

**NASSAU COUNTY WORK AUTHORIZATION #01**

<b>Contract Number:</b>	CM3505
<b>Consultant/Vendor:</b>	Kimley-Horn and Associates, Inc.
<b>Consultant/Vendor Contact Name:</b>	Jessica Novak
<b>Consultant/Vendor Contact Phone Number:</b>	904.828.3937
<b>Consultant/Vendor Contact Email Address:</b>	Jessica.Novak@kimley-horn.com
<b>Project Short Title:</b>	US 301 and Crawford Road Intersection Improvements
<b>Total Amount of Previous Work Authorizations:</b>	\$0
<b>Amount of this Work Authorization:</b>	\$151,452.69
<b>New Contract Amount including this Work Authorization:</b>	\$151,452.69
<b>Funding Source:</b>	63470541-563365 C0166

This Work Authorization is issued pursuant to the Contract referenced above between Nassau County and the Consultant/Vendor for the following services:

**ARTICLE 1. Description of Services.** Consultant/Vendor shall provide the services as set forth in Exhibit “A”, attached hereto and incorporated herein.

**ARTICLE 2. Time Schedule.** Consultant/Vendor anticipates the services to be completed pursuant to the time schedule contained in Exhibit “A”, attached hereto and incorporated herein, or no later than 500 days from the issuance of this Work Authorization. The parties agree that this Work Authorization shall be considered as the Notice to Proceed.

**ARTICLE 3. Compensation.** Consultant/Vendor shall be compensated for the services in detailed in Exhibit “B”, attached hereto and incorporated herein, using rates previously established in the Contract referenced above.

**ARTICLE 4. Other Provisions.** This Work Authorization shall become a part of the Contract when executed by both parties. Any Work Authorization entered into prior to expiration or termination set forth in the Contract shall continue in effect through the earlier of: (i) the date all of the Services thereunder have been fully completed and accepted by Nassau County, or (ii) until such time as such Work Authorization expires or is terminated in accordance with its terms or is terminated pursuant to Article 2 hereof. Consultant/Vendor acknowledges that all drawings, data, electronic files and other information required for this Work Authorization has been accepted by Consultant/Vendor. Specifically, all electronic files have been reviewed and accepted for the purposes of this Work Authorization.

**RECOMMENDED AND APPROVED BY:**

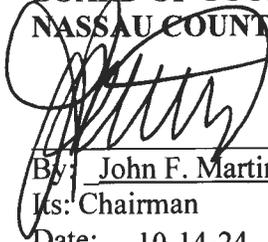
Department Head/Managing Agent: Robert Companion 8/5/2024  
Robert Companion Date

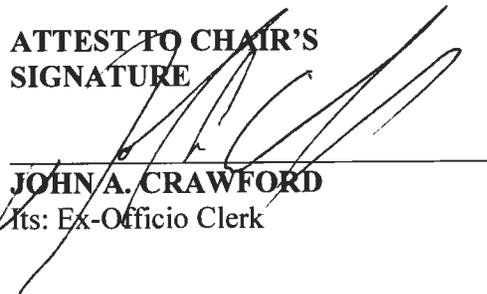
Procurement: Lanaee Gilmore 8/8/2024  
Lanaee Gilmore Date

Office of Management & Budget: Chris LaCambra 8/6/2024 *JP*  
Chris LaCambra Date

County Attorney: Denise C. May, Esq., BLS 8/21/2024 *DJ*  
Denise C. May Date

**IN WITNESS WHEREOF**, the Parties have caused this Work Authorization to be executed by its duly authorized representatives, effective as of the last date below.

**BOARD OF COUNTY COMMISSIONERS  
NASSAU COUNTY, FLORIDA**  
  
By: John F. Martin  
As: Chairman  
Date: 10-14-24

**ATTEST TO CHAIR'S  
SIGNATURE**  
  
JOHN A. CRAWFORD  
Its: Ex-Officio Clerk

**KIMLEY-HORN AND ASSOCIATES, INC.**  
By: George Roland  
Print Name: George Roland  
Title: Assistant Secretary  
Date: 8/8/2024

## EXHIBIT "A" GR

### US 301 at Crawford Road Intersection Improvements

NC3505

Nassau County

### Scope of Design Services

July 18, 2024

**Project Understanding:** Nassau County has requested engineering design and plans production services from Kimley-Horn and Associates, Inc. (Kimley-Horn) for the design of intersection improvements on US 301 at the intersection of Crawford Road in Nassau County, FL. The intent of this project is to add a southbound right turn lane onto Crawford Road and a northbound acceleration lane in the median of US 301 at Crawford Road to accommodate an anticipated increase in truck traffic accessing the future Crawford Diamond Industrial Park. The posted speed of US 301 in the project area is 65 mph, with a design speed of 70 mph. Both auxiliary lanes will be 12-ft wide and match the existing pavement design section on US 301.

Funding for this project is partially provided through a State Funded Grant Agreement with the Florida Department of Transportation (FDOT) under FPN 435821-2-54-01. Under the conditions of this funding agreement the design plans shall be submitted to the FDOT for review and approval. The design for this project will be prepared under the design criteria defined in the 2024 FDOT Design Manual, the 2024-25 FDOT Standard Plans for Road Construction, and the 11<sup>th</sup> edition of the Manual of Uniform Traffic Control Devices (MUTCD) published in December 2023.

The scope of services described herein are based upon our understanding of the project.

#### **Task 1: Project Management Tasks**

##### ***1.) Project Administration***

- a. **Project Setup:** Upon notice to proceed, Kimley-Horn will establish project files, setup project accounting, and develop a project schedule.
- b. **Project Kick-Off Meeting:** Kimley-Horn will schedule a project kick-off meeting with the County to discuss project start up and anticipated schedule.
- c. **Progress Meetings:** Kimley-Horn will attend up to four (4) project progress meetings with Nassau County.

##### ***2.) Coordination with Agencies***

- a. **Florida Department of Transportation (FDOT):** The project is within FDOT right-of-way and is funded through a State-Funded Grant. Kimley-Horn will assist Nassau County in coordinating with FDOT. Kimley-Horn will submit plans to FDOT on behalf of Nassau County for review at the Phase II (60%) and Phase IV (100%) design development stage through the FDOT's Electronic Review Comment (ERC) System.
- b. **St. Johns River Water Management District (SJRWMD):** This project is within the SJRWMD jurisdiction. Kimley-Horn will attend a pre-application meeting with SJRWMD and submit for a permit exemption determination.

Permitting effort with SJRWMD beyond an exemption is not included.

**3.) Coordination with Subconsultants**

- a. Kimley-Horn will coordinate with two subconsultants for this project: CSI Geo for the geotechnical investigation and SAM Surveying and Mapping for the topographic survey.

**4.) Site Visits:** Kimley-Horn's project manager will perform one site visit upon completion of the design survey.

**5.) Public involvement is not included in this scope.**

**6.) Typical Section Package is not included in this scope.**

**7.) Specifications & Bid Phase Support**

- a. Kimley-Horn will coordinate with Nassau County to develop the Bid Documents using the County's boiler plate documents. Draft bid documents will be submitted to the County for review.
- b. Kimley-Horn will assist the County to prepare necessary addenda during the bidding. The County will be responsible for issuing addenda to the Bidders of Records.
- c. Kimley-Horn will not attend the Bid Opening.

**Task 2: Roadway Design Plans**

- 1.) Kimley-Horn will prepare roadway design plans on 11"x17" sheets depicting the intersection improvements, which will include a southbound right turn lane onto Crawford Road and a northbound acceleration lane in the median of US 301. The roadway design plans may include the following:

- a. **Key Sheet**
- b. **General Notes Sheet:** to include general notes and pay item requirements, which will also include a tabulation of all bid items and quantities.
- c. **Typical Sections:** The typical sections will be developed to illustrate the areas of pavement widening onto the existing pavement of US 301. The proposed pavement design will match the existing pavement on US 301 within the project area.  
  
