \$369,200.00
3 Bidders

UNITED SIGNS & SIGNALS

Bid Amount: \$363,419.00

Irregularities Noted:

United Signs & Signal did not factor in the Allowances for Disputes to Review Board and Work Order in their total bid. Their bid amount submitted was \$333,415.00.

TRAFFIC CONTROL PRODUCTS OF FLORIDA

Bid Amount: \$456,955.00

No Irregularities Noted.

CREATIVE SIGNS DESIGN

Bid Amount: \$758,374.00

Irregularities Noted:

Creative Signs Design calculations were off in several areas. Their total bid amount submitted was \$784,556.00.

RESULTS OF ANALYSIS: The apparent low bidder is UNITED SIGNS & DESIGNS. The determination of being the lowest responsible bidder will depend on review of the bid by the EOR as unbalanced and within acceptable tolerance when compared to the Engineer's Estimate.

Aneth Williams
March 14, 2017

CONSENT AGENDA ITEM

#13

CENTRAL FLORIDA EXPRESSWAY AUTHORITY

MEMORANDUM

TO: CFX Board Members

FROM: Aneth Williams 
Director of Procurement

DATE: April 4, 2017

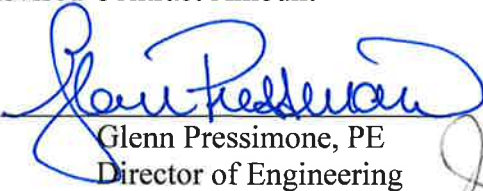

SUBJECT: Authorization for Approval of Supplemental Agreement No. 8
URS Corporation Southern, Inc.
Post Design Consultant Services
SR 408 / SR 417 Ultimate Interchange Improvements, Phase II
Project 253F, Contract No. 000818

Board approval is requested of Supplemental Agreement No. 8 with URS Corporation Southern, Inc. in the not-to-exceed amount of \$781,357.45. Services will include shop drawing reviews, attendance at construction meetings, site visits, and responding to the design/builder's requests for information on construction project 253G (SR 408 / SR 417 Ultimate Interchange Improvements – Phase II).

This Supplemental Agreement will be a continuation of an agreement previously approved. (Original Agreement dated November 14, 2011).

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
Supplemental Agreement No. 6 (Phase I Post Design)	\$361,091.19
Supplemental Agreement No. 7	\$79,270.88
<u>Supplemental Agreement No. 8 (Phase II Post Design)</u>	<u>\$781,357.45</u>
Total Revised Contract Amount	\$7,030,768.31

Reviewed by:


Glenn Pressimone, PE
Director of Engineering 

SUPPLEMENTAL AGREEMENT NO. 8
TO
AGREEMENT FOR PROFESSIONAL SERVICES
POST DESIGN SERVICES (253G)

SR 408 / SR 417 ULTIMATE INTERCHANGE IMPROVEMENTS – PHASE II

THIS SUPPLEMENTAL AGREEMENT is made and entered into this _____ day of _____, 2017, 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 "CFX" 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 CFX and the CONSULTANT, dated the 14th 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, CFX 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 CFX 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. CFX hereby authorizes the CONSULTANT to proceed with Post Design Services required as outlined in the CONSULTANT's correspondence to CFX dated April 4, 2017 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 CFX 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 CFX 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 CFX dated April 4, 2017. Direct expenses will be reimbursed for local travel only (per mile). The maximum fee for Post Design Services shall be \$781,357.45

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 253G (Phase II 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, CFX, and CFX's CEI.

C. Pre-bid Conference

The Consultant shall, prior to the pre-bid conference, be prepared to walk the project with the assigned CFX 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 CFX 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 CFX'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 CFX 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 CFX. The Consultant will also attend progress / coordination meetings as requested by CFX 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 CFX, relative to pile driving, earthwork, embankment and MSE wall construction.

L. Utilities

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

M. Record Drawings

Based on information provided by the Contractor, the Contractor's surveyor and CFX'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.

From: Noppinger, Steve <steve.noppinger@aecom.com>
Sent: Tuesday, April 04, 2017 8:56 AM
To: Glenn Pressimone; Will Hawthorne
Cc: Foster, Gary (Orlando)
Subject: CFX 253F - Amendment No. 8 Request
Attachments: AECOM - CA 8 Post Design Services.xlsx; CFX 253G-Scope of Services CA 8 Final.docx

Attached is a revised scope of services and fee proposal for this amendment. This revision includes the development of a probable construction cost estimate for the LS items as well as an evaluation of the bids.

Stephen Noppinger, PE
Surface Transportation Manager, Transportation Engineering, Greater Florida
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M +1-407-718-1990
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SUPPLEMENTAL AGREEMENT NO. 8

TO

AGREEMENT FOR PROFESSIONAL SERVICES

POST DESIGN SERVICES (253F)

SR 408/SR 471 ULTIMATE INTERCHANGE IMPROVEMENTS – PHASE II

1.0 GENERAL

1.02 Description

The services to be provided under this Contract Amendment are to provide post design services to the Design-Build Contract 253G.

4.0 WORK PERFORMED BY CONSULTANT

The Consultant shall be responsible for the work outlined in this Section. The work shall conform to the standards, criteria, and requirements of this Scope of Services.

424 Post Design Services

424.1. Pre-Construction Support

4.24.1.1 Pre-Construction Meeting

The Consultant shall attend a pre-award meeting with the Design-Build Firm, CFX, and CEI.

4.24.1.2 Addenda

The Consultant shall prepare up to one (1) addenda required to clarify the work included in the contract documents.

4.24.1.3 Construction Cost Estimate & Evaluation

The Consultant shall prepare a probable construction cost estimate and evaluate the LS bids for the various components of the project.

424.2 Plan Reviews

The Consultant shall review the Design-Build Firm's plan submissions for compliance with Design-Build intent, and compliance with design standards established for this project.

424.2 Request for Information (RFI)

The Consultant shall respond to RFI's from the Design-Build Firm for those items related to the bridge structures including temporary shoring structures.

424.3 Shop Drawing Reviews

The Consultant shall review and approve shop drawings from the Design-Build Firm for those items related to the bridge structures including temporary shoring structures.

424.5 Bridge Load Ratings

Approved design bridge load ratings were submitted by the Consultant under the final design phase for the bridge structures. The Design-Build Firm shall be responsible for revising and resubmitting the load ratings if changes to the bridge design occur during construction. The Consultant shall review revised load ratings submitted by the Design-Build Firm. If no changes occurred during construction to the bridge structures and no additional load ratings are necessary, the Consultant shall provide written correspondence to FDOT that the bridges were constructed in accordance with the plans and the load ratings for the structure as designed still apply.

424.6 Record Drawings

Based on information provided by the Design-Build Firm, its' surveyor and CFX's Construction Manager, the Consultant will prepare record drawings reflecting improvements build for the bridge structures only. This scope assumes surveys will be undertaken by a registered surveyor by the Design-Build Firm.

424.7 Management and Meetings

424.7.1 Field Visits

The Consultant shall be available to respond to questions in the field that may arise relative to the intent of the Concept Plans, or details pertaining to the bridge structures. Visits are not considered to be inspections of construction and will not take the place of formal construction inspection by CFX'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 Design-Build Firm is being performed in general conformance with the project plans as they relate to the bridge structures.

424.7.2 Meetings

The Consultant shall attend up to 6 (six) meetings as requested by CFX.

The following items are not included in the scope of this amendment:

1. Utility coordination
2. Geotechnical reviews

CENTRAL FLORIDA EXPRESSWAY AUTHORITY

Project Number: 253F

DESCRIPTION: SR 408/SR 417 Ultimate Interchange (CONTRACT AMENDMENT NO. 8)

URS Corporation

CFX Contract No.: 000818

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	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	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	440	1,156	1,541	1,101	550	550	165	0	0	0	5,503	\$300,372.27	\$54.58
700	Administration	0	0	0	0	0	0	0	0	0	0	0	\$0.00	
TOTAL MANHOURS		440	1,156	1,541	1,101	550	550	165	0	0	0	5,503	\$300,372.27	\$54.58
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		\$41,184.00	\$71,533.28	\$98,439.08	\$42,839.91	\$21,813.00	\$19,283.00	\$5,280.00	\$0.00	\$0.00	\$0.00	N/A	\$300,372.27	

Salary Related Costs

Total Activity Salary Costs	\$300,372.27
Post Design Labor Multiplier	156.80%
Subtotal Salary Related Costs (Limiting Amount)	\$771,355.99

Subconsultants

Ardaman & Associates	\$10,001.46
Nadic Engineering Services	\$0.00
RS&H	\$0.00
WBQ	\$0.00
Subtotal Subconsultants (Limiting Amount)	\$10,001.46

GRAND TOTAL (Maximum Limiting Amount) \$781,357.45

CENTRAL FLORIDA EXPRESSWAY AUTHORITY**URS Corporation****Project Number: 253F****CFX Contract No.: 000818****DESCRIPTION: SR 408/SR 417 Ultimate Interchange (CONTRACT AMENDMENT NO. 8)****County****HIGHWAY TASK LIST**

Task No.	Task Description	Units	Number of Units	Hours per Unit	Total Hours	Comments
24.1 Pre-Construction Support						
24.1.1	Pre-Construction Meeting	LS	1	16	16	
24.1.2	Addendum Preparation	LS	1	16	16	
24.1.3	Constr. Cost Est. & Evaluation	LS	1	300	300	
24.1 Pre-Construction Support Subtotal					332	
24.2 Plans Review						
24.2.1	Roadway	EA	2	100	200	
24.2.2	Drainage	EA	2	140	280	Includes calculation review
24.2.3	Lighting	EA	2	40	80	
24.2.4	ITS	EA	2	40	80	
24.2.5	SPM	EA	2	40	80	
24.2.6	Structures	EA	4	140	560	Retaining Walls, Misc Str only.
24.2 Plans Review Subtotal					1,280	
24.3 Request for Information						
24.3.1	Roadway	EA	12	3	36	
24.3.2	Drainage	EA	20	3	60	
24.3.3	Lighting	EA	5	3	15	
24.3.4	ITS	EA	6	3	18	

CENTRAL FLORIDA EXPRESSWAY AUTHORITY**URS Corporation****Project Number: 253F****CFX Contract No.: 000818****DESCRIPTION: SR 408/SR 417 Ultimate Interchange (CONTRACT AMENDMENT NO. 8)****County****HIGHWAY TASK LIST**

24.3.5	Structures - Bridges	EA	160	4	640	Bridge Structures only.
24.3.6	Structures - Field Directives	EA	20	8	160	Bridge Structures only.
24.3.7	Structures - Walls, Misc	EA	20	4	80	Walls, Temp Walls, Misc.
24.3 Request for Information Subtotal					1,009	
24.4 Shop Drawing Review						
24.4.1	Roadway	EA	0	0	0	Not included since this is D-B
24.4.2	Drainage	EA	0	0	0	Not included since this is D-B
24.4.3	Lighting	EA	0	0	0	Not included since this is D-B
24.4.4	ITS	EA	0	0	0	Not included since this is D-B
24.4.5	Structures					Bridge Structures only.
	Vibration Monitoring	EA				Not included since this is D-B
	Review of Pile Driving Records	EA				Installation Plan, Test Piles, etc. - Ardaman
	Traffic Control Plan	EA	4	8	32	
	Permanent MSE Walls	EA	12	4	48	
	Segment Working Drawings	EA				
	Ramp A (38 Segments)	EA	76	4	304	
	Ramp C (32 Segments)	EA	64	4	256	
	Ramp A & D1 (22 Segments)	EA	44	4	176	
	Segment Standard Drawings	EA				

CENTRAL FLORIDA EXPRESSWAY AUTHORITY**URS Corporation****Project Number: 253F****CFX Contract No.: 000818****DESCRIPTION: SR 408/SR 417 Ultimate Interchange (CONTRACT AMENDMENT NO. 8)****County****HIGHWAY TASK LIST**

	End Diaphragms	EA	1	16	16	
	Intermediate Diaphragms	EA	1	16	16	
	Closure Pours	EA	1	8	8	
	Blisters	EA	1	8	8	
	Access Hatches	EA	1	4	4	
	Access Ramps	EA	1	4	4	
	Headed Rebar	EA	1	4	4	
	Rebar Couplers	EA	1	4	4	
	Diaphragm Screening	EA	1	4	4	
	Concrete Inserts	EA	1	4	4	
	Erection Manual & Geometry Control	EA	2	200	400	Assumes parallel modelling to verify. Includes stress evaluation and camber calcs at each stage. Required for later as-built load rating evaluation.
	PT Hardware/Stressing/Jacking	EA			0	
	Hardware	EA	1	8	8	
	Ductwork	EA	1	8	8	
	Grout and Grouting Procedures	EA	1	16	16	
	Elongations	EA	3	24	72	
	Lighting in Box Girders	EA	3	8	24	
	Temporary works	EA	3	60	180	
	Epoxy for Doweled Bars	EA	1	4	4	

CENTRAL FLORIDA EXPRESSWAY AUTHORITY**URS Corporation****Project Number: 253F****CFX Contract No.: 000818****DESCRIPTION: SR 408/SR 417 Ultimate Interchange (CONTRACT AMENDMENT NO. 8)****County****HIGHWAY TASK LIST**

	Mass Concrete Plan	EA	1	16	16	
	Mix Designs	EA	3	8	24	
	Concrete Coating / Colors	EA	1	4	4	
	Expansion Joints - Modular	EA	3	8	24	
	Expansion Joints - Parapet Cover Plates	EA	3	4	12	
	Multi-Rotational Bearings	EA	3	16	48	
	Bearing Anchor Rods & Grout	EA	1	4	4	
	Prestressed Beams	EA	12	4	48	
	SIP Forms	EA	3	6	18	
	Deck Overhang Brackets	EA	3	6	18	
	Prestressed Beam Bracing	EA	3	6	18	
	Utility Hangers/Conduit Couplers/J-Boxes	EA	3	12	36	
	Bridge Deck Drains	EA	1	24	24	
	Temporary Critical Walls	EA	1	40	40	Only thoses protecting Curved U-Beam Bridges.
	Foundation Shoring	EA	1	40	40	
	Demolition Plans	EA	1	40	40	
24.4.6	Shop Drawing Resubmittals	EA	50	4	200	
24.4 Shop Drawing Review Subtotal					2,214	
24.5 Bridge Load Rating						

CENTRAL FLORIDA EXPRESSWAY AUTHORITY**URS Corporation****Project Number: 253F****CFX Contract No.: 000818****DESCRIPTION: SR 408/SR 417 Ultimate Interchange (CONTRACT AMENDMENT NO. 8)****County****HIGHWAY TASK LIST**

24.5.1	Bridge Load Rating	EA	3	80	240	
24.5 Bridge Load Rating Subtotal					240	
24.6 Record Drawings						
24.6.1	Record Drawings	LS	1	300	300	447 sheets
24.6 Management and Meetings Subtotal					300	
24.7 Management and Meetings						
24.7.1	Field Visits	LS	1	80	80	
24.7.2	Meetings	EA	12	4	48	
24.6 Management and Meetings Subtotal					128	
					5,503	

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: 3/30/2017
 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	24	24	24	8	14	0	0	0	0	0	0	0	94	\$10,001	\$106.40
Total Staff Hours	0	24	24	24	8	14	0	0	0	0	0	0	0	94		
Total Staff Cost		\$3,577.20	\$3,035.52	\$2,176.56	\$546.48	\$665.70	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00		\$10,001.46	\$106.40

Survey Field Days by Subconsultant:
 4 - Person Crew:

- 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.

SALARY RELATED COSTS: \$10,001.46
 OVERHEAD: 0.00% \$0.00
 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 days @ \$ / day \$0.00
SUBTOTAL ESTIMATED FEE: \$10,001.46

CENTRAL FLORIDA EXPRESSWAY AUTHORITY

Ardaman & Associates

Project Number: 253F

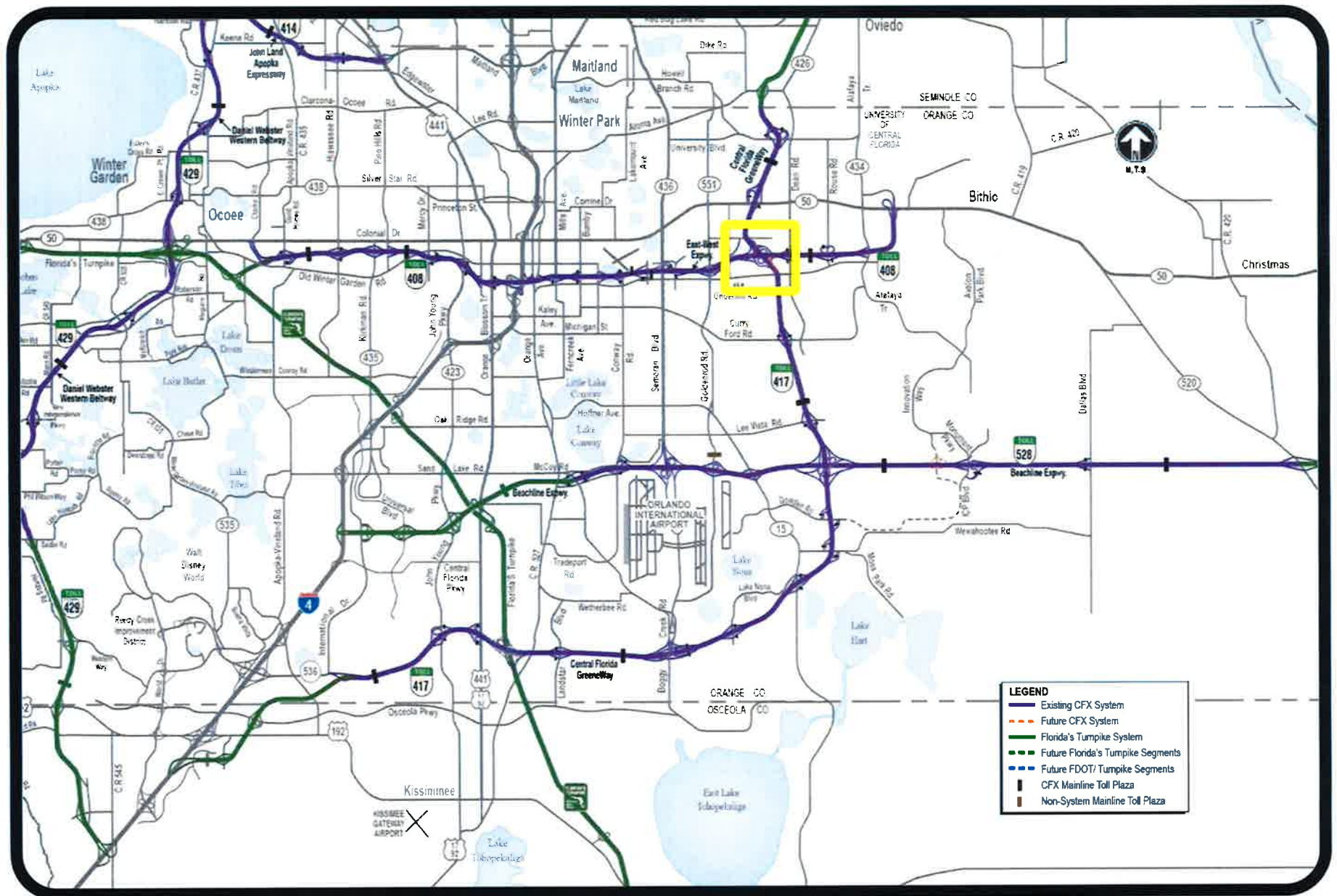
CFX Contract No.: 000818

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	4	6	24	
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	10	50	
24.2 Request for Information Subtotal					74	
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	
					94	



Project Location Map for
 SR 408 / SR 417 Ultimate Interchange Improvements Phase 2 (253G)

CONSENT AGENDA ITEM

#14

CENTRAL FLORIDA EXPRESSWAY AUTHORITY

MEMORANDUM

TO: CFX Board Members

FROM: Aneth Williams 
Director of Procurement

DATE: March 27, 2017

SUBJECT: Authorization for Approval of Supplemental Agreement No. 1
Dewberry Engineers, Inc.
S.R. 417 Widening from Econlockhatchee Trail to Seminole County Line
Project 417-134, Contract No. 001153

Board approval is requested for Supplemental Agreement No. 1 with Dewberry Engineers, Inc. in the not-to-exceed amount of \$416,197.12



The northern limit of the current CFX design project (the Seminole County Line) adjoins the portion of S.R. 417 within the jurisdictional limits of Florida's Turnpike Enterprise (FTE). A widening of S.R. 417 to eight (8) lanes is contemplated by FTE in the future. For the mutual benefit of CFX and FTE customers traveling on S.R. 417 and to simplify the interface between CFX's current project and FTE's future project, FTE has requested that CFX enter into a Supplemental Agreement with Dewberry to provide additional design services related to proposed work within FTE's jurisdictional limits. Supplemental Agreement No. 1 includes all design related costs associated with this request from FTE.

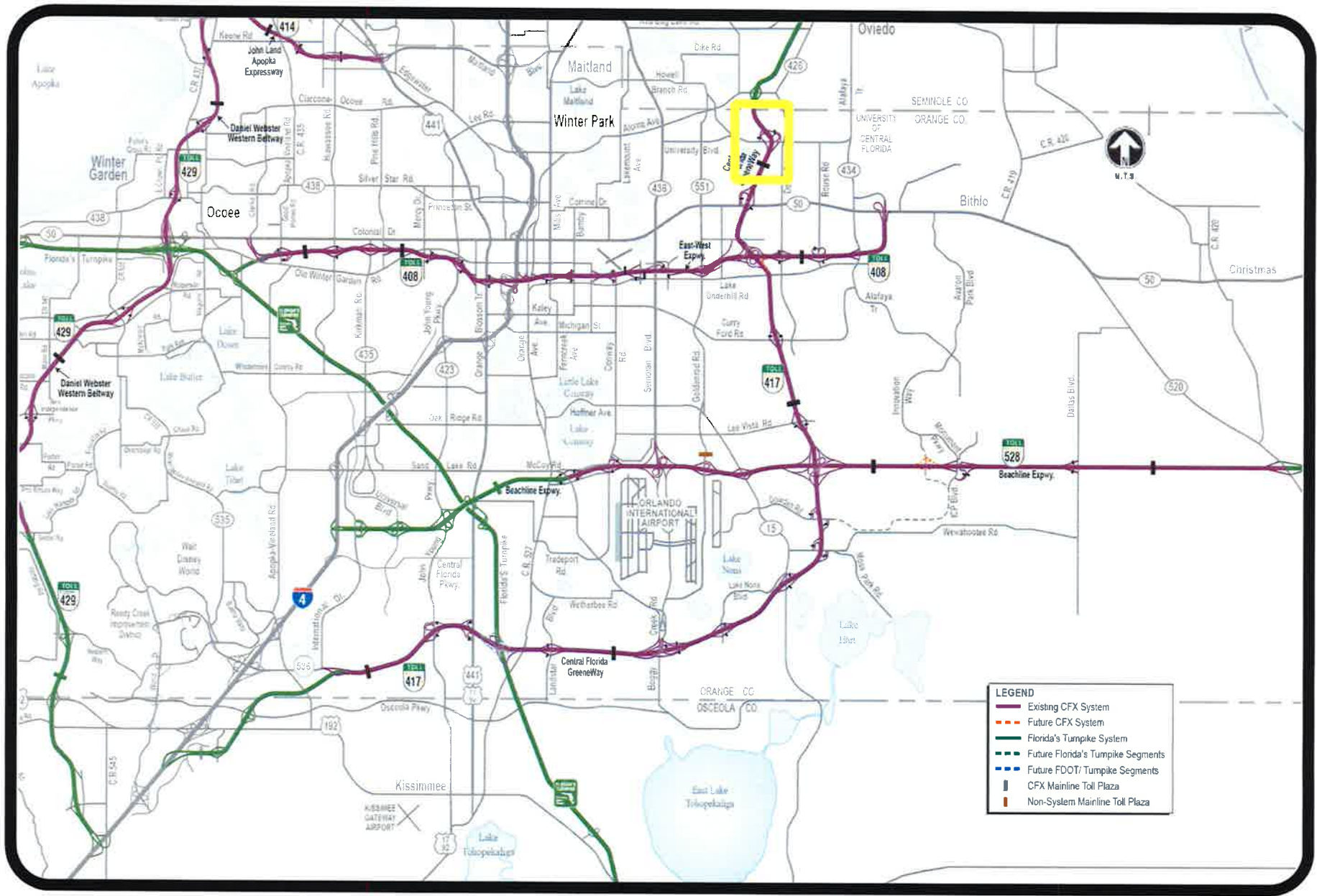
Reimbursement to CFX by FTE for all costs associated with Supplemental Agreement No. 1 is contemplated through a Reimbursement Agreement between CFX and FTE.

This Contract was previously approved by CFX for this project. (Original Agreement dated June 16, 2016)

Original Contract Amount	\$2,575,000.00
Amount of Supplemental Agreement No. 1	\$ 416,197.12
Total Revised Contract Amount	\$2,991,197.12

Reviewed by:


Glenn Pressimone, PE
Director of Engineering




Project Location Map for
 S.R. 417 Widening from Econlockhatchee Trail to Seminole County Line (417-134)

SUPPLEMENTAL AGREEMENT NO. 1
TO
AGREEMENT FOR PROFESSIONAL SERVICES
FINAL DESIGN
S.R. 417 Widening from Econlockhatchee Trail
To Seminole County Line

THIS SUPPLEMENTAL AGREEMENT is made and entered into this _____ day of _____, 2017, by and between the CENTRAL FLORIDA EXPRESSWAY AUTHORITY, a corporate body and agency of the State of Florida, hereinafter called "CFX" and DEWBERRY ENGINEERS, INC., hereinafter called the "CONSULTANT".

WHEREAS, Articles 2.00 and 12.0 of the Agreement for Professional Services between CFX and the CONSULTANT, dated the 16th day of June 2016, provides that in the event that CFX 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. CFX hereby authorizes the CONSULTANT to proceed with additional services as outlined in the Consultant's April 3, 2017 correspondence to CFX, 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 upward by \$303,429.87 to \$1,650,644.17.
- b. The Design Survey – Field (Prime) is adjusted upward by \$11,277.36 to \$159,136.08.
- c. The Direct Expenses (Lump Sum) remain unchanged at \$25,300.00.
- d. The Subcontract Items are adjusted upward by \$101,489.89 to \$929,353.81.
 - CES \$48,832.47
 - The Balmoral Group \$14,172.02
 - Tierra \$38,485.40
- e. The Allowance remains unchanged at \$226,763.06.

The total Maximum Limiting Amount is adjusted upward by \$416,197.12 to \$2,991,197.12.

3. The Department Funded Agreement between Florida’s Turnpike Enterprise and the Central Florida Expressway Authority for Improvements to the Central Florida Greenway (S.R. 417) from Econlockhatchee Trail to the Seminole County Line, CFX Project No. 417-134, CFX Contract No. 001153 will be referred to as the “CFX-FTE Agreement”, which is attached hereto and made a part of this Supplemental Agreement. In accordance with the terms of the CFX-FTE Agreement, and for good and valuable consideration for the execution of this Supplemental Agreement, the CONSULTANT agrees that this Supplemental Agreement shall include the following additional provisions:

- a. Per paragraph 6.j. of the CFX-FTE Agreement, there shall be no reimbursement for travel expenses under this Supplemental Agreement.
- b. Per paragraph 6.k. of the CFX-FTE Agreement, if FTE or CFX determine that the performance of CONSULTANT is unsatisfactory, CFX shall notify CONSULTANT of the deficiency to be corrected, which correction shall be made within a time-frame to be specified by CFX. CONSULTANT shall, within five days after notice from CFX, provide CFX with a corrective action plan describing how CONSULTANT will address all issues of contract non-performance, unacceptable performance, failure to meet the minimum performance levels, deliverable deficiencies, or contract non-compliance. If the corrective action plan is unacceptable to CFX, CONSULTANT shall be assessed a non-performance retainage equivalent to 10% of the total invoice amount. The retainage shall be applied to the invoice for the then-current billing period. The retainage shall be withheld until CONSULTANT resolves the deficiency. If the deficiency is subsequently resolved, CONSULTANT may bill CFX for the retained amount during the next billing period. If CONSULTANT is unable to resolve the deficiency, the funds retained may be forfeited at the end of this Supplemental Agreement's term.
- c. In accordance with paragraph 6.o. of the CFX-FTE Agreement, records of costs incurred under the terms of this Supplemental Agreement shall be maintained and made available upon request to the CFX at all times during the period of this Supplemental Agreement and for three (3) years after final payment is made. Copies of these documents and records shall be furnished

to the CFX upon request. Records of costs incurred include CONSULTANT's general accounting records and the FTE Project records, together with supporting documents and records, of all subcontractors performing work on the FTE Project, and all other records of CONSULTANT and its subcontractors considered necessary by CFX for a proper audit of costs. (Section 287.058(4), F.S.).

- d. Per paragraph 8 of the CFX-FTE Agreement, CONSULTANT shall add FTE as an additional insured under the Commercial General Liability coverage and Business Automobile Liability Coverage insurance policies provided for in sections 16.1 and 16.2 of the Agreement for Professional Services in CFX Contract No. 001153, as provided by law. The insurance shall remain in effect until acceptance of the design work by FTE. Prior to commencement of the FTE Project and on such other occasions as CFX may reasonably require, CONSULTANT shall provide CFX with certificates documenting that the required insurance coverage is in place and effective.
- e. Per paragraph 9 of the CFX-FTE Agreement, to the extent that there are design professional services subject to Section 725.08, Florida Statutes, and notwithstanding the provisions of Section 725.06, Florida Statutes, CONSULTANT shall indemnify and hold harmless FTE and CFX, and their officers and employees, from liability, damages, losses, and costs, including, but not limited to, reasonable attorneys' fees, to the extent caused by the negligence, recklessness, or intentionally wrongful conduct of CONSULTANT and other persons employed or utilized by CONSULTANT

in the performance of this Supplemental Agreement. Nothing herein shall be construed to extend the limits of liability of CFX beyond that provided in Section 768.28, Florida Statutes. Nothing herein is intended as a waiver of CFX's sovereign immunity under Section 768.28, Florida Statutes. Nothing hereby shall inure to the benefit of any third party for any purpose, which might allow claims otherwise barred by sovereign immunity or operation of law. The parties shall notify each other in writing immediately upon becoming aware of such liabilities. CONSULTANT's inability to evaluate liability, or its evaluation of liability, shall not excuse performance of the provisions of this paragraph. The indemnities given by CONSULTANT in connection with the FTE Project shall survive termination of this Supplemental Agreement. The insurance coverage and limits required in this Supplemental Agreement may or may not be adequate to protect CFX or FTE and such insurance coverage shall not be deemed a limitation of the indemnities to CFX or FTE set forth in this Supplemental Agreement. The provisions of this paragraph shall survive the expiration or earlier termination of this Supplemental Agreement, in accordance with the laws of the State of Florida.

4. 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

By: _____
Director of Procurement

DEWBERRY ENGINEERS, INC.

Attest: _____ By: _____
Title: Title:

Approved as to form and execution, only.

General Counsel for CFX

**Attachment to Supplemental Agreement No.1
CFX Contract 001153**

**Negotiated Scope, Manhours and Fee between Florida's
Turnpike Enterprise and Dewberry for Supplemental
Agreement No.1 to CFX Contract 001153**

Glenn Pressimone

From: Knudsen, Kevin <kknudsen@Dewberry.com>
Sent: Monday, April 03, 2017 3:47 PM
To: Ambare, Snehal; Glenn Pressimone
Cc: Hustad, Marc; Shannon, Michael
Subject: RE: SR 417 (417-134) - Negotiated Scope, Manhours and Fee
Attachments: Mimecast Large File Send Instructions

I'm using Mimecast to share large files with you. Please see the attached instructions.

Please find attached the Concept Plan and Scope. Thanks.

Kevin E. Knudsen, P.E.
Vice President
Dewberry
800 N. Magnolia Ave., Suite 1000
Orlando, FL 32803
321.354.9646 Direct
407.649.8664 Fax
407.760.0321 Mobile
www.dewberry.com
kknudsen@dewberry.com

From: Glenn Pressimone [mailto:Glenn.Pressimone@CFXWay.com]
Sent: Monday, April 03, 2017 3:09 PM
To: Knudsen, Kevin <kknudsen@Dewberry.com>; Ambare, Snehal <Snehal.Ambare@dot.state.fl.us>
Cc: Hustad, Marc <Marc.Hustad@dot.state.fl.us>; Shannon, Michael <Michael.Shannon@dot.state.fl.us>
Subject: RE: SR 417 (417-134) - Negotiated Scope, Manhours and Fee

This message originated from outside your organization

Kevin,

Can you please also send me the final scope document and exhibit that go with the executed staffhour forms. These items need to be in the Board SA package.

Thanks,
-GP

Glenn M. Pressimone, P.E.
Director of Engineering
CENTRAL FLORIDA EXPRESSWAY AUTHORITY
4974 ORL Tower Rd.
Orlando, FL 32807
(o) 407.690.5321
(f) 407.690.5033
glenn.pressimone@cfxway.com

PLEASE NOTE: Florida has a very broad public records law (F. S. 119). All emails to and from the Expressway Authority are kept as a public record. Your email communications, including your email address, may be disclosed to the public and media at any time.

From: Knudsen, Kevin [<mailto:kknudsen@Dewberry.com>]
Sent: Monday, April 03, 2017 3:00 PM
To: Ambare, Snehal <Snehal.Ambare@dot.state.fl.us>
Cc: Hustad, Marc <Marc.Hustad@dot.state.fl.us>; Glenn Pressimone <Glenn.Pressimone@CFXWay.com>; Shannon, Michael <Michael.Shannon@dot.state.fl.us>
Subject: RE: SR 417 (417-134) - Negotiated Scope, Manhours and Fee

Snehal, please find attached the signed staffhour forms. Thanks for your help.

Kevin E. Knudsen, P.E.
Vice President
Dewberry
800 N. Magnolia Ave., Suite 1000
Orlando, FL 32803
321.354.9646 Direct
407.649.8664 Fax
407.760.0321 Mobile
www.dewberry.com
kknudsen@dewberry.com

From: Ambare, Snehal [<mailto:Snehal.Ambare@dot.state.fl.us>]
Sent: Friday, March 31, 2017 4:18 PM
To: Knudsen, Kevin <kknudsen@Dewberry.com>
Cc: Hustad, Marc <Marc.Hustad@dot.state.fl.us>; Glenn Pressimone (Glenn.Pressimone@CFXWay.com) <Glenn.Pressimone@CFXWay.com>; Shannon, Michael <Michael.Shannon@dot.state.fl.us>
Subject: RE: SR 417 (417-134) - Negotiated Scope, Manhours and Fee

This message originated from outside your organization

Kevin,

We have reviewed the updated scope and staffhours. I am sending you the FTE signed staffhours. Please sign and date the PDF and send it back to me for records.

I will be sending the file via FTA. Please confirm your receipt.

Thanks!
Snehal

Snehal Ambare
Project Manager

HNTB CORPORATION
Florida's Turnpike Milepost 263, Building 5315, Ocoee, FL 34761
Tel (407) 264-3414 | Fax (407) 822-5821 | Mobile (407) 453-8422

Snehal.Ambare@dot.state.fl.us

From: Knudsen, Kevin [<mailto:kknudsen@Dewberry.com>]
Sent: Thursday, March 30, 2017 5:48 PM
To: Ambare, Snehal <Snehal.Ambare@dot.state.fl.us>

Cc: Hustad, Marc <Marc.Hustad@dot.state.fl.us>; Glenn Pressimone (Glenn.Pressimone@CFXWay.com)
<Glenn.Pressimone@CFXWay.com>

Subject: SR 417 (417-134) - Negotiated Scope, Manhours and Fee

Snehal, please find attached, for your review, the revised scope, manhours and fee based on our negotiations this morning. Please contact me if you have any questions or require additional information. Thanks.

Kevin E. Knudsen, P.E.
Vice President
Dewberry
800 N. Magnolia Ave., Suite 1000
Orlando, FL 32803
321.354.9646 Direct
407.649.8664 Fax
407.760.0321 Mobile
www.dewberry.com
kknudsen@dewberry.com

Visit Dewberry's website at www.dewberry.com

If you've received this email even though it's intended for someone else, then please delete the email, don't share its contents with others, and don't read its attachments. Thank you.

Visit Dewberry's website at www.dewberry.com

If you've received this email even though it's intended for someone else, then please delete the email, don't share its contents with others, and don't read its attachments. Thank you.

EXHIBIT "A"
SCOPE OF SERVICES
FOR
SR 417 Widening from Econlockhatchee Trail to Seminole County Line
Orange County, Florida

March 23, 2017

I. INTRODUCTION

The Central Florida Expressway Authority (CFX) is proposing to widen SR 417 from Econlockhatchee Trail northward to the Orange / Seminole County Line to a six-lane facility. The County Line is the jurisdictional limit between the CFX and Florida's Turnpike maintenance on SR 417. The County Line is located just south of the SR 426 (Aloma Avenue) interchange, which is a logical termini for the roadway widening improvements. FTE has future plans to widen SR 417 to an eight-lane section from the County Line northward. FTE wishes to limit future rework, avoid throw-away construction and minimize impacts to their customers by coordinating improvements with the CFX SR 417 design project

II. PROJECT DESCRIPTION

The CFX project will be modified to include a one-mile southbound auxiliary lane between Aloma Avenue and University Boulevard. The auxiliary lane will tie-in to the existing two lane University Boulevard off-ramp. In addition, the southbound on-ramp at Aloma Avenue will be widened to two lanes from the ramp gore to the existing ramp plaza, a distance of approximately 0.2 miles. The southbound mainline pavement will also be widened to the physical ramp gore so that the gore will be in its ultimate location. The northbound mainline pavement will transition from 3-lanes to 2-lanes between the Aloma Avenue exit ramp and the existing bridge over Aloma Avenue. The Aloma Avenue northbound off-ramp will also be improved to 2-lanes. The exit ramp gore will be shifted southward to maximize the merge distance between the gore and bridge.

The southbound auxiliary lane between Aloma Avenue and University Boulevard will add a significant amount of impervious surface and impact two existing ponds (Ponds 7W and 8). Retaining walls and/or guardrail and shoulder gutter may be required to provide the additional treatment volumes required. The existing infield pond (Pond 6W) at the University Boulevard interchange will be expanded to handle the additional stormwater. The roadway widening within the FTE/CFX transition area will also add a significant amount of impervious surface. Currently, there is one existing dry pond (Pond 9) that handles the interchange drainage. FTE has permitted adding an infield pond (Pond 9A) in the southeast quadrant of the interchange as part of the future

8-laning project. A portion of this pond (Pond 9A) will be designed and constructed to provide the treatment required for the additional SB pavement. The existing pond (Pond 9) outfall to Deep Lake will also be improved. Stormwater and environmental permits will be modified.

Additional geotechnical and survey services will be required. The lighting, ITS and signing and pavement marking plans will be updated for the added auxiliary lane and ramps.

All improvements within the FTE jurisdiction and right-of-way will be designed in accordance with FTE standards and specifications.

III. SERVICES TO BE PERFORMED BY THE CONSULTANT

ACTIVITY 3) - PROJECT COMMON AND GENERAL TASKS:

Additional meetings and contract maintenance will be required.

ACTIVITIES 4) and 5) - ROADWAY ANALYSIS AND PLANS:

The CONSULTANT shall update the roadway design and plans to accommodate the auxiliary lane and ramp improvements. The major work efforts include:

- Horizontal/Vertical Master Design Files.
- Cross Section Design Files.
- Traffic Control Analysis, Design and Plans.
- Quantities.
- Cost Estimates.
- Typical Sections.
- Plan and Profile Sheets.
- Ramp Terminal Details.
- Roadway Cross Sections.

ACTIVITY 6) - DRAINAGE ANALYSIS AND PLANS:

The CONSULTANT shall update the drainage design and plans to accommodate the auxiliary lane and ramp improvements. The major work efforts include:

- Drainage Maps
- Design of Cross Drains.
- Design of Ditches.
- Design and Plans for Stormwater Management Facilities.
- Design and Plans for Storm Drains.
- Update Drainage Design Documentation Report.
- Miscellaneous Drainage Detail Sheets.

ACTIVITY 7) - UTILITIES:

No additional utility tasks anticipated.

ACTIVITY 8) - ENVIRONMENTAL PERMITS, COMPLIANCE AND CLEARANCES:

The CONSULTANT shall update the permit application and submittal to accommodate the proposed improvements. The major work efforts include:

Complete and Submit Permit Applications.

ACTIVITY 9) and 18) – MISCELLANEOUS STRUCTURES:

The CONSULTANT shall design the required miscellaneous structures. The major work efforts include:

Overhead Sign Structures

Sta. 1231+80

Sta. 1249+00

Sta. 1258+50

Retaining Walls

Pond 7W

Pond 8

ACTIVITIES 19) and 20) – SIGNING AND PAVEMENT MARKING ANALYSIS AND PLANS:

The CONSULTANT shall update the signing and pavement marking design and plans to accommodate the auxiliary lane and ramp improvements. The major work efforts include:

Master Design Files

Signing and Pavement Marking Plans

ACTIVITIES 23) and 24) - LIGHTING ANALYSIS AND PLANS:

The CONSULTANT shall update the lighting design and plans to accommodate the auxiliary lane and ramp improvements and shall convert to LED. The major work efforts include:

Lighting Design Analysis Report

Voltage Drop Calculations

Master Design Files

Lighting Plans

ACTIVITY 27) - SURVEY

The CONSULTANT shall provide additional topographic and drainage surveys for the proposed roadway and drainage improvements. The major work efforts include:

- Drainage Survey
- Pond Site Survey
- Geotechnical Support
- Work Zone Safety

ACTIVITIES 33) and 34) – ITS ANALYSIS AND PLANS:

The CONSULTANT shall update the ITS design and plans to accommodate the auxiliary lane and ramp improvements. The major work efforts include:

- Master ITS Design Files
- ITS Plans

ACTIVITY 35) - GEOTECHNICAL:

The CONSULTANT shall be responsible for a complete geotechnical investigation to accommodate the design improvements. The major work efforts include:

- Roadway and Pond Borings
- Structure Borings
- Geotechnical Reports
- Laboratory Testing
- Engineering Support Services

Project Staff Hour Summary

Name of Consultant:

Dewberry

SR 417, Econ Trail to Seminole County Line, SA #1
417-134

Activity No.	Activity	Project Staff Hours												Total Hours	
		Dewberry	CE5	Balmoral	Tierra	Sub 4	Sub 5	Sub 6	Sub 7	Sub 8	Sub 9	Sub 10	Sub 11		Sub 12
3	Project Common and General Tasks	71													71
4	Roadway Analysis	834													834
5	Roadway Plans	359													359
6a	Drainage Analysis	312													312
6b	Drainage Plans	288													288
7	Utilities	0													0
8	Env. Permits, Compliance & Clearances	41													41
9	Structures - Summary, Misc Tasks, Dwgs.	55													55
10	BDR	0													0
11	Temporary Bridge	0													0
12	Short Span Concrete Bridge	0													0
13	Medium Span Concrete Bridge	0													0
14	Structural Steel Bridge	0													0
15	Segmental Concrete Bridge	0													0
16	Movable Span	0													0
17	Retaining Walls	80													80
18	Miscellaneous Structures	72													72
19	Signing & Pavement Marking Analysis	0		74											74
20	Signing & Pavement Marking Plans	0		57											57
21	Signalization Analysis	0													0
22	Signalization Plans	0													0
23	Lighting Analysis	111	209												320
24	Lighting Plans	28	42												70
25	Landscape Architecture Analysis	0													0
26	Landscape Architecture Plans	0													0
27	Survey - Field and Office Support	45													45
28	Photogrammetry	0													0
29	Mapping	0													0
30	Terrestrial Mobile LIDAR	0													0
31	Architecture Development	0													0
32	Noise Barriers Impact Design Assessment	0													0
33	ITS Analysis	0	61												61
34	ITS Plans	0	34												34
35	Geotechnical	0			187										187
	Project Total	2,296	346	131	187	0	0	0	0	0	0	0	0	0	2,960
27	Survey Field Crew Days	9													9

- Notes: 1. Staff hours for prime consultant come directly from each discipline's worksheet.
 2. Staff hours for subconsultants are to be entered manually into columns D through O.
 3. For workbooks prepared by subconsultants, their project hours will be totaled in column C.

ESTIMATE OF WORK EFFORT AND COST - PRIME CONSULTANT

Name of Project
County:
FPH:
FAP No.:

SR 417, Ecan Trail to Seminole County Line, SA #1
Orange County
417-134
N/A

Consultant Name: Dewberry
Consultant No.: enter consultants proj number
Date: 3/23/2017
Estimator: Kevin Knudsen

Staff Classification	Total Staff Hours From "SH Summary"	Project Manager	Senior Engineer	Engineer	Engineer Intern	Sr. Engr. Technician	Engr. Technician	Sr. Envir. Scientist	Envir. Specialist	Senior Surveyor	Surveyor	Survey Technician	Staff Classification 12	By Activity	Cost By Activity	Average Rate Per Task
		\$87.70	\$60.34	\$41.73	\$29.28	\$35.98	\$19.73	\$36.00	\$26.72	\$67.21	\$44.09	\$26.06	\$0.00			
3. Project General and Project Common Tasks	71	43	14	7	0	7	0	0	0	0	0	0	0	71	\$5,160	\$72.67
4. Roadway Analysis	834	125	334	167	42	125	41	0	0	0	0	0	0	834	\$44,821	\$53.60
5. Roadway Plans	359	38	90	90	18	90	35	0	0	0	0	0	0	359	\$16,799	\$46.79
6a. Drainage Analysis	312	31	125	94	0	62	0	0	0	0	0	0	0	312	\$18,415	\$58.81
6b. Drainage Plans	288	30	72	72	14	86	14	0	0	0	0	0	0	288	\$13,760	\$47.78
7. Utilities	0	0	0	0	0	0	0	0	0	0	0	0	0	0	\$0	#DIV/0!
8. Environmental Permits, Compliance & Clearances	41	4	4	8	0	0	0	17	8	0	0	0	0	41	\$1,766	\$43.56
9. Structures - Misc. Tasks, Dwg, Non-Tech.	55	3	22	14	3	10	3	0	0	0	0	0	0	55	\$2,882	\$48.78
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	80	4	20	20	8	24	4	0	0	0	0	0	0	80	\$3,569	\$44.61
18. Structures - Miscellaneous	72	4	18	18	6	22	4	0	0	0	0	0	0	72	\$3,234	\$44.92
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	111	11	44	34	0	22	0	0	0	0	0	0	0	111	\$5,830	\$52.52
24. Lighting Plans	28	3	8	8	1	8	0	0	0	0	0	0	0	28	\$1,387	\$49.89
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)	45	0	0	0	0	0	0	0	0	9	14	22	0	45	\$1,795	\$39.80
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!
Total Staff Hours	2,296	294	751	532	92	456	101	17	8	9	14	22	0	2,296	\$117,048.10	\$50.98
Total Staff Cost		\$25,783.80	\$45,315.34	\$22,200.36	\$2,893.78	\$16,406.68	\$1,992.73	\$646.00	\$213.78	\$804.89	\$617.26	\$573.32	\$0.00		\$117,048.10	

Survey Field Days by Subconsultant
4 - Person Crew:

BALARY RELATED COSTS:			
OVERHEAD:	131.46%		\$117,048.10
Sub-total Salary Related Costs			\$153,871.43
OPERATING MARGIN:	12%		\$270,819.53
EXPENSES:			\$32,510.34
			\$0.00
Survey (Field - 8 by Prime)	9	4-man crew days @ \$ 1,253.04 / day	\$11,277.36
SUBTOTAL ESTIMATED FEE:			\$314,707.23
Subconsultant: CES			\$48,832.47
Subconsultant: Belmont			\$14,172.02
Subconsultant: Terra			\$38,485.40
Subconsultant: Sub 4			\$0.00
Subconsultant: Sub 5			\$0.00
SUBTOTAL SUBCONSULTANTS:			\$101,489.89
Geotechnical Field and Lab Testing			\$0.00
SUBTOTAL ESTIMATED FEE:			\$416,197.12
Optional Services			\$0.00
GRAND TOTAL ESTIMATED FEE:			\$416,197.12

- 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.

Project Activity 3: General Tasks

Estimator

SR 417, Econ Trail to Seminole County Line, SA #1
417-134

Representing	Print Name	Signature / Date
FDOT District	<i>Patrick Menden</i>	<i>Patrick Menden</i>
Dewberry	Kevin Krudsen	2/31/17 4/21/17

NOTE: Signature Block is optional, per District preference

Task No.	Task	Units	No of Units	Hours/ Unit	Total Hours	Comments
3.1	Public Involvement					N/A
3.1.1	Community Awareness Plan	LS	0	0	0	N/A
3.1.2	Notifications	LS	0	0	0	N/A
3.1.3	Prepare Mailing Lists	LS	0	0	0	N/A
3.1.4	Median Modification Letters	LS	0	0	0	N/A
3.1.5	Driveway Modification Letters	LS	0	0	0	N/A
3.1.6	Newsletters	LS	0	0	0	N/A
3.1.7	Renderings and Fly Throughs	LS	0	0	0	N/A
3.1.8	PowerPoint Presentation	LS	0	0	0	N/A
3.1.9	Public Meeting Preparations	LS	0	0	0	N/A
3.1.10	Public Meeting Attendance/Followup	LS	0	0	0	N/A
3.1.11	Other Agency Meetings	LS	0	0	0	N/A
3.1.12	Web Site	LS	0	0	0	N/A
	3.1 Public Involvement Subtotal				0	
3.2	Joint Project Agreements	EA	0	0	0	N/A
3.3	Specifications Package Preparation	LS	0	0	0	N/A
3.4	Contract Maintenance and EDMS	LS	0	0	0	N/A
3.5	Value Engineering (Multi-Discipline Team) Review	LS	0	0	0	N/A
3.6	Prime Consultant Project Manager Meetings	LS	1	71	71	See listing below
3.7	Plans Update	LS	0	0	0	N/A

Project Activity 3: General Tasks

Task No.	Task	Units	No of Units	Hours/ Unit	Total Hours	Comments
3.8	Post Design Services	LS	0	0	0	N/A
3.9	Digital Delivery	LS	0	0	0	N/A
3.10	Risk Assessment Workshop	LS	0	0	0	N/A
3.11	Railroad, Transit, and/or Airport Coordination	LS	0	0	0	N/A
3.12	Other Project General Tasks	LS	0	0	0	N/A
3. Project Common and Project General Tasks Total					71	

3.6 - List of Project Manager Meetings	Units	No of Units	Hours/ Unit	Total Hours	Comments
Roadway Analysis	EA	0	0	0	N/A
Drainage	EA	0	0	0	N/A
Utilities	EA	0	0	0	N/A
Environmental	EA	0	0	0	N/A
Structures	EA	0	0	0	N/A
Signing & Pavement Marking	EA	0	0	0	N/A
Signalization	EA	0	0	0	N/A
Lighting	EA	0	0	0	N/A
Landscape Architecture	EA	0	0	0	N/A
Survey	EA	0	0	0	N/A
Photogrammetry	EA	0	0	0	N/A
ROW & Mapping	EA	0	0	0	N/A
Terrestrial Mobile LIDAR	EA	0	0	0	N/A
Architecture	EA	0	0	0	N/A
Noise Barriers	EA	0	0	0	N/A
ITS Analysis	EA	0	0	0	N/A
Geotechnical	EA	0	0	0	N/A
Progress Meetings	EA	4	9	36	Bi-Weekly for 2 months (4 people @ 2hrs/ea) + 1 hr/mtg for agenda & minutes
Phase Reviews	EA	3	9	27	Turnpike Coord Mtgs (3 mtgs - 3people - 3 hrs/ea)
Field Reviews	EA	1	8	8	2 people @ 4 hrs/ea
Total Project Manager Meetings		8		71	Total PM Meeting Hours carries to Task 3.6 above

Notes:

1. If the hours per meeting vary in length (hours) enter the average in the hours/unit column.
2. Do not double count agency meetings between permitting agencies.
3. Project manager meetings are calculated in each discipline sheet and brought forward to Column D, except for Photogrammetry

Project Activity 4: Roadway Analysis

Estimator:

SR 417, Econ Trail to Seminole County Line, SA #1

417-134

Representing	Print Name	Signature / Date
FDOT District	<i>Patrick Muench</i>	<i>Patrick Muench</i> 2/30/17
Dewberry	<i>Kevin Kauder</i>	<i>Kevin Kauder</i> 4/2/17

NOTE: Signature Block is optional, per District preference

Task No.	Task	Units	No of Units	Hours/ Unit	Total Hours	Comments
4.1	Typical Section Package	LS	0	0	0	N/A
4.2	Pavement Type Selection Report	LS	0	0	0	N/A
4.3	Pavement Design Package	LS	1	0	0	Use Pvm't Design from FTE Express Lane Project
4.4	Cross-Slope Correction	LS	0	0	0	N/A
4.5	Horizontal /Vertical Master Design Files	LS	1	304	304	SR 417 (1.0 mile of SB Auxiliary Lane between Aloma Avenue and University Blvd) @ 240 hrs/mi) + Ramps (0.2 mi of SB on-ramp at Aloma Ave and 0.2 mi of SB off-ramp at University Blvd = 0.4 mi @ 160 hrs/mi)=240 mhs + 84 mhs = 304 mhs
4.6	Access Management	LS	0	0	0	N/A
4.7	Roundabout Evaluation	LS	0	0	0	N/A
4.8	Roundabout Final Design Analysis	LS	0	0	0	N/A
4.9	Cross Section Design Files	LS	1	168	168	SR 417 (1.0 mi) + Ramps (0.4 mi) = 1.4 mi @ 120 hrs/mi)
4.10	Traffic Control Analysis	LS	1	80	80	Level 2 @ 1.4 miles, Analysis LS = 60 hrs
4.11	Master TCP Design Files	LS	1	112	112	Level 2 @ 1.4 miles, SR 417 (40 hrs/mi x 2 phases x 1.0 miles) = 80 hrs, Ramp (0.4 mi x 2 phases x 40 hrs/phase) = 32 hrs
4.12	Design Variations and Exceptions	LS	0	0	0	N/A
4.13	Design Report	LS	0	0	0	N/A
4.14	Quantities	LS	1	80	80	
4.15	Cost Estimate	LS	1	32	32	2 @ 16 hrs/ea
4.16	Technical Special Provisions	LS	0	0	0	N/A
4.17	Other Roadway Analyses	LS	0	0	0	N/A
Roadway Analysis Technical Subtotal					736	

Project Activity 4: Roadway Analysis



Task No.	Task	Units	No of Units	Hours/ Unit	Total Hours	Comments
4.18	Field Reviews	LS	0	0	0	N/A
4.19	Monitor Existing Structures	LS	0	0	0	N/A
4.20	Technical Meetings	LS	0	0	0	N/A
4.21	Quality Assurance/Quality Control	LS	%	5%	37	
4.22	Independent Peer Review	LS	%	0%	0	N/A
4.23	Supervision	LS	%	5%	37	
Roadway Analysis Nontechnical Subtotal					74	
4.24	Coordination	LS	%	3%	24	
4. Roadway Analysis Total					834	

Technical Meetings	Units	No of Units	Hours/ Unit	Total Hours	PM Attendance at Meeting Required?	Number
Typical Section	EA	0	0	0	N/A	
Pavement	EA	0	0	0	N/A	
Access Management	EA	0	0	0	N/A	
15% Line and Grade	EA	0	0	0	N/A	
Driveways	EA	0	0	0	N/A	
Local Governments (cities, counties, MPO)	EA	0	0	0	N/A	
Work Zone Traffic Control	EA	0	0	0	N/A	
30/60/90/100% Comment Review Meetings	EA	0	0	0	N/A	
Other Meetings	EA	0	0	0	N/A	
Subtotal Technical Meetings				0		
Progress Meetings (if required by FDOT)	EA	0	0	0	N/A	
Phase Review Meetings	EA	0	0	0	N/A	
Total Meetings				0	Total Project Manager Meetings (carries to Tab 3)	0

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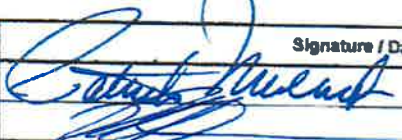

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Project Activity 5: Roadway Plans

Estimator:

SR 417, Econ Trail to Seminole County Line, SA #1

417-134

Representing		Print Name	Signature / Date
FDOT District		Patrick M. Welch	 3/31/17
Dewberry		Kevin Knudsen	 4/2/17

NOTE: Signature Block is optional, per District preference

Task No.	Task	Scale	Units	No. of Units or Sheet	Hours/ Unit or Sheet	Total Hours	Comments
5.1	Key Sheet		Sheet	1	2	2	Revise
5.2	Summary of Pay Items Including Quantity Input		Sheet	2	4	8	Revise
5.3	Typical Section Sheets						
5.3.1	Typical Sections		EA	3	6	18	SR 417 (1), Univ Off-Ramp (1), Aloma On-Ramp (1)
5.3.2	Typical Section Details		EA	0	0	0	N/A
5.4	General Notes/Pay Item Notes		Sheet	0	0	0	N/A
5.5	Summary of Quantities Sheets		Sheet	8	1	8	FDOT Method
5.6	Project Layout		Sheet	1	2	2	Add Ramps
5.7	Plan/Profile Sheet		Sheet	0	0	0	N/A
5.8	Profile Sheet		Sheet	15	4	60	SR 417 (11), University Off-Ramp (1), Aloma On-Ramp (3)
5.9	Plan Sheet		Sheet	12	4	48	SR 417 (11), University Off-Ramp (1)
5.10	Special Profile		Sheet	0	0	0	N/A
5.11	Back-of-Sidewalk Profile Sheet		Sheet	0	0	0	N/A
5.12	Interchange Layout Sheet		Sheet	0	0	0	N/A
5.13	Ramp Terminal Details (Plan View)		Sheet	2	10	20	University Off-Ramp (1), Aloma On-Ramp (1)
5.14	Intersection Layout Details		Sheet	0	0	0	N/A
5.15	Special Details		EA	0	0	0	N/A
5.16	Cross-Section Pattern Sheet(s)		Sheet	1	4	4	N/A

Project Activity 5: Roadway Plans



Task No.	Task	Scale	Units	No. of Units or Sheet	Hours/ Unit or Sheet	Total Hours	Comments
5.17	Roadway Soil Survey Sheet(s)		Sheet	0	0	0	N/A
5.18	Cross Sections		EA	74	0.25	19	SR 417 (1.0 mi) + Ramp (0.4 mi) = 1.4 mi = 7,392 LF @ 100' spacing
5.19	Temporary Traffic Control Plan Sheets		Sheet	24	4	96	12 sheets x 2 Phases = 24 sheets
5.20	Temporary Traffic Control Cross Section Sheets		EA	22	0.25	6	1.4 mi @ 500' spacing = 11 sections x 2 phases = 22 sections
5.21	Temporary Traffic Control Detail Sheets		Sheet	3	4	12	General Notes, Quantities, Paving Typical & Notes, Detour Sheets, Advanced Signing, etc
5.22	Utility Adjustment Sheets		Sheet	12	2	24	Revise
5.23	Selective Clearing and Grubbing Sheet(s)		Sheet	0	0	0	N/A
5.24	Project Network Control Sheet(s)		Sheet	0	0	0	N/A
5.25	Environmental Detail Sheets		Sheet	0	0	0	N/A
5.26	Utility Verification Sheet(s) (SUE Data)		Sheet	0	0	0	N/A
Roadway Plans Technical Subtotal						327	
5.27	Quality Assurance/Quality Control		LS	%	5%	16	
5.28	Supervision		LS	%	5%	16	
5. Roadway Plans Total						369	

Project Activity 6a: Drainage Analysis

Estimator:

SR 417, Econ Trail to Seminole County Line, SA #1
417-134

Representing	Print Name	Signature / Date
FDOT District	Patrick Muench	 3/31/17
Dewberry	Kevin Knudsen	 4/2/17

NOTE: Signature Block is optional, per District preference

Task No.	Task	Units	No of Units	Hours/ Unit	Total Hours	Comments
6a.1	Drainage Map Hydrology	Per Map	1	8	8	Pond 9A
6a.2	Base Clearance Report	Per Location	0	0	0	N/A
6a.3	Pond Siting Analysis and Report	Per Basin	0	0	0	N/A
6a.4	Design of Cross Drains	EA	2	9	18	Pond 9A-Aloma
6a.5	Design of Ditches	Per Ditch Mile	1.4	15	21	1.4 miles (ft)
6a.6	Design of Stormwater Management Facility (Offsite or Infield Pond)	EA	4	34	136	2 New Ponds (6W & 8A) @ 40 hrs/ea, 2 Exist Ponds (7W & 8) @ 28 hrs/ea
6a.7	Design of Stormwater Management Facility (Roadside Ditch as Linear Pond)	Per Cell	0	0	0	N/A
6a.8	Design of Floodplain Compensation	Per Floodplain Basin	0	0	0	N/A
6a.9	Design of Storm Drains	EA	24	2	48	Add shoulder gutter, Aloma interchange area
6a.10	Optional Culvert Material	EA	0	0	0	N/A
6a.11	French Drain Systems	Per Cell	0	0	0	N/A
6a.12	Drainage Wells	EA	0	0	0	N/A
6a.13	Drainage Design Documentation Report	LS	1	24	24	Update
6a.14	Bridge Hydraulic Report	EA	0	0	0	N/A

Project Activity 6a: Drainage Analysis



Task No.	Task	Units	No of Units	Hours/ Unit	Total Hours	Comments
6a.15	Temporary Drainage Analysis	LS	1	16	16	SB 417 at Aloma
6a.16	Cost Estimate	LS	0	0	0	N/A
6a.17	Technical Special Provisions	LS	0	0	0	N/A
6a.18	Other Drainage Analysis	LS	0	0	0	N/A
Drainage Analysis Technical Subtotal					269	
6a.19	Field Reviews	LS	1	8	8	1 reviews x 2 people x 4 hrs
6a.20	Technical Meetings	LS	0	0	0	N/A
6a.21	Environmental Look-Around (ELA) Meeting	LS	1	0	0	N/A
6a.22	Quality Assurance/Quality Control	LS	%	5%	13	
6a.23	Independent Peer Review	LS	%	0%	0	N/A
6a.24	Supervision	LS	%	5%	13	
Drainage Analysis Nontechnical Subtotal					34	
6a.25	Coordination	LS	%	3%	9	
6a. Drainage Analysis Total					312	

Technical Meetings	Units	No of Units	Hours/ Unit	Total Hours	PM Attendance at Meeting Required?	Number
Base Clearance Water Elevation	EA	0	0	0	N/A	0
Pond Siting	EA	0	0	0	N/A	0
Agency	EA	0	0	0	N/A	0
Local Governments (cities, counties)	EA	0	0	0	N/A	0
FTE Drainage	EA	0	0	0	N/A	0
Other Meetings	EA	0	0	0	N/A	0
Subtotal Technical Meetings				0		0
Progress Meetings (if required by FDOT)	EA	0	0	0	N/A	--
Phase Review Meetings	EA	0	0	0	N/A	--
Total Meetings				0	Total Project Manager Meetings (carries to Tab 3)	0


Carries to 6 19

Carries to Tab 3

6b. Drainage Plans

Estimator

SR 417, Econ Trail to Seminole County Line, SA #1
417-134

Representing	Print Name	Signature / Date
FDOT District	Patrick Mosenh	 2/21/17
Dewberry	Kevin Krudse	4/2/17

NOTE: Signature Block is optional, per District preference



Task No.	Task	Scale	Units	No. of Units or Sheet	Hours/ Unit or Sheet	Total Hours	Comments
6b.1	Drainage Map (Including Interchanges)		Sheet	4	16	64	1" = 200'
6b.2	Bridge Hydraulics Recommendation Sheets		Sheet	0	0	0	N/A
6b.3	Summary of Drainage Structures		Sheet	1	16	16	New structures
6b.4	Optional Pipe/Culvert Material		Sheet	0	0	0	N/A
6b.5	Drainage Structure Sheet(s) (Per Structure)		EA	24	2.5	60	New structures
6b.6	Miscellaneous Drainage Detail Sheets		Sheet	1	24	24	New Pond outfalls
6b.7	Lateral Ditch Plan/Profile		Sheet	0	0	0	N/A
6b.8	Lateral Ditch Cross Sections		EA	0	0	0	N/A
6b.9	Retention/Detention Ponds Detail Sheet(s)		Sheet	4	22	88	2 New Ponds (6W & 6A) @ 28 hrs/ea, 2 Exist Ponds (7W & 8) @ 18 hrs/ea
6b.10	Retention Pond Cross Sections		EA	32	0.3	10	5 per pond
6b.11	Erosion Control Plan Sheet(s)		Sheet	0	0	0	N/A
6b.12	SWPPP Sheet(s)		Sheet	0	0	0	N/A
Drainage Plans Technical Subtotal						262	
6b.13	Quality Assurance/Quality Control		LS	%	5%	13	
6b.14	Supervision		LS	%	5%	13	
6. Drainage Plans Total						288	

Project Activity 8: Environmental Permits

Estimator

SR 417, Econ Trail to Seminole County Line, SA #1

417-134

Representing	Print Name	Signature / Date
FDOT District	Patrick Vnrench	 2/21/17
Dewberry	Kevin Knudsen	 7/12/17

NOTE: Signature Block is optional, per District preference

Task No.	Task	Units	No. of Units	Hours/ Units	Total Hours	Comments
	Environmental Permits, Compliances and Clearances					
8 1	Preliminary Project Research	LS	1	4	4	
	Permits					
8 2	Field Work					
8.2.1	Pond Site Alternatives	per pond site	0	0	0	N/A
8 2.2	Establish Wetland Jurisdictional Lines and Assessments	LS	0	0	0	N/A
8 2.3	Species Surveys	LS	0	0	0	N/A
8.2.4	Archeological Surveys	LS	0	0	0	N/A
8 3	Agency Verification of Wetland Data	LS	0	0	0	N/A
8 4	Complete And Submit All Required Permit Applications					
8.4.1	Complete and Submit All Required Wetland Permit Applications	LS	1	24	24	Pond BA
8.4.2	Complete and Submit All Required Species Permit Applications	LS	0	0	0	N/A
8.5	Prepare Dredge and Fill Sketches (as needed)	LS	1	8	8	Modify Impacts
8.6	Prepare USCG Permit Sketches	LS	0	0	0	N/A
8.7	Prepare Water Management District Right-of-Way Occupancy Permit	LS	0	0	0	N/A
8 8	Prepare Coastal Construction Control Line (CCCL) Permit Application	LS	0	0	0	N/A
8.9	Prepare Tree Permit Information	LS	0	0	0	N/A
8 10	Mitigation Design	LS	0	0	0	N/A
8 11	Mitigation Coordination and Meetings	LS	0	0	0	N/A

Project Activity B: Environmental Permits



Task No.	Task	Units	No. of Units	Hours/ Units	Total Hours	Comments
8.12	Other Environmental Permits	LS	0	0	0	N/A
	Environmental Clearances/Reevaluations					
8.13	Technical support to Department for Environmental Clearances and Reevaluations (use when consultant provides technical support only)					
8.13.1	NEPA or SEIR Reevaluation	LS	0	0	0	N/A
8.13.2	Archaeological and Historical Features	LS	0	0	0	N/A
8.13.3	Wetland Impact Analysis	LS	0	0	0	N/A
8.13.4	Essential Fish Habitat	LS	0	0	0	N/A
8.13.5	Wildlife and Habitat Impact Analysis	LS	0	0	0	N/A
8.13.6	Section 7 or Section 10 Consultation	LS	0	0	0	N/A
8.14	Preparation of Environmental Clearances and Reevaluations (use when consultant prepares all documents associated with reevaluation)					
8.14.1	NEPA or SEIR Reevaluation	LS	0	0	0	N/A
8.14.2	Archaeological and Historical Features	LS	0	0	0	N/A
8.14.3	Wetland Impact Analysis	LS	0	0	0	N/A
8.14.4	Essential Fish Habitat	LS	0	0	0	N/A
8.14.5	Wildlife and Habitat Impact Analysis	LS	0	0	0	N/A
8.14.6	Section 7 or Section 10 Consultation	LS	0	0	0	N/A
8.15	Contamination Impact Analysis	LS	0	0	0	N/A
8.16	Asbestos Survey	LS	0	0	0	N/A
Environmental Permits, Compliance, and Clearances/Reevaluations Technical Subtotal					36	
8.17	Technical Meetings	LS	0	0	0	N/A
8.18	Quality Assurance/Quality Control	LS	%	5%	2	
8.18	Supervision	LS	%	5%	2	
Environmental Permits, Compliance and Clearances Nontechnical Subtotal					4	
8.20	Coordination	LS	%	3%	1	
8. Environmental Permits, Compliance and Clearances Total					41	

Project Activity 8: Environmental Permits



Task No.	Task	Units	No. of Units	Hours/ Units	Total Hours	Comments
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Technical Meetings	Units	No of Units	Hours/ Unit	Total Hours	PM Attendance at Meeting Required?	Number
WMD	EA	0	0	0	N/A	
NMFS	EA	0	0	0	N/A	
USACE	EA	0	0	0	N/A	
USCG	EA	0	0	0	N/A	
USFWS	EA	0	0	0	N/A	
FFWCC	EA	0	0	0	N/A	
FDOT	EA	0	0	0	N/A	
Other Meetings	EA	0	0	0	N/A	
Subtotal Technical Meetings				0		
					Subtotal Project Manager Meetings	0
Progress Meetings (if required by FDOT)	EA	0	0	0	N/A	--
Phase Review Meetings	EA	0	0	0	N/A	--
Total Meetings				0	Total Project Manager Meetings (carries to Tab 3)	0



Carries to B 18

Carries to Tab 3

Project Activity 9: Structures Summary and Miscellaneous Tasks and Drawings

Estimator:

SR 417, Econ Trail to Seminole County Line, SA #1
417-134

Representing	Print Name	Signature / Date
FDOT District	Patrick Moench	 3/21/17
Dewberry	Kevin Knudsen	 4/2/17

NOTE: Signature Block is optional, per District preference

Task No.	Task	Units	Design and Production Staffhours				Comments				
			No. of Units	Hours per Unit	No. of Sheets	Total					
	General Drawings										
9.1	Key Sheet and Index of Drawings	Sheet	1	2	1	2	Revise				
9.2	Project Layout	Sheet	0	0	0	0	N/A				
9.3	General Notes and Bid Item Notes	Sheet	1	4	1	4	Add Notes				
9.4	Miscellaneous Common Details	Sheet	0	0	0	0	N/A				
9.5	Incorporate Report of Core Borings	Sheet	1	1	1	1	Walls				
9.6	Existing Bridge Plans	LS	0	0		0	N/A				
9.7	Assemble Plan Summary Boxes and Quantities	LS	1	4		4					
9.8	Cost Estimate	LS	1	4		4					
9.9	Technical Special Provisions	LS	0	0		0	N/A				
Structures - Summary and Miscellaneous Tasks and Drawings Subtotal					3	15					
Task No.	Task	Total	Task 10	Task 11	Task 12	Task 13	Task 14	Task 15	Task 16	Task 17	Task 18
10-18	Bridge 1	0	0	0	0	0	0	0	0		
10-16	Bridge 2	0									
10-16	Bridge 3	0									
10-18	Bridge 4	0									
10-16	Bridge 5	0									
10-16	Bridge 6	0									

Project Activity 9: Structures Summary and Miscellaneous Tasks and Drawings

Gma

10-16	Bridge 7	0									
10-16	Bridge 8	0									
10-16	Bridge 9	0									
10-16	Bridge 10	0									
17	Retaining Walls	80								80	
18	Miscellaneous Structures	72									72
Structures Technical Subtotal		152	0	0	0	0	0	0	0	80	72
Task No.	Task	Units	No. of Units	Hours per Unit	Total	Comments					
9 10	Field Reviews	LS	0	0	0	N/A					
9 11	Technical Meetings	LS	0	0	0	N/A					
9 12	Quality Assurance/Quality Control	LS	5%	5%	8						
9 13	Independent Peer Review	LS	0	0	0	N/A					
9 14	Supervision	LS	5%	5%	8						
Structures Nontechnical Subtotal					16						
9 16	Coordination	LS	1	24	24	Miscellaneous Str. Coord - FTE - retaining walls, signs					
9. Structures - Summary and Miscellaneous Tasks and Drawings Nontechnical and Coordination Total					55						

Technical Meetings	Units	No of Units	Hours/ Unit	Total Hours	PM Attendance at Meeting Required?	Number
BDR Coordination/Review	EA	0	0	0	N/A	0
90/100% Comment Review	EA	0	0	0	N/A	0
Aesthetics Coordination	EA	0	0	0	N/A	0
Regulatory Agency	EA	0	0	0	N/A	0
Local Governments (cities, counties)	EA	0	0	0	N/A	0
Utility Companies	EA	0	0	0	N/A	0
Other Meetings	EA	0	0	0	N/A	0
Subtotal Technical Meetings				0		0
Progress Meetings (if required by FDOT)	EA	0	0	0	N/A	--
Phase Review Meetings	EA	0	0	0	N/A	--
Total Meetings				0	Total Project Manager Meetings (carries to Tab 3)	0

Carries to 9 11

Carries to Tab 3

Project Activity 17: Retaining Walls

Estimator



SR 417, Econ Trail to Seminole County Line, SA #1
417-134

Representing	Print Name	Signature / Date
FDOT District	<i>Kevin Knudsen</i>	<i>Patrick Muench</i>
Dewberry	3/31/17 4/2/17	

NOTE: Signature Block is optional, per District preference

Task No.	Task	Unit	No. of Units	Hours/ Unit	No. of Sheets	Total Hours	Comments
General Requirements							
17.1	Key Sheet	Sheet	0	0	0	0	N/A
17.2	Horizontal Wall Geometry	Per Wall	1	8		8	
Permanent Proprietary Walls							
17.3	Vertical Wall Geometry	Per Wall	2	8		16	Ponds 7W and 8
17.4	Semi-Standard Drawings	Sheet	2	4	2	8	Ponds 7W and 8
17.5	Wall Plan and Elevations (Control Drawings)	Sheet	2	16	2	32	Ponds 7W and 8
17.6	Details	Sheet	1	16	1	16	Ponds 7W and 8
Temporary Proprietary Walls							
17.7	Vertical Wall Geometry	Per Wall	0	0		0	N/A
17.8	Semi-Standard Drawings	Sheet	0	0	0	0	N/A
17.9	Wall Plan and Elevations (Control Drawings)	Sheet	0	0	0	0	N/A
17.10	Details	Sheet	0	0	0	0	N/A
Cast-in-Place Retaining Walls							
17.11	Design	EA Design	0	0	0	0	N/A
17.12	Vertical Wall Geometry	EA Wall	0	0	0	0	N/A
17.13	General Notes	Sheet	0	0	0	0	N/A
17.14	Wall Plan and Elevations (Control Drawings)	Sheet	0	0	0	0	N/A
17.15	Sections and Details	Sheet	0	0	0	0	N/A
17.16	Reinforcing Bar List	Sheet	0	0	0	0	N/A

Project Activity 17: Retaining Walls



Task No.	Task	Unit	No. of Units	Hours/ Unit	No. of Sheets	Total Hours	Comments
Other Retaining Walls and Bulkheads							
17.17	Design	EA Design	0	0	0	0	N/A
17.18	Vertical Wall Geometry	EA Wall	0	0	0	0	N/A
17.19	General Notes, Tables and Misc. Details	Sheet	0	0	0	0	N/A
17.20	Wall Plan and Elevations	Sheet	0	0	0	0	N/A
17.21	Details	Sheet	0	0	0	0	N/A
17. Structures - Retaining Walls Total					5	80	

Project Activity 18: Miscellaneous Structures

Estimator

GR 417, Econ Trail to Seminole County Line, SA #1
417-134

Representing	Print Name	Signature	Date
FDOT District	Patrick Muesch	<i>[Signature]</i>	3/31/17
Dewberry	Kevin Knudsen	<i>[Signature]</i>	4/2/17

NOTE: Signature Block is optional, per District preference

Task No.	Task	Unit	No. of Units	Hours/Unit	No. of Sheets	Total Hours	Comments
Concrete Box Culvert							
18.1	Concrete Box Culverts	EA	0	0	0	0	N/A
18.2	Concrete Box Culverts Extensions	EA Extension	0	0	0	0	N/A
18.3	Concrete Box Culvert Data Table Plan Sheets	Sheet	0	0	0	0	N/A
18.4	Concrete Box Culvert Special Details Plan Sheets	Sheet	0	0	0	0	N/A
Strain Poles							
18.5	Steel Strain Poles	Initial Config	0	0	0	0	N/A
		EA ADD Config	0	0	0	0	N/A
18.6	Concrete Strain Poles	Initial Config	0	0	0	0	N/A
		EA ADD Config	0	0	0	0	N/A
18.7	Strain Pole Data Table Plan Sheets	Sheet	0	0	0	0	N/A
18.8	Strain Pole Special Details Plan Sheets	Sheet	0	0	0	0	N/A
Mast Arms							
18.9	Mast Arms	EA Design	0	0	0	0	N/A
18.10	Mast Arms Data Table Plan Sheets	Sheet	0	0	0	0	N/A
18.11	Mast Arm Special Details Plan Sheets	Sheet	0	0	0	0	N/A
Overhead/Cantilever Sign Structures							
18.12	Cantilever Sign Structures	EA Design	0	0	0	0	N/A
18.13	Overhead Span Sign Structures	EA Design	3	16	48	48	Revise for Aux Lane
18.14	Special (Long Span) Overhead Span Sign Structures	EA Design	0	0	0	0	N/A
18.15	Monotube Overhead Sign Structures	EA Design	0	0	0	0	N/A
18.16	Bridge Mounted Signs (Attached to Support)	EA Design	0	0	0	0	N/A
18.17	Overhead and Cantilever Sign Structures Data Table Plan Sheets	Sheet	3	8	24	24	Revise for Aux Lane
18.18	Overhead and Cantilever Sign Structures Special Details Plan Sheets	Sheet	0	0	0	0	N/A
High Mast Lighting							
18.19	Non-Standard High Mast Lighting Structures	EA Design	0	0	0	0	N/A
18.20	High Mast Lighting Special Details Plan Sheets	Sheet	0	0	0	0	N/A
Noise Barrier Walls (Ground Mount)							
18.21	Horizontal Wall Geometry	EA Wall	0	0	0	0	N/A
18.22	Vertical Wall Geometry	EA Wall	0	0	0	0	N/A
18.23	Summary of Quantities - Aesthetic Requirements	Sheet	0	0	0	0	N/A
18.24	Control Drawings	Sheet	0	0	0	0	N/A
18.25	Design of Noise Barrier Walls Covered by Standards	EA Design	0	0	0	0	N/A
18.26	Design of Noise Barrier Walls Not Covered by Standards	EA Design	0	0	0	0	N/A
18.27	Aesthetic Details	LS	0	0	0	0	N/A
Special Structures							

Project Activity 18: Miscellaneous Structures

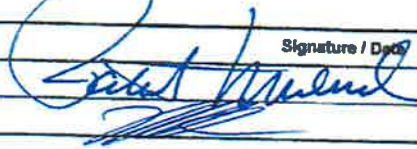
18.28	Fender System	LS	1	0	0	N/A
18.29	Fender System Access	LB	1	0	0	N/A
18.30	Special Structures	LS	1	0	0	N/A
18.31	Other Structures	LS	1	0	0	N/A
18. Structures - Miscellaneous Total					3	72

Project Activity 23: Lighting Analysis

Estimator

SR 417, Econ Trail to Seminole County Line, SA #1

417-134

Representing	Print Name	Signature / Date
FDOT District	Patrick Muench	 2/21/17
Dewberry	Kevin Knudsen	4/2/17

NOTE: Signature Block is optional, per District preference

Task No.	Task	Units	No. of Units	Hours/ Units	Total Hours	Comments
23.1	Lighting Justification Report	LS	0	0	0	Lighting Design by CES. Electrical Design by Dewberry
23.2	Lighting Design Analysis Report	LS	1	36	36	PDAR (include in LDAR)
23.3	Aeronautical Evaluation	LS	0	0	0	N/A
23.4	Voltage Drop Calculations	LS	1	20	20	Load Center
23.5	FDEP Coordination and Report	LS	0	0	0	N/A
23.6	Reference and Master Design Files	LS	0	0	0	N/A
23.7	Temporary Lighting	LS	0	0	0	N/A
23.8	Design Documentation	LS	0	0	0	N/A
23.8	Quantities	LS	0	0	0	N/A
23.10	Cost Estimate	LS	0	0	0	N/A
23.11	Technical Special Provisions	LS	0	0	0	N/A
23.12	Other Lighting Analysis	LS	1	32	32	Load Analysis, Short Circuit Analysis, Arc Flash Analysis
Lighting Analysis Technical Subtotal					88	
23.13	Field Reviews	LS	1	4	4	1 review, 1 person, 4 hrs
23.14	Technical Meetings	LS	1	8	8	Meetings are listed below
23.15	Quality Assurance/Quality Control	LS	%	5%	4	
23.16	Independent Peer Review	LS	%	0%	0	N/A
23.17	Supervision	LS	%	5%	4	
Lighting Analysis Nontechnical Subtotal					20	
23.18	Coordination	LS	%	1%	3	
23. Lighting Analysis Total					111	

Project Activity Z3: Lighting Analysis



Technical Meetings	Units	No of Units	Hours/ Unit	Total Hours	PM Attendance at Meeting Required?	Number
FOOT Lighting Design	EA	0	0	0		0
FOOT Traffic Design	EA	0	0	0		0
Power Company (service point coordination)	EA	1	4	4		0
Maintaining Agency (cities, counties)	EA	0	0	0		0
Airport authority	EA	0	0	0		0
FDEP Lighting (coast areas)	EA	0	0	0		0
Other Meetings	EA	0	0	0		0
Subtotal Technical Meetings				4		0
					Subtotal Project Manager Meetings	0
Progress Meetings (if required by FDOT)	EA	0	0	0	<i>PM attendance at Progress Meetings is manually entered on General Task 3</i>	--
Phase Review Meetings	EA	1	4	4	<i>PM attendance at Phase Review Meetings is manually entered on General Task 3</i>	--
Total Meetings				8	Total Project Manager Meetings (carries to Tab 3)	0

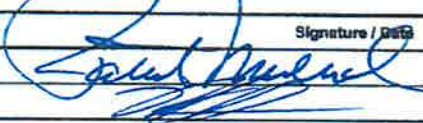
Carries to Tab 1

Carries to Tab 3

24. Lighting Plans

Estimator:

SR 417, Econ Trail to Seminole County Line, SA #1
417-134

Representing	Print Name	Signature / Date
FDOT District	Patrick Muench	 3/21/17
Dewberry	Kevin Knudson	4/2/17

NOTE: Signature Block is optional, per District preference

Task No.	Task	Scale	Units	No. of Units	Hours/ Unit	No. of Sheets	Total Hours	Comments
24 1	Key Sheet		Sheet	0	0	0	0	N/A
24 2	Summary of Pay Items Including Designer Interface (TRANS-Port) input		Sheet	0	0	0	0	N/A
24 3	Tabulation of Quantities		Sheet	0	0	0	0	N/A
24 4	General Notes/Pay Item Notes		Sheet	0	0	0	0	N/A
24 5	Pole Data, Legend and Criteria		Sheet	0	0	0	0	N/A
24 6	Service Point Details		Sheet	1	26	1	26	Load Center
24 7	Project Layout		Sheet	0	0	0	0	N/A
24 8	Plan Sheet		Sheet	0	0	0	0	N/A
24 9	Special Details		Sheet	0	0	0	0	N/A
24 10	Temporary Lighting Data and Details		Sheet	0	0	0	0	N/A
24 11	Traffic Control Plan Sheets		Sheet	0	0	0	0	N/A
24 12	Intern Standards		LS	0	0	0	0	N/A
Lighting Plans Technical Subtotal						1	26	
24 13	Quality Assurance/Quality Control		LS	%	5%		1	
24 14	Supervision		LS	%	5%		1	
24. Lighting Plans Total						1	28	

27. Survey

Estimator

SR 417, Econ Trail to Seminole County Line, SA #1

417-134

Representing	Print Name	Signature / Date
FDOT District	<i>Patrick Muench</i>	<i>Patrick Muench 3/21/17</i>
Dewberry	<i>Kevin Knudsen</i>	<i>4/2/17</i>

NOTE: Signature Block is optional, per District preference

Task No.	Task	Units	No of Units	Field Crew Days/Unit	Crew Days	Field Support Hours / Crew Days	Field Support Hours	Office Support Hours / Crew Days	Office Support Hours	Comments
27.1	Horizontal Project Control (HPC)									
	2-Lane Roadway	Mile			0.00		0.00		0.00	N/A
	Multi-lane Roadway	Mile			0.00		0.00		0.00	
	Interstate	Mile	0.00	1.75	0.00		0.00	4.00	0.00	
27.2	Vertical PC / Bench Line									
	2-Lane Roadway	Mile			0.00		0.00		0.00	N/A
	Multi-lane Roadway	Mile			0.00		0.00		0.00	
	Interstate	Mile	0.00	1.75	0.00		0.00	5.00	0.00	
27.3	Alignment and Existing R/W Lines									
		Mile	0.00	2.00	0.00	1.00	0.00	8.00	0.00	N/A
27.4	Aerial Targets			Units/Day						
	2-Lane Roadway	EA			0.00		0.00		0.00	N/A
	Multi-lane Roadway	EA			0.00		0.00		0.00	
	Interstate	EA	0.00	12.00	0.00		0.00	5.00	0.00	
27.5	Reference Points	"A"		Units/Day						
	2-Lane Roadway	EA			0.00		0.00		0.00	N/A
	Multi-lane Roadway	EA			0.00		0.00		0.00	
	Interstate	EA	0.00	2.00	0.00	1.00	0.00	10.00	0.00	
	Reference Points	"B"		Units/Day						N/A

27. Survey

Task No.	Task	Units	No of Units	Field Crew Days/Unit	Crew Days	Field Support Hours / Crew Days	Field Support Hours	Office Support Hours / Crew Days	Office Support Hours	Comments
	Non Alignment Points/Approximate	EA			0.00		0.00		0.00	N/A
27.6	Topography/DTM (3D)	Mile	0.00	5.00	0.00		0.00	6.00	0.00	N/A
27.7	Planimetric (2D)	Mile			0.00		0.00		0.00	N/A
27.8	Roadway Cross-Sections/Profiles	EA	0.00	0.1867	0.00		0.00	4.00	0.00	N/A
27.9	Side Street Surveys	Mile	0.00	4.00	0.00		0.00	8.00	0.00	N/A
27.10	Underground Utilities									
	Designates	Mile/Site	0.00	1.00	0.00		0.00	3.00	0.00	N/A
	Locates	Point	0	0.125	0.00		0.00	4.00	0.00	
	Survey		35%	0.00	0.00		0.00	5.00	0.00	
27.11	Duffel Survey	Mile			0.00		0.00		0.00	N/A
27.12	Drainage Survey	EA	20.00	12.00	1.67		0.00	4.00	8.87	Detail an estimated 20 existing drainage structures in FTE limits SB. Add information to DREXRD.DGN file.
27.13	Bridge Survey									
	Minor / Major	EA	0.00	1.00	0.00		0.00	6.00	0.00	N/A
27.14	Channel Survey	EA			0.00		0.00		0.00	N/A
27.15	Pond Site Survey	EA	2.00	2.00	4.00		0.00	6.00	24.00	TOPO/DTM Survey 2 ponds within the RAW - Pond 6W and Pond 9A. Add information to TIN, TOPORD.DGN, DREXRD.DGN and UTEXRD.DGN files
27.16	Mitigation Survey	Mile			0.00		0.00		0.00	N/A
27.17	Jurisdiction Line Survey	Mile	0.00	2.00	0.00		0.00	6.00	0.00	N/A

27. Survey

Task No.	Task	Units	No of Units	Field Crew Days/Unit	Crew Days	Field Support Hours / Crew Days	Field Support Hours	Office Support Hours / Crew Days	Office Support Hours	Comments	
27.18	Geotechnical Support			Units/Day							
		EA	18	8	2.00		0.00	4.00	8.00	Stake or locate 18 borings for ponds and walls	
27.19	Sectional / Grant Survey										
		Corner			0.00		0.00		0.00	Not Included	
		Mile			0.00		0.00		0.00		
27.20	Subdivision Location										
		Block			0.00		0.00		0.00	Not Included	
27.21	Maintained RAW										
		Mile			0.00		0.00		0.00	Not Included	
27.22	Boundary Survey										
		EA			0.00		0.00		0.00	Not Included	
27.23	Water Boundary Survey										
		EA			0.00		0.00		0.00	Not Included	
27.24	RAW Staking / RAW Line										
		EA			0.00		0.00		0.00	Not Included	
		Mile			0.00		0.00		0.00		
27.25	RAW Monumentation										
		Point			0.00		0.00		0.00	Not Included	
27.26	Line Cutting										
		Mile			0.00					Included in other tasks if required	
27.27	Work Zone Safety										
			8	0.125	1.00					One hour per day	
27.28	Miscellaneous Surveys										
					0.00		0.00		0.00	Not Included	
Survey Subtotal					Crew Days	9	Field Support Hours	0	Office Support Hours	38	
27.29	Supplemental Surveys										
			4.5%	9	0		0		2	THE % FOR SUPPLEMENTAL WILL BE DETERMINED AT NEGOTIATIONS. THIS ITEM CAN ONLY BE USED IF AUTHORIZED IN WRITING BY THE DISTRICT SURVEYOR	
27.30	Document Research	Units									
									0	N/A	

27. Survey

Task No.	Task	Units	No of Units	Field Crew Days/Unit	Crew Days	Field Support Hours / Crew Days	Field Support Hours	Office Support Hours / Crew Days	Office Support Hours	Comments
27.31	Field Reviews	Units							0	N/A
27.32	Technical Meetings	LS							0	N/A
27.33	Quality Assurance / Quality Control	LS	0 00					5%	2	
27.34	Supervision	LS						5%	2	
27.36	Coordination	LS						3%	1	
27. Survey Total					9		0		45	

SPLS =
 PLS =
 Office Support =
 Total Hours = 43

Technical Meetings	Units	No of Units	Hours/ Unit	Total Hours	PM Attendance at Meeting Required?	Number
Kickoff Meeting with FDOT	EA	0	0	0		0
Baseline Approval Review	EA	0	0	0		0
Network Control Review	EA	0	0	0		0
Vertical Control Review	EA	0	0	0		0
Local Governments (cities, counties)	EA	0	0	0		0
Final Submittal Review	EA	0	0	0		0
Other Meetings	EA	0	0	0		0
Subtotal Technical Meetings				0	Subtotal PM Meetings	0
Progress Meetings (if required by FDOT)	EA	0	0	0	--	--
Phase Review Meetings	EA	0	0	0	--	--
Total Meetings				0	Total PM Mts (carries to Tab 3)	0

Carries to 27.31

Carries to Tab 3

-- Project Manager attendance at progress, phase and field review meetings are manually entered on General Task 3

ESTIMATE OF WORK EFFORT AND COST - SUBCONSULTANT

Name of Project: SR 417, Econlockhatchee Trail to Seminole County Line
 County: 0
 FPN: 417-134
 FAP No. 1/0/1900

Consultant Name: Comprehensive Engineering Services, Inc.
 Consultant No.: enter consultants proj number
 Date: 3/30/2017
 Estimator: insert name

Staff Classification	Total Staff Hours From "BH Summary Firm"	Chief Engineer	Senior Engineer	Project Engineer	Engineer Intern	Survey Designer	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
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, Dwg, 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	209	21	42	42	52	52	0	0	0	0	0	0	0	0	\$0	#DIV/0!
24. Lighting Plans	42	4	8	8	11	11	0	0	0	0	0	0	0	209	\$4,399	\$44.97
25. Landscape Architecture Analysis	0	0	0	0	0	0	0	0	0	0	0	0	0	42	\$1,858	\$44.26
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	61	0	14	14	18	11	0	0	0	0	0	0	0	61	\$2,768	\$45.38
34. Intelligent Transportation Systems Plans	34	3	8	8	9	8	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	34	\$1,928	\$44.98
Total Staff Hours	346	34	72	72	88	80	0	0	0	0	0	0	0	346	\$15,554.62	\$44.96
Total Staff Cost		\$3,078.70	\$4,500.00	\$2,758.32	\$2,173.80	\$3,044.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00		\$15,554.62	\$44.96

Notes:
 1 This sheet to be used by Subconsultant to calculate its fee


Cred =		115,964.82
SALARY RELATED COSTS:		\$15,554.62
OVERHEAD:	177.42%	\$27,547.01
SUBTOTAL SALARY-RELATED COSTS		\$43,101.63
OPERATING MARGIN:	11.4447%	\$4,936.57
EXPENSES:	0.00%	\$742.27
SUBTOTAL ESTIMATED FEE:		\$48,832.47
SUBTOTAL ESTIMATED FEE:		\$48,832.47
Optional Services		\$0.00
GRAND TOTAL ESTIMATED FEE:		\$48,832.47

Project Activity 23: Lighting Analysis

Estimator

SR 417, Econlockhatchee Trail to Seminole County Line

417-134

Representing	Print Name	Signature / Date
FDOT District	Patrick Moench	 3/31/17
CES	Kevin Knudsen	4/2/17

NOTE: Signature Block is optional, per District preference

Task No.	Task	Units	No. of Units	Hours/Units	Total Hours	Comments
23.1	Lighting Justification Report	LS	0	0	0	N/A
23.2	Lighting Design Analysis Report	LS	1	48	48	Updates design documentation
23.3	Aeronautical Evaluation	LS	1	8	8	FAA filing required based on notice criteria tool - online approval process where information for each light pole is input for determination (latitude, longitude, ground elevation, pole height, and traverseway)
23.4	Voltage Drop Calculations	LS	0	0	0	To be completed by Dewberry
23.5	FDEP Coordination and Report	LS	0	0	0	N/A
23.6	Reference and Master Design Files	LS	1	79	79	Project lengths: SR 417 mainline 1.0 miles, University ramps 0.2 miles, Aloma ramps 0.2 miles Middle range (limited access with interchange spacing greater than two miles), 16 hours setup + (1.4 miles mainline/toll plaza/ramps) * 45 hours per mile = 79 hours
23.7	Temporary Lighting	LS	0	0	0	N/A
23.8	Design Documentation	LS	1	8	8	Included with each submittal
23.9	Quantities	LS	1	12	12	6 plan sheets @ 2 hour per sheet
23.10	Cost Estimate	LS	1	4	4	2 estimates - phase III, and final
23.11	Technical Special Provisions	LS	0	0	0	N/A
23.12	Other Lighting Analysis	LS	0	0	0	N/A
Lighting Analysis Technical Subtotal					169	
23.13	Field Reviews	LS	1	16	16	2 field reviews, 2 people @ 4 hours
23.14	Technical Meetings	LS	1	12	12	See listed meetings for breakdown
23.15	Quality Assurance/Quality Control	LS	%	5%	8	
23.16	Independent Peer Review	LS	%	0%	0	
23.17	Supervision	LS	%	5%	8	
Lighting Analysis Nontechnical Subtotal					44	
23.18	Coordination	LS	%	1%	6	

Project Activity 23: Lighting Analysis

Technical Meetings		Units	No of Units	Hours/ Unit	Total Hours	PM Attendance at Meeting Required?	Number
FDOT Lighting Design		EA	0	0	0		0
FDOT Traffic Design		EA	0	0	0		0
Power Company (service point coordination)		EA	1	4	4		0
Maintaining Agency (cities, counties)		EA	1	4	4		0
Airport authority		EA	0	0	0		0
FDEP Lighting (coast areas)		EA	0	0	0		0
Other Meetings		EA	0	0	0		0
Subtotal Technical Meetings					8		0
Progress Meetings (if required by FDOT)		EA	0	0	0	<i>PM attendance at Progress Meetings is manually entered on General Task 3</i>	--
Phase Review Meetings		EA	1	4	4	<i>PM attendance at Phase Review Meetings is manually entered on General Task 3</i>	--
Total Meetings					12	Total Project Manager Meetings (carries to Tab 3)	0

Carries to Tab 14

Carries to Tab 3

24. Lighting Plans

Estimator

SR 417, Econlockhatchee Trail to Seminole County Line
417-134

Representing	Print Name	Signature / Date
FDOT District	<i>Patrick Muench</i>	<i>Patrick Muench</i>
CES	<i>Kevin Krudsen</i>	<i>2/31/17</i> <i>4/2/17</i>

NOTE: Signature Block is optional, per District preference

Task No.	Task	Scale	Units	No. of Units	Hours/ Unit	No. of Sheets	Total Hours	Comments
24 1	Key Sheet		Sheet	0	0	0	0	Include with CFX project
24 2	Summary of Pay Items including Designer Interface (TRNS-Port) Input		Sheet	0	0	0	0	N/A
24 3	Tabulation of Quantities		Sheet	1	8	1	8	1 sheet
24 4	General Notes/Pay Item Notes		Sheet	1	6	1	6	FTE Notes
24 5	Pole Data, Legend and Criteria		Sheet	1	12	1	12	1 pole data sheet, LED
24 6	Service Point Details		Sheet	0	0	0	0	N/A
24 7	Project Layout		Sheet	0	0	0	0	N/A
24 8	Plan Sheet	1" = 50'	Sheet	6	2	6	12	6 plan sheets
24 9	Special Details		Sheet	0	0	0	0	N/A
24 10	Temporary Lighting Data and Details		Sheet	0	0	0	0	N/A
24 11	Traffic Control Plan Sheets		Sheet	0	0	0	0	N/A
24 12	Interim Standards		LS	0	0	0	0	N/A
Lighting Plans Technical Subtotal						9	36	
24 13	Quality Assurance/Quality Control		LS	%	5%		2	
24 14	Supervision		LS	%	5%		2	
24. Lighting Plans Total						9	42	

33. ITS Analysis

Estimator: RLS

SR 417, Econlockhatchee Trail to Seminole County Line
417-134

Representing	Print Name	Signature / Date
FDOT District	<i>Patrick Maerck</i>	<i>[Signature]</i> 3/31/17
CES	<i>Kevin Knudsen</i>	<i>[Signature]</i> 4/12/17

NOTE: Signature Block is optional, per District preference

Task No.	Task	Units	No of Units	Hours/ Unit	Total Hours	Comments
33.1	ITS Analysis	LS	0	0	0	N/A
33.2	Communications Plan Analysis	LS	0	0	0	N/A
33.3	Lightning Protection Analysis	Per Site	0	0	0	N/A
33.4	Power Subsystem	LS	0	0	0	N/A
33.5	Voltage Drop Calculations	LS	0	0	0	N/A
33.6	Design Documentation	LS	0	0	0	N/A
33.7	Existing ITS System	LS	1	8	8	Review FTE as-builts
33.8	Queue Analysis	PI	0	0	0	N/A
33.9	Reference and Master ITS Design File	PI	0	0	0	N/A
33.10	Reference and Master Communications Design File	PI	1	16	16	Aux Lane - 1.0 mi @ 16 hrs/mi
33.11	Pole Elevation Analysis	LS	0	0	0	N/A
33.12	Sign Panel Design Analysis	LS	0	0	0	N/A
33.13	Quantities	Sheet	5	3	15	Aux Lane - 5 plan sheets
33.14	Cost Estimate	LS	0	0	0	N/A
33.15	Technical Special Provisions	LS	0	0	0	N/A
33.16	Other ITS Analyses	LS	0	0	0	N/A
Intelligent Transportation Systems Analysis Technical Subtotal					39	

33. ITS Analysis



Task No.	Task	Units	No of Units	Hours/ Unit	Total Hours	Comments
33.17	Field Reviews	LS	1	16	16	2 reviews, 2 people, 4 hours
33.18	Technical Meetings	LS	1	0	0	Meetings are listed below
33.19	Quality Assurance/Quality Control	LS	%	5%	2	
33.20	Supervision	LS	%	5%	2	
Intelligent Transportation Systems Analysis Nontechnical Subtotal					20	
33.21	Coordination	LS	%	3%	2	
33. Intelligent Transportation Systems Analysis Total					61	

Technical Meetings	Units	No of Units	Hours/ Unit	Total Hours	PM Attendance at Meeting Required?	Number
Kickoff Meeting with FDOT	EA	0	0	0		0
Local Governments (cities, counties, MPO)	EA	0	0	0		0
Utility Owners	EA	0	0	0		0
Field Meetings	EA	0	0	0		0
Other Meetings	EA	0	0	0		0
Subtotal Technical Meetings				0		0
Progress Meetings (if required by FDOT)	EA	0	0	0	<i>PM attendance at Progress Meetings is manually entered on General Task 3</i>	--
Phase Review Meetings	EA	0	0	0	<i>PM attendance at Phase Review Meetings is manually entered on General Task 3</i>	--
Total Meetings				0	Total Project Manager Meetings (carries to Tab 3)	0

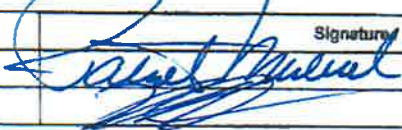

Carries to 33.18

Carries to Tab 3

34. ITS Plans

Estimator: RLS

SR 417, Econlockhatchee Trail to Seminole County Line
417-134

Representing	Print Name	Signature	Date
FDOT District	Patrick Muench		3/31/17
CES	Kevin Knudsen		4/12/17

NOTE: Signature Block is optional, per District preference

Task No.	Task	Scale	Units	No. of Units	Hours/ Unit	No. of Sheets	Total Hours	Comments
34.1	Key Sheet		Sheet	0	0	0	0	N/A
34.2	Summary of Pay Items-including Designer interface (Trms-port) Input		Sheet	0	0	0	0	N/A
34.3	Tabulation of Quantities		Sheet	1	5	1	5	
34.4	General Notes/Pay Item Notes		Sheet	0	0	0	0	N/A
34.5	Project Layout		Sheet	0	0	0	0	N/A
34.6	Typical and Special Details		Sheet	0	0	0	0	N/A
34.7	Plan Sheet		Sheet	0	0	0	0	N/A
34.8	ITS Communications Plans		Sheet	5	4	5	20	Aux Lane - 5 plan sheets, 100 scale
34.9	Fiber Optic Splice Diagrams		Sheet	0	0	0	0	N/A
34.10	Lightning Protection Plans		Sheet	0	0	0	0	N/A
34.11	Cross Sections		Sheet	0	0	0	0	N/A
34.12	Guide Sign Worksheet(s)		Sheet	0	0	0	0	N/A
34.13	Special Service Point Details		Sheet	0	0	0	0	N/A
34.14	Strain Pole Schedule		Sheet	0	0	0	0	N/A
34.15	Overhead/Cantilever Sign Structure		Sheet	0	0	0	0	N/A
34.16	Other Overhead Sign Structures (Long Span, Monotube, etc.)		Sheet	0	0	0	0	N/A
34.17	Traffic Control Plans		Sheet	5	1	5	5	FON MOT Plan
34.18	Interim Standards		Sheet	0	0	0	0	N/A
34.19	GIS Data and Asset Management Requirements		LS	0	0	0	0	N/A

34. ITS Plans



Task No.	Task	Scale	Units	No. of Units	Hours/ Unit	No. of Sheets	Total Hours	Comments
Intelligent Transportation System Plans Technical Subtotal						11	30	
34.20	Quality Assurance/Quality Control		LS	%	5%		2	
34.21	Supervision		LS	%	5%		2	
34. Intelligent Transportation System Plans Total						11	34	

ESTIMATE OF WORK EFFORT AND COST - SUBCONSULTANT

Name of Project: SR 417, Econ Trail to Seminole County Line (SA#1)
 County: Orange
 FPN: 417-134
 FAP No:

Consultant Name: The Belmont Group
 Consultant No.: enter consultants proj number
 Date: 3/30/2017
 Estimator: S Klaus

Staff Classification	Total Staff Hours From Summary Firm	Chief Engineer	Project Manager	Senior Engineer	Project Engineer	Engineer Intern	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	
		\$58.75	\$57.59	\$48.75	\$40.15	\$25.72	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00			
3 Project General and Project Common Tasks	0	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	\$0	#DIV/0!
5 Roadway Plans	0	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	\$0	#DIV/0!
6b. Drainage Plans	0	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	\$0	#DIV/0!
8 Environmental Permits, Compliance & Clearances	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	\$0	#DIV/0!
9 Structures - Misc. Tasks, Drgs, Non-Tech.	0	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	\$0	#DIV/0!
11 Structures - Temporary Bridge	0	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	\$0	#DIV/0!
13 Structures - Medium Span Concrete Bridge	0	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	\$0	#DIV/0!
15 Structures - Segmental Concrete Bridge	0	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	\$0	#DIV/0!
17 Structures - Retaining Walls	0	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	\$0	#DIV/0!
19. Signing & Pavement Marking Analysis	74	4	0	18	29	28	0	0	0	0	0	0	0	0	0	\$0	#DIV/0!
20. Signing & Pavement Marking Plans	57	3	0	8	22	28	0	0	0	0	0	0	0	0	74	\$2,828	\$38.23
21. Signalization Analysis	0	0	0	0	22	28	0	0	0	0	0	0	0	0	57	\$2,038	\$35.77
22. Signalization Plans	0	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	\$0	#DIV/0!
24. Lighting Plans	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	\$0	#DIV/0!
25. Landscape Architecture Analysis	0	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	\$0	#DIV/0!
27 Survey (Field & Office Support)	0	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	\$0	#DIV/0!
29. Mapping	0	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	\$0	#DIV/0!
31. Architecture Development	0	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	\$0	#DIV/0!
33. Intelligent Transportation Systems Analysis	0	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	\$0	#DIV/0!
35. Geotechnical	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	\$0	#DIV/0!
Total Staff Hours	131	7	0	24	49	52	0	0	0	0	0	0	0	0	0	0	0
Total Staff Cost		\$481.25	\$0.00	\$1,122.00	\$1,927.20	\$1,337.44	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	131	\$4,667.83	\$37.16	

