# CENTRAL FLORIDA EXPRESSWAY AUTHORITY

#### **MEMORANDUM**

TO:

**Authority Board Members** 

FROM:

Claude Miller Alle Muller

Director of Procurement

DATE:

July 28, 2015

RE:

Award of Contract to DRMP, Inc.

Design Services for S.R. 408 Widening from S.R. 417 to Alafaya Trail

Contract No. 001066

At its meeting on April 9, 2015, the Board approved the final ranking of the firms for the referenced project and authorized staff to enter negotiations with DRMP, Inc. (DRMP), the firm ranked first. Those negotiations have been completed and Board award of the contract to DRMP in the amount of \$4,650,000.00 is requested.

# **AGREEMENT**

# CENTRAL FLORIDA EXPRESSWAY AUTHORITY AND DRMP, INC.

S.R. 408 WIDENING FROM S.R. 417 TO ALAFAYA TRAIL

CONTRACT NO. 001066

CONTRACT DATE: AUGUST 13, 2015 CONTRACT AMOUNT: \$4,650,000.00

# **CENTRAL FLORIDA EXPRESSWAY AUTHORITY**

AGREEMENT, SCOPE OF SERVICES, METHOD OF COMPENSATION, DETAILS OF COSTS AND FEES, PROJECT ORGANIZATIONAL CHART, PROJECT LOCATION MAP, AND SCHEDULE

# AGREEMENT, SCOPE OF SERVICES, METHOD OF COMPENSATION, DETAILS OF COSTS AND FEES, PROJECT ORGANIZATIONAL CHART, PROJECT LOCATION MAP, AND SCHEDULE

#### **FOR**

#### S.R. 408 WIDENING FROM S.R. 417 TO ALAFAYA TRAIL

#### CONTRACT NO. 001066

#### **AUGUST 2015**

#### CENTRAL FLORIDA EXPRESSWAY AUTHORITY

#### Members of the Board

Welton Cadwell, Chairman
Scott Boyd, Vice-Chairman
Brenda Carey, Secretary/Treasurer
Buddy Dyer, Member
Fred Hawkins, Jr., Member
Teresa Jacobs, Member
Walter A. Ketcham Jr., Member
Jay Madara, Member
S. Michael Scheeringa, Member
Diane Guitierrez- Scaccetti, Non-Voting Advisor

#### **Executive Director**

Laura Kelley

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# CENTRAL FLORIDA EXPRESSWAY AUTHORITY AGREEMENT FOR PROFESSIONAL SERVICES

THIS AGREEMENT, made and entered into this 13<sup>th</sup> day of August, 2015, 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 the "AUTHORITY" and DRMP, INC., hereinafter called "CONSULTANT", carrying on professional practice in engineering with offices located at 941 Lake Baldwin Lane, Orlando, Florida 32814.

That the AUTHORITY did determine that the CONSULTANT is fully qualified to render the services contracted.

#### WITNESSETH:

- 1.0 The AUTHORITY does hereby retain the CONSULTANT to furnish certain services in connection with the design of the S.R. 408 widening from S.R. 417 to Alafaya Trail identified as Contract No. 001066.
- 2.0 The CONSULTANT and the AUTHORITY 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 Amendment 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 the AUTHORITY's Executive Director.

Reference herein to the Project Manager shall mean the AUTHORITY's Director of Engineering or his authorized designee. The Project Manager shall provide the management and technical direction for this Agreement on behalf of the AUTHORITY. 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 the AUTHORITY 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 the AUTHORITY and at intervals established by the AUTHORITY. The AUTHORITY 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 the AUTHORITY, or of other agencies interested in the project on behalf of the AUTHORITY. Either party to the Agreement may request and be granted a conference.

In the event there are delays on the part of the AUTHORITY 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, the AUTHORITY 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 the AUTHORITY 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. The AUTHORITY 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 the AUTHORITY 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 the AUTHORITY.

#### 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 the AUTHORITY, 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 the AUTHORITY. It is understood and agreed that the AUTHORITY 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.

RS&H, Inc.

WBQ Design and Engineering, Inc.

AVCON, Inc.

Antillian Engineering Associates, Inc. (Class 2)

Ardaman & Associates, Inc. (Class 2)

EPG Engineering (Class 2)

Aerial Cartographic 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 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 subconsultant 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 subconsultant, 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.

#### 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 the AUTHORITY'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 the AUTHORITY'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 the AUTHORITY, 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 the AUTHORITY of said plans, documents, reports, studies or other data for any purpose other than intended by the terms of this Agreement.

#### 7.0 COMPENSATION

The AUTHORITY 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 \$4,650,000.00. Bills for fees or other compensation for services or expenses shall be submitted to the AUTHORITY in detail sufficient for a proper pre-audit and post audit thereof.

The CONSULTANT may be liable for AUTHORITY costs resulting from errors or deficiencies in designs furnished under this Agreement. The AUTHORITY may enforce such liability and collect the amount due if the recoverable cost will exceed the administrative cost involved or is otherwise in the AUTHORITY's best interest.

Records of costs incurred by the CONSULTANT under terms of this Agreement shall be maintained and made available upon request to the AUTHORITY 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 the AUTHORITY 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 the AUTHORITY 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 the AUTHORITY without restriction or limitation on their use on this project; and shall be made available, upon request, to the AUTHORITY at any time. The AUTHORITY 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 941 Lake Baldwin Lane, Orlando, Florida 32814.

The CONSULTANT shall allow public access to all documents, papers, letters, or other material as approved and authorized by the AUTHORITY 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 the AUTHORITY.

#### 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 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.

#### 11.0 TERMINATION

The AUTHORITY may terminate this Agreement in whole or in part at any time the interest of the AUTHORITY requires such termination.

If the AUTHORITY determines that the performance of the CONSULTANT is not satisfactory, the AUTHORITY 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 the AUTHORITY requires termination of the Agreement for reasons other than unsatisfactory performance of the CONSULTANT, the AUTHORITY 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 the AUTHORITY 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, the AUTHORITY 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 the AUTHORITY.

The AUTHORITY 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 the AUTHORITY, 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 the AUTHORITY. The CONSULTANT shall be compensated for its services rendered up to the time of any such termination in accordance with Paragraph 11.0 hereof. The AUTHORITY 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. The AUTHORITY further reserves the right to suspend the qualifications of the CONSULTANT to do business with the AUTHORITY 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 the AUTHORITY'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 the AUTHORITY are not able to reach an agreement as to the amount of compensation to be paid to the CONSULTANT for supplemental work desired by the AUTHORITY, the CONSULTANT shall be obligated to proceed with the supplemental work in a timely manner for the amount determined by the AUTHORITY to be reasonable. In such event, the CONSULTANT will have the right to file a claim with the AUTHORITY 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 the AUTHORITY and request clarification of the AUTHORITY'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 the AUTHORITY 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 the AUTHORITY or any of its officers, agents or employees during the performance of the Agreement.

When the AUTHORITY 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, the AUTHORITY will immediately forward the notice of claim to the CONSULTANT. The CONSULTANT and the AUTHORITY 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 the AUTHORITY alleging negligence or wrongdoing by the CONSULTANT, the AUTHORITY and the CONSULTANT will jointly discuss options in defending the lawsuit. After reviewing the lawsuit, the AUTHORITY will determine whether to request the participation of the CONSULTANT in the defense of the lawsuit or to request

that the CONSULTANT defend the AUTHORITY in such lawsuit as described in this section. The AUTHORITY'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 the AUTHORITY to the CONSULTANT of the notice of claim or filing of a lawsuit. The AUTHORITY 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 the AUTHORITY 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 the AUTHORITY 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 the AUTHORITY against any claim, suit or proceeding brought against the AUTHORITY 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 the AUTHORITY.

#### 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, the AUTHORITY 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 the AUTHORITY, 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 the AUTHORITY. 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 the AUTHORITY) or the general aggregate limit shall be twice the required occurrence limit. The AUTHORITY 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 the AUTHORITY 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 the AUTHORITY for negligence, errors, mistakes or omissions in the performance of services to be performed and furnished by the CONSULTANT.

The CONSULTANT shall provide the AUTHORITY with Certificate(s) of Insurance with required endorsements on all the policies of insurance and renewals thereof in a form(s)

acceptable to the AUTHORITY. The AUTHORITY 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 the AUTHORITY 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 the AUTHORITY, the AUTHORITY 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 the AUTHORITY. At the option of AUTHORITY, either the insurer shall reduce or eliminate such deductibles or self-insured retentions as requests the AUTHORITY, 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 the AUTHORITY.

Compliance with these insurance requirements shall not relieve or limit the CONSULTANT's liabilities and obligations under this Agreement. Failure of the AUTHORITY to demand such certificate or evidence of full compliance with these insurance requirements or failure of the AUTHORITY 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 the AUTHORITY of any certificate of insurance evidencing the required coverage and limits does not constitute approval or agreement by the

AUTHORITY 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 the AUTHORITY 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 the AUTHORITY.

Regarding the use of logos, printed documents and presentations produced for the AUTHORITY shall not contain the name of logo of the CONSULTANT unless approved by the AUTHORITY's Director of Public Affairs and Communication or his/her designee. If a copy of the AUTHORITY 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 AUTHORITY logo is of utmost importance to the AUTHORITY. Any questions regarding the use of the AUTHORITY 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 the AUTHORITY'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 the AUTHORITY 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 the AUTHORITY harmless for any violations of the same. Furthermore, if the AUTHORITY determines that CONSULTANT has knowingly employed any unauthorized alien in the performance of this Agreement, the AUTHORITY 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 the AUTHORITY 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 the AUTHORITY 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 the AUTHORITY 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 the AUTHORITY 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 the Authority's Board of Directors at its meeting on August 13, 2015.

