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Mesa, AZ 85209
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September 25, 2023

Mr. Castulo Estrada
Utilities Manager
City of Coachella
53462 Enterprise Way
Coachella, CA 92236
Sent Via Email

Subject: Proposal for Engineering Services for the Extension of both Sewer and Water Facilities along Avenue 51 & Avenue 52 within the proposed Western Service Annexation Area

Dear Castulo:

Heptagon Seven Consulting is pleased to submit our proposal for engineering services associated with the extension of water and sewer mains along Avenue 51 and Avenue 52 generally between Van Buren and Jefferson Streets.

We understand that the City is using their On-Call for contracting on this project. From our conversations, we understand the Utility Department is seeking to annex into your service area the land between Jefferson Street to east of Calhoun and from Avenue 51 to Avenue 52. Our work will consist of an initial master planning phase of this unserved area for both sewer and water. Following the master planning, Consultant will proceed with final design plans for the requested extension segments. The following scope of work will provide a base water and sewer extension based on the initial request, as well as optional extension segments in the major street segments within the proposed LAFCO annexation area.

The following is our proposed scope of services and associated fees:

SCOPE OF WORK:

TASK 1: PROJECT MANAGEMENT

Consultant will manage project management duties for the duration of the project to assure a cost-efficient, quality design process. Our staff will effectively coordinate and communicate the project with City Staff and necessary agency partners from inception to final approval. Project Management activities will begin at the project initiation and will not end until construction activities have concluded. Consultant utilizes a hands-on approach to our business and thus our principal will be actively involved for the duration of the project.

TASK 2: TOPOGRAPHIC BASE MAP

Consultant will provide a field topographic and boundary survey to collect existing features within proposed construction areas. The limits of the topographic survey will include a 200 foot wide strip centered along the following street segments:

- Avenue 51, Jackson Street to Van Buren Street
- Avenue 52, Jackson Street to 0.25 mile east of Van Buren Street
- Jackson Street, Avenue 52 to Avenue 50
- Calhoun Street, Avenue 52 to 1,000' north of Avenue 51

The collected feature shall include but are not limited to surrounding street curb and gutter, building footprint, existing utility manholes, valves and above ground structures, irrigation valves, top of curb, flow line of valley gutters, walls, all above ground features / structures and other hardscape features. The Consultant will deliver a topographic base file, land base file depicting center, section and right of

way lines. Following the gathering and processing of the field topographic data, Consultant will prepare a base map containing information such as parcel lines and underlying easements, if readily available through recorded maps.

TASK 3: UTILITY RESEARCH AND COORDINATION

Consultant will review existing utility data available from the City from Record Plan drawings and through requested utility plat information for the park site.

Utility Outreach. Immediately following processing of a Task Order, Consultant will prepare Utility Information Request letters to be sent to various utility companies, along with the base plans, requesting the utility facility maps (“Atlas Maps” and Record drawings) within the project limits. Following receipt of all utility plats, Consultant will field verify, to the extent possible, the accuracy of the existing utility base information.

Utility Base File. Based on the City and utility company provided information, Consultant will prepare a utility base file noting the approximate location of each utility facility within each street corridor. Additionally, following USA Utility Marking for the geotechnical and utility potholing work, Consultant will review all utility markings and update the utility base map with any corrections and/or additions.

TASK 4: GEOTECHNICAL ANALYSIS

Consultant proposes to explore the subsurface conditions by drilling eight (8) 20 foot deep borings. Undisturbed and disturbed soil samples will be recovered for laboratory testing. A staff engineer or geologist will maintain a continuous log of the soils encountered and obtain samples for visual classifications and subsequent laboratory testing.

Laboratory Testing. In-situ samples will be recovered to perform the following:

- Moisture Content & Unit Weight
- Gradation
- Collapse Potential
- Corrosion Potential
- R-Value

The laboratory testing program may be modified based on subsurface conditions encountered.

To summarize the project finding, Consultant will prepare a geotechnical report that describes the work performed, the subsurface soils conditions encountered, and presents the findings of our work, along with professional opinions regarding project design.

Consultant will prepare a project specific geotechnical report providing geotechnical parameters for trenches, pavement design, if needed, thrust blocks, and compaction. The report will include a description of pavement conditions at each core location, if applicable, a plan depicting the boring locations, boring logs, and laboratory test data in accordance with Greenbook and AWWA requirements.

Consultant will perform the geotechnical borings within the shoulder areas, outside of the main surfaced travel lanes, which will reduce the cost for traffic control.

TASK 5: AREA MASTER PLAN

Consultant will prepare a Sewer Master Plan for extending sewer mains throughout the major roadway within the area bounded by Avenue 51 on the north, Jackson Street on the west, Avenue 52 on the south and Van Buren on the east. The master plan will review and determine the location of manholes, manhole depths and main line slopes to ensure the area can be fully serviced through a gravity system. This master plan will also note the proposed location of all required domestic water extensions.

TASK 6: UTILITY POTHOLING

Following the development of the Sewer Master Plan and preparation of the utility base map, Consultant will prepare an exhibit noting pothole locations, which will be provided to the City for review and comment prior to initiating field potholing operations. For this proposal, we have proposed up to 10 potholes of existing utility facilities that may cross the proposed sewer and water extensions. Deliverable will be a pothole log noting the location, depth, utility facility, and facility size.

