

**CITY OF KEY WEST**  
**TASK ORDER NO. 2004-02**  
**ENGINEERING SERVICES PROJECT NO. EN 1406**

**FINANCE DEPARTMENT NO. EN 1406**  
**SOUTH ROOSEVELT BOULEVARD**  
**BY**  
**METRIC ENGINEERING, INC.**  
**(CONSULTANT)**

**A. Scope of Services**

Services shall be provided by the Consultant following the terms and conditions in the agreement between the City and Consultant dated April 7<sup>th</sup>, 2004. This Task Order shall become a supplemental to and part of the Agreement. The Scope of Services is attached entitled Scope of Supplemental Services for South Roosevelt Blvd.

**B. Time Completion**

Work under this Task Order will begin upon written authorization from the City to Proceed. The estimated work effort including workdays and expenses is shown in the attached statement entitled Task Order No. Metric Engineering – 2004-02 Scope of Services

**C. Compensation**

Professional fees for this task order will be as provided in the Agreement as Lump Sum billed per percentage of completion. The amount will not exceed \$60,287.92.

**D. Acceptance**

By signature each party accepts the terms of this Task Order Metric Engineering \_\_\_\_\_

Metric Engineering, Inc.

City of Key West

By: Robert Linares, PE

\_\_\_\_\_

Title: Sr. Vice President

\_\_\_\_\_

Date: \_\_\_\_\_

Date: \_\_\_\_\_

**Task Order No Metric Engineering 2004-02  
SCOPE OF SUPPLEMENTAL SERVICES  
SOUTH ROOSEVELT BOULEVARD  
CITY OF KEY WEST  
PROJECT NUMBER NO. EN 1406**

**A. Scope of Services**

The City of Key West is proposing to reconstruct South Roosevelt Boulevard (State Road A1A) from Smathers Beach to a distance of approximately 400 feet east where it transitions to an existing reconstructed project that was completed by the Florida Department of Transportation.

**Project Limits** – The Project limits will be from Station 44+00 to Station 49+00 or any point that provides for a logical transition. This Project as it is funded by FDOT. The project will improve the existing roadbed, drainage, seawall, lighting and markings.

The project will be implemented as follows:

- Phase I – The Consultant will prepare preliminary plans and submit for City/FDOT approval.
- Phase II, Plans Production - Once the preliminary plans have been approved MEI will proceed to the production of final construction documents. Phase Reviews at 60%, 90% and 100% completed plans will occur. The review entities will be the City and FDOT per the Local Agency program requirements.
- Phase III, Post Design – Post Design services will be part of the larger project. Work effort will be negotiated after the submittal of the 100% contract documents.
- Phase IV, construction – The Consultant will provide construction inspection services or construction monitoring for the City. This effort will be separately negotiated with the City as part of the larger project.

**LAP Coordination & Funding** – The Consultant will provide Local Agency Program coordination between the City and FDOT throughout the design and the construction of this project. The Consultant will prepare the necessary forms for FDOT for FDOT approval and programming of the funds in the FDOT system as the project evolves.

## Contract Documents

**Roadway Plans** - Roadway Plans will be prepared in FDOT format at 1"=40'.

**Drainage & Permitting** - All drainage analysis and plans will be performed per FDOT standards. The Consultant will prepare all permit applications, coordinate with the permitting agencies and if needed submit directly to the agencies. Permitting agencies include:

- South Florida Water Management District
- Department of Environmental & Resource Management
- Army Corps of Engineers
- United States Coast Guard.

All of the agency permitting and plan review fees will be included in the consultant's fee proposal.

**Landscaping** - Landscaping will be provided only as mitigation for construction impacts to existing landscaping.

**Seawall Plans** - Roadway plans will include seawall construction plans and coastal analysis.

**Lighting** - The Consultant will prepare lighting plans per FDOT standards. There are no specific requirements for lighting as long as they are turtle friendly.

**Signalization** - This work under the LAP agreement does not include any signalization work.

**Utility Services** - The Consultant will provide total utility coordination services for the City. The Consultant expects to coordinate the effort with eight (8) separate utility companies.

