

DATE SUBMITTED 07/26/2018
 SUBMITTED BY PUBLIC SERVICES DIR.
 DATE ACTION REQUIRED 08/01/2018

Agenda Item No *E-2*
 CITY COUNCIL ACTION (X)
 PUBLIC HEARING REQUIRED ()
 RESOLUTION ()
 ORDINANCE 1ST READING ()
 ORDINANCE 2ND READING ()
 CITY CLERK'S INITIALS *STJ*

**IMPERIAL CITY COUNCIL
 AGENDA ITEM**

SUBJECT: ENGINEERING DESIGN AND CONSTRUCTION MANAGEMENT SERVICES FOR VARIOUS WATER AND WASTEWATER PROJECTS.	
1. APPROVE PROPOSAL FROM ALBERT A WEBB ASSOCIATES FOR VARIOUS PROJECTS IN THE AMOUNT OF \$326,840.00	
DEPARTMENT INVOLVED: City Manager	
BACKGROUND/SUMMARY: Staff has met with engineers from Albert A Webb Associates to discuss various projects/developments within the city to determine whether the current infrastructure is able to handle increased capacity and/or continuity of use of certain lines and components. Several projects have been identified in which current capacity and/or aging infrastructure requires replacement/upgrades. Webb Associates has prepared a proposal for the design and construction management costs for the following projects: <ul style="list-style-type: none"> *Marshall Road Sewer Replacement *13th Street Sewer Slip Line *Barioni Blvd. Waterline Hwy 86 Crossing *Brick Manhole Repair/Replacement Standard *Filter to Waste Modifications at the Water Treatment Plant 	
FISCAL IMPACT: \$326,840.00	
STAFF RECOMMENDATION: Council approve the proposal as submitted by Albert A. Webb Associates.	
MANAGER'S RECOMMENDATION:	MANAGER'S INITIAL <i>STJ</i>
MOTION:	
SECONDED: AYES: NAYES: ABSENT:	APPROVED () REJECTED () DISAPPROVED () DEFERRED () REFERRED TO:

July 13, 2018

Corporate Headquarters

3788 McCray Street
Riverside, CA 92506
951.686.1070

Palm Desert Office

36-951 Cook Street #103
Palm Desert, CA 92211
760.568.5005

Murrieta Office

41391 Kalmia Street #320
Murrieta, CA 92562
951.686.1070

Mr. Jackie Loper
Public Services Director
City of Imperial
420 S. Imperial Avenue
Imperial, CA 92251

RE: Proposal for Engineering Services for Marshall Road Sewer Replacement, 13th Street Sewer Slip Line Project, Barioni Blvd. Waterline HWY 86 Crossing, Brick Manhole Repair/Replacement Standard Plan, and Filter to Waste Modifications at the Water Treatment Plant.

Dear Jackie,

Pursuant to your request Albert A. Webb Associates (Webb) has prepared the following proposal to provide engineering services for the subject projects. **Webb's tasks will be to prepared final engineering plans and specifications ready for bidding and construction.** The plans will include all necessary civil, and structural engineering design information and will be signed by a registered engineer in the state of California. Webb will also prepare the necessary paperwork required by CEQA, it is assumed that these projects will qualify for Categorical Exemptions and no further environmental documentation or special studies will be required.

Based upon our understanding of the projects, Webb's scope of work will include the following tasks for each project:

SCOPE OF SERVICES

Marshall Road Sewer Replacement

The existing 8-inch diameter sewer located in Marshall Road is at capacity and is in need or replacement from the Claypool Lift Station to Aten Road (approx. 2,900 LF) It is proposed that the 8-inch diameter sewer will be replaced with a 12-inch diameter sewer line. A portion of the existing sewer line in Aten Road from the intersection of Marshall Road and Aten Road, across HWY 86 will also be replaced as part of this project (approx. 850 LF). This portion of the project will require a jack and bore to cross HWY 86. Engineering services proposed for this project is as follows.