TASK 7: DOMESTIC WATER & SEWER EXTENSION PLANS – BASE STREET SEGMENTS

Based on the City approved Concept Plan, Consultant will prepare, under one cover/title sheet, the domestic water and sewer extension plans for the base street segments, which include the following:

Domestic Water

- Avenue 51 from Jackson Street to Calhoun Street (L=~2,690 LF)
- Calhoun Street from Avenue 51 to approximately 400' North of Avenue 51 (L=~415 LF)
- Avenue 52 from Jackson Street to approximately 1,365' East of Van Buren Street (L=~6,720 LF)

Sewer

- Avenue 51 from Jackson Street to approximately 800' East of Calhoun Street (L=~3,420 LF)
- Avenue 52 from Jackson Street to Van Buren Street (L=~5,320 LF)

Both water and sewer improvement plans will be depicted on same plan and profile sheets, utilizing AutoCAD software. Plan sheets will be prepared at an appropriate scale and will conform to the City Utilities Department Standards. Plans will be submitted for City review via an electronic submittal (PDF file) on 24x36 plan sheets.

TASK 8: RIVERSIDE COUNTY ENCROACHMENT PERMIT

Consultant will prepare the necessary paperwork, submit plans for review, and coordinate with Riverside County on obtaining an Encroachment Permit for the proposed sewer and water improvements.

TASK 9: COST ESTIMATE

Consultant will prepare an Engineers Estimate of Probable Construction Costs for the proposed improvements based upon the approved preliminary design plans utilizing the current edition of the Caltrans Contract Cost Data Book and recent bid information from area bids for unit costs. The construction cost estimate will be updated at each plan submittal stage including the concept plan.

TASK 10: SPECIFICATIONS

Using the City provided "Boilerplate" bid package and project specifications, Consultant shall prepare the technical specifications for each item of work in the Project not sufficiently covered by the Standard Specifications (Greenbook). The Consultant shall also prepare the bid schedule, update any utility relocation requirements for the project, review and modify the traffic control and staging for the project and determine the liquidated damages and working days for the proposed construction work.

TASK 11: BIDDING ASSISTANCE

Consultant will assist the City with the bidding and award process for this project. These services will be performed on a Time and Material (T&M) basis.

Activities associated with this task include but are not limited to:

- Bid Support. All key team members will be available to attend a pre-bid meeting.
- Respond to Inquiries. Consultant will respond to bidder inquiries by phone or email.
- Prepare Addenda. Consultant will prepare addenda as requested by the City.
- Review/Recommended Award. Consultant will assist in recommendation for award.

For this task, Consultant assumes 6 total hours, to be billed Time and Materials at a rate of \$200 / hour.

TASK 12: POST DESIGN SERVICES

Consultant will assist project staff with construction support services. Upon request from City staff the following will be provided:

- RFI documentation and response to questions regarding construction documents;
- Periodic site visits during construction, as requested;
- Input from the consultant regarding change orders;
- Final project review to ensure plan conformance; and
- Prepare Record Drawings based on Contractor As-Built plans.

For this task, Consultant assumes 16 total hours, to be billed Time and Materials at a rate of \$200 / hour.

OPTIONAL TASKS

The following tasks are optional tasks for additional street segment design plans.

TASK 13: DOMESTIC WATER EXTENSION PLANS – OPTIONAL STREET SEGMENTS

Based on the City approved Concept Plan and written direction from the City on adding any or all the optional segments, Consultant will prepare domestic water extension plans for the following street segments:

- Jackson Street from Avenue 52 to Avenue 51 (L=~2,700 LF)
- Calhoun Street from Avenue 52 to Avenue 51 (L=~2,600 LF)
- Avenue 51 from Calhoun Street to Van Buren Street (L=~2,700 LF)

Water improvements will be depicted on plan and profile sheets, utilizing AutoCAD software. Plan sheets will be prepared at an appropriate scale and will conform to the City Utilities Department Standards. Plans will be submitted for City Review via an electronic submittal (PDF file) on 24x36 plan sheets.

TASK 14: SANITARY SEWER EXTENSION PLANS – OPTIONAL STREET SEGMENTS

Based on the City approved Concept Plan and written direction from the City on adding any or all the optional segments, Consultant will prepare sanitary sewer extension plans for the following street segments:

- Jackson Street from Avenue 52 to Avenue 51 (L=~2,700 LF)
- Calhoun Street from Avenue 52 to Avenue 51 (L=~2,600 LF)

Sanitary Sewer improvements will be depicted on plan and profile sheets, utilizing AutoCAD software. Plan sheets will be prepared at an appropriate scale and will conform to the City Utilities Department Standards. Plans will be submitted for City Review via an electronic submittal (PDF file) on 24x36 plan sheets.

PROJECT FEE; BASE TASKS

Task 1	Project Management	\$3,900
Task 2	Topographic Base Map	\$30,300
Task 3	Utility Research & Coordination	\$2,100
Task 4	Geotechnical Report	\$17,200
Task 5	Area Master Plan	\$4,600
Task 6	Utility Potholing	\$18,200
Task 7	Water & Sewer Plans, Base Segments	\$32,300
Task 8	Riverside County Encroachment Permit	\$2,300
Task 9	Cost Estimate	\$2,100
Task 10	Specifications	\$2,400
Task 11	Bidding Assistance (T&M)	\$1,200
Task 12	Post Design Services (T&M)	\$3,200
TOTAL		\$119,800

PROJECT FEE; OPTIONAL TASKS

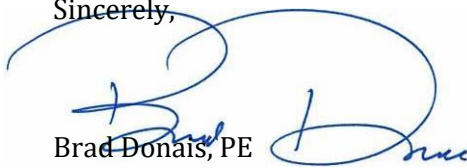
Upon request from the City, Consultant provide fees for the optional street segments based on if they will include only sewer, only water or both sewer and water design improvements.

REIMBURSABLE EXPENSES (T&M)

Utility Plat Maps	\$1,500
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Thank you for the opportunity to provide you with a proposal on this work. Please review the scope of work and fee and let me know if you have any comments or questions.

Sincerely,



Brad Donais, PE
Principal
Heptagon Seven Consulting, Inc.