Notes



1 This sheet to be used by Subconsultant to calculate its fee

SALARY RELATED COSTS:		Check *	\$4,867.88
OVERHEAD:	159.84%		\$4,867.88
SUB-TOTAL SALARY-RELATED COSTS			\$7,785.70
PROFIT MARGIN:	12.00%		\$1,253.50
EXPENSES:			\$0.00
SUBTOTAL ESTIMATED FEE:			\$14,172.02
Survey (Field)	0	4-man crew da \$ / day	\$0.00
Geotechnical Field and Lab Testing			\$0.00
SUBTOTAL ESTIMATED FEE:			\$14,172.02
Optional Services			\$0.00
GRAND TOTAL ESTIMATED FEE:			\$14,172.02

Project Activity 19: Signing and Pavement Marking Analysis

Estimator: S. Klaus

SR 417, Econ Trail to Seminole County Line (SA#1)
417-134

Representing	Print Name	Signature / Date
FDOT District	Patrick Moench	 3/31/17
Consultant Name	The Balmoral Group Kevin Knudson	 4/4/17

NOTE: Signature Block is optional, per District preference

Task No.	Task	Units	No. of Units	Hours/ Units	Total Hours	Comments
19.1	Traffic Data Analysis	LS	0	0	0	N/A
19.2	No Passing Zone Study	LS	0	0	0	N/A
19.3	Reference and Master Design File	LS	1	48	48	Mainline (Sta. 1232+00 to Sta. 283+00) = 1.0 miles; Ramps (SB UNIV-OFF=1000'; SB AL-ON=1250') = 0.4 miles Originally 45 hours setup + 90 hrs./mile; Use 0 setup + 30 hrs. X 1.8 miles = 48 hrs.
19.4	Multi-Post Sign Support Calculations	EA	2	4	8	2 additional ground mounted guide signs (1 new, 1 relocate)
19.5	Sign Panel Design Analysis	EA	1	4	4	1 new multi-post ground mount affected by widening X 4 hrs. = 4 hrs.
19.6	Sign Lighting/Electrical Calculations	EA	0	0	0	By CES
19.7	Quantities	LS	0	0	0	Task accounted for in original hours
19.8	Cost Estimate	LS	0	0	0	Task accounted for in original hours
19.9	Technical Special Provisions	LS	0	0	0	N/A
19.10	Other Signing and Pavement Marking	LS	0	0	0	N/A
Signing and Pavement Marking Analysis Technical Subtotal					60	
19.11	Field Reviews	LS	1	6	6	1 reviews X 2 people X 3 hrs. (incl. travel time) for additional sign inventory
19.12	Technical Meetings	LS	0	0	0	N/A
19.13	Quality Assurance/Quality Control	LS	%	5%	3	
19.14	Independent Peer Review	LS	%	0%	0	
19.15	Supervision	LS	%	5%	3	
Signing and Pavement Marking Analysis Nontechnical Subtotal					12	
19.16	Coordination	LS	%	3%	2	
19. Signing and Pavement Marking Analysis Total					74	

Project Activity 19: Signing and Pavement Marking Analysis



Task No.	Task	Units	No. of Units	Hours/ Units	Total Hours	Comments	
Technical Meetings		Units	No of Units	Hours/ Unit	Total Hours	PM Attendance at Meeting Required?	Number
	Sign Panel Design	EA	0	0	0		0
	Queue Length Analysis	EA	0	0	0		0
	Local Governments (cities, counties)	EA	0	0	0		0
	Other Meetings	EA	0	0	0		0
	Subtotal Technical Meetings				0	Subtotal Project Manager Meetings	0
	Progress Meetings (if required by FDOT)	EA	0	0	0	<i>PM attendance at Progress Meetings is manually entered on General Task 3</i>	--
	Phase Review Meetings	EA	0	0	0	<i>PM attendance at Phase Review Meetings is manually entered on General Task 3</i>	--
	Total Meetings				0	Total Project Manager Meetings (carries to Tab 3)	0

Connect to 19.12

Connect to Tab 3

Project Activity 20: Signing and Pavement Marking Plans

Estimator: S. Klaus

SR 417 Econ Trail to Seminola County Line (SA#1)
417-134

Representing	Print Name	Signature / Date
FDOT District	<i>Patrick Muench</i>	<i>Patrick Muench</i> 3/31/17
Consultant Name	The Balmoral Group <i>Kevin Kudva</i>	<i>Kevin Kudva</i> 4/2/17

NOTE: Signature Block is optional, per District preference

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	N/A - included in roadway
20 2	Summary of Pay Items Including TRANS-Port Input		LS	0	0		0	N/A - included in roadway
20 3	Tabulation of Quantities		Sheet	0	0	0	0	Task accounted for in original hours
20 4	General Notes/Pay Item Notes		Sheet	1	2	1	2	Review and incorporate necessary FTE S&PM notes
20 5	Project Layout		Sheet	0	0	0	0	Task accounted for in original hours
20 6	Plan Sheet	1"=50'	Sheet	11	1	11	11	Revise 11 plan sheets
20 7	Typical Details		EA	0	0	0	0	No additional details anticipated
20 8	Guide Sign Worksheet(s)		EA	8	1	1	8	1 new multi-post ground mount affected by widening
20 9	Traffic Monitoring Site		EA	0	0		0	N/A
20 10	Cross Sections		EA	5	6	5	30	Develop full section for 3 span truss & half sections for 2 ground mount (1 new, 1 relocate) 8 hrs. X 3 OH structure + 2 hrs. X 3 multi-post = 30 hrs
20 11	Special Service Point Details		EA	0			0	N/A
20 12	Special Details		LS	0			0	N/A
20 13	Interim Standards		LS	0			0	N/A
Signing and Pavement Marking Plans Technical Subtotal						18	51	
20 14	Quality Assurance/Quality Control		LS	%	5%		3	
20 15	Supervision		LS	%	5%		3	
20. Signing and Pavement Marking Plans Total						18	57	

ESTIMATE OF WORK EFFORT AND COST - SUBCONSULTANT

Name of Project SR 417, Econlochatchee Trail to Seminole County Line - Supplemental
 County Orange
 PFN 417-134
 FAP No 1/01900

Consultant Name Tierra
 Consultant No enter consultants proj number
 Date 3/30/2017
 Estimator insert name

Staff Classification	Total Staff Hours From Summary Form	Project Manager	Senior Engineer	Chief Scientist	Senior Project	Geotechnical Engineer	Engineering Intern	Senior Scientist	Designer	Senior Engineering	Geotechnical Technician	Secretarial/Clerical	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	\$0.00	#DIV/0!
9. Structures - Misc. Tasks, Dwg, 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	0	0	0	0	0	0	0	0	0	0	0	0	0	0	\$0	#DIV/0!
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	187	0	15	0	19	28	68	0	28	7	0	4	0	187	\$21,874.68	\$116.98
Total Staff Hours	187	0	15	0	19	28	68	0	28	7	0	4	0	187	\$21,874.68	\$116.98
Total Staff Cost		\$1,784.25	\$2,822.70	\$0.00	\$3,808.84	\$3,771.32	\$6,479.04	\$0.00	\$2,549.61	\$542.12	\$803.27	\$273.24	\$0.00		\$21,874.68	\$116.98

Notes:
 1 This sheet to be used by Subconsultant to calculate its fee

SALARY RELATED COSTS		\$21,874.48
OVERHEAD:	0%	\$0.00
OPERATING MARGIN:	0%	\$0.00
FCM (Facilities Capital Cost Money)	0.00%	\$0.00
EXPENSES	0.00%	\$0.00
SUBTOTAL ESTIMATED FEE:		\$21,874.48
Contamination ODCs		\$0.00
Geotechnical Field and Lab Testing		\$16,610.94
SUBTOTAL ESTIMATED FEE:		\$38,485.40
Optional Services		\$0.00
GRAND TOTAL ESTIMATED FEE:		\$38,485.40

35. Geotechnical

Estimator

SR 417, Econlockhatchee Trail to Seminole County Line - Supplemental
417 134

Representing	Print Name	Signature / Date
CFX	<i>Patrick Ploesch</i>	
Tierra Inc	Kevin Kudim	<i>[Signature]</i> 4/2/17

NOTE: Signature Block is optional, per District preference

Task No.	Task	Units	No of Units	Hours/ Unit	Total Hours	Comments
	Roadway					
35.1	Document Collection and Review	LS	0	0	0	N/A - Performed during initial investigation
35.2	Develop Detailed Boring Location Plan	LS	1	8	8	Per CFX Direction 40 roadway borings, 8 SPTs - 20', 32 Augers - 5'. Total 465 LF (160 LF SPT + 180 LF Augers)
35.3	Stake Borings/Utility Clearance	Boring	10	0.25	10	
35.4	Muck Probing	Crew Day	0	0	0	Tierra will use separate pay item in fee schedule to perform muck probing.
35.5	Coordinate and Develop MOT Plans for Field Investigation	EA	0	0	0	N/A
35.6	Drilling Access Permits	Location	1	8	8	Permit for work within Seminole County - FL Turnpike ROW
35.7	Property Clearances	EA	0	0	0	N/A - All Work within ROW
35.8	Groundwater Monitoring	EA	0	0	0	N/A
35.9	LBR/Resilient Modulus Sampling	EA	0	0	0	N/A - Performed during initial investigation
35.10	Coordination of Field Work	100 lf of boring	3.2	1	3	
35.11	Soil and Rock Classification - Roadway	100 lf of boring	3.2	2	6	
35.12	Design LBR	LS	0	0	0	N/A
35.13	Laboratory Data	100 lf of boring	3.2	0.75	2	
35.14	Seasonal High Water Table	Boring	40	0.2	8	
35.15	Parameters for Water Retention Areas	EA	0	0	0	
35.16	Delineate Limits of Unsuitable Material	Cross-section	6	1.2	7	Assume 6 cross sections @ 0.5 hr/cross section (3 hrs) + 2 plan reviews @ 2 hrs each (4 hrs) Sum = 7 hrs
35.17	Electronic Files for Cross-Sections	100 lf of boring	3.2	1	3	
35.18	Embankment Settlement and Stability	Embankment Boring	0	0	0	N/A
35.19	Monitor Existing Structures	LS	0	0	0	N/A

35. Geotechnical



Task No.	Task	Units	No of Units	Hours/ Unit	Total Hours	Comments
35.20	Stormwater Volume Recovery and/or Background Seepage Analysis	EA	0	0	0	To be performed by others.
35.21	Geotechnical Recommendations	LS	1	8	8	
35.22	Pavement Condition Survey and Pavement Evaluation Report	LS	0	0	0	Pavement Coring and Evaluation Not Required.
35.23	Preliminary Roadway Report	LS	1	8	8	To Be Included With Overall Report
35.24	Final Report	EA	1	12	12	To Be Included With Overall Report
35.25	Auger Boring Drafting	100 lf boring	16	4	6	
35.26	SPT Boring Drafting	100 lf boring	16	5	8	
Roadway Geotechnical Subtotal					97	
Structures						
35.27	Develop Detailed Boring Location Plan	LS	1	4	4	Total Approx 1,600 LF of Gravity Walls and 3 Sign Structures
35.28	Stake Borings/Utility Clearance	Boring	7	0.4	3	Per CFX Direction: 3 Sign Structure Borings to 50' (150 LF) + 4 Wall Borings to 20' (80 LF) = 7 borings for 230 LF
35.29	Coordinate and Develop MOT Plans for Field Investigation	EA	0	0	0	N/A
35.30	Drilling Access Permits	Location	0	0	0	N/A - Turnpike Permit included with Roadway Investigation
35.31	Property Clearances	EA	0	0	0	N/A - All Work within ROW
35.32	Collection of Corrosion Samples	EA	0	0	0	To be collected at time of drilling.
35.33	Coordination of Field Work	100 lf of boring	2.3	1	2	
35.34	Soil and Rock Classification - Structures	100 lf of boring	2.3	2	9	
35.35	Tabulation of Laboratory Data	100 lf of boring	2.3	0.75	2	
35.36	Estimate Design Groundwater Level for Structures	EA	7	0.25	2	
35.37	Selection of Foundation Alternatives (BDR)	Bridge boring	0	0	0	N/A
35.38	Detailed Analysis of Selected Foundation Alternate(s)	Bridge boring	0	0	0	N/A
35.39	Bridge Construction and Testing Recommendations	Bridge boring	0	0	0	N/A
35.40	Lateral Load Analysis (Optional)	Bridge boring	0	0	0	N/A
35.41	Walls	Wall Boring	2	2	4	Analyze all Walls - Use 1 Representative Boring Per Wall
35.42	Sheet Pile Wall Analysis (Optional)	Wall Boring	0	0	0	N/A
35.43	Design Soil Parameters for Signs, Signets, High Mast Lights, and Strain Poles and Geotechnical Recommendations	Boring	3	1	3	3 Sign Structures

35. Geotechnical



Task No.	Task	Units	No of Units	Hours/ Unit	Total Hours	Comments
35.44	Box Culvert Analysis	EA	0	0	0	N/A - No Culvert Extensions.
35.45	Preliminary Report - BDR	EA	0	0	0	N/A
35.46	Final Report - Bridge and Associated Walls	EA	0	0	0	N/A
35.47	Final Reports - Signs, Signals, Box Culvert, Walls and High Mast Lights	EA	1	20	20	
35.48	SPT Boring Drafting	100 lf of boring	2.3	5	12	
35.49	Other Geotechnical	LS	0	0	0	N/A
Structural Geotechnical Subtotal					67	
Geotechnical Technical Subtotal					154	
35.50	Technical Special Provisions	EA	0	0	0	
35.51	Field Reviews	LS	1	8	8	
35.52	Technical Meetings	LS	1	4	4	Meetings listed below
35.53	Quality Assurance/Quality Control	LS	%	5%	8	
35.54	Supervision	LS	%	5%	8	
Geotechnical Nontechnical Subtotal					28	
35.55	Coordination	LS	%	3%	5	
35. Geotechnical Total					187	

Technical Meetings	Units	No of Units	Hours/ Unit	Total Hours	PM Attendance at Meeting Required?	Number
Kickoff Meeting with CFX	EA	0	0	0		0
Boring Layout Approval	EA	0	0	0		0
Attend in BDR Review Meeting	EA	0	0	0		0
30/60/90% Submittal Review	EA	0	0	0		0
Other Meetings	EA	2	2	4		0
Subtotal Technical Meetings				4		0
Progress Meetings (if required by FDOT)	EA	0	0	0	PM attendance at Progress Meetings is manually entered on General Task 3	--
Phase Review Meetings	EA	0	0	0	PM attendance at Phase Review Meetings is manually entered on General Task 3	--
Total Meetings				4	Total Project Manager Meetings (carries to Tab 3)	0

Carries to 31.18

Carries to Tab 3

Contract Number: 001153
 Project Number: 5511-16-004

Tierra Inc
 Table 6 Standard Fee Schedule 2016

SR 417 Widening from Econlockhatchee Tr
 from Orange-Seminole CL - Supplemental

Item Description	Unit	Unit Price	Quantity	Total
Geotechnical Field Investigation				
612-Geo Mobilization Drill Rig Truck Mount	Each	\$ 337.00	1	\$ 337.00
614-Geo Mobilization Mudbug/All Terrain Vehicle	Each	\$ 500.00	1	\$ 500.00
610-Geo Mobilization Drill Rig Truck Mount	Each	\$ 3,110.00	0	\$ -
418-Geo Drill Crew Support Vehicle	Day	\$ 152.00	6	\$ 912.00
609-Geo Mobilization Drill Rig Barge Mount	Each	\$ 7,420.00	0	\$ -
405-Geo Barge (Owned)	Day	\$ 2,500.00	0	\$ -
618-Geo Mobilization Support Boat	Each	\$ 500.00	0	\$ -
Geo Support Safety Boat	Day	\$ 275.00	0	\$ -
619-Geo Mobilization Tri-Pod	Each	\$ 1,250.00	0	\$ -
419-Geo Drilling Crew 2-Person	Hour	\$ 135.00	0	\$ -
420-Geo Drilling Crew 3-Person	Hour	\$ 185.00	0	\$ -
Geo SPT Truck 0-50 Ft	LF	\$ 12.00	0	\$ -
Geo SPT Truck 50-100 Ft	LF	\$ 14.00	0	\$ -
Geo SPT Truck 100-150 Ft	LF	\$ 20.00	0	\$ -
Geo SPT Truck 150-200 Ft	LF	\$ 39.00	0	\$ -
478-Geo SPT Truck-Mud Bug 0-50 Ft	LF	\$ 12.50	390	\$ 4,875.00
479-Geo SPT Truck-Mud Bug 50-100 Ft	LF	\$ 16.00	0	\$ -
480-Geo SPT Truck-Mud Bug 100-150 Ft	LF	\$ 27.50	0	\$ -
481-Geo SPT Truck-Mud Bug 150-200 Ft	LF	\$ 42.00	0	\$ -
473-Geo SPT Barge/Track/Amphibious 000-050 Ft	LF	\$ 18.50	0	\$ -
474-Geo SPT Barge/Track/Amphibious 050-100 Ft	LF	\$ 25.00	0	\$ -
475-Geo SPT Barge/Track/Amphibious 100-150 Ft	LF	\$ 40.00	0	\$ -
476-Geo SPT Barge/Track/Amphibious 150-200 Ft	LF	\$ 70.00	0	\$ -
Geo Grout Boreholes- Truck 0-050 Ft	LF	\$ 4.50	0	\$ -
Geo Grout Boreholes- Truck 50-100 Ft	LF	\$ 5.00	0	\$ -
Geo Grout Boreholes- Truck 100-150 Ft	LF	\$ 5.50	0	\$ -
Geo Grout Boreholes- Truck 150-200 Ft	LF	\$ 14.00	0	\$ -
440-Geo Grout Boreholes- Truck/Mud Bug 000-050 Ft	LF	\$ 5.95	390	\$ 2,320.50
441-Geo Grout Boreholes- Truck/Mud Bug 050-100 Ft	LF	\$ 7.10	0	\$ -
442-Geo Grout Boreholes- Truck/Mud Bug 100-150 Ft	LF	\$ 9.00	0	\$ -
443-Geo Grout Boreholes- Truck/Mud Bug 150-200 Ft	LF	\$ 18.00	0	\$ -
435-Geo Grout Boreholes- Barge/Track/Amphibious 000-050 Ft	LF	\$ 8.50	0	\$ -
436-Geo Grout Boreholes- Barge/Track/Amphibious 050-100 Ft	LF	\$ 9.00	0	\$ -
437-Geo Grout Boreholes- Barge/Track/Amphibious 100-150 Ft	LF	\$ 10.00	0	\$ -
438-Geo Grout Boreholes- Barge/Track/Amphibious 150-200 Ft	LF	\$ 25.00	0	\$ -
Geo Temp Casing 3" Truck 0-050 Ft	LF	\$ 7.50	0	\$ -
Geo Temp Casing 3" Truck 50-100 Ft	LF	\$ 8.75	0	\$ -
Geo Temp Casing 3" Truck 100-150 Ft	LF	\$ 10.50	0	\$ -
Geo Temp Casing 3" Truck 150-200 Ft	LF	\$ 15.00	0	\$ -

Contract Number: 001153
 Project Number: 5511-16-004

Tierra Inc
 Table 6 Standard Fee Schedule 2016

SR 417 Widening from Econlockhatchee Tr
 from Orange-Seminole CL - Supplemental

Item Description	Unit	Unit Price	Quantity	Total
488-Geo Temp Casing 3" Truck/Mud Bug 000-050 Ft	LF	\$ 9.80	80	\$ 784.00
489-Geo Temp Casing 3" Truck/Mud Bug 050-100 Ft	LF	\$ 12.75	0	\$ -
490-Geo Temp Casing 3" Truck/Mud Bug 100-150 Ft	LF	\$ 16.75	0	\$ -
491-Geo Temp Casing 3" Truck/Mud Bug 150-200 Ft	LF	\$ 22.00	0	\$ -
483-Geo Temp Casing 3" Barge/Track/Amphibious 0-050 Ft	LF	\$ 12.90	0	\$ -
484-Geo Temp Casing 3" Barge/Track/Amphibious 50-100 Ft	LF	\$ 14.70	0	\$ -
485-Geo Temp Casing 3" Barge/Track/Amphibious 100-150 Ft	LF	\$ 17.85	0	\$ -
486-Geo Temp Casing 3" Barge/Track/Amphibious 150-200 Ft	LF	\$ 25.00	0	\$ -
463-Geo Rock Coring Truck/Mud Bug 000-050 Ft less than 4" ID	LF	\$ 34.25	0	\$ -
465-Geo Rock Coring Truck/Mud Bug 050-100 Ft less than 4" ID	LF	\$ 36.55	0	\$ -
467-Geo Rock Coring Truck/Mud Bug 100-150 Ft less than 4" ID	LF	\$ 39.90	0	\$ -
453-Geo Rock Coring Barge/Track/Amphibious 000-050 Ft less than 4" ID	LF	\$ 45.79	0	\$ -
455-Geo Rock Coring Barge/Track/Amphibious 050-100 Ft less than 4" ID	LF	\$ 60.74	0	\$ -
457-Geo Rock Coring Barge/Track/Amphibious 100-150 Ft less than 4" ID	LF	\$ 85.00	0	\$ -
459-Geo Rock Coring Barge/Track/Amphibious 150-200 Ft less than 4" ID	LF	\$ 94.00	0	\$ -
427-Geo Extra SPT Samples-Truck/Mud Bug 000-050 Ft	Each	\$ 31.40	0	\$ -
428-Geo Extra SPT Samples-Truck/Mud Bug 050-100 Ft	Each	\$ 36.44	0	\$ -
429-Geo Extra SPT Samples-Truck/Mud Bug 100-150 Ft	Each	\$ 42.20	0	\$ -
430-Geo Extra SPT Samples-Truck/Mud Bug 150-200 Ft	Each	\$ 85.00	0	\$ -
422-Geo Extra SPT Samples-Barge/Track/Amphibious 000-050 Ft	Each	\$ 47.13	0	\$ -
423-Geo Extra SPT Samples-Barge/Track/Amphibious 050-100 Ft	Each	\$ 54.80	0	\$ -
424-Geo Extra SPT Samples-Barge/Track/Amphibious 100-150 Ft	Each	\$ 63.30	0	\$ -
425-Geo Extra SPT Samples-Barge/Track/Amphibious 150-200 Ft	Each	\$ 85.00	0	\$ -
519-Geo Undisturbed Samples Truck/Mud Bug 000-050 Ft	Each	\$ 119.50	0	\$ -
520-Geo Undisturbed Samples Truck/Mud Bug 050-100 Ft	Each	\$ 130.40	0	\$ -
521-Geo Undisturbed Samples Truck/Mud Bug 100-150 Ft	Each	\$ 195.60	0	\$ -
522-Geo Undisturbed Samples Truck/Mud Bug 150-200 Ft	Each	\$ 200.00	0	\$ -
515-Geo Undisturbed Samples Barge/Track/Amphibious 000-050 Ft	Each	\$ 179.00	0	\$ -
516-Geo Undisturbed Samples Barge/Track/Amphibious 050-100 Ft	Each	\$ 195.60	0	\$ -
517-Geo Undisturbed Samples Barge/Track/Amphibious 100-150 Ft	Each	\$ 293.40	0	\$ -
518-Geo Undisturbed Samples Barge/Track/Amphibious 150-200 Ft	Each	\$ 375.00	0	\$ -
401-Geo Auger Borings- Hand & Truck/Mud Bug	LF	\$ 9.25	160	\$ 1,480.00
402-Geo Auger Borings- Track	LF	\$ 9.25	0	\$ -
432-Geo Field Permeability 0-10 Ft (Open - End Borehole Method)	Each	\$ 270.00	0	\$ -
Flagman and Barricades 2-Man Crew Own Equipment	Day	\$ 850.00	1	\$ 850.00
450-Geo Piezometer 2" 000-050 Ft	LF	\$ 30.00	0	\$ -
445-Geo Grouted Monitor Well 2" 000-050 Ft	LF	\$ 6.25	0	\$ -
450.1 Piezometer Permit Cost Actual	Each	\$ 50.00	0	\$ -
403-Geo Backhoe (Owned)	Day	\$ 800.00	0	\$ -
418-Geo Dozer (Owned)	Day	\$ 800.00	0	\$ -
Site Clearing to Access Boring or Test Locations	Hour	\$ 150.00	4	\$ 600.00
407-Geo Chainsaw (Owned)	Day	\$ 28.00	0	\$ -
415-Geo Double Ring Infiltration (ASTM D3385)	Each	\$ 460.00	0	\$ -
434-Geo Ground Penetrating Radar (GPR)	Day	\$ 2,800.00	0	\$ -

Contract Number: 001153
 Project Number: 5511-16-004

Terra Inc
 Table 6 Standard Fee Schedule 2016

SR 417 Widening from Econlockhatchee Tr
 from Orange-Seminole CL - Supplemental

Item Description	Unit	Unit Price	Quantity	Total
Asphalt and Concrete Pavement Coring				
209-Asphalt Pavement Coring - 4" dia with Base Depth Check	Each	\$ 125.00	0	\$ -
210-Asphalt Pavement Coring - 4" dia without Base Depth Check	Each	\$ 110.00	0	\$ -
211-Asphalt Pavement Coring - 6" dia with Base Depth Check	Each	\$ 125.00	0	\$ -
212-Asphalt Pavement Coring - 6" dia without Base Depth Check	Each	\$ 110.00	0	\$ -
305-Concrete Pavement Coring - 4" Dia	Each	\$ 110.00	0	\$ -
306-Concrete Pavement Coring - 8" Dia	Each	\$ 110.00	0	\$ -
803-Mobilization Asphalt Coring equipment	Each	\$ 250.00	0	\$ -
808-Mobilization Concrete Coring	Each	\$ 250.00	0	\$ -
Geotechnical Soil Laboratory Testing				
812-Soils Materials Finer than 200 Sieve (FM 1-T011)	Test	\$ 35.00	15	\$ 525.00
817-Soils Moisture Content Laboratory (AASHTO T 285)	Test	\$ 9.58	18	\$ 172.44
821-Soils Particle Size Analysis (AASHTO T 88) (Including Hydrometer)	Test	\$ 131.00	0	\$ -
822-Soils Particle Size Analysis (AASHTO T 88) (No Hydrometer)	Test	\$ 67.00	15	\$ 1,005.00
805-Soils Compsion Series (FM 5-550 through 5-553)	Test	\$ 145.00	8	\$ 1,160.00
825-Soils pH Soil or Water (FM 5-550)	Test	\$ 30.00	0	\$ -
829-Soils Resistivity Soil or Water (FM 5-551)	Test	\$ 35.00	0	\$ -
800-Soils Chloride Soil or Water (FM 5-552)	Test	\$ 40.00	0	\$ -
833-Soils Sulfate Soil or Water (FM 5-553)	Test	\$ 40.00	0	\$ -
818-Soils Organic Content Ignition (FM 1 T-267)	Test	\$ 35.00	8	\$ 280.00
Atterberg Limit Tests (AASHTO T-89 and T-90) Combined	Test	\$ 81.00	10	\$ 810.00
826-Soils Plastic Limit & Plasticity Index (AASHTO T 90)	Test	\$ 81.00	0	\$ -
811-Soils Liquid Limit (AASHTO T 89)	Test	\$ 41.00	0	\$ -
823-Soils Permeability Constant Head (AASHTO T 215)	Test	\$ 155.00	0	\$ -
824-Soils Permeability Falling Head (FM 5-513)	Test	\$ 155.00	0	\$ -
827-Soils Proctor Modified (FM 1-T 180)	Test	\$ 115.00	0	\$ -
828-Soils Proctor Standard (AASHTO T 99)	Test	\$ 111.00	0	\$ -
832-Soils Splitting Tensile Strength of Rock Cores (ASTM D3987)	Test	\$ 105.00	0	\$ -
838-Soils Unconfined Compression - Rock (ASTM D7012, Method C)	Test	\$ 105.00	0	\$ -
803-Soils Consolidation - Constant Strain (ASTM D4186)	Test	\$ 500.00	0	\$ -
804-Soils Consolidation - Extended Load Increments (AASHTO T218)	Each	\$ 50.00	0	\$ -
806-Soils Direct Shear Consolidated Drained/ Point AASHTO T 236	Test	\$ 250.00	0	\$ -
810-Soils Limerock Bearing Ratio (LBR)(FM 5-515)	Test	\$ 326.18	0	\$ -
Engineering and Technical Support Services				
Project Manager	Hour	\$ 198.25	9	\$ 1,784.25
Senior Engineer	Hour	\$ 188.18	15	\$ 2,822.70
Chief Scientist	Hour	\$ 151.47	0	\$ -
Senior Project Engineer	Hour	\$ 158.38	19	\$ 3,008.84
Geotechnical Engineer	Hour	\$ 134.69	28	\$ 3,771.32
Engineering Intern	Hour	\$ 95.28	68	\$ 6,479.04
Senior Scientist	Hour	\$ 117.34	0	\$ -
Designer	Hour	\$ 91.08	28	\$ 2,549.68
Sr Engineering Technician	Hour	\$ 83.18	7	\$ 582.12
Geotechnical Technician	Hour	\$ 67.03	9	\$ 603.27
Secretary/Clerical	Hour	\$ 68.31	4	\$ 273.24
			Total Estimated Fee	\$ 38,485.40

**Attachment to Supplemental Agreement No.1
CFX Contract 001153**

**Department Funded Agreement between Florida's Turnpike
Enterprise and the Central Florida Expressway Authority for
Improvements to the Central Florida GreeneWay (S.R. 417)
from Econlockhatchee Trail to the Seminole County Line**

CFX Project No. 417-134, CFX Contract No. 001153

**DEPARTMENT FUNDED AGREEMENT
BETWEEN
FLORIDA'S TURNPIKE ENTERPRISE AND
THE CENTRAL FLORIDA EXPRESSWAY AUTHORITY
FOR IMPROVEMENTS TO
THE CENTRAL FLORIDA GREENEWAY (S.R. 417)
FROM ECONLOCKHATCHEE TRAIL TO THE SEMINOLE COUNTY LINE
CFX PROJECT NO. 417-134, CFX CONTRACT NO. 001153**

This Agreement is made and entered into by and between **THE STATE OF FLORIDA, DEPARTMENT OF TRANSPORTATION, FLORIDA'S TURNPIKE ENTERPRISE**, an executive agency of the State of Florida having a business address located at Florida's Turnpike Headquarters, Turkey Lake Service Plaza, Milepost 263, Florida's Turnpike, Building 5315, P.O. Box 613069, Ocoee, Florida 34761 (hereinafter referred to as "FTE" and sometimes referred to as "Department"), its successors and assigns, and the **CENTRAL FLORIDA EXPRESSWAY AUTHORITY**, an agency of the State of Florida, with a business address of 4974 ORL Tower Road, Orlando, Florida 32807 (hereinafter referred to as the "CFX").

WITNESSETH:

WHEREAS, FTE is authorized by Section 334.044(13), Florida Statutes, to coordinate the planning, development, and operation of the State Highway System;

WHEREAS, FTE is authorized under Section 338.2216(2), Florida Statutes, to plan, develop, own, purchase, lease, or otherwise acquire, demolish, construct, improve, relocate, equip, repair, maintain, operate, and manage the Florida Turnpike System; and to cooperate, coordinate, partner, and contract with other entities, public and private, to accomplish these purposes;

WHEREAS, CFX owns and operates the Central Florida Expressway Authority System, a system of limited access toll roads;

WHEREAS, FTE owns and operates the Florida Turnpike Enterprise System, a system of limited access toll roads;

WHEREAS, S.R. 417 is a limited access toll road forming the eastern beltway around the city of Orlando, portions of which are owned, operated, and maintained by CFX as part of the Central Florida Expressway System and portions of which are owned, operated and maintained by FTE as part of the Florida Turnpike Enterprise System;

WHEREAS, the northern jurisdictional limit between the Central Florida Expressway Authority System and the Florida Turnpike Enterprise System on S.R. 417 is the Orange/Seminole County Line;

WHEREAS, CFX is currently in the design phase for the widening of S.R. 417 from Econlockhatchee Trail north to the Orange/Seminole County Line, CFX Project No. 417-134 (hereinafter referred to as the "Project");

WHEREAS, the Engineer of Record for design services related to the Project is Dewberry Engineers, Inc. (hereinafter referred to as "Dewberry");

WHEREAS, Dewberry is currently under contract with CFX for design services related to the Project through CFX Contract No. 001153, attached as **Exhibit "A"**;

WHEREAS, design services provided by Dewberry related to the Project include the final design and preparation of construction drawings/specifications to provide six (6) general use lanes on S.R. 417 between Econlockhatchee Trail and the Orange/Seminole County line. Specifically, the project will include outside widening of S.R. 417 between Econlockhatchee Trail and the University Mainline Plaza, outside/median widening of S.R. 417 from the University Mainline Plaza to the Orange/Seminole County line, conversion of the S.R. 417 northbound and southbound inside cash lanes to express lanes and widening of the southbound S.R. 417 Bridge over University Boulevard. The project will also include the addition of one (1) northbound auxiliary lane and one (1) southbound auxiliary lane between the S.R. 50 / Colonial Drive ramps and the University Mainline Plaza and the addition of one (1) northbound auxiliary lane between the University Boulevard ramp and the S.R. 417 Aloma Avenue ramps;

WHEREAS, under FPID project number 427690-1-32-03, FTE has received an appropriation from the Florida legislature for design costs related to future capacity improvements on S.R. 417 within the Florida Turnpike Enterprise System between the Orange/Seminole County Line and Aloma Avenue, including without limitation, widening of the S.R. 417 mainline in the northbound and southbound directions to provide a total of eight (8) general use lanes (hereinafter referred to as the "FTE Improvements");

WHEREAS, for the mutual benefit of CFX and FTE customers traveling on S.R. 417 and to simplify the prosecution of work between the Project and FTE Improvements, FTE has requested that CFX enter into a Supplemental Agreement with Dewberry to provide additional design services related to a portion of the FTE Improvements (hereinafter referred to as the "FTE Project"). The scope of services for the FTE Project is attached as **Exhibit "B"**;

WHEREAS, FTE has agreed to provide an advance payment to CFX for all design fees associated with the Dewberry Supplemental Agreement for the FTE Project;

WHEREAS, a portion of the FTE Project will be designed in CFX's right of way, specifically one (1) southbound auxiliary lane between the Aloma Avenue ramp and the University Boulevard ramp; and

WHEREAS, CFX and FTE desire to formalize the terms and conditions for FTE's payment of the design fees to CFX for the FTE Project.

NOW THEREFORE, in consideration of the mutual benefits, conditions, promises, and covenants hereinafter set forth, and for other good and valuable consideration, the receipt and sufficiency of which is acknowledged, the parties agree as follows:

1. **Recitals.** The recitals set forth above are specifically incorporated herein by reference and made a part of this Agreement.

2. **FTE Project Scope of Work.** The FTE Project design services to be provided by CFX through CFX Contract No. 001153 are set forth in Exhibit "B". The total estimated cost of the FTE Project is \$416,197.12.
3. **Term.** The term of this Agreement shall begin upon the Effective Date (as defined in Section 22 below) and shall end on December 31, 2017. This Agreement will expire at the end of the term unless an extension of the term is requested by FTE prior to the expiration of the term and CFX grants such extension in writing.

4. **FTE's Responsibilities.**

- a. The payment of funds under this Agreement will be made directly to CFX for deposit.
- b. FTE shall designate a project manager for the FTE Project to coordinate with CFX's designated project manager for its Project.
- c. FTE will provide phase submittal design reviews of the FTE Project within fourteen (14) business days from receipt of a phase submittal from Dewberry.
- d. At the request of CFX, FTE will assist Dewberry with permit agency coordination pertaining to the Project and the FTE Project (collectively referred to as the "Projects").
- e. FTE shall prepare a second Department Funded Agreement ("Second DFA") that addresses the ultimate construction of the FTE Project by CFX. CFX shall assist FTE with creation of a first draft of the Second DFA with the goal that such draft will be completed by June 30, 2017. Thereafter, CFX and FTE will work together to make modifications to the first draft of the Second DFA to the satisfaction of both parties. Such modifications shall not be unreasonably delayed by either party.

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- a. In reliance upon FTE's advance payment of the above-referenced funds, CFX shall be responsible for executing a Supplemental Agreement with Dewberry in the same amount for design of the FTE Project.
- b. CFX shall designate a project manager for the FTE Project to manage and coordinate any and all matters between FTE's designated project manager for its FTE Project and Dewberry.
- c. All FTE Project plans preparation within FTE's right of way shall be in accordance with the current FDOT and TPPPH standards and specifications.
- d. Following completion and FTE acceptance of design services related to the FTE Project, CFX will prepare bidding documents and advertise the Projects for construction bids.

6. **Financial Provisions.**

- a. FTE shall advance an amount of \$332,957.70, which is equal to 80% of 100% of FTE's participation in the estimated cost of the FTE Project. The remaining 20% shall be withheld by FTE as a retainage amount to draw upon pursuant to subsection k. Any retainage amount that is not forfeited pursuant to subsection k will be paid to CFX upon FTE's acceptance of the work.
- b. The advance payment amount under 6.a shall be released after execution of this Agreement on or before June 30, 2017.
- c. The advanced amount must be accounted for separately from other funds of CFX.
- d. CFX shall invoice FTE upon completion of each deliverable for costs incurred. The amount advanced will be subtracted from each invoice only after such amounts are reviewed and approved by FTE's project manager.
- e. All invoices submitted to FTE must provide complete documentation, including a copy of the contractor's or consultant's invoice(s), to substantiate the cost on the invoice.
- f. CFX must certify on each invoice that the costs from the contractor(s) or consultant(s) are valid and have been incurred by the contractor(s) or consultant(s).
- g. Each monthly invoice subsequent to the first invoice from CFX must contain a statement from CFX that the previous month's cost incurred by the contractor(s) or consultant(s) has been paid by CFX to the contractor(s) or consultant(s).
- h. CFX will submit an invoice for the advance.
- i. Invoices shall be submitted by CFX in detail sufficient for a proper pre-audit and post audit based on the quantifiable, measurable and verifiable units of deliverables as established in Exhibit B – Scope of Services. Deliverables must be received and accepted in writing by FTE's project manager prior to payments.
- j. There shall be no reimbursement for travel expenses under this Agreement.
- k. If FTE determines that the performance of Dewberry is unsatisfactory, FTE shall notify CFX of the deficiency to be corrected, which correction shall be made within a time-frame to be specified by FTE. CFX shall, within five days after notice from FTE, provide FTE with a corrective action plan describing how Dewberry will address all issues of contract non-performance, unacceptable performance, failure to meet the minimum performance levels, deliverable deficiencies, or contract non-compliance. If the corrective action plan is unacceptable to FTE, CFX shall be assessed a non-performance retainage equivalent to 10% of the total invoice amount. The retainage shall be applied to the invoice for the then-current billing period. The retainage shall be withheld until CFX resolves the deficiency. If the deficiency is subsequently resolved, CFX may bill FTE for the retained amount during the next billing period. If

CFX is unable to cause Dewberry to resolve the deficiency, the funds retained may be forfeited at the end of the Agreement's term.

- l. Any unused funds remaining at the conclusion/termination of the Agreement will be due to FTE within 180 days of the completion/termination of the project.
- m. If a payment to CFX from FTE is not available within 40 days, a separate interest penalty at a rate as established pursuant to Section 55.03(1), F.S., will be due and payable, in addition to the invoice amount, to CFX. Interest penalties of less than one (1) dollar will not be enforced unless CFX requests payment. Invoices that have to be returned to CFX because of CFX preparation errors will result in a delay in the payment. The invoice payment requirements do not start until a properly completed invoice is provided to the Department. (Section 215.422(3)(b), F.S.).
- n. A Vendor Ombudsman has been established within the Department of Financial Services. The duties of this individual include acting as an advocate for CFX who may be experiencing problems in obtaining timely payment(s) from a state agency. The Vendor Ombudsman may be contacted at (850) 413-5516 or by calling the Division of Consumer Services at 1-877-693-5236. (Section 215.422(5) and (7), F.S.).
- o. Records of costs incurred under the terms of this Agreement shall be maintained and made available upon request to the Department at all times during the period of this Agreement and for three (3) years after final payment is made. Copies of these documents and records shall be furnished to the Department upon request. Records of costs incurred include CFX's general accounting records and the FTE Project records, together with supporting documents and records, of the contractor and all subcontractors performing work on the FTE Project, and all other records of the Contractor and subcontractors considered necessary by the Department for a proper audit of costs. (Section 287.058(4), F.S.).
- p. In the event this contract is for services in excess of \$25,000.00 and a term for a period of more than 1 year, the provisions of Section 339.135(6)(a), F.S., are hereby incorporated:

"The Department, during any fiscal year, shall not expend money, incur any liability, or enter into any contract which, by its terms, involves the expenditure of money in excess of the amounts budgeted as available for expenditure during such fiscal year. Any contract, verbal or written, made in violation of this subsection is null and void, and no money may be paid on such contract. The Department shall require a statement from the Comptroller of the Department that such funds are available prior to entering into any such contract or other binding commitment of funds. Nothing herein contained shall prevent the making of contracts for periods exceeding 1 year, but any contract so made shall be executory only for the value of the services to be rendered or agreed to be paid for in succeeding fiscal years; and this paragraph shall be incorporated verbatim in all contracts of the Department

which are for an amount in excess of \$25,000.00 and which have a term for a period of more than 1 year."

- q. The Department's obligation to pay is contingent upon an annual appropriation by the Florida Legislature. (Section 216.311, F.S.).

7. CFX and its contractor Dewberry shall:

- a. Utilize the U.S. Department of Homeland Security's E-Verify system to verify the employment eligibility of all new employees hired by the CFX during the term of this Agreement; and
- b. Expressly require any contractors and subcontractors performing work or providing services pursuant to this Agreement to likewise utilize the U.S. Department of Homeland Security's E-Verify system to verify the employment eligibility of all new employees hired by the subcontractor during the contract term.

(Executive Order Number 11-116).

- 8. CFX shall cause Dewberry to add FTE as an additional insured under the Commercial General Liability coverage and Business Automobile Liability Coverage insurance policies provided for in sections 16.1 and 16.2 of the "Scope of Work" in CFX Contract No. 001153, attached as Exhibit "A," as provided by law. The insurance shall remain in effect until acceptance of the design work by FTE. Prior to commencement of the FTE Project and on such other occasions as either party may reasonably require, CFX shall provide FTE with certificates documenting that the required insurance coverage with Dewberry is in place and effective.
- 9. To the extent that there are design professional services subject to Section 725.08, Florida Statutes, and notwithstanding the provisions of Section 725.06, Florida Statutes, CFX shall cause Dewberry, through the execution of the Supplemental Agreement, to indemnify and hold harmless FTE and CFX, and their officers and employees, from liability, damages, losses, and costs, including, but not limited to, reasonable attorneys' fees, to the extent caused by the negligence, recklessness, or intentionally wrongful conduct of Dewberry and other persons employed or utilized by Dewberry in the performance of this Agreement. Nothing herein shall be construed to extend the limits of liability of CFX beyond that provided in Section 768.28, Florida Statutes. Nothing herein is intended as a waiver of CFX's sovereign immunity under Section 768.28, Florida Statutes. Nothing hereby shall inure to the benefit of any third party for any purpose, which might allow claims otherwise barred by sovereign immunity or operation of law. The parties shall notify each other in writing immediately upon becoming aware of such liabilities. The indemnities given by Dewberry in connection with the FTE Project shall survive termination of this Agreement. The insurance coverage and limits required in this Agreement may or may not be adequate to protect the FTE and such insurance coverage shall not be deemed a limitation of the indemnities to the FTE set forth in this Agreement. The provisions of this paragraph shall survive the expiration or earlier termination of this Agreement, in accordance with the laws

of the State of Florida. Furthermore, all of CFX's obligations under this Agreement are limited to the payment of no more than the amount limitation per person and in the aggregate contained in Section 768.28, Florida Statutes, even if the sovereign immunity limitations of that statute are not otherwise applicable to the matters as set forth herein.

10. **Notices; Service of Process.** All notices, requests, certificates, or other communications shall be sufficiently given and shall be deemed given when hand-delivered, mailed by registered or certified mail postage prepaid, return receipt required or overnight courier service with guaranteed next day delivery to the parties at the following addresses:

To FTE:

Executive Director & Chief Executive Officer
Florida's Turnpike Enterprise
Turnpike Headquarters -Bldg. 5315
P.O. Box 613069
Ocoee, FL 34761-3069

With Copy to:

Turnpike Chief Counsel
Turnpike Headquarters -Bldg. 5315
P.O. Box 613069
Ocoee, FL 34761-3069

To CFX:

Executive Director
Central Florida Expressway Authority
4974 ORL Tower Road
Orlando, Florida 32807

With Copy to:

General Counsel
Central Florida Expressway Authority
4794 ORL Tower Road
Orlando, FL 32807

Either of the above parties may, by notice in writing given to the other, alter the address to which communications or copies are to be sent by giving notice of such change of address in conformity with the provisions of this Section for the giving of notice.

11. **Sovereign Immunity.** Nothing in this Agreement shall be deemed or otherwise interpreted as waiving the parties' respective sovereign immunity protections, or as increasing the limits of liability as set forth in Section 768.28, Florida Statutes.

12. **Entire Agreement.** This Agreement, including the exhibits to this Agreement, contain the sole and entire agreement between the parties with respect to their subject matter and supersede any and all other prior written or oral agreements between them with respect to such subject matter.
13. **Jurisdiction and Venue.** This Agreement is accepted and entered into in Florida and any question regarding its validity, construction, enforcement, or performance shall be governed by Florida law. Venue for any and all actions arising out of or in any way related to the interpretation, validity, performance or breach of this Agreement shall lie within a Florida circuit court having jurisdiction over the parties.
14. **Severability.** In the event any provision of this Agreement shall be held invalid or unenforceable by any court of competent jurisdiction, such holding shall not invalidate or render unenforceable any other provision hereof.
15. **Counterparts.** This Agreement may be simultaneously executed in several counterparts, each of which shall be an original and all of which shall constitute but one and the same instrument.
16. **Public Records Law.** The parties shall allow public access to all public records made or received in conjunction with this Agreement and the performance thereof, in accordance with the provisions of Chapter 119, Florida Statutes.
17. **Modifications, Amendments, or Alterations.** No modification, amendment, or alteration in the terms or conditions contained herein shall be effective unless contained in a written document executed with the same formality and of equal dignity herewith.
18. **Waiver.** The failure of either party to insist on one or more occasions on the strict performance or compliance with any term or provision of this Agreement shall not be deemed a waiver or relinquished in the future of the enforcement thereof, and it shall continue in full force and effect unless waived or relinquished in writing by the party seeking to enforce the same. A modification or waiver of any of the provisions of this Agreement shall be effective only if made in writing and executed with the same formality as this Agreement.
19. **Assignment.** This Agreement may not be assigned without the written consent of the parties.
20. **Binding Effect.** This Agreement shall be binding upon and inure to the benefit of the parties hereto and their respective successors and assigns. Nothing in this Agreement is intended to confer any rights, privileges, benefits, obligations or remedies upon any other person or entity except as expressly provided for herein.
21. **No Contingent Fees.** The parties warrant that they have not employed or obtained any company or person, other than their respective bona fide employees to solicit or to secure this Agreement and that they have not paid or agreed to pay any company, corporation, individual or firm, other than bona fide employees to solicit or secure this Agreement. For the breach or violation of this provision, CFX shall have the right to terminate the Agreement without liability at its discretion.

22. **Effective Date.** This Agreement shall become effective when all parties have signed it. The date this Agreement is signed by the last party to sign it (as indicated by the date stated under that party's signature) shall be deemed the effective date of this Agreement.

IN WITNESS WHEREOF, FTE and CFX have caused these present to be executed this Agreement for the purposes herein expressed on the dates indicated below. This Agreement was approved by the CFX's Board of Directors at its meeting on _____, 2017.


**STATE OF FLORIDA
DEPARTMENT OF TRANSPORTATION**

BY: 
Executive Director & Chief Executive Officer
Florida's Turnpike Enterprise

DATE: 04/06/2017

ATTEST: 
Executive Secretary

Legal Review:

BY: 
Legal Counsel - James Hetz

CENTRAL FLORIDA EXPRESSWAY AUTHORITY

BY: _____
Executive Director

Date: _____

ATTEST: _____
Executive Secretary

Legal Review:

BY: _____
General Counsel

Exhibits: A. *Contract No. 001153* and B. *Scope of Services for the FTE Project*


CONSENT AGENDA ITEM

#15

CENTRAL FLORIDA EXPRESSWAY AUTHORITY

MEMORANDUM

TO: CFX Board Members

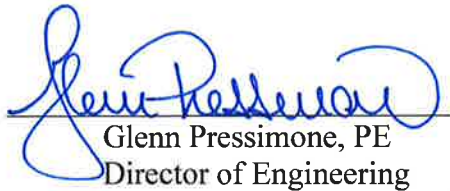
FROM: Aneth Williams 
Director of Procurement

DATE: March 27, 2017

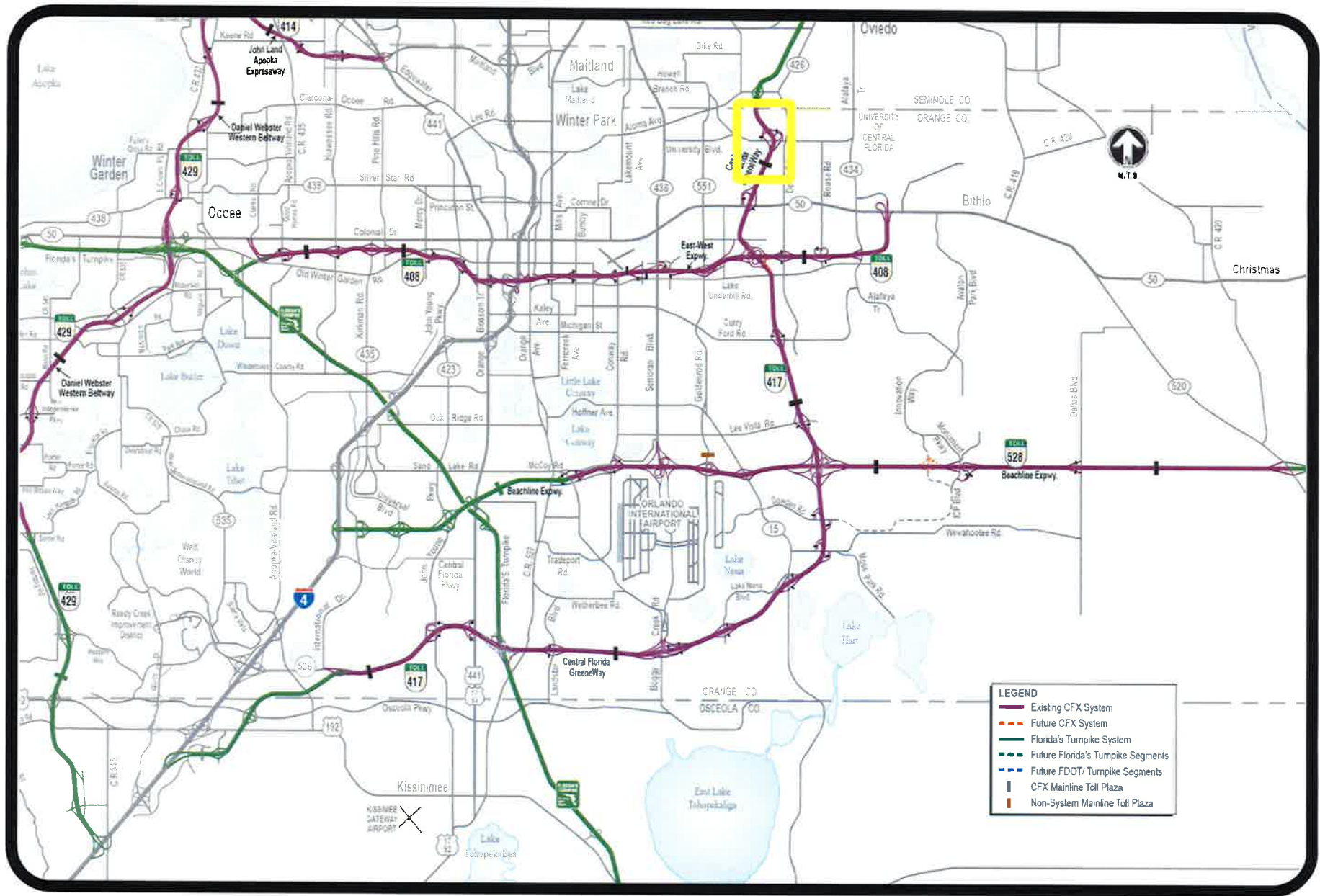
SUBJECT: Authorization for Approval to Execute Reimbursement Agreement with Florida's Turnpike Enterprise
S.R. 417 Widening from Econlockhatchee Trail to the Seminole County Line
Project 417-134, Contract No. 001153

Board approval is requested to authorize execution of a Reimbursement Agreement between CFX and Florida's Turnpike Enterprise (FTE) in the amount of \$416,197.12. This Agreement provides CFX with a full reimbursement from FTE for all costs associated with Supplemental Agreement No.1 to Contract 001153 (Dewberry Engineers, Inc.) for additional design services related to the S.R. 417 Widening form Econlockhatchee Trail to the Seminole County Line, Project 417-134.

Reviewed by:


Glenn Pressimone, PE
Director of Engineering





Project Location Map for
 S.R. 417 Widening from Econlockhatchee Trail to Seminole County Line (417-134)

**DEPARTMENT FUNDED AGREEMENT
BETWEEN
FLORIDA'S TURNPIKE ENTERPRISE AND
THE CENTRAL FLORIDA EXPRESSWAY AUTHORITY
FOR IMPROVEMENTS TO
THE CENTRAL FLORIDA GREENEWAY (S.R. 417)
FROM ECONLOCKHATCHEE TRAIL TO THE SEMINOLE COUNTY LINE
CFX PROJECT NO. 417-134, CFX CONTRACT NO. 001153**

This Agreement is made and entered into by and between **THE STATE OF FLORIDA, DEPARTMENT OF TRANSPORTATION, FLORIDA'S TURNPIKE ENTERPRISE**, an executive agency of the State of Florida having a business address located at Florida's Turnpike Headquarters, Turkey Lake Service Plaza, Milepost 263, Florida's Turnpike, Building 5315, P.O. Box 613069, Ocoee, Florida 34761 (hereinafter referred to as "FTE" and sometimes referred to as "Department"), its successors and assigns, and the **CENTRAL FLORIDA EXPRESSWAY AUTHORITY**, an agency of the State of Florida, with a business address of 4974 ORL Tower Road, Orlando, Florida 32807 (hereinafter referred to as the "CFX").

WITNESSETH:

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WHEREAS, S.R. 417 is a limited access toll road forming the eastern beltway around the city of Orlando, portions of which are owned, operated, and maintained by CFX as part of the Central Florida Expressway System and portions of which are owned, operated and maintained by FTE as part of the Florida Turnpike Enterprise System;

WHEREAS, the northern jurisdictional limit between the Central Florida Expressway Authority System and the Florida Turnpike Enterprise System on S.R. 417 is the Orange/Seminole County Line;

WHEREAS, CFX is currently in the design phase for the widening of S.R. 417 from Econlockhatchee Trail north to the Orange/Seminole County Line, CFX Project No. 417-134 (hereinafter referred to as the "Project");

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CFX is unable to cause Dewberry to resolve the deficiency, the funds retained may be forfeited at the end of the Agreement's term.

- l. Any unused funds remaining at the conclusion/termination of the Agreement will be due to FTE within 180 days of the completion/termination of the project.
- m. If a payment to CFX from FTE is not available within 40 days, a separate interest penalty at a rate as established pursuant to Section 55.03(1), F.S., will be due and payable, in addition to the invoice amount, to CFX. Interest penalties of less than one (1) dollar will not be enforced unless CFX requests payment. Invoices that have to be returned to CFX because of CFX preparation errors will result in a delay in the payment. The invoice payment requirements do not start until a properly completed invoice is provided to the Department. (Section 215.422(3)(b), F.S.).
- n. A Vendor Ombudsman has been established within the Department of Financial Services. The duties of this individual include acting as an advocate for CFX who may be experiencing problems in obtaining timely payment(s) from a state agency. The Vendor Ombudsman may be contacted at (850) 413-5516 or by calling the Division of Consumer Services at 1-877-693-5236. (Section 215.422(5) and (7), F.S.).
- o. Records of costs incurred under the terms of this Agreement shall be maintained and made available upon request to the Department at all times during the period of this Agreement and for three (3) years after final payment is made. Copies of these documents and records shall be furnished to the Department upon request. Records of costs incurred include CFX's general accounting records and the FTE Project records, together with supporting documents and records, of the contractor and all subcontractors performing work on the FTE Project, and all other records of the Contractor and subcontractors considered necessary by the Department for a proper audit of costs. (Section 287.058(4), F.S.).
- p. In the event this contract is for services in excess of \$25,000.00 and a term for a period of more than 1 year, the provisions of Section 339.135(6)(a), F.S., are hereby incorporated:

"The Department, during any fiscal year, shall not expend money, incur any liability, or enter into any contract which, by its terms, involves the expenditure of money in excess of the amounts budgeted as available for expenditure during such fiscal year. Any contract, verbal or written, made in violation of this subsection is null and void, and no money may be paid on such contract. The Department shall require a statement from the Comptroller of the Department that such funds are available prior to entering into any such contract or other binding commitment of funds. Nothing herein contained shall prevent the making of contracts for periods exceeding 1 year, but any contract so made shall be executory only for the value of the services to be rendered or agreed to be paid for in succeeding fiscal years; and this paragraph shall be incorporated verbatim in all contracts of the Department

which are for an amount in excess of \$25,000.00 and which have a term for a period of more than 1 year."

- q. The Department's obligation to pay is contingent upon an annual appropriation by the Florida Legislature. (Section 216.311, F.S.).

7. CFX and its contractor Dewberry shall:

- a. Utilize the U.S. Department of Homeland Security's E-Verify system to verify the employment eligibility of all new employees hired by the CFX during the term of this Agreement; and
- b. Expressly require any contractors and subcontractors performing work or providing services pursuant to this Agreement to likewise utilize the U.S. Department of Homeland Security's E-Verify system to verify the employment eligibility of all new employees hired by the subcontractor during the contract term.

(Executive Order Number 11-116).

- 8. CFX shall cause Dewberry to add FTE as an additional insured under the Commercial General Liability coverage and Business Automobile Liability Coverage insurance policies provided for in sections 16.1 and 16.2 of the "Scope of Work" in CFX Contract No. 001153, attached as Exhibit "A," as provided by law. The insurance shall remain in effect until acceptance of the design work by FTE. Prior to commencement of the FTE Project and on such other occasions as either party may reasonably require, CFX shall provide FTE with certificates documenting that the required insurance coverage with Dewberry is in place and effective.
- 9. To the extent that there are design professional services subject to Section 725.08, Florida Statutes, and notwithstanding the provisions of Section 725.06, Florida Statutes, CFX shall cause Dewberry, through the execution of the Supplemental Agreement, to indemnify and hold harmless FTE and CFX, and their officers and employees, from liability, damages, losses, and costs, including, but not limited to, reasonable attorneys' fees, to the extent caused by the negligence, recklessness, or intentionally wrongful conduct of Dewberry and other persons employed or utilized by Dewberry in the performance of this Agreement. Nothing herein shall be construed to extend the limits of liability of CFX beyond that provided in Section 768.28, Florida Statutes. Nothing herein is intended as a waiver of CFX's sovereign immunity under Section 768.28, Florida Statutes. Nothing hereby shall inure to the benefit of any third party for any purpose, which might allow claims otherwise barred by sovereign immunity or operation of law. The parties shall notify each other in writing immediately upon becoming aware of such liabilities. The indemnities given by Dewberry in connection with the FTE Project shall survive termination of this Agreement. The insurance coverage and limits required in this Agreement may or may not be adequate to protect the FTE and such insurance coverage shall not be deemed a limitation of the indemnities to the FTE set forth in this Agreement. The provisions of this paragraph shall survive the expiration or earlier termination of this Agreement, in accordance with the laws

of the State of Florida. Furthermore, all of CFX's obligations under this Agreement are limited to the payment of no more than the amount limitation per person and in the aggregate contained in Section 768.28, Florida Statutes, even if the sovereign immunity limitations of that statute are not otherwise applicable to the matters as set forth herein.

10. **Notices; Service of Process.** All notices, requests, certificates, or other communications shall be sufficiently given and shall be deemed given when hand-delivered, mailed by registered or certified mail postage prepaid, return receipt required or overnight courier service with guaranteed next day delivery to the parties at the following addresses:

To FTE:

Executive Director & Chief Executive Officer
Florida's Turnpike Enterprise
Turnpike Headquarters -Bldg. 5315
P.O. Box 613069
Ocoee, FL 34761-3069

With Copy to:

Turnpike Chief Counsel
Turnpike Headquarters -Bldg. 5315
P.O. Box 613069
Ocoee, FL 34761-3069

To CFX:

Executive Director
Central Florida Expressway Authority
4974 ORL Tower Road
Orlando, Florida 32807

With Copy to:

General Counsel
Central Florida Expressway Authority
4794 ORL Tower Road
Orlando, FL 32807

Either of the above parties may, by notice in writing given to the other, alter the address to which communications or copies are to be sent by giving notice of such change of address in conformity with the provisions of this Section for the giving of notice.

11. **Sovereign Immunity.** Nothing in this Agreement shall be deemed or otherwise interpreted as waiving the parties' respective sovereign immunity protections, or as increasing the limits of liability as set forth in Section 768.28, Florida Statutes.

12. **Entire Agreement.** This Agreement, including the exhibits to this Agreement, contain the sole and entire agreement between the parties with respect to their subject matter and supersede any and all other prior written or oral agreements between them with respect to such subject matter.
13. **Jurisdiction and Venue.** This Agreement is accepted and entered into in Florida and any question regarding its validity, construction, enforcement, or performance shall be governed by Florida law. Venue for any and all actions arising out of or in any way related to the interpretation, validity, performance or breach of this Agreement shall lie within a Florida circuit court having jurisdiction over the parties.
14. **Severability.** In the event any provision of this Agreement shall be held invalid or unenforceable by any court of competent jurisdiction, such holding shall not invalidate or render unenforceable any other provision hereof.
15. **Counterparts.** This Agreement may be simultaneously executed in several counterparts, each of which shall be an original and all of which shall constitute but one and the same instrument.
16. **Public Records Law.** The parties shall allow public access to all public records made or received in conjunction with this Agreement and the performance thereof, in accordance with the provisions of Chapter 119, Florida Statutes.
17. **Modifications, Amendments, or Alterations.** No modification, amendment, or alteration in the terms or conditions contained herein shall be effective unless contained in a written document executed with the same formality and of equal dignity herewith.
18. **Waiver.** The failure of either party to insist on one or more occasions on the strict performance or compliance with any term or provision of this Agreement shall not be deemed a waiver or relinquished in the future of the enforcement thereof, and it shall continue in full force and effect unless waived or relinquished in writing by the party seeking to enforce the same. A modification or waiver of any of the provisions of this Agreement shall be effective only if made in writing and executed with the same formality as this Agreement.
19. **Assignment.** This Agreement may not be assigned without the written consent of the parties.
20. **Binding Effect.** This Agreement shall be binding upon and inure to the benefit of the parties hereto and their respective successors and assigns. Nothing in this Agreement is intended to confer any rights, privileges, benefits, obligations or remedies upon any other person or entity except as expressly provided for herein.
21. **No Contingent Fees.** The parties warrant that they have not employed or obtained any company or person, other than their respective bona fide employees to solicit or to secure this Agreement and that they have not paid or agreed to pay any company, corporation, individual or firm, other than bona fide employees to solicit or secure this Agreement. For the breach or violation of this provision, CFX shall have the right to terminate the Agreement without liability at its discretion.

22. **Effective Date.** This Agreement shall become effective when all parties have signed it. The date this Agreement is signed by the last party to sign it (as indicated by the date stated under that party's signature) shall be deemed the effective date of this Agreement.

IN WITNESS WHEREOF, FTE and CFX have caused these present to be executed this Agreement for the purposes herein expressed on the dates indicated below. This Agreement was approved by the CFX's Board of Directors at its meeting on _____, 2017.

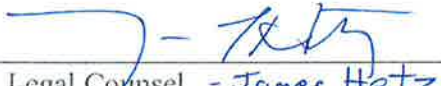
**STATE OF FLORIDA
DEPARTMENT OF TRANSPORTATION**

BY: 
Executive Director & Chief Executive Officer
Florida's Turnpike Enterprise

DATE: 04/06/2017

ATTEST: 
Executive Secretary

Legal Review:

BY: 
Legal Counsel - James Hetz

CENTRAL FLORIDA EXPRESSWAY AUTHORITY

BY: _____
Executive Director

Date: _____

ATTEST: _____
Executive Secretary

Legal Review:

BY: _____
General Counsel

Exhibits: A. Contract No. 001153 and B. Scope of Services for the FTE Project

EXHIBIT A

Contract with Dewberry Engineers, Inc.

CFX Contract No. 001153

AGREEMENT

**CENTRAL FLORIDA EXPRESSWAY AUTHORITY
AND
DEWBERRY ENGINEERS, INC.**

**S.R. 417 WIDENING FROM ECONLOCKHATCHEE TRAIL
TO SEMINOLE COUNTY LINE**

CONTRACT NO. 001153, PROJECT NO. 417-134

**CONTRACT DATE: June 22, 2016
CONTRACT AMOUNT: \$2,575,000.00**

CENTRAL FLORIDA EXPRESSWAY AUTHORITY

**AGREEMENT, SCOPE OF SERVICES, METHOD
OF COMPENSATION, DETAILS OF COSTS AND
FEES, PROJECT ORGANIZATIONAL CHART,
PROJECT LOCATION MAP, AND SCHEDULE**

TABLE OF CONTENTS

<u>Section</u>	<u>Title</u>
AG	Agreement
A	Exhibit "A", Scope of Services
B	Exhibit "B", Method of Compensation
C	Exhibit "C", Details of Cost and Fees
D	Exhibit "D", Project Organization Chart
E	Exhibit "E", Project Location Map
F	Exhibit "F", Schedule

**CENTRAL FLORIDA EXPRESSWAY AUTHORITY
AGREEMENT FOR PROFESSIONAL SERVICES**

THIS AGREEMENT, made and entered into this 16th day of June, 2016, by and between the CENTRAL FLORIDA EXPRESSWAY AUTHORITY, a corporate body and agency of the State of Florida, created by Chapter 63-573 Laws of Florida, 1963, (Chapter 348, Part V, Florida Statutes) hereinafter called "CFX" and DEWBERRY ENGINEERS, INC., hereinafter called "CONSULTANT", carrying on professional practice in engineering with offices located at 800 North Magnolia Avenue, Suite 1000, Orlando, FL. 32803.

That CFX did determine that the CONSULTANT is fully qualified to render the services contracted.

WITNESSETH:

1.0 CFX does hereby retain the CONSULTANT to furnish certain services in connection with the design of the S.R. 417 Widening from Econlockhatchee Trail to Seminole County Line identified as Contract No. 001153.

2.0 The CONSULTANT and CFX mutually agree to furnish, each to the other, the respective services, information and items as described in Exhibit "A", Scope of Services, attached hereto and made a part hereof.

Before any additions or deletions to the work described in Exhibit "A", and before undertaking any changes or revisions to such work, the parties shall negotiate any necessary cost changes and shall enter into a Supplemental Agreement covering such modifications and the compensation to be paid therefore.

Reference herein to this Agreement shall be considered to include any Supplemental Agreement thereto.

Reference herein to Director shall mean CFX's Executive Director.

Reference herein to the Project Manager shall mean CFX's Director of Engineering or his authorized designee. The Project Manager shall provide the management and technical direction for this Agreement on behalf of CFX. All technical and administrative provisions of this Agreement shall be managed by the Project Manager and the CONSULTANT shall comply with all of the directives of the Project Manager that are within the purview of this Agreement. Decisions concerning Agreement amendments and adjustments, such as time extensions and supplemental agreements shall be made by the Project Manager.

This Agreement is considered a non-exclusive Agreement between the parties.

3.0 TERM OF AGREEMENT AND RENEWALS

Unless otherwise provided herein or by Supplemental Agreement, the provisions of this Agreement will remain in full force and effect for a five-year term from the date of the Notice to Proceed for the required project services as detailed in Exhibit "A". An extension of the five-year term may be approved by CFX at its sole discretion.

The CONSULTANT agrees to commence the scheduled project services to be rendered within ten (10) calendar days from the date specified in the written Notice to Proceed from the Project Manager, which Notice to Proceed will become part of this Agreement. The CONSULTANT shall complete scheduled project services within the timeframe(s) specified in Exhibit "A", or as may be modified by subsequent Supplemental Agreement.

4.0 PROJECT SCHEDULE

The CONSULTANT agrees to provide Project Schedule progress reports in a format acceptable to CFX and at intervals established by CFX. CFX will be entitled at all times to be advised, at its request, as to the status of work being done by the CONSULTANT and of the details thereof. Coordination shall be maintained by the CONSULTANT with representatives of CFX, or of other agencies interested in the project on behalf of CFX. Either party to the Agreement may request and be granted a conference.

In the event there are delays on the part of CFX as to the approval of any of the materials submitted by the CONSULTANT or if there are delays occasioned by circumstances beyond the control of the CONSULTANT, which delay the scheduled project completion date, CFX may grant to the CONSULTANT by "Letter of Time Extension" an extension of the scheduled project completion date equal to the aforementioned delays. The letter will be for time only and will not include any additional compensation.

It shall be the responsibility of the CONSULTANT to ensure at all times that sufficient time remains within the project schedule within which to complete the services on the project. In the event there have been delays which would affect the scheduled project completion date, the CONSULTANT shall submit a written request to CFX which identifies the reason(s) for the delay, the amount of time related to each reason and specific indication as to whether or not the delays were concurrent with one another. CFX will review the request and make a determination as to granting all or part of the requested extension.

In the event the scheduled project completion date is reached and the CONSULTANT has not requested, or if CFX has denied, an extension of the completion date, partial progress payments will be stopped when the scheduled project completion date is met. No further payment for

the project will be made until a time extension is granted or all work has been completed and accepted by CFX.

5.0 PROFESSIONAL STAFF

The CONSULTANT shall maintain an adequate and competent professional staff to enable the CONSULTANT to timely perform under this Agreement. The CONSULTANT shall continue to be authorized to do business within the State of Florida. In the performance of these professional services, the CONSULTANT shall use that degree of care and skill ordinarily exercised by other similar professionals in the field under similar conditions in similar localities. The CONSULTANT shall use due care in performing in a design capacity and shall have due regard for acceptable standards of design principles. The CONSULTANT may associate with it such specialists, for the purpose of its services hereunder, without additional cost to CFX, other than those costs negotiated within the limits and terms of this Agreement. Should the CONSULTANT desire to utilize specialists, the CONSULTANT shall be fully responsible for satisfactory completion of all subcontracted work. The CONSULTANT, however, shall not sublet, assign or transfer any work under this Agreement to other than the associate consultants listed below without the written consent of CFX. It is understood and agreed that CFX will not, except for such services so designated herein, permit or authorize the CONSULTANT to perform less than the total contract work with other than its own organization.

Comprehensive Engineering Services, Inc. (Class 1)
The Balmoral Group, LLC (Class 1)
Tierra, Inc. (Class 2)
Aerial Cartographics of America, Inc. (Class 2)

CONSULTANT shall not further sublet, sell, transfer, assign, delegate, subcontract, or otherwise dispose of this Contract or any portion thereof, or of the CONSULTANT's right, title, or interest therein without the written consent of CFX, which may be withheld in CFX'S sole and absolute discretion.

Any attempt by CONSULTANT to dispose of this Contract as described above, in part or in whole, without CFX'S written consent shall be null and void and shall, at CFX's option, constitute a default under the Contract.

If, during the term of the Contract, CONSULTANT desires to subcontract any portion(s) of the work to a subconsultant that was not disclosed by the CONSULTANT to CFX at the time that the Contract was originally awarded, and such subcontract would, standing alone or aggregated with prior subcontracts awarded to the proposed subconsultant, equal or exceed twenty five thousand dollars (\$25,000.00), the CONSULTANT shall first submit a request to CFX's Director of Procurement for authorization to enter into such subcontract. Except in the case of an emergency, as determined by the Executive Director or his/her designee, no such subcontract shall be executed by the CONSULTANT until it has been approved by CFX Board. In the event of a designated emergency, the CONSULTANT may enter into such a subcontract with the prior written approval of the Executive Director or his/her designee, but such subcontract shall contain a provision that provides that it shall be automatically terminated if not approved by CFX Board at its next regularly scheduled meeting.

6.0 SERVICES TO BE PROVIDED

The work covered by this Agreement includes the preparation of construction plans for one construction project. If the work is divided into more than one construction project by CFX's Project Manager, then the CONSULTANT shall supply construction plans for each project. A Supplemental Agreement will be required for the additional work.

All construction plans, documents, reports, studies and other data prepared by the CONSULTANT shall bear the endorsement of a person in the full employ of the CONSULTANT and duly registered by the State of Florida in the appropriate professional category.

After CFX's acceptance of construction plans and documents for the project, the original set of CONSULTANT's drawings, tracings, plans, maps and CADD files shall be provided to CFX, along with one record set of the final plans. The CONSULTANT shall signify, by affixing an endorsement (seal/signature, as appropriate) on every sheet of the record set, that the work shown on the endorsed sheets was produced by the CONSULTANT. With the tracings and the record set of prints, the CONSULTANT shall submit a final set of design computations. The computations shall be bound in an 8-1/2 x 11" format and shall be endorsed (seal/signature, as appropriate) by the CONSULTANT. Refer to Exhibit "A" for the computation data required for this Agreement.

The CONSULTANT shall submit a final set of reports and studies which shall be endorsed (seal/signature) by the CONSULTANT.

The CONSULTANT shall not be liable for use by CFX of said plans, documents, reports, studies or other data for any purpose other than intended by the terms of this Agreement.

7.0 COMPENSATION

CFX agrees to pay the CONSULTANT compensation as detailed in Exhibit "B", Method of Compensation, attached hereto and made a part hereof, in the amount of \$2,575,000.00. Bills for fees or other compensation for services or expenses shall be submitted to CFX in detail sufficient for a proper pre-audit and post audit thereof.

The CONSULTANT may be liable for CFX costs resulting from errors or deficiencies in designs furnished under this Agreement. CFX may enforce such liability and collect the amount due if the recoverable cost will exceed the administrative cost involved or is otherwise in CFX's best interest.

Records of costs incurred by the CONSULTANT under terms of this Agreement shall be maintained and made available upon request to CFX at all times during the period of this

Agreement and for three years after final payment is made. Copies of these documents and records shall be furnished to CFX upon request. The CONSULTANT agrees to incorporate the provisions of this paragraph in any subcontract into which it might enter with reference to the work performed.

Records of costs incurred includes the CONSULTANT's general accounting records and the project records, together with supporting documents and records, of the CONSULTANT and all subconsultants performing work on the project, and all other records of the CONSULTANT and subconsultants considered necessary by CFX for a proper audit of project costs.

The general cost principles and procedures for the negotiation and administration, and the determination or allowance of costs under this Agreement shall be as set forth in the Code of Federal Regulations, Titles 23, 48, 49, and other pertinent Federal and State Regulations, as applicable, with the understanding that there is no conflict between State and Federal regulations in that the more restrictive of the applicable regulations will govern. Whenever travel costs are included in Exhibit "B", the provisions of Section 112.061, Florida Statutes, shall govern as to reimbursable costs.

8.0 DOCUMENT OWNERSHIP AND RECORDS

All plans, documents, reports, studies, and/or other data prepared or obtained under this Agreement shall be considered instruments made for services and shall become the property of CFX without restriction or limitation on their use on this project; and shall be made available, upon request, to CFX at any time. CFX will have the right to visit the site for inspection of the work and the drawings of the CONSULTANT at any time. Unless changed by written agreement of the parties, said site shall be 800 North Magnolia Avenue, Suite 1000, Orlando, FL. 32803.

The CONSULTANT shall allow public access to all documents, papers, letters, or other material as approved and authorized by CFX and subject to the provisions of Chapter 119,

Florida Statutes, and made or received by the CONSULTANT in conjunction with this Agreement. Failure by the CONSULTANT to grant such public access shall be grounds for immediate unilateral cancellation of this Agreement by CFX.

9.0 COMPLIANCE WITH LAWS

The CONSULTANT shall comply with all federal, state and local laws and ordinances applicable to the work or payment for work thereof, and shall not discriminate on the grounds of race, color, religion, sex, or national origin in the performance of work under this contract.

The CONSULTANT shall keep fully informed regarding and shall fully and timely comply with all current laws and future laws that may affect those engaged or employed in the performance of this Agreement.

10.0 WAGE RATES AND TRUTH-IN-NEGOTIATIONS CERTIFICATE

The CONSULTANT hereby certifies, covenants and warrants that wage rates and other factual unit costs as shown in attached Exhibit "C", Details of Costs and Fees, supporting the compensation are accurate, complete and current as of the date of this Agreement. It is further agreed that said price shall be adjusted to exclude any significant sums where CFX shall determine the price was increased due to inaccurate, incomplete or non-current wage rates and other factual unit costs. All such adjustments shall be made within one year following the date of final billing or acceptance of the work by CFX, whichever is later.

11.0 TERMINATION

CFX may terminate this Agreement in whole or in part at any time the interest of CFX requires such termination.

If CFX determines that the performance of the CONSULTANT is not satisfactory, CFX shall have the option of (a) immediately terminating the Agreement or (b) notifying the

CONSULTANT of the deficiency with a requirement that the deficiency be corrected within a specified time, otherwise the Agreement will be terminated at the end of such time.

If CFX requires termination of the Agreement for reasons other than unsatisfactory performance of the CONSULTANT, CFX shall notify the CONSULTANT in writing of such termination, not less than seven (7) calendar days as to the effective date of termination or specify the stage of work at which the Agreement is to be terminated.

If CFX abandons the work or subtracts from the work, suspends, or terminates the Agreement as presently outlined, the CONSULTANT shall be compensated on the basis of the percentage completion ratio of the fixed fee shown in attached Exhibit "B", plus actual costs as determined in Exhibit "B". In determining the percentage of work completed, CFX shall consider the work performed by the CONSULTANT prior to abandonment or termination to the total amount of work contemplated by this Agreement. The ownership of all engineering documents completed or partially completed at the time of such termination or abandonment, shall be retained by CFX.

CFX reserves the right to cancel and terminate this Agreement in the event the CONSULTANT or any employee, servant, or agent of the CONSULTANT is indicted or has a direct information issued against him for any crime arising out of or in conjunction with any work being performed by the CONSULTANT for or on behalf of CFX, without penalty. It is understood and agreed that in the event of such termination, all tracings, plans, specifications, maps, and data prepared or obtained under this Agreement shall immediately be turned over to CFX. The CONSULTANT shall be compensated for its services rendered up to the time of any such termination in accordance with Paragraph 11.0 hereof. CFX also reserves the right to terminate or cancel this Agreement in the event the CONSULTANT shall be placed in either voluntary or involuntary bankruptcy or an assignment be made for the benefit of creditors. CFX further reserves the right to

suspend the qualifications of the CONSULTANT to do business with CFX upon any such indictment or direct information. In the event that any such person against whom any such indictment or direct information is brought shall have such indictment or direct information dismissed or be found not guilty, such suspension on account thereof may be lifted by CFX's Project Manager.

12.0 ADJUSTMENTS

All services shall be performed by the CONSULTANT to the reasonable satisfaction of the Project Manager who shall decide all questions, difficulties and dispute of any nature whatsoever that may arise under or by reason of this Agreement, the prosecution and fulfillment of the services hereunder and the character, quality, amount and value thereof. Adjustments of compensation and term of the Agreement, because of any major changes in the work that may become necessary or desirable as the work progresses, shall be left to the absolute discretion of the Director and Supplemental Agreement(s) of such a nature as required may be entered into by the parties in accordance herewith. Disputes between the Project Manager and the CONSULTANT that cannot be resolved shall be referred to the Director whose decision shall be final.

In the event that the CONSULTANT and CFX are not able to reach an agreement as to the amount of compensation to be paid to the CONSULTANT for supplemental work desired by CFX, the CONSULTANT shall be obligated to proceed with the supplemental work in a timely manner for the amount determined by CFX to be reasonable. In such event, the CONSULTANT will have the right to file a claim with CFX for such additional amounts as the CONSULTANT deems reasonable; however, in no event will the filing of the claim or the resolution or litigation thereof, through administrative procedures or the courts, relieve the CONSULTANT from the obligation to timely perform the supplemental work.

13.0 CONTRACT LANGUAGE AND INTERPRETATION

All words used herein in the singular form shall extend to and include the plural. All words used in the plural form shall extend to and include the singular. All words used in any gender shall extend to and include all genders.

References to statutes or regulations shall include all statutory or regulatory provisions consolidating, amending, or replacing the statute or regulation referred to. Words not otherwise defined that have well known technical or industry meanings, are used in accordance with such recognized meanings. References to persons include their respective functions and capacities.

If the CONSULTANT discovers any material discrepancy, deficiency, ambiguity, error, or omission in this Agreement, or is otherwise in doubt as to the meaning of any provision of the Agreement, the CONSULTANT shall immediately notify CFX and request clarification of CFX's interpretation of this Agreement.

The Agreement shall not be more strictly construed against either party hereto by reason of the fact that one party may have drafted or prepared any or all of the terms and provisions hereof.

14.0 HOLD HARMLESS AND INDEMNIFICATION

The CONSULTANT shall indemnify and hold harmless CFX and all of its officers and employees from any liabilities, losses, damages, costs, including, but not limited to reasonable attorneys' fee, arising out of any negligent act, error, omission by the CONSULTANT, its agents, employees, or subcontractors during the performance of the Agreement, except that neither the CONSULTANT, its agents, employees nor any of its subconsultants will be liable under this paragraph for any claim, loss, damage, cost, charge or expense arising solely out of any act, error, omission or negligent act by CFX or any of its officers, agents or employees during the performance of the Agreement.

When CFX receives a notice of claim for damages that may have been caused by the CONSULTANT in the performance of services required by the CONSULTANT under this Agreement, CFX will immediately forward the notice of claim to the CONSULTANT. The CONSULTANT and CFX will evaluate the notice of claim and report their findings to each other within fourteen working days.

In the event a lawsuit is filed against CFX alleging negligence or wrongdoing by the CONSULTANT, CFX and the CONSULTANT will jointly discuss options in defending the lawsuit. After reviewing the lawsuit, CFX will determine whether to request the participation of the CONSULTANT in the defense of the lawsuit or to request that the CONSULTANT defend CFX in such lawsuit as described in this section. CFX's failure to notify the CONSULTANT of a notice of claim will not release the CONSULTANT from any of the requirements of this section upon subsequent notification by CFX to the CONSULTANT of the notice of claim or filing of a lawsuit. CFX and the CONSULTANT will pay their own cost for the evaluation, settlement negotiations and trial, if any. However, if only one party participates in the defense of the claim at trial, that party is responsible for all of its costs, but if the verdict determines that there is joint responsibility, the costs of defense and liability for damages will be shared in the same percentage as that judicially established. Nothing herein shall be construed to waive the sovereign immunity damages limitations afforded CFX pursuant to F.S. 768.28.

The parties agree that 1% of the total compensation to the CONSULTANT for performance of this Agreement is the specific consideration from CFX to the CONSULTANT for the CONSULTANT's indemnity agreement.

The CONSULTANT shall pay all royalties and assume all costs arising from the use of any invention, design, process materials, equipment, product or device which is the subject of

patent rights or copyrights. The CONSULTANT shall, at its expense, hold harmless and defend CFX against any claim, suit or proceeding brought against CFX which is based upon a claim, whether rightful or otherwise, that the goods or services, or any part thereof, furnished under this Agreement, constitute an infringement of any patent or copyright of the United States. The CONSULTANT shall pay all damages and costs awarded against CFX.

15.0 THIRD PARTY BENEFICIARY

The CONSULTANT warrants that it has not employed or retained any company or person, other than a bona fide employee working solely for the CONSULTANT to solicit or secure this Agreement, and that the CONSULTANT has not paid or agreed to pay any person, company, corporation, individual or firm any fee, commission, percentage, gift or any other consideration, contingent upon or resulting from the award or making of this Agreement. It is understood and agreed that the term "fee" shall also include brokerage fee, however denoted. For the breach or violation of this paragraph, CFX shall have the right to terminate this Agreement without liability, and, at its discretion, to deduct from the contract price, or otherwise recover, the full amount of such fee, commission percentage, gift or consideration.

16.0 INSURANCE

The CONSULTANT, at its own expense, shall keep in force and at all times maintain during the term of this Agreement all insurance of the types and to the limits specified herein.

The CONSULTANT shall require and ensure that each of its subconsultants providing services hereunder procures and maintains, until the completion of the services, insurance of the requirements, types and to the limits specified herein. Upon request from CFX, the CONSULTANT shall furnish copies of certificates of insurance evidencing coverage of each subconsultant.

The CONSULTANT shall require all insurance policies in any way related to the work

and secured and maintained by the CONSULTANT to include clauses stating each underwriter shall waive all rights of recovery, under subrogation or otherwise, against CFX. The CONSULTANT shall require of subconsultants, by appropriate written agreements, similar waivers each in favor of all parties enumerated in this section. When required by the insurer, or should a policy condition not permit an endorsement, the CONSULTANT agrees to notify the insurer and request that the policy(ies) be endorsed with a Waiver of Transfer of Rights of Recovery Against Others, or an equivalent endorsement. This Waiver of Subrogation requirement shall not apply to any policy, which includes a condition that specifically prohibits such an endorsement or voids coverage should the CONSULTANT enter into such an agreement on a pre-loss basis. At the CONSULTANT's expense, all limits must be maintained.

16.1 Commercial General Liability coverage shall be on an occurrence form policy for all operations including, but not limited to, Contractual, Products and Completed Operations, and Personal Injury. The limits shall be not less than One Million Dollars (\$1,000,000) per occurrence, Combined Single Limits (CSL) or its equivalent. The general aggregate limit shall apply separately to this Agreement (with the ISO CG 25 01 or insurer's equivalent endorsement provided to CFX) or the general aggregate limit shall be twice the required occurrence limit. CFX shall be listed as an additional insured. The CONSULTANT further agrees coverage shall not contain any endorsement(s) excluding or limiting Product/Completed Operations, Independent Consultants, Broad Form Property Damage, X-C-U Coverage, Contractual Liability, or Severability of Interests. The Additional Insured Endorsement included on all such insurance policies shall state that coverage is afforded the additional insured with respect to claims arising out of operations performed by or on behalf of the insured. If the additional insureds have other insurance which is applicable to the loss, such other insurance shall be excess to any policy of insurance required herein. The amount of the

insurer's liability shall not be reduced by the existence of such other insurance.

16.2 Business Automobile Liability coverage shall be on an occurrence form policy for all owned, non-owned and hired vehicles issued on ISO form CA 00 01 or its equivalent. The limits shall be not less than One Million Dollars (\$1,000,000) per occurrence, Combined Single Limits (CSL) or its equivalent. In the event the CONSULTANT does not own automobiles the CONSULTANT shall maintain coverage for hired and non-owned auto liability, which may be satisfied by way of endorsement to the Commercial General Liability policy or separate Business Auto Liability policy.

Each of the above insurance policies shall include the following provisions: (1) The standard severability of interest clause in the policy and when applicable the cross liability insurance coverage provision which specifies that the inclusion of more than one insured shall not operate to impair the rights of one insured against another insured, and the coverages afforded shall apply as though separate policies had been issued to each insured; (2) The stated limits of liability coverage for Commercial/Comprehensive General Liability, and Business Automobile Liability, assumes that the standard "supplementary payments" clause will pay in addition to the applicable limits of liability and that these supplementary payments are not included as part of the insurance policies limits of liability.

16.3 Workers' Compensation and Employer's Liability Insurance shall be provided as required by law or regulation (statutory requirements). Employer's Liability insurance shall be provided in amounts not less than \$100,000 per accident for bodily injury by accident, \$100,000 per employee for bodily injury by disease, and \$500,000 policy limit by disease. The Workers' Compensation policy shall be endorsed with a waiver of subrogation in favor of CFX for all work performed by the CONSULTANT, its employees, agents and subconsultants.

16.4 Professional Liability Coverage shall have limits of not less than One Million Dollars (\$1,000,000) Combined Single Limit (CSL) or its equivalent, protecting the selected firm or individual against claims of CFX for negligence, errors, mistakes or omissions in the performance of services to be performed and furnished by the CONSULTANT.

The CONSULTANT shall provide CFX with Certificate(s) of Insurance with required endorsements on all the policies of insurance and renewals thereof in a form(s) acceptable to CFX. CFX shall be notified in writing of any reduction, cancellation or substantial change of policy or policies at least thirty (30) days prior to the effective date of said action.

All insurance policies shall be issued by responsible companies who are acceptable to CFX and licensed to do business under the laws of the State of Florida. Each Insurance company shall minimally have an A.M. Best rating of A-:VII. If requested by CFX, CFX shall have the right to examine copies and relevant provisions of the insurance policies required by this Agreement, subject to the appropriate confidentiality provisions to safeguard the proprietary nature of CONSULTANT manuscript policies.

Any deductible or self-insured retention must be declared to and approved by CFX. At the option of CFX, either the insurer shall reduce or eliminate such deductibles or self-insured retentions as requests CFX, or the CONSULTANT shall procure a bond guaranteeing payment of losses and related investigations, claim administration and defense expenses.

All such insurance required by the CONSULTANT shall be primary to, and not contribute with, any insurance or self-insurance maintained by CFX.

Compliance with these insurance requirements shall not relieve or limit the CONSULTANT's liabilities and obligations under this Agreement. Failure of CFX to demand such certificate or evidence of full compliance with these insurance requirements or failure of CFX to

identify a deficiency from evidence provided will not be construed as a waiver of the CONSULTANT's obligation to maintain such insurance.

The acceptance of delivery by CFX of any certificate of insurance evidencing the required coverage and limits does not constitute approval or agreement by CFX that the insurance requirements have been met or the insurance policies shown in the certificates of insurance are in compliance with the requirements.

17.0 COMMUNICATIONS, PUBLIC RELATIONS, AND USE OF LOGOS

The CONSULTANT agrees that it shall make no statements, press releases or publicity releases concerning this Agreement or its subject matter or otherwise disclose or permit to be disclosed any of the data or other information obtained or furnished in compliance with this Agreement, or any particulars thereof, during the period of the Agreement, without first notifying CFX and securing its consent in writing. The CONSULTANT also agrees that it shall not publish, copyright or patent any of the data furnished in compliance with this Agreement, it being understood that, under Paragraph 8.00 hereof, such data or information is the property of CFX.

Regarding the use of logos, printed documents and presentations produced for CFX shall not contain the name of logo of the CONSULTANT unless approved by CFX's Director of Public Affairs and Communication or his/her designee. If a copy of the CFX logo is to be used in a document or presentation, the logo shall not be altered in any way. The width and height of the logo shall be of equal proportions. The proper presentation of the CFX logo is of utmost importance to CFX. Any questions regarding the use of the CFX logo shall be directed to the Director of Public Affairs and Communication or his/her designee.

18.0 STANDARD OF CONDUCT

The CONSULTANT covenants and agrees that it and its employees shall be bound by the standards of conduct provided in Florida Statutes 112.313 as it relates to work performed under this Agreement, which standards will by reference be made a part of this Agreement as though set forth in full. The CONSULTANT agrees to incorporate the provisions of this paragraph in any subcontract into which it might enter with reference to the work performed.

The CONSULTANT acknowledges that it has read CFX's Code of Ethics and to the extent applicable to the CONSULTANT agrees to abide with such policy.

19.0 DOCUMENTED ALIENS

The CONSULTANT warrants that all persons performing work for CFX under this Agreement, regardless of the nature or duration of such work, shall be United States citizens or properly authorized and documented aliens. The CONSULTANT shall comply with all federal, state and local laws and regulations pertaining to the employment of unauthorized or undocumented aliens at all times during the performance of this Agreement and shall indemnify and hold CFX harmless for any violations of the same. Furthermore, if CFX determines that CONSULTANT has knowingly employed any unauthorized alien in the performance of this Agreement, CFX may immediately and unilaterally terminate this Agreement for cause.

20.0 CONFLICT OF INTEREST

The CONSULTANT shall not knowingly enter into any other contract with CFX during the term of this Agreement which would create or involve a conflict of interest with the services provided herein. Likewise, subconsultants shall not knowingly enter into any other contract with CFX during the term of this Agreement which would create or involve a conflict of interest with the service provided herein and as described below. Questions regarding potential conflicts of interest shall be addressed to the Director for resolution. During the term of this Agreement, the

CONSULTANT is not eligible to pursue any advertised construction engineering and inspection projects of CFX as either a prime or subconsultant where the CONSULTANT participated in the oversight of the projects or for any project which the CONSULTANT prepared plans and/or specifications. Subconsultants are also ineligible to pursue construction engineering and inspection projects where they participated in the oversight of the projects or for any project which the subconsultant was involved in the preparation of plans and/or specifications.

21.0 SEVERABILITY

The invalidity or non-enforceability of any portion or provision of this Agreement shall not affect the validity or enforceability of any other portion or provision. Any invalid or unenforceable portion or provision shall be deemed severed from this Agreement and the balance hereof shall be construed and enforced as if this Agreement did not contain such invalid or unenforceable portion or provision.

22.0 GOVERNING LAW AND VENUE

This Agreement is accepted and entered into in Florida and any question regarding its validity, construction, enforcement, or performance shall be governed by Florida law. The parties consent to the exclusive jurisdiction of the courts located in Orange County, Florida.

23.00 ATTACHMENTS

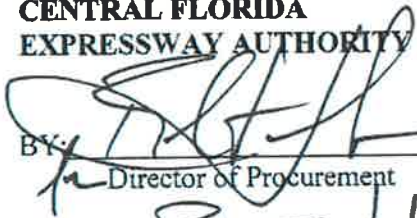
- Exhibit "A", Scope of Services
- Exhibit "B", Method of Compensation
- Exhibit "C", Details of Cost and Fees
- Exhibit "D", Project Organization Chart
- Exhibit "E", Project Location Map
- Exhibit "F", Schedule

IN WITNESS WHEREOF, the CONSULTANT and CFX have caused this instrument to be signed by their respective duly authorized officials, as of the day and year first above written. This Contract was awarded by CFX's Board of Directors at its meeting on June 16th, 2016.

DEWBERRY ENGINEERS, INC.

BY: 
Authorized Signature
Print Name: Kevin E. Knudson
Title: Vice President

CENTRAL FLORIDA EXPRESSWAY AUTHORITY

BY:  7/22/16
Director of Procurement
Print Name: Robert Johnson

ATTEST: Ruby A. Magee (Seal)
Secretary or Notary



Approved as to form and execution, only.

General Counsel for CFX



EXHIBIT A

SCOPE OF SERVICES

Exhibit A

CENTRAL FLORIDA EXPRESSWAY AUTHORITY

SCOPE OF SERVICES

FOR

**S.R. 417 WIDENING
ECONLOCKHATCHEE TRAIL TO THE
ORANGE / SEMINOLE COUNTY LINE**

PROJECT NO. 417-134

IN ORANGE COUNTY, FLORIDA

JUNE, 2016

Exhibit A

SCOPE OF SERVICES

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1.0 GENERAL

1.01 Location

- A. See EXHIBIT "E", Project Location Map.

1.02 Description

The services to be provided for the project shall include final design and preparation of construction drawings/specifications to provide six (6) general use lanes on S.R. 417 between Econlockhatchee Trail and the Orange/Seminole County line. Specifically, the project will include outside widening of S.R. 417 between Econlockhatchee Trail and the University Mainline Plaza, outside/median widening of S.R. 417 from the University Mainline Plaza to the Orange/Seminole County line, conversion of the S.R. 417 northbound and southbound inside cash lanes to express lanes and widening of the southbound S.R. 417 Bridge over University Boulevard. The project will also include the addition of one (1) northbound auxiliary lane and one (1) southbound auxiliary lane between the S.R. 50 / Colonial Drive ramps and the University Mainline Plaza and the addition of one (1) northbound auxiliary lane between the University Boulevard ramp and the S.R. 417 Aloma Avenue ramps.

Additional elements include surveying, drainage evaluation and design, permitting, lighting, signing and pavement markings, maintenance of traffic, traffic operations modeling, utility design and coordination, geotechnical analysis, walls, scheduling and project control, progress reporting and any other incidental items necessary for the proposed design of the project.

1.03 Purpose

- A. The purpose of this Exhibit is to describe the scope of work and responsibilities required in connection with Final Engineering and Final Construction Drawings and Documents for the proposed S.R. 417 Widening from Econlockhatchee Trail to the Orange/Seminole County line.
- B. The Consultant shall perform those engineering services required for final roadway plans, final bridge plans, and the preparation of a complete environmental resource application including 100% storm water management, final lighting plans, final traffic control plans, final utility relocation plans, final toll plaza plans, final fiber optic network plans and final signing and pavement marking plans.
- C. The Authority's Project Manager will provide contract administration, management services and technical reviews of all work associated with the preliminary and final designs.

- D. It is understood that references throughout this document to items of work and services to be performed are the responsibility of the Consultant unless otherwise expressly stated as the responsibility of others.

1.04 Organization

- A. The Authority's Project Manager will administer the Consultant services detailed in this scope. The following sections define the duties and obligations of the Authority and the Consultant.

1.05 Term of Agreement for Design Services

- A. The term of the Agreement to perform the required design services shall be 12 months from notice to proceed, including all reviews.
- B. The Consultant may continue the design efforts while design submittals are being reviewed. Doing so, however, in no way relieves the Consultant of the responsibility to incorporate review comments into the design, nor does it entitle the Consultant to any additional design fees as a result of making changes due to review comments.

- 1. Project Milestones:

- The Consultant will prepare a tabulation of major project milestones.

- 2. Project Schedule:

- The Consultant shall include a schedule of major design tasks.

2.0 STANDARDS

A. The applicable design and construction standards and policies of the Florida Department of Transportation, Federal Highway Administration (FHWA), American Association of State Highway and Transportation Officials (AASHTO), Transportation Research Board (TRB), Standard Building Code, the Authority's Design Practices and Standard Notes and the Authority's Guidelines for Preparation of Signing and Pavement Marking Plans shall be followed throughout the design and construction of the project unless specifically stated otherwise. The editions of the applicable standards and policies in effect at the time of Contract execution shall be used except as follows:

1. Division II, Construction Details, and Division III, Materials, of the FDOT Standard Specifications for Road and Bridge Construction, 2015 edition, and updates, shall be used for this project.
2. The FDOT Design Standards (Index Drawings), latest edition and subsequent interim indexes and updates, shall be used for this project.
3. The FDOT Plans Preparation Manual, latest edition, shall be used for this project.
4. The FDOT Basis of Estimates Handbook, latest edition, shall be used for this project.
5. The AASHTO Policy on Geometric Design of Highway and Streets (Green Book), 2004 edition, shall be used for this project.
6. The FHWA Manual on Uniform Traffic Control Devices (MUTCD), 2009 edition, as amended, shall be used for this project.
7. The CFX ITS Design Standard Details for Design, Construction, Maintenance and Utility Operations on the State Highway System, April 2015, shall be used for this project.

3.0 DESIGN CRITERIA

3.01 General

Design of this project will be guided by the basic design criteria listed below.

- A. The design criteria listed in this section and Project Design Directives, provided by the Authority during the course of the project, may supplement the Project Design Guidelines.
- B. Design year – 2038
- C. Design vehicle – WB-62FL

3.02 Geometry

The following criteria are to be incorporated into the design:

DESIGN ELEMENT	EXPRESSWAY		CROSSROADS/ COLLECTORS
	MAINLINE	RAMPS	
<u>Design Speed, MPH</u>	70 mph	30 mph (Loop) 50 mph (Diamond) 50 mph (Directional)	30 Local 45 Urban 50 Rural
<u>Horizontal Alignment</u>			
a. Max. Curve, Degrees	3° 30'	24° 45' Loop 8° 15' Diamond 8° 15' Directional	20°
b. Max. Superelevation, ft/ft.	0.10	0.10	0.05 Urban 0.10 Rural
c. Lane Drop Tapers	70:1	50:1	
d. Transitions	Use spirals for curves > 1° 30'	Use spirals for curves > 1° 30'	Use spirals for curves > 1° 30'
<u>Vertical Alignment</u>			
a. Max. Grade	3%	5% to 7% (30 mph) 3% to 5% (50 mph)	5% Arterial Rural 7% Collector Rural
b. Vertical Curvature (K) (K=Len./%grade change)			
Crest	506 FDOT 290 to 540 AASHTO	31 (30 mph) 136 (50 mph) 110 to 160 Other (AASHTO)	31 to 136
Sag	206 FDOT 150 to 200 AASHTO	31 (30 mph) 136 (50 mph) 90 to 110 Other (AASHTO)	37 to 96
c. Decision Sight Dist., ft.	Refer to AASHTO	N/A	N/A

DESIGN ELEMENT	EXPRESSWAY		CROSSROADS/ COLLECTORS
	MAINLINE	RAMPS	
<u>Cross Sections</u>			
a. Lane Widths, ft.	12	12 dual lanes 15 min. single lane	12 inner lanes 12-16 outer lanes
b. Shoulder width, ft.	<u>4-Lane</u>	<u>Single Lane</u>	
Right	12 (10 paved)	6 (4 paved)	8 (4*paved)
Left	8 (4 paved)	6 (2 paved)	8 (2 paved)
			* min. 5' paved FDOT
	<u>6-Lane</u>	<u>Dual Lane</u>	
Right	12 (10 paved)	10* (8* paved)	
Left	12 (10 paved)	8 (4 paved) (* add 2' for interstate)	
	<u>4-Lane</u>	<u>Single-Lane</u>	
Right	10	6	
Left	6	6	
	<u>6-Lane</u>	<u>Dual Lane</u>	
Right	10	10	
Left	10	6	
c. Cross Slopes			
1. Traffic Lanes	2% (4-lane) 3% or tbd (6-lane)	2%	2%
2. Bridge Lanes	2% typ. (no break)		
3. Left Shoulder	5%	5%	5%
4. Right Shoulder	6%	6%	6%
d. Median Width (4-lane), ft. (E.O.P./E.O.P.)	64' (typical) 26' (with barrier)	N/A	22' or 40'
<u>Horizontal Clearance</u>	PPM 1-2.11	PPM 1-2.11	PPM 1-2.11
<u>Vertical Clearance, ft.</u>			
a. Over Roadway*	16.5	16.5	16.5
b. Overhead Signs	17.5	17.5	17.5
c. Over Railroad	23.5	23.5	N/A

Ramp Operations

- a. Two thousand (2,000) ft. between entrance and exit terminals – full freeways
- b. Six hundred (600) ft. between exit and entrance terminals
- c. Single Lane Entrance Ramp Parallel
- d. Exit Ramp Taper of 550 ft. (3° – divergence)

Right of Way

- a. Ten (10) ft. from back of walls or limit of construction.
- b. Two (2) ft. from back of sidewalk on frontage roads.
- c. Drainage and construction easements as required
- d. Limited access right-of-way limits per Index 450
- e. Right of way limits for ramps is based upon limit of construction plus 10 feet.

3.03 Bridge and Other Structures

- A. All plans and designs shall be prepared in accordance with the latest standard specifications adopted by AASHTO, FDOT Structures Design Guidelines (Manual), FDOT Structures Detailing Manual, FDOT Plans Preparation Manual, FDOT Standard Drawings, FDOT Indices, etc., except as otherwise directed by the Authority.

4.0 WORK PERFORMED BY CONSULTANT

The Consultant shall be responsible for the work outlined in this Section. The work shall conform to the standards, criteria, and requirements of this Scope of Services.

4.01 Design Features

A. The work required for this project includes preparation of final construction drawings and specifications as well as the preparation of a complete environmental resource application.

B. Major elements of the work include the following:

The services to be provided for the project shall include final design and preparation of construction drawings/specifications to provide six (6) general use lanes on S.R. 417 between Econlockhatchee Trail and the Orange/Seminole County line. Specifically, the project will include outside widening of S.R. 417 between Econlockhatchee Trail and the University Mainline Plaza, outside/median widening of S.R. 417 from the University Mainline Plaza to the Orange/Seminole County line, conversion of the S.R. 417 northbound and southbound inside cash lanes to express lanes and widening of the southbound S.R. 417 Bridge over University Boulevard. The project will also include the addition of one (1) northbound auxiliary lane and one (1) southbound auxiliary lane between the S.R. 50 / Colonial Drive ramps and the University Mainline Plaza and the addition of one (1) northbound auxiliary lane between the University Boulevard ramp and the S.R. 417 Aloma Avenue ramps.

