




REPORT TO CITY COUNCIL

Approved by:



Keith Helmuth, Department Director



Arnaldo Rodriguez, City Manager

Council Meeting of: December 15, 2021

Agenda Number: B-10

SUBJECT:

Evaluation of the Loy Cook Water Tower

RECOMMENDATION:

Adopt a Resolution approving an Agreement with Beyaz & Patel, Inc. for the structural evaluation and interior and exterior coating evaluation of the Loy Cook Water Tower in the amount of \$104,798.38 and a contingency of 10 percent of the contract amount

SUMMARY:

Loy Cook Water Tower, located on the southwest corner of South and Columbia Streets, was constructed in 1962 and has capacity of 1 million gallons of water is due for a structural assessment to determine potential improvements. The Agreement with Beyaz & Patel, Inc. is for Professional Engineering Services for:

- Field investigation, structural analysis and recommendations of the water tower for the purpose of evaluating the structure relative to current seismic and building codes.
- Analysis and recommendations of the interior and exterior coatings of the structure. A 20-year maintenance program will be provided.

BACKGROUND:

The water tower, named after Loy E. Cook. Mr. Cook who served as the water superintendent at the time and was a long-time employee of the City for 35 years, has a capacity of over 1 million gallons, a height of 134 feet, and a diameter of 76 feet. The iconic structure is the only remaining elevated water storage tank still in use by the City. The other tower, located at the Frank Bergon Center, is not actively used.

The consultant is required to perform field investigations of the tower for the purposes of providing structural recommendations to bring the water tower up to current seismic and building codes should the tower be found to be structurally deficient. Additionally, the consultant will be performing field investigations of the interior and exterior coatings for the purpose providing a condition assessment and recommendations for rehabilitation and preservation. After all final reports are prepared and accepted by the City, the consultant will provide an estimate to prepare construction plans and specifications that incorporate all the findings in the final reports. At that time this contract could be amended to include the preparation of plans and specifications.

On September 16, 2021, the City released a Request for Proposals for Professional Engineering Services (RFP) for the structural evaluation and interior and exterior evaluation of the water tower. The RFP was advertised September 16, 2021.

The City received two responses as highlighted on table 1.

<i>Firm</i>	<i>Bid</i>
Beyaz & Patel, Inc.	\$104,798.38
Provost and Prichard, Inc	\$171,800.00

Representatives from the Engineering Department and Public Works Water Division reviewed the proposals and ranked them on responsiveness to the criteria established in the RFP. Beyaz & Patel, Inc.'s proposal was the highest ranked proposal, and their fee is within the established project budgets.

FINANCIAL IMPACT:

There is no fiscal impact to the City's General Fund, rather funding for City Project W-22 and W-34 is included in the Fiscal Year 2021/22 Capital Projects Budgets from Water Utility Funds. Funding is limited to the structural evaluation and interior and exterior coating evaluation of the Loy Cook Water Tower. Any repairs, alterations, or renovations are not included in the current budget.

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
3. Photos of the water tower

RESOLUTION NO. 21-_____

**A RESOLUTION OF THE CITY COUNCIL OF THE CITY OF MADERA,
CALIFORNIA APPROVING AN AGREEMENT WITH BEYAZ & PATEL, INC.
FOR PROFESSIONAL ENGINEERING SERVICES FOR THE STRUCTURAL
EVALUATION AND INTERIOR AND EXTERIOR COATING EVALUATION OF
THE LOY COOK WATER TOWER IN THE AMOUNT OF \$ 104,789.38 AND A
10 PERCENT CONTINGENCY**

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 (RFP) on the City's website and solicited firms to provide a proposal for the Project; and

WHEREAS, the City received two proposals in response to the RFP; and

WHEREAS, City staff reviewed the proposals and recommended that Council select said firm; and

WHEREAS, Beyaz & Patel, Inc. submitted a proposal for \$104,789.38 with a 10 percent contingency; and

WHEREAS, Beyaz & Patel, Inc. was selected based on their experience and knowledge of the proposed project; and

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 Council approves the Agreement with Beyaz & Patel, Inc. for Professional Engineering Services in the amount not to exceed \$ 104,798.38 for the structural evaluation and interior and exterior coating evaluation of the Loy Cook Water Tower. A copy of said Agreement is attached hereto as Exhibit A.
3. The Council authorizes a contingency amount of \$10,480.00 to be approved by the City Engineer.
4. This resolution is effective immediately.

* * * *

EXHIBIT A

**CONSULTANT SERVICES AGREEMENT BETWEEN THE CITY OF MADERA AND BEYAZ & PATEL, INC.
FOR PROFESSIONAL ENGINEERING SERVICES FOR THE STRUCTURAL EVALUATION AND INTERIOR
AND EXTERIOR COATING EVALUATIONS OF THE LOY COOK WATER TOWER, CITY PROJECTS W-22
AND W-34**

This Consultant Services Agreement ("Agreement") is entered into between the CITY OF MADERA, a California general law city ("City") and Beyaz & Patel, Inc. ("Consultant"). This Agreement shall be effective on the date signed by City which shall occur after execution by Consultant ("Effective Date").

RECITALS

A. City has sought, by a Request for Proposals, to select a consultant to provide Professional Engineering Services for the structural evaluation and interior/exterior coating evaluations of the Loy Cook Water Tower, City Projects W-22 and W-34.