DRMP, INC.	CENTRAL FLORIDA EXPRESSWAY AUTHORITY
BY:Authorized Signature	BY:
Print Name:	Print Name:
Title:	
ATTEST:(Seal)  Secretary or Notary	
Approved as to form and execution, only.	
General Counsel for the AUTHORITY	

# EXHIBIT A SCOPE OF SERVICES

#### Exhibit A

# CENTRAL FLORIDA EXPRESSWAY AUTHORITY

# **SCOPE OF SERVICES**

**FOR** 

S.R. 408 WIDENING, S.R. 417 TO ALAFAYA TRAIL

**PROJECT NO. 408-128** 

IN ORANGE COUNTY, FLORIDA

**JULY, 2015** 

# 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. 408 between S.R. 417 and east of Alafaya Trail. Specifically, the project will include median widening of S.R. 408 from four (4) general use lanes to six (6) general use lanes from west of the Little Econlockhatchee River Bridge to east of Alafaya Trail; a two (2) lane exit from 408 eastbound to Alafaya Trail; a two (2) lane entrance from Alafaya Trail to 408 westbound; a two (2) lane exit from 408 westbound to Rouse Road; milling and resurfacing of the existing S.R. 408 within the project limits; median widening of the twin bridges over Little Econlockhatchee River, Rouse Road and Kehoe Boulevard; outside widening of the twin bridges over Kehoe Boulevard; bridge replacement over Alafaya Trail. The project includes demolition of the existing ramp toll plaza from westbound SR 408 to Rouse Road and its replacement at the new exit ramp location.

Additional elements include: surveying, drainage evaluation and design, permitting, lighting, signing and pavement markings, maintenance of traffic, utility design and coordination, fiber optic network, walls, geotechnical analysis, scheduling and project control, progress reporting and any other incidental items necessary for the proposed design 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. 408 Widening from S.R. 417 to Alafaya Trail.
- B. The Consultant shall perform those engineering services required for final roadway plans, final bridge plans, and assist in the preparation of an environmental resource application including storm water management calculation, final lighting plans, final traffic control plans, final utility, 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 15 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, July 2014, shall be used for this project.
- B. The toll plazas shall be designed in conformance with the latest edition of the National Electrical Code, the latest edition of the Standard Building Code, the latest editions of the ANSI National Electrical Safety Code and NFPA Life Safety Code and all applicable local codes.

#### 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 2037
- C. Design vehicle WB-62FL

#### 3.02 Geometry

The following criteria are to be incorporated into the design:

DESIGN ELEMENT	EXPRESSWAY		CROSSROADS/
	MAINLINE	RAMPS	COLLECTORS
Design Speed, MPH	70 mph	30 mph (Loop)	30 Local
		50 mph (Diamond)	45 Urban
		50 mph (Directional)	50 Rural
Horizontal Alignment			
a. Max. Curve, Degrees	3°° 30'	24° 45' Loop	20°
<u> </u>		8° 15' Diamond	
		8° 15' Directional	
b. Max. Superelevation,			
ft/ft.	0.10	0.10	0.05 Urban
Į.			0.10 Rural
c. Lane Drop Tapers			
	70:1	50:1	
d. Transitions	,		
d. Hunsitions	Use spirals for	Use spirals for curves >	Use spirals for
	curves > 1° 30'	1° 30'	curves > 1° 30'
	Carves - 1 30	1 30	Curves 1 50
Vertical Alignment			
a. Max. Grade	3%	50/ to 70/ (20 mmh)	5% Arterial Rural
a. Max. Grade	3%	5% to 7% (30 mph)	
		3% to 5% (50 mph)	7% Collector
1. Westerd Commenter (CA)			Rural
b. Vertical Curvature (K)			
(K=Len./%grade change)	506 PD OT	21.622 1)	
Crest	506 FDOT	31 (30 mph)	21. 126
	290 to 540	136 (50 mph)	31 to 136
	AASHTO	110 to 160 Other	
		(AASHTO)	
Sag	206 FDOT	31 (30 mph)	
	150 to 200	136 (50 mph)	37 to 96
	AASHTO	90 to 110 Other	
		(AASHTO)	
c. Decision Sight Dist., ft.	Refer to		
	AASHTO	N/A	N/A
Cross Sections			
a. Lane Widths, ft.	12	12 dual lanes	12 inner lanes
•		15 min. single lane	12-16 outer lanes
b. Shoulder width, ft.	4-Lane	Single Lane	
Right	12 (10 paved)	6 (4 paved)	8 (4*paved)
Left	8 (4 paved)	6 (2 paved)	8 (2 paved)
			* min. 5' paved
			FDOT
			L

DECYCNIEL ENGENG		DECCAYAN	CDOSSDO A DS/
DESIGN ELEMENT	EXPRESSWAY MAINLINE RAMPS		CROSSROADS/ COLLECTORS
	6-Lane	Dual Lane	COLLECTORS
Right	12 (10 paved)	10* (8* paved)	
Left	12 (10 paved)	8 (4 paved)	
		(* add 2' for interstate)	
<b>i</b>			
Bridges, ft.	4-Lane	Single-Lane	
Right	10	6	
Left	6	6	
	6-Lane	<u>Dual Lane</u>	
Right	10	10	
Left	10	6	
		·	
c. Cross Slopes			
1. Traffic Lanes	2% (4-lane)	2%	2%
	3% or tbd (6-	·	
·	lane)		•
2 Duides I amas	20/ true (m.a.		
2. Bridge Lanes	2% typ. (no break)		
	oleak)		
3. Left Shoulder	5%	5%	5%
4. Right Shoulder	6%	6%	6%
d. Median Width (4-lane),	64' (typical)	N/A	22' or 40'
ft. (E.O.P./E.O.P.)	26' (with barrier)		
Horizontal Clearance	PPM 1-2.11	PPM 1-2.11	PPM 1-2.11
Vertical Clearance, ft.			
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

- Two thousand (2,000) ft. between entrance and exit terminals full freeways a.
- Six hundred (600) ft. between exit and entrance terminals b.
- c.
- Single Lane Entrance Ramp Parallel Exit Ramp Taper of 550 ft. (3° divergence) d.

### 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. 408 between S.R. 417 and east of Alafaya Trail. Specifically, the project will include median widening of S.R. 408 from four (4) general use lanes to six (6) general use lanes from west of the Little Econlockhatchee River Bridge to east of Alafaya Trail; a two (2) lane exit from 408 eastbound to Alafaya Trail; a two (2) lane entrance from Alafaya Trail to 408 westbound; a two (2) lane exit from 408 westbound to Rouse Road; milling and resurfacing of the existing S.R. 408 within the project limits; median widening of the twin bridges over Little Econlockhatchee River, Rouse Road and Kehoe Boulevard; outside widening of the twin bridges over Kehoe Boulevard; bridge replacement over Alafaya Trail. The project includes demolition of the existing ramp toll plaza from westbound SR 408 to Rouse Road and its replacement at the new exit ramp location.

Additional elements include: surveying, drainage evaluation and design, permitting, lighting, signing and pavement markings, maintenance of traffic, utility design and coordination, fiber optic network, walls, geotechnical analysis, scheduling and project control, progress reporting and any other incidental items necessary for the proposed design 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 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.

For specific scope items, units, and limits, please refer to the Survey section of the scope summary document.

#### 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'. Pavement Survey will be performed by Mobile LiDAR. DRMP will extract topographic data collected from LiDAR and merge and combine Lidar, and ground surveys performed by DRMP and WBQ as survey subconsultant into single DTM and topographic survey base files.
- 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

Mark underground utilities (Designates) by flags or paint and survey locations to include in survey base files. 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, , LBR testing (widening limits only), design methods for the selected foundation, external stability evaluation at proprietary retaining walls, groundwater and estimated seasonal high groundwater level, , pH and resistivity conditions requiring design considerations, soil shrinkage/swell characteristics, slope stability and benching in embankment/excavation locations, , 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 provision of recommended design soil parameters

for 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 may 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. If required, 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 and noise wall elements. The Authority will prepare exhibits pertaining to aesthetic treatments and other design issues if applicable. This scope assumes presentations at two 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 ninedigit 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.

# C. Utility Service to Toll Plazas

1. The Consultant shall identify utility service points to for service connections to the toll plazas. At a minimum electrical, telephone and FON connections are required at the plazas. The Consultant shall determine the feasibility of connections to municipal water and sewer services. Water and sewer service is required at the mainline plaza either by connecting to municipal service or provide well and septic system.

- 2. Coordinate with the respective utilities to provide the required connections.
- 3. All required utilities shall be shown on the plans along with any required construction details.
- 4. The Consultant shall prepare any required permits for construction or installation of utilities (and or well and septic system) along with supporting documentation for submittal to the appropriate agency.

### 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 Preliminary Design Report 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 (N/A)
  - 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 3.01.
  - 2. Finalize the pond design at the 30% submittal.
  - 3. Have its chief drainage engineer available at the scheduled (biweekly/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.
  - 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, twelve (12) new cantilever and two (2) overhead truss signs are assumed to be required for the improvements. Also, fourteen (14) existing overhead sign structures along the project will be affected by the improvements will be analyzed for sign panel modifications or replacements and are assumed to meet current wind load criteria. Should these analyzed structures be determined to not meet current criteria and are required to be replaced, a supplemental agreement will be completed to incorporate their replacements in to the project.

#### 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 replacement of all existing fiber optic drop ductbanks, cablesand 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. Existing fiber optic backbone/ feeder system shall remain and be protected in-place with Black Steel Pipe as required.

This scope has assumed that 4.3 miles of ITS replacement/upgrades will be required.

- 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
  - 1. Connectivity with the FON backbone conduits
  - m. Fiber cable routing summaries, fiber cable allocation charts, and splice details and tables

- n. Controller cabinet, CCTV pole, and foundation details
- o. 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.
- p. Grounding
- q. Table of quantities
- r. Special notes
- s. Maintenance of fiber operations (protection of existing FON through all phases of construction and cutover phasing to ensure continuous operation of existing ITS devices)
- t. All existing and proposed FON to be included and shown with roadway cross sections and drainage cross sections
- Replacement or upgrades of existing CCTV sites are anticipated under this contract as well as new CCTV sites anticipated as part of the proposed improvements.
- v. 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.
- w. Relocation or replacement of existing DMS sites are anticipated under this contract as part of the proposed improvements.
- x. 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.
- y. Proposed Wrong-Way Driving RRFB for Dean Roadinterchange off-ramps from SR 408.
- z. Proposed ADMS for northbound and southbound arterials at the interchanges of Dean, Rouse and Alafaya.
- 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.
- 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 and Technical Special Provisions will be provided to the Consultant.

#### 4.23 Toll Plazas

A. This proposal includes the replacement of the existing WB SR 408 exit ramp toll plaza to Rouse Road to a new location on the east side of Rouse Road over the new off-ramp alignment, including any associated equipment and gantry systems.