Additional elements include surveying, drainage evaluation and design, permitting, lighting, signing and pavement markings, maintenance of traffic, traffic operations modeling, utility design and coordination, geotechnical analysis, walls, scheduling and project control, progress reporting and any other incidental items necessary for the proposed design of the project.

4.02 Governmental Agencies

A. The Consultant shall coordinate with and assist in securing the approval of all interested agencies involved. These agencies may include, but are not necessarily limited to Orange County, City of Orlando, FDOT, Florida's Turnpike and SJRWMD.

4.03 Preliminary Design Report - Review

A. The Consultant shall review the project concept for proposed alternatives with regard to proposed design criteria, maintenance of traffic and construction feasibility.

At the completion of this review, the Consultant shall submit to the

Authority a written list of recommendations and proposed revisions, if any, to the basic layout. A conference will be scheduled by the Authority's Project Manager with the Consultant to resolve any outstanding differences and agree upon a final layout for the project.

4.04 Surveys and Mapping

- A. All Surveying and Mapping shall be performed under the direction of a Surveyor and Mapper properly licensed with the Florida Board of Professional Surveyors and Mappers, under Chapter 472, Florida Statutes. The Consultant shall review data provided by the Authority and provide complete field surveys suitable for contract document preparation.

Survey activities shall be coordinated with the Consultant's design team including roadway, drainage, structures, geotechnical, and other disciplines as required.

Field surveys shall be performed with minimal disruption of the normal traffic flow for the project. Field personnel shall use safety devices such as warning signs, traffic cones, warning lights, and safety vests at all times, according to the Florida Department of Transportation requirements. Advanced warning signs required when survey crews are working on the Authority's system shall be made with 3M Scotchlite Diamond Grade Fluorescent orange roll up sign sheeting.

B. Alignment

1. Establish Survey Centerline by establishing the tangent lines of existing Right of Way maps if such maps exist, or in the center of dedicated Right of Way as per subdivision plats, or in the center of the pavement when no Right of Way map or dedication exists. Set alignment points Begin, End, PC's, PT's, PI's and at maximum 1400-foot intervals along alignment.
2. Establish and set alignment in the same manner on cross roads and major adjacent alignments.
3. Station all alignments at 100' intervals.
4. Meet with Authority's Project Manager to discuss methods for determining alignments prior to staking.

C. Reference Points

1. Set at all alignment points, left and right at 90-degrees to alignment where possible, outside the proposed construction limits.
2. Show obstructions where alternate references are set.

D. Bench Levels

1. The Consultant shall establish new benchmarks at 1000' intervals, along all alignments, using stable points.

E. Topography

1. Planimetric mapping and a digital terrain model (DTM), suitable for 1"=50' display scale shall be conducted by the Consultant.
2. The Consultant will obtain existing pavement elevations and cross-slopes along the inside travel lane and outside travel lane every 100'.
3. Additional topographic and DTM surveys, as needed for the project design, are the responsibility of the Consultant. These may include existing water bodies and pavement elevations.

F. Drainage Survey

Perform a drainage survey including pipe type, location, size and flow line elevations as needed for design.

G. Underground Utilities

Locate all underground utilities, horizontally and vertically as flagged by respective utility companies or a qualified utility marking consultant. Provide soft excavation verifications as needed to verify location and at utility conflict areas.

H. Side Street Surveys

Perform topographic and utility surveys of side streets as needed for engineering design.

I. Bridge Survey

Provide bridge survey data as needed for engineering design.

J. Jurisdictional Line Surveys

Perform Jurisdictional Line Surveys as needed for engineering design and permitting.

K. Geotechnical Surveys

Locate and/or stake boring locations as needed for geotechnical investigations.

L. Right-of-Way Ties

Locate right-of-way limits for construction purposes. No new right-of-way is anticipated.

- M. Prior to construction, the Consultant shall re-flag and reset alignment control points, references and benchmarks and meet with the construction contractor to review these points

4.05 Geotechnical Investigation

- A. The Consultant shall perform a geotechnical investigation of the project in accordance with the requirements of the Authority.
- B. Investigations shall be performed with minimal disruption of the normal traffic flow for the project. Field personnel shall use safety devices such as warning signs, traffic cones, warning lights, and safety vests at all times, according to Authority requirements. The Consultant shall adhere to all traffic control requirements when taking samples on existing roadways. A traffic control plan and permit may be required. Any advanced warning signs required when crews are working on the Authority system shall be made with 3M Scotchlite Diamond Grade Fluorescent orange roll up sign sheeting.
- C. The work includes, but is not limited to, identifying roadway structural section requirements, LBR testing, design methods for the selected foundation, external stability evaluation at proprietary retaining walls, groundwater and estimated seasonal high groundwater level, estimate of the maximum rate of pumping that will be required at sites that dewatering is anticipated, certification of all under drain and pond draw down times, pH and resistivity conditions requiring design considerations, soil shrinkage/swell characteristics, slope stability and benching in embankment/excavation locations, recommendation for methods of rock excavation, potential imported borrow sites and availability of structural section materials, location and depths of unsuitable material (muck), and design alternatives based on geotechnical findings; design values for active, at rest, and passive soil pressures; allowable design loads or pressures for each foundation type, corrosion testing for structures and design of foundations for sign structures.
- D. The results of the geotechnical investigation shall be contained in a Geotechnical Report which shall be submitted to the Authority's Project Manager for approval. The geotechnical investigation shall include all necessary laboratory testing of materials.
- E. Upon approval of the Geotechnical Report, the Consultant shall proceed with preparation of the pavement and foundation designs.

- F. Boring profiles shall be included on cross-section sheets in the contract plans and include the boring number, station, offset, soil legend, observed water table, design high water elevation and geotechnical consultant's address. A boring number and target symbol shall be shown at the appropriate location on the roadway and bridge plans.
- G. Roadway core samples shall be taken to determine the existing pavement section. The Consultant shall submit a plan to the Authority for location approval.

4.06 Contamination Impact Analysis

- A. The Consultant shall consider applicability of a contamination impact analysis of the project in accordance with the applicable rules and regulations of the FDOT Project Development and Environment Guidelines, Chapter 22, the Florida Department of Environmental Protection (FDEP), and all other pertinent State or Federal agencies having jurisdiction, and the requirements of the Authority.
- B. At a minimum, the Consultant shall conduct a windshield survey along the project corridor to identify any new sources of environmental contamination not reported in the referenced document(s).
- C. The testing of any sites including the use of ground penetrating radar, if required to complete the design and/or construction of the project, will be added to the Scope of Services by Supplemental Agreement.

4.07 Pavement Design

- A. The Consultant shall prepare the pavement design as appropriate in accordance with the requirements of the FDOT for mainline and ramps.
- B. The proposed pavement design recommendation, resulting from the Consultant's analysis of the various alternatives, shall be contained in a Pavement Design Summary.

4.08 Borrow Pits

- A. The Consultant's geotechnical investigation may include the investigation of current borrow pits. The location and testing of any new borrow pits if required to complete the construction of the project shall be added to the Scope of Services by Supplemental Agreement. The analysis and test results shall be contained in a separate report submitted not later than the preliminary submittal.

4.09 Governmental Agency and Public Meetings

- A. Except as may be provided elsewhere in this Scope of Services, the Consultant shall have appropriate representatives present at such meetings, conferences or hearings as the Authority may direct to secure necessary approvals and/or support of the project by county, municipal, or other governmental agencies. If so directed, the Consultant shall also have appropriate representatives present at meetings or conferences of the Authority, its Chairman or staff.
- B. The Consultant shall assist the Authority in presentations to various parties. The Consultant shall prepare exhibits pertaining to basic roadway, aesthetic treatments and noise wall elements. This scope assumes presentations at two public meetings with adjacent property owners.

4.10 Environmental Permits

- A. The Authority's Project Manager will review, coordinate and submit the applications for all environmental permits, including EPA's NPDES General Permits for Stormwater Discharges from Construction Sites. The Consultant shall provide all information, permit applications and data relating to Stormwater Management and Floodplain Impacts required for the permits to the Authority. (The Authority will be responsible for preparing all of the Wetlands and Protected Species analysis and documentation required for the permits.) The Consultant shall:
 - 1. Attend the pre-application meetings and site visits with the Authority and regulatory agencies.
 - 2. Provide additional information requested at the pre-application by regulatory agencies for permits.
 - 3. Provide aerial maps at a 1"=400' scale which include SCS soils data, 100-year floodplain limits and proposed project.
 - 4. Provide all plans, calculations, sketches and reports required for permits except as described above.
 - 5. Provide copies of all drainage calculation, including pond routing nodal diagrams, for the project.
 - 6. Assist the Authority in responding to any requests for additional information made by regulatory agencies after the permit application is submitted.
 - 7. Incorporate any changes required by changes in regulatory agency

requirements during the course of the project. If this requires additional work by the Consultant a Supplemental Agreement will be prepared.

8. Prepare a list of adjacent landowners along with address and nine-digit zip code at all wetland encroachment sites.
9. Provide all permit application material in .pdf format and 7 hard copies.
10. The Consultant will provide dredge and fill sketched as required by the permitting agencies if applicable. Mitigation plans, if required, may be added as a supplemental service.
11. Determine extent of floodplain impacts, if any, and provide compensatory flood stages as required.

4.11 Utilities

A. Location

The Consultant shall obtain available utility mapping and information and identify all utilities within the general project limits to determine potential conflicts and relocations. Where a potential conflict exists, the Consultant may need to arrange to probe or expose ("pothole") the utility and survey the horizontal and vertical location of the utility line. The Consultant shall coordinate this effort with involved utility companies. All existing utilities shall be shown on appropriate preliminary construction plans. The Consultant's notes shall include the name and telephone number of contact persons for the construction contractor's use.

B. Utility Coordination

1. The Consultant shall prepare reproducible utility adjustments plans based on information provided by respective utility companies.
2. Private utilities will prepare design plans for the relocation of their facilities. If a utility cannot or will not prepare these design plans, the work shall be added to the scope by Supplemental Agreement and the Consultant shall prepare design plans for utility relocation for approval of the utility and review by the Authority.
3. Where utility conflicts occur which require utility relocation agreements between the affected utility and Authority, the Consultant shall prepare the necessary data/plans required for the agreements. The Consultant shall advise the Authority seven days

in advance of meetings with utility companies/agencies scheduled to discuss utility relocations.

4. The preparation and negotiation of the agreement will be performed by the Authority's Project Manager. After approval of the agreement by the utility and Authority, the Consultant shall prepare reproducible utility adjustment sheets identifying proposed relocations with respect to the construction plans.
5. The Consultant shall prepare a utility conflict matrix to assist in identifying and resolving conflicts between utilities and proposed construction prior to completion of the plans.
6. The Consultant shall obtain utility work schedules from the utility companies.
7. The Consultant shall prepare the Utility Certification Letter certifying that all utility negotiations (full execution of each agreement, approved utility work schedule, technical special provisions written, etc.) have been completed with arrangements made for utility work to be undertaken and completed as required.

4.12 Roadway Design - - -

- A. A Typical Section Package will not be prepared for this project. Rather, typical sections will be prepared as part of the 15% submittal and submitted to the Authority for review and approval.
- B. The Consultant shall design the geometrics for this project using the design standards included in the scope. The design elements shall include, but not be limited to, the horizontal and vertical alignments, cross section template development, lane width, shoulder widths, cross slopes, borders, sight distance, side slopes, lane transitions, superelevations, features of intersections, ramp terminal details, interchanges, and limited access points.
- C. The Consultant shall prepare designs and contract documents for the roadway improvements, including, but not necessarily limited to:
 1. Cover sheet (key sheet)
 2. Summary of Pay Items
 3. General notes
 4. Summary Quantities sheets

5. Project Layout
6. Typical roadway sections
7. Plans and profiles (plans at 1"=50' scale)
8. Interchange plans, profiles, alignment and plan index sheets
9. Interchange layout plans
10. Intersection plans and profiles or spot elevations
11. Interchange curve and coordinate data sheets
12. Ramp Terminal Details
13. Crossroad plans and profiles (1"= 50' scale)
14. Cross-sections (with pattern plan) (1" = 20' horiz.) (1" = 5' vert.)
15. Earthwork quantities
16. Traffic Control Sheets
17. Utility Adjustment Sheets
18. Details
19. Special provisions
20. Special specifications

4.13 Structures Design

- A. Prior to commencement of final design, the consultant shall prepare a Bridge Concept Memorandum which documents a limited range of structural alternatives and identifies preferred alternatives. Specifically, the alternatives to be examined include beam type, wall type / configuration and foundation pile type.
- B. The Consultant shall prepare designs and contract documents for structural design including, but not necessarily limited to the following items.
 1. Complete Bridge designs will be provided for all bridges.
 2. Retaining walls

3. Box Culverts
4. Slope protection
5. Approach slabs
6. Details
7. Summary quantity tables
8. Special provisions and specifications
9. Stage construction-sequencing details (if applicable).
10. Sign\Signal structures.
11. Sound walls.
12. The Consultant shall perform Load Rating Analysis per FDOT criteria for any box culverts and bridges at the 90% design phase. The Load Rating Analysis packages shall be submitted to FDOT for their review and approval.

4.14 Drainage Design

- A. As part of the drainage design requirements, the Consultant shall:
 1. Perform all drainage design in accordance with the approved criteria from Section 3.01C.
 2. Finalize the pond design at the 30% submittal.
 3. Have its chief drainage engineer available at the scheduled (bi-weekly/monthly) team meetings to review progress and discuss problems.
 4. Notify the Authority's Project Manager immediately if any deviation from approved design criteria is anticipated.
 5. Provide drainage/contour maps used in the development of the drainage design to the Authority for use in scheduled reviews. These maps will be returned to the Consultant along with review comments at the end of the review process.
 6. Provide copies of its internal quality control comments and

calculations at the scheduled reviews.

Critical duration analysis is not included in this effort and, if required, shall be added to the scope by Supplemental Agreement. A pond siting report is not required.

- B. The Consultant shall prepare designs and contract documents for drainage features including, but not necessarily limited to:
 - 1. Connector pipes
 - 2. Drainage structure details
 - 3. Storm drain and culvert profiles and/or drainage cross-sections
 - 4. Lateral ditches/channels
 - 5. Outfall ditches/channels
 - 6. Retention/detention ponds/exfiltration system

4.15 Roadway Lighting

- A. The Consultant shall provide a complete set of final roadway lighting documents in accordance with FDOT and Authority design criteria. The work shall include coordination with the local utility to provide electrical service. Plan sheet scale shall be at 1"=50' scale.
- B. The Authority will provide a cut sheet for the type of lighting fixtures to be used for this project.

4.16 Traffic Engineering

- A. Traffic Data will be furnished by the Authority.
- B. Maintenance of Traffic Plans
 - 1. The Consultant shall prepare maintenance of traffic plans at scale of 1"=100' to safely and effectively move vehicular and pedestrian traffic during all phases of construction. The designs shall include construction phasing of roadways ingress and egress to existing property owners and businesses, routing, signing and pavement markings, and detour quantity tabulations. Special consideration shall be given to the construction of the drainage system when developing the construction phases. Positive drainage must be maintained at all times.

2. The Consultant shall investigate the need for temporary traffic signals, signs, alternative detour roads, arrow boards, flagging operations, and the use of materials such as sheet pilings in the analysis. A certified designer who has completed the FDOT training course shall prepare the maintenance of traffic plan.
3. Traffic shall be maintained during all phases of project construction at all locations determined by the Authority and other governmental agencies. This includes meeting with the governmental agencies which may be impacted by the maintenance of traffic plans.

4.17 Signing Plans

- A. The Consultant shall prepare designs and contract documents for final signing plans including layouts showing the locations of ground mounted and overhead signs, special sign details, lighting, and any structural or foundation requirements in accordance with applicable design standards. Any requirements for electric service shall be coordinated with the local electric utility.
- B. The Authority will provide conceptual signing plans for the project.
- C. The Authority will provide preliminary aesthetic input for the architectural modification of standard FDOT details for sign structures.
- D. Plan sheets will be developed at a scale of 1"=50' (11"x17" format).
- F. For the purposes of this proposal, six (6) cantilevers and seven (7) overhead truss signs are assumed to be required for the improvements. Of the signs mentioned above, two (2) existing overhead trusses and two (2) existing cantilevers along the project will be affected by the improvements and are assumed to require reconstruction since they do not meet current wind load criteria.

4.18 Pavement Marking Plans

- A. The Consultant shall prepare designs and contract documents for final pavement marking plans, including striping, crosswalks, intersection details, reflective pavement markers and traffic delineators.
- B. The pavement marking design will be shown on the same plan sheets as the signing design.

4.19 Right-of-Way Surveys

- A. No additional right-of-way is anticipated for this project.

4.20 Cost Estimates

- A. The Consultant shall prepare and submit to the Authority construction cost estimates at the 60%, 90%, 100%, Pre-Bid and Bid Set submittals outlined herein. The estimate shall be based on the current unit prices as applied to the latest concept of the proposed construction.

4.21 Special Provisions and Specifications

- A. The Consultant shall prepare and submit at the 90% level special provisions, special specifications, and technical special provisions for items, details and procedures not adequately covered by the Authority's Technical Specifications.

4.22 Fiber Optic Network (FON)

A. Fiber Optic Infrastructure Plans

1. The site construction plans shall be developed at a scale of 1" equals 50 feet. These plans shall include the relocation of all existing fiber optic ductbanks, cables, manholes, and pull boxes in areas where the existing locations conflict with construction. The Consultant shall identify existing physical features and utilities that will impact the construction and installation of the equipment. The Consultant shall review and modify standard FON details as necessary.

This scope has assumed that four (4) miles of ITS relocation will be required consisting of two (2) miles of relocations on each side of SR 417.

2. Fiber optic network (FON) plans shall include the following:
 - a. Roadway geometry
 - b. Rights-of-Way
 - c. Existing utilities within the right-of-way including the Authority's FON
 - d. Physical features affecting construction/installation (sign structures, light poles, fences, etc.)
 - e. Manhole/Pull box locations and stub-out details (standard details provided)
 - f. Device layout
 - g. Device installation details
 - h. Conduit installation details (standard details provided)
 - i. Fiber optic cable route marker detail (standard details provided)

- j. Fiber count per conduit
 - k. Communications interconnect
 - l. Connectivity with the FON backbone conduits
 - m. Fiber cable design to include link loss budget calculations, per Corning standard recommended procedure
 - n. Fiber cable routing summaries, fiber cable allocation charts, and splice details and tables
 - o. Controller cabinet, CCTV pole, and foundation details
 - p. Power interconnect, calculations to support conductor size, and details. Power conductors to each device location shall be sized to the capacity of the main breaker in the cabinet.
 - q. Grounding
 - r. Table of quantities
 - s. Special notes
 - t. Maintenance of fiber operations (protection of existing FON through all phases of construction and cutover phasing to ensure continuous operation of existing ITS devices)
 - u. All existing and proposed FON to be included and shown with roadway cross sections and drainage cross sections
 - v. No relocation of existing CCTV sites are anticipated under this contract nor or any new CCTV sites anticipated as part of the proposed improvements.
 - w. Relocation of existing data collection sensor (DCS) sites and any necessary structures, foundations, attachment details, power service, fiber optic connections, and cabinets (standard details provided), in the event existing DCS would not survive project construction.
 - x. No relocation of existing DMS sites are anticipated under this contract nor or any new DMS sites anticipated as part of the proposed improvements.
 - y. Conversion of any existing ITS devices within the project limits from point-to-point fiber optic modems to gigabit Ethernet field switches, relocation of video encoders from the mainline toll plazas to the CCTV cabinets, and upgrading other cabinet equipment as needed to meet current Authority ITS equipment standards.
3. The Consultant shall take the following information into consideration when developing the site construction plans:
- a. Minimize utility conflicts and adjustments.
 - b. Minimize traffic impact.
 - c. Accessibility and ease of equipment maintenance.

- d. Safety of equipment maintenance personnel and the traveling public.
- e. Maintain the existing FON system through all phases of construction.
- f. Environmental conditions.
- g. Concurrent/future Authority projects.
- h. Compatibility with existing and proposed ITS infrastructure (e.g. Authority enhanced grounding standards for ITS devices, Authority transient voltage surge suppression (TVSS) standards for ITS devices, etc.)
- i. Leased conduits in the Authority FON duct bank that are occupied by the fiber optic cable of other agencies or entities.

B. Splice and Cable Routing Details

1. The Consultant shall provide splicing detail diagrams to document fiber optic splices within and between manholes, ITS devices, tollbooths, and other junction points.
2. Splicing tables shall include ITS device connectivity, fiber use, drop cable fiber identification, drop cable identification, backbone cable identification, translateral cable identification, backbone into mainline cable identification, and toll plaza patch panel jack.
3. The Consultant shall provide cable routing diagrams and fiber allocation charts in the Authority's standard format to document the functional connectivity between fiber optic conduit and all splices.

C. Maintenance Of Fiber Operations

1. The Consultant shall provide a plan of action to ensure existing fiber optic network is not disrupted during construction operations.
2. The Consultant shall determine the sequence of fiber optic cable splices to minimize disruption to communications.

D. Inside Plant Plans

1. The Consultant shall be responsible for any data collection necessary to complete its design.
2. All equipment shown on the inside-plant construction plans shall be clearly delineated as existing, proposed, or by-others. The Consultant shall be responsible for identifying and detailing on the inside-plant construction plans with notes and drawings any make-ready work required. The Consultant shall also provide a table of quantities for all

materials and equipment specified in the inside-plant construction plans.

3. The Consultant shall sign and seal final inside-plant construction plans by a licensed professional Electrical Engineer registered in the state of Florida. The inside-plant construction plans shall be subject to the review and approval of the Authority.

Quantities And General Notes

4. Standard notes shall be included to provide direction to the contractor and provide pay item descriptions as necessary.
- E. Standard Authority specifications will be provided to the Consultant. The Consultant shall review the specifications and modify them as necessary.

4.23 Toll Plazas

- A. This proposal includes modifications pertaining to converting the existing S.R. 417 northbound and southbound inside cash lanes to express lanes at the University Mainline Toll Plaza.

4.24 Post-Design Services

- A. Services shall begin after authorization by the Authority. The Consultant 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.
- B. 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 construction contractor, the Authority, and the Authority's CEI.
- C. The Consultant shall, prior to the pre-bid conference, be prepared to walk the project with the Authority's CEI 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. The Consultant shall prepare any addenda required to clarify the work included in the construction contract documents. Addenda may be required based on the project inspection with the CEI, or questions developed in the pre-bid conference, or conditions discovered by bidders during the bid

period.

- E. 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 shall periodically visit the project site to observe the progress of construction on the project. This visit will not replace the formal construction inspection by the Authority. It is intended to provide the opportunity of the design team to observe whether the work is being performed in general conformance with the project plans. Written memos of all such field trips shall be submitted to the Authority within five working days of the trip.
- F. The Consultant shall review and approve shop drawings for structural, lighting, signing, traffic signal elements, and toll plaza shop drawings. This work will include the erection procedure plans, review proposals for substitutions, develop supplemental agreements, and provide other engineering services required to facilitate construction of the project. Reviews will be conducted and returned within two weeks from receipt of information.
- G. The Consultant shall appoint a responsible member of the firm to be the contact person for all post-design services. The person should be continually available during the course of construction for review of design plans.
- H. 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. The Consultant shall attend partnering meetings as requested by the Authority's Project Manager. The Consultant shall also attend progress/coordination meetings as requested by the Authority's Project Manager including, but not limited to, the Notice to Proceed meeting.
- J. 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. The Consultant shall provide geotechnical engineering services as needed by the Authority, relative to pile driving, earthwork, embankment and MSE wall construction.
- L. The Consultant shall provide utility consulting services as needed by the

Authority, relative to proposed utility adjustments within the project limits.

- M. The Consultant shall prepare Record Drawings in electronic format following completion of the construction phase. The Authority shall provide all As-Built drawings from the Contractor / CEI to the Consultant for their use in preparation of the Record Drawings.**

5.0 MATERIALS FURNISHED BY THE AUTHORITY OR ITS DESIGNEE

5.01 Record Documents

- A. The Authority will provide the Consultant, within ten working days of a written request, the following items:
1. Available record drawings of existing conditions
 2. Available right-of-way plans of existing conditions
 3. Current list available to the Authority of owners of all affected properties within the section.
 4. Sample plans to be used as guidelines for format, organization and content.
 5. Title searches of all affected properties for use by the Consultant in the preparation of the right-of-way maps.
 6. Contract unit prices from latest Authority construction projects.

5.02 Traffic Data

- A. The Authority will provide the following design traffic data:
1. Current and design year ADT
 2. Current and design year peak hour volumes
 3. Turning movements at each intersection/interchange
 4. K, D and T factors
 5. Design speed - See Section 3.02, Geometry.
 6. AVI Percentages

5.03 Other

1. Utility designates for the FON and roadway lighting within CFX right-of-way.

6.0 WORK PERFORMED BY THE AUTHORITY OR ITS DESIGNEE

6.01 Right-of-Way Acquisition

- A. If necessary, the Authority, or its designee, will review all right-of-way plans, parcel sketches and legal descriptions prepared by the Consultant. The Authority will handle all appraisals, negotiations, relocations, condemnation, and property settlements.

6.02 Utility Agreements

- A. The Authority will support, as necessary, the Consultant's acquisition of information required for utility agreements.

6.03 Public Involvement

- A. The Authority will provide a moderator for all required public meetings and provide guidelines for the Public Involvement aspects of the project. The need for public meetings or public hearings will be determined by the Authority. The Authority will be responsible for mailings and advertisements for the public meetings.

6.04 Contracts and Specifications Services

- A. The Authority will prepare the necessary bid documents for the construction contract using plans, technical special provisions, and special specifications prepared by the Consultant.

6.05 Post-Design Services

- A. The Authority will be the principal initial contact for post-design questions and answer questions on a limited scope.

6.06 Environmental Permits

- A. The Authority will review and submit the environmental permit applications and coordinate with the Consultant on requests for additional information from the regulatory agencies.
- B. The Authority will stake wetland lines and coordinate agency site visits. The Authority will also prepare the wetland and wildlife analysis and documentation for the permits.

6.07 Conceptual Specialty Design

- A. The Authority will provide a conceptual major guide signing plan.

- B. The Authority will provide conceptual aesthetics design and treatments for structures.

7.0 ADMINISTRATION

7.01 Central Florida Expressway Authority

- A. The Authority's Project Manager will administer the Consultant services detailed in this scope.
- B. All contractual payments and changes shall be reviewed and approved by the Authority's Project Manager.

7.02 Authority's Project Manager

The Authority's Project Manager will:

- A. Conduct ongoing reviews of the Consultant's progress in performing the work and furnish technical comments in a timely manner.
- B. Review the Consultant's billings.
- C. Review and evaluate the Consultant's requests for extension of time and supplemental agreements and recommend appropriate action.
- D. Review all correspondence with public agencies prior to the Consultant's mailing of any correspondence except for requests for information.
- E. Coordinate the distribution of public information.
- F. Coordinate the data (including documentation of prior rights, cost estimates and plans) necessary for the Authority to prepare and execute all utility and railroad agreements.
- G. Conduct an introductory meeting to deliver relevant information and explain the administration process.
- H. Review the Consultant's Quality Control program and the Consultant's conformance to the Quality Control Program.
- I. Provide a focal point contact for all questions, requests, and submittals.
- J. Provide a system to monitor the Consultant's schedule, progress and key milestone submittal dates.

7.03 Consultant

- A. The Consultant has total responsibility for the accuracy and completeness

of the construction contract documents and related design prepared under this project and shall check all such material accordingly. The plans will be reviewed by Authority for conformity with the Authority procedures and the terms of the Contract, as well as coordination with adjacent design contracts. Review by the Authority does not include detailed review or checking of design of major components and related details or the accuracy with which such designs are depicted on the plans. The responsibility for accuracy and completeness of such items remains solely that of the Consultant. The Consultant shall:

1. Establish, furnish and maintain suitable office facilities to serve as the project office for the duration of the project at a location acceptable to the Authority.
2. Maintain an adequate staff of qualified support personnel to perform the work necessary to complete the project.
3. Establish internal accounting methods and procedures for documenting and monitoring project costs.
4. Establish and maintain contract administration procedures, which will include supplemental agreements, time extensions and subcontracts.

7.04 Project Control

- A. The Consultant shall provide data for the Authority's Management Information System to monitor costs and manpower, and report progress. This project control system may include features to:
 1. Determine and highlight critical path work from initial plans as work progresses.
 2. Identify progress against schedule for each identified work item.
 3. Forecast completion dates from current progress.
 4. Highlight rescheduled work in any area which is out of required sequence.
 5. Highlight rescheduling that has overloaded any physical area that requires more resources than originally allocated.
 6. Forecast future conflicts in any area.

7.05 Work Progress

- A. The Consultant shall meet with the Authority's Project Manager on a bi-weekly basis (or more often if necessary) and provide written progress reports which describe the work performed on each task. The dates and times of these meetings will be established by the Authority. Two working days prior to each progress meeting, the Consultant shall provide the Authority's Project Manager with a draft copy of the Progress Report and a typewritten agenda for the meeting. The Consultant shall prepare typewritten meeting minutes and submit them to the Authority's Project Manager within five working days after the meeting. The minutes shall indicate issues discussed and the resolution or action required to resolve any issues.

7.06 Schedule

- A. Within twenty (20) calendar days after receipt of the Notice to Proceed, the Consultant shall provide a schedule of calendar deadlines in a format prescribed by the Authority.

7.07 Project Related Correspondence

- A. The Consultant shall furnish copies of all written correspondence between the Consultant and any party pertaining specifically to this project to the Authority for its records within one (1) week of the receipt or mailing of said correspondence. The Consultant shall record and distribute the minutes of all meetings pertaining to this project.

7.08 Quality Control

- A. The Consultant has total responsibility for the accuracy and completeness of the plans and related designs prepared under this project and shall check all such material accordingly. Consultant shall have a quality control plan in effect during the entire time work is being performed under the Contract. The plan shall establish a process whereby calculations are independently checked, plans checked, corrected and back checked. All plans, calculations, and documents submitted for review shall be clearly marked as being fully checked by a qualified individual other than the originator. The FDOT plan review checklist shall be attached and appropriate items checked.
- B. The Consultant's quality control plan shall be submitted to the Authority within fifteen (15) working days of receipt of written notice to proceed.

7.09 Consultant Personnel

- A. The Consultant's work shall be performed and/or directed by the key personnel identified in Exhibit "D". Any changes in the indicated key personnel or the Consultant's office in charge of the work shall be subject to review and approval by the Authority.

7.10 Site Visit

- A. The Consultant shall arrange a site visit within ten (10) calendar days of receipt of written Notice to Proceed. Consultant personnel assigned to perform the work on the project shall attend. Authority representatives will be present. Within seven calendar days of the site visit, the Consultant shall issue to the Authority a brief written report including observations, discussions, and any questions pertaining to the scope or level of effort of the project. The purpose of this visit is to acquaint key personnel with the details and features of the project to facilitate the design process.

7.11 Acceptability of the Work

- A. The plans, design, calculations, reports and other documents furnished under this Scope of Services shall conform to the "standards-of-the industry" quality as acceptable to the Authority. The criteria for acceptance shall be a product of neat appearance, well organized, accurate and complete, technically and grammatically correct, checked in accordance with the approved Quality Control program, and have the maker and checker identified. The minimum standard of appearance, organization and content of drawings shall be similar to the type produced by the Florida Department of Transportation and the Authority.

7.12 Design Documentation

- A. The Consultant shall submit any design notes, sketches, worksheets, and computations to document the design conclusions reached during the development of the construction contract documents to the Authority for review.
- B. The design notes and computations shall be recorded on 8-1/2" x 11" computation sheets, appropriately titled, numbered, dated, indexed and signed by the designer and checker. Computer output forms and other oversized sheets shall be folded or legibly reduced to 8-1/2" x 11" size. The data shall be bound in a hard-back folder for submittal to the Authority.
- C. Three copies of the design notes and computations shall be submitted to Authority with each review submittal. When the plans are submitted for 90% review, the design notes and computations corrected for any Authority

comments shall be resubmitted. At the project completion (bid set), a final set of the design notes and computations, sealed by a Professional Engineer, registered in the State of Florida, shall be submitted with the record set of plans and tracings.

D. Design notes and calculations shall include, but are not necessarily limited to, the following data:

1. Field survey notes and computations.
2. Design criteria used for the project.
3. Geometric design calculations for horizontal alignment.
4. Vertical geometry calculations.
5. Right-of-way calculations.
6. Drainage computations.
7. Structural design calculations.
8. Geotechnical report.
9. Hydraulics Report for each bridged stream crossing.
10. Earthwork calculations not included in the quantity computation booklet.
11. Calculations showing cost comparisons of various alternatives considered.
12. Calculations of quantities.
13. Documentation of decisions reached resulting from meetings, telephone conversations or site visits.
14. Lighting and voltage drop calculations.
15. Lighting service letter from the power company stating the following: service voltage, type of service (overhead or underground), location of power company service point, and any other power company requirements.

7.13 Reviews and Submittals

- A. Review and coordination of the Consultant's work by the Authority shall continue through the project development process
- B. Formal submittals for review shall be made to the Authority when the plans have been developed to the following levels of completion:
 - 1. Preliminary Engineering (Memorandum) (3 sets and 1 .PDF required)
 - 2. 30% Roadway and Toll Plaza plans (6 sets and 1 .PDF CD/DVD required)
 - 3. 30% Bridge and Structural Plans (6 sets and 1 .PDF CD/DVD required)
 - 4. 60% Roadway, Toll Plaza and specifications, Geotechnical Report (6, 6, and 3 sets and 1 .PDF CD/DVD required)
 - 5. 60% Bridge Plans (required only on Category 2 bridges).
 - 6. 90% Bridge and Structural Plans (6 sets and 1 .PDF CD/DVD required)
 - 7. 90% Roadway, Toll Plaza and specifications (6 and 6 sets and 1 .PDF CD/DVD required)
 - 8. 100% Roadway Toll Plaza, Bridge and specifications, Geotechnical Report (6, 6, 6 and 3 sets and 1 .PDF CD/DVD required))
 - 9. Pre-Bid Plans (3 sets and 1 .PDF CD/DVD required)
 - 10. Bid Set (1 set signed and sealed plans, 1 set "clean" plans, 1 set signed and sealed reports and 1 .PDF of all plans and reports)
- C. Formal review submittals shall include copies as listed above. 8-1/2" x 11" and 11" x 17" documents do not require reproducible copies.
- D. Preparation and distribution of roadway and ROW plans to other than the Authority will not be made until approved by the Authority.
- E. The format of review submittal plans shall conform to the FDOT Plans Preparation Manual, except as amended by the Authority.
- F. Due to the compact schedule of the design, review and construction process,

any modification to the agreed submittal dates will require a letter from the Consultant to the Authority giving:

1. The reason for the delay.
 2. The design components impacted.
 3. Proposed methods to maintain submittal dates.
- G. The Consultant shall submit all CADD files, including GEOPAK files, use in the preparation of the plans and right of way mapping on compact disk with the final submittal.

7.14 30% Roadway and Toll Plaza Plan Submittal

- A. At the completion of this phase, design and plan development should be approximately 30 percent complete except stormwater pond designs. The designs of the stormwater ponds shall be at 90% complete. The following material shall be developed and submitted for review:
1. Key Map Prepared
 - a) Location map shown complete with destinations, ranges and townships.
 - b) Beginning and ending stations shown.
 - c) Any equations on project shown.
 - d) Project numbers and title shown.
 - e) Index shown.
 2. Drainage Map Prepared
 - a) Existing culvert sizes and elevations.
 - b) Horizontal alignment shown.
 - c) Drainage areas and flow arrows shown.
 - d) High water information shown.
 - e) Beginning and end stations shown along with any equations

on project.

f) Interchange supplemental maps prepared.

3. Typical Section Sheets

a) Ramp typical sections developed.

b) Pavement structure shown.

c) Special details developed.

d) General notes shown.

4. Plan and Profile Sheets

a) Centerline plotted.

b) Reference points and bench marks shown.

c) Existing topography.

d) Base line of surveys, curve data, bearings, etc. shown.

e) Beginning and end stations (project and construction).

f) Geometric dimensions.

g) Proposed and existing limited access right-of-way lines.

h) Existing ground line.

i) Proposed profile grade.

j) Type, size and horizontal location of existing utilities.

k) Drainage structures and numbers are shown

l) Drainage ponds are shown.

5. Cross Sections

a) Existing ground line.

b) Preliminary templates at critical locations (not to exceed 500

feet).

- c) Existing utilities shown.
- 6. Interchange Layout and Ramp Profiles
 - a) Geometric dimensions.
 - b) Proposed profile grades.
- 7. Right-of-Way Control Survey
- 8. Signing and Pavement Markings
 - a) Striping layout.
 - b) Sign structure locations.

7.15 30% Bridge and Structural Plan Submittal

- A. At completion of this phase, design and plan development should be approximately 30 percent complete. The Consultant shall refer to FDOT Structural Design Guidelines for plan contents and submittal requirements. Preliminary geotechnical results and recommendations should also be included with this submittal.

7.16 60% Roadway and Toll Plaza Plan Submittal

- A. At completion of this phase, design and plan development should be approximately 60 percent complete except stormwater pond designs. The designs of the stormwater ponds shall be at 100% complete. The following material shall be developed and submitted for review:
 - 1. Key Map
 - a) Project description and number shown.
 - b) Equations, exceptions and bridge stations shown.
 - c) North arrow and scale included.
 - d) Consultant and Authority sign-off included.
 - e) Contract set index complete.

- f) Index of sheets updated.
2. Drainage Maps
- a) Flood data shown.
 - b) Cross drains and storm sewer shown.
 - c) Bridges shown with beginning and ending stations.
 - d) Interchange supplemental sheets updated.
3. Typical Section Sheets
- a) All required typical sections are included.
 - b) Limited access right-of-way lines are shown.
 - c) Design speed and traffic are shown.
 - d) Special details have been completed.
 - e) Station limits of each typical section are shown.
4. Plan and Profile Sheets
- a) Match lines shown.
 - b) Limited access right-of-way lines shown.
 - c) Stations and offset shown for all fence corners and angles.
 - d) All work shown should be within right-of-way or proposed easement.
 - e) Drainage structures and numbers are shown.
 - f) Drainage ponds shown.
 - g) Curve data and superelevation included.
 - h) Pavement edges, shoulders and dimensions shown.
 - i) Project and construction limits shown.

- j) Bridges shown with beginning and ending stations.
 - k) General Notes.
5. Drainage Structures
- a) Drainage structures plotted and numbered.
 - b) Station location and offsets identified.
6. Cross Sections
- a) Templates are shown at all stations.
 - b) Limited access right-of-way lines are shown.
 - c) Cross section pattern sheet included.
 - d) Miscellaneous notes included.
 - e) Boring profiles.
7. Interchange Layouts, Ramp Profiles and Intersection Details
- a) Geometric data shown.
 - b) Profiles finalized.
 - c) Coordinate data shown.
 - d) Limited access right-of-way lines shown.
 - e) Curve data shown.
 - f) Bearings and bridges shown.
 - g) Cross roads, frontage roads, and access roads shown.
 - h) Intersection details shown.
8. Traffic Control Plans
9. Utility Adjustments
10. Signing and Pavement Marking Plans

11. Highway Lighting Plans

12. Selective Clearing and Grubbing (if required)

7.17 90 % Bridge and Structure Plan Submittal

A. At completion of this phase, design and plan development should be approximately 90 percent complete. The Consultant shall refer to FDOT Structural Design Guidelines for plan contents and submittal requirements.

7.18 90% Roadway and Toll Plaza Plan Submittal

A. At completion of this phase, design and plan development should be approximately 90 percent complete. The following material shall be developed and submitted for review:

1. Key Map

a) Length of Project with exceptions shown.

b) Index of sheets updated.

2. Drainage Maps

a) Drainage divides, areas and flow arrows shown.

b) Elevation datum and design high water information shown.

c) Disclaimer and other appropriate notes added.

3. Typical Section Sheets

4. Plan and Profile Sheets

a) Curve Control Points (P.C., P.I., P.T.) flagged and labeled.

b) Limits of side road construction.

c) Angle and stationing for intersections.

d) Treatment for non-standard superelevation transitions diagramed.

e) General notes shown.

f) Special ditches profiled.

5. Drainage Structures

a) Existing structures requiring modifications are shown.

b) Existing and proposed utilities are shown.

6 Soil Borings

a) Soils data and estimated high seasonal groundwater table shown.

7. Cross Section Sheets

a) Scale and special ditch grades shown.

b) Utilities plotted.

c) Sub-excavation shown.

d) Volumes computed and shown.

8. Utility Relocation Plans

a) Utility relocation plans prepared.

9. Traffic Control Plans

10. Signing and Pavement Marking Plans

11. Highway Lighting Plans

12. Selective Clearing and Grubbing (if required)

7.19 100% Roadway, Toll Plaza, Bridge and Structural Plans

A. At the completion of this phase, the design plans, technical specifications and special provisions shall be 100 percent complete.

7.20 Pre-Bid Plans

7.21 Bid Set

EXHIBIT B

METHOD OF COMPENSATION

EXHIBIT "B"
METHOD OF COMPENSATION

1.00 PURPOSE:

This Exhibit describes and defines the limits of compensation to be made to the CONSULTANT for the services set forth in Exhibit "A" of this Agreement and the method by which payments shall be made.

2.00 AMOUNT OF COMPENSATION:

2.10 CFX agrees to pay the CONSULTANT for the performance of services described in Exhibit "A" an amount not to exceed a Total Maximum Limiting Amount of \$2,575,000.00.

2.11 The Total Maximum Limiting Amount for the project assigned under this Agreement shall include:

- A Limiting Amount for Salary Related Costs consisting of the sum of actual salary and wages and the applicable administrative overhead and payroll burden (fringe benefits) costs;
- A Fixed Fee as the Operating Margin or profit paid for the professional services described in this Agreement;
- A Lump Sum Amount for Expenses;
- A Limiting Amount for Subconsultants (as identified in paragraph 5.0 of the Agreement for Professional Services);
- An Allowance Amount for CFX to utilize as necessary.

2.12 The Total Maximum Limiting Amount for the project assigned under this Agreement shall consist of the following:

DEWBERRY ENGINEERS, INC.

Total Activity Salary Costs	<u>\$519,688.03</u>
(a) Overhead Additives	
(1) Combined (131.46%)	<u>683,181.88</u>
Subtotal (Salary + Overhead)	<u>1,202,869.91</u>
(b) Lump Sum for Operating Margin (12.00%)	<u>144,344.39</u>
Subtotal (Salary Related)	<u>1,347,214.30</u>
(c) Design Survey - Field (Prime)	<u>147,858.72</u>
(d) Direct Expenses - Lump Sum (Prime)	<u>25,300.00</u>
BASIC FEE	1,520,373.02
(e) Subcontracts (Limiting Amount)	<u>827,863.92</u>
(f) Allowance	<u>226,763.06</u>
TOTAL MAXIMUM LIMITING AMOUNT	<u>\$2,575,000.00</u>

- 2.13 It shall be the responsibility of the CONSULTANT to ensure at all times that sufficient funding remains within the Total Maximum Limiting Amount stated above in Section 2.12 to complete the services for the project. Changes in the Total Maximum Limiting Amount for the project shall require execution of a Supplemental Agreement. The CONSULTANT is obligated to complete project services within the Total Maximum Limiting Amount established herein.

3.00 ALLOWABLE COSTS:

CFX shall reimburse the CONSULTANT for all reasonable allocable and allowable costs. The reasonableness, allocability and allowability of reimbursements sought under this Agreement are expressly made subject to the terms of (1) this Agreement (2) Federal Acquisition Regulations sub-part 31-2 (3) Office of Management and Budget (OMB) Circular A-87 (46FR9548, January 28, 1981) and A-102 (45FR55086, August 18, 1980) and (4) other pertinent federal and state regulations. By reference hereto, said sub-part of Federal Acquisition Regulations and OMB circulars are hereby incorporated in and made a part of this Agreement. Allowable Costs and Fees are defined as follows:

3.10 Direct Salaries and Wages: All direct salaries and wages of the CONSULTANT and Subconsultants (as identified in paragraph 5.0 of the Agreement for Professional Services) for time expended by personnel in the performance of the work (exclusive of unit price based work performed by Class 2 Subconsultants); however, this shall specifically exclude salaries and payroll burden of Corporate Officers and Principals when expended in the performance of indirect functions.

Direct Salaries and Wages (salary costs) include both straight time payments and all overtime payments made for an employee's services on a project. Straight time costs shall be the hourly rate paid for an employee based on a forty (40) hour work week. Overtime costs shall be the salary costs paid for an employee for work exceeding a forty (40) hour work week. Overtime costs shall be paid as either Straight Overtime costs or Premium Overtime costs.

- Straight Overtime: Straight overtime shall be the portion of overtime compensation paid for employees at the straight time hourly rate and shall be burdened with overhead and fringe benefits.

- Premium Overtime: Premium overtime costs shall be the portion of overtime compensation paid in excess of the straight time hourly rate and shall not be burdened with overhead and fringe benefits.

- Payment of Overtime: Straight Overtime or Premium Overtime shall be paid in accordance with the CONSULTANT'S overtime policies and practices, provided that such compensation plan or practice is so consistently followed, in effect, to imply an equitable treatment of overtime to all the CONSULTANT'S clients.

Premium Overtime is not authorized unless approved in writing by CFX'S DIRECTOR.

3.11 Indirect Charges: Administrative overhead and payroll burden costs not to exceed a combined maximum rate of 131.46% when applied to the CONSULTANT'S chargeable salaries and wages. Administrative overhead and payroll burden costs for Subconsultants shall be as established in Exhibit "C".

3.12 Expenses: A Lump Sum Amount shall be paid to the CONSULTANT and all subconsultants for miscellaneous and out-of-pocket expenses as established in Exhibit "C".

3.13 Class 2 Subconsultants: Compensation shall be based on a unit price basis not to exceed the limiting amount established herein. The unit prices acceptable for this agreement shall be at the unit prices established in Exhibit "C".

3.14 Field Survey by subconsultant: Compensation shall be based on a unit price basis not to exceed the limiting amount established herein. The unit prices acceptable for this agreement shall be at the unit prices established in Exhibit "C".

3.15 Fixed Fee: Fixed Fee is the operating margin paid to the CONSULTANT and the Subconsultants for the professional services described in this Agreement (exclusive of unit price based work performed by Class 2 Subconsultants). The fixed fee shall remain fixed regardless of the relation of the actual salary related costs to the estimated salary related costs and regardless of any extension of contract time granted pursuant to paragraph 4.0 of the Agreement for Professional Services. Salary related costs are defined as the sum of direct salaries and wages and the applicable administrative overhead and payroll burden costs.

4.00 METHOD OF PAYMENT:

No more than the Total Maximum Limiting Amount provided for in Section 2.00 shall be paid by CFX to the CONSULTANT as follows, subject to the provisions of Section 3.00:

4.10 The CONSULTANT shall be reimbursed monthly for authorized services performed. Payment to the CONSULTANT shall be in an amount to cover costs incurred during the preceding month for actual direct salary and wages, a provisional allowance for the administrative overhead and payroll burden, a portion of Lump Sum expenses and Subconsultant Costs, plus an allowance for Fixed Fee (Operating Margin), less retainage.

The basis for all CONSULTANT and Class 1 Subconsultant (as defined in Section 5.0 in the Agreement for Professional Services) invoices shall be the actual employee salary and wages at the time work was performed on the project by such employee. Staff classification maximum rates have been established in Exhibit "C" for the CONSULTANT and all Class 1 Subconsultants. It is understood that the staff classification maximum rates shall not be exceeded without prior written approval from CFX. It is further understood that the staff classification average rates used to generate the Total Maximum Limiting Amount in Exhibit "C" will not be revised throughout the term of the Agreement. All future Supplemental Agreements executed as part of this Agreement shall be based on the negotiated staff classification average rates detailed in Exhibit "C". Class 2 Subconsultants shall prepare their invoices in accordance with the provisions of Section 3.13.

4.11 The combined provisional allowance for administrative overhead and payroll burden, expressed as a percentage of salary related costs, for the CONSULTANT is 131.46 percent.

The provisional allowance for administrative overhead and fringe benefits established herein will be adjusted, as necessary, upon completion of an interim audit during the term of the project, or a post audit following project completion, subject to the following limitations:

- The combined allowance for administrative overhead and fringe benefits shall not exceed 131.46%; and
- Adjustments to the combined allowance for administrative overhead and fringe benefits shall not increase the compensation to the CONSULTANT beyond the Total Maximum Limiting Amount.

4.12 The Fixed Fee (Operating Margin) approved by CFX to be paid to the CONSULTANT for the services set forth in this Agreement is established as shown in Section 2.12 of this Exhibit "B".

The CONSULTANT shall earn monthly a portion of its approved fixed fee at 12.00 percent of actual approved salary related costs. Accumulated fixed fee earnings are subject to the aforementioned fixed fee amount. When project services have been satisfactorily completed, the difference between the approved and previously earned fixed fee shall be due and payable to the CONSULTANT and Subconsultants (exclusive of unit price based work performed by Class 2 Subconsultants).

4.13 The CONSULTANT shall earn a portion of its established Lump Sum expense cost in the amount equal to such Lump Sum equally distributed over the project's anticipated duration. Any balance due the CONSULTANT upon completion of a project shall be paid in the final invoice.

4.14 The CONSULTANT shall be compensated for Subconsultant Services in accordance with Section 3.00 of this Exhibit "B" for actual work performed.

4.15 Payments to the CONSULTANT shall be subject to retainage. Retainage shall be calculated as a percent of the sum of salary costs, administrative overhead and payroll burden, and operating margin. No retainage shall be withheld on expenses or Subconsultant Services.

CFX shall withhold from monthly payments a retainage of ten percent (10%) until fifty percent (50%) of the work is completed, and five percent (5%) thereafter until all work is completed. Retainage withheld at project completion shall be released to the CONSULTANT upon satisfactory completion of all services and acceptance of all deliverables by CFX.

4.16 The CONSULTANT shall be responsible for the consolidation and submittal of one (1) original monthly invoice, in the form and detail established or approved by CFX. All payments on such invoices are conditional and subject to adjustment as a result of a final audit as to the allowability of costs in accordance with this Agreement. Invoices shall

include an itemization and substantiation of costs incurred. The itemization must include the amount budgeted, current amount billed, total billed to date and amount to complete.

4.17 The CONSULTANT shall promptly pay all subconsultants their proportionate share of payments received from CFX.

4.18 CFX reserves the right to withhold payment or payments in whole or in part, and to continue to withhold any such payments for work not completed, completed unsatisfactorily, work that is behind schedule or work that is otherwise performed in an inadequate or untimely fashion as determined by CFX. Any and all such payment previously withheld shall be released and paid to CONSULTANT promptly when the work is subsequently satisfactorily performed notwithstanding paragraph 4.0 of the Agreement for Professional Services.

5.00 PROJECT CLOSEOUT:

5.10 Final Audit: The CONSULTANT shall permit CFX to perform or have performed an audit of the records of the CONSULTANT and any or all subconsultants to support the compensation paid the CONSULTANT. The audit will be performed as soon as practical after completion and acceptance of the contracted services. In the event funds paid to the CONSULTANT under this Agreement are subsequently properly disallowed by CFX because of accounting errors or charges not in conformity with this Agreement, the CONSULTANT agrees that such disallowed amounts are due to CFX upon demand. Further, CFX shall have the right to deduct from any payment due the CONSULTANT under any other contract between CFX and the CONSULTANT an amount sufficient to satisfy any amount due and owing CFX by the CONSULTANT under this Agreement. Final payment to the CONSULTANT shall be adjusted for audit results.

5.11 Certificate of Completion: Subsequent to the completion of the final audit, a Certificate of Completion will be prepared for execution by both parties stating the total compensation due the CONSULTANT, the amount previously paid, and the difference.

Upon execution of the Certificate of Completion, the CONSULTANT shall either submit a termination invoice for an amount due or refund to CFX for the overpayment, provided the net difference is not zero.

EXHIBIT C

DETAILS OF COST AND FEES

Dewberry

**SR 417 Widening - Econlockhatchee Trail to Orange/Seminole Co. Line
417-134**

C #

Contract Summary Sheet

	Firm Name	Overhead	Fixed Fee	Total Multiplier for Class II Subs (Unit Price)
Class I	Dewberry	131.46%	12.00%	
Class II	Aerial	250.00%	8.1221%	3.78
Class I	Balmoral	159.94%	12.00%	
Class II	Tierra	164.75%	12.00%	2.97
Class I	Comprehensive	177.42%	11.4447%	

- * **Class I will be billed using overhead and fixed fee.**
- * **Class II subs will be billed at unit price for classification.**

ESTIMATE OF WORK EFFORT AND COST - PRIME CONSULTANT

Name of Project: SR 417, Econlockhatchee Trail to Seminole County Line
 County: Orange County
 FPN: 417-134
 FAP No: N/A

Consultant Name: Dawberry
 Consultant No: enter consultants proj number
 Date: 6/7/2016
 Revision: None

Staff Classification	Total Staff Hours From SH Summary	Project Manager	Senior Engineer	Engineer	Engineer Intern	Sr. Engr Technician	Engr. Technician	Sr. Envir. Scientist	Envir Specialist	Senior Surveyor	Surveyor	Survey Technician	Staff Classification 12	SH By Activity	Salary Cost By Activity	Average Rate Per Task
		\$87.70	\$60.34	\$41.73	\$29.28	\$35.98	\$19.73	\$38.00	\$26.72	\$67.21	\$44.09	\$26.06	\$0.00			
0 Project General and Project Common Tasks	420	252	84	42	0	42	0	0	0	0	0	0	0	420	\$30,433	\$72.46
4 Roadway Analysis	3,322	498	1,330	664	166	496	166	0	0	0	0	0	0	3,322	\$177,689	\$53.48
5 Roadway Plans	1,432	143	358	358	72	358	143	0	0	0	0	0	0	1,432	\$68,893	\$48.71
6a Drainage Analysis	1,140	114	456	342	0	228	0	0	0	0	0	0	0	1,140	\$59,898	\$52.62
6b Drainage Plans	976	98	244	244	49	292	49	0	0	0	0	0	0	976	\$46,407	\$47.55
7 Utilities	42	25	17	0	0	0	0	0	0	0	0	0	0	42	\$3,218	\$76.63
8 Environmental Permits, Compliance & Clearances	214	21	21	43	0	0	0	66	43	0	0	0	0	214	\$9,320	\$43.55
9 Structures - Misc. Tasks, Dwg, Non-Tech	323	16	129	81	16	65	16	0	0	0	0	0	0	323	\$15,890	\$48.58
10 Structures - Bridge Development Report	160	8	68	40	8	32	16	0	0	0	0	0	0	160	\$7,451	\$46.57
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	840	42	210	210	84	262	42	0	0	0	0	0	0	840	\$37,473	\$44.61
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	64	4	16	16	6	19	3	0	0	0	0	0	0	64	\$2,602	\$46.35
18 Structures - Miscellaneous	812	40	203	203	81	244	41	0	0	0	0	0	0	812	\$36,188	\$44.57
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	0	0	0	0	0	0	0	0	0	0	0	0	0	0	\$0	#DIV/0!
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)	655	0	0	0	0	0	0	0	0	132	186	327	0	655	\$26,036	\$39.75
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!
Total Staff Hours	10,400	1,261	3,124	2,243	482	2,030	478	86	43	132	196	327	0	10,400		
Total Staff Cost		\$110,589.70	\$168,502.16	\$93,600.39	\$14,112.88	\$73,039.40	\$9,391.48	\$3,268.00	\$1,148.98	\$8,871.72	\$8,641.84	\$8,521.62	\$0.00		\$519,688.03	\$49.97

Check = \$519,688.03

Survey Field Days by Subconsultant
 4 - Person Crew

SALARY RELATED COSTS:			
OVERHEAD:	131.46%		\$683,181.88
OPERATING MARGIN:	12%		\$144,344.39
EXPENSES:			\$26,300.00
Survey (Field - If by Prime)	118	4-man crew days @ \$ 1,253.04 /day	\$147,858.72
SUBTOTAL ESTIMATED FEE:			\$1,620,373.02
Subconsultant: CES			\$373,441.89
Subconsultant: Belmont			\$123,485.44
Subconsultant: Terra			\$189,200.64
Subconsultant: ACA			\$141,665.85
Subconsultant: Sub 6			\$0.00
SUBTOTAL SUBCONSULTANTS:			\$627,893.82
Geotechnical Field and Lab Testing			\$0.00
SUBTOTAL ESTIMATED FEE:			\$2,348,238.84
Optional Services			\$0.00
GRAND TOTAL ESTIMATED FEE:			\$2,348,238.84

- Notes:
 1. This sheet is 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.

Project Staff Hour Summary

Name of Consultant:

Dewberry

SR 417, Econlockhatchee Trail to Seminole County Line
417-134

Activity No.	Activity	Project Staff Hours												Total Hours	
		Dewberry	CEB	Balmoral	Terra	Sub 4	Sub 5	Sub 6	Sub 7	Sub 8	Sub 9	Sub 10	Sub 11		Sub 12
3	Project Common and General Tasks	420													420
4	Roadway Analysis	3322	140												3462
5	Roadway Plans	1432													1432
6a	Drainage Analysis	1140		40											1180
6b	Drainage Plans	976													976
7	Utilities	42	382												424
8	Env. Permits, Compliance & Clearances	214			45										259
9	Structures - Summary, Misc. Tasks, Dwgs.	323													323
10	BDR	160													160
11	Temporary Bridge	0													0
12	Short Span Concrete Bridge	0													0
13	Medium Span Concrete Bridge	0													0
14	Structural Steel Bridge	840													840
15	Segmental Concrete Bridge	0													0
16	Movable Span	0													0
17	Retaining Walls	64													64
18	Miscellaneous Structures	812													812
19	Signing & Pavement Marking Analysis	0	65	680											745
20	Signing & Pavement Marking Plans	0		389											389
21	Signalization Analysis	0													0
22	Signalization Plans	0													0
23	Lighting Analysis	0	934												934
24	Lighting Plans	0	342												342
25	Landscape Architecture Analysis	0													0
26	Landscape Architecture Plans	0													0
27	Survey - Field and Office Support	655													655
28	Photogrammetry	0													0
29	Mapping	0													0
30	Terrestrial Mobile LIDAR	0													0
31	Architecture Development	0													0
32	Noise Barriers Impact Design Assessment	0													0
33	ITS Analysis	0	433												433
34	ITS Plans	0	288												288
35	Geotechnical	0			811										811
	Project Total	10,400	2,584	1,109	868	0	0	0	0	0	0	0	0	0	14,849
27	Survey Field Crew Days	118													118

- Notes:
- Staff hours for prime consultant come directly from each discipline's worksheet.
 - Staff hours for subconsultants are to be entered manually into columns D through O.
 - For workbooks prepared by subconsultants, their project hours will be totaled in column C.

Project Activity 3: General Tasks

Estimator:

SR 417, Econlockhatchee Trail to Seminole County Line

417-134

Representing	Print Name	Signature / Date
FDOT District		
Dewberry		

NOTE: Signature Block is optional, per District preference

Task No.	Task	Units	No of Units	Hours/ Unit	Total Hours	Comments
3.1	Public Involvement					
3.1.1	Community Awareness Plan	LS	1	0	0	
3.1.2	Notifications	LS	1	0	0	
3.1.3	Prepare Mailing Lists	LS	1	0	0	
3.1.4	Median Modification Letters	LS	1	0	0	
3.1.5	Driveway Modification Letters	LS	1	0	0	
3.1.6	Newsletters	LS	1	0	0	
3.1.7	Renderings and Fly Throughs	LS	1	0	0	
3.1.8	PowerPoint Presentation	LS	1	0	0	
3.1.9	Public Meeting Preparations	LS	1	60	60	Exhibit Preparation
3.1.10	Public Meeting Attendance/Followup	LS	1	12	12	3 people @ 4 hrs/ea
3.1.11	Other Agency Meetings	LS	4	7	28	2 people (1 hr travel, 2 hr meeting ea) + 1 hr/mtg agenda & minutes
3.1.12	Web Site	LS	1	0	0	
3.1 Public Involvement Subtotal					100	
3.2	Joint Project Agreements	EA	0	0	0	
3.3	Specifications Package Preparation	LS	1	24	24	Review Spec Package prepared by Atkins
3.4	Contract Maintenance and EDMS	LS	1	40	40	16 hrs setup + 2hrs/mo for 12 months
3.5	Value Engineering (Multi-Discipline Team) Review	LS	1	0	0	
3.6	Prime Consultant Project Manager Meetings	LS	1	240	240	See listing below
3.7	Plans Update	LS	1	0	0	

Project Activity 3: General Tasks

Task No.	Task	Units	No of Units	Hours/ Unit	Total Hours	Comments
3.8	Post Design Services	LS	1	0	0	
3.9	Digital Delivery	LS	1	16	16	
3.10	Risk Assessment Workshop	LS	1	0	0	
3.11	Railroad, Transit, and/or Airport Coordination	LS	1	0	0	
3.12	Other Project General Tasks	LS	1	0	0	
3. Project Common and Project General Tasks Total					420	

3.6 - List of Project Manager Meetings	Units	No of Units	Hours/ Unit	Total Hours	Comments
Roadway Analysis	EA	0	0	0	
Drainage	EA	0	0	0	
Utilities	EA	0	0	0	
Environmental	EA	0	0	0	
Structures	EA	0	0	0	
Signing & Pavement Marking	EA	0	0	0	
Signalization	EA	0	0	0	
Lighting	EA	0	0	0	
Landscape Architecture	EA	0	0	0	
Survey	EA	0	0	0	
Photogrammetry	EA	0	0	0	
ROW & Mapping	EA	0	0	0	
Terrestrial Mobile LIDAR	EA	0	0	0	
Architecture	EA	0	0	0	
Noise Barriers	EA	0	0	0	
ITS Analysis	EA	0	0	0	
Geotechnical	EA	0	0	0	
Progress Meetings	EA	24	9	216	Bi-Weekly for 12 months (4 people @ 2hrs/ea) + 1 hr/mtg for agenda & minutes
Phase Reviews	EA	4	4	16	2 people @ 2 hrs/ea
Field Reviews	EA	2	4	8	2 people @ 4 hrs/ea
Total Project Manager Meetings		30		240	Total PM Meeting Hours carries to Task 3.6 above

Notes:

1. If the hours per meeting vary in length (hours) enter the average in the hour/unit column.
2. Do not double count agency meetings between permitting agencies.
3. Project manager meetings are calculated in each discipline sheet and brought forward to Column D, except for Photogrammetry.

Project Activity 4: Roadway Analysis

Estimator:

SR 417, Econtockhatchee Trail to Seminole County Line

417-134

Representing	Print Name	Signature / Date
FDOT District		
Dewberry		

NOTE: Signature Block is optional, per District preference

Task No.	Task	Units	No of Units	Hours/ Unit	Total Hours	Comments
4.1	Typical Section Package	LS	1	0	0	Included in Preliminary Design Review
4.2	Pavement Type Selection Report	LS	1	0	0	
4.3	Pavement Design Package	LS	1	50	50	SR 417 Widening, SR 417 M&R, University Blvd Ramp (20 hrs set-up + 10 hrs/typical)
4.4	Cross-Slope Correction	LS	1	60	60	Widening Transitions
4.5	Horizontal/Vertical Master Design Files	LS	1	986	986	SR 417 (1 mile @ 300 hrs/mi + 2 miles @ 240 hrs/mi) + Toll Plaza Cash Lanes (0.6 mi @ 200 hrs/mi) + Univ Blvd On-Ramp (0.5 mi @ 200 hrs/mi) + 16 hrs for gen files
4.6	Access Management	LS	1	0	0	
4.7	Roundabout Evaluation	LS	1	0	0	
4.8	Roundabout Final Design Analysis	LS	1	0	0	
4.9	Cross Section Design Files	LS	1	525	525	SR 417 (3 mi) + Ramps (0.5 mi) = 3.5 mi @ 150 hrs/mi
4.10	Traffic Control Analysis	LS	1	360	360	Level 3 @ 3 miles, Analysis LS = 80 hrs, Cross Sections (Critical Locations) - SR 417 (1.5 mi x 3 phases x 40 hrs/phase) = 240 hrs, Univ Ramp (0.5 mi x 2 phases x 40 hrs/phase) = 40 hrs
4.11	Master TCP Design Files	LS	1	400	400	Level 3 @ 3 miles, SR 417 (40 hrs/mi x 3 phases x 3 miles) = 360 hrs, Univ Ramp (0.5 mi x 2 phases x 40 hrs/phase) = 40 hrs
4.12	Design Variations and Exceptions	LS	1	0	0	
4.13	Design Report	LS	1	52	52	Design Notebook
4.14	Quantities	LS	1	140	140	
4.15	Cost Estimate	LS	1	60	60	3 @ 20 hrs/ea
4.16	Technical Special Provisions	LS	1	0	0	
4.17	Other Roadway Analyses	LS	1	288	288	Preliminary Design Review (3 people x 3 weeks x 32 hrs/wk)
Roadway Analysis Technical Subtotal					2931	

Project Activity 4: Roadway Analysis

Task No.	Task	Units	No of Units	Hours/ Unit	Total Hours	Comments
4.18	Field Reviews	LS	1	0	0	
4.19	Monitor Existing Structures	LS	1	0	0	
4.20	Technical Meetings	LS	1	0	0	Meetings are listed below
4.21	Quality Assurance/Quality Control	LS	%	5%	147	
4.22	Independent Peer Review	LS	%	0%	0	
4.23	Supervision	LS	%	5%	147	
Roadway Analysis Nontechnical Subtotal					294	
4.24	Coordination	LS	%	3%	97	
4. Roadway Analysis Total					3322	

Technical Meetings	Units	No of Units	Hours/ Unit	Total Hours	PM Attendance at Meeting Required?	Number
Typical Section	EA	0	0	0		0
Pavement	EA	1	0	0		0
Access Management	EA	0	0	0		0
15% Line and Grade	EA	1	0	0		0
Driveways	EA	0	0	0		0
Local Governments (cities, counties, MPO)	EA	0	0	0		0
Work Zone Traffic Control	EA	0	0	0		0
30/60/90/100% Comment Review Meetings	EA	3	0	0		0
Other Meetings	EA	0	0	0		0
Subtotal Technical Meetings				0	Subtotal Project Manager Meetings	0
Progress Meetings (if required by FDOT)	EA	0	0	0	<i>PM attendance at Progress Meetings is manually entered on General Task 3</i>	--
Phase Review Meetings	EA	0	0	0	<i>PM attendance at Phase Review Meetings is manually entered on General Task 3</i>	--
Total Meetings				0	Total Project Manager Meetings (carries to Tab 3)	0

Curves to 4.17

Curves to Tab 3

Project Activity 5: Roadway Plans

Estimator:

SR 417, Econlockhatchee Trail to Seminole County Line

417-134

Representing		Print Name		Signature / Date
FDOT District				
Dewberry				

NOTE: Signature Block is optional, per District preference

Task No.	Task	Scale	Units	No. of Units or Sheet	Hours/ Unit or Sheet	Total Hours	Comments
5.1	Key Sheet		Sheet	1	8	8	
5.2	Summary of Pay Items Including Quantity Input		Sheet	2	20	40	
5.3	Typical Section Sheets						
5.3.1	Typical Sections		EA	7	9	63	SR 417 (3), Cash Lanes (1), Ramp (3)
5.3.2	Typical Section Details		EA	3	10	30	Cross Slope Correction/Mil & Resurface and shoulder treatment Details
5.4	General Notes/Pay Item Notes		Sheet	2	16	32	
5.5	Summary of Quantities Sheets		Sheet	25	5	125	FDOT Method
5.6	Project Layout		Sheet	1	8	8	
5.7	Plan/Profile Sheet		Sheet	0	0	0	
5.8	Profile Sheet		Sheet	34	4	136	SR 417 (24), Cash Lanes (4), University Ramp (4)
5.9	Plan Sheet		Sheet	28	4	112	SR 417 (24), University Ramp (2)
5.10	Special Profile		Sheet	0	0	0	
5.11	Back-of-Sidewalk Profile Sheet		Sheet	0	0	0	
5.12	Interchange Layout Sheet		Sheet	1	24	24	University Blvd
5.13	Ramp Terminal Details (Plan View)		Sheet	7	10	70	Cash Lanes (4), University Blvd (2), Aloma (1)
5.14	Intersection Layout Details		Sheet	0	0	0	
5.15	Special Details		EA	0	0	0	
5.16	Cross-Section Pattern Sheet(s)		Sheet	2	6	12	

Project Activity 5: Roadway Plans

Task No.	Task	Scale	Units	No. of Units or Sheet	Hours/ Unit or Sheet	Total Hours	Comments
5.17	Roadway Soil Survey Sheet(s)		Sheet	1	1	1	
5.18	Cross Sections		EA	205	0.25	51	SR 417 (3 mi) + University Blvd Ramp (0.5 mi) = 3.5 mi = 18,480 LF @ 100' spacing
5.19	Temporary Traffic Control Plan Sheets		Sheet	72	5	360	3 mi @ 50 Scale = 24 sheets x 3 Phases = 72 sheets
5.20	Temporary Traffic Control Cross Section Sheets		EA	96	0.25	24	3 mi @ 500' spacing = 32 sections x 3 phases = 96 sections
6.21	Temporary Traffic Control Detail Sheets		Sheet	12	6	72	General Notes, Quantities, Phasing Typical & Notes, Detour Sheets, Advanced Signing, etc
5.22	Utility Adjustment Sheets		Sheet	30	3	90	
5.23	Selective Cleaning and Grubbing Sheet(s)		Sheet	12	3	36	
5.24	Project Network Control Sheet(s)		Sheet	0	0	0	Not Required
5.25	Environmental Detail Sheets		Sheet	0	0	0	Not Required
5.26	Utility Verification Sheet(s) (SUE Data)		Sheet	2	4	8	
Roadway Plans Technical Subtotal						1302	
5.27	Quality Assurance/Quality Control		LS	%	5%	65	
5.28	Supervision		LS	%	5%	65	
5. Roadway Plans Total						1432	

Project Activity 6a: Drainage Analysis

Estimator:

SR 417, Econlockhatchee Trail to Seminole County Line

417-134

Representing	Print Name	Signature / Date
FDOT District		
Dewberry		

NOTE: Signature Block is optional, per District preference

Task No.	Task	Units	No of Units	Hours/ Unit	Total Hours	Comments
6a.1	Drainage Map Hydrology	Per Map	9	12	108	9 Basins
6a.2	Base Clearance Report	Per Location	1	12	12	Aloma Auxillary Lane (Turnpike)
6a.3	Pond Siting Analysis and Report	Per Basin	0	0	0	
6a.4	Design of Cross Drains	EA	9	8	72	
6a.5	Design of Ditches	Per Ditch Mile	7	15	105	3.5 miles (lt & rt)
6a.6	Design of Stormwater Management Facility (Offsite or Infield Pond)	EA	6	40	240	Ponds 4,7,8,8E & 8U, Watermill
6a.7	Design of Stormwater Management Facility (Roadside Ditch as Linear Pond)	Per Cell	0	0	0	
6a.8	Design of Floodplain Compensation	Per Floodplain Basin	1	40	40	Lake Telfer Floodplain
6a.9	Design of Storm Drains	EA	116	2	232	
6a.10	Optional Culvert Material	EA	0	0	0	
6a.11	French Drain Systems	Per Cell	0	0	0	
6a.12	Drainage Wells	EA	0	0	0	
6a.13	Drainage Design Documentation Report	LS	1	80	80	
6a.14	Bridge Hydraulic Report	EA	0	0	0	

Project Activity 6a: Drainage Analysis

Task No.	Task	Units	No of Units	Hours/ Unit	Total Hours	Comments
6a.15	Temporary Drainage Analysis	LS	1	40	40	Toll Plaza Area
6a.16	Cost Estimate	LS	1	8	8	
6a.17	Technical Special Provisions	LS	1	0	0	
6a.18	Other Drainage Analysis	LS	1	0	0	
Drainage Analysis Technical Subtotal					937	
6a.19	Field Reviews	LS	1	32	32	2 reviews x 2 people x 8 hrs
6a.20	Technical Meetings	LS	1	44	44	Meetings are listed below
6a.21	Environmental Look-Around (ELA) Meeting	LS	1	0	0	
6a.22	Quality Assurance/Quality Control	LS	%	5%	47	
6a.23	Independent Peer Review	LS	%	0%	0	
6a.24	Supervision	LS	%	5%	47	
Drainage Analysis Nontechnical Subtotal					170	
6a.25	Coordination	LS	%	3%	33	
6a. Drainage Analysis Total					1140	

Technical Meetings	Units	No of Units	Hours/ Unit	Total Hours	PM Attendance at Meeting Required?	Number
Base Clearance Water Elevation	EA	0	0	0		0
Pond Siting	EA	0	0	0		0
Agency	EA	2	8	16		0
Local Governments (cities, counties)	EA	0	0	0		0
FDOT Drainage (Mtg w/Atkins)	EA	1	4	4		0
Other Meetings	EA	0	0	0		0
Subtotal Technical Meetings				20		0
Progress Meetings (if required by FDOT)	EA	12	2	24	PM attendance at Progress Meetings is manually entered on General Task 3	--
Phase Review Meetings	EA	0	0	0	PM attendance at Phase Review Meetings is manually entered on General Task 3	--
Total Meetings				44	Total Project Manager Meetings (carries to Tab 3)	0

Carries to Tab 3

Carries to Tab 3

6b. Drainage Plans

Estimator:

SR 417, Econlockhatchee Trail to Seminole County Line
417-134

Representing	Print Name	Signature / Date
FDOT District		
Dawberry		

NOTE: Signature Block is optional, per District preference

Task No.	Task	Scale	Units	No. of Units or Sheet	Hours/ Unit or Sheet	Total Hours	Comments
6b.1	Drainage Map (Including Interchanges)		Sheet	5	40	200	1" = 200'
6b.2	Bridge Hydraulics Recommendation Sheets		Sheet	0	0	0	
6b.3	Summary of Drainage Structures		Sheet	4	28	112	
6b.4	Optional Pipe/Culvert Material		Sheet	0	0	0	
6b.5	Drainage Structure Sheet(s) (Per Structure)		EA	116	2.5	290	
6b.6	Miscellaneous Drainage Detail Sheets		Sheet	3	24	72	
6b.7	Lateral Ditch Plan/Profile		Sheet	0	0	0	
6b.8	Lateral Ditch Cross Sections		EA	0	0	0	
6b.9	Retention/Detention Ponds Detail Sheet(s)		Sheet	6	32	192	
6b.10	Retention Pond Cross Sections		EA	48	0.3	14	3 per pond
6b.11	Erosion Control Plan Sheet(s)		Sheet	1	8	8	Notes only.
6b.12	SWPPP Sheet(s)		Sheet	0	0	0	Not Required
Drainage Plans Technical Subtotal						888	
6b.13	Quality Assurance/Quality Control		LS	%	5%	44	
6b.14	Supervision		LS	%	5%	44	
6. Drainage Plans Total						976	

Project Activity 7: Utilities

Estimator:

SR 417, Econlockhatchee Trail to Seminol

Representing	Print Name	Signature / Date
FDOT District		
Dewberry		

NOTE: Signature Block is optional, per District preference

Task No.	Task	Units	No of Units	Hours/ Unit	Total Hours	Comments
7.1	Utility Kickoff Meeting	LS	1	4	4	1 MTG X (2) ATTENDEES X 2 HR MTG
7.2	Identify Existing Utility Agency Owners (UAO(s))	LS	1		0	
7.3	Make Utility Contacts	LS	1		0	
7.4	Exception Processing	LS	1	0	0	
7.5	Preliminary Utility Meeting	LS	1	5	5	1 HR PRE-MTG PREP + 2 hr DURATION x 2 ATTENDEES
7.6	Individual/Field Meetings	LS	1	8	8	2 HR MEETING DURATION x 1 ATTENDEES X 4 MEETINGS
7.7	Collect and Review Plans and Data from UAO(s)	LS	1	0	0	
7.8	Subordination of Easements Coordination	LS	1	0	0	
7.9	Utility Design Meeting	LS	1	5	5	1 HR PRE-MTG PREP + 2 HR DURATION x 2 ATTENDEES
7.10	Review Utility Markups & Work Schedules, and Processing of Schedules & Agreements	LS	1	20	20	(1) HOURS X (1) UTILITY DOCUMENTS x 20 UAO's
7.11	Utility Coordination/Followup	LS	1	0	0	
7.12	Utility Constructability Review	LS	1	0	0	
7.13	Additional Utility Services	LS	1	0	0	
7.14	Processing Utility Work by Highway Contractor (UWHC)	LS	1	0	0	
7.15	Contract Plans to UAO(s)	LS	1	0	0	

Project Activity 7: Utilities

7.16	Certification/Close-Out	LS	1	0	0	
7.17	Other Utilities	LS	1	0	0	
7. Utilities Total					142	

Technical Meetings	Units	No of Units	Hours/ Unit	Total Hours	PM Attendance at Meeting Required?
Kickoff (see 7.1)	EA	0	0	0	
Preliminary Meeting (see 7.5)	EA	0	0	0	
Individual UAO Meetings (see 7.6)	EA	0	0	0	
Field Meetings (see 7.8)	EA	0	0	0	
Design Meeting (see 7.9)	EA	0	0	0	
Other Meetings (this is automatically added into Utilities Total (cell F27))	EA	0	0	0	
Total Meetings				0	Total Project Manager Meetings (carries to Tab 3)

Project Activity 8: Environmental Permits

Estimator:

SR 417, Econlockhatchee Trail to Seminole County Line

417-134

Representing	Print Name	Signature / Date
FDOT District		
Dewberry		

NOTE: Signature Block is optional, per District preference

Task No.	Task	Units	No. of Units	Hours/ Units	Total Hours	Comments
	Environmental Permits, Compliances and Clearances					
8.1	Preliminary Project Research	LS	1	16	16	
	Permits					
8.2	Field Work					
8.2.1	Pond Site Alternatives	per pond site	0	0	0	
8.2.2	Establish Wetland Jurisdictional Lines and Assessments	LS	1	0	0	
8.2.3	Species Surveys	LS	1	0	0	
8.2.4	Archeological Surveys	LS	1	0	0	
8.3	Agency Verification of Wetland Data	LS	1	0	0	
8.4	Complete And Submit All Required Permit Applications					
8.4.1	Complete and Submit All Required Wetland Permit Applications	LS	1	120	120	
8.4.2	Complete and Submit All Required Species Permit Applications	LS	1	0	0	
8.5	Prepare Dredge and Fill Sketches (as needed)	LS	1	24	24	
8.6	Prepare USCG Permit Sketches	LS	1	0	0	
8.7	Prepare Water Management District Right-of-Way Occupancy Permit	LS	1	0	0	
8.8	Prepare Coastal Construction Control Line (CCCL) Permit Application	LS	1	0	0	
8.9	Prepare Tree Permit Information	LS	1	0	0	
8.10	Mitigation Design	LS	1	0	0	
8.11	Mitigation Coordination and Meetings	LS	1	0	0	

Project Activity 8: Environmental Permits

Task No.	Task	Units	No. of Units	Hours/ Units	Total Hours	Comments
8.12	Other Environmental Permits	LS	1	0	0	
	Environmental Clearances/Reevaluations					
8.13	Technical support to Department for Environmental Clearances and Reevaluations (use when consultant provides technical support only)					
8.13.1	NEPA or SEIR Reevaluation	LS	1	0	0	
8.13.2	Archaeological and Historical Features	LS	1	0	0	
8.13.3	Wetland Impact Analysis	LS	1	0	0	
8.13.4	Essential Fish Habitat	LS	1	0	0	
8.13.5	Wildlife and Habitat Impact Analysis	LS	1	0	0	
8.13.6	Section 7 or Section 10 Consultation	LS	1	0	0	
8.14	Preparation of Environmental Clearances and Reevaluations (use when consultant prepares all documents associated with reevaluation)					
8.14.1	NEPA or SEIR Reevaluation	LS	1	0	0	
8.14.2	Archaeological and Historical Features	LS	1	0	0	
8.14.3	Wetland Impact Analysis	LS	1	0	0	
8.14.4	Essential Fish Habitat	LS	1	0	0	
8.14.5	Wildlife and Habitat Impact Analysis	LS	1	0	0	
8.14.6	Section 7 or Section 10 Consultation	LS	1	0	0	
8.15	Contamination Impact Analysis	LS	1	0	0	
8.16	Asbestos Survey	LS	1	0	0	
Environmental Permits, Compliance, and Clearances/Reevaluations Technical Subtotal					160	
8.17	Technical Meetings	LS	1	32	32	Meetings are listed below
8.18	Quality Assurance/Quality Control	LS	%	5%	6	
8.19	Supervision	LS	%	6%	6	
Environmental Permits, Compliance and Clearances Nontechnical Subtotal					48	
8.20	Coordination	LS	%	3%	6	
8. Environmental Permits, Compliance and Clearances Total					214	

Project Activity 8: Environmental Permits

Task No.	Task	Units	No. of Units	Hours/ Units	Total Hours	Comments
	Technical Meetings	Units	No of Units	Hours/ Unit	Total Hours	PM Attendance at Meeting Required?
						Number
	WMD	EA	1	8	8	0
	NMFS	EA	0	0	0	0
	USACE	EA	1	8	8	0
	USCG	EA	0	0	0	0
	USFWS	EA	0	0	0	0
	FFWCC	EA	0	0	0	0
	FDOT	EA	0	0	0	0
	Other Meetings	EA	2	8	16	0
	Subtotal Technical Meetings				32	Subtotal Project Manager Meetings
	Progress Meetings (if required by FDOT)	EA	0	0	0	<i>PM attendance at Progress Meetings is manually entered on General Task 3</i>
	Phase Review Meetings	EA	0	0	0	<i>PM attendance at Phase Review Meetings is manually entered on General Task 3</i>
	Total Meetings				32	Total Project Manager Meetings (carries to Tab 3)
						0

Carries to 8.14

Carries to Tab 3

Project Activity 9: Structures Summary and Miscellaneous Tasks and Drawings

Estimator:

SR 417, Econlockhatchee Trail to Seminole County Line

417-134

Representing	Print Name	Signature / Date
FDOT District		
Dewberry		

NOTE: Signature Block is optional, per District preference

Task No.	Task	Units	Design and Production Staffhours				Comments				
			No. of Units	Hours per Unit	No. of Sheets	Total					
General Drawings											
9.1	Key Sheet and Index of Drawings	Sheet	1	8	1	8					
9.2	Project Layout	Sheet	0	0	0	0					
9.3	General Notes and Bid Item Notes	Sheet	2	16	2	32					
9.4	Miscellaneous Common Details	Sheet	0	0	0	0					
9.5	Incorporate Report of Core Borings	Sheet	1	1	1	1					
9.6	Existing Bridge Plans	LS	1	4		4					
9.7	Assemble Plan Summary Boxes and Quantities	LS	1	16		16					
9.8	Cost Estimate	LS	1	8		8					
9.9	Technical Special Provisions	LS	1	0		0					
Structures - Summary and Miscellaneous Tasks and Drawings Subtotal					4	68					
Task No.	Task	Total	Task 10	Task 11	Task 12	Task 13	Task 14	Task 15	Task 16	Task 17	Task 18
10-16	Bridge 1	1000	160	0	0	0	640	0	0		
10-16	Bridge 2	0									
10-16	Bridge 3	0									
10-16	Bridge 4	0									
10-16	Bridge 5	0									
10-16	Bridge 6	0									

Project Activity 9: Structures Summary and Miscellaneous Tasks and Drawings

10-18	Bridge 7	0									
10-16	Bridge 8	0									
10-16	Bridge 9	0									
10-16	Bridge 10	0									
17	Retaining Walls	64								64	
18	Miscellaneous Structures	612									612
Structures Technical Subtotal		1876	160	0	0	0	840	0	0	64	612
Task No.	Task	Units	No. of Units	Hours per Unit	Total	Comments					
9.10	Field Reviews	LS	1	0	0						
9.11	Technical Meetings	LS	1	12	12	Meetings are listed below					
9.12	Quality Assurance/Quality Control	LS	5%	5%	97	This should be (5% to 10%) x ("Structures - Summary and Miscellaneous Tasks and Drawings Subtotal, cell G21" + "Structures Technical Subtotal, cell C35")					
9.13	Independent Peer Review	LS	1	0	0						
9.14	Supervision	LS	5%	5%	97	This should be (3% to 7%) x ("Structures - Summary and Miscellaneous Tasks and Drawings Subtotal, cell G21" + "Structures Technical Subtotal, cell C35")					
Structures Nontechnical Subtotal					206						
9.15	Coordination	LS	1	48	48	Miscellaneous Str. Coord. - retaining walls, signs, noise walls.					
9. Structures - Summary and Miscellaneous Tasks and Drawings Nontechnical and Coordination Total					323						

Technical Meetings	Units	No of Units	Hours/ Unit	Total Hours	PM Attendance at Meeting Required?	Number
BDR Coordination/Review	EA	1	4	4		0
90/100% Comment Review	EA	1	4	4		0
Aesthetics Coordination	EA	1	4	4		0
Regulatory Agency	EA	0	0	0		0
Local Governments (cities, counties)	EA	0	0	0		0
Utility Companies	EA	0	0	0		0
Other Meetings	EA	0	0	0		0
Subtotal Technical Meetings				12		0
Progress Meetings (if required by FDOT)	EA	0	0	0	<i>PM attendance at Progress Meetings is manually entered on General Task 3</i>	--
Phase Review Meetings	EA	0	0	0	<i>PM attendance at Phase Review Meetings is manually entered on General Task 3</i>	--
Total Meetings				12	Total Project Manager Meetings (carries to Tab 3)	0

Carries to 9.11

Carries to Tab 3

Project Activity 10: BDR

Estimator:

SR 417, Econlockhatchee Trail to Seminole County Line

Bridge Identifier (Number or Name):

417-134

Representing	Print Name	Signature / Date
FDOT District		
Dewberry		

NOTE: Signature Block is optional, per District preference

Task No.	Task	Units	No of Units	Hours/ Unit	No. of Sheets	Total Hours	Comments
General Requirement							
10.1	Bridge Geometry	LS	1	8		8	
10.2	Ship Impact Data Collection	LS	0	0		0	
10.3	Ship Impact Criteria	EA	0	0		0	
Superstructure Alternatives							
10.4	Short Span Concrete Bridge	EA ALT	0	0		0	
10.5	Medium Span Concrete Bridge	EA ALT	0	0		0	
10.6	Long Span Concrete Bridge	EA ALT	0	0		0	
10.7	Structural Steel Bridge	EA ALT	1	16		16	
Foundation & Substructure Alternatives							
10.8	Pier/Bent	EA Type	1	4		4	Match Existing
10.9	Shallow Foundations / GRS Abutments	EA Type	0	0		0	
10.10	Deep Foundations	EA Foundation Evaluated	2	4		8	Steel and concrete piles
Movable Span							
10.11	Data Collection and Design Criteria	LS	1	0		0	
10.12	Movable Span Geometrics and Clearances	LS	1	0		0	
10.13	Deck System Evaluation	LS	1	0		0	
10.14	Framing Plan Development	LS	1	0		0	
10.15	Main Girder Preliminary Design	LS	1	0		0	
10.16	Conceptual Span Balance/Counterweight	LS	1	0		0	

Project Activity 10: BDR

Task No.	Task	Units	No of Units	Hours/ Unit	No. of Sheets	Total Hours	Comments
10.17	Support System Development	LS	1	0		0	
10.18	Drive Power Calculations	LS	1	0		0	
10.19	Drive System Development	LS	1	0		0	
10.20	Power and Control Development	LS	1	0		0	
10.21	Conceptual Pier Design	LS	1	0		0	
10.22	Foundation Analysis (FL PIER)	LS	1	0		0	
10.23	Tender Visibility Study	LS	1	0		0	
Other BDR Issues							
10.24	Aesthetics	LS	1	2		2	
10.25	TCP/Staged Construction Requirements	LS	1	16		16	
10.26	Constructibility Requirements	LS	1	0		0	
10.27	Load Rating for damaged/widened structures	EA Unit	1	0		0	We will do the load rating with final design
10.28	Quantity and Cost Estimates	EA ALT	2	8		16	
10.29	Quantity and Cost Estimates - Movable Span	LS	1	0		0	
10.30	Wall Type Justification	LS	1	2		2	Match Existing
Report Preparation							
10.31	Exhibits	EA SHEET	4	16		64	Plan and Elevation, Typ Section, End Bents/ Wall modifications and phasing plan
10.32	Exhibits - Movable Span	EA SHEET	0	0		0	
10.33	Report Preparation	LS	1	24		24	
10.34	Report Preparation - Movable Span	LS	1	0		0	
10.35	BDR Submittal Package	LS	1	0		0	
10. Structures - Bridge Development Report Total						160	
When ONLY 30% plans are final deliverable, use Task Nos. as shown for applicable bridge types for project Activities 12 thru 16. Staffhours to be negotiated and scaled appropriately.							

Project Activity 14: Structures -Structural Steel

Estimator:

Bridge Identifier (Number or Name):

SR 417, Econlockhatchee Trail to Seminole County Line

417-134

Representing	Print Name	Signature / Date
FDOT District		
Dewberry		

NOTE: Signature Block is optional, per District preference

Task No.	Task	Unit	No. of Units	Hours/ Unit	No. of Sheets	Total Hours	Comments
General Layout Design and Plans							
14.1	Overall Bridge Final Geometry	LS	1	8		8	
14.2	Expansion/Contraction Analysis	EA Unit	1	8		8	
14.3	General Plan and Elevation	Sheet	1	32	1	32	Update preliminary plan
14.4	Construction Staging	Sheet	0	0	0	0	
14.5	Approach Slab Plan and Details	Sheet	1	32	1	32	
14.6	Miscellaneous Details	Sheet	1	8	1	8	slope protection details
End Bent Design and Plans							
14.7	End Bent Geometry	EA Bent	2	8		16	
14.8	Wingwall Design and Geometry	EA Bent	2	8		16	
14.9	End Bent Structural Design	EA Design	1	24		24	
14.10	End Bent Plan and Elevation	Sheet	2	20	2	40	
14.11	End Bent Details	Sheet	2	18	2	36	
Intermediate Bent Design and Plans							
14.12	Bent Geometry	EA bent	0	0		0	
14.13	Bent Stability Analysis	EA design	0	0		0	
14.14	Bent Structural Design	EA design	0	0		0	
14.15	Bent Plan and Elevation	Sheet	0	0	0	0	
14.16	Bent Details	Sheet	0	0	0	0	
Pier Design and Plans							
14.17	Pier Geometry	EA pier	0	0		0	

Project Activity 14: Structures -Structural Steel

Task No.	Task	Unit	No. of Units	Hours/ Unit	No. of Sheets	Total Hours	Comments
14.18	Pier Stability Analysis	EA design	0	0		0	
14.19	Pier Structural Design	EA design	0	0		0	
14.20	Pier Plan and Elevation	Sheet	0	0	0	0	
14.21	Pier Details	Sheet	0	0	0	0	
Miscellaneous Substructure Design and Plans							
14.22	Foundation Layout	Sheet	1	16	1	16	
Superstructure Deck Design and Plans							
14.23	Finish Grade Elevation (FGE) Calculation	LS	1	24		24	
14.24	Finish Grade Elevations	Sheet	2	16	2	32	
14.25	Bridge Deck Design	EA section	1	24		24	
14.26	Bridge Deck Reinforcing and Concrete Quantities	EA Unit	1	8		8	
14.27	Superstructure Plan	Sheet	1	24	1	24	
14.28	Superstructure Section	Sheet	1	24	1	24	
14.29	Miscellaneous Bridge Deck Details	Sheet	1	24	1	24	Phasing
Reinforcing Bar Lists							
14.30	Preparation of Reinforcing Bar List	Sheet	1	12	1	12	
Structural Steel Plate Girder Design							
14.31	Unit Modeling	EA Unit	1	40		40	
14.32	Section Design	EA Unit	1	16		16	
14.33	Stiffener Design and Locations	EA Unit	1	16		16	
14.34	Cross-Frame Design	EA Unit	1	8		8	
14.35	Connections	EA Unit	1	24		24	
14.36	Bearing Assembly Design and Detailing (with Jacking Analysis)	EA Unit	1	16		16	
14.37	Splice Design	EA Unit	1	24		24	
14.38	Shear Stud Connectors	EA Unit	1	12		12	
14.39	Deflection Analysis	EA Unit	1	16		16	
14.40	Framing Plan	Sheet	1	16	1	16	

Project Activity 14: Structures - Structural Steel

Task No.	Task	Unit	No. of Units	Hours/ Unit	No. of Sheets	Total Hours	Comments
14.41	Girder Elevation	Sheet	1	16	1	16	
14.42	Structural Steel Details	Sheet	3	28	3	84	
14.43	Splice Details	Sheet	1	16	1	16	
14.44	Girder Deflections and Camber	Sheet	1	16	1	16	
Structural Steel Box Girder Design							
14.45	Unit Modeling	EA Unit	0	0		0	
14.46	Section Design	EA Unit	0	0		0	
14.47	Stiffener Design and Locations	EA Unit	0	0		0	
14.48	Interior Cross-Frame Design	EA Unit	0	0		0	
14.49	Exterior Cross-Frame Design	EA Unit	0	0		0	
14.50	Connections	EA Unit	0	0		0	
14.51	Bearing Assembly Design and Detailing (with Jacking Analysis)	EA Unit	0	0		0	
14.52	Splice Design	EA Unit	0	0		0	
14.53	Shear Stud Connectors	EA Unit	0	0		0	
14.54	Deflection Analysis	EA Unit	0	0		0	
14.55	Framing Plan	Sheet	0	0	0	0	
14.56	Girder Elevation	Sheet	0	0	0	0	
14.57	Structural Steel Details	Sheet	0	0	0	0	
14.58	Splice Details	Sheet	0	0	0	0	
14.59	Girder Deflections and Camber	Sheet	0	0	0	0	
Erection Scheme							
14.60	Erection scheme analysis	EA Critical Stage	2	24		48	
14.61	Erection scheme	Sheet	1	24	1	24	
Load Rating							
14.62	Load Rating	EA Unit	1	40		40	
14. Structures - Structural Steel Bridge Total					22	840	

Project Activity 17: Retaining Walls

Estimator:

SR 417, Econlockhatchee Trail to Seminole County Line

417-134

Representing	Print Name	Signature / Date
FDOT District		
Dewberry		

NOTE: Signature Block is optional, per District preference

Task No.	Task	Unit	No. of Units	Hours/ Unit	No. of Sheets	Total Hours	Comments
General Requirements							
17.1	Key Sheet	Sheet	0	0	0	0	
17.2	Horizontal Wall Geometry	Per Wall	1	6		6	
Permanent Proprietary Walls							
17.3	Vertical Wall Geometry	Per Wall	1	6		6	
17.4	Semi-Standard Drawings	Sheet	1	4	1	4	
17.5	Wall Plan and Elevations (Control Drawings)	Sheet	2	16	2	32	
17.6	Details	Sheet	1	16	1	16	
Temporary Proprietary Walls							
17.7	Vertical Wall Geometry	Per Wall	0	0		0	
17.8	Semi-Standard Drawings	Sheet	0	0	0	0	
17.9	Wall Plan and Elevations (Control Drawings)	Sheet	0	0	0	0	
17.10	Details	Sheet	0	0	0	0	
Cast-in-Place Retaining Walls							
17.11	Design	EA Design	0	0		0	
17.12	Vertical Wall Geometry	EA Wall	0	0		0	
17.13	General Notes	Sheet	0	0	0	0	
17.14	Wall Plan and Elevations (Control Drawings)	Sheet	0	0	0	0	
17.15	Sections and Details	Sheet	0	0	0	0	
17.16	Reinforcing Bar List	Sheet	0	0	0	0	

Project Activity 17: Retaining Walls

Task No.	Task	Unit	No. of Units	Hours/ Unit	No. of Sheets	Total Hours	Comments	
	Other Retaining Walls and Bulkheads							
17.17	Design	EA Design	0	0		0		
17.18	Vertical Wall Geometry	EA Wall	0	0		0		
17.19	General Notes, Tables and Misc. Details	Sheet	0	0	0	0		
17.20	Wall Plan and Elevations	Sheet	0	0	0	0		
17.21	Details	Sheet	0	0	0	0		
	17. Structures - Retaining Walls Total					4	64	

Project Activity 18: Miscellaneous Structures

Estimator:

SR 417, Economic/Active Trail to Berninole County Line

417-134

Representing	Print Name	Signature / Date
FDOT District		
Dewberry		

NOTE: Signature Block is optional, per District preference

Task No.	Task	Unit	No. of Units	Hours/Unit	No. of Sheets	Total Hours	Comments
Concrete Box Culvert							
18.1	Concrete Box Culverts	EA	0	0		0	
18.2	Concrete Box Culverts Extensions	EA Extension	0	0		0	
18.3	Concrete Box Culvert Data Table Plan Sheets	Sheet	0	0	0	0	
18.4	Concrete Box Culvert Special Details Plan Sheets	Sheet	0	0	0	0	
Strain Poles							
18.5	Steel Strain Poles	Initial Config	0	0		0	
		EA Add'l Config	0	0		0	
18.6	Concrete Strain Poles	Initial Config	0	0		0	
		EA Add'l Config	0	0		0	
18.7	Strain Pole Data Table Plan Sheets	Sheet	0	0	0	0	
18.8	Strain Pole Special Details Plan Sheets	Sheet	0	0	0	0	
Mast Arms							
18.9	Mast Arms	EA Design	0	0		0	
18.10	Mast Arms Data Table Plan Sheets	Sheet	0	0	0	0	
18.11	Mast Arm Special Details Plan Sheets	Sheet	0	0	0	0	
Overhead/Cantilever Sign Structures							
18.12	Cantilever Sign Structures	EA Design	8	16		128	
18.13	Overhead Span Sign Structures	EA Design	7	16		112	
18.14	Special (Lung Span) Overhead Span Sign Structures	EA Design	0	0		0	
18.15	Monolube Overhead Sign Structure	EA Design	0	0		0	
18.16	Bridge Mounted Signs (Attached to Superstr.)	EA Design	0	0		0	
18.17	Overhead and Cantilever Sign Structures Data Table Plan Sheets	Sheet	3	8	3	24	
18.18	Overhead and Cantilever Sign Structures Special Details Plan Sheets	Sheet	1	16	1	16	Special Foundation Details, Steep Slope.
High Mast Lighting							
18.19	Non-Standard High Mast Lighting Structures	EA Design	0	0		0	
18.20	High Mast Lighting Special Details Plan Sheets	Sheet	0	0	0	0	
Noise Barrier Walls (Ground Mount)							
18.21	Horizontal Wall Geometry	EA Wall	2	8		16	
18.22	Vertical Wall Geometry	EA Wall	2	16		32	
18.23	Summary of Quantities - Aesthetic Requirements	Sheet	2	12	2	24	
18.24	Control Drawings	Sheet	4	18	4	72	
18.25	Design of Noise Barrier Walls Covered by Standards	EA Design	2	12		24	
18.26	Design of Noise Barrier Walls Not Covered by Standards	EA Design	0	0		0	
18.27	Aesthetic Details	LS	1	4		4	
Special Structures							

Project Activity 18: Miscellaneous Structures

18.20	Fender System	LS	1	0		0	
18.20	Fender System Access	LS	1	0		0	
18.30	Spaced Structures	LS	1	0		0	
18.31	Other Structures	LS	1	300		300	Total Plaza Revolves
18. Structures - Miscellaneous Total				18		300	

27. Survey

Estimator:

SR 417, Econlockhatchee Trail to Seminole County Line
417-134

Representing	Print Name	Signature / Date
FDOT District		
Dewberry		

NOTE: Signature Block is optional, per District preference

Task No.	Task	Units	No of Units	Field Crew Days/Unit	Crew Days	Field Support Hours / Crew Days	Field Support Hours	Office Support Hours / Crew Days	Office Support Hours	Comments
27.1	Horizontal Project Control (HPC)									Establish horizontal control as needed for tasks below, datum to match that used for previous Survey by Turnpike Authority.
	2-Lane Roadway	Mile			0.00		0.00		0.00	
	Multi-lane Roadway	Mile			0.00		0.00		0.00	
	Interstate	Mile	3.05	1.75	5.34		0.00	4.00	21.35	
27.2	Vertical PC / Bench Line									Establish vertical control as needed for tasks below, set project benchmarks at 1000'± intervals along project corridor. Datum to match that used for previous Survey by Turnpike Authority. Add Benchmark information to PNC sheets.
	2-Lane Roadway	Mile			0.00		0.00		0.00	
	Multi-lane Roadway	Mile			0.00		0.00		0.00	
	Interstate	Mile	3.05	1.75	5.34		0.00	5.00	26.89	
27.3	Alignment and Existing R/W Lines									Re-trace alignment from the first PT south of Econ Trail to the first PC north of Aloma Avenue. Compute existing R/W lines through project corridor.
		Mile	4.50	2.00	9.00	1.00	9.00	6.00	54.00	
27.4	Aerial Targets			Units/Day						Locate (XYZ) targets set by ACA
	2-Lane Roadway	EA			0.00		0.00		0.00	
	Multi-lane Roadway	EA			0.00		0.00		0.00	
	Interstate	EA	72.00	12.00	6.00		0.00	5.00	30.00	
27.5	Reference Points	"A"		Units/Day						Stake and reference alignment through project corridor. Prepare PNC sheets with reference point details for EOR use in construction plans prep.
	2-Lane Roadway	EA			0.00		0.00		0.00	
	Multi-lane Roadway	EA			0.00		0.00		0.00	
	Interstate	EA	18.00	2.00	9.00	1.00	9.00	10.00	90.00	
	Reference Points	"B"		Units/Day						

27. Survey

Task No.	Task	Units	No of Units	Field Crew Days/Unit	Crew Days	Field Support Hours / Crew Days	Field Support Hours	Office Support Hours / Crew Days	Office Support Hours	Comments
	Non Alignment Points/Approximate	EA			0.00		0.00		0.00	
27.6	Topography/DTM (3D)	Mile	3.05	5.00	15.25		0.00	6.00	91.50	Topo / DTM Survey of project corridor, lateral limits from outside edge of shoulder to 25' past R/W and within median. Prepare TIN, TOPORD.DGN, DREXRD.DGN and UTEXRD.DGN files - ACA to merge with their files.
27.7	Planimetric (2D)	Mile			0.00		0.00		0.00	Included in 27.6
27.8	Roadway Cross-Sections/Profiles	EA	33.00	0.1867	5.50		0.00	4.00	22.00	Check cross sections at 500' intervals through project corridor.
27.9	Side Street Surveys	Mile	0.50	4.00	2.00		0.00	6.00	12.00	Topo / DTM Survey of obscure areas on side streets, add information to TIN, TOPORD.DGN, DREXRD.DGN and UTEXRD.DGN files.
27.10	Underground Utilities									
	Designates	Mile/Site	11.50	1.00	11.50		0.00	3.00	34.50	Designate: estimated 2 utilities through project corridor (6.1 miles); 5 utilities crossing at Trevarthon and Econlockhatchee (2.8 miles); 6 utilities crossing at University (2.2 miles); 3 utilities crossing at Watermill and toll plaza (0.4 miles). 40 VVH's at potential conflicts, locations to be provided by EOR. Locate same and add information to UTEXRD.DGN file
	Locates	Point	40	0.125	5.00		0.00	4.00	20.00	
	Survey		35%	16.50	5.78		0.00	5.00	28.88	
27.11	Duffall Survey	Mile			0.00		0.00		0.00	Included in 27.6 if needed
27.12	Drainage Survey	EA	60.00	12.00	5.00		0.00	4.00	20.00	Detail an estimated 60 existing drainage structures. Add information to DREXRD.DGN file.
27.13	Bridge Survey	EA	2.00	1.00	2.00		0.00	6.00	12.00	Detail bridges over University
27.14	Channel Survey	EA			0.00		0.00		0.00	Included in 27.6 if needed
27.15	Pond Site Survey	EA	6.00	1.00	8.00		0.00	6.00	48.00	Topo/DTM Survey 8 existing ponds within the R/W to waters edge (bottom of wet ponds not to be surveyed). Add information to TIN, TOPORD.DGN, DREXRD.DGN and UTEXRD.DGN files
27.16	Mitigation Survey	Mile			0.00		0.00		0.00	Not Included
27.17	Jurisdiction Line Survey	Mile	1.00	2.00	2.00		0.00	6.00	12.00	Locate up to one mile of wetland lines to be flagged by others.

