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PROPOSAL FOR PROFESSIONAL SERVICES

**Task Order 02-2013**

**Engineering Design and Technical Services**

**Caroline Street Outfall Improvements**

*Margaret, William, and Grinnell Streets*

**Prepared for**

**City of Key West Utilities Department**

**September 16, 2013**



**PEREZ ENGINEERING**  
**& DEVELOPMENT, INC**

**1010 Kennedy Drive, Suite 201**

**Key West, Florida 33040**

**305-293-9440**

## **BACKGROUND AND OBJECTIVES**

The City of Key West is currently designing a street upgrade along Caroline Street between Elizabeth and Grinnell Streets. The area of Caroline Street roughly between Elizabeth Street and White Street is lower than the rest of the street and drains primarily to existing 24-inch outfalls along William, Margaret, and Grinnell Streets. There are two outfalls at Grinnell Street as the White Street intersection and the stores from Ace Hardware to the Ferry Terminal drain to one pipe, and the Grinnell Street corridor from Southard Street to the waterfront has a separate drain system.

William Street has a 15-inch pipe leading from Caroline Street to the low spot. Then a 24-inch outfall is connected the last 110 feet to the seawall. Margaret Street has a 24-inch pipe from Caroline Street to the seawall. The Grinnell Street System has a pipe system leading from Southard Street to the south, but this pipe is 24-inches in diameter between Caroline Street and the seawall.

The City of Key West Stormwater Master Plan has recommended upsizing the pipes along William, Margaret, and Grinnell to 30-inches between Caroline and the end of each of these streets and increase to 36-inch outfalls from the end of the streets to the harbor. This project will also include the installation of triple chamber water quality baffle boxes on each outfall and possibly the installation of Tideflex check valves.

This task order includes the following components:

- Project management - Design,
- Land surveying,
- Final construction plans and specifications,
- Detailed construction cost estimates,
- South Florida Water Management District Permitting/coordination

## **SCOPE OF WORK**

### **TASK 1 – SITE EVALUATION, DATA COLLECTION AND SURVEY**

- 1.1 Collect and review available as-built documents and drainage basin data describing the existing land use, drainage facilities, topography, utility atlas maps and utility record drawings.
- 1.2 Review the Storm Water Master Plan with City staff to identify the specific locations and limits of the proposed improvements.
- 1.3 Perform project area inspection to determine City drainage sub-basins and confirm existing physical conditions pertaining to current stormwater drainage elements, patterns and characteristics.

- 1.4 Prepare a detailed topographic survey of Margaret, William, and Grinnell Streets between Caroline Street and the harbor.

## **TASK 2 – PRELIMINARY DESIGN**

- 2.1 Prepare Preliminary Design documents consisting of final design criteria, preliminary drawings, outline specifications and written descriptions of the Project.
- 2.2 These drawings shall consist of a cover sheet, overall site plan/key map, site plans, profiles, and details. The drawings shall also depict any required ADA sidewalk improvements. These drawings will be of presentation quality intended to reflect the final product.
- 2.3 Prepare a preliminary estimate of construction costs based on current area, volume or other unit costs, which shall be updated throughout the design development phase.
- 2.4 Prepare a development schedule, which shall include, but shall not be limited to, the review and approval times by all governmental agencies as may be required.
- 2.5 Make available all design calculations and associated data.
- 2.6 Furnish five (5) copies of the Preliminary Design documents and present and review them with the City.
- 2.7 Upon receipt of complete written comments from all applicable CITY departments, we shall address the comments, provide the necessary revisions and prepare final drawings.

## **TASK 3 – FINAL DESIGN**

- 3.1 Prepare construction documents which shall include but not be limited to drawings and technical specifications, general and supplementary conditions, bid forms, invitations to bid, instructions to bidders, with technical criteria, descriptions and design data necessary for permitting by governmental authorities, and shall include any further adjustments in the scope or quality of the project or in the construction budget authorized by the City.
- 3.2 Prepare a detailed opinion of probable cost which shall be reviewed by the City prior to going out for bids.
- 3.3 Use front end bid documents provided by the City including bidding forms, conditions of the contract, and form of AGREEMENT between the City and CONTRACTOR.
- 3.4 Make available all design calculations and associated Data.
- 3.5 Furnish five (5) copies of the 95% Complete Design documents and present and review them with the City for final comments and revisions.

- 3.6 Provide 100% complete contract documents for bidding purposes (hardcopies and electronic format).
- 3.7 Prepare and submit the necessary Environmental Resource Permit (ERP) applications to the South Florida Water Management District.

## **DELIVERABLES**

1. Minutes of PE&D team and City meetings to all participants and designees
2. Task 2 Preliminary Design / Const. Drawings & Specifications
3. Task 3 Final Design / Const. Drawings & Specifications
4. Detailed Engineer's Opinion of Construction Costs

## **ASSUMPTIONS**

1. City will furnish all pertinent documents and site specific data in its possession regarding the project area in a timely matter, including basin lines, topographic maps, storm sewer system maps, and related information to infiltration studies that were conducted within the drainage basin for existing and proposed wells.
2. City will bring to attention in a timely matter other consultants under contract having information pertinent to PE&D scope of work and complete its review of draft/progress deliverables in a timely manner.

## **COMPENSATION**

The proposed total lump sum fee compensation for this scope of work is **\$66,370**. A summary of compensation per task is shown on the attached worksheet.

Task 1 – Site Evaluation, Data Collection, and Survey	\$ 17,200
Task 2 – Preliminary Design	\$ 18,720
Task 3 – Final Design	<u>\$ 30,450</u>
<b>Total</b>	<b>\$ 66,370</b>

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**Bogdan Vitas, Jr.**  
**City Manager**

**Date**

A handwritten signature in blue ink, appearing to read "Bogdan Vitas, Jr.", is written over a light blue rectangular background.

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**Allen E. Perez, P.E.**  
**President**

**Date**



EXHIBIT No. 1

Caroline Street Outfalls - Margaret, William, and Grinnell Streets

Summary of Billable Costs											
Sub-Task Description	Principal		Senior Engineer	Design Engineer	Senior CADD Designer	Clerical	Const. Manager	Survey		TOTAL HOURS	TOTAL BILLABLE COSTS
Hourly Rate	170.00	0.00	135.00	90.00	80.00	35.00	75.00	1.00	1.00		
A. Site Evaluation and Data Collection	12	0	24	12	8	0	0	10200		56	\$17,200.00
B. Preliminary Design	20	0	48	24	80	8	0			180	\$18,720.00
C. Final Design	48	0	54	36	140	16	0			294	\$30,450.00
<b>SUBTOTAL LABOR</b>	80	0	126	72	228	24	0			530	
<b>TOTAL BILLABLE COSTS</b>	\$13,600.00	\$0.00	\$17,010.00	\$6,480.00	\$18,240.00	\$840.00	\$0.00	\$10,200.00	\$0.00	\$66,370.00	<b>\$66,370.00</b>