



City of Tulare

Board of Public Utilities Commissioners

Agri-Center of the World

Agenda

President
Ray Fonseca

Vice President
Thomas Griesbach

Commissioners
Renee Soto
Tony Sozinho
Blake Wilbur

Tulare Public Library & Council Chamber
491 North M Street, Tulare
www.tulare.ca.gov

Thursday, December 7, 2023
4:00 p.m. – Regular Meeting

Mission Statement

To promote a quality of life making Tulare the most desirable community in which to live, learn, play, work, worship and prosper.

Attending Meetings

Regular meetings of the Board of Public Utilities Commissioners (BPU) are held on the first and third Thursdays of each month in the Council Chamber located in the Tulare Public Library at 491 North M Street, Tulare, subject to cancellation. Additional meetings of the BPU may be called as needed.

Documents related to items on the agenda are accessible on the City's website at www.tulare.ca.gov and available for viewing at the entrance of the Council Chamber.



Rules for Addressing the Commissioners

- Members of the public may address the BPU on matters within their jurisdiction.
- If you wish to address the BPU, please complete one of the pink speaker cards located at the entrance to the Council Chamber and provide to the Clerk.
- Persons wishing to address the BPU concerning an **agendized** item will be invited to address the BPU during the time that the BPU is considering that agenda item. Persons wishing to address the BPU concerning a **non-agendized** issue will be invited to address the BPU during the Citizen Comments portion of the meeting.
- When invited by the President to speak, please step up to the podium, state your name and city where you reside, and make your comments. Comments are limited to three minutes per speaker.

Americans with Disabilities Act

Pursuant to the Americans with Disabilities Act, persons with a disability who require a disability-related modification or accommodation to participate in a meeting, including auxiliary aids or services, may request such modification from the City Clerk's Office at (559) 684-4200. Notification 48 hours prior to the meeting will enable the City to make reasonable arrangements to assure accessibility to the meeting.

1. CALL TO ORDER

2. PLEDGE OF ALLEGIANCE AND INVOCATION

- ## 3. PUBLIC COMMENTS
- This is the time for the public to comment on items on the Consent Calendar or within the jurisdiction of the Board. Comments related to General Business items will be heard at the time the item is discussed. The Board cannot legally discuss or take official action on citizen request items that are introduced tonight. Each speaker will be allowed three minutes, with a maximum time of 10 minutes per item, unless otherwise extended by the Board.

4. **COMMUNICATIONS** - No action will be taken on matters listed under Communications; however, the Board may direct staff to schedule issues raised during Communications for a future agenda.
5. **CONSENT CALENDAR** - All Consent Calendar items are considered routine and will be enacted in one motion. There will be no separate discussion of these matters unless a request is made, in which event the item will be removed from the Consent Calendar to be discussed and voted upon by a separate motion.
- 5.1 **Special and/or Regular Meeting Minutes of November 16, 2023.**
Recommended Action: Approve as submitted. [M. Peton]
6. **GENERAL BUSINESS** - Comments related to General Business items are limited to three minutes per speaker, for a maximum of 30 minutes per item, unless otherwise extended by the Board.
- 6.1 **Lawn to Garden Rebate Program.**
Recommended Action: Approve and authorize staff to move forward with implementation of the Lawn to Garden Rebate Program as presented. [A. Luttrell]
- 6.2 **Award Contract for Engineering Design Services of Water Well #1 Replacement, Project WT0056.**
Recommended Action: Award and authorize the City Manager to sign a contract for the engineering design services for the replacement of water well #1 (Project WT0056) with Carollo Engineers, Inc. of Fresno, CA in the amount of \$336,095.00 and authorize the City Manager or designee to approve contract change orders in the amount not to exceed 10% (\$33,609.50) of the contract award amount. [T. Doyle]

7. ITEMS OF INTEREST

8. ADJOURNMENT

The next regularly scheduled meeting of the Board of Public Utilities Commissioners is Thursday, December 21, 2023, at 4:00 p.m. in the Council Chamber, 491 North M Street, Tulare.

AFFIDAVIT OF POSTING AGENDA

I hereby certify, in conformance with Government Code Sections 54954.2 and 54956, this agenda was posted in the kiosk at the front of City Hall, 411 E. Kern Avenue, as well as on the City of Tulare's website (www.tulare.ca.gov).

DATE & TIME POSTED: Friday, December 1, 2023 at 4:00 p.m.



Maegan Peton, Deputy City Clerk

CITY OF TULARE

BOARD OF PUBLIC UTILITIES COMMISSIONERS
MEETING MINUTES

Tulare Public Library & Council Chamber
491 North M Street, Tulare

Thursday, November 16, 2023
4:00 p.m. - Regular Meeting

COMMISSIONERS PRESENT: President Ray Fonseca (left at 4:39 p.m.)
Vice President Thomas Griesbach
Commissioner Renee Soto
Commissioner Tony Sozinho

COMMISSIONERS ABSENT: Commissioner Blake Wilbur

STAFF PRESENT: City Manager Marc Mondell; Assistant City Attorney Megan Dodd; Deputy City Clerk Maegan Peton; Public Works Director Trisha Whitfield; Assistant Finance Director Melanie Gaboardi; City Engineer Michael Miller; Assistant Public Works Director Tim Doyle; Senior Management Analyst Andrew Bettencourt; Utility Billing Manager Elissa Arroyo; Projects Manager Dylan Chimienti; Chief Technology Officer Jason Bowling

1. CALL TO ORDER

President Fonseca called the regular meeting of the Board of Public Utilities Commissioners to order at 4:00 p.m. in the Council Chamber located at 491 North M Street.

2. PLEDGE OF ALLEGIANCE AND INVOCATION

Commissioner Sozinho led the Pledge of Allegiance and an invocation was given by Vice President Griesbach.

3. PUBLIC COMMENTS

There were no public comments.

4. COMMUNICATIONS

There were no communications.

5. CONSENT CALENDAR

Items 5.2 and 5.3 were removed from the Consent Calendar by Commissioner Soto.

It was moved by Commissioner Sozinho, seconded by Vice President Griesbach, and carried 4 to 0 (Commissioner Wilbur absent) that the items on the Consent Calendar be approved as presented except for items 5.2 and 5.3.

5.1 Special and/or Regular Meeting Minutes of November 2, 2023.

Recommended Action: Approve as submitted. [M. Peton]

PULLED CONSENT CALENDAR ITEMS**5.2 October 2023 Public Works Performance Reports.**

Recommended Action: Receive the Public Works performance reports for October 2023. [A. Bettencourt]

Board Action: This item was pulled by Commissioner Soto to request a year-to-date solid waste statistic be included on future reports. It was moved by Commissioner Sozinho, seconded by Commissioner Soto, and carried 4 to 0 (Commissioner Wilbur absent) that the item be approved as presented.

5.3 System Loss Quarterly Report.

Recommended Action: Receive the quarterly Potable Water Pumping and Metered Delivery Report. [A. Bettencourt]

Board Action: This item was pulled by Commissioner Soto for clarification. It was moved by Commissioner Sozinho, seconded by Commissioner Soto, and carried 4 to 0 (Commissioner Wilbur absent) that the item be approved as presented.

6. GENERAL BUSINESS**6.1 Services Contract for Utility Billing Electronic Payment Processing and Paperless Billing.**

Recommended Action: Approve contract with InvoiceCloud and authorize the City Manager to sign a 5-year agreement with InvoiceCloud, subject only to minor conforming and clarifying changes acceptable to the City Attorney and City Manager for Utility Billing electronic payment processing and paperless billing using a cooperative purchasing agreement from Omnia Partners.

Presented By: Chief Technology Officer Jason Bowling and Invoice Cloud Representative Adam Elk

Public Comment: None

Board Action: It was moved by Commissioner Sozinho, seconded by Commissioner Soto, and carried 3 to 0 (Commissioner Wilbur and President Fonseca absent) to approve the item as presented.

6.2 Award of Bid for Project WT0020 – Well Rehabilitation 33, 31, 26.

Recommended Action: Award and authorize the City Manager or his designee to sign contracts related to the construction of City Project WT0020 for the Rehabilitation of Wells 33, 31, 26; authorize the City Manager or his designee to approve contract change order in an amount not to exceed 10% of each contract amount; and approve the revised project sheet.