B. Consultant submitted a proposal for performing the requested Services and is engaged in the business of furnishing such services as a consultant and hereby warrants and represents that it is qualified, licensed, and professionally capable of performing the Services called for in the Request for Proposals and this Agreement.

C. City has selected Consultant to perform the requested Services on the basis of Consultant's demonstrated competence and professional qualifications.

D. City desires to retain Consultant, and Consultant desires to provide City with the Services, on the terms and conditions as set forth in this Agreement.

NOW, THEREFORE, in consideration of the promises and mutual agreements herein, City and Consultant agree as follows:

AGREEMENT

1. Scope of Services. Consultant shall perform, to the satisfaction of City in accordance with this Agreement, the Services described in the "Scope of Services" attached hereto as **Exhibit A, Scope of Work** and incorporated by herein by this reference. Consultant shall at all times faithfully, competently and to the best of its ability, experience and talent, perform all services described herein. It is understood that services under Exhibit A include an estimate to prepare construction plans and specifications that incorporate all the findings in the final reports. Any such further work will be addressed pursuant to an amendment to this Agreement.

2. Commencement of Services; Term of Agreement. Consultant shall commence the Services upon City's issuance of a written "Notice to Proceed" and shall continue with the Services until Consultant, as determined by City, has satisfactorily performed and completed the Services, or until such time as the Agreement is terminated by either party in accordance with this Agreement,

whichever is earlier. See **Exhibit D, Project Schedule**

- (a) Continuity of Personnel. Consultant shall make every reasonable effort to maintain the stability and continuity of Consultant's staff and subcontractors assigned to perform the Services under this Agreement. Consultant shall notify City of any changes in Consultant's staff and subcontractors assigned to perform the Services under this Agreement.
 - (b) Additional Services. Consultant shall not be compensated for any services rendered in connection with its performance of this Agreement which are in addition to or outside of those set forth in this Agreement or listed in **Exhibit B, Manpower/Fee Proposal** unless such additional services are authorized in advance and in writing by the City Manager of City. Consultant shall be compensated for any such additional services in the amounts and in the manner agreed to by the City and Consultant. CITY agrees to pay Consultant for extra services not contemplated hereunder as set forth in **Exhibit B, Manpower/Fee Proposal** or for such services as may be specifically requested by CITY for an agreed-to fixed fee or hourly rate of compensation per **Exhibit C, Hourly Rate Schedule**, provided; however, that the City Engineer authority is limited to expenditures not to exceed the amount of \$ 10,480, ten thousand, four hundred and eighty dollars.
3. Compensation for Services. City shall compensate Consultant for rendering the Services as follows:
 - (a) Subject to any limitations set forth in this Agreement, City agrees to pay Consultant by the amounts specified in the Schedule of Compensation attached hereto as **Exhibit B, Manpower/Fee Proposal** and incorporated herein by this reference.
 - (b) Each month Consultant shall invoice City for all work performed and expenses incurred during the preceding month. The invoice shall detail charges by the following categories: labor (by subcategory), travel, materials, equipment, supplies, and sub-consultant contracts.
 - (c) City shall independently review each invoice submitted by the Consultant to determine whether the work performed, and expenses incurred are in compliance with the provisions of this Agreement. The invoiced amount shall be paid within 30 calendar days unless City disputes any charges or expenses. If any charges or expenses are disputed, City shall pay the undisputed amount, and notify Consultant of the nature and amount of the disputed charge or expense. The parties shall seek to resolve the disputed items(s) by mutual agreement.
 - (d) Payment to Consultant for work performed under this Agreement shall not be deemed to waive any defects in work performed by Consultant.
4. Independent Contractor Status. Consultant and its subcontractors shall perform the Services

as independent contractors and not as officers, employees, agents or volunteers of City. Nothing contained in this Agreement shall be deemed to create any contractual relationship between City and Consultant's employees or subcontractors, nor shall anything contained in this Agreement be deemed to give any third party, including but not limited to Consultant's employees or subcontractors, any claim or right of action against City. Neither the City nor any of its employees shall have any control over the manner, mode, or means by which Consultant or its agents or employees perform the services under this Agreement.

5. Qualifications, and Professional Standards. Consultant represents and warrants that it has the qualifications, experience and facilities necessary to properly perform the services required under this Agreement in a thorough, competent and professional manner. In meeting its obligations under this Agreement, Consultant shall employ, at a minimum, generally accepted standards and practices utilized by persons engaged in providing services similar to those required of Consultant under this Agreement. Consultant represents that to the extent Consultant utilizes subcontractors, such subcontractors are, and will be, qualified in their fields. Consultant also expressly represents that both Consultant and its subcontractors, if any, are now, and will be throughout their performance of the Services under this Agreement, properly licensed or otherwise qualified and authorized to perform the Services required and contemplated by this Agreement. Consultant and its subcontractors, if any, shall utilize the standard of care and skill customarily exercised by members of their profession, shall use reasonable diligence and best judgment while performing the Services, and shall comply with and keep themselves informed of all applicable laws and regulations.

6. Identity of Subcontractors and Sub-Consultants. Consultant shall before commencing any work under this Agreement provide to City in writing: (a) the identity of all subcontractors and sub-consultants (collectively referred to as "subcontractors"), if any, which Consultant intends to utilize in Consultant's performance of this Agreement; and (b) a detailed description of the full scope of work to be provided by such subcontractors. Consultant shall only employ subcontractors pre-approved by City and in no event shall Consultant replace an approved subcontractor without the advance written permission of City, with the understanding that City's permission will not be unreasonably withheld. Notwithstanding any other provisions in this Agreement, Consultant shall be liable to City for the performance of Consultant's subcontractors.

