

**WORK AUTHORIZATION # CM1863-WA01
 NASSAU COUNTY
 BOARD OF COUNTY COMMISSIONERS
 CONTINUING CONTRACT FOR PROFESSIONAL ENGINEERING SERVICES
 RFQ/BID NO. NC11-021**

Consultant:	England-Thims & Miller, Inc.
Contract Number:	CM1863
Contact Name:	Matthew Maggiore, P.E., Vice President
Contact Number:	904-265-3202 Mobile: 904-699-1401
Email:	MaggioreM@etminc.com

CURRENT WORK AUTHORIZATION			
Project Short Title: Design services for the Bay Road Widening and Resurfacing – Phase II			
		CONTRACT OVERVIEW	
Date Submitted	01-09-13	Total of Previous Authorizations	\$0.00
Amount	187,247.46	This Work Authorization	\$187,247.46
Scheduled Completion	210 calendar days from NTP	Current Contract Total	\$187,247.46

This Work Authorization is to the AGREEMENT between Nassau County and the Consultant known as the Continuing Contract for Professional Engineering Services for Nassau County, Florida, dated May 16, 2012. The services to be provided under this Work Authorization are as follows:

ARTICLE 1. Services Described as:

England-Thims & Miller, Inc will provide final construction documents and all required permits for the milling, resurfacing and widening of Bay Road – Phase II pursuant to scope of services dated January 9, 2013, attached hereto as Exhibit “A”.

ARTICLE 2. Time Schedule

All elements contained in this scope shall be satisfactorily completed and submitted to the County within 210 calendar days of the NTP from the County, excepting Bid Phase and Post Design services which shall be performed in a timely manner, as required and prior to billing for those services.

ARTICLE 3. Budget

England-Thims & Miller, Inc. will perform the scope of services outlined herein for a lump sum fee of \$187,247.46.

Article 4. Other Provisions

The Services covered by this Work Authorization will be performed in accordance with the provisions set forth in the AGREEMENT referenced above and any of its attachments

or schedules. This Work Authorization will become a part of the referenced AGREEMENT when executed by both parties.

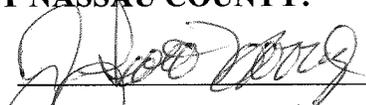
In presenting this Work Authorization, Consultant agrees that:

Unless detailed herein, all drawings, data, electronic files and other information required for this Work Authorization has been accepted by Consultant. Specifically, all electronic files have been reviewed and accepted for the purposes of this Work assignment. Any additional information, including detailed scope of services are attached.

AGREED TO BY:

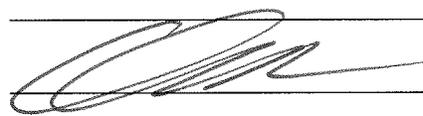
BY: 
Print Name: ROBERT MIZELL
Title: VICE PRESIDENT
Date: 2.18.2013

RECOMMENDED AND APPROVED BY NASSAU COUNTY:

Director of Public Works : 

Board of County Commissioners, Chair: 

Ex-Officio Clerk: _____

County Attorney:  MES 02.13.13

APPROVED by the BOARD OF COUNTY COMMISSIONERS, the 11th day of February, 2013

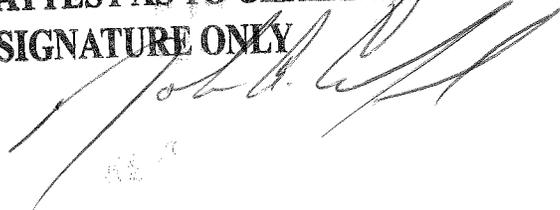
ATTEST AS TO CHAIRMAN'S SIGNATURE ONLY


EXHIBIT A
SCOPE OF SERVICES
ENGINEERING SERVICES
FOR
BAY ROAD WIDENING AND RESURFACING – PHASE II
NASSAU COUNTY, FLORIDA
JANUARY 9, 2013