27. Survey

Task No.	Task	Units	No of Units	Field Crew Days/Unit	Crew Days	Field Support Hours / Crew Days	Field Support Hours	Office Support Hours / Crew Days	Office Support Hours	Comments	
27.18	Geotechnical Support			Units/Day						Stake or locate 30 borings for walls and bridges.	
		EA	30	8	3.75		0.00	4.00	15.00		
27.19	Sectional / Grant Survey									Not Included	
		Corner			0.00		0.00		0.00		
		Mile			0.00		0.00		0.00		
27.20	Subdivision Location									Not Included	
		Block			0.00		0.00		0.00		
27.21	Maintained RAW									Not Included	
		Mile			0.00		0.00		0.00		
27.22	Boundary Survey									Not Included	
		EA			0.00		0.00		0.00		
27.23	Water Boundary Survey									Not Included	
		EA			0.00		0.00		0.00		
27.24	RAW Staking / RAW Line									Not Included	
		EA			0.00		0.00		0.00		
		Mile			0.00		0.00		0.00		
27.25	RAW Monumentation									Not Included	
		Point			0.00		0.00		0.00		
27.26	Line Cutting									Included in other tasks if required	
		Mile			0.00						
27.27	Work Zone Safety									One hour per day	
			100	0.125	12.50						
27.28	Miscellaneous Surveys										
					0.00		0.00		0.00		
Survey Subtotal					Crew Days	113	Field Support Hours	18	Office Support Hours	538	
27.29	Supplemental Surveys									THE % FOR SUPPLEMENTAL WILL BE DETERMINED AT NEGOTIATIONS. THIS ITEM CAN ONLY BE USED IF AUTHORIZED IN WRITING BY THE DISTRICT SURVEYOR	
			4.6%	113	5		1		27		
27.30	Document Research	Units								0	

27. Survey

Task No.	Task	Units	No of Units	Field Crew Days/Unit	Crew Days	Field Support Hours / Crew Days	Field Support Hours	Office Support Hours / Crew Days	Office Support Hours	Comments
27.31	Field Reviews	Units							0	
27.32	Technical Meetings	LS	0.00						0	
27.33	Quality Assurance / Quality Control	LS						5%	27	
27.34	Supervision	LS						5%	28	
27.35	Coordination	LS						3%	16	
27. Survey Total				Crew Days	118	Field Support Hours	19	Office Support Hours	638	

SPLS =
 PLS =
 Office Support =
 Total Hours = 633

Technical Meetings	Units	No of Units	Hours/ Unit	Total Hours	PM Attendance at Meeting Required?	Number
Kickoff Meeting with FDOT	EA	0	0	0		0
Baseline Approval Review	EA	0	0	0		0
Network Control Review	EA	0	0	0		0
Vertical Control Review	EA	0	0	0		0
Local Governments (cities, counties)	EA	0	0	0		0
Final Submittal Review	EA	0	0	0		0
Other Meetings	EA	0	0	0		0
Subtotal Technical Meetings				0	Subtotal PM Meetings	0
Progress Meetings (if required by FDOT)	EA	0	0	0	**	**
Phase Review Meetings	EA	0	0	0	**	**
Total Meetings				0	Total PM Mtgs (carries to Tab 3)	0

Carries to 27.32

Carries to Tab 3

** Project Manager attendance at progress, phase and field review meetings are manually entered on General Task 3

MISCELLANEOUS & DIRECT EXPENSES						
Central Florida Expressway Authority			Consultant: Dewberry			
Name of Job			SR 417 - Econ Trail to Orange/Seminole County Line - 417-134			
Aerial Photography:	Sheets	Cost	Amount			
Right-of-Way Maps						
Drafting Medium (Mylar):						
	0	\$0.00	\$0			\$0.00
						\$0.00
	BlueLine	Vellum	11X17	8.5X11		
30% Plans			6000	1000	Sheets	
60% Plans			12000	8000	Sheets	
90% Plans			15000	10000	Sheets	
100% Plans			15000	6000	Sheets	
Final Plans			3000	5000	Sheets	
Misc. Prints			18000	10000	Sheets	
Total	0	0	69000	40000	Sheets	
Costs:	Blue Line		0	Sheets @	0.60	\$0.00
	Vellum		0	Sheets @	3.60	\$0.00
	Photocopy - 11X17		69000	Sheets @	0.30	\$20,700.00
	Photocopy - 8.5X11		40000	Sheets @	0.10	\$4,000.00
						\$24,700.00
Travel From: [Consultant Office Location]						
To Project: Trips						
(Overnight)	x	people x		days @	\$50	\$0.00
(Per Diem)	x	people x		days @	\$6	\$0.00
Transport - (Comm.)	x	people x	0.00	per trip		\$0.00
- (POV)	0 x	0 miles x	0.29	per mile		\$0.00
-(Rental)	0 x	0 (days x \$	0.00	Day Rate)		\$0.00
	+	0 (miles x \$	0.00	Mi. Rate)		\$0.00
To District: Trips						
(Per Diem)	0 x	0 people x	0.00	days @	\$6	\$0.00
Transport - (Comm.)	0 x	0 people x	0.00	per trip		\$0.00
- (POV)	0 x	0 miles x	0.29	per mile		\$0.00
-(Rental)	0 x	0 (days x \$	0.00	Day Rate)		\$0.00
		0 (miles x \$	0.00	Mi. Rate)		\$0.00
						\$0.00
Shipping & Telephone 12 months @ \$ 50.00 /Month)						
						\$600.00
TOTAL EXPENSES						LUMP SUM \$25,300.00
Kevin Knudsen						04/25/16

ESTIMATE OF WORK EFFORT AND COST - SUBCONSULTANT

Name of Project: SR 417, Econohatchee Trail to Seminole County Line
 County: Orange
 CFX Contract Number: 417-134

Consultant Name: Comprehensive Engineering Services, Inc
 Consultant No.: TBD
 Date: 6/7/2016

Estimator: C. Simonneau

Staff Classification	Total Staff Hours (FTE) (Only Saturday Fee)	Chief Engineer	Senior Engineer	Project Engineer	Engineer Intern	Senior Designer	Admin Assistant	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
		\$90.55	\$62.60	\$39.31	\$24.70	\$36.05	\$26.48	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00			
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	140	14	28	35	28	35	0	0	0	0	0	0	0	140	\$6,382	\$45.68
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	382	38	76	96	76	96	0	0	0	0	0	0	0	382	\$17,399	\$45.55
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, Dvgs, 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	65	7	13	16	13	16	0	0	0	0	0	0	0	65	\$2,989	\$45.99
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	934	93	187	234	187	233	0	0	0	0	0	0	0	934	\$42,558	\$45.67
24 Lighting Plans	342	34	68	86	68	86	0	0	0	0	0	0	0	342	\$15,575	\$45.54
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	433	43	87	109	87	108	0	0	0	0	0	0	0	433	\$19,727	\$45.58
34 Intelligent Transportation Systems Plans	266	26	52	72	56	71	0	0	0	0	0	0	0	266	\$13,143	\$49.84
35 Geotechnical	0	0	0	0	0	0	0	0	0	0	0	0	0	0	\$0	#DIV/0!
Total Staff Hours	2,584	258	517	647	517	645	0	0	0	0	0	0	0	2,584	\$117,773.12	\$45.58
Total Staff Cost		\$23,361.90	\$32,312.50	\$24,786.57	\$12,769.90	\$24,642.25	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00		\$117,773.12	

Notes:
 1 This sheet to be used by Subconsultant to calculate its fee.

SALARY RELATED COSTS:		\$	117,773.12
OVERHEAD:	177.42%	\$	208,868.07
OPERATING MARGIN:	11.4447%	\$	37,382.83
EXPENSES:		\$	8,322.87
SUBTOTAL ESTIMATED FEE:		\$	373,441.99
SUBTOTAL ESTIMATED FEE:		\$	373,441.99
Optional Services		\$	
GRAND TOTAL ESTIMATED FEE:		\$	373,441.99

EXPENSES									
Prepared by:		Comprehensive Engineering Services, Inc.							
Project Identification No.:		417-134							
Project Description:		SR 417 - Econ Trail to Seminole County Line							
REPRODUCTION	3/4"x11"	8 1/2"x11"	9 1/2"x14"	11" X 17"	11" X 17"	11" X 17"	Drill & Post	24" X 36"	24" X 36"
	COLOR	XEROX	XEROX	COLOR	XEROX	Laminate	Binding	Bond Paper Plots	Mylar Plots
Printing	665	4814		4120	23165				
Laminated Covers & Backs						156			
30%, 60% & Final Submittals							156		
Signed & Sealed Originals								0	0
SUBTOTAL	665	4814	0	4120	23165	156	156	0	0
UNIT COST	\$0.60	\$0.04	\$0.06	\$1.10	\$0.070	\$1.70	\$2.25	\$0.60	\$8.40
TOTALS COST	\$399.00	\$192.56	\$0.00	\$4,532.00	\$1,621.55	\$265.20	\$351.00	\$0.00	\$0.00
							Sub Total	\$7,361.31	
TRAVEL EXPENSES									
TRAVEL (From Orlando Office)									
				Round Trip					
To Project :	12	Trips @	35	Miles @	\$0.445	Per Mile =	\$186.90		
Tolls:	12	Trips @	\$4.00	/round trip		=	\$48.00		
Meals	0	Trips with	\$0.00	per diem x	0	People =	\$0.00		
TRAVEL (From Orlando Office)									
To CFX Office:	10	Trips @	8.8	Miles @	\$0.445	Per Mile =	\$39.16		
Tolls:	10	Trips @	\$2.00	/round trip		=	\$20.00		
TRAVEL (From Orlando Office)									
	0	Trips @		Miles @	\$0.445	Per Mile =	\$0.00		
TRAVEL (From Orlando Office)									
To Other Office:	0	Trips @		Miles @	\$0.445	Per Mile =	\$0.00		
							Sub Total	\$294.06	
SHIPPING									
	12	Months @	\$126.70	Per Month			\$1,520.40		
SHIPPING (Regular Mail)	10	Letters/Mo	@	\$0.47	/letter		\$4.70		
SHIPPING (PEDEX)	2	Overnight Letters @	\$12.25	/letter			\$24.50		
(Includes Utilities Submittals)	5	Overnight Boxes @	\$18.25	/Box			\$91.25		
				Monthly Total =			\$126.70		
COURIER SHIPPING	0	Trips @	\$32.85	per Trip			\$0.00	Final & Final Mylar Plots	
PUBLIC MEETINGS									
Public Meeting No. 1									
2' x 10' Project Board - 20sf		=							
3 - 3' x 2' Exhibits Boards - 18 sf		=							
(Typical Section, Sample Landscaping layout, Landscaping Typical)									
Handouts (10 color sheets - 30 sets)		=							
Public Meeting No. 2									
2' x 10' Project Board - 20sf		=							
3 - 3' x 2' Exhibits Boards - 18 sf		=							
(Typical Section, Sample Landscaping layout, Landscaping Typical)									
Handouts (10 color sheets - 30 sets)		=							
MISCELLANEOUS									
							\$147.20		
CD Recordable Disks									
Comp Book Covers									
Report Binding			\$147.20	32 @ \$4.60					
			\$147.20						
							Sub Total	\$1,667.60	
TOTAL EXPENSES									\$9,322.97

Project Activity 4: Roadway Analysis

Estimator:

SR 417, Econlockhatchee Trail to Seminole County Line

417-134

Representing	Print Name	Signature / Date
FDOT District		
Comprehensive Engineering Services		

NOTE: Signature Block is optional, per District preference

Task No.	Task	Units	No of Units	Hours/ Unit	Total Hours	Comments
4.1	Typical Section Package	LS	1	0	0	
4.2	Pavement Type Selection Report	LS	1	0	0	
4.3	Pavement Design Package	LS	1	0	0	
4.4	Cross-Slope Correction	LS	1	0	0	
4.5	Horizontal /Vertical Master Design Files	LS	1	0	0	
4.6	Access Management	LS	1	0	0	
4.7	Roundabout Evaluation	LS	1	0	0	
4.8	Roundabout Final Design Analysis	LS	1	0	0	
4.9	Cross Section Design Files	LS	1	0	0	
4.10	Traffic Control Analysis	LS	1	0	0	
4.11	Master TCP Design Files	LS	1	0	0	
4.12	Design Variations and Exceptions	LS	1	0	0	
4.13	Design Report	LS	1	140	140	Traffic data reduction, field reviews, traffic projection & operational review, modeling, crash review, meetings, traffic analysis documentation
4.14	Quantities	LS	1	0	0	
4.15	Cost Estimates	LS	1	0	0	
4.16	Technical Special Provisions	LS	1	0	0	
4.17	Other Roadway Analyses	LS	1	0	0	
Roadway Analysis Technical Subtotal					140	

Project Activity 4: Roadway Analysis

Task No.	Task	Units	No of Units	Hours/ Unit	Total Hours	Comments
4.18	Field Reviews	LS	1	0	0	
4.19	Monitor Existing Structures	LS	1	0	0	
4.20	Technical Meetings	LS	1	0	0	Meetings are listed below
4.21	Quality Assurance/Quality Control	LS	%	0%	0	
4.22	Independent Peer Review	LS	%	0%	0	
4.23	Supervision	LS	%	0%	0	
Roadway Analysis Nontechnical Subtotal					0	
4.24	Coordination	LS	%	0%	0	
4. Roadway Analysis Total					140	

Technical Meetings	Units	No of Units	Hours/ Unit	Total Hours	PM Attendance at Meeting Required?	Number
Typical Section	EA	0	0	0		0
Pavement	EA	0	0	0		0
Access Management	EA	0	0	0		0
15% Line and Grade	EA	0	0	0		0
Driveways	EA	0	0	0		0
Local Governments (cities, counties, MPO)	EA	0	0	0		0
Work Zone Traffic Control	EA	0	0	0		0
30/60/90/100% Comment Review Meetings	EA	0	0	0		0
Other Meetings	EA	0	0	0		0
Subtotal Technical Meetings				0		
					Subtotal Project Manager Meetings	0
Progress Meetings (if required by FDOT)	EA	0	0	0	<i>PM attendance at Progress Meetings is manually entered on General Task 3</i>	--
Phase Review Meetings	EA	0	0	0	<i>PM attendance at Phase Review Meetings is manually entered on General Task 3</i>	--
Total Meetings				0	Total Project Manager Meetings (carries to Tab 3)	0

Sheet 10 of 17

Sheet 10 of 17

Project Activity 7: Utilities

Estimator:

SR 417, Econlockhatchee Trail to Seminole County Line
417-134

Representing	Print Name	Signature / Date
FDOT District		
Comprehensive Engineering Services		

NOTE: Signature Block is optional, per District preference

Task No.	Task	Units	No of Units	Hours/ Unit	Total Hours	Comments
7.1	Utility Kickoff Meeting	LS	1	4	4	2 people x 2 hours
7.2	Identify Existing Utility Agency Owners (UAO(s))	LS	1	10	10	0.5 hr x 20 utilities (Bright House, City of Orlando - wastewater, City of Winter Park, Duke Energy Distribution, Duke Energy Transmission, FPL Fibernet, Level 3, Lovelace Gas Service, Verizon Business fka MCI, Orange County Utilities Wastewater, Orange County Public Works, Central Florida Expressway Authority, Orange County Utilities, Orlando Telephone Company, TECO Gas, CenturyLink fka Qwest, AT&T Florida, Seminole County, Comcast Cablevision, CenturyLink
7.3	Make Utility Contacts	LS	1	40	40	2 hr x 20 utilities
7.4	Exception Processing	LS	1	0	0	not anticipated
7.5	Preliminary Utility Meeting	LS	1	8	8	phase I meeting include prep & documentation
7.6	Individual/Field Meetings	LS	1	32	32	2 people x 4 hours for 4 meetings
7.7	Collect and Review Plans and Data from UAO(s)	LS	1	20	20	1 hr x 20 utilities
7.8	Subordination of Easements Coordination	LS	1	0	0	not anticipated
7.8	Utility Design Meeting	LS	1	8	8	Phase II meeting includes prep and documentation
7.10	Review Utility Markups & Work Schedules, and Processing of Schedules & Agreements	LS	1	80	80	2 hrs x 2 docs x 20 utilities
7.11	Utility Coordination/Followup	LS	1	60	60	20 utilities x 2 follow up x 1.5 complexity
7.12	Utility Constructability Review	LS	1	60	60	20 utilities x 2 follow up x 1.5 complexity
7.13	Additional Utility Services	LS	1	0	0	not anticipated
7.14	Processing Utility Work by Highway Contractor (UWHC)	LS	1	0	0	not anticipated
7.15	Contract Plans to UAO(s)	LS	1	20	20	1 hr x 20 utilities
7.16	Certification/Close-Out	LS	1	40	40	2 hr x 20 utilities
7.17	Other Utilities	LS	1	0	0	
7. Utilities Total					382	

Project Activity 19: Signing and Pavement Marking Analysis

Estimator:

SR 417, Econlockhatchee Trail to Seminole County Line

417-134

Representing	Print Name	Signature / Date
FDOT District		
Comprehensive Engineering Services		

NOTE: Signature Block is optional, per District preference

Task No.	Task	Units	No. of Units	Hours/ Units	Total Hours	Comments
19.1	Traffic Data Analysis	LS	1	0	0	
19.2	No Passing Zone Study	LS	1	0	0	
19.3	Reference and Master Design File	LS	1	0	0	
19.4	Multi-Post Sign Support Calculations	EA	1	0	0	
19.5	Sign Panel Design Analysis	EA	1	0	0	
19.6	Sign Lighting/Electrical Calculations	EA	1	57	57	11 cantilevers, 8 span truss structures, and 2 bridge mounted signs. Total of 38 sign panels to be lighted, including 18 existing sign panels anticipated to be upgraded to LED. 38 signs * 1.5 hours per sign = 76 hours.
19.7	Quantities	LS	1	0	0	
19.8	Cost Estimate	LS	1	0	0	
19.9	Technical Special Provisions	LS	1	0	0	
19.10	Other Signing and Pavement Marking	LS	1	0	0	
Signing and Pavement Marking Analysis Technical Subtotal					57	
19.11	Field Reviews	LS	1	0	0	
19.12	Technical Meetings	LS	1	0	0	Meetings are listed below
19.13	Quality Assurance/Quality Control	LS	%	5%	3	
19.14	Independent Peer Review	LS	%	0%	0	
19.15	Supervision	LS	%	5%	3	
Signing and Pavement Marking Analysis Nontechnical Subtotal					6	
19.16	Coordination	LS	%	3%	2	
19. Signing and Pavement Marking Analysis Total					65	

Project Activity 23: Lighting Analysis

Estimator:

SR 417, Econlockhatchee Trail to Seminole County Line

417-134

Representing	Print Name	Signature / Date
FDOT District		
Comprehensive Engineering Services		

NOTE: Signature Block is optional, per District preference

Task No.	Task	Units	No. of Units	Hours/ Units	Total Hours	Comments
23.1	Lighting Justification Report	LS	0	0	0	N/A
23.2	Lighting Design Analysis Report	LS	1	120	120	Full photometric calculation color sheets or contour (mainline, ramps, and underpass), evaluate areas without outside widening where existing light poles may be salvaged, veiling luminance calculations for each typical section, sign lighting calculations, and design fixture correspondence for CFX preference, includes relamping University Interchange with LED.
23.3	Aeronautical Evaluation	LS	1	40	40	FAA filing required based on notice criteria tool - online approval process where information for each light pole is input for determination (latitude, longitude, ground elevation, pole height, and traverseway)
23.4	Voltage Drop Calculations	LS	1	48	48	Estimate 4 load centers and 9 circuits average per load center (alternating circuits)
23.5	FDEP Coordination and Report	LS	0	0	0	N/A
23.6	Reference and Master Design Files	LS	1	459	459	Project lengths: SR 417 mainline 3 miles, toll plaza 1.1 miles, University ramps 0.5 miles. Middle range (limited access with interchange spacing greater than two miles), 45 hours setup + (4.6 miles mainline/toll plaza/ramps) * 60 hours per mile = 459 hours (Toll plaza area redo with LED assumed & relamp University Interchange)
23.7	Temporary Lighting	LS	1	8	8	Notes only with spacing ranges based on temporary lighting fixture
23.8	Design Documentation	LS	1	16	16	Included with each submittal
23.9	Quantities	LS	1	70	70	35 plan sheets @ 2 hour per sheet
23.10	Cost Estimate	LS	1	16	16	3 estimates - initial, phase III, and final
23.11	Technical Special Provisions	LS	0	0	0	Not anticipated
23.12	Other Lighting Analysis	LS	0	0	0	Not anticipated
Lighting Analysis Technical Subtotal					777	
23.13	Field Reviews	LS	1	24	24	3 field reviews, 2 people @ 4 hours
23.14	Technical Meetings	LS	1	28	28	See listed meetings for breakdown
23.15	Quality Assurance/Quality Control	LS	%	5%	39	
23.16	Independent Peer Review	LS	%	0%	0	
23.17	Supervision	LS	%	5%	39	
Lighting Analysis Nontechnical Subtotal					139	
23.18	Coordination	LS	%	3%	27	

Project Activity 23: Lighting Analysis

23. Lighting Analysis Total						
					934	
Technical Meetings	Units	No of Units	Hours/ Unit	Total Hours	PM Attendance at Meeting Required?	Number
FDOT Lighting Design	EA	0	0	0		0
FDOT Traffic Design	EA	0	0	0		0
Power Company (service point coordination)	EA	1	8	8		0
Maintaining Agency (cities, counties)	EA	1	8	8		0
Airport authority	EA	0	0	0		0
FDEP Lighting (coast areas)	EA	0	0	0		0
Other Meetings	EA	0	0	0		0
Subtotal Technical Meetings				12	Subtotal Project Manager Meetings	0
Progress Meetings (if required by FDOT)	EA	4	2	8	<i>PM attendance at Progress Meetings is manually entered on General Task 3</i>	..
Phase Review Meetings	EA	2	4	8	<i>PM attendance at Phase Review Meetings is manually entered on General Task 3</i>	..
Total Meetings				28	Total Project Manager Meetings (carries to Tab 3)	0

Carries to Tab 14

Carries to Tab 3

24. Lighting Plans

Estimator:

SR 417, Econlockhatchee Trail to Seminole County Line
417-134

Representing	Print Name	Signature / Date
FDOT District		
Comprehensive Engineering Services		

NOTE: Signature Block is optional, per District preference

Task No.	Task	Scale	Units	No. of Units	Hours/ Unit	No. of Sheets	Total Hours	Comments
24.1	Key Sheet		Sheet	1	4	1	4	
24.2	Summary of Pay Items Including Designer Interface (TRNS-Port) Input		Sheet	0	0	0	0	
24.3	Tabulation of Quantities		Sheet	5	7.2	5	36	4 sheets for 35 plan sheets and 3 underdeck sheets
24.4	General Notes/Pay Item Notes		Sheet	1	8	1	8	
24.5	Pole Data, Legend and Criteria		Sheet	6	16	6	96	Legend/criteria sheet and 4 pole data sheets (3 conventional lighting, 1 underdeck lighting)
24.6	Service Point Details		Sheet	4	12	4	48	4 load centers
24.7	Project Layout		Sheet	1	4	1	4	
24.8	Plan Sheet	1" = 50'	Sheet	35	2	35	70	700' per panel for 24,288' of lighting + tie in to existing lighting to remain
24.9	Special Details		Sheet	3	12	3	36	Under deck at 3 crossings
24.10	Temporary Lighting Data and Details		Sheet	1	8	1	8	Notes only with spacing ranges based on temporary lighting fixture
24.11	Traffic Control Plan Sheets		Sheet	0	0	0	0	
24.12	Interim Standards		LS	0	0		0	
Lighting Plans Technical Subtotal						67	310	
24.13	Quality Assurance/Quality Control		LS	%	5%		18	
24.14	Supervision		LS	%	5%		16	
24. Lighting Plans Total						67	342	

33. ITS Analysis

Estimator: RLS

SR 417, Econlockhatchee Trail to Seminole County Line

417-134

Representing	Print Name	Signature / Date
FDOT District		
Comprehensive Engineering Services		

NOTE: Signature Block is optional, per District preference

Task No.	Task	Units	No of Units	Hours/ Unit	Total Hours	Comments
33.1	ITS Analysis	LS	1	16	16	
33.2	Communications Plan Analysis	LS	1	24	24	
33.3	Lightning Protection Analysis	Per Site	0	0	0	N/A
33.4	Power Subsystem	LS	1	100	100	
33.5	Voltage Drop Calculations	LS	1	16	16	4 power service circuits
33.6	Design Documentation	LS	1	20	20	
33.7	Existing ITS System	LS	1	16	16	
33.8	Queue Analysis	PI	0	0	0	N/A
33.9	Reference and Master ITS Design File	PI	0	0	0	N/A
33.10	Reference and Master Communications Design File	PI	1	56	56	20 hrs/mile, SR 417 from Econlockhatchee Trail to Orange/Seminole County line - 2.9 miles
33.11	Pole Elevation Analysis	LS	1	7	7	6 CCTV locations
33.12	Sign Panel Design Analysis	LS	0	0	0	N/A
33.13	Quantities	Sheet	29	3	87	23 plan sheets, 6 MOT sheets
33.14	Cost Estimate	LS	1	8	8	Phase II, Phase III, Phase IV, Pre-Bid
33.15	Technical Special Provisions	LS	0	0	0	N/A
33.16	Other ITS Analyses	LS	1	0	0	
Intelligent Transportation Systems Analysis Technical Subtotal					352	

33. ITS Analysis

Task No.	Task	Units	No of Units	Hours/ Unit	Total Hours	Comments
33.17	Field Reviews	LS	1	16	16	2 reviews, 2 people, 4 hours
33.18	Technical Meetings	LS	1	16	16	Meetings are listed below
33.19	Quality Assurance/Quality Control	LS	%	6%	18	
33.20	Supervision	LS	%	5%	18	
Intelligent Transportation Systems Analysis Nontechnical Subtotal					68	
33.21	Coordination	LS	%	3%	13	
33. Intelligent Transportation Systems Analysis Total					433	

Technical Meetings	Units	No of Units	Hours/ Unit	Total Hours	PM Attendance at Meeting Required?	Number
Kickoff Meeting with FDOT	EA	0	0	0		0
Local Governments (cities, counties, MPO)	EA	0	0	0		0
Utility Owners	EA	0	0	0		0
Field Meetings	EA	0	0	0		0
Other Meetings	EA	0	0	0		0
Subtotal Technical Meetings				0	Subtotal Project Manager Meetings	0
Progress Meetings (if required by FDOT)	EA	2	4	8	<i>PM attendance at Progress Meetings is manually entered on General Task 3</i>	--
Phase Review Meetings	EA	2	4	8	<i>PM attendance at Phase Review Meetings is manually entered on General Task 3</i>	--
Total Meetings				16	Total Project Manager Meetings (carries to Tab 3)	0

Carries to 33.18

Carries to Tab 3

34. ITS Plans

Estimator: RLS

SR 417, Econlockhatchee Trail to Seminole County Line

417-134

Representing	Print Name	Signature / Date
FDOT District		
Comprehensive Engineering Services		

NOTE: Signature Block is optional, per District preference

Task No.	Task	Scale	Units	No. of Units	Hours/ Unit	No. of Sheets	Total Hours	Comments
34.1	Key Sheet		Sheet	1	4	1	4	
34.2	Summary of Pay Items-including Designer Interface (Time-port) Input		Sheet	0	0	0	0	Included in Rdwy
34.3	Tabulation of Quantities		Sheet	3	5	3	15	
34.4	General Notes/Pay Item Notes		Sheet	1	8	1	8	
34.5	Project Layout		Sheet	1	6	1	6	
34.6	Typical and Special Details		Sheet	3	6	3	18	Wiring/cabinet details for CCTV, DMS, DCS
34.7	Plan Sheet		Sheet	0	0	0	0	N/A
34.8	ITS Communications Plans		Sheet	23	6	23	138	
34.9	Fiber Optic Splice Diagrams		Sheet	17	2	17	34	
34.10	Lightning Protection Plans		Sheet	0	0	0	0	N/A
34.11	Cross Sections		Sheet	0	0	0	0	N/A
34.12	Guide Sign Worksheet(s)		Sheet	0	0	0	0	N/A
34.13	Special Service Point Details		Sheet	1	6	1	6	Electrical power service
34.14	Strain Pole Schedule		Sheet	1	3	1	3	Pole data tabulation
34.15	Overhead/Cantilever Sign Structure		Sheet	0	0	0	0	N/A
34.16	Other Overhead Sign Structures (Long Span, Monotube, etc.)		Sheet	0	0	0	0	N/A
34.17	Traffic Control Plans		Sheet	6	5	6	30	FON MOT Plan
34.18	Interim Standards		Sheet	0	0	0	0	N/A
34.18	GIS Data and Asset Management Requirements		LS	0	0	0	0	N/A

34. ITS Plans

Task No.	Task	Scale	Units	No. of Units	Hours/ Unit	No. of Sheets	Total Hours	Comments
Intelligent Transportation System Plans Technical Subtotal						57	263	
34.20	Quality Assurance/Quality Control		LS	%	5%		13	
34.21	Supervision		LS	%	2%		13	
34. Intelligent Transportation System Plans Total						57	280	

ESTIMATE OF WORK EFFORT AND COST - SUBCONSULTANT

Name of Project: SR 417, Econlockhatchee Trail to Seminole County Line
 County: 0
 FPN: 417-134
 FAP No:

Consultant Name: The Balmoral Group
 Consultant No: enter consultants proj number
 Date: 6/7/2016

Estimator: S. Klaus

Staff Classification	Total Staff Hours From BH Summary Form	Chief Engineer	Project Manager	Senior Engineer	Project Engineer	Engineer Intern	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
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	40	20	10	0	10	0	0	0	0	0	0	0	0	40	\$2,350	\$58.84
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, Dwg's, 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	680	34	0	170	238	238	0	0	0	0	0	0	0	680	\$25,982	\$38.18
20 Signing & Pavement Marking Plans	389	19	0	39	158	175	0	0	0	0	0	0	0	389	\$13,894	\$35.72
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	0	0	0	0	0	0	0	0	0	0	0	0	0	0	\$0	#DIV/0!
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!
Total Staff Hours	1,109	73	10	209	404	413	0	0	0	0	0	0	0	1,109		
Total Staff Cost		\$5,016.75	\$576.90	\$9,770.75	\$16,220.60	\$10,622.30	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00		\$42,209.36	\$38.08

SALARY RELATED COSTS:			\$42,209.36
OVERHEAD:	150.94%		\$67,509.65
OPERATING MARGIN:	12%		\$13,186.28
FCCM (Facilities Capital Cost Money):	0.00%		\$0.00
EXPENSES:	0.4721%		\$580.15
SUBTOTAL ESTIMATED FEE:			\$123,465.44
Survey (Field)	0	4-man crew da \$ - / day	\$0.00
Geotechnical Field and Lab Testing			\$0.00
SUBTOTAL ESTIMATED FEE:			\$123,465.44
Optional Services			\$0.00
GRAND TOTAL ESTIMATED FEE:			\$123,465.44

Notes:
 1 This sheet to be used by Subconsultant to calculate its fee.

Project Activity 6a: Drainage Analysis

Estimator:

SR 417, Econlockhatchee Trail to Seminole County Line

417-134

Representing	Print Name	Signature / Date
FDOT District		
Balmoral		

NOTE: Signature Block is optional, per District preference

Task No.	Task	Units	No of Units	Hours/ Unit	Total Hours	Comments
6a.1	Drainage Map Hydrology	Per Map	0	0	0	
6a.2	Base Clearance Report	Per Location	0	0	0	
6a.3	Pond Siting Analysis and Report	Per Basin	0	0	0	
6a.4	Design of Cross Drains	EA	0	0	0	
6a.5	Design of Ditches	Per Ditch Mile	0	0	0	
6a.6	Design of Stormwater Management Facility (Offsite or Infield Pond)	EA	0	0	0	
6a.7	Design of Stormwater Management Facility (Roadside Ditch as Linear Pond)	Per Cell	0	0	0	
6a.8	Design of Floodplain Compensation	Per Floodplain Basin	0	0	0	
6a.9	Design of Storm Drains	EA	0	0	0	
6a.10	Optional Culvert Material	EA	0	0	0	
6a.11	French Drain Systems	Per Cell	0	0	0	
6a.12	Drainage Wells	EA	0	0	0	
6a.13	Drainage Design Documentation Report	LS	1	0	0	
6a.14	Bridge Hydraulic Report	EA	0	0	0	

Project Activity 6a: Drainage Analysis

Task No.	Task	Units	No of Units	Hours/ Unit	Total Hours	Comments
6a.15	Temporary Drainage Analysis	LS	1	0	0	
6a.16	Cost Estimate	LS	1	0	0	
6a.17	Technical Special Provisions	LS	1	0	0	
6a.18	Other Drainage Analysis	LS	1	0	0	
Drainage Analysis Technical Subtotal					0	
6a.19	Field Reviews	LS	1	0	0	
6a.20	Technical Meetings	LS	1	0	0	Meetings are listed below
6a.21	Environmental Look-Around (ELA) Meeting	LS	1	0	0	
6a.22	Quality Assurance/Quality Control	LS	%	0%	0	
6a.23	Independent Peer Review	LS	1	40	40	Peer review by TBG - focus on stormwater management
6a.24	Supervision	LS	%	0%	0	
Drainage Analysis Nontechnical Subtotal					40	
6a.25	Coordination	LS	%	0%	0	
6a. Drainage Analysis Total					40	

Technical Meetings	Units	No of Units	Hours/ Unit	Total Hours	PM Attendance at Meeting Required?	Number
Base Clearance Water Elevation	EA	0	0	0		0
Pond Siting	EA	0	0	0		0
Agency	EA	0	0	0		0
Local Governments (cities, counties)	EA	0	0	0		0
FDOT Drainage	EA	0	0	0		0
Other Meetings	EA	0	0	0		0
Subtotal Technical Meetings				0		0
Progress Meetings (If required by FDOT)	EA	0	0	0	PM attendance at Progress Meetings is manually entered on General Task 3	--
Phase Review Meetings	EA	0	0	0	PM attendance at Phase Review Meetings is manually entered on General Task 3	--
Total Meetings				0	Total Project Manager Meetings (carries to Tab 3)	0

Carries to 6.13

Carries to Tab 3

Project Activity 19: Signing and Pavement Marking Analysis

Estimator: S. Klaus

SR 417, Econlockhatchee Trail to Seminole County Line

417-134

Representing	Print Name	Signature / Date
FDOT District		
Consultant Name	The Balmoral Group	

NOTE: Signature Block is optional, per District preference

Task No.	Task	Units	No. of Units	Hours/ Units	Total Hours	Comments
19.1	Traffic Data Analysis	LS	1	0	0	
19.2	No Passing Zone Study	LS	1	0	0	
19.3	Reference and Master Design File	LS	1	368	368	Middle range: Interchange/toll plaza spacing ~ 2 miles. Mainline = 2.85 miles; Ramps = 0.8 miles 45 hours setup + 80 hrs. X 3.6 miles
19.4	Multi-Post Sign Support Calculations	EA	4	3	12	4 ground mounted guide signs
19.5	Sign Panel Design Analysis	EA	24	4	96	18 Overhead panels (11 Replacements 7 New) & 4 multi-post ground mount; very detailed sign panels
19.6	Sign Lighting/Electrical Calculations	EA	0	0	0	By CES
19.7	Quantities	LS	1	75	75	3 hrs. X 25 sheets
19.8	Cost Estimate	LS	1	18	18	6 hours for initial estimate + 3 hrs X 4 add'l submittals
19.9	Technical Special Provisions	LS	1	0	0	
19.10	Other Signing and Pavement Marking	LS	1	0	0	
Signing and Pavement Marking Analysis Technical Subtotal					670	
19.11	Field Reviews	LS	1	18	18	3 reviews X 2 people X 3 hrs. average (incl. travel time)
19.12	Technical Meetings	LS	1	14	14	Meetings are listed below
19.13	Quality Assurance/Quality Control	LS	%	5%	29	
19.14	Independent Peer Review	LS	%	0%	0	
19.15	Supervision	LS	%	5%	29	
Signing and Pavement Marking Analysis Nontechnical Subtotal					80	
19.16	Coordination	LS	%	3%	20	
19. Signing and Pavement Marking Analysis Total					690	

Project Activity 19: Signing and Pavement Marking Analysis

Task No.	Task	Units	No. of Units	Hours/ Units	Total Hours	Comments	
Technical Meetings		Units	No of Units	Hours/ Unit	Total Hours	PM Attendance at Meeting Required?	Number
	Sign Panel Design	EA	1	2	2		0
	Queue Length Analysis	EA	0	0	0		0
	Local Governments (cities, counties)	EA	0	0	0		0
	Other Meetings	EA	0	0	0		0
	Subtotal Technical Meetings				2	Subtotal Project Manager Meetings	0
	Progress Meetings (if required by FDOT)	EA	4	3	12	<i>PM attendance at Progress Meetings is manually entered on General Task 3</i>	--
	Phase Review Meetings	EA	0	0	0	<i>PM attendance at Phase Review Meetings is manually entered on General Task 3</i>	--
	Total Meetings				14	Total Project Manager Meetings (carries to Tab 3)	0

Carries to 19.12

Carries to Tab 3

Project Activity 20: Signing and Pavement Marking Plans

S. Klaua

SR 417, Econlockhatchee Trail to Seminole County Line

417-134

Representing	Print Name	Signature / Date
FDOT District		
Consultant Name	The Balmoral Group	

NOTE: Signature Block is optional, per District preference

Task No.	Task	Scale	Units	No of Units	Hours/ Unit	No. of Sheets	Total Hours	Comments
20.1	Key Sheet		Sheet	1	6	1	6	
20.2	Summary of Pay Items Including TRNS-Port Input		LB	1	0		0	N/A - included in roadway
20.3	Tabulation of Quantities		Sheet	3	6	3	18	10 plan sheets per column. 12 hours for the 1st tabulation sheet and 6 hours X 2 add'l sheets.
20.4	General Notes/Pay Item Notes		Sheet	1	4	1	4	Modify standard CFX notes
20.5	Project Layout		Sheet	1	6	1	6	
20.6	Plan Sheet	1"=50'	Sheet	28	4	28	112	700' per sheet. Project length: Mainline=15,032 ft. (22 sheets); ramp=2700 ft (4 sheets)
20.7	Typical Details		EA	11	4	6	44	Incorporate CFX details into plans for exit gore signs, route confirmation markers, milepost signs, toll route shield, curve warning signs, loop ramp signs, option lane arrow, toll plaza signs, line of sight. Estimate 11 details X 2 hrs + 2 hrs X 6 sheets
20.8	Guide Sign Worksheet(s)		EA	22	2	6	44	17 sign panels; 4 per sheet
20.9	Traffic Monitoring Site		EA	0	0		0	
20.10	Cross Sections		EA	17	7	4	118	Develop full sections for 6 cantilever, 7 span truss & 4 ground mount 8 hrs. X 13 OH structures + 3 hrs X 4 multi-post = 116 hrs. (~ 7 hrs. per section)
20.11	Special Service Point Details		EA	0	0		0	
20.12	Special Details		LS	1	0		0	
20.13	Interim Standards		LS	1	0		0	
Signing and Pavement Marking Plans Technical Subtotal						60	363	
20.14	Quality Assurance/Quality Control		LS	%	5%		18	
20.15	Supervision		LS	%	5%		18	
20. Signing and Pavement Marking Plans Total						60	380	



MISCELLANEOUS & DIRECT EXPENSES						
Central Florida Expressway Authority			Consultant: The Balmoral Group, LLC			
Name of Job: SR 417 - Econ Trail to Orange/Seminole County Line - 417-134						
Aerial Photography:	Sheets	Cost	Amount			
Right-of-Way Maps						
Drafting Medium (Mylar):						
	0	\$0.00	\$0			\$0.00 \$0.00
	BlueLine	Vellum	11X17	8.5X11		
30% Plans			30	0	Sheets	
60% Plans			47	0	Sheets	
90% Plans			47	0	Sheets	
100% Plans			47	0	Sheets	
Final Plans			47	0	Sheets	
Misc. Prints			2,180	0	Sheets	
Total	0	0	2,398	0	Sheets	
Costs:	Blue Line		0	0	Sheets @	0 00 \$0.00
	Vellum		0	0	Sheets @	0 00 \$0.00
	Photocopy - 11X17		2,398	0	Sheets @	0.19 \$455.62
	Photocopy - 8.5X11		0	0	Sheets @	0.11 \$0.00
Travel From: 185 Lincoln Avenue Winter Park, FL						
To Project: Trips						
(Overnight)	x	people x			days @\$50	\$0.00
(Per Diem)	x	people x			days @\$6	\$0.00
Transport - (Comm.)	x	people x		0.00	per trip	\$0.00
- (POV)	3 x	19 miles x		0.445	per mile	\$25.37
- (Rental)	0 x	0 (days x \$		0.00	Day Rate)	
	+	0 (miles x \$		0.00	Mi. Rate)	\$0.00
To District: Trips						
(Per Diem)	0 x	0 people x		0.00	days @\$6	\$0.00
Transport - (Comm.)	0 x	0 people x		0.00	per trip	\$0.00
- (POV)	4 x	22 miles x		0.445	per mile	\$39.18
- (Rental)	0 x	0 (days x \$		0.00	Day Rate)	
		0 (miles x \$		0.00	Mi. Rate)	\$0.00
						\$64.53
Shipping & Telephone	12 months @ \$		\$5.00 /Month)			\$60.00
TOTAL EXPENSES						LUMP SUM \$580.15
Date: 04/22/16						

ESTIMATE OF WORK EFFORT AND COST - SUBCONSULTANT

Name of Project:
County:
FPN:
FAP No.:

SR 417, Econlockhatchee Trail to Seminole County Line
Orange
417-134
1/0/1900

Consultant Name: Tierra, Inc.
Consultant No.: enter consultants proj. number
Date: 6/7/2016

Staff Classification	Total Staff Hours From 'S1 Summary Form	Project Manager	Senior Engineer	Chief Scientist	Senior Project Engineer	Geotechnical Engineer	Engineering Intern	Senior Scientist	Designer	Senior Engineering Technician	Geotechnical Technician	Secretarial/UC	Staff Classification 12	SM	Salary	Average
														By Activity	Cost By Activity	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	45	2	0	7	0	0	0	18	7	5	5	1	0	45	\$5,025.58	\$111.68
9 Structures - Misc Tasks, Dwg, 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	0	0	0	0	0	0	0	0	0	0	0	0	0	0	\$0	#DIV/0!
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	611	41	65	7	81	122	260	18	162	37	37	17	0	611	\$85,042.85	\$137.19
Total Staff Hours	656	43	65	7	81	122	260	18	162	37	37	17	0	656	\$85,042.85	\$116.90
Total Staff Cost		\$8,524.75	\$12,231.70	\$1,060.29	\$19,827.16	\$16,432.18	\$24,772.80	\$2,112.12	\$15,388.14	\$3,078.92	\$2,480.11	\$1,161.27	\$0.00		\$100,068.44	\$116.90

Notes:
1. This sheet to be used by Subconsultant to calculate its fee.

SALARY RELATED COSTS:		\$100,068.44
OVERHEAD:	0%	\$0.00
OPERATING MARGIN:	0%	\$0.00
FCCM (Facilities Capital Cost Money):	0.00%	\$0.00
EXPENSES:	0.00%	\$0.00
SUBTOTAL ESTIMATED FEE:		\$100,068.44
Contingency ODCs		\$152.00
Geotechnical Field and Lab Testing		\$89,070.20
SUBTOTAL ESTIMATED FEE:		\$189,290.64
Optional Services		\$0.00
GRAND TOTAL ESTIMATED FEE:		\$189,290.64

Project Activity 8: Environmental Permits

Estimator:

SR 417, Econlockhatchee Trail to Seminole County Line

417-134

Representing	Print Name	Signature / Date
FDOT District		
Tierra, Inc.		

NOTE: Signature Block is optional, per District preference

Task No.	Task	Units	No. of Units	Hours/ Units	Total Hours	Comments
	Environmental Permits, Compliances and Clearances					
8.1	Preliminary Project Research	LS	1	0	0	
	Permits					
8.2	Field Work					
8.2.1	Pond Site Alternatives	per pond site	0	0	0	
8.2.2	Establish Wetland Jurisdictional Lines and Assessments	LS	1	0	0	
8.2.3	Species Surveys	LS	1	0	0	
8.2.4	Archeological Surveys	LS	1	0	0	
8.3	Agency Verification of Wetland Data	LS	1	0	0	
8.4	Complete And Submit All Required Permit Applications					
8.4.1	Complete and Submit All Required Wetland Permit Applications	LS	1	0	0	
8.4.2	Complete and Submit All Required Species Permit Applications	LS	1	0	0	
8.5	Prepare Dredge and Fill Sketches (as needed)	LS	1	0	0	
8.6	Prepare USCG Permit Sketches	LS	1	0	0	
8.7	Prepare Water Management District Right-of-Way Occupancy Permit	LS	1	0	0	
8.8	Prepare Coastal Construction Control Line (CCCL) Permit Application	LS	1	0	0	
8.9	Prepare Tree Permit Information	LS	1	0	0	
8.10	Mitigation Design	LS	1	0	0	
8.11	Mitigation Coordination and Meetings	LS	1	0	0	

Project Activity 8: Environmental Permits

Task No.	Task	Units	No. of Units	Hours/ Units	Total Hours	Comments	
8.12	Other Environmental Permits	LS	1	0	0		
	Environmental Clearances/Reevaluations						
8.13	Technical support to Department for Environmental Clearances and Reevaluations (use when consultant provides technical support only)						
8.13.1	NEPA or SEIR Reevaluation	LS	1	0	0		
8.13.2	Archaeological and Historical Features	LS	1	0	0		
8.13.3	Wetland Impact Analysis	LS	1	0	0		
8.13.4	Essential Fish Habitat	LS	1	0	0		
8.13.5	Wildlife and Habitat Impact Analysis	LS	1	0	0		
8.13.6	Section 7 or Section 10 Consultation	LS	1	0	0		
8.14	Preparation of Environmental Clearances and Reevaluations (use when consultant prepares all documents associated with reevaluation)						
8.14.1	NEPA or SEIR Reevaluation	LS	1	0	0		
8.14.2	Archaeological and Historical Features	LS	1	0	0		
8.14.3	Wetland Impact Analysis	LS	1	0	0		
8.14.4	Essential Fish Habitat	LS	1	0	0		
8.14.5	Wildlife and Habitat Impact Analysis	LS	1	0	0		
8.14.6	Section 7 or Section 10 Consultation	LS	1	0	0		
8.15	Contamination Impact Analysis	LS	1	40	40	desktop/windshield Level 1 update; appx 3 miles; analysis&field review 25 hrs + 15 hrs memo = 40 MH	
8.16	Asbestos Survey	LS	1	0	0	no asbestos, no Level 2, no EDR report (CLM only)	
	Environmental Permits, Compliance, and Clearances/Reevaluations Technical Subtotal					40	
8.17	Technical Meetings	LS	1	0	0	Meetings are listed below	
8.18	Quality Assurance/Quality Control	LS	%	5%	2		
8.19	Supervision	LS	%	5%	2		
	Environmental Permits, Compliance and Clearances Nontechnical Subtotal					4	
8.20	Coordination	LS	%	3%	1		
	8. Environmental Permits, Compliance and Clearances Total					45	

35. Geotechnical

Estimator:

SR 417, Econlockhatchee Trail to Seminole County Line

417-134

Representing	Print Name	Signature / Date
CFX		
Tierra, Inc.		

NOTE: Signature Block is optional, per District preference

Task No.	Task	Units	No of Units	Hours/ Unit	Total Hours	Comments
	Roadway					
35.1	Document Collection and Review	LS	1	10	10	Literature Survey (Existing Plans, USDA, USGS, Potentiometric, etc.)
35.2	Develop Detailed Boring Location Plan	LS	1	8	8	195 roadway borings, 55 SPTs, 140 Augers: Total 1,900 LF.
35.3	Stake Borings/Utility Clearance	Boring	195	0.25	49	
35.4	Muck Probing	Crew Day	0	0	0	Tierra will use separate pay item in fee schedule to perform muck probing.
35.5	Coordinate and Develop MOT Plans for Field Investigation	EA	2	4	8	Toll Plaza
35.6	Drilling Access Permits	Location	0	0	0	N/A
35.7	Property Clearances	EA	0	0	0	All Work within ROW
35.8	Groundwater Monitoring	EA	0	0	0	N/A
35.9	LBR/Resilient Modulus Sampling	EA	12	1.5	18	Collecting LBR/Mr samples
35.10	Coordination of Field Work	100 lf of boring	18	1	18	
35.11	Soil and Rock Classification - Roadway	100 lf of boring	18	2	36	
35.12	Design LBR	LS	1	8	8	
35.13	Laboratory Data	100 lf of boring	18	0.75	14	
35.14	Seasonal High Water Table	Boring	195	0.2	39	
35.15	Parameters for Water Retention Areas	EA	2	1	2	Contingency, if Required.
35.16	Delineate Limits of Unsuitable Material	Cross-section	10	1.3	13	Assume 10 cross sections @ 0.5 hr/cross section (5 hrs) + 2 plan reviews @ 4 hrs each (8 hrs). 13 hrs
35.17	Electronic Files for Cross-Sections	100 lf of boring	18	1	18	
35.18	Embankment Settlement and Stability	Embankment Boring	2	4	8	
35.19	Monitor Existing Structures	LS	1	20	20	2 hrs preliminary review + 10 hrs field visit + 8 hrs recommendations

35. Geotechnical

Task No.	Task	Units	No of Units	Hours/ Unit	Total Hours	Comments
35.20	Stormwater Volume Recovery and/or Background Seepage Analysis	EA	0	0	0	To be performed by others.
35.21	Geotechnical Recommendations	LS	1	20	20	
35.22	Pavement Condition Survey and Pavement Evaluation Report	LS	0	0	0	Pavement Coring and Evaluation Not Required.
35.23	Preliminary Roadway Report	LS	1	16	16	
35.24	Final Report	EA	1	16	16	
35.25	Auger Boring Drafting	100 lf boring	7	4	28	
35.26	SPT Boring Drafting	100 lf boring	11	5	55	
Roadway Geotechnical Subtotal					404	
	Structures					
35.27	Develop Detailed Boring Location Plan	LS	1	4	4	38 structure borings. Total 1,445 LF
35.28	Stake Borings/Utility Clearance	Boring	38	0.3	11	
35.29	Coordinate and Develop MOT Plans for Field Investigation	EA	3	2	6	Bridge, Walls, Misc Structures
35.30	Drilling Access Permits	Location	0	0	0	N/A
35.31	Property Clearances	EA	0	0	0	All Work within ROW
35.32	Collection of Corrosion Samples	EA	0	0	0	To be collected at time of drilling.
35.33	Coordination of Field Work	100 lf of boring	14.45	1	14	
35.34	Soil and Rock Classification - Structures	100 lf of boring	14.45	2	29	
35.35	Tabulation of Laboratory Data	100 lf of boring	14.45	0.75	11	
35.36	Estimate Design Groundwater Level for Structures	EA	38	0.25	10	
35.37	Selection of Foundation Alternatives (BDR)	Bridge boring	2	4	8	Two borings at End Bents.
35.38	Detailed Analysis of Selected Foundation Alternate(s)	Bridge boring	2	4	8	
35.39	Bridge Construction and Testing Recommendations	Bridge boring	2	4	8	Anticipate standard foundation work
35.40	Lateral Load Analysis (Optional)	Bridge boring	2	1.5	3	Provide soil parameters only.
35.41	Walls	Wall Boring	0	2	12	
35.42	Sheet Pile Wall Analysis (Optional)	Wall Boring	0	0	0	N/A
35.43	Design Soil Parameters for Signs, Signals, High Mast Lights, and Strain Poles and Geotechnical Recommendations	Boring	23	1	23	14 Sign Borings, 1 Signal Boring, 8 ITS Borings

35. Geotechnical

Task No.	Task	Units	No of Units	Hours/ Unit	Total Hours	Comments
35.44	Box Culvert Analysis	EA	0	0	0	No Culvert Extensions.
35.45	Preliminary Report - BDR	EA	1	20	20	
35.46	Final Report - Bridge and Associated Walls	EA	1	20	20	
35.47	Final Reports - Signs, Signals, Box Culvert, Walls and High Mast Lights	EA	4	8	32	Reports for Signs, Signals, ITS and Sound Wall
35.48	SPT Boring Drafting	100 lf of boring	14.45	5	72	
35.49	Other Geotechnical	LS	0	0	0	N/A
Structural Geotechnical Subtotal					291	
Geotechnical Technical Subtotal					695	
35.50	Technical Special Provisions	EA	0	0	0	
35.51	Field Reviews	LS	1	8	8	
35.52	Technical Meetings	LS	1	14	14	Meetings listed below
35.53	Quality Assurance/Quality Control	LS	%	5%	35	
35.54	Supervision	LS	%	5%	35	
Geotechnical Nontechnical Subtotal					92	
35.55	Coordination	LS	%	3%	24	
35. Geotechnical Total					811	

Technical Meetings	Units	No of Units	Hours/ Unit	Total Hours	PM Attendance at Meeting Required?	Number
Kickoff Meeting with CFX	EA	1	2	2		0
Boring Layout Approval	EA	0	0	0		0
Attend in BDR Review Meeting	EA	0	0	0		0
30/60/90% Submittal Review	EA	0	0	0		0
Other Meetings	EA	0	0	0		0
Subtotal Technical Meetings				2	Subtotal Project Manager Meetings	0
Progress Meetings (if required by FDOT)	EA	6	2	12	<i>PM attendance at Progress Meetings is manually entered on General Task 3</i>	--
Phase Review Meetings	EA	0	0	0	<i>PM attendance at Phase Review Meetings is manually entered on General Task 3</i>	--
Total Meetings				14	Total Project Manager Meetings (carries to Tab 3)	0

Continued to Tab 18

Continued to Tab 3

Contract Number: 001153
 Project Number: 5511-16-004

Tierra Inc
 Table 6 Standard Fee Schedule 2016

SR 417 Widening from Econlockhatchee Tr
 from Orange-Seminole CL

Item Description	Unit	Unit Price	Quantity	Total
Geotechnical Field Investigation				
612-Geo Mobilization Drill Rig Truck Mount	Each	\$ 337.00	0	\$ -
614-Geo Mobilization Mudbug/All Terrain Vehicle	Each	\$ 500.00	0	\$ -
610-Geo Mobilization Drill Rig Truck Mount	Each	\$ 3,110.00	0	\$ -
418-Geo Drill Crew Support Vehicle	Day	\$ 152.00	1	\$ 152.00
609-Geo Mobilization Drill Rig Barge Mount	Each	\$ 7,420.00	0	\$ -
405-Geo Barge (Owned)	Day	\$ 2,500.00	0	\$ -
618-Geo Mobilization Support Boat	Each	\$ 500.00	0	\$ -
Geo Support Safety Boat	Day	\$ 275.00	0	\$ -
619-Geo Mobilization Tri-Pod	Each	\$ 1,250.00	0	\$ -
419-Geo Drilling Crew 2-Person	Hour	\$ 135.00	0	\$ -
420-Geo Drilling Crew 3-Person	Hour	\$ 185.00	0	\$ -
Geo SPT Truck 0-50 Ft	LF	\$ 12.00	0	\$ -
Geo SPT Truck 50-100 Ft	LF	\$ 14.00	0	\$ -
Geo SPT Truck 100-150 Ft	LF	\$ 20.00	0	\$ -
Geo SPT Truck 150-200 Ft	LF	\$ 39.00	0	\$ -
478-Geo SPT Truck-Mud Bug 0-50 Ft	LF	\$ 12.50	0	\$ -
479-Geo SPT Truck-Mud Bug 50-100 Ft	LF	\$ 16.00	0	\$ -
480-Geo SPT Truck-Mud Bug 100-150 Ft	LF	\$ 27.50	0	\$ -
481-Geo SPT Truck-Mud Bug 150-200 Ft	LF	\$ 42.00	0	\$ -
473-Geo SPT Barge/Track/Amphibious 000-050 Ft	LF	\$ 18.50	0	\$ -
474-Geo SPT Barge/Track/Amphibious 050-100 Ft	LF	\$ 25.00	0	\$ -
475-Geo SPT Barge/Track/Amphibious 100-150 Ft	LF	\$ 40.00	0	\$ -
476-Geo SPT Barge/Track/Amphibious 150-200 Ft	LF	\$ 70.00	0	\$ -
Geo Grout Boreholes- Truck 0-050 Ft	LF	\$ 4.50	0	\$ -
Geo Grout Boreholes- Truck 50-100 Ft	LF	\$ 5.00	0	\$ -
Geo Grout Boreholes- Truck 100-150 Ft	LF	\$ 5.50	0	\$ -
Geo Grout Boreholes- Truck 150-200 Ft	LF	\$ 14.00	0	\$ -
440-Geo Grout Boreholes- Truck/Mud Bug 000-050 Ft	LF	\$ 5.95	0	\$ -
441-Geo Grout Boreholes- Truck/Mud Bug 050-100 Ft	LF	\$ 7.10	0	\$ -
442-Geo Grout Boreholes- Truck/Mud Bug 100-150 Ft	LF	\$ 9.00	0	\$ -
443-Geo Grout Boreholes- Truck/Mud Bug 150-200 Ft	LF	\$ 18.00	0	\$ -
435-Geo Grout Boreholes- Barge/Track/Amphibious 000-050 Ft	LF	\$ 8.50	0	\$ -
436-Geo Grout Boreholes- Barge/Track/Amphibious 050-100 Ft	LF	\$ 9.00	0	\$ -
437-Geo Grout Boreholes- Barge/Track/Amphibious 100-150 Ft	LF	\$ 10.00	0	\$ -
438-Geo Grout Boreholes- Barge/Track/Amphibious 150-200 Ft	LF	\$ 25.00	0	\$ -
Geo Temp Casing 3" Truck 0-050 Ft	LF	\$ 7.50	0	\$ -
Geo Temp Casing 3" Truck 50-100 Ft	LF	\$ 8.75	0	\$ -
Geo Temp Casing 3" Truck 100-150 Ft	LF	\$ 10.50	0	\$ -
Geo Temp Casing 3" Truck 150-200 Ft	LF	\$ 15.00	0	\$ -

Contract Number: 001153
 Project Number: 5511-16-004

Tierra Inc
 Table 6 Standard Fee Schedule 2016

SR 417 Widening from Econlockhatchee Tr
 from Orange-Seminole CL

Item Description	Unit	Unit Price	Quantity	Total
488-Geo Temp Casing 3" Truck/Mud Bug 000-050 Ft	LF	\$ 9.80	0	\$ -
489-Geo Temp Casing 3" Truck/Mud Bug 050-100 Ft	LF	\$ 12.75	0	\$ -
490-Geo Temp Casing 3" Truck/Mud Bug 100-150 Ft	LF	\$ 15.75	0	\$ -
491-Geo Temp Casing 3" Truck/Mud Bug 150-200 Ft	LF	\$ 22.00	0	\$ -
483-Geo Temp Casing 3" Barge/Track/Amphibious 0-050 Ft	LF	\$ 12.90	0	\$ -
484-Geo Temp Casing 3" Barge/Track/Amphibious 50-100 Ft	LF	\$ 14.70	0	\$ -
485-Geo Temp Casing 3" Barge/Track/Amphibious 100-150 Ft	LF	\$ 17.65	0	\$ -
486-Geo Temp Casing 3" Barge/Track/Amphibious 150-200 Ft	LF	\$ 25.00	0	\$ -
483-Geo Rock Coring Truck/Mud Bug 000-050 Ft less than 4" ID	LF	\$ 34.25	0	\$ -
465-Geo Rock Coring Truck/Mud Bug 050-100 Ft less than 4" ID	LF	\$ 36.55	0	\$ -
467-Geo Rock Coring Truck/Mud Bug 100-150 Ft less than 4" ID	LF	\$ 39.90	0	\$ -
453-Geo Rock Coring Barge/Track/Amphibious 000-050 Ft less than 4" ID	LF	\$ 45.79	0	\$ -
455-Geo Rock Coring Barge/Track/Amphibious 050-100 Ft less than 4" ID	LF	\$ 60.74	0	\$ -
457-Geo Rock Coring Barge/Track/Amphibious 100-150 Ft less than 4" ID	LF	\$ 65.00	0	\$ -
459-Geo Rock Coring Barge/Track/Amphibious 150-200 Ft less than 4" ID	LF	\$ 94.00	0	\$ -
427-Geo Extra SPT Samples-Truck/Mud Bug 000-050 Ft	Each	\$ 31.40	0	\$ -
428-Geo Extra SPT Samples-Truck/Mud Bug 050-100 Ft	Each	\$ 36.44	0	\$ -
429-Geo Extra SPT Samples-Truck/Mud Bug 100-150 Ft	Each	\$ 42.20	0	\$ -
430-Geo Extra SPT Samples-Truck/Mud Bug 150-200 Ft	Each	\$ 85.00	0	\$ -
422-Geo Extra SPT Samples-Barge/Track/Amphibious 000-050 Ft	Each	\$ 47.15	0	\$ -
423-Geo Extra SPT Samples-Barge/Track/Amphibious 050-100 Ft	Each	\$ 54.80	0	\$ -
424-Geo Extra SPT Samples-Barge/Track/Amphibious 100-150 Ft	Each	\$ 63.30	0	\$ -
425-Geo Extra SPT Samples-Barge/Track/Amphibious 150-200 Ft	Each	\$ 85.00	0	\$ -
519-Geo Undisturbed Samples Truck/Mud Bug 000-050 Ft	Each	\$ 119.50	0	\$ -
520-Geo Undisturbed Samples Truck/Mud Bug 050-100 Ft	Each	\$ 130.40	0	\$ -
521-Geo Undisturbed Samples Truck/Mud Bug 100-150 Ft	Each	\$ 195.60	0	\$ -
522-Geo Undisturbed Samples Truck/Mud Bug 150-200 Ft	Each	\$ 200.00	0	\$ -
515-Geo Undisturbed Samples Barge/Track/Amphibious 000-050 Ft	Each	\$ 179.00	0	\$ -
516-Geo Undisturbed Samples Barge/Track/Amphibious 050-100 Ft	Each	\$ 195.60	0	\$ -
517-Geo Undisturbed Samples Barge/Track/Amphibious 100-150 Ft	Each	\$ 293.40	0	\$ -
518-Geo Undisturbed Samples Barge/Track/Amphibious 150-200 Ft	Each	\$ 375.00	0	\$ -
401-Geo Auger Borings- Hand & Truck/Mud Bug	LF	\$ 9.25	0	\$ -
402-Geo Auger Borings- Track	LF	\$ 9.25	0	\$ -
432-Geo Field Permeability 0-10 Ft (Open - End Borehole Method)	Each	\$ 270.00	0	\$ -
Flagman and Barricades 2-Man Crew Own Equipment	Day	\$ 850.00	0	\$ -
450-Geo Piezometer 2" 000-050 Ft	LF	\$ 30.00	0	\$ -
445-Geo Grouted Monitor Well 2" 000-050 Ft	LF	\$ 6.25	0	\$ -
450.1 Piezometer Permit Cost Actual	Each	\$ 50.00	0	\$ -
403-Geo Backhoe (Owned)	Day	\$ 800.00	0	\$ -
416-Geo Dozer (Owned)	Day	\$ 800.00	0	\$ -
Site Clearing to Access Boring or Test Locations	Hour	\$ 150.00	0	\$ -
407-Geo Chainsaw (Owned)	Day	\$ 28.00	0	\$ -
415-Geo Double Ring Infiltration (ASTM D3385)	Each	\$ 460.00	0	\$ -
434-Geo Ground Penetrating Radar (GPR)	Day	\$ 2,800.00	0	\$ -

Contract Number: 001153
 Project Number: 5511-16-004

Tierra Inc
 Table 6 Standard Fee Schedule 2016

SR 417 Widening from Econlockhatchee Tr
 from Orange-Seminole CL

Item Description	Unit	Unit Price	Quantity	Total
Asphalt and Concrete Pavement Coring				
209-Asphalt Pavement Coring – 4" dia with Base Depth Check	Each	\$ 125.00	0	\$ -
210-Asphalt Pavement Coring – 4" dia without Base Depth Check	Each	\$ 110.00	0	\$ -
211-Asphalt Pavement Coring – 6" dia with Base Depth Check	Each	\$ 125.00	0	\$ -
212-Asphalt Pavement Coring – 6" dia without Base Depth Check	Each	\$ 110.00	0	\$ -
305-Concrete Pavement Coring - 4" Dia	Each	\$ 110.00	0	\$ -
306-Concrete Pavement Coring - 6" Dia	Each	\$ 110.00	0	\$ -
603-Mobilization Asphalt Coring equipment	Each	\$ 250.00	0	\$ -
606-Mobilization Concrete Coring	Each	\$ 250.00	0	\$ -
Geotechnical Soil Laboratory Testing				
812-Soils Materials Finer than 200 Sieve (FM 1-T011)	Test	\$ 35.00	0	\$ -
817-Soils Moisture Content Laboratory (AASHTO T 265)	Test	\$ 9.58	0	\$ -
821-Soils Particle Size Analysis (AASHTO T 88) (Including Hydrometer)	Test	\$ 131.00	0	\$ -
822-Soils Particle Size Analysis (AASHTO T 88) (No Hydrometer)	Test	\$ 67.00	0	\$ -
805-Soils Corrosion Series (FM 5-550 through 5-553)	Test	\$ 145.00	0	\$ -
825-Soils pH Soil or Water (FM 5-550)	Test	\$ 30.00	0	\$ -
829-Soils Resistivity Soil or Water (FM 5-551)	Test	\$ 35.00	0	\$ -
800-Soils Chloride Soil or Water (FM 5-552)	Test	\$ 40.00	0	\$ -
833-Soils Sulfate Soil or Water (FM 5-553)	Test	\$ 40.00	0	\$ -
819-Soils Organic Content Ignition (FM 1 T-267)	Test	\$ 35.00	0	\$ -
Atterberg Limit Tests (AASHTO T-89 and T-90) Combined	Test	\$ 81.00	0	\$ -
826-Soils Plastic Limit & Plasticity Index (AASHTO T 90)	Test	\$ 81.00	0	\$ -
811-Soils Liquid Limit (AASHTO T 89)	Test	\$ 41.00	0	\$ -
823-Soils Permeability Constant Head (AASHTO T 215)	Test	\$ 155.00	0	\$ -
824-Soils Permeability Falling Head (FM 5-513)	Test	\$ 155.00	0	\$ -
827-Soils Proctor Modified (FM 1-T 180)	Test	\$ 115.00	0	\$ -
828-Soils Proctor Standard (AASHTO T 99)	Test	\$ 111.00	0	\$ -
832-Soils Splitting Tensile Strength of Rock Cores (ASTM D3967)	Test	\$ 105.00	0	\$ -
838-Soils Unconfined Compression - Rock (ASTM D7012, Method C)	Test	\$ 105.00	0	\$ -
803-Soils Consolidation - Constant Strain (ASTM D4186)	Test	\$ 500.00	0	\$ -
804-Soils Consolidation - Extended Load Increments (AASHTO T216)	Each	\$ 50.00	0	\$ -
806-Soils Direct Shear Consolidated Drained/ Point AASHTO T 236	Test	\$ 250.00	0	\$ -
810-Soils Limerock Bearing Ratio (LBR)(FM 5-515)	Test	\$ 326.18	0	\$ -
Engineering and Technical Support Services				
Project Manager	Hour	\$ 198.25	2	\$ 396.50
Senior Engineer	Hour	\$ 188.18	0	\$ -
Chief Scientist	Hour	\$ 151.47	7	\$ 1,060.29
Senior Project Engineer	Hour	\$ 158.36	0	\$ -
Geotechnical Engineer	Hour	\$ 134.69	0	\$ -
Engineering Intern	Hour	\$ 95.28	0	\$ -
Senior Scientist	Hour	\$ 117.34	18	\$ 2,112.12
Designer	Hour	\$ 91.06	7	\$ 637.42
Sr Engineering Technician	Hour	\$ 83.18	5	\$ 415.80
Geotechnical Technician	Hour	\$ 67.03	5	\$ 335.15
Secretary/Clerical	Hour	\$ 68.31	1	\$ 68.31
Total Estimated Fee				\$ 5,177.59

Contract Number: 001153
 Project Number: 5511-16-004

Tierra Inc
 Table 6 Standard Fee Schedule 2016

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Item Description	Unit	Unit Price	Quantity	Total
Geotechnical Field Investigation				
612-Geo Mobilization Drill Rig Truck Mount	Each	\$ 337.00	4	\$ 1,348.00
614-Geo Mobilization Mudbug/All Terrain Vehicle	Each	\$ 500.00	4	\$ 2,000.00
610-Geo Mobilization Drill Rig Truck Mount	Each	\$ 3,110.00	0	\$ -
418-Geo Drill Crew Support Vehicle	Day	\$ 152.00	40	\$ 6,080.00
609-Geo Mobilization Drill Rig Barge Mount	Each	\$ 7,420.00	0	\$ -
405-Geo Barge (Owned)	Day	\$ 2,500.00	0	\$ -
618-Geo Mobilization Support Boat	Each	\$ 500.00	0	\$ -
Geo Support Safety Boat	Day	\$ 275.00	0	\$ -
619-Geo Mobilization Tri-Pod	Each	\$ 1,250.00	0	\$ -
419-Geo Drilling Crew 2-Person	Hour	\$ 135.00	0	\$ -
420-Geo Drilling Crew 3-Person	Hour	\$ 185.00	0	\$ -
Geo SPT Truck 0-50 Ft	LF	\$ 12.00	1585	\$ 19,020.00
Geo SPT Truck 50-100 Ft	LF	\$ 14.00	100	\$ 1,400.00
Geo SPT Truck 100-150 Ft	LF	\$ 20.00	60	\$ 1,200.00
Geo SPT Truck 150-200 Ft	LF	\$ 39.00	0	\$ -
478-Geo SPT Truck-Mud Bug 0-50 Ft	LF	\$ 12.50	800	\$ 10,000.00
479-Geo SPT Truck-Mud Bug 50-100 Ft	LF	\$ 16.00	0	\$ -
480-Geo SPT Truck-Mud Bug 100-150 Ft	LF	\$ 27.50	0	\$ -
481-Geo SPT Truck-Mud Bug 150-200 Ft	LF	\$ 42.00	0	\$ -
473-Geo SPT Barge/Track/Amphibious 000-050 Ft	LF	\$ 18.50	0	\$ -
474-Geo SPT Barge/Track/Amphibious 050-100 Ft	LF	\$ 25.00	0	\$ -
475-Geo SPT Barge/Track/Amphibious 100-150 Ft	LF	\$ 40.00	0	\$ -
476-Geo SPT Barge/Track/Amphibious 150-200 Ft	LF	\$ 70.00	0	\$ -
Geo Grout Boreholes- Truck 0-050 Ft	LF	\$ 4.50	1585	\$ 7,132.50
Geo Grout Boreholes- Truck 50-100 Ft	LF	\$ 5.00	100	\$ 500.00
Geo Grout Boreholes- Truck 100-150 Ft	LF	\$ 5.50	60	\$ 330.00
Geo Grout Boreholes- Truck 150-200 Ft	LF	\$ 14.00	0	\$ -
440-Geo Grout Boreholes- Truck/Mud Bug 000-050 Ft	LF	\$ 5.95	800	\$ 4,760.00
441-Geo Grout Boreholes- Truck/Mud Bug 050-100 Ft	LF	\$ 7.10	0	\$ -
442-Geo Grout Boreholes- Truck/Mud Bug 100-150 Ft	LF	\$ 9.00	0	\$ -
443-Geo Grout Boreholes- Truck/Mud Bug 150-200 Ft	LF	\$ 18.00	0	\$ -
435-Geo Grout Boreholes- Barge/Track/Amphibious 000-050 Ft	LF	\$ 8.50	0	\$ -
436-Geo Grout Boreholes- Barge/Track/Amphibious 050-100 Ft	LF	\$ 9.00	0	\$ -
437-Geo Grout Boreholes- Barge/Track/Amphibious 100-150 Ft	LF	\$ 10.00	0	\$ -
438-Geo Grout Boreholes- Barge/Track/Amphibious 150-200 Ft	LF	\$ 25.00	0	\$ -
Geo Temp Casing 3" Truck 0-050 Ft	LF	\$ 7.50	400	\$ 3,000.00
Geo Temp Casing 3" Truck 50-100 Ft	LF	\$ 8.75	80	\$ 700.00
Geo Temp Casing 3" Truck 100-150 Ft	LF	\$ 10.50	0	\$ -
Geo Temp Casing 3" Truck 150-200 Ft	LF	\$ 15.00	0	\$ -

Contract Number: 001153
 Project Number: 5511-16-004

Tierra Inc
 Table 6 Standard Fee Schedule 2016

SR 417 Widening from Econlockhatchee Tr
 from Orange-Seminole CL

Item Description	Unit	Unit Price	Quantity	Total
488-Geo Temp Casing 3" Truck/Mud Bug 000-050 Ft	LF	\$ 9.80	150	\$ 1,470.00
489-Geo Temp Casing 3" Truck/Mud Bug 050-100 Ft	LF	\$ 12.75	0	\$ -
490-Geo Temp Casing 3" Truck/Mud Bug 100-150 Ft	LF	\$ 15.75	0	\$ -
491-Geo Temp Casing 3" Truck/Mud Bug 150-200 Ft	LF	\$ 22.00	0	\$ -
483-Geo Temp Casing 3" Barge/Track/Amphibious 0-050 Ft	LF	\$ 12.90	0	\$ -
484-Geo Temp Casing 3" Barge/Track/Amphibious 50-100 Ft	LF	\$ 14.70	0	\$ -
485-Geo Temp Casing 3" Barge/Track/Amphibious 100-150 Ft	LF	\$ 17.65	0	\$ -
486-Geo Temp Casing 3" Barge/Track/Amphibious 150-200 Ft	LF	\$ 25.00	0	\$ -
463-Geo Rock Coring Truck/Mud Bug 000-050 Ft less than 4" ID	LF	\$ 34.25	0	\$ -
465-Geo Rock Coring Truck/Mud Bug 050-100 Ft less than 4" ID	LF	\$ 36.55	0	\$ -
467-Geo Rock Coring Truck/Mud Bug 100-150 Ft less than 4" ID	LF	\$ 39.90	0	\$ -
453-Geo Rock Coring Barge/Track/Amphibious 000-050 Ft less than 4" ID	LF	\$ 45.79	0	\$ -
455-Geo Rock Coring Barge/Track/Amphibious 050-100 Ft less than 4" ID	LF	\$ 60.74	0	\$ -
457-Geo Rock Coring Barge/Track/Amphibious 100-150 Ft less than 4" ID	LF	\$ 65.00	0	\$ -
459-Geo Rock Coring Barge/Track/Amphibious 150-200 Ft less than 4" ID	LF	\$ 94.00	0	\$ -
427-Geo Extra SPT Samples-Truck/Mud Bug 000-050 Ft	Each	\$ 31.40	14	\$ 439.60
428-Geo Extra SPT Samples-Truck/Mud Bug 050-100 Ft	Each	\$ 36.44	20	\$ 728.80
429-Geo Extra SPT Samples-Truck/Mud Bug 100-150 Ft	Each	\$ 42.20	12	\$ 506.40
430-Geo Extra SPT Samples-Truck/Mud Bug 150-200 Ft	Each	\$ 85.00	0	\$ -
422-Geo Extra SPT Samples-Barge/Track/Amphibious 000-050 Ft	Each	\$ 47.15	0	\$ -
423-Geo Extra SPT Samples-Barge/Track/Amphibious 050-100 Ft	Each	\$ 54.80	0	\$ -
424-Geo Extra SPT Samples-Barge/Track/Amphibious 100-150 Ft	Each	\$ 63.30	0	\$ -
425-Geo Extra SPT Samples-Barge/Track/Amphibious 150-200 Ft	Each	\$ 85.00	0	\$ -
519-Geo Undisturbed Samples Truck/Mud Bug 000-050 Ft	Each	\$ 119.50	2	\$ 239.00
520-Geo Undisturbed Samples Truck/Mud Bug 050-100 Ft	Each	\$ 130.40	0	\$ -
521-Geo Undisturbed Samples Truck/Mud Bug 100-150 Ft	Each	\$ 195.80	0	\$ -
522-Geo Undisturbed Samples Truck/Mud Bug 150-200 Ft	Each	\$ 200.00	0	\$ -
515-Geo Undisturbed Samples Barge/Track/Amphibious 000-050 Ft	Each	\$ 179.00	0	\$ -
516-Geo Undisturbed Samples Barge/Track/Amphibious 050-100 Ft	Each	\$ 195.80	0	\$ -
517-Geo Undisturbed Samples Barge/Track/Amphibious 100-150 Ft	Each	\$ 293.40	0	\$ -
518-Geo Undisturbed Samples Barge/Track/Amphibious 150-200 Ft	Each	\$ 375.00	0	\$ -
401-Geo Auger Borings- Hand & Truck/Mud Bug	LF	\$ 9.25	700	\$ 6,475.00
402-Geo Auger Borings- Track	LF	\$ 9.25	0	\$ -
432-Geo Field Permeability 0-10 Ft (Open - End Borehole Method)	Each	\$ 270.00	4	\$ 1,080.00
Flagman and Barricades 2-Man Crew Own Equipment	Day	\$ 850.00	3	\$ 2,550.00
450-Geo Piezometer 2" 000-050 Ft	LF	\$ 30.00	0	\$ -
445-Geo Grouted Monitor Well 2" 000-050 Ft	LF	\$ 6.25	0	\$ -
450.1 Piezometer Permit Cost Actual	Each	\$ 50.00	0	\$ -
403-Geo Backhoe (Owned)	Day	\$ 600.00	0	\$ -
416-Geo Dozer (Owned)	Day	\$ 800.00	1	\$ 800.00
Site Clearing to Access Boring or Test Locations	Hour	\$ 150.00	8	\$ 1,200.00
407-Geo Chainsaw (Owned)	Day	\$ 28.00	1	\$ 28.00
415-Geo Double Ring Infiltration (ASTM D3385)	Each	\$ 460.00	0	\$ -
434-Geo Ground Penetrating Radar (GPR)	Day	\$ 2,800.00	0	\$ -

Contract Number: 001153
 Project Number: 5511-16-004

Tierra Inc
 Table 6 Standard Fee Schedule 2016

SR 417 Widening from Econlockhatchee Tr
 from Orange-Seminole CL

Item Description	Unit	Unit Price	Quantity	Total
Asphalt and Concrete Pavement Coring				
209-Asphalt Pavement Coring - 4" dia with Base Depth Check	Each	\$ 125.00	0	\$ -
210-Asphalt Pavement Coring - 4" dia without Base Depth Check	Each	\$ 110.00	0	\$ -
211-Asphalt Pavement Coring - 6" dia with Base Depth Check	Each	\$ 125.00	0	\$ -
212-Asphalt Pavement Coring - 6" dia without Base Depth Check	Each	\$ 110.00	0	\$ -
305-Concrete Pavement Coring - 4" Dia	Each	\$ 110.00	0	\$ -
306-Concrete Pavement Coring - 6" Dia	Each	\$ 110.00	0	\$ -
603-Mobilization Asphalt Coring equipment	Each	\$ 250.00	0	\$ -
606-Mobilization Concrete Coring	Each	\$ 250.00	0	\$ -
Geotechnical Soil Laboratory Testing				
812-Soils Materials Finer than 200 Sieve (FM 1-T011)	Test	\$ 35.00	40	\$ 1,400.00
817-Soils Moisture Content Laboratory (AASHTO T 265)	Test	\$ 9.58	45	\$ 431.10
821-Soils Particle Size Analysis (AASHTO T 88) (Including Hydrometer)	Test	\$ 131.00	0	\$ -
822-Soils Particle Size Analysis (AASHTO T 88) (No Hydrometer)	Test	\$ 67.00	80	\$ 5,360.00
805-Soils Corrosion Series (FM 5-550 through 5-553)	Test	\$ 145.00	15	\$ 2,175.00
825-Soils pH Soil or Water (FM 5-550)	Test	\$ 30.00	0	\$ -
829-Soils Resistivity Soil or Water (FM 5-551)	Test	\$ 35.00	0	\$ -
800-Soils Chloride Soil or Water (FM 5-552)	Test	\$ 40.00	0	\$ -
833-Soils Sulfate Soil or Water (FM 5-553)	Test	\$ 40.00	0	\$ -
819-Soils Organic Content Ignition (FM 1 T-267)	Test	\$ 35.00	15	\$ 525.00
Atterberg Limit Tests (AASHTO T-89 and T-90) Combined	Test	\$ 81.00	0	\$ -
826-Soils Plastic Limit & Plasticity Index (AASHTO T 90)	Test	\$ 81.00	30	\$ 2,430.00
811-Soils Liquid Limit (AASHTO T 89)	Test	\$ 41.00	0	\$ -
823-Soils Permeability Constant Head (AASHTO T 215)	Test	\$ 155.00	0	\$ -
824-Soils Permeability Falling Head (FM 5-513)	Test	\$ 155.00	0	\$ -
827-Soils Proctor Modified (FM 1-T 180)	Test	\$ 115.00	0	\$ -
828-Soils Proctor Standard (AASHTO T 99)	Test	\$ 111.00	0	\$ -
832-Soils Splitting Tensile Strength of Rock Cores (ASTM D3967)	Test	\$ 105.00	0	\$ -
838-Soils Unconfined Compression - Rock (ASTM D7012, Method C)	Test	\$ 105.00	0	\$ -
803-Soils Consolidation - Constant Strain (ASTM D4186)	Test	\$ 500.00	1	\$ 500.00
804-Soils Consolidation - Extended Load Increments (AASHTO T216)	Each	\$ 50.00	0	\$ -
806-Soils Direct Shear Consolidated Drained/ Point AASHTO T 236	Test	\$ 250.00	0	\$ -
810-Soils Limerock Bearing Ratio (LBR)(FM 5-515)	Test	\$ 326.18	10	\$ 3,261.80
Engineering and Technical Support Services				
Project Manager	Hour	\$ 198.25	41	\$ 8,128.25
Senior Engineer	Hour	\$ 188.18	65	\$ 12,231.70
Chief Scientist	Hour	\$ 151.47	0	\$ -
Senior Project Engineer	Hour	\$ 158.36	81	\$ 12,827.16
Geotechnical Engineer	Hour	\$ 134.69	122	\$ 16,432.18
Engineering Intern	Hour	\$ 95.28	260	\$ 24,772.80
Senior Scientist	Hour	\$ 117.34	0	\$ -
Designer	Hour	\$ 91.06	162	\$ 14,751.72
Sr Engineering Technician	Hour	\$ 83.16	32	\$ 2,661.12
Geotechnical Technician	Hour	\$ 87.03	32	\$ 2,144.96
Secretary/Clerical	Hour	\$ 68.31	16	\$ 1,092.96
Total Estimated Fee				\$ 184,113.05

Mobile LIDAR MAPPING

Consultant: Dewberry

Job Name: SR 417

ACA Proposal #: 17807

From: Econ Trail

Date: 5/31/2016

To: Orange/Seminole County Line

Estimator's Name: Aerial Cartographics of America, Inc.

Project Length: 7.0 Corridor Miles/31.5 Scan Miles

Mobile LIDAR Item	Scale 1" =	Unit	No. of Unit	Price per Unit	Total Cost	Comments
1 LIDAR Mission Planning (MOC Item D.1.)		Mile	31.5	\$342.45	\$10,787.18	Scan miles (Task 30.1- 18 hours and 30.2 - 24 hours)
2 Mobile LIDAR Acquisition Full Day (MOC Item E.1.)		Day	1	\$16,000.00	\$16,000.00	(Tasks 30.3 and 30.4)
3 LIDAR Mission Data Processing (MOC Item F.1.a.)		Mile	31.5	\$482.14	\$15,187.41	(Task 30.5 - 40 hours and Task 30.7 - 96 hours)
4 LIDAR Survey Report (MOC Item F.1.b.)		Each	1	\$1,258.82	\$1,258.82	(Task 30.14 - 24 hours)
5 LIDAR Mission Digital Imagery Processing (MOC Item F.1.c.)		Mile	31.5	\$212.06	\$6,679.89	(Task 30.6 - 24 hours)
6 LIDAR Point Cloud Classification Urban (MOC Item F.1.d.)		Mile	7	\$1,447.48	\$10,132.22	Corridor miles (SR 417, Sidestreets & Ramps) (Task 30.8 - 60 hours)
7 LIDAR Specific Surface Reporting (MOC Item F.1.e.)		Each		\$1,512.48	\$0.00	N/A
8 LIDAR Mapp Den Urb Rdwy 6-lane (MOC Item G.1.a.)		Mile	0.41	\$9,082.45	\$3,716.60	3D Topo University Blvd (Task 30.10 - 246 Total Hours)
9 LIDAR Mapp Mod Urb Rdwy 3-lane (MOC Item G.1.b.)		Mile	0.22	\$2,900.20	\$638.04	3D Topo Econ Trail & Trevarthon (Task 30.10)
10 LIDAR Mapp Multi-Lane Rdwy/Int 6-lane (MOC Item G.1.c.)		Mile	6	\$5,097.76	\$30,586.56	3D Topo SR 417 (Task 30.10)
11 LIDAR Mapp Multi-Lane Rdwy/Int 2-lane ramp (MOC Item G.1.c.)		Mile	0.37	\$2,038.26	\$754.16	3D Topo Ramps (Task 30.10)
12 LIDAR CAD Den Urb Rdwy 6-lane (MOC Item G.2.a.)		Mile	0.41	\$906.25	\$371.56	Cadd Edits University Blvd. (Task 30.12 - 26 Total hours)
13 LIDAR CAD Mod Urb Rdwy 3-lane (MOC Item G.2.b.)		Mile	0.22	\$340.77	\$74.97	Cadd Edits Econ Trail & Trevarthon (Task 30.12)
14 LIDAR CAD Multi-Lane Rdwy/Int 6-lane (MOC Item G.2.c.)		Mile	6	\$906.25	\$5,437.50	Cadd Edits SR 417 (Task 30.12)
15 LIDAR CAD Multi-Lane Rdwy/Int 2-lane ramp (MOC Item G.2.c.)		Mile	0.37	\$462.60	\$167.46	Cadd Edits Ramps (Task 30.12)
16 LIDAR Data Merging (MOC Item G.3.a.)		Mile	6	\$2,831.82	\$16,988.72	Merging Survey Data Furnished By Dewberry (Task 30.13 - 26 Hours)
17 Mapping 4-man crew (MOC Item G.4.a.)		Day	4	\$1,948.58	\$7,794.32	Set and maintain control targets (Task 27.4 & 27.27- 4 man crew @ 4 days)
18 Mapping 4-man crew (MOC Item G.4.a.)		Day	2	\$1,948.58	\$3,897.16	Field Review (Task 30.15 - 4 man crew @ 2 days)
19 Senior Surveyor and Mapper		Hour	59	\$189.72	\$11,193.48	Includes Tasks 30.16 thru 30.19 (59 hours total)
20 Professional Surveyor and Mapper		Hour	0	\$160.85	\$0.00	N/A
TOTAL FEES					\$141,665.86	

Prepared by: Patrick Senna, PSM, Sr. Vice President

Date: May 31, 2016

EXHIBIT D

PROJECT ORGANIZATIONAL CHART

Organization and Management

CENTRAL FLORIDA EXPRESSWAY AUTHORITY

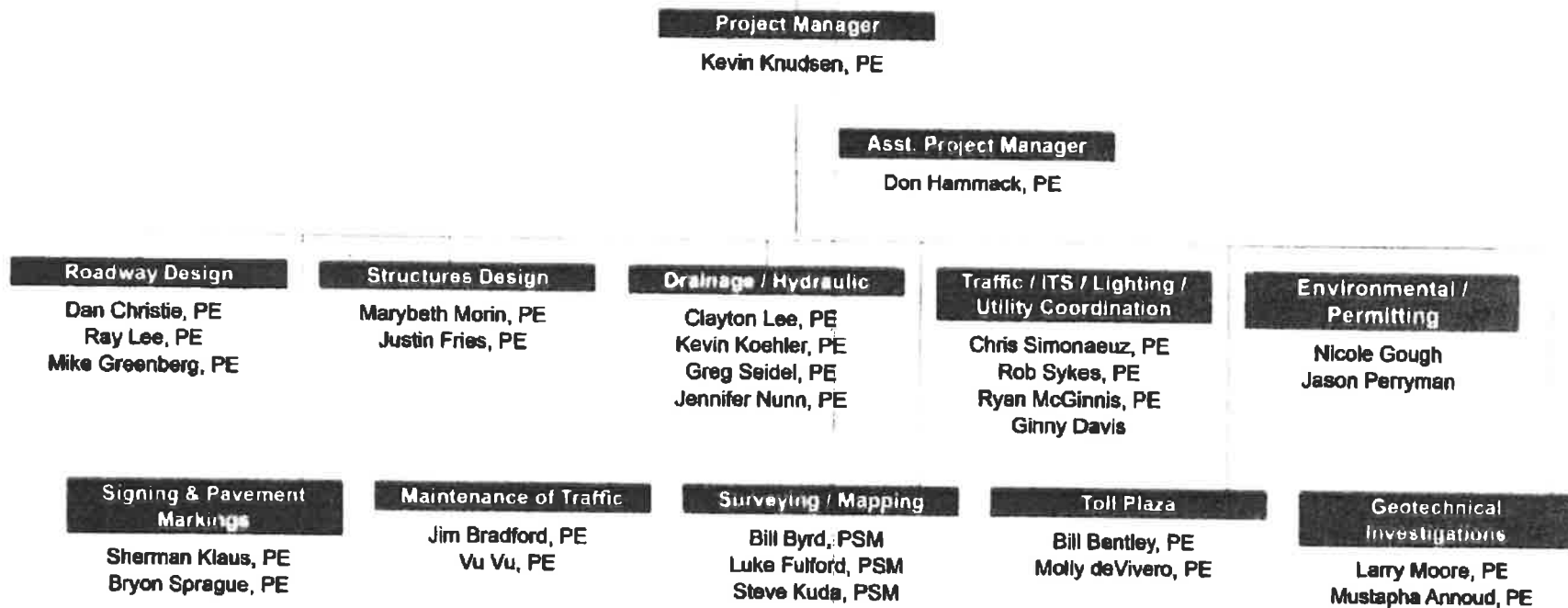
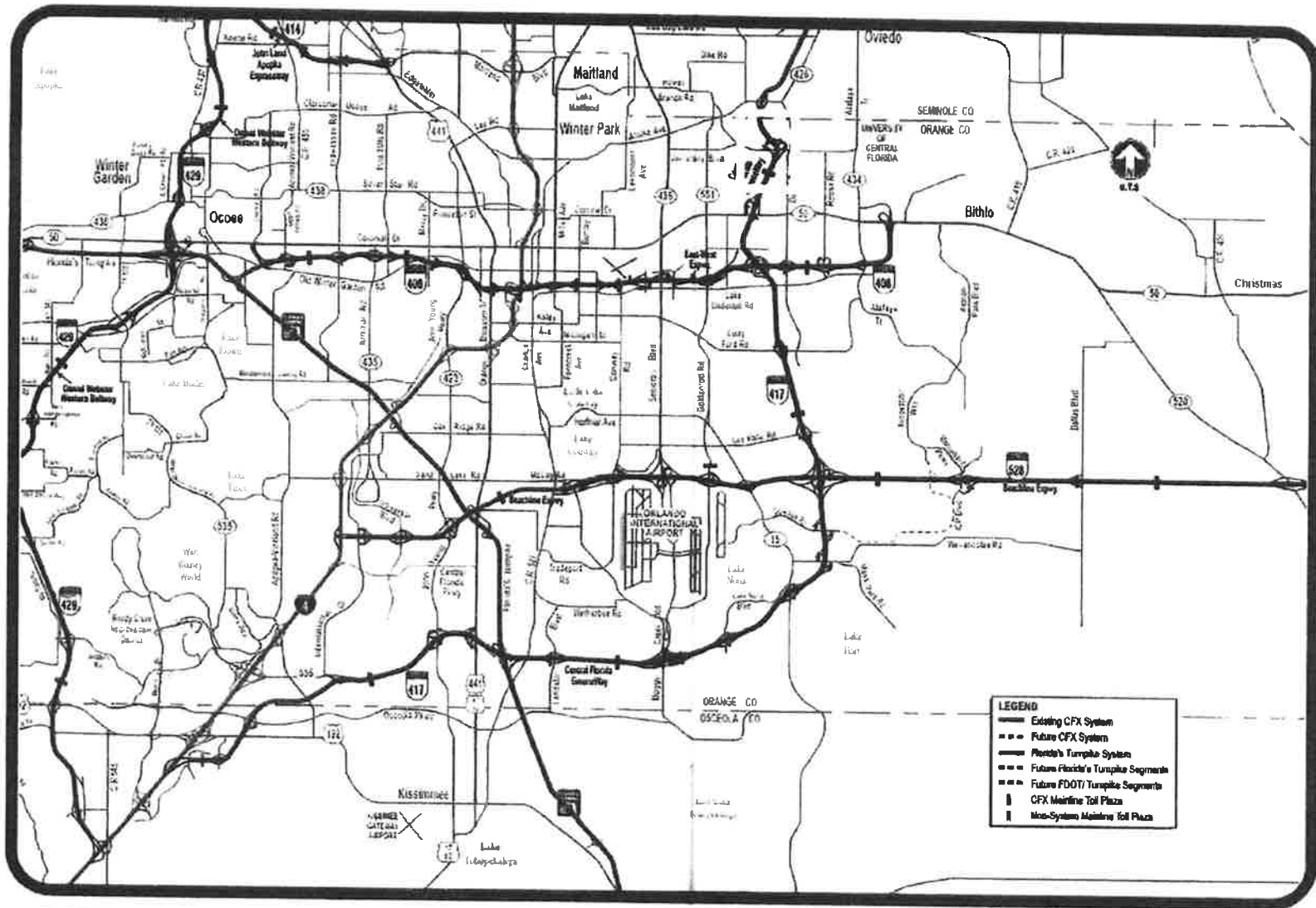


EXHIBIT E

PROJECT LOCATION MAP



Project Location Map for
 S.R. 417 Widening from Econlockhatchee Trail to Seminole County Line (417-134)

EXHIBIT F

SCHEDULE

Contract No. 001153, Project 417-134

SR 417 Widening from Econlockhatchee Trail to Orange / Seminole County Line

Project Schedule

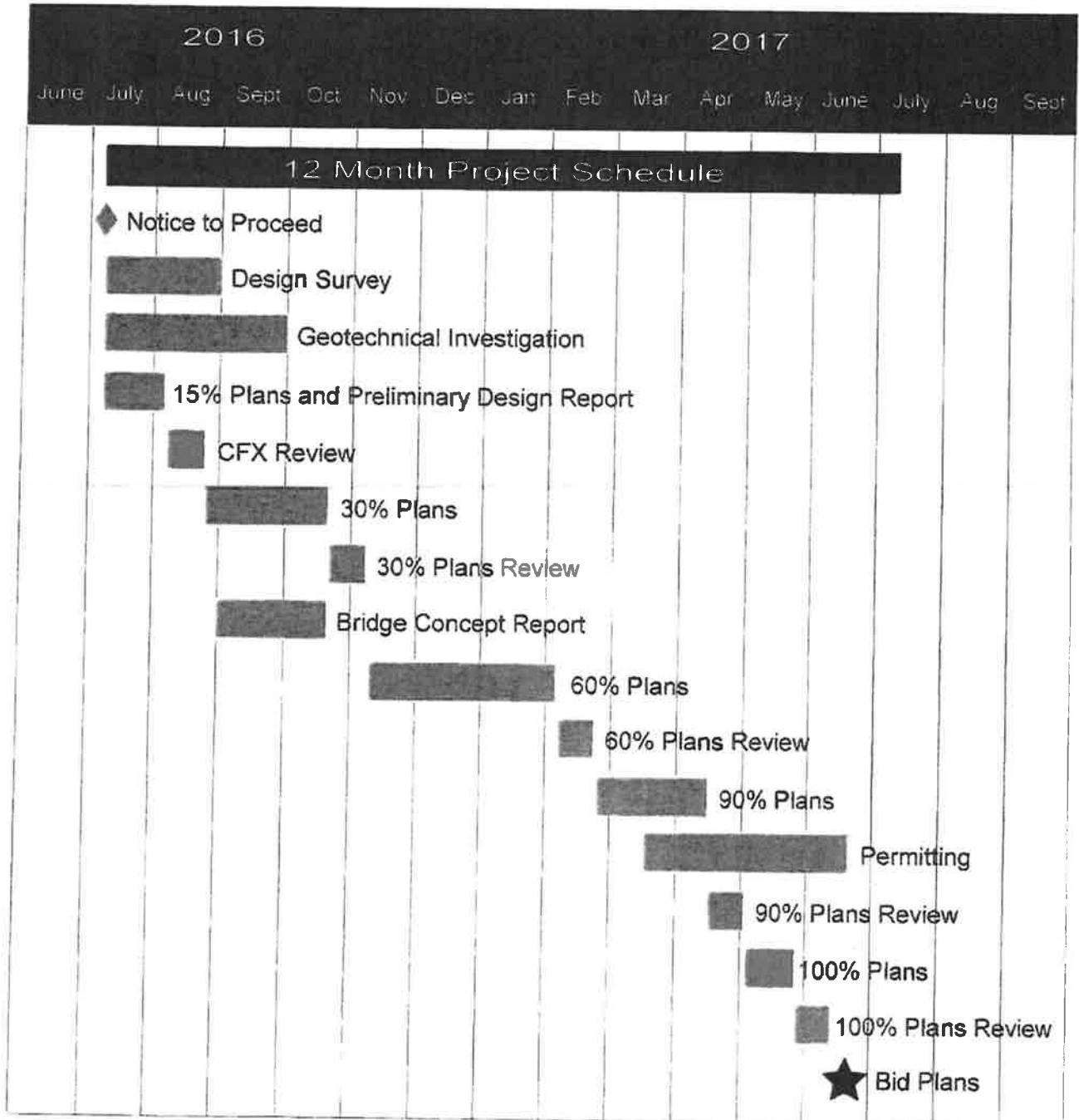


EXHIBIT B

Scope of Services for Supplemental Agreement No. 1

to

CFX Contract No. 001153

EXHIBIT "A"
SCOPE OF SERVICES
FOR
SR 417 Widening from Econlockhatchee Trail to Seminole County Line
Orange County, Florida

March 23, 2017

I. INTRODUCTION

The Central Florida Expressway Authority (CFX) is proposing to widen SR 417 from Econlockhatchee Trail northward to the Orange / Seminole County Line to a six-lane facility. The County Line is the jurisdictional limit between the CFX and Florida's Turnpike maintenance on SR 417. The County Line is located just south of the SR 426 (Aloma Avenue) interchange, which is a logical termini for the roadway widening improvements. FTE has future plans to widen SR 417 to an eight-lane section from the County Line northward. FTE wishes to limit future rework, avoid throw-away construction and minimize impacts to their customers by coordinating improvements with the CFX SR 417 design project

II. PROJECT DESCRIPTION

The CFX project will be modified to include a one-mile southbound auxiliary lane between Aloma Avenue and University Boulevard. The auxiliary lane will tie-in to the existing two lane University Boulevard off-ramp. In addition, the southbound on-ramp at Aloma Avenue will be widened to two lanes from the ramp gore to the existing ramp plaza, a distance of approximately 0.2 miles. The southbound mainline pavement will also be widened to the physical ramp gore so that the gore will be in its ultimate location. The northbound mainline pavement will transition from 3-lanes to 2-lanes between the Aloma Avenue exit ramp and the existing bridge over Aloma Avenue. The Aloma Avenue northbound off-ramp will also be improved to 2-lanes. The exit ramp gore will be shifted southward to maximize the merge distance between the gore and bridge.

The southbound auxiliary lane between Aloma Avenue and University Boulevard will add a significant amount of impervious surface and impact two existing ponds (Ponds 7W and 8). Retaining walls and/or guardrail and shoulder gutter may be required to provide the additional treatment volumes required. The existing infield pond (Pond 6W) at the University Boulevard interchange will be expanded to handle the additional stormwater. The roadway widening within the FTE/CFX transition area will also add a significant amount of impervious surface. Currently, there is one existing dry pond (Pond 9) that handles the interchange drainage. FTE has permitted adding an infield pond (Pond 9A) in the southeast quadrant of the interchange as part of the future

8-laning project. A portion of this pond (Pond 9A) will be designed and constructed to provide the treatment required for the additional SB pavement. The existing pond (Pond 9) outfall to Deep Lake will also be improved. Stormwater and environmental permits will be modified.

Additional geotechnical and survey services will be required. The lighting, ITS and signing and pavement marking plans will be updated for the added auxiliary lane and ramps.

All improvements within the FTE jurisdiction and right-of-way will be designed in accordance with FTE standards and specifications.

III. SERVICES TO BE PERFORMED BY THE CONSULTANT

ACTIVITY 3) - PROJECT COMMON AND GENERAL TASKS:

Additional meetings and contract maintenance will be required.

ACTIVITIES 4) and 5) - ROADWAY ANALYSIS AND PLANS:

The CONSULTANT shall update the roadway design and plans to accommodate the auxiliary lane and ramp improvements. The major work efforts include:

- Horizontal/Vertical Master Design Files.
- Cross Section Design Files.
- Traffic Control Analysis, Design and Plans.
- Quantities.
- Cost Estimates.
- Typical Sections.
- Plan and Profile Sheets.
- Ramp Terminal Details.
- Roadway Cross Sections.

ACTIVITY 6) - DRAINAGE ANALYSIS AND PLANS:

The CONSULTANT shall update the drainage design and plans to accommodate the auxiliary lane and ramp improvements. The major work efforts include:

- Drainage Maps
- Design of Cross Drains.
- Design of Ditches.
- Design and Plans for Stormwater Management Facilities.
- Design and Plans for Storm Drains.
- Update Drainage Design Documentation Report.
- Miscellaneous Drainage Detail Sheets.

ACTIVITY 7) - UTILITIES:

No additional utility tasks anticipated.

ACTIVITY 8) - ENVIRONMENTAL PERMITS, COMPLIANCE AND CLEARANCES:

The CONSULTANT shall update the permit application and submittal to accommodate the proposed improvements. The major work efforts include:

Complete and Submit Permit Applications.

ACTIVITY 9) and 18) – MISCELLANEOUS STRUCTURES:

The CONSULTANT shall design the required miscellaneous structures. The major work efforts include:

Overhead Sign Structures

Sta. 1231+80

Sta. 1249+00

Sta. 1258+50

Retaining Walls

Pond 7W

Pond 8

ACTIVITIES 19) and 20) – SIGNING AND PAVEMENT MARKING ANALYSIS AND PLANS:

The CONSULTANT shall update the signing and pavement marking design and plans to accommodate the auxiliary lane and ramp improvements. The major work efforts include:

Master Design Files

Signing and Pavement Marking Plans

ACTIVITIES 23) and 24) - LIGHTING ANALYSIS AND PLANS:

The CONSULTANT shall update the lighting design and plans to accommodate the auxiliary lane and ramp improvements and shall convert to LED. The major work efforts include:

Lighting Design Analysis Report

Voltage Drop Calculations

Master Design Files

Lighting Plans

ACTIVITY 27) - SURVEY

The CONSULTANT shall provide additional topographic and drainage surveys for the proposed roadway and drainage improvements. The major work efforts include:

- Drainage Survey
- Pond Site Survey
- Geotechnical Support
- Work Zone Safety

ACTIVITIES 33) and 34) – ITS ANALYSIS AND PLANS:

The CONSULTANT shall update the ITS design and plans to accommodate the auxiliary lane and ramp improvements. The major work efforts include:

- Master ITS Design Files
- ITS Plans

ACTIVITY 35) - GEOTECHNICAL:

The CONSULTANT shall be responsible for a complete geotechnical investigation to accommodate the design improvements. The major work efforts include:

- Roadway and Pond Borings
- Structure Borings
- Geotechnical Reports
- Laboratory Testing
- Engineering Support Services

Project Staff Hour Summary

Name of Consultant:

Dewberry

SR 417, Econ Trail to Seminole County Line, SA #1
417-134

Activity No.	Activity	Project Staff Hours												Total Hours	
		Dewberry	CEB	Balmoral	Tierra	Sub 4	Sub 5	Sub 6	Sub 7	Sub 8	Sub 9	Sub 10	Sub 11		Sub 12
3	Project Common and General Tasks	71													71
4	Roadway Analysis	834													834
5	Roadway Plans	359													359
6a	Drainage Analysis	312													312
6b	Drainage Plans	288													288
7	Utilities	0													0
8	Env. Permits, Compliance & Clearances	41													41
9	Structures - Summary, Misc. Tasks, Dwgs.	55													55
10	BDR	0													0
11	Temporary Bridge	0													0
12	Short Span Concrete Bridge	0													0
13	Medium Span Concrete Bridge	0													0
14	Structural Steel Bridge	0													0
15	Segmental Concrete Bridge	0													0
16	Movable Span	0													0
17	Retaining Walls	80													80
18	Miscellaneous Structures	72													72
19	Signing & Pavement Marking Analysis	0		74											74
20	Signing & Pavement Marking Plans	0		57											57
21	Signalization Analysis	0													0
22	Signalization Plans	0													0
23	Lighting Analysis	111	209												320
24	Lighting Plans	28	42												70
25	Landscape Architecture Analysis	0													0
26	Landscape Architecture Plans	0													0
27	Survey - Field and Office Support	45													45
28	Photogrammetry	0													0
29	Mapping	0													0
30	Terrestrial Mobile LiDAR	0													0
31	Architecture Development	0													0
32	Noise Barriers Impact Design Assessment	0													0
33	ITS Analysis	0	61												61
34	ITS Plans	0	34												34
35	Geotechnical	0			187										187
Project Total		2,296	346	131	187	0	0	0	0	0	0	0	0	0	2,960
27	Survey Field Crew Days	9													9

- Notes: 1. Staff hours for prime consultant come directly from each discipline's worksheet.
 2. Staff hours for subconsultants are to be entered manually into columns D through O.
 3. For workbooks prepared by subconsultants, their project hours will be totaled in column C.

