
PROPOSAL FOR PROFESSIONAL SERVICES

Task Order 11-005
Engineering Design and Technical Services
Caroline Street and Trumbo Road Improvements

Prepared for
City of Key West

April 18, 2011



1010 Kennedy Drive, Suite 400
Key West, Florida 33040
305-293-9440

BACKGROUND AND OBJECTIVES

Caroline Street and the area businesses contributed significantly to the City of Key West throughout the early to mid 1900's. This area was a bustling sea port and an economic engine for the City. During the last 30 years the area became run-down and Caroline Street and Trumbo Road have seen little infrastructure maintenance since. The road, sidewalks, stormwater, landscaping, and lighting are generally deteriorated and in need of rehabilitation or reconstruction.

Community redevelopment investment in area businesses can be further sustained by providing a safe, clean, attractive and inviting corridor on Caroline Street and Trumbo Road. The historic nature of the area can be enhanced by making the area more walkable, calming traffic, improving road drainage, enhancing connectivity and parking throughout the area, and landscaping. A solid foundation is necessary to support the vision for the economic future of the area.

Caroline Street has a mix of residences and businesses; the businesses being in the area of lower elevation and greater flooding during storms and standing water after rains. Business operations and building structures are negatively impacted by vehicles splashing water on buildings and pedestrians. The road is in substandard condition due to a combination of inadequate maintenance and high groundwater which can completely infiltrate the entire base material at high tides. The deterioration and standing water make traveling by bicycle hazardous at best.

Trumbo Road has the opportunity for dramatic change. It begins at the entrance to the United States Coast Guard Station, and although it is used for residents to access businesses on Caroline Street and downtown, there is no sidewalk available. On either side of the paved road is an unkempt green space often used for dumping trash and debris. Pedestrians walking from the School Board facility to Caroline for lunch have to travel in the street and often around standing water.

This project seeks to address many concepts listed in the Community Redevelopment Plan:

- Improve Infrastructure
- Recognition of Unique Community Characteristics
- Stimulate Public and Private Participation
- Address Parking and Traffic Congestion
- Innovative Development and Use of Open Space
- Promote Sustainable Community Redevelopment
- Support Community Redevelopment
- Emphasize a Safe and Clean Environment

This task order includes the following components pertaining to the proposed improvements to Caroline Street and Trumbo Road:

- Project management,
- Land surveying,
- Civil Engineering Services,

- Geotechnical Engineering Services,
- Professional Architectural Services,
- Professional Landscape Architectural Services,
- Street Lighting Design,
- Public Meetings,
- Permitting Services, and
- Final construction plans and specifications.

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 and from the City. In addition, we shall collect and review recent well development and pumping test data for existing gravity injection wells within the area.
- 1.2 Perform project area inspection to determine City drainage sub-basins and confirm existing physical conditions pertaining to current stormwater drainage elements, patterns and characteristics.
- 1.3 Prepare a detailed topographic survey of the right of way, including locations of all properties, utilities, pavement, sidewalks, landscape, elevations of adjacent yards, and finished floor elevations of existing buildings.
- 1.4 Prepare a professional pavement evaluation (Geotechnical Report) of the existing roadway. The evaluation shall be conducted by a geotechnical engineering firm and shall include site specific borings taken at various locations. The evaluation shall include recommendations for proposed pavement sections.

TASK 2 – PRELIMINARY DESIGN

- 2.1 Coordinate with the City to determine the staff's vision and goals of the project.
- 2.2 Coordinate with the project architect and landscape architect to evaluate pedestrian access, landscaping, lighting, etc. improvements.
- 2.3 Prepare a Design Memorandum (DM), which documents the data collected, detailed evaluation, conclusions and recommendations generated in Task 1 above. The recommended solutions will address the City's flood protection needs and permitting requirements of FDEP. At a minimum, the DM will identify and discuss the following:
 - Physical design constraints imposed by hydrogeology, tides, and topography,
 - Potential impacts to adjacent utilities and infrastructure,
 - Regulatory permitting issues,

- Compatibility with other on-going and proposed improvement plans in the City,
 - Engineering design criteria, and
 - Engineering design data and assumptions.
- 2.4 Prepare Preliminary Design documents consisting of final design criteria, preliminary drawings, outline specifications and written descriptions of the Project.
- 2.5 These drawings shall consist of a cover sheet, overall site plan/key map, plan and profile sheets, 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.
- 2.6 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.
- 2.7 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.
- 2.8 Make available all design calculations and associated data.
- 2.9 Furnish five (5) copies of the Preliminary Design documents and present and review them with the City.
- 2.10 Coordinate with the City to schedule and attend a public/neighborhood meeting.
- 2.11 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 AND PERMITTING

- 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 and submit the FDEP permit applications, drawings, and calculations for Class V Injection Wells to FDEP for approval. (The City is responsible for permit fees and advertisements costs.)
- 3.3 Prepare a detailed opinion of probable cost which shall be reviewed by the City prior to going out for bids.
- 3.4 Coordinate with the City to schedule and attend a public/neighborhood meeting.

