



## REPORT TO CITY COUNCIL

Approved by:

*Keith Helmuth*

Keith Helmuth, Department Director

*Arnoldo Rodriguez*

Arnoldo Rodriguez, City Manager

Council Meeting of: September 15, 2021

Agenda Number: B-5

### SUBJECT:

Agreement with Quad Knopf Inc, dba QK for Professional Engineering Services for the planning and design of new automatic meter reading (AMR) water meters

### RECOMMENDATION:

Adopt a Resolution approving an Agreement with Quad Knopf Inc, dba QK in the Amount of \$281,862 for professional engineering design services for the installation of new automatic meter reading (AMR) water meters at various locations, City Project No. W-31, W-32 and W-33 ("Project")

### SUMMARY:

The Agreement with QK is for design engineering and investigation services for the installation and/or replacement of existing water services and water meters with new AMR water meters within the City. In short, the agreement with QK calls for assistance in designing the water meters, not the installation of the water meters.

Funding is being provided by City Water Utility Funds and a Integrated Regional Water Management (IRWM) grant.

### BACKGROUND:

The State is requiring all municipalities to have all water services metered by 2025. This State requirement is an effort to add water usage accountability and reduce consumption. The vast majority of the City is currently metered; however, some of the more challenging meters remain. This contract covers installing AMR's on:

- Unmetered water services
- Replacement of manual read meters
- Replacement of older AMR water meters

The consultant is required to perform field inspection of existing water services, prepare evaluation reports, prepare a construction scope of work for a future construction contract, provide GIS data for each location, and preparation of final engineering report. The contract also provides that QK will perform construction inspections. City staff will be involved on a day-to-day basis during field inspections. The contract is a conglomeration of the following projects.

- **W-31**, Engineering services for the replacement of existing 3 inch and larger manual read meters with new AMR water meters at commercial and mixed-use residential locations. There are 66 locations identified for this contract. The water service size criteria in this contract is set due to City forces not being well equipped to install larger meters of this size category.
- **W-32**, Engineering services for the installation new AMR water meters at commercial and residential locations where there are no water meters present. These are known as flat rate water services with no existing water meter. There are 583 locations identified for this contract.
- **W-33**, The consultant is to provide engineering services for the replacement of older existing residential AMR water meters. There are 3,225 locations identified. No field inspections are required. The Engineering Execution Program will be used for an eventual construction contract to replace these meters.

The project is summarized in table 1.

<i>Meter type</i>	<i>Land Use</i>	<i># of meters</i>
Manual read water meters replacement	Commercial and Mixed Use	66
No water meter present (was never installed)	Commercial & Residential	583
Replacement of older AMR water meter	Residential	3,225

On July 15, 2021, the City released a Request for Proposals for Professional Engineering Services (RFP) for the installation of new AMR. There were six firms showing interest. Two of the firms were QK and Carollo Engineers. On August 13, 2021 the City received a proposal from QK and Carollo Engineers, who had teamed up and provided a single proposal with Carollo Engineers acting in a subconsultant role to QK. No other proposals were received. The QK proposal met the requirements of the RFP and the fee proposal is within the established project budgets.

**FINANCIAL IMPACT:**

There is no fiscal impact to the City's General Fund.

Funding for Project Nos. W-31, W-32, and W-33 is included in the FY 2021/22 Capital Projects Budgets from City Water Utility Funds and the IRWM grant

**ALTERNATIVES:**

Re-advertise the request for proposals, such action will represent a delay of approximately 2-3 months due to the advertisement period, review new proposals, and selecting a consultant.

**ATTACHMENTS:**

1. Resolution
2. Exhibit A - Agreement

**RESOLUTION NO. 21-\_\_\_\_\_**

**A RESOLUTION OF THE CITY COUNCIL OF THE CITY OF MADERA,  
CALIFORNIA APPROVING AN AGREEMENT WITH QUAD KNOPF, dba QK  
FOR PROFESSIONAL ENGINEERING SERVICES FOR CITY OF MADERA AMR  
WATER METER PROJECTS W-31, W-32 AND W-33 IN THE AMOUNT OF  
\$281,862**

**WHEREAS**, funding for design engineering of the installation new AMR water meters (“Project”) has been included in the Fiscal Year 2021/22 Capital Projects Budget; and

**WHEREAS**, engineering services by a professional firm are required for the design engineering of the Project; and

**WHEREAS**, the City of Madera (City) published a Request for Proposal on the City’s website and solicited firms to provide a proposal for the Project; and

**WHEREAS**, Quad Knopf, dba QK partnered with Carollo Engineers and submitted a single proposal; and

**WHEREAS**, the City received a single proposal in response to the Request for Proposal; and

**WHEREAS**, Quad Knopf, dba QK was selected based on their experience and knowledge of the proposed project; and

**WHEREAS**, Quad Knopf, dba QK proposal was within City’s budget.

**NOW, THEREFORE, THE COUNCIL OF THE CITY OF MADERA** hereby resolves, finds, determines and orders as follows:

1. The above recitals are true and correct.
2. The Agreement with Quad Knopf, dba QK for professional engineering services in an amount not to exceed \$281,862 as approved by the City Engineer for installation of new automatic meter reading (AMR) at unmetered service locations, the replacement of existing manual read meters with new AMR water meters, and replacement of older residential AMR water meters at various locations, City Project Nos. W-31, W-32 and W-33, a copy of which is attached hereto as Exhibit A and referred to as particulars, is approved.
3. This resolution is effective immediately.

## EXHIBIT A

**AGREEMENT WITH Quad Knopf Inc, dba QK FOR PROFESSIONAL  
ENGINEERING SERVICES for  
CITY of MADERA AMR WATER METER PROJECTS W-31, W-32, W-33**

This Agreement made and entered into this (     ) day of (                     ),  
2021, between the City of Madera, a municipal corporation of the State of California,  
hereinafter called "**CITY**", and Quad Knopf Inc, dba QK located in (city, state), hereinafter  
called "**CONSULTANT**".

**WITNESSETH**

**WHEREAS**, CITY plans "City of Madera AMR Water Meter Projects W-31, W-32,  
W-33" hereinafter called "Project"; and

**WHEREAS**, CITY needs the services of a professional engineering firm to provide  
professional engineering services for the Project; and

**WHEREAS**, CONSULTANT is qualified and certified to provide the required  
professional engineering services and is knowledgeable of the principals and practices of  
the industry associated with the design and construction of water main facilities; and

**WHEREAS**, CITY desires to hire CONSULTANT for such professional engineering  
design services.

**NOW THEREFORE:**

The parties hereto mutually agree as follows:

**1. SERVICES OF CONSULTANT:**

CITY hereby hires CONSULTANT to provide professional engineering  
services as set forth herein in connection with the Project. Said work to be performed  
pursuant to this agreement is more particularly described in the Scope of Work.

**2. SCOPE OF WORK:**

CONSULTANT shall provide the professional engineering services as set forth in  
EXHIBIT A, "Scope of Work", attached hereto and incorporated herein by reference.

CONSULTANT accepts full responsibility for the scope of services provided by sub-consultants necessary for delivery of the project. CONSULTANT shall comply with applicable City of Madera design standards and requirements as directed by the CITY and applicable State and Federal requirements.

### **3. PROGRESS MEETINGS:**

CONSULTANT shall communicate and meet with CITY staff at project progress meetings at intervals mutually agreed to between CITY and CONSULTANT to verify, refine and complete the project requirements and review the progress of the project. Such meetings shall be as set forth in the Scope of Work, EXHIBIT A.

### **4. CITY'S OBLIGATIONS**

The CITY shall provide the CONSULTANT with the following:

- a. Provide a Project Manager to work with CONSULTANT.
- b. Review all submittals timely.
- c. Pay all fees for permits;
- d. Available studies, reports, and other data pertinent to CONSULANT'S services; obtain or authorize CONSULTANT to obtain or provided additional reports and data as required for the performance of CONSULTANT'S services hereunder, and CONSULTANT shall be entitled to use and rely upon all such information and services provided by the City or others in performing CONSULTANT'S services under this Agreement.
- e. Arrange for access to and make provisions for CONSULTANT to enter upon public and private property as required for CONSULTANT to perform services hereunder.