Presented By: Project Manager Dylan Chimienti

Public Comment: None

Board Action: It was moved by Commissioner Soto, seconded by Commissioner Sozinho, and carried 3 to 0 (Commissioner Wilbur and President Fonseca absent) to approve the item as presented.

7. ITEMS OF INTEREST

Items of interest were discussed amongst the Board and staff.

8. ADJOURNMENT

Vice President Griesbach adjourned the regular meeting at 4:54 p.m.

Approved by the Board on December 7, 2023.

RAY FONSECA, PRESIDENT

ATTEST:

MARC MONDELL, CITY CLERK

By Maegan Peton, Deputy City Clerk

DRAFT

This page intentionally left blank.

DRAFT



Staff Report

Meeting: Board of Public Utilities Commissioners

Date: December 7, 2023

Item #:
General Business 6.1

Department: Public Works - Water

Submitted by: April Luttrell, Conservation Coordinator

Agenda Title: Lawn to Garden Rebate Program

RECOMMENDED ACTION

Approve and authorize staff to move forward with implementation of the Lawn to Garden Rebate Program as presented.

SUMMARY

On January 19, 2023, the Board of Public Utilities adopted a resolution authorizing the grant application process for the 2022 Urban Community Drought Relief Program. The City of Tulare was awarded \$3 million for a Lawn-to-Garden Rebate Program from the California Department of Water Resources from this application process. The Lawn-to-Garden Rebate Program is available to residential and commercial properties with active, good standing City of Tulare water accounts.

The Lawn to Garden Rebate Program offers \$3.00 per square of lawn removed up to 1,500 square feet for residential properties and \$3.00 per square foot of lawn removed up to 5,000 square feet for commercial properties. The maximum rebate for residential properties is \$4,500 and for commercial properties is \$15,000. Lawn must be removed and replaced with water-wise, drought tolerant plants, mulch, drip irrigation lines, and allow for a small amount of permeable hardscaping. Plants must cover at least 50% of the converted area when full grown and permeable hardscaping cannot be greater than 20% of the converted area. Artificial turf is not eligible for a rebate nor are high-water plants, low-water lawns, invasive plants, plastic weed barriers, or concrete.

Residential and commercial customers must fill out the application, submit to the Conservation Coordinator, and wait for pre-approval before beginning conversion. Renters are allowed to apply with consent from property owner. Conversion needs to be completed within 120 days after pre-approval. Applicants must notify the Conservation Coordinator when project is complete for a final review. If project is deemed to be out of compliance with the terms and conditions of the agreement, applicant is given the remaining portion of 120 days or 60 days, whichever is greater, to gain compliance. Rebate is mailed to applicant after final inspection has been completed and the conversion has met all terms and conditions of the agreement.

FISCAL IMPACT & FUNDING SOURCE(S)

Funding for the Lawn to Garden Rebate Program was awarded through the Budget Act of 2021 and through an agreement with the California Department of Water Resources. The grant includes administrative costs so there is very minimal cost to the City.

LEGAL REVIEW

The Assistant City Attorney has reviewed and approved the Lawn to Garden Rebate Program Application and Terms and Conditions.

ALTERNATIVE ACTION

1. Approve with changes
2. Deny
3. Table

ATTACHMENTS

1. Lawn to Garden Rebate Program Application
2. Lawn to Garden Terms and Conditions
3. Landscape Quick Plan Guide

Reviewed/Approved:

A handwritten signature in blue ink, appearing to be 'ML', written over a horizontal line.



Lawn to Garden Rebate Program

**Rebates up to \$4,500 residential
\$15,000 commercial**

City of Tulare's lawn to garden rebate supports water-wise gardens that thrive in California's summer dry climate and during drought. Lower your water bill and conserve water when you convert lawn to sustainable landscape and upgrade to high-efficiency irrigation equipment.



When you convert or upgrade your landscape you:

 **Save Water**  **Save Money**  **Save Time**  **Reduce Waste**

HOW TO GET STARTED IN THREE STEPS:

- 1** Decide you want to participate in lawn to garden rebate!
- 2** Send in a completed application form to the City of Tulare.
- 3** Wait for City of Tulare approval before beginning work.

RESOURCES FOR A SUCCESSFUL PROJECT:

-  Low-water plants for our local climate: fresnogardening.org
-  Garden design and maintenance guidance: fresnogardening.org/tours.php
-  Tutorials for lawn removal: <https://www.bewaterwise.com/toolkit.html#how-to-videos>





Lawn to Garden Rebate Program Application

Eligibility:

- Rebates are reserved for landscaped areas currently irrigated by an active potable City of Tulare water service.
- City of Tulare rebates are subject to terms, conditions, and available program funding. Please read entire application carefully.
- Rebate is \$3.00 per square foot up to 1,500 square feet with a maximum rebate amount of \$4,500 per residence.
- Rebate is \$3.00 per square foot up to 5,000 square feet with a maximum rebate amount of \$15,000 per multi-family or commercial property.

Return completed form to: aluttrell@tulare.ca.gov or
 City of Tulare Lawn to Garden Rebate Program, 3981 S K St, Tulare, CA 93274

Customer Information

Property is:
 Residential Single/Multi-family 4 units or less
 Maximum possible rebate \$4,500
 Multi-family 5 units or more/Commercial Property
 Maximum possible rebate \$15,000
 Irrigation only meter? Yes No

Contact Information:

Check one:
 Owner Tenant Property Manager Landscape Contractor

City of Tulare Water Account # _____

Name: _____ Email: _____

Installation Address: _____

Phone: _____ Owner Email: _____

Tax Notice

All residential rebates, that individually or in combination, total \$600 or more in a tax year require submittal of a W-9 form to the District prior to payment. All personal information provided within the W-9 will be kept confidential in accordance with the Privacy Act. If your total rebate amount is \$600 or more, you will receive a 1099 form to comply with IRS requirements. The determination of whether your rebate is taxable or not may depend on several variables; you are recommended to contact your tax professional for more information.

Agreement

I, the undersigned, understand that this a limited, first-come/first-served program and that the City of Tulare is entitled to deny any application that does not meet program requirements. I have voluntarily determined to participate in the City of Tulare's Lawn to Garden Rebate Program. I have independently selected materials, supplies, and labor for the purpose of performing the installation. I agree that all work performed will comply with applicable federal, state, and local laws, ordinances and regulations. I agree that the City of Tulare may visit the premises and verify existing conditions and that the work has been performed. By virtue of these inspections, I understand that the City of Tulare makes no determination with respect to whether materials and equipment are free of defects, the quality of the workmanship, or the suitability of the premises or the materials or the equipment for the installation. I also understand that the installation of irrigation equipment and landscape materials may not result in lower water bills. If this application is approved by the City of Tulare and the work proceeds, I agree to defend, indemnify and hold harmless the City of Tulare, its directors, officers, agents and employees against any and all loss, liability, expense, claims, suits and damages, including attorneys' fees, arising out of or resulting from the installation of irrigation equipment and landscape materials.

Please provide Property Owner signature and Applicant signature (if Applicant is not Property Owner) to process rebate application.

 Property Owner Signature Print Name Date

 Applicant Signature Print Name Date



Lawn to Garden Rebate Requirements

Step 1. Check each box to indicate you understand the requirements.

Is your lawn eligible for a rebate?

- Lawn has been actively maintained and irrigated by potable City of Tulare water.
- Lawn conversion project has not started.
- Project will not begin until City of Tulare provides written notice of approval.

Projects must include:

Conversion Method (select one)

- Physical removal: Fast and effective, but can disturb and compact soil. Compost may be required to improve soil health.
- Sheet mulching: Layer cardboard, compost, and mulch on top of the lawn instead of physically removing or killing it with herbicides. For more information about this easy process, visit lawntogarden.org.

Plants

- Plants must cover 50% of the converted area once fully grown. A tree is recommended.
- Plants must be low-water-use for our local climate. Low-water-use plants need little to no supplemental water once established. Edible plants and trees are accepted. Find examples at fresnogardening.org.
- (Recommended) Majority of plants are native to California.