Separate pavement design not included in this scope.
- d. **Project Survey Control Sheet:** Provided by SAM Surveying and Mapping
- e. **Drainage Map:** An overall drainage map to depict existing drainage basin areas.
- f. **Plan Sheets:** Plan sheets will be set at 40 scale to show the proposed pavement widening for the two auxiliary lanes along US 301. Plan sheets will include the drainage structure ID, FDOT Index, and pipe invert for the impacted median ditch bottom inlet on US 301. Plan sheets will include erosion control measures that may be needed during construction. Plan sheets will include details for the regrading of the affected ditches along US 301, adjacent to both the southbound right turn lane and median acceleration lane.
- g. **Cross Sections:** Cross sections will be developed at 50-ft intervals along US 301.
- h. **Soil Survey Sheet:** Provided by CSI Geo
- i. **Drainage Structure Section:** A drainage structure section sheet for the impacted median ditch bottom inlet.
- j. **Traffic Control Plan:** A Level I Traffic Control Plan to include general TTCP notes and reference to the appropriate FDOT Design Standards (102-600 Series).
- k. **Signing and Pavement Marking Plan Sheets**
- l. **Utility Adjustment Plans:** Based on information provided by the various utility providers in the corridor, proposed utility adjustments will be detailed identified in plans as work to be completed by UAO's.

- m. **Quantities:** Develop quantities and prepare an Opinion of Probable Costs (OPC). The OPC to be prepared with the first submittal and updated once more.

*Note: Kimley-Horn has no control over the cost of labor, materials, equipment, or over the Contractor's methods of determining prices or over competitive bidding or market conditions. Opinions of probable costs provided in accordance with this AGREEMENT are based on the information known to at the time the opinions of cost are developed and represent only Kimley-Horn's judgment as a design professional familiar with the construction industry. Actual costs for proposals, bids, or actual construction costs will be different.*

- n. **Submittals:** Kimley-Horn will submit a signed and sealed PDF of the roadway plans and OPC at 60%, 90% and final completion stage to Nassau County. Kimley-Horn will submit copies of the roadway plans to FDOT for ERC review up to 2 times.

### **Task 3: Utility Coordination**

- 1.) Kimley-Horn will coordinate the proposed design with the five (5) affected Utility Agency/Owners (UAO) consisting of Windstream Communication, Florida Public Utilities Company, Florida Power & Light, MCI, and Okefenoke Rural Electric Membership Cor. The individual UAOs will designate the existing utilities within the project limits during the design phase. Each UAO will be responsible for the design of their respective utilities for this project. These designs will be provided to Kimley-Horn by the UAO in CADD format for inclusion in the utility adjustment sheets. Kimley-Horn will be responsible for coordinating with the UAOs for the proposed construction elements such that utility conflicts are minimized or avoided. Kimley-Horn will provide the UAO's electronic PDF files of the roadway plans at 60%, 90%, and final plans submittals. Kimley-Horn cannot be responsible for the accuracy of the CADD files after they are provided to the Utility owners, if requested. Kimley-Horn will, prior to and during design, obtain available data from the UAO's that may be needed to determine the actual location and depth of the underground utilities. Kimley-Horn will prepare for and attend up to three (3) utility coordination meetings.

### **Task 4: Survey (SAM Surveying and Mapping, LLC)**

SAM Surveying and Mapping, LLC (SAM) will perform a topographic survey of the areas of interest (AOI) to the right of ways of US Hwy 301 (2,100 linear feet) and Crawford Road (200 linear feet) as shown on attached Exhibit "A".

- 1.) Set/establish (or reference to provided) horizontal and vertical survey control at the project site, based horizontally on the Florida East Zone State Plane Coordinate System, North American Datum of 1983 and vertically on the North American Vertical Datum of 1988.
- 2.) Locate sufficient parcel and right of way boundary corners to calculate the apparent right of way limits of US Hwy 301 and Crawford Road.
- 3.) Collect topographic information to include all aboveground visible improvements, edges of pavement, driveways, storm sewer and structures (with invert elevations where accessible), and sanitary sewer and structures (with invert elevations where accessible).
  - a. Grades shots to be collected on a 50ft-grid, plus all breaks.
  - b. Generate DTM surface with 1ft contour interval.
- 4.) Locate and depict aboveground visible evidence of underground utilities as evidenced by aboveground features marked at the time of field survey.

## **Subsurface Utility Engineering (SUE) Survey**

The following SUE services will be performed for the project:

- 1.) Quality Level B Investigation along US Hwy 301.

### **SUE Survey Limits of Technology**

- a) SAM's success in performing the scope of services for this work is limited to the extent of the technology utilized. Non-metallic piping, inactive electric and/or communication lines may or may not be found. SAM will not be responsible for omission of utility information that is not obtainable via equipment and methodologies it employs on this project.
- b) The accuracy of subsurface data can be influenced by factors beyond SAM's control such as conductivity of materials and their surroundings, soil moisture content, proximity of other underground utilities or structures, depth of utility, etc. Therefore, physical verification (through vacuum excavation or otherwise) is the only subsurface utility data that is collected to applicable engineering and/or surveying standards.
- c) Other surface geophysical methods, such as terrain conductivity and point to source transmitters can be used, as appropriate. These techniques, although typically involving extra expense, can further refine the utility model. Generally, these extra refinements are not cost effective, and SAM will not apply these techniques without authorization of the client.
- d) Electronic Depth Readings (EDRs), where they appear to be reliable and are repeatable, may be included along with our QLB deliverables. It is important to understand that neither EDRs nor their derivative work products have any Quality Level(s) associated with them. ASCE 38-22 states: There are many conditions under which a Depth derived from Geophysical Methods will be erroneous; often supplemental groundtruth (QLA) observations are required to calibrate and gain confidence in Depths derived from Geophysical Methods. ASCE 38-22 further states: Depth is not a sufficient stand-alone attribute of QLA. QLA is referenced as an elevation. SAM highly recommends that stand-alone EDRs and/or their derivative work products not be used for engineering, architectural, and other critical design, and construction purposes.

### **Survey Assumptions**

- 1.) Surveying services will be performed under the direct supervision of a Florida Professional Surveyor (PSM).
- 2.) Client will coordinate right-of-entry for any areas requiring access, prior to deployment of SAM field crew(s).
- 3.) SAM is not providing or preparing a right of way survey and/or a boundary survey.
- 4.) Tree location is not part of the above scope.
- 5.) SAM will call in a Sunshine One Call Design ticket for utility markings.
- 6.) SAM is not responsible for resolving Title and/or boundary conflicts found during the survey, however said conflicts, including such situations as gaps or overlaps, will be noted on the survey. Any title, boundary, or ownership conflicts/disputes, if any, which may require additional research, plats, exhibits and field surveys will be considered additional work and billed according to our project rate schedule.
- 7.) Client will provide all current deeds, prior deeds, and other documents required for the delineation of the subject parcels to be included within the boundary survey with Notice to Proceed. This includes any adjoining or intersecting road right of way maps, utility right of way maps, and railroad valuation maps.

### **Task 5: Geotechnical Investigation (CSI Geo)**

CSI Geo will perform a geotechnical exploration that will consist of exploratory borings, laboratory testing, and a geotechnical analysis of the collected data.

**1.) Proposed Geotechnical Exploration:** The proposed exploration will consist of geotechnical studies and the collection of subsurface data as follows:

- a. **Roadway Turn Lanes:** Auger borings will be performed to depth of 5.0 feet and 20 feet within the proposed roadway turn lanes. Work will also include review of the encountered ground water levels and estimation of the seasonal high ground water levels as well as delineation of limits of unsuitable material(s) in both horizontal and vertical directions. Pavement cores will be taken from the existing roadway pavement to assist in pavement design. Soil samples will be classified, containerized, and marked in the field and returned to the laboratory for visual inspection and classification by the geotechnical engineer using the AASHTO and Unified Soil Classification Systems.
- b. **Laboratory Testing:** Routine laboratory testing will be conducted on representative soil samples. Laboratory classification and index soil tests will be performed as necessary on selected soil samples obtained from the exploration. Specific tests to be performed are Organic Content, Natural Moisture Content, Single Sieve Grain Analysis, Atterberg Limits, environmental corrosion series, and LBR Testing.
- c. **Engineering/Support Services:** A geotechnical engineer, registered in the State of Florida, will direct the geotechnical exploration, and provide engineering analysis and evaluation of the site and subsurface conditions with respect to the planned construction. The results of the exploration will be presented in a report containing the following:
  - i. A brief discussion of the planned construction.
  - ii. A graphical representation of the subsurface conditions encountered as well as the existing on-site conditions, such as topography, surface vegetation, encountered water tables, etc., as they relate to the planned construction.
  - iii. An appendix that contains stratified soil boring profiles and laboratory test data sheets.
  - iv. Written discussion of the subsurface conditions encountered.
  - v. Evaluation of the subsurface soils and recommendations concerning the suitability of the subsurface soils.
  - vi. Recommendations for the required site preparation and earthwork construction.