A. PROJECT DESCRIPTION

1. The intent of this project is to provide final construction documents and all required permits for the milling, resurfacing and widening of approximately 3.2 miles of the existing two lanes of Bay Road.
2. The existing road is approximately 18-20 feet in width. The intent of the roadway widening is to provide 2 – 11 foot wide travels lanes.
3. The resurfacing will include cross-slope correction to bring it within the tolerances set by the *Manual of Uniform Minimum Standards for Design, Construction and Maintenance for Streets and Highways* (commonly known as the “Florida Greenbook”) of 1.5% min to 4.0% max.
4. If the pavement widening requires altering the front slope of the roadside swale, a maximum 3:1 slope will be provided.
5. The project limits begin at the east end of the “Bay Road Widening and Resurfacing Project” – Phase 1 (Just west of the intersection of Bay Rd. and Conner-Nelson Rd.) and extend to the intersection with County Rd. 108.

B. PROJECT SCOPE

1. Data Collection
 - a. Geotechnical - Twenty (20) pavement cores (six feet deep) will be performed within the existing roadway. Thirty-five (35) auger borings (six foot deep) will be performed in the roadway widening areas. Laboratory classification testing and index properly testing will be performed as necessary on samples obtained from the borings. An engineering report will be prepared that will include a review of available project information, a discussion and results of the conducted field and laboratory services, a discussion of site and subsurface conditions, and recommendations for pavement rehabilitation and widening.
 - b. Survey - The consultant shall provide survey services within the projects limits as follows:
 - i. Establish Horizontal and Vertical Control.
 - ii. Establish Baseline of Survey.
 - iii. Establish project Benchmarks at 1,000' intervals.
 - iv. Design Survey within project limits will include cross sections at 300' intervals showing existing pavement and roadside swales (does not include finding or re-establishing the R/W lines).
 - v. Provide survey data by electronic files.(Microstation *.dgn file format)

2. Project General Tasks

- a. Notice to Proceed Meeting - The Consultant team shall prepare for and attend one Notice to Proceed Meeting with Nassau County staff.
- b. Project Status Meetings - The appropriate members of the Consulting team shall attend up to three progress meetings with the County staff to discuss project progress and status, upcoming events and activities. The purpose of these meetings is to maintain clear communication between the County and the Project Team. The Consultant shall prepare and distribute meeting minutes following each of these meetings.
- c. Other Coordination Meetings - The appropriate members of the Consulting team shall attend other additional meetings with adjacent agencies and/or their consultants as appropriate.
- d. Project Schedule - The Consultant shall prepare and submit a project schedule for this project identifying major tasks, their duration and task relationships. The schedule shall be updated monthly and at other appropriate intervals.
- e. Invoices/Progress Report - Invoices shall be prepared in the format prescribed by the County. Progress reports shall be submitted with each monthly invoice.
- f. Quality Assurance/Quality Control - The Consultant shall designate appropriate staff to conduct Quality Assurance/Quality Control (QA/QC) reviews of all work products prior to submittals to the County.

3. Roadway Analysis and Plans

The Consultant will perform the necessary roadway analyses and prepare construction plan sheets, notes and details for a complete set of roadway construction documents to convey the intent and scope of the project for the purposes of construction. The consultant will develop a pavement design based on the existing traffic data provided by the County and pavement cores obtained as part of this scope. Included herein are also the analyses, plans and design details necessary for a safe and effective Maintenance of Traffic (MOT) Plan to move vehicular traffic during all phases of construction. The design will be prepared in accordance with the FDOT Green Book, County Standards and the FDOT Design Standards for Design, Construction, Maintenance and Utility Operations on the State Highway System (Topic No. 625-010-003), latest editions, as applicable. This task will also include the preparation of Standard Specifications and Special Provisions.

4. Drainage Analysis

The Consultant shall maintain the existing systems and adjust ditch bottom locations only where side slope construction has interfered with the existing flow patterns and ditch grades. No Drainage analysis shall be provided.

The Consultant will meet with the SJRWMD to verify the assumption that this is project will be classified as a safety improvement and that it will be exempt from stormwater treatment requirements. Stormwater treatment calculations and permitting are not included in this scope of services.