- 3.5 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.
- 3.6 Make available all design calculations and associated Data.
- 3.7 Furnish five (5) copies of the 95% Complete Design documents and present and review them with the City for final comments and revisions.
- 3.8 Provide 100% complete contract documents for bidding purposes (hardcopies and electronic format).

TASK 4 – BID PHASE SERVICES

- 4.1 We shall assist the CLIENT in obtaining bids or negotiated proposals, assist in awarding and preparing contracts for construction, attend pre-bid conferences, and prepare addenda.
- 4.2 We shall issue addenda as appropriate to interpret, clarify or expand the Bidding Documents.

TASK 5 – CONSTRUCTION PHASE SERVICES

- 5.1 Shop Drawing Review – We shall review sets of shop drawings supplied by Contractor for conformance with the engineering design concept of the project and information given in the contract documents. Review of any shop drawing is limited to general design concepts and general compliance with the information in the construction plans and specifications.
- 5.2 Limited Construction Observation – We shall provide limited construction observation services as shown below:
 - We shall provide project representation by staff to inspect water, sanitary sewer, and storm sewer in order to provide construction observation to determine, in general, if it is proceeding in accordance with the contract documents and permit conditions. Project representation in the field shall be as required in order to complete agency certifications.
 - We shall conduct at least one (1) walk through at the end of construction to determine if the project is substantially complete and one (1) final construction observation visit to determine if the project has been completed in substantial accordance with the contract documents and permit conditions.
 - Our representatives will attend the appropriate utility system tests (water main pressure test), as required to make engineering certifications to appropriate governmental agencies.

- 5.3 Record Drawings – We shall prepare record drawings based on “as-built” drawings to be provided to the engineer by the contractor. The “as-built” drawings must be signed and sealed by a Professional Land Surveyor registered in the State of Florida. The contractor shall also provide the ACAD files of the survey for our use in development of the record drawings. The record drawings prepared by us shall be submitted to the Client and to the applicable municipal/regulatory agencies.
- 5.4 Final Certifications - If, after the final construction observation visit, it is determined that the project has been completed in substantial accordance with the contract documents and permit conditions, we shall provide final certifications to FDEP and all other applicable governmental agencies for acceptance of the site work.

DELIVERABLES

1. Minutes of PE&D team and City meetings to all participants and designees
2. Task 2 Preliminary Design / Design Memorandum (DM) (5 copies)
3. Task 2 Preliminary Design / Const. Drawings & Specifications (5 copies)
4. Task 3 Final Design / Const. Drawings & Specifications (5 copies)
5. Final Construction Bid documents (5 copies)

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 **\$302,755**. A summary of compensation per task is shown below.

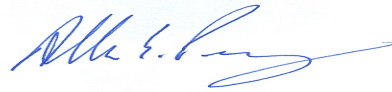
Task 1 – Site Evaluation, Data Collection, and Survey	\$ 48,460
Task 2 – Preliminary Design	\$ 97,425
Task 3 – Final Design and Permitting	\$130,075
Task 4 – Bid Phase Services	\$ 5,295

Task 5 – Construction Phase Services

Total \$ 21,500
 \$302,755

Jim Scholl
City Manager

Date



Allen E. Perez, P.E.
President

Date



EXHIBIT No. 1

Caroline Street and Trumbo Road Improvements

Summary of Billable Costs											
Sub-Task Description	Principal	Architect/ Landscape Architect	Senior Engineer	Design Engineer	Senior CADD Designer	Clerical	Const. Manager	Survey	Geotech	TOTAL HOURS	TOTAL BILLABLE COSTS
Hourly Rate	150.00	120.00	110.00	80.00	70.00	35.00	75.00	1.00	1.00		
A. Site Evaluation and Data Collection	48	0	64	90	36	0	0	16500	8000	24738	\$48,460.00
B. Preliminary Design	125	96	195	269	325	41	0			1051	\$97,425.00
C. Final Design	145	123	160	446	550	51	0			1475	\$130,075.00
D. Bid Phase Services	6	4	6	15	12	9	12			64	\$5,295.00
E. Construction Phase Services	15	11	29	0	36	17	155			263	\$21,500.00
SUBTOTAL LABOR	339	234	454	820	959	118	167			27591	
TOTAL BILLABLE COSTS	\$50,850.00	\$28,080.00	\$49,940.00	\$65,600.00	\$67,130.00	\$4,130.00	\$12,525.00	\$16,500.00	\$8,000.00	\$302,755.00	\$302,755.00