

May 3, 2018

Leighton Walker **City of Riviera Beach Utility District** 600 W Blue Heron Blvd Riviera Beach, FL 33404

## Subject: CDBG 17-18 Utilities Replacement & Rehabilitation Project CMA Proposal No. P17.221.07

Dear Mr. Walker:

Chen Moore and Associates (CMA) is pleased to submit the attached of Services to provide civil engineering for the replacement of water main and lining of gravity sewer within the limits of the CDBG 17-18 roadway improvement project for the Riviera Beach Utility District. The project is located on Avenue O (from 27<sup>th</sup> Street to 31<sup>st</sup> Street), 28<sup>th</sup> Street and 30<sup>th</sup> Street (from Avenue O to Avenue R), 36<sup>th</sup> Street (from Avenue O to President Barrack Obama Highway) and Avenue N (from 36<sup>th</sup> Street to 35<sup>th</sup> Street).

## BACKGROUND

The Public Works Department of the City of Riviera Beach has prepared plans to resurface roads as part of a CDBG funded project. Before advertising this work for Bid, the Riviera Beach Utility District has decided to replace the aging asbestos concrete water mains and line the gravity sewers within the proposed roadway improvement area. This scope of work includes all civil engineering design services necessary for the completion of the project. The project design is anticipated to begin immediately upon receiving Notice to Proceed (NTP).

The anticipated submittals for the Project include: 90% Design Permit Documents 100% Bid Documents

The "Client" is the Riviera Beach Utility District (RBUD) The "Consultant" is Chen Moore and Associates (CMA)

## SCOPE OF SERVICES

The professional engineering services and the associated fees are described below.

## **TASK 1 - FIELD INVESTIGATION AND COORDINATION**

- 1.1 Survey Coordination: ENGINEER shall coordinate with a licensed surveyor in order obtain the required topographic data within the project limits.
  - Right-of-way to right-of-way location of all above ground features (especially location of cleanouts if found in the field)

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- Spot elevations at cross sections every 100-ft along the subject roadways
- Rim and Invert Elevations of Sewer Manholes (maximum of 20)
- Rim and Invert Elevations of Drainage Structures (maximum of 24)

This will not constitute a boundary or right-of-way survey as defined in the Minimum Technical Standards for Land Surveying and Mapping. Ownership and title searches are not included. Easements will be based on information obtained from record plats.

1.2 Utility Coordination: ENGINEER will review all existing record drawings, design plans, utility atlases, and GIS data for the project area to develop the alignment of the proposed piping. ENGINEER shall perform a Sunshine One design ticket call, send letters to all identified utilities, collect utility location information and digitize utility locations for drawings. ENGINEER shall coordinate with a subsurface utility engineering (SUE) firm for the performance of up to 20 utility testholes to locate any existing underground utilities within the project limits. SUE firm shall provide equipment and labor, or the services of a qualified subconsultant, for exploratory subsurface test holes ("soft digs") for certain existing underground utilities as determined by the ENGINEER.

1.3 Field Verification: ENGINEER shall conduct field visits to assess the existing conditions of the project area.

1.4 Coordination with RBUD: ENGINEER will coordinate with the RBUD for the water replacement design parameters.

# TASK 2 – 90% DESIGN SUBMITTAL

2.1 Plans: ENGINEER will prepare and submit 90% design drawings to Project Manager for review. The drawings will consist of the existing conditions and a proposed design for review by the RBUD. The existing conditions plans will be based on survey, GIS data including parcels, aerials and RBUD existing water and sewer data. No vertical clearances will be included in the 90% submittal based on the need for approval of the horizontal pipe alignment prior to defining utility locations. Chen Moore and Associates will submit up to 2 half size (11"x17") plan sets to the RBUD and TOWN as part of this submittal.

2.2 Technical Specifications: ENGINEER shall prepare technical specifications required to perform the work within the 90% plans.

2.3 Cost Estimate: ENGINEER shall submit a cost estimate of the probable construction costs which will reflect the proposed improvements included within the 90% design plans.

2.4 Progress Meeting RBUD: ENGINEER will attend one review meeting with RBUD to discuss the 35% plans and obtain any review comments.

## TASK 3 – PERMITTING

3.1 Permit Submittal: ENGINEER shall prepare a permit submittal based on incorporating comments from RBUD regarding design adjustments to the 90% submittal. Vertical clearances will be included in this submittal based on the input from utility locations and confirmation of the horizontal pipe alignment.

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Chen Moore and Associates will submit up to 2 half size (11"x17") plan sets to the RBUD as part of this submittal.