7. Subcontractor Provisions. Consultant shall include in its written agreements with its subcontractors, if any, provisions which: (a) impose upon the subcontractors the obligation to provide to City the same insurance and indemnity obligations that Consultant owes to City; (b) make clear that City intends to rely upon the reports, opinions, conclusions and other work product prepared and performed by subcontractors for Consultant; and (c) compliance with all laws and certifications as required under this Agreement.

8. Power to Act on Behalf of City. Consultant shall not have any right, power, or authority to create any obligation, express or implied, or make representations on behalf of City except as may be expressly authorized in advance in writing from time to time by City and then only to the extent

of such authorization.

9. Record Keeping; Reports. Consultant shall keep complete records showing the type of Services performed. Consultant shall be responsible and shall require its subcontractors to keep similar records. City shall be given reasonable access to the records of Consultant and its subcontractors for inspection and audit purposes. Consultant shall provide City with a working draft of all reports and a copy of all final reports prepared by Consultant under this Agreement.

10. Ownership and Inspection of Documents. All data, tests, reports, documents, conclusions, opinions, recommendations and other work product generated by or produced for Consultant or its subcontractors in connection with the Services, regardless of the medium, including physical drawings and materials recorded on computer discs ("Work Product"), shall be and remain the property of City. City shall have the right to use, copy, modify, and reuse the Work Product as it sees fit. Upon City's request, Consultant shall make available for inspection and copying all such Work Product and all Work Product shall be turned over to City promptly at City's request or upon termination of this Agreement, whichever occurs first. Consultant shall not release any Work Product to third parties without prior written approval of the City Manager. This obligation shall survive termination of this Agreement and shall survive for four (4) years from the date of expiration or termination of this Agreement.

11. Confidentiality. All data, reports, conclusions, opinions, recommendations and other work product prepared and performed by and on behalf of Consultant in connection with the Services performed pursuant to this Agreement shall be kept confidential and shall be disclosed only to City, unless otherwise provided by law or expressly authorized by City. Consultant shall not disclose or permit the disclosure of any confidential information acquired during performance of the Services, except to its agents, employees, affiliates, and subcontractors who need such confidential information in order to properly perform their duties relative to this Agreement. Consultant shall also require its subcontractors to be bound to these confidentiality provisions.

12. City Name and Logo. Consultant shall not use City's name or insignia, photographs relating to the City projects for which Consultant's services are rendered, or any publicity pertaining to the Consultant's services under this Agreement in any magazine, trade paper, newspaper, television or radio production or other similar medium without the prior written consent of City.

13. Conflicts of Interest. Consultant warrants that neither Consultant nor any of its employees have an interest, present or contemplated, which would conflict in any manner with the interests of the City or which would in any way hinder Consultant's performance of services under this Agreement. Consultant covenants that no person having any such interest, whether an employee or subcontractor shall perform the Services under this Agreement. During the performance of the Services, Consultant shall not employ or retain the services of any person who is employed by the City or a member of any City Board or Commission. City understands and acknowledges that Consultant is, as of the date of execution of this Agreement, independently involved in the performance of non-related services for other governmental agencies and private parties.

Consultant is unaware of any stated position of City relative to such projects. Any future position of City on such projects shall not be considered a conflict of interest for purposes of this section. City understands and acknowledges that Consultant will, perform non-related services for other governmental agencies and private parties following the completion of the Services under this Agreement, and any such future service shall not be considered a conflict of interest for purposes of this section.

14. Non-liability of Officers and Employees. No officer or employee of City shall be personally liable to Consultant, or any successors in interest, in the event of a default or breach by City for any amount which may become due Consultant or its successor, or for any breach of any obligation under the terms of this Agreement.

15. City Right to Employ Other Consultants. This Agreement is non-exclusive with Consultant. City reserves the right to employ other consultants in connection with the Services.

16. Termination of Agreement. This Agreement shall terminate upon completion of the Services, or earlier pursuant to the following.

a. For Convenience of City. This Agreement may be terminated by City at its discretion upon thirty (30) days prior written notice to Consultant.

b. For Breach of Either Party. If for any cause either party fails to fulfill in a timely and proper manner its obligations under this Agreement (the "breaching party"), the other party (the "terminating party") shall have the right to terminate the Agreement by giving not less than five (5) working days' written notice to the breaching party of the intent to terminate and specifying the effective date thereof. The terminating party shall, however, provide the breaching party with a detailed statement of the grounds for termination. This statement shall include, as appropriate, references to specific provisions of this Agreement, dates, dollar amounts and other information relevant to the decision to terminate for cause.

c. Compensation to Consultant Upon Termination. In the event termination is not due to fault attributable to Consultant and provided all other conditions for payment have been met, Consultant shall be paid compensation for services performed prior to notice of termination. As to any phase partially performed but for which the applicable portion of Consultant's compensation has not become due, Consultant shall be paid the reasonable value of its services provided. However, in no event shall such payment when added to any other payment due under the applicable part of the work exceed the total compensation of such part as specified in Section 3 herein. In the event of termination due to Consultant's failure to perform in accordance with the terms of this Agreement through no fault of City, City may withhold an amount that would otherwise be payable as an offset to City's damages caused by such failure.

d. Effect of Termination. Upon receipt of a termination notice (or completion of this Agreement), Consultant shall: (i) promptly discontinue all Services affected (unless the notice directs

otherwise); and (ii) deliver or otherwise make available to the City, without additional compensation, all data, documents, procedures, reports, estimates, summaries, and such other information and materials as may have been accumulated by the Consultant in performing this Agreement, whether completed or in process. Following the termination of this Agreement for any reason whatsoever, City shall have the right to utilize such information and other documents, or any other works of authorship fixed in any tangible medium of expression, including but not limited to physical drawings, data magnetically or otherwise recorded on computer disks, or other writings prepared or caused to be prepared under this Agreement by Consultant. Consultant may not refuse to provide such writings or materials for any reason whatsoever.