### **Project Duration:**

Project duration is estimated to be 500 calendar days upon approval by the Nassau County Board of County Commissioners.

The Consultant shall not have liability for or be deemed in breach because of delays caused by any factor outside of its reasonable control, including but not limited to natural disasters, adverse weather, or acts of the Client, third parties, or governmental agencies. Times for performance shall be extended as necessary for delays or suspensions due to circumstances that the Consultant does not control.

**Method of Compensation:**

Services under this scope will be provided on a lump sum bases in accordance with the staff hour summary attached dated June 24, 2024. **The total fee to complete this project is \$151,452.69.** A breakdown of the lump sum fee is provided below.

<b>CONSULTANT</b>	<b>FEE</b>
<b>Kimley-Horn Fee</b>	\$94,060.00
<b>SAM Surveying and Mapping Fee</b>	\$41,430.00
<b>CSI Geo Fee</b>	\$15,962.69
<b>TOTAL:</b>	<b>\$151,452.69</b>

All permitting, application, and similar project fees will be paid directly by the County. Fee and expenses will be invoiced monthly based upon the percentage of services performed or actual services performed, and expenses incurred as of the invoice date.

## EXHIBIT A

### Approximate Topographic Survey Limits



# EXHIBIT "B"

## ESTIMATE OF WORK EFFORT AND COST - PRIME CONSULTANT

Name of Project: US 301 at Crawford Road Intersection Improvements  
 County: Nassau  
 FPN: 999999-1-32-01  
 FAP No.: 54321

Consultant Name: Kimley-Horn  
 CM3505  
 Date: 6/24/2024  
 Estimator: Jessica Novak, P.E.

Staff Classification	Total Staff Hours From "SH Summary - Firm"	Principal Engineer	Chief Engineer 2	Chief Engineer 1	Senior Engineer 2	Senior Engineer 1	Project Manager 2	Project Manager 1	Engineer 2	Engineer 1	Engineering Intern	Environmental Specialist	Clerical/Admin	SH By	Salary Cost By	Average Rate Per															
		\$310.00	\$290.00	\$260.00	\$252.00	\$220.00	\$230.00	\$180.00	\$200.00	\$154.00	\$135.00	\$110.00	\$115.00	Activity	Activity	Task															
3. Project Common and Project General Tasks	51	0	0	0	0	0	0	51	0	0	0	0	0	51	\$9,180	\$180.00															
4. Roadway Analysis	177	0	0	18	0	35	35	53	18	18	0	0	0	177	\$36,342	\$205.32															
5. Roadway Plans	75	0	0	4	0	8	8	8	15	23	8	0	0	74	\$13,702	\$185.16															
6a. Drainage Analysis	34	0	2	2	3	3	14	0	7	3	0	0	0	34	\$7,598	\$223.47															
6b. Drainage Plans	37	0	0	2	0	4	2	7	11	7	4	0	0	37	\$6,938	\$187.51															
6c. Selective C&G	0	0	0	0	0	0	0	0	0	0	0	0	0	0	\$0	#DIV/0!															
7. Utilities	38	0	0	0	0	0	27	0	8	4	0	0	0	39	\$8,426	\$216.05															
8. Environmental Permits, and Env. Clearances	0	0	0	0	0	0	0	0	0	0	0	0	0	0	\$0	#DIV/0!															
9. Structures - Misc. Tasks, Dwgs, Non-Tech.	0	0	0	0	0	0	0	0	0	0	0	0	0	0	\$0	#DIV/0!															
10. Structures - Bridge Development Report	0	0	0	0	0	0	0	0	0	0	0	0	0	0	\$0	#DIV/0!															
11. Structures - Temporary Bridge	0	0	0	0	0	0	0	0	0	0	0	0	0	0	\$0	#DIV/0!															
12. Structures - Short Span Concrete Bridge	0	0	0	0	0	0	0	0	0	0	0	0	0	0	\$0	#DIV/0!															
13. Structures - Medium Span Concrete Bridge	0	0	0	0	0	0	0	0	0	0	0	0	0	0	\$0	#DIV/0!															
14. Structures - Structural Steel Bridge	0	0	0	0	0	0	0	0	0	0	0	0	0	0	\$0	#DIV/0!															
15. Structures - Segmental Concrete Bridge	0	0	0	0	0	0	0	0	0	0	0	0	0	0	\$0	#DIV/0!															
16. Structures - Movable Span	0	0	0	0	0	0	0	0	0	0	0	0	0	0	\$0	#DIV/0!															
17. Structures - Retaining Walls	0	0	0	0	0	0	0	0	0	0	0	0	0	0	\$0	#DIV/0!															
18. Structures - Miscellaneous	0	0	0	0	0	0	0	0	0	0	0	0	0	0	\$0	#DIV/0!															
19. Signing & Pavement Marking Analysis	47	0	2	0	5	5	26	5	0	5	0	0	0	48	\$10,590	\$220.63															
20. Signing & Pavement Marking Plans	8	0	0	0	0	0	0	2	0	6	0	0	0	8	\$1,284	\$160.50															
21. Signalization Analysis	0	0	0	0	0	0	0	0	0	0	0	0	0	0	\$0	#DIV/0!															
22. Signalization Plans	0	0	0	0	0	0	0	0	0	0	0	0	0	0	\$0	#DIV/0!															
23. Lighting Analysis	0	0	0	0	0	0	0	0	0	0	0	0	0	0	\$0	#DIV/0!															
24. Lighting Plans	0	0	0	0	0	0	0	0	0	0	0	0	0	0	\$0	#DIV/0!															
25. Landscape Analysis	0	0	0	0	0	0	0	0	0	0	0	0	0	0	\$0	#DIV/0!															
26. Landscape Plans	0	0	0	0	0	0	0	0	0	0	0	0	0	0	\$0	#DIV/0!															
27. Survey (Field & Office Support)	0	0	0	0	0	0	0	0	0	0	0	0	0	0	\$0	#DIV/0!															
28. Photogrammetry	0	0	0	0	0	0	0	0	0	0	0	0	0	0	\$0	#DIV/0!															
29. Mapping	0	0	0	0	0	0	0	0	0	0	0	0	0	0	\$0	#DIV/0!															
30. Terrestrial Mobile LIDAR	0	0	0	0	0	0	0	0	0	0	0	0	0	0	\$0	#DIV/0!															
31. Architecture Development	0	0	0	0	0	0	0	0	0	0	0	0	0	0	\$0	#DIV/0!															
32. Noise Barriers Impact Design Assessment	0	0	0	0	0	0	0	0	0	0	0	0	0	0	\$0	#DIV/0!															
33. Intelligent Transportation Systems Analysis	0	0	0	0	0	0	0	0	0	0	0	0	0	0	\$0	#DIV/0!															
34. Intelligent Transportation Systems Plans	0	0	0	0	0	0	0	0	0	0	0	0	0	0	\$0	#DIV/0!															
35. Geotechnical	0	0	0	0	0	0	0	0	0	0	0	0	0	0	\$0	#DIV/0!															
<b>Total Staff Hours</b>	467	0	4	26	8	55	112	126	59	66	12	0	0	468																	
<b>Total Staff Cost</b>		\$0.00	\$1,160.00	\$6,760.00	\$2,016.00	\$12,100.00	\$25,760.00	\$22,680.00	\$11,800.00	\$10,164.00	\$1,620.00	\$0.00	\$0.00		\$94,060.00	\$200.98															
Check =															\$94,060.00																
															<b>SUBTOTAL ESTIMATED FEE:</b>														<b>\$94,060.00</b>		
															Subconsultant:	CSI Geo														<b>\$15,962.69</b>	
															Subconsultant:	SAM Survey and Mapping															<b>\$41,430.00</b>
															<b>GRAND TOTAL ESTIMATED FEE:</b>																<b>\$151,452.69</b>