Materials

- Planted areas and exposed soil must be covered with two (2) inches of mulch.
- New landscape may include pathways or patios as long as they are permeable, allowing water to pass through. Permeable materials can include pavers or brick filled with sand, gravel, or decomposed granite.
- Only permeable weed barriers may be used. Must be permeable to air and water.
- (Recommended) Compost must be applied in planted areas (minimum 1/2 inch layer)

Irrigation

- If there is a sprinkler system currently in place, it must be removed, capped, or replaced with a drip system.
- If installed, drip systems must use a pressure regulator and filter to ensure proper function.
- If there are any plants with different watering needs, they must be placed in separate irrigation zones to avoid overwatering.

Project Timing

- Lawn conversion project will be completed within 120 days of project pre-approval.
- (Recommended) Plants will be installed between September and February.

Project must **NOT** include:

- Artificial turf.
- Concrete, mortared, or glued paths or patios.
- Plants that need moderate to frequent watering once established.
- Plastic or non-biodegradable weed barriers, including landscape fabric.
- Low-water lawns from seed or sod.
- Plants listed as invasive on cal-ipc.org/plants/profiles.



Lawn to Garden Rebate Application

Step 2. Complete all sections below.

Measure and sketch the lawn conversion area below or attach a sketch separately.

Reminder: Non-irrigated lawns and lawns already converted at the time of the pre-inspection are not eligible for a rebate.

Attach several photos of the existing lawn area to this application.

I understand City of Tulare may need to schedule a rebate pre-inspection at the project site.

Provide a plant list

- Use the space below to list the plants planned for your lawn conversion area. Plants must be climate appropriate and require little to no supplemental water once established. Visit fresnogardening.org for suggestions of approved low-water-use plants. Mark plants that are California native with an asterisk *.

_____	_____
_____	_____
_____	_____
_____	_____
_____	_____
_____	_____
_____	_____
_____	_____
_____	_____
_____	_____

Estimate your lawn to garden rebate:

_____ square feet x \$3.00 = \$ _____

Step 3. Wait for City of Tulare approval before beginning work.



Lawn to Garden Rebate Program Terms and Conditions

The Lawn to Garden Rebate Program provides rebates to City of Tulare water customers as an incentive to convert water-thirsty lawns to water efficient landscapes. Funding is limited and applications will be accepted on a first-come, first-served basis. City of Tulare reserves the right to terminate this program at any time, for any reason.

The following terms and conditions apply to the **Lawn to Garden Rebate Program**. Please read carefully prior to submission of your application.

I. Pre-Conversion Eligibility

- Program is NOT retroactive. Projects underway or completed prior to receiving a City of Tulare Notice to Proceed are not eligible.
- Sites can participate multiple times up to the rebate amount.
- The Lawn to Garden Rebate Program is available for single-family, multi-family, and commercial customers who receive water for their landscape through a metered service with the City of Tulare. The applicant's water account must be in good standing.
- Lawn areas proposed to be converted must have been irrigated. Brown or dead lawns that are not currently irrigated due to drought are accepted. However, bare dirt or seasonal weed areas that show no signs of the presence of a lawn do NOT qualify.
- A minimum of 250 square feet of lawn must be converted in the front or back yard. Smaller front or back yard projects will be considered if 100% of the lawn area is being removed.
- The rebate application must be submitted to the City of Tulare and a Notice to Proceed letter issued by the City of Tulare prior to the removal of any lawn or sprinklers. Conversions that are initiated prior to the City of Tulare's approval are ineligible.
- The City of Tulare may require an on-site inspection to verify eligibility and take photos and measurements of the project area prior to issuing a Notice to Proceed letter, Customers may need to be present for the inspection which will be conducted during normal business hours.



II. Landscaping Requirements for Converted Areas

- **Fifty Percent (50%) Plant Cover:** The converted area must include a sufficient number of plants, planted in the ground, to ensure at least 50% of the converted area is covered with plants when the plants are fully grown. Tree canopy and plants outside the converted area are not considered in the calculation, even if they are adjacent to or overhanging the converted area. To determine mature plant size, consult the *Sunset Western Garden Book*.
- **Plants:** Plants must be low water needing and adaptable to our local climate. *Plants must be listed on the Approved Plant List. Plants not found on this list will be considered on a case-by-case basis.*
- **Permeable Hardscape:** Permeable hardscape (i.e. stepping stones without mortar or grout) may be used but **cannot make up more than 20%** of the total area to be rebated. Note, the 50% plant coverage requirement still applies to the entire area. Therefore, more plants will be needed in the remaining area.
- **Organic Mulch:** All planting areas must have a minimum of two (2) inches of mulch. Note: if a weed barrier is below the mulch, it must be permeable to air and water.
- **Efficient Irrigation:** The existing lawn sprinkler heads in the converted area must be removed. Any lawn areas remaining outside the converted area must be irrigated separately from the new landscape. Participants have three options for irrigating their new landscape:
 1. The City of Tulare encourages participants to install a new drip irrigation system equipped with a pressure regulator, filter, and pressure compensating emitters. Drip is the most efficient way to irrigate plants, trees, and shrubs. Information on drip irrigation can be found at https://sonomamg.ucanr.edu/Drip_Irrigation.
 2. Participants can choose to hand water their new landscape and not install a drip system. However, this is not encouraged as it is more difficult to establish plants and maintain uniform moisture.
 3. On rare occasions, with prior City approval, participants may use low-application rate sprinklers to irrigate their new landscape. These systems must have an application rate of less than 1" per hour and be designed and installed to ensure there is zero overspray onto adjacent pavement or structures and zero runoff due to plants blocking the spray. Participants must get prior City approval and be able to demonstrate the system meets the requirements.



III. Terms of the Rebate

- **Term:** Conversions must be completed within 120 days following receipt of the Notice to Proceed from the City of Tulare. To ensure water savings are achieved, the converted area must remain in compliance with the program terms and conditions for a period of five (5) years following receipt of the rebate. At the City of Tulare's discretion, non-compliance may result in a charge to applicant for all or part of the area under violation.
- **Rebate Amount:** The rebate is three dollars (\$3.00) per square foot of grass converted. The maximum rebate is \$4,500 for **single-family residential** and \$15,000 for **multi-family and commercial properties**. Rebates will be issued to the property owner or to the property owner's legally appointed representative.

The following illustrates a range of potential rebates:

Rebate Amounts	
Area Converted (sq. ft.)	Rebate
250	\$750
500	\$1,500
1500	\$4,500
5000	\$15,000

- **Tax Implications:** The State of California has made it clear that water conservation rebates are NOT taxable. However, current federal IRS tax rules are not as clear. The IRS has, however, made it clear that the City of Tulare is required to issue a 1099 form to individuals and companies that receive \$600 or more in rebates in a calendar year. Therefore, the City of Tulare now requires program participants that are approved to receive \$600 or more in rebates in a calendar year to complete an IRS W-form and submit it to the City of Tulare prior to receiving their rebate. Then in January of each year the City of Tulare will issue 1099 forms to those customers that received \$600 or more in rebates in the prior year. Note, water agencies, state officials, and members of Congress continue to work with federal tax officials to request that they treat water conservation rebates the same as they do the tax-free energy efficiency rebates.
- **Applying for the Program:** Customers interested in participating should visit our website at tulare.ca.gov and go to the water conservation page to learn more about the program and submit an application. Please read these Terms and Conditions **and the Frequently Asked Questions below** before submitting an application. *Do NOT start working on the project until you have received your Notice to Proceed letter.*