ESTIMATE OF WORK EFFORT AND COST - PRIME CONSULTANT

Name of Project:
County:
FPH:
FAP No.:

SR 417, Econ Trail to Seminole County Line, SA #1
Orange County
417-134
N/A

Consultant Name: Dewberry
Consultant No.: enter consultants proj number
Date: 3/30/2017
Estimator: Kevin Kudson

Staff Classification	Total Staff Hours From "SH Summary"	Project Manager	Senior Engineer	Engineer	Engineer Intern	Sr. Engr. Technician	Engr. Technician	Sr. Envir. Scientist	Envir. Specialist	Senior Surveyor	Surveyor	Survey Technician	Staff Class. Section 12	SH	Salary	Average
														By Activity	Cost By Activity	Rate Per Task
3. Project General and Project Common Tasks	71	43	14	7	0	7	0	0	0	0	0	0	0	71	\$5,180	\$72.67
4. Roadway Analysis	834	125	334	187	42	125	41	0	0	0	0	0	0	834	\$44,821	\$53.60
5. Roadway Plans	359	38	90	90	18	90	35	0	0	0	0	0	0	359	\$18,799	\$48.79
6a. Drainage Analysis	312	31	125	94	0	82	0	0	0	0	0	0	0	312	\$18,415	\$52.61
6b. Drainage Plans	288	30	72	72	14	88	14	0	0	0	0	0	0	288	\$13,780	\$47.78
7. Utilities	0	0	0	0	0	0	0	0	0	0	0	0	0	0	\$0	#DIV/0!
8. Environmental Permits, Compliance & Clearances	41	4	4	8	0	0	0	17	8	0	0	0	0	41	\$1,786	\$43.56
9. Structures - Misc. Tasks, Dwg, Non-Tech.	55	3	22	14	3	10	3	0	0	0	0	0	0	55	\$2,682	\$48.78
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	80	4	20	20	8	24	4	0	0	0	0	0	0	80	\$3,569	\$44.81
18. Structures - Miscellaneous	72	4	18	18	6	22	4	0	0	0	0	0	0	72	\$3,234	\$44.92
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	111	11	44	34	0	22	0	0	0	0	0	0	0	111	\$5,830	\$52.52
24. Lighting Plans	28	3	8	8	1	8	0	0	0	0	0	0	0	28	\$1,397	\$49.89
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)	45	0	0	0	0	0	0	0	0	9	14	22	0	45	\$1,785	\$39.90
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!
Total Staff Hours	2,296	294	751	532	82	458	101	17	8	9	14	22	0	2,296	\$117,048.10	\$50.98
Total Staff Cost		\$25,783.80	\$45,315.34	\$22,200.38	\$2,893.78	\$18,408.88	\$1,992.73	\$848.00	\$213.78	\$804.89	\$817.26	\$573.32	\$0.00		\$117,048.10	

Survey Field Days by Subconsultant
4 - Person Crew:

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.

SALARY RELATED COSTS:

OVERHEAD:	131.48%	\$117,048.10
Sub-total Salary Related Costs		\$153,871.43
OPERATING MARGIN:	12%	\$270,819.53
EXPENSES:		\$32,610.34
Survey (Field - # by Prime)	8 4-man crew days @ \$ 1,253.04 / day	\$11,277.36
SUBTOTAL ESTIMATED FEE:		\$314,707.23
Subconsultant: CES		\$48,832.47
Subconsultant: Balmoral		\$14,172.02
Subconsultant: Terra		\$38,485.40
Subconsultant: Sub 4		\$0.00
Subconsultant: Sub 5		\$0.00
SUBTOTAL SUBCONSULTANTS:		\$101,489.89
Geotechnical Field and Lab Testing		\$0.00
SUBTOTAL ESTIMATED FEE:		\$416,197.12
Optional Services		\$0.00
GRAND TOTAL ESTIMATED FEE:		\$416,197.12

Project Activity 3: General Tasks

Estimator:

SR 417, Econ Trail to Seminole County Line, SA #1
417-134

Representing	Print Name	Signature / Date
FDOT District	<i>Patrick Mwendu</i>	<i>Patrick Mwendu</i>
Dewberry	Kevin Krudse	2/31/17 4/2/17

NOTE: Signature Block is optional, per District preference

Task No.	Task	Units	No of Units	Hours/ Unit	Total Hours	Comments
3.1	Public Involvement					N/A
3.1.1	Community Awareness Plan	LS	0	0	0	N/A
3.1.2	Notifications	LS	0	0	0	N/A
3.1.3	Prepare Mailing Lists	LS	0	0	0	N/A
3.1.4	Median Modification Letters	LS	0	0	0	N/A
3.1.5	Driveway Modification Letters	LS	0	0	0	N/A
3.1.6	Newsletters	LS	0	0	0	N/A
3.1.7	Renderings and Fly Throughs	LS	0	0	0	N/A
3.1.8	PowerPoint Presentation	LS	0	0	0	N/A
3.1.9	Public Meeting Preparations	LS	0	0	0	N/A
3.1.10	Public Meeting Attendance/Followup	LS	0	0	0	N/A
3.1.11	Other Agency Meetings	LS	0	0	0	N/A
3.1.12	Web Site	LS	0	0	0	N/A
3.1 Public Involvement Subtotal					0	
3.2	Joint Project Agreements	EA	0	0	0	N/A
3.3	Specifications Package Preparation	LS	0	0	0	N/A
3.4	Contract Maintenance and EDMS	LS	0	0	0	N/A
3.5	Value Engineering (Multi-Discipline Team) Review	LS	0	0	0	N/A
3.6	Prime Consultant Project Manager Meetings	LS	1	71	71	See listing below
3.7	Plans Update	LS	0	0	0	N/A

Project Activity 3: General Tasks



Task No.	Task	Units	No of Units	Hours/ Unit	Total Hours	Comments
3.8	Post Design Services	LS	0	0	0	N/A
3.9	Digital Delivery	LS	0	0	0	N/A
3.10	Risk Assessment Workshop	LS	0	0	0	N/A
3.11	Railroad, Transit, and/or Airport Coordination	LS	0	0	0	N/A
3.12	Other Project General Tasks	LS	0	0	0	N/A
3. Project Common and Project General Tasks Total					71	

3.6 - List of Project Manager Meetings	Units	No of Units	Hours/ Unit	Total Hours	Comments
Roadway Analysis	EA	0	0	0	N/A
Drainage	EA	0	0	0	N/A
Utilities	EA	0	0	0	N/A
Environmental	EA	0	0	0	N/A
Structures	EA	0	0	0	N/A
Signing & Pavement Marking	EA	0	0	0	N/A
Signalization	EA	0	0	0	N/A
Lighting	EA	0	0	0	N/A
Landscape Architecture	EA	0	0	0	N/A
Survey	EA	0	0	0	N/A
Photogrammetry	EA	0	0	0	N/A
ROW & Mapping	EA	0	0	0	N/A
Terrestrial Mobile LIDAR	EA	0	0	0	N/A
Architecture	EA	0	0	0	N/A
Noise Barriers	EA	0	0	0	N/A
ITS Analysis	EA	0	0	0	N/A
Geotechnical	EA	0	0	0	N/A
Progress Meetings	EA	4	9	36	Bi-Weekly for 2 months (4 people @ 2hrs/ea) + 1 hr/mtg for agenda & minutes
Phase Reviews	EA	3	9	27	Tumpike Coord Mtgs (3 mtgs - 3people - 3 hrs/ea)
Field Reviews	EA	1	8	8	2 people @ 4 hrs/ea
Total Project Manager Meetings		8		71	Total PM Meeting Hours carries to Task 3.6 above

Notes:

1. If the hours per meeting vary in length (hours) enter the average in the hour/unit column.
2. Do not double count agency meetings between permitting agencies.
3. Project manager meetings are calculated in each discipline sheet and brought forward to Column D, except for Photogrammetry

Project Activity 4: Roadway Analysis

Estimator:

SR 417, Econ Trail to Seminole County Line, SA #1
417-134

Representing	Print Name	Signature / Date
FDOT District	<i>Patrick Muench</i>	<i>Patrick Muench</i> 2/30/17
Dewberry	<i>Kevin Kaudser</i>	<i>Kevin Kaudser</i> 4/2/17

NOTE: Signature Block is optional, per District preference

Task No.	Task	Units	No of Units	Hours/ Unit	Total Hours	Comments
4.1	Typical Section Package	LS	0	0	0	N/A
4.2	Pavement Type Selection Report	LS	0	0	0	N/A
4.3	Pavement Design Package	LS	1	0	0	Use Pvm1 Design from FTE Express Lane Project
4.4	Cross-Slope Correction	LS	0	0	0	N/A
4.5	Horizontal/Vertical Master Design Files	LS	1	304	304	SR 417 (1.0 mile of SB Auxiliary Lane between Aloma Avenue and University Blvd) @ 240 hrs/mi) + Ramps (0.2 mi of SB on-ramp at Aloma Ave and 0.2 mi of SB off-ramp at University Blvd = 0.4 mi @ 180 hrs/mi)=240 mhs + 64 mhs = 304 mhs
4.6	Access Management	LS	0	0	0	N/A
4.7	Roundabout Evaluation	LS	0	0	0	N/A
4.8	Roundabout Final Design Analysis	LS	0	0	0	N/A
4.9	Cross Section Design Files	LS	1	188	188	SR 417 (1.0 mi) + Ramps (0.4 mi) = 1.4 mi @ 120 hrs/mi)
4.10	Traffic Control Analysis	LS	1	80	80	Level 2 @ 1.4 miles, Analysis LS = 60 hrs
4.11	Master TCP Design Files	LS	1	112	112	Level 2 @ 1.4 miles, SR 417 (40 hrs/mi x 2 phases x 1.0 miles) = 80 hrs, Ramp (0.4 mi x 2 phases x 40 hrs/phase) = 32 hrs
4.12	Design Variations and Exceptions	LS	0	0	0	N/A
4.13	Design Report	LS	0	0	0	N/A
4.14	Quantities	LS	1	80	80	
4.15	Cost Estimate	LS	1	32	32	2 @ 16 hrs/ea
4.16	Technical Special Provisions	LS	0	0	0	N/A
4.17	Other Roadway Analyses	LS	0	0	0	N/A
Roadway Analysis Technical Subtotal					736	

Project Activity 4: Roadway Analysis



Task No.	Task	Units	No of Units	Hours/ Unit	Total Hours	Comments
4.18	Field Reviews	LS	0	0	0	N/A
4.19	Monitor Existing Structures	LS	0	0	0	N/A
4.20	Technical Meetings	LS	0	0	0	N/A
4.21	Quality Assurance/Quality Control	LS	%	5%	37	
4.22	Independent Peer Review	LS	%	0%	0	N/A
4.23	Supervision	LS	%	5%	37	
Roadway Analysis Nontechnical Subtotal					74	
4.24	Coordination	LS	%	3%	24	
4. Roadway Analysis Total					834	

Technical Meetings	Units	No of Units	Hours/ Unit	Total Hours	PM Attendance at Meeting Required?	Number
Typical Section	EA	0	0	0	N/A	
Pavement	EA	0	0	0	N/A	
Access Management	EA	0	0	0	N/A	
15% Line and Grade	EA	0	0	0	N/A	
Driveways	EA	0	0	0	N/A	
Local Governments (cities, counties, MPO)	EA	0	0	0	N/A	
Work Zone Traffic Control	EA	0	0	0	N/A	
30/60/90/100% Comment Review Meetings	EA	0	0	0	N/A	
Other Meetings	EA	0	0	0	N/A	
Subtotal Technical Meetings				0		
Progress Meetings (if required by FDOT)	EA	0	0	0	N/A	
Phase Review Meetings	EA	0	0	0	N/A	
Total Meetings				0		
Subtotal Project Manager Meetings						0
Total Project Manager Meetings (carries to Tab 3)						0

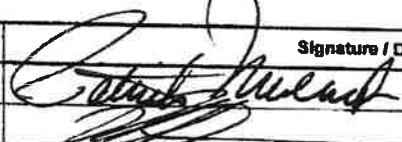

Carries to 4 (1)

Carries to Tab J

Project Activity 6: Roadway Plans

Estimator:

SR 417, Econ Trail to Seminole County Line, SA #1
417-134

Representing		Print Name	Signature / Date
FDOT District		Patrick Muench	 3/31/17
Dewberry		Kevin Knudsen	 4/2/17

NOTE: Signature Block is optional, per District preference

Task No.	Task	Scale	Units	No. of Units or Sheet	Hours/ Unit or Sheet	Total Hours	Comments
5.1	Key Sheet		Sheet	1	2	2	Revise
5.2	Summary of Pay Items Including Quantity Input		Sheet	2	4	8	Revise
5.3	Typical Section Sheets						
5.3.1	Typical Sections		EA	3	8	18	SR 417 (1), Univ Off-Ramp (1), Aloma On-Ramp Ramp (1)
5.3.2	Typical Section Details		EA	0	0	0	N/A
5.4	General Notes/Pay Item Notes		Sheet	0	0	0	N/A
5.5	Summary of Quantities Sheets		Sheet	8	1	8	FDOT Method
5.6	Project Layout		Sheet	1	2	2	Add Ramps
5.7	Plan/Profile Sheet		Sheet	0	0	0	N/A
5.8	Profile Sheet		Sheet	15	4	60	SR 417 (11), University Off-Ramp (1), Aloma On-Ramp (3)
5.9	Plan Sheet		Sheet	12	4	48	SR 417 (11), University Off-Ramp (1)
5.10	Special Profile		Sheet	0	0	0	N/A
5.11	Back-of-Sidewalk Profile Sheet		Sheet	0	0	0	N/A
5.12	Interchange Layout Sheet		Sheet	0	0	0	N/A
5.13	Ramp Terminal Details (Plan View)		Sheet	2	10	20	University Off-Ramp (1), Aloma On-Ramp (1)
5.14	Intersection Layout Details		Sheet	0	0	0	N/A
5.15	Special Details		EA	0	0	0	N/A
5.16	Cross-Section Pattern Sheet(s)		Sheet	1	4	4	N/A

Project Activity 5: Roadway Plans





Task No.	Task	Scale	Units	No. of Units or Sheet	Hours/ Unit or Sheet	Total Hours	Comments
5.17	Roadway Soil Survey Sheet(s)		Sheet	0	0	0	N/A
5.18	Cross Sections		EA	74	0.25	19	SR 417 (1.0 mi) + Ramp (0.4 mi) = 1.4 mi = 7,362 LF @ 100' spacing
5.19	Temporary Traffic Control Plan Sheets		Sheet	24	4	96	12 sheets x 2 Phases = 24 sheets
5.20	Temporary Traffic Control Cross Section Sheets		EA	22	0.25	6	1.4 mi @ 500' spacing = 11 sections x 2 phases = 22 sections
5.21	Temporary Traffic Control Detail Sheets		Sheet	3	4	12	General Notes, Quantities, Paving Typical & Notes, Detour Sheets, Advanced Signing, etc.
5.22	Utility Adjustment Sheets		Sheet	12	2	24	Revise
5.23	Selective Clearing and Grubbing Sheet(s)		Sheet	0	0	0	N/A
5.24	Project Network Control Sheet(s)		Sheet	0	0	0	N/A
5.25	Environmental Detail Sheets		Sheet	0	0	0	N/A
5.26	Utility Verification Sheet(s) (SUE Data)		Sheet	0	0	0	N/A
Roadway Plans Technical Subtotal						327	
5.27	Quality Assurance/Quality Control		LS	%	5%	16	
5.28	Supervision		LS	%	5%	18	
5. Roadway Plans Total						369	

Project Activity 6a: Drainage Analysis

Estimator:

SR 417, Econ Trail to Seminole County Line, SA #1
417-134

Representing	Print Name	Signature / Date
FDOT District	Patrick Muench	 3/31/17
Dewberry	Kevin Knudsen	 4/12/17

NOTE: Signature Block is optional, per District preference

Task No.	Task	Units	No of Units	Hours/ Unit	Total Hours	Comments
6a.1	Drainage Map Hydrology	Per Map	1	8	8	Pond 9A
6a.2	Base Clearance Report	Per Location	0	0	0	N/A
6a.3	Pond Siting Analysis and Report	Per Basin	0	0	0	N/A
6a.4	Design of Cross Drains	EA	2	9	18	Pond 9A-Aloma
6a.5	Design of Ditches	Per Ditch Mile	1.4	15	21	1.4 miles (lt)
6a.6	Design of Stormwater Management Facility (Offsite or Infield Pond)	EA	4	34	136	2 New Ponds (6W & 8A) @ 40 hrs/ea, 2 Exist Ponds (7W & 8) @ 28 hrs/ea
6a.7	Design of Stormwater Management Facility (Roadside Ditch as Linear Pond)	Per Cell	0	0	0	N/A
6a.8	Design of Floodplain Compensation	Per Floodplain Basin	0	0	0	N/A
6a.9	Design of Storm Drains	EA	24	2	48	Add shoulder gutter, Aloma Interchange area
6a.10	Optional Culvert Material	EA	0	0	0	N/A
6a.11	French Drain Systems	Per Cell	0	0	0	N/A
6a.12	Drainage Wells	EA	0	0	0	N/A
6a.13	Drainage Design Documentation Report	LS	1	24	24	Update
6a.14	Bridge Hydraulic Report	EA	0	0	0	N/A

Project Activity 6a: Drainage Analysis



Task No.	Task	Units	No of Units	Hours/ Unit	Total Hours	Comments
6a.15	Temporary Drainage Analysis	LS	1	16	16	SB 417 at Aloma
6a.16	Cost Estimate	LS	0	0	0	N/A
6a.17	Technical Special Provisions	LS	0	0	0	N/A
6a.18	Other Drainage Analysis	LS	0	0	0	N/A
Drainage Analysis Technical Subtotal					269	
6a.19	Field Reviews	LS	1	8	8	1 reviews x 2 people x 4 hrs
6a.20	Technical Meetings	LS	0	0	0	N/A
6a.21	Environmental Look-Around (ELA) Meeting	LS	1	0	0	N/A
6a.22	Quality Assurance/Quality Control	LS	%	5%	13	
6a.23	Independent Peer Review	LS	%	0%	0	N/A
6a.24	Supervision	LS	%	5%	13	
Drainage Analysis Nontechnical Subtotal					34	
6a.25	Coordination	LS	%	3%	9	
6a. Drainage Analysis Total					312	

Technical Meetings	Units	No of Units	Hours/ Unit	Total Hours	PM Attendance at Meeting Required?	Number
Base Clearance Water Elevation	EA	0	0	0	N/A	0
Pond Siting	EA	0	0	0	N/A	0
Agency	EA	0	0	0	N/A	0
Local Governments (cities, counties)	EA	0	0	0	N/A	0
FTE Drainage	EA	0	0	0	N/A	0
Other Meetings	EA	0	0	0	N/A	0
Subtotal Technical Meetings				0		0
Progress Meetings (if required by FDOT)	EA	0	0	0	N/A	0
Phase Review Meetings	EA	0	0	0	N/A	--
Total Meetings				0	Total Project Manager Meetings (carries to Tab 3)	0



Carries to 6 11

Carries to Tab 3

6b. Drainage Plans

Estimator

SR 417, Econ Trail to Seminola County Line, SA #1
417-134

Representing	Print Name	Signature / Date
FDOT District	Patrick Mserch	 2/20/17
Dewberry	Kevin Knudsen	 4/2/17

NOTE: Signature Block is optional, per District preference



Task No.	Task	Scale	Units	No. of Units or Sheet	Hours/ Unit or Sheet	Total Hours	Comments
6b.1	Drainage Map (Including Interchanges)		Sheet	4	16	64	1" = 200'
6b.2	Bridge Hydraulics Recommendation Sheets		Sheet	0	0	0	N/A
6b.3	Summary of Drainage Structures		Sheet	1	16	16	New structures
6b.4	Optional Pipe/Culvert Material		Sheet	0	0	0	N/A
6b.5	Drainage Structure Sheet(s) (Per Structure)		EA	24	2.5	60	New structures
6b.6	Miscellaneous Drainage Detail Sheets		Sheet	1	24	24	New Pond outfalls
6b.7	Lateral Ditch Plan/Profile		Sheet	0	0	0	N/A
6b.8	Lateral Ditch Cross Sections		EA	0	0	0	N/A
6b.9	Retention/Detention Ponds Detail Sheet(s)		Sheet	4	22	88	2 New Ponds (6W & 6A) @ 22 hrs/ea, 2 Exst Ponds (7W & 8) @ 16 hrs/ea
6b.10	Retention Pond Cross Sections		EA	32	0.3	10	6 per pond
6b.11	Erosion Control Plan Sheet(s)		Sheet	0	0	0	N/A
6b.12	SWPPP Sheet(s)		Sheet	0	0	0	N/A
Drainage Plans Technical Subtotal						262	
6b.13	Quality Assurance/Quality Control		LS	%	5%	13	
6b.14	Supervision		LS	%	5%	13	
6. Drainage Plans Total						288	

Project Activity 8: Environmental Permits

Estimator

SR 417, Econ Trail to Seminole County Line, SA #1

417-134

Representing	Print Name	Signature / Date
FDOT District	Patrick Pherech	 2/21/17
Dewberry	Kevin Knudsen	 4/2/17

NOTE: Signature Block is optional, per District preference

Task No.	Task	Units	No. of Units	Hours/ Units	Total Hours	Comments
Environmental Permits, Compliances and Clearances						
8.1	Preliminary Project Research	LS	1	4	4	
Permits						
8.2	Field Work					
8.2.1	Pond Site Alternatives	per pond site	0	0	0	N/A
8.2.2	Establish Wetland Jurisdictional Lines and Assessments	LS	0	0	0	N/A
8.2.3	Species Surveys	LS	0	0	0	N/A
8.2.4	Archeological Surveys	LS	0	0	0	N/A
8.3	Agency Verification of Wetland Data	LS	0	0	0	N/A
8.4	Complete And Submit All Required Permit Applications					
8.4.1	Complete and Submit All Required Wetland Permit Applications	LS	1	24	24	Pond 8A
8.4.2	Complete and Submit All Required Species Permit Applications	LS	0	0	0	N/A
8.5	Prepare Dredge and Fill Sketches (as needed)	LS	1	8	8	Modify Impacts
8.6	Prepare USCG Permit Sketches	LS	0	0	0	N/A
8.7	Prepare Water Management District Right-of-Way Occupancy Permit	LS	0	0	0	N/A
8.8	Prepare Coastal Construction Control Line (CCCL) Permit Application	LS	0	0	0	N/A
8.9	Prepare Tree Permit Information	LS	0	0	0	N/A
8.10	Mitigation Design	LS	0	0	0	N/A
8.11	Mitigation Coordination and Meetings	LS	0	0	0	N/A

Project Activity 8: Environmental Permits



Task No.	Task	Units	No. of Units	Hours/ Units	Total Hours	Comments
8.12	Other Environmental Permits	LS	0	0	0	N/A
	Environmental Clearances/Reevaluations					
8.13	Technical support to Department for Environmental Clearances and Reevaluations (use when consultant provides technical support only)					
8.13.1	NEPA or SEIR Reevaluation	LS	0	0	0	N/A
8.13.2	Archaeological and Historical Features	LS	0	0	0	N/A
8.13.3	Wetland Impact Analysis	LS	0	0	0	N/A
8.13.4	Essential Fish Habitat	LS	0	0	0	N/A
8.13.5	Wildlife and Habitat Impact Analysis	LS	0	0	0	N/A
8.13.6	Section 7 or Section 10 Consultation	LS	0	0	0	N/A
8.14	Preparation of Environmental Clearances and Reevaluations (use when consultant prepares all documents associated with reevaluation)					
8.14.1	NEPA or SEIR Reevaluation	LS	0	0	0	N/A
8.14.2	Archaeological and Historical Features	LS	0	0	0	N/A
8.14.3	Wetland Impact Analysis	LS	0	0	0	N/A
8.14.4	Essential Fish Habitat	LS	0	0	0	N/A
8.14.5	Wildlife and Habitat Impact Analysis	LS	0	0	0	N/A
8.14.6	Section 7 or Section 10 Consultation	LS	0	0	0	N/A
8.15	Contamination Impact Analysis	LS	0	0	0	N/A
8.16	Asbestos Survey	LS	0	0	0	N/A
Environmental Permits, Compliance, and Clearances/Reevaluations Technical Subtotal					36	
8.17	Technical Meetings	LS	0	0	0	N/A
8.18	Quality Assurance/Quality Control	LS	%	5%	2	
8.18	Supervision	LS	%	5%	2	
Environmental Permits, Compliance and Clearances Nontechnical Subtotal					4	
8.20	Coordination	LS	%	3%	1	
8. Environmental Permits, Compliance and Clearances Total					41	

Project Activity 8: Environmental Permits



Task No.	Task	Units	No. of Units	Hours/ Units	Total Hours	Comments	
	Technical Meetings					PM Attendance at Meeting Required?	Number
	WMD	EA	0	0	0	N/A	
	NMFS	EA	0	0	0	N/A	
	USACE	EA	0	0	0	N/A	
	USCG	EA	0	0	0	N/A	
	USFWS	EA	0	0	0	N/A	
	FFWCC	EA	0	0	0	N/A	
	FDOT	EA	0	0	0	N/A	
	Other Meetings	EA	0	0	0	N/A	
	Subtotal Technical Meetings				0	Subtotal Project Manager Meetings	0
	Progress Meetings (if required by FDOT)	EA	0	0	0	N/A	--
	Phase Review Meetings	EA	0	0	0	N/A	--
	Total Meetings				0	Total Project Manager Meetings (carries to Tab 3)	0

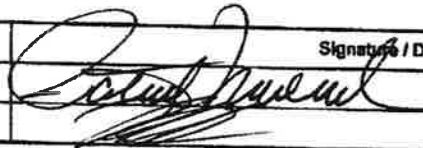
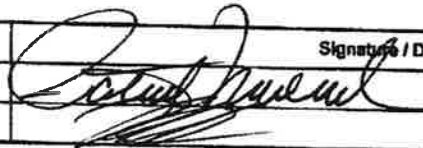
Carries to B 18

Carries to Tab 3

Project Activity 9: Structures Summary and Miscellaneous Tasks and Drawings

Estimator:

SR 417, Econ Trail to Seminole County Line, SA #1
417-134

Representing	Print Name	Signature / Date
FDOT District	Patrick Moench	 3/21/17
Dewberry	Kevin Knudsen	 4/2/17

NOTE: Signature Block is optional, per District preference

Task No.	Task	Units	Design and Production Staffhours				Comments				
			No. of Units	Hours per Unit	No. of Sheets	Total					
	General Drawings										
9.1	Key Sheet and Index of Drawings	Sheet	1	2	1	2	Revise				
9.2	Project Layout	Sheet	0	0	0	0	N/A				
9.3	General Notes and Bid Item Notes	Sheet	1	4	1	4	Add Notes				
9.4	Miscellaneous Common Details	Sheet	0	0	0	0	N/A				
9.5	Incorporate Report of Core Borings	Sheet	1	1	1	1	Wells				
9.6	Existing Bridge Plans	LS	0	0		0	N/A				
9.7	Assemble Plan Summary Boxes and Quantities	LS	1	4		4					
9.8	Cost Estimate	LS	1	4		4					
9.9	Technical Special Provisions	LS	0	0		0	N/A				
Structures - Summary and Miscellaneous Tasks and Drawings Subtotal					3	15					
Task No.	Task	Total	Task 10	Task 11	Task 12	Task 13	Task 14	Task 15	Task 16	Task 17	Task 18
10-16	Bridge 1	0	0	0	0	0	0	0	0		
10-16	Bridge 2	0									
10-16	Bridge 3	0									
10-16	Bridge 4	0									
10-16	Bridge 5	0									
10-16	Bridge 6	0									

Project Activity 9: Structures Summary and Miscellaneous Tasks and Drawings

John M

10-16	Bridge 7	0									
10-16	Bridge 8	0									
10-16	Bridge 9	0									
10-16	Bridge 10	0									
17	Retaining Walls	80								80	
18	Miscellaneous Structures	72									72
Structures Technical Subtotal		152	0	0	0	0	0	0	0	80	72
Task No.	Task	Units	No. of Units	Hours per Unit	Total	Comments					
9 10	Field Reviews	LS	0	0	0	N/A					
9 11	Technical Meetings	LS	0	0	0	N/A					
9 12	Quality Assurance/Quality Control	LS	5%	5%	8						
9 13	Independent Peer Review	LS	0	0	0	N/A					
9 14	Supervision	LS	5%	5%	8						
Structures Nontechnical Subtotal					16						
9 15	Coordination	LS	1	24	24	Miscellaneous Str. Coord - FTE - retaining walls, signs					
9. Structures - Summary and Miscellaneous Tasks and Drawings Nontechnical and Coordination Total					55						

Technical Meetings	Units	No of Units	Hours/ Unit	Total Hours	PM Attendance at Meeting Required?	Number
BDR Coordination/Review	EA	0	0	0	N/A	0
90/100% Comment Review	EA	0	0	0	N/A	0
Aesthetics Coordination	EA	0	0	0	N/A	0
Regulatory Agency	EA	0	0	0	N/A	0
Local Governments (cities, counties)	EA	0	0	0	N/A	0
Utility Companies	EA	0	0	0	N/A	0
Other Meetings	EA	0	0	0	N/A	0
Subtotal Technical Meetings				0		0
Progress Meetings (if required by FDOT)	EA	0	0	0	N/A	--
Phase Review Meetings	EA	0	0	0	N/A	--
Total Meetings				0	Total Project Manager Meetings (carries to Tab 3)	0

Carries to 9.1

Carries to Tab 3

Project Activity 17: Retaining Walls

Estimator



SR 417, Econ Trail to Seminole County Line, SA #1

417-134

Representing	Print Name	Signature / Date
FDOT District	<i>Kevin Krudsen</i>	<i>Patrick Muench</i>
Dewberry	3/31/17 4/2/17	

NOTE: Signature Block is optional, per District preference

Task No.	Task	Unit	No. of Units	Hours/ Unit	No. of Sheets	Total Hours	Comments
General Requirements							
17.1	Key Sheet	Sheet	0	0	0	0	N/A
17.2	Horizontal Wall Geometry	Per Wall	1	8		8	
Permanent Proprietary Walls							
17.3	Vertical Wall Geometry	Per Wall	2	8		16	Ponds 7W and 8
17.4	Semi-Standard Drawings	Sheet	2	4	2	8	Ponds 7W and 8
17.5	Wall Plan and Elevations (Control Drawings)	Sheet	2	16	2	32	Ponds 7W and 8
17.6	Details	Sheet	1	18	1	18	Ponds 7W and 8
Temporary Proprietary Walls							
17.7	Vertical Wall Geometry	Per Wall	0	0		0	N/A
17.8	Semi-Standard Drawings	Sheet	0	0	0	0	N/A
17.9	Wall Plan and Elevations (Control Drawings)	Sheet	0	0	0	0	N/A
17.10	Details	Sheet	0	0	0	0	N/A
Cast-in-Place Retaining Walls							
17.11	Design	EA Design	0	0	0	0	N/A
17.12	Vertical Wall Geometry	EA Wall	0	0	0	0	N/A
17.13	General Notes	Sheet	0	0	0	0	N/A
17.14	Wall Plan and Elevations (Control Drawings)	Sheet	0	0	0	0	N/A
17.15	Sections and Details	Sheet	0	0	0	0	N/A
17.16	Reinforcing Bar List	Sheet	0	0	0	0	N/A

Project Activity 17: Retaining Walls

Task No.	Task	Unit	No. of Units	Hours/ Unit	No. of Sheets	Total Hours	Comments
	Other Retaining Walls and Bulkheads						
17.17	Design	EA Design	0	0	0	0	N/A
17.18	Vertical Wall Geometry	EA Wall	0	0	0	0	N/A
17.19	General Notes, Tables and Misc. Details	Sheet	0	0	0	0	N/A
17.20	Wall Plan and Elevations	Sheet	0	0	0	0	N/A
17.21	Details	Sheet	0	0	0	0	N/A
17. Structures - Retaining Walls Total					5	80	

Project Activity 18: Miscellaneous Structures

Estimator

GR 417, Econ Trail to Seminole County Line, SA #1

417-134

Representing	Print Name	Signature	Date
FDOT District	Patrick Murench	<i>[Signature]</i>	3/26/17
Dewberry	Kevin Knudsen	<i>[Signature]</i>	4/12/17

NOTE: Signature Block is optional, per District preference

Task No.	Task	Unit	No. of Units	Hours/Unit	No. of Sheets	Total Hours	Comments
Concrete Box Culvert							
18.1	Concrete Box Culverts	EA	0	0	0	0	N/A
18.2	Concrete Box Culverts Extensions	EA Extension	0	0	0	0	N/A
18.3	Concrete Box Culvert Data Table Plan Sheets	Sheet	0	0	0	0	N/A
18.4	Concrete Box Culvert Special Details Plan Sheets	Sheet	0	0	0	0	N/A
Strain Poles							
18.5	Steel Strain Poles	Initial Config	0	0	0	0	N/A
		EA Add'l Config	0	0	0	0	N/A
18.6	Concrete Strain Poles	Initial Config	0	0	0	0	N/A
		EA Add'l Config	0	0	0	0	N/A
18.7	Strain Pole Data Table Plan Sheets	Sheet	0	0	0	0	N/A
18.8	Strain Pole Special Details Plan Sheets	Sheet	0	0	0	0	N/A
Mast Arms							
18.9	Mast Arms	EA Design	0	0	0	0	N/A
18.10	Mast Arms Data Table Plan Sheets	Sheet	0	0	0	0	N/A
18.11	Mast Arm Special Details Plan Sheets	Sheet	0	0	0	0	N/A
Overhead/Cantilever Sign Structures							
18.12	Cantilever Sign Structures	EA Design	0	0	0	0	N/A
18.13	Overhead Span Sign Structures	EA Design	3	16	0	48	Revise for Aux Lane
18.14	Special (Long Span) Overhead Span Sign Structures	EA Design	0	0	0	0	N/A
18.15	Monolobe Overhead Sign Structure	EA Design	0	0	0	0	N/A
18.16	Bridge Mounted Signs (Attached to Support)	EA Design	0	0	0	0	N/A
18.17	Overhead and Cantilever Sign Structures Data Table Plan Sheets	Sheet	3	8	3	24	Revise for Aux Lane
18.18	Overhead and Cantilever Sign Structures Special Details Plan Sheets	Sheet	0	0	0	0	N/A
High Mast Lighting							
18.19	Non-Standard High Mast Lighting Structures	EA Design	0	0	0	0	N/A
18.20	High Mast Lighting Special Details Plan Sheets	Sheet	0	0	0	0	N/A
Noise Barrier Walls (Ground Mount)							
18.21	Horizontal Wall Geometry	EA Wall	0	0	0	0	N/A
18.22	Vertical Wall Geometry	EA Wall	0	0	0	0	N/A
18.23	Summary of Quantities - Aesthetic Requirements	Sheet	0	0	0	0	N/A
18.24	Control Drawings	Sheet	0	0	0	0	N/A
18.25	Design of Noise Barrier Walls Covered by Standards	EA Design	0	0	0	0	N/A
18.26	Design of Noise Barrier Walls Not Covered by Standards	EA Design	0	0	0	0	N/A
18.27	Aesthetic Details	LS	0	0	0	0	N/A
Special Structures							

Project Activity 18: Miscellaneous Structures

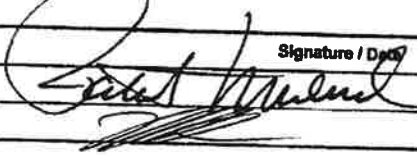
18.20	Fender System	LS	1	0	0	N/A
18.20	Fender System Access	LS	1	0	0	N/A
18.30	Special Structures	LS	1	0	0	N/A
18.31	Other Structures	LS	1	0	0	N/A
18. Structures - Miscellaneous Total:					3	72

Project Activity 23: Lighting Analysis

Estimator

SR 417, Econ Trail to Seminole County Line, SA #1

417-134

Representing	Print Name	Signature / Date
FDOT District	Patrick Muench	 3/31/17
Dewberry	Kevin Knudsen	4/2/17

NOTE: Signature Block is optional, per District preference

Task No.	Task	Units	No. of Units	Hours/ Units	Total Hours	Comments
23.1	Lighting Justification Report	LS	0	0	0	Lighting Design by CES, Electrical Design by Dewberry
23.2	Lighting Design Analysis Report	LS	1	36	36	PDAR (include in LDAR)
23.3	Aeronautical Evaluation	LS	0	0	0	N/A
23.4	Voltage Drop Calculations	LS	1	20	20	Load Center
23.5	FDEP Coordination and Report	LS	0	0	0	N/A
23.6	Reference and Master Design Files	LS	0	0	0	N/A
23.7	Temporary Lighting	LS	0	0	0	N/A
23.8	Design Documentation	LS	0	0	0	N/A
23.9	Quantities	LS	0	0	0	N/A
23.10	Cost Estimate	LS	0	0	0	N/A
23.11	Technical Special Provisions	LS	0	0	0	N/A
23.12	Other Lighting Analysis	LS	1	32	32	Load Analysis, Short Circuit Analysis, Arc Flash Analysis
Lighting Analysis Technical Subtotal					88	
23.13	Field Reviews	LS	1	4	4	1 review, 1 person, 4 hrs
23.14	Technical Meetings	LS	1	8	8	Meetings are listed below
23.15	Quality Assurance/Quality Control	LS	%	5%	4	
23.16	Independent Peer Review	LS	%	0%	0	N/A
23.17	Supervision	LS	%	5%	4	
Lighting Analysis Nontechnical Subtotal					20	
23.18	Coordination	LS	%	15%	3	
23. Lighting Analysis Total					111	

Project Activity 23: Lighting Analysis



Technical Meetings	Units	No of Units	Hours/ Unit	Total Hours	PM Attendance at Meeting Required?	Number
FDOT Lighting Design	EA	0	0	0		0
FDOT Traffic Design	EA	0	0	0		0
Power Company (service point coordination)	EA	1	4	4		0
Maintaining Agency (cities, counties)	EA	0	0	0		0
Airport authority	EA	0	0	0		0
FDEP Lighting (coast areas)	EA	0	0	0		0
Other Meetings	EA	0	0	0		0
Subtotal Technical Meetings				4		0
Progress Meetings (if required by FDOT)	EA	0	0	0	<i>PM attendance at Progress Meetings is manually entered on General Task 3</i>	--
Phase Review Meetings	EA	1	4	4	<i>PM attendance at Phase Review Meetings is manually entered on General Task 3</i>	--
Total Meetings				8	Total Project Manager Meetings (carries to Tab 3)	0

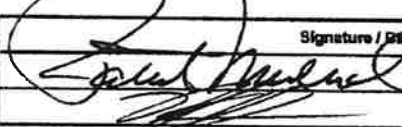
Carries to Tab 1

Carries to Tab 3

24. Lighting Plans

Estimator:

SR 417, Econ Trail to Sammole County Line, SA #1
417-134

Representing	Print Name	Signature / Date
FDOT District	Patrick Muench	 3/21/17
Dewberry	Kevin Knudson	4/2/17



NOTE: Signature Block is optional, per District preference

Task No.	Task	Scale	Units	No. of Units	Hours/ Unit	No. of Sheets	Total Hours	Comments
24 1	Key Sheet		Sheet	0	0	0	0	N/A
24 2	Summary of Pay Items Including Designer Interface (TRNS-Part) Input		Sheet	0	0	0	0	N/A
24 3	Tabulation of Quantities		Sheet	0	0	0	0	N/A
24 4	General Notes/Pay Item Notes		Sheet	0	0	0	0	N/A
24 5	Pole Data, Legend and Criteria		Sheet	0	0	0	0	N/A
24 6	Service Point Details		Sheet	1	26	1	26	Load Center
24 7	Project Layout		Sheet	0	0	0	0	N/A
24 8	Plan Sheet		Sheet	0	0	0	0	N/A
24 9	Special Details		Sheet	0	0	0	0	N/A
24 10	Temporary Lighting Data and Details		Sheet	0	0	0	0	N/A
24 11	Traffic Control Plan Sheets		Sheet	0	0	0	0	N/A
24 12	Intern Standards		LS	0	0		0	N/A
Lighting Plans Technical Subtotal						1	26	
24 13	Quality Assurance/Quality Control		LS	%	5%		1	
24 14	Supervision		LS	%	5%		1	
24. Lighting Plans Total						1	28	

27. Survey

Estimator

SR 417, Econ Trail to Seminole County Line, SA #1
417-134

Representing	Print Name	Signature / Date
FDOT District	Patrick Muench	 3/21/17
Dewberry	Kevin Krudsen	 4/2/17

NOTE: Signature Block is optional, per District preference

Task No.	Task	Units	No of Units	Field Crew Days/Unit	Crew Days	Field Support Hours / Crew Days	Field Support Hours	Office Support Hours / Crew Days	Office Support Hours	Comments
27.1	Horizontal Project Control (HPC)									
	2-Lane Roadway	Mile			0.00		0.00		0.00	N/A
	Multi-lane Roadway	Mile			0.00		0.00		0.00	
	Interstate	Mile	0.00	1.75	0.00		0.00	4.00	0.00	
27.2	Vertical PC / Bench Line									
	2-Lane Roadway	Mile			0.00		0.00		0.00	N/A
	Multi-lane Roadway	Mile			0.00		0.00		0.00	
	Interstate	Mile	0.00	1.75	0.00		0.00	5.00	0.00	
27.3	Alignment and Existing R/W Lines									
		Mile	0.00	2.00	0.00	1.00	0.00	8.00	0.00	N/A
27.4	Aerial Targets			Units/Day						
	2-Lane Roadway	EA			0.00		0.00		0.00	N/A
	Multi-lane Roadway	EA			0.00		0.00		0.00	
	Interstate	EA	0.00	12.00	0.00		0.00	5.00	0.00	
27.5	Reference Points	"A"		Units/Day						
	2-Lane Roadway	EA			0.00		0.00		0.00	N/A
	Multi-lane Roadway	EA			0.00		0.00		0.00	
	Interstate	EA	0.00	2.00	0.00	1.00	0.00	10.00	0.00	
	Reference Points	"B"		Units/Day						N/A

27. Survey

Task No.	Task	Units	No of Units	Field Crew Days/Unit	Crew Days	Field Support Hours / Crew Days	Field Support Hours	Office Support Hours / Crew Days	Office Support Hours	Comments
	Non Alignment Points/Approximate	EA			0.00		0.00		0.00	N/A
27.6	Topography/DTM (3D)									N/A
		Mile	0.00	5.00	0.00		0.00	6.00	0.00	N/A
27.7	Planimetric (2D)									N/A
		Mile			0.00		0.00		0.00	N/A
27.8	Roadway Cross-Sections/Profiles									N/A
		EA	0.00	0.1867	0.00		0.00	4.00	0.00	N/A
27.9	Side Street Surveys									N/A
		Mile	0.00	4.00	0.00		0.00	6.00	0.00	N/A
27.10	Underground Utilities									N/A
	Designates	Mile/Site	0.00	1.00	0.00		0.00	3.00	0.00	N/A
	Locates	Point	0	0.125	0.00		0.00	4.00	0.00	
	Survey		35%	0.00	0.00		0.00	5.00	0.00	
27.11	Outfall Survey									N/A
		Mile			0.00		0.00		0.00	N/A
27.12	Drainage Survey			Units/Day						Detail an estimated 20 existing drainage structures in FTE limits SB. Add information to DREXRD.DGN file.
		EA	20.00	12.00	1.67		0.00	4.00	6.67	
27.13	Bridge Survey									N/A
	Minor / Major	EA	0.00	1.00	0.00		0.00	6.00	0.00	N/A
27.14	Channel Survey									N/A
		EA			0.00		0.00		0.00	N/A
27.15	Pond Site Survey									TOPO/DTM Survey 2 ponds within the R/W - Pond 6W and Pond 6A. Add information to TIN, TOPORD.DGN, DREXRD.DGN and UTEXRD.DGN files
		EA	2.00	2.00	4.00		0.00	6.00	24.00	
27.16	Mitigation Survey									N/A
		Mile			0.00		0.00		0.00	N/A
27.17	Jurisdiction Line Survey									N/A
		Mile	0.00	2.00	0.00		0.00	6.00	0.00	N/A

27. Survey

Task No.	Task	Units	No of Units	Field Crew Days/Unit	Crew Days	Field Support Hours / Crew Days	Field Support Hours	Office Support Hours / Crew Days	Office Support Hours	Comments	
27.18	Geotechnical Support			Units/Day						Stake or locate 18 borings for ponds and walls	
		EA	18	8	2.00		0.00	4.00	8.00		
27.19	Sectional / Grant Survey									Not Included	
		Corner			0.00		0.00		0.00		
		Mile			0.00		0.00		0.00		
27.20	Subdivision Location									Not Included	
		Block			0.00		0.00		0.00		
27.21	Maintained RW									Not Included	
		Mile			0.00		0.00		0.00		
27.22	Boundary Survey									Not Included	
		EA			0.00		0.00		0.00		
27.23	Water Boundary Survey									Not Included	
		EA			0.00		0.00		0.00		
27.24	R/W Staking / R/W Line									Not Included	
		EA			0.00		0.00		0.00		
		Mile			0.00		0.00		0.00		
27.25	R/W Monumentation									Not Included	
		Point			0.00		0.00		0.00		
27.26	Line Cutting									Included in other tasks if required	
		Mile			0.00						
27.27	Work Zone Safety									One hour per day	
			8	0.125	1.00						
27.28	Miscellaneous Surveys									Not Included	
					0.00		0.00		0.00		
Survey Subtotal					Crew Days	9	Field Support Hours	0	Office Support Hours	38	
27.29	Supplemental Surveys									THE % FOR SUPPLEMENTAL WILL BE DETERMINED AT NEGOTIATIONS. THIS ITEM CAN ONLY BE USED IF AUTHORIZED IN WRITING BY THE DISTRICT SURVEYOR	
			4.5%	9	0		0		2		
27.30	Document Research	Units								N/A	
									0		

27. Survey



Task No.	Task	Units	No of Units	Field Crew Days/Unit	Crew Days	Field Support Hours / Crew Days	Field Support Hours	Office Support Hours / Crew Days	Office Support Hours	Comments
27.31	Field Reviews	Units							0	N/A
27.32	Technical Meetings	LS							0	N/A
27.33	Quality Assurance / Quality Control	LS	0 00					5%	2	
27.34	Supervision	LS						5%	2	
27.35	Coordination	LS						3%	1	
27. Survey Total				Crew Days	9	Field Support Hours	0	Office Support Hours	45	

SPLS =
 PLS =
 Office Support =
 Total Hours = 45

Technical Meetings	Units	No of Units	Hours/ Unit	Total Hours	PM Attendance at Meeting Required?	Number
Kickoff Meeting with FDOT	EA	0	0	0		0
Baseline Approval Review	EA	0	0	0		0
Network Control Review	EA	0	0	0		0
Vertical Control Review	EA	0	0	0		0
Local Governments (cities, counties)	EA	0	0	0		0
Final Submittal Review	EA	0	0	0		0
Other Meetings	EA	0	0	0		0
Subtotal Technical Meetings				0	Subtotal PM Meetings	0
Progress Meetings (if required by FDOT)	EA	0	0	0	--	--
Phase Review Meetings	EA	0	0	0	--	--
Total Meetings				0	Total PM Mtgs (carries to Tab 3)	0

Carries to 27.31

Carries to Tab 3

** Project Manager attendance at progress, phase and field review meetings are manually entered on General Task 3

ESTIMATE OF WORK EFFORT AND COST - SUBCONSULTANT

Name of Project: SR 417, Econlochatchee Trail to Seminole County Line
 County: 0
 FPN: 417-134
 FAP No. 1/0/1900

Consultant Name: Comprehensive Engineering Services, Inc.
 Consultant No.: enter consultants proj number
 Date: 3/30/2017
 Estimator: insert name

Staff Classification	Total Staff Hours From "BH Summary Firm"	Chief Engineer	Senior Engineer	Project Engineer	Engineer Intern	Senior Designer	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
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, Dega, 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	209	21	42	42	52	52	0	0	0	0	0	0	0	0	\$0,399	\$44.87
24. Lighting Plans	42	4	8	8	11	11	0	0	0	0	0	0	0	209	\$1,858	\$44.28
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	61	6	14	14	18	11	0	0	0	0	0	0	0	61	\$2,788	\$45.38
34. Intelligent Transportation Systems Plans	34	3	6	6	9	6	0	0	0	0	0	0	0	34	\$1,528	\$44.96
35. Geotechnical	0	0	0	0	0	0	0	0	0	0	0	0	0	0	\$0	#DIV/0!
Total Staff Hours	348	34	72	72	68	80	0	0	0	0	0	0	0	348	\$18,254.83	\$44.98
Total Staff Cost		\$3,078.70	\$4,500.00	\$2,758.32	\$2,173.60	\$3,644.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00			

Check = 615,964.82

Notes:

1 This sheet to be used by Subconsultant to calculate its fee

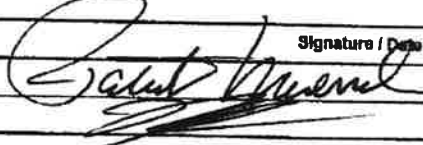
SALARY RELATED COSTS:		\$15,554.82
OVERHEAD:	177.42%	\$27,567.01
SUBTOTAL SALARY-RELATED COSTS		\$43,151.83
OPERATING MARGIN:	11.4447%	\$4,938.67
EXPENSES:	0.00%	\$742.27
SUBTOTAL ESTIMATED FEE:		\$48,832.47
SUBTOTAL ESTIMATED FEE:		\$48,832.47
Optional Services		\$0.00
GRAND TOTAL ESTIMATED FEE:		\$48,832.47

Project Activity 23: Lighting Analysis

Estimator

SR 417, Econlockhatchee Trail to Seminole County Line

417-134

Representing	Print Name	Signature / Date
FDOT District	Patrick Moench	 3/31/17
CES	Kevin Knudsen	4/2/17

NOTE: Signature Block is optional, per District preference

Task No.	Task	Units	No. of Units	Hours/ Units	Total Hours	Comments
23.1	Lighting Justification Report	LS	0	0	0	N/A
23.2	Lighting Design Analysis Report	LS	1	48	48	Update design documentation
23.3	Aeronautical Evaluation	LS	1	8	8	FAA filing required based on notice criteria tool - online approval process where information for each light pole is input for determination (latitude, longitude, ground elevation, pole height, and traverseway)
23.4	Voltage Drop Calculations	LS	0	0	0	To be completed by Dewberry
23.5	FDEP Coordination and Report	LS	0	0	0	N/A
23.6	Reference and Master Design Files	LS	1	79	79	Project lengths: SR 417 mainline 1.0 miles, University ramps 0.2 miles, Aloma ramps 0.2 miles Middle range (limited access with interchange spacing greater than two miles), 16 hours setup + (1.4 miles mainline/toll plaza/ramps) * 45 hours per mile = 79 hours
23.7	Temporary Lighting	LS	0	0	0	N/A
23.8	Design Documentation	LS	1	8	8	Included with each submittal
23.9	Quantities	LS	1	12	12	6 plan sheets @ 2 hour per sheet
23.10	Cost Estimate	LS	1	4	4	2 estimates - phase III, and final
23.11	Technical Special Provisions	LS	0	0	0	N/A
23.12	Other Lighting Analysis	LS	0	0	0	N/A
Lighting Analysis Technical Subtotal					168	
23.13	Field Reviews	LS	1	16	16	2 field reviews, 2 people @ 4 hours
23.14	Technical Meetings	LS	1	12	12	See listed meetings for breakdown
23.15	Quality Assurance/Quality Control	LS	%	5%	8	
23.16	Independent Peer Review	LS	%	0%	0	
23.17	Supervision	LS	%	5%	8	
Lighting Analysis Nontechnical Subtotal					44	
23.18	Coordination	LS	%	1%	6	

Project Activity 23: Lighting Analysis

Technical Meetings		Units	No of Units	Hours/ Unit	Total Hours	PM Attendance at Meeting Required?	Number
FDOT Lighting Design		EA	0	0	0		0
FDOT Traffic Design		EA	0	0	0		0
Power Company (service point coordination)		EA	1	4	4		0
Maintaining Agency (cities, counties)		EA	1	4	4		0
Airport authority		EA	0	0	0		0
FDEP Lighting (coast areas)		EA	0	0	0		0
Other Meetings		EA	0	0	0		0
Subtotal Technical Meetings					8		0
Progress Meetings (if required by FDOT)		EA	0	0	0	<i>PM attendance at Progress Meetings is manually entered on General Task 3</i>	--
Phase Review Meetings		EA	1	4	4	<i>PM attendance at Phase Review Meetings is manually entered on General Task 3</i>	--
Total Meetings					12	Total Project Manager Meetings (carries to Tab 3)	0

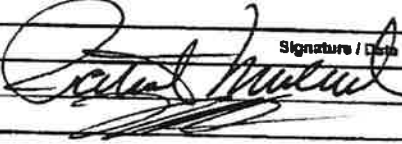
Carries to Tab 14

Carries to Tab 3

24. Lighting Plans

Estimator

SR 417, Econlochatchee Trail to Seminole County Line
417-134

Representing	Print Name	Signature / Date
FDOT District	Patrick Muench	
CES	Kevin Knudson	3/31/17 4/2/17

NOTE: Signature Block is optional, per District preference

Task No.	Task	Scale	Units	No. of Units	Hours/ Unit	No. of Sheets	Total Hours	Comments
24 1	Key Sheet		Sheet	0	0	0	0	Include with GFX project
24 2	Summary of Pay Items including Designer Interface (TRANS-Port) Input		Sheet	0	0	0	0	N/A
24 3	Tabulation of Quantities		Sheet	1	8	1	8	1 sheet
24 4	General Notes/Pay Item Notes		Sheet	1	6	1	6	FTE Notes
24 5	Pole Data, Legend and Criteria		Sheet	1	12	1	12	1 pole data sheet, LED
24 6	Service Point Details		Sheet	0	0	0	0	N/A
24 7	Project Layout		Sheet	0	0	0	0	N/A
24 8	Plan Sheet	1" = 50'	Sheet	0	2	6	12	6 plan sheets
24 9	Special Details		Sheet	0	0	0	0	N/A
24 10	Temporary Lighting Data and Details		Sheet	0	0	0	0	N/A
24 11	Traffic Control Plan Sheets		Sheet	0	0	0	0	N/A
24 12	Interim Standards		LS	0	0		0	N/A
Lighting Plans Technical Subtotal						9	38	
24 13	Quality Assurance/Quality Control		LS	%	5%		2	
24 14	Supervision		LS	%	5%		2	
24. Lighting Plans Total						9	42	

33. ITS Analysis

Estimator: RLS

SR 417, Econlockhatchee Trail to Seminole County Line

417-134

Representing	Print Name	Signature / Date
FDOT District	<i>Patrick Muend</i>	<i>Patrick Muend</i> 3/31/17
CES	<i>Karin Knudsen</i>	4/12/17

NOTE: Signature Block is optional, per District preference

Task No.	Task	Units	No of Units	Hours/ Unit	Total Hours	Comments
33.1	ITS Analysis	LS	0	0	0	N/A
33.2	Communications Plan Analysis	LS	0	0	0	N/A
33.3	Lightning Protection Analysis	Per Site	1	0	0	N/A
33.4	Power Subsystem	LS	0	0	0	N/A
33.5	Voltage Drop Calculations	LS	0	0	0	N/A
33.6	Design Documentation	LS	0	0	0	N/A
33.7	Existing ITS System	LS	1	8	8	Review FTE as-builts
33.8	Queue Analysis	PI	1	0	0	N/A
33.9	Reference and Master ITS Design File	PI	0	0	0	N/A
33.10	Reference and Master Communications Design File	PI	1	16	16	Aux Lane - 10 mi @ 16 hrs/mi
33.11	Pole Elevation Analysis	LS	0	0	0	N/A
33.12	Sign Panel Design Analysis	LS	0	0	0	N/A
33.13	Quantities	Sheet	5	3	15	Aux Lane - 5 plan sheets
33.14	Cost Estimate	LS	0	0	0	N/A
33.15	Technical Special Provisions	LS	0	0	0	N/A
33.16	Other ITS Analyses	LS	0	0	0	N/A
Intelligent Transportation Systems Analysis Technical Subtotal					39	

33. ITS Analysis

Task No.	Task	Units	No of Units	Hours/ Unit	Total Hours	Comments
33.17	Field Reviews	LS	1	16	16	2 reviews, 2 people, 4 hours
33.18	Technical Meetings	LS	1	0	0	Meetings are listed below
33.19	Quality Assurance/Quality Control	LS	%	5%	2	
33.20	Supervision	LS	%	5%	2	
Intelligent Transportation Systems Analysis Nontechnical Subtotal					20	
33.21	Coordination	LS	%	3%	2	
33. Intelligent Transportation Systems Analysis Total					61	

Technical Meetings	Units	No of Units	Hours/ Unit	Total Hours	PM Attendance at Meeting Required?	Number
Kickoff Meeting with FDOT	EA	0	0	0		0
Local Governments (cities, counties, MPO)	EA	0	0	0		0
Utility Owners	EA	0	0	0		0
Field Meetings	EA	0	0	0		0
Other Meetings	EA	0	0	0		0
Subtotal Technical Meetings				0		0
Progress Meetings (if required by FDOT)	EA	0	0	0	<i>PM attendance at Progress Meetings is manually entered on General Task 3</i>	--
Phase Review Meetings	EA	0	0	0	<i>PM attendance at Phase Review Meetings is manually entered on General Task 3</i>	--
Total Meetings				0	Total Project Manager Meetings (carries to Tab 3)	0

Carries to 33.18

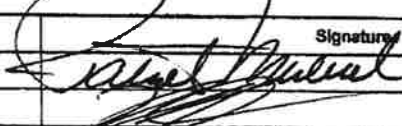

Carries to Tab 3

34. ITS Plans

Estimator RLS

SR 417, Ecorse/Hatchee Trail to Seminole County Line

417-134

Representing	Print Name	Signature	Date
FDOT District	Patrick Morsch		3/21/17
CES	Kevin Knudsen		4/12/17

NOTE: Signature Block is optional, per District preference

Task No.	Task	Scale	Units	No. of Units	Hours/ Unit	No. of Sheets	Total Hours	Comments
34.1	Key Sheet		Sheet	0	0	0	0	N/A
34.2	Summary of Pay Items-including Designer Interface (Transport) Input		Sheet	0	0	0	0	N/A
34.3	Tabulation of Quantities		Sheet	5	1	5	5	
34.4	General Notes/Pay Item Notes		Sheet	0	0	0	0	N/A
34.5	Project Layout		Sheet	0	0	0	0	N/A
34.6	Typical and Special Details		Sheet	0	0	0	0	N/A
34.7	Plan Sheet		Sheet	0	0	0	0	N/A
34.8	ITS Communications Plans		Sheet	5	4	5	20	Aux Lane - 5 plan sheets, 100 scale
34.9	Fiber Optic Splice Diagrams		Sheet	0	0	0	0	N/A
34.10	Lightning Protection Plans		Sheet	0	0	0	0	N/A
34.11	Cross Sections		Sheet	0	0	0	0	N/A
34.12	Guide Sign Worksheet(s)		Sheet	0	0	0	0	N/A
34.13	Special Service Point Details		Sheet	0	0	0	0	N/A
34.14	Strain Pole Schedule		Sheet	0	0	0	0	N/A
34.15	Overhead/Cantilever Sign Structure		Sheet	0	0	0	0	N/A
34.16	Other Overhead Sign Structures (Long Span, Monotube, etc.)		Sheet	0	0	0	0	N/A
34.17	Traffic Control Plans		Sheet	5	1	5	5	FON MOT Plan
34.18	Interim Standards		Sheet	0	0	0	0	N/A
34.19	GIS Data and Asset Management Requirements		LS	0	0	0	0	N/A

34. ITS Plans



Task No.	Task	Scale	Units	No. of Units	Hours/ Unit	No. of Sheets	Total Hours	Comments
Intelligent Transportation System Plans Technical Subtotal						11	30	
34.20	Quality Assurance/Quality Control		LS	%	10%		2	
34.21	Supervision		LS	%	5%		2	
34. Intelligent Transportation System Plans Total						11	34	

ESTIMATE OF WORK EFFORT AND COST - SUBCONSULTANT

Name of Project:
County:
FPN:
FAP No.:

SR 417, Econ Trail to Seminole County Line (SA#1)
Orange
417-134

Consultant Name: The Balmoral Group
Consultant No.: enter consultant's proj number
Date: 3/30/2017
Estimator: S. Klaus

Staff Classification	Total Staff Hours From SH Summary Form	Chief Engineer	Project Manager	Senior Engineer	Project Engineer	Engineer Intern	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
3. Project General and Project Common Tasks	0	0	557.69	546.75	540.15	525.72	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	0	\$0	#DA/01
4. Roadway Analysis	0	0	0	0	0	0	0	0	0	0	0	0	0	0	\$0	#DA/01
5. Roadway Plans	0	0	0	0	0	0	0	0	0	0	0	0	0	0	\$0	#DA/01
6a. Drainage Analysis	0	0	0	0	0	0	0	0	0	0	0	0	0	0	\$0	#DA/01
6b. Drainage Plans	0	0	0	0	0	0	0	0	0	0	0	0	0	0	\$0	#DA/01
7. Utilities	0	0	0	0	0	0	0	0	0	0	0	0	0	0	\$0	#DA/01
8. Environmental Permits, Compliance & Clearances	0	0	0	0	0	0	0	0	0	0	0	0	0	0	\$0	#DA/01
9. Structures - Misc. Tasks, Drgs, Non-Tech.	0	0	0	0	0	0	0	0	0	0	0	0	0	0	\$0	#DA/01
10. Structures - Bridge Development Report	0	0	0	0	0	0	0	0	0	0	0	0	0	0	\$0	#DA/01
11. Structures - Temporary Bridge	0	0	0	0	0	0	0	0	0	0	0	0	0	0	\$0	#DA/01
12. Structures - Short Span Concrete Bridge	0	0	0	0	0	0	0	0	0	0	0	0	0	0	\$0	#DA/01
13. Structures - Medium Span Concrete Bridge	0	0	0	0	0	0	0	0	0	0	0	0	0	0	\$0	#DA/01
14. Structures - Structural Steel Bridge	0	0	0	0	0	0	0	0	0	0	0	0	0	0	\$0	#DA/01
15. Structures - Segmental Concrete Bridge	0	0	0	0	0	0	0	0	0	0	0	0	0	0	\$0	#DA/01
16. Structures - Movable Span	0	0	0	0	0	0	0	0	0	0	0	0	0	0	\$0	#DA/01
17. Structures - Retaining Walls	0	0	0	0	0	0	0	0	0	0	0	0	0	0	\$0	#DA/01
18. Structures - Miscellaneous	0	0	0	0	0	0	0	0	0	0	0	0	0	0	\$0	#DA/01
19. Signing & Pavement Marking Analysis	74	4	0	18	29	26	0	0	0	0	0	0	0	74	\$2,829	\$38.23
20. Signing & Pavement Marking Plans	57	3	0	6	22	26	0	0	0	0	0	0	0	57	\$2,039	\$35.77
21. Signalization Analysis	0	0	0	0	0	0	0	0	0	0	0	0	0	0	\$0	#DA/01
22. Signalization Plans	0	0	0	0	0	0	0	0	0	0	0	0	0	0	\$0	#DA/01
23. Lighting Analysis	0	0	0	0	0	0	0	0	0	0	0	0	0	0	\$0	#DA/01
24. Lighting Plans	0	0	0	0	0	0	0	0	0	0	0	0	0	0	\$0	#DA/01
25. Landscape Architecture Analysis	0	0	0	0	0	0	0	0	0	0	0	0	0	0	\$0	#DA/01
26. Landscape Architecture Plans	0	0	0	0	0	0	0	0	0	0	0	0	0	0	\$0	#DA/01
27. Survey (Field & Office Support)	0	0	0	0	0	0	0	0	0	0	0	0	0	0	\$0	#DA/01
28. Photogrammetry	0	0	0	0	0	0	0	0	0	0	0	0	0	0	\$0	#DA/01
29. Mapping	0	0	0	0	0	0	0	0	0	0	0	0	0	0	\$0	#DA/01
30. Terrestrial Mobile LIDAR	0	0	0	0	0	0	0	0	0	0	0	0	0	0	\$0	#DA/01
31. Architecture Development	0	0	0	0	0	0	0	0	0	0	0	0	0	0	\$0	#DA/01
32. Noise Barriers Impact Design Assessment	0	0	0	0	0	0	0	0	0	0	0	0	0	0	\$0	#DA/01
33. Intelligent Transportation Systems Analysis	0	0	0	0	0	0	0	0	0	0	0	0	0	0	\$0	#DA/01
34. Intelligent Transportation Systems Plans	0	0	0	0	0	0	0	0	0	0	0	0	0	0	\$0	#DA/01
35. Geotechnical	0	0	0	0	0	0	0	0	0	0	0	0	0	0	\$0	#DA/01
Total Staff Hours	131	7	0	24	48	52	0	0	0	0	0	0	0	131	\$4,967.89	\$37.16
Total Staff Cost		\$481.25	\$0.00	\$1,122.00	\$1,927.20	\$1,337.44	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00			

Check = \$4,967.89

SALARY RELATED COSTS:			
OVERHEAD:	159.84%		\$4,967.89
SUB-TOTAL SALARY-RELATED COSTS			\$7,785.70
PROFIT MARGIN:	12.00%		\$12,653.50
EXPENSES:			\$1,518.43
SUBTOTAL ESTIMATED FEE:			\$0.00
Survey (Field)	0	4-man crew da 5	/ day
Geotechnical Field and Lab Testing			\$0.00
SUBTOTAL ESTIMATED FEE:			\$14,172.02
Optional Services			\$0.00
GRAND TOTAL ESTIMATED FEE:			\$14,172.02

Notes

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

Project Activity 19: Signing and Pavement Marking Analysis

Estimator: S. Klaus

SR 417, Econ Trail to Seminole County Line (SA#1)

417-134

Representing	Print Name	Signature / Date
FDOT District	<i>Patrick Muench</i>	<i>Patrick Muench</i> 3/31/17
Consultant Name	The Balmoral Group <i>Kevin Kowden</i>	<i>Kevin Kowden</i> 4/1/17

NOTE: Signature Block is optional, per District preference

Task No.	Task	Units	No. of Units	Hours/ Units	Total Hours	Comments
19.1	Traffic Data Analysis	LS	0	0	0	N/A
19.2	No Passing Zone Study	LS	0	0	0	N/A
19.3	Reference and Master Design File	LS	1	48	48	Mainline (Sta. 1232+00 to Sta. 283+00) = 1.0 miles; Ramps (SB UNIV-OFF=1000'; SB AL-ON=1250') = 0.4 miles Originally 45 hours setup + 60 hrs./mile; Use 0 setup + 30 hrs. X 1.8 miles = 48 hrs.
19.4	Multi-Post Sign Support Calculations	EA	2	4	8	2 additional ground mounted guide signs (1 new, 1 relocate)
19.5	Sign Panel Design Analysis	EA	1	4	4	1 new multi-post ground mount affected by widening X 4 hrs. = 4 hrs.
19.6	Sign Lighting/Electrical Calculations	EA	0	0	0	By CES
19.7	Quantities	LS	0	0	0	Task accounted for in original hours
19.8	Cost Estimate	LS	0	0	0	Task accounted for in original hours
19.9	Technical Special Provisions	LS	0	0	0	N/A
19.10	Other Signing and Pavement Marking	LS	0	0	0	N/A
Signing and Pavement Marking Analysis Technical Subtotal					60	
19.11	Field Reviews	LS	1	6	6	1 reviews X 2 people X 3 hrs. (incl. travel time) for additional sign inventory
19.12	Technical Meetings	LS	0	0	0	N/A
19.13	Quality Assurance/Quality Control	LS	%	5%	3	
19.14	Independent Peer Review	LS	%	0%	0	
19.15	Supervision	LS	%	5%	3	
Signing and Pavement Marking Analysis Nontechnical Subtotal					12	
19.16	Coordination	LS	%	3%	2	
19. Signing and Pavement Marking Analysis Total					74	

Project Activity 19: Signing and Pavement Marking Analysis



Task No.	Task	Units	No. of Units	Hours/ Units	Total Hours	Comments	
Technical Meetings		Units	No of Units	Hours/ Unit	Total Hours	PM Attendance at Meeting Required?	Number
	Sign Panel Design	EA	0	0	0		0
	Queue Length Analysis	EA	0	0	0		0
	Local Governments (cities, counties)	EA	0	0	0		0
	Other Meetings	EA	0	0	0		0
	Subtotal Technical Meetings				0		0
	Progress Meetings (if required by FDOT)	EA	0	0	0	PM attendance at Progress Meetings is manually entered on General Task 3	--
	Phase Review Meetings	EA	0	0	0	PM attendance at Phase Review Meetings is manually entered on General Task 3	--
	Total Meetings				0	Total Project Manager Meetings (carries to Tab 3)	0

Carries to 19.12

Carries to Tab 3

Project Activity 20: Signing and Pavement Marking Plans

Estimator S. Klaus

SR 417 Econ Trail to Seminole County Line (SA#1)
417-134

Representing	Print Name	Signature / Date
FDOT District	<i>Patrick Muench</i>	<i>Patrick Muench</i> 3/31/17
Consultant Name	The Balmoral Group <i>Kevin Knudsen</i>	<i>[Signature]</i> 4/2/17

NOTE: Signature Block is optional, per District preference

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	N/A - included in roadway
20 2	Summary of Pay Items Including TRANS-Port Input		LS	0	0	0	0	N/A - included in roadway
20 3	Tabulation of Quantities		Sheet	0	0	0	0	Task accounted for in original hours
20 4	General Notes/Pay Item Notes		Sheet	1	2	1	2	Review and incorporate necessary FTE S&PM notes
20 5	Project Layout		Sheet	0	0	0	0	Task accounted for in original hours
20 6	Plan Sheet	1"=50'	Sheet	11	1	11	11	Revise 11 plan sheets
20 7	Typical Details		EA	0	0	0	0	No additional details anticipated
20 8	Guide Sign Worksheet(s)		EA	1	8	1	8	1 new multi-post ground mount affected by widening
20 9	Traffic Monitoring Site		EA	0	0	0	0	N/A
20 10	Cross Sections		EA	5	6	5	30	Develop full section for 3 span truss & half sections for 2 ground mount (1 new, 1 relocate) 6 hrs. X 3 OH structure + 2 hrs. X 3 multi-post - 30 hrs
20 11	Special Service Point Details		EA	0			0	N/A
20 12	Special Details		LS	0			0	N/A
20 13	Interim Standards		LS	0			0	N/A
Signing and Pavement Marking Plans Technical Subtotal						18	51	
20 14	Quality Assurance/Quality Control		LS	%	5%		3	
20 15	Supervision		LS	%	5%		3	
20. Signing and Pavement Marking Plans Total						18	57	

ESTIMATE OF WORK EFFORT AND COST - SUBCONSULTANT

Name of Project
County
FPN
FAP No

SR 417, Econlockhatchee Trail to Seminole County Line - Supplemental
Orange
417-134
1/0/1900

Consultant Name
Consultant No.
Date
Estimator

Tierra
erier consultants proj number
3/30/2017
insert name

Staff Classification	Total Staff Hours From '24 Summary Plans'	Project Manager	Senior Engineer	Chief Scientist	Senior Project	Geotechnical Engineer	Engineering Intern	Senior Scientist	Designer	Senior Engineering	Geotechnical Technician	Secretarial/Clerical	Staff Classification 12	SH By Activity	Salary Cost By Activity	Average Rate Per Hour
3. Project General and Project Common Tasks	0	0	0	0	0	0	0	0	0	0	0	0	0	0	\$0	#DVR/
4. Roadway Analysis	0	0	0	0	0	0	0	0	0	0	0	0	0	0	\$0	#DVR/
5. Roadway Plans	0	0	0	0	0	0	0	0	0	0	0	0	0	0	\$0	#DVR/
6a. Drainage Analysis	0	0	0	0	0	0	0	0	0	0	0	0	0	0	\$0	#DVR/
6b. Drainage Plans	0	0	0	0	0	0	0	0	0	0	0	0	0	0	\$0	#DVR/
7. Utilities	0	0	0	0	0	0	0	0	0	0	0	0	0	0	\$0	#DVR/
8. Environmental Permits, Compliance & Clearances	0	0	0	0	0	0	0	0	0	0	0	0	0	0	\$0.00	#DVR/
9. Structures - Misc. Tasks, Dwg, Non-Tech	0	0	0	0	0	0	0	0	0	0	0	0	0	0	\$0	#DVR/
10. Structures - Bridge Development Report	0	0	0	0	0	0	0	0	0	0	0	0	0	0	\$0	#DVR/
11. Structures - Temporary Bridge	0	0	0	0	0	0	0	0	0	0	0	0	0	0	\$0	#DVR/
12. Structures - Short Span Concrete Bridge	0	0	0	0	0	0	0	0	0	0	0	0	0	0	\$0	#DVR/
13. Structures - Medium Span Concrete Bridge	0	0	0	0	0	0	0	0	0	0	0	0	0	0	\$0	#DVR/
14. Structures - Structural Steel Bridge	0	0	0	0	0	0	0	0	0	0	0	0	0	0	\$0	#DVR/
15. Structures - Segmental Concrete Bridge	0	0	0	0	0	0	0	0	0	0	0	0	0	0	\$0	#DVR/
16. Structures - Movable Span	0	0	0	0	0	0	0	0	0	0	0	0	0	0	\$0	#DVR/
17. Structures - Retaining Walls	0	0	0	0	0	0	0	0	0	0	0	0	0	0	\$0	#DVR/
18. Structures - Miscellaneous	0	0	0	0	0	0	0	0	0	0	0	0	0	0	\$0	#DVR/
19. Signing & Pavement Marking Analysis	0	0	0	0	0	0	0	0	0	0	0	0	0	0	\$0	#DVR/
20. Signing & Pavement Marking Plans	0	0	0	0	0	0	0	0	0	0	0	0	0	0	\$0	#DVR/
21. Signalization Analysis	0	0	0	0	0	0	0	0	0	0	0	0	0	0	\$0	#DVR/
22. Signalization Plans	0	0	0	0	0	0	0	0	0	0	0	0	0	0	\$0	#DVR/
23. Lighting Analysis	0	0	0	0	0	0	0	0	0	0	0	0	0	0	\$0	#DVR/
24. Lighting Plans	0	0	0	0	0	0	0	0	0	0	0	0	0	0	\$0	#DVR/
25. Landscape Architecture Analysis	0	0	0	0	0	0	0	0	0	0	0	0	0	0	\$0	#DVR/
26. Landscape Architecture Plans	0	0	0	0	0	0	0	0	0	0	0	0	0	0	\$0	#DVR/
27. Survey (Field & Office Support)	0	0	0	0	0	0	0	0	0	0	0	0	0	0	\$0	#DVR/
28. Photogrammetry	0	0	0	0	0	0	0	0	0	0	0	0	0	0	\$0	#DVR/
29. Mapping	0	0	0	0	0	0	0	0	0	0	0	0	0	0	\$0	#DVR/
30. Terrestrial Mobile LIDAR	0	0	0	0	0	0	0	0	0	0	0	0	0	0	\$0	#DVR/
31. Architecture Development	0	0	0	0	0	0	0	0	0	0	0	0	0	0	\$0	#DVR/
32. Noise Barriers Impact Design Assessment	0	0	0	0	0	0	0	0	0	0	0	0	0	0	\$0	#DVR/
33. Intelligent Transportation Systems Analysis	0	0	0	0	0	0	0	0	0	0	0	0	0	0	\$0	#DVR/
34. Intelligent Transportation Systems Plans	0	0	0	0	0	0	0	0	0	0	0	0	0	0	\$0	#DVR/
35. Geotechnical	187	0	15	0	18	28	48	0	28	7	9	4	0	187	\$21,874.48	\$116.98
Total Staff Hours	187	0	15	0	18	28	48	0	28	7	9	4	0	187	\$21,874.48	\$116.98
Total Staff Cost		\$1,784.25	\$2,822.70	\$0.00	\$3,868.84	\$3,771.32	\$6,479.04	\$0.00	\$2,549.68	\$582.12	\$803.27	\$273.24	\$0.00		\$21,874.48	\$116.98

Notes:


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

SALARY RELATED COSTS		\$21,874.48
OVERHEAD:	0%	\$0.00
OPERATING MARGIN:	0%	\$0.00
FCCM (Facilities Capital Cost Money)	0.00%	\$0.00
EXPENSES	0.00%	\$0.00
SUBTOTAL ESTIMATED FEE:		\$21,874.48
Contingency OOCs		\$0.00
Geotechnical Field and Lab Testing		\$16,610.94
SUBTOTAL ESTIMATED FEE:		\$38,485.40
Optional Services		\$0.00
GRAND TOTAL ESTIMATED FEE:		\$38,485.40

35, Geotechnical

Estimator

SR 417, Econlockhatchee Trail to Seminole County Line - Supplemental
417 134

Representing	Print Name	Signature / Date
CFX	Patrick Morsch	
Tierra Inc	Kevin Kudim	 4/2/17

NOTE: Signature Block is optional, per District preference

Task No.	Task	Units	No of Units	Hours/ Unit	Total Hours	Comments
	Roadway					
35.1	Document Collection and Review	LS	0	0	0	N/A - Performed during initial investigation
35.2	Develop Detailed Boring Location Plan	LS	1	8	8	Per CFX Direction 40 roadway borings, 8 SPTs - 20', 32 Augers - 5'. Total 485 LF (180 LF SPT + 180 LF Augers)
35.3	Stake Borings/Utility Clearance	Boring	40	0.25	10	
35.4	Muck Probing	Crew Day	0	0	0	Tierra will use separate pay item in fee schedule to perform muck probing.
35.5	Coordinate and Develop MOT Plans for Field Investigation	EA	0	0	0	N/A
35.6	Drilling Access Permits	Location	1	8	8	Permit for work within Seminole County - FL Turnpike ROW
35.7	Property Clearances	EA	0	0	0	N/A - All Work within ROW
35.8	Groundwater Monitoring	EA	0	0	0	N/A
35.9	LBR/Resilient Modulus Sampling	EA	0	0	0	N/A - Performed during initial investigation
35.10	Coordination of Field Work	100 lf of boring	3.2	1	3	
35.11	Soil and Rock Classification - Roadway	100 lf of boring	3.2	2	6	
35.12	Design LBR	LS	0	0	0	N/A
35.13	Laboratory Data	100 lf of boring	3.2	0.75	2	
35.14	Seasonal High Water Table	Boring	40	0.2	8	
35.15	Parameters for Water Retention Areas	EA	0	0	0	
35.16	Delineate Limits of Unsuitable Material	Cross-section	6	1.2	7	Assume 6 cross sections @ 0.5 hr/cross section (3 hrs) + 2 plan reviews @ 2 hrs each (4 hrs) Sum = 7 hrs
35.17	Electronic Files for Cross-Sections	100 lf of boring	3.2	1	3	
35.18	Embankment Settlement and Stability	Embankment Boring	0	0	0	N/A
35.19	Monitor Existing Structures	LS	0	0	0	N/A

35. Geotechnical

Task No.	Task	Units	No of Units	Hours/ Unit	Total Hours	Comments
35.20	Stormwater Volume Recovery and/or Background Seepage Analysis	EA	0	0	0	To be performed by others.
35.21	Geotechnical Recommendations	LS	1	8	8	
35.22	Pavement Condition Survey and Pavement Evaluation Report	LS	0	0	0	Pavement Coring and Evaluation Not Required.
35.23	Preliminary Roadway Report	LS	1	8	8	To Be Included With Overall Report
35.24	Final Report	EA	1	12	12	To Be Included With Overall Report
35.25	Auger Boring Drafting	100 ft boring	1.6	4	8	
35.26	SPT Boring Drafting	100 ft boring	1.6	5	8	
Roadway Geotechnical Subtotal					97	
Structures:						
35.27	Develop Detailed Boring Location Plan	LS	1	4	4	Total Approx 1,600 LF of Gravity Walls and 3 Sign Structures
35.28	Stake Borings/Utility Clearance	Boring	7	0.4	3	Per CFX Direction: 3 Sign Structure Borings to 50' (150 LF) + 4 Wall Borings to 20' (80 LF) = 7 borings for 230 LF
35.29	Coordinate and Develop MOT Plans for Field Investigation	EA	0	0	0	N/A
35.30	Drilling Access Permits	Location	0	0	0	N/A - Turnpike Permit included with Roadway Investigation
35.31	Property Clearances	EA	0	0	0	N/A - All Work within ROW
35.32	Collection of Corrosion Samples	EA	0	0	0	To be collected at time of drilling.
35.33	Coordination of Field Work	100 ft of boring	2.3	1	2	
35.34	Soil and Rock Classification - Structures	100 ft of boring	2.3	2	5	
35.35	Tabulation of Laboratory Data	100 ft of boring	2.3	0.75	2	
35.38	Estimate Design Groundwater Level for Structures	EA	7	0.25	2	
35.37	Selection of Foundation Alternatives (BDR)	Bridge boring	0	0	0	N/A
35.38	Detailed Analysis of Selected Foundation Alternate(s)	Bridge boring	0	0	0	N/A
35.39	Bridge Construction and Testing Recommendations	Bridge boring	0	0	0	N/A
35.40	Lateral Load Analysis (Optional)	Bridge boring	0	0	0	N/A
35.41	Walls	Wall Boring	2	2	4	Analyze all Walls - Use 1 Representative Boring Per Wall
35.42	Sheet Pile Wall Analysis (Optional)	Wall Boring	0	0	0	N/A
35.43	Design Soil Parameters for Signs, Signals, High Mast Lights, and Strain Poles and Geotechnical Recommendations	Boring	3	1	3	3 Sign Structures

35. Geotechnical

Task No.	Task	Units	No of Units	Hours/ Unit	Total Hours	Comments
35.44	Box Culvert Analysis	EA	0	0	0	N/A - No Culvert Extensions.
35.45	Preliminary Report - BDR	EA	0	0	0	N/A
35.46	Final Report - Bridge and Associated Walls	EA	0	0	0	N/A
35.47	Final Reports - Signs, Signals, Box Culvert, Walls and High Mast Lights	EA	1	20	20	
35.48	SPT Boring Drafting	100 # of boring	23	5	12	
35.49	Other Geotechnical	LS	0	0	0	N/A
Structural Geotechnical Subtotal					67	
Geotechnical Technical Subtotal					164	
35.50	Technical Special Provisions	EA	0	0	0	
35.51	Field Reviews	LS	1	8	8	
35.52	Technical Meetings	LS	1	4	4	Meetings listed below
35.53	Quality Assurance/Quality Control	LS	%	5%	8	
35.54	Supervision	LS	%	5%	8	
Geotechnical Nontechnical Subtotal					28	
35.55	Coordination	LS	%	3%	5	
35. Geotechnical Total					187	

Technical Meetings	Units	No of Units	Hours/ Unit	Total Hours	PM Attendance at Meeting Required?	Number
Kickoff Meeting with CFX	EA	0	0	0		0
Boring Layout Approval	EA	0	0	0		0
Attend in BDR Review Meeting	EA	0	0	0		0
30/60/90% Submittal Review	EA	0	0	0		0
Other Meetings	EA	2	2	4		0
Subtotal Technical Meetings				4		0
Progress Meetings (if required by FDOT)	EA	0	0	0	<i>PM attendance at Progress Meetings is manually entered on General Task 3</i>	--
Phase Review Meetings	EA	0	0	0	<i>PM attendance at Phase Review Meetings is manually entered on General Task 3</i>	--
Total Meetings				4	Total Project Manager Meetings (carries to Tab 3)	0

Carries to 31.14

Carries to Tab 3

Contract Number: 001153
 Project Number: 5511-16-004

Tierra Inc
 Table 6 Standard Fee Schedule 2016

SR 417 Widening from Econlockhatchee Tr
 from Orange-Seminole CL - Supplemental

Item Description	Unit	Unit Price	Quantity	Total
Geotechnical Field Investigation				
612-Geo Mobilization Drill Rig Truck Mount	Each	\$ 337.00	1	\$ 337.00
614-Geo Mobilization Mudbug/All Terrain Vehicle	Each	\$ 500.00	1	\$ 500.00
610-Geo Mobilization Drill Rig Truck Mount	Each	\$ 3,110.00	0	\$ -
418-Geo Drill Crew Support Vehicle	Day	\$ 152.00	6	\$ 912.00
608-Geo Mobilization Drill Rig Barge Mount	Each	\$ 7,420.00	0	\$ -
405-Geo Barge (Owned)	Day	\$ 2,500.00	0	\$ -
618-Geo Mobilization Support Boat	Each	\$ 500.00	0	\$ -
Geo Support Safety Boat	Day	\$ 275.00	0	\$ -
619-Geo Mobilization Tri-Pod	Each	\$ 1,250.00	0	\$ -
419-Geo Drilling Crew 2-Person	Hour	\$ 135.00	0	\$ -
420-Geo Drilling Crew 3-Person	Hour	\$ 185.00	0	\$ -
Geo SPT Truck 0-50 Ft	LF	\$ 12.00	0	\$ -
Geo SPT Truck 50-100 Ft	LF	\$ 14.00	0	\$ -
Geo SPT Truck 100-150 Ft	LF	\$ 20.00	0	\$ -
Geo SPT Truck 150-200 Ft	LF	\$ 39.00	0	\$ -
478-Geo SPT Truck-Mud Bug 0-50 Ft	LF	\$ 12.50	390	\$ 4,875.00
479-Geo SPT Truck-Mud Bug 50-100 Ft	LF	\$ 16.00	0	\$ -
480-Geo SPT Truck-Mud Bug 100-150 Ft	LF	\$ 27.50	0	\$ -
481-Geo SPT Truck-Mud Bug 150-200 Ft	LF	\$ 42.00	0	\$ -
473-Geo SPT Barge/Track/Amphibious 000-050 Ft	LF	\$ 18.50	0	\$ -
474-Geo SPT Barge/Track/Amphibious 050-100 Ft	LF	\$ 25.00	0	\$ -
475-Geo SPT Barge/Track/Amphibious 100-150 Ft	LF	\$ 40.00	0	\$ -
476-Geo SPT Barge/Track/Amphibious 150-200 Ft	LF	\$ 70.00	0	\$ -
Geo Grout Boreholes- Truck 0-050 Ft	LF	\$ 4.50	0	\$ -
Geo Grout Boreholes- Truck 50-100 Ft	LF	\$ 5.00	0	\$ -
Geo Grout Boreholes- Truck 100-150 Ft	LF	\$ 5.50	0	\$ -
Geo Grout Boreholes- Truck 150-200 Ft	LF	\$ 14.00	0	\$ -
440-Geo Grout Boreholes- Truck/Mud Bug 000-050 Ft	LF	\$ 5.95	390	\$ 2,320.50
441-Geo Grout Boreholes- Truck/Mud Bug 050-100 Ft	LF	\$ 7.10	0	\$ -
442-Geo Grout Boreholes- Truck/Mud Bug 100-150 Ft	LF	\$ 9.00	0	\$ -
443-Geo Grout Boreholes- Truck/Mud Bug 150-200 Ft	LF	\$ 18.00	0	\$ -
435-Geo Grout Boreholes- Barge/Track/Amphibious 000-050 Ft	LF	\$ 8.50	0	\$ -
436-Geo Grout Boreholes- Barge/Track/Amphibious 050-100 Ft	LF	\$ 9.00	0	\$ -
437-Geo Grout Boreholes- Barge/Track/Amphibious 100-150 Ft	LF	\$ 10.00	0	\$ -
438-Geo Grout Boreholes- Barge/Track/Amphibious 150-200 Ft	LF	\$ 25.00	0	\$ -
Geo Temp Casing 3" Truck 0-050 Ft	LF	\$ 7.50	0	\$ -
Geo Temp Casing 3" Truck 50-100 Ft	LF	\$ 8.75	0	\$ -
Geo Temp Casing 3" Truck 100-150 Ft	LF	\$ 10.50	0	\$ -
Geo Temp Casing 3" Truck 150-200 Ft	LF	\$ 15.00	0	\$ -

Contract Number: 001153
 Project Number: 5511-16-004

Tierra Inc
 Table 6 Standard Fee Schedule 2016

SR 417 Widening from Econlockhatchee Tr
 from Orange-Seminole CL - Supplemental

Item Description	Unit	Unit Price	Quantity	Total
488-Geo Temp Casing 3" Truck/Mud Bug 000-050 Ft	LF	\$ 9.80	80	\$ 784.00
489-Geo Temp Casing 3" Truck/Mud Bug 050-100 Ft	LF	\$ 12.75	0	\$ -
490-Geo Temp Casing 3" Truck/Mud Bug 100-150 Ft	LF	\$ 15.75	0	\$ -
491-Geo Temp Casing 3" Truck/Mud Bug 150-200 Ft	LF	\$ 22.00	0	\$ -
483-Geo Temp Casing 3" Barge/Track/Amphibious 0-050 Ft	LF	\$ 12.90	0	\$ -
484-Geo Temp Casing 3" Barge/Track/Amphibious 50-100 Ft	LF	\$ 14.70	0	\$ -
485-Geo Temp Casing 3" Barge/Track/Amphibious 100-150 Ft	LF	\$ 17.85	0	\$ -
486-Geo Temp Casing 3" Barge/Track/Amphibious 150-200 Ft	LF	\$ 25.00	0	\$ -
463-Geo Rock Coring Truck/Mud Bug 000-050 Ft less than 4" ID	LF	\$ 34.25	0	\$ -
465-Geo Rock Coring Truck/Mud Bug 050-100 Ft less than 4" ID	LF	\$ 36.55	0	\$ -
467-Geo Rock Coring Truck/Mud Bug 100-150 Ft less than 4" ID	LF	\$ 39.90	0	\$ -
453-Geo Rock Coring Barge/Track/Amphibious 000-050 Ft less than 4" ID	LF	\$ 45.79	0	\$ -
455-Geo Rock Coring Barge/Track/Amphibious 050-100 Ft less than 4" ID	LF	\$ 60.74	0	\$ -
457-Geo Rock Coring Barge/Track/Amphibious 100-150 Ft less than 4" ID	LF	\$ 65.00	0	\$ -
459-Geo Rock Coring Barge/Track/Amphibious 150-200 Ft less than 4" ID	LF	\$ 94.00	0	\$ -
427-Geo Extra SPT Samples-Truck/Mud Bug 000-050 Ft	Each	\$ 31.40	0	\$ -
428-Geo Extra SPT Samples-Truck/Mud Bug 050-100 Ft	Each	\$ 36.44	0	\$ -
429-Geo Extra SPT Samples-Truck/Mud Bug 100-150 Ft	Each	\$ 42.20	0	\$ -
430-Geo Extra SPT Samples-Truck/Mud Bug 150-200 Ft	Each	\$ 85.00	0	\$ -
422-Geo Extra SPT Samples-Barge/Track/Amphibious 000-050 Ft	Each	\$ 47.15	0	\$ -
423-Geo Extra SPT Samples-Barge/Track/Amphibious 050-100 Ft	Each	\$ 54.80	0	\$ -
424-Geo Extra SPT Samples-Barge/Track/Amphibious 100-150 Ft	Each	\$ 63.30	0	\$ -
425-Geo Extra SPT Samples-Barge/Track/Amphibious 150-200 Ft	Each	\$ 85.00	0	\$ -
519-Geo Undisturbed Samples Truck/Mud Bug 000-050 Ft	Each	\$ 119.50	0	\$ -
520-Geo Undisturbed Samples Truck/Mud Bug 050-100 Ft	Each	\$ 130.40	0	\$ -
521-Geo Undisturbed Samples Truck/Mud Bug 100-150 Ft	Each	\$ 195.60	0	\$ -
522-Geo Undisturbed Samples Truck/Mud Bug 150-200 Ft	Each	\$ 200.00	0	\$ -
515-Geo Undisturbed Samples Barge/Track/Amphibious 000-050 Ft	Each	\$ 179.00	0	\$ -
516-Geo Undisturbed Samples Barge/Track/Amphibious 050-100 Ft	Each	\$ 195.60	0	\$ -
517-Geo Undisturbed Samples Barge/Track/Amphibious 100-150 Ft	Each	\$ 293.40	0	\$ -
518-Geo Undisturbed Samples Barge/Track/Amphibious 150-200 Ft	Each	\$ 375.00	0	\$ -
401-Geo Auger Borings- Hand & Truck/Mud Bug	LF	\$ 9.25	160	\$ 1,480.00
402-Geo Auger Borings- Track	LF	\$ 9.25	0	\$ -
432-Geo Field Permeability 0-10 Ft (Open - End Borehole Method)	Each	\$ 270.00	0	\$ -
Flagman and Barricades 2-Man Crew Own Equipment	Day	\$ 850.00	1	\$ 850.00
450-Geo Piezometer 2" 000-050 Ft	LF	\$ 30.00	0	\$ -
445-Geo Grouted Monitor Well 2" 000-050 Ft	LF	\$ 6.25	0	\$ -
450.1 Piezometer Permit Cost Actual	Each	\$ 50.00	0	\$ -
403-Geo Backhoe (Owned)	Day	\$ 600.00	0	\$ -
416-Geo Dozer (Owned)	Day	\$ 800.00	0	\$ -
Site Clearing to Access Boring or Test Locations	Hour	\$ 150.00	4	\$ 600.00
407-Geo Chainsaw (Owned)	Day	\$ 28.00	0	\$ -
415-Geo Double Ring Infiltration (ASTM D3385)	Each	\$ 460.00	0	\$ -
434-Geo Ground Penetrating Radar (GPR)	Day	\$ 2,800.00	0	\$ -

Contract Number: 001153
 Project Number: 5511-16-004

Tierra Inc
 Table 6 Standard Fee Schedule 2016

SR 417 Widening from Econlockhatchee Tr
 from Orange-Seminole CL - Supplemental

Item Description	Unit	Unit Price	Quantity	Total
Asphalt and Concrete Pavement Coring				
209-Asphalt Pavement Coring – 4" dia with Base Depth Check	Each	\$ 125.00	0	\$ -
210-Asphalt Pavement Coring – 4" dia without Base Depth Check	Each	\$ 110.00	0	\$ -
211-Asphalt Pavement Coring – 6" dia with Base Depth Check	Each	\$ 125.00	0	\$ -
212-Asphalt Pavement Coring – 6" dia without Base Depth Check	Each	\$ 110.00	0	\$ -
305-Concrete Pavement Coring - 4" Dia	Each	\$ 110.00	0	\$ -
306-Concrete Pavement Coring - 6" Dia	Each	\$ 110.00	0	\$ -
803-Mobilization Asphalt Coring equipment	Each	\$ 250.00	0	\$ -
806-Mobilization Concrete Coring	Each	\$ 250.00	0	\$ -
Geotechnical Soil Laboratory Testing				
812-Soils Materials Finer than 200 Sieve (FM 1-T011)	Test	\$ 35.00	15	\$ 525.00
817-Soils Moisture Content Laboratory (AASHTO T 285)	Test	\$ 9.58	18	\$ 172.44
821-Soils Particle Size Analysis (AASHTO T 88) (Including Hydrometer)	Test	\$ 131.00	0	\$ -
822-Soils Particle Size Analysis (AASHTO T 88) (No Hydrometer)	Test	\$ 67.00	15	\$ 1,005.00
805-Soils Corrosion Series (FM 5-550 through 5-553)	Test	\$ 145.00	8	\$ 1,160.00
825-Soils pH Soil or Water (FM 5-550)	Test	\$ 30.00	0	\$ -
829-Soils Resistivity Soil or Water (FM 5-551)	Test	\$ 35.00	0	\$ -
800-Soils Chloride Soil or Water (FM 5-552)	Test	\$ 40.00	0	\$ -
833-Soils Sulfate Soil or Water (FM 5-553)	Test	\$ 40.00	0	\$ -
819-Soils Organic Content Ignition (FM 1 T-267)	Test	\$ 35.00	8	\$ 280.00
Atterberg Limit Tests (AASHTO T-89 and T-90) Combined	Test	\$ 81.00	10	\$ 810.00
826-Soils Plastic Limit & Plasticity Index (AASHTO T 90)	Test	\$ 81.00	0	\$ -
811-Soils Liquid Limit (AASHTO T 89)	Test	\$ 41.00	0	\$ -
823-Soils Permeability Constant Head (AASHTO T 215)	Test	\$ 155.00	0	\$ -
824-Soils Permeability Falling Head (FM 5-513)	Test	\$ 155.00	0	\$ -
827-Soils Proctor Modified (FM 1-T 180)	Test	\$ 115.00	0	\$ -
828-Soils Proctor Standard (AASHTO T 99)	Test	\$ 111.00	0	\$ -
832-Soils Splitting Tensile Strength of Rock Cores (ASTM D3987)	Test	\$ 105.00	0	\$ -
838-Soils Unconfined Compression - Rock (ASTM D7012, Method C)	Test	\$ 105.00	0	\$ -
803-Soils Consolidation - Constant Strain (ASTM D4186)	Test	\$ 500.00	0	\$ -
804-Soils Consolidation - Extended Load Increments (AASHTO T218)	Each	\$ 50.00	0	\$ -
806-Soils Direct Shear Consolidated Drained/ Point AASHTO T 236	Test	\$ 250.00	0	\$ -
810-Soils Limerock Bearing Ratio (LBR)(FM 5-515)	Test	\$ 328.18	0	\$ -
Engineering and Technical Support Services				
Project Manager	Hour	\$ 198.25	9	\$ 1,784.25
Senior Engineer	Hour	\$ 188.18	15	\$ 2,822.70
Chief Scientist	Hour	\$ 151.47	0	\$ -
Senior Project Engineer	Hour	\$ 158.36	19	\$ 3,008.84
Geotechnical Engineer	Hour	\$ 134.69	28	\$ 3,771.32
Engineering Intern	Hour	\$ 95.28	68	\$ 6,479.04
Senior Scientist	Hour	\$ 117.34	0	\$ -
Designer	Hour	\$ 91.08	28	\$ 2,549.68
Sr Engineering Technician	Hour	\$ 83.18	7	\$ 582.12
Geotechnical Technician	Hour	\$ 67.03	9	\$ 603.27
Secretary/Clerical	Hour	\$ 68.31	4	\$ 273.24
			Total Estimated Fee	\$ 38,485.40



LEGEND

	WIDENING
	SHLDR WIDENING
	CFX PROJECT 417-134
	FTE FPID 417545-1
	ULTIMATE ROADWAY

DONOGHUE CONSULTING ENGINEERS
 3110 N. W. 10TH AVE.
 SUITE 100
 BOCA RATON, FL 33433
 561-993-1111
 31 TIMES



FTE FPID 417545-1
PROJECT COORDINATION

CFX PROJECT 417-134
SR 417 WIDENING SOUTH OF ECONLOCKHATCHEE
TRAIL TO ORANGE/SEMINOLE COUNTY LINE


CONSENT AGENDA ITEM

#16

CENTRAL FLORIDA EXPRESSWAY AUTHORITY

MEMORANDUM

TO: CFX Board Members

FROM: Aneth Williams 
Director of Procurement

DATE: March 28, 2017

RE: Approval of Contract to Carousel Industries for Annual Maintenance on the IT Extreme Network Switches in the Data Center and Floor Stacks

Board approval is requested for an annual hardware service contract in the amount of \$53,558.90. This amount is based on a quote received from Extreme Network's authorized reseller, Carousel Industries, utilizing the State of Florida WSCA Contract (#43220000-WSCA-14-ACS), which was competitively bid by the State of Florida in 2014.

This contract provides software and technical support for CFX's Extreme Networks switches, which are critical components of the IT network infrastructure.

This maintenance service contract is funded in OM&A Budget.