1. Field topo by Holt Group including key shots of valve cans, manholes, telephone poles, curbs, ROW, property lines, easements, etc.
2. Evaluate ability of proposed sewer replacement to flow by gravity and evaluate the need of potential lift station. Incorporate the required improvements into the project plans and specifications for construction.
3. Prepare plans, specifications and bid documents for construction. **Drawings will be prepared on 24" x 36" sheets for pipelines at 1"=40' horizontal scale and 1"=4' vertical scale showing all appropriate connection details and construction notes per City requirements and applicable jurisdiction requirements.**
4. Apply for Caltrans encroachment permit (City to pay all fees)
5. Provide construction management services including:
 - a. Responding to contractor RFIs
 - b. Submittal review
 - c. Field inspection (Holt Group)
 - d. Field visits during construction

Schedule and Compensation

It is anticipated that the design will be completed within 20 weeks after the execution of contracts, notice to proceed, and easement acquisition. These services will be performed on a lump sum basis not to exceed \$145,405. A breakdown of the fee is included in the attached spreadsheet. Estimated Construction Cost is \$1.5 Million.

13th Street Sewer Slip Line

Based on a recent sewer line evaluation performed by the City, the existing 8-inch and 12-inch diameter sewer line in 13th Street from HWY 86 to C Street is damaged and requires repair. The City is proposing to repair the damaged portion of sewer line using a trenchless slip lining method. Engineering services proposed for this project is as follows:

1. Field topo by Holt Group including key shots of valve cans and manholes.
2. Prepare plans, specifications and bid documents for construction. Drawings will be prepared on 24" x 36" sheets for pipelines at 1"=40' horizontal scale and 1"=4' vertical scale showing all appropriate connection details and construction notes per City requirements and applicable jurisdiction requirements.
3. Review construction bids and prepare recommendation for award
4. Provide construction management services including:
 - a. Responding to contractor RFIs
 - b. Submittal review
 - c. Field inspection (Holt Group)
 - d. Field visits during construction

Schedule and Compensation

It is anticipated that the design will be completed within 12 weeks after the execution of contracts and notice to proceed. These services will be performed on a lump sum basis not to exceed \$46,915. A breakdown of the fee is included in the attached spreadsheet. Estimated Construction Cost is \$300,000.

Barioni Blvd. Waterline, Hwy 86 Crossing

An existing 4-inch diameter waterline extending across HWY 86 in Barioni Blvd. requires replacement with an 8-inch diameter waterline to improve system hydraulics and fire flows for the water system. The proposed 8-inch diameter waterline will extend across Barioni Blvd. and connect to the existing waterlines on each side of the HWY 86 right-of-way (approx.. 300 L.F.). A Encroachment Permit from Caltrans will be required for this project. Design and construction management services assumed for this project are as follows:

1. Field topo by Holt Group including key shots of valve cans, manholes, telephone poles, curbs, ROW, property lines, easements, etc.
2. Prepare plans, specifications and bid documents for construction. Drawings will be prepared on 24" x 36" sheets for pipelines at 1"=40' horizontal scale and 1"=4' vertical scale showing all appropriate connection details and construction notes per City requirements and applicable jurisdiction requirements.
3. Review construction bids and prepare recommendation for award
4. Prepare permit applications and associated documentation for Caltrans encroachment permit (City to pay permit fees)
5. Provide construction management services including:
 - a. Responding to contractor RFIs
 - b. Submittal review
 - c. Field inspection (Holt Group)
 - d. Field visits during construction

Schedule and Compensation

It is anticipated that the design will be completed within 20 weeks after the execution of contracts and notice to proceed. These services will be performed on a lump sum basis not to exceed \$57,800. A breakdown of the fee is included in the attached spreadsheet. Estimated Construction Cost is \$520,000.