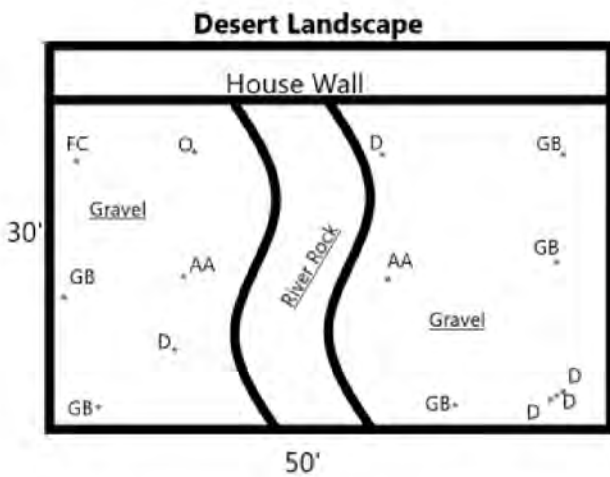
- **Application Review:** The City of Tulare will review the application to determine if the site is eligible and calculate the square footage of the lawn area(s).
- **Pre-Project Inspection:** As part of the review process, the City of Tulare may need to schedule a pre-project inspection at the project site. During the inspection, our conservation coordinator may take photos of the project site, measure existing lawn areas, and check for existing lawn sprinklers. Customers may need to be present for the inspection which will be conducted during normal business hours.
- **Eligibility:** If the site is eligible, the City of Tulare will send a Notice to Proceed letter to the customer. Customers may then remove the lawn and install the project according to the Program Terms and Conditions.
- **Finished Project Review:** It is the customer's responsibility to notify the City of Tulare when their project is complete and ready for a Finished Project Review. The City of Tulare will review the project to verify it was completed according to the Program Terms and Conditions and determine the final rebate amount. If the conversion fails the Finished Project Review, the applicant will be given sixty (60) days, or the remainder of the 120 day period, whichever is greater, to bring the project into compliance.
- **Post-Project Inspection:** As part of the Finished Project Review, the City of Tulare will need to schedule a post-project inspection at the project site. As part of the inspection, our conservation coordinator may take photos and measurements of the project and verify it was completed according to the Program Terms and Conditions. Customers may need to be present for the inspection which will be conducted during normal business hours.
- **Finished Project Approval:** If the Finished Project is approved, the owner will be mailed a rebate check.
- **Additional Responsibilities of the Applicant:** The City of Tulare enforces only the terms and conditions of this agreement. The applicant is solely responsible for complying with any and all laws, regulations, policies, conditions, covenants and restrictions that may apply, and for any and all liabilities arising from a conversion project. Applicants must comply with all local permitting requirements, and with all state and local laws relating to landscape maintenance.





Landscape Plan Quick Guide

- Plans do not have to be professionally drawn.
- Draw the shape of your yard with dimensions and square footage
- Computer or hand drawing is acceptable
- Add a plant legend/key
 - Use a coding system with letters or numbers to identify the plants you will be using.
 - Place them on the plan according to their planting location.
- See sample landscape plans below



Plant List:

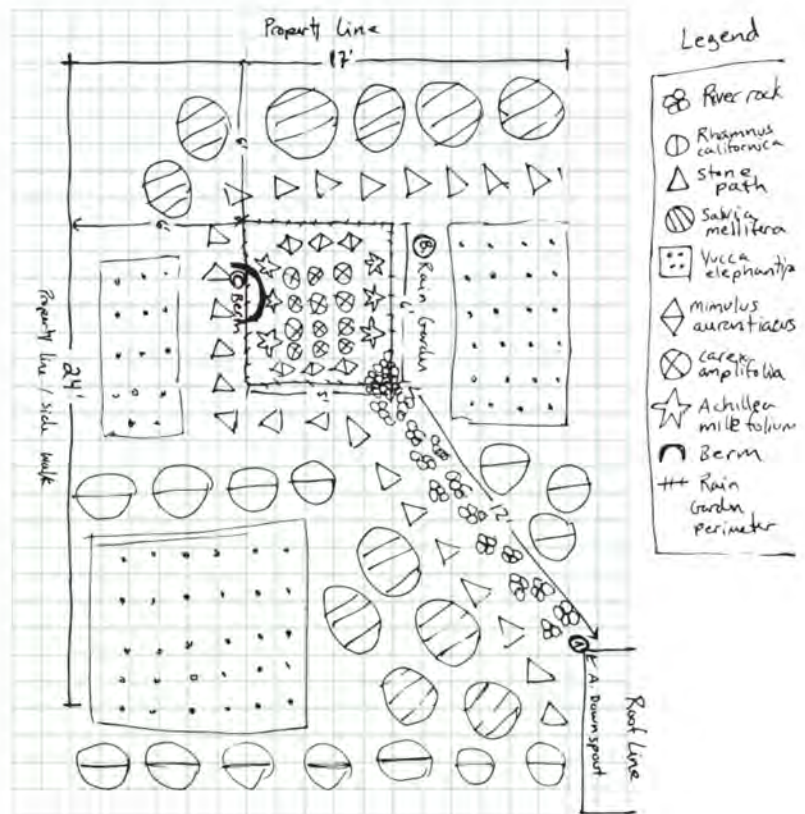
Agave Americana (AA)- 2
 Golden Barrel Cactus (GB)-5
 Ocotillo (O)- 1
 Fire Cracker Plant (FC) -1
 Damianita (D) -5

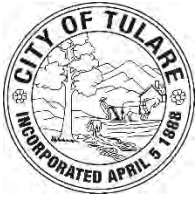
Groundcover:

Gravel
 River Rock

New Irrigation:

Drip *





Staff Report

Meeting: Board of Public Utilities Commissioners

Date: December 7, 2023

Item #:
General Business 6.2

Department: Public Works - Water

Submitted by: Tim Doyle, Assistant Public Works Director

Agenda Title: Award Contract for Engineering Design Services of Water Well #1 Replacement, Project WT0056

RECOMMENDED ACTION

Award and authorize the City Manager to sign a contract for the engineering design services for the replacement of water well #1 (Project WT0056) with Carollo Engineers, Inc. of Fresno, CA in the amount of \$336,095.00 and authorize the City Manager or designee to approve contract change orders in the amount not to exceed 10% (\$33,609.50) of the contract award amount.

SUMMARY

On October 6, 2022, the Board of Public Utilities approved a list of pre-qualified consultants for on-call water well design services and authorized the City Manager to enter professional services contracts with Carollo Engineers, Inc. of Fresno, CA and Provost & Pritchard of Visalia, CA for a period of two years with three (3) annual renewals available. The City has successfully utilized contractual services for various components of CIP construction projects to rehabilitate and upgrade the efficiencies of the current utility systems.

Well #1 was originally drilled in 1950 to a depth of 596 feet and is located in the alley between C and D Streets, north of San Joaquin Avenue. In 2014 the well went through a rehabilitation process that included swage patches of breaks in the casing, lowering the column pipe 100 feet, new pump bowls and motor. At that time it was stated that the casing had deteriorated to the point that any future breaks would be non-repairable. In September 2021, Well #1 became non-operational due to casing failure resulting in sand and dirty water being pumped into the system.

During the most recent Capital Improvement Program (CIP) budget adoption that occurred in June 2023, staff anticipated replacing well #1 and programmed a budget in the CIP for the current fiscal year. In October staff reached out to the City's on-call hydrogeologist, Ken Schmidt and Associates (KSA), and presented the analytical data gathered from well #1. KSA reviewed the data and determined that a replacement well could be constructed on this site due to the history of the well site typically producing water of good quality and quantity. Staff contacted the on-call water well design engineers and conducted a site visit to well #1 to go over the scope of work. Both Carollo Engineers and Provost & Pritchard submitted a proposal for the work. Staff reviewed the proposals and determined that Carollo Engineering, Inc. would be best suited to design the well site and appurtenances, prepare construction documents, and assist city staff in construction bidding and support. The replacement well and site improvements will be very similar to the recently completed new well sites utilizing established design standards and products.

FISCAL IMPACT & FUNDING SOURCE(S)

This project is budgeted in the Water Capital Fund 610 in the amount of \$2,102,000.

LEGAL REVIEW

This item did not require legal review.

ALTERNATIVE ACTION

- 1. Approve with changes
- 2. Deny
- 3. Table

If the project is not approved, the water system runs the risk of decreased water pressures and production.