Reviewed by: 
Rafael Millan 
Manager of Software Development



Quote

Document #:	203486-002
Expires On:	12/25/2015

Account Executive: Kenneth Jones
 Email: KJones@carouselindustries.com
 Phone:

Central Florida Expressway

Requested By:

Bill To Information

Central Florida Expressway
 4974 Orlando Tower Rd
 ENTERPRISE
 Orlando, FL 32807

Ship To Information

Central Florida Expressway
 4974 Orlando Tower Rd
 ENTERPRISE
 Orlando, FL 32807

Maintenance

Data Maintenance

<u>Description</u>	<u>Qty</u>	<u>Ext. Price</u>
4974 Orlando Tower Road, Orlando FL		
Summit 300W AC PSU	1	\$0.00
Covers: 97004 (sn: 1304E-40231) 4/1/2016 - 3/31/2017		
Summit 300W AC PSU	1	\$0.00
Covers: 97004 (sn: 1304E-40221) 4/1/2016 - 3/31/2017		
Summit 750W PoE AC PSU	1	\$0.00
Covers: 97004 (sn: 1330A-40435) 4/1/2016 - 3/31/2017		
Summit 750W PoE AC PSU	1	\$0.00
Covers: 97004 (sn: 1330A-40703) 4/1/2016 - 3/31/2017		
Summit 750W PoE AC PSU	1	\$0.00
Covers: 97004 (sn: 1330A-40704) 4/1/2016 - 3/31/2017		
Summit 750W PoE AC PSU	1	\$0.00
Covers: 97004 (sn: 1330A-40356) 4/1/2016 - 3/31/2017		
Summit 750W PoE AC PSU	1	\$0.00
Covers: 97004 (sn: 1330A-40705) 4/1/2016 - 3/31/2017		
Summit 750W PoE AC PSU	1	\$0.00
Covers: 97004 (sn: 1330A-40702) 4/1/2016 - 3/31/2017		
Summit 750W PoE AC PSU	1	\$0.00
Covers: 97004 (sn: 1330A-40707) 4/1/2016 - 3/31/2017		
Summit X460-24t	1	\$375.00
Covers: (sn: 1119G-80363) 4/1/2016 - 3/31/2017		
Summit X460-24t	1	\$375.00
Covers: (sn: 1119G-80364) 4/1/2016 - 3/31/2017		
Summit X460-24x	1	\$695.00
Covers: (sn: 1229G-80653) 4/1/2016 - 3/31/2017		
Summit X460-24x	1	\$695.00
Covers: (sn: 1229G-80654) 4/1/2016 - 3/31/2017		
Summit X460-48p	1	\$695.00
Covers: (sn: 1333N-41780) 4/1/2016 - 3/31/2017		
Summit X460-48p	1	\$695.00
Covers: (sn: 1333N-41781) 4/1/2016 - 3/31/2017		
Summit X460-48p	1	\$695.00

Data Maintenance

<u>Description</u>	<u>Qty</u>	<u>Ext. Price</u>
Covers: (sn: 1306N-40130) 4/1/2016 - 3/31/2017 Summit X460-48p	1	\$695.00
Covers: (sn: 1151G-81189) 4/1/2016 - 3/31/2017 Summit X460-48p	1	\$695.00
Covers: (sn: 1151G-81203) 4/1/2016 - 3/31/2017 Summit X460-48p	1	\$695.00
Covers: (sn: 1105G-01954) 4/1/2016 - 3/31/2017 Summit X460-48p	1	\$695.00
Covers: (sn: 1105G-01910) 4/1/2016 - 3/31/2017 Summit X460-48p	1	\$695.00
Covers: (sn: 1105G-01955) 4/1/2016 - 3/31/2017 Summit X460-48p	1	\$695.00
Covers: (sn: 1105G-01905) 4/1/2016 - 3/31/2017 Summit X460-48p	1	\$695.00
Covers: (sn: 1103G-02998) 4/1/2016 - 3/31/2017 Summit X460-48p	1	\$695.00
Covers: (sn: 1103G-02997) 4/1/2016 - 3/31/2017 Summit X460-48p	1	\$695.00
Covers: (sn: 1105G-01907) 4/1/2016 - 3/31/2017 Summit X460-48p	1	\$695.00
Covers: (sn: 1151G-81264) 4/1/2016 - 3/31/2017 Summit X460-48p	1	\$695.00
Covers: (sn: 1151G-81208) 4/1/2016 - 3/31/2017 Summit X460-48p	1	\$695.00
Covers: (sn: 1151G-81204) 4/1/2016 - 3/31/2017 Summit X460-48p	1	\$695.00
Covers: (sn: 1151G-81207) 4/1/2016 - 3/31/2017 Summit X460-48p	1	\$695.00
Covers: (sn: 1323N-44581) 4/1/2016 - 3/31/2017 Summit X460-48p	1	\$695.00
Covers: (sn: 1324N-40110) 4/1/2016 - 3/31/2017 Summit X460-48p	1	\$695.00
Covers: (sn: 1324N-40109) 4/1/2016 - 3/31/2017 Summit X460-48p	1	\$695.00
Covers: (sn: 1323N-44582) 4/1/2016 - 3/31/2017 Summit X460-48p	1	\$695.00
Covers: (sn: 1323N-44588) 4/1/2016 - 3/31/2017 XGM3SB-4sf/module	1	\$225.00
Covers: (sn: 1305G-01535) 4/1/2016 - 3/31/2017 XGM3SB-4sf/module	1	\$225.00
Covers: (sn: 1305G-01536) 4/1/2016 - 3/31/2017 XGM3SB-4sf/module	1	\$225.00
Covers: (sn: 1305G-01537) 4/1/2016 - 3/31/2017 XGM3SB-4sf/module	1	\$225.00
Covers: (sn: 1305G-01538) 4/1/2016 - 3/31/2017 Summit 1100W AC PSU FB	1	\$0.00
Covers: 97004 (sn: 1503A-40063) 4/1/2016 - 3/31/2017 Summit 1100W AC PSU FB	1	\$0.00
Covers: 97004 (sn: 1503A-40079) 4/1/2016 - 3/31/2017		

Data Maintenance

<u>Description</u>	<u>Qty</u>	<u>Ext. Price</u>
Summit 1100W AC PSU FB Covers: 97004 (sn: 1503A-40005) 4/1/2016 - 3/31/2017	1	\$0.00
Summit 1100W AC PSU FB Covers: 97004 (sn: 1503A-40002) 4/1/2016 - 3/31/2017	1	\$0.00
Summit 1100W AC PSU FB Covers: 97004 (sn: 1503A-40084) 4/1/2016 - 3/31/2017	1	\$0.00
Summit 1100W AC PSU FB Covers: 97004 (sn: 1503A-40080) 4/1/2016 - 3/31/2017	1	\$0.00
Summit 1100W AC PSU FB Covers: 97004 (sn: 1503A-40060) 4/1/2016 - 3/31/2017	1	\$0.00
Summit 1100W AC PSU FB Covers: 97004 (sn: 1503A-40038) 4/1/2016 - 3/31/2017	1	\$0.00
Summit 1100W AC PSU FB Covers: 97004 (sn: 1503A-40082) 4/1/2016 - 3/31/2017	1	\$0.00
Summit 1100W AC PSU FB Covers: 97004 (sn: 1503A-40062) 4/1/2016 - 3/31/2017	1	\$0.00
Summit 1100W AC PSU FB Covers: 97004 (sn: 1503A-40036) 4/1/2016 - 3/31/2017	1	\$0.00
Summit 1100W AC PSU FB Covers: 97004 (sn: 1503A-40033) 4/1/2016 - 3/31/2017	1	\$0.00
Summit 1100W AC PSU FB Covers: 97004 (sn: 1503A-40006) 4/1/2016 - 3/31/2017	1	\$0.00
Summit 1100W AC PSU FB Covers: 97004 (sn: 1503A-40065) 4/1/2016 - 3/31/2017	1	\$0.00
Summit 1100W AC PSU FB Covers: 97004 (sn: 1503A-40034) 4/1/2016 - 3/31/2017	1	\$0.00
Summit 1100W AC PSU FB Covers: 97004 (sn: 1503A-40004) 4/1/2016 - 3/31/2017	1	\$0.00
Summit 1100W AC PSU FB Covers: 97004 (sn: 1503A-40081) 4/1/2016 - 3/31/2017	1	\$0.00
Summit 1100W AC PSU FB Covers: 97004 (sn: 1503A-40064) 4/1/2016 - 3/31/2017	1	\$0.00
Summit 1100W AC PSU FB Covers: 97004 (sn: 1503A-40037) 4/1/2016 - 3/31/2017	1	\$0.00
Summit 1100W AC PSU FB Covers: 97004 (sn: 1503A-40035) 4/1/2016 - 3/31/2017	1	\$0.00
Summit 1100W AC PSU FB Covers: 97004 (sn: 1503A-40007) 4/1/2016 - 3/31/2017	1	\$0.00
Summit 1100W AC PSU FB Covers: 97004 (sn: 1503A-40083) 4/1/2016 - 3/31/2017	1	\$0.00
Summit 1100W AC PSU FB Covers: 97004 (sn: 1503A-40061) 4/1/2016 - 3/31/2017	1	\$0.00
Summit 1100W AC PSU FB Covers: 97004 (sn: 1503A-40003) 4/1/2016 - 3/31/2017	1	\$0.00
X460-G2-48p-10GE4-Base Covers: (sn: 1452N-40402) 4/1/2016 - 3/31/2017	1	\$405.00
X460-G2-48p-10GE4-Base Covers: (sn: 1452N-40372) 4/1/2016 - 3/31/2017	1	\$405.00
X460-G2-48p-10GE4-Base	1	\$405.00

Data Maintenance

<u>Description</u>	<u>Qty</u>	<u>Ext. Price</u>
Covers: (sn: 1452N-40389) 4/1/2016 - 3/31/2017 X460-G2-48p-10GE4-Base	1	\$405.00
Covers: (sn: 1504N-42265) 4/1/2016 - 3/31/2017 X460-G2-48p-10GE4-Base	1	\$405.00
Covers: (sn: 1504N-42264) 4/1/2016 - 3/31/2017 X460-G2-48p-10GE4-Base	1	\$405.00
Covers: (sn: 1504N-42213) 4/1/2016 - 3/31/2017 X460-G2-48p-10GE4-Base	1	\$405.00
Covers: (sn: 1504N-42257) 4/1/2016 - 3/31/2017 X460-G2-48p-10GE4-Base	1	\$405.00
Covers: (sn: 1504N-42259) 4/1/2016 - 3/31/2017 X460-G2-48p-10GE4-Base	1	\$405.00
Covers: (sn: 1504N-42258) 4/1/2016 - 3/31/2017 X460-G2-48p-10GE4-Base	1	\$405.00
Covers: (sn: 1504N-42253) 4/1/2016 - 3/31/2017 X460-G2-48p-10GE4-Base	1	\$405.00
Covers: (sn: 1504N-42263) 4/1/2016 - 3/31/2017 X460-G2-48p-10GE4-Base	1	\$405.00
Covers: (sn: 1452N-40371) 4/1/2016 - 3/31/2017 Summit X460-G2 VIM-2q	1	\$125.00
Covers: (sn: 1439N-40965) 4/1/2016 - 3/31/2017 Summit X460-G2 VIM-2q	1	\$125.00
Covers: (sn: 1439N-40966) 4/1/2016 - 3/31/2017 Summit X460-G2 VIM-2q	1	\$125.00
Covers: (sn: 1439N-40967) 4/1/2016 - 3/31/2017 Summit X460-G2 VIM-2q	1	\$125.00
Covers: (sn: 1439N-40968) 4/1/2016 - 3/31/2017 Summit X460-G2 VIM-2q	1	\$125.00
Covers: (sn: 1439N-40969) 4/1/2016 - 3/31/2017 Summit X460-G2 VIM-2q	1	\$125.00
Covers: (sn: 1439N-41042) 4/1/2016 - 3/31/2017 Summit X460-G2 VIM-2q	1	\$125.00
Covers: (sn: 1439N-40971) 4/1/2016 - 3/31/2017 Summit X460-G2 VIM-2q	1	\$125.00
Covers: (sn: 1439N-40972) 4/1/2016 - 3/31/2017 Summit X460-G2 VIM-2q	1	\$125.00
Covers: (sn: 1439N-40975) 4/1/2016 - 3/31/2017 Summit X460-G2 VIM-2q	1	\$125.00
Covers: (sn: 1439N-40976) 4/1/2016 - 3/31/2017 Summit X460-G2 VIM-2q	1	\$125.00
Covers: (sn: 1439N-41041) 4/1/2016 - 3/31/2017 Summit X460-G2 VIM-2q	1	\$125.00
Covers: (sn: 1439N-40970) 4/1/2016 - 3/31/2017	1	\$125.00

Data Maintenance Total \$23,995.00

Finance Options

\$ Out Lease *FMV Lease*

Term	Monthly Payment	Term	Monthly Payment
36	\$771.64	36	\$676.39
60	\$502.58	60	\$479.74

Key Advantages of Sales Financing

- Companies benefit from the use of technology and not the ownership - and transferring the risk onto the lessor allows the customer to focus on their productivity and business needs
- Addresses budget needs, cash flow patterns and streams of income
- Improves cash position
- Turn-key solution
- Interest and depreciation expense

Terms: Payments calculated are approximate; do not include taxes, fees, or insurance and are subject to change without notification. Any proposed transaction is subject to credit and documentation approval. This pricing tool is for information purposes only and does not constitute a commitment to provide financing. The equipment to be financed by this proposed transaction must be used for business purposes only.

About Carousel Capital Finance:

A business unit within Carousel Industries focused on securing financing for customers that are investing in Carousel's solution portfolio / value proposition. We are structured to provide customers a consultancy approach that not only focuses on our strength and value proposition on "What and Why to Buy the solution", but also "How to Buy the Solution". We have a number of financial firms and options to offer customers in the form of traditional finance, loan-and lease products, but also can use our financial network to structure deals that allow customers to achieve their strategic objectives around areas such as Managed Services, Outsourcing and Hosted initiatives.

Any questions related to Carousel Capital Finance can be directed to: David White 678-892-3728 or dwhite@carouselindustries.com



Quote

Document #:	203486-002
Expires On:	12/25/2015

Quote Totals

Maintenance Total \$23,995.00

Grand Total \$23,995.00

Terms and Conditions

All new products are guaranteed to be as specified by the manufacturer's documentation and are provided with the manufacturer's standard product warranty. All refurbished components are covered by a Carousel direct warranty. Customer is responsible for any electrical service, environmental conditions and cable work needed to support the quoted Products unless otherwise specified on the Quote. Any changes to the above Products and/or Scope of Work will require the written authorization of both Carousel and the Customer. The grand total does not include taxes and freight charges, and as applicable, these costs will be added to the invoice.

All work is done subject to the terms and conditions of Carousel's Master Agreement (available at http://www.carouselindustries.com/company/master-agreement), unless Carousel and the Customer have previously agreed to otherwise in writing.

Method of Payment

Cash Purchase* Terms of Payment: Net 30 Terms

*All cash purchases are subject to credit approval and down payments must be received prior to Product order or rendering of Services.

Finance Option: No money due in advance for qualified leasees.

Finance Type: \$Out FMV Terms: ___ months

By signing below, Customer makes an offer to purchase the Products and/or Services above from Carousel. Carousel's acceptance of this offer to purchase shall be evidenced by the conversion of the Quote into a Carousel Service Order, and the return of the Service Order number to the Customer.

This contractor and subcontractor shall abide by the requirements of 41 CFR §§ 60-300.5(a) and 60-741.5(a). These regulations prohibit discrimination against qualified individuals on the basis of protected veteran status or disability, and require affirmative action by covered prime contractors and subcontractors to employ and advance in employment qualified protected veterans and individuals with disabilities.

Carousel Signature: _____

Name: _____ Title: _____ Date: _____

Customer Signature: _____

Name: _____ Title: _____ Date: _____


CONSENT AGENDA ITEM

#17

CENTRAL FLORIDA EXPRESSWAY AUTHORITY

MEMORANDUM

TO: CFX Board Members

FROM: Aneth Williams 
Director of Procurement

DATE: March 28, 2017

RE: Approval of Contract to Avaya for Maintenance Support on the CFX Phone System (PBX)

Board authorization is requested to issue a contract to Avaya for a three (3) year period for maintenance and support on the CFX Phone System (PBX) in the amount of \$310,393.08.

This contract coincides with the anticipated completion of the Phone Upgrade Project and reflects the new upgrades in the Call Center.

This service contract will be funded in future OM&A Budgets.

Reviewed by: 

Rafael Millan
Manager of Software Development 



Service Agreement Detail Document
CFE SAUA PREON 7X24 3YRA 050117
For
CENTRAL FLORIDA EXPRESSWAY
Quote Reference Number: 604544
Quote Produced on Mar 31, 2017
Quote Expires on Jul 29, 2017
Estimated Service Agreement Start Date: May 1, 2017

Maintenance Payment Frequency: Annual Prepaid
Maintenance Quote Term in Months: 36
Port Pricing Type: N/A
Region: United States
Currency: USD

* Estimated Subsequent Invoice Amount is for informational purposes only & does not reflect 1) changes associated with utility measurements gathered at true-up, 2) subsequent component additions to already covered product categories or 3) Invoice amounts for items eligible for coverage in yearly increments. Estimated subsequent invoice amounts are calculated assuming that coverage is still available in subsequent years.

* The quoted items included in this report must be covered by a current, unexpired contract to generate a complete quote detail.

Coverage for this MPC/Material has lapsed beyond the grace period, therefore, charges apply and are included in the Re-Initiation fee.

The Maintenance Services being ordered on this Order Form and the associated billing may commence, in some cases, during the Avaya Product warranty period.

Avaya will, at its discretion, perform a true up on no more than a quarterly basis to reconcile future billing on some items which have been added (activated) or removed (deactivated) during the previous period. No credits or cash payments will be issued against previously paid amounts.

Maintenance service unit price associated with CMS Administered Agents and Administered Voice Mail Boxes will remain fixed based on the number of units located at the site at time of the maintenance contract start date. This per unit charge will remain unchanged for the contracted term of maintenance support, independent of quantity changes recorded during true-ups.

Service charges for IP ports and certain Communication Manager applications (including but not limited to Wan Spare Processor, Local Spare Processor, Survivable Remote Processor & IP Agents) located at remote customer sites that are priced under the utility pricing methodology will be invoiced at customer's main/media server location. These service charges will be invoiced based on the coverage option and pricing reflected at the main site or location.

The Re-Initiation Fee Policy can be found at: **Partner Portal > Business Tools, Policies & Processes > Policy Information > Support Services Policies**

ALERT NOTIFICATION FOR QUOTES WITH SS and SSU COVERAGE:

SS Coverage is only billed as FULLY PREPAID. If your SSU annual billed quote has SS items on it, the SS items will be co-terminated with the SSU coverage but will bill as a one-time full prepayment regardless of the billing option selected when creating the quote. Please adjust your purchase order/contract accordingly.



SAP Sold to: 0002683138
 FL: 0002683138
 Organization Code: B001
 Distribution Channel: 01
 Payer Ref Number: 0000000000
 FL Address:
 CENTRAL FLORIDA EXPRESSWAY
 4974 ORL TOWER RD
 ORLANDO , FL 32807

MPC/Material Code	Description	*Qty	Delayed Billing Date	Months	Monthly Unit Price	Initial Invoice Amount	*Estimated Subsequent Invoice Amount	*Estimated Total Price
Converged Voice Products				36-Month Term	Remote Only Support			
				24x7				
00000000000150940	CIRCUIT PACK TN2302 IP MEDIA PROCESSOR	4			\$0.00	\$0.00	\$0.00	\$0.00
00000000000151423	CIRCUIT PACK C-LAN INTERFACE TN799	4			\$0.00	\$0.00	\$0.00	\$0.00
00000000000170657	CIRCUIT PACK TN2312AP IPSI	4			\$0.00	\$0.00	\$0.00	\$0.00
00000000000170663	LINUX MEDIA SERVER MODEM	2			\$0.00	\$0.00	\$0.00	\$0.00
00000000000185596	C-LAN INTF CIRCUIT PACK TN799DP	2			\$0.00	\$0.00	\$0.00	\$0.00
00000000000224274	IP320 MEDIA RESOURCE CIRCUIT PACK TN2602AP NON GSA	1			\$0.00	\$0.00	\$0.00	\$0.00
00000000000263764	DL360G7 SERVER CM SIMPLEX/DUPLEX/MBT/SBC	2			\$0.00	\$0.00	\$0.00	\$0.00
000000000700405012	POWER SUPPLY FOR SAMP LITE RMB RHS	1			\$0.00	\$0.00	\$0.00	\$0.00
000000000700451172	USB MODEM MT9234ZBA V.92 56K	2			\$0.00	\$0.00	\$0.00	\$0.00
MPC Totals -						\$0.00	\$0.00	\$0.00
Enterprise Voice Systems				36-Month Term	Remote Only Support			
				24x7				
00000000000102913	CIRCUIT PACK AUXILLIARY TRUNK I	1			\$0.00	\$0.00	\$0.00	\$0.00
00000000000102924	UNIVERSAL COUPLER	2			\$0.00	\$0.00	\$0.00	\$0.00
00000000000102935	CSU MODULE 120A4	7			\$0.00	\$0.00	\$0.00	\$0.00
00000000000102947	DEFINITY CIRCUIT PACK DIGITAL 2 WIRE 24 PORTS TN2224	2			\$0.00	\$0.00	\$0.00	\$0.00
00000000000103002	DEFINITY TERMINAL ENTERPRISE MGMT 715 BC	1			\$0.00	\$0.00	\$0.00	\$0.00
00000000000103090	DEFINITY AUDIX CABLE CONNECTOR ASSEMBLY	1			\$0.00	\$0.00	\$0.00	\$0.00
00000000000105827	SWITCHROOM 110AC ADMINISTRATION	3			\$0.00	\$0.00	\$0.00	\$0.00
00000000000179316	VAL TN2501 CIRCUIT PACK	1			\$0.00	\$0.00	\$0.00	\$0.00
000000000107058950	SWITCHROOM AUXILIARY FIELD	2			\$0.00	\$0.00	\$0.00	\$0.00
000000000107214702	CIRCUIT PACK DS1 INTERFACE TN464F	4			\$0.00	\$0.00	\$0.00	\$0.00
000000000107784001	CIRCUIT PACK CALL CLASSIFIER TN744D	2			\$0.00	\$0.00	\$0.00	\$0.00

MPC/Material Code	Description	*Qty	Delayed Billing Date	Months	Monthly Unit Price	Initial Invoice Amount	*Estimated Subsequent Invoice Amount	*Estimated Total Price
000000000108551755	CIRCUIT PACK TN793B ANALOG 24 PORTS	10			\$0.00	\$0.00	\$0.00	\$0.00
000000000108724907	DEFINITY PACKAGE 8MB FLASHCARD	1			\$0.00	\$0.00	\$0.00	\$0.00
000000000700012909	24 PORT LINE PATCH PANEL	1			\$0.00	\$0.00	\$0.00	\$0.00
000000000700394497	BUS TERMINATOR CIRCUIT PACK AHF110 RHS	2			\$0.00	\$0.00	\$0.00	\$0.00
000000000700394794	DS1 INTERFACE TN464HP RHS	1			\$0.00	\$0.00	\$0.00	\$0.00
000000000700405020	USB MODEM V.92 56K RHS	1			\$0.00	\$0.00	\$0.00	\$0.00
MPC Totals -						\$0.00	\$0.00	\$0.00
MSG SRVR DELL R2 HDWR MAINT	36-Month Term		Remote Only Support 24x7					
000000000000264181	R610 SERVER AURA MESSAGING STANDARD STORAGE	4		12	\$0.00	\$0.00	\$0.00	\$0.00
MPC Totals -						\$0.00	\$0.00	\$0.00
Paging Systems	36-Month Term		Full Coverage 24x7					
000000000000101684	MOH SYSTEM MESSAGNER & PERSONALIZED PRODUCTION	1		36	\$2.56	\$30.72	\$30.72	\$92.16
000000000406915280	PAGING AMPLIFIER PAGEPAC PLUS 20 WATT 1 ZONE	1		36	\$6.23	\$74.76	\$74.76	\$224.28
000000000408184059	PAGING ROUND CEILING 70 VOLT SPEAKER	25		36	\$0.69	\$207.00	\$207.00	\$621.00
MPC Totals -						\$312.48	\$312.48	\$937.44
SA CM GATEWAY LARGE	36-Month Term		Onsite 7x24					
000000000000230224	SA ON-SITE 24X7 SUPT CM LARGE GATEWAY 3YR AN PREPD	3		36	\$99.74	\$3,590.64	\$3,590.64	\$10,771.92
MPC Totals -						\$3,590.64	\$3,590.64	\$10,771.92
SA MM SERVER	36-Month Term		Onsite 7x24					
000000000000256171	SA ON-SITE 24X7 SUPT MSG SRV R2-D 3YR AN PREPD	4		36	\$236.31	\$11,342.88	\$11,342.88	\$34,028.64
000000000000264181	R610 SERVER AURA MESSAGING STANDARD STORAGE	2			\$0.00	\$0.00	\$0.00	\$0.00
MPC Totals -						\$11,342.88	\$11,342.88	\$34,028.64
SA_APPL ENBLMT SVCS SW SUPT R6	36-Month Term		Preferred					
000000000000238268	SA PREFER SUPT AES R6 BASIC TSAPI 3YR AN PREPD	1084		36	\$0.24	\$3,121.92	\$3,121.92	\$9,365.76
000000000000238269	UPGRADE ADVANTAGE AES R6 BASIC TSAPI 3YR AN PREPD	1084		36	\$0.14	\$1,821.12	\$1,821.12	\$5,463.36
000000000000238292	SA PREFER SUPT AES R6 ADV TSAPI LARGE 3YR AN PREPD	1		36	\$208.32	\$2,499.84	\$2,499.84	\$7,499.52
000000000000238293	UPGRADE ADVANTAGE AES R6 ADV TSAPI LARGE 3YR AN PREPD	1		36	\$124.25	\$1,491.00	\$1,491.00	\$4,473.00
000000000000238304	SA PREFER SUPT AES R6 DMCC FULL 3YR AN PREPD	75		36	\$0.99	\$891.00	\$891.00	\$2,673.00
000000000000238305	UPGRADE ADVANTAGE AES R6 DMCC FULL 3YR AN PREPD	75		36	\$0.85	\$765.00	\$765.00	\$2,295.00
000000000000238307	SA PREFER SUPT AES R6 DMCC BASIC 3YR AN PREPD	879		36	\$0.24	\$2,531.52	\$2,531.52	\$7,594.56
000000000000238308	UPGRADE ADVANTAGE AES R6 DMCC BASIC 3YR AN PREPD	879		36	\$0.14	\$1,476.72	\$1,476.72	\$4,430.16
MPC Totals -						\$14,598.12	\$14,598.12	\$43,794.36
SA_AURA SW SUPPORT R7	36-Month Term		Preferred					
000000000000292606	SA PREFER SUPT AURA R7 CORE SUITE 3YR AN PREPD	844		36	\$2.03	\$20,559.84	\$20,559.84	\$61,679.52
000000000000292613	UPGRADE ADVANTAGE AURA R7 CORE SUITE 3YR AN PREPD	844		36	\$1.06	\$10,735.68	\$10,735.68	\$32,207.04
MPC Totals -						\$31,295.52	\$31,295.52	\$93,886.56

MPC/Material Code	Description	*Qty	Delayed Billing Date	Months	Monthly Unit Price	Initial Invoice Amount	*Estimated Subsequent Invoice Amount	*Estimated Total Price
SA_AVAYA AURA EXP PRTL		36-Month Term		Preferred				
SW R7								
000000000000249956	SA PREFER SUPT AAEP R7 3YR AN PREPD	48		36	\$13.09	\$7,539.84	\$7,539.84	\$22,619.52
000000000000249964	UPGRADE ADVANTAGE AAEP R7 3YR AN PREPD	48		36	\$4.26	\$2,453.76	\$2,453.76	\$7,361.28
000000000000250952	SA PREFER SUPT AAEP R7 ZONE 3YR AN PREPD	48		36	\$0.00	\$0.00	\$0.00	\$0.00
000000000000250958	UPGRADE ADVANTAGE AAEP R7 ZONE 3YR AN PREPD	48		36	\$0.00	\$0.00	\$0.00	\$0.00
000000000000251835	SA PREFER SUPT AAEP R7 CM CONNECT 3YR AN PREPD	48		36	\$0.69	\$397.44	\$397.44	\$1,192.32
MPC Totals -						\$10,391.04	\$10,391.04	\$31,173.12
SA_CALL CENTER SW		36-Month Term		Preferred				
SUPPORT R6								
000000000000236182	SA PREFER SUPT CC R6 ELITE MULTI CHANNEL 1-400 3YR AN PREPD	75		36	\$5.22	\$4,698.00	\$4,698.00	\$14,094.00
000000000000236188	UPGRADE ADVANTAGE CC R6 ELITE MULTI CHANNEL 1-400 3YR AN PREPD	75		36	\$2.04	\$1,836.00	\$1,836.00	\$5,508.00
MPC Totals -						\$6,534.00	\$6,534.00	\$19,602.00
SA_CALL CENTER SW		36-Month Term		Preferred				
SUPPORT R7								
000000000000291729	SA PREFER SUPT CC R7 ELITE AGENT 3YR AN PREPD	75		36	\$4.92	\$4,428.00	\$4,428.00	\$13,284.00
000000000000291736	UPGRADE ADVANTAGE CC R7 ELITE AGENT 3YR AN PREPD	75		36	\$2.31	\$2,079.00	\$2,079.00	\$6,237.00
MPC Totals -						\$6,507.00	\$6,507.00	\$19,521.00
SA_CALL MGMT SYSTEM SW		36-Month Term		Preferred				
R18								
000000000000293110	SA PREFER SUPT CMS R18 AGT 1-250 3YR AN PREPD	50		36	\$1.78	\$1,068.00	\$1,068.00	\$3,204.00
		25		36	\$1.78	\$534.00	\$534.00	\$1,602.00
000000000000293116	UPGRADE ADVANTAGE CMS R18 AGT 1-250 3YR AN PREPD	50		36	\$2.31	\$1,386.00	\$1,386.00	\$4,158.00
		25		36	\$2.31	\$693.00	\$693.00	\$2,079.00
000000000000293200	SA PREFER SUPT CMS R18 SUPERVISOR 3YR AN PREPD	18		36	\$5.06	\$1,092.96	\$1,092.96	\$3,278.88
000000000000293212	SA PREFER SUPT CMS R18 INITIAL AUTO CALL DIST 3YR AN PREPD	2		36	\$0.00	\$0.00	\$0.00	\$0.00
000000000000334744	SA PREFER SUPT CMS R18 3PARTY REAL TIME 3YR AN PREPD	1		36	\$195.93	\$2,351.16	\$2,351.16	\$7,053.48
000000000000334750	UPGRADE ADVANTAGE CMS R18 3PARTY REAL TIME 3YR AN PREPD	1		36	\$56.80	\$681.60	\$681.60	\$2,044.80
MPC Totals -						\$7,806.72	\$7,806.72	\$23,420.16
SA_SAL SW SUPPORT R1_5		36-Month Term		Preferred				
000000000000253607	SA PREFER SUPT SAL R1.5 STANDALONE GATEWAY DOWNLOADABLE TRACKING	4		36	\$0.00	\$0.00	\$0.00	\$0.00
000000000000253609	SA PREFER SUPT SAL R1.5 POLICY SERVER DOWNLOADABLE TRACKING	1		36	\$0.00	\$0.00	\$0.00	\$0.00
MPC Totals -						\$0.00	\$0.00	\$0.00
SA_SAL SW SUPPORT R2		36-Month Term		Preferred				
000000000000253617	SA PREFER SUPT SAL R2 STANDALONE GATEWAY APP ON VAPP TRACKING	6		36	\$0.00	\$0.00	\$0.00	\$0.00
MPC Totals -						\$0.00	\$0.00	\$0.00

MPC/Material Code	Description	*Qty	Delayed Billing Date	Months	Monthly Unit Price	Initial Invoice Amount	*Estimated Subsequent Invoice Amount	*Estimated Total Price	
SA_UNIFIED COMM EDITION R2	36-Month Term				Preferred				
00000000000242262	SA PREFER SUPT UCE R5.2+ ONE-X MOBILE R1/R5 CLIENT /E	829		36	\$0.00	\$0.00	\$0.00	\$0.00	
00000000000242274	SA PREFER SUPT UCE R5.2+ ONE-X COMMUNICATOR R5 /E	829		36	\$0.00	\$0.00	\$0.00	\$0.00	
00000000000242286	SA PREFER SUPT UCE R5.2+ ONE-X PORTAL R5 STANDARD /E	829		36	\$0.00	\$0.00	\$0.00	\$0.00	
00000000000242310	SA PREFER SUPT UCE R5.2+ EC500 R8 SINGLE MODE /E	829		36	\$0.00	\$0.00	\$0.00	\$0.00	
00000000000249522	UPGRADE ADVANTAGE UCE R5.2+ ONE-X MOBILE R1/R5 CLIENT /E	829		36	\$0.00	\$0.00	\$0.00	\$0.00	
00000000000249528	UPGRADE ADVANTAGE UCE R5.2+ ONE-X COMMUNICATOR R5 /E	829		36	\$0.00	\$0.00	\$0.00	\$0.00	
00000000000249534	UPGRADE ADVANTAGE UCE R5.2+ ONE-X PORTAL R5 STANDARD /E	829		36	\$0.00	\$0.00	\$0.00	\$0.00	
00000000000249546	UPGRADE ADVANTAGE UCE R5.2+ EC500 R8 SINGLE MODE /E	829		36	\$0.00	\$0.00	\$0.00	\$0.00	
MPC Totals -						\$0.00	\$0.00	\$0.00	
SQRN: 769820	Sold To Totals -						\$92,378.40	\$92,378.40	\$277,135.20



SAP Sold to: 0004563577
 FL: 0004563577
 Organization Code: B001
 Distribution Channel: 01
 Payer Ref Number: 0000000000
 FL Address:
 Orlando Orange Cty Expressway
 8302 East West Expressway
 ORLANDO , FL 32835

MPC/Material Code	Description	*Qty	Delayed Billing Date	Months	Monthly Unit Price	Initial Invoice Amount	*Estimated Subsequent Invoice Amount	*Estimated Total Price
Converged Voice Products				36-Month Term			Remote Only Support	
							24x7	
000000000000170663	LINUX MEDIA SERVER MODEM	1			\$0.00	\$0.00	\$0.00	\$0.00
000000000000170899	MM711 ANALOG MEDIA MODULE	1			\$0.00	\$0.00	\$0.00	\$0.00
000000000000170900	MM710 T1/TE MEDIA MODULE	1			\$0.00	\$0.00	\$0.00	\$0.00
000000000000170901	MM760 VOICE OVER IP MEDIA MODULE	2			\$0.00	\$0.00	\$0.00	\$0.00
000000000700259898	AVAYA G700 MEDIA GATEWAY ASSEMBLY	3			\$0.00	\$0.00	\$0.00	\$0.00
000000000700463532	S8300D SERVER - NON GSA	1			\$0.00	\$0.00	\$0.00	\$0.00
000000000700466626	MM711 ANALOG MEDIA MODULE - NON GSA	1			\$0.00	\$0.00	\$0.00	\$0.00
MPC Totals -						\$0.00	\$0.00	\$0.00
MSG SRVR DELL R2 HDWR MAINT				36-Month Term			Remote Only Support	
							24x7	
000000000000264181	R610 SERVER AURA MESSAGING STANDARD STORAGE	1		12	\$0.00	\$0.00	\$0.00	\$0.00
MPC Totals -						\$0.00	\$0.00	\$0.00
SA CM SERVER SMALL				36-Month Term			Onsite 7x24	
000000000000230044	SA ON-SITE 24X7 SUPT CM SMALL SERVER 3YR AN PREPD	1		36	\$50.64	\$607.68	\$607.68	\$1,823.04
000000000700463532	S8300D SERVER - NON GSA	1			\$0.00	\$0.00	\$0.00	\$0.00
MPC Totals -						\$607.68	\$607.68	\$1,823.04
SA MM SERVER				36-Month Term			Onsite 7x24	
000000000000256171	SA ON-SITE 24X7 SUPT MSG SRV R2-D 3YR AN PREPD	1		36	\$236.31	\$2,835.72	\$2,835.72	\$8,507.16
000000000000264181	R610 SERVER AURA MESSAGING STANDARD STORAGE	1			\$0.00	\$0.00	\$0.00	\$0.00
MPC Totals -						\$2,835.72	\$2,835.72	\$8,507.16
SA_AURA SW SUPPORT R6				36-Month Term			Preferred	
000000000000250581	SUPT ADV PREFERRED TRACKING REMOTE SITE AURATM R6	1		36	\$0.00	\$0.00	\$0.00	\$0.00
MPC Totals -						\$0.00	\$0.00	\$0.00
SA_AURA SW SUPPORT R7				36-Month Term			Preferred	

MPC/Material Code	Description	*Qty	Delayed Billing Date	Months	Monthly Unit Price	Initial Invoice Amount	*Estimated Subsequent Invoice Amount	*Estimated Total Price
000000000000292934	SUPT ADV PREFERRED REMOTE SITE TRACKING AURA R7	1		36	\$0.00	\$0.00	\$0.00	\$0.00
MPC Totals -						\$0.00	\$0.00	\$0.00
SA_SAL SW SUPPORT R2	36-Month Term	Preferred						
000000000000253617	SA PREFER SUPT SAL R2 STANDALONE GATEWAY APP ON VAPP TRACKING	1		36	\$0.00	\$0.00	\$0.00	\$0.00
MPC Totals -						\$0.00	\$0.00	\$0.00
SA_SVC LEVEL AGREEMENT SW R2	36-Month Term	Preferred						
000000000000236781	SUPT ADV PREFERRED TRACKING REMOTE SITE SLA R2	1		36	\$0.00	\$0.00	\$0.00	\$0.00
MPC Totals -						\$0.00	\$0.00	\$0.00
SQRN: 28695						\$3,443.40	\$3,443.40	\$10,330.20
Sold To Totals -								



SAP Sold to: 0004563602
 FL: 0004563602
 Organization Code: B001
 Distribution Channel: 01
 Payer Ref Number: 0000000000
 FL Address:
 Orlando Orange Cty Expressway
 762 S GOLDENROD RD
 ORLANDO , FL 32822-8108

MPC/Material Code	Description	*Qty	Delayed Billing Date	Months	Monthly Unit Price	Initial Invoice Amount	*Estimated Subsequent Invoice Amount	*Estimated Total Price
Converged Software				36-Month Term	Remote Only Support 24x7			
000000000000170869	CM LSP SOFTWARE LIC S8300 MS LIC:DS	1			\$0.00	\$0.00	\$0.00	\$0.00
MPC Totals -						\$0.00	\$0.00	\$0.00
Converged Voice Products				36-Month Term	Remote Only Support 24x7			
000000000000170663	LINUX MEDIA SERVER MODEM	1			\$0.00	\$0.00	\$0.00	\$0.00
000000000000170900	MM710 T1/TE MEDIA MODULE	3			\$0.00	\$0.00	\$0.00	\$0.00
000000000000170901	MM760 VOICE OVER IP MEDIA MODULE	1			\$0.00	\$0.00	\$0.00	\$0.00
000000000700259898	AVAYA G700 MEDIA GATEWAY ASSEMBLY	1			\$0.00	\$0.00	\$0.00	\$0.00
000000000700463532	S8300D SERVER - NON GSA	1			\$0.00	\$0.00	\$0.00	\$0.00
MPC Totals -						\$0.00	\$0.00	\$0.00
SA CM SERVER SMALL				36-Month Term	Onsite 7x24			
000000000000230044	SA ON-SITE 24X7 SUPT CM SMALL SERVER 3YR AN PREPD	1		36	\$50.64	\$607.68	\$607.68	\$1,823.04
000000000700463532	S8300D SERVER - NON GSA	1			\$0.00	\$0.00	\$0.00	\$0.00
MPC Totals -						\$607.68	\$607.68	\$1,823.04
SA_AURA SW SUPPORT R6				36-Month Term	Preferred			
000000000000250581	SUPT ADV PREFERRED TRACKING REMOTE SITE AURATM R6	1		36	\$0.00	\$0.00	\$0.00	\$0.00
MPC Totals -						\$0.00	\$0.00	\$0.00
SA_AURA SW SUPPORT R7				36-Month Term	Preferred			
000000000000292934	SUPT ADV PREFERRED REMOTE SITE TRACKING AURA R7	1		36	\$0.00	\$0.00	\$0.00	\$0.00
MPC Totals -						\$0.00	\$0.00	\$0.00
SA_AV APP VRTL PLTRM SW R7				36-Month Term	Preferred			
000000000000293650	SA PREFER SUPT AAVP R7 SINGLE CPU EMBD SRV ENBL 3YR AN PREPD	1		36	\$3.86	\$46.32	\$46.32	\$138.96

MPC/Material Code	Description	*Qty	Delayed Billing Date	Months	Monthly Unit Price	Initial Invoice Amount	*Estimated Subsequent Invoice Amount	*Estimated Total Price	
000000000000293656	UPGRADE ADVANTAGE AAVP R7 SINGLE CPU EMBD SRV ENBL 3YR AN PREPD	1		36	\$0.89	\$10.68	\$10.68	\$32.04	
MPC Totals -						\$57.00	\$57.00	\$171.00	
SA_SVC LEVEL AGREEMENT		36-Month Term		Preferred					
SW R2									
000000000000236781	SUPT ADV PREFERRED TRACKING REMOTE SITE SLA R2	1		36	\$0.00	\$0.00	\$0.00	\$0.00	
MPC Totals -						\$0.00	\$0.00	\$0.00	
SQRN: 5539						Sold To Totals -	\$664.68	\$664.68	\$1,994.04



SAP Sold to: 0004563605
 FL: 0004563605
 Organization Code: B001
 Distribution Channel: 01
 Payer Ref Number: 0000000000
 FL Address:
 ORLANDO ORANGE CTY EXPRESSWAY
 8919 W COLONIAL DR
 OCOEE , FL 34761

MPC/Material Code	Description	*Qty	Delayed Billing Date	Months	Monthly Unit Price	Initial Invoice Amount	*Estimated Subsequent Invoice Amount	*Estimated Total Price
Converged Software				36-Month Term			Remote Only Support	
000000000000170869	CM LSP SOFTWARE LIC S8300 MS LIC:DS	1			\$0.00	\$0.00	\$0.00	\$0.00
MPC Totals -						\$0.00	\$0.00	\$0.00
Converged Voice Products				36-Month Term			Remote Only Support	
							24x7	
000000000000170663	LINUX MEDIA SERVER MODEM	1			\$0.00	\$0.00	\$0.00	\$0.00
000000000000170899	MM711 ANALOG MEDIA MODULE	2			\$0.00	\$0.00	\$0.00	\$0.00
000000000000170900	MM710 T1/TE MEDIA MODULE	2			\$0.00	\$0.00	\$0.00	\$0.00
000000000000170901	MM760 VOICE OVER IP MEDIA MODULE	1			\$0.00	\$0.00	\$0.00	\$0.00
000000000700259898	AVAYA G700 MEDIA GATEWAY ASSEMBLY	1			\$0.00	\$0.00	\$0.00	\$0.00
000000000700463532	S8300D SERVER - NON GSA	1			\$0.00	\$0.00	\$0.00	\$0.00
MPC Totals -						\$0.00	\$0.00	\$0.00
SA CM SERVER SMALL				36-Month Term			Onsite 7x24	
000000000000230044	SA ON-SITE 24X7 SUPT CM SMALL SERVER 3YR AN PREPD	1		36	\$50.64	\$607.68	\$607.68	\$1,823.04
000000000700463532	S8300D SERVER - NON GSA	1			\$0.00	\$0.00	\$0.00	\$0.00
MPC Totals -						\$607.68	\$607.68	\$1,823.04
SA_AURA SW SUPPORT R6				36-Month Term			Preferred	
000000000000250581	SUPT ADV PREFERRED TRACKING REMOTE SITE AURATM R6	1		36	\$0.00	\$0.00	\$0.00	\$0.00
MPC Totals -						\$0.00	\$0.00	\$0.00
SA_AURA SW SUPPORT R7				36-Month Term			Preferred	
000000000000292934	SUPT ADV PREFERRED REMOTE SITE TRACKING AURA R7	1		36	\$0.00	\$0.00	\$0.00	\$0.00
MPC Totals -						\$0.00	\$0.00	\$0.00
SA_AV APP VRTL PLTFRM SW R7				36-Month Term			Preferred	
000000000000293650	SA PREFER SUPT AAVP R7 SINGLE CPU EMBD SRV ENBL 3YR AN PREPD	1		36	\$3.86	\$46.32	\$46.32	\$138.96

MPC/Material Code	Description	*Qty	Delayed Billing Date	Months	Monthly Unit Price	Initial Invoice Amount	*Estimated Subsequent Invoice Amount	*Estimated Total Price
000000000000293656	UPGRADE ADVANTAGE AAVP R7 SINGLE CPU EMBD SRV ENBL 3YR AN PREPD	1		36	\$0.89	\$10.68	\$10.68	\$32.04
MPC Totals -						\$57.00	\$57.00	\$171.00
SA_SVC LEVEL AGREEMENT		36-Month Term		Preferred				
SW R2								
000000000000236781	SUPT ADV PREFERRED TRACKING REMOTE SITE SLA R2	1		36	\$0.00	\$0.00	\$0.00	\$0.00
MPC Totals -						\$0.00	\$0.00	\$0.00
Sold To Totals -						\$664.68	\$664.68	\$1,994.04
Grand Totals -						\$97,151.16	\$97,151.16	\$291,453.48

SQRN: 5539

CONSENT AGENDA ITEM

#18

MEMORANDUM

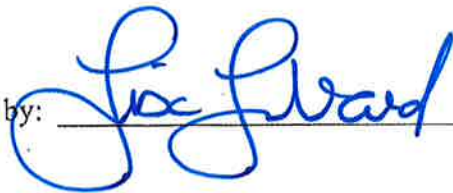
TO: CFX Board Members
FROM: Jeff Tecau, Managing Director, Protiviti
DATE: May 29, 2017
SUBJECT: Internal Audit Reports



Attached, please find the following 2017 Internal Audit Reports reviewed and accepted by the Audit Committee on March 29, 2017.

1. Prior Audit Recommendations: Semi-Annual Follow-Up
2. Procurement and Contract Billing Audit
3. Call Center Staffing Model Development (Memo)
4. Vendor Security Review

Reviewed by:



**Prior Audit Recommendations:
Semi-Annual Follow-up**



CENTRAL FLORIDA EXPRESSWAY AUTHORITY

Prior Audit Recommendations Follow-Up

January 2017

Internal Audit, Risk, Business & Technology Consulting

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Executive Summary

As part of the Fiscal Year 2017 Internal Audit plan, Internal Audit (IA) performed a review of open audit recommendations from prior audit reports to verify the implementation status reported by management. Open recommendations from the following audits were evaluated:

- 2010 Contracts Audit
- 2013 Toll Revenue Audit
- 2014 Maintenance & Safety Plan Audit
- 2015 Intelligent Transportation Security (ITS) Systems Security Review
- 2016 Contracts Audit
- 2016 ROW Legal Counsel Procurement & Invoice Audit
- 2016 Toll Revenue Audit
- 2017 Public Records Review

Internal Audit last reviewed the status of open audit recommendations in August 2016. Results were reported to the Audit Committee at that time.

This review was completed as of January 2017, and consisted of meetings with management to determine the status of open audit recommendations and performing testing of management's response and status. In addition, only those recommendations that remained open at the time of the last review have been included in this report. If a recommendation was completed as of August 31, 2016, no further work was performed and the recommendation was not included for review in this report.

Internal Audit did not include or follow-up on the recommendation and management action plan from the 2015 Sensitive Data Review. The management action plan was to move the sensitive data identified to an appropriate location or to delete the data. Confirmation that sensitive data was moved or deleted would require an additional project and re-scan of selected systems with a data loss prevention (DLP) tool.

Testing performed included inquiry with the employees responsible for completing the recommendations and obtaining documentation evidence to confirm management's reported status and explanation. In instances where the evidence obtained did not agree with management's status, discussions with management were held and the differences were resolved.

There were no instances where management and Internal Audit did not come to an agreement on the status of a recommendation.

Recommendations Summary

Audit	Open as of August 31, 2016	New Recommendations	Completed as of January 15, 2017	In Progress as of January 15, 2017*	Past Due
2010 Contracts Audit	1	0	1	0	0
2013 Toll Revenue Audit	1	0	0	1	1
2014 Maintenance & Safety Plan	1	0	1	0	0
2015 Intelligent Transportation Security (ITS) Systems Security Review	2	0	1	1	1
2016 Contracts Audit	1	0	1	0	0
2016 ROW Legal Counsel Procurement & Invoice Audit	1	0	1	0	0
2016 Toll Revenue Audit	1	0	0	1	1
2017 Public Records Review	0	8	2	6	0
Total	8	8	7	9	3

*9 recommendations are classified as "In Progress." 3 of these recommendations are considered "Past Due."

Summary of Past Due Management Action Plans

#	Audit	Internal Audit Recommendation	Management Action Plan	Responsible Party	Summary of Status as of January 15, 2017	Due Date
1	2013 Toll Revenue Audit	6. b) The Authority should also consider automating certain aspects of the Attendant's Shift Record log by integrating the unusual occurrence, violations, and insufficient fund transactions within the MLT system. This would reduce the subjectivity of the FTS auditor's interpretation of the manual ASR log.	The Authority currently has this recommendation as a function in the planned Toll System Replacement project that is currently ongoing at this time. The Authority would expect to have the new system in place and operating by July 1, 2015.	David Wynne, Director of Toll Operations	Per discussion with David Wynne, Director of Toll Operations, this recommendation will be implemented as a function in the planned Toll System Replacement (TSR) project. The work is in progress with Transcore and the first go-live date is scheduled for April 2017 in the Coral Hills plaza group based on the current status of the project.	Original: 7/1/15 Revised: 4/30/16 Revised: 1/31/17 Revised: 4/30/17
2	2015 Intelligent Transportation Security (ITS) Systems Security Review	7. Deploy a log aggregation tool to the environment.	ITS will research the feasibility of including this functionality into the current logging system "What's up Gold". Update July 21, 2015: Research complete. Implementation of Secure Information and Event Management solution pending upcoming organizational changes.	Corey Quinn, Chief of Technology/Operations	Per discussion with Bryan Homayouni, Manager of Traffic Operations, IT is in process of making improvements to the logging process. Therefore, additional time is required to complete the action plan.	Original: 6/30/15 Revised: 12/31/15 Revised: 6/30/16 Revised: 3/31/17 Revised: 11/30/17
3	2016 Toll Revenue Audit	We recommend that the Authority purchase new surveillance equipment that is compatible with its current operating system and allows for 30 days storage of surveillance data, at minimum, for retrieval as needed. We recommend that footage be recorded in digital format and maintained for a period of at least two weeks to one month based on leading practices. Additionally, the Authority should consider assigning the responsibility of periodic monitoring of the security cameras to EGIS to be performed at least weekly in order to improve monitoring of the mailroom and counting room where checks, cash, and money orders get processed.	The Authority will procure and deploy the needed equipment and EGIS will perform monitoring of the cameras at least weekly. The procurement of the system will be included in an upcoming camera installation project	Fred Nieves, Manager of E-PASS & Plaza Operations	Per discussion with Fred Nieves, Manager of E-PASS & Plaza Operations, and Mahmood Haq, Information Security Manager, procurement of cameras for use throughout the Authority's facilities to enhance security is being planned by the IT department. The cameras for the call center mail room and counting room will be included in this procurement. The work is currently scheduled to take place at the end of spring or early summer, so the due date was revised to accommodate the current project plan.	Original: 12/31/16 Revised: 3/31/17 Revised: 7/31/17

Appendix A

Recommendations Detail

**Contracts Audit
January 2011 Recommendations
Status of Recommendations**

Internal Audit Observation	Internal Audit Recommendation	Management Response	Management Action Plan	Responsible Party	Management Status at January 15, 2017	Testing Results	Due Date	IA Evaluation of Management's Status
<p>7. Account Adjustment Approval Limits in TRIMS: Section IV B in the scope of services section of the ACS contract indicates that personal E-PASS account adjustments over \$200 and commercial E-PASS account adjustments in excess of \$500 must be approved by an ACS manager in TRIMS. Currently, TRIMS is not configured to prevent the approval of adjustments to personal E-PASS accounts in excess of \$200 by CSC Supervisors. Internal Audit obtained all adjustments processed in TRIMS between August 1, 2009 and September 30, 2010 and noted that 93 of 140 adjustments to private accounts between \$200 and \$500 were approved in TRIMS by CSC Supervisors instead of a manager, as required.</p> <p>As a mitigating control, ACS indicated that all adjustments are reviewed by the Financial Analyst and Accounting Assistant, with the exception of voids, which should only be approved by CSC Managers in TRIMS. However, Internal Audit noted that 482 of 587 void adjustments were approved in TRIMS by CSC Supervisors.</p> <p>Furthermore, a CSC Manager or CSC Supervisor enters their PIN in TRIMS to approve adjustments; however, PINs are never changed which may result in the sharing of PINs between employees.</p> <p>Data analytics were performed related to the approval of adjustments in excess of \$200 to personal E-PASS accounts and \$500 to commercial E-PASS accounts and no adjustments were identified for additional follow-up; however, the strengthening of the controls related to the review and approval of adjustments in TRIMS may reduce the risk of fraud.</p>	<p>The Authority should utilize CSC Manager and CSC Supervisor passwords, rather than PINs, to approve adjustment transactions in TRIMS (passwords are required to be changed on a regular basis by the system).</p>	<p>The Authority concurs that moving to a password based approval is in its best interest. However, the change to a password based approval key would be a fairly significant change to the existing system. The current system is currently being reviewed for replacement as part of the Toll System Replacement (TSR) project. Making these changes now may be waste of valuable IT resources if the current system were to be disposed of in the near term. Based on the outcome of the TSR project the Authority would make this change as a part of a newly procured system or would be developed and implemented in the existing system once it was determined that we would be retaining the existing system.</p>	<p>Toll Operations will require passwords to be used for approvals in any new toll collection software procured by the Authority or its existing software if it is retained and that the password be changed on a regular basis by the system.</p>	<p>Mahmood Haq, Information Security Manager; David Wynne, Director of Toll Operations</p>	<p>Complete</p>	<p>Per discussion with David Wynne, Director of Toll Operations, and Mahmood Haq, Information Security Manager, IT implemented the password requirement to the production environment in November 2016. The password requirement was implemented for the TRIMS, TRAILS, SCWeb, VESWeb, and IVR applications. Internal Audit obtained e-mail correspondence from Nancy Ippolito, Senior Business Analyst, to CFX personnel notifying CFX of the system outage associated with deploying the change and that Supervisors and Managers must now use their EA Login password when approving Adjustments in TRIMS. Additionally, Internal Audit obtained TRIMS screenshots from Mahmood Haq, Information Security Manager, as evidence of the password implementation and requirements for regular password changes within the system.</p>	<p>Original: 12/31/13 Revised: 12/31/15 Revised: 3/31/16 Revised: 9/30/16 Revised: 12/31/16</p>	<p>Concur</p>

**Toll Revenue Audit
March 2013 Recommendations
Status of Recommendations**

Internal Audit Observation	Internal Audit Recommendation	Management Response	Management Action Plan	Responsible Party	Management Status at January 15, 2017	Testing Results	Due Date	IA Evaluation of Management's Status
<p>6. Potential Revenue Leakage: The potential extrapolated discrepancies in the toll collections audit highlighted above total approximately \$1,000 for the six month period ended December 2012. A root cause of this appears to be the manual nature of the Attendant's Shift Record used as a reconciling item during toll collections audits, for which third party contractor auditors are required to make assumptions as to what is being communicated by the TSA.</p> <p>Additionally, during the review of the toll collections audit, Internal Audit found that system purges and reverse run through transactions, system functions used to reset the toll lane if the lane server is out of sync, generates an expected revenue amount. Also the description on the Unusual Occurrence report for these transactions have the same overclass description as small vehicle transactions that do not engage the toll lane treadles. The third party contractor uses the Unusual Occurrence report to reduce the expected revenue for the system purges and reverse run through transactions, while maintaining the expected revenue related to the smaller vehicles that do not engage the treadles.</p> <p>Internal Audit performed a review of the overclass transactions (excluding purges, re-syncs, and reverse run throughs) and found that the third party contractor reversed the expected revenue inappropriately in 4 out of 25 transactions tested, an error rate of 13%. The potential extrapolated variance when applied to all overclass transactions for the six month period ended December 31, 2012 is estimated to be approximately \$700.</p>	<p>6. b) The Authority should also consider automating certain aspects of the Attendant's Shift Record log by integrating the unusual occurrence, violations, and insufficient fund transactions within the MLT system. This would reduce the subjectivity of the FTS auditor's interpretation of the manual ASR log.</p>	<p>Concur</p>	<p>The Authority currently has this recommendation as a function in the planned Toll System Replacement project that is currently ongoing at this time. The Authority would expect to have the new system in place and operating by July 1, 2015.</p>	<p>David Wynne, Director of Toll Operations</p>	<p>In Progress (Past Due)</p>	<p>Per discussion with David Wynne, Director of Toll Operations, this recommendation will be implemented as a function in the planned Toll System Replacement (TSR) project. The Request for Proposal (RFP) has been awarded and the new system is currently in development.</p> <p>Internal Audit obtained the System Requirements advertised as part of the RFP and determined specification 1.5.1.7.2.2 states the system should have drop down menu codes for unusual occurrences. Internal Audit determined the TSR project was awarded to TransCore, LP on 5/14/15 as evidenced by Board minutes. Per David Wynne, Director of Toll Operations, the work is in progress with Transcore and the first go-live date is scheduled for April 2017 in the Coral Hills plaza group based on the current status of the project.</p> <p>As part of Internal Audit's review of management status at 1/15/2017, Internal Audit obtained the TransCore monthly status report from December 2016 and the agenda for the January 2017 progress meeting from David Wynne, Director of Toll Operations. Based on the documents obtained project activities, deliverables/documentation, contract administration, and action items are discussed at least monthly with CFX and TransCore personnel.</p>	<p>Original: 7/1/15 Revised: 4/30/16 Revised: 1/31/17 Revised: 4/30/17</p>	<p>Concur</p>

**Maintenance and Safety Plan Compliance
April 2014 Recommendations
Status of Recommendations**

Internal Audit Observation	Internal Audit Recommendation	Management Response	Management Action Plan	Responsible Party	Management Status at January 15, 2017	Testing Results	Due Date	IA Evaluation of Management's Status
<p>1. Written Maintenance and Safety Procedures: The Authority's Maintenance and Safety activities follow the State of Florida and Federal guidelines and the Master Bond Resolution Covenants from a policy perspective. However, in regards to the method of accomplishing the applicable standards, there are no written procedures documenting the Authority's maintenance and inspection program. Written procedures are an integral component of the infrastructure surrounding each critical business process. Procedures help govern, in writing, the actions necessary to fulfill the organization's policy for operations. Procedures provide guidance in the pursuit of achieving the objectives of the process, help reduce misunderstanding, and increase distribution of pertinent information to those involved in the process.</p>	<p>The Authority should develop written "desktop" procedures that clearly document key aspects of the Authority's maintenance and inspection program, including: Internal procedures for managing and maintaining the Authority's roadways and bridges, Asset tracking, Role of third party maintenance & inspections agreements (scheduling of inspections, repairs, and replacements; outputs of preventative maintenance), Maintenance contract performance monitoring, Work order, maintenance request, and deficiency response deadlines, Incidence and Emergency Response process, and the GEC Annual Inspection process.</p>	<p>Concur</p>	<p>The Authority will develop written procedures to document the pertinent aspects of the Authority's maintenance and inspection operations in regards to bridges, overhead structures, and roadways.</p>	<p>Claude Miller, Director of Maintenance</p>	<p>Complete</p>	<p>Per discussion with Claude Miller, Director of Maintenance, procedures to document the pertinent aspects of CFX's maintenance and inspection operations in regards to bridges, overhead structures, and roadways were approved by the Director of Maintenance and implemented as of 10/1/16. Internal Audit obtained a copy of the Quick Reference guide for Roadway, Bridge, and Facilities Maintenance from Claude Miller, Director of Maintenance, as evidence of implementation. IA determined through inspection that the procedures include management and maintenance for CFX roadways and bridges, asset tracking, third party agreements, performance monitoring, work orders/maintenance requests, deficiency responses, emergency response processes, and GEC Annual Inspections were addressed in the new desktop procedures.</p>	<p>Original: 12/31/14 Revised: 12/31/15 Revised: 10/1/16</p>	<p>Concur</p>

**Intelligent Transportation Systems Security Review
February 2015 Recommendations
Status of Recommendations**

Internal Audit Observation	Internal Audit Recommendation	Management Response	Management Action Plan	Responsible Party	Management Status at January 15, 2017	Testing Results	Due Date	IA Evaluation of Management's Status
1. Access to Roadside Equipment: Improvement opportunities exist surrounding access to ITS network equipment on the roadways.	1. Review the feasibility of deploying a stronger access control tool to the ITS network roadside equipment.	Concur	ITS will develop a plan to implement a stronger access control.	Corey Quinn, Chief of Technology/Operations	Complete	Per discussion with Bryan Homayouni, Manager of Traffic Operations, a stronger access control mechanism has been installed on all roadside equipment.	12/31/16	Concur
7. Log Configuration: Improvement opportunities exist surrounding aggregation and correlation of logs for equipment in the ITS network.	7. Deploy a log aggregation tool to the environment.	Concur	ITS will research the feasibility of including this functionality into the current logging system "What's up Gold". Update July 21, 2015: Research complete. Implementation of Secure Information and Event Management solution pending upcoming organizational changes.	Corey Quinn, Chief of Technology/Operations	In Progress (Past Due)	Per discussion with Bryan Homayouni, Manager of Traffic Operations, IT is in process of making improvements to the logging process. Therefore, additional time is required to complete the action plan.	Original: 6/30/15 Revised: 12/31/15 Revised: 6/30/16 Revised: 3/31/17 Revised: 11/30/17	Concur

Contracts Audit
January 2016 Recommendations
Status of Recommendations

Internal Audit Observation	Internal Audit Recommendation	Management Response	Management Action Plan	Responsible Party	Management Status at January 15, 2017	Testing Results	Due Date	IA Evaluation of Management's Status
<p>The Authority has policies and procedures to authorize the use of subcontractors by vendors. Subcontractors may be approved through (1) inclusion in the vendor proposal and bid or (2) the completion of an "Authorization to Subcontract" form. The "Authorization to Subcontract" form can be approved by the Procurement Director for amounts up to \$25,000 and requires Board Approval for any amount in excess of \$25,000. The Jorgensen contract states that all subcontractors intended to be utilized by Jorgensen must be approved by the Authority in advance.</p> <p>Jorgensen utilized twenty-six subcontractors since the inception of the contract. Of those twenty-six subcontractors, five were disclosed in the original proposal and contract approved by the Board. Jorgensen did not complete the "Authorization to Subcontract" request for the remaining twenty-one subcontractors. In addition, eight of the twenty-one subcontractors were paid amounts in excess of \$25,000, which required Board approval.</p>	<p>The Authority should utilize a vendor billing compliance checklist (similar to one employed for construction and engineering contracts) to allow for monitoring of the use of subcontractors. A listing of authorized subcontractors should be included in the checklist and the checklist should be used to track the approval of new. The contractor should also be required to submit a detail of the use of subcontractors with each vendor invoice.</p>	<p style="text-align: center;">Concur</p>	<p>Contract Specialists within the maintenance department will implement the use of a "Subcontractor Status Report" as part of monthly checklist of contract requirement monitoring and require the vendor to provide the listing of subcontractors along with their monthly invoice. Additionally, the Contract Specialist will compare the listing provided against the subcontractor approval forms submitted to confirm compliance. The Contract Specialist will also maintain a spreadsheet of subcontractor use and seek Board approval if the amounts approach \$25,000.</p>	<p style="text-align: center;">Claude Miller, Director of Maintenance</p>	<p style="text-align: center;">Complete</p>	<p>Per discussion with Claude Miller, Director of Maintenance, and Carrie Baker, Contract Support Specialist, the Asset Maintenance/Routine Inspection Monthly Subcontractor Status Report was created and sent out to prime contractors. IA obtained the January 2016 Monthly Subcontractor Status Report from Jorgensen Contract Services, LLC, and noted through inspection that the Report tracks subcontractors used, M/W/DBE status, total anticipated expenditures, actual expenditures, length of sublet, and amount and percentage paid to date for each subcontractor. Per discussion with Carrie Baker, Contract Support Specialist, the Status Report is reviewed by the Contract Specialist for compliance with Subcontractor Approval policies. Per discussion with Claude Miller, Director of Maintenance, the Director of Maintenance reviews the report for reasonableness of expenditures, and notes that the contractor is required to request Board approval if expenditures approach the \$25,000 limit. In the event that expenditures exceed the \$25,000 limit and the subcontractor has not previously notified the Contract Support Specialist or the Director of Maintenance, CFX will immediately request Board approval prior to payment. IA noted per inspection of the Status Report that two subcontractors were noted as missing approval. IA obtained the Request for Authorization to Sublet Services for Dive Tech International and MK Guardrail, Inc., the last outstanding subcontractor approvals.</p>	<p style="text-align: center;">Original: 2/1/2016 Revised: 4/1/16 Revised: 12/31/16</p>	<p style="text-align: center;">Concur</p>

**ROW Legal Counsel Procurement & Invoice Audit
February 2016 Recommendations
Status of Recommendations**

Internal Audit Observation	Internal Audit Recommendation	Management Response	Management Action Plan	Responsible Party	Management Status at January 15, 2017	Testing Results	Due Date	IA Evaluation of Management's Status
<p>Based on Transportation Infrastructure Finance and Innovation Act (TIFIA) loan requirements, the Authority submits a monthly report of project costs to the Federal government and will be required to report final costs for the project in order to obtain the TIFIA loan funding. During the audit, we reviewed various sources of Right of Way data, including the Right of Way Committee minutes, Excel tracking files from outside legal counsel, and the monthly TIFIA reports, and identified multiple instances of inaccurate or inconsistent data between sources. Specifically, the TIFIA reports contained formula errors, data that was incorrectly rolled forward from month-to-month, in addition to classification issues for closed parcels that were listed as open. Of most concern were inaccuracies identified in the TIFIA reports that are designed to track project costs for later funding from the Federal government. There are multiple parties involved in creating and reviewing the TIFIA reports, including Legal Counsel and Finance personnel, which all input or review parts of the report. It is critical that the data in the TIFIA reports be kept complete and accurate for monitoring and reporting purposes. There is an opportunity to improve the quality and reliability of the data gathered for presentation in the TIFIA reports.</p>	<p>The Authority should formalize its quality assurance/quality control process by assigning a process owner(s) responsible for compiling TIFIA data, reconciling TIFIA data to source documents, and verifying the completeness and accuracy of the information included in the monthly TIFIA reports. Additionally, there is an opportunity to centralize Right of Way activity into one spreadsheet or database in order to minimize (or eliminate) the maintenance and monitoring of multiple sources of information.</p>	<p>Concur</p>	<p>Initially, each Right of Way outside counsel or responsible party within the Authority will confirm the amount paid in the cumulative payments columns of the monthly TIFIA reports to ensure accuracy of the current spreadsheet. If there is a discrepancy identified, the responsible party will research and correct the discrepancy in the TIFIA reports. Going forward, each firm or responsible party will prepare a separate monthly TIFIA report summarizing the activity in the parcels assigned to that firm. The Accounting Department will audit the spreadsheets for accuracy using source documentation, which will be made available to the party responsible for performing the review of the spreadsheets.</p>	<p>Linda Lanosa, Deputy General Counsel Michael Carlisle, Director of Accounting and Finance</p>	<p>Complete</p>	<p>Per discussion with Linda Lanosa, Deputy General Counsel, each firm/responsible party creates their own separate monthly TIFIA report summarizing the activity in the parcels assigned to them. Each firm/responsible party certifies that the monthly TIFIA report contains accurate information and acknowledges that the information will be relied upon for the Authority's reporting requirements. Internal Audit obtained examples of the signed acknowledgment form for each responsible party. Per discussion with Mike Carlisle, Director of Accounting and Finance, Accounting conducts an additional review of the relocation costs, CFX parcels, the Lowndes parcels, the Shutts & Bowen reports, and Winderweelde reports for agreement to actual amounts paid in the cumulative payments columns of each monthly TIFIA report. Any discrepancies are resolved through discussion with Legal Counsel or each firm/responsible party as needed. Additional review considerations are documented in the TIFIA Project Status Report Verification Steps checklist to ensure consistent review across multiple periods and personnel. Internal Audit obtained e-mails between Michael Carlisle, Director of Accounting and Finance, and Linda Lanosa, evidencing review of each monthly TIFIA report, and obtained the TIFIA Project Status Report Verification Steps checklist as evidence of procedures performed by Accounting. Once comments or changes are incorporated, the report is provided to Scott Bear, CH2M Hill Consultant.</p> <p>Per discussion with Scott Bear, CH2M Hill Consultant, he receives the monthly reports from the external counsel and other responsible parties and he compiles the reports for review by the Authority. Per discussion with Michael Carlisle, Director of Accounting and Finance, review entails agreement to the GL via CFX accounting software (EDEN) and agreement of rollover balances to previous reports, if applicable. Per discussion with the Manager of Accounting and Finance, several rounds of comments and revisions are generally required to account for corrections and adjustments. Internal Audit inspected the January 2017 compiled reports and noted that review by the Director of Accounting and Finance was ongoing. Once comments or changes are incorporated by the CH2M Hill Consultant, the report is provided to Glenn Pressimone, Director of Engineering. Glenn reviews and approves before the compiled report is submitted to the TIFIA contact.</p>	<p>Original: 8/1/16 Revised: 1/31/17</p>	<p>Concur</p>

**Toll Revenue Audit
March 2016 Recommendations
Status of Recommendations**

Internal Audit Observation	Internal Audit Recommendation	Management Response	Management Action Plan	Responsible Party	Management Status at January 15, 2017	Testing Results	Due Date	IA Evaluation of Management's Status
<p>All check, cash, money order transactions received via mail are processed in the back office mailroom or counting room located at the Authority's headquarters. To allow monitoring of the processing and handling of payments, the mailroom and the counting room are under video camera surveillance.</p> <p>Based on inquiry of EGIS management and Authority IT personnel, camera surveillance is not being actively monitored by either party and the camera footage is not digitally stored and available for retrieval. The IT department indicated that the camera storage system became obsolete when the Authority upgraded to the Windows 7 operating system due to compatibility issues. Management was aware of the obsolete camera system and made a business decision to not upgrade the system at the time.</p>	<p>We recommend that the Authority purchase new surveillance equipment that is compatible with its current operating system and allows for 30 days storage of surveillance data, at minimum, for retrieval as needed. We recommend that footage be recorded in digital format and maintained for a period of at least two weeks to one month based on leading practices. Additionally, the Authority should consider assigning the responsibility of periodic monitoring of the security cameras to EGIS to be performed at least weekly in order to improve monitoring of the mailroom and counting room where checks, cash, and money orders get processed.</p>	<p style="text-align: center;">Concur</p>	<p>The Authority will procure and deploy the needed equipment and EGIS will perform monitoring of the cameras at least weekly. The procurement of the system will be included in an upcoming camera installation project</p>	<p style="text-align: center;">Fred Nieves, Manager of E-PASS & Plaza Operations</p>	<p style="text-align: center;">In Progress (Past Due)</p>	<p>Per discussion with Fred Nieves, Manager of E-PASS & Plaza Operations, and Mahmood Haq, Information Security Manager, procurement of cameras for use throughout the Authority's facilities to enhance security is being planned by the IT department. The cameras for the call center mail room and counting room will be included in this procurement. The work is currently scheduled to take place at the end of spring or early summer, so the due date was revised to accommodate the current project plan.</p>	<p style="text-align: center;">Original: 12/31/16 Revised: 3/31/17 Revised: 7/31/17</p>	<p style="text-align: center;">Concur</p>

**Public Records Review
January 2017 Recommendations
Status of Recommendations**

Internal Audit Observation	Internal Audit Recommendation	Management Response	Management Action Plan	Responsible Party	Management Status at January 15, 2017	Testing Results	Due Date	IA Evaluation of Management's Status
<p>CFX has a records management policy in place and a records management plan, which was created in 2011 by a third-party consultant to provide long-term, forward-looking guidelines and recommendations for governing CFX's records management program. The CFX records management policy contains portions of the records management plan.</p> <p>CFX does not have a records management procedural document that provides the detailed records management practices that are currently in place.</p> <p>Policies should contain clear, simple statements of how an organization or entity intends to conduct its operations and provide a set of guiding principles to help management with decision making, while procedures should help govern the actions necessary to fulfill the organization's policies for operations. Procedures containing an appropriate level of detail can help reduce misunderstanding and increase distribution of pertinent information to those involved in the process.</p>	<p>CFX should consider revising the records management policy to clearly state the direction of the Records Management function and create separate "desktop" procedures that clearly define and document key aspects of CFX's records management activities that are currently in place, including, but not limited to the following:</p> <p>Record Coordinator procedures by department Frequently used GS1-SL Retention Schedules by department and any departures from the GS1-SL Retention Schedule for specific records Barcode and database tracking process for offsite storage of records Public records request tracking and quality control review process Use of the records management database and email search tool for public records requests Exemptions to public records law that are frequently used and/or relevant to CFX's business Examples of confidential information that should not be disclosed in response to a public records request</p> <p>Methods for electronic records retention: Preservation process for permanent public records Public records destruction process</p>	Concur	CFX will develop a revised policy and desktop procedures based on the recommendations in this report and the new records management plan from the third-party consultant.	Michelle Maikisch, Chief of Staff	In Progress	Per discussion with Michelle Maikisch, Chief of Staff, policies and desktop procedures are currently under development and are expected to be completed by the due date.	Policy revision - 6/30/17 Desktop procedures - 6/30/18	Concur
<p>CFX policy requires that all employees complete an annual public records training, which is currently accomplished in conjunction with Ethics and Sunshine Law training provided by the CFX Legal department. The Manager of Public Records receives additional training to ensure the employee has the appropriate knowledge and skills to serve as the Records Management Liaison Officer.</p> <p>In addition, CFX selects Record Coordinators within each department to work with the Manager of Public Records to ensure departmental public records are managed in compliance with Florida Public Records Law. The Record Coordinators perform a key role in the organization's public records management processes. However, specialized training for Record Coordinators is not in place.</p>	<p>Management should implement an annual public records management training program for the Record Coordinator role. The training should include the following, at a minimum:</p> <p>Internal processes and expectations for Record Coordinators Application of Florida Public Records Law to accomplish assigned responsibilities Exemptions and confidential information per Florida Public Records Law as applicable to the individual departments Upcoming public records related projects Opportunities to discuss challenges and questions related to the Record Coordinator role</p>	Concur	CFX will develop a formalized training process for the Record Coordinators with the assistance of the records management consultant. Training will be in addition to the basic public records training for all employees and will include detail specific to their role and responsibilities as Record Coordinators.	Michelle Maikisch, Chief of Staff	In Progress	Per discussion with Michelle Maikisch, Chief of Staff, the formalized training process for Record Coordinators is currently under development and is expected to be implemented by the due date.	12/31/17	Concur
<p>Although CFX's IT department built a custom Access Database for the Records Management department to store and retrieve location data for hard copy public records, it is no longer supported or maintained by the IT department (although it is stored on the Network File Share and subject to normal backup processes). Due to this, the Records Management department, the users of the database, have experienced issues and errors accessing the information contained within the database including:</p> <p>Reliance on web search results in order to troubleshoot problems with the database. Orphaned data that points to records that no longer exist, or have already been destroyed. Data integrity issues, such as the incorrect modification of the retention schedule of all records (which was changed to "retain permanently" for all documents). Unnecessary custom queries, tables, and search forms built approximately 10 years ago that affect the user interface and performance of the Access Database.</p>	CFX should consider migrating the current Access Database to a records management tool designed for this purpose. The selected tool should be provisioned and managed by the IT department, and should include a user-friendly interface, such as a web-based front end application to allow the Records Management department to access the information needed to fulfill public records requests. CFX should also consider contacting the offsite storage vendor to determine if they have a records management tool that can be leveraged to query, retrieve, and maintain records.	Concur	CFX will research solutions to replace the records management database and will include the procurement of a new database in the budget for next fiscal year.	Michelle Maikisch, Chief of Staff Corey Quinn, Chief of Technology/Operations	In Progress	Per discussion with Corey Quinn, Chief of Technology/Operations, research for solutions to replace the records management database is ongoing. CFX is currently attempting to leverage systems already in place, but turnover within the IT department may delay the project. Michelle Maikisch, Chief of Staff, was added to the IT Steering Committee and is currently attempting to hire a new staff member within IT to support the records management database.	6/30/18	Concur


**Public Records Review
January 2017 Recommendations
Status of Recommendations**

Internal Audit Observation	Internal Audit Recommendation	Management Response	Management Action Plan	Responsible Party	Management Status at January 15, 2017	Testing Results	Due Date	IA Evaluation of Management's Status
<p>CFX utilizes the Smarsh application to collect and store text messages sent to or from CFX cellular telephones. Due to the configuration of Apple devices, any text message sent between two Apple devices (e.g. iPhone to iPhone), whether the message is between two CFX employees or between CFX and an external party, is not captured in the Smarsh application. This is due to the manner in which the iMessage communication platform was designed by Apple.</p> <p>Once the issue of record retention specific to Apple device messaging was identified, CFX's IT department quickly escalated the concern with the Smarsh application vendor. The solution provided by Smarsh included turning off the iMessage feature on each enrolled Apple device so that messages are forced to use Short Message Service (SMS) or Multimedia Messaging Service (MMS) instead of iMessage. The request to make this configuration change has been distributed to CFX's user base, and at the time of the audit, was completed for all iPhone users within the environment.</p>	<p>Management should update user procedures for CFX connected devices to include the requirement to keep iMessage turned off. Management should also enhance the current mobile phone provisioning process and related procedures to include a step for turning off iMessage on Apple devices before they are issued to the user.</p> <p>Management should consider the following options to monitor compliance with the procedures and ensure collection of text message records: Develop a manual process to periodically review user settings on enrolled Apple devices Implement "parental controls" on enrolled devices with a password known by two CFX IT employees Implement a mobile device management (MDM) tool to automate the control process</p>	Concur	<p>Management is completely confident that due to the redundancy of safeguards currently in place that all text messages are retrievable. Notwithstanding, management agrees to implementing additional layers of safeguards.</p>	Corey Quinn, Chief of Technology/Operations	In Progress	<p>Per discussion with Corey Quinn, Chief of Technology/Operations, CFX removed iMessage capabilities from CFX devices in November 2016. The review of Vendor MDM capabilities and procedure updates are currently ongoing and are expected to be completed by the due date.</p>	<p>Turn off iMessage capability - 11/30/16 (Complete)</p> <p>Procedure Updates - 6/30/17</p> <p>Review Vendor MDM Capabilities - Original: 3/31/17</p> <p>Revised: 11/30/17</p>	Concur
<p>The CFX Board is comprised of government employees and three gubernatorial appointed citizens. The gubernatorial appointed citizens serving on the CFX Board have been provided CFX electronic mail (email) addresses, which helps with record collection and retention for compliance with Florida Public Records law. However, Board members do not serve on committees, and instead appoint representatives to serve in their place. The non-government citizens serving at the Committee level have not been provided with CFX email addresses, creating greater opportunity for emails regarding agency business to be sent outside of CFX's Exchange deployment, leaving them absent from the public records files or CFX-established records retention schedules.</p>	<p>CFX should assign a CFX email address to each non-government Committee member and should communicate the expectation that all agency business be conducted using this email address. If this is not possible, CFX should consider requiring that any email messages related to agency business conducted outside of a CFX email address be forwarded to a designated CFX address for collection and retention.</p>	Concur	<p>CFX will issue email addresses to the non-government committee members and will require committee members to utilize the email address for agency business or to forward all related emails to the address for collection and retention.</p>	Michelle Malkisch, Chief of Staff	Complete	<p>Per discussion with Michelle Malkisch, Chief of Staff, CFX e-mail addresses have been issued to non-government committee members, and non-government committee members have been instructed to utilize the e-mail addresses for CFX business or to forward all related e-mails to the address for collection and retention. IA obtained the Help Desk ticket requesting the creation of the e-mail addresses as well as a copy of the e-mail distributed to non-government committee members explaining the e-mail requirements and providing instructions on how to access the e-mail address.</p>	12/31/17	Concur
<p>To aid in tracking the movement, storage, and retrieval of paper records, when records are ready to be sent to the offsite storage vendor for retention, barcodes are issued to Record Coordinators or custodians by the Records Management department. The Record Coordinator or custodian completes and returns a box inventory form to Records Management, which identifies the records within the box, attaches the barcode, and sends the box to offsite storage. The Records Management department enters the detailed box contents into the records management database, by barcode, for record tracking and retrieval purposes. All available and issued barcodes are tracked by Records Management in Excel, but Records Management does not currently follow up on the status of barcodes where no box inventory form was returned and does not confirm receipt of the box by the offsite storage vendor.</p> <p>During the audit, one instance was identified in which a barcode was issued to a Record Coordinator ten months prior but could not be located in the records management database, indicating that the box inventory form was not returned to Records Management. The box was subsequently located onsite; however, inadequate tracking of barcodes, box inventory forms, and receipt of boxes by the offsite storage vendor increases the risk of undetected loss and an inability to subsequently comply with any public records request specific to those records.</p>	<p>To improve the tracking process of public record boxes, Records Management should perform a monthly reconciliation of the barcodes issued, box inventory forms received, and boxes received by the offsite storage vendor. CFX may consider including a barcode tracking tool in the records management database and developing reports to facilitate and formalize the tracking and reconciliation processes for records sent to the offsite vendor for storage.</p>	Concur	<p>CFX will implement the monthly reconciliation process as recommended.</p>	Michelle Malkisch, Chief of Staff	Complete	<p>Per discussion with Michelle Malkisch, Chief of Staff, a monthly reconciliation process of the barcodes issued, box inventory forms received, and boxes received by the offsite storage vendor has been implemented. Internal Audit obtained and reviewed the most recent monthly reconciliation of barcodes from the Chief of Staff as evidence of implementation.</p>	3/31/17	Concur

**Public Records Review
January 2017 Recommendations
Status of Recommendations**

Internal Audit Observation	Internal Audit Recommendation	Management Response	Management Action Plan	Responsible Party	Management Status at January 15, 2017	Testing Results	Due Date	IA Evaluation of Management's Status
<p>Although a records retention schedule is clearly defined in policies, electronic records are not being destroyed according to the retention schedule. Currently, CFX is permanently retaining records for the following digital technologies with no defined procedures or technology in place to guide destruction beyond the required retention limits:</p> <ul style="list-style-type: none"> • Microsoft Exchange (electronic mail, calendar, and contacts) • Smarsh (text messages) • Network Shared Drive (electronic documents and other records) • SharePoint (electronic documents and other records) <p>CFX's Records Management Policy and Public Records Training are documented and establish the records retention schedule. The training states that "a public record may only be destroyed or disposed of in accordance with the retention schedules", and "after the retention period, public records that are no longer needed must be systematically disposed".</p> <p>Florida Administrative Code 1B-24.003(1)(a) states that "Retention periods are determined by the content, nature, and purpose of records, and are set based on their legal, fiscal, administrative, and historical values, regardless of the format in which they reside or the method by which they are transmitted." This means that certain emails or text messages may need to be retained longer than others based on their content.</p>	<p>Review existing policies and procedures surrounding the disposition or destruction of documents to ensure they provide sufficient detail around record retention and destruction.</p> <p>Develop an approach to destroy records from the systems they are stored within (such as Smarsh, Exchange, SharePoint, Shared Drives, etc.) once their retention schedule has been met. To facilitate this, consider developing a method within each digital technology instance to classify records and document their associated destruction date according to the retention schedule and Authority policy.</p> <p>The timely destruction of public records once retention is met would help reduce electronic and manual resource requirements and associated costs to store records. In addition, public records held beyond the retention period would need to be produced in the event of a public record request. Timely destruction of records could reduce labor requirements for the discovery of items that should have been destroyed in the event of a sizeable public record request.</p> <p>Specific to Microsoft Exchange, CFX should consider the following actions to assist in managing email correspondence so emails can be categorized and destroyed when necessary:</p> <p>Set mailbox limits that automatically delete messages after a pre-determined period of time</p> <p>Restrict the creation of .PST files so that all messages reside within user's inbox (and not on their local machine)</p> <p>Create a "vault" to store important emails that must be kept for a certain number of days on each user's inbox, and outline the type of content within emails that would warrant the message to be placed within the "vault". This "vault" would not be subject to the automatic delete processes outlined above so that all messages that must be kept are secured and can be retrieved when necessary.</p> <p>CFX may consider implementing an email management tool that does the above and allows for categorization of emails by retention schedule.</p>	<p>Concur</p>	<p>CFX will establish a systematic destruction process for each type of electronic technology. The process will be documented in the policies and desktop procedures. CFX will explore email management tools available to assist with the destruction process.</p>	<p>Michelle Maikisch, Chief of Staff</p>	<p>In Progress</p>	<p>Per discussion with Michelle Maikisch, Chief of Staff, research into e-mail management tools available to assist with the destruction process is ongoing. The systematic destruction process is expected to be established by the due date.</p>	<p>6/30/18</p>	<p>Concur</p>
<p>Florida Regulation 1B-24.003(10) requires all destruction of public records be conducted in a manner that safeguards the interests of the state and safety, security and privacy of individuals. The current CFX process is to have a witness present during onsite or offsite destruction of public records, which helps ensure compliance with the statute. Per CFX's contract with its offsite storage vendor, the vendor must complete a Certificate of Destruction each time records are destroyed, which is to include the name of the person performing destruction and the name of the witness. However, during the audit, upon inspection of these Certificates of Destruction, the names of the people performing the destruction and the name of the witness were not consistently documented on the Certificates of Destruction submitted to CFX.</p>	<p>CFX should contact its offsite storage vendor and request compliance with the contract terms through timely submission of complete Certificates of Destruction. In addition, CFX should implement a consistent management review control to check the completeness of Certificates of Destruction as received to verify the information provided is in accordance with the contractual requirements.</p>	<p>Concur</p>	<p>CFX will review the contractual requirements with the offsite storage vendor and will review future certificates to ensure the person performing destruction and the name of the witness are included.</p>	<p>Michelle Maikisch, Chief of Staff</p>	<p>In Progress</p>	<p>Per discussion with Michelle Maikisch, Chief of Staff, the contractual requirements for the offsite storage vendors have been reviewed, and future certifications will include the person performing the destruction and the name of the witness. CFX has not conducted a destruction since the implementation of the action plan, therefore evidence was not available at the time of the follow-up meeting. IA will obtain certificates of the next destruction performed by CFX as evidence of implementation.</p>	<p>3/31/17</p>	<p>Concur</p>

Procurement and Contract Billing Audit



FISCAL 2017 CONTRACT AUDITS

February 2017

**CENTRAL
FLORIDA
EXPRESSWAY
AUTHORITY**

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EXECUTIVE SUMMARY

Overview / Objectives / Scope and Approach

Overview

In accordance with the 2017 Internal Audit Plan, Internal Audit audited three (3) contracts with a combined contract value exceeding \$53,967,000 from a population of currently active, large engineering, service, maintenance, operations, and construction projects.

Objectives

The objectives of this audit were to (1) audit the accuracy of items billed to CFX in accordance with contract terms and conditions, and (2) identify and test key processes and controls related to contract bidding and execution, budgeting, billing, project oversight, reporting, and supplemental agreement management.

Project Scope and Approach

This audit was performed using a four-phased approach as outlined below:

Phase I – Contract Analysis and Selection

To select contracts for audit, Internal Audit obtained a listing of all active contracts with CFX and identified a short-list of contracts for audit after interviewing management and performing a risk analysis based on contract size, duration, terms and conditions, and nature of the work performed. The following contracts were selected for audit as approved by the Audit Committee:

- 1. Superior Construction Company, Southeast LLC (#001061)** – Contract for construction of S.R. 429 (Wekiva Parkway) from north of Ponkan Road to north of Kelly Park Road. This contract began in August 2015 and has a current contract value of approximately \$46.6 million. Per CFX's accounting system (Eden), expenditures to date at the time of this audit totaled approximately \$27.9 million.
- 2. WBQ Design & Engineering, Inc. (#000817)** – Contract for miscellaneous design consulting services related to highway and bridge design, traffic engineering studies, intelligent transportation systems analysis and design, signing, pavement marking and channelization, soil exploration, geotechnical lab testing, foundation studies, and architecture. This contract began in December 2011 and has a current contract value of approximately \$6.6 million. Per Eden, expenditures to date at the time of this audit totaled approximately \$5.3 million.
- 3. Precision Contracting Services (#000990)** – Contract for maintenance of CFX's fiber optic network, both current structures and future expansions. Services provided include network troubleshooting, repairs, remote monitoring and diagnostics, field investigation of OSP Issues, equipment and cable OSP procurement and installation, and change control. This contract began in March 2017 and has a total contract value of approximately \$725,000. Per Eden, expenditures to date at the time of this audit totaled approximately \$382,000.

Continued on the following page....

EXECUTIVE SUMMARY

Overview / Objectives / Scope and Approach *(continued)*

Phase II – Processes and Controls Review

Internal Audit performed procedures to review CFX's processes related to procurement, contract administration, project and cost management, and supplemental management agreement. Key controls within each of these areas were identified and tested for each contract selected in Phase I. Detailed regarding the procedures performed, results, and observations are provided on the following pages and in Appendix A.

In August 2016, Internal Audit completed a review open prior year Contracts Audit recommendations and verified that all have been incorporated into practice and policy, with the exception of the implementation of a "Subcontractor Status Report" which is scheduled for completion in early 2017. Prior year observations were also considered and incorporated into this year's Contracts Audit approach to verify that prior years findings were resolved and are not prevalent in the contracts selected for fiscal year 2017 Contracts Audit testing.

Phase III – Contract Specific Audit Procedures

Internal Audit performed detailed procedures to review contract terms, costs billed to CFX, and other key attributes for each of the contracts selected for audit. The contracts selected, value, spend to date, sample tested, and percentage of spend tested are outlined below:

Contract	Contract Value	Spend to Date [1]	Sample Tested [2]	% Spend Tested
Superior Construction Company, Southeast LLC	\$46,593,297	\$27,860,478	\$ 11,976,406 [3]	43%
WBQ Design & Engineering, Inc.	\$6,650,000	\$5,302,868	\$ 2,972,673	56%
Precision Contracting Services	\$724,590	\$381,696	\$ 173,143	45%

[1] As of September 6, 2016

[2] Invoices were selected for testing using judgmental sampling. A detail of all invoices paid to date was obtained and analyzed on a month over month basis to select samples for testing. The invoices selected were tested for compliance with contract terms and conditions.

[3] Samples were judgmentally selected to include items such as unit quantities, fuel price adjustments, bituminous mix adjustments, and Owner Direct Material Purchases ("ODMP") billed to CFX across several months of the project.

Phase IV – Reporting and Deliverables

Internal Audit prepared this report for management review and comment and for issuance to CFX's Audit Committee.

SUMMARY OF PROCEDURES PERFORMED AND RESULTS

Process Areas / Procedures / Controls Tested

For the contracts selected for audit, Internal Audit identified risks and tested key controls within the process areas outlined below. Where applicable, a sample of detailed project costs was reviewed and tested for compliance with contract terms and conditions. The table below provides an overview of the areas reviewed for each contract audit. Further detail related to the specific procedures performed is provided in Appendix A.

Process	Procedures Performed / Key Areas Reviewed	Total Controls Tested	Number of Observations	Observation Reference
Procurement	Project funding and bid authorization, project bidding (sealed bids and competitive sealed proposals), bid awards, bid bond requirements, and contract renewals.	25	0	N/A
Contract Administration	Contract terms and conditions, insurance, bond and permitting requirements, and minority and women owned business ("MWBE") requirements.	10	2	1, 2
Project & Cost Management	Invoice processing, project planning, scheduling, quality control, subcontract management, cost management, owner direct material purchases ("ODMP") management, and project reporting.	36	0	N/A
Supplemental Agreement Management	Supplemental agreement review, approval, and execution.	9	0	N/A
TOTALS:		80	2	

DETAILED OBSERVATIONS

Observation 1 – Payment to Ineligible Subcontractors

Relative Priority

Medium

Requirements

Contract Administration

Project & Cost Management

Supplier/Internal Agreement Management

Contract(s): Superior Construction Co.

Observation

The construction of S.R. 429 (Wekiva Parkway) is being financed with a Federal loan, with requirements to follow Federal guidelines for including specific costs incurred by Disadvantaged Business Enterprise (DBE) firms. As a result, Superior Construction Co. was required by Section 8 “Disadvantaged Business Enterprise” of the executed contract to have an approved DBE Affirmative Action Program Plan filed with CFX and also have a plan to use DBE Certified subcontractors.

Superior Construction Co. initially listed one of the subcontractors, RWH Construction, Inc. a DBE subcontractor, and charged costs as such on five invoices. It was later determined that RWH Construction, Inc. was removed from the DBE listing due to an ineligible status with the Federal Highway Administration (FHWA). This was appropriately noted by the CEI (GAI) and CFX, and new control procedures were implemented by the CEI to verify eligibility for future subcontractor selections for this Project. However, the incorrect classification of RWH Construction, Inc. as a DBE contractor resulted in the inability to pay \$73,856.48 (total amount paid to RWH) of project costs using Federal funds.

Recommendation

CFX should implement a subcontractor compliance checklist similar to the one implemented by the CEI on this project to be utilized in a similar fashion on all future federally funded projects. A listing of authorized subcontractors should be included in the checklist and the checklist should be used to track the approval of subcontractors. Additionally, the checklist should detail mandatory criteria to be met by the subcontractor regarding eligibility requirements with the FHWA, EEO, DBE eligibility, etc.

Continued on the following page ...

DETAILED OBSERVATIONS

Observation 1 – Payment to Ineligible Subcontractors

Relative Priority

Medium

Contract(s): Superior Construction Co.

Management Response

RWH was identified to be a disqualified contractor with the FHWA during a review of DBE eligibility with FDOT that was performed in August 2016 (prior to the Protiviti audit.) This was after RWH Construction had completed \$93,313.02 of work on the project.

As a result of the review, it was determined that the FDOT listing of approved DBE Contractors includes contractors that have been disbarred or suspended according with the FHWA. Immediately after discovering that this was the case with RWH, CFX consulted the FHWA for the appropriate course of action. The FHWA and CFX agreed that moving forward there would not be any new subcontracts with RWH on the Wekiva projects, however, RWH was allowed to complete the work subcontracted for the Superior and Prince projects. However, none of the work completed would be eligible for reimbursement by the Federal TIFIA loan.

Prior to this determination, CFX CEI's were approving subcontractors based solely on the UPC DBE Directory on the FDOT website. Upon realization that the FDOT site did not consider the FHWA list, CFX implemented an enhanced approval process that required verification of subcontractors with five different web sites to confirm contractor status for Federally Funded Contracts.

Management Action Plan

As previously mentioned, CFX has implemented a new, more robust contractor status approval process for any federally funded projects. This was put into place as of August 29, 2016. No further action is required.

Action Plan Owner / Due Date

Not Applicable – Management Action Plan Complete

Procurement

Contract Administration

Project & Cost Management

Supplemental Agreement Management

DETAILED OBSERVATIONS

Observation 2 – Contractor Compliance with Insurance Requirements

Relative Priority

Low

Procurement

Contract Administration

Project & Cost Management

Inventory & Asset Management

Contract(s): Precision Contracting Services, Inc.

Observation

The Precision Contracting Services, Inc. (Precision) contract states that all insurance companies used by the Contractor should have been in business for at least five years and have A.M. Best financial ratings of at least A- (excellent) and a financial size category rating of XII (\$1 Billion to \$1.25 Billion in policyholder surplus funds) or higher.

Precision used three separate insurance carriers over the life of the contract for commercial liability, business automobile liability, worker's compensation coverages, and unemployment insurance. Two of the insurance carriers, Amerisure Insurance Co. and Amerisure Mutual Insurance Co., maintained a financial rating of A- or better; however, their financial size category was only XI (\$750 Million to \$1 Billion in policyholder surplus funds) which is below the size required per the contract.

As a result of observations from the contracts audit in FY 2016, CFX implemented a new insurance compliance review for all insurance renewals for current and future projects to verify credit ratings and financial size category requirements; however, the Precision contract was executed prior to the implementation of the new insurance compliance review.

Recommendation

In addition to the renewal monitoring process currently in place as a result of the FY 2016 contracts audit, CFX should implement a retrospective review of the A.M. Best Ratings and financial size categories for insurance carriers currently utilized by vendors for all active construction and maintenance contracts when new insurance certificates are submitted for review. The review should include researching historical financial ratings and sizes for each insurance carrier to assess current compliance with contract requirements.

Management Response

Management concurs with the observation.

DETAILED OBSERVATIONS

Observation 2 – Contractor Compliance with Insurance Requirements

Relative Priority

Low

Contract(s): Precision Contracting Services, Inc.

Management Action Plan

CFX will perform a retrospective review of the A.M. Best Ratings and financial size categories for insurance carriers currently utilized by vendors for all active construction and maintenance contracts retroactive to July 1, 2016. CFX will also perform a review when new insurance certificates are submitted for review.

Procurement

Action Plan Owner / Due Date

Aneth Williams, Director of Procurement / December 2017

Contract Administration

Project & Cost Management

Information Management

APPENDIX A

Detailed Audit Procedures Performed

APPENDIX A

Detailed Audit Procedures Performed

Procurement

Internal Audit performed detailed audit procedures related to the procurement, bidding, and contract award, and contract renewal of all contracts selected for testing. The procedures performed included:

- ❖ High level review of the process for establishing bid estimates for large construction contracts;
- ❖ Testing of Board approval to advertise for bids and proposals and Board approval of the contract award;
- ❖ Testing for the use of five year contract terms and the option for five one year renewals for contracts;
- ❖ Testing of the key components of the competitive sealed bid and proposal processes, including:
 - Completion and utilization of bidding and award schedules;
 - Timestamps applied to all received proposals and compliance with submittal deadlines;
 - The use of bid opening and bid tabulation sheets;
 - Performance of unbalanced bid reviews for competitive bids;
 - Completion of disclosure forms completed by CFX's employees responsible for evaluating technical and price proposals; and
 - Comparison of evaluation and scoring to advertised request for proposals.
- ❖ Completion and distribution of the monthly expiring contracts report by the procurement department; and
- ❖ Completion and approval of the expiring contract renewal worksheet and Board approval of contract renewals.

Continued on the following page....

APPENDIX A

Detailed Audit Procedures Performed

Contract Administration

Internal Audit performed detailed audit procedures related to key contract terms and conditions utilized by CFX and the satisfaction of insurance, bonding, permitting and MWBE requirements by the contractors selected for testing. The procedures performed included:

- ❖ Testing for the review of contracts by CFX's Legal Counsel;
- ❖ Testing of key contract reviews and clauses, including:
 - Review by CFX's Legal Counsel; and
 - Inclusion of key right to audit, termination, and indemnity clauses.
- ❖ Outlining and testing of insurance, bonding, and permitting requirements specific to the contracts selected; and
- ❖ Satisfaction of MWBE requirements set forth in the original bid and as required by CFX.

Supplemental Agreement Management

Internal Audit performed detailed audit procedures related to supplemental agreement execution, review, and approval. The procedures performed included:

- ❖ Testing for Board approval of all supplemental agreements in excess of \$50,000;
- ❖ Testing for the approval of all supplemental agreements by the appropriate parties;
- ❖ Testing of adequate supporting documentation and compliance with contract terms and conditions in regards to price and scope for all executed supplemental agreements related to the construction contracts selected for review; and
- ❖ Testing of a sample of fuel price and bituminous mix adjustments related to the construction contracts selected for review.

Continued on the following page....

APPENDIX A

Detailed Audit Procedures Performed

Project & Cost Management

Internal Audit performed detailed audit procedures related to invoice processing and approval, project planning, scheduling and quality control, project cost management and reporting, subcontractor management, CEI oversight, and ODMP processing. The procedures performed included:

- ❖ Testing of a sample of invoices for the projects selected for adequate review and approval by the appropriate personnel and compliance with CFX's invoice processing procedures;
- ❖ Discussion of current practices in regards to quality control and risk management plans and performance and quality monitoring;
- ❖ Testing of subcontractor approval and a sample of payments made to subcontractors;
- ❖ Detailed testing of costs billed for a sample of invoices selected for each of the service contracts selected and detailed testing of a sample of the quantities billed for each of the construction contracts selected;
- ❖ Utilization and monitoring of the CEI Consultants assigned to construction contracts;
- ❖ Detailed testing of costs billed for a sample of invoices selected for each of the construction contracts selected and detailed testing of a sample of the quantities billed vs. installed for each of the construction contracts selected;
- ❖ Detailed testing of fuel price and bituminous mix adjustment calculations;
- ❖ Discussion and limited testing of changes to project schedules;
- ❖ Review of reporting submitted to management on a regular basis; and
- ❖ Detailed testing of the ODMP programs implemented for the construction contracts selected.

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Call Center Staffing Model Development

INTERNAL MEMORANDUM

SUBJECT: CENTRAL FLORIDA EXPRESSWAY AUTHORITY
CALL CENTER STAFFING MODEL ASSISTANCE

DATE: MARCH 14, 2017

Background and Objectives:

As outlined in the 2017 Internal Audit plan, the Central Florida Expressway Authority (“CFX”) requested that Protiviti, through partnership with its customer call center subject matter expert, assist with an independent analysis of its call center staffing model used to forecast agent staffing needs to match call volume patterns. This request was in part driven by CFX seeking to proactively manage a request from EGIS, its third party, outsourced call center vendor, to hire additional agents to cover increased call volumes and to maintain service levels within established targets. As part of this project, CFX sought to better understand requests from EGIS to hire additional agents, and requested guidance with selecting a technology product to help it proactively manage agent scheduling and forecasting into the future.

Scope, Approach, and Results

During the time period time period of August 2016 through December 2016, a Protiviti supported CFX with the following activities.

1. Pre-procurement advisory services specific to the acquisition of the Monet system, the technology package selected by CFX to manage agent staffing and forecasting within its customer call center. Specific to pre-procurement advisory services, Protiviti performed the following:
 - Provided advice and guidance to CFX during the procurement of Monet. More specifically, Protiviti provided input on the functionality and ability of the Monet package to meet CFX’s staffing and forecasting management needs.
 - Read the Monet proposal and provided input to CFX for points to consider.
 - Provided guidance to CFX on needs and opportunities in advance of the implementation of Monet, including reporting elements and other enhancements. Specifically, Protiviti provided guidance around which components of the Monet platform to acquire to help CFX meet its business needs. Ultimately, CFX elected to add a performance metrics component to the initially proposed scope. The performance metrics component allows for more detailed reporting to help manage the center.
 - Provided input on skill requirements for potential candidates for an open Business Analyst position to support the new Monet scheduling software.
2. Post-procurement of the Monet software package, Protiviti supported CFX through the implementation of Monet by performing the following:
 - Provided subject matter guidance and assistance to advise on use and knowledge transfer.
 - Participated in design meetings with CFX and Monet.
 - Participated in vendor training and supported CFX throughout the process to verify that the training provided by Monet addressed CFX’s needs for effective handover and management of the new solution.

Reporting and Deliverables

No deliverables were prepared or provided as a result of this work and the advisory services provided to CFX. At the completion of the procedures outlined, this memo summarizing the assistance provided has been prepared.

Vendor Security Review

Executive Summary of the 2017 Vendor Security Review

Central Florida Expressway Authority

September 2016

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2017 Vendor Security Review

I. Executive Summary

Background

During the period between August 1 to September 2, 2016, Internal Audit (“IA”) performed a Vendor Security Review for the Central Florida Expressway Authority (“CFX”). This is the first review of vendor security that IA has conducted at CFX. The review focused on vendor IT connections entering the CFX environment and vendor systems within the CFX environment. CFX vendors play an important role as they perform a variety of critical duties including database management, web development, Intelligent Transportation Systems (“ITS”) hardware maintenance, fiber optic network support, engineering, marketing, toll operations and more. The CFX and ITS environments share network equipment that allows communication between the networks, though each is a distinct environment. Though both utilize vendors, the CFX IT environment is larger, making up approximately 90% of the IT systems within CFX. ITS comprises approximately 10% of the IT systems within CFX, and is the area to which vendors connect to maintain systems on the roadways, or systems that support roadway systems.

Scope and Approach

The focus of this review had two (2) primary components. First, IA reviewed vendor IT connections coming into the CFX environment, and second, IA reviewed security configurations of vendor systems within the CFX environment. Specific steps to accomplish these objectives are described here:

- To assess vendor connections into the CFX environment, IA:
 - Established an inventory of vendors with whom CFX exchanges data. In so doing, IA confirmed relevant attributes about each connection, including:
 - The type of connection used (e.g., web URL, Secure File Transfer protocol (SFTP), hosted portal, system-to-system connectivity, etc.)
 - The nature and volume of the data exchanged
 - Identified the appropriate CFX business owner for each connection and discussed the security processes and controls in place to protect data in transit and once it arrived at its destination.
 - Executed specific procedures to test the security controls in place including:
 - Security of the connection
 - Access controls
 - Logging and monitoring
- To assess vendors systems within the CFX environment, IA:
 - Established an inventory of vendors that have placed systems within the CFX environment
 - Identified the appropriate CFX business owner for each vendor system (or group of systems) that exists within the CFX environment and discussed the security processes and controls in place to protect data on those systems.
 - Executed specific procedures to validate the design and operating effectiveness of the security controls in place including
 - System configurations (system hardening, operating system patching, software updates)

2017 Vendor Security Review

- Access controls
- Logging and monitoring

In order to accomplish this review, Internal Audit:

- Interviewed key personnel (i.e. CFX Security Manager, ITS Domain Administrator, IT Administrators)
- Performed a Risk Analysis of vendors in the environment to determine which to sample
- Performed a sample-based review of high-risk vendor access
- Reviewed documentation associated with the vendor access request, authorization, and approval process
- Performed walkthroughs of CFX access control systems (i.e. Active Directory, Juniper Radius, and the WatchGuard Firewall)
- Reviewed system configurations for a sample of vendor systems (or systems to which vendors had access)
- Obtained an understanding of how vendor access is provisioned, controlled, and monitored

The vendor systems and connections assessed as part of this review are:

- Transcore – Manages databases and servers in the environment
- Atkins – Manages and maintains systems within the ITS environment
- Kapsch – Manages and maintains systems within the ITS environment
- Evolve – Manages and maintains websites within the CFX environment
- Carousel – Provides support for network infrastructure in the CFX environment
- Aecom – Collects cash tolls for CFX on the roadways

Summary of Findings

As a result of this review, Internal Audit identified six (6) observations specific to the ITS environment that should be addressed in order to strengthen the overall security of vendor IT connections that come into CFX's ITS environment and the security configurations on vendor systems that exist within the CFX ITS environment (no observations were identified within the CFX IT environment). The observations are grouped into the following three (3) high-level topics:

- Vendor Access and Privileges
- Vulnerability Management
- System Configuration Settings

2017 Vendor Security Review

Recommendations

The following high-level recommendations should be considered in order to address the topics above:

- Review Vendor Access and Privileges
- Require Formal Vulnerability Management Processes
- Enhance System Configuration Settings

Status of Completion

As of the time of this report, five of the six observations have been remediated.


CONSENT AGENDA ITEM

#19

CENTRAL FLORIDA EXPRESSWAY AUTHORITY

MEMORANDUM

TO: CFX Board Members

FROM: Aneth O. Williams 
Director of Procurement

DATE: March 22, 2017

SUBJECT: Approval to award contract for Roadway and Bridge Maintenance Services
to HDR|ICA
S.R. 429, S.R. 414 and S.R. 451
Contract No. 001152

Request for Proposals (RFP) from qualified firms to provide Roadway and Bridge Maintenance Services was advertised on January 15, 2017. Proposals were received from five (5) firms by the February 28, 2017 deadline. Those firms were: DBI Services, LLC, FDI Services, HDR|ICA, IILP USA, LLC and Jorgensen Contract Services, LLC.

As part of the scoring process for the Technical Proposals, the Committee interviewed the firms on March 15, 2017. After scoring of the Technical Proposals was completed, the Price Proposals were opened and scored. Based on the combined scores for the Technical and Price Proposals, the final ranking of the firms was:

<u>Firm</u>	<u>Ranking</u>
HDR ICA	1
DBI Services, LLC	2
IILP USA, LLC	3
Jorgensen Contract Services, LLC	4
FDI Services	5

Board approval is requested to award the contract to HR|ICA in the amount of \$9,271,953.00 for a five (5) year term.

This service is funded in the OM&A Budget.

Reviewed by: 
Claude Miller
Director of Maintenance

RFP-001152 Committee Meeting March 15, 2017 Minutes

Evaluation Committee for Roadway and Bridge Maintenance Services; RFP-001152, held a duly noticed meeting on Wednesday, March 15, 2017, commencing at 8:15 a.m. in the Pelican Conference Room at the CFX Administrative Bldg., Orlando, Florida.

Committee Members:

Claude Miller., Director of Maintenance
Joe Berenis, Chief of Infrastructure
Steve Geiss, Senior Roadway Supervisor
Brad Osterhaus, Roadway Inspector

Other Attendees:

Aneth Williams, CFX Director of Procurement

Discussion and Motions:

Aneth commenced the meeting with introductions, collection of the committee members disclosure forms, and explained that today's meeting was to conduct interviews of the proposers, open the price proposals, finalize the evaluation, and make a recommendation to be presented to the Board. The Committee discussed their concerns about the team Jorgensen submitted on this project, which is the same team they submitted on Contract No. 001152 which they are the intended awardee.

Interviews:

Aneth commenced each interview with an outline of the interview process. For the record it was stated the interview portion of the meeting is closed to the public and is being recorded in accordance with Florida Statute.

Upon completion of the last interview the recorder was stopped and the meeting was considered no longer closed to the public.