5. Utility Coordination

The Consultant shall be responsible for coordinating all design with the affected utility companies in order to minimize utility conflicts. The following services will be included:

- a. Utility Coordination - The Consultant shall coordinate with the known private and public utility companies within the project corridor and obtain plans of their existing facilities within the project limits. The consultant shall re-contact these utilities and submit 60% design plans that include all known existing utilities. The consultant shall make a final contact with these utilities to submit 90% plans that show all existing and proposed utility relocations.
- b. Subsurface Utility Exploration - A visual inspection has been made along the anticipated project construction limits. There is no evidence of underground utilities, therefore no SUE work is anticipated or included in this scope of work.

6. Signing and Pavement Marking Analyses and Plans

The Consultant will perform the necessary signing and pavement marking analyses and prepare notes and details to convey the intent and scope of the project for the purposes of construction. A No-Passing Zone analysis will be completed and the appropriate No-Passing Zones will be depicted on the plans.

7. Signalization Analyses and Plans

Not included herein.

8. Permitting

The Consultant will be responsible for obtaining the following permits:

- a. The CONSULTANT shall provide the information necessary to submit the Notice of Intent to Use the Generic Permit for Stormwater Discharge from Large and Small Construction Activities within 60 days of NTP.
- b. St. Johns River Water Management District
 - i. Attend and facilitate a pre-design meeting within 30 days of NTP.
 - ii. The consultant shall submit for a formal exemption from the stormwater permitting requirements of St. Johns River Water Management District under Chapter 40C-42.0225 (5)(c) F.A.C. within 60 days of NTP.
 - iii. No jurisdictional wetland mitigation or other such permitting issues are anticipated for this project. Should any such ecological science services be required of the Consultant, they will be in addition to this scope and fee.
 - iv. The consultant shall be responsible for responding to any requests for additional information regarding the above permit submittals.

9. Roadway Lighting Analyses and Plans

Not included herein.

10. Landscape Analyses and Plans

Not included herein.

11. Right of Way Mapping

Not included herein.

12. Construction Cost Estimate

To be provided at 90% and final plan stages.

13. Bid Phase Services

The Consultant will prepare a bid package including front end documents, special provisions and specifications for the bidding of this project. The consultant will also formally respond to questions during the bidding phase of the project and prepare a recommendation of the lowest qualified bidder based on the county prepared bid tabulations.

14. Post Design Services

The Consultant will provide post design services to include shop drawing review and approval, response to contractor RAI's, as-built review and certification and filing of a N.O.T. upon completion of the project.

C. PROJECT DELIVERABLES

The Consultant shall contact the County prior to making a submission to verify the number of copies to submit. Up to five draft copies of the construction plans and required supporting documents (reports, design calculations, letters, memos, etc.) will be submitted at the 60%, 90% and final stages of design.

D. PROJECT SCHEDULE

All elements contained in this scope shall be satisfactorily completed and submitted to the County within 210 calendar days of the NTP from the County, excepting Bid Phase and Post Design services which shall be performed in a timely manner, as required and prior to billing for those services.

E. COMPENSATION

Consultant will perform the scope of services outlined herein for a lump sum fee of \$187,247.46.

F. COUNTY RESPONSIBILITIES

1. Documents- the County shall provide access to any available plans, maps and other pertinent information under its control essential to the satisfactory completion of the work indicated herein.
2. Reviews- the County will provide timely reviews of The Consultant's work in accordance with the schedule agreed upon between the County and The Consultant. Each review period by the county shall be two weeks, at which time all comments will be forwarded to The Consultant.

G. ASSUMPTIONS

1. This effort included in this scope is not intended to meet the FDOT or the Federal NEPA process.
2. This effort does not include any Contamination investigations or analysis. If areas are identified during the design phase requiring further analysis, they will be addressed separately.
3. Utility relocation design services are not included in this scope of work. If relocations and/or upgrades are identified as necessary by utility agencies, the relocation design work will be addressed separately.
4. Wetland mitigation and/or threatened and endangered species mitigation efforts and/or designs are not included with this scope. If necessary, efforts will be addressed separately.
5. Existing guardrail within the project limits will remain. Calculations to reset guardrail are not included in this scope.
6. The County will be responsible for all agency permitting and/or application fees. These costs are not part of The Consultant's scope and proposal.