### **5. COMPENSATION**

The basic fee for the work tasks itemized in EXHIBIT B, "Fee and Hourly Rate Schedule" is \$281,862.00 (two hundred eighty-one thousand, eight hundred sixty-two dollars and zero cents).

CITY and CONSULTANT agree on the rates shown in EXHIBIT B, "Hourly Rate Schedule", and agree that they will remain in effect until the date of expiration of agreement indicated in Section 11. It is understood and agreed by both parties that all expenses incidental to CONSULTANT'S performance of services, including travel expenses, are included in the basic fee shown in EXHIBIT B.

**6. PAYMENT:**

Payments for all undisputed portions of each invoice as provided for hereunder shall be made within 30 days of receipt and approval of CONSULTANT'S monthly invoices for the work performed specified herein. CONSULTANT'S invoice shall specify the billed hours and hourly rates for each employee classification. The sub-consultants work shall be included on CONSULTANT 'S invoice with a copy of the sub-consultant's invoice attached. A report on summary of costs to date for each component of the work shall accompany the invoice. This summary shall also estimate the percentage of the work completed for each component and the balance remaining in each component.

**7. EXTRA SERVICES:**

CITY agrees to pay CONSULTANT for extra services not contemplated hereunder as set forth in the Proposal or for such services as may be specifically requested by CITY through the City Engineer in writing and agreed to by CONSULTANT for an agreed-to fixed fee or hourly rate of compensation or for necessary expenses over that listed in the Budget, provided, however, the City Engineer's authority is limited to expenditures not to exceed the amount of \$28,186.00 (twenty eight thousand, one hundred eighty-six dollars and zero cents

**8. AUDITS AND INSPECTIONS ACCESS:**

CONSULTANT shall, upon reasonable notice and at any time during regular business hours, and as often as CITY may deem necessary, make available to the CITY or its authorized representative for examination, all of its books, records and data with respect to matters covered by this Agreement. CONSULTANT shall permit CITY to audit



and inspect all invoices, materials, payrolls, records of personnel, conditions of employment, and other data relating to matters covered by this Agreement.

## **9. LIABILITY INSURANCE:**

Without limiting CONSULTANT'S indemnification of CITY, and prior to commencement of Work, CONSULTANT shall obtain, provide, and continuously maintain at its own expense during the term of the Agreement, and shall require any and all Subcontractors and Subconsultants of every Tier to obtain and maintain, policies of insurance of the type and amounts described below and in form satisfactory to the CITY.

### ***Minimum Scope and Limits of Insurance***

CONSULTANT shall maintain limits no less than:

- \$2,000,000 **General Liability** (including operations, products and completed operations) per occurrence, \$4,000,000 general aggregate, for bodily injury, personal injury, and property damage, including without limitation, blanket contractual liability. Coverage shall be at least as broad as Insurance Services Office (ISO) Commercial General Liability coverage form CG 00 01. General liability policies shall be endorsed using ISO form CG 20 10 that the CITY and its officers, officials, employees and agents shall be additional insureds under such policies.
- \$2,000,000 **Automobile Liability** combined single limit per accident for bodily injury or property damage at least as broad as ISO Form CA 00 01 for all activities of Consultant arising out of or in connection with Work to be performed under this Agreement, including coverage for any owned, hired, non-owned or rented vehicles. Automobile Liability policies shall be endorsed to provide that the CITY and its officers, officials, employees and agents shall be additional insureds under such policies.
- **Worker's Compensation** as required by the State of California and \$1,000,000 **Employer's Liability** per accident for bodily injury or disease. CONSULTANT shall

submit to the CITY, along with the certificate of insurance, a Waiver of Subrogation endorsement in favor of the CITY, it's officers, agents, employees, and volunteers.

- **\$1,000,000 Professional Liability (Errors & Omissions)** per claim and in the aggregate. CONSULTANT shall maintain professional liability insurance that insures against professional errors and omission that may be made in performing the Services to be rendered in connection with this Agreement. Any policy inception date, continuity date, or retroactive date must be before the effective date of this Agreement, and CONSULTANT agrees to maintain continuous coverage through a period no less than three years after completion of the services required by this Agreement. The cost of such insurance shall be included in CONSULTANT'S proposal.

### ***Maintenance of Coverage***

CONSULTANT shall procure and maintain, for the duration of the contract, insurance against claims for injuries to persons or damages to property, which may arise from or in connection with the performance of the Work hereunder by CONSULTANT, its agents, representatives, employees, subcontractors or subconsultants as specified in this Agreement.

### ***Proof of Insurance***

CONSULTANT shall provide to the CITY certificates of insurance and endorsements, as required, as evidence of the insurance coverage required herein, along with a waiver of subrogation endorsement for workers' compensation. Insurance certificates and endorsements must be approved by the CITY prior to commencement of performance. Current evidence of insurance shall be kept on file with the CITY at all times during the term of this Agreement. CITY reserves the right to require complete, certified copies of all required insurance policies, at any time.

### ***Acceptable Insurers***

All insurance policies shall be issued by an insurance company currently authorized by the Insurance commissioner to transact business of insurance in the State of California, with an assigned policyholders' Rating of A- (or higher) and a Financial Size Category Class VII (or larger), in accordance with the latest edition of Best's Key Rating Guide.

### ***Waiver of Subrogation***

All insurance coverage maintained or procured pursuant to this agreement shall be endorsed to waive subrogation against the CITY, its elected or appointed officers, agents, officials, employees, and volunteers, or shall specifically allow CONSULTANT, or others providing insurance evidence in compliance with these specifications, to waive their right of recovery prior to a loss. CONSULTANT hereby waives its own right of recovery against the CITY and shall require similar written express waivers and insurance clauses from each of its subconsultants or subcontractors.

### ***Enforcement of Contract Provisions (non-estoppel)***

CONSULTANT acknowledges and agrees that any actual or alleged failure on the part of the CITY to inform Consultant of non-compliance with any requirement imposes no additional obligations on the CITY, nor does it waive any rights hereunder.

### ***Specifications not Limiting***

Requirements of specific coverage features, or limits contained in this Section are not intended as a limitation on coverage, limits or other requirements, or a waiver of any coverage normally provided by any insurance. Specific reference to a given coverage feature is for purposes of clarification only as it pertains to a given issue and is not intended by any party or insured to be all inclusive, or to the exclusion of other coverage, or a waiver of any type. If CONSULTANT maintains higher limits than the minimums

required above, the CITY shall be entitled to coverage at the higher limits maintained by CONSULTANT.

***Notice of Cancellation***

CONSULTANT agrees to oblige its insurance agent or broker and insurers to provide to the CITY with thirty (30) calendar days notice of cancellation (except for nonpayment for which ten (10) calendar days notice is required) or nonrenewal of coverage for each required coverage.

***Self-insured Retentions***

Any self-insured retentions must be declared to and approved by the CITY. The CITY reserves the right to require that self-insured retentions be eliminated, lowered or replaced by a deductible. Self-insurance will not be considered to comply with these specifications unless approved by the CITY'S Risk Manager.

***Timely Notice of Claims***

CONSULTANT shall give the CITY prompt and timely notice of claims made or suits instituted that arise out of or result from CONSULTANT'S performance under this Agreement, and that involve or may involve coverage under any of the required liability policies.

***Additional Insurance***

CONSULTANT shall also procure and maintain, at its own cost and expense, any additional kinds of insurance, which in its own judgement may be necessary for its proper protection and prosecution of the Work.