17. Insurance. Consultant shall obtain and maintain in full force and effect during the term of this Agreement the insurance policies set forth in **Exhibit E, Insurance Requirements** attached hereto and incorporated herein by this reference. All insurance policies shall be subject to City approval as to form and content. Consultant shall provide City with copies of required certificates of insurance.

18. Indemnification.

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 City 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 City in the performance of professional services under this agreement.

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 City, 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, 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 City for which Consultant is legally liable, including, but not limited to officers, agents, employees, or subcontractors of Consultant, except when caused by the active negligence or willful misconduct of the City.

19. Compliance with All Laws. Consultant shall be familiar with and shall comply with all City, State, and Federal laws and regulations applicable to the work to be performed under this Agreement. In providing the services required under this Agreement, Consultant shall at all times comply with all applicable laws, regulations, and resolutions of the United States, the State of

California, and the City of Madera now in force and as they may be enacted, issued, or amended during the term of this Agreement.

20. Assignment. Neither this Agreement nor any duties or obligations hereunder shall be assignable by Consultant without the prior written consent of City. In the event of an assignment to which City has consented, the assignee shall agree in writing to personally assume and perform the covenants, obligations, and agreements herein contained. In addition, Consultant shall not assign the payment of any monies due Consultant from City under the terms of this Agreement to any other individual, corporation or entity. City retains the right to pay any and all monies due Consultant directly to Consultant.

21. Form and Service of Notices. All notices required or permitted to be given under this Agreement shall be in writing and shall be personally delivered, or sent by certified mail, postage prepaid and return receipt requested, addressed as follows:

To City: Steve Bettencourt PE
City of Madera
428 E. Yosemite Blvd.
Madera, CA 93637
Email: sbettencourt@madera.gov

To Consultant: Subhash Patel
Beyaz & Patel, Inc.
10920 Via Frontera, Suite 210
San Diego, CA 92127
Email: spatel@beyazpatel.com

Notice shall be deemed effective on the date personally delivered or transmitted by facsimile, or if mailed, three (3) days after deposit of the same in the custody of the United States Postal Service.

22. Entire Agreement. This Agreement, including the attachments and exhibits, represents the entire Agreement between City and Consultant and supersedes all prior negotiations, representations or agreements, either written or oral with respect to the subject matter herein. This Agreement may be amended only by written instrument signed by both City and Consultant.

23. Successors and Assigns. This Agreement shall be binding upon and shall inure to the benefit of the parties hereto and their respective successors and assigns.

24. Authority. The signatories to this Agreement warrant and represent that they have the legal right, power, and authority to execute this Agreement and bind their respective entities.

25. Severability. In the event any term or provision of this Agreement is declared to be invalid or illegal for any reason, this Agreement will remain in full force and effect and will be interpreted

as though such invalid or illegal provision were not a part of this Agreement. The remaining provisions will be construed to preserve the intent and purpose of this Agreement and the parties will negotiate in good faith to modify any invalidated provisions to preserve each party's anticipated benefits.

26. Applicable Law and Interpretation and Venue. This Agreement shall be interpreted in accordance with the laws of the State of California. The language of all parts of this Agreement shall, in all cases, be construed as a whole, according to its fair meaning, and not strictly for or against either party. This Agreement is entered into by City and Consultant in the County of Madera, California. Thus, in the event of litigation, venue shall only lie with the appropriate state or federal court in Fresno County.

27. Attorneys Fees. If either party is required to commence any proceeding or legal action to enforce or interpret any term, covenant, or condition of this Agreement, the prevailing party in such proceeding or action shall be entitled to recover from the other party its reasonable attorneys' fees and legal expenses.

28. Amendments and Waiver. This Agreement shall not be modified or amended in any way, and no provision shall be waived, except in writing signed by the parties hereto. No waiver of any provision of this Agreement shall be deemed, or shall constitute, a waiver of any other provision, whether or not similar, nor shall any such waiver constitute a continuing or subsequent waiver of the same provision. Failure of either party to enforce any provision of this Agreement shall not constitute a waiver of the right to compel enforcement of the remaining provisions of this Agreement.

29. Third Party Beneficiaries. Nothing in this Agreement shall be construed to confer any rights upon any party not a signatory to this Agreement.

30. Execution in Counterparts. This Agreement may be executed in counterparts such that the signatures may appear on separate signature pages. A copy or an original, with all signatures appended together, shall be deemed a fully executed Agreement.

31. Non-Discrimination. Consultant shall not discriminate on the basis of any protected class under federal or State law in the provision of the Services or with respect to any Consultant employees or applicants for employment. Consultant shall ensure that any subcontractors are bound to this provision. A protected class, includes, but is not necessarily limited to race, color, national origin, ancestry, religion, age, sex, sexual orientation, marital status, and disability.