Brick Manhole Repair/Replacement Standard Plan

The remaining brick manholes within the sewer system are beginning to fail and the City desires that a standard plan be created for both the repair of the brick manhole or replacement of the manhole as required. Webb will prepare standard details and a specification for the repair or replacement of a brick manhole as required. Webb will evaluate potential methods of repair and provide the City with a recommendation as it pertains to the most feasible repair method. Following selection by the City, Webb will prepare a standard plan with specifications for brick manhole repair and a separate plan with specifications for brick manhole replacement.

Schedule and Compensation

It is anticipated that the design will be completed within 8 weeks after the execution of contracts and notice to proceed. These services will be performed on a lump sum basis not to exceed \$8,505. A breakdown of the fee is included in the attached spreadsheet. The City estimates that there are approximately 7-10 brick manholes that this project will apply to.

Filter to Waste Modifications at the Water Treatment Plant

The existing Dual-Media Gravity Filters at the Water Treatment Plant do not currently have the ability to take filtered water leaving the filters to waste following a backwash event. The ability to take filtered water to waste immediately following a backwash event would allow the turbidity from the backwash event to decrease prior to passing through the turbidity meter, decreasing the amount of violations that have occurred due to high levels of turbidity in the filter effluent. The assumed scope of work for this project is as follows:

1. Evaluate as-built drawings to determine location of piping/valving modifications
2. Field visit to determine location of piping/valving modifications
3. Possible modifications/programming to PLC to incorporate any new valving
4. Preparation of plans and specifications to incorporate piping/valving modifications.
5. Review construction bids and prepare recommendation for award
6. Provide construction management services including:
 - a. Responding to contractor RFIs
 - b. Submittal review
 - c. Field inspection (Holt Group)
 - d. Field visits during construction

Schedule and Compensation

It is anticipated that the design will be completed within 12 weeks after the execution of contracts and notice to proceed. These services will be performed on a lump sum basis not to exceed \$68,215. A breakdown of the fee is included in the attached spreadsheet. Estimated Construction Cost is \$400,000.

CONSTRUCTION SERVICES

Unless indicated elsewhere, the scope of construction services that Webb Associates will be providing for these projects are as follows:

1. Prepare bid addenda as necessary (assume 1 addendum)
2. Review contractor bids and provide recommendations for award
3. Respond to RFI's during bid period
4. Review contractor submittals
5. Attend a jobsite pre-construction meeting
6. Full time field inspection on pipeline projects
7. Perform three field visits during construction and one field visit to verify project performance and compliance with construction documents.
8. Provide telephone/email coordination during construction
9. Prepare record documents based upon contractor's redline markups

PROJECT TEAM

The primary personnel assigned to these projects will be as follows:

- Mr. Shane Bloomfield, PE (Senior Engineer) will serve as project manager and responsible engineer over all the projects.
- Mr. Brian Knoll, PE (Vice President) will serve as Principal-in-charge and will oversee the projects through completion.
- Mr. Kris Danielson, PE (Associate Engineer) will be the project engineer on these projects and will be responsible for overseeing the development of the design documents and project specifications.
- The Holt Group will provide survey and inspection services for the pipeline replacement projects.

EXCLUSIONS

The following items have been specifically excluded from Webb's scope of work for these projects.

1. City will be responsible to post and file the Notice of Exemption with the appropriate authority
2. Preparation of permit applications and paying for permits unless specifically indicated in the proposed scope of work
3. Construction staking and surveying during construction
4. Property acquisition
5. Material testing
6. Traffic control plans
7. Utility relocation plans
8. Preparation of easement documents

As detailed above, based upon each project's Scope of Work, our engineering services budget for these projects is as follows:

<u>Project Name</u>	<u>Budget</u>
Marshall Road Sewer Replacement	\$145,405
13 th Street Sewer Slip Line	\$ 46,915
Barioni Blvd. Waterline, HW 86 Crossing	\$ 57,800
Brick Manhole Repair/Replacement Standard	\$ 8,505
Filter to Waste Modifications at the WTP	<u>\$ 68,215</u>
TOTAL DESIGN/CONSTRUCTION MANAGEMENT COSTS	\$326,840

We thank you for the opportunity to continue working with the City of Imperial on these critical projects. Should you have any questions, please contact me at (951) 686-1070.