**10. OWNERSHIP OF DOCUMENTS:**

All original papers, documents, reports, drawings and other work product of CONSULTANT are instruments of service. All reports and legal documents shall include the professional's registration number and be stamped, signed and dated. All instruments of service shall, upon payment in full to CONSULTANT, become the property of the CITY whether the project for which they are prepared is executed or not. CONSULTANT shall be permitted to retain copies, including reproducible copies, of the instruments of service for information and reference. The instruments of service shall not be used by the CONSULTANT on other projects, except by agreement in writing by the CITY. In the event the CITY reuses such instruments of service, CONSULTANT shall be released and held harmless by the CITY from any and all liability, including legal costs and attorneys' fees, with respect to the reuse of such instruments of service.

Reuse of documents for any purpose other than as intended under this Agreement shall be at CITY'S sole risk. CITY shall indemnify CONSULTANT for any damages incurred as a result of such reuse, including use of incomplete documents.

#### **11. TIME OF COMPLETION:**

A. Based on an agreed upon Notice to Proceed date, CONSULTANT shall complete the work as shown in EXHIBIT C, Schedule:

B. CONSULTANT shall not be held responsible for delays caused by CITY review or by reasons beyond CONSULTANT'S control. Also, CONSULTANT shall not stop his work, including work unrelated to any extra services request, unless it can be shown that the project work cannot proceed while a claim or request for extra services is being evaluated.

C. Time is of the essence in the completion of the services covered by this Agreement. Failure of CONSULTANT to comply with the above time schedule by more than fourteen (14) calendar days, unless the delay is not attributable to CONSULTANT or is attributable to CITY, is sufficient cause to terminate this Agreement, at the option of CITY, in accordance with Section 12.

D. CONSULTANT shall complete all services required under this Agreement and this Agreement shall expire on December 31<sup>st</sup>, 2020, unless extended by mutual agreement.

## **12. TERMINATION OF AGREEMENT:**

A. This agreement may be terminated at any time by either party upon fifteen (15) calendar days written notice. In the event the Agreement is terminated by either party, CONSULTANT shall be compensated for services performed to the date of termination based upon the compensation rates and subject to the maximum amounts payable agreed to together with such additional services performed after termination which are authorized by the CITY representative to wind up the work performed to date of termination.

B. CITY may immediately suspend or terminate this Agreement in whole or in part by written notice where, in the determination of CITY, there is:

1. An illegal use of funds by CONSULTANT.
2. A failure by CONSULTANT to comply with any material term of this Agreement.
3. A substantially incorrect or incomplete report submitted by CONSULTANT to CITY.

In no event shall any payment by CITY or acceptance by CONSULTANT constitute a waiver by such party of any breach of this Agreement or any default which may then exist on the part of either party. Neither shall such payment impair or prejudice any remedy available to either party with respect to such breach or default. CITY shall have the right to demand of CONSULTANT the repayment to CITY of any funds disbursed to CONSULTANT under this Agreement which, as determined by the appropriate court or arbitrator, were not expended in accordance with the terms of this Agreement.

## **13. APPROVAL:**

CITY will give reasonably prompt consideration to all matters submitted by CONSULTANT for approval to the end that there will be no significant delays in

CONSULTANT'S program of work. An approval, authorization or request to CONSULTANT given by CITY will only be binding upon CITY under the terms of this Agreement if in writing and signed on behalf of CITY by a CITY representative or designee.

#### 14. **HOLD HARMLESS:**

***Indemnity for Professional Liability:*** When the law establishes a professional standard of care for Consultant's Services, to the fullest extent permitted by law, Consultant shall indemnify, protect, defend, and hold harmless Agency and any and all of its officials, employees and agents from and against any and all losses, liabilities, damages, costs, and expenses, including legal counsel's fees and costs but only to the extent the Consultant (and its Subconsultants) are responsible for such damages, liabilities and costs on a comparative basis of fault between the Consultant (and its Subconsultants) and the Agency in the performance of professional services under this agreement. Consultant shall not be obligated to defend or indemnify Agency for the Agency's own negligence or for the negligence of others

***Indemnity for Other Than Professional Liability:*** Other than in the performance of professional services and to the full extent permitted by law, Consultant shall indemnify, defend, and hold harmless Agency, and any and all of its employees, officials and agents from and against any liability (including liability for claims, suits, actions, arbitration proceedings, administrative proceedings, regulatory proceedings, losses, expenses or costs of any kind, whether actual, alleged or threatened, including legal counsel's fees and costs, court costs, interest, defense costs, and expert witness fees), where the same arise out of, are a consequence of, or are in any way attributable to, in whole or in part, the performance of this Agreement by Consultant or by any individual or Agency for which Consultant is legally liable, including, but not limited to, officers, agents, employees, or subcontractors of Consultant

**15. RESPONSIBILITY FOR OTHERS:**

CONSULTANT shall be responsible to CITY for its services and the services of its sub consultants. CONSULTANT shall not be responsible for the acts or omissions of other parties engaged by CITY nor for their construction means, methods, techniques, sequences, or procedures, or their health and safety precautions and programs.

**16. PROFESSIONAL RESPONSIBILITY:**

CONSULTANT shall be obligated to comply with applicable standards of professional care in the performance of the Services by exercising the skill and ability ordinarily required of engineers performing the same or similar services, under the same or similar circumstances, in the State of California. CONSULTANT recognizes that opinions relating to environmental, geologic, and geotechnical conditions are based on limited data and that actual conditions may vary from those encountered at the times and locations where the data are obtained, despite the use of due professional care.

In providing opinions of cost, financial analyses, economic feasibility projections, and schedules for potential projects, CONSULTANT has no control over cost or price of labor and material; unknown or latent conditions of existing equipment or structures that may affect operation and maintenance costs; competitive bidding procedures and market conditions; time or quality of performance of third parties; quality, type, management, or direction of operating personnel; and other economic and operational factors that may materially affect the ultimate project cost or schedule. Therefore, CONSULTANT makes no warranty that the CITY's actual project costs, financial aspects, economic feasibility, or schedules will not vary from CONSULTANT's opinions, analyses, projections, or estimates

**17. PARTIES BOUND BY AGREEMENT:**

This Agreement shall be binding upon CITY, CONSULTANT, and their successors in interest, legal representatives, executors, administrators and assigns with respect to all covenants as set forth herein. CONSULTANT shall not subcontract, assign, or transfer any of the work except as otherwise provided for in this agreement.



**18. COMPLETE AGREEMENT OF PARTIES:**

This Agreement, including attachments incorporated herein by reference, represents the entire Agreement and understanding between the parties. Any modifications of this Agreement shall be in writing and signed by authorized representatives of the parties. One or more waivers of any term, condition or covenant by either party shall not be construed as a waiver of any other term, condition or covenant.

**19. ASSIGNMENT WITH APPROVAL:**

It is understood that neither party shall assign, sublet, subcontract or transfer its rights or obligation under this Agreement without the prior express, written consent of the other party.

**20. INDEPENDENT CONTRACTOR:**

In performance of the work, duties and obligations assumed by CONSULTANT under this Agreement, it is mutually understood and agreed that CONSULTANT, including any and all of CONSULTANT'S officers, agents and employees will, at all times, be acting and performing as an independent contractor, and shall act in an independent capacity and not as an officer, agent, servant, employee, joint venture, partner or associate of CITY. Furthermore, CITY shall have no right to control or supervise or direct the manner or method by which CONSULTANT shall perform its work and function. However, CITY shall retain the right to administer this Agreement so as to verify that CONSULTANT is performing its obligations in accordance with the terms and conditions hereof. CONSULTANT and CITY shall comply with all applicable provisions of law and the rules and regulations, if any, of governmental authorities having jurisdiction over the subject matter hereof.

Because of its status as an independent contractor, CONSULTANT shall have absolutely no right to employment rights and benefits available to CITY employees. CONSULTANT shall be solely liable and responsible for providing to, or on behalf of, its employees all legally required employee to others unrelated to CITY or to this Agreement.

**21. GOVERNING LAW:**

Any controversy or claim arising out of, or relating to, this Agreement which cannot be amicably settled without court action shall be litigated either in the appropriate State court for Madera County, California, or as appropriate in the U. S. District Court for the Eastern District of California, located in Fresno County. The rights and obligations of the parties and all interpretations and performance of this Agreement shall be governed in all respects by the laws of the State of California.