**Project Activity 3: General Tasks**

Estimator:						US 301 at Crawford Road Intersection Improvements 999999-1-32-01
<b>Representing</b>		<b>Print Name</b>			<b>Signature / Date</b>	
FDOT District						
Consultant Name						
<b>NOTE: Signature Block is optional, per District preference</b>						
Task No.	Task	Units	No of Units	Hours/ Unit	Total Hours	Comments
3.1	Public Involvement					
3.1.1	Community Awareness Plan	LS	1	0	0	NOT INCLUDED
3.1.2	Notifications	LS	1	0	0	NOT INCLUDED
3.1.3	Preparing Mailing Lists	LS	1	0	0	NOT INCLUDED
3.1.4	Median Modification Letters	LS	1	0	0	NOT INCLUDED
3.1.5	Driveway Modification Letters	LS	1	0	0	NOT INCLUDED
3.1.6	Newsletters	LS	1	0	0	NOT INCLUDED
3.1.7	Renderings and Fly Throughs	LS	1	0	0	NOT INCLUDED
3.1.8	PowerPoint Presentation	LS	1	0	0	NOT INCLUDED
3.1.9	Public Meeting Preparations	LS	1	0	0	NOT INCLUDED
3.1.10	Public Meeting Attendance/Followup	LS	1	0	0	NOT INCLUDED
3.1.11	Other Agency Meetings	LS	1	0	0	NOT INCLUDED
3.1.12	Web Site	LS	1	0	0	NOT INCLUDED
<b>3.1 Public Involvement Subtotal</b>					<b>0</b>	
3.2	Joint Project Agreements	EA	0	0	0	NOT INCLUDED
3.3	Specifications & Estimates					
3.3.1	Specifications Package Preparation	LS	1	12	12	INCLUDES TIME FOR ASSEMBLING SPECIFICATIONS PACKAGE AND BID PHASE ASSISTANCE EFFORT.
3.3.2	Estimated Quantities Report Preparation	Report	0	Calculated Hours 0	0	NOT INCLUDED - Quantities Calculation effort included in Rdwy Activity
		Components	0			
3.4	Contract Maintenance and Project Documentation	LS	1	16	16	8HRS FOR CONTRACT SETUP + 2HRS PER MONTH FOR MAINTENANCE x 4 MONTHS
3.5	Value Engineering (Multi-Discipline Team) Review	LS	1	0	0	NOT INCLUDED
3.6	Prime Consultant Project Manager Meetings	LS	1	23	23	See listing below
3.7	Plans Update	LS	1	0	0	NOT INCLUDED

**Project Activity 3: General Tasks**

Task No.	Task	Units	No of Units	Hours/ Unit	Total Hours	Comments
3.8	Post Design Services	LS	1	0	0	NOT INCLUDED
3.9	Digital Delivery	LS	1	0	0	NOT INCLUDED
3.10	Risk Assessment Workshop	LS	1	0	0	NOT INCLUDED
3.11	Railroad, Transit, and/or Airport Coordination	LS	1	0	0	NOT INCLUDED
3.11.1	Aeronautical Evaluation	LS	1	0	0	NOT INCLUDED
3.12	Landscape and Existing Vegetation Coordination	LS	1	0	0	NOT INCLUDED
3.13	Other Project General Tasks	LS	1	0	0	NOT INCLUDED
<b>3. Project Common and Project General Tasks Total</b>					<b>51</b>	
<b>3.6 - List of Project Manager Meetings</b>						
		Units	No of Units	Hours/ Unit	Total Hours	Comments
Roadway Analysis		EA	2	0.5	1	meeting with FDOT D2 Design Engineer
Drainage		EA	1	1	1	Preapplication meeting with SJRWMD
Selective C&G		EA	0	0	0	
Utilities		EA	6	1	6	ATTENDANCE AT MEETINGS WITH UAO'S
Environmental		EA	0	0	0	
Structures		EA	0	0	0	
Signing & Pavement Marking		EA	0	0	0	
Signalization		EA	0	0	0	
Lighting		EA	0	0	0	
Landscape Architecture		EA	0	0	0	
Survey		EA	0	0	0	
Photogrammetry		EA	0	0	0	
ROW & Mapping		EA	0	0	0	
Terrestrial Mobile LiDAR		EA	0	0	0	
Architecture		EA	0	0	0	
Noise Barriers		EA	0	0	0	
ITS Analysis		EA	0	0	0	
Geotechnical		EA	0	0	0	
Progress Meetings		EA	4	3	12	BASED ON 4 PROGRESS MEETINGS, INCLUDES TRAVEL TIME
Phase Reviews		EA	0	0	0	
Field Reviews		EA	1	3	3	Site review following completion of survey
<b>Total Project Manager Meetings</b>			14		23	Total PM Meeting Hours carries to Task 3.6 above

Estimator: **4. Roadway Analysis Staff Hours** US 301 at Crawford Road Intersection Improvements  
999999-1-32-01

<b>Representing</b>	<b>Print Name</b>	<b>Signature / Date</b>
<b>FDOT District</b>		
<b>Consultant Name</b>		

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

Task No.	Task	Project Parameter			Staff Hours				Documentation
		Description	Units	Complexity	Calculated	Department	Consultant	Negotiated	
<b>What is the overall project complexity? (See Roadway Guidelines)</b>			<b>Low</b>						Provide documentation when negotiated hours differ from the calculated hours.
4.1	Typical Section Package	Cover	0		0	0	0	0	NOT INCLUDED
		Typical	0	2-Lane FS & Ramps	0	0	0	0	NOT INCLUDED
		Typical	0	2-Lane C & Multi-Lane FS	0	0	0	0	NOT INCLUDED
		Typical	0	LA w/ Barrier & Multi-Lane C	0	0	0	0	NOT INCLUDED
4.2	Pavement Type Selection Report	Report	0		0	0	0	0	NOT INCLUDED
4.3	Pavement Design Package	Report & Assembly	0	<b>Low</b>	0	0	0	0	NO PAVEMENT DESIGN REPORT INCLUDED
		Pavt Designs	1	Travel/Aux. Lanes	0	0	0	8	8 HOURS FOR ONE PAVEMENT DESIGN TO BE USED ON ALL AUXILIARY LANES
		Pavt Designs	0	Other Roads & Shoulders	0	0	0	0	NOT INCLUDED
4.4	Cross Slope Analysis (lanes and shoulders)	X-Slope Assessment	0.00	Undivided Roadway	0	0	0	0	NOT INCLUDED
		X-Slope Assessment	0.00	Divided Roadway	0	0	0	0	NOT INCLUDED
		Concepts for Corrections	0		0	0	0	0	NOT INCLUDED
4.5	Safety Analysis	HSM Assessment	0		0	0	0	0	NOT INCLUDED
		Crash Analysis	0		0	0	0	0	NOT INCLUDED
4.6	Design Analysis	Monitor Exist. Structures	0	<b>Low</b>	0	0	0	0	NOT INCLUDED
		Access Management	0.00	<b>Low</b>	0	0	0	0	NOT INCLUDED
4.7	Operational Analysis	Roundabout	0	1x1 Roundabout	0	0	0	0	NOT INCLUDED
		Roundabout	0	1x2 Roundabout	0	0	0	0	NOT INCLUDED
		Roundabout	0	2x2 Roundabout	0	0	0	0	NOT INCLUDED
4.8	Design Reports	RRR	0		0	0	0	0	NOT INCLUDED
		Other Reports	0		0	0	0	0	NOT INCLUDED
4.9	Design Variations and Exceptions	Variation Memo	0		0	0	0	0	NOT INCLUDED
		Formal Variation	0		0	0	0	0	NOT INCLUDED
		Design Exception	0		0	0	0	0	NOT INCLUDED
4.10	Master Design File Setup & Maintenance, Model Management Plan	LS	1	<b>Low</b>	30	0	0	30	EFFORT REQUIRED FOR INITIAL SETUP OF HORIZONTAL/VERTICAL MASTER DESIGN FILE AND MAINTENANCE OF THE DESIGN FILE THROUGH THE LIFE OF THE DESIGN. HOURS INCLUDE PLANNING AND DEVELOPMENT MANAGEMENT TO GET THE DESIGN FILE STARTED.
	Horizontal /Vertical Master Design Files	Mainline	0.40	<b>Low</b>	70	0	0	70	EFFORT REQUIRED FOR ESTABLISHING THE MASTER DESIGN FILES FOR HORIZONTAL AND VERTICAL GEOMETRY, DRAINAGE STRUCTURE FEATURES, UTILITIES, ETC. BASED ON PROJECT ELEMENTS TO BE DESIGNED IN 2D FOR PLAN SHEETS. INCLUDES ALL EFFORT TO UPDATE DESIGN BASED ON COMMENTS RECEIVED.
		Side Road & Ramps	0.00	<b>Low</b>	0	0	0	0	NOT INCLUDED