**Public Involvement** - The Consultant will prepare and execute a Community Awareness Plan (CAP) for this project in accordance with FOOT criteria. It is anticipated that a Level III cap will be required for this project. This may be included in the larger project.

**Survey Services** - The original Survey will be updated (IF REQUIRED) as well. An estimated fee is included in the proposal for this effort.

**Geotechnical Services** - This effort includes obtaining soil tests, percolation tests for drainage and borings for the sea walls.

**Subsurface Utility Services** - Since previous data is available, we estimated that few vacuum excavation locations may be required.

## **B. Cost Estimates and Reports**

The consultant will prepare construction cost estimates, time of completion and cash flow time line projections, engineering costs, inspection costs, and permitting costs

## **C. Deliverables will consist of:**

1. Roadway Plans in electronic format (Micro-station & Auto-CADD)
2. Commission presentation in electronic format (Power Point)
3. Project Technical Specifications

**Phase reviews-** The consultant will provide 20 copies of plans and documents to the City and FDOT for reviews. The Consultant will coordinate the FDOT reviews for the City.

## **D. Time of Completion**

This Task Order is estimated to be completed within 25 weeks from the written Notice to Proceed (NTP) date. It is understood that permitting issues may take longer. The final submittal must be complete by within 245 days unless a revised task is agreed to by the City.

## **E. Compensation**

Compensation for Supplemental Agreement will not exceed \$60,287.92 based on the attached fee proposal. Since this Task will be performed with the FDOT LAP funds, the proposed fee has been approved by the FDOT.

### Scope of Supplemental Services for South Roosevelt Boulevard

The general scope of the supplemental services for South Roosevelt Boulevard include the preparation of legal description and parcel sketches to transfer ownership of the promenade/sidewalk from the City of Key West to FDOT ownership.

Below is a detailed list of additional services required for the above mentioned modifications, separated by component.

#### **27.01 & 27.02 Horizontal and Vertical Control**

Primary control points will be set and established. Horizontal Control will be established on the Florida State Plane Coordinate System, East Zone, and North American Datum (NAD) of 1983 / 1990 Adjustment. Vertical Control will be established on NAVD 1988. Includes analysis and processing of all field-collected data.

Note: PNC sheets will be prepared as part of the Right of Way Control Survey and Maps Scope.

#### **27.03 Survey Baseline**

The Historic survey baseline and right of ways will be established as per Department Right of Way Maps, platted and / or dedicated rights of way for South Roosevelt and all intersecting side-streets. Survey baselines will be placed in Topo file, PNC sheet and the survey database. A Geopack .GPK file will be submitted as part of the survey data-base. The beginning and end stations of the Survey baseline will be set along with all PI's, PC's and PT's.

#### **27.19 Sectional Survey & 27.20 Subdivision Locations for Survey Baseline & Right of Way Lines**

Perform field locations of section corners, 1/4-section corners, and fractional corners as well as block closures, monument lines, etc., in order to establish the Miami – Dade County or public right of way lines and in order to establish survey baseline, right of way lines and complete the right of way control survey.

#### **Right of Way Mapping Scope of Services:**

Right of Way Control survey and Right of Way Maps will be prepared in accordance with all applicable DEPARTMENT Manuals, Procedures, Handbooks, and Florida Statutes. The following tasks will be performed and submitted:

##### **Master CADD File**

- 29.1 Alignment
- 29.2 Section and 1/4 Section Lines
- 29.3 Subdivisions / Property Lines
- 29.4 Existing Right of Way
- 29.6 Parent Tract Properties / Existing Takes

##### **Sheet Files**

- 29.10 Control Survey Cover Sheet
- 29.11 Control Survey Key Sheet
- 29.12 Control Survey Detail Sheet
- 29.13 R/W Map Cover Sheet
- 29.14 R/W Map Survey Key Sheet
- 29.15 R/W Map Survey Detail Sheet

**29.22 Parcel Sketches**

Prepare parcel sketches for Promenade Parcel.

**29.29 Legal Descriptions**

Prepare legal descriptions to Promenade Parcel.

**29.28 Title Search Report**

Review title searches and prepare report.

