

REPORT TO CITY COUNCIL

Approved by:

Keith Helmuth, PE, City Engineer

Arnaldo Rodriguez, City Manager

Council Meeting of: February 6, 2019

Agenda Number: B-15

SUBJECT: Consideration of a Resolution Approving Agreement with Beyaz & Patel, Inc. in the Amount of \$84,487.81 for Professional Engineering Design Services and Authorizing Optional Services up to \$8,448 for the "D" Street Water Tower Evaluation for the City of Madera, and Authorizing the Mayor to Execute the Agreement

RECOMMENDATION:

Staff recommends that the City Council (Council):

1. Adopt a resolution approving an agreement with Beyaz & Patel, Inc. for design services related to the "D" Street water tower evaluation
2. Authorize the Mayor to execute the agreement

SUMMARY:

Staff presented an informational report to the City Council (Council) on August 15, 2018 and sought direction on how to proceed with the "D" Street Water Tower (Tower). Staff presented that an in-depth structural evaluation could range up to \$125,000. A formal Request for Proposals (RFP) was issued on October 18, 2018 with a due date of November 30, 2018, for professional engineering design services for the project. The proposed professional services agreement with Beyaz & Patel addresses the direction given by Council to evaluate the seismic and physical integrity of the "D" Street Water Tower and to present alternatives for the project. The cost proposed by Beyaz & Patel, Inc is \$84,487.81

DISCUSSION:

The "D" Street Water Tower, located at the corner of "D" Street and 7th Street next to the Frank Bergon Senior Center was constructed in 1911, is 133 feet tall, and, when functional, had a

capacity of 80,000 gallons. The Tower was decommissioned in 1976 and is no longer in use. A visual assessment was completed in 1994 at which time it was noted the Tower leaned nine inches from plumb, had loose rivet and bracing connections, and most likely would not meet then 1994 code standards. During this preliminary structural survey, it was also noted the steel tank structure was constructed with lead seals and painted with lead pigment paints. At that time, the consulting engineer recommended a more thorough structural evaluation (with calculations) be completed.

In 2011, the City Council directed Staff to begin collecting funds to demolish and remove the water tower. The current water rate structure approved in 2015 includes a budget of \$300,000 for demolition of the tower.

In August of 2018, staff met with representatives of the Madera County Historical Society to discuss the potential demolition. While the Historical Society opposes the loss of the community feature, they reiterated that they do not have funding to assist with the rehabilitation of the Tower. They felt strongly about the preservation of the tower and appreciated City staff informing them of the agenda item. The Historical Society supported Council's direction to conduct a thorough investigation of the tower and to obtain information on the options discussed at the August 15 meeting.

Council directed staff to circulate a RFP so that options could be identified in conjunction with projected estimates. Bayez & Patel, Inc. was the sole firm that responded to the RFP. A review of their proposal showed, based on experience, that they are qualified for the evaluation. The agreement with Bayez & Patel, Inc. will evaluate the three alternatives below and provide recommendations for the feasibility of each:

- 1. Retain at present location.** A seismic and physical integrity evaluation will be performed. The evaluation will include field exploratory and testing work for dimensions and member sizes, size and depth of the existing footing, material properties of the steel and concrete, and the presence of lead paint
- 2. Demolish and Remove.** Complete demolish of the Water Tower and removal from the site.
- 3. Deconstruct and Remove.** Deconstruct the Tower and remove from the site while retaining the ability to secure and reconstruct only the water tank as a cultural amenity at a new location in the future.

FINANCIAL IMPACT:

The recommended options as part of this evaluation would have no fiscal impact to the City's General Fund. It will cost the city \$84,487.81 of the water fund. The cost of the evaluation has been included in budget.

CONSISTENCY WITH THE VISION MADERA 2025 PLAN:

This effort supports this strategy to create a safe and healthy environment for all Maderans which is included in the Vision Statements Summary.

ALTERNATIVES:

1. Elect to not study the alternatives as discussed.
2. Provide additional guidance which would require that staff recirculate the RFP.
3. Reject the proposal and leave the tower as-is.