IN WITNESS WHEREOF, the City and Consultant have executed this Agreement on the date(s) set forth below.

CONSULTANT NAME

Beyaz and Patel, Inc.

CITY OF MADERA

By: _____
Subhash Patel

By: _____
Santos Garcia, Mayor

Date: _____

Date: _____

EXHIBIT A - Scope of Work



Scope of Services

Beyaz & Patel proposes to perform a structural evaluation and interior and exterior coatings investigation. The project will be in compliance with applicable local laws and ordinances. Beyaz & Patel will provide a structural evaluation and interior and exterior inspection reports with our findings and recommendations. The structural evaluation plan will include plans and specifications for any retrofit work and all reports will include documented images, photos, and three-dimensional finite element modeling. The goal of the project is to determine existing condition of the water tower and to conform the water tower to current code requirements.

Scope of Work

Our scope of work includes the following tasks:

- Task 1: Data Collection and Field Investigation
- Task 2: Exterior Inspection
- Task 3: Interior Inspection
- Task 4: Project Management

TASK 1: PROJECT MANAGEMENT

We understand that proactive project management is essential to making this project a success. Key to this effort is a thorough understanding of the City's budget and schedule requirements.

- **Develop Detailed Work Plan** that identifies scope of work.
- **Confirm** project schedule as well as deliverables and duration for each task.
- **Prepare** monthly progress report with invoice.
- **Track and monitor** project budget and schedules.

Task 4 Deliverables

- Agenda for monthly meetings
- Draft Work Plan, Project Schedule, and Budget

TASK 2: DATA COLLECTION AND FIELD SERVICES

This task includes a review of all existing documentation, conduct-

ing a survey of structures on the site, and a limited geotechnical investigation.

- **Kick-off Meeting** where we will submit the detailed Work Plan and project schedule to City for review. The Work Plan will be discussed along with communication procedure, meeting schedules, set date for site/field work, and coordination documents.
- **Site evaluation and investigation.** Due to the lack of as-built drawings, a survey is required to determine the subsurface conditions and to develop the foundation design parameters, including the allowable soil bearing capacity, passive earth pressure and soil friction coefficient.
- **Geotechnical Investigation** to assess the general condition of the existing Water Tower, and to determine the existing foundation system, including dimensions of the foundation system and embedment depth of the connecting anchor bolts. Material testing, including steel and concrete, will be performed. Also, we will test for lead paint on the water tank and tower support structure steel. Geotechnical services will be completed by BSK Associates, and include the following:
 - One (1) Exploratory test pit at one of the column footing to measure depth and size of the footing.
 - Electromagnetic and/or GPR method to evaluate location and embedment of anchor bolt into concrete foundation.
 - Scan size and spacing of any rebar.
 - Perform in-place density test

- Prepare geotechnical report including:
 - Test pit log
 - Bearing capacity of soil
 - Soil friction
 - Passive resistance of soil
 - Ground water observances
- Anchor bolt size and embedment
- Rebar sizes and spacing
- Backfill test pit with minimum 95% compaction.

Task 1 Deliverables

- Meeting Notes
- Geotechnical report
- As-Built drawings

TASK 3: EXTERIOR EVALUATION AND ASSESSMENT

Beyaz & Patel will perform seismic and structural evaluations of the Water Tower for both seismic and wind loading. The assessment will be based on requirements in the 2016 California Building Code and ASCE 7-10 standard. Material properties for steel and concrete will be based on our tested values. CSI will perform the exterior coatings inspection and make minor repairs.

2.1 STRUCTURAL AND SEISMIC EVALUATION

- Taking direction from the field investigation and as-built survey information, Beyaz & Patel will perform seismic and structural evaluations of the Water Tower for both seismic and wind loading. The assessment will be based on requirements in the 2019 California Building Code, ASCE 1-16 and AWWA D100-11 standard.
- General behavior of the tower and foundation structure will be evaluated and critical component demand-to-capacity (DCRs) will be computed. To assist in the evaluation, Beyaz & Patel will develop a three dimensional finite element computer model using SAP 2000 structural analysis software. We will determine which structural elements are overstressed and deficient, and will require strengthening.
- Develop strengthening measures to mitigate the deficient structural components.

2.2 EXTERIOR COATING ASSESSMENT

Beyaz & Patel has teamed with CSI Services. CSI is no stranger to the City or the Water Tower.

CSI has worked on the Loy E. Cook Water Tower on two separate projects, including providing an assessment of the interior and exterior coating.

CSI Services meet all the requirements outlined in the City's Request for Proposal in terms of certifications and experience. CSI divers are ADC certified commercial divers, which incorporates any high-alti-

tude diving certification requirements.