**22. AMENDMENTS:**

Any changes to this Agreement requested either by CITY or CONSULTANT may only be affected if mutually agreed upon in writing by duly authorized representatives of the parties hereto. This Agreement shall not be modified or amended or any rights of a party to it waived except by such in writing.

**23. COMPLIANCE WITH LAWS AND WAGE RATES:**

CONSULTANT shall comply with all Federal, State, and local laws, ordinances, regulations and provisions applicable in the performance of CONSULTANT'S services. CONSULTANT may use professional practices and standards regarding the interpretation of these laws.

Wherever reference is made in this Agreement to standards or codes in accordance with which work is to be performed or tested, the edition or revision of the standards or codes current on the effective date of this Agreement shall apply, unless otherwise expressly stated.

**24. CONSULTANT'S LEGAL AUTHORITY:**

Each individual executing or attesting this Agreement on behalf of CONSULTANT hereby covenants and represents: (i) that he or she is duly authorized to execute or attest and deliver this Agreement on behalf of such corporation in accordance with a duly adopted resolution of the corporation's board of directors and in accordance with such corporation's articles of incorporation or charter and by-laws; (ii) that this Agreement is binding

upon such corporation; and (iii) that CONSULTANT is a duly organized and legally existing corporation in good standing in the State of California.

**25. NOTICES:**

Any and all notices or other communications required or permitted by this Agreement or by law to be served on or given to either party to this Agreement by the other party shall be in writing, and shall be deemed duly served and given when personally delivered to the party to whom it is directed or any managing employee or that party or, in lieu of personal service, when deposited in the United States mail, first class postage prepaid, addressed as follows:

**CITY OF MADERA**

Engineering Division  
428 Yosemite Avenue  
Madera, CA 93638

**CONSULTANT**

Quad Knopf Inc, dba QK  
901 E. Main Street  
Visalia, CA 93292

**26. SOLE AGREEMENT:**

This instrument constitutes the sole and only agreement between CONSULTANT and CITY respecting the Project and correctly sets the obligations of the CONSULTANT and CITY to each other as of this date. Any agreements or representations respecting the above project, not expressly set forth in this instrument are null and void.

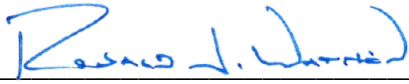
**27. THIRD PARTIES**

The services to be performed by CONSULTANT are intended solely for the benefit of the CITY. No person or entity not a signatory to this Agreement shall be entitled to rely on the CONSULTANT's performance of its services hereunder, and no right to assert a claim against the CONSULTANT by assignment of indemnity rights or otherwise shall accrue to a third party as a result of this Agreement or the Performance of the CONSULTANT's services hereunder.

IN WITNESS WHEREOF, the parties hereto have caused this Agreement to be executed as of the day and year first above written.

\* \* \* \* \*

**Quad Knopf Inc, dba QK**

By:   
Ronald J. Wathan, PE, President PE #058690

Taxpayer I.D. Number, 94-22228472

**CITY OF MADERA**

By: \_\_\_\_\_  
Santos Garcia, Mayor

**APPROVED AS TO FORM:**

By: \_\_\_\_\_  
City Attorney, Hilda Cantu Montoy

**ATTEST:**

By: \_\_\_\_\_  
City Clerk, Alicia Gonzales

# EXHIBIT A

## Scope of Work

### Project Understanding

It is our understanding that the City of Madera has received grant funding to install meters in areas of the City where there currently aren't meters and to replace old meters with AMR (Automatic Meter Reading) technology, based on City Standards. To complete this effort, the City is seeking qualified engineering consultants to assess the existing conditions, summarize findings in a report and provide recommendations, cost estimates, and construction documents that can be used for soliciting bids from contractors for the installation of the new meters and related improvements.

To most effectively complete this project, QK is teaming with Carollo Engineers for this project. We feel our combined experience on water metering projects, our familiarity with the IRWM (Integrated Regional Water Management) program, and our combined programmatic approach make us the ideal fit for this project.

### Project Approach

Our team's approach to the scope of services will be begin with a kickoff meeting with City staff to ensure our understanding of the scope, schedule, and City expectations are met during the duration of the project. QK's main role in the project will be to perform the field services which include taking photos, recording condition and size of meters, services, fittings, and meter boxes. Our field staff will be equipped with tablets, using Headlight software, and will accompany City staff to record physical address, field notes, photos, and GIS coordinates of each service connection. This information will then be processed by QK's GIS staff to create maps, tables, and summaries necessary to be incorporated into the report and cost estimates to be completed by Carollo.

Carollo will provide the engineering report, including figures, tables, and text to describe the findings and summarize the improvements needed to bring the entire system to City Standards for meter installations. The report will also include recommendations and detail drawings for any exceptions or special cases where existing conditions require a variance from the City Standards, including cost estimates for construction.

QK will provide regular weekly updates to the City regarding progress of data collection and will coordinate site visits and observations with City field staff. This team effort between QK and Carollo allows a greater level of combined experience and quality control for the City as all deliverables will go through both team members QA/QC process in order to meet the City's needs for the project.

This proposed scope of work and project deliverables is further described below.

### Scope of Work

CONSULTANT will provide the following services to support the PROJECT.

#### **TASK 1.0 PROJECT MANAGEMENT**

As part of this task, CONSULTANT's project manager shall direct and coordinate the efforts of the project team members, including subconsultants, to deliver the PROJECT within the contracted scope, schedule, and budget. The level of effort for this task is based on an estimated project duration of 4 months (From October 2021 to January 2022).

##### **Subtask 1.1 Project Management and Administration**

CONSULTANT shall provide general project administration and management for the duration of the PROJECT. CONSULTANT shall coordinate work effort, conduct project communication with the Project team and City staff, and prepare monthly invoices with progress report letters.

### **Subtask 1.2 Weekly Progress Meetings**

The project team will conduct weekly progress meetings with City staff to discuss project progress, data collection, specific work efforts, project scope and budget status. The progress meetings are assumed to be conducted using virtual technology with the CITY's project manager and other CITY-specified staff, as appropriate.

Items to be incorporated into the weekly progress meetings shall include

1. Discuss general progress, data collection, budget status, and overall project scope status.
2. List of the past week's inspections and the condition of the service locations. This information will be incorporated into the draft and Final Report
3. The draft scope of work to install new AMR water meters to City Standards. This information will be incorporated into the Final Report
4. A draft scope of work to install new AMR water meters at locations with special circumstances. This information will be incorporated into the Final Report
5. A two week look ahead schedule of inspection locations. This schedule will be used by the City staff to schedule city inspection where special circumstances are known.
6. The CONSULTANT shall document key decisions in a meeting summary within 1 week after the meeting.

### **Subtask 1.3 Kick-off Meeting**

The project team shall prepare for and attend a 2-hour kick-off meeting with City staff. As part of this task, meeting agenda, presentation materials, handouts and a meeting summary shall be prepared by CONSULTANT staff and delivered in electronic format. The kick-off meeting may be conducted face to face or using virtual technology to accommodate safety precautions.

### **Subtask 1.4 Quality Management**

CONSULTANT's quality management team shall perform an independent review of major deliverables (report sections and TMs) before submittal to the CITY. This includes both a technical review (for soundness of logic and justification of conclusions reached) and a readability review (for clarity, organization, grammar, spelling, etc.).

#### **Task 1.0 Deliverables**

- Monthly progress report and invoice.
- Kick-off meeting with agenda, meeting materials, and meeting summary.
- Weekly progress meeting summaries.
- Inspection schedule accessible online by City staff.

#### **Task 1.0 Assumptions**

- Initial project duration of 4 months (From October 2021 – To January 2022).
- Meetings will be attended virtually for remote staff.
- City's project manager to identify point of contacts within Public Works and the Engineering Department for coordinating field activities.