4.11	3D Modeling Development	Frontage Road	0.00	Low	0	0	0	0	NOT INCLUDED
		Mainline	0.00	Low	0	0	0	0	NO 3D MODEL TO BE DEVELOPED
		Side Road & Ramps	0.00	Low	0	0	0	0	NOT INCLUDED
		Frontage Road	0.00	Low	0	0	0	0	NOT INCLUDED
		AMG Files	0	Low	0	0	0	0	NOT INCLUDED
4.12	TTCP Analysis	LS	1	Low	20	0	0	10	INCLUDES ALL WORK NECESSARY TO DEVELOP A TTCP CONCEPT
	TTCP Master Design Files	Length (Phase-Miles)	0.00	Low	0	0	0	0	LEVEL I TTCP PLANS ANTICIPATED
		Pedestrian	0		0	0	0	0	NOT INCLUDED
	TTCP 3D Modeling (Isolated Locations)	Locations	0		0	0	0	0	NOT INCLUDED
4.13	Utility Data Collection & Analysis	LS	0	Low	0	0	0	0	SEE ACTIVITY 7.UTILITIES
4.14	Roadway Quantities for EQ Report	Length (Miles)	0.40	Low	3	0	0	5	INCLUDES ALL WORK REQUIRED TO DETERMINE AND VALIDATE ROADWAY PAY ITEMS AND QUANTITIES, AND INCLUDES ESTIMATING CONSTRUCTION DAYS.
		Interchanges Rest Areas	0		0	0	0	0	NOT INCLUDED
		Validation	0	Low	0	0	0	0	NOT INCLUDED
	TTCP Quantities for EQ Report	Major Phases	0	Simple	0	0	0	0	NOT INCLUDED
4.15	Cost Estimate	Engineer Estimate	2	Low	20	0	0	20	BASED ON 10 HOURS PER ESTIMATE, FOR 2 ESTIMATES. INCLUDES PREPARATION OF INITIAL COST ESTIMATE AND ONE UPDATE =10*2
		LRE Updates	0	Low	0	0	0	0	NOT INCLUDED
4.16	Technical or Modified Special Provisions	TSPs & MSPs	0		0	0	0	0	NOT INCLUDED
4.17	Other Roadway Tasks	Other Analysis			0	0	0	0	NOT INCLUDED
<b>Roadway Analysis Technical Subtotal</b>					<b>143</b>	<b>0</b>	<b>0</b>	<b>143</b>	
4.18	Quality Assurance/Quality Control	LS	1	5%	8	0	0	8	
4.19	Supervision	LS	1	5%	8	0	0	8	
4.20	Roadway Meetings (listed below)	Meetings	2		4	0	0	4	
		Travel Time			2	0	0	2	
4.21	Field Reviews (listed below)	LS			6	0	0	6	
<b>Roadway Analysis Non-Technical Subtotal</b>					<b>28</b>	<b>0</b>	<b>0</b>	<b>28</b>	
4.22	Coordination	LS	1	3%	6	0	0	6	
<b>4. Roadway Analysis Total</b>					<b>177</b>	<b>0</b>	<b>0</b>	<b>177</b>	

Estimator: **5. Roadway Plans Staff Hours** US 301 at Crawford Road Intersection Improvements  
999999-1-32-01

<b>Representing</b>	<b>Print Name</b>	<b>Signature / Date</b>
<b>FDOT District</b>		
<b>Consultant Name</b>		

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

Task No.	Task	Project Parameter			Staff Hours				Documentation
		Description	Units	Complexity	Calculated	Department	Consultant	Negotiated	
<b>What is the overall project complexity? (See Roadway Guidelines)</b>				<b>Below</b>					Provide documentation when negotiated hours differ from the calculated hours.
5.1	Key Sheet		1		4	0	0	4	4 HOURS TO CREATE KEY SHEET
	Signature Sheet		1		2	0	0	2	2 HOURS TO CREATE SIGNATURE SHEET
5.2	Typical Section Sheets	Typical Sections w/ CADD	0		0	0	0	0	
		Typical Sections w/o CADD	1		10	0	0	12	INCLUDES CREATING AND DELIVERING THE TYPICAL SECTION SHEETS AND STANDARD DETAILS. BASED ON 6 HOURS FOR 1 TYPICAL SECTION + 2 HOURS EACH FOR 3 SPECIAL DETAILS
		Partial Sections	1		3	0	0	3	3 HOURS TO CREATE A PARTIAL SECTION TO DETAIL THE SOUTHBOUND RIGHT TURN LANE
5.3	Cross Slope Correction Details	Pavement Segments	0		0	0	0	0	NOT INCLUDED
5.4	General Notes/Pay Item Notes		1	<b>Simple</b>	6	0	0	6	BASED ON 6 HOURS FOR PRIMARILY STANDARDIZED GENERAL AND PAY ITEMS NOTE SHEET
5.5	Project Layout/Model Management		0		0	0	0	0	NOT INCLUDED
5.6	Plan View (Plan Sheets)	Length (Miles)	0.40	<b>Below</b>	6	0	0	6	BASED ON 14 HOURS PER MILE FOR 0.4 MILES TO CREATE PLAN SHEETS
		Interchange	0		0	0	0	0	NOT INCLUDED
		Roundabout	0		0	0	0	0	NOT INCLUDED
5.7	Profile View (Plan/Profile Sheets)	Length (Miles)	0.00	Flush Shoulder	0	0	0	0	NOT INCLUDED
		Length (Miles)	0.00	Curbed	0	0	0	0	NOT INCLUDED
5.8	Special Profiles	Driveway Curb Return	0		0	0	0	0	NOT INCLUDED
		Intersection RR Xing	0		0	0	0	0	NOT INCLUDED
5.9	Sidewalk Profiles	Length (Miles)	0.00		0	0	0	0	NOT INCLUDED
5.10	Interchange Layout Sheet	Interchange	0	Standard 2 Levels	0	0	0	0	NOT INCLUDED
			0	Complex 3+ Levels	0	0	0	0	NOT INCLUDED
5.11	Details	Ramp Terminal	0		0	0	0	0	NOT INCLUDED
		Intersection Layout	0		0	0	0	0	NOT INCLUDED
		Special	0		0	0	0	0	NOT INCLUDED
5.12	Soil Survey Sheets		1		2	0	0	2	BASED ON 2 HOURS PER SOIL SURVEY SHEET. INCLUDES TIME TO REVIEW AND ADD SHEET INTO ROADWAY PLANS
5.13	Cross Sections	Alignments	0		0	0	0	20	BASED ON 0.5 HOURS PER CROSS SECTION, CUT EVERY 50 LF FOR 2000 LF = 0.5*(2000/50)
5.14	Temporary Traffic Control Plan	TTC Notes	1		4	0	0	4	TTCP NOTES SHEET WILL INCLUDES PHASING NOTES AND REFERENCE STANDARD PLANS
		Length (Miles)	0.00	<b>Below</b>	0	0	0	0	NOT INCLUDED
		Critical Cross Sections	0		0	0	0	0	NOT INCLUDED

		TTC Details	0		0	0	0	0	NOT INCLUDED
5.15	Utility Adjustment Sheets	Length (Miles)	0.00	Standard	0	0	0	0	NOT INCLUDED. UTILITY ADJUSTMENTS TO BE NOTED ON PLAN SHEETS
5.16	Project Control Sheets		1		4	0	0	4	BASED ON 4 HOURS. INCLUDES EFFORT TO COORDINATE WITH SURVEYOR TO ADD PROJECT CONTROL SHEET INTO ROADWAY PLANS.
5.17	Utility Verification Data (SUE)		1		4	0	0	4	BASED ON 4 HOURS. INCLUDES EFFORT TO CRETE AND DELIVER UTILITY VERIFICATION DATA (SUE).
<b>Roadway Plans Technical Hours Subtotal</b>					<b>45</b>	<b>0</b>	<b>0</b>	<b>67</b>	
5.18	Quality Assurance/Quality Control	%	1	5%	3	0	0	4	
5.19	Supervision	%	1	5%	3	0	0	4	
<b>Roadway Plans Total</b>					<b>51</b>	<b>0</b>	<b>0</b>	<b>75</b>	