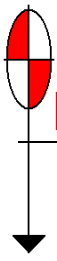
*Note: Title searches to be performed and provided by FDOT.*

**Notes:**

1. Right of Way Control and Right of Way Map detail sheet will be prepared in 1:40 scale.
2. If additional tasks are required beyond the aforementioned items, MGV will provide an additional fee estimate.
3. A surveyors report will be prepared; signed and sealed copies will be provided for all design survey tasks.

**Cost and Man-hour breakdown**

Please refer to FDOT Project Activity 27: Survey Man-Hour spreadsheet for our man-hour breakdown and to the FDOT Fee sheet attached here-to.



Revised August 26, 2015

Metric Engineering, Inc.  
13940 SW 136<sup>th</sup> Street  
Suite 200  
Miami, FL 33186

Project: South Roosevelt Blvd. from Sta. 41+00 to Sta. 154+00 / (US-1)  
Monroe County Florida  
FM #: 250548-2

Dear Mr. Manuel A. Sauleda

Below is our scope of services for the Design Survey of the above referenced project. This scope items are based on Design Survey criteria and are derived from the FDOT Project Activity 27 and 29: Survey Man-Hour spread sheet, attached hereto. In addition to the specific scope items, all work shall be accomplished in accordance with the criteria established by the Departments Highway Field Specifications, Survey Handbook (Survey Procedure Topic No. 550-030-101a) (Chapter 20, sec 23 (3)(a), F.S.), CADD Production Criteria Handbook and must comply with the Minimum Technical Standards for Land Surveyors Rule 5J-17 F.A.C., Florida Statute 472.027, the latest's addition of the District VI Survey Standards and Guidelines and any special instructions.

**27.01 & 27.02 Horizontal and Vertical Control**

Primary control points will be set and established. Horizontal Control will be established on the Florida State Plane Coordinate System, East Zone, and North American Datum (NAD) of 1983 / 1990 Adjustment. Vertical Control will be established on NAVD 1988. Includes analysis and processing of all field-collected data.

Note: PNC sheets will be prepared as part of the Right of Way Control Survey and Maps Scope.

**27.03 Survey Baseline**

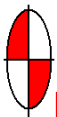
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*Note: Title searches to be performed and provided by FDOT.*

**Notes:**

1. Right of Way Control and Right of Way Map detail sheet will be prepared in 1:40 scale.
2. If additional tasks are required beyond the aforementioned items, MGVA will provide an additional fee estimate.
3. A surveyors report will be prepared; signed and sealed copies will be provided for all design survey tasks.

**Cost and Man-hour breakdown**

Please refer to FDOT Project Activity 27: Survey Man-Hour spreadsheet for our man-hour breakdown and to the FDOT Fee sheet attached here-to.

We look forward to providing our services and please contact me if you have any questions or require additional information.

Sincerely,  
Manuel G. Vera & Associates, Inc.

Manuel G. Vera Jr. PSM



**Project Information Sheet**

Financial Project Identification Number: 250548-2 Federal Aid Project Identification Number: \_\_\_\_\_

Name of Prime / Subconsultant: Manuel G. Vera & Assoc., Inc. County: Monroe

Project Description: South Roosevelt Blvd. from Sta. 41+00 to Sta. 154+00 (US-1)

Begin Milepost: \_\_\_\_\_ End Milepost: \_\_\_\_\_ Project Length: 2.1 Miles

Number of Lanes: \_\_\_\_\_ Typical Section: Urban (Urban / Rural / Int.) Lane Configuration: \_\_\_\_\_ (Divided / Undivided)

Project Type: Major (Minor / Major) Access Management Classification: \_\_\_\_\_ Roadway Classification: \_\_\_\_\_ (NHS/FIHS/Off Sys.):

CAP Level: \_\_\_\_\_ TCP Level: \_\_\_\_\_ Survey Level: \_\_\_\_\_

Variances: 1. \_\_\_\_\_ Exceptions: 1. \_\_\_\_\_  
 2. \_\_\_\_\_ 2. \_\_\_\_\_  
 3. \_\_\_\_\_ 3. \_\_\_\_\_  
 4. \_\_\_\_\_ 4. \_\_\_\_\_  
 5. \_\_\_\_\_ 5. \_\_\_\_\_