## **TASK 2.0 MANUAL READ METER REPLACEMENTS (W-31) 3-INCHES AND GREATER**

This task describes the activities for the inspection and evaluation for up to sixty-six (66) 3-inch and greater manual meters to be replaced with new AMR water meters per City of Madera Standard Drawings and Specifications. The addresses and locations of these meters are provided as AttachmentW-31.1 to this Scope of Work.

### **Subtask 2.1 Inspection Schedule, Notifications and Coordination**

CONSULTANT shall develop an inspection schedule for the W-31 field activities and provide City staff online access to the schedule using Microsoft SharePoint (or similar). CONSULTANT shall manage and maintain the schedule to serve as notification to City staff of the inspection locations and dates. As required, CONSULTANT shall coordinate field activities with the City's designated Public Works and Engineering Department representatives.

CONSULTANT shall draft a template document for property owner notifications and submit to the City's project manager for review and approval. Once approved by the City, the document template will be completed and used to notify property owners of the field investigation activities. A copy of the notifications will also be provided to the City. For the purposes of developing a preliminary level of effort, to be reviewed by the City during the contract negotiations phase, door-hanger or similar type of notifications shall be used. **Property owner notification shall be delivered to each location at least 24 hours prior to inspection.** No notifications are required if inspections are in public right of way, City owned property, or any municipally owned property. **The CONSULTANT shall prepare Property owner notifications only at locations where the CONSULTANT'S inspectors will need access to private property.**

### **Subtask 2.2 Field Inspections**

CONSULTANT shall conduct a visual inspection of each of the 66 existing meter locations and document the following:

- a) service size connected to the meter,
- b) size and type of existing meter and valve(s) connected to the service,
- c) special circumstances that need to be included in the construction documents for installing the replacement meter,
- d) a digital photo of the existing meter location.
- e) Evaluate the condition of the existing water service
- f) Determine what necessary AMR installation scope of work is required to install a new AMR water meter to City of Madera Standards
- g) All manual read meters are currently accessible to city staff for reading.

CONSULTANT shall include the visual inspection results of the items noted above in the interim reports described in the subtask to follow. The level of effort for this task assumes twenty location inspections per day (3-4 field days).

The City of Madera shall have City staff available throughout the field inspection period. The CONSULTANT (per a mutually agreed to field inspection schedule) shall perform the field inspection for 8-hour days, 5 days a week until the field inspections are completed.

City staff will only be present for field inspections at locations where special circumstances are known to be present or are uncovered during the field inspection period.

During the field inspections, if it becomes necessary for City staff to be present due to situations where City input is needed for unforeseen inspection conditions, the CONSULTANT shall immediately notify City staff and provide electronic photos or video of the condition to assist the CONSULTANT in making a decision at special circumstance locations. In the event City staff will need to physically inspect the location, City staff will accompany the CONSULTANT at that location.

### **Subtask 2.3 Interim Reporting**

CONSULTANT shall develop, in collaboration with the City's project manager, the content outline, format, and reporting frequency for providing interim updates on the inspection and evaluation progress. For the purposes of developing a preliminary level of effort, to be reviewed by the City during the contract negotiations phase, weekly interim reports have been assumed to coincide with the weekly progress meetings. The report content is assumed to include a list of the meters to be inspected in the upcoming week and special circumstances identified regarding the meters inspected the week prior. The level of effort for this task assumes 2 weekly interim reports.

### **Subtask 2.4 Evaluation of Special Circumstances**

Using record information provided by the City for underground water service piping, service connections, and information discernable through visual field inspection, CONSULTANT shall evaluate the following special circumstances to indicate

which locations will require additions or adjustments to the Standard Drawings and Specifications for the construction of the new or replacement meter installations.

- a) Locations where a single meter is serving two different uses, two or more separate lots, or service separate residences or customers on the same lot.
- b) Locations where there are multiple meters serving the same lot or business. If possible, identify the type of meter in use (i.e. fire service vs. domestic).
- c) Identify locations with looped systems.

CONSULTANT shall provide the City notice, 5 working days in advance, for the field investigation of cross lot and multiple service lot locations. City staff are to be present for the field investigations of these locations. Service shut-offs, if necessary to determine which customers are connected to a meter or service line, will be conducted only by City personnel.

CONSULTANT shall prepare preliminary layout sketches for each special circumstance location with sufficient detail for developing planning-level construction cost estimates to be provided in the subtask to follow. The level of effort for this subtask assumes 10 locations involve special circumstances.

### **Subtask 2.5 Construction Cost Estimate**

CONSULTANT shall develop Class V planning-level cost estimates for each inspected location and special circumstance to receive a new or replacement water meter. The level of effort for this subtask assumes 10 locations involve special circumstances.

### **Subtask 2.6 Engineering Report**

CONSULTANT shall prepare an Engineering Report documenting the results of the field investigations, special circumstance evaluations, and associated construction cost estimate. CONSULTANT shall provide the draft Report to the City's project manager in both PDF and MSWord formats for distribution to the review team. The schedule assumes a 3-week review period for receiving all City review comments. After receiving the comments from the City's review team, CONSULTANT shall prepare and submit a comment-response log documenting the City's comments and CONSULTANT's responses to those comments. After approval of the comment-response log from the City, CONSULTANT will prepare and submit the Final Report in PDF format.

The consultant shall prepare a Water Meter Evaluation & New Installation Final Report for the City of Madera Engineering Division for Category W-31 and W-32. The report shall include the following (at a minimum):

1. Title Page and Table of Contents
2. Area (or aerial) map of the locations. Prepare a separate map for each category. The aerial map provided in this RFP can be used and modified for the report.
3. A detailed description of the findings from the field investigation (size, location, condition, etc.). The detailed description shall be broken down in the three (3) categories above (W-31, W-32, W-33). Where the findings are similar or identical at numerous locations, these locations can be grouped together under one description in the report.
4. The report shall also group and break out separately:
  - a. Cross lot locations where a single water service is serving multiple residences or locations with different uses (e.g. commercial and residential on same property)
  - b. Locations where multiple water services are serving the same property. In some cases the onsite water distribution lines may be looped systems.
5. A description of the action needed for all locations that new AMR water meters are going to be installed. This will be used as a basis (if not a complete) statement of work for the construction contract. The City of Madera Standard Drawings and Specification shall be used as a basis. Where the water meter installation



is similar or identical at numerous locations, the report can group these locations together under a single description.

6. The report shall include appendices (or attachments) that include documentation of the field survey for each location. Digital photographs shall be included.
7. The report shall also include:
  - a. A spreadsheet that includes APN (Assessors Parcel Number), address, meter size, Latitude/Longitude, type of meter box (traffic rated?).
  - b. A GIS map of all locations.
8. The report shall be submitted to the City of Madera Engineering Division in PDF electronic format. Supporting documents shall be including in their original format (e.g. spreadsheet, GIS, Word, etc.)

### **Task 2.0 Deliverables**

- Inspection schedule accessible online by City staff.
- Property owner notification template
- Up to 10 sketches of special construction circumstances
- Up to 2 weekly interim reports
- Planning-level (class V) construction cost estimate
- Draft Engineering Report
- Comment-response Log
- Final Engineering Report

### **Task 2.0 Assumptions**

- Meters less than 3-inches are not covered within this scope.
- There are 66 manual read meter locations to be replaced.
- City's project manager to identify point of contacts within Public Works and the Engineering Department for coordinating field activities.
- Interim reports will be submitted in conjunction with the weekly progress meetings described in Task 1, Project Management.
- Property owner notifications will be delivered the same day as the field investigation activities.
- No water turn-offs are needed for the field investigations.
- Meter boxes shall be clear of all dirt, debris, and/or water or shall be cleaned out by others prior to field staff inspections.
- Construction cost estimate for 56 standard meter replacements and 10 special circumstances
- All City's review comments will be provided together for a single iteration between draft and final to incorporate comments.