Carries to Summary Tab

<b>Representing</b>	<b>Print Name</b>	<b>Signature / Date</b>
<b>FDOT District</b>		
<b>Consultant Name</b>		

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

Task No.	Task	Project Parameter			Staff Hours				Documentation <small>Provide documentation when negotiated hours differ from the calculated hours.</small>
		Description	Units	Complexity	Calculated	Department	Consultant	Negotiated	
6a.1	Base Clearance Analysis	Locations	0		0	0	0	0	
		Report	0		0	0	0	0	
6a.2	Hydroplaning Analysis	LS	0		0	0	0	0	
6a.3	Existing Permit Analysis	LS	0		0	0	0	0	
6a.4	Utility Conflict Matrix (for drainage structures)	LS	0		0	0	0	0	
6a.5	Noise Barrier Drainage Analysis	Wall Length (Miles)	0.00		0	0	0	0	
6a.6	Temporary Drainage Analysis	LS	0		0	0	0	0	
6a.7	Pond Siting Analysis and Report	Basins	0		0	0	0	0	
		Report	0		0	0	0	0	
6a.8	Analysis of Pipe Video Inspection Report	LS	0		0	0	0	0	
6a.9	Bridge Hydraulic Report (Canal Crossing or Ped Bridge)	Canal Xing or Ped Bridge	0		0	0	0	0	
	Bridge Hydraulic Report (Main Bridge, Non-Tidal)	w/o Relief Bridges	0		0	0	0	0	
		With Relief Bridges	0		0	0	0	0	
		No-Rise	0		0	0	0	0	
	Bridge Hydraulic Report (Main Bridge, Tidal)	w/o Relief Bridges	0		0	0	0	0	
		With Relief Bridges	0		0	0	0	0	
		No-Rise	0		0	0	0	0	
Wave Modeling	Wave Modeling	0		0	0	0	0		
6a.10	Design of Minor Cross Drains	Cross Drains	0	Simple	0	0	0	0	
			0	Standard	0	0	0	0	
			0	Complex	0	0	0	0	
	Design of Major Cross Drains	Cross Drains	0	Simple	0	0	0	0	
			0	Standard	0	0	0	0	
			0	Complex	0	0	0	0	
6a.11	Design of Ditches and Side Drains	Ditches (Miles)	0.00	Simple	0	0	0	0	
			0.46	Standard	10	0	0	10	INCLUDES 530' LEFT DITCH FOR SB RT TURN LANE, 1900' FOR NB ACCELERATION LANE IMPACTS TO THE MEDIAN DITCH = 2430'. RT DITCH REMAINS UNTOUCHED
			0.00	Complex	0	0	0	0	
		Side Drains	2		4	0	0	4	2 NB DRIVEWAY SIDE DRAINS - CHECK FOR CAPACITY

6a.12	Design of Stormwater Management Facility	Ponds	0	Simple	0	0	0	0	
			0	Standard	0	0	0	0	
			0	Complex	0	0	0	0	
		Cells	0		0	0	0	0	
6a.13	Design of Floodplain Compensation	Basins	0		0	0	0	0	
6a.14	Design of Storm Drains	Drainage Structures	1	Simple	3	0	0	3	BASED ON 3 HRS PER STRUCTURE FOR 1 STRUCTURE. INCLUDES RELOCATION OF ONE IMPACTED MEDIAN INLET
		Non-Standard Structures	0		0	0	0	0	
6a.15	Optional Culvert Material	Drainage Pipes	0		0	0	0	0	
6a.16	Design of Trench Drains	Each	0		0	0	0	0	
6a.17	Design of French Drain Systems	Cell	0		0	0	0	0	
	Evaluation of Existing French Drain Systems	Cell	0		0	0	0	0	
6a.18	Design of Drainage Wells	Wells	0		0	0	0	0	
6a.19	Stormwater Runoff Control Concept	Length (Miles)	0.00		0	0	0	0	
6a.20	Other Drainage Tasks	LS			4	0	0	4	REQUEST FOR PERMIT DETERMINATION LETTER TO FDOT AND SJRWMD
6a.21	Drainage Design Documentation Report	Report	0		0	0	0	0	
		Exhibits	0		0	0	0	0	
6a.22	Drainage Quantities for EQ Report	LS	0		0	0	0	0	
6a.23	Cost Estimate	Engineer Estimate	0		0	0	0	0	
		LRE Updates	0		0	0	0	0	
6a.24	Technical or Modified Special Provisions	TSPs & MSPs	0		0	0	0	0	
<b>Drainage Analysis Technical Subtotal</b>					<b>21</b>	<b>0</b>	<b>0</b>	<b>21</b>	
6a.25	Quality Assurance/Quality Control	LS	1	5%	2	0	0	1	
6a.26	Supervision	LS	1	5%	2	0	0	1	
6a.27	Drainage Meetings (listed below)	Meetings	1		2	0	0	2	
		Travel Time			0	0	0	0	
6a.28	Field Reviews (listed below)	LS			8	0	0	8	
<b>Drainage Analysis Non-Technical Subtotal</b>					<b>14</b>	<b>0</b>	<b>0</b>	<b>12</b>	
6a.29	Coordination	%	1	3%	2	0	0	1	
<b>Drainage Analysis Total</b>					<b>37</b>	<b>0</b>	<b>0</b>	<b>34</b>	

Carries to Summary Tab

Technical Meetings	# Meetings Designer	Travel Time (Hours)	# Meetings PM	Documentation
Base Clearance Water Elevation	0	0	0	
Pond Siting	0	0	0	
Agency	1	0	1	Preapplication meeting with SJRWMD
Local Governments (cities, counties)	0	0	0	
FDOT Drainage	0	0	0	
Utility Coordination	0	0	0	
Other Meetings	0	0	0	

<b>Subtotal Technical Meetings</b>	<b>1</b>	<b>0</b>	<b>1</b>
Progress Meetings (if required by FDOT)	0	0	
Phase Review Meetings	0	0	
<b>Total Drainage Meetings</b>	<b>1</b>	<b>0</b>	

<b>Field Reviews</b>	<b># of Staff</b>	<b>Site Time (per staff)</b>	<b>Travel Time (per staff)</b>	<b>Total Hours</b>
Field Review #1	2	1	3	8
Field Review #2	0	0	0	0
Field Review #3	0	0	0	0
Field Review #4	0	0	0	0
Plans-in-hand Field Review	0	0	0	0
<b>Total Field Review Hours</b>				<b>8</b>

**6b. Drainage Plans**

Estimator: <b>6b. Drainage Plans Staff Hours</b> <span style="float: right;">US 301 at Crawford Road Intersection Improvements 999999-1-32-01</span>									
Representing		Print Name						Signature / Date	
FDOT District									
Consultant Name									
<i>NOTE: Signature Block is optional, per District preference</i>									
Task No.	Task	Project Parameter			Staff Hours				Documentation
		Description	Units	Complexity	Calculated	Department	Consultant	Negotiated	Provide documentation when negotiated hours differ from the calculated hours.
6b.1	Drainage Map (Including Interchanges)	Length (Miles)	0.40	Simple	4	0	0	4	BASED ON SIMPLE COMPLEXITY. INCLUDES EFFORT TO CREATE AND INCLUDE DRAINAGE BASIN MAP IN ROADWAY PLANS
6b.2	Bridge Hydraulics Recommendation Sheets	Bridges	0		0	0	0	0	
6b.3	Drainage Structures	Drainage Structures	1		13	0	0	13	INCLUDES EFFORT FOR DRAINAGE PLAN VIEW AND CROSS SECTION, STRUCTURE INFORMATION
		Details	0		0	0	0	0	
6b.4	Lateral Ditches	Ditches	2	Standard	16	0	0	16	BASED ON 8 HOURS PER DITCH. INCLUDES HORIZONTAL AND VERTICAL REDESIGN OF DITCHES IMPACTED BY ROADWAY WIDENING
			0	Complex	0	0	0	0	
		Cross Section Alignments	0		0	0	0	0	
6b.5	Retention/Detention/Floodplain Compensation Ponds	Ponds	0	Standard	0	0	0	0	
			0	Complex	0	0	0	0	
		Cross Section Alignments	0		0	0	0	0	
<b>Drainage Plans Technical Subtotal</b>					<b>33</b>	<b>0</b>	<b>0</b>	<b>33</b>	
6b.6	Quality Assurance/Quality Control	%	1	5%	2	0	0	2	
6b.7	Supervision	%	1	5%	2	0	0	2	
<b>Drainage Plans Total</b>					<b>37</b>	<b>0</b>	<b>0</b>	<b>37</b>	