Evaluation Portion:

The Committee members individually scored the interviews and submitted them to Aneth for tallying. Aneth then tallied the score sheets utilizing the raw scores assigned by each committee member and averaged the raw scores for each Proposal received. Below are the results:

<u>Proposer</u>	<u>Total Raw Points</u>	<u>Average Points</u>
DBI Services, LLC	206	51.50
FDI Services	202	50.50
HDR ICA	237	59.25
IPL USA, LLC	204	51.00
Jorgensen Contract Services, LLC	186	46.50

Pricing

Upon completion of the evaluation of the technical portion, Aneth opened the pricing proposals and scored the pricing proposals in accordance with the RFP requirements.


<u>Proposer</u>	<u>Total Price</u>	<u>Points</u>
DBI Services, LLC	\$ 7,520,557.08	40
FDI Services	\$14,277,915.00	21.07
HDR ICA	\$ 9,271,953.00	32.44
IPL USA, LLC	\$10,296,599.00	29.22
Jorgensen Contract Services, LLC	\$10,250,000.00	29.35

Total Points and Rankings

<u>Proposer</u>	<u>Tech. Points</u>	<u>Pricing Points</u>	<u>Total Points</u>	<u>Ranking</u>
DBI Services, LLC	51.50	40	91.50	2
FDI Services	50.50	21.07	71.57	5
HDR ICA	59.25	32.44	91.69	1
IPL USA, LLC	51.00	29.22	80.22	4
Jorgensen Contract Services, LLC	51.00	29.35	80.35	3

The Committee members agreed that the highest ranked firm would be recommended to the Board for award.

There being no further business to come before the Committee, the meeting was adjourned at 12:30 p.m. These minutes are considered to be the official minutes of the interview, opening of the Price Proposals and final evaluation by the Evaluation Committee at its meeting held Wednesday, March 15, 2017.

Submitted by: 
Aneth Williams, CFX Director of Procurement

On behalf of the Evaluation Committee these minutes have been review and approved by:


Claude Miller, Director of Maintenance

CENTRAL FLORIDA EXPRESSWAY AUTHORITY

TECHNICAL AND PRICE PROPOSAL SCORING SUMMARY

Roadway and Bridge Maintenance Services, Contract No. 001152

EVALUATOR	DBI Services, LLC		FDI Services		HDR ICA		IPL USA, LLC		Jorgensen Contract Services, LLC	
	TECHNICAL	PRICE	TECHNICAL	PRICE	TECHNICAL	PRICE	TECHNICAL	PRICE	TECHNICAL	PRICE
Claude Miller	47		43		60		51		32	
Joe Berenis	56		56		59		51		51	
Steve Geiss	54		54		60		54		57	
Brad Osterhaus	49		49		58		48		46	
TOTAL	206		202		237		204		186	
AVG. TECH. POINTS	51.50		50.50		59.25		51.00		46.50	

PRICE PROPOSAL SUMMARY

PROPOSER	PROPOSAL AMOUNT	POINT VALUE
DBI Services, LLC	\$ 7,520,557.08	40.00
FDI Services	\$ 14,277,915.00	21.07
HDR ICA	\$ 9,271,953.00	32.44
IPL USA, LLC	\$ 10,296,599.00	29.22
Jorgensen Contract Services, LLC	\$10,250,000.00	29.35

POINT TOTALS AND FINAL RANKING

PROPOSER	TECHNICAL POINTS	PRICE POINTS	TOTAL POINTS	FINAL RANKING
DBI Services, LLC	51.50	40.00	91.50	2
FDI Services	50.50	21.07	71.57	5
HDR ICA	59.25	32.44	91.69	1
IPL USA, LLC	51.00	29.22	80.22	3
Jorgensen Contract Services, LLC	46.50	29.35	75.85	4

Committee Members:

Claude Miller

Steve Geiss

Joe Berenis

Brad Osterhaus

3/15/2017


3/15/2017

3/15/2017

3/15/2017

**CONSENT AGENDA ITEM
#20**

MEMORANDUM

TO: CFX Board Members
FROM: Tim O'Toole, Records Administrator 
DATE: April 3, 2017
SUBJECT: Records & Information Management Program Policy Update

Board approval is requested to adopt the amended Records & Information Management Program policy which is attached. The changes made are designed to allow this policy to stand alone while delegating the authority for the creation, implementation, modification and maintenance of departmental procedures to the Executive Director or his or her designee. These departmental procedures are to be based on Records & Information Management industry standards, best practices, and in accordance with any applicable state statutes, rules, and regulations.

Reviewed by:


Michelle Maikisch
Chief of Staff/Public Affairs Officer

**A RESOLUTION OF THE
CENTRAL FLORIDA EXPRESSWAY AUTHORITY
AMENDING THE RECORDS MANAGEMENT
POLICY TO ADOPT
CHAPTER 119, FLORIDA STATUTES**

WHEREAS, on June 20, 2014, and in accordance with the provisions of Chapter 2014-171, Laws of Florida, the Central Florida Expressway Authority (“CFX”) was created and assumed the governance and control of the Orlando-Orange County Expressway System; and

WHEREAS, CFX has an existing Records Management Policy establishing a comprehensive Records Management Plan; and

WHEREAS, to accommodate the complex and diverse nature of records and information management, the CFX Board is desirous of adopting a general Records & Information Management Policy delegating the authority to implement, modify, maintain, and manage the CFX Records & Information Management procedures to the CFX Executive Director or his or her designee.

NOW, THEREFORE, BE IT RESOLVED BY THE CENTRAL FLORIDA EXPRESSWAY AUTHORITY as follows:

Section 1. Adoption. The CFX governing Board does hereby adopt the attached Records & Information Management Policy (**Exhibit “A”**) as the official Records & Information Management Policy for CFX.

Section 2. Effective Date. This Resolution shall become effective upon adoption by the CFX governing Board.

ADOPTED this _____ day of _____, 2017.

ATTEST: _____
Darleen Mazzillo
Executive Assistant

Buddy Dyer, CFX Board Chairman

Approved as to form and legality

Joseph L. Passiatore, General Counsel

**RECORDS & INFORMATION MANGEMENT
PROGRAM POLICY**

Department: Records & Information Management

Supersedes: 12/21/11, 4/23/14, and 10/24/16

CENTRAL FLORIDA EXPRESSWAY AUTHORITY

Central Florida Expressway Authority Records & Information Management RIM Program Policy

Contents

- I. Statement of Policy
 - II. Purpose
 - III. Scope
 - IV. Policy
 - V. Authority
 - VI. Definitions
 - VII. RMLO & Records Coordinators
 - VIII. Violation
 - IX. Effective Date / Repeal Date
-

I. Statement of Policy

The Central Florida Expressway Authority (CFX) will establish and maintain an active and continuing program for the economical and efficient management of records pursuant to Section 257.36, *Florida Statutes* and Chapter 119, *Florida Statutes*. CFX will develop and implement policies and procedures to ensure compliance with applicable Federal and State statutes, rules, and regulations as they relate to the management of Public Records.

The records that Florida's state and local government agencies keep in the normal course of carrying out their duties and responsibilities are public records. Public Records are different from records of businesses and private organizations because Florida law requires public records to be readily accessible and available to the public upon request. All employees must ensure that public records in their custody are maintained and accessible as required by Florida law. Employees and agencies do not have the authority to withhold records deemed "sensitive." The only records that can be withheld from public disclosure are those specifically designated by the *Florida Statutes* as confidential or exempt. This policy will provide employees with the information necessary to understand and carry out their public records responsibilities.

II. Purpose

The purpose of this policy is to address the requirements of the Florida Public Records Law, including:

- a) The requirements for managing CFX public records by CFX employees, committee appointees, and governing body members, and
- b) The manner in which public records requests are to be processed to ensure that responses to the request are organized, inclusive, and in compliance with applicable statutes, rules, and regulations.

CENTRAL FLORIDA EXPRESSWAY AUTHORITY

III. Scope

This policy applies to all CFX employees, committee appointees, and governing body members, as well as publicly created advisory boards and private organizations (such as Citizen Support Organizations), including contractors that have been delegated the authority to perform some governmental function. This policy applies to all public records of CFX, regardless of the medium in which they exist (i.e., paper, electronic or other).

IV. Policy

It is the Central Florida Expressway Authority's policy to ensure that public records in CFX's custody are maintained and managed as required by the Florida Public Records Law. This law provides that all materials made or received by Florida's state and local government agencies in connection with their official business are public records.

It is also the policy of the Central Florida Expressway Authority to ensure that all public records in its custody that are not exempt or confidential are open for inspection and copying by any person, for any reason, at any reasonable time, under reasonable conditions, as required by the Florida Public Records Law. Requested public records may not be withheld for any reason, except if the record or a portion of the record is specifically designated under law as confidential or exempt from public disclosure.

The Central Florida Expressway Authority places a high priority on efficient, effective, and economical management of public records to ensure that information is available when and where it is needed, in an organized and efficient manner, and in an appropriate environment.

V. Authority

- a) Sections 257.36(5)(b) and (6), 119.07, 119.011(12), and 119.021, *Florida Statutes*.
- b) Rules 1-2.0031, 1B-24, 1B-26.003, and 1B-26.0021, *Florida Administrative Code*.

VI. Definitions

The definitions set forth in section 119.011, *Florida Statutes*, and rules 1B-24, and 1B-26.003 of the *Florida Administrative Code*, as amended from time to time, are incorporated herein by reference for the terms below.

- a. "Confidential" means public records that have been identified in the *Florida Statutes* as confidential. The information in these records is not subject to inspection by the public and may be released only to the persons and entities designated in the statute.
- b. "Custodian" means the elected or appointed state, county, or municipal officer charged with the responsibility of maintaining the office having public records, or his or her designee.
- c. "Exempt" means public records that have been identified in Chapter 119 or other applicable *Florida Statutes* as exempt from public disclosure.

CENTRAL FLORIDA EXPRESSWAY AUTHORITY

- d. "Public Records" means all documents, papers, letters, maps, books, tapes, photographs, films, sound recordings, data processing software or other material, regardless of the physical form, characteristics, or means of transmission, made or received pursuant to law or ordinance or in connection with the transaction of official business by any agency.
- e. "Record Coordinators" means the employees of the Central Florida Expressway Authority responsible for the coordination of Public Records activities.
- f. "Records Management Liaison Officer" (RMLO) means the Central Florida Expressway Authority employee designated in writing to the Florida Department of State. The RMLO is responsible for managing CFX's Records & Information Management Program.

VII. Records Management Liaison Officer and Records Coordinators

The CFX Records Management Liaison Officer (RMLO) is designated by the Executive Director and serves as the CFX's contact for the Records & Information Management program. The RMLO is hereby authorized to implement, modify, maintain and manage CFX's comprehensive Records & Information Management program through the adoption and modification of appropriate procedures. In addition, each department shall appoint a Record Coordinator who will be the RMLO's records contact for that department.

VIII. Violation

Violation of this policy may result in disciplinary action, up to and including termination of employment as well as those penalties prescribed by section 119.10, *Florida Statutes*.

IX. Effective Date and Repeal

This policy shall become effective upon adoption by the CFX governing body and shall supersede and repeal in its entirety RM-4 Public Records Management Policy as previously adopted on 12/21/2011 and 04/23/2014 and administratively revised on 10/24/2016.

Approved by:

Executive Director


Date

**CONSENT AGENDA ITEM
#21**

CENTRAL FLORIDA EXPRESSWAY AUTHORITY

MEMORANDUM

TO: CFX Board Members

FROM: Aneth Williams 
Director of Procurement

DATE: March 17, 2017

RE: Approval of Extension of the Inter-local Agreement
between CFX and UCF for the
Wrong Way Driving Phase 3 Study: Allocating and Evaluating
Countermeasures, Contract 001143

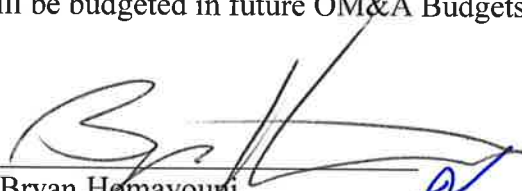

Board approval is requested to extend the referenced Inter-local Agreement between Central Florida Expressway Authority and the University of Central Florida in the amount of \$225,000.00. The extension will be from August 13, 2017 to August 12, 2019. The contract scope will be replaced with the amended Extension Proposal of Research Project Contract Version 5.0.

Original Contract Amount	\$200,000.00
Extension	<u>\$225,000.00</u>
Total Revised Contract Amount	\$425,000.00

CFX entered into an agreement with UCF on August 13, 2015 for a period of two years, to provide research and reporting on CFX's Wrong Way Driving system first deployed in February of 2015. This agreement will expire on August 12, 2017, with the option to extend upon approval by both parties. The Wrong Way Driving (WWD) deployments on CFX system are authorized by FHWA under Request to Experiment (RTE) 4(09)-49 E. As a part of this RTE approval, CFX is required to provide bi-annual reports to FHWA. A key scope item of the UCF Phase III study includes the generation of monthly reports for CFX reference as well as the bi-annual reports required by FHWA. At the start of the Phase III study there were only five (5) WWD locations online, currently there are a total of 34 locations online which is increasing the amount of data available for review, increasing the value of the reporting. The Extension Proposal documents the continuation of all current scope items along with addition of new scope items in the research project that will help with the further development of the CFX WWD Program.

This service will be budgeted in future OM&A Budgets.

Reviewed by:


Bryan Homayouni
Manager of Traffic Operations 

4974 ORL TOWER RD. ORLANDO, FL 32807 | PHONE: (407) 690-5000 | FAX: (407) 690-5011

WWW.CFXWAY.COM



FINAL VERSION
EXTENSION PROPOSAL OF RESEARCH PROJECT CONTRACT
Version 5.0

Submitted to

Central Florida Expressway Authority
(CFX)

**EXTENSION TO PROJECT “WRONG-WAY DRIVING PHASE-3 STUDY:
ALLOCATING AND EVALUATING COUNTERMEASURES ON CFX
ROADWAY NETWORK”**

Project Extension Period	24 months
Project Extension Duration	08/13/2017-08/12/2019
Extension Budget Amount	\$225,000

Proposal Submitted By

Haitham Al-Deek, Ph.D., P.E.

(Principal Investigator)

Professor of Civil, Environmental, and Construction Engineering,
Department of Civil, Environmental, and Construction Engineering
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And

His students

Administrative Contact: Arlisia Potter, Team Manager

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Phone: (407) 882-2018

Extension Proposal Originally Submitted in February 2017

Revised in March 2017

EXTENSION TO PROJECT TITLED “WRONG-WAY DRIVING PHASE-3 STUDY: ALLOCATING AND EVALUATING COUNTERMEASURES ON CFX ROADWAY NETWORK”

Principal Investigator:

Haitham Al-Deek, Ph.D., P.E., Professor of Engineering, CECE Department, UCF, Orlando, FL 32816-2450, Cell: (321) 695-7664; Fax (407) 823-3315; email Haitham.Al-Deek@ucf.edu

1. RESEARCH GOAL AND OBJECTIVES

Research Main Goal

The main goal of the extension to the originally proposed study is to continue evaluating wrong-way driving (WWD) advanced countermeasures that have been deployed (and additional countermeasures that will be deployed) at ramps and medians throughout the CFX toll road network, help CFX determine the best way to warn right-way drivers of intentional wrong-way drivers that do not correct their behavior before entering the mainline, and study potential technologies that can prevent these wrong-way drivers from entering the mainline in the first place. An additional goal is to explore placing of WWD detection devices on the mainline.

Research Objectives

To achieve the main goal of this research, the following objectives need to be achieved:

- 1) Continue collecting data so that a sufficient sample of WWD data can be reached for the entire CFX system to evaluate their implemented WWD countermeasures. Examples of this WWD data include crashes, Computer Aided Dispatch (CAD) privileged data also known as 911 calls and events data, citations, traffic management center (TMC) logs, SunGuide reports, and detections (TAPCO logs and video recordings, mainline detections, etc.), as well as geometric design of interchange types that are known to have

higher than normal frequency of WWD events as reported in the literature and FDOT design documents (examples of this include full or partial diamond interchanges).

Extension to Objective #1:

The above WWD data will be continuously monitored every month and the trends of WWD acts and false alerts will be examined to understand how the RRFB devices are working and how wrong-way drivers are reacting to them. The WWD detections and false alerts will also be compared across radar and laser sites on CFX network to report performance of different WWD detection and deterrence technologies.

- 2) Develop a scoring methodology to identify locations where deployment of Rapid Rectangular Flashing Beacons (RRFBs) would be beneficial. This methodology will consider many factors, including WWD history (crashes, CAD data/911 calls, citations, etc.), interchange design (full diamond, partial diamond, extended left turn lanes, etc.), and other factors driven by CFX (e.g., infrastructure readiness in terms of ITS equipment at these sites and budget considerations).

Extension to Objective #2:

The above scoring methodology proposed in the original contract will be evaluated again using additional data that was not available when the methodology was initially developed to see if there are any changes in potential deployment locations. Additionally, an optimization model will be developed to determine the next locations where WWD countermeasures should be deployed. This optimization model will expand on the scoring methodology and consider WWD event data, budgetary constraints, and other factors to determine where various types of WWD countermeasures (including low-

cost improvements and advanced warning devices) should be implemented. This extension to Objective#2 is a major undertaking.

- 3) Study the effects of WWD countermeasures implemented at medians. The types of median countermeasures to be studied will be determined based on the results of literature review.

Extension to Objective #3:

As additional data is becoming available during the extension period, the initial model developed to meet the above objective (which had small data sample) will be revisited to include larger data sample.

- 4) Study various methods of warning right-way drivers about WWD events to determine the most appropriate methods for the CFX roadway network.

Extension to Objective #4:

The UCF research team will continuously monitor the introduction of new technologies that have potential for right-way driver notification about WWD events and discuss these with CFX.

- 5) Evaluate technologies that can physically prevent wrong-way vehicles from entering the mainline (e.g., nets or barriers) to see if these technologies are feasible and effective.

Extension to Objective #5:

The potential application of connected and automated vehicle technologies to alert and prevent wrong-way drivers from entering the mainline will be examined.

- 6) Analyze the WWD detection data collected from the RRFBs installed at the CFX pilot test locations to understand how drivers react to these devices (correct themselves or keep driving the wrong way).

Extension to Objective #6:

Continue to analyze WWD detection data collected from RRFBs and produce monthly detection and false alerts reports verified with SunGuide reports and report these to CFX. Locations that still have high frequencies of WWD acts even with the RRFB devices will be examined to see what other measures could be implemented to reduce the occurrence of WWD at these locations. Also, continue producing FHWA progress reports every 6 months during the two-year extension of the original project.

- 7) **New Objective as Part of Extension:** Assist CFX in developing a methodology for deploying WWD mainline detection systems to detect wrong-way drivers that enter the mainline. This will include determining the placement of these systems, evaluating any potential signage to use in conjunction with these systems, and collecting and analyzing the data from any potential pilot deployment of these systems.

2. EXECUTIVE SUMMARY

CFX has been proactively involved in understanding and combatting wrong-way driving (WWD) since they contracted with the University of Central Florida (UCF) in 2012 to explore the extent of WWD problem on its toll road network as part of a Phase-1 study. The results of this study, "*Wrong-Way Driving Incidents on OOCEA Toll Road Network, Phase-1 Study: What is the Extent of this Problem?*" showed that WWD is a significant problem in Central Florida and has been growing in recent years.

To reduce WWD, and based on recommendations from UCF in Phase 1 final report, CFX decided to test the use of Rapid Rectangular Flashing Beacons (RRFBs) as WWD

countermeasures in a Phase-2 study. This technology had previously been used for pedestrian crossings; it had never been used as a WWD countermeasure before UCF recommendation was made in Phase-1. During the Phase-2 study, “*Wrong-Way Driving Incidents on CFX Toll Road Network, Phase-2 Study: Developing Countermeasures*,” the RRFB technology was successfully tested, first in the CFX headquarters parking lot, then at the SR 528 and SR 520 ramp. Since the RRFBs were implemented at this location in January 2015, CFX have successfully detected several vehicles driving the wrong way on the exit ramp, as verified by the TAPCO camera and the numerous images taken of the wrong-way vehicles.

The success of this technology has convinced CFX to implement it at additional ramps along their toll road network. A methodology and extension to the methodology originally proposed in Phase 3 will be developed by the UCF research team that will estimate WWD risk values for roadway segments including interchanges throughout the CFX network. This methodology will use real-life WWD data, examples of which include WWD crash data, CAD/911 call data and events, citation data, TMC logs, SunGuide reports, TAPCO BlinkLink detection data, TAPCO video logs, and mainline detection data (if and when it becomes available). Other considerations, such as the presence of full or partial diamond interchanges, extended left turn bays, and other CFX practical constraints (e.g., budget and infrastructure ITS equipment readiness/limitations) will also be considered when developing this methodology. The methodology will include optimization techniques as described in the extension to Objective#2 above. It is believed that no methodology like this has ever been developed that focuses solely on WWD.

In addition to exit ramps, another potential source of WWD events is median crossovers. These types of events can occur on stretches of roadway where there is only a paved or grassy median or in spaces in barriers designated for emergency or law enforcement use (also known as emergency median openings). To prevent these types of WWD events, various potential median WWD countermeasures will be studied to see which would be effective for CFX. The types of median countermeasures to be studied will be determined based on the results of literature review. The best locations to implement these countermeasures will also be determined and detection data will be collected at these implementation sites to evaluate how effective these countermeasures are.

While WWD countermeasures can help prevent confused wrong-way drivers from entering the mainline, these devices may not be effective at preventing intentional wrong-way drivers, such as suicidal drivers, from entering the mainline. Additionally, extremely intoxicated drivers might not comprehend that they are driving the wrong way when they encounter the WWD countermeasures. Therefore, it is important for CFX to be able to notify right-way drivers when a wrong-way driver has entered the system. There are many possible ways to notify these drivers of WWD events, including DMS, smartphone applications, and in-vehicle notifications. These various methods will be examined to determine the most effective options for CFX based on roadway characteristics and driver preferences. To obtain driver preferences, a customer survey has been developed and implemented with the approval of CFX administration. This survey asked CFX customers how they would like to receive WWD notifications, along with other WWD related questions. During the extension project, this survey will be analyzed thoroughly to understand expectations from WWD customers about right-way driver notification methods.

An analysis of potential ways to physically prevent intentional or intoxicated drivers from entering the mainline will also be performed to see if these technologies, which can include barriers, nets, or other similar devices, are feasible and would be effective for the CFX to implement at its ramps.

Extension Period:

Extending this research by 24 months for a total timeframe of 48 months will allow for the UCF research team to continuously monitor WWD events on the CFX network during this timeframe.

The UCF research team will also develop an optimization model that CFX can use to determine the next locations for RRFB implementation, as well as where other, lower cost countermeasures could be most effectively implemented. New potential WWD countermeasures, including the use of automated and connected vehicle technologies, will also be researched to ensure CFX remains a leader in WWD detection and prevention. Additional research on WWD notification methods for right-way drivers will also be conducted to determine the best and most effective notification methods for CFX and its customers.

The UCF research team will also assist CFX in developing and deploying WWD mainline detection systems to obtain more data about wrong-way drivers who do not turn around at ramps and continue to the mainline. This assistance will include determining the most appropriate locations for these detection systems based on WWD data, evaluating any potential signage to be used with these systems to notify wrong-way and right-way drivers, and collecting and analyzing data for any pilot deployments of these systems on the CFX roadway network.

The Phase-3 project extension is a fixed lump sum 24 months with requested total budget for the extension only of \$225,000. This will be billed in 4 equal invoices, \$56,250 each, every 6 months during the 24 months extension period (the last invoice will be billed at the

end of the last month of the extension project). Details of the budget are provided on the last page of this proposal.

3. UNDERSTANDING OF THE PROBLEM

Wrong-way driving (WWD) is a rare but serious event which often occurs during late night hours and typically involves impaired drivers (intoxicated, tired, or confused). Crashes caused by WWD often result in severe injuries or fatalities, especially on toll roads or other limited access facilities due to the high travel speeds. The low frequency of WWD crashes presents a difficult challenge to researchers, so other WWD data is needed to accurately research and effectively prevent WWD events. This data includes WWD CAD/911 call data, citation data, TMC logs, and detection data (e.g., video, camera, or radar). A sufficient quantity of data collected over several years is also necessary to properly understand the effects of WWD countermeasures. WWD countermeasures can prevent confused drivers from entering the mainline while traveling the wrong direction, but they will not prevent intentional wrong-way drivers (suicidal or extremely intoxicated drivers) from entering the mainline. However, the risk of crashes due to these wrong-way drivers can be reduced by notifying right-way drivers that a wrong-way driver has been spotted or by implementing technologies, such as barriers or nets, that could physically prevent a wrong-way driver from entering the mainline. These preventative technologies require a lot of study before implementation to ensure there are no adverse effects to traffic operations, safety, or emergency response and to make sure these technologies are feasible and appropriate. Methods of notifying right-way drivers can include DMS, highway advisory radio, smartphone applications, or in-vehicle devices; these methods need to be evaluated and CFX customer preferences need to be determined to decide which methods would

be the most effective. These potential methods will be discussed and approved by the CFX administration before they can be released.

4. BENEFITS TO CFX

The main benefits of this Phase-3 study and its extension to CFX are:

- Saving lives of CFX customers from the danger they could face if wrong way drivers continue to pursue their behavior to the mainline without being detected in time and/or stopped.
- Demonstrating that CFX is using their budget carefully and wisely by installing RRFBs and other effective countermeasures where they are most needed.
- Providing notifications to right-way drivers about WWD events that can allow the right-way drivers to be aware of and potentially avoid collisions.
- Evaluating the effects of RRFBs and median WWD countermeasures to understand which countermeasures are effective in which locations and which locations could require additional measures to reduce WWD.
- Contributing to development of potential innovative technologies to prevent wrong-way drivers from entering the mainline.
- Ensuring that CFX remains at the cutting edge of WWD research by investigating new potential WWD countermeasures, as well as connected and automated vehicle technologies.

-
- Enabling CFX to evaluate mainline detection and deterrence technologies to detect and deter wrong-way drivers who reach the mainline so they can be stopped before they cause a crash.
 - Demonstrating to CFX's customers that their safety is priority.

5. PLAN FOR IMPLEMENTATION OF RESULTS

From this Phase-3 extension study, CFX will understand how the implemented WWD countermeasures at ramps and medians affect WWD. CFX will also gain valuable insight on right-way driver notification methods and potential technologies to prevent wrong-way drivers from entering the mainline. With this knowledge, CFX can effectively decide on what types of technologies to test and/or implement to reduce WWD crashes on the mainline.

Extension Plan:

The developed optimization model will allow CFX to optimally install future WWD countermeasures to provide the most benefits within a given budget. CFX will also understand how automated and connected vehicle technologies can be used for WWD prevention and notification. By evaluating the deployed mainline WWD detection systems, CFX will be able to more accurately track wrong-way drivers and evaluate the potential of stopping them before they cause a crash on the mainline.

6. PROPOSED RESEARCH APPROACH

Tasks

To achieve the stated goal and objectives of this proposed project, the University of Central Florida's (UCF) research team members under the guidance of Professor Haitham Al-Deek,

Ph.D., P.E., (UCF Principal Investigator, PI), will perform the proposed project tasks listed in this section. Their aim will be to assist CFX in optimally implementing WWD countermeasures at ramps and medians and assessing their performance, determining ways to notify right-way drivers and prevent intentional wrong-way drivers from entering the mainline, and understanding the potential applications of automated and connected vehicle technologies for WWD prevention and notification. Professor Al-Deek will be assisted by several members of his research team (e.g., students). His current research team includes: Adrian Sandt, a UCF Ph.D. student and Trustees Fellowship recipient; Md. Imrul Kayes, a UCF Ph.D. student; Omar Al-Sahili, a UCF M.S. student; Md. Omar Faruk, a UCF M.S. student; as well as additional outstanding undergraduate engineering students, including Sara Wertanen, Antony Shamma, Corin Staves, and Abigail VanLuven. Also, other graduate and/or undergraduate students may join this extension project throughout its duration as needed. Additionally, Dr. Grady Carrick of Enforcement Engineering Inc., who is a former Chief of FHP in Jacksonville area (for a period of 30 + years) with very important hands on experience in first response to WWD incidents, will also be subcontracted by UCF as consultant to assist in critical data collection on the performance of WWD countermeasures, and will provide law enforcement perspective concerning UCF innovative WWD countermeasures, right-way driver notification methods, and technologies to stop wrong-way drivers. (Formal commitment will be provided by the consultant when funding is established).

Tasks to be performed by the UCF research team include the following:

1. *Phase-3 kick-off meeting between UCF research team and CFX.*
2. *Methodology development.* A methodology will be developed to identify locations at the highest risk for WWD activity. This methodology may use some or all of the following:

historic WWD data, including crashes, CAD/911 calls and events, citations, TMC reports, and detection data, as well as design characteristics (interchange type and presence of potentially confusing features) to estimate the WWD risk of the selected ramps and other potential ramps that were not selected.

Extension to Task #2 (Methodology):

The model developed from this methodology will be updated with the most recent data to see how the high-risk locations have changed.

3. *Collection and analysis of WWD data.* Accurate and reliable data is crucial for this project. A variety of WWD data will be collected and analyzed for the entire CFX system. Examples of this data include WWD crash data, CAD/911 call and event data, citation data, TMC logs, and SunGuide reports. Additionally, WWD detection data obtained from the installed RRFBs at the pilot ramps will also be analyzed. This data includes TAPCO BlinkLink logs and video as well as other detection logs. Data will also be collected from the median WWD countermeasures that will be implemented as part of Task 7. It is highly recommended to collect as much data as possible after implementation for each site to accurately evaluate the countermeasures. The minimum period of data collection cannot be determined accurately until data is collected for several months from each location. The minimum sample size needed varies by location and will depend on the WWD activity at each location.

Extension to Task #3:

The UCF research team will continue monitoring WWD events on CFX roadway network, including the creation of monthly WWD detection and false alerts reports for the 34 sites

currently equipped with RRFBs, as well as for any additional sites where RRFBs will be implemented during the timeframe of this extension study.

4. *Literature review on median WWD countermeasures.* To determine the most effective countermeasures at preventing median crossovers, previous research will be reviewed. Many types of countermeasures ranging from signs and pavement markings to ITS technologies will be analyzed to determine which would be most effective for CFX.

Extension to Task #4:

The UCF research team will investigate other potential WWD countermeasures for use at ramps and/or medians. These can include new detection or warning technologies being used by other agencies, as well as technologies that are not currently being used for WWD prevention, but could be adapted or modified for this purpose.

5. *Examination of right-way driver notification systems.* There are many ways that CFX could potentially alert right-way drivers of WWD events. To determine the most effective notification methods, a literature review and a customer survey, with its questions being pre-approved by the CFX administration, has been conducted as part of this task.

- 5.1. *Literature review on WWD notifications.* A literature review will be conducted on ways other agencies currently warn about wrong-way drivers. Based on this review, potential notification methods for CFX will be identified.

- 5.2. *Customer survey on WWD notifications.* In addition to the literature review, a customer survey has been developed, reviewed and approved by the CFX administration, and then it was implemented to obtain the opinions of CFX's customers regarding WWD notifications and countermeasures. This survey was implemented online and customers

were asked about their preferences concerning WWD notification methods and messages, as well as about WWD countermeasures.

5.3. *Determination of notification methods.* Based on Tasks 5.1 and 5.2, the most appropriate notification methods for the CFX system will be determined. Additional research will be performed to determine the optimal deployment methods for these notification methods.

Extension to Task #5:

The literature review in Sub-Task 5.1 will be updated as needed. Further research will be conducted on notification methods, including the applications of vehicle-to-vehicle (V2V) and vehicle-to-infrastructure (V2I) communications for WWD notification.

6. *Review of technologies to stop intentional wrong-way drivers.* Since intentional wrong-way drivers, such as suicidal drivers, will not correct themselves when they encounter WWD countermeasures, additional technologies could be necessary to prevent these drivers from entering (or continuing on) the mainline. A literature review will be conducted on potential technologies that can physically prevent wrong-way drivers from entering the mainline to see if these technologies are feasible or would be effective for CFX to implement. Other innovative technologies that have not previously been used as WWD countermeasures will also be evaluated to see if they would be appropriate. If feasible technologies are found, testing plans and appropriate documentation for the MUTCD's Request to Experiment (RTE) will be developed.

Extension to Task #6:

The use of connected and automated vehicle technologies to stop wrong-way vehicles from entering the mainline will be investigated. If CFX desires to test any of these technologies,

The UCF research team will assist CFX in coordinating with vehicle manufacturers and any other necessary third parties.

7. *Determination of appropriate median crossover countermeasures.* Based on the literature review conducted in Task 4, appropriate countermeasures to prevent median crossovers will be determined. Appropriate sites for implementation of these countermeasures will be determined using a methodology customized for medians. Once the median locations have been selected and the countermeasures installed, WWD data at these sites will be collected, as described in Task 3.
8. *Progress reports for FHWA RTE.* Every six months, a progress report will be written for the FHWA RTE of all RRFBs installed on the CFX system at the time of each report. These progress reports will indicate the progress of this experiment, including any important observations and issues that occurred or were resolved.

Extension to Task #8:

The UCF research team will continue writing these FHWA progress reports every six months for the entire timeframe of this study including the 24 month extension period of the original project.

9. New Extension Task:

WWD countermeasure optimization model for CFX network. In addition to the **WWD Hotspots™** identification model that was developed as part of Task 2, an optimization model will also be developed. This model will consider the use of various WWD countermeasures, including low-cost improvements (enhanced signage, increased pavement markings, etc.) and advanced technologies (RRFBs or other potential technologies discovered as part of the extension to Task 4). With this model, CFX can determine the best WWD countermeasures

to implement and where to implement them to provide the best reduction in WWD for the lowest cost.

10. New Extension Task:

Evaluation of current RRFB deployment sites. Using the data collected as part of Task 3, the ramps equipped with RRFBs will be analyzed to see which ramps have higher frequencies of WWD acts and events. For any identified high-frequency ramps, potential mitigating measures to reduce the occurrence of WWD will be examined and recommended. These measures could include additional signs or markings, improved lighting, or geometric changes.

11. New Extension Task:

Analysis of CFX network for mainline WWD detection deployment. The UCF research team will assist CFX in analyzing the potential of deploying mainline WWD detection systems throughout the CFX network. First, WWD event data will be analyzed to determine mainline locations where WWD seems to occur most frequently. Then, the best type of detection systems and supplementary signage or other devices will be determined for each potential deployment location. Using this information, CFX can decide where to deploy these detection systems for a pilot test. The UCF research team will collect and analyze any data from this pilot test deployment and document the results to understand whether these systems help reduce WWD crashes and help CFX more accurately track wrong-way drivers on the mainline.

12. Recommendations for CFX. Based on the results of the previous tasks, recommendations will be provided to CFX. Recommendations on the use of RRFBs and the applied median countermeasures will be made based on the results of Task 3 and Task 7. Effective

methods to notify right-way drivers of WWD events will be made based on the results of Task 5 and potential preventative technologies will be recommended based on the results of Task 6. These recommendations will include the types of technologies and potential testing and/or implementation methods.

Extension of Task #12:

The UCF research team will also make recommendations to CFX regarding the application of connected and automated vehicle technologies (as studied in the extension to Task 6) and where to optimally implement future WWD countermeasures based on the results of the optimization model developed in Task 9. Recommendations on the future use of mainline WWD detection systems will also be made based on the results of any pilot deployment of these systems. Task 11 will help CFX determine the best mainline locations to deploy the appropriate type of WWD detection and deterrence technologies, and to evaluate the potential and viability of these technologies.

13. *Final report and presentation of results to CFX.* At the end of the extension project, a final report will be submitted in electronic format and a final presentation will be made to CFX. This final report and final presentation will also constitute the only final report and final presentation deliverables for the entire original and extension study. The final report and presentation in the original contract will be replaced by a progress presentation only made at the end of the original 24 months contract period (that ends before the extension period), also see Task#14 below.

14. *Progress Presentations.* A progress presentation will be made to CFX approximately once every four months during the extension period of the project. These progress presentations are deliverables by themselves. The original contract final presentation deliverable will be

substituted by a regular progress presentation deliverable due on the last day of the current contract ending date (August 12, 2017).

7. QUALIFICATIONS OF THE UCF PI AND HIS RESEARCH TEAM AS EVIDENCED BY PAST EXPERIENCE IN THE FIELD

Professor Haitham Al-Deek, Ph.D., P.E., is the Principal Investigator (PI) of this proposed extension of CFX WWD phase-3 study. He is the PI for the original CFX WWD Phase-3 study. He has more than **thirty years** of experience in transportation engineering, planning, and operations. He is **nationally recognized in his field and received the best paper award on developing wrong way driving risk models for Florida limited access highway network granted to him and his research team by the Freeway Operations Committee of the National Research Council-Transportation Research Board (TRB) in April 2015.** His Ph.D. student, **Adrian Sandt**, who is the lead graduate student researcher in Professor Al-Deek's WWD projects, has won the **2017 Best Freeway Operations Student Paper Award.** The paper was titled **"Identifying Wrong-Way Driving Hotspots by Modeling Crash Risk and Assessing Durations of Wrong-Way Driving Events."** This paper was also nominated for the **2017 Cunard Award (TRB Operations Section committees including freeway operations, Regional Transportation Systems Management and Operations or Regional TSMO, safety, ITS, Traffic Flow Theory, Networks, and many others).** Professor Al-Deek also received **two Chairman Awards** from TRB for his significant contributions to the fields of ***Freeway Operations, and Regional Transportation Systems Management and Operations*** in **January 2012.** In addition, he received the best TRB freeway operations paper award in

2010, which was about the impact of Dynamic Message Signs on CFX drivers, and another best paper award by the TRB Freeway Operations Committee on travel time prediction on I-4 in 2003. He also received the best TRB paper award in Regional Transportation Systems Management and Operations in January 2017, 2016, and January 2014. In 2015, he won a competitive national research project in collaboration with Texas A&M Transportation Institute (TTI) on wrong way driving countermeasures (NCHRP 03-117). He had numerous media interviews on wrong-way driving such as Channel 9 News and FOX 19 NOW News in 2016, and Channel 9 News in 2015 and 2014 featuring the innovative wrong-way driving countermeasure he and his research team came up with, which was later implemented for the first time in Central Florida. Professor Al-Deek has two US patents related to WWD, two US trademarks one of them is related to WWD, and eight software copyrights. Professor Al-Deek was invited as keynote speaker to talk about innovative research methodology and countermeasures for combating wrong way driving at the 7th Traffic Safety Conference in Amman, Jordan, May 12-13, 2015. He was featured as a distinguished researcher by the UCF College of Engineering and Computer Science in 2003. He received the Research Incentive Award in 2001 and the UCF Researcher of the Year 1999 Award (this is a very prestigious award given to the best professor researcher of the year out of the entire UCF's 1500+ faculty). He earned his Ph.D. and MS degrees from the University of California at Berkeley in 1991 and 1987 respectively. Professor Al-Deek was the principal (or co-principal) investigator of more than 70 applied research projects at UCF and elsewhere, and a large number of them were on toll roads. Since joining UCF in 1992, the total budget of applied research projects he attracted to UCF exceeded \$7.7 million. He has published more than 350 papers and technical reports in peer-reviewed journals and conferences, and more than half of these publications are related to traffic

operations and **toll roads**. He chaired 11 Ph.D. dissertations and 26 MS theses to completion. Presently, and for the past 17 years, he has been the Chair of TRB's paper review for all papers submitted to two key TRB committees: *Freeway Operations* and *Regional Transportation Systems Management and Operations*. These two committees review nearly all papers submitted to TRB's annual meeting on freeway and toll operations and management every year. Professor Al-Deek has been an associate editor of the Journal of Intelligent Transportation Systems (J-ITS) since 2007.

Professor Al-Deek teaches undergraduate and graduate courses at UCF. He developed *new* courses such as Intelligent Transportation Systems (ITS), Highway Capacity, Traffic Operations, Mass Transit, Transportation Engineering Systems, and Highway Engineering. He also teaches Transportation Engineering courses on a regular basis. Professor Al-Deek has been an active registered Professional Engineer in Florida since 1998. Professor Al-Deek has completed three federally mandated training courses required for all principal investigators and key personnel working on projects dealing with human subjects in surveys and/or interviews.

Adrian Sandt, Ph.D. student, is currently a graduate research assistant at the University of Central Florida under the supervision of Professor Al-Deek. He obtained his B.S. in Civil Engineering from UCF and is currently pursuing his Ph.D. with Professor Al-Deek as his major academic and research adviser. Mr. Sandt is a recipient of the UCF Trustees Fellowship. He won the University Transportation Center (UTC) Student of the Year (SOY) Award representing the Southeastern Transportation Center (STC) competing with students from ten universities that are members of the STC consortium including UCF. This award was presented to him by the

Consortium for University Transportation Centers (CUTC) on January 7, 2017 at the 96th TRB annual meeting in Washington, D.C. He is extremely proficient in technical writing, and he has been involved with CFX's Phase-1, Phase-2, and Phase-3 WWD studies.

Md Imrul Kayes, Ph.D. student, is a graduate research assistant at the University of Central Florida under the supervision of Professor Al-Deek. He obtained his B.Sc. in Civil Engineering in July 2014 from Bangladesh University of Engineering and Technology (BUET), the top university in Bangladesh, and was admitted to the Civil Engineering Ph.D. program at UCF in Fall 2015. Imrul Kayes has been involved in CFX WWD Phase-3 study.

Omar Al-Sahili, MS student, is a graduate research assistant under the supervision of Professor Al-Deek. He obtained his B.S. in Civil Engineering in December 2014 from An-Najah University (NNU) overseas. He worked in a transportation engineering professional consultancy firm for one year before being admitted to UCF in Spring 2016. He is also the current treasurer of the UCF student chapter of the Institute of Transportation Engineers (UCF-ITE). Omar Al-Sahili has been involved in CFX WWD Phase-3 study.

Md Omar Faruk, MS student, is a graduate research assistant at the University of Central Florida under the supervision of Professor Al-Deek. He obtained his B.Sc. in Civil Engineering, in September 2015 from Bangladesh University of Engineering and Technology (BUET), the top university in Bangladesh, and he worked in a consultancy service with this same university before being admitted to the Masters of Science in Transportation Engineering Systems (MSTS) program at UCF in Fall 2016. Omar Faruk has been involved in CFX WWD Phase-3 study.

Sara Wertanen, Undergraduate student researcher, is working on her Bachelor of Science Degree in Environmental Engineering with electives in transportation. She is a research assistant working under the supervision of Professor Al-Deek and is the UCF-ITE student chapter vice president. She is set to obtain her B.S. in Environmental Engineering in December 2017 and plans on starting in the UCF transportation engineering graduate program in spring 2018. Sara has been involved in CFX WWD Phase-3 study.

Antony Shamma, Undergraduate student researcher, is working on his Bachelor of Science Degree in Civil Engineering at UCF with a focus in Transportation. He is a research assistant working under the supervision of Professor Al-Deek and is the current president of the UCF student chapter of the Institute of Transportation Engineers (UCF-ITE). Antony has been involved in CFX WWD Phase-3 study

Corin Staves, Undergraduate student researcher, is working on his Bachelor of Science degree in Civil Engineering at UCF with a focus in Transportation. He is concurrently working on a Bachelor of Science degree in mathematics and a Bachelor of Music degree. He is a research assistant working under the supervision of Professor Al-Deek and a member of UCF-ITE. He plans to graduate in December 2017 and continue studying transportation engineering at the graduate level, through either an M.S. or direct to Ph.D. track.

Abigail VanLuvén, Undergraduate student researcher, is working on her Bachelor of Science degree in Civil Engineering at UCF with a focus in Transportation and Structures. She is a

research assistant working under the supervision of Professor Al-Deek and plans to graduate in December 2018.

Grady Carrick, Ph.D., is a thirty year plus veteran of the Florida Highway Patrol, who retired at the rank of Chief in 2012. Dr. Carrick has spent his career building bridges between the law enforcement and transportation professions. He has a national reputation as an advocate for traffic safety and traffic incident management. His leadership in the Florida Strategic Highway Safety Plan, the Florida Bicycle and Pedestrian Advisory Board, and numerous Community Traffic Safety Teams are a few accomplishments. Carrick has participated in several traffic safety initiatives as a member of The International Association of Chiefs of Police (IACP). In his current position as principal for the firm Enforcement Engineering Inc., he seeks to improve transportation safety through the integration of transportation engineering, research and enforcement operations. He has extensive experience in traffic safety analysis and the development of law enforcement countermeasures. In addition to his professional accomplishments, Dr. Carrick holds a Ph.D. in Transportation Engineering from the University of Florida. He has published and presented at numerous state, national, and international conferences on traffic safety and operations.

Roles and Responsibilities of Project Team

The roles and responsibilities of the project team are listed below. Additional information on the team can be found in the qualifications of the UCF research team section in this proposal.

Professor Haitham Al-Deek, Ph.D., P.E., *UCF Principal Investigator*. He will be responsible for the entire project management and coordination with CFX, budget control, submitting the

final report, conducting progress and final presentations to CFX, and attending project meetings with CFX.

Adrian Sandt, *Graduate Research Assistant and UCF Ph.D. Student*. He will be responsible for editing of reports, presentations, as well as other products submitted to CFX during the course of this study. He will also help with methodology development and data analysis, including development of the optimization model, as well as work on the literature reviews, final report, final presentation, and progress presentations and will attend the project meetings with CFX.

Md. Imrul Kayes, *Graduate Research Assistant and UCF Ph.D. Student*. He will be responsible for collecting and analyzing WWD events, including all WWD acts and false activations/false alerts generated by the RRFb devices. He will also help with the literature reviews, FHWA progress reports, monthly detection and false alerts reports, final report, final presentation, and progress presentations and will attend the project meetings with CFX.

Omar Al-Sahili, *Graduate Research Assistant and UCF MS Student*. He will be responsible for analyzing WWD median crossover citations and determining the appropriate countermeasures to use at medians. He will also help with the editing of progress presentations and attend project meetings with CFX.

Md. Omar Faruk, *Graduate Research Assistant and UCF MS Student*. He will help with the analysis of the WWD median crossover citations, as well as the investigation of using automated

and connected vehicle technologies for WWD prevention. He will also attend project meetings with CFX.

Sara Wertanen, *UCF Undergraduate Student Researcher*. She will help with the examination of WWD countermeasures and notification methods, including design and analysis of the customer survey results. She will also edit progress reports, presentations, literature reviews, final report, and final presentation, and will attend project meetings with CFX. She will attend field trips and technology testing.

Antony Shamma, *UCF Undergraduate Student Researcher*. He will help identify potential WWD countermeasures and notification methods, including automated and connected vehicle technologies. He will attend field trips and technology testing. He will also work on literature reviews and progress presentations and attend project meetings with CFX.

Corin Staves, *UCF Undergraduate Student Researcher*. He will help analyze and monitor WWD events, as well as identify potential WWD countermeasures and notification methods. He will also work on progress reports and presentations and attend project meetings with CFX.

Abigail VanLuven, *UCF Undergraduate Student Researcher*. She will help analyze and monitor WWD events, as well as examine potential WWD countermeasures and notification methods. She will also work on progress presentations and reports and attend project meetings with CFX.

Grady Carrick, Ph.D., Enforcement Engineering Inc. He will provide the research team with vital WWD CAD/911 call and citation data in a timely fashion to evaluate the implemented WWD countermeasures (RRFBs and median treatments) and meet the project deadlines on time. He will also provide the perspective of law enforcement and input on the median treatments and the feasibility of innovative technologies to stop intentional wrong-way drivers. (Formal commitment will be provided by the consultant when funding is established).

8. PROJECT EXTENSION DELIVERABLES

- a. Progress Presentations.** A progress presentation will be made to CFX approximately **once every four months** during the extension period of the project. These progress presentations are deliverables by themselves.
- b. Final Report.** A final report will be submitted to CFX in MS Word or PDF format. The final report will be provided in electronic format only. As agreed with CFX, only one final report will be delivered for the entire project (including the original contract and this extension of the original contract).
- c. Project Final Presentation to CFX.** The UCF research team will make a final presentation at CFX's Headquarters (HQ) with conclusions and recommendations. The final presentation represents the last progress presentation in this project. As agreed with CFX, only one final presentation will be delivered for the entire project (including the original contract and its current proposed extension). The original contract final presentation will be substituted by a regular progress presentation due on the last day of the current contract ending date (August 12, 2017).

9. TRAVEL

Travel during the extension period includes **6 meetings (3 per year) including the final presentation** with CFX, the project sponsor, in their Orlando HQ office. This also includes a potential of 4 field (and/or CFX HQ) visits. Estimate of local travel cost is based on travel history to CFX HQ (and previous field trips/field visits) and is included in the budget where only mileage and tolls will be charged.

10. PROJECT SCHEDULE

Central Florida Expressway Authority CFX PROJECT SCHEDULE																									
Project Title	EXTENSION TO "WRONG-WAY DRIVING PHASE-3 STUDY: ALLOCATING COUNTERMEASURES ON CFX ROADWAY NETWORK"																								
Start - Finish	August 13, 2017 to August 12, 2019																								
Research Agency	University of Central Florida																								
Principal Investigator	Professor Haitham Al-Deek, Ph.D., P.E., University of Central Florida																								
RESEARCH TASK	25	26	27	28	29	30	31	32	33	34	35	36	37	38	39	40	41	42	43	44	45	46	47	48	
1. Phase-3 kick-off meeting																									
2. Methodology development and extension (expansion to 34 sites + additional sites)																									
3. Collection and analysis of WWD data + Extension to Task#3																									
4. Literature review on median WWD countermeasures																									
4. Extension to Task #4. Investigation of new WWD countermeasures																									
5. Examination of right-way driver notification systems																									
5.1 Literature review on WWD notifications																									
5.2 Customer survey on WWD notifications																									
5.3 Determination of notification methods																									
5. Extension to Task #5. Research on V2V and V2I WWD notification																									
6. Literature review of technologies to stop intentional WW drivers																									
6. Extension to Task #6. Investigation of automated and connected vehicle WWD prevention																									
7. Determination of appropriate median crossover countermeasures																									
8. Progress reports for FHWA RTE (Extension to Task#8)																									
9. New Extension Task: WWD countermeasure optimization model for CFX network																									
10. New Extension Task: Evaluation of current RRFB deployment sites																									
11. New Extension Task: Analysis of CFX network for mainline WWD detection deployment																									
12. Recommendations for CFX																									
12. Extension to Task #12. Recommendations on application of connected vehicles																									
13. Final report and presentation of results to CFX																									
14. Progress Presentations																									

11. BUDGET SHEET

EXTENSION TO PROJECT TITLED "WRONG-WAY DRIVING PHASE-3: ALLOCATING COUNTERMEASURES ON CFX ROADWAY NETWORK" PROJECT PERIOD (AUGUST 13, 2017- AUGUST 12, 2019)				
	PROJECT DURATION IS 24 MONTHS			TOTAL
PERSONNEL	Hours	Rate	Subtotal	
P.I. (Professor Al-Deek, Ph.D., P.E.)	509.60	\$104.314	\$53,158	\$53,158
Graduate Research Assistant (1 student)	2080	\$21.32	\$44,335	\$44,335
OPS	2080	\$21.32	\$44,335	\$44,335
Undergraduate students	2000	\$10.15	\$20,300	\$20,300
PERSONNEL BENEFITS				
P.I. (Professor Al-Deek, Ph.D., P.E.)		28.95%	\$15,389	\$15,389
Students		0.65%	\$420	\$420
OPS		2.25%	\$998	\$998
EXPENSES				
Local travel for CFX project meetings + field visits	Trips	Each Trip		
	10	\$60.0	\$600	\$600
Enforcement Engineering, Inc., Consultant			\$5,000	\$5,000
	Months	Cost/Month		
Supplies	24	\$38.08	\$914	\$914
Student tuition (1 student)			\$19,096	\$19,096
DIRECT COST PER TIME PERIOD			\$204,545	\$204,545
INDIRECT COST (10%)				\$20,455
TOTAL COST				\$225,000

*Hours and hourly rates are included in this budget for estimating purposes only. Faculty and Administrative and Professional personnel of the University of Central Florida are salaried employees that do not complete time cards. Invoicing for services rendered will be based on percentage of total professional effort, in amounts not to exceed the total budgeted salary.

**PI rate includes anticipated increase in connection with internal awards. This increase has been included in the above proposed budget.

**INTERLOCAL AGREEMENT BETWEEN
CENTRAL FLORIDA EXPRESSWAY AUTHORITY
AND
UNIVERSITY OF CENTRAL FLORIDA**

THIS AGREEMENT is made and entered into as of the 13th day of August, 2015 ("Effective Date"), by and between the CENTRAL FLORIDA EXPRESSWAY AUTHORITY, a body and corporate politic and agency of the State of Florida, hereinafter referred to as "AUTHORITY" and the UNIVERSITY OF CENTRAL FLORIDA BOARD OF TRUSTEES, a public body corporate of the State of Florida, hereinafter referred to as "UNIVERSITY."

WHEREAS, the UNIVERSITY is authorized by Section 1004.22, Florida Statutes, to enter into interlocal agreements providing for the performance by one governmental unit on behalf of another of any function which either agency is authorized to perform; and

WHEREAS, the AUTHORITY was created and established to acquire, hold, construct, improve, maintain and operate the Central Florida Expressway Authority System, pursuant to Part III, Chapter 348, Florida Statutes; and

WHEREAS, pursuant to Section 348.754, Florida Statutes, the AUTHORITY has been granted the power to make and enter into contracts or other transactions and to do all acts and things necessary or convenient for the conduct of its business and for carrying out the purposes of the AUTHORITY; and

WHEREAS, the AUTHORITY desires that the UNIVERSITY perform a study entitled "Wrong-Way Driving Study Phase III: Allocating and Evaluating Countermeasures on CFX Roadway Network".

NOW, THEREFORE, in consideration of the promises herein made and the benefits to accrue to the parties, and for good and valuable consideration, the parties agree as follows:

1. Term. Services to be provided by the UNIVERSITY shall begin upon the Effective Date and shall be completed no later than two (2) years from the Effective Date, unless extended by written modification and signed by the parties.

2. Services. The UNIVERSITY shall provide the services outlined in the attached **Exhibit A**. Any changes must be approved in writing by the authorized representatives of the parties.

3. Anything contained herein to the contrary notwithstanding, the AUTHORITY shall have final approval of the study product as it relates to its implementation on the AUTHORITY system.

4. Payment. The AUTHORITY shall pay the UNIVERSITY for services rendered as outlined in the budget included in **Exhibit A**, which states that payment will be billed in eight (8) equal invoices of \$25,000 each every three months. All deliverables/invoices submitted by the UNIVERSITY must be approved in writing by Authority prior to payment by the AUTHORITY to the UNIVERSITY. The payment for all work shall not exceed \$200,000.00. Invoices shall be submitted in a format acceptable to the AUTHORITY with detail sufficient for a proper pre-audit and post-audit thereof. Invoices submitted for pre-authorized travel expenses shall be paid in accordance with the rates specified in Section 112.061, Florida Statutes. Payment will be remitted to:

University of Central Florida
Contracts & Grants
PO Box 160118
Orlando, FL 32816

5. Administrative Personnel. The UNIVERSITY shall perform the activities described in **Exhibit A** and will comply with all statutory requirements and applicable regulations in the conduct of the project. The UNIVERSITY agrees that such activities will be directed by:

AUTHORITY:

Technical and Contractual:
Corey Quinn, P.E.
Central Florida Expressway Authority
4974 ORL Tower Road
Orlando, FL 32807
Phone: (407) 690-5000
Fax: (407) 690-5011
E-mail: Corey.Quinn@CFXway.com

UNIVERSITY:

Project Director/Technical:
Dr. Haitham Al-Deek, Ph.D., P.E.
University of Central Florida/CECE
4000 Central Florida Boulevard
Orlando, FL 32816-2450
Phone: (407) 823-2988
Fax: (407) 823-3315
e-mail: Haitham.Al-Deek@ucf.edu

Contractual:
Jessica Maass

University of Central Florida
Office of Research and Commercialization
12201 Research Parkway, Suite 501
Orlando, FL 32826-3252
Phone: (407) 882-1187
Fax: (407) 823-1379
e-mail: Jessica.Maass@ucf.edu

6. Records and Audit. The UNIVERSITY agrees to keep and maintain accounts for a period of at least three (3) years from the end of the contract, or longer if required by the State of Florida's retention schedules, in order to record complete and correct entries as to all costs and expenditures. No funds provided by the AUTHORITY shall be expended for expenses other than for the study. Such books and records shall be available at all reasonable times during normal business hours for examination and audit by the AUTHORITY. Incomplete or incorrect entries in such books and records will be grounds for disallowance by the AUTHORITY of any fees, expenses or costs based upon such entries.

7. Public Records Act. Both parties and any subconsultants to this Agreement shall comply with the provisions of Chapter 119, Florida Statutes, and shall permit public access to all documents, papers, letters or other material subject to the provisions of Chapter 119, Florida Statutes, and made or received in conjunction with this Agreement.

8. Extensions. The AUTHORITY and the UNIVERSITY agree that at future dates this Agreement may be extended or supplemented for future services, as mutually agreed to and signed by the authorized representatives of the parties.

9. Assumption of Risk. Each party assumes any and all risks of personal injury and property damage attributable to the negligent acts or omissions of that party and its officers, agents or employees while acting within the scope of their employment. Neither party, nor any of its agents or employees will be liable under this section for damages arising out of injury or damage to persons or property directly caused or resulting from the negligence of the other party or any of its officers, agents or employees. In no event will either party be responsible for any incidental damages, consequential damages, exemplary damages of any kind, lost goodwill, lost profits, lost business and/or any indirect economic damages whatsoever regardless of whether such damages arise from claims based upon contract, negligence, tort (including strict liability or other legal theory), a breach of any warranty or term of this agreement, and regardless of whether it was advised or had reason to know of the possibility of incurring such damages in advance.

10. No Contingency Fee. The UNIVERSITY represents that it has not employed or obtained any company or person, other than bona fide employees or consultants of the UNIVERSITY to solicit or to secure this Agreement, and it has not paid or agreed to pay any company, corporation, individual or firm, other than

bona fide employees employed by the UNIVERSITY. For the breach or violation of this provision, the AUTHORITY shall have the right to terminate the Agreement at its discretion.

11. No Assignments without Written Consent. This Agreement or any interest herein shall not be assigned, transferred or otherwise encumbered under any circumstances by either party without the prior written consent of the other party. However, the Agreement shall run to the AUTHORITY and its successors.

12. Termination. This Agreement may be terminated by either party upon 30 days written notice to the other with or without cause. In the event of termination by the parties the AUTHORITY will pay the UNIVERSITY for all costs incurred and any non-cancellable obligations properly incurred through the date of termination. In the event that UNIVERSITY'S project director becomes unable or unwilling to continue the project activities hereunder, and a mutually acceptable substitute is not available, the AUTHORITY shall have the option to cancel this Agreement.

13. Publication. The parties agree that UNIVERSITY may publish the results of the work in its own form. AUTHORITY shall be furnished with copies of any proposed publication, to review for confidential information only, thirty (30) days in advance of the intended publication date. AUTHORITY will complete its review and provide UNIVERSITY with any objections within thirty (30) days of receipt. In the absence of timely objection, UNIVERSITY shall be free to proceed without restriction, subject to compliance with the exemptions and provisions set forth in the Florida Statutes and law. In the event of an objection, the parties will negotiate in good faith the removal of the confidential material.

14. Ownership. Except for ownership of Intellectual Property pursuant to Section 15, and publications pursuant to Section 13, AUTHORITY is and shall be and remain the sole owner of all deliverable documents, software, data and items developed with respect to and in connection with the performance of this Agreement. Subject to UNIVERSITY's right to publish in Section 13 above, UNIVERSITY may not use such materials in any way, other than in performance of its services under the terms of this Agreement, without the prior written consent of AUTHORITY, which may be granted or denied in the AUTHORITY's sole discretion. Deliverable information and work product generated in connection with this Agreement shall be the property of AUTHORITY. Subject to UNIVERSITY's right to publish in Section 13 above, UNIVERSITY shall not transfer, disclose or otherwise use such information or work product for any purpose other than in performance of its duties hereunder, without AUTHORITY's prior written consent, which may be withheld or granted in the sole discretion of AUTHORITY. Information and materials with respect to the AUTHORITY and this Agreement obtained by UNIVERSITY from AUTHORITY during the Term of this Agreement shall remain confidential for a period of three (3) years from the Effective Date. Notwithstanding the foregoing, both parties will be subject to the requirements of the Florida Public Records law and other law, including requirements pertaining to confidential information, and any valid court order.

15. Intellectual Property. The term "Intellectual Property" means individually and collectively all inventions, improvements and/or discoveries, patentable or unpatentable, copyrightable or uncopyrightable, including but not limited to mask works, computer software, both object and source code, data bases and works of authorship.

Intellectual Property developed solely by UNIVERSITY shall be solely and exclusively owned by UNIVERSITY. Intellectual Property developed solely by AUTHORITY shall be solely and exclusively owned by AUTHORITY. "Joint Intellectual Property" means any Intellectual Property developed jointly by the AUTHORITY and UNIVERSITY under this Agreement. Joint Intellectual Property will be owned jointly by AUTHORITY and UNIVERSITY, who agree to jointly determine proper inventorship, authorship, and ownership subject to Title 35 of the United States Code for inventions and Title 17 of the United States Code for works of authorship, and to jointly determine filing and licensing.

"Background Intellectual Property" means Intellectual Property which was in existence, prior to the Effective Date of this Agreement, or which is subsequently created or developed by a party so long as such creation or development was not in the course of this project. The parties agree that Background Intellectual Property of AUTHORITY and UNIVERSITY is their separate property, respectively, and are not affected by this Agreement. Neither party shall acquire any claims to or rights in the Background Intellectual Property of the other party.

Nothing in the Agreement shall circumvent or restrict either party's pre-existing obligations with the U.S. government pertaining to any kind of intellectual property or any copyrightable material or other Intellectual Property, including but not limited to such pre-existing obligations contained in grants, contracts and other types of agreements or arrangements between either parties, and the U.S. government. These obligations may include granting licenses to the U.S. government for certain Intellectual Property or any copyrightable material or other intellectual property which is being developed.

Notwithstanding any provision to the contrary in the Agreement, UNIVERSITY shall retain the right to practice any invention, discovery and copyright developed hereunder for its own academic, non-commercial research and teaching purposes.

16. Dispute Resolution. The parties will attempt in good faith to resolve any controversy or claim arising out of or relating to this Agreement promptly by negotiations between a senior executive of the UNIVERSITY who has the authority to settle the controversy and a designated representative from the AUTHORITY who has the authority to recommend a settlement to the Board.

The disputing party shall give the other party written notice of the dispute. Within twenty days after receipt of said notice or longer with the prior written approval from the disputing party, the receiving party shall submit to the other a written response. The

notice and response shall include (a) a statement of each party's position and a summary of the evidence and arguments supporting its position, and (b) the name and title of the executive who will represent that party. The executives shall meet at a mutually acceptable time and place within thirty days of the date of the disputing party's notice and thereafter as often as they reasonably deem necessary to exchange relevant information and to attempt to resolve the dispute.

In the event a dispute arising out of or related to this Agreement (on the Services performed thereunder) has not been resolved pursuant to the aforesaid mediation procedure within sixty days of the initiation of such procedures, the parties shall be free to pursue any available legal remedies.

17. Governing Law; Venue. This Agreement and the rights of the parties will be governed and construed in accordance with the laws of the State of Florida and the United States, without regard to its choice of law principles. The parties agree that jurisdiction and venue for any action arising under this Agreement shall lie exclusively within either the state courts of Florida located in Orange County, Florida or the United States District Court for the Middle District of Florida, Orlando Division. The parties specifically waive the right to any other jurisdiction and venue, and the defense based on inconvenient forum.

18. Time is of the Essence. The AUTHORITY and the UNIVERSITY recognize that time is of the essence with respect to the Agreement and UNIVERSITY shall meet the date specified in Exhibit A attached hereto.

19. Waiver. No failure or delay by a party hereto to insist on the strict performance of any term of this Agreement, or to exercise any right or remedy consequent to a breach thereof, shall constitute a waiver of any breach or any subsequent breach of such term. No waiver of any breach hereunder shall affect or alter the remaining terms of this Agreement, but each and every term of this Agreement shall continue in full force and effect with respect to any other then existing or subsequent breach thereof.

20. Force Majeure. Neither party shall be liable in damages or have the right to terminate this Agreement for the delay or default in performing hereunder if such delay or default is caused by conditions beyond its control including, but not limited to, Acts of God, government restrictions, wars, insurrections and/or any other cause beyond the reasonable control of the party whose performance is affected.

21. Export Control. Both parties are subject to United States laws and regulations controlling the export of technical data, computer software, laboratory prototypes and other commodities, and that its obligations hereunder are contingent on compliance with applicable U.S. export laws and regulations (including the Arms Export Control Act, as amended, and the Export Administration Act of 1979). The transfer of certain technical data and commodities may require a license from the cognizant agency of the United States Government and/or written assurances by the parties that they will

not re-export data or commodities to certain foreign countries without prior approval of the cognizant government agency. While UNIVERSITY agrees to cooperate in securing any license which the cognizant agency deems necessary in connection with this Agreement, UNIVERSITY cannot and does not guarantee that such licenses will be granted.

22. No Warranties. UNIVERSITY is a NON-PROFIT EDUCATIONAL INSTITUTION. UNIVERSITY MAKES NO REPRESENTATIONS AND EXTENDS NO WARRANTIES OF ANY KIND, EITHER EXPRESS OR IMPLIED WITH REGARD TO THE RESEARCH AND WORK PERFORMED UNDER THIS AGREEMENT. THERE ARE NO EXPRESS OR IMPLIED WARRANTIES OF MERCHANTABILITY OR FITNESS FOR A PARTICULAR PURPOSE, OR THAT ANY RESEARCH DELIVERABLES OR INTELLECTUAL PROPERTY DEVELOPED BY UNIVERSITY UNDER THIS AGREEMENT WILL NOT INFRINGE ANY THIRD PARTY PATENT, COPYRIGHT, TRADEMARK, OR OTHER THIRD PARTY RIGHTS. UNIVERSITY MAKES NO REPRESENTATION AS TO THE USEFULNESS OF RESEARCH DELIVERABLES OR INTELLECTUAL PROPERTY. IF THE AUTHORITY CHOOSES TO EXPLOIT RESEARCH DELIVERABLES OR INTELLECTUAL PROPERTY IN ANY MANNER WHATSOEVER, IT DOES SO AT ITS OWN RISK.

23. Non-Use of Name. UNIVERSITY and the AUTHORITY may not use each other's name or trademarks in any promotion, statement, advertisement, press release or communications to the general public or any third party without each other's express written consent. Any proposed public statement, advertisement, press release or communications by either party shall be submitted to the other party for its review and written approval at least thirty (30) days prior to the planned dissemination or publication. However, neither party shall be prohibited from complying with Section 1004.22(2) regarding sponsored research activities.

24. Independent Contractor. UNIVERSITY shall provide services under this Agreement as an independent contractor and as such shall maintain complete control over and be responsible for all of its operations and personnel. This Agreement shall not be deemed to create any other form of employment relationship or business organization between the parties.

25. Severability. If any one or more of the provisions of this Agreement shall be held to be invalid, illegal or unenforceable, the validity, legality or enforceability of the remaining provisions of this Agreement shall not be in any way affected or impaired thereby and shall remain in full force and effect.

26. Counterparts. This Agreement may be executed in counterparts, each of which shall be considered an original, but which together shall constitute but one and the same Agreement.

27. Entire Agreement. This Agreement and its Exhibit(s) constitute the entire

agreement of the parties and supersedes all prior communications, understandings and agreements relating to the subject matter hereof, whether oral or written.

28. No Third Party Beneficiaries. This Agreement shall not be construed to inure to the benefit of or to invest rights in any third parties and shall inure only to the benefit of the parties hereto.

29. Unauthorized Aliens. The AUTHORITY shall consider the employment by the UNIVERSITY of unauthorized aliens a violation of Section 274A(e) of the Immigration and Nationality Act. If the UNIVERSITY knowingly employs unauthorized aliens, such violation shall be cause for unilateral cancellation of the contract.

IN WITNESS WHEREOF, the parties hereto set their hands and seals the day and year set forth below. This Agreement was approved by the AUTHORITY'S Board of Directors at its meeting on August 13, 2015.

UNIVERSITY OF CENTRAL FLORIDA
BOARD OF TRUSTEES

CENTRAL FLORIDA
EXPRESSWAY AUTHORITY

BY: Courtney Benson
Authorized Signature

BY: Paul Miller
Director of Procurement

Courtney Benson
Print Name

Date: 8/19/15

Title: Contract Manager

4 AUG '15 AM 8:43

Date: 7/30/2015

Legal Content Approved for the University:

[Signature]
Name:

Date: 7-30-15

Approved as to form and execution,
only.

Linda S. B. Lanza
General Counsel, Deputy

E.1.

Chairman's Report

**THERE ARE NO
BACKUP MATERIALS
FOR THIS ITEM**

E.2.

Treasurer's Report

CENTRAL FLORIDA EXPRESSWAY AUTHORITY

MEMORANDUM

TO: CFX Board Members

FROM: Michael Carlisle, Director of Accounting and Finance

DATE: March 22, 2017 

RE: February 2017 Financial Reports

Attached please find the February 2017 Financial Reports. Please feel free to contact me if you have any questions or comments with regard to any of these reports.

**CENTRAL FLORIDA EXPRESSWAY AUTHORITY
CALCULATION OF NET REVENUES AS DEFINED BY THE BOND RESOLUTIONS
AND RELATED DOCUMENTS
FOR THE MONTH ENDING FEBRUARY 28, 2017 AND YEAR-TO-DATE**

	<u>FY 17 MONTH ACTUAL</u>	<u>FY 17 MONTH BUDGET</u>	<u>FY 17 YEAR-TO-DATE ACTUAL</u>	<u>FY 17 YEAR-TO-DATE BUDGET</u>	<u>FY 17 YEAR-TO-DATE VARIANCE</u>	<u>FY 17 YEAR-TO-DATE % VARIANCE</u>	<u>FY 16 - 17 YEAR-TO-DATE COMPARISON</u>
REVENUES							
TOLLS	\$ 32,252,115	\$ 31,512,085	\$ 259,089,519	\$ 246,594,102	\$ 12,495,417	5.1%	7.2%
TOLLS COLLECTED VIA UTN'S AND PBP'S	2,060,514	1,255,543	12,928,413	7,621,567	5,306,846	69.6%	41.8%
FEES COLLECTED VIA UTN/UTC'S AND PBP'S	964,781	549,004	4,600,374	3,772,995	827,379	21.9%	-1.4%
TRANSPONDER SALES	17,270	40,731	145,231	325,845	(180,614)	-55.4%	76.8%
OTHER OPERATING	168,208	142,038	891,661	902,792	(11,131)	-1.2%	-2.3%
INTEREST	415,046	174,222	3,238,670	1,821,434	1,417,236	77.8%	66.6%
MISCELLANEOUS	93,780	82,624	698,564	673,561	25,003	3.7%	-4.9%
TOTAL REVENUES	35,971,714	33,756,246	281,592,433	261,712,297	19,880,136	7.6%	8.7%
O M & A EXPENSES							
OPERATIONS	4,887,634	4,378,987	27,943,343	29,227,311	1,283,968	4.4%	14.3%
MAINTENANCE	1,189,384	1,921,315	7,685,919	9,712,422	2,026,503	20.9%	6.4%
ADMINISTRATION	544,820	725,319	4,114,974	5,022,921	907,947	18.1%	-6.7%
OTHER OPERATING	211,153	190,643	1,565,014	1,811,107	246,093	13.6%	22.3%
TOTAL O M & A EXPENSES	6,832,991	7,216,264	41,309,250	45,773,761	4,464,511	9.8%	10.5%
NET REVENUES BEFORE DEBT SERVICE	29,138,723	26,539,983	240,283,182	215,938,536	24,344,647	11.3%	8.4%
COMBINED NET DEBT SERVICE	14,359,225	14,377,605	114,266,055	115,164,960	898,904	0.8%	20.3%
NET REVENUES AFTER DEBT SERVICE	\$ 14,779,498	\$ 12,162,378	\$ 126,017,127	\$ 100,773,576	\$ 25,243,551	25.0%	-0.6%

The monthly Treasurer's Report is provided as interim information for management's use. It is prepared on a modified cash basis and has not been audited, nor should it be deemed final. For audited financial statements, please see CFX's Comprehensive Annual Financial Reports.

**CENTRAL FLORIDA EXPRESSWAY AUTHORITY
SUMMARY OF OPERATIONS, MAINTENANCE AND ADMINISTRATION
COMPARISON OF ACTUAL TO BUDGET FOR FISCAL YEAR 2017
FOR THE MONTH ENDING FEBRUARY 28, 2017 AND YEAR-TO-DATE**

	<u>FY 2017 ACTUAL</u>	<u>FY 2017 BUDGET</u>	<u>VARIANCE</u>	<u>FY 17 YEAR-TO-DATE % VARIANCE</u>
Operations	\$ 27,943,343	\$ 29,227,311	\$ 1,283,968	4.4%
Maintenance	7,685,919	9,712,422	2,026,503	20.9%
Administration	4,114,974	5,022,921	907,947	18.1%
Other Operating	<u>1,565,014</u>	<u>1,811,107</u>	<u>246,093</u>	<u>13.6%</u>
Total O M & A	\$ 41,309,250	\$ 45,773,761	\$ 4,464,511	9.8%
 Capital Expenditures				
Operations	\$ 8,520	\$ 203,299	194,779	95.8%
Maintenance	47,464	45,205	(2,259)	-5.0%
Administration	<u>44,148</u>	<u>51,667</u>	<u>7,519</u>	<u>14.6%</u>
Total Capital Expenditures	\$ 100,132	\$ 300,171	\$ 200,039	66.6%

The monthly Treasurer's Report is provided as interim information for management's use. It is prepared on a modified cash basis and has not been audited, nor should it be deemed final. For audited financial statements, please see CFX's Comprehensive Annual Financial Reports.



**Central Florida Expressway Authority
Operations - Comparison of Actual to Budget
For the Eight Months Ending February 28, 2017**

	<u>YTD Actual</u>	<u>YTD Budget</u>	<u>Budget Variance</u>	<u>Variance Percentage</u>
Toll Operations	317,113	346,937	29,824	8.60%
Image Review	2,835,769	2,496,815	(338,953)	-13.58%
Special Projects	99,245	125,251	26,006	20.76%
Information Technology	2,020,550	2,306,873	286,323	12.41%
E-PASS Service Center	9,969,740	10,315,572	345,832	3.35%
Public Outreach/Education	1,322,272	1,367,023	44,752	3.27%
Subtotal CFX	16,564,689	16,958,472	393,783	2.32%
TOLL FACILITIES				
Beachline Expressway (SR 528)				
Beachline Plaza	881,791	987,382	105,591	10.69%
Airport Plaza	0	0	0	0.00%
Dallas Plaza	753,042	809,815	56,773	7.01%
East-West Expressway (SR 408)				
Dean Plaza	783,583	870,859	87,276	10.02%
Conway Main Plaza	1,398,922	1,459,873	60,951	4.18%
Pine Hills Plaza	935,683	1,030,371	94,688	9.19%
Hiawassee Plaza	810,651	894,353	83,702	9.36%
Western Expressway (SR 429)				
Independence Plaza	787,041	884,469	97,429	11.02%
Forest Lake Plaza	815,459	933,618	118,159	12.66%
Ponkan Plaza	0	12,000	12,000	100.00%
Greeneway Expressway (SR 417)				
University Plaza	870,964	895,883	24,919	2.78%
Curry Ford Plaza	684,515	861,123	176,608	20.51%
Boggy Creek Plaza	979,444	926,328	(53,116)	-5.73%
John Young Plaza	880,511	1,006,655	126,145	12.53%
John Land Apopka (SR 414)				
Coral Hills Plaza	805,568	899,409	93,841	10.43%
Subtotal Toll Facilities	11,387,174	12,472,138	1,084,964	8.70%
Total Operations Expenses	27,951,863	29,430,610	1,478,747	5.02%



**Central Florida Expressway Authority
Maintenance - Comparison of Actual to Budget
For the Eight Months Ending February 28, 2017**

	<u>YTD Actual</u>	<u>YTD Budget</u>	<u>Budget Variance</u>	<u>Variance Percentage</u>
Maintenance Administration	1,027,364	1,135,048	107,684	9.49%
Expressway Operations	1,880,286	2,649,328	769,041	29.03%
Routine Maintenance	4,825,732	5,973,251	1,147,519	19.21%
FDOT Services	0	0	0	0.00%
Total Maintenance Expenses	<u><u>7,733,383</u></u>	<u><u>9,757,627</u></u>	<u><u>2,024,244</u></u>	<u><u>20.75%</u></u>



**Central Florida Expressway Authority
Administration - Actual to Budget by Cost Center
For the Eight Months Ending February 28, 2017**

	<u>YTD Actual</u>	<u>YTD Budget</u>	<u>Budget Variance</u>	<u>Variance Percentage</u>
General	389,604	411,039	21,435	5.21%
Administrative Services	1,281,134	1,409,008	127,875	9.08%
Communications	342,630	438,870	96,240	21.93%
Human Resources	91,573	150,259	58,686	39.06%
Supplier Diversity	124,551	240,253	115,703	48.16%
Accounting	863,820	1,007,490	143,671	14.26%
Records Management	186,564	187,030	466	0.25%
Construction Administration	36,341	62,655	26,314	42.00%
Procurement	278,025	310,090	32,065	10.34%
Legal	342,189	482,779	140,590	29.12%
Internal Audit	172,032	321,333	149,301	46.46%
525 Magnolia	15,876	17,238	1,362	7.90%
Plans Production	34,785	36,543	1,758	4.81%
Grand Total Expenses	<u><u>4,159,122</u></u>	<u><u>5,074,588</u></u>	<u><u>915,466</u></u>	<u><u>18.04%</u></u>

**CENTRAL FLORIDA EXPRESSWAY AUTHORITY
CALCULATION OF NET REVENUES AS DEFINED BY THE BOND RESOLUTIONS
PREVIOUS YEAR BUDGET TO ACTUAL COMPARISON
FOR THE MONTH ENDING FEBRUARY 28, 2017 AND YEAR-TO-DATE**

	FY 17 YEAR-TO-DATE ACTUAL	FY 17 YEAR-TO-DATE BUDGET	FY 17 YEAR-TO-DATE VARIANCE	FY 16 YEAR-TO-DATE ACTUAL	FY 16 YEAR-TO-DATE BUDGET	FY 16 YEAR-TO-DATE VARIANCE	YEAR-TO-DATE VARIANCE COMPARISON
REVENUES							
TOLLS	\$ 259,089,519	\$ 246,594,102	\$ 12,495,417	\$ 241,637,935	\$ 217,339,733	\$ 24,298,202	\$ (11,802,785)
TOLLS COLLECTED VIA UTN'S AND PBP'S	12,928,413	7,621,567	5,306,846	9,120,384	5,502,316	3,618,068	1,688,778
FEES COLLECTED VIA UTN/UTC'S AND PBP'S	4,600,374	3,772,995	827,379	4,665,852	3,207,296	1,458,556	(631,177)
TRANSPONDER SALES	145,231	325,845	(180,614)	82,151	43,418	38,733	(219,347)
OTHER OPERATING	891,661	902,792	(11,131)	912,191	1,349,700	(437,509)	426,378
INTEREST	3,238,670	1,821,434	1,417,236	1,943,465	1,279,641	663,824	753,412
MISCELLANEOUS	698,564	673,561	25,003	734,525	651,555	82,970	(57,967)
TOTAL REVENUES	281,592,433	261,712,297	19,880,136	259,096,503	229,373,659	29,722,844	(9,842,708)
O M & A EXPENSES							
OPERATIONS	27,943,343	29,227,311	1,283,968	24,456,739	27,023,729	2,566,990	(1,283,022)
MAINTENANCE	7,685,919	9,712,422	2,026,503	7,225,751	9,338,123	2,112,372	(85,869)
ADMINISTRATION	4,114,974	5,022,921	907,947	4,409,806	4,482,570	72,764	835,183
OTHER OPERATING	1,565,014	1,811,107	246,093	1,279,218	1,560,843	281,625	(35,532)
TOTAL O M & A EXPENSES	41,309,250	45,773,761	4,464,511	37,371,514	42,405,265	5,033,751	(569,240)
NET REVENUES BEFORE DEBT SERVICE	240,283,182	215,938,536	24,344,647	221,724,989	186,968,394	34,756,595	(10,411,948)
COMBINED NET DEBT SERVICE	114,266,055	115,164,960	898,904	94,960,586	95,212,023	(251,437)	1,150,341
NET REVENUES AFTER DEBT SERVICE	<u>\$ 126,017,127</u>	<u>\$ 100,773,576</u>	<u>\$ 25,243,551</u>	<u>\$ 126,764,403</u>	<u>\$ 91,756,371</u>	<u>\$ 35,008,032</u>	<u>\$ (9,764,481)</u>

The monthly Treasurer's Report is provided as interim information for management's use. It is prepared on a modified cash basis and has not been audited, nor should it be deemed final. For audited financial statements, please see CFX's Comprehensive Annual Financial Reports.

**CENTRAL FLORIDA EXPRESSWAY AUTHORITY
CALCULATION OF NET REVENUES AS DEFINED BY THE BOND RESOLUTIONS
PREVIOUS YEAR COMPARISON
FOR THE MONTH ENDING FEBRUARY 28, 2017 AND YEAR-TO-DATE**

	FY 17 MONTH ACTUAL	FY 16 MONTH ACTUAL	FY 16 - 17 SAME MONTH COMPARISON	FY 17 YEAR-TO-DATE ACTUAL	FY 16 YEAR-TO-DATE ACTUAL	FY 16 - 17 YEAR-TO-DATE COMPARISON
REVENUES						
TOLLS	\$ 32,252,115	\$ 31,255,250	\$ 996,865	\$ 259,089,519	\$ 241,637,935	\$ 17,451,584
TOLLS COLLECTED VIA UTN'S AND PBP'S	2,060,514	1,502,451	558,063	12,928,413	9,120,384	3,808,029
FEES COLLECTED VIA UTN/UTC'S AND PBP'S	964,781	665,155	299,626	4,600,374	4,665,852	(65,478)
TRANSPONDER SALES	17,270	20,862	(3,592)	145,231	82,151	63,080
OTHER OPERATING	168,208	136,381	31,827	891,661	912,191	(20,530)
INTEREST	415,046	322,472	92,574	3,238,670	1,943,465	1,295,205
MISCELLANEOUS	93,780	67,706	26,074	698,564	734,525	(35,961)
TOTAL REVENUES	35,971,714	33,970,277	2,001,437	281,592,433	259,096,503	22,495,930
O M & A EXPENSES						
OPERATIONS	4,887,634	2,964,400	1,923,234	27,943,343	24,456,739	3,486,604
MAINTENANCE	1,189,384	1,462,789	(273,405)	7,685,919	7,225,751	460,168
ADMINISTRATION	544,820	647,498	(102,678)	4,114,974	4,409,806	(294,832)
OTHER OPERATING	211,153	79,184	131,969	1,565,014	1,279,218	285,796
TOTAL O M & A EXPENSES	6,832,991	5,153,871	1,679,120	41,309,250	37,371,514	3,937,736
NET REVENUES BEFORE DEBT SERVICE	29,138,723	28,816,406	322,317	240,283,182	221,724,989	18,558,193
COMBINED NET DEBT SERVICE	14,359,225	11,867,803	2,491,422	114,266,055	94,960,586	19,305,469
NET REVENUES AFTER DEBT SERVICE	<u>\$ 14,779,498</u>	<u>\$ 16,948,603</u>	<u>\$ (2,169,105)</u>	<u>\$ 126,017,127</u>	<u>\$ 126,764,403</u>	<u>\$ (747,276)</u>

The monthly Treasurer's Report is provided as interim information for management's use. It is prepared on a modified cash basis and has not been audited, nor should it be deemed final. For audited financial statements, please see CFX's Comprehensive Annual Financial Reports.

E.3.

Executive Director's Report

**Executive Director Report
April, 2017**

DASHBOARD

The February Performance Dashboard is attached for your review. The contractor for the SR 408/SR 417 Interchange project is approximately 69 days behind schedule. The completion date is now estimated to be in September, 2017 (instead of July, 2017). In accordance with the contract, CFX has declared the Contractor to be delinquent with regard to maintaining satisfactory progress. This status of delinquency has caused CFX to withhold an additional \$2,917,911.31 in retainage from the Contractor's earned revenue.

TOLL RECIPROCITY AGREEMENT

A 180 day termination notice for the toll reciprocity agreement between the Florida Department of Transportation (FDOT), Miami Dade Expressway Authority (MDX), Osceola County, Lee County and CFX was received from Florida's Turnpike Enterprise on January 12, 2017. I met with Interim FDOT Secretary Rachel Cone on March 20th to discuss our partnerships and toll reciprocity. CFX received a draft toll transaction processing agreement from FDOT on March 30, 2017, which is under review. Discussions with Mayor Dyer, FDOT and CFX staff took place on April 5, 2017. FDOT agreed to extend the termination date to September to give the agencies time to negotiate the agreement. Negotiation meetings between FDOT and CFX are scheduled to begin the week of April 17. The negotiated agreement will be brought to the Board for final approval.

CFX PURCHASE OF LOCAL TOLL ROADS OWNED BY FDOT

Interim FDOT Secretary Rachel Cone acknowledged that Governor Scott had sent her the letter from Mayor Dyer during our visit on March 20th. FDOT is assessing the value of the roads we identified. CFO Lisa Lumbard, Financial Advisor Brent Wilder and I met with Ben Watkins, Executive Director of the Florida Division of Bond Finance on March 20 to discuss the purchase and valuation methodology. Mr. Watkins agreed to review the methodology and discuss with FDOT and CFX. CFX will follow up with Mr. Watkins later this month.

US 27/SR 429 CONNECTOR

A meeting with Commissioner Sean Parks, Orange County Commissioner Betsy Vanderley and CFX staff took place on March 24th to discuss options for connecting US 27 and SR 429. CFX is performing a traffic review of the area and a follow up meeting will be scheduled in May.

COMMUNITY EVENTS/MEETINGS

March 9 – Sweetwater Oaks HOA (Wekiva Parkway)
March 9 – Mt. Plymouth Landowners League (Wekiva Parkway)
March 12 - March 14 – IBTTA Communications & Administration Workshop in Tampa
March 14 – Hamilton ES Engineering Classes, Fourth Grade
March 15 East Central Florida Regional Planning Council
March 15 – I-4 Ultimate Communications Team Meeting
March 17 External advisory board meeting for the UF Transportation Institute
March 23 – East Orlando Chamber Presentation at Lakehouse at Laureate Park
March 20 – Dunwoody Commons HOA (7B) (Wekiva Parkway)
March 21 – Lake County Board of County Commissioners (Wekiva Parkway)
March 21 – Section 8 Public Meeting (Wekiva Parkway)
March 23 – Country Club of Mount Dora (2C, 3A & 3B) (Wekiva Parkway)
March 24 – East Lake-Northwest Orange Elected Officials Committee
March 25 – Kissimmee Kowtown Festival E-PASS Promotion
March 29 – I-4 Ultimate Communications Team Meeting
March 30 – Lyman High School Tour (1B & 2B) (Wekiva Parkway)
March 30 - Florida Department of Environmental Protection Advisory Group Meeting to review the draft management plan for the Wekiva River Basin State Parks.
April 1 & 2 – Spring Fiesta at Lake Eola
April 3 Orlando Business Journal Mentoring Monday Event
April 4 – UCF College of Engineering Presentation
April 4 – Rock Springs Ridge HOA (Wekiva Parkway)
April 5 – UCF Athletics 10th Annual Wellness Fair
April 5 – Meridian Club of Winter Park Presentation
April 12 – Waterford Lakes HOA Presentation at Discovery Middle
April 13 - Southernaire Mobile Home Park (3B) (Wekiva Parkway)

The Monthly Legislative Update from Southern Strategies and Alcalde and Fay are attached for your information.

PERFORMANCE DASHBOARD FEBRUARY 2017

Fiscal year runs from July 1/June 30

CUSTOMER SERVICE

Activity	Wait Time		
	Actual	6 mo. Avg	Target
Service Center: East	9,831	9,639	<5m
Service Center: West	3,928	3,058	<5m

SERVICE CENTER: MINUTE INTERVALS <5 5-6 6-7 7-8 8-9 9+

Call Center 71,543 64,362 0:52 <1m

CALL CENTER: % MINUTE INTERVALS <1 1-2 2-3 3-4 4-5 5+

71% 9% 5% 2% 1%

AVERAGE SPEED: PEAK DIRECTION

SR	W. SR 50 to E. SR 50	AM Peak (6-9)		PM Peak (4-7)	
		Avg mph	%	Avg mph	%
SR 408	W. SR 50 to E. SR 50	55-65	53	51	
SR 417	Int'l Dr. to Seminole Co. Line	55-70	65	62	
SR 528	Sand Lake Rd. to SR 520	70	64	63	
SR 429	Seidel Rd. to SR 414	70	66	66	
SR 451	SR 429 to US 441	65	61	65	
SR 414	US 441 to US 441	65	63	63	

LEGEND: <10 11-20 >/= 21

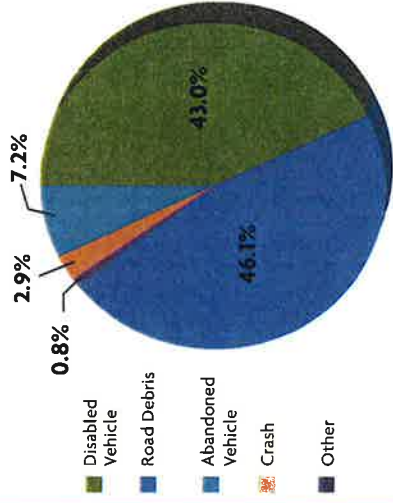
MAJOR CONSTRUCTION PROJECTS

Contract (millions)	Spent	% Spent	% Time	VAR
SR 408/SR 417 Interchange	\$36.3	65%	77%	
SR 429 Systems Interchange	\$80.7	54%	57%	
SR 429, US 441 to North of Ponkan Rd.	\$56.4	79%	81%	
SR 429, North of Ponkan Rd. to North of Kelly Park Rd.	\$46.5	90%	95%	
SR 453, Lake County Line to SR 46	\$49.2	44%	50%	
SR 528/Innovation Way Interchange	\$61.4	50%	37%	
SR 429 Systems Interchange to Mt. Plymouth Rd.	\$38.6	27%	36%	

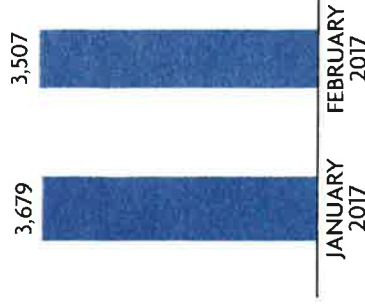
LEGEND: Spent vs. Time <10 11-20 >/= 21

SAFETY

CATEGORY OF ASSISTS ON CFX ROADS



ROAD RANGER: NUMBER OF ASSISTS ON CFX ROADS



2014 FATALITIES

1.07	Nationwide: Arterials, Limited Access, Toll Roads
0.26	FDOT: Urban Toll Roads
0.20	CFX: Toll Roads Urban Only

Per 100 Million Vehicles Miles Traveled
2010-2014 - 5 Year Average

WRONG WAY DRIVING (WWD)

34 Locations	Vehicles Detected	27
	Documented Turn Arounds	24

FINANCIALS

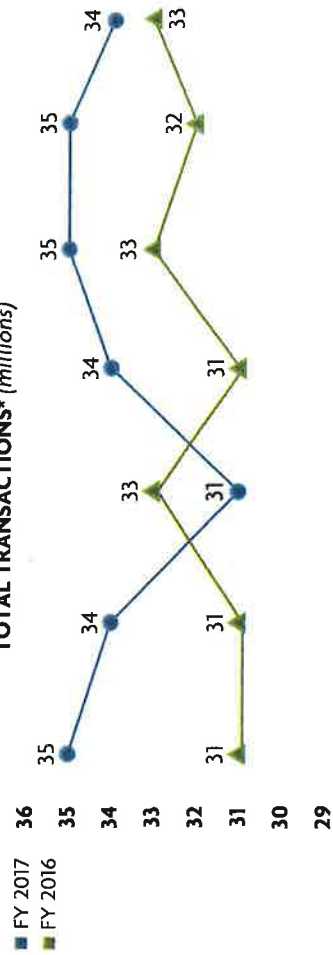
FY to Date

	Actual	Budget	VAR
Total Revenue	\$281.6	\$261.7	8%
OM&A Expenses	\$41.3	\$45.8	10%
Net Revenue	\$126.0	\$100.8	25%

DEBT SERVICE

	Year to Date	Actual	Budget
Senior Lien	2.06	1.96	
Subordinate Lien	1.77	1.68	

TOTAL TRANSACTIONS* (millions)



*All plazas had tolls suspended in FY17 due to Hurricane Matthew from 10/5/16 until early on 10/10/16.

Southern Strategy - State Legislative Report
April Board Meeting

- The Florida Legislature has passed the halfway point of the 60-day regular legislative session. On April 13th, there will be 22 more days for the Legislature to complete their work and pass a budget before Sine Die on Friday, May 5th.
- The formal budget conference is expected to begin during week 7. The budget conference will negotiate the differences between the House's \$81.2 billion proposal and the Senate's \$83.1 billion proposal. The budget conference must be completed and a budget conference report printed (final budget) no later than Tuesday, May 2nd in order to the Legislature to meet the constitutionally required 72-hour "cooling-off" period before final passage on Friday, May 5th.
- Applications to the Florida Transportation Commission for the FDOT Secretary have been extended until May 1st. At that time, the FTC will review the applications and formally submit names to Governor Rick Scott for a permanent appointment.
- **Designation of the Arnold Palmer Expressway:** The Senate passed the Palmer designation on the second day of session. The House bill, however, remains in the final committee. The Committee chairman let me know this week that all the road designations bills will be integrated into one bill and advanced to the House floor in the next two weeks.
- **Expanding the membership of the Central Florida Expressway Authority:** Senator Debbie Mayfield presented SB 720 to the Senate Ethics and Elections Committee this week. SB 720 adds Brevard County to the Central Florida Expressway Authority (CFX) by:
 - Increasing the number of governing body members from nine to ten;
 - Adding the Brevard County Commission chair to the list of chairs authorized to appoint a member to the CFX;
 - Adding Brevard County to the list of counties the citizens of which may be appointed by the Governor to serve on the authority;
 - Adding the geographical boundary of Brevard County to the area served by the CFX;
 - Increasing the number of members constituting a quorum from five to six; and
 - Adding Brevard County to the list of counties outside the jurisdictional boundaries of which the CFX may undertake the specified activities with the consent of the county within whose jurisdiction the activities occur, to conform to changes made by the act.SB 720 has one more committee stop remaining in the Senate. The House Companion, HB 299 by Rep. Tom Goodson, passed the Florida House during week four by a vote of 112-0.
- **Expressway Authority Revenue:** HB 961 by Speaker Pro-Tempore Jeanette Nunez was presented this week in the House Governmental Accountability Committee. Rep. Bryan Avila offered a clarifying amendment that was approved. The Senate companion, SB 1282 by Senate President Pro-Tempore Anitere Flores was not heard this week. The proposal provides that 20 percent of the toll revenue collected and defined as surplus revenue is transferred to Miami-Dade County for specified transportation projects. The bill requires Miami-Dade County to submit a report to the Legislature after receiving a

transfer of revenue. HB 961 passed the Committee unanimously and next heads to the full House. SB 1282 has two more committee stops in the Senate.

- **Elimination of the Miami-Dade Expressway Authority: (WITHDRAWN)** Elimination of the Miami-Dade Expressway Authority: Senator Frank Artiles has withdrawn SB 308 from consideration during the 2017 regular legislative session. SB 308 would have eliminated the Miami-Dade Expressway Authority and transfer all facilities and operations to the Florida Turnpike Enterprise.
- **Toll Reform Act:** HB 1049, by State Rep. Bryan Avila, which creates the “Toll Reform Act” was presented this week in the House Governmental Accountability Committee. Rep. Avila presented a clarifying amendment to the bill that was approved. The bill provides that MDX, subject to any contractual requirements contained in documents securing indebtedness, may not increase its tolls unless justified by an independent traffic and revenue study. The bill stipulates that MDX may only increase tolls to the extent necessary to adjust for inflation and approve toll increases by a two-thirds vote of the board. The bill also prohibits MDX from using more than 10 percent of its toll revenues for administrative expenses. Additionally, on transportation facilities constructed after July 1, 2017, there must be a distance of at least five miles between toll collection facilities. The bill also requires MDX to place certain documents on its website, including board and committee meeting agendas and minutes, budgets, contracts, and bond covenants. HB 1049 unanimously passed its final House Committee this week. The Senate companion, SB 1562 by Senator Rene Garcia, was not heard during week five.
- **Elimination of High Occupancy Toll and Express Lanes:** State Rep. Matt Willhite presented HB 777 this week to the House Transportation and Infrastructure Committee. The proposal would have eliminated the authority of the FDOT and the FTE to create High Occupancy Toll and Express Lanes. After a spirited debate, the measure failed on a vote of 6-8. The Senate companion, SB 250 by Senator Frank Artiles was not heard during week five. Both bills were opposed by the Department. However, it is likely the issue is dead for the 2017 session.
- **Red Light Cameras:** Legislation has been filed in both chambers to eliminate the state’s red light camera program. In the Senate, SB 178 by Senator Frank Artiles died in Senate Transportation on a 2-2 vote on February 7th. In the House, HB 6007 by State Rep. Bryan Avila overwhelmingly passed the Florida House of Representatives during week three. Neither bill was heard during week five.
- **Dept. of Highway Safety and Motor Vehicles:** HB 545 has been filed by State Rep. Bobby Payne relating to the DHSMV legislation package. SB 784 by Senate Transportation Chairman George Gainer is the companion bill. Neither SB 784 nor the House Companion, HB 545 by State Rep. Bobby Payne, was heard during week five.
- **Dept. of Transportation:** HB 865, by State Rep. Jayer Williamson, and the Senate companion, SB 1118, by Senate Transportation Chairman George Gainer reflect the Department’s legislative priorities. The proposals are a comprehensive package that would do the following: • Increases the allowable weight of natural gas-fueled vehicles on the Interstate Highway System. • Authorizes DOT to request permission from the Federal Highway Administration (FHWA) to conduct bridge inspections at risk-based intervals. • Increases the maximum dollar threshold for rapid response contracts issued

by DOT. • Makes the validation of turnpike revenue bonds optional instead of mandatory. • Provides that amendments to DOT's work program for certain emergency repairs are not subject to Legislative Budget Commission approval. • Repeals the Highway Beautification Council, but retains highway beautification grants within DOT. • Requires DOT approval for certain contracts issued by the South Florida Regional Transportation Authority (SFRTA). • Provides that funds provided to SFRTA by DOT may not be committed without DOT's approval of SFRTA's expenditures. • Prohibits DOT from providing certain funding until SFRTA cancels a specified contract. • Requires DOT to provide a fiscal analysis regarding the re-designation of certain district boundaries and district headquarters. Both HB 865 and SB 1118 have two more committee stops in each chamber and were not heard during week five.

- **All-Aboard Florida Liability:** State Rep. David Santiago has filed HB 695. The bill addresses issues related to the South Florida Regional Transportation Authority (SFRTA) which operates commuter rail service in Palm Beach, Broward, and Miami-Dade Counties. The bill primarily addresses liability regarding the use of a rail corridor. The bill provides SFRTA's ability to indemnify the Florida East Coast Railway (FECR) and All Aboard Florida (AAF) under certain circumstances. The bill provides who is responsible for property damage and injury to certain persons associated with several scenarios involving rail accidents. The bill also provides an allocation of risk between the parties and includes provisions for passengers and other rail corridor invitees. The bill authorizes SFRTA to purchase railroad liability insurance of \$295 million per occurrence, and allows it to adjust the limit in accordance with applicable law. For a frame of reference, the SunRail statute has a \$200 million liability cap. The bill also requires SFRTA to maintain a \$5 million self-insurance retention account. For frame of reference, the SunRail statute authorizes a self-insurance retention fund not to exceed \$10 million. The bill authorizes the Department of Transportation (DOT) to indemnify and insure certain rail services on a DOT-owned rail corridor. The bill also requires that certain state required payments to SFRTA be made quarterly and is not considered state financial assistance subject to various provisions of Ch. 215, F.S. relating to state financial matters, including the Florida Single Audit Act. HB 695 passed its first of three committees this week. Neither HB 695 nor the Senate companion, SB 842 by Senator Frank Artiles, was heard during week five.
- The House Government Accountability Committee has filed a Memorial to Congress and the President requesting that the Congress of the United States establish block grant funding for surface transportation systems that provide States with maximum discretionary authority and responsibility for the construction, operation, and maintenance of the state's surface transportation system.

Chris Dudley
Southern Strategy Group

ALCALDE & FAY

GOVERNMENT & PUBLIC AFFAIRS CONSULTANTS

March 27, 2017

MEMORANDUM

TO: Michelle Maikisch, Chief of Staff, Public Affairs

FROM: Skip Bafalis
Jim Davenport

Subject: Federal Legislative Update

PRESIDENT'S BUDGET REQUEST

On March 16, President Trump released initial details about his Administration's Fiscal Year (FY) 2018 Budget, unveiling a 53-page budget outline (or "skinny" budget) entitled "America First: A Budget Blueprint to Make America Great Again." The pared-down version of the FY 2018 budget highlights the President's priorities, including a \$54 billion increase in defense spending, fully offset by cuts to nondefense discretionary spending. Prior to the blueprint's release, Mick Mulvaney, Director of the Office of Management and Budget (OMB), re-confirmed that the outline released would not include information on mandatory spending, reforms to entitlement programs or tax policies, or the President's \$1 trillion infrastructure plan. Instead, Directory Mulvaney indicated that details on those proposals, would be included in the full budget request due to be released in early May. We also expect detailed budget requests for each agency to be included in the forthcoming release, and will provide additional analysis at that time.

The outline is mostly limited to topline discretionary spending levels for federal agencies and some specific programs and in many cases is incredibly short on specific details about how proposed program or agency reductions will be implemented. For example, the blueprint proposes cutting funding for the Army Corps of Engineers by \$1 billion (from \$6 billion to \$5 billion), but provides no details on how the 16.3 percent reduction would be implemented. In addition to the discretionary spending cuts for specific programs outlined below, the budget outline also includes a list of independent agencies the Administration is seeking to eliminate, including the Corporation for Public Broadcasting; Institute of Museum and Library Services; the National Endowment for the Arts; and the National Endowment for the Humanities. It is important to note that the Administration's proposed recommendations are intended to serve as a guide to funding levels for Congress to enact through the annual appropriations process. Furthermore, several House and Senate Appropriators from both sides of the aisle have pushed back on dramatic cuts to nondefense discretionary spending, with several House Republicans

suggesting that their FY 2018 budget resolution may not directly reflect the President's requested cuts to discretionary spending.

Funding levels and policy provisions generally of interest to local governments have been highlighted below and the full budget outline is available [here](#).

As it pertains to the Department of Transportation, the budget request includes \$16.2 billion for DOT's discretionary budget, a \$2.4 billion (or 13 percent decrease) from the 2017 annualized CR level. As previously noted, the Administration's budget outline does not include details about the President's \$1 trillion infrastructure proposal, but OMB Director Mulvaney has indicated such a proposal would likely be included in the full budget proposal due to be released in early May.

New Starts

- Limits funding for the Federal Transit Administration's (FTA) Capital Investment Program (New Starts) to projects with existing full funding grant agreements only.
- The budget also proposes that in the future, additional investments in any new transit projects would be funded "by the localities that use and benefit from these localized projects."

TIGER Discretionary Program

- Eliminates the TIGER program, saving \$499 million from the 2017 annualized CR level. The budget calls the program duplicative, noting that projects previously receiving funds through this program were already "generally eligible for funding under existing surface transportation programs."

Air Traffic Control

- Initiates a multi-year reauthorization proposal to shift control the air traffic control function of the FAA to an independent, non-governmental organization, which the Administration states will make the system "more efficient and innovative while maintaining safety."

Please contact us with any questions.