## **TASK 3.0 NEW AMR METERS ON UNMETERED SERVICES (W-32)**

This task describes the activities for the inspection and evaluation for up to 583 unmetered service locations to receive new AMR water meters per City of Madera Standard Drawings and Specifications. The addresses and locations of these unmetered services are provided as Attachments W-32.1, W-32.2, W-32.3 and W-32.4 to the Request for Proposals and are included herein by reference. The unmetered service locations consist of:

- a) 313 single lot locations
- b) 60 cross-lot locations
- c) 122 landscape district services
- d) 83 shared landscape maintenance locations

### **Subtask 3.1 Inspection Schedule, Notifications and Coordination**

CONSULTANT shall develop an inspection schedule for the W-32 field activities and provide City staff online access to the schedule using Microsoft SharePoint (or similar). CONSULTANT shall manage and maintain the schedule to serve as

notification to City staff of the inspection locations and dates. As required, CONSULTANT shall coordinate field activities with the City's designated Public Works and Engineering Department representatives. CONSULTANT shall draft a template document for property owner notifications and submit to the City's project manager for review and approval. Once approved by the City, the document template will be completed and used to notify property owners of the field investigation activities. A copy of the notifications will also be provided to the City. For the purposes of developing a preliminary level of effort, to be reviewed by the City during the contract negotiations phase, door-hanger or similar type of notifications delivered the same day as the field investigation is assumed. Schedule updates for inspections shall be provided in a consistent recurring format to facilitate timely updates of the online data.

### **Subtask 3.2 Field Inspections**

CONSULTANT shall conduct a visual inspection of each of the 583 service locations and document the following:

- a) if discernable from visual inspection: the service size and type of existing piping and valve(s) connected to the service,
- b) special circumstances that need to be included in the construction documents for installing the replacement meter,
- c) digital photos of the existing service locations where the meters are anticipated to be installed.
- d) Evaluate the condition of the existing water service
- e) Determine what necessary AMR installation scope of work is required to install a new AMR water meter to City of Madera Standards

CONSULTANT shall include the visual inspection results of the items noted above in the interim reports described in the subtask to follow. The level of effort for this task assumes an average of fifteen location inspections per day for the 313 single lot locations (20 field days) and ten location inspections per day for the remaining 270 special locations (27 field days).

The City of Madera shall have City staff available throughout the field inspection period. The CONSULTANT (per a mutually agreed to field inspection schedule) shall perform the field inspection for 8-hour days, 5 days a week until the field inspections are completed.

City staff will only be present for field inspections at locations where special circumstances are known to be present or are uncovered during the field inspection period.

During the field inspections, if it becomes necessary for City staff to be present due to situations where City input is needed for unforeseen inspection conditions, the CONSULTANT shall immediately notify City staff and provide electronic photos or video of the condition to assist the CONSULTANT in making a decision at special circumstance locations. In the event City staff will need to physically inspect the location, City staff will accompany the CONSULTANT at that location.

### **Subtask 3.3 Interim Reporting**

CONSULTANT shall develop, in collaboration with the City's project manager, the content outline, format, and reporting frequency for providing interim updates on the inspection and evaluation progress. For the purposes of developing a preliminary level of effort, to be reviewed by the City during the contract negotiations phase, weekly interim reports have been assumed to coincide with the weekly progress meetings. The report content is assumed to include a list of the meters to be inspected in the upcoming week and special circumstances identified regarding the meters inspected the week prior. The level of effort for this task assumes up to 6 weekly interim reports.

### **Subtask 3.4 Evaluation of Special Circumstances**

Using record information provided by the City for underground water service piping, service connections, and information discernable through visual field inspection, CONSULTANT shall evaluate the following special circumstances to indicate which locations will require additions or adjustments to the Standard Drawings and Specifications for the construction of the new meter installations.

- a) Locations where a single meter is serving two different uses, two or more separate lots, or service separate residences or customers on the same lot.
- b) Locations where there are multiple meters serving the same lot or business. If possible, identify the type of meter in use (i.e. fire service vs. domestic).
- c) Identify locations with looped systems.

CONSULTANT shall provide the City notice, 5 working days in advance, for the field investigation of cross lot and multiple service lot locations. City staff are to be present for the field investigations of these locations. Service shut-offs, if necessary to determine which customers are connected to a meter or service line, will only be conducted only by City personnel.

CONSULTANT shall prepare preliminary layout sketches for each special circumstance location with sufficient detail for developing planning-level construction cost estimates to be provided in the subtask to follow. The level of effort for this subtask assumes 270 locations involve special circumstances.

### **Subtask 3.5 Construction Cost Estimate**

CONSULTANT shall develop Class V planning-level cost estimates for each inspected location and special circumstance to receive a new water meter. The level of effort for this subtask assumes 270 locations involve special circumstances and the remaining 313 to be standard meter installations.

### **Subtask 3.6 Engineering Report**

CONSULTANT shall prepare an Engineering Report documenting the results of the field investigations, special circumstance evaluations, and associated construction cost estimate. CONSULTANT shall provide the draft Report to the City's project manager in both PDF and MSWord formats for distribution to the review team. The schedule assumes a 3-week review period for receiving all City review comments. After receiving the comments from the City's review team, CONSULTANT shall prepare and submit a comment-response log documenting the City's comments and CONSULTANT's responses to those comments. After approval of the comment-response log from the City, CONSULTANT will prepare and submit the Final Report in PDF format.

#### **Final Engineering Report, W-31 and W-32 only**

The consultant shall prepare a Water Meter Evaluation & New Installation Final Report for the City of Madera Engineering Division for Category W-31 and W-32. The report shall include the following (at a minimum):

1. Title Page and Table of Contents
2. Area (or aerial) map of the locations. Prepare a separate map for each category. The aerial map provided in this RFP can be used and modified for the report.
3. A detailed description of the findings from the field investigation (size, location, condition, etc.). The detailed description shall be broken down in the three (3) categories above (W-31, W-32, W-33). Where the findings are similar or identical at numerous locations, these locations can be grouped together under one description in the report.
4. The report shall also group and break out separately:
  - a. Cross lot locations where a single water service is serving multiple residences or locations with different uses (e.g. commercial and residential on same property)

- b. Locations where multiple water services are serving the same property. In some cases the onsite water distribution lines may be looped systems.
5. A description of the action needed for all locations that new AMR water meters are going to be installed. This will be used as a basis (if not a complete) statement of work for the construction contract. The City of Madera Standard Drawings and Specification shall be used as a basis. Where the water meter installation is similar or identical at numerous locations, the report can group these locations together under a single description.
6. The report shall include appendices (or attachments) that include documentation of the field survey for each location. Digital photographs shall be included.
7. The report shall also include:
  - a. A spreadsheet that includes APN (Assessor's Parcel Number), address, meter size, Latitude/Longitude, type of meter box (traffic rated?).
  - b. A GIS map of all locations.
8. The report shall be submitted to the City of Madera Engineering Division in PDF electronic format. Supporting documents shall be including in their original format (e.g. spreadsheet, GIS, Word, etc.)

### **Subtask 3.7 Pothole Allowance**

The level of effort for this task assumes up to 60 potholes, each at depths less than 10 feet, shall be conducted on existing buried service piping.

### **Task 3.0 Deliverables**

- Inspection schedule accessible online by City staff.
- Property owner notification template
- Up to 270 sketches of special construction circumstances
- Up to 6 weekly interim reports
- Planning-level (class V) construction cost estimate
- Draft Engineering Report
- Comment-response Log
- Final Engineering Report

### **Task 3.0 Assumptions**

- There are 313 standard single lot services and 270 special circumstance services to receive new AMR meters.
- City's project manager to identify point of contacts within Public Works and the Engineering Department for coordinating field activities.
- Interim reports will be submitted in conjunction with the weekly progress meetings described in Task 1, Project Management.
- Property owner notifications will be delivered the same day as the field investigation activities.
- Water turn-offs, if necessary, will be conducted only by City personnel.
- Meter boxes shall be clear of all dirt, debris, and/or water or shall be cleaned out by others prior to field staff inspections.
- Construction cost estimate for 313 standard meter replacements and 270 special circumstances
- All City's review comments will be provided together for a single iteration between draft and final to incorporate comments.