### 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 biweekly 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. If required, 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.
- 16. Cut sheets for equipment and fixtures (required with 60% submittal)
- 17. Mechanical design calculations.

#### 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 Schematic 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 and Toll Plaza Plans 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 and Toll Plaza plans and specifications (6 and 6 sets and 1 .PDF CD/DVD required)
  - 8. 100% Roadway, Toll Plaza and Bridge Plans 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 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 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 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, Bridge, Structural and Right-of-Way Plans
  - A. At the completion of this phase, the design plans and special provisions shall be 100 percent complete.
- 7.20 Schematic Toll Plaza Plans
  - A. At the completion of this phase, the toll plaza layout should be complete with lane and island configurations shown. The following material shall be developed and submitted for review:
    - 1. Plan view of toll plaza with dimensions showing lane and island widths with column configuration and express lane layout.
    - 2. East and west elevation views of the canopy including concept for overhead structure for express lane ETC equipment.
    - 3. Construction phasing plan
    - 4. Description of improvements required for the administration building to accommodate installation of toll equipment.

### 7.21 60% Toll Plaza Plans

A. At the completion of this phase, the toll plaza plans should be developed to 60% completion. The following material, as a minimum, shall be developed and submitted for review:

- 1. Key sheet with sheet index
- 2. Architectural, structural, mechanical, plumbing and electrical general notes, abbreviations and symbols
- 3. Plan view
- 4. Exterior elevations
- 5. Canopy sections and details
- 6. Canopy reflected ceiling plan
- 7. Roof plan and details
- 8. Canopy framing and foundation plan
- 9. Concrete pavement plan
- 10. Express lane overhead structure plan and details
- 11. Tunnel sections and details
- 12. Structural sections and details
- 13. Plumbing plan and diagrams
- 14. Lighting plan
- 15. Power plan and diagram
- 16. Lightning protection plan and details
- 17. Demolition and construction phasing plan
- 18. Plans and details for improvements to the administration building (as needed by discipline) to accommodate installation of toll equipment.
- 19. All calculations and design data to support the design for each discipline.
- 20. Technical specifications

### 7.22 90% and 100% Toll Plaza Plans

- A. At the completion of this phase, the toll plaza plans should be developed to 90% and 100% completion respectively. The material listed with the 60% submittal shall be developed along with additional details required for construction and submitted for review.
- B. The 90% and 100% submittals shall also include the technical specifications and special provisions required for construction
- C. A detailed estimate of construction costs shall be included with the 100% submittal.
- 7.23 Pre-Bid Plans
- 7.24 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 The AUTHORITY 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 \$4,650,000.00.
- 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 the AUTHORITY to utilize as necessary.
- 2.12 The Total Maximum Limiting Amount for the project assigned under this Agreement shall consist of the following:

### DYER, RIDDLE, MILLS & PRECOURT, INC.

Total Activity Salary Costs	\$ 779,313.07
(a) Overhead Additives	·
(1) Combined (164.73%)	1,283,762.42
Subtotal (Salary + Overhead)	2,063,075.49
(b) Lump Sum for Operating Margin (12.00%)	<u>247,569.06</u>
Subtotal (Salary Related)	2,310,644.55
(c) Design Survey – Office (Prime)	82,224.66
(d) Design Survey - Field (Prime)	218,811.76
(e) Direct Expenses - Lump Sum (Prime)	<u>58,497.65</u>
BASIC FEE	2,670,178.62
(f) Subcontracts (Limiting Amount)	1,873,480.87
(g) Allowance	106,340.51
TOTAL MAXIMUM LIMITING AMOUNT	\$4,650,000.00

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:

The AUTHORITY 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.

- <u>Straight Overtime</u>: 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.
- <u>Premium Overtime</u>: 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.
- <u>Payment of Overtime</u>: 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 the AUTHORITY'S DIRECTOR.

- 3.11 Indirect Charges: Administrative overhead and payroll burden costs not to exceed a combined maximum rate of 164.73% 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 the AUTHORITY 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 the AUTHORITY. 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 164.73 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 164.73%; 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 the AUTHORITY 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.

The AUTHORITY 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 the AUTHORITY.

- 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 the AUTHORITY. 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 the AUTHORITY.
- 4.18 The AUTHORITY 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 the AUTHORITY. 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 the AUTHORITY 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 the AUTHORITY because of accounting errors or charges not in conformity with this Agreement, the CONSULTANT agrees that such disallowed amounts are due to the AUTHORITY upon demand. Further, the AUTHORITY shall have the right to deduct from any payment due the CONSULTANT under any other contract between the AUTHORITY and the CONSULTANT an amount sufficient to satisfy any amount due and owing the AUTHORITY 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 the AUTHORITY for the overpayment, provided the net difference is not zero.

## EXHIBIT C DETAILS OF COSTS AND FEES

Name of Project: County: FPN:

SR 408 Widening from SR 417 to Alafaya Trail Orange 408-128

Consultant Name: DRMP, Inc. Consultant No.: 14-0374.000 Date: 7/30/2015

AP No.:	N/A Total Staff		<del>,                                      </del>						· · · · · · · · · · · · · · · · · · ·		<del>,                                    </del>		Estimator:			
Staff Classification	Hours From	Project Manager	Chief Engineer	Senior Engineer	Project Engineer	Senior Designer	Engineer	Project Planner	Engineering Intern	Clerical	Staff Classi- fication 10	Staff Classi- fication 11	Staff Classi- fication 12	SH By	Salary Cost By	Average Rate Per
	- Firm"	\$88,58	\$60.99	\$54,89	\$38.95	\$34,84	\$31.27	\$39,79	\$26,88	\$25,48	\$0,00	\$0.00	\$0,00	Activity	Activity	Task
Project General and Project Common Tasks	298	238	0	45	0	0	0	15	0	0	0	0	0	298	\$24,149	\$81,04
Roadway Analysis	2,583	129	413	439	542	465	207	0	258	130	0	0	0	2,583	\$114,742	\$44,42
Roadway Plans	1,117	58	179	190	235	201	89	0	112	55	0	0	0	1,117	\$49,657	\$44.46
. Drainage Analysis	756	38	121	129	159	138	60	0	76	37	۱ ،	0	0	758	\$33,619	\$44,47
. Drainage Plans	757	38	121	129	159	138 :	61	0	76	37	0	0	0	757	\$33,650	\$44,45
Utilities	0	0		0	0	0	0	0	0	0	0	0	0	0	\$0	#DIV/0!
Environmental Permits, Compliance & Clearances	206	10	33	35 ·	43	37	16	0	21	1 11	0		0	206	\$9,128	\$44,31
Structures - Misc. Tasks, Dwgs, Non-Tech.	1,487	73	235	249	308	264	117	0	147	74		۰ ا		1,467	\$65,155	\$44,41
), Structures - Bridge Development Report	882	44	141	150	185	159 .	71	0	88	44	0	0	ō	882	\$39,182	\$44.42
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. Structures - Short Span Concrete Bridge	0	0	0	0	0	0	0	o		Ö	0	0	. 0	0	\$0	#DIV/01
3. Structures - Medium Span Concrete Bridge	2,774	139	444	472	583	499	222	0	277	138	0	ō	0	2,774	\$123,294	\$44.45
. Structures - Structural Steel Bridge	1,558	78	249	265	327	280	125	0	158	78	. 0	0	0	1,558	\$69,221	\$44,43
. Structures - Segmental Concrete Bridge	0	0		0	0	0	0	0	0	0	0	١٠٥	0	0	\$0	#DIV/0
. Structures - Movable Span	0	0	0 1	0		0	0	0	١ ٥	ها	0	0.	0	0	\$0	#DIV/0
. Structures - Retaining Walls	1,538	77	248	261	323	277	123	ò	.154	77	ها	۱ ،	0	1,538	\$68,328	\$44.43
, Structures - Miscellaneous	1,220	61	195	207	258	220	98	0	122	61		٥	0	1,220	\$54,192	\$44.42
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I, Lighting Analysis	587	29	94	100	123	108	47	0	59	29		۰	0	587	\$26,089	\$44,41
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. Geotechnical	0	0	0	0	0	0	0	ō	0	0	0	, o		0	\$0	#DIV/0
Total Staff Hours	17,295	. 1,087	2,719	2,935	3,569	3,080	1,381	15	1,702	847	0	0	0	· 17,295	*-	1
Total Staff Cost		\$96,286,46	\$165,831,81	\$161,102,15	\$139,012,55	\$108,810,40	\$42,558,47	\$596.85	\$45,749,78	\$21,564,62	\$0.00	\$0.00	\$0.00		\$779,313,07	\$45,06

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:					\$779,313.07
OVERHEAD:		164.73%			\$1,283,762.42
PROFIT		12.00%			\$247,569.06
FCCM (Facilities Capital Cost Money):		0,00%			\$0,00
EXPENSES:					\$58,497.65
Survey (Office - if by Prime)		4-man crew			\$82,224.66
Survey (Field - if by Prime)	138	days @	\$ 1,608.91	/ day	\$218,811.76
SUBTOTAL ESTIMATED FEE:					\$2,870,178.62
Subconsultant: RS&H, Inc.					\$642,304.35
Subconsultant: WBQ					\$558,492.68
Subconsultant: AVCON					\$66,944,16
Subconsultant: Antillan					\$170,188.52
Subconsultant: Ardaman					\$347,359.36
Subconsultant: EPG Engineering					\$22,550.00
Subconsultant: ACA					\$65,663.80
Subconsultant: Sub 8					\$0.00
Subconsultant: Sub 9					\$0.00
Subconsultant: Sub 10			•		\$0.00
Subconsultant: Sub 11					\$0.00
Subconsultant: Sub 12					\$0.00
SUBTOTAL ESTIMATED FEE:					\$4,543,659.49
Geotechnical Field and Lab Testing					\$0.00
SUBTOTAL ESTIMATED FEE:					\$4,543,659.49
Optional Services					\$0.00
GRAND TOTAL ESTIMATED FEE:					\$4,543,659.49

Name of Project: County: FPN: FAP No.:

SR 408 Widening from SR 417 to Alafaya Trafi Orange 408-128 N/A

Consultant Name: DRMP, Inc. Consultant No.: 14-0374,000 Date: 7/29/2015

### Start Classification   February   Start Classification   Start C	FAP No.:	N/A										•		Estimator:	AIO		
Secretary   Performance   Performance   Secretary	Staff Classification	Total Staff Hours From		Senior Surveyor and										Staff Classi-		Salary	Average
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2. Signefization Plans 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	21. Signalization Analysis	ō	Ö		ŏ		"		١ ،	1 .	, ,		0	0	0		
3. Lighting Analysis 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	22. Signefization Plans		Ö		o i	ŏ			"	١ ،	١ ،	٠				1	
4. Lighting Plans 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	23. Lighting Analysis			ا هٔ	ì	ň			"	"						1	
5. Landscape Architecture Analysis 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	24. Lighting Plans	ا ہ	ò		١٠				١ ،			•	0	0	0	1	
8. Landscepe Architecture Plans 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	25. Landscape Architecture Analysis	i i	0	ا م	Ö	ň	"			• •			0	0	0	1	l .
7. Survey (Fletd & Office Support) 700 0 70 245 288 119 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0		ò	0	ا أ				•		"	, ,		0		0		
8. Photogrammetry 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0		700		70	245		440		١ ،	"	"		0.				1
9. Mapping 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	28, Photogrammetry	0	ò	👸		200	1 10	ů	١ ،				0	· •	1		
0. Terrestrial Mobile LIDAR 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	29. Mapping	اۃا	0	ا م	, i					"		0		0	0	1	
1. Architecture Development 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	30, Terrestrial Mobile LIDAR				Š			•	"	"	, ,	0	0	0	0	1	
2. Noise Barriers Impact Design Assessment 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0		اۃا	0	1 .					١ :	"		0	0	0	0	1	
3. Intelligent Transportation Systems Analysis 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0					ů	Ů			"	"	l "	0	0	0	0		
4. Intelligent Transportation Systems Plans 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0		ا ہ	0		, ,	ŏ	"		1 ,	"		0	0	0	0	ı	
5. Geotachridal 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0		اۃا	0		,	, ,		٥	I	"	"	0	0		. 0	1	
Total Staff Hours 700 0 70 245 286 119 0 0 0 0 0 0 0 0 700	35. Geotechnical	اۃا	-		.*	Š		0	I ,			•	•		•		1
		700				266	110	0	<del>                                     </del>	-						\$0	#DIV/01
Total Staff Cost \$0.00 \$12,474.00 \$33,452.30 \$27,708.58 \$8,591.80 \$0.00 \$0.00 \$0.00 \$0.00 \$0.00 \$0.00 \$0.00 \$0.00 \$0.00 \$10.00 \$	Total Staff Cost		\$0,00	\$12,474,00	\$33,452,30	\$27,708,58									700		

Survey Field Days by Subconsultant 4 - Person Crew:

		CIBCK - \$02,224.00	
SALARY RELATED COSTS:			\$82,224,66
OVERHEAD:	0,00%		\$0.00
PROFIT .	0.00%		\$0,00
FCCM (Facilities Capital Cost Money):	0.00%		\$0.00
EXPENSES:			\$0.00
Survey (Field - if by Prime) 136	4-man crew	4 444 44 44	
	days @ \$	1,608,91 / day	\$218,811.76
SUBTOTAL ESTIMATED FEE:			\$301,038.42
Subconsultant: Sub 1			\$0,00
Subconsultant: Sub 2			\$0.00
Subconsultant: Sub 3			\$0.00
Subconsultant: Sub 4			\$0,00
Subconsultant: Sub 5			\$0.00
Subconsultant: Sub 6	•		\$0.00
Subconsultant: Sub 7			\$0.00
Subconsultent: Sub 8			\$0.00
Subconsultent: Sub 9			\$0.00
Subconsultant: '			\$0.00
Subconsultant: Sub 11			\$0.00
Subconsultant: Sub 12			\$0.00
SUBTOTAL ESTIMATED FEE:	•		\$301,036.42
Geotechnical Field and Lab Testing			\$0.00
SUBTOTAL ESTIMATED FEE:			\$301,036.42
Optional Services			\$0,00
GRAND TOTAL ESTIMATED FEE:			\$301,036,42

Notes:

1. This sheet to be used by Prime Consultant to calculate the Grand Total fee.

<sup>2.</sup> Manually enter fee from each subconsultant. Unused subconsultant rows may be hidden.

Name of Project: County: FPN: FAP No.:

SR 408 Widening from SR 417 to Alafaya Trail Orange 408-128 N/A

Consultant Name: RS&H Inc Consultant No.: Date: 7/30/2015

FAP No.:	N/A												Estimator:	R, Gonzalez		
Staff Classification	Total Staff Hours From "SH Summary	Project Manager	QAQC	Chief Engineer	Sr. Project Engineer	Engineer/ Designer	Architect	CADD Technician	Clerical	٥.	•	0	0	SH By	Salary Cost By	Average Rate Per
	- Firm	\$83,28	\$75,88	\$64.42	\$50.42	\$41.92	\$40.28	\$30,75	\$25,77	\$0,00	\$0.00	\$0,00	\$0,00	Activity	Activity	Task
Project General and Project Common Tasks	34	31	0	0	0	0	0	0	3	0	0	0	0	34	\$2,659	\$78.21
. Roadway Analysis	299	15	15	0	30	120	0	120	0	- 0	0	0	0	300	\$12,620	\$42.07
. Roadway Plans	114	6	6	0	11	48	0	48	0		0	0	) 0	115	\$4,852	\$42.19
a, Drainage Analysis	0	0	0	0	. 0	0	0	0	0	0	0	0	0	0	\$0	#DIV/0!
b. Drainage Plans	. 0	0	0	0	. 0	0	0	0	0	1 0	0	0	0	0	\$0	#DIV/01
. Utilities	0	0	0 .	0	0	0	0	. 0	0	0	0	0	0	0	\$0	#DIV/01
Environmental Permits, Compliance & Clearances		0	0	0	0	. 0	0	. 0	0	0	0	0	0	0	\$0	#DIV/01
Structures - Miso, Tasks, Dwgs, Non-Tech.	314	16	18	-0	79	110	0	94	0		0	0	0	315	\$14,031	\$44.54
D, Structures - Bridge Development Report	248	12	12	0	62	87	0	74 .	0	0	0	0	0	247	\$10,958	\$44.37
1. Structures - Temporary Bridge		0	0	0	0	0	0 .	0	0	0	0	0	0		\$0	#DIV/0!
2, Structures - Short Span Concrete Bridge	0	0	0	0	0	0	0	0	0	0.	0	0	0	0	\$0	#DIV/0!
3. Structures - Medium Span Concrete Bridge	972	49	49	0	243	340	0	292	0	0	0	0	0	973	\$43,282	\$44.48
4. Structures - Structural Steel Bridge	. 0	0	0	0	0	0	0	0	0	0	0	0	0	0	\$0	#DIV/01
5. Structures - Segmental Concrete Bridge	0	0	0	0	0		0	0	0			0	0	0	\$0	#DIV/01
3, Structures - Movable Span	0	0	0	0	0	0	. 0	0	0	0		0	0	0	\$0	#DIV/0!
7. Structures - Retaining Walls	0	0	0	0	Ó	0	0	0	0.	0	0	0	0	0	\$0	#DIV/0!
8. Structures - Miscellaneous	308	15	31	0	77	107	0	77	0	0	0	0	0	307	\$14,338	\$46.70
9. Signing & Pavement Marking Analysis	937	19	47	0	94	403	0	375	0	0	0	0	1 0	938	\$38,312	\$40,84
0. Signing & Pavement Marking Plans	784	18	39.	0	78	337	0	314	0	0	0	0	0	784	\$32,006	\$40.82
1. Signalization Analysis	1 0	0	0	0	0	0	. 0	0	0	0		0	0	0	\$0	#DIV/01
2. Signelization Plans	0	0 .	0	0	0	0	0	0 .	0	0		0		0	\$0	#DIV/0!
3. Lighting Analysis	0	0	0	. 0	0	0	0	0	0	0		0	0	0	\$0	#DIV/0!
4. Lighting Plans	0	0	0	. 0	0	0	0	0	0	0	) 0		0	0	. \$0	#DIV/0!
5. Landscape Architecture Analysis	o	0	0 .	0	0		0	0	0	0	0	0 .	0	0	\$0	#DIV/0!
6. Landscape Architecture Plans	0	0	0	0	0 .	0	0	0	0	0		0	0	0	\$0	#DIV/01
7. Survey (Field & Office Support)	0	0	0	0	0		- 0	. 0	0	0	0	0	1 0	0	\$0	#D1V/0!
8, Photogrammetry	0	0	0	0		0	0	0	0	0	0	0	0	0	\$0	#DIV/0!
9. Mapping	0	0	0	0	0	jo	. 0	0	0	0	0	0	0	0	\$0	#DIV/01
0, Terrestrial Mobile LIDAR	0	0	0	0	0	0	0	0.	0	0	0	0	0	0	\$0	#DIV/0!
1. Architecture Development	755	15	38	38	151	76	189	249	0	0	0	0	0	758	\$32,649	\$43,19
2. Noise Barriers Impact Design Assessment	0	0	0	0	0	0	0	0	0		0		0	0	\$0	#DIV/01
3. Intelligent Transportation Systems Analysis	0	0	0	0	0	0	0	0	0	0	0	0	0	0	\$0	#DIV/0!
4. Intelligent Transportation Systems Plans	0	0		0	0	0	0	0	0	0	0	0	0	0	\$0	#DIV/0!
5. Geotechnical		0	0	0	0	0	0	0	0	0	0		0	0	\$0	#DIV/0!
Total Staff Hours	4,763	194	253	38	825	1,626	189	1,641	3	0	0	0	0	4,769		
Total Staff Cost		\$16,156.32	\$19,192,58	\$2,447.98	\$41,596,50	\$68,161.92	\$7,612,92	\$50,460,75	\$77.31	\$0.00	\$0,00	\$0.00	\$0.00		\$205,708.28	\$43,13
								_						Check =	= \$205,708,26	

		SALARY RELATED COSTS: OVERHEAD: SALARY PLUS OVERHEAD TOTAL	178.06%	Olleck -	8200,700.20	\$205,706.26 \$386,280.57 \$571,986.83
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 m	•	PROFIT:	11.51%			\$65,835,68
	•	LUMP SUM EXPENSES: TRAVEL (FROM TAMPA)				\$3,269.94 \$1,211.90
		TOTAL ESTIMATED SEC.				\$642 204 2E

Name of Project: County: FPN: FAP No.:

SR 408 Widening - SR 417 to Alafaya Trail

Orange 408-128 N/A

Consultant Name: WBQ Consultant No.:
Date: 7/30/2015
Estimator: WBQ

1 AF 110	N/A												Estimator:	WBQ		
Staff Classification	Hours From "SH Summary -	Principal	Project Manager	Chief Engineer	Sr. Utility Coordinator	•	8r. Project Engineer	Project Engineer	Contract Coordinator	Sr. Surveyor & Mapper	Surveyor & Mapper	Survey Technician	-	SH By	Salary Cost By	Average Rate Per
	Firm*	\$88,56	\$72.96	\$82,25	\$52,02	\$0,00	\$43,72	\$32,67	\$24,24	\$48,25	\$30,87	\$22,00	\$0,00	Activity	Activity	Task
3. Project General and Project Common Tasks	28	0	22	5	0 .	0	0	0	1	0	0	0	0	28	\$1,941	\$69.31
4. Roadway Analysis	1,739	17	87	435	0	0	678	435	87		o	0	0	1,739	\$80,860	\$48.50
5. Roadway Plans	1,138	11.	57	284	0	0	444	284	56 ~.	0	. 0		۰ ا	1,136	\$52,837	\$48,51
6a, Drainage Analysis	0	0	.0	0	0	0	0	0			0		٥	.,	\$0	#DIV/01
6b, Drainage Plans	0	0	0	0	0	0	0	0	0	0	0	o	هٔ		\$0	#DIV/01
7. Utilities	224	0	0	0	112	0	0	101	11		0	0	0	224	\$9,393	\$41.93
8. Environmental Permits, Compliance & Clearances	0	0	0		0	0	0	0	0		0	ا ه ا	0	0	\$0	#DIV/01
9. Structures - Misc. Tasks, Dwgs, Non-Tech.	0	0	. 0	0	0	0	0	ó	0	0	ō	0	0	١	\$0	#DIV/01
10. Structures - Bridge Development Report	0	. 0	0		0	0	0	0	0	0	0		0		\$0	#DIV/01
11. Structures - Temporary Bridge	0	0	0	0	0	0	0	0		1 0	D		,	1	\$0	#DIV/01
12, Structures - Short Span Concrete Bridge	0	0	0	0	0	: 0	0	0			0	0		١٠	so so	#DIV/0!
13, Structures - Medium Span Concrete Bridge	0	0	0	0	0	0	0	0	0	0	0		o	١	\$0	#DIV/01
14. Structures - Structural Steel Bridge	0 -	0	0	0	0	0	0	0	0				0	١	so	#DIV/01
15, Structures - Segmental Concrete Bridge	0	0	0	0	0	0	0	0		0	ō	0	ō	i	\$0	#DIV/0!
16, Structures - Movable Span	0	0	O	0	0	0	o ·	0			0	0	0	ا ا	\$0	#DIV/01
17. Structures - Retaining Walls	0	0	0	0	0	0 -				٥	ō	,	'n		so	#DIV/01
18. Structures - Miscellaneous	0	0	0	0	0	0	0	0		0	ō	Ö	0	١	so so	#DIV/01
19. Signing & Pavement Marking Analysis	0	0	0	0	0	0	0	0	0	o	0	0	ō	٥	\$0	#DIV/0I
20. Signing & Pavement Marking Plans	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	#DIV/0!
22. Signalization Plans	0	0	0	0	0.	0		0	. 0	0	0	0	0	1 0	\$0	#DIV/0!
23. Lighting Analysis	0	0	0	0 1	0	0	0	0	Ò	0	0	ا	0	ا	so	#DIV/01
24. Lighting Plans	0	0	0	0 1	0	0	0	0	0	0	0	0	0	١٠	\$0	#DIV/01
25. Landscape Architecture Analysis	0	o	Ò	0	0	0		0	0	0	0	0	o		\$0	#DIV/0!
26. Landscape Architecture Plans	0	0	0		0	0	0	0	١ ،	0	o	0	0	١ ،	\$0	#DIV/01
27. Survey (Field & Office Support)	218	0	0	0	0	0	0	0	0	22	22	108		152	\$4,117	\$27.08
28. Photogrammetry	0	0	0	0	0	0	0	0		0	0	0	ō	0	\$0	#DIV/01
29. Mapping	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	١ ،	0	0	0	ه ا	١٠	\$0	#DIV/01
31. Architecture Development	0	0	0	0	0	0	0	0	0	0	0	0	0	١٠	\$0	#DIV/0!
32. Noise Barriers Impact Design Assessment	0	0	0	` 0	0	0	0	0	۰ ا	0		0	0	ه ا	\$0	#DIV/0!
33. Intelligent Transportation Systems Analysis	0	. 0	0	0	0	0	0	0	0	0	0	ا	ő	١٠	\$0	#DIV/0!
34. Intelligent Transportation Systems Plans	0	0	0	0	0	0	0	0	0	0	ő	ا ہ	٥	١٠	\$0	#DIV/0!
35. Geotechnical	0	0	. 0	. 0	0	0	0	0	0 .		ō	٥	هٔ ا	هٔ ا	\$0	#DIV/0!
Total Staff Hours	3,343	28	166	724	112	0	1,122	820	155	22	22	108	0	3,279	<del>                                     </del>	#5,4701
Total Staff Cost		\$2,423.68	\$12,111.38	\$45,069.00	\$5,826.24	\$0,00	\$49,053.84	\$26,789,40	\$3,757.20	\$1,081.50	\$879.14	\$2,376,00	\$0.00	<del></del>	\$149,147,36	\$45.49

Survey Field Days by Subconsultant 4 - Person Crew;

2. Manually enter fee from each subconsultant. Unused subconsultant rows may be hidden.

SALARY RELATED COSTS:						\$149,147.36
OVERHEAD RATE:		182.4900%				\$272,179.02
SUBTOTAL:						\$421,326.38
PROFIT		11.24%			٠.	\$47,357.09
SUBTOTAL ESTIMATED FEE:		4-man crew				\$468,683.47
Survey (Field)	59	days @	\$	1,522,19	8 Hour/ day	\$89,809.21
SUBTOTAL ESTIMATED FEE:	•••	,- @	•	1,022,10	o i louir duy	\$558,492.68
Subconsultant: Sub 1						\$0.00
Subconsultant: Sub 2						\$0.00
Subconsultant: Sub 3						\$0.00
Subconsultant: Sub 4						\$0.00
Subconsultant: Sub 5						\$0.00
Subconsultant: Sub 6						\$0.00
Subconsultant: Sub 7						\$0.00
SUBTOTAL ESTIMATED FEE:						\$558,492.68
Geotechnical Field and Lab Testing						\$0.00
SUBTOTAL ESTIMATED FEE:						\$558,492.68
Optional Services						\$0.00
GRAND TOTAL ESTIMATED FEE:						\$558,492.68

Check = \$149,147.38

Notes:

1. This sheet to be used by Prime Consultant to calculate the Grand Total fee.

Name of Project:

SR 408 Widening from SR 417 to Alafaya Trail

County: FPN: FAP No.:

29. Mapping

35. Geotechnical

30. Terrestrial Mobile LIDAR

31. Architecture Development

32. Noise Barriers Impact Design Assessment

33. Intelligent Transportation Systems Analysis

Total Staff Hours
Total Staff Cost

34. Intelligent Transportation Systems Plans

Orange 408-128

Consultant Name: AVCON, INC.

Consultant No.: enter consultants proj. number
Date: 7/30/2015

Estimator: Rick B.

Staff Classification		Manager	Chief Engineer	Engineer	Project Engineer	Engineer	CADD Tech / Designer	Admin	Staff Classi-	SH	Salary	Average				
	"SH Summary							·	fication 8	fication 9	fication 10	fication 11	fication 12	By	Cost By	Rate Per
2.0-1-10-1-10-1-10	- Firm	\$69,33	\$69,33	\$44.81	\$41.45	\$33,37	\$24.90	\$20,65	\$0.00	\$0,00	\$0,00	\$0,00	\$0,00	Activity	Activity	Task
3. Project General and Project Common Tasks		0	0	0	0	0	0	. 0	0	0	0	0	0	0	\$0	#DIV/0I
4. Roadway Analysis	•	0	0	0	0	0	0	0	0		0	0	0	0	\$0	#DIV/0I
5. Roadway Plans	0	0	0	0	0	0 .	0	0	0		0	. 0	0	o	\$0	#DIV/01
8a. Drainage Analysis	0	0	0	0	0		0	0	1 0	1 0			. 0		\$0	#DIV/01
6b. Drainage Plans	0	0	0	0	0		0	0	0		0	'n			\$0	#DIV/01
7. Utilities	0	0	0	0	0		0	oʻ	0		1 0	0		ŏ	\$0	#DIV/01
8. Environmental Permits, Compliance & Clearances	0	0	0	0	0		1 0	0	0	0.	ه ا	,	0	ň	\$0	#DIV/01
9. Structures - Misc. Tasks, Dwgs, Non-Tech.	70	4	11	· 21	14	14	8	4			ا آ			71	\$3,198	\$45.05
10. Structures - Bridge Development Report	0	0	0	0	0	١ .		o	0	١	١٠	1 .	١،		\$0	#DIV/01
11. Structures - Temporary Bridge	0	0	1 0 1	0			0	0	1 0			1	1 .		\$0	#DIV/01
12. Structures - Short Span Concrete Bridge			1 0 1	0	0	ا أ	ا أ			;	1 %	1 .	, ,		1	
13. Structures - Medium Span Concrete Bridge	0			0		`	, ,	,	1 .	1 :	"	"	1		\$0	#DIV/01
14. Structures - Structural Steel Bridge			0	ŏ	١٠	١ ،	1 ,		1 .	١	"	1 .		0	\$0	#DIV/0!
15. Structures - Segmental Concrete Bridge	0	Ö	1 6	ŏ		١،	1 ,	٠	1 ,	1 .	1	0	l °	0	\$0	#DIV/0I
16. Structures - Moveble Span	0	١	1 0 1	0	,	١،			1 ,	١ ،		l "		0	\$0	#DIV/0
17. Structures - Retaining Walls		ا ا	ا ہُا	ň		i .			"			, ,	0	0	\$0	#DIV/0!
18. Structures - Miscellaneous	420	21	63	126	84	یّ ا	34		"			"		0	\$0	#DIV/01
19. Signing & Pavement Marking Analysis	D		"	0	<u>~</u>	٦ ٦	1 🖀 1		"		"	0	0	420	\$18,766	\$44,68
20. Signing & Pavement Marking Plans	0		1 6 1		,	,	1 , 1	ŭ	"	1 "				0	\$0	#DIV/0!
21. Signalization Analysis					;	١	"	0	I ,	"		0	0	0	\$0	#DIV/01
22. Signalization Plans		ò			۱			ŭ	"		"		0		\$0	#DIV/0!
23. Lighting Analysis	ا ہ	ŏ				١			1 :	"		0	0	0	\$0	#DIV/01
24. Lighting Plans	ا ہ ا					ا ا	"		1 :	1 .	°		0	0	\$0	#DIV/0!
25, Landscape Architecture Analysis	ا ة ا		1 6 1	,	,	ا ،	1 , 1	9	I :	"		0		0	\$0	#DIV/01
26, Landscape Architecture Plans	ا ہ ا	,	,	,	,	ı			1 2		, °	0	0	0	\$0	#DIV/0!
27. Survey (Field & Office Support)	ا ٿا	ň				١		0	1 2	0	0	0	0	0	\$0	#DIV/01
28 Photogrammetry			I I					0	i °	0	, ,	0	0	0	\$0	#DIV/0!