ESTIMATE OF WORK EFFORT AND COST - PRIME CONSULTANT

Name of Project: Bay Road - Phase 2
 County: Nassau
 FPN: 123456-1-52-01
 FAP No.: 54321

Consultant Name: England-Thims & Miller, Inc.
 Consultant No.: enter consultants proj. number
 Date: 1/9/2013
 Estimator: insert name

Staff Classification	Total Staff Hours From 'SH Summary -	Principal	Project Manager	Senior Engineer	Engineer	Designer	Cadd Technician	Staff Classification 7	Staff Classification 8	Staff Classification 9	Staff Classification 10	Staff Classification 11	Staff Classification 12	SH By Activity	Salary Cost By Activity	Average Rate Per Task
		\$200.00	\$161.21	\$172.87	\$113.35	\$92.51	\$79.05	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00		
3. Project General and Project Common Tasks	325	16	49	65	81	114	0	0	0	0	0	0	0	325	\$42,063	\$129.43
4. Roadway Analysis	354	18	53	71	89	123	0	0	0	0	0	0	0	354	\$45,885	\$129.62
5. Roadway Plans	217	11	33	43	54	76	0	0	0	0	0	0	0	217	\$28,105	\$129.52
6. Drainage Analysis	0	0	0	0	0	0	0	0	0	0	0	0	0	0	\$0	#DIV/0!
7. Utilities	31	2	5	6	8	10	0	0	0	0	0	0	0	31	\$4,075	\$131.46
8. Environmental Permits, Compliance & Clearances	52	3	8	10	13	18	0	0	0	0	0	0	0	52	\$6,757	\$129.94
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	104	5	16	21	26	36	0	0	0	0	0	0	0	104	\$13,487	\$129.68
20. Signing & Pavement Marking Plans	53	3	8	11	13	18	0	0	0	0	0	0	0	53	\$6,930	\$130.75
21. Signalization Analysis	0	0	0	0	0	0	0	0	0	0	0	0	0	0	\$0	#DIV/0!
22. Signalization Plans	0	0	0	0	0	0	0	0	0	0	0	0	0	0	\$0	#DIV/0!
23. Lighting Analysis	0	0	0	0	0	0	0	0	0	0	0	0	0	0	\$0	#DIV/0!
24. Lighting Plans	0	0	0	0	0	0	0	0	0	0	0	0	0	0	\$0	#DIV/0!
25. Landscape Architecture Analysis	0	0	0	0	0	0	0	0	0	0	0	0	0	0	\$0	#DIV/0!
26. Landscape Architecture Plans	0	0	0	0	0	0	0	0	0	0	0	0	0	0	\$0	#DIV/0!
27. Survey (Field & Office Support)	0	0	0	0	0	0	0	0	0	0	0	0	0	0	\$0	#DIV/0!
28. Photogrammetry	0	0	0	0	0	0	0	0	0	0	0	0	0	0	\$0	#DIV/0!
29. Mapping	0	0	0	0	0	0	0	0	0	0	0	0	0	0	\$0	#DIV/0!
30. Geotechnical	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!
Total Staff Hours	1,136	58	172	227	284	395	0	0	0	0	0	0	0	1,136		
Total Staff Cost		\$11,600.00	\$27,728.12	\$39,241.49	\$32,191.40	\$36,541.45	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00		\$147,302.46	\$129.67

Check = \$147,302.46

Survey Field Days by Subconsultant
 4 - Person Crew:

SALARY RELATED COSTS:	\$147,302.46
OVERHEAD:	\$0.00
OPERATING MARGIN:	\$0.00
FCCM (Facilities Capital Cost Money):	\$0.00
EXPENSES:	\$0.00
Survey (Field - if by Prime) 0 4-man crew days @ \$ - / day	\$0.00
SUBTOTAL ESTIMATED FEE:	\$147,302.46
Subconsultant: R.M. Angas Associates, Inc. (Survey)	\$20,000.00
Subconsultant: Ellis & Associates (Geotechnical)	\$9,945.00
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:	\$177,247.46
Optional Services - Add'l Survey /Geotechnical (if needed and approved by Nassau County)	\$10,000.00
GRAND TOTAL ESTIMATED FEE:	\$187,247.46