ATTACHMENTS

- 1. Proposal from Carollo Engineers

Reviewed/Approved: _____





1401 Fulton Street, Suite 802
Fresno, California 93721
P 559-436-6616
carollo.com

October 31, 2023

Tim Doyle
Assistant Public Works Director
3981 So. K Street
Tulare, CA 93274

Subject: Well 1 Replacement Project

Dear Mr. Doyle:

Our team's recent successes on domestic water supply wells demonstrate a proven approach to delivering high quality well designs. Our commitment to client satisfaction and meeting the unique goals of each individual project. We are extremely excited for this opportunity to assist the City of Tulare with taking its next steps toward the replacement of aging wells.

We have developed a detailed scope of work for your project, tailored to meet your needs with the following:

- **A proven team of dedicated engineers.** Every member of our core team – Reace Fisher, Michael Ducker, and Bryan Burnitt (Carollo Engineers) has delivered successful well projects in northern California. Currently, members of this team are working with the City of Roseville, City of Santa Cruz, City of Yuba, City of Lathrop, City of Gig Harbor, WA and other central valley well projects to design, construct, and commission production wells as part of their respective water supply strategies.

The City will provide well permitting requirements by initiating early contact and continuing outreach with state and county agencies, we'll make sure construction, commissioning, and permitting of the new well remains on schedule. It is our understanding that the necessary technical studies and environmental documents for CEQA and NEPA compliance have been or will be completed and submitted by the City.

- **In-house engineering expertise for well equipping design.** We will leverage our experience and lessons learned from our other production well projects to deliver a cost-effective, operator-friendly design that will meet the City's long-term goals for water supply resiliency. Our electrical and instrumentation engineers only work on water and wastewater infrastructure projects, so we understand the intricacies of working within an active treatment plant. All of these factors translate directly to project success.

Mr. Tim Doyle
City of Tulare
October 31, 2023

Page 2

This proposal demonstrates how the qualifications, experience, understanding, and approach of our team are ideally suited to take this project from start to successful completion. We are committed to serving the City of Tulare as one of largest firms in the United States dedicated solely to water related engineering – **it's all we do.**

Sincerely,

CAROLLO ENGINEERS, INC.

A handwritten signature in black ink that reads "Michael Ducker". The signature is fluid and cursive, with a long horizontal stroke at the end.

Michael Ducker
Project Manager

MD:sm

Enclosures:List Enclosures: Scope of Work, Attachments A and B, Fee Schedule, and Rate Schedule





October 31, 2023

Tim Doyle
Assistant Public Works Director
3981 So. K Street
Tulare, CA 93274

Subject: Well 1 Replacement Project

Dear Mr. Doyle:

Project Background

Well 1 is located on a City owned property along an alley way between West Pine Avenue and West San Joaquin Avenue, west of North D Street in Tulare, CA. The existing Well 1 is no longer in use. It was at one time a good production well but started to produce sand after the well casing and screen deteriorated. In time, the existing in-line pressure vessel began to serve as a sand separator and as it filled with sand it was periodically blown off into a concrete vault. The sand would settle in the concrete vault and the water would drain out of the back of the pit into a drainage ditch and to an onsite earthen percolation basin. The sand would be off-hauled or spread onsite. Power is supplied to the site via a power pole drop. Communications is provided to the site via cellular communications. Increased water demands due to upcoming developments in the City and a decreasing water supply has inspired the City to reinstate Well 1 as an active production well.

Project Description

The existing Well 1 is to be abandoned. All the existing Well 1 equipment and facilities are to be removed and replaced. The project design is to be modeled closely after the example set of construction documents titled "City of Tulare Well 4-5 Equipping Project WT0038, produced by Cannon, dated 3/12/2021".

The project will include a new production Well 1. Electrical, controls and instrumentation will include a new power service, pad mounted transformer and power meter. A new CMU electrical building with HVAC will house the main switch board, automatic transfer switch for a generator receptacle (portable generator not included), motor control center, PLC, cellular communications, and security system with cameras and door switches. Outdoor improvements include above ground well equipping, piping, valves, controls, and instrumentation. A sodium hypochlorite storage tank and chemical feed pump injection system will be installed outside under a canopy shade structure. It is assumed that a fire sprinkler system is not required. Yard piping would include a storm drain and air-gap structure, electrical joint trench, potable water, and drain to sewer. Onsite improvements include grading the site to slope to storm drain and install a security fence that will allow access for maintenance and delivery vehicles. The existing water line running through the alleyway connecting to the adjacent streets is undersized and there is no storm drain running to the well site. Offsite improvements include an upsized domestic water line and storm drain from the well site to the adjacent streets. Included herein is Attachment A Site Map showing the well site and proposed offsite utilities. PLC and SCADA programming is to be provided by the City integrator who will be contracted through the General CONTRACTOR. The well design, construction inspection and oversight will be provided by the City Hydrologist who will be contracted by the City.

The timeline for design completion is estimated to be within 9 months of Notice to Proceed. Construction is to be completed in 9 months following issuance of Notice to Proceed and construction contract award.

If supplemental funding is secured by the City, a potential Optional Task to the project includes finished site grading and application of asphalt concrete from the access alley way to the well site.

Scope of Work

Task 1 Project Management and Administration

The purpose of this task is to provide ongoing project coordination, management, review of deliverables, and project meetings.

Task 1.1 Project Management.

All phases of the work will be managed under a single project management task for project execution, office administration, invoicing, coordinating work of the design team, and coordinating and reporting on the progress of the project to the City.

Task 1.2 Project Administration

The Carollo's Project Manager (PM) will assign labor resources for completion of project tasks, review work products, respond to City requests and concerns, and maintain communications with City staff to ensure satisfactory completion of the work on schedule and within budget. Under this task, the PM will also prepare progress reports to send with monthly billing invoices.

Task 1.3 Progress Calls

Carollo's PM will schedule and participate in weekly status calls with the City's PM throughout completion of the design tasks. These calls will be used to review status of the work, action items, information needs, the decision log, and the project look ahead schedule.

Task 1.4 Progress Meetings

Carollo will schedule a project kick-off, coordination, design, review, and outreach meetings to facilitate dialogue between all project team members to review the design submittals at subsequent phases of design completion.

Task 1.5 Quality Control/Quality Assurance

Carollo will provide quality control and quality assurance throughout project completion. This includes completion of a task to set up a system for tracking work progress and expenditures, per Carollo standard procedures. Carollo's PM will complete formal internal review procedures (which includes formal review by senior staff) prior to submittal of all project deliverables to provide an objective check on the adequacy of the design and related work products.

▪ *Task 1 Assumptions:*

- » Project management fee is based on an assumed overall project design duration of 9months.
- » Budget assumes annual escalation adjustments. If Optional tasks begin more than 12 months after 30 % design package submittal, budget review may be necessary.



Page 3

- » Progress calls will be weekly 1 hour conference calls between Carollo's and the City's project managers, with other City staff invited by the City's project manager. Include 1 hour preparation.
 - » Kick-off meeting will be 2 people in person at 8 hours each plus 4 key personnel on conference call at 2 hours each.
 - » Coordination meetings will be 3 people on a conference call at 2 hours each.
 - » Design review meetings will be 4 people on a conference call at 2 hours each.
 - » City staff will be made available for the design and design review meetings.
 - » City Council or Neighborhood meetings will be 1 persons in person at 8 hours plus 4 hours preparation.
- **Task 1 Meetings:**
 - » Kickoff Meeting
 - » 2 Coordination Meetings
 - » 60% Design Meeting
 - » 60% Design Review Meeting
 - » 90% Design Review Meeting
 - » One (1) City Council or neighborhood meeting where design team PM will assist City with meeting preparation and will be prepared to present project concepts.
 - **Task 1 Deliverables:**
 - » Information request log, meeting agendas, presentation materials, handouts, and meeting summary notes.
 - » Monthly invoices.
 - » Monthly progress reports.

Task 2 Field Work

Task 2 includes onsite and offsite field work and investigations.

Task 2.1 Data Collection and Review

Carollo will work with all project subconsultants to develop a comprehensive list of preliminary data needs for the project, and will transmit this to the City's PM. Carollo will compile the data as it is received from the City, distribute it to the design team, and collect team feedback of additional data needs required to facilitate the work.