Proposed Design Contract Time: \_\_\_\_\_ months

**Project Preliminary Design Specifics:**

Roadway	_____	<===Roadway Plan Type (Plan/Profile, Plan Only, etc.)
Drainage	_____	<===Number of Drainage Structures
Utility Coordination	_____	<===Number of Effected Utilities
Structures - Bridges	_____	<=== Bridge Structures? (Y/N, number)
Structures - Retaining Walls	_____	<=== Retaining Walls? (Y/N, number)
Structures - Misc. Structures	_____	<=== Miscellaneous Structures? (Y/N, number)
Permits	_____	<===Permits Required (WMD, ACOE, Local Permits, etc.)
Signing and Pavement Marking	_____	<===Signing & Pavement Marking Plans Required? (Y / N)
Signalization Intersections	_____	<===Number of Intersections Requiring Signals:
Non-Signalized Intersections	_____	<===Number of Non-Signalized Intersections
Traffic Control	_____	<===Number of phases requiring detailed phase drawings
Landscaping	_____	<===Landscaping Plans Required? (Y / N)
Right-of-Way	_____	<===Right Of Way Plans Required? (Y / N)
Lighting	_____	<===Lighting Plans Required? (Y / N)
Architecture	_____	<===Architectural Plans Required? (Y / N)
Geotech	_____	<===Geotechnical Consultant Services Required? (Y / N)
Survey	_____	<===Survey Consultant Services Required? (Y / N)
JPAs	_____	<===JPAs Prepared by Consultant? (Y / N, if so how many?)
Mitigation Plan	_____	<===Mitigation Plans Required? (Y / N)
Noise Barriers	_____	<===Noise Walls Plans Required? (Y / N)
Specifications Package	_____	<===Specifications Package to be Prepared by Consultant? (Y / N)

**ESTIMATE OF WORK EFFORT AND COST - SUBCONSULTANT**

Name of Project: South Roosevelt Blvd. from Sta. 41+00 to Sta. 154+00 (US-1)  
 County: Monroe  
 FPN: 250548-2  
 FAP No.:

Consultant Name: Manuel G. Vera & Assoc., Inc.  
 Consultant No.:  
 Date: 8/26/2015  
 Estimator: Manny Vera Jr.

Staff Classification	Total Staff Hours From "SH Summary Firm"	Senior Surveyor	Surveyor Mapper	Survey Intern	Cadd/Comp Technician	Survey Technician	Staff Classification 6	Staff Classification 7	Staff Classification 8	Staff Classification 9	Staff Classification 10	Staff Classification 11	Staff Classification 12	SH By Activity	Salary Cost By Activity	Average Rate Per Task
3. Project General and Project Common Tasks	0	0	0	0	0	0	0	0	0	0	0	0	0	0	\$0	#DIV/0!
4. Roadway Analysis	0	0	0	0	0	0	0	0	0	0	0	0	0	0	\$0	#DIV/0!
5. Roadway Plans	0	0	0	0	0	0	0	0	0	0	0	0	0	0	\$0	#DIV/0!
6. Drainage Analysis	0	0	0	0	0	0	0	0	0	0	0	0	0	0	\$0	#DIV/0!
7. Utilities	0	0	0	0	0	0	0	0	0	0	0	0	0	0	\$0	#DIV/0!
8. Environmental Permits, Compliance & Clearances	0	0	0	0	0	0	0	0	0	0	0	0	0	0	\$0	#DIV/0!
9. Structures - Misc. Tasks, 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	0	0	0	0	0	0	0	0	0	0	0	0	0	0	\$0	#DIV/0!
20. Signing & Pavement Marking Plans	0	0	0	0	0	0	0	0	0	0	0	0	0	0	\$0	#DIV/0!
21. Signalization Analysis	0	0	0	0	0	0	0	0	0	0	0	0	0	0	\$0	#DIV/0!
22. Signalization Plans	0	0	0	0	0	0	0	0	0	0	0	0	0	0	\$0	#DIV/0!
23. Lighting Analysis	0	0	0	0	0	0	0	0	0	0	0	0	0	0	\$0	#DIV/0!
24. Lighting Plans	0	0	0	0	0	0	0	0	0	0	0	0	0	0	\$0	#DIV/0!
25. Landscape Architecture Analysis	0	0	0	0	0	0	0	0	0	0	0	0	0	0	\$0	#DIV/0!
26. Landscape Architecture Plans	0	0	0	0	0	0	0	0	0	0	0	0	0	0	\$0	#DIV/0!
27. Survey (Field & Office Support)	125	15	25	25	46	14	0	0	0	0	0	0	0	125	\$4,303	\$34.43
28. Photogrammetry	0	0	0	0	0	0	0	0	0	0	0	0	0	0	\$0	#DIV/0!
29. Mapping	381	35	70	100	110	66	0	0	0	0	0	0	0	381	\$12,547	\$32.93
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!
<b>Total Staff Hours</b>	506	50	95	125	156	80	0	0	0	0	0	0	0	506		
<b>Total Staff Cost</b>		\$2,600.00	\$3,990.00	\$4,000.00	\$4,820.40	\$1,440.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00		\$16,850.40	\$33.30