ATTACHMENTS:

1. Photo of tower
2. Resolution
3. Agreement

ATTACHMENT 1

D STREET WATER TOWER



ATTACHMENT 2

RESOLUTION NO. 19 - _____

A RESOLUTION OF THE COUNCIL OF THE CITY OF MADERA, CALIFORNIA, APPROVING AN AGREEMENT WITH BEYAZ & PATEL, INC. IN THE AMOUNT OF \$84,487.81 FOR PROFESSIONAL ENGINEERING DESIGN SERVICES AND AUTHORIZING OPTIONAL SERVICES UP TO \$8,448 FOR THE "D" STREET WATER TOWER EVALUATION FOR THE CITY OF MADERA AND AUTHORIZING THE MAYOR TO EXECUTE THE AGREEMENT

WHEREAS, the City of Madera has identified the "*D*" Street Water Tower Evaluation Project and the need to validate options; and

WHEREAS, professional engineering services are necessary for completion of the Project; and

WHEREAS, the City of Madera has programmed Water System Utility Funds in the Fiscal Year 2016/17 Budget for such services; and

WHEREAS, the City of Madera has prepared an agreement for such services with Beyaz & Patel, Inc. that is on file in the office of the City Clerk of the City of Madera (the "Agreement") and referred to for full particulars.

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 for professional engineering services as described above is necessary to carry out the project.
3. The Agreement with Beyaz & Patel, Inc., is approved for a Basic Fee amount of \$84,487.81 and \$8,448 for Optional Services as approved by the City Engineer.
4. The Mayor is authorized to execute the agreement on behalf of the City.
5. This resolution is effective immediately upon adoption.

* * * * *

ATTACHMENT 3

ATTACHMENT 1

**Standard Professional Services Agreement
&
Consultant Acknowledgment**

**AGREEMENT WITH BEYAZ & PATEL, INC. FOR PROFESSIONAL
ENGINEERING DESIGN SERVICES FOR “D” STREET WATER TOWER
(WATER TOWER) EVALUATION FOR THE CITY OF MADERA**

This Agreement made and entered into this 6TH day of February, 2019 between the City of Madera, a municipal corporation of the State of California, hereinafter called “CITY”, and Beyaz & Patel, Inc., located in Walnut Creek, CA, hereinafter called “CONSULTANT ”.

WITNESSETH

WHEREAS, CITY plans to conduct seismic analysis and demolition of the “D” Street Water Tower located on “D” Street in the City of Madera, California, hereinafter called “Project”; and

WHEREAS, CITY needs the services of a professional engineering firm to provide professional engineering design services for the evaluation and demolition of the water tower; and

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

5. COMPENSATION

The basic fee based on the estimated hours of work shown in EXHIBIT B, "Proposed Fee ", attached hereto and incorporated herein by reference, for the work tasks itemized in the Scope of Work is \$84,487.81.

City and Consultant agree on the rates shown in EXHIBIT C, "Hourly Rate Schedule". 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 Scope of Work 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 eight thousand four hundred forty eight dollars (\$8,448).

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:

- **\$1,000,000 General Liability** (including operations, products and completed operations) per occurrence, \$2,000,000 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.
- **\$1,000,000 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 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.

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 D, "Project Timeline."

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 13.

D. CONSULTANT shall complete all services required under this Agreement and this Agreement shall expire on December 31, 2019, 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. 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.

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
205 W. 4th Street
Madera, CA 93637

CONSULTANT

Beyaz & Patel, Inc
1280 Civic Dr., Ste. 204
Walnut Creek, Ca 94596

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.

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

* * * * *

CITY OF MADERA

CONSULTING FIRM

By: _____
Andrew J. Medellin, Mayor

By: _____

Taxpayer I.D. Number

APPROVED AS TO FORM:

By: _____
Brent Richardson, City Attorney

ATTEST:

By: _____
Sonia Alvarez, City Clerk

EXHIBIT A

SCOPE OF WORK FOR THE CITY OF MADERA "D" STREET WATER TOWER

The project objective is to evaluate the seismic and physical integrity of the Water Tower and evaluate the feasibility of the three alternatives. To achieve this objective, we plan to implement the following Work Plan.

Task 1: Project Management

- Develop detailed Work Plan that identifies scope of work.
- Develop detailed 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 1 Deliverables (3): Draft Work Plan, Project Schedule, and Budget
 Monthly Progress Reports
 Monthly Invoice

Task 2: Data Collection Phase

- Review all available City record documents, including Tank scale drawings, miscellaneous foundation photographs, Computed Dimensions for Estimated Purposes by G. Richardson (dated 1988), and Preliminary Structural Survey of Water Tank by Eugene C. Wong & Associates (dated March 10, 1994).
- Attend project 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.
- Perform field evaluation, investigation, survey and exploratory work 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 2-1/2" diameter anchor bolts. We will determine whether the existing condition conforms with the information presented in the Computed Dimensions for Estimated Purposes document by G. Richardson. 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.
- Perform a site evaluation and investigation 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.