Carollo's PM will develop an Information Request Log, which will be updated and shared with the City regularly to facilitate ongoing collection of data/information and on-schedule completion of the work.

Task 2.2 Survey and Mapping

Carollo will coordinate the completion of survey and topographic mapping for each site as required to support the work outlined herein.

Survey SUBCONSULTANT will establish the supplemental control for the well site based on ties to the City's GPS monument network. All project files will be tied to this network. Supplemental control points will be sufficient in number and stability so that they may be used throughout the design and construction process.



The site and extents of surveying include the following areas:

- Well 1, City owned property along an alley way between W Pine Avenue and W San Joaquin Avenue, west of N D Street in Tulare, CA.
- Alley way access road sufficient for tie-in and replacement of existing wet utilities and the placement of asphalt pavement.
- Sections of W Pine Avenue and W San Joaquin Avenue for the tie and replacement of wet utilities and asphalt repair.

The topographic mapping for the site will include all the following items:

- Spot elevations of sufficient density to produce a surface model with 1' contours, including all break lines, high points, and low points. Spot elevations on natural ground will be shown to the nearest 0.1' and spot elevations on pavement, concrete or other hard surfaces shown to the nearest 0.01'.
- Visible utilities including manholes, wells, drain inlets, culverts, water valves, fire hydrants, cleanouts, utility vaults, poles, guys and pull boxes. Invert elevations, pipe size and direction will be obtained for all manholes (unless bolted), drain inlets and culverts. Overhead power and/or communication lines will be shown.
- Trees with 6" trunk diameter or greater, areas of landscaping, concrete curbs and/or walkways.
- Sites with street frontage will also include location and elevation of the lip of gutter, back of curb and back of walk as well as surface visible utility assets.
- Geotechnical boring locations, if present.

Survey SUBCONSULTANT will submit topographic survey data with a surface feature developed in AutoCAD Civil 3D format. The survey deliverable will also include an electronic PDF site plot at 1"-20' scale.

This Scope of Work assumes the site is within existing parcels of land previously mapped and described. Therefore, in addition to the topographic information listed above, Survey SUBCONSULTANT will also include the site and/or parcel boundary and the location of any easements depicted on the map of record or identified in a Preliminary Title Report provided by others. In the event that the site is not located within a recent map of record and would require a complete boundary survey and possible Record of Survey, that would be considered additional services and subject to a separate scope and budget.

Task 2.3 Geotechnical Investigation

Geotechnical SUBCONSULTANT scope of services shall include review of existing subsurface exploration data, laboratory test results, and site field investigation for the project site and access road.

To characterize the subsurface conditions for design, Geotechnical SUBCONSULTANT will explore the well site by drilling two borings within and near to the proposed building footprint. Boring locations are shown in Attachment A and are subject to change prior to the field investigation. Geotechnical SUBCONSULTANT will retain the services of a subcontractor to drill the borings using applicable methods to depths of approximately 20 feet below existing grade, or refusal (whichever is shallower), with a truck-mounted drill rig. SUBCONSULTANT will provide appropriate notification to Underground Service Alert prior to performing our exploration to locate public utilities in potential conflict with the proposed subsurface exploration. Borings will be permitted and

backfilled in accordance with City of Tulare requirements. The preparation of a draft and final geotechnical reports that will include the following:

1. Earthwork recommendations:
 - a. Site clearing and original ground preparation.
 - b. Treatment of over-optimum soil moisture conditions.
 - c. Acceptable on-site and imported fill materials.
 - d. Subgrade and fill compaction requirements.
 - e. Utility trench backfill compaction.
 2. Evaluation and mitigation of Geologic Hazards including expansive soil, soft soil, loose soil and liquefiable soil, as necessary.
 3. Current Seismic Design Parameters
 4. Approximate depth to groundwater.
 5. Foundation recommendations for various structures.
 6. Recommendations for concrete slabs-on-grade.
 7. Recommendations for flexible pavement design.
 8. Soil corrosion potential parameters (redox potential, pH, electrical resistivity, sulfides, soluble chloride, soluble sulfate).
- **Task 2 Assumptions:**
 - » A boundary survey and easements have already been completed for the proposed well site.
 - **Task 2 Deliverables:**
 - » Design level topographic survey.
 - » Draft and Final Geotechnical Report.

Task 3 Well Equipping Design Services

Under this task Carollo will develop a set of construction documents including detailed plans and technical specifications for the project. Because of Carollo's previous experience with well designs for the City, we propose to forego the 30% design as it will allow us to save costs and time. There will still be adequate comment periods for the 60% and 90% deliverables.

Task 3.1 60% Contract Documents

Carollo will prepare responses to comments, incorporate feedback, and prepare the 60% design submittal. Following submittal and City review of the 60% Contract Documents, a review meeting will be held with the City (Task 1.4).

Task 3.2 90% Contract Documents



Page 6

Following receipt of all comments on the 60% design submittal, Carollo will prepare responses to comments, incorporate feedback, and prepare the 90% design submittal. Following submittal and City review of the 90% Contract Documents, a review meeting will be held with the City (Task 1.4).

Task 3.3 Final Contract Documents

Following receipt of all comments on the 90% design submittal, Carollo will prepare responses to comments, incorporate feedback, and prepare the final design submittal. Final Contract Documents will be submitted with Certified Digital Signatures and engineering seals for bid advertisement.

An optional task for grading and installation of asphalt pavement over the alley in front of the Well 1 site has been provided in Task 6 below.

▪ **Task 3 Assumptions:**

- » Front-end Specifications to be provided by City
- » Well design will have similar design concepts, details, and equipment to the latest example provided by the City.
- » Technical specifications using Carollo's master specification template/format.
- » Front-end Specifications to be provided by City
- » Estimated List of Drawings in Attachment B, as included herein.
- » Civil/site concepts will be adjusted to meet site constraints.
- » Carollo will be provided with Well Design documents including Drafted plan sheets to be incorporated into the Carollo's combined plan set including site and standard details. The well designer shall provide the design documents in Revit or AutoCAD Civil 3D format), and technical specifications (MS Word format).
- » Well Design Technical specifications using ENGINEER's master specification template/format.

▪ **Task 3 Design Parameters:**

- » Approximately 480 linear feet of water main in the alley way is to be upsized to 12" per City recommendations. Approximately 480 linear feet of storm drain is to be installed in the alley way connecting to the adjacent streets. Modeling of the water distribution and storm water systems is not included in this scope but can be added as an optional item per request of the City.

▪ **Task 3 Deliverables:**

- » Plans and specifications will be submitted to the City for review at the 60%, 90%, and Final Bid Document design stages.
- » The 60% submittal will include 60% design drawings, and the TOC showing all specifications sections and draft versions of the major technical specification sections, supporting documents (geotechnical reports etc.), and an updated engineer's cost estimate.
- » The 90% submittal and final bid documents will include drawings, specifications, any additional supporting documents, and an updated engineer's cost estimate summarizing estimated construction costs.

Page 7

- » A total of 1 reproducible sets of half-sized drawings and specifications and 3 bound sets of half-sized drawings and specifications (along with the final engineer's cost estimate) will be provided as the final submittal. Specifications will also be provided electronically in PDF format.
- » Design documents include Drafted plan sheets to be incorporated into Carollo's plan set including Site Details and Standard Details (Revit or AutoCAD Civil 3D format), and technical specifications (MS Word format).
- » Technical specifications using Carollo's master specification template/format.
- » Planning level (Class 3) cost estimate for at the 60% design level, as defined by AACE International
- » Planning level (Class 2) cost estimate for both sites at the final design level, as defined by AACE International
- » Well drilling contract documents will be part of the overall package of Contract Documents.
- » Attendance at design kick-off meeting
- » Site visit with City to the well site to discuss site specific design and construction issues and requirements.

Task 4 Bidding Assistance

Carollo will assist the CITY with preparation of applicable portions of the request for proposal (RFP). Carollo will prepare for and attend the pre-proposal meeting and be prepared to discuss applicable project components and answer questions. Carollo will prepare responses to applicable questions during the proposal period for incorporation into addenda to be issued by CITY.