Check = \$16,850.40

SALARY RELATED COSTS:		\$16,850.40
OVERHEAD:	121.13%	\$20,410.89
OPERATING MARGIN:	32.00%	\$5,392.13
FCCM (Facilities Capital Cost Money):	0.424%	\$71.45
EXPENSES:	15.41%	\$2,596.65
<b>SUBTOTAL ESTIMATED FEE:</b>		<b>\$45,321.52</b>
Survey (Field)	15 3-man crew da \$ 997.76 / day	\$14,966.40
Survey (Field)	0 4-man crew da \$ - / day	\$0.00
<b>SUBTOTAL ESTIMATED FEE:</b>		<b>\$60,287.92</b>
Optional Services		\$0.00
<b>GRAND TOTAL ESTIMATED FEE:</b>		<b>\$60,287.92</b>

Notes:

- This sheet to be used by Subconsultant to calculate its fee.

**Project Activity 27: Survey**  
**M.G. Vera Assoc., Inc**

December 21, 2012

Estimator: Manuel G. Vera Jr.  
 FINAL 06/08/10

South Roosevelt Blvd. from Sta. 41+00 to Sta. 154+00 (US-1)  
 250548-2

Task No.	Task	Units	No of Units	Field Crew Days/Unit	Crew Days	Field Support Hours / Crew Days	Field Support Hours	Office Support Hours / Crew Days	Office Support Hours	Comments
27.01	Horizontal Project Control (HPC)									
	2-Lane Roadway	Mile			0.00		0.00		0.00	Establish or recover HPNC, for the purpose of establishing horizontal control on the Florida State Plane Coordinate System 83/90.
	Multi-lane Roadway	Mile	1.00	2.00	2.00	1.00	2.00	4.00	8.00	
	Interstate	Mile			0.00		0.00		0.00	
27.02	Vertical PC / Bench Line									
	2-Lane Roadway	Mile			0.00		0.00		0.00	Establish, verify and / or recover existing Vertical Project Network Control (VPNC), for the purpose of establishing vertical control on NAVD 1988 vertical datum.
	Multi-lane Roadway	Mile	1.00	1.00	1.00	1.00	1.00	4.00	4.00	
	Interstate	Mile			0.00		0.00		0.00	
27.03	Alignment and Existing R/W Lines									Establish Historic survey baseline as per Department Right of Way Maps. The beginning and end stations of the Survey baseline will be set along with all PI's, PC's and PT's.
		Mile	2.10	1.00	2.10	1.00	2.10	6.00	12.60	
27.04	Aerial Targets			Units/Day						
	2-Lane Roadway	EA			0.00		0.00		0.00	
	Multi-lane Roadway	EA			0.00		0.00		0.00	
	Interstate	EA			0.00		0.00		0.00	
27.05	Reference Points	"A"		Units/Day						
	2-Lane Roadway	EA			0.00		0.00		0.00	
	Multi-lane Roadway	EA			0.00		0.00		0.00	
	Interstate	EA			0.00		0.00		0.00	
	Reference Points	"B"		Units/Day						
	Non Alignment Points/Approximate	EA			0.00		0.00		0.00	
27.06	Topography/DTM (3D)									
		Mile			0.00		0.00		0.00	
27.07	Planimetric (2D)									
		Mile			0.00		0.00		0.00	
27.08	Roadway Cross-Sections/Profiles									
		Mile			0.00		0.00		0.00	
27.09	Side Street Surveys									
27.10	Underground Utilities									
	Designates	Mile/Site			0.00		0.00		0.00	
	Locates	Point			0.00		0.00		0.00	
	Survey		0%	0.00	0.00		0.00		0.00	
27.11	Outfall Survey									
		Mile			0.00		0.00		0.00	