## **TASK 4.0 REPLACEMENT AMR METERS ON DOMESTIC SERVICES (W-33)**

This task describes the activities to develop an engineering execution program to replace up to 3,225 existing AMR meters with new AMR water meters per City of Madera Standard Drawings and Specifications. The addresses and

locations of these existing meter locations are provided as Attachment W-33.1 . This list may include commercial, industrial, and city-owned properties in addition to residential services.

#### **Subtask 4.1 Draft Engineering Execution Program Report**

CONSULTANT shall prepare a draft Engineering Execution Program Report documenting a replacement strategy for the W-33 type of meter locations. The replacement strategy is to include a schedule for replacements prioritized according to the installation date of the currently installed meters as provided by the City. CONSULTANT shall develop a preliminary schedule for the following execution program activities:

- a) conducting field inspections of the meters to be replaced
- b) performing analysis of the field inspection results
- c) preparing a draft and final engineering report
- d) CONSULTANT shall also prepare a planning-level (class V) cost estimate for the standard construction and installation of the W-33 type replacement meters to be included as part of the Engineering Execution Program Report.
- e) CONSULTANT shall provide the draft Report to the City's project manager in both PDF and MSWord formats for distribution to the review team. The schedule assumes a 3-week review period for receiving all City review comments.

#### **Subtask 4.2 Final Engineering Execution Program Report**

After receiving the comments from the City's review team, CONSULTANT shall prepare and submit a comment-response log documenting the City's comments and CONSULTANT's responses to those comments. After approval of the comment-response log from the City, CONSULTANT will prepare and submit the Final Report in PDF format.

#### **Task 4.0 Deliverables**

- Planning-level (class V) construction cost estimate
- Draft Engineering Execution Program Report
- Comment-response Log
- Final Engineering Execution Program Report

#### **Task 4.0 Assumptions**

- Meter installation dates provided by the City will be used to prioritize and schedule meter replacements.
- Field inspections are not required for the W-33 type water meters to be replaced.
- The W-33 type meter locations involve standard meter replacement installations and do not involve special circumstances as described in Tasks 2 and 3.
- All City's review comments will be provided together for a single iteration between draft and final to incorporate comments.

### **TASK 5.0 CONSTRUCTION RELATED SERVICES**

This task describes the services to be provided during bidding and construction of the meter improvements.

#### **Subtask 5.1 General Construction Related Services**

CONSULTANT will assist the City as requested in reviewing and providing responses to RFIs and related questions during bidding. CONSULTANT may assist the City in the preparation of addenda to the Contract Documents during the bidding period.

CONSULTANT shall review and provide response and technical support to material submittals, RFIs, and Changes Order Requests as requested by the City.

CONSULTANT shall provide up to 6 site visits during construction to observe general progress of the improvements and/or to review special site conditions exposed during construction.

### **Task 5.0 Deliverables**

- Stamped submittal reviews
- Responses to RFIs
- Responses to Change Order Requests
- Construction Observation Reports

### **Task 5.0 Assumptions**

- CITY shall coordinate all correspondence with the Contractor
- CITY shall be responsible for bidding the project and reviewing Contractor's Schedule and Pay Requests.

## **TASK 6.0 METER ASSET MANAGEMENT AND GIS SERVICES**

This task describes the activities to develop a GIS geodatabase to be used by the City of Madera for documenting asset attribute and lifecycle information on existing and future meters.

### **Subtask 6.1 Develop GIS Database to Support Meter Asset Management**

CONSULTANT shall prepare a draft database schema to capture pertinent information for meters existing and to be installed on the City's existing domestic, commercial, and irrigation services for review by the CITY. After receiving the City's approval of the database schema for the attribute fields and data structure, CONSULTANT will use an export of the City's water service and meter data (provided in MS Excel format from the City) to develop a geodatabase, using ESRI's ArcGIS Pro, that shall provide geospatial points and tabular information for the City's water services and meters. Service and meter points will initially be located at or near the centroid of the county parcel that they are associated with.

The following attribute fields are anticipated for the database: assessor's parcel number (APN), parcel address, customer account number or other unique identification code, service type, service size, service pipe material, curb stop location, billing type (i.e., flat rate vs. metered), meter type, meter size, meter model type, meter serial number, meter register number, meter transmitter number, meter installation date, meter location, schedule status. The final list of data fields and acceptable value codes for the fields are to be developed in collaboration with the City.

CONSULTANT shall publish the resulting information to ArcGIS online for review and use by the City and its contractors. The budget for this task includes an allowance of one thousand dollars (\$1,000) for up to 10 ArcGIS Online viewer 1-year accounts, if necessary.

If extensive data clean-up is needed for the list of existing water services and meters, such as missing APNs, duplicates, inconsistent formatting of data entries, the level of effort will be discussed with the City and negotiated separately as additional services, if necessary. The need for minor data clean-up is anticipated and included as part of the expected quality review of the data.

### **Subtask 6.2 Update Online GIS Data During Inspections**

CONSULTANT will use the weekly two-week look ahead schedule updates (level of effort assumes schedule to be provided in MS Excel format) associated with Tasks 2 and Tasks 3 to publish weekly updates of the online GIS map representing the completed and upcoming services or meters to be field inspected.

### **Subtask 6.3 Update Online GIS Data During Construction**

CONSULTANT will use monthly construction schedule updates (level of effort assumes schedule to be provided in MS Excel format) to publish monthly updates of the online GIS map representing the completed and upcoming meter installations.

### **Task 6 Deliverables**

- Meter asset management geodatabase schema (in MS Excel format for City's review)

- Meter asset management geodatabase (in ESRI ArcGIS format)
- Meter asset management online map (in ESRI ArcGIS Online format) with up to 10 viewer licenses
- Weekly updates to the online map using inspection schedule updates provided by CONSULTANT
- Monthly updates to the online map using construction schedule updates provided by CITY

### **Task 6 Assumptions**

- City's list of water services and meters is provided in a MS Excel format with each service (metered or unmetered) represented on a single row.
- If extensive data clean-up is needed for the list of water services and meters, such as missing APNs, duplicates, inconsistent formatting of data entries, the level of effort will be discussed with the City and negotiated separately as additional services, if necessary. The need for minor data clean-up is anticipated and included as part of the expected quality review of the data.
- Schedule updates for inspections and construction will be provided in a consistent recurring format to facilitate timely updates of the online data.

### **GENERAL ASSUMPTIONS**

- The services to be performed by the CONSULTANT are intended solely for the benefit of the CITY. No person or entity not a signatory to the Agreement shall be entitled to rely on the CONSULTANT's performance of its services hereunder, and no right to assert a claim against the CONSULTANT by assignment of indemnity rights or otherwise shall accrue to a third party as a result of the Agreement or the performance of the CONSULTANT's services hereunder.
- In providing opinions of cost, financial analyses, economic feasibility projections, schedules, and quantity and/or quality estimates for potential projects, the CONSULTANT has no control over cost or price of labor and material; unknown or latent conditions of existing equipment or structures that may affect operation and maintenance costs; competitive bidding procedures and market conditions; time or quality of performance of third parties; quality, type, management, or direction of operating personnel; the incoming water quality and/or quantity; the way the CITY's plant(s) and/ or associated processes re operated and/or maintained; and other economic and operational factors that may materially affect the ultimate project elements, including, but not limited to, cost or schedule. Therefore, the CONSULTANT makes no warranty that the CITY's actual project costs, financial aspects, economic feasibility, schedules, and/or quantities or quality realized will not vary from the CONSULTANT's opinions, analyses, projections, or estimates.
- The CITY shall furnish the CONSULTANT available studies, reports and other data pertinent to the CONSULTANT's services; obtain or authorize the CONSULTANT to obtain or provide additional reports and data as required; furnish to the CONSULTANT services of others required for the performance of the CONSULTANT's services hereunder, and the CONSULTANT shall be entitled to use and reasonably rely upon all such information and services provided by the CITY or others in performing the CONSULTANT's services under this scope of work.
- The CITY shall arrange for access to and make all provisions for the CONSULTANT to enter upon public and private property as required for the CONSULTANT to perform services hereunder.