Survey Field Days by Subconsultant 4 - Person Crew:

40

\$185,85

\$996,00

0

0

147 98 98 \$6,587.07 \$4,082.10 \$3,270.28

0

0

0

0

0

490

0

0

25

\$1,733.25 \$5,130.42

This sheet to be used by Prime Consultant to calculate the Grand Total fee.

2. Manually enter fee from each subconsultant. Unused succonsultant rows may be hidden.

					Check =	\$21,964.95	
BALARY RELAT	ED COSTS:						\$21,964,95
OVERHEAD:			172,39%				\$37,865,38
PROFIT			11,89%				\$7,113,83
FCCM (Facilities	Capital Cost Money):		0.00%				\$0.00
EXPENSES:			0.00%				\$0.00
Survey (Field - If	by Drimo)	0	4-man crew days @	\$		/ day	
SUBTOTAL EST		٠	uays @	•	-	/ day	\$0.00
							\$66,944.16
Subconsultant:	•						\$0.00
Subconsultant:	Sub 2						\$0.00
Bubconsultant:	Sub 3						\$0.00
Subconsultent	Sub 4						\$0.00
Subconsultant:	Sub 5						\$0.00
Subconsultant;	Sub 6						\$0.00
Subconsultant:	Sub 7						\$0.00
Subconsultant:	Sub 8						\$0,00
Subconsultant:	Sub 9						\$0.00
Subconsultant:	Sub 10						\$0.00
Subconsultant:	Sub 11						\$0.00
	Sub 12						\$0,00
SUBTOTAL EST	IMATED FEE:						\$66,944.16
Geotechnical Fl	ield and Lab Testing						\$0.00
SUBTOTAL EST	IMATED FEE:						\$66,944.16
Optional Service:	•						\$0.00
BRAND TOTAL	ESTIMATED FEE:						\$68,944.16

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491

Name of Project: County: FPN: FAP No.:

SR 408 Widening from SR 417 to Alafaya Trail

Consultant Name: DRMP/ANTILLIAN Engineering Associates, Inc Consultant No.: enter consultants proj. number Date: 7/29/2015

FAP No.:	N/A												Estimator:	PGS		
Staff Classification	Total Staff Hours From "SH Summary	Chief Eng	Project Manager	Project Eng	Eng Intern	Sr. Eng Teich	CADD	Clerical	Staff Classi- fication 8	Staff Classi- fication 9	Staff Classi- fication 10	Staff Classi- fication 11	Staff Classi- fication 12	SH By	Salary Cost By	Average Rate Per
	- Flmt	\$0.00	\$135,63	\$133,38	\$0.00	\$0,00	\$83,09	\$0.00	\$0.00	\$0,00	\$0,00	\$0.00	\$0.00	Activity	Activity	Task
3. Project General and Project Common Tasks	0	0	0	0	0	0	0	0	0	0	0	0	0	0	\$0	#DIV/01
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	· o	0	0	0	0		0	so	#DIV/0!
6a. Dreinage Analysis	0	0	0	0 .	0	0	0	0	0	0	0	0		0	\$0	#DIV/01
6b. Drainage Plans	0	0	0	0	0	0	0	0	0		0	0		0	\$0	#DIV/0i
7. Utilities	0	0	0	0	0		0	0		١ ،	0	0		0	\$0	#DIV/01
8. Environmental Permits, Compliance & Clearances	0	0	0	0	0	0	0	۰	1 0	ا	0	0	ا ہ	ō	\$0	#DIV/01
9. Structures - Misc. Tesks, Dwgs, Non-Tech.	0	0	0		0	0	0	0		0	0	0		ā	\$0	#DIV/01
10. Structures - Bridge Development Report	0	0	0		0		0	0		0	o	ō	Ö	o	\$0	#DIV/01
11. Structures - Temporary Bridge	0	0	0		0	0	0	٥		0	0	0		0	\$0	#DIV/01
12. Structures - Short Span Concrete Bridge	0	0	0	0	0		0	0	0	ه ا	١٠	o			\$0	#DIV/01
13. Structures - Medium Span Concrete Bridge	1 0	0	0		0			ه ا	0	0	o	ō		ň	\$0	#DIV/0
14. Structures - Structure! Steel Bridge	0	0	١ ٥		0	0		ه ا	0	۱ ۵	o	ň	,	ŏ	\$0	#DIV/01
15. Structures - Segmental Concrete Bridge	1 0	0	٥		0			ه ا		١٠	,	0		ŏ	\$0	#DIV/01
16. Structures - Moveble Span	0		ه ا	0	0		0	ه ا	,		'n	ň	اةا	Ô	\$0	#DIV/0
17. Structures - Retaining Walls	۰	0	0	0	0	0	Ď		1 6		ŏ	ň	ا هٔ ا	0	\$0	#DIV/01
18. Structures - Miscellaneous		0	١٠		0	0	ŏ				Š	ň	ا ة	0	\$0	#DIV/01
19. Signing & Pavement Marking Analysis		0	١٠٠		0		Ď	0	1			ň	i	ň	\$0	#DIV/01
20. Signing & Pavement Marking Plans		0	ه ا		0	0	0	ò		١٠	, ,	ň		0	\$0	#DIV/0!
21, Signalization Analysis			ı o	اۃًا			ň	ŏ		•	١٠	,		0	\$0	#DIV/01
22. Skinalization Plans			ا a	ا		ا ہ ا	ŏ	0		١ ،	Ö	0		0	\$0	#DIV/01
23, Lighting Analysis			ا م		ŏ	ا ہُا	ŏ	Ĭ		1 .	l ö	, .		0	\$0 \$0	#DIV/01
24. Lighting Plans		اة	امًا	ا ہ			ň	ň		1 .	,		ا ة ا	0	\$0	#DIV/01
25. Landscape Architecture Analysis	٥	١٠	ا آ	١٠	Ď.	ا ہ ا	ŏ	ŏ	"			,	"	0	\$0	#DIV/01
26, Landscape Architecture Plans	١٠		ه ا	اۃا	ŏ		Š	,	"	"	ů	Ö	"	0	\$0	#DIV/01
27. Survey (Field & Office Support)			١٠				ŏ	١			١	, v	"	0	\$0 \$0	#DIV/01
28. Photogrammetry	١٠		١١	ادا			ŏ	١	۱ ،	١ ،		Ö	"	0	\$0 \$0	#DIV/0!
29. Mapping	1 6		١٠		ň	,		, ,	"	"	,	,		0	\$0 \$0	#DIV/01
30. Terrestrial Mobile LIDAR	0		ا ا	ا ۃ ا	ŏ		ů	١	"		ı ,	Š	ı	0	\$0 \$0	#DIV/01
31. Architecture Development		0					ı ,	Ö	"	1 0	١ ،	, v		0	\$0 \$0	#DIV/0!
32. Noise Barriers Impact Design Assessment	١٠	0	١				,	١	"	1 0	, ,	,		0	\$0 \$0	#DIV/01
33. Intelligent Transportation Systems Analysis		0	ة ا		ő	ا ۃ ا		i		1 ,	l ,	ĭ		0	\$0 \$0	#DIV/01
34. Intelligent Transportation Systems Plans	١٠	0	١	ا		1 6	ŏ	١٠	1 6	1 0	١	,		0	\$0	#DIV/0!
35. Geotechnical	576		125	387		1 6	84	ĭ	1 .	,		0		578	\$0 \$72,884	\$126,53
Total Staff Hours	578	0	125	387	0	0	84	0	0	-	0	0	0	576	₽12,884	\$126,53
Total Staff Cost		\$0.00	\$16,953,75	\$48,950,46	\$0,00	\$0.00	\$6,979,56	\$0.00	\$0.00	\$0,00	\$0,00	\$0,00	\$0,00	5/6	\$72,883,77	\$126,53
		. ,,,,,,			<del></del>	1 40,00	. 40,010,00	40,00	1 40,00	30,00	<b>\$0,00</b>	<b>40.00</b>	<b>⊉∪,∪∪</b>		914,003,11	\$120,03

Survey Field Days by Subconsultant 4 - Person Crew,

SALARY RELATED COSTS:					\$72,883.77
OVERHEAD:		0.000%			\$0.00
PROFIT		0.000%			\$0.00
FCCM (Facilities Capital Cost Money):		0,00%			\$0.00
EXPENSES:		0.00%			\$0.00
		4-man crew			
Survey (Field - if by Prime)	0	days @	\$ 	/ day	\$0.00
SUBTOTAL ESTIMATED FEE:					\$72,883.77
Subconsultant: Sub 1					\$0.00
Subconsultent: Sub 2					\$0.00
Subconsultant: Sub 3					\$0.00
Subconsultant; Sub 4					\$0.00
Subconsultant; Sub 5					\$0.00
Subconsultant: Sub 6					\$0.00
Subconsultant: Sub 7					\$0.00
Subconsultant: Sub 8					\$0.00
Subconsultant: Sub 9					\$0.00
Subconsultant: Sub 10					\$0.00
Subconsultant: Sub 11					\$0.00
Subconsultant: Sub 12					\$0.00
SUBTOTAL ESTIMATED FEE:					\$72,883.77
Geotechnical Field and Lab Testing					\$97,282.75
SUBTOTAL ESTIMATED FEE:					\$170,166.52
Optional Services					\$0.00
GRAND TOTAL ESTIMATED FEE:					\$170,188.52

<sup>1.</sup> This sheet to be used by Prime Consultant to calculate the Grand Total fee.