Carollo will review applicable sections of CONTRACTOR proposals and assist Carollo with recommendations for award.

Task 4.1 Prepare Package and Conduct Pre-Proposal Meetings.

Carollo will work with City staff to prepare a request for proposal (RFP) package using the City's standard Contract Agreement. Carollo will prepare for and conduct a pre-proposal meeting for the construction project. The mandatory meetings to be conducted in two parts: 1) conference room setting where the administrative aspects of the project will be presented by the construction manager, and the project components and details of the project processes will be presented by the design engineer; and 2) site visit that takes the potential proposers through an organized site tour to provide a brief understanding of the project features and the potential construction challenges. This would include a visual explanation of project constraints, construction components, and construction related aspects such as laydown/staging areas, ingress/egress, field offices, parking, security, dewatering, noise control, and environmental considerations.

Task 4.2 Technical Assistance for Questions During Proposal Period.

City will receive questions during proposal period and develop responses to questions produced by the bidders and respond in and create addenda with technical support from Carollo. Carollo will provide up to two (2) Addenda.

Task 4.3 Review Proposals, Prepare Recommendation on Contract Award.



Review construction proposals and provide recommendations to the City regarding proposal completeness or responsiveness, proposer capabilities, and contract award.

▪ **Assumptions:**

- » Pre-proposal Meeting Attendance by one Well Drilling SUBCONSULTANT team member
- » Task budget includes travel, meeting preparation, and summary.
- » Respond to RFI's specific to well drilling contract documents.

Task 5 (Optional Task) Engineering Services During Construction (ESDC)

The following sections describe the detailed scope of engineering services during construction:

Task 5.1 Pre-Construction Conference

Carollo shall prepare an agenda for, attend, take meeting notes, and type and distribute minutes to the participants for a CITY-led pre-construction conference. Key members of the CONSULTANT's design team will also participate in the meeting via conference call.

Task 5.2 Site Visits

Carollo's local representative shall visit the construction sites as required to monitor construction progress and to address CONTRACTOR questions and RFIs. The project manager will visit the construction sites twice during project construction (assume 4 hours per visit including travel time).

Carollo's local design team shall attempt to schedule the local representative visits to coincide with regular construction progress meetings or as required by the CITY.

Members of Carollo's design team shall visit the site at key times during construction to monitor specific aspects of the construction (assume 8 hours per visit including travel time).

Task 5.3 Submittal Reviews

Carollo's designated construction services coordinator will maintain a submittal log and will utilize the web-based construction document management system to distribute submittals to members of the design team for review. The designated design team members will review the submittals for compliance with the contract documents. They will provide written comments and a summary response for each submittal. The review comments will be routed through Carollo's construction services coordinator for return to the CONTRACTOR. Based on specification submittal requirements for equipment, material, and testing, a total of 50 submittal reviews (including original submittals and a 50-percent resubmittal rate) are included in the scope. The corresponding budget is based on an average of 4 hours per submittal for Carollo's review and response, and 2 hours per resubmittal for up to 50% of the total shop drawing count.

Task 5.4 Request for Information (RFIs)

Carollo shall receive and respond to CONTRACTOR's RFIs. Carollo's construction services coordinator will maintain an RFI log and may utilize members of the design team to resolve specific issues and to assist in preparation RFI responses. The RFI log will be periodically distributed to the CONTRACTOR, Carollo's design

Page 9

team and the City. A total of 10 RFIs are included in the scope. The corresponding budget is based on an average of 4 hours per RFI for Carollo's review and response.

Task 5.5 Design Clarifications (DCs)

Carollo shall prepare design clarifications (DCs) as required by the project. A total of 5 DCs are included in the scope. The corresponding budget is based on an average of 6 hours per DC, which includes preparation time, discussions with CONTRACTOR and CITY representatives in the field, and preparation of the design clarification memorandums (DCMs).

Task 5.6 Record Drawings

Carollo will provide a combined set of record drawings to the City.

Assumptions:

- Agenda and minutes for pre-construction conference.
- Electronic responses to RFIs.
- Responses to submittals.
- Submission of DCMs.
- Record drawings.
- The CITY will coordinate with the regulatory agencies, procure all necessary permits, and pay required fees.
- The scope of work in the geotechnical report includes the field investigation and recommendations for paving and grading of the alley. Any unforeseen additional scope would be negotiated.

Task 6 (Optional Task) Alley Paving and Grading

1. The City has expressed interest in allocated funds to grade and pave the alley way access way in front of the Well 1 site in between West Pine Avenue and West San Joaquin Avenue. Should the City approve this optional scope of work Carollo will include this task in the improvement plans and technical specifications.





1401 Fulton Street, Suite 802
Fresno, California 93721
P 559-436-6616
carollo.com

Time of Performance

- Carollo will perform the scope of services in accordance to support the milestone schedule provided as part of Attachment B Project Schedule. This schedule reflects our understanding of the City's timing and coordination with the well design consultant.

Level of Effort

Carollo will perform the well equipping design and site improvements for the well 1 site for three hundred and thirty six thousand, ninety five dollars (\$336,095).

Sincerely,
CAROLLO ENGINEERS, INC.

A handwritten signature in black ink that reads "Michael Ducker".