F. 1.

DRAFT BUDGET
AND
DRAFT FIVE YEAR WORK PLAN

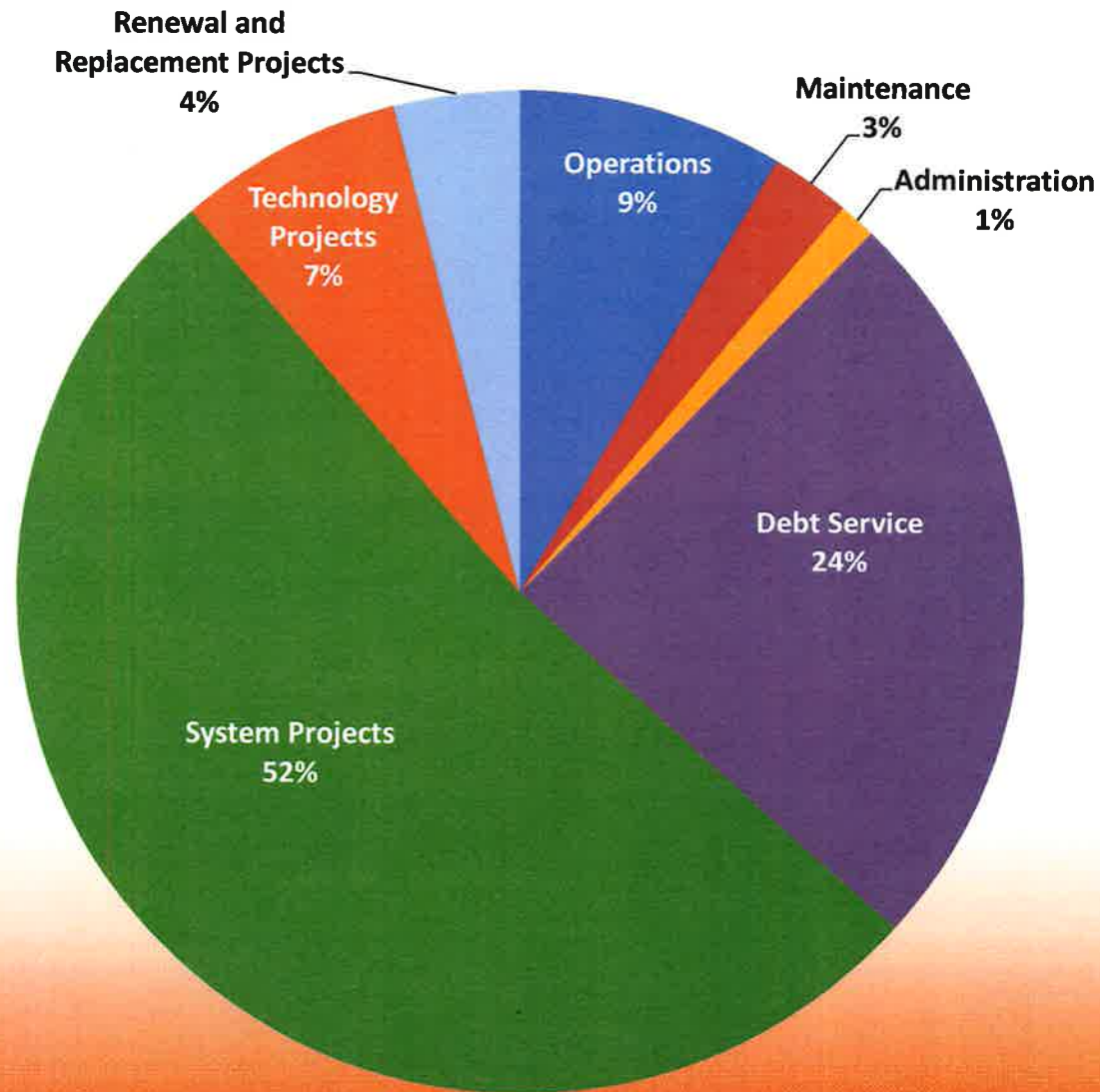


CENTRAL FLORIDA EXPRESSWAY AUTHORITY

DRAFT FY 2018 OPERATIONS, MAINTENANCE & ADMINISTRATION BUDGET
and
DRAFT FY 2018 - FY 2022 FIVE YEAR WORK PLAN
April 13, 2017



Total Proposed Spending for FY 2018



Projected Revenues

	<u>FY 2017</u>	<u>FY 2018</u>	<u>Change</u>	<u>%</u>
Tolls	\$392,100,000	\$430,500,000	\$38,400,000	9.8%
Fees	5,695,900	5,840,000	144,100	2.5%
Transponder Sales	488,767	226,460	(262,307)	-53.7%
Other Operating	1,408,974	1,399,646	(9,328)	-0.7%
Interest	2,446,481	3,118,625	672,144	27.5%
Miscellaneous	993,086	1,010,268	17,182	1.7%
Total Revenues	\$403,133,208	\$442,094,999	\$38,961,791	9.7%

Proposed Operations Budget

FY 2017 Budget	FY 2018 Budget	Change	%
\$52,180,152	\$57,219,317	\$5,039,166	9.7%

Cost Increases:

- IT
 - Contract personnel
 - Maintenance - Toll System Replacement
- Image Review
 - Increase in Pay-by-Plate Invoices
 - Opening of Wekiva Parkway
 - Increase in revenue covers the expenses
- Plazas
 - Full year of Reload Lanes
 - Maintenance - All Equipment
 - Facilities Maintenance
 - Insurance - Opening of Wekiva

Proposed Maintenance Budget

FY 2017 Budget	FY 2018 Budget	Change	%
\$17,131,201	\$17,804,909	\$673,708	3.9%

Cost Increases:

- Maintenance Administration
 - 2 New Positions
 - GEC Support
 - Contract Personnel - Security Guard
 - Motorist Service Patrol - Opening of Wekiva Parkway
- Traffic Operations
 - Overall Program Support and Maintenance
 - System Wide Deployment of Wrong Way Driving Detection Stations
 - Opening of Wekiva Parkway

Cost Decreases:

- Routine Maintenance
 - New Contracts



Proposed Administration Budget

FY 2017 Budget	FY 2018 Budget	Change	%
\$7,811,620	\$8,213,774	\$402,154	5.1%

Cost Increases:

- General
 - Utilities
 - Repairs and Maintenance - Software and Hardware
 - Facilities Maintenance
- Records Management
 - Reorganization of Department
- Construction Administration
 - Reclassification of a position

➤➤➤ Major OM&A Capital Items & Projects

Major Capital Items and Projects:

- IT equipment and software
- Purchase of four vehicles
- Data Collection Sensors software
- New timesheet software
- Changes to corporate website

Proposed OM&A Expenses

	FY 2017 <u>Budget</u>	FY 2018 <u>Budget</u>	<u>Change</u>	<u>%</u>
Operations	\$52,180,152	\$57,219,317	\$5,039,165	9.7%
Maintenance	17,131,201	17,804,909	673,708	3.9%
Administration	7,811,620	8,213,774	402,154	5.1%
Other Operating	2,669,000	2,535,599	(133,401)	-5.0%
Total Budget	<u>\$79,791,973</u>	<u>\$85,773,599</u>	<u>\$5,981,626</u>	<u>7.5%</u>
OM&A Capital Expenditures	\$425,460	\$456,500	\$31,040	7.3%

Proposed OM&A Budget - Debt Service Ratio

(in thousands)

	FY 2016 Actual	FY 2017 Projected	FY 2018 Budgeted
Total Revenues	\$404,537	\$432,647	\$442,095
Total Expenses	62,553	76,789	85,774
OM&A Reserve Deposits	972	1,073	748
FDOT Advances	(7,699)	(6,543)	(7,279)
Net Revenues	\$348,711	\$361,328	\$362,852
Senior Debt Service Payments	\$143,882	\$166,105	\$162,955
Senior Debt Service Ratio	2.42	2.18	2.23

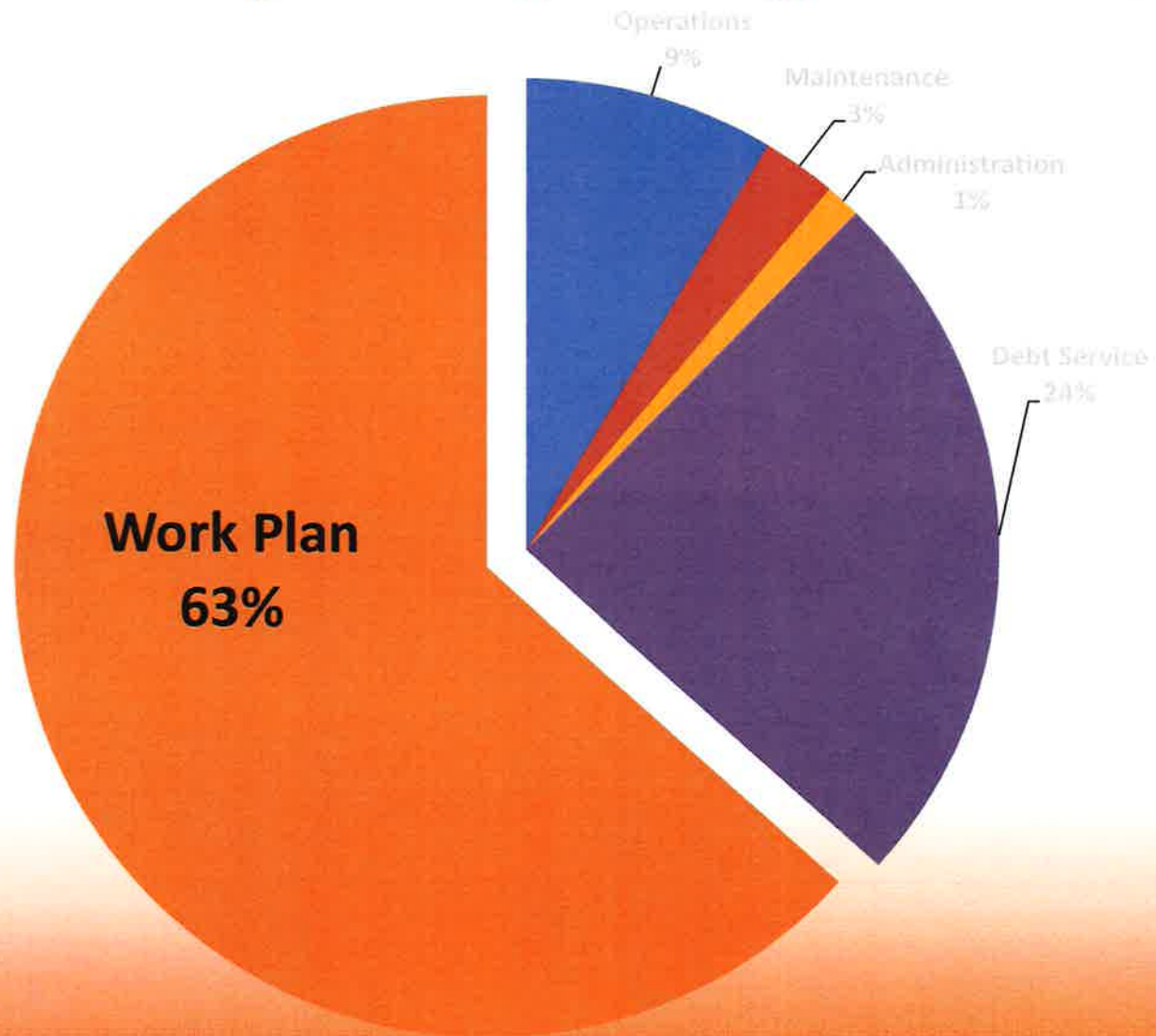
Proposed OM&A Budget - Goldenrod Extension

Goldenrod Budget

- Total operations and maintenance expense budget - \$459,786
- Toll revenue budget - \$2,000,000



Total Proposed Spending for FY 2018



➤➤➤ Current Five-Year Work Plan

➤ Adopted May 2016

- \$1.36 B

➤ Major Accomplishments:

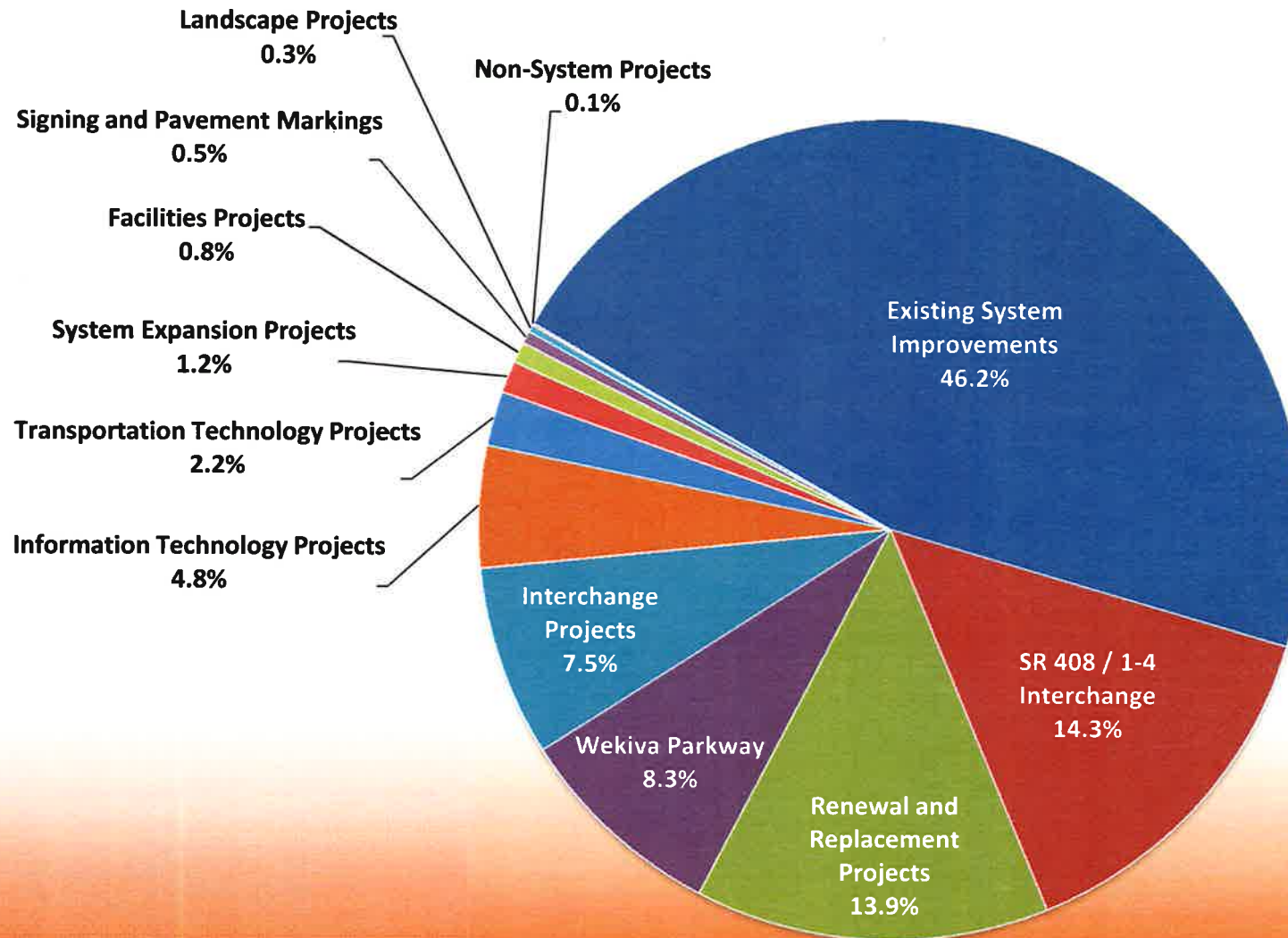
- SR 528 / Innovation Way Interchange
- SR 408 / SR 417 Interchange
- OCX Master Plan Concept Studies
- Toll System Upgrade
- Wrong-Way Driving Countermeasures
- Wekiva Parkway Sections 1A & 1B open to public



Draft FY 2018-2022 Work Plan

Project Cost Summary (\$000's)	Fiscal Year					Totals
	2017/18	2018/19	2019/20	2020/21	2021/22	
Existing System Improvements	88,108	111,573	195,550	187,902	171,941	755,074
System Expansion Projects	127,746	12,821	7,374	5,666	2,304	155,911
Interchange Projects	142,878	117,624	81,421	6,279	6,818	355,020
Facilities Projects	3,378	6,304	1,330	1,059	1,054	13,125
Transportation Technology Projects	5,811	16,121	5,228	4,183	3,909	35,252
Information Technology Projects	45,164	25,627	7,383	538	0	78,712
Signing and Pavement Markings	2,520	1,981	1,969	1,394	180	8,044
Renewal and Replacement Projects	31,850	96,118	34,880	40,463	23,574	226,885
Landscape Projects	810	805	1,435	810	805	4,665
Non-System Projects	715	690	0	0	0	1,405
TOTALS	448,980	389,664	336,570	248,294	210,585	1,634,094

»»» Draft Work Plan Funding Distribution



Draft Work Plan Major Projects

- Capacity Improvements (\$681.3 M)
 - SR 408 from Good Homes to Hiawassee
 - SR 408 from SR 417 to Alafaya Trail
 - SR 417 from I-Drive to SR 528
 - SR 417 from Econ Trail to Seminole County Line
 - SR 429 from CR 535 to CR 437A
 - SR 528 from SR 436 to Goldenrod Road
 - SR 528 from Narcoossee Road to SR 417

Draft Work Plan Major Projects

➤ Interchange Projects (\$339.4 M)

- SR 408 / SR 417
 - Phase I Complete in Fall 2017
 - Phase II Complete in Summer 2019
- SR 528 / Innovation Way
- SR 408 / I-4 Ultimate (contribution)

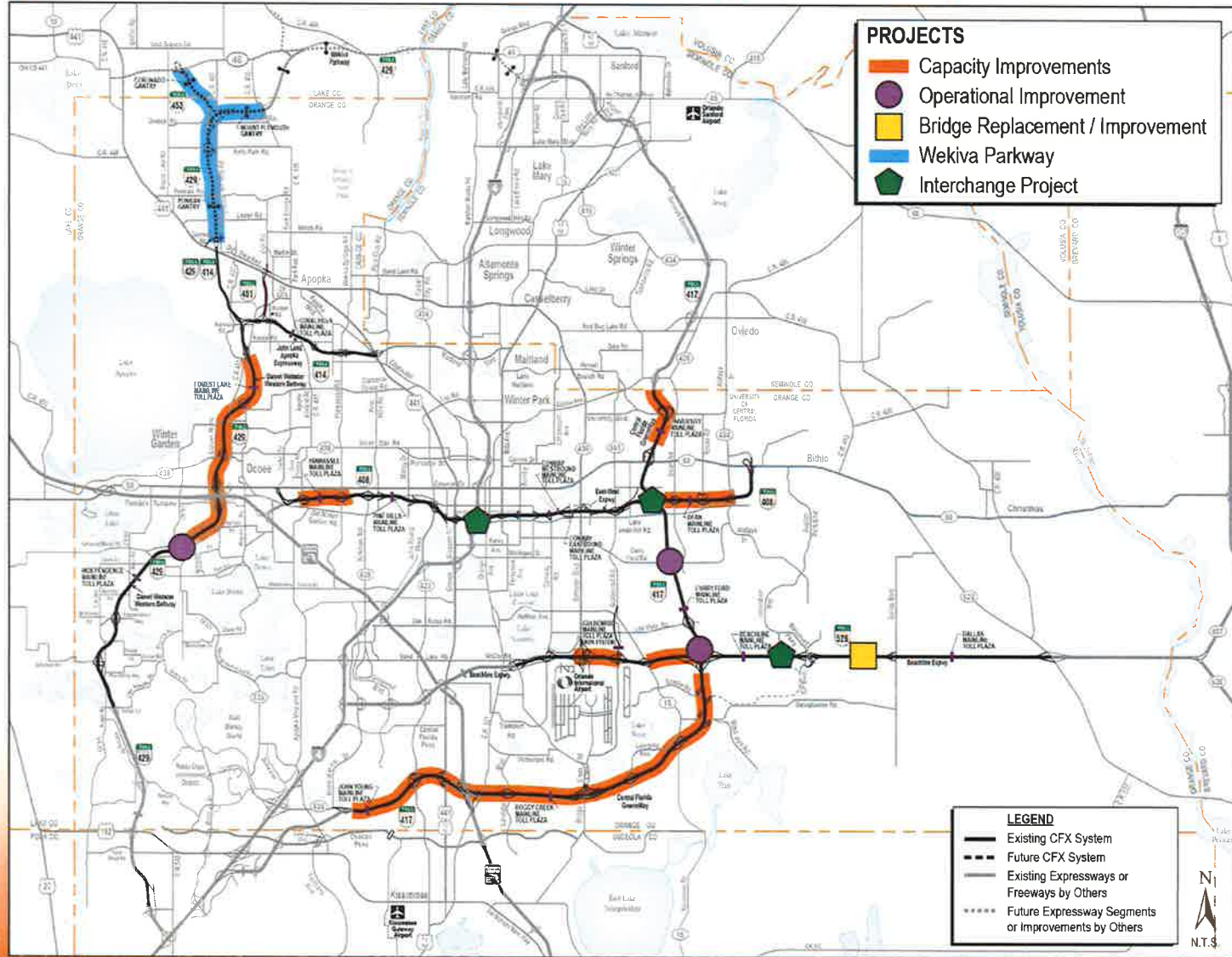
➤ Wekiva Parkway (\$126.5 M)

- US 441 to Kelly Park Complete in June 2017
- Kelly Park to SR 46 Complete in Spring 2018
- Complete Right-of-Way Acquisition

➤➤➤ Draft Work Plan Major Projects

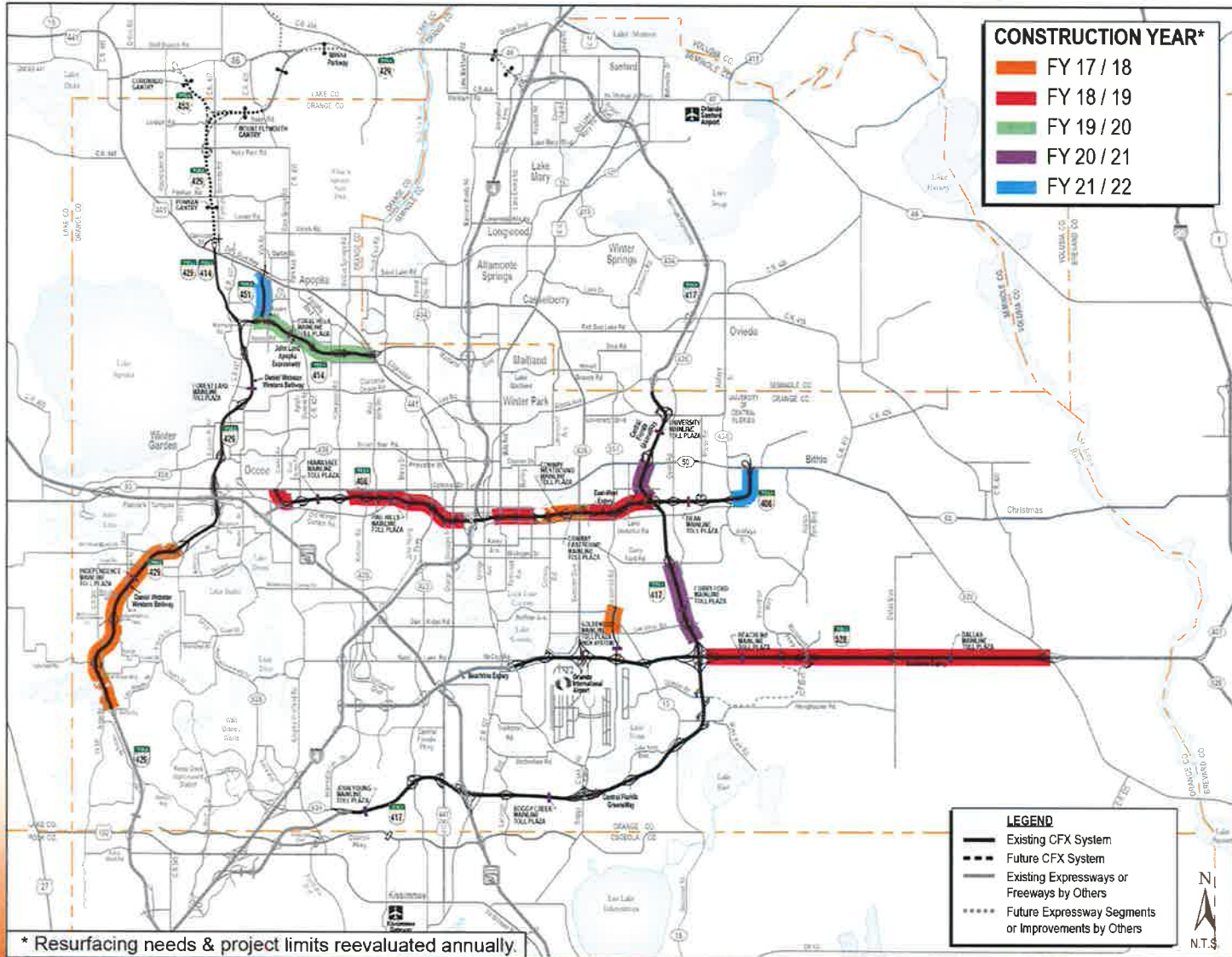
- Milling & Resurfacing (\$192.5M)
- Toll Collection System Upgrade (\$52.0 M)
- Planning Studies for 2040 Master Plan Expansion Projects (\$19.5 M)
- Operational Improvements (\$15.4 M)
 - SR 417 SB to SR 528 WB Ramp Modification
 - CR 535 NB entrance ramp to SR 429 Modification
 - Curry Ford SB entrance ramp to SR 417 Modification

Draft Work Plan Major Projects



CENTRAL FLORIDA EXPRESSWAY AUTHORITY

Draft Work Plan Resurfacing Projects



CENTRAL FLORIDA EXPRESSWAY AUTHORITY

Capital Planning Model Assumptions

➤ Debt issuance assumptions are:

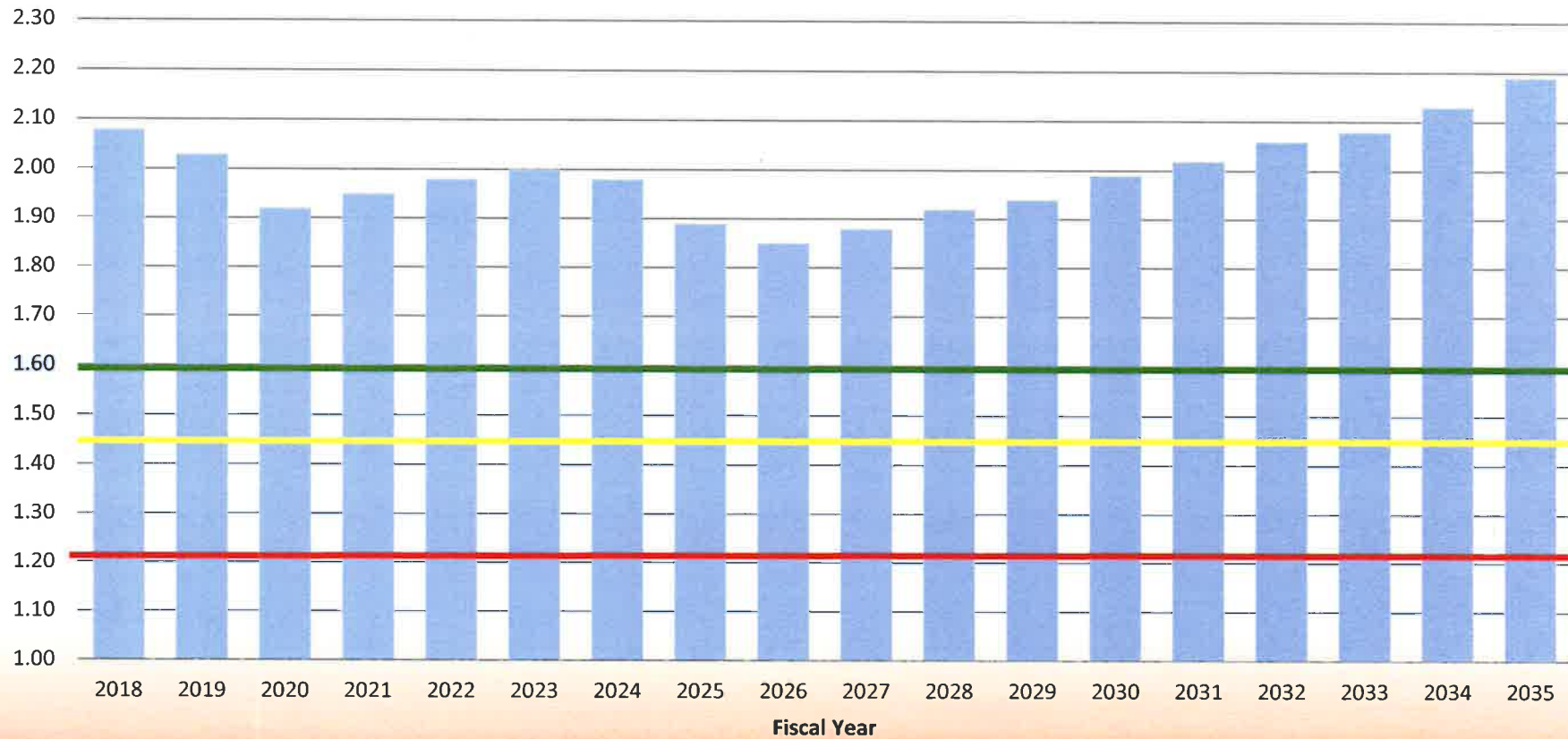
- 30-year, fixed rate bonds
- Interest rates
 - AAA Municipal Market Data as of 3/27/2017 plus 90 bps of credit spread (based on CFX's current credit ratings) and an additional 50 bps of cushion
 - additional 25 bps added per year for each future issuance
- Debt Service Ratio target of 1.60x (senior lien debt)
- Fully cash funded debt service reserve funds

Capital Planning Model Results

- Requires additional debt
 - Approximately \$835 million (FY18, FY19, FY20, FY22, FY24 and FY25)
 - Approximately 31% of project expenditures over the 10 year period
- Modeling updated
 - New bonds are issued
 - New major assumptions
- Debt coverage ratios meets 1.60 planning target



Projected Senior Lien Coverage Ratio



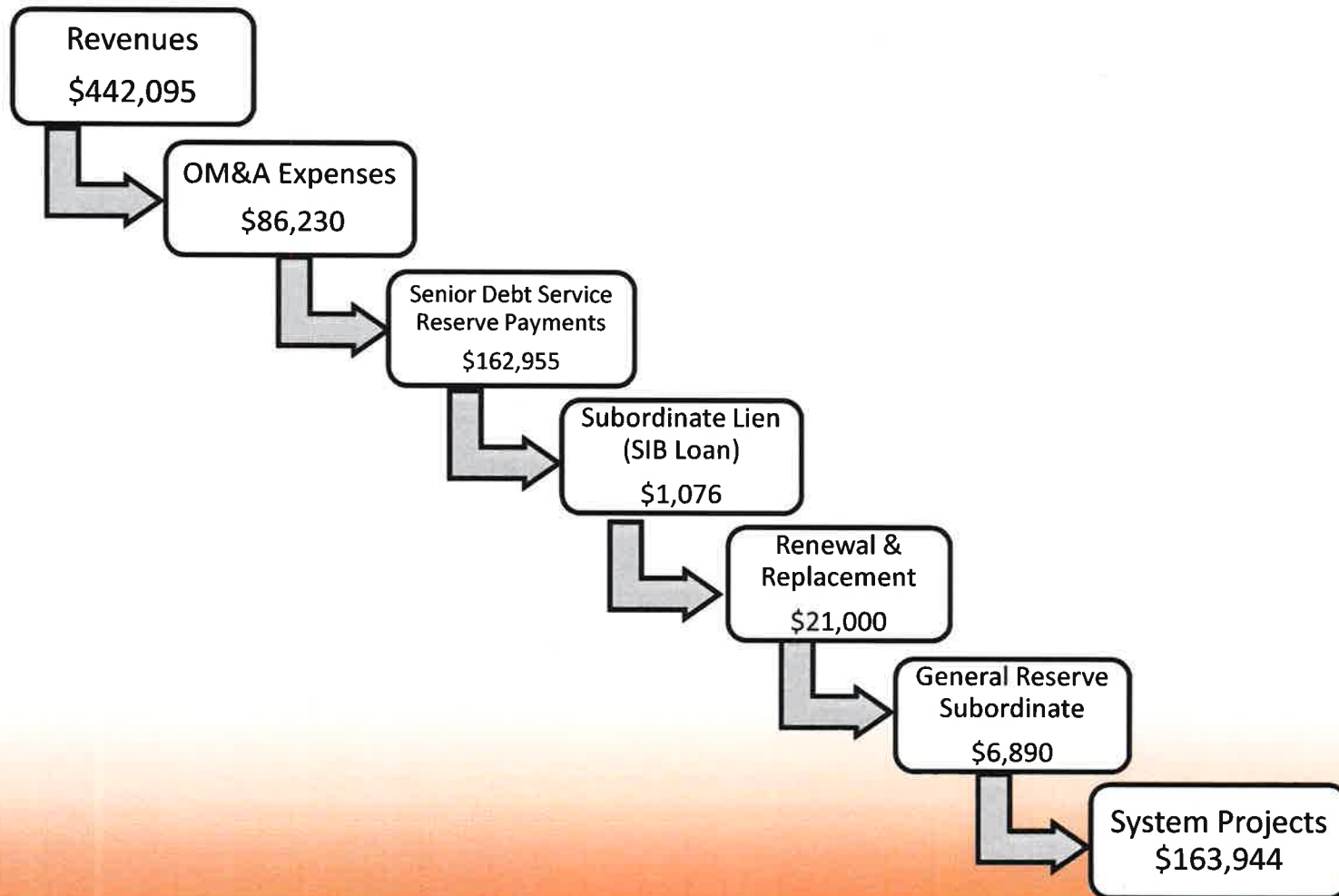
— CFX Planning Target — CFX Board Policy — CFX Bond Covenants

CENTRAL FLORIDA EXPRESSWAY AUTHORITY



Flow of Funds

In Thousands (\$000's)



**DRAFT FISCAL YEAR 2018
OPERATIONS, MAINTENANCE
AND ADMINISTRATION
BUDGET**

Central Florida Expressway Authority
Calculation of the Composite Debt Service Ratio, as Defined
by the Bond Resolutions and Related Documents - Including Subordinate Coverage

	Budget 2017	Projected 2017	Budget 2018	\$ Inc (Decr) Over Budget	% Inc (Decr) Over Proj	% Ince (Decr) Over Budget
Revenues:						
Tolls	\$392,100,000	418,791,268	\$430,500,000	\$38,400,000	3%	10%
Fees Collected via Pay by Plate and UTC's	5,695,900	6,397,750	5,840,000	144,100	-9%	3%
Transponder sales	488,767	219,730	226,460	(262,307)	3%	-54%
Other Operating	1,408,974	1,344,915	1,399,646	(9,328)	4%	-1%
Interest	2,446,481	4,900,000	3,118,625	672,144	-36%	27%
Miscellaneous	993,086	992,898	1,010,268	17,162	2%	2%
Total revenues	403,133,208	432,646,561	442,094,999	38,961,791	2%	10%
Expenses:						
Operations	52,180,152	50,112,374	57,219,317	5,039,166	14%	10%
Maintenance	17,131,201	15,749,139	17,804,909	673,708	13%	4%
Administrative	7,811,620	6,867,974	8,213,774	402,154	20%	5%
Other Operating	2,669,000	4,059,114	2,535,599	(133,401)	-38%	-5%
Total expenses	79,791,972	76,788,601	85,773,600	5,981,627	12%	7%
Add deposits into OMA reserve	1,073,342	1,073,342	747,704	(325,638)	-30%	-30%
Less advances for operations and maintenance expenses received from the FDOT	(6,603,119)	(6,543,441)	(7,278,577)	(675,458)	11%	10%
Total Expenses and Deposits	74,262,195	71,318,503	79,242,726	4,980,531	11%	7%
Net revenues, as defined, plus payments received from the FDOT	328,871,013	361,328,058	362,852,273	33,981,260	0%	10%
Senior debt service payments*	166,105,477	166,105,477	162,955,205	(3,150,272)	-2%	-2%
Subordinate Lien (SIB Loan)	1,031,300	1,031,300	1,074,549	43,249	4%	4%
General Reserve subordinate payments	20,000,000	20,000,000	-	(20,000,000)	-100%	-100%
SunTrust Bank Loan Payment	6,644,722	6,644,722	6,890,416	245,694	4%	4%
Total debt payments plus FDOT repayments	193,781,499	193,781,499	170,920,170	(22,861,329)	-12%	-12%
Subordinate debt service ratio of net revenues to total debt paymen	1.70	1.86	2.12	0.43	14%	25.1%
Senior debt service ratio of net revenues to debt service	1.98	2.18	2.23	0.25	2.4%	12.5%

* Per Bond Resolution Calculation.

Central Florida Expressway Authority
Budgeted Flow of Funds - Including Subordinate Payments
On a Cash Flow Basis (Includes Capitalized Items)

	Budget 2017	Projected 2017	Budget 2018	\$ Inc (Decr) Over Budget	% Inc (Decr) Over Proj	% Ince (Decr) Over Budget
Revenues:						
Tolls	\$392,100,000	418,791,268	\$430,500,000	\$38,400,000	3%	10%
Fees Collected via Pay by Plate and UTC's	5,695,900	6,397,750	5,840,000	144,100	-9%	3%
Transponder sales	488,767	219,730	226,460	(262,307)	3%	-54%
Other Operating	1,408,974	1,344,915	1,399,646	(9,328)	4%	-1%
Interest	2,446,481	4,900,000	3,118,625	672,144	-36%	27%
Miscellaneous	993,086	992,898	1,010,268	17,182	2%	2%
Total revenues	403,133,208	432,646,561	442,094,999	38,961,791	2%	10%
Expenses:						
Operations	52,180,152	50,112,374	57,219,317	5,039,166	14%	10%
Maintenance	17,131,201	15,749,139	17,804,909	673,708	13%	4%
Administrative	7,811,620	6,867,974	8,213,774	402,154	20%	5%
Other Operating	2,669,000	4,059,114	2,535,599	(133,401)	-38%	-5%
Total expenses	79,791,972	76,788,601	85,773,600	5,981,627	12%	7%
Debt service payments	166,105,477	166,105,477	162,955,205	(3,150,272)	-2%	-2%
Subordinate Lien (SIB Loan)	1,031,300	1,031,300	1,074,549	43,249	4%	4%
General Reserve subordinate payments	20,000,000	20,000,000	-	(20,000,000)	-100%	-100%
SunTrust Bank Loan Payment	6,644,722	6,644,722	6,890,416	245,694	4%	4%
Renewal and Replacement Reserve	10,000,000	9,000,000	21,000,000	11,000,000	133%	110%
OM&A Capital Expenditures & Projects	425,460	191,357	456,500	31,040	139%	7%
Net Available for System Projects	\$119,134,277	\$152,885,104	\$163,944,729	\$44,810,453	7%	38%

**Central Florida Expressway Authority
All Activities - Total By Line Item**

Description	2017 Annual Budget	Projected Year-end Actual	2018 Annual Budget	\$ Inc (Decr) over 2016 Budget	% Inc (Decr) over Proj. 2017 Actual	% Inc (Decr) over 2017 Budget
SALARIES & BENEFITS						
Salaries & Wages	\$ 5,335,280	\$ 4,925,578	\$ 5,490,408	\$ 155,128	11.5%	2.9%
Social Security and Medicare	368,127	346,453	392,192	24,065	13.2%	6.5%
Retirement Contributions -FRS	567,827	555,368	595,768	27,941	7.3%	4.9%
Life and Health Insurance	1,175,861	1,017,239	1,289,305	113,444	26.7%	9.6%
State Assessment	12,470	5,255	13,005	535	147.5%	4.3%
Workers' Compensation	44,706	61,861	52,298	7,591	-15.5%	17.0%
Reemployment Assistance Program	-	5,736	-	-	-100.0%	-
Total Salaries & Benefits	7,504,271	6,917,490	7,832,976	328,704	13.2%	4.4%
OTHER						
Cost Of Transponders Sold - Sticker	766,360	820,000	844,600	78,240	3.0%	10.2%
Cost Of Transponders Sold - Hardcase	622,440	355,000	365,000	(257,440)	2.8%	-41.4%
Cost Of Transponders Sold - Bumper	37,313	8,300	8,722	(28,591)	5.1%	-76.6%
Interoperability Transaction Fee	6,363,187	5,302,656	5,500,000	(863,187)	3.7%	-13.6%
Professional Services	989,750	1,405,946	1,391,750	402,000	-1.0%	40.6%
Legal Fees	200,000	150,000	200,000	-	33.3%	0.0%
Consultant Fees	420,684	397,368	441,229	20,545	11.0%	4.9%
Consultant Fees - Surveys	20,000	15,000	-	(20,000)	-100.0%	-100.0%
Maintenance Program Support	-	-	112,000	112,000	-	-
Maintenance Program Support - ITS	969,983	969,983	1,020,000	50,017	5.2%	5.2%
Mitigation Maint. Support	500	-	-	(500)	-	-100.0%
FON Program Support	200,000	200,000	200,000	-	0.0%	0.0%
Pavement Management System	26,000	26,000	35,000	9,000	34.6%	34.6%
Auditing Fees	90,000	75,000	79,500	(10,500)	6.0%	-11.7%
Contract Personnel	8,648,800	7,249,000	9,769,625	1,120,825	34.8%	13.0%
Toll Plazas Salaries/Wages	8,911,651	8,911,651	10,172,024	1,260,373	14.1%	14.1%
Toll Plazas Other Direct Expenses	391,690	387,818	433,852	42,162	11.9%	10.8%
Toll Collection Management Fees	894,098	914,668	951,542	57,444	4.0%	6.4%
Toll Plazas Administration Salaries	1,653,947	1,603,060	1,729,603	75,656	7.9%	4.6%
Toll Plazas Office Expenses	292,627	289,732	303,405	10,778	4.7%	3.7%
Toll Plazas Insurance and Bond	46,292	45,840	49,471	3,179	7.9%	6.9%
Florida Highway Patrol Services	977,945	924,435	965,871	(12,074)	4.5%	-1.2%
Motorist Service Patrol Agreement	1,077,650	1,077,650	1,400,000	322,350	29.9%	29.9%
Rapid Incident Scene Clearance	-	-	50,000	50,000	-	-
Toll Plazas Janitorial	310,882	307,816	317,113	6,231	3.0%	2.0%
Travel	71,500	49,954	70,500	(1,000)	41.1%	-1.4%
Reimbursed Local Travel	9,750	8,291	12,095	2,345	45.9%	24.1%
Gasoline	18,000	13,200	15,250	(2,750)	15.5%	-15.3%
Telephone Service	587,057	513,735	548,410	(38,647)	6.7%	-6.6%
Internet Service	55,800	55,800	55,800	-	0.0%	0.0%
Postage and Delivery	1,367,750	1,676,035	1,944,500	576,750	16.0%	42.2%
Printing	417,740	425,645	454,480	36,740	6.8%	8.8%
Service Center Printing and Mailing	66,000	57,800	60,000	(6,000)	3.8%	-9.1%
CAFR	25,000	15,000	17,500	(7,500)	16.7%	-30.0%
Utilities	2,458,280	2,331,500	2,474,000	15,720	6.1%	0.6%
Lease - Buildings	129,000	136,000	234,900	105,900	72.7%	82.1%
Leases - Equipment	50,200	52,792	57,632	7,432	9.2%	14.8%
Records Management	32,400	17,442	31,900	(500)	82.9%	-1.5%
Insurance	745,721	733,253	875,934	130,213	19.5%	17.5%
Repairs & Maint. - Equipment	135,000	114,600	181,600	46,600	58.5%	34.5%
Maintenance FON Locates	10,900	10,900	12,000	1,100	10.1%	10.1%
Maintenance - ITS Infrastructure	1,721,800	1,721,800	1,790,000	68,200	4.0%	4.0%

Description	2017 Annual Budget	Projected Year-end Actual	2018 Annual Budget	\$ Inc (Decr) over 2016 Budget	% Inc (Decr) over Proj. 2017 Actual	% Inc (Decr) over 2017 Budget
Support & Maint. - Software	94,200	96,800	98,910	4,710	2.2%	5.0%
Repairs & Maint. - Software and Hardware	828,185	839,804	1,011,715	183,530	20.5%	22.2%
Maintenance - Toll Collection Software	790,000	790,000	890,000	100,000	12.7%	12.7%
Maintenance - Toll System Replacement	-	-	511,372	511,372		
Repairs & Maint. - Fiber Optic Network	376,000	356,000	380,000	4,000	6.7%	1.1%
Facilities Maintenance	1,776,972	1,790,725	2,058,120	281,148	14.9%	15.8%
Repairs and Maint. - Toll Equipment	2,330,901	2,330,151	2,987,796	656,895	28.2%	28.2%
Repairs and Maint. - Toll Equipment Parts	483,000	385,250	420,500	(62,500)	9.1%	-12.9%
Repairs & Maint. - VES Equipment	402,297	402,297	521,303	119,006	29.6%	29.6%
Repairs & Maint. - Vehicles	11,050	9,600	10,100	(950)	5.2%	-8.6%
System Modifications Maintenance -Website	12,500	3,600	5,400	(7,100)	50.0%	-56.8%
Roadway and Bridges Maintenance	5,633,000	5,625,000	5,259,300	(373,700)	-6.5%	-6.6%
Landscape Maintenance Service	3,657,000	2,740,000	3,707,300	50,300	35.3%	1.4%
Bridge Inspection	269,000	344,000	342,000	73,000	-0.6%	27.1%
Sign Maintenance/Inspection	339,200	240,000	294,500	(44,700)	22.7%	-13.2%
Traffic Signals and Lights	181,200	40,000	164,000	(17,200)	310.0%	-9.5%
Aquatics	209,950	186,000	218,750	8,800	17.6%	4.2%
Board Meeting Broadcasting	16,000	8,640	8,700	(7,300)	0.7%	-45.6%
Promotion - Sponsorships	50,000	-	-	(50,000)		-100.0%
Promotion	1,938,000	1,592,001	1,757,500	(180,500)	10.4%	-9.3%
Newsletter	3,000	1,989	2,000	(1,000)	0.6%	-33.3%
Photography	2,000	1,875	2,000	-	6.7%	0.0%
Displays	-	2,392	1,500	1,500	-37.3%	
Graphic Production Services	95,000	79,345	78,500	(16,500)	-1.1%	-17.4%
Promotional Items	9,000	31,000	26,000	17,000	-16.1%	188.9%
Advertising and Legal Notices	7,500	8,753	7,500	-	-14.3%	0.0%
Bank Fees	1,155,000	1,225,000	1,230,000	75,000	0.4%	6.5%
Credit Card Fees	6,186,000	6,521,440	7,345,537	1,159,537	12.6%	18.7%
Security	10,150	10,160	14,260	4,110	40.4%	40.5%
Special Events	13,500	35,000	21,000	7,500	-40.0%	55.6%
Employee Support Services	3,000	3,000	3,000	-	0.0%	0.0%
Miscellaneous Expense	15,550	9,000	20,550	5,000	128.3%	32.2%
Office Supplies	92,319	73,869	94,019	1,700	27.3%	1.8%
Office Expense - Other	325,233	287,138	198,575	(126,658)	-30.8%	-38.9%
Operating Supplies	39,750	20,125	39,250	(500)	95.0%	-1.3%
Transponder Supplies	15,000	7,000	10,000	(5,000)	42.9%	-33.3%
Software Expense	53,075	65,031	49,775	(3,300)	-23.5%	-6.2%
Dues and Subscriptions	208,447	200,421	242,685	34,238	21.1%	16.4%
Books and Publications	600	50	600	-	1100.0%	0.0%
Seminars and Conferences	29,825	20,348	30,300	475	48.9%	1.6%
Staff Training and Education	79,100	53,025	72,600	(6,500)	36.9%	-8.2%
Contingency (Projects)	63,500	5,500	57,500	(6,000)	945.5%	-9.4%
Furniture	-	-	33,800	33,800		
Total Other:	69,618,701	65,811,997	75,405,025	5,786,324	14.6%	8.3%
Other Operating Expenses	2,669,000	4,059,114	2,535,599	(133,401)	-37.5%	-5.0%
TOTAL	79,791,972	76,788,601	85,773,600	5,981,627	11.7%	7.5%
CAPITAL EXPENDITURES						
General Equipment	248,600	41,000	168,500	(80,100)	311.0%	-32.2%
Furniture	5,000	-	-	(5,000)		-100.0%
Vehicle Purchases	82,500	80,997	113,000	30,500	39.5%	37.0%
Software	89,360	69,360	175,000	85,640	152.3%	95.8%
Total Capital Expenditures:	425,460	191,357	456,500	31,040	138.6%	7.3%

**Central Florida Expressway Authority
Operations Activity - Summary**

	2017 Budget	Projected Year-end Actual	2018 Annual Budget	\$ Inc (Decr) over 2017 Budget	% Inc (Decr) over Proj. 2017 Actual	% Inc (Decr) over 2017 Budget
Toll Operations (710)	\$ 517,963	\$ 485,784	\$ 543,117	\$ 25,154	12%	5%
IT (720)	3,752,941	4,010,108	4,537,779	784,838	13%	21%
Special Projects (725)	189,054	174,922	195,249	6,195	12%	3%
E-PASS Service Center (740)	19,830,918	17,396,691	20,246,667	415,749	16%	2%
Public Outreach/Education (745)	2,329,000	2,375,384	2,413,500	84,500	2%	4%
Image Review (750)	4,019,100	4,450,025	5,340,725	1,321,625	20%	33%
Toll Facilities	21,541,176	21,219,460	23,942,281	2,401,105	13%	11%
Operations Before FDOT Participation	52,180,152	50,112,374	57,219,317	5,039,166	14%	10%
<u>FDOT Participation</u>						
Conway Main and Pine Hills	(3,995,891)	(3,936,213)	(4,671,349)	(675,458)	19%	17%
Total Operating Costs	48,184,261	46,176,161	52,547,968	4,363,708	14%	9%
<u>Capital Expenditures and Projects</u>						
<u>Capital Expenditures</u>						
IT (720)	226,500	18,000	153,500	(73,000)	753%	-32%

**Central Florida Expressway Authority
Operations Activity - Total By Line Item**

Description	2017	Projected	2018	\$ Inc (Decr)	% Inc (Decr)	% Inc (Decr)
	Annual Budget	Year-end Actual	Annual Budget	over 2017 Budget	over Proj. 2017 Actual	over 2017 Budget
SALARIES & BENEFITS						
Salaries & Wages	\$ 1,210,884	\$ 1,365,404	\$ 1,192,685	\$ (18,199)	-13%	-1.5%
Social Security and Medicare	88,329	102,809	88,905	576	-14%	0.7%
Retirement Contributions -FRS	116,835	131,752	118,640	1,805	-10%	1.5%
Life and Health Insurance	265,343	294,041	270,724	5,381	-8%	2.0%
State Assessment	2,815	1,309	2,705	(109)	107%	-3.9%
Workers' Compensation	3,734	6,785	3,685	(49)	-46%	-1.3%
Total Salaries & Benefits	1,687,939	1,902,100	1,677,343	(10,595)	-12%	-0.6%
OTHER						
Cost Of Transponders Sold - Sticker	766,360	820,000	844,600	78,240	3%	10.2%
Cost Of Transponders Sold - Hardcase	622,440	355,000	365,000	(257,440)	3%	-41.4%
Cost Of Transponders Sold - Bumper	37,313	8,300	8,722	(28,591)	5%	-76.6%
Interoperability Transaction Fee	6,363,187	5,302,656	5,500,000	(863,187)	4%	-13.6%
Professional Services	330,000	752,802	659,000	329,000	-12%	99.7%
Consultant Fees- Surveys	20,000	15,000	-	(20,000)	-100%	-100.0%
Contract Personnel	8,074,800	6,749,000	9,095,625	1,020,825	35%	12.6%
Toll Plazas Salaries/Wages	8,911,651	8,911,651	10,172,024	1,260,373	14%	14.1%
Toll Plazas Other Direct Expenses	391,690	367,818	433,852	42,162	12%	10.8%
Toll Collection Management Fees	894,098	914,668	951,542	57,444	4%	6.4%
Toll Plazas Administration Salaries	1,653,947	1,603,060	1,729,603	75,656	8%	4.6%
Toll Plazas Office Expenses	292,627	289,732	303,405	10,778	5%	3.7%
Toll Plazas Insurance and Bond	46,292	45,840	49,471	3,179	8%	6.9%
Toll Plazas Janitorial	310,882	307,816	317,113	6,231	3%	2.0%
Travel	12,200	7,854	12,200	-	55%	0.0%
Reimbursed Local Travel	1,450	846	1,450	-	71%	0.0%
Gasoline	2,150	1,400	1,900	(250)	36%	-11.6%
Telephone Service	572,282	494,519	528,560	(43,722)	7%	-7.6%
Internet Service	55,800	55,800	55,800	-	0%	0.0%
Postage and Delivery	1,361,750	1,663,035	1,937,500	575,750	17%	42.3%
Printing	404,150	421,575	448,500	44,350	6%	11.0%
Service Center Printing and Mailing	66,000	57,800	60,000	(6,000)	4%	-9.1%
Utilities	2,063,280	1,936,500	2,042,000	(21,280)	5%	-1.0%
Lease - Buildings	129,000	136,000	234,900	105,900	73%	82.1%
Leases - Equipment	18,200	16,800	20,200	2,000	20%	11.0%
Records Management	1,900	1,550	1,900	-	23%	0.0%
Insurance	646,398	635,974	775,000	128,602	22%	19.9%
Repairs & Maint. - Equipment	124,700	112,100	171,300	46,600	53%	37.4%
Repairs & Maint. - Software and Hardware	819,835	818,879	884,865	65,030	8%	7.9%
Maintenance - Toll Collection Software	790,000	790,000	890,000	100,000	13%	12.7%
Maintenance - Toll System Replacement	-	-	511,372	511,372	-	-
Facilities Maintenance	1,611,861	1,615,225	1,832,620	220,759	13%	13.7%
Repairs and Maint. - Toll Equipment	2,330,901	2,330,151	2,987,796	656,895	28%	28.2%
Repairs and Maint. - Toll Equipment Parts	483,000	385,250	420,500	(62,500)	9%	-12.9%
Repairs & Maint. - VES Equipment	402,297	402,297	521,303	119,006	30%	29.6%
Repairs & Maint. - Vehicles	1,500	800	2,050	550	156%	36.7%
Promotion - Sponsorships	50,000	-	-	(50,000)	-	-100.0%
Promotion	1,938,000	1,592,001	1,757,500	(180,500)	10%	-9.3%
Newsletter	3,000	1,989	2,000	(1,000)	1%	-33.3%
Displays	-	2,392	1,500	1,500	-37%	-
Graphic Production Services	80,000	66,200	63,500	(16,500)	-4%	-20.6%
Promotional Items	8,000	30,000	25,000	17,000	-17%	212.5%
Bank Fees	1,123,000	1,193,000	1,194,000	71,000	0%	6.3%
Credit Card Fees	6,186,000	6,521,440	7,345,537	1,159,537	13%	18.7%
Security	9,150	9,160	12,760	3,610	39%	39.5%
Miscellaneous Expense	3,050	2,000	3,050	-	53%	0.0%
Office Supplies	42,569	40,469	43,569	1,000	8%	2.3%
Office Expense - Other	263,743	256,669	150,025	(113,718)	-42%	-43.1%
Operating Supplies	39,750	20,125	39,250	(500)	95%	-1.3%
Transponder Supplies	15,000	7,000	10,000	(5,000)	43%	-33.3%
Software Expense	47,075	63,531	47,275	200	-26%	0.4%
Dues and Subscriptions	13,610	15,914	17,460	3,850	10%	28.3%

Description

Books and Publications
Seminars and Conferences
Staff Training and Education
Contingency Project(s)
Furniture

Total Other:

TOTAL**CAPITAL EXPENDITURES**

General Equipment
Software
Total Capital Expenditures:

2017 Annual Budget	Projected Year-end Actual	2018 Annual Budget	\$ Inc (Decr) over 2017 Budget	% Inc (Decr) over Proj. 2017 Actual	% Inc (Decr) over 2017 Budget
600	50	600	-	1100%	0.0%
3,725	2,138	3,725	-	74%	0.0%
38,500	36,500	34,000	(4,500)	-7%	-11.7%
13,500	2,000	10,000	(3,500)	400%	-25.9%
-	-	9,550	9,550		
50,492,213	48,210,274	55,541,974	5,049,761	15%	10.0%
52,180,152	50,112,374	57,219,317	5,039,166	14%	9.7%
216,500	18,000	133,500	(83,000)	642%	-38.3%
10,000	-	20,000	10,000		100.0%
226,500	18,000	153,500	(73,000)	753%	-32.2%

**Central Florida Expressway Authority
Maintenance Activity - Summary**

	2017 Annual Budget	Projected Year-end Actual	2018 Annual Budget	\$ Inc (Decr) over 2017 Budget	% Inc (Decr) over Proj. 2017 Actual	% Inc (Decr) over 2017 Budget
Maintenance Administration (810)	\$ 1,922,183	\$ 1,829,678	\$ 2,617,836	\$ 695,653	43%	36%
Expressway Operations (820)	4,912,168	4,780,961	5,205,723	293,555	9%	6%
Routine Maintenance (408, 414, 417, 429, 451, 528)	10,296,850	9,138,500	9,981,350	(315,500)	9%	-3%
Total Maintenance Expenditures Before FDOT Participation	17,131,201	15,749,139	17,804,909	673,708	13%	4%
FDOT Participation	(2,607,228)	(2,607,228)	(2,607,228)	-	0%	0%
Total Maintenance Costs	14,523,973	13,141,911	15,197,681	673,708	16%	5%

Capital Expenditures

Capital Expenditures						
Maintenance Administration (810)	65,000	55,000	65,000	-	18%	0%
Expressway Operations (820)	56,460	49,360	68,000	11,540	38%	20%
Total Capital Expenditures	121,460	104,360	133,000	11,540	27%	10%

**Central Florida Expressway Authority
Maintenance Activity - Total By Line Item**

Description	2017 Annual Budget	Projected Year-end Actual	2018 Annual Budget	\$ Inc (Decr) over 2017 Budget	% Inc (Decr) over Proj. 2017 Actual	% Inc (Decr) over 2017 Budget
SALARIES & BENEFITS						
Salaries & Wages	\$ 839,380	\$ 743,191	\$ 942,455	\$ 103,075	26.8%	12.3%
Social Security and Medicare	62,693	56,115	71,207	8,514	26.9%	13.6%
Retirement Contributions -FRS	59,596	55,888	66,915	7,319	19.7%	12.3%
Life and Health Insurance	189,714	143,412	237,798	48,084	65.8%	25.3%
State Assessment	2,013	662	2,380	367	259.5%	18.2%
Workers' Compensation	27,497	36,477	34,533	7,036	-5.3%	25.6%
Total Salaries & Benefits	1,180,893	1,035,745	1,355,288	174,395	30.9%	14.8%
OTHER						
Consultant Fees	100,000	106,000	120,000	20,000	13.2%	20.0%
Maintenance Program Support	-	-	112,000	112,000	-	-
Maintenance Program Support - ITS	969,983	969,983	1,020,000	50,017	5.2%	5.2%
Mitigation Maint. Support	500	-	-	(500)	-	-100.0%
FON Program Support	200,000	200,000	200,000	-	0.0%	0.0%
Pavement Management System	26,000	26,000	35,000	9,000	34.6%	34.6%
Contract Personnel	-	-	100,000	100,000	-	-
Florida Highway Patrol Services	977,945	924,435	965,871	(12,074)	4.5%	-1.2%
Motorist Service Patrol Agreement	1,077,650	1,077,650	1,400,000	322,350	29.9%	29.9%
Rapid Incident Scene Clearance	-	-	50,000	50,000	-	-
Travel	7,000	6,000	7,000	-	16.7%	0.0%
Reimbursed Local Travel	1,700	1,600	1,700	-	6.3%	0.0%
Gasoline	14,200	10,700	11,200	(3,000)	4.7%	-21.1%
Telephone Service	7,500	8,900	8,900	1,400	0.0%	18.7%
Postage and Delivery	1,000	1,000	1,000	-	0.0%	0.0%
Printing	580	80	-	(580)	-100.0%	-100.0%
Utilities	120,000	120,000	132,000	12,000	10.0%	10.0%
Insurance	4,600	3,246	-	(4,600)	-100.0%	-100.0%
Maintenance FON Locates	10,900	10,900	12,000	1,100	10.1%	10.1%
Maintenance - ITS Infrastructure	1,721,800	1,721,800	1,790,000	68,200	4.0%	4.0%
Repairs & Maint. - Software and Hardware	-	-	85,000	85,000	-	-
Repairs & Maint. - Fiber Optic Network	376,000	356,000	380,000	4,000	6.7%	1.1%
Repairs & Maint. - Vehicles	7,500	7,000	6,000	(1,500)	-14.3%	-20.0%
Roadway and Bridges Maintenance	5,633,000	5,625,000	5,259,300	(373,700)	-6.5%	-6.6%
Landscape Maintenance Service	3,614,500	2,700,000	3,655,300	40,800	35.4%	1.1%
Bridge Inspection	269,000	344,000	342,000	73,000	-0.6%	27.1%
Sign Maintenance/Inspection	339,200	240,000	294,500	(44,700)	22.7%	-13.2%
Traffic Signals and Lights	181,200	40,000	164,000	(17,200)	310.0%	-9.5%
Aquatics	209,950	186,000	218,750	8,800	17.6%	4.2%
Advertising and Legal Notices	1,000	1,000	1,000	-	0.0%	0.0%
Office Supplies	4,100	4,100	4,100	-	0.0%	0.0%
Office Expense - Other	5,500	7,000	4,500	(1,000)	-35.7%	-18.2%
Dues and Subscriptions	2,500	2,000	2,500	-	25.0%	0.0%
Seminars and Conferences	5,000	3,000	5,000	-	66.7%	0.0%
Staff Training and Education	10,500	6,500	8,500	(2,000)	30.8%	-19.0%
Contingency Project(s)	50,000	3,500	47,500	(2,500)	1257.1%	-5.0%
Furniture	-	-	5,000	5,000	-	-
Total Other:	15,950,308	14,713,394	16,449,621	499,313	11.8%	3.1%
TOTAL	17,131,201	15,749,139	17,804,909	673,708	13.1%	3.9%
CAPITAL EXPENDITURES						
General Equipment	12,100	-	10,000	(2,100)	-	-17.4%
Furniture	5,000	-	-	(5,000)	-	-100.0%
Vehicle Purchases	55,000	55,000	83,000	28,000	50.9%	50.9%
Software	49,360	49,360	40,000	(9,360)	-19.0%	-19.0%
Total Capital Expenditures:	121,460	104,360	133,000	11,540	27.4%	9.5%

**Central Florida Expressway Authority
Administration Activity - Summary**

	2017 Budget	Projected Year-end Actual	2018 Annual Budget	\$ Inc (Decr) over 2017 Budget	% Inc (Decr) over Proj. 2017 Actual	% Inc (Decr) over 2017 Budget
General (610)	\$ 665,549	\$ 675,641	\$ 821,679	\$ 156,130	22%	23%
525 Magnolia (615)	25,356	23,517	24,646	(710)	5%	-3%
Administrative Services (620)	2,157,873	1,964,848	2,240,506	82,633	14%	4%
Plans Production (623)	55,097	52,303	57,185	2,088	9%	4%
Legal (625)	732,829	594,463	742,944	10,115	25%	1%
Accounting (630)	1,477,186	1,279,675	1,547,653	70,467	21%	5%
Procurement (640)	475,827	423,180	472,018	(3,809)	12%	-1%
Records Management (655)	364,751	255,555	418,922	54,171	64%	15%
Human Resources (660)	194,887	171,788	198,510	3,623	16%	2%
Supplier Diversity (665)	361,035	262,335	361,421	386	38%	0%
Communications (670)	681,163	616,796	704,937	23,774	14%	3%
Construction Administration (685)	56,067	47,873	59,354	3,286	24%	6%
Internal Audit (690)	564,000	500,000	564,000	-	13%	0%
Total Administration Costs	7,811,620	6,867,974	8,213,774	402,154	20%	5%

Capital Expenditures and Projects

Capital Expenditures						
General (610)	10,000	18,000	45,000	35,000	150%	350%
HR (660)	30,000	-	30,000	-		0%
Communications (670)	-	20,000	85,000	85,000	325%	
Construction Administration (685)	37,500	30,997	10,000	(27,500)	-68%	-73%
Total Capital Expenditures	77,500	68,997	170,000	92,500	146%	119%

Central Florida Expressway Authority
Administration Activity - Total By Line Item

Description	2017 Annual Budget	Projected Year-end Actual	2018 Annual Budget	\$ Inc (Decr) over 2017 Budget	% Inc (Decr) over Proj. 2017 Actual	% Inc (Decr) over 2017 Budget
SALARIES & BENEFITS						
Salaries & Wages	\$ 3,285,016	\$ 2,816,983	\$ 3,355,268	\$ 70,252	19.1%	2.1%
Social Security and Medicare	217,105	187,529	232,080	14,975	23.8%	6.9%
Retirement Contributions -FRS	391,397	367,728	410,213	18,816	11.6%	4.8%
Life and Health Insurance	720,804	579,787	780,783	59,979	34.7%	8.3%
State Assessment	7,642	3,284	7,920	278	141.2%	3.6%
Workers' Compensation	13,476	18,600	14,080	604	-24.3%	4.5%
Reemployment Assistance Program	-	5,736	-	-	-100.0%	-
Total Salaries & Benefits	4,635,440	3,979,645	4,800,344	164,904	20.6%	3.6%
OTHER						
Professional Services	659,750	653,144	732,750	73,000	12.2%	11.1%
Legal Fees	200,000	150,000	200,000	-	33.3%	0.0%
Consultant Fees	320,684	291,368	321,229	545	10.2%	0.2%
Auditing Fees	90,000	75,000	79,500	(10,500)	6.0%	-11.7%
Contract Personnel	574,000	500,000	574,000	-	14.8%	0.0%
Travel	52,300	36,100	51,300	(1,000)	42.1%	-1.9%
Reimbursed Local Travel	6,600	5,845	8,945	2,345	53.0%	35.5%
Gasoline	1,650	1,100	2,150	500	95.5%	30.3%
Telephone Service	7,275	10,316	10,950	3,675	6.1%	50.5%
Postage and Delivery	5,000	12,000	6,000	1,000	-50.0%	20.0%
Printing	13,010	3,990	5,980	(7,030)	49.9%	-54.0%
CAFR	25,000	15,000	17,500	(7,500)	16.7%	-30.0%
Utilities	275,000	275,000	300,000	25,000	9.1%	9.1%
Leases - Equipment	32,000	35,992	37,432	5,432	4.0%	17.0%
Records Management	30,500	15,892	30,000	(500)	88.8%	-1.6%
Insurance	94,723	94,033	100,934	6,211	7.3%	6.6%
Repairs & Maint. - Equipment	10,300	2,500	10,300	-	312.0%	0.0%
Support & Maint. - Software	94,200	96,800	98,910	4,710	2.2%	5.0%
Repairs & Maint. - Software and Hardware	8,350	20,925	41,850	33,500	100.0%	401.2%
Facilities Maintenance	165,111	175,500	225,500	60,389	28.5%	36.6%
Repairs & Maint. - Vehicles	2,050	1,800	2,050	-	13.9%	0.0%
System Modifications Maintenance - Website	12,500	3,600	5,400	(7,100)	50.0%	-56.8%
Landscape Maintenance Service	42,500	40,000	52,000	9,500	30.0%	22.4%
Board Meeting Broadcasting	16,000	8,640	8,700	(7,300)	0.7%	-45.6%
Photography	2,000	1,875	2,000	-	6.7%	0.0%
Graphic Production Services	15,000	13,145	15,000	-	14.1%	0.0%
Promotional Items	1,000	1,000	1,000	-	0.0%	0.0%
Advertising and Legal Notices	6,500	7,753	6,500	-	-16.2%	0.0%
Bank Fees	32,000	32,000	36,000	4,000	12.5%	12.5%
Security	1,000	1,000	1,500	500	50.0%	50.0%
Special Events	13,500	35,000	21,000	7,500	-40.0%	55.6%
Employee Support Services	3,000	3,000	3,000	-	0.0%	0.0%
Miscellaneous Expense	12,500	7,000	17,500	5,000	150.0%	40.0%
Office Supplies	45,650	29,300	46,350	700	58.2%	1.5%
Office Expense - Other	55,990	23,469	44,050	(11,940)	87.7%	-21.3%
Software Expense	6,000	1,500	2,500	(3,500)	66.7%	-58.3%
Dues and Subscriptions	192,337	182,507	222,725	30,388	22.0%	15.8%
Seminars and Conferences	21,100	15,210	21,575	475	41.8%	2.3%
Staff Training and Education	30,100	10,025	30,100	-	200.2%	0.0%
Furniture	-	-	19,250	19,250	-	-
Total Other:	3,176,180	2,888,329	3,413,430	237,250	18.2%	7.5%
TOTAL	7,811,620	6,867,974	8,213,774	402,154	19.6%	5.1%
CAPITAL EXPENDITURES						
General Equipment	20,000	23,000	25,000	5,000	8.7%	25.0%
Vehicles	27,500	25,997	30,000	2,500	15.4%	9.1%
Software	30,000	20,000	115,000	85,000	475.0%	283.3%
Total Capital Expenditures:	77,500	68,997	170,000	92,500	146.4%	119.4%

**Central Florida Expressway Authority
Other Operating**

	2017 Annual Budget	Projected Year-end Actual	2018 Annual Budget	\$ Inc (Decr) over 2017 Budget	% Inc (Decr) over Proj. 2017 Actual	% Inc (Decr) over 2017 Budget
Traffic & Engineering Consultant	\$ 535,000	\$ 1,500,000	\$ 500,000	\$ (35,000)	-67%	-7%
General Engineering Consultant	2,134,000	2,559,114	2,035,599	(98,401)	-20%	-5%
Total Other Operating Expenses	2,669,000	4,059,114	2,535,599	(133,401)	-38%	-5%

**Central Florida Expressway Authority
Goldenrod Road - Summary**

	2017 Annual Budget	Projected Year-end Actual	2018 Annual Budget	\$ Inc (Decr) over 2017 Budget	% Inc (Decr) over Proj. 2017 Actual	% Inc (Decr) over 2017 Budget
Maintenance	\$ 141,000	\$ 137,000	\$ 151,000	\$ 10,000	10%	7%
Operations	274,086	256,756	308,786	34,700	20%	13%
TOTAL	415,086	393,756	459,786	44,700	17%	11%
TOLL REVENUE	(1,650,000)	(1,900,000)	(2,000,000)	(350,000)	5%	21%
NET RESULT OF ACTIVITY	1,234,914	1,506,244	1,540,214	305,300	2%	25%

**DRAFT FISCAL YEAR 2018 – 2022
FIVE-YEAR WORK PLAN**

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Central Florida Expressway Authority
Five-Year Work Plan
Category Summary

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Category	Project Cost (thousand \$)								
	Fiscal Year								
	17/18		18/19		19/20	20/21	21/22		Total
	E	U	E	U	U	U	U		
Existing System Improvements	26,918	61,190	3,293	108,280	195,550	187,902	171,941	755,074	
System Expansion Projects	70,723	57,023	0	12,821	7,374	5,666	2,304	155,911	
Interchange Projects	102,900	39,978	75,964	41,660	81,421	6,279	6,818	355,020	
Facilities Projects	325	3,053	0	6,304	1,330	1,059	1,054	13,125	
Transportation Technology Projects	0	5,811	0	16,121	5,228	4,183	3,909	35,252	
Information Technology Projects	30,757	14,407	17,668	7,959	7,383	538	0	78,712	
Signing and Pavement Markings	1,708	812	0	1,981	1,969	1,394	180	8,044	
Renewal and Replacement Projects	5,152	26,698	0	96,118	34,880	40,463	23,574	226,885	
Landscape Projects	0	810	0	805	1,435	810	805	4,665	
SUB TOTALS	238,483	209,782	96,925	292,049	336,570	248,294	210,585		
TOTALS		448,265		388,974	336,570	248,294	210,585	1,632,689	
Non-System Project (Goldenrod Road)	715	0	0	690	0	0	0	1,405	
GRAND TOTALS		448,980		389,664	336,570	248,294	210,585	1,634,094	

* Construction costs escalated at 2.7% for FY 2018, 2.8% for FY 2019, 2.6% for FY 2020, 2.5% for FY 2021 and 2.7% for FY 2022. In general, all other costs escalated at an average of 2.6% per year.
E - Encumbered costs from projects under contracts from previous fiscal years
U - Unencumbered costs

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Central Florida Expressway Authority
Five-Year Work Plan

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Existing System Improvements Summary (Page 1 of 2)

Page	Project Number	Project Name	Project Description				Project Cost (Thousands \$) by Fiscal Year *					Fund Source	Project Phases Funded			
			From	To	Length (miles)	Work Description	17/18		18/19		19/20			20/21	21/22	
							E	U	E	U	U			U	U	
35	417-134	SR 417 Widening from Eon Trail to County Line	Econothackerlee Trail	County Line	2.3	Add Lanes, Mill and Resurface	0	7,080	0	25,776	0	0	0	0	SP	Design & Construction
36	-	SR 417 Widening from International Drive to John Young Parkway	International Drive	John Young Parkway	3.6	Add Lanes, Mill and Resurface	0	4,558	0	13,351	47,309	12,280	0	0	SP	Design & Construction
37	-	SR 417 Widening from John Young Parkway to Landstar Boulevard	John Young Parkway	Landstar Boulevard	3.8	Add Lanes, Mill and Resurface	0	2,701	0	2,712	42,061	21,031	0	0	SP	Design & Construction
38	-	SR 417 Widening from Lanistar Boulevard to Boggy Creek Road	Lanistar Boulevard	Boggy Creek Road	2.6	Add Lanes, Mill and Resurface	0	0	0	4,231	16,491	32,962	0	0	SP	Design & Construction
39	-	SR 417 Widening from Narcoossee Road to SR 528	Narcoossee Road	SR 528	3.9	Add Lanes, Mill and Resurface	0	0	0	0	5,618	21,860	43,699	0	SP	Design & Construction
40	-	SR 417 Widening from Boggy Creek Road to Narcoossee Road	Boggy Creek Road	Narcoossee Road	5.3	Add Lanes, Mill and Resurface	0	0	0	0	0	0	7,823	0	SP	Design
41	599-126	SR 417 / SR 528 Ramp Improvements	-	-	-	Ramp Improvements	3	7,614	0	3,594	0	0	0	0	SP	Bidding & Construction
42	417-133	SR 417 / Curry Ford Road Southbound On Ramp Improvements	-	-	-	On Ramp Improvements	302	0	0	0	0	0	0	0	SP	Construction
43	-	SR 417 Widening - Curry Ford to Lake Underhill Landscaping	Curry Ford Road	Lake Underhill Road	1.6	Landscaping	0	0	0	0	19	305	0	21	SP	Design, Installation & Partial Maintenance
44	417-253G	SR 408 / SR 417 Interchange Landscaping	-	-	-	Interchange Landscaping	0	0	0	0	0	0	0	81	SP	Design and Bidding
45	-	SR 417 / Florida's Turnpike Interchange Landscaping	-	-	-	Interchange Landscaping	0	0	0	0	59	773	0	20	SP	Design, Installation & Partial Maintenance
46	-	SR 429 / Florida's Turnpike Interchange	-	-	-	Add Lanes, Mill and Resurface	0	111	0	411	1,246	1,246	0	28,817	SP	IMR, Design & Construction
47	-	SR 429 Widening from Florida's Turnpike to West Road	Florida's Turnpike / SR 50	West Road	4.2	Add Lanes, Mill and Resurface	10	0	0	5,681	22,119	44,218	0	0	SP	Design & Construction
48	-	SR 429 Widening from West Road to CR 437A	West Road	CR 437A	2.5	Add Lanes, Mill and Resurface	0	0	0	0	3,286	12,790	26,040	0	SP	Design & Construction
Encumbered Total							307		0							
Unencumbered Total								21,468		55,669	138,208	147,475	106,502			
SUB-TOTALS (Page 1)							21,775		55,669		138,208	147,475	106,502			

* Construction costs escalated at 2.7% for FY 2018, 2.8% for FY 2019, 2.6% for FY 2020, 2.5% for FY 2021 and 2.7% for FY 2022. In general, all other costs escalated at an average of 2.6% per year.
E = Encumbered costs from projects under contracts from previous fiscal years
U = Unencumbered costs

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Central Florida Expressway Authority
Five-Year Work Plan

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Existing System Improvements Summary (Page 2 of 2)

Page	Project Number	Project Name	Project Description				Project Cost (thousands \$) by Fiscal Year *					Fund Source	Project Phases Funded			
			From	To	Length (miles)	Work Description	17/18		18/19		19/20			20/21	21/22	
							E	U	E	U	U			U	U	
49	-	SR 429 Widening from CR 535 to Florida's Turnpike	CR 535	Florida's Turnpike	3.1	Add Lanes, Mill and Resurface	0	0	0	0	4,453	17,325	34,610	SP	Design & Construction	
50	429-454D	SR 429 / CR 535 Northbound On Ramp Improvements	-	-	-	On Ramp Improvements	0	3,057	0	1,524	0	0	0	0	SP	Bidding & Construction
51	408-127	SR 408 Widening from Good Homes to East of Hanssawee	Good Homes Road	East of Hanssawee Road	1.8	Add Lanes, Mill and Resurface	13,440	0	0	0	0	0	0	0	SP	Construction
52	408-128	SR 408 Widening from SR 417 to Alafaya Trail	SR 417	Alafaya Trail	4.1	Add Lanes, Mill and Resurface	0	33,207	0	44,269	11,067	0	0	0	SP	Bidding & Construction
53	-	SR 528 Widening - SR 436 to Goldenrod Rd	SR 436	Goldenrod Road	1.4	Widening and Bridge Replacement	0	2,549	0	2,560	39,680	19,840	0	0	SP	Design & Construction
54	-	SR 528 Widening from Nacoossee Road to SR 417	Nacoossee Road	SR 417	1.9	Add Lanes, Mill and Resurface	0	0	0	0	900	1,830	29,881	SP	Design & Construction	
55	528-131	SR 528 Eon River Bridge	-	-	-	Bridge Replacement & Widening	13,171	0	3,293	0	0	0	0	0	SP	Construction
56	-	SR 528 Airport Frontage 1 Landscaping	Hoggy Creek Road	SR 436	2.1	Landscaping	0	0	0	0	0	250	20	SP	Design, Installation & Maintenance	
57	-	Systemwide Safety and Operational Improvement Projects	-	-	-	Minor Roadway Projects	0	274	0	248	333	300	174	SP	Design & Construction	
58	-	Systemwide Guardrail Upgrade	-	-	-	Guardrail Improvements	0	29	0	156	150	150	90	SP	Design, Bidding & Construction	
59	-	Systemwide Drainage Improvements	-	-	-	Drainage Improvements	0	20	0	155	155	150	90	SP	Design, Bidding & Construction	
60	599-137	Systemwide Roadway Lighting	-	-	-	Lighting Rehabilitation	0	90	0	90	155	155	150	SP	Design, Bidding & Construction	
61	-	Multimodal/Intermodal Opportunity Study	-	-	-	Multimodal/Intermodal Study	0	300	0	300	300	300	300	SP	Multimodal/Intermodal Study	
62	-	Safety Campaign	-	-	-	Safety Project	0	195	0	170	160	120	100	SP	Communications	
63	-	SR 528 Fencing	Nacoossee Road	East of SR 520	18.0	Safety Project	0	10	0	3,134	0	0	0	SP	Design, Bidding & Construction	
Encumbered Total							26,611		3,293							
Unencumbered Total								19,722		52,611	57,341	40,427	65,439			
SUB-TOTALS (Page 2)							66,333		55,904		57,342	40,427	65,439			
TOTALS							88,108		111,573		195,550	187,902	171,941			

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Five-Year Work Plan

System Expansion Projects Summary (Page 1 of 2)

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Page	Project Number	Project Name	Project Description				Project Cost (thousands \$) by Fiscal Year *						Fund Source	Project Phases Funded	
			From	To	Length (miles)	Work Description	17/18		18/19		19/20	20/21			21/22
							E	U	E	U	U	U			U
64	408-254	SR 408 Eastern Extension	Chalcopter Parkway	SR 520	7.3	New Expressway	1,000	0	0	0	1,675	1,664	0	SP	PD&E & 15% Line & Grade
65	528-215	SR 528 / Northeast District Connector Study	Northeast District	SR 528	8.0	New Expressway	0	995	0	990	0	0	0	SP	Concept, Feasibility & Mobility Study
66	599-2210	Osceola Parkway Extension Feasibility Study	Northeast Connector	SR 417	-	New Expressway	0	1,125	0	0	0	0	0	SP	Concept, Feasibility & Mobility Study
67	599-2220	Northeast Connector Expressway Study	Turnpike	Osceola Parkway Extension	-	New Expressway	0	1,125	0	0	0	0	0	SP	Concept, Feasibility & Mobility Study
68	599-2230	Southport Connector Feasibility Study	Poinciana Parkway	Turnpike	-	New Expressway	0	938	0	0	0	0	0	SP	Concept, Feasibility & Mobility Study
69	599-2240	Poinciana / I-4 Connector Feasibility Study	I-4	Poinciana Parkway	-	New Expressway	0	1,125	0	0	0	0	0	SP	Concept, Feasibility & Mobility Study
70	-	SR 414 Direct Connection Study	US 441	SR 434	-	New Expressway	0	150	0	0	0	0	0	SP	Concept, Feasibility & Mobility Study
71	-	Lake / Orange Connector Feasibility Study	US 27	US 429	-	New Expressway	0	0	0	285	825	0	0	SP	Concept, Feasibility & Mobility Study
72	-	Expansion PD&E based on Feasibility Studies (1)	-	-	-	New Expressway	0	0	0	1,057	1,046	1,113	1,102	SP	PD&E & 15% Line & Grade
73	-	Expansion PD&E based on Feasibility Studies (2)	-	-	-	New Expressway	0	0	0	0	1,085	1,074	1,142	SP	PD&E & 15% Line & Grade
74	429-200F	SR 429 / SR 414 Interchange Landscape	-	-	-	Landscaping	5	0	0	0	0	0	0	SP	Maintenance
75	429-200G	SR 429 / SR 414 Interchange Landscape Phase II	-	-	-	Landscaping	0	825	0	20	5	0	0	SP	Installation & Maintenance
Encumbered Total							1,005		0						
Unencumbered Total								6,283		2,352	4,636	3,851	2,244		
SUB-TOTALS (Page 1)							7,288		2,352	4,636	3,851	2,244			

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Five-Year Work Plan

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System Expansion Projects Summary (Page 2 of 2)

M/R	Project Number	Project Name	Project Description				Project Cost (thousands \$) by Fiscal Year *					Fund Source	Project Phases Funded		
			From	To	Length (miles)	Work Description	17/18		18/19		19/20			20/21	21/22
							E	U	E	U	U			U	U
76	429-202	Wekiva Parkway Section 1A	US-441 Interchange	North of Poinkan Road	2.3	New Expressway	2,100	0	0	0	0	0	0	SP / CF	Construction
77	429-203	Wekiva Parkway Section 1D	North of Poinkan Road	North of Kelly Park Road	2.3	New Expressway	2,625	0	0	0	0	0	0	SP / CF	Construction
78	429-205	Wekiva Parkway Section 2A	East of CR 437	East of Mt Plymouth Road	2.0	New Expressway	21,255	0	0	0	0	0	0	SP / CF	Construction
79	429-204	Wekiva Parkway Section 2B	North of Kelly Park Road	East of CR 437 & South to Lake Co. Line	2.0	New Expressway	26,008	0	0	0	0	0	0	SP / CF	Construction
80	429-206	Wekiva Parkway Section 2C	Lake Co. Line	SR 46 East of Round Lake Road	1.3	New Expressway	17,730	0	0	0	0	0	0	SP / CF	Construction
81	429-82-40	Wekiva Parkway (202 & 203) Landscape	US 441	Kelly Park Road	-	Landscaping	0	2,451	0	60	60	0	0	SP	Installation & Maintenance
82	-	Wekiva Parkway (206) Landscape	Coronado Somerset Dr.	SR 46	-	Landscaping	0	527	0	493	20	5	0	SP	Design, Installation & Maintenance
83	-	Wekiva Parkway (204) Landscape	SR 453	SR 429	-	Landscaping	0	89	0	983	20	15	0	SP	Design, Installation & Maintenance
84	-	Wekiva Parkway (205) Landscape	Utility Viaduct	Mt Plymouth Road	-	Landscaping	0	26	0	340	295	20	5	SP	Design, Installation & Maintenance
85	-	Wekiva Parkway (203) Kelly Park Rd Interchange Landscape	Kelly Park Rd Interchange	-	-	Landscaping	0	0	0	70	973	20	15	SP	Design, Installation & Maintenance
86	-	Wekiva Parkway (206) Buffer Landscape	North of 429/453 Interchange	Coronado Somerset Dr	-	Landscaping	0	0	0	43	627	589	20	SP	Design, Installation & Partial Maintenance
87	-	Wekiva Parkway (205) Buffer Landscape	Panel 1	Utility Corridor	-	Landscaping	0	0	0	0	95	1,166	20	SP	Design, Installation & Partial Maintenance
88	429-051	SR 429 - Wekiva Parkway (Right of Way)	US 441	East of Mt Plymouth Rd and NW to SR 46	-	New Expressway	0	47,656	0	8,497	648	0	0	SP / CF	Right of Way
Encumbered Total							69,718								
Unencumbered Total								50,740		10,469	2,738	1,815	60		
SUB-TOTALS (Page 2)							120,458		10,469	2,738	1,815	60			
TOTALS							127,746		12,821	7,374	5,666	2,304			

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Central Florida Expressway Authority
Five-Year Work Plan
Interchange Projects Summary

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Page	Project Number	Project Name	Project Description				Project Cost (thousands \$) by Fiscal Year *					Fund Source	Project Phases Funded		
			From	To	Length (miles)	Work Description	17/18		18/19		19/20			20/21	21/22
							E	U	E	U	U			U	U
89	408-253G	SR 408/SR 417 Interchange (Phase II) Design-Build	SR 408/SR 417	Lake Underhill Road	-	Add Ramps, Mill and Resurface	0	39,766	0	39,766	0	0	0	SP	Construction
90	429-305	SR 429 / Schofield Road Interchange Landscaping	-	-	-	Landscaping	0	0	0	13	433	20	20	SP	Design, Installation & Maintenance
91	417-301C	SR 417 / Hoggy Creek Road Interchange (Phase III) Landscaping	-	-	-	Landscaping	0	58	0	854	26	15	0	SP	Design, Installation & Maintenance
92	528-313	SR 528 / Innovation Way Interchange	Innovation Way	Aerospace Parkway	-	New Interchange	26,934	0	0	0	0	0	0	SP	Design-Build
93	408-312	SR 408 at I-4 Ultimate	-	-	-	Interchange Reconstruction	75,964	0	75,964	0	80,968	0	0	SP	Contribution & Corridor Consultant
94	-	SR 429 New Interchange Studies	-	-	-	Interchange Studies and Design	0	160	0	1,033	0	6,195	6,184	SP	Concept Study, Design & Construction
95	-	SR 528 / Innovation Way Landscaping	-	-	-	Landscaping	0	0	0	0	0	49	614	SP	Design, Installation & Partial Maintenance
Encumbered Total							102,900		75,964						
Unencumbered Total								39,978		41,660	81,421	6,279	6,818		
TOTALS							142,878		117,624		81,421	6,279	6,818		

* Construction costs escalated at 2.7% for FY 2018, 2.8% for FY 2019, 2.6% for FY 2020, 2.5% for FY 2021 and 2.7% for FY 2022. In general, all other costs escalated at an average of 2.6% per year.
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Central Florida Expressway Authority
Five-Year Work Plan
Facilities Projects Summary

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Page	Project Number	Project Name	Project Description				Project Cost (Thousands \$) by Fiscal Year *						Fund Source	Project Phases Funded	
			From	To	Length (miles)	Work Description	17/18		18/19		19/20	20/21			21/22
							E	U	E	U	U	U			U
96	-	Systemwide Toll Plaza Projects	-	-	-	Toll Plaza Projects	0	100	0	100	100	100	100	SP	Design & Construction
97	599-735	Systemwide Generator Replacements	-	-	-	Generator Replacement	315	391	0	0	0	0	0	SP	Construction
98	599-735	Systemwide Generator Replacement (SR 417 / 408 / 429)	-	-	-	Generator Replacement	0	36	0	2,140	0	0	0	SP	Design & Construction
99	599-735	Systemwide Generator Replacement (SR 429)	-	-	-	Generator Replacement	0	15	0	322	296	0	0	SP	Design & Construction
100	599-735	Systemwide Generator Replacements and Upgrades	-	-	-	Generator Replacements	0	0	0	0	8	116	189	SP	Design & Construction
101	599-732a	Systemwide AC Unit Replacement #08	-	-	-	Air Conditioner Replacements	10	297	0	297	0	0	0	SP	Design & Construction
102	599-732	Systemwide AC Unit Replacement #08 / 429 / 414	-	-	-	Air Conditioner Replacements	0	18	0	121	197	0	0	SP	Design & Construction
103	599-732	Systemwide Air Conditioner Replacements and Upgrades	-	-	-	Air Conditioner Replacements	0	0	0	9	64	106	106	SP	Design & Construction
104	417-744	SR417 DC/Ramps Roof Replacement	-	-	-	Roof Replacements	0	467	0	0	0	0	0	SP	Design & Construction
105	-	SR408 Ramps Roof Replacement	-	-	-	Roof Replacements	0	260	0	230	0	0	0	SP	Design & Construction
106	-	Systemwide Roof Replacements	-	-	-	Roof Replacements	0	0	0	240	240	240	240	SP	Design & Construction
107	-	Systemwide UPS Replacements	-	-	-	UPS Replacements	0	110	0	110	110	110	110	SP	Installation
108	599-4130	HO 3rd Floor Improvements	-	-	-	3rd Floor and Pkwy Improvements	0	856	0	0	0	0	0	SP	Bidding & Construction
109	-	Miscellaneous CFX Headquarters Improvements	-	-	-	Miscellaneous Projects	0	0	0	315	315	315	315	SP	Design & Construction
110	-	West District Facility	-	-	-	Operations Centers	0	110	0	1,765	0	0	0	SP	Design & Construction
111	-	McCoy Road Maintenance Yard	-	-	-	Operations Centers	0	387	0	652	0	0	0	SP	Design & Construction
Encumbered Total							325		0						
Unencumbered Total								3,053		6,304	1,330	1,059	1,054		
TOTALS							3,378		6,304	1,330	1,059	1,054			

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Central Florida Expressway Authority
 Five-Year Work Plan
Transportation Technology Projects Summary

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Age	Project Number	Project Name	Project Description				Project Cost (thousands \$) by Fiscal Year *					Fund Source	Project Phases Funded		
			From	To	Length (miles)	Work Description	17/18		18/19		19/20			20/21	21/22
							E	U	E	U	U			U	U
112	408-509	Fiber Optic Network (FON) Utility Adjustments	-	-	-	Utility Adjustments	0	100	0	50	50	50	50	SP	Utility Adjustments
113	599-536	Regional ITS Partnership Projects	-	-	-	Regional ITS Partnership Projects	0	180	0	180	180	0	0	SP	Partnership Contributions
114	599-524	ITS Network Upgrade Phase II	-	-	-	Re-splice Network Physical Architecture	0	155	0	1,869	0	0	0	SP	Installation
115	-	Wekiva Parkway CCTV Deployment Sections 1A, 2B & 2C	-	-	-	CCTV Cameras	0	316	0	979	960	0	0	SP	Design & Installation
116	-	Advanced Expressway Operations Performance Measures	-	-	-	Enhancements to ITS Data Analysis Systems	0	0	0	1,345	0	0	0	SP	Implementation
117	599-537	Supplemental DCS and CCTV Deployment	-	-	-	Deploy DCS and CCTV Cameras	0	1,970	0	5,208	0	0	0	SP	Design & Installation
118	599-526	Wrong-Way Driving Countermeasures	-	-	-	Wrong-Way Driving Countermeasures at selected ramps	0	1,717	0	1,724	0	0	0	SP	Installation
119	-	Transportation Technology Master Plan	-	-	-	Connected Vehicle Pilot Concept	0	200	0	0	0	0	0	SP	Concept
120	599-538	Relocation of Field Utilities	-	-	-	Relocation	0	135	0	0	0	0	0	SP	Implementation
121	-	Three-Line DMS Upgrade Program	-	-	-	Provide New Full-Color DMS roadway signs over 4 years on 4 miles	0	343	0	3,766	3,868	3,968	3,688	SP	Design & Construction
122	-	Field Ethernet Switch Replacement	-	-	-	IT Network switches to support field deployment of DMS signs	0	153	0	157	161	163	170	SP	Implementation
123	-	Wingate Virtual Server Environment	-	-	-	Furnish, Install, Test and Train	0	500	0	0	0	0	0	SP	Installation
124	-	Interchange Traffic Safety Improvements Pilot	-	-	-	Add warning devices to existing system interchange ramps	0	42	0	323	0	0	0	SP	Design & Construction
125	-	Security Cameras - Plazas, Ramps, and Service Centers	-	-	-	Security Cameras - Plazas, Ramps, and Service Centers	0	0	0	520	0	0	0	SP	Design & Construction
Encumbered Total							0	0							
Unencumbered Total								5,811		16,121	5,228	4,183	3,909		
TOTALS								5,811		16,121	5,228	4,183	3,909		

* Construction costs escalated at 2.7% for FY 2018, 2.8% for FY 2019, 2.6% for FY 2020, 2.5% for FY 2021 and 2.7% for FY 2022. In general, all other costs escalated at an average of 2.6% per year.
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Central Florida Expressway Authority
Five-Year Work Plan

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Information Technology Projects Summary

Page	Project Number	Project Name	Project Description				Project Cost (thousands \$) by Fiscal Year *					Fiscal Source	Project Phases Funded		
			From	To	Length (miles)	Work Description	17/18		18/19		19/20			20/21	21/22
							E	U	E	U	U			U	U
126	599-902	Toll Collection System Upgrade	-	-	-	System Upgrade	30,757	0	17,668	0	3,569	0	0	SP	Implementation & Testing
127	599-5330	Software - Hardware Replacements & Upgrades	-	-	-	Replacements & Upgrades	0	1,240	0	0	0	0	0	SP	Design & Implementation
128	599-5320	E-PASS Update	-	-	-	E-PASS Update	0	9,207	0	6,958	3,482	0	0	SP	Design & Implementation
129	-	Financial / Accounting Software Replacement	-	-	-	Acquire and config (commercial off the shelf)	0	595	0	82	0	0	0	SP	Design
130	-	E-PASS Service Center Relocations and Outfitting	-	-	-	Buildout of new space(s)	0	189	0	159	32	338	0	SP	Design & Construction
131	-	Reload Lane Expansion Program	-	-	-	Additional Reload Lanes	0	171	0	0	0	0	0	SP	Design & Construction
132	-	E-PASS Parking Initiatives	-	-	-	Develop / Install Airport E-PASS Parking	0	2,026	0	0	0	0	0	SP	Design & Implementation
133	-	Third-Party Toll Technology Product and Services Testing	-	-	-	New Services Testing	0	200	0	300	300	200	0	SP	Support Services
134	599-5310	eCommerce Mobile Application	-	-	-	Mobile Application	0	784	0	460	0	0	0	SP	Design & Implementation
Encumbered Total							30,757		17,668						
Unencumbered Total								14,107		7,959	7,383	538	0		
TOTALS							45,164		25,627		7,383	538	0		

* Construction costs escalated at 2.7% for FY 2018, 2.8% for FY 2019, 2.6% for FY 2020, 2.5% for FY 2021 and 2.7% for FY 2022. In general, all other costs escalated at an average of 2.6% per year.
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Central Florida Expressway Authority
 Five-Year Work Plan
Signing and Pavement Markings Summary

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Page	Project Number	Project Name	Project Description				Project Cost (thousands \$) by Fiscal Year *						Fund Source	Project Phases Funded		
			From	To	Length (miles)	Work Description	17/18		18/19		19/20	20/21			21/22	
							E	U	E	U	U	U			U	
135	599-626	Central Florida Expressway Authority Logo Replacement	-	-	-	Signing	1,701	0	0	0	0	0	0	0	SP	Bidding & Construction
136	428-6280	SR 408 Guide Sign Replacement	-	-	-	Signing	0	645	0	1,150	0	0	0	0	SP	Design & Construction
137	-	SR 417 Guide Sign Replacement	-	-	-	Signing	0	62	0	663	1,183	0	0	0	SP	Design & Construction
138	-	SR 414 Guide Sign Replacement	-	-	-	Signing	0	0	0	63	681	1,214	0	0	SP	Design & Construction
139	599-7360	Systemwide Miscellaneous Signing & Pavement Markings	-	-	-	Signing and Pavement Markings	0	105	0	105	105	180	180	0	SP	Design & Construction
Encumbered Total							1,701		0							
Unencumbered Total								812		1,981	1,969	1,394	180			
TOTALS							2,520		1,981		1,969	1,394	180			

* Construction costs escalated at 2.7% for FY 2018, 2.8% for FY 2019, 2.6% for FY 2020, 2.5% for FY 2021 and 2.7% for FY 2022. In general, all other costs escalated at an average of 2.6% per year.
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Renewal and Replacement Projects Summary (Page 1 of 2)

Page	Project Number	Project Name	Project Description				Project Cost (thousands \$) by Fiscal Year *					Fund Source	Project Phases Funded		
			From	To	Length (miles)	Work Description	17/18		18/19		19/20			20/21	21/22
							E	U	E	U	U			U	U
140	-	SR 417 Resurfacing	SR 528	Curry Ford Rd.	4.2	Mill & Resurface	0	0	0	0	999	12,791	6,396	RR	Design & Construction
141	-	SR 417 Resurfacing	SR 408	SR 50	1.6	Mill & Resurface	0	0	0	0	454	8,669	0	RR	Design & Construction
142	429-739	SR 429 Resurfacing	Seidel Road	CR 535	8.4	Mill & Resurface	5,152	0	0	0	0	0	0	RR	Construction
143	-	SR 429 Resurfacing	CR 437A	US 451 / US 441 Interchange	2.0	Mill and Resurface	0	0	0	0	0	0	339	RR	Design
144	-	SR 451 Resurfacing	North of CR 437A Ramps	US 441	1.7	Mill and Resurface	0	0	0	0	0	264	5,090	RR	Design & Construction
145	-	SR 414 Resurfacing	SR 429	West of Keene Rd.	3.8	Mill & Resurface	0	0	0	910	11,668	5,829	0	RR	Design & Construction
146	-	SR 414 Resurfacing	West of Keene Rd.	US 441 (East)	3.1	Mill & Resurface	0	0	0	623	8,050	4,020	0	RR	Design & Construction
147	408-742	SR 408 Resurfacing	W SR 50	Ortman/Mercy Dr.	3.9	Mill & Resurface	0	4,774	0	12,942	0	0	0	RR	Partial Design & Construction
148	408-742	SR 408 Resurfacing	Ortman/Mercy Dr.	I-4	3.2	Mill & Resurface	0	4,145	0	7,670	0	0	0	RR	Partial Design & Construction
149	-	SR 408 Resurfacing	East of I-4	Lake Underhill Bridge	1.8	Mill & Resurface	0	584	0	11,005	0	0	0	RR	Design & Construction
150	408-739	SR 408 Resurfacing	Lake Underhill Bridge	Yucatan Drive	1.8	Mill & Resurface	0	7,247	0	3,619	0	0	0	RR	Bidding & Construction
151	-	SR 408 Resurfacing	Yucatan Drive	SR 417	2.6	Mill & Resurface	0	734	0	9,407	4,698	0	0	RR	Design & Construction
152	-	SR 408 Resurfacing	East of Woodbury Rd.	North of SR 50 (East)	1.3	Mill & Resurface	0	0	0	0	0	235	4,420	RR	Design & Construction
153	-	SR 528 Resurfacing	SR 417	Jessamine Way / SR 417 Interchange Way	5.8	Mill & Resurface	0	1,037	0	19,693	0	0	0	RR	Design & Construction
154	-	SR 528 Resurfacing	Innovation Way	East of Dallas Blvd	6.7	Mill & Resurface	0	520	0	9,991	0	0	0	RR	Design & Construction
Encumbered Total							5,152	0	0	0	0	0	0		
Unencumbered Total							19,041	75,868	25,869	31,748	16,239				
SUB-TOTALS (Page 1)							24,193	75,868	25,869	31,748	16,239				

* Construction costs escalated at 2.7% for FY 2018, 2.8% for FY 2019, 2.6% for FY 2020, 2.5% for FY 2021 and 2.7% for FY 2022. In general, all other costs escalated at an average of 2.6% per year.
E = Encumbered costs from projects under contracts from previous fiscal years
U = Unencumbered costs

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Central Florida Expressway Authority
Five-Year Work Plan

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Renewal and Replacement Projects Summary (Page 2 of 2)

Page	Project Number	Project Name	Project Description				Project Cost (thousands \$) by Fiscal Year *					Fund Source	Project Phases Planned		
			From	To	Length (miles)	Work Description	17/18		18/19		19/20			20/21	21/22
							E	U	E	U	U			U	U
155	-	SR 528 Resurficing	East of Dallas Blvd	SR 520 (East)	7.6	Mill and Resurface	0	918	0	11,756	5,873	0	0	RR	Design & Construction
156	-	Miscellaneous Resurficing Projects	-	-	-	Mill & Resurfice	0	25	0	290	290	290	290	RR	Design & Construction
157	-	Miscellaneous Drainage and Stormwater Projects	-	-	-	Channel and Stormwater	0	60	0	310	310	310	310	RR	Design & Construction
158	-	Systemwide Bridge Projects	-	-	-	Misc. Structural Projects	0	52	0	429	429	392	243	RR	Design & Construction
159	599-7340	Systemwide Contings SR 408	-	-	-	Painting & Inspections	0	5,219	0	0	0	0	0	RR	Design & Construction
160	599-7340	Systemwide Contings	-	-	-	Painting & Inspections	0	156	0	4,490	160	4,630	4,490	RR	Design & Construction
161	599-7370	Systemwide Fence Projects	-	-	-	Fencing Replacement	0	273	0	275	275	273	273	RR	Construction
162	-	Systemwide Bridge Joint & Approach Slab Projects	-	-	-	Concrete Pavement Projects	0	17	0	110	110	110	110	RR	Design & Construction
163	-	Systemwide Reflective Pavement Markers & Thermo Striping	-	-	-	RPM Replacement & Striping	0	24	0	135	180	185	140	RR	Design & Construction
164	-	Systemwide Trailblazer Upgrades	-	-	-	Signing Upgrades	0	620	0	615	1,085	620	645	RR	Design & Construction
165	-	Systemwide Signing Replacement Projects	-	-	-	Signing Improvements	0	145	0	1,685	140	1,740	832	RR	Design & Construction
166	599-5280	Traffic Management CCTV Upgrade	-	-	-	Migration to IP Traffic Management Cameras	0	151	0	155	159	163	0	RR	Implementation
Encumbered Total							0	0							
Unencumbered Total								7,657		20,250	9,011	8,715	7,335		
SUB-TOTALS (Page 2)								7,657		20,250	9,011	8,715	7,335		
TOTALS								31,850		96,118	34,880	40,463	23,574		

* Construction costs escalated at 2.7% for FY 2018, 2.8% for FY 2019, 2.6% for FY 2020, 2.5% for FY 2021 and 2.7% for FY 2022. In general, all other costs escalated at an average of 2.6% per year.
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Central Florida Expressway Authority
 Five-Year Work Plan
Landscape Projects Summary

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Page	Project Number	Project Name	Project Description				Project Cost (thousands \$) by Fiscal Year *					Fund Source	Project Phases Funded		
			From	To	Length (miles)	Work Description	17/18		18/19		19/20			20/21	21/22
							E	U	E	U	U			U	U
167		Systemwide Discretionary Landscape Projects				Landscape	0	810	0	805	1,435	810	805	SP	Design & Construction
						Encumbered Total	0		0						
						Unencumbered Total		810		805	1,435	810	805		
						TOTALS	810	810	805	805	1,435	810	805		

* Construction costs escalated at 2.7% for FY 2018, 2.8% for FY 2019, 2.6% for FY 2020, 2.5% for FY 2021 and 2.7% for FY 2022. In general, all other costs escalated at an average of 2.6% per year.
 E = Encumbered costs from projects under contracts from previous fiscal years
 U = Unencumbered costs

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Central Florida Expressway Authority
 Five-Year Work Plan
Non-System Projects Summary

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%	Project Number	Project Name	Project Description				Project Cost (thousands \$) by Fiscal Year *					Fund Source	Project Phases Funded		
			From	To	Length (miles)	Work Description	17/18		18/19		19/20			20/21	21/22
							E	U	E	U	U			U	U
168	800-903E (903D-B)	Glennrod Road Resurfacing	Lee Vista	Narcoossee Road	0.9	Mill & Resurface	715	0	0	690	0	0	0	NSP	Construction
Encumbered Total							715		0						
Unencumbered Total								0		690	0	0	0		
TOTALS							715		690	0	0	0			

* Construction costs escalated at 2.7% for FY 2018, 2.8% for FY 2019, 2.6% for FY 2020, 2.5% for FY 2021 and 2.7% for FY 2022. In general, all other costs escalated at an average of 2.6% per year.
 E = Encumbered costs from projects under contracts from previous fiscal years
 U = Unencumbered costs

F. 2.

LEGISLATIVE UPDATE

THERE ARE NO BACKUP MATERIALS
FOR THIS ITEM
AT THIS TIME