<sup>2.</sup> Manually enter fee from each subconsultant. Unused subconsultant rows may be hidden.

Name of Project: County: FPN: FAP No.:

SR 408 Widening from SR 417 to Alafaya Trail Orange 408-128 N/A

Consultant Name: DRMP/Ardaman & Associates, Inc. Consultant No.: enter consultants proj. number Date: 7/30/2015 Estimator: Insert name

Ar 110.,	Total Staff												Estimator:	insert name		
Staff Classification	Hours From	Chief Eng	Senior Eng	Project Eng	Eng Intern	Sr. Eng Tech	CADD	Clerical	Staff Classi- fication 8	Staff Classi- fication 9	Staff Classi- fication 10	Staff Classi- fication 11	Staff Classi- fication 12	SH	Salary	Average
	*SH Summery	\$265,03	\$168,37	\$0.00	\$82.31		470.00					<del></del>		By.	Cost By	Rate Per
Project General and Project Common Tasks	- Firm"	\$200,03				\$87.93	\$70,20	\$52,03	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	Activity	Activity	Task
Roadway Analysis	"			0	0	0	0	0	0	0	0	0.	0	0	\$0	#DIV/01
Roadway Plans	"					.0		0	, °	0	0	0	0	0	\$0	#DIV/01
L Drainage Analysis	0	0	, ,	0.		0	0	0	0	0	0	0	0	0	\$0	#DIV/0
	0	0		0	0	0	0 .	0	0	0	0	0	0	0	\$0	#D1V/0
, Drainage Plans	0	0	, •	0	°	. 0	0	0	0	0	0	0	0	0	. \$0	#DIV/0
Utilities	0	0	0	0	0	0	0.	0	0	. 0	0	0	0	0	\$0	#D1V/0
Environmental Permits, Compliance & Clearances	0	0	0	0	0	0	0	0 ,	0	0	0	0	0	0	\$0	#DIV/0
Structures - Misc. Tasks, Dwgs, Non-Tech.	0	0	0	0	0	0	0	0	0	0	0	0	0	0	\$0	#DIV/0
Structures - Bridge Development Report	0	0	0	0	0	0	0	0	0	0	0	0	0	0	\$0	#DIV/0
. Structures - Temporary Bridge	0	0	0	0	0	0	0	0	0	0	0	0	. 0	0	\$0	#DIV/0
. Structures - Short Span Concrete Bridge	0	0	0	0	0	0	0	0	0	0	0	0	0	0	\$0	#DIV/0
. Structures - Medium Span Concrete Bridge	0.	0.	0	0	0	0	0	0	0	0	0	0	0	0	\$0	#DIV/0
. Structures - Structural Steel Bridge	0	0	0	0	0	0	0	0	0	]. 0	0	0 -	1 0	0	\$0	#DIV/0
Structures - Segmental Concrete Bridge	0	0	0	0.	0	0	0	0	0 .	0	0		0	0	\$0	#DIV/0
. Structures - Movable Span	0	0	0	0	0	0	. 0	Ö	0	0	0	0	1 0	0	\$0	#DIV/0
Structures - Retaining Walls	0	0		0	0	0	0	0		0	٥	١ ،		٥	\$0	#DIV/0
. Structures - Miscellaneous	0	0	. 0	0	0	0	0	0	0	0	0		0	0	\$0	#DIV/0
. Signing & Pavement Marking Analysis	0	0	0	0	0	0	0	0	۱ ،	0	ا	ه ا	١ ،	ه ا	\$0	#DIV/0
. Signing & Pavement Marking Plans	0	0	0	0	0	. 0	0	0	١ ،		۰ ا		١ ،		so	#DIV/0
l. Signalization Analysis	0		0	0	0	0	0	0			ه ا				\$0	#DIV/0
. Signafization Plans	0	0	0	0	0	0	0	.0			١٠	ه ا	1 0	0	\$0	#DIV/0
I. Lighting Analysis	0	0	0	0		0	0	0			هٔ ا		0		\$0	#DIV/0
I. Lighting Plans	0		۰	0			0	0	0		ه ا	0	١	1 6	\$0	#DIV/0
i, Landscape Architecture Analysis	0		0	0	0	0	ō			١٠	١٠			١٠	so so	#DIV/0
3. Landscape Architecture Plans	0			o	0		ō	0	ا ا	ه ا	١٠	١٠	١٠	,	\$0	#DIV/0
. Survey (Field & Office Support)		0 '			١٠	ا ہ	0	0	ا م	١	ه ا	1 0	هٔ ا	1 0	\$0	#DIV/0
3. Photogrammetry	ا	ا ه	١٠	Ó	١٠	ا ه	ő		1 6	١،	هٔ ا	١٠	l ,	١،	\$0	#DIV/0
. Mapping	0		١٠	ا ہ	١٠	ا ه	0.		•	١،	١،	0	١ ،	١ ،	\$0	#DIV/0
. Terrestrial Mobile LIDAR	١٠	0	١٠	٥	١٠	ا ہُا	0	هٔ ا	0	۱ ،	١،	1 0	۱ ۵	١ ،	\$0	#DIV/0
. Architecture Development	0		1 0	١٠	١٠٠	ا ة ا	0		"	۱ ،	١	1 0	"	۱ ،	\$0	#DIV/0
. Noise Barriers Impact Design Assessment	0.	0	١٠٠	ا ہ	١٠٥	ا	0		"	۱ ،	1 ,	1 6	١ ،	l š	. so	#DIV/0
. Intelligent Transportation Systems Analysis	Ö	ا ه	ه ا	ا	ا آ	ا ة	0 .			١،	١٠	1 6		l š	\$0	#DIV/0
. Intelligent Transportation Systems Plans	0	0		٥	١	ا آ	0	٥	1 6	۱ ،	هٔ ا	1 0	١ ،	ة ا	so so	#DIV/0
. Geotechnical	1,437	29	435	,	585	93	285	30	"	"	١ ،	1 .	١ ،	1,437	\$155,317	\$108.0
Total Staff Hours	1,437	29	435	0	565	93	285	30	1 6	- 0	- 0	-	<del></del>	1,437	\$100,017	3108.U
Total Staff Cost		\$7,685,87	\$73,240,95	\$0.00	\$46,505,15	\$6,317,49	\$20,007,00	\$1,560,90	\$0,00	\$0,00	\$0,00	\$0,00	\$0.00	1,43/	\$155,317,36	\$108,08
					,500,10	44,411,40	920,007,00	41,000,00	1 40.00	1 40,00	- 00,00	1 90.00	90,00	Check =		3108.08

Survey Field Days by Subconsultant 4 - Person Crew:

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:					\$155,317.36
OVERHEAD:		0.000%			\$0.00
PROFIT		0.000%			\$0.00
FCCM (Facilities Capital Cost Money):		0.00%			\$0.00
EXPENSES:		0.00% 4-man crew			\$0,00
Survey (Field - if by Prime)	0	days @	\$ •	/ day	\$0,00
SUBTOTAL ESTIMATED FEE:					\$155,317.38
Subconsultent: Sub 1	ν.				\$0.00
Subconsultent: Sub 2				,	\$0.00
Subconsultant: Sub 3		**			\$0,00
Subconsultant: Sub 4					\$0.00
Subconsultent: Sub 5					\$0.00
Subconsultant: Sub 6					\$0.00
Subconsultant: Sub 7					\$0.00
Subconsultant: Sub 8					\$0.00
Subconsultent: Sub 9					\$0.00
Subconsultant: Sub 10					\$0.00
Subconsultant: Sub 11					\$0.00
Subconsultant: Sub 12					\$0.00
SUBTOTAL ESTIMATED FEE:					\$155,317.36
Geotechnical Field and Lab Testing					\$192,042.00
SUBTOTAL ESTIMATED FEE:					\$347,359.36
Optional Services					\$0.00
GRAND TOTAL ESTIMATED FEE:					\$347,359.38

Name of Project: County: FPN: FAP No.:

SR 408 Orange 1/0/1900

Consultant Name: EPG Engineering
Consultant No.: enter consultants proj. number
Date: 7/27/2015
Estimator: Moheen