Michael Ducker
Project Manager

MD:sm

Enclosures:List Enclosures: Attachments A and B

Attachment A
City of Tulare - Well 1 Replacement Project
Site Map



NOT TO SCALE



Attachment B - List of Drawings

Sheet	Discipline	Sheet	Title	Sheet	Discipline	Sheet	Title
GENERAL				INSTRUMENTATION			
1	General	G01	COVER SHEET	1	Instrumentation	GN01	SYMBOLS AND ABBREVIATIONS 1
2	General	G02	DRAWING INDEX	2	Instrumentation	GN02	SYMBOLS AND ABBREVIATIONS 2
3	General	G03	ABBREVIATIONS	3	Instrumentation	GN03	SYMBOLS AND ABBREVIATIONS 3
4	General	G04	GENERAL NOTES, SYMBOLS, AND LEGENDS	4	Instrumentation	GN04	SYMBOLS AND ABBREVIATIONS 4
5	General	G05	DESIGN CRITERIA	5	Instrumentation	GN05	SYMBOLS AND ABBREVIATIONS 5
6	General	G07	TITLE 24 CALCULATIONS 1	6	Instrumentation	GN06	SAMPLE LOOP DRAWING
7	General	G08	TITLE 24 CALCULATIONS 2	7	Instrumentation	GN07	CONTROL BLOCK DIAGRAM
8	General	G09	TITLE 24 CALCULATIONS 3	8	Instrumentation	GN09	PCM EXTERNAL ELEVATION
9	General	G10	TITLE 24 CALCULATIONS 4	9	Instrumentation	GN10	PCM INTERNAL ELEVATION
CIVIL				10	Instrumentation	GN11	PCM WIRING DIAGRAM
10	Civil	GC01	GENERAL CIVIL NOTES AND LEGEND	11	Instrumentation	N13	WELL AND CHEM P&ID
11	Civil	C02	DEMOLITION SITE PLAN	TYPICAL DETAILS			
12	Civil	C03	PAVING, GRADING, AND SITE PLAN	12	Typ. Arch	TA01	ARCHITECTURAL 1
13	Civil	C04	YARD PIPING AND UTILITIES PLAN	13	Typ. Arch	TA02	ARCHITECTURAL 2
14	Civil	C05	OFFSITE UTILITIES PLAN	14	Typ. Civil	TC04	CIVIL 1
15	Civil	C06	PIPE PROFILES 1	15	Typ. Civil	TC05	CITY STANDARD DETAILS 1
16	Civil	C07	PIPE PROFILES 2	16	Typ. Civil	TC06	CITY STANDARD DETAILS 2
ARCHITECTURAL				17	Typ. Elec	TE07	ELECTRICAL 1
17	Architectural	GA01	GENERAL CODE ANALYSIS, AND SCHEDULES	18	Typ. Elec	TE08	ELECTRICAL 2
18	Architectural	GA02	PLANS AND ELEVATIONS	19	Typ. Elec	TE09	ELECTRICAL 3
19	Architectural	A05	ELEVATIONS	20	Typ. Elec	TE10	ELECTRICAL 4
STRUCTURAL				21	Typ. Elec	TE11	ELECTRICAL 5
20	Structural	GS01	GENERAL STRUCTURAL NOTES AND LEGEND	22	Typ. Elec	TE12	ELECTRICAL 6
21	Structural	S02	FOUNDATION AND ROOF PLANS	23	Typ. HVAC	TH15	HVAC 1
22	Structural	S04	SECTIONS AND DETAILS	24	Typ. HVAC	TH16	HVAC 2
23	Structural	S05	CANOPY PLAN, SECTION AND DETAILS	25	Typ. HVAC	TH17	HVAC 3
MECHANICAL				26	Typ. HVAC	TH18	HVAC 4
24	Mechanical	GM01	GENERAL MECHANICAL NOTES AND LEGEND	27	Typ. Mech	TM19	MECHANICAL
25	Mechanical	GM03	GENERAL HVAC NOTES, ABBREVIATIONS, AND SYMBOLS	28	Typ. Instr	TN20	INSTRUMENTATION 1
26	Mechanical	GM04	PROCESS EQUIPMENT, VALVE, AND PIPE SCHEDULES	29	Typ. Instr	TN21	INSTRUMENTATION 2
27	Mechanical	M10	HVAC PLAN, SCHEDULE AND SCHEMATIC	30	Typ. Instr	TN22	INSTRUMENTATION 3
28	Mechanical	M12	WELL PLAN AND SECTION	31	Typ. Instr	TN23	INSTRUMENTATION 4
29	Mechanical	M13	WELL SECTIONS AND DETAILS	32	Typ. Instr	TN24	INSTRUMENTATION 5
30	Mechanical	M14	CHEM AREA PLAN, SECTION AND DETAILS	33	Typ. Piping	TP25	PIPING 1
ELECTRICAL				34	Typ. Piping	TP26	PIPING 2
31	Electrical	GE01	ELECTRICAL LEGEND	35	Typ. Struct	TS27	STRUCTURAL 1
32	Electrical	GE02	ELECTRICAL ABBREVIATIONS	36	Typ. Struct	UT28	STRUCTURAL 2
33	Electrical	GE03	SCHEMATIC SYMBOLS	37	Typ. Struct	UT29	STRUCTURAL 3
34	Electrical	E04	CONTROL SCHEMATICS 1	38	Typ. Struct	UT30	STRUCTURAL 4
35	Electrical	E05	CONTROL SCHEMATICS 2	39	Typ. Struct	UT31	STRUCTURAL 5
36	Electrical	E06	ELECTRICAL SCHEDULES				
37	Electrical	E07	ELECTRICAL OVERALL SITE PLAN				
38	Electrical	E08	DUCT BANK SCHEDULES AND SECTIONS				
39	Electrical	E09	SWITCHBOARD AND MCC ELEVATION				
40	Electrical	E10	ONE LINE DIAGRAM				
41	Electrical	E11	PANELBOARD & HANDHOLE/MANHOLE SCHEDULES				
42	Electrical	E12	ELEC BUILDING POWER AND CONTROL PLAN				
43	Electrical	E13	ELEC BUILDING LIGHTING & GROUNDING PLAN				
44	Electrical	E14	CHEM FEED POWER AND CONTROL PLAN				
45	Electrical	E15	CHEM FEED LIGHTING & GROUNDING PLAN				

CITY OF TULARE
New Well 1 and Site Improvements
FEE PROPOSAL



		Carollo Engineers, Inc. ¹																PROJECT TOTAL ²				
Task	Task Description	Principal-in-Charge	Technical Advisor	Quality Assurance	Project Manager	Civil/Site Engineer	Structural Engineer	Architectural Engineer	Mechanical Engineer	Electrical Engineer	Instrument Engineer	Discipline Support	Senior CAD Tech	CAD Tech	Doc. Process	Total Hours	Labor Cost		PECE ³	Expenses ²	O'Neil	BSK
		Tom Loper	Reece Fisher	Justin Peterson	Michael Duckel	Bryan Burnitt	Mike Dethle	Michelle Holtenbach	Chad Green	Erik Sahrmann	Daniel Robinson	Professionals									Surveying	Geotech
1	Project Coordination and Administration																					
1.1	Project Management	4	10	4	18	-	-	-	-	-	-	-	-	-	28	64	\$ 12,672	\$ 896	\$ -	\$ -	\$ -	\$ -
1.2	Project Administration	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
1.3	Progress Calls	-	-	-	18	-	-	-	-	-	-	-	-	-	-	18	\$ 4,140	\$ 252	\$ -	\$ -	\$ -	\$ -
1.4	Progress Meetings	2	6	-	12	18	-	-	-	8	8	-	-	-	-	54	\$ 12,674	\$ 756	\$ 1,480	\$ -	\$ -	\$ -
1.5	Quality Control / Quality Assurance	2	2	4	-	-	4	-	-	4	4	-	4	-	-	24	\$ 5,578	\$ 336	\$ -	\$ -	\$ -	\$ -
	TASK 1 TOTAL	8	18	8	48	18	4	-	-	12	12	-	4	-	28	160	\$ 35,264	\$ 2,240	\$ 1,480	\$ -	\$ -	\$ -
2	Field Work																					
2.1	Data Collection and Review	-	-	-	2	-	-	-	-	-	-	-	-	-	-	2	\$ 480	\$ 128	\$ -	\$ -	\$ -	\$ -
2.2	Surveying and Mapping	-	-	-	2	-	-	-	-	-	-	-	8	-	-	10	\$ 1,908	\$ 140	\$ 60	\$ 15,250	\$ -	\$ -
2.3	Geotechnical Recommendations	-	-	-	2	-	2	-	-	-	-	-	-	-	-	4	\$ 920	\$ 56	\$ -	\$ -	\$ 12,000	\$ -
	TASK 2 TOTAL	-	-	-	6	-	2	-	-	-	-	-	8	-	-	16	\$ 3,288	\$ 224	\$ 60	\$ 15,250	\$ 12,000	\$ -
3	Well Equipping Design Services																					
3.1	60% Contract Documents	-	4	-	12	44	20	20	16	32	16	198	-	132	28	520	\$ 100,824	\$ 7,280	\$ -	\$ -	\$ -	\$ -
3.2	90% Contract Documents	4	4	4	16	32	12	12	12	24	12	180	-	100	28	440	\$ 85,852	\$ 6,160	\$ -	\$ -	\$ -	\$ -
3.3	Final Contract Documents	-	4	-	4	12	8	8	8	12	8	84	-	60	28	236	\$ 44,424	\$ 3,304	\$ -	\$ -	\$ -	\$ -
	TASK 3 TOTAL	4	12	4	32	88	40	40	36	68	36	460	-	292	84	1,196	\$ 231,100	\$ 16,744	\$ -	\$ -	\$ -	\$ -
4	Bidding Assistance																					
4.1	Prepare Package and Conduct Pre-Proposal Meetings	-	2	-	12	8	-	-	-	-	-	-	4	-	-	26	\$ 5,894	\$ 364	\$ 120	\$ -	\$ -	\$ -
4.2	Technical Assistance for Questions During Proposal Period	-	2	-	4	16	2	2	2	2	2	4	-	-	-	40	\$ 8,792	\$ 560	\$ -	\$ -	\$ -	\$ -
	TASK 4 TOTAL	-	4	-	16	24	2	2	2	2	4	4	4	-	4	66	\$ 14,676	\$ 924	\$ 120	\$ -	\$ -	\$ -
Project Total (Base Scope)		12	34	12	102	130	48	42	38	82	50	464	16	292	116	1,438	284,328	20,132	1,660	15,250	12,000	\$ 336,095

Notes:
(1) Rates are based on Carollo Engineers, Inc., Fee Schedule as of Jan 1, 2023 for California.
(2) Other direct expenses include mileage traveling to/from meetings at IRS Federal Rate, travel at cost and Project Equipment and Communication Expense (PECE) at the indicated rate per Direct Labor Hour.
(3) Includes Subconsultant markup of 10%.