**EXHIBIT B  
FEE AND HOURLY RATE SCHEDULE**

Description	Number of Meters	Not-To-Exceed Fee
<b>W-31 (larger than 3")</b>		
Field Investigations	66	\$19,533.00
Reporting, Project Management & Support		\$32,577.00
<b>W-32</b>		
Field Investigations	578	\$74,993.00
Reporting, Project Management & Support		\$64,312.00
<b>W-33</b>		
Reporting, Project Management & Support	3,225	\$24,236.00
<b>Potholing Allowance</b>		\$15,000.00
<b>Construction Related Services</b>		\$16,003.00
<b>GIS Meter Asset Management</b>		\$35,208.00
<b>Total</b>	<b>3,869</b>	<b>\$281,862.00</b>



# Hourly Rate Schedule

The following are the billing rates for the proposed project team members. A copy of QK's and Carollo's current Charge Rate Schedules, including expenses (printing, travel, etc.), are included on the following pages.

Team Member	Labor Classification	Billing Rate
<b>QK</b>		
Garth Pecchenino, PE, PLS	Principal Engineer	\$250 / hour
Spencer Supinger, PE, ENV SP	Senior Project Manager	\$170 / hour
Greg Thompson, PE, QSD/QSP, CASp	Senior Construction Manager	\$170 / hour
Ismail Niazy, EIT	Assistant Engineer	\$115 / hour
Sean Pinkston, EIT	Assistant Engineer	\$115 / hour
Kristoffer Law	Senior GIS Analyst	\$118 / hour
<b>Carollo Engineers</b>		
Felicia James, PE	Lead Project Professional	\$262 / hour
Michelle Eckard, PE	Assistant Professional	\$145 / hour
Chris Powell	Lead Project Professional	\$262 / hour
Kevin Christensen	Technician	\$116 / hour
Eli Weintraub, PE	Professional	\$195 / hour



## 2021 CHARGE RATE SCHEDULE

Current

<b>TECHNICAL SERVICES</b>	
Project Assistant	\$69 / hour
Project Administrator	\$92 / hour
Assistant CADD Technician/Designer /GIS Technician	\$87 / hour
Associate CADD Technician/Designer /GIS Analyst	\$102 / hour
Senior Associate CADD Technician/Designer/ GIS Analyst	\$118 / hour
Senior CADD Technician/Designer /GIS Analyst	\$133 / hour
Landscape Architect Technician	\$102 / hour
<b>PROFESSIONAL SERVICES</b>	
<b>Engineering</b>	
Assistant Engineer	\$115 / hour
Associate Engineer	\$145 / hour
Senior Associate Engineer	\$170 / hour
Senior Engineer / City Engineer / District Engineer	\$199 / hour
Principal Engineer	\$250 / hour
<b>Planning / Environmental / Landscape Architecture</b>	
Assistant Environmental Scientist	\$80 / hour
Assistant Planner	\$90 / hour
Associate Planner/Environmental Scientist	\$105 / hour
Senior Associate Environmental Scientist	\$130 / hour
Senior Associate Planner	\$130 / hour
Senior Environmental Scientist	\$155 / hour
Senior Planner/ Landscape Architect	\$155 / hour
Principal Planner/Environmental Scientist	\$170 / hour
Senior Principal Planner/Environmental Scientist	\$195 / hour
<b>Construction and Project Management</b>	
Field Construction Observer	\$118 / hour
Senior Field Construction Observer	\$138 / hour
Assistant Construction/Project Manager	\$110 / hour
Associate Construction/Project Manager	\$129 / hour
Project Manager	\$133 / hour
Senior Associate Construction/Project Manager	\$148 / hour
Senior Construction/Project Manager	\$170 / hour
Principal Construction/Project Manager	\$185 / hour
<b>Surveying</b>	
Assistant Surveyor	\$102 / hour
Associate Surveyor	\$116 / hour
Senior Associate Surveyor	\$145 / hour
Senior Surveyor	\$170 / hour
One-Person Survey Crew	\$140 / hour
Two-Person Survey Crew	\$225 / hour
Three-Person Survey Crew	\$275 / hour
UAV Pilot	\$156 / hour
UAV Flight Observer	\$116 / hour

Fees are based on the median hourly pay rate for employees in each classification, plus indirect costs, overhead, and profit.

<b>EXPENSES</b>	
Plotting, Printing and Reproduction, Equipment Rental, Postage and Shipping	1.15 x Cost
Transportation and per diem (QK will provide documented evidence of business travel, travel outside of work areas shall be pre-approved by Client)	1.15 x Cost
Mileage	\$0.67 / mile
Other Expenses – Including Subconsultants & Purchased Services through Subcontracts	1.15 x Cost

Rates are effective through December 31, 2021. If contract assignment extends beyond that date, a new rate schedule may be added to the contract. Expert Witness/ Litigation support will be billed as quoted.

Rates based on "Prevailing Wage" (PW) for Construction Surveying will be determined by project and County per California law.

12/23/2020

**CAROLLO ENGINEERS, INC.  
FEE SCHEDULE**

**As of January 1, 2021  
California**

	<u>Hourly Rate</u>
<b>Engineers/Scientists</b>	
Assistant Professional	\$145.00
Professional	195.00
Project Professional	239.00
Lead Project Professional	262.00
Senior Professional	299.00
<b>Technicians</b>	
Technicians	116.00
Senior Technicians	173.00
<b>Support Staff</b>	
Document Processing / Clerical	106.00
 <b>Other Direct Expenses</b>	
Travel and Subsistence	at cost
Mileage at IRS Reimbursement Rate Effective January 1, 2021	\$.56 per mile
Subconsultant	cost + 10%
Other Direct Cost	cost + 10%
Expert Witness	Rate x 2.0

This fee schedule is subject to annual revisions due to labor adjustments.



# EXHIBIT C, SCHEDULE

## Schedule of Work

Task Description	Weeks following Notice to Proceed																		
	10/1/2021	10/8/2021	10/15/2021	10/22/2021	10/29/2021	11/5/2021	11/12/2021	11/19/2021	11/26/2021	12/3/2021	12/10/2021	12/17/2021	12/24/2021	12/31/2021	1/7/2022	1/14/2022	1/21/2022	1/28/2022	
<b>Task 1.0 - Project Management</b>																			
1.1 - Project Management and Administration																			
1.2 - Weekly Progress Meetings																			
1.3 - Kick-off meeting																			
1.4 - Quality Management																			
<b>Task 2.0 – Manual Read Meter Replacements (W-31, 3" diameter and greater)</b>																			
2.1 - Inspection schedule, notifications and coordination																			
2.2 - Field Inspections																			
2.3 - Interim Reporting																			
2.4 - Evaluation of Special Circumstances																			
2.5 - Construction Cost Estimate																			
2.6 - Engineering Report																			
<b>Task 3.0 – New AMR Meters on Unmetered Services (W-32)</b>																			
3.1 - Inspection schedule, notifications and coordination																			
3.2 - Field Inspections																			
3.3 - Interim Reporting																			
3.4 - Evaluation of Special Circumstances																			
3.5 - Construction Cost Estimate																			
3.6 - Engineering Report																			
3.7 - Pothole Allowance																			
<b>Task 4.0 – Replacement AMR Meters on Domestic Services (W-33)</b>																			
4.1 - Draft Engineering Execution Program Report																			
4.2 - Final Engineering Execution Program Report																			
<b>Task 5.0 – Manual Read Meter Replacements (W-31, less than 3" diameter)</b>																			
5.1 - Inspection schedule, notifications and coordination																			
5.2 - Field Inspections																			
5.3 - Interim Reporting																			
5.4 - Evaluation of Special Circumstances																			
5.5 - Construction Cost Estimate																			
5.6 - Engineering Report																			