Carries to Summary Tab

**Project Activity 7: Utilities**

Estimator:

US 301 at Crawford Road Intersection Improvements  
999999-1-32-01

Representing	Print Name	Signature / Date
FDOT District		
Consultant Name		

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

Task No.	Task	Units	No of Units	Hours/ Unit	Total Hours	Comments
7.1	Utility Kickoff Meeting	LS	1	2	2	INCLUDES MEETING WITH THE COUNTY AND FDOT DISTRICT UTILITY OFFICE (DUO)
7.2	Identify Existing Utility Agency Owner(s)	LS	1	6	6	INCLUDES IDENTIFICATION OF ALL UTILITY AGENCY OWNERS (UAO'S) IN THE CORRIDOR
7.3	Make Utility Contacts	LS	1	15	15	BASED ON 3 HOURS PER UAO (5 UAO'S) = 5*3. INCLUDES EFFORT FOR MULTIPLE CONTACTS FOR COORDINATION
7.4	Exception Processing	LS	1	0	0	NOT INCLUDED
7.5	Preliminary Utility Meeting	LS	1	4	4	INCLUDES ATTENDANCE, PREPARATION, AND CLOSE OUT OF MEETING INTENDED TO REVIEW PROJECT WITH ALL AFFECTED UAO'S
7.6	Individual/Field Meetings	LS	1	0	0	NOT INCLUDED
7.7	Collect and Review Plans and Data from UAO(s)	LS	1	5	5	BASED ON 1 HOUR PER UAO * 5 UAO'S. INCLUDES REVIEW OF RECEIVED PLANS.
7.8	Subordination of Easements Coordination	LS	1	0	0	NOT INCLUDED
7.9	Utility Design Meeting	LS	1	6	6	INCLUDES PREPARATION TIME AND ATTENDANCE AT VIRTUAL MEETING WITH UAO'S TO ASSIST UAO'S IN IDENTIFYING AND RESOLVING DESIGN CONFLICTS.
7.10	Review Utility Markups & Work Schedules, and Processing of Schedules & Agreements	LS	1	0	0	NOT INCLUDED
7.11	Utility Coordination/Followup	LS	1	0	0	NOT INCLUDED
7.12	Utility Constructability Review	LS	1	0	0	NOT INCLUDED
7.13	Additional Utility Services	LS	1	0	0	NOT INCLUDED
7.14	Processing Utility Work by Highway Contractor (UWHC)	LS	1	0	0	NOT INCLUDED
7.15	Contract Plans to UAO(s)	LS	1	0	0	NOT INCLUDED
7.16	Certification/Close-Out	LS	1	0	0	NOT INCLUDED
7.17	Other Utilities	LS	1	0	0	NOT INCLUDED
<b>7. Utilities Total</b>					<b>38</b>	

**Project Activity 7: Utilities**

Technical Meetings	Units	No of Units	Hours/ Unit	Total Hours	Comments	PM Attendance at Meeting Required?	Number
Kickoff (see 7.1)	EA	2	1	2		Yes	2
Preliminary Meeting (see 7.5)	EA	2	2	4		Yes	2
Individual UAO Meetings (see 7.6)	EA	0	0	0			0
Field Meetings (see 7.6)	EA	0	0	0			0
Design Meeting (see 7.9)	EA	2	3	6		Yes	2
Other Meetings <i>(this is automatically added into Utilities Total (cell F27))</i>	EA	0	0	0			0
<b>Total Meetings</b>				<b>12</b>	<b>Total Project Manager Meetings (carries to Tab 3)</b>		<b>6</b>

Carries to Tab 3

**Project Activity 19: Signing and Pavement Marking Analysis**

Estimator:

US 301 at Crawford Road Intersection Improvements

999999-1-32-01

Representing	Print Name	Signature / Date
FDOT District		
Consultant Name		

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

Task No.	Task	Units	No. of Units	Hours/ Units	Total Hours	Comments
19.1	Traffic Data Analysis	LS	1	2	2	BASED ON 2 HOURS. INCLUDES EFFORT FOR REVIEW OF TURN LANE ANALYSIS PREVIOUSLY PERFORMED
19.2	No Passing Zone Study	LS	1	0	0	NOT INCLUDED
19.3	Signing and Pavement Marking Master Design File	LS	1	26	26	BASED ON 10 HOURS FOR SET UP AND 40 HOURS PER MILE. INCLUDES ALL EFFORT NEEDED TO CREATE MASTER DESIGN FILE PLUS DESIGN OF ALL SIGNING AND PAVEMENT MARKINGS =20+(40*0.4)
19.4	Multi-Post Sign Support Calculations	EA	1	0	0	NOT INCLUDED
19.5	Sign Panel Design Analysis	EA	1	0	0	NOT INCLUDED
19.6	Sign Lighting/Electrical Calculations	EA	1	0	0	NOT INCLUDED
19.7	S&PM Quantities for EQ Report	Length (Miles)	0.40	Calculated Hours	7	BASED ON 16 HOURS FOR THE FIRST MILE. INCLUDES ALL EFFORT REQUIRED TO DETERMINE SIGNING AND PAVEMENT MARKING PAY ITEMS AND QUANTITIES. =16*0.4
		Complexity	Low Range			
		Interchanges Rest Areas	0	7		
19.8	Cost Estimate	LS	2	3	6	BASED ON 3 HOURS PER ESTIMATE FOR 2 ESTIMATES. INCLUDES PREPARATION OF INITIAL COST ESTIMATE AND ONE UPDATE =3*2
19.9	Technical Special Provisions and Modified Special Provisions	LS	1	0	0	NOT INCLUDED
19.10	Other Signing and Pavement Marking	LS	1	0	0	NOT INCLUDED
<b>Signing and Pavement Marking Analysis Technical Subtotal</b>					<b>41</b>	
19.11	Field Reviews	LS	1	0	0	
19.12	Technical Meetings	LS	1	0	0	Meetings are listed below
19.13	Quality Assurance/Quality Control	LS	%	5%	2	
19.14	Independent Peer Review	LS	%	0%	0	
19.15	Supervision	LS	%	5%	2	
<b>Signing and Pavement Marking Analysis Nontechnical Subtotal</b>					<b>4</b>	
19.16	Coordination	LS	%	5%	2	
<b>19. Signing and Pavement Marking Analysis Total</b>					<b>47</b>	

Estimator: **20. Signing and Pavement Marking Plans Staff Hours** US 301 at Crawford Road Intersection Improvements  
999999-1-32-01

<b>Representing</b>	<b>Print Name</b>	<b>Signature / Date</b>
<b>FDOT District</b>		
<b>Consultant Name</b>		