3.2 Technical Specifications: ENGINEER shall prepare revised technical specifications incorporating comments from RBUD on the 90% submittal.

3.3 Permit Procurement: ENGINEER shall prepare and submit applications for the permits necessary to authorize the project to be bid. The potential permits include:

- Palm Beach County Health Department (Water / Sewer Permits)
- Palm Beach County Water Utilities Department (if necessary at President Barrack Obama Highway)

## TASK 4 – 100% FINAL DESIGN

4.1 Design Submittal: ENGINEER shall prepare a 100% final design plan which addresses previous review comments from the RBUD and all regulatory agencies including the plans and relevant details for the following disciplines: existing conditions, utility relocations and maintenance of traffic plans. ENGINEER will submit up to 2 half size (11"x17") plan sets.

4.2 Contract Documents: ENGINEER shall prepare 100% construction documents including technical specifications, final quantity list and additional special provisions as required by the RBUD and TOWN.

4.3 Cost Estimate: ENGINEER shall prepare a final cost estimate which will indicate all construction costs for items within the final design drawings.

## TASK 5 – BIDDING ASSISTANCE

CMA will provide services during bidding.

5.1 Pre-Bid Meeting: ENGINEER shall assist with the preparation of materials and attend a pre-bid meeting to be attended by any interested contractor. The purpose of the meeting will be to outline any special site conditions and clarify any contractor questions.

5.2 Issue Construction Documents: ENGINEER shall prepare and provide one set of construction documents to the RBUD. The RBUD will reproduce the construction sets and distribute to contractors as necessary.

5.3 Respond to Questions / Addendums: ENGINEER shall assist RBUD by responding to all written inquiries made by contractors regarding utility relocation and prepare one addendum to clarify contract questions.

5.4 Bid Analysis: ENGINEER shall assist with bid analysis when necessary.

## TASK 6 – REIMBURSABLES

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The following are estimated costs of reimbursable expenses. The RBUD will only pay for those services which were used.

6.1 Printing: The costs for the printing and reproduction costs for submittal material will be billed to the project.

- 6.2 Utility Locates: The costs for utility locates will be billed to the project.
- 6.3 Survey: The costs for the topographic survey will be billed to the RBUD.
- 6.4 Permit Fees: The cost for PBCHD water main permit will be billed to the RBUD.

## ASSUMPTIONS

- This proposal does not include any services required for easement or right-of-way acquisitions.
- This proposal does not include any services during construction.
- All review comments from the RBUD on each design submittal shall be provided to ENGINEER at one time. Any revisions due to additional comments may result in the need for additional services.
- Restoration will be addressed by the CDBG 17-18 roadway resurfacing project. Investigation into drainage issues or grading design is not included.

## DELIVERABLES

Chen Moore and Associates will provide the following deliverables at each submittal:

Design plans:

- 2 half size sets (11"x17") at 90% and 100% submittal
- 4 half size sets (11"x17") for permitting submittals
- 1 half size set (11"x17") for bidding purposes
- 1 digital CAD copy for bidding purposes
- 1 digital PDF copy for bidding purposes

**Technical Specifications:** 

- 1 set at 100% submittal
- 1 set for bidding purposes

## **Digital Copies:**

- Final Design Drawings (AutoCAD format)
- Final Design Drawings (PDF format)
- Technical specifications (Word format)
- Technical specifications (PDF format)

## SCHEDULE OF SERVICES

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Chen Moore and Associates will complete Tasks 1 and 2 within 45 days of the Notice to Proceed (NTP). Task 3 will be completed within 30 days of receipt of comments on Task 2. Task 4 will be completed within 15 days of the approval of Task 3. Task 5 will be performed according to the RBUD schedule. Task 6 will be performed in conjunction with the other tasks.

#### ENGINEERING FEES

The fees for the above tasks are as follows.

	l otal per Task
TASK 1 – FIELD INVESTIGATION AND COORDINATION	\$8,110
TASK 2 – 90% DESIGN SUBMITTAL	\$30,400
TASK 3 – PERMITTING	\$17,750
TASK 4 – 100% DESIGN	\$10,100
TASK 5 – BIDDING ASSISTANCE	\$4,950
TASK 6 – REIMBURSABLES	\$34,393
TOTAL	\$105,703

The tasks will be billed according to the following schedule. Lump Sum Tasks will be billed on a monthly basis according to the percentage completion of the project. Reimbursable Expenses will be billed at cost to the RBUD.