Sincerely,
ALBERT A. WEBB ASSOCIATES



Shane Bloomfield, P.E.
Senior Engineer

Cc: Brian Knoll, WEBB
Kris Danielson, WEBB

**MANPOWER AND FEE ESTIMATE
CITY OF IMPERIAL**

Proposal for Design Engineering Services for:
Marshall Road Sewer, 13th Street Sewer, Barioni Blvd. Waterline, Brick Manhole Standard Plan, and Filter to Waste Modifications

Task	Personnel Hours				Total Hours	Budget ⁽¹⁾
	Principal Engineer	Senior Engineer	Associate Engineer	Project Coordinator		
Task 1 - Marshall Road Sewer Replacement						\$ 145,405
1.1 - Design (Utility Research)		2	6	8	16	\$ 2,150
Design (60% Plans)	12	36	80	6	134	\$ 25,070
Design (90% Plans & Spec.)	10	24	60	6	100	\$ 18,550
Design (100% Plans & Spec.)	8	18	40	6	72	\$ 13,290
1.2 - Process Required Permits	12	18	24	4	58	\$ 11,320
1.3 - Construction Management	24	60	40	20	144	\$ 27,300
1.A - Subcontractor - Survey						\$ 9,775
1.B - Subcontractor - Inspection						\$ 37,950
Task 2 - 13th Street Sewer Slip Line						\$ 46,915
2.1 - Design (Utility Research)		1	6	4	11	\$ 1,600
Design (90% Plans & Spec.)	4	12	30	4	50	\$ 9,110
Design (100% Plans & Spec.)	4	12	15	2	33	\$ 6,315
2.2 - Construction Management	6	15	24	4	49	\$ 9,190
2.A - Subcontractor - Survey						\$ 5,175
2.B - Subcontractor - Inspection						\$ 15,525
Task 3 - Barioni Blvd. Waterline, Hwy 86 Crossing						\$ 57,800
3.1 - Design (Utility Research)		1	6	4	11	\$ 1,600
Design (60% Plans)	2	10	40	2	54	\$ 9,770
Design (90% Plans & Spec.)	2	8	30	2	42	\$ 7,600
Design (100% Plans & Spec.)	2	8	16	2	28	\$ 5,150
3.2 - Process Required Permits	4	12	12	8	36	\$ 6,300
3.3 - Construction Management	6	24	12	4	46	\$ 8,980
3.A - Subcontractor - Survey						\$ 5,175
3.B - Subcontractor - Inspection						\$ 13,225
Task 4 - Brick Manhole Repair/Replacement Standard						\$ 8,505
3.1 - Brick Manhole Repair Research	2	4		2	8	\$ 1,510
3.2 - Recommendations to the City	1	2		1	4	\$ 755
3.3 - Prepare Repair Standard Plan and	2	4	8	2	16	\$ 2,910
3.4 - Prepare Replacement Standard Plan and	2	6	8	2	18	\$ 3,330
Task 5 - Filter to Waste Modifications at the Water Treatment Plant						\$ 68,215
5.1 - Review Record Drawings - Site Evaluation	10	16	4	1	31	\$ 6,645
5.2 - Design (90% Plans & Spec)	6	24	40	2	72	\$ 13,710
Design (100% Plans & Spec.)	4	16	25	2	47	\$ 8,905
5.3 - Construction Management	4	24	12	4	44	\$ 8,480
5.A - Subcontractor - Electrical						\$ 30,475
5.B - Subcontractor - Inspection						\$ 7,475
TOTAL BUDGET	127	357	538	102	1124	\$ 326,840

⁽¹⁾The amounts indicated for each individual project task are estimated budget amounts and accordingly the actual amounts may be more or less than shown. However, the total budget will not be exceeded without written authorization from the City.