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

Project Activity 3: Project Common and Project General Tasks

Estimator:

Bay Road - Phase 2

Updated 080818

123456-1-52-01

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	Prepare 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	MPO Meetings	LS	1	0	0	Not Included.
3.1.12	Web Site	LS	1	0	0	Not Included.
3.1 Public Involvement Subtotal					0	
3.2	Joint Project Agreements	EA	0	0	0	Not Included.
3.3	Specifications Package Preparation	LS	1	120	120	Includes Bid Phase Services
3.4	Contract Maintenance	LS	1	37	37	16 hrs set up + 3hrs/month * 7 months
3.5	Value Engineering (Multi-Discipline Team) Review	LS	1	0	0	Not Included.
3.6	Prime Consultant Project Manager Meetings	LS	1	8	8	See listing below
3.7	Plans Update	LS	1	0	0	Not Included.

Project Activity 3: Project Common and Project General Tasks

Task No.	Task	Units	No of Units	Hours/ Unit	Total Hours	Comments
3.8	Post Design Services	LS	1	160	160	
3.9	Electronic Delivery	LS	1	0	0	Not Included.
3.10	Other Project General Tasks	LS	1	0	0	Not Included.
3. Project Common and Project General Tasks Total					325	

3.6 - List of Project Manager Meetings

Roadway Analysis	EA	0	0	0
Drainage	EA	0	0	0
Utilities	EA	0	0	0
Environmental	EA	0	0	0
Structures	EA	0	0	0
Signing & Pavement Marking	EA	0	0	0
Signalization	EA	0	0	0
Lighting	EA	0	0	0
Landscape Architecture	EA	0	0	0
Survey	EA	0	0	0
Photogrammetry	EA	0	0	0
ROW & Mapping	EA	0	0	0
Geotechnical	EA	0	0	0
Architecture	EA	0	0	0
Noise Barriers	EA	0	0	0
ITS Analysis	EA	0	0	0
Progress Meetings	EA	4	2	8
Phase Reviews	EA	0	0	0
Field Reviews	EA	0	0	0

Total Project Manager Meetings		4		8
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Notes:

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

Project Activity 4: Roadway Analysis

Estimator:

Bay Road - Phase 2
123456-1-52-01

Task No.	Task	Units	No of Units	Hours/ Unit	Total Hours	Comments
4.1	Typical Section Package	LS	1	16	16	
4.2	Pavement Design Package	LS	1	0	0	To be provided by subconsultant
4.3	Access Management	LS	1	0	0	Not Included.
4.4	Horizontal/Vertical Master Design Files	LS	1	120	120	
4.5	Cross Section Design Files	LS	1	48	48	16 hrs/mile
4.6	Traffic Control Analysis	LS	1	16	16	
4.7	Master TCP Design Files	LS	1	0	0	Not Included.
4.8	Design Variations and Exceptions	LS	1	0	0	Not Included.
4.9	Design Report	LS	1	0	0	Not Included.
4.10	Computation Book & Quantities	LS	1	80	80	
4.11	Cost Estimate	LS	1	24	24	2 at 12 hrs each
4.12	Technical Special Provisions	LS	1	0	0	Not Included.
4.13	Other Roadway Analysis	LS	1	0	0	Not Included.
Roadway Analysis Technical Subtotal					304	
4.14	Field Reviews	LS	3	4	12	
4.15	Technical Meetings	LS	1	8	8	Meetings are listed below
4.16	Quality Assurance/Quality Control	LS	%	5%	15	
4.17	Independent Peer Review	LS	%	0%	0	Not Included.
4.18	Supervision	LS	%	5%	15	
Roadway Analysis Nontechnical Subtotal					50	
4.19	Coordination	LS	%	0%	0	
4. Roadway Analysis Total					354	

Project Activity 4: Roadway Analysis

Task No.	Task	Units	No of Units	Hours/ Unit	Total Hours	Comments
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Technical Meetings