Based on CSI's previous experience conducting dives of the Loy E. Cook Water Tower, the interior inspection and up to 30 minor repairs can be conducted in one day. Should further repairs be required, the team will conduct repairs on an hourly basis. CSI will perform a visual inspection that will include the following field work services for the Loy E. Cook Water Tower project:

- **Degree of exterior paint chalking and any breaks, blisters, or other coating defects.** It is not the intent of this exterior evaluation work to make access to any surfaces that cannot be surveyed from the tank ladder(s) or catwalks (i.e. repelling is not included with in this scope). *Degree of chalking will be determined in general accordance with ASTM D4214 "Standard Test Method for Evaluating the Degree of Chalking of Exterior Paint Films"
- **Rusting** will be quantified in accordance with ASTM D610 "Standard Test Method for Evaluating the Degree of Rusting of Painted Steel Surfaces."
- **Dry film thickness (DFT)** measurements will be obtained in general accordance with SSPC: The Society of Protective Coatings Paint Application Specification No. 2 "Measurement of Dry Film Thickness with Magnetic Gages"
- **Exterior paint adhesion** will be assessed using ASTM D3359 "Standard Test Method for Evaluating Adhesion by Tape Test, Method A" (modified) and/or ASTM D6677 "Adhesion by Knife Test".
- **Blistering** will be quantified in accordance with ASTM D714 "Standard Test Method for Evaluating the Degree of Blistering Paints."
- **Corrosion.** The surveys will investigate any areas where rust or other corrosion products are in evidence for erosion, cracking, pitting and/or metal loss.
- **Steel Thickness (UT) Measurements.** Where applicable, corrosion pits will be measured and compared to obtained steel thickness (UT) measurements. UT work can include underwater surfaces.
- **Leakage.** Any indications of leakage will be determined
- **Sediment.** Measurement of bottom sediment will be reported.

2.3 EXTERIOR INVESTIGATION REPORT

The product of the above would be a written narrative and color pictorial description of the condition of each tank along with specific recommendations for coatings, cathodic protection, and structural considerations, where applicable. See Section 3.2 for comprehensive discussion of report contents.

Task 2 Deliverables

- Draft Exterior Field Investigation Report
- Final Exterior Report

TASK 4: INTERIOR ASSESSMENT

3.1 DIVE INSPECTION

Our understanding of the objective of the Tank Dive Assessment is to determine sound maintenance strategies and plans for maintaining the structure. Surveys of both the internal and external surfaces of potable or non-potable steel reservoirs will be completed. Surveys will be completed with the tank in operation. This specific task of completing a dive inspection is described below.

- Underwater survey would be performed while a tank is full of water using special underwater techniques and AWWA C652 sanitary procedures for potable tanks.
- The survey will be conducted by a team of highly trained and certified inspectors having exceptional diving and underwater photography skills.
- During the evaluations, particular attention will be paid to the condition of the following critical areas:

Critical Areas	
• Roof	• Ladders/Safety Climbs
• Roof Structure Shell	• Platforms/Railings
• Tank Bottom	• Manways
• Overflow Pipe/Weir	• Hatches
• Drains/Sumps	• Gaskets
• Inlets/Outlets	• Ringwall/Anchor Bolts
• Piping	• Grade/Tank Crevices
• Vents/Screens	• Water Level Indicators
• Shell and Roof Chime/ Joints	• CP Equipment/ Component

The focus of the inspections will be to evaluate the current condition of the interior and exterior coating systems and the level of corrosion on the tanks. The evaluation will involve:

- Visual observations,
- Dry film thickness (DFT) measurements,
- Adhesion testing, and
- Potentially corrosion pit depth and/or ultrasonic (UT) testing for steel thickness measurements.

3.2 COATINGS ASSESSMENT REPORT

The product of the above would be a written narrative and color pictorial description of the condition of each tank along with specific recommendations for coatings, cathodic protection, and structural considerations, where applicable.

- Recommendations for maintenance work will be based on the level of corrosion and the condition of tank coatings and CP systems.
- Corrosion assessments will be based on the amount of change from the original tank design. The life expectancy of existing coating systems, as well as the projected corrosion rates on the structures are used to determine the future maintenance strategies.

- Recommendations for coatings work will be based on paint or lining's percentage of failure, ability to be recoated, film heavy metal content, estimated remaining life of the system(s); and/or concerns with any impressed current cathodic protection system.
- Recommendation for CP repair work, will include a list of required repairs. If the alternative approach to CP assessments is used, then the results of various CP issued, as appropriate.
- Recommendations for any future retrofitting concerns will also be presented, where identified. CSI will comment on any applicable safety, sanitary, vandalism, and seismic concerns. Safety concerns will include ladder size/design observations, fall-prevention systems, roof access areas, etc.
- Sanitary concerns will make note of items such as venting and other tank openings such as overflow air-gaps.
- Vandalism concerns will involve an evaluation of perimeter fencing, locking mechanisms, and climb deterrents.
- Seismic concerns will address items such as obvious visual indications of tank movement, flexible couplings, drain locations, etc.
- It should be clear that our cost proposal does not include a seismic analysis of a tank's ability to structurally withstand a probable seismic event, nor does this scope include any geotechnical/soils reports.
- The report(s) will also include estimated repair costs. A narrated video will also be included for underwater inspections.

3.3 FINAL ENGINEERING REPORT AND 20-YEAR MAINTENANCE PROGRAM

The final engineering report will include:

- **Results of structural evaluation**
- **Retrofit recommendations, and**
- **Cost estimates**
- **20-Year and beyond Maintenance Program** will maximize the service life of the Water Tower and minimize maintenance costs. The program will be developed by our Team and include the following considerations and content:
 - **Budget components and cost estimates**, such as coatings, metal repairs, foundations repairs, safety upgrades, antenna upgrades, cathodic protection, engineering, field inspection, and pressure systems.
 - **Prioritizing and work scheduling**, including structural repairs, interior and exterior coatings, appurtenances upgrades, and public health concerns (i.e. blast cleanings).
 - **Maintenance schedule**, including prioritizing, specification preparation, bidding, and construction inspection. Other parts of the program include frequency, annual inspections, health and safety, coatings schedule, specific measures for this Water Tank, and inspection method alternatives.