**Project Activity 27: Survey**  
**M.G. Vera Assoc., Inc**

December 21, 2012

Task No.	Task	Units	No of Units	Field Crew Days/Unit	Crew Days	Field Support Hours / Crew Days	Field Support Hours	Office Support Hours / Crew Days	Office Support Hours	Comments
27.12	Drainage Survey			Units/Day						
		EA			0.00		0.00		0.00	
27.13	Bridge Survey									
	Minor / Major	EA			0.00		0.00		0.00	
27.14	Channel Survey									
		EA			0.00		0.00		0.00	
27.15	Pond Site Survey									
		EA			0.00		0.00		0.00	
27.16	Mitigation Survey									
		Mile			0.00		0.00		0.00	
27.17	Jurisdiction Line Survey									
		Mile			0.00		0.00		0.00	
27.18	Geotechnical Support			Units/Day						
		EA			0.00		0.00		0.00	
27.19	Sectional / Grant Survey									
		Corner			0.00		0.00		0.00	Locate section comers as needed in order to establish survey baseline.
		Mile			0.00		0.00		0.00	
27.20	Subdivision Location									
		Block	13	0.5	6.50	1.00	6.50	4.00	26.00	Survey subdivisions as needed in order to establish survey baseline.
27.21	Maintained R/W									
		Mile			0.00		0.00		0.00	
27.22	Boundary Survey									
		EA			0.00		0.00		0.00	
27.23	Water Boundary Survey									
		EA			0.00		0.00		0.00	
27.24	R/W Staking / Baseline Line									
		EA			0.00		0.00		0.00	
		Mile			0.00		0.00		0.00	
27.25	R/W Monumentation									
		Point			0.00		0.00		0.00	

**Project Activity 27: Survey**  
**M.G. Vera Assoc., Inc**

December 21, 2012

Task No.	Task	Units	No of Units	Field Crew Days/Unit	Crew Days	Field Support Hours / Crew Days	Field Support Hours	Office Support Hours / Crew Days	Office Support Hours	Comments
27.26	Line Cutting				0.00					
		Mile								
27.27	Work Zone Safety		14	0.125	1.75					
27.28	Miscellaneous Surveys									Travel time
			1.00	2	2.00	1.00	2.00	4.00	8.00	
<b>Survey Subtotal</b>				<b>Crew Days</b>	<b>15</b>	<b>Field Support Hours</b>	<b>14</b>	<b>Office Support Hours</b>	<b>59</b>	
27.29	Supplemental Surveys			15	0		0		0	THE % FOR SUPPLEMENTAL WILL BE DETERMINED AT NEGOTIATIONS. THIS ITEM CAN ONLY BE USED IF AUTHORIZED IN WRITING BY THE DISTRICT SURVEYOR
27.30	Document Research	Units	16.00						16	
27.31	Field Reviews	Units	8.00						8	
27.32	Technical Meetings	LS	18.00						18	
27.33	Quality Control / Quality Assurance	LS						5%	3	
27.34	Supervision	LS						5%	6	
27.35	Coordination	LS						3%	2	
<b>27. Survey Total</b>				<b>Crew Days</b>	<b>15</b>	<b>Field Support Hours</b>	<b>14</b>	<b>Office Support Hours</b>	<b>111</b>	

<b>Technical Meetings</b>				
Kickoff Meeting with FDOT	EA	1	2	2
Baseline Approval Review	EA	0	0	0
Network Control Review	EA	0	0	0
Vertical Control Review	EA	0	0	0
Local Governments (cities, counties)	EA	0	0	0
Final Submittal Review	EA	0	0	0
Other Meetings	EA	0	0	0
<b>Subtotal Technical Meetings</b>				<b>2</b>
Progress Meetings	EA	8	2	16
Phase Review Meetings	EA	0	0	0
<b>Total Meetings</b>				<b>18</b>

Carries to 27.32

SPLS =  
 PLS =  
 Office Support =  
 Total Hours = 125

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

**Project Activity 29: Mapping**

Estimator: Manuel G. Vera Jr.