	Typical Section	EA	0	0	0	
	Pavement	EA	0	0	0	
	Access Management	EA	0	0	0	
	15% Line and Grade	EA	0	0	0	
	Driveways	EA	0	0	0	
	Local Governments (cities, counties, MPO)	EA	4	2	8	
	Work Zone Traffic Control	EA	0	0	0	
	30/60/90/100% Comment Review Meeting:	EA	0	0	0	
	Other Meetings	EA	0	0	0	
	Subtotal Technical Meetings				8	
	Progress Meetings (if required by FDOT)	EA	0	0	0	
	Phase Review Meetings	EA	0	0	0	

Total Meetings **8**

Carries to 4.15

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

Project Activity 5: Roadway Plans

Estimator:

Bay Road - Phase 2
123456-1-52-01

Task No.	Task	Scale	Units	No. of Units	Hours/ Unit	No. of Sheets	Total Hours	Comments
5.1	Key Sheet		Sheet	1	8	1	8	
5.2	Summary of Pay Items Including Quantity Input		Sheet	0	12	0	0	
5.3	Drainage Map		Sheet	0	0	0	0	Not Included.
5.4	Interchange Drainage Map		Sheet	0	0	0	0	Not Included.
5.5	Typical Section Sheets		Sheet	1	12	1	12	
5.6	General Notes/Pay Item Notes		Sheet	1	8	1	8	
5.7	Summary of Quantities		Sheet	0	0	0	0	Not Included.
5.8	Box Culvert Data Sheet		Sheet	0	0	0	0	Not Included.
5.9	Bridge Hydraulics Recommendation Sheets		Sheet	0	0	0	0	Not Included.
5.10	Summary of Drainage Structures		Sheet	0	0	0	0	Not Included.
5.11	Optional Pipe/Culvert Material		Sheet	0	0	0	0	Not Included.
5.12	Project Layout		Sheet	0	0	0	0	Not Included.
5.13	Plan/Profile Sheet		Sheet	15	4	15	60	Not Included.
5.14	Profile Sheet		Sheet	0	0	0	0	Not Included.
5.15	Plan Sheet		Sheet	15	4	15	60	11x17 sheets, 40 scale, double stacked
5.16	Special Profile		Sheet	0	0	0	0	Not Included.
5.17	Back of Sidewalk Profile Sheet		Sheet	0	0	0	0	Not Included.
5.18	Interchange Layout Sheet		Sheet	0	0	0	0	Not Included.
5.19	Ramp Terminal Details (Plan View)		Sheet	0	0	0	0	Not Included.
5.20	Intersection Layout Details		Sheet	0	0	0	0	Not Included.

Project Activity 5: Roadway Plans

Task No.	Task	Scale	Units	No. of Units	Hours/ Unit	No. of Sheets	Total Hours	Comments
5.21	Miscellaneous Detail Sheets		Sheet	0	0	0	0	Not Included.
5.22	Drainage Structure Sheet (Per Structure)		EA	0	0		0	Not Included.
5.23	Miscellaneous Drainage Detail Sheets		Sheet	0	0	0	0	Not Included.
5.24	Lateral Ditch Plan/Profile		Sheet	0	0	0	0	Not Included.
5.25	Lateral Ditch Cross Sections		EA	0	0		0	Not Included.
5.26	Retention/Detention Ponds Detail Sheet		Sheet	0	0	0	0	Not Included.
5.27	Retention Pond Cross Sections		EA	0	0		0	Not Included.
5.28	Cross-Section Pattern Sheet		Sheet	0	0	0	0	Not Included.
5.29	Roadway Soil Survey Sheet		Sheet	1	1	1	1	
5.30	Cross Sections		EA	57	0.25		14	
5.31	Traffic Control Plan Sheets		Sheet	0	0	0	0	Not Included.
5.32	Traffic Control Cross Section Sheets		EA	0	0		0	Not Included.
5.33	Traffic Control Detail Sheets		Sheet	3	6	3	18	
5.34	Utility Adjustment Sheets		Sheet	0	0	0	0	Not Included.
5.35	Selective Clearing and Grubbing		Sheet	0	0	0	0	Not Included.
5.36	Erosion Control Plan		Sheet	15	2	15	30	
5.37	SWPPP		Sheet	3	2	3	6	
5.38	Project Control Network Sheet		Sheet	0	0	0	0	Not Included.
5.39	Environmental Detail Sheets		LS	0	0		0	Not Included.
5.40	Utility Verification Sheet (SUE Data)		Sheet	0	0	0	0	Not Included.
Roadway Plans Technical Subtotal						55	217	