Lump Sum Tasks Total (Task 1 - Task 6)	\$71,310
Reimbursable Expenses (Task 7)	\$34,393
Total Budget	\$105,703

See Exhibit A for a breakdown of fees.

Should you have any questions, please do not hesitate to contact me at my office at (561) 746-6900 x 1160, my cell phone at (954) 650-7996 or send me an electronic message at <u>bwhitfield@chenmoore.com</u>.

Respectfully submitted,

CHEN MOORE AND ASSOCIATES Brent Whitfield/Project Manager Senior Engineer

Attachment(s): Exhibit A

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#### Riviera Beach Utility District CDBG 17-18 Utilities Replacement & Rehabilitation Project - Fee Proposal

Chen Moore and Associates Project # P17.221.007

	Subconsultant					ofessional S	•			Total
	Costs	Clerical	Senior Technician	Inspector	Senior Inspector	Project Engineer	Senior Engineer	Senior Project Manager	Principal	
Hourly Rate		\$60.00	\$95.00	\$85.00	\$140.00	\$115.00	\$140.00	\$185.00	\$240.00	
TASK 1 – FIELD INVESTIGATION AND 1.1 Survey Coordination	COORDINATION	N				6		2		\$1,060
1.2 Utility Coordination		8	16			8		2		\$3,290
1.3 Field Verification 1.5 Coordination with RBUD			8			12 4		8 4		\$3,620 \$1,200
1.5 Coordination with RBOD						4		4		\$1,200
Task 1 Total		\$480	\$2,280	\$0	\$0	\$2,760	\$0	\$2,590	\$0	\$8,110
TASK 2 – 90% DESIGN SUBMITTAL										
2.1 Plans			80			40		24	2	\$17,120
2.2 Cost Estimate 2.3 Technical Specifications			32			16 24		8 16		\$6,360 \$5,720
2.4 Progress Meeting RBUD						4		4		\$1,200
Task 2 Total		¢0	¢10.640	¢0	¢0	¢0,660	¢O	¢0,600	\$480	¢20,400
Task 2 Total		\$0	\$10,640	\$0	\$0	\$9,660	\$0	\$9,620	<b></b> φ400	\$30,400
			<u> </u>			04		20	4	¢40,400
3.1 Develop Permit Submittal 3.2 Technical Specifications			60			24 12		20 8	1	\$12,400 \$2,860
3.3 Permit Procurement						12		6		\$2,490
Tools 2 Total		\$0	¢5 700	\$0	\$0	¢5 500	¢0.	¢6 200	\$240	¢17 750
Task 3 Total		φU	\$5,700	φU	ΦU	\$5,520	\$0	\$6,290	<b></b> ΦΖ40	\$17,750
TASK 4 – 100% DESIGN						10				<b>AF 0 10</b>
4.1 Design Submittal 4.2 Contract Documents			24			16 16		8 2	1	\$5,840 \$2,210
4.3 Cost Estimate			8			8		2		\$2,050
Task 4 Tatal		\$0	\$3,040	\$0	\$0	\$4,600	\$0	\$2,220	\$240	¢10,100
Task 4 Total		φU	<b>\$</b> 3,040	φU	ΦU	\$4,000	φU	<i>Φ</i> Ζ,ΖΖΟ	<b></b> \$240	\$10,100
TASK 5 – BIDDING ASSISTANCE								-		
5.1 Pre-Bid Meeting 5.2 Issue Construction Documents						6 4		2 1		\$1,060 \$645
5.3 Respond to Questions/Addendum	S					8		4		\$1,660
5.4 Bid Analysis		8				8		1		\$1,585
Task 5 Total		\$480	\$0	\$0	\$0	\$2,990	\$0	\$1,480	\$0	\$4,950
TASK 6 – REIMBURSABLES										
6.1 Printing	\$250									
6.2 Utility Locates	\$9,000									
6.3 Survey	\$24,493									
6.4 Permit Fees	\$650									
Task 6 Total	\$34,393									
			т	otal per Tas	k					
TASK 1 – FIELD INVESTIGATION AND	COORDINATION	I		\$8,110						
TASK 2 – 90% DESIGN SUBMITTAL				\$30,400						
TASK 3 – PERMITTING TASK 4 – 100% DESIGN				\$17,750 \$10,100						
TASK 5 – BIDDING ASSISTANCE				\$4,950						
TASK 6 – REIMBURSABLES				\$34,393						

TOTAL

Lump Sum Tasks Total (Task 1 - Task 6)	\$71,310
Reimbursable Expenses (Task 7)	\$34,393
Total Budget	\$105,703

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