South Roosevelt Blvd. (Sta. 10+00 to Sta. 52+00)  
FM# 250548-4

Task No.	Task	Units	No. of Units	Hours/ Unit	No. of Sheets	Total Hours	Comments
<b>Master CADD File</b>							
29.1	Alignment	Mile	2.1	4	0	8	
29.2	Section and 1/4 Section Lines	Section	0	0		0	
29.3	Subdivisions / Property Lines	EA	10	2		20	
29.4	Existing R/W	Mile	2.1	2	0	4	
29.5	Topography	Mile	0	0		0	
29.6	Parent Tract Properties/Existing Easements	Parcel	10	2		20	
29.7	Proposed R/W Requirements	Parcel	0	0		0	
29.8	Limits of Construction	Mile	0	0		0	
29.9	Jurisdictional/Agency Lines	Linear Mile	0	0		0	
<b>Sheet Files</b>							
29.10	Control Survey Cover Sheet	Sheet	1	10	1	10	
29.11	Control Survey Key Sheet	Sheet	2	10	2	20	
29.12	Control Survey Detail Sheet	Sheet	10	12	10	120	
29.13	R/W Map Cover Sheet	Sheet	1	10	1	10	
29.14	R/W Map Key Sheet	Sheet	2	10	2	20	
29.15	R/W Map Detail Sheet	Sheet	10	8	10	80	
29.16	Maintenance Map Cover Sheet	Sheet	0	0		0	
29.17	Maintenance Map Key Sheet	Sheet	0	0		0	
29.18	Maintenance Map Detail Sheet	Sheet	0	0		0	
29.19	Reference Point Sheet	Sheet	0	0		0	
29.20	Project Network Control Sheet	Sheet	2	8	2	16	Prepare PNC sheet.
29.21	Table of Ownerships Sheet	Sheet	1	8	1	8	

**Project Activity 29: Mapping**

Task No.	Task	Units	No. of Units	Hours/ Unit	No. of Sheets	Total Hours	Comments
<b>Miscellaneous</b>							
29.22	Parcel Sketches	Parcel	0	0	0	0	Parcels will be prepared as part of the Map
29.23	TIITF Sketches	Parcel	0	0		0	
29.24	Other Specific Purpose Survey Map	EA	0	0		0	
29.25	Boundary Survey(s) Map	EA	0	0		0	
29.26	R/W Monumentation Map	Mile	0	0		0	
29.27	Title Search Map	LS	0	0		0	
29.28	Title Search Report	LS	2	4		8	Review title searches
29.29	Legal Descriptions	Parcel	1	8		8	Prepare for Promenade Parcel
29.30	Final Maps/Plans Comparison	Sheet	0	0		0	
<b>Mapping Technical Subtotal</b>					<b>29</b>	<b>352</b>	
29.31	Field Reviews	LS	0	0		0	
29.32	Technical Meetings	LS	8	0		0	
29.33	Quality Assurance/Quality Control	EA	%	3%		11	
29.34	Supervision	EA	%	3%		11	
<b>Mapping Nontechnical Subtotal</b>						<b>22</b>	
29.35	Coordination	LS	%	2%		7	
29.36	Supplemental Mapping	LS	%	0%		0	
<b>29. Mapping Total</b>					<b>29</b>	<b>381</b>	

**Project Activity 29: Mapping**

Task No.	Task	Units	No. of Units	Hours/ Unit	No. of Sheets	Total Hours	Comments
<b>Technical Meetings</b>							
	Kickoff meeting	EA	1	2	2		
	Control map review	EA	1	2	2		
	45/60/90/final map review	EA	0	0	0		
	Other meetings	EA	2	2	4		
	<b>Subtotal technical meetings</b>				<b>8</b>		
	Progress Meetings	EA	0	0	0		
	Phase Review Meetings	EA	0	0	0		
	<b>Total Meetings</b>				<b>8</b>		

Carries to 29.32

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