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

Task No.	Task	Project Parameter			Staff Hours				Documentation
		Description	Units	Complexity	Calculated	Department	Consultant	Negotiated	Provide documentation when negotiated hours differ from the calculated hours.
20.1	Key Sheet		0		0	0	0	0	NOT NEEDED - SIGNING AND PAVEMENT MARKINGS INCLUDED IN ROADWAY PLAN SET
	Signature Sheet		0		0	0	0	0	NOT NEEDED - SIGNING AND PAVEMENT MARKINGS INCLUDED IN ROADWAY PLAN SET
20.2	General Notes/Pay Item Notes		0		0	0	0	0	NOT NEEDED - SIGNING AND PAVEMENT MARKINGS INCLUDED IN ROADWAY PLAN SET
20.3	Project Layout		0		0	0	0	0	NOT NEEDED - SIGNING AND PAVEMENT MARKINGS INCLUDED IN ROADWAY PLAN SET
20.4	Plan Sheet	Length (Miles)	0.40	Low	6	0	0	6	BASED ON LOW RANGE, 14 HOURS PER MILE = 0.4*14
		Sig Intersection Mid-Block Xing	0		0	0	0	0	NOT INCLUDED
		Interchange Roundabout	0		0	0	0	0	NOT INCLUDED
		Rest Area Toll Facility	0		0	0	0	0	NOT INCLUDED
20.5	Special Details	Details	0	Simple	0	0	0	0	NOT INCLUDED
			0	Standard	0	0	0	0	NOT INCLUDED
			0	Complex	0	0	0	0	NOT INCLUDED
20.6	Service Point Details	Service Point	0	Simple	0	0	0	0	NOT INCLUDED
			0	Standard	0	0	0	0	NOT INCLUDED
20.7	Guide Sign Data	Sign Panel	0		0	0	0	0	NOT INCLUDED
20.8	Cross Sections (Sign Installations)	Multi-post signs	0		0	0	0	0	NOT INCLUDED
			0	Standard	0	0	0	0	NOT INCLUDED
		Overhead Sign Structures	0	Complex	0	0	0	0	NOT INCLUDED
<b>S&amp;PM Plans Technical Hours Subtotal</b>					<b>6</b>	<b>0</b>	<b>0</b>	<b>6</b>	
20.9	Quality Assurance/Quality Control	%	1	5%	1	0	0	1	
20.10	Supervision	%	1	5%	1	0	0	1	
<b>S&amp;PM Plans Total</b>					<b>8</b>	<b>0</b>	<b>0</b>	<b>8</b>	

Carries to Summary Tab

DATE: May 29, 2024  
 PROJ. NO.: \_\_\_\_\_  
 DESC.: US Hwy 301 at Crawford Road  
Design Survey

**SAM SURVEYING AND MAPPING  
 TALLAHASSEE, FL**

REQUESTED BY: Jessica Novak/KHA  
 PREPARED BY: Fred Bermudez  
 ESTIMATE DUE BY: \_\_\_\_\_

**ESTIMATE**

TASK	Three (3) Person Survey Field Crew	Three (3) Person Survey Field Crew	Senior Office Technician	Office Technician	Survey Project Manager	Field Coordinator	SUE Project Manager	SUE Phase Manager	SUE Field Supervisor	SUE Field Technician I	DESCRIPTION/SCOPE	TOTAL	#	%
Deed Research				4	1						Research and Base map preparation	\$582.00	1	1%
Geodetic Control	2			1							Geodetic Primary Control	\$578.00	2	1%
Bench Levels	4			1							Vertical Control bench run	\$1,058.00	3	3%
Conventional Traverse	4			1	1						Horizontal Control Traverse	\$1,248.00	4	3%
Monumentation / Evidence Ties	10			4	1						ROW/Boundary monumentation ties	\$2,982.00	5	7%
Alignment												\$0.00	6	
Reference Points												\$0.00	7	
Aerial Targets/Photo ID Points												\$0.00	8	
Jurisdictional Line Survey												\$0.00	9	
Control Survey												\$0.00	10	
Topography Survey	30			24	3						TOPO data location and drafting	\$10,122.00	11	24%
UAS Orthophoto Capture												\$0.00	12	
HDS Data Capture		20	12								3DS laser scanning capture and registration	\$6,216.00	28	15%
HDS Data Reduction and Extraction			16	16	2						3DS point-cloud data extraction	\$3,836.00	13	9%
Tree Survey												\$0.00	14	
Side Street Survey												\$0.00	15	
Utilities Survey	10			6	1						Locate above ground/visible utilities	\$3,178.00	16	8%
SUE Services							2	2	30	30	SUE LVL-B Designates and Location	\$2.00	17	0%
Hydrographic Survey												\$0.00	18	
MHWL/OHWL Survey												\$0.00	19	
Supplemental Survey												\$0.00	20	
Property/R/W/Easement Staking												\$0.00	21	
Construction Staking												\$0.00	22	
Geotechnical Staking												\$0.00	23	
Property/Easment Sketch & Description												\$0.00	24	
Boundary Survey drawings												\$0.00	25	
Record Plat preparation												\$0.00	26	
Data Reduction/Computations/Analyse												\$0.00	27	
Project Administration/Management					2	2						\$610.00	29	1%
Travel	12	6										\$4,320.00	30	10%
Total Hours	72	26	28	57	11	2	2	2	30	30	Total Hours	196		
Hourly Rate	\$240.00	\$240.00	\$118.00	\$98.00	\$190.00	\$115.00	\$200.00	\$150.00	\$120.00	\$65.00			10	
Total Labor and Overhead	\$17,280.00	\$6,240.00	\$3,304.00	\$5,586.00	\$2,090.00	\$230.00	\$400.00	\$300.00	\$3,600.00	\$1,950.00			8.00	9.80
Consultants											Total Survey fees	\$34,732.00		
Direct Expenses											Total SUE fees	\$6,700.00	31	16%
Per diem											Total direct expenses	\$0.00	32	
Lodging									\$65.00	\$65.00	Personell	2	\$59	\$150
									\$160.00	\$160.00				
											Total Per diem and Lodging	\$0.00	33	
<b>TOTAL</b>	<b>\$17,280.00</b>	<b>\$6,240.00</b>	<b>\$3,304.00</b>	<b>\$5,586.00</b>	<b>\$2,090.00</b>	<b>\$230.00</b>	<b>\$400.00</b>	<b>\$300.00</b>	<b>\$3,825.00</b>	<b>\$2,175.00</b>	<b>TOTAL PROJECT FEES</b>	<b>\$41,430.00</b>		

PROJECT DATA

Acreage	per Ac.	Perimeter	2,200	\$ per LF	\$18.83	miles		mi. per day	0.00	\$ per mile	FALSE
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**GEOTECHNICAL FEE ESTIMATE**

2394 St. Johns Bluff Rd, S Ste 200  
 Jacksonville, Florida 32246  
 tel (904) 641-1993

**Geotechnical Exploration**

**Crawford Road \_ US 301 Intersection Improvements**

**Nassau County, Florida**

Item Description	Unit	Number of Units		Cost / Unit		Estimated Cost
<b>Field Investigation</b>						
Truck Mount Mobilization 0-30 Miles	ea.	1	ea.	\$580.00	/ea.	\$580.00
<b>Roadway and Shared Path</b>						
18 Truck/Mud Bug Auger/Wash Boring 0-50 Ft	ft.	90	ft.	\$12.00	/ft.	\$1,080.00
4 Truck/Mud Bug Auger/Wash Boring 0-50 Ft	ft.	80	ft.	\$12.00	/ft.	\$960.00
Asphalt Pavement Coring – 4” Diameter with Base Check	ea.	2	ea.	\$170.00	/ea.	\$340.00
Asphalt Pavement Patching	ea.	2	ea.	\$55.00	/ea.	\$110.00
Boring Layout/Utility Clearance/Coordination/Engineer Intern	hr.	6	day	\$135.00	/day	\$810.00
MOT	day	2	day	\$2,150.00	/day	\$4,300.00
<b>Subtotal:</b>						<b>\$8,180.00</b>
<b>Laboratory Testing</b>						
Lab Moisture Content of Soils (ASTM D2216. AASHTO T127)	ea.	11	ea.	\$22.00	/ea.	\$242.00
Lab Organic Content in Soils (Ignition or Combustion Method)	ea.	11	ea.	\$52.00	/ea.	\$572.00
Lab Material Finer Than No.200 Sieve	ea.	11	ea.	\$48.00	/ea.	\$528.00
Lab Atterberg Limits Test - ASTM D423, D424, AASHTO T90, ASTM D43	ea.	6	ea.	\$115.00	/ea.	\$690.00
Environmental Corrosion Series Test	ea.	2	ea.	\$235.00	/ea.	\$470.00
<b>Subtotal:</b>						<b>\$2,502.00</b>
<b>Engineering/Support Services</b>						
Project Manager	hr.	2	hr.	\$230.00	/hr.	\$460.00
Senior Geotechnical Engineer	hr.	4	hr.	\$220.00	/hr.	\$880.00
Geotechnical Engineer	hr.	9	hr.	\$181.33	/hr.	\$1,631.97
Engineer Intern	hr.	10	hr.	\$135.00	/hr.	\$1,350.00
Drafter or CADD Operator	hr.	8	hr.	\$100.00	/hr.	\$800.00
Clerical	hr.	2	hr.	\$79.36	/hr.	\$158.72
<b>Subtotal:</b>						<b>\$5,280.69</b>
<b>TOTAL (Estimated):</b>						<b>\$15,962.69</b>