Project Activity 5: Roadway Plans

Task No.	Task	Scale	Units	No. of Units	Hours/ Unit	No. of Sheets	Total Hours	Comments
5.41	Quality Assurance/Quality Control		LS	%	0%		0	
5.42	Supervision		LS	%	0%		0	
5. Roadway Plans Total						55	217	

Project Activity 7: Utilities

Estimator:

Bay Road - Phase 2

123456-1-52-01

Task No.	Task	Units	No of Units	Hours/ Unit	Total Hours	Comments
7.1	Kickoff Meeting	LS	1	0	0	Not Included.
7.2	Identify Existing UAO(s)	LS	1	4	4	
7.3	Make Utility Contacts	LS	1	9	9	Assume 3 Utilites, 3 contacts each
7.4	Exception Coordination	LS	1	0	0	Not Included.
7.5	Preliminary Utility Meeting	LS	1	0	0	Not Included.
7.6	Individual/Field Meetings	LS	1	0	0	Not Included.
7.7	Collect and Review Plans and Data from UAO(s)	LS	1	6	6	
7.8	Subordination of Easements Coordination	LS	1	0	0	Not Included.
7.9	Utility Design Meeting	LS	1	0	0	Not Included.
7.10	Review Utility Markups and Work Schedules, and Processing of Schedules and Agreements	LS	1	0	0	Not Included.
7.11	Utility Coordination/Followup	LS	1	12	12	Assume 3 Utilites, 4 hrs each
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.
7. Utilities Total					31	

Project Activity 7: Utilities

Technical Meetings

Kickoff	EA	0
Preliminary Meeting	EA	0
Individual UAO Meetings	EA	0
Field Meetings	EA	0
Design Meeting	EA	0
Other Meetings	EA	0

Total Technical Meetings 0

Project Activity 8: Environmental Permits, Compliance and Clearances

Estimator:
Updated 080818

Bay Road - Phase 2
123456-1-52-01

Task No.	Task	Units	No. of Units	Hours/ Units	Total Hours	Comments
8.1	Preliminary Project Research	LS	1	4	4	
8.2	Complete Permit Involvement Form	LS	1	0	0	Not Included.
8.3	Establish Wetland Jurisdictional Lines and Assessments	LS	1	0	0	Not Included.
8.4	Agency Verification of Wetland Data	LS	1	0	0	Not Included.
8.5	Complete And Submit All Required Permit Applications	LS	1	40	40	Verification of SJRWMD Exemption / Coord.
8.6	Prepare Dredge and Fill Sketches	LS	1	0	0	Not Included.
8.7	Prepare USCG Permit Sketches	LS	1	0	0	Not Included.
8.8	Prepare Water Management District Right-of-Way Occupancy Sketches	LS	1	0	0	Not Included.
8.9	Prepare Coastal Construction Control Line (CCCL) Permit Application	LS	1	0	0	Not Included.
8.10	Prepare Tree Permit Information	LS	1	0	0	Not Included.
8.11	Mitigation Coordination and Meetings	LS	1	0	0	Not Included.
8.12	Mitigation Design	LS	1	0	0	Not Included.
8.13	Environmental Clearances and Technical Support	LS	1	0	0	Not Included.
8.14	Environmental Clearances and Reevaluations	LS	1	0	0	Not Included.
8.15	Other Environmental Permits	LS	1	0	0	Not Included.
Environmental Permits, Compliance and Clearances Technical Subtotal					44	
8.16	Technical Meetings	LS	1	4	4	Meetings are listed below
8.17	Quality Assurance/Quality Control	LS	%	5%	2	
8.18	Supervision	LS	%	5%	2	
Environmental Permits, Compliance and Clearances Nontechnical Subtotal					8	
8.19	Coordination	LS	%	0%	0	
8. Environmental Permits, Compliance and Clearances Total					52	