Task 3 Deliverables

- Draft Engineering Report, including coatings assessment
- Final Engineering Report, including coatings assessment
- Draft 20-Years Maintenance Program

EXHIBIT A - FEE AND MANPOWER

Be Yaz & Patel has included our 2021 hourly fee schedule for the Loy E. Cook Water Tower Projects, including the seismic evaluation and the interior and exterior coatings evaluation. We do not charge for travel or other miscellaneous expenses with the exception of car mileage. See exceptions below table.

BEYAZ & PATEL								
Hourly Billing Rates	Principal in Charge	Sr Struct Engineer	Senior Engineer	CAD Designer	Admin. Assistant	Total Labor Cost	ODC 3%	TOTAL COST
	\$246.00	\$213.00	\$167.00	\$133.00	\$77.00			
SCOPE OF WORK								
Task 1-Project Management								
1.1 Project Management	24					\$5,904.00	\$177.12	\$6,081.12
1.2 Develop Detail Work Plan	2		4			\$1,160.00	\$34.80	\$1,194.80
1.4 QA/QC Review		16				\$3,408.00	\$102.24	\$3,510.24
Task 1 Total	26	16	4			\$10,472.00	\$314.16	\$10,786.16
Task 2-Data Collection Phase								
2.1 Review Available Documents		1	4			\$881.00	\$26.43	\$907.43
2.2 Attend Kick-off Meeting	8					\$1,968.00	\$59.04	\$2,027.04
2.3 Field Investigation/Survey Work			8			\$1,336.00	\$40.08	\$1,376.08
2.4 Geotechnical Investigation/Evaluate	1		4			\$914.00	\$27.42	\$941.42
Task 2 Total	9	1	16			\$5,099.00	\$152.97	\$5,251.97
Task 3-Exterior Evaluation Phase								
3.1 Seismic and Structural Evaluation	24	16	96			\$25,344.00	\$760.32	\$26,104.32
3.2 Exterior Coating Inspection	8		8			\$3,304.00	\$99.12	\$3,403.12
3.3 Finalize Report	8	12	24	8	8	\$9,596.00	\$287.88	\$9,883.88
Task 3 Total	40	28	128	8	8	\$38,244.00	\$1,147.32	\$39,391.32
Task 4-Interior Evaluation Phase								
4.1 Interior Investigation/Diving Inspection	8	8	8			\$5,008.00	\$150.24	\$5,158.24
4.2 Interior Investigation Report	4	4	8			\$3,172.00	\$95.16	\$3,267.16
4.3 Interior Final Report						\$0.00	\$0.00	\$0.00
Task 4 Total	12	12	16			\$8,180.00	\$245.40	\$8,425.40
Subtotal of All Tasks 1-4	87	57	164	8	8	\$61,995.00	\$1,859.85	\$63,854.85
Other Direct Costs								
Geotechnical Services and Material Testing						\$12,000.00	\$360.00	\$12,360.00
Field Survey Work						\$4,000.00	\$120.00	\$4,120.00
Exterior Coating Inspection						\$4,000.00	\$120.00	\$4,120.00
Interior Dive Inspection						\$9,600.00	\$288.00	\$9,888.00
Subtotal of Direct Costs						\$39,751.00	\$1,192.53	\$40,943.53
Total	87	57	164	8	8	\$101,746.00	\$3,052.38	\$104,798.38

EXHIBIT C - HOURLY FEE SCHEDULE

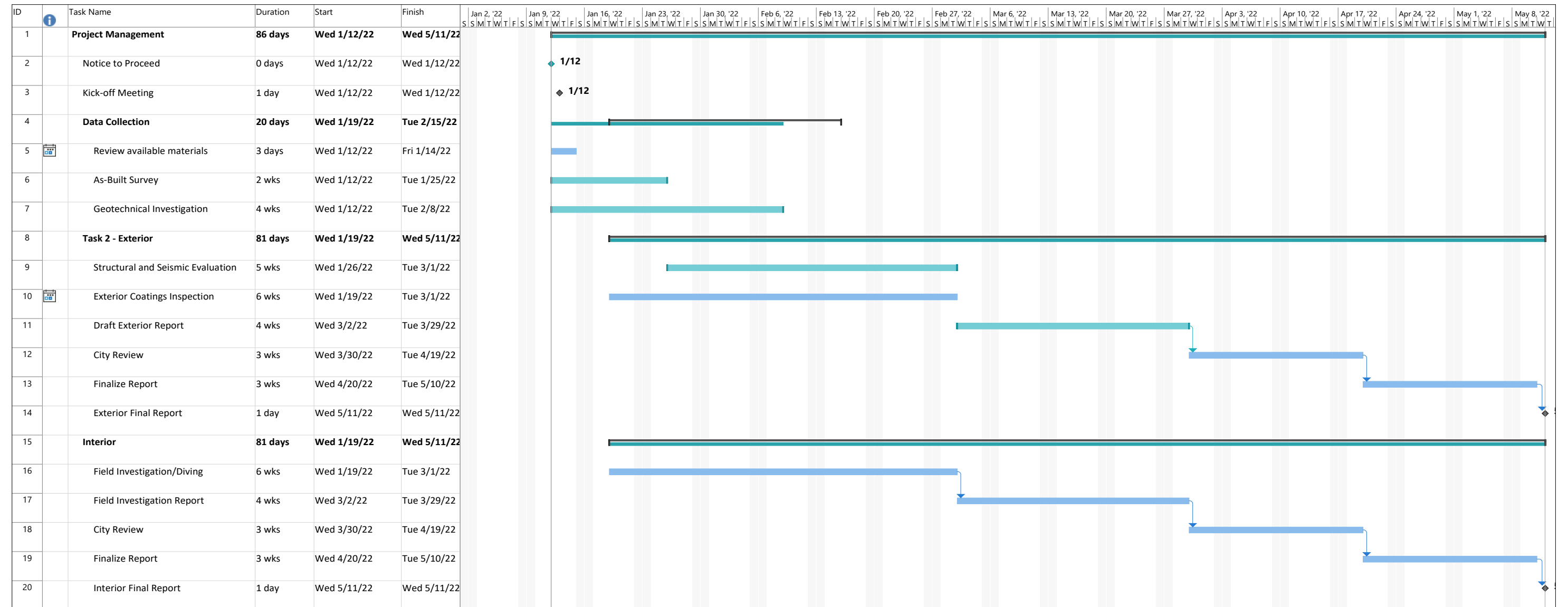
Beyaz & Patel has included our 2021 hourly fee schedule for the Loy E. Cook Water Tower Projects, including the seismic evaluation and the interior and exterior coatings evaluation. We do not charge for travel or other miscellaneous expenses with the exception of car mileage. See exceptions below table.