	Total Staff												Estimator:	Mohsen		
Staff Classification	Hours From "SH Summary	Principal Engineer A	Engineer B	Staff Classi- fication 3	Staff Classi- fication 4	Staff Classi- fication 5	Staff Classi- fication 6	Staff Classi- fication 7	Staff Classi- fication 8	Staff Classi- fication 9	Staff Classi- fication 10	Staff Classi- fication 11	Staff Classi- fication 12	SH By	Salary Cost By	Average Rate Per
	Firm	\$150.00	\$100,00	\$100,00	\$0.00	\$0.00	\$0.00	\$0.00	\$0,00	\$0,00	\$0.00	\$0,00	\$0.00	Activity	Activity	Task
3. Project General and Project Common Tasks	0	0	0	0	0	0	0	0	0	.0	0	0	0	Activity	\$0	
4. Roadway Analysis	Ö	0	. 0	0	0	0			0			ŏ		١	-	#DIV/01
5. Roadway Plans	0	0	0	0	0	0	0	0			,		,	١	\$0	#DIV/0!
6. Drainage Analysis	0	: 0	0	. 0	۱ ،		1 6		1 0	1	ů			"	\$0	#DIV/01
7. Utilities	0	0	0		1 0					"	١	ŭ	"		\$0	#DIV/0!
8. Environmental Permits, Compliance & Clearances	0	0	0	0	١ .			1 .		١ ،	Ů	ŭ	١		\$0	#DIV/0!
9. Structures - Misc. Taska, Dwgs, Non-Tech.	0	0	0	0	١٠		i ,		,		١				\$0	#DIV/01
10. Structures - Bridge Development Report	0		0	0	ه ا	هٔ ا	,	1		,	۰			0	\$0	#DIV/01
11. Structures - Temporary Bridge	0	0	o	0			١		,	"	۰		٠	0	\$0	#DIV/01
12. Structures - Short Span Concrete Bridge	0	0	0	0	١٠٠	ا ہ			"	1				0	\$0	#DIV/01
13. Structures - Medium Span Concrete Bridge	0	0	0	0		ا م	,	1 .						0	\$0	#D[V/0]
14. Structures - Structural Steel Bridge	0		0	0	ì			٠, ١	1 :	1 .		0.	0	0	\$0	#DIV/0!
15. Structures - Segmental Concrete Bridge			0	ò							0	0	0	0	\$0	#DIV/01
16. Structures - Movable Span			ŏ	۰	;					0	0	0	.0	0	\$0	#DIV/01
17. Structures - Retaining Walls			ů		"			l "	0	0	. 0	0	0	0	\$0	#DIV/0!
18. Structures - Miscellaneous			0	۰	Ů		0		0	0	0	0	0	0	\$0	#DIV/0!
19. Signing & Pavement Marking Analysis	0		ů	٠			0	0		0	0	0	0	0	\$0	#DIV/0!
20. Signing & Pavement Marking Plans		,	Č	۰			0	0		0	0	0	0	0	\$0	#DIV/0!
21. Signalization Analysis	1 5	1 . 1	•				0	, ,		0	0	0	0	0	\$0	#DIV/01
22, Signalization Plans	"			•		-0	0	0	0	0	0	0	0	0	\$0	#DIV/01
23. Lighting Analysis	128	90	38		U	0	0	0	0	0	Q.	0	0	0	\$0	#DfV/01
24. Lighting Plans	39	27	12	•		0	0	•	0	0	0	0	0	128	\$17,300	\$135.16
25. Landscape Architecture Analysis	🐃	ا " ا	12	Ü	•	0	0	0	0	0	0	0	0	39.	\$5,250	\$134.62
26. Landscape Architecture Plans	"			0	0	0	D	0		0	0	0	0	0	\$0	#DIV/0!
27. Survey (Field & Office Support)	"		•		0	0	0	0	. •	0	0	0	0	0	\$0	#DIV/0!
28. Photogrammetry	"				0	0,	0	•	0	0	0	0	0	0	\$0	#DIV/01
29. Mapping	"	1	•		0	0	0	•	0	0	0	0	0	0	\$0	#DIV/01
30. Geotechnical	"		0	0	0	0	0	0	0	0	. 0	0	0	0	\$0	#DIV/01
31. Architecture Development	0	"	0	0	0	0	0	0	0	0	0	0	0	0	\$0	#DIV/0!
32. Noise Barriers Impact Design Assessment	١ ،			0	0	0	0	0	0	0	0	0	0	0	\$0	#DIV/01
33. Intelligent Transportation Systems Analysis					0	0	0	0	0	0	0	0	0	0 '	\$0	#DIV/0!
34. Intelligent Transportation Systems Plans	1 6			0	0	0	O I	0	0	0	0	0	0	0	\$0	#DIV/0!
Total Staff Hours	167	117	- 0	.0	0	0	00	0	0	0	0	0 -	0	0	\$0	#DIV/01
Total Staff Cost	10/		50	- 0	0	0	0	0	. 0	0 .	. 0	0	0	167		
I viai outil Cost		\$17,550.00	\$5,000.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0,00	\$0.00	\$0.00	\$0.00	\$0.00		\$22,550,00	\$135.03

Survey Field Days by Subconsultant 4 - Person Crew.

			Cneck =	\$22,550.00	
SALARY RELATED COSTS:					\$22,550.00
OVERHEAD:		0%			\$0,00
OPERATING MARGIN:		0%			\$0.00
FCCM (Facilities Capital Cost Money): EXPENSES:		0.00%			\$0.00
EXPENSES.		0.00% · 4-man crew			\$0.00
Survey (Field - if by Prime)	0	days @	\$ -	/ day	\$0.00
SUBTOTAL ESTIMATED FEE:				•	\$22,550.00
Subconsultant: Enter Name Sub 1					\$0.00
Subconsultant: Sub 2					\$0.00
Subconsultant: Sub-3					\$0.00
Subconsultant: Sub 4					\$0.00
Subconsultant: Sub 5					\$0.00
Subconsultant: Sub 6					\$0.00
Subconsultant: Sub 7					\$0.00
Subconsultant: Sub 8					\$0.00
Subconsultant: Sub 9					\$0.00
Subconsultant: Sub 10					\$0.00
Subconsultant: Sub 11					\$0.00
Subconsultant: Sub 12					\$0.00
SUBTOTAL ESTIMATED FEE:		4.3			\$22,550,00
Geotechnical Field and Lab Testing					\$0.00
SUBTOTAL ESTIMATED FEE:					\$22,550.00
Optional Services					\$0.00
GRAND TOTAL ESTIMATED FEE:					\$22,550,00

Notes:

1. This sheet to be used by Prime Consultant to calculate the Grand Total fee.

<sup>2.</sup> Manually enter fee from each subconsultant. Unused subconsultant rows may be hidden.

### Mobile LIDAR MAPPING

Consultant: DRMP ACA Proposal #: 17262

Date: 7/28/2015

Estimator's Name: Aerial Cartographics of America, Inc.

Job Name: SR 408

From: SR 417 To: Alafaya Trail

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Lenath:	7.2	m	lle

Mobile LIDAR Item	Scale	Unit	No. of	Price per	Total	0
	1" =	Oill	Unit	Unit	Cost	Comments
1 LiDAR Mission Planning (MOC Item D.1.)		Mile	29.4	\$324.60	\$9,543.24	Scan miles
2 Mobile LiDAR Acquisition Full Day (MOC Item E.1.)		Day	1	\$16,000.00	\$16,000,00	
3 LIDAR Mission Data Processing (MOC Item F.1.a.)		Mile	29.4	\$457.00	\$13,435,80	,
LiDAR Survey Report (MOC Item F.1.b.)		Each	1	\$1,193.00	\$1,193.00	
5 LiDAR Point Cloud Classification Urban (MOC Item F	Mile	11.9	\$1,372.00		Corridor miles	
Project Management, Coordination & Support (per Project)	Hour	56	\$163.66	\$9,164.96	Includes Tasks 30.16 th	
TOTAL FEES					\$65,663,80	

Prepared by: Patrick Senne, PSM, Vice President

Date: July 27, 2015

# EXHIBIT D PROJECT ORGANIZATIONAL CHART

Principal-in-Charge/Project Manager Jon S. Meadows, PE **Assistant Project Manager** 

TJ Lallathin, Jr., PE

**Quality Assurance/Quality Control** 

Allen W. Schrumpf, PE - Roadway/MOT Peeter Mannik, PE - Structures Kenneth R. Kniel, PE - Drainage Glenn J. Lusink, PSM - Survey Juan P. Camacho, PE - Traffic

Roadway Design

Thomas G. Caffery, PE Corey M. Bloxam, EI Anthony J. Smith Paul Markel, PE

**Maintenance of Traffic** 

Troy Vargas, PE Gail Woods, PE

Structures

TJ Lallathin, Jr., PE Joseph A. Roberts, PE Peter Rogas, PE Justin P. Wellborn, PE Rick Baldocchi, PE

**Toll Plaza Facilities** 

Nicole M. Jeffers, PE

**Utility Coordination** 

Dan Angel, CCS

Geotechnical

Peter G. Suah, PE Bill L. Fox. PE Colin Jewsbury, PE

Signing & Markings

Renato J. Gonzalez, PE

Lighting

Jim W. Highland, PE **Brandon Beaver** 

ITS

Nicholas D. DeVito, PE Jim W. Highland, PE

**Public Involvement** Support

TJ Lallathin, Jr., PE

Lisa M. Lanman, AICP

Signalization

William E. Moss, PE

**Electrical Engineering** 

Mohsen Faraji-Tajrishi, PE

**Drainage Design/Permitting** 

Donald W. Brown, PE Chad A. Croft, PE

**Scheduling & Project Control** 

John R. Burkett, PE

Design Survey/SUE

Allen L. Quickel, PSM Steve Kuda, PSM, PPS Danny Williams, III, PSM, **LEED AP** 

Eli Donaldson, PSM

SUBCONSULTANTS:

Aerial Cartographic of America, Inc.

Ardaman & Associates, Inc.

MBE Antillian Engineering Associates, Inc.

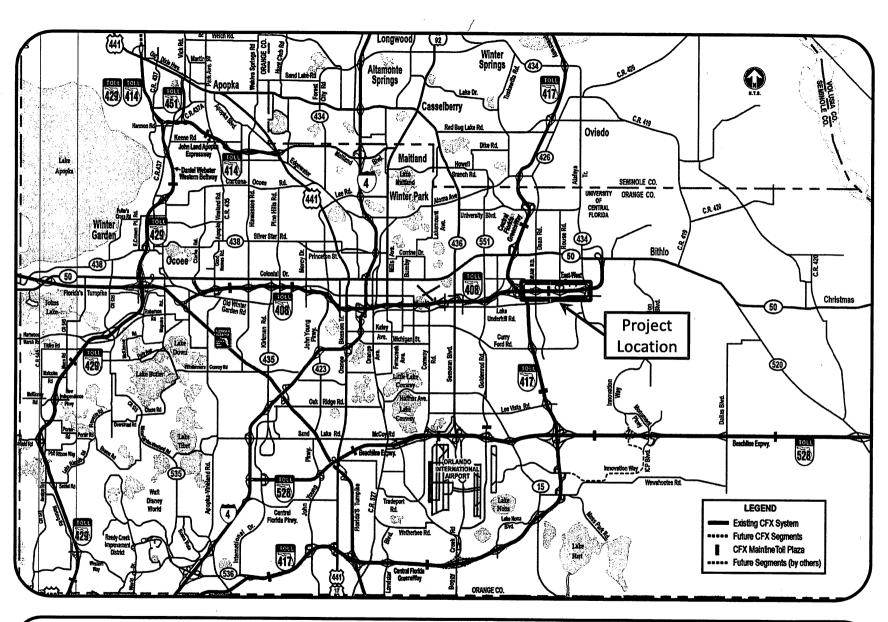
MBE AVCON, Inc.

**EPG** Engineering

RS&H, Inc.

MBE WBQ Design & Engineering, Inc.

### EXHIBIT E PROJECT LOCATION MAP



Central Florida Expressway Authority
SR 408 Widening from SR 417 to Alafaya Trail (Project 408-128)

### EXHIBIT F SCHEDULE