Project Activity 8: Environmental Permits, Compliance and Clearances

Task No.	Task	Units	No. of Units	Hours/ Units	Total Hours	Comments
Technical Meetings						
	WMD	EA	0	0	0	
	ACOE	EA	0	0	0	
	USCG	EA	0	0	0	
	USFWS	EA	0	0	0	
	FFWCC	EA	0	0	0	
	FDOT	EA	0	0	0	
	Other Meetings	EA	0	0	0	
	Subtotal Technical Meetings				0	
	Progress Meetings	EA	0	0	0	
	Phase Review Meetings	EA	0	0	0	
	Total Meetings				0	

Carries to 8.16

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

Project Activity 19: Signing and Pavement Marking Analysis

Estimator:

Bay Road - Phase 2
123456-1-52-01

Task No.	Task	Units	No. of Units	Hours/ Units	Total Hours	Comments
19.1	Traffic Data Analysis	LS	1	0	0	Not Included.
19.2	No Passing Zone Study	LS	1	40	40	Includes fieldwork and analysis.
19.3	Reference and Master Design File	LS	1	40	40	
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	Quantities	LS	1	8	8	
19.8	Computation Book	LS	1	0	0	Not Included.
19.9	Cost Estimate	LS	1	0	0	Included in Roadway Cost Estimate
19.10	Technical Special Provisions	LS	1	0	0	Not Included.
19.11	Other Signing and Pavement Marking	LS	1	0	0	Not Included.
Signing and Pavement Marking Analysis Technical Subtotal					88	
19.12	Field Reviews	LS	1	8	8	
19.13	Technical Meetings	LS	1	0	0	Meetings are listed below
19.14	Quality Assurance/Quality Control	LS	%	5%	4	
19.15	Independent Peer Review	LS	%	0%	0	Not Included.
19.16	Supervision	LS	%	5%	4	
Signing and Pavement Marking Analysis Nontechnical Subtotal					16	
19.17	Coordination	LS	%	0%	0	
19. Signing and Pavement Marking Analysis Total					104	

Project Activity 19: Signing and Pavement Marking Analysis

Technical Meetings				
Sign Panel Design	EA	0	0	0
Queue Length Analysis	EA	0	0	0
Local Governments (cities, counties)	EA	0	0	0
Other Meetings	EA	0	0	0
Subtotal Technical Meetings				0
Progress Meetings	EA	0	0	0
Phase Review Meetings	EA	0	0	0
Total Meetings				0

Carries to 19.13

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

Project Activity 20: Signing and Pavement Marking Plans

Estimator:

Bay Road - Phase 2
123456-1-52-01

Task No.	Task	Scale	Units	No of Units	Hours/ Unit	No. of Sheets	Total Hours	Comments
20.1	Key Sheet		Sheet	0	0	0	0	Not Included.
20.2	Summary of Pay Items Including CES Input		LS	1	0		0	Included on Roadway Summary of Pay Items
20.3	Tabulation of Quantities		Sheet	0	0	0	0	Not Included.
20.4	General Notes/Pay Item Notes		Sheet	0	0	0	0	Included on Roadway General Notes
20.5	Project Layout		Sheet	0	0	0	0	Not Included.
20.6	Plan Sheet		Sheet	15	3	15	45	11x17, 40 scale, double stacked
20.7	Typical Details		EA	2	2		4	
20.8	Guide Sign Worksheet(s)		EA	0	0		0	Not Included.
20.9	Traffic Monitoring Site		EA	0	0		0	Not Included.
20.10	Cross Sections		EA	0	0		0	Not Included.
20.11	Special Service Point Details		EA	0	0		0	Not Included.
20.12	Special Details		LS	1	0		0	Not Included.
20.13	Interim Standards		LS	1	0		0	Not Included.
Signing and Pavement Marking Plans Technical Subtotal						15	49	
20.14	Quality Assurance/Quality Control		LS	%	5%		2	
20.15	Supervision		LS	%	5%		2	
20. Signing and Pavement Marking Plans Total						15	53	