BEYAZ & PATEL HOURLY FEE SCHEDULE	
Professional Classification	Hourly Billing Rates
Principal Engineer	\$246.00
Senior Structural Engineer	\$213.00
Senior Engineer	\$167.00
Engineer	\$144.00
Technical Classification	Hourly Billing Rates
CAD Designer	\$133.00
Administrative Classification	Hourly Billing Rates
Clerical/Word Processing	\$77.00

Notes:

1. Hourly billing rates are adjusted annually at the beginning of the fiscal year.
2. Other Direct Costs will be billed at cost.
3. Mileage will be billed at Federal standard mileage rate.

6.0 SCHEDULE



Project: Schedule_LoyECook
Date: Wed 11/3/21

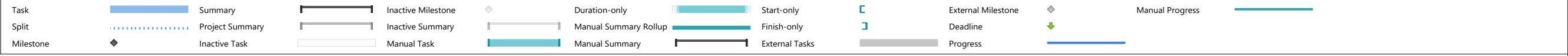


EXHIBIT E - INSURANCE REQUIREMENTS

INSURANCE REQUIREMENTS FOR CONSULTANTS

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, its 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 bid.

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. Agency 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 Agency 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 entity 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.

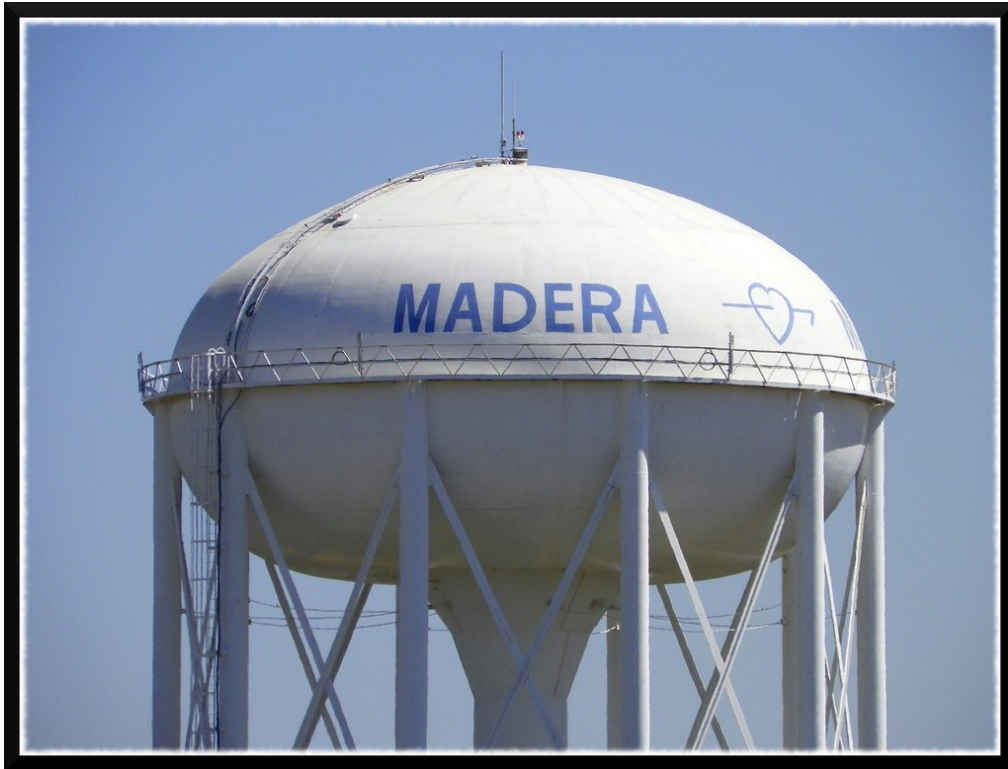
Indemnity for Professional Liability:

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 City 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 City in the performance of professional services under this agreement.

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 City, 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, 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 City for which Consultant is legally liable, including, but not limited to officers, agents, employees, or subcontractors of Consultant, except when caused by the active negligence or willful misconduct of the City.

Loy Cook Water Tower E. South St and Columbia St



Commemorative Plaque at Public Works