Task 2 Deliverables (1): Detailed Work Plan, Project Schedule, Project Budget

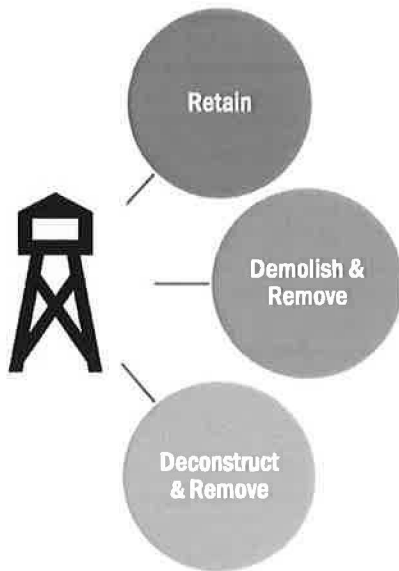
Task 3: Seismic and Structural Evaluation Phase

- Base on the field evaluation and 1988 G. Richardson document, Computed Dimensions for Estimated Purposes, we 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.

- The 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 tower evaluation, we plan to develop a three-dimensional finite element computer model using the structural analysis software SAP 2000 computer program. We will be able to determine which structural component is overstress and deficient, and will require strengthening.
- Determine why the Water Tower is leaning approximately eight inches.
- Develop strengthening measures to mitigate the deficient structural components.

Task 4: Alternative Analysis

- Evaluate the feasibility of the three alternatives as list below. The assessment will provide the advantages and disadvantages of each option, develop conceptual drawings and develop engineering estimate of the construction cost.



Option 1: Retain the Water Tower at its present location. Seismic and physical integrity evaluation will be performed for the “D” Street site. Field exploratory work will be required to determine the size and depth of the existing footing. This option will include evaluating the feasibility and cost impact to reduce the overall height of the Water Tower.

Option 2: Complete demolition of the Water Tower and removal from the site.

Option 3: Deconstruct the Water Tower and removal from the site while retaining the ability to secure and reconstruct only the water tank as a cultural amenity at a new location in the future.

- Attend alternative analysis review meeting with the City.

Task 5 Deliverables (2): Assessment Report
 Engineering Estimate

Task 5: Preliminary Design Report

- Prepare Preliminary Design Report (PDR), documenting findings and recommendations with estimated engineering cost estimates, to City for review. Geotechnical report will be included as an appendix to the PDR.
- Attend PDR review meeting with City

Task 5 Deliverables (2): Preliminary Design Report
 Geotechnical Report

Beyaz & Patel

Engineering expertise since 1975

1280 Civic Drive
Suite 204
Walnut Creek, CA 94596

(925) 934-0707
www.beyazpatel.com

EXHIBIT B

PROPOSED FEE

Below is our proposed fee for the City of Madera "D" Street Water Tower Evaluation.

City of Madera "D" Street Water Tower Evaluation

	BEYAZ & PATEL						Total Labor Cost	ODC 3%	TOTAL COST
	Principal in Charge	Project Manager	Senior Engineer	Engineer	CAD Designer	Admin. Assistant			
Hourly Billing Rates	\$236.00	\$206.00	\$161.00	\$134.00	\$127.00	\$73.00			
SCOPE OF WORK									
Task 1-Project Management									
1.1 Project Management		24					\$4,944.00	\$148.32	\$5,092.32
1.2 Develop Detail Work Plan		2	4			1	\$1,129.00	\$33.87	\$1,162.87
1.4 QA/QC Review	8						\$1,888.00	\$56.64	\$1,944.64
1. Total	8	26	4	0	0	1	\$7,961.00	\$238.83	\$8,199.83
Task 2-Data Collection Phase									
2.1 Review Available Documents		1	4				\$850.00	\$25.50	\$875.50
2.2 Attend Kick-off Meeting		8					\$1,648.00	\$49.44	\$1,697.44
2.3 Field Investigation/Survey Work		12	8				\$3,760.00	\$112.80	\$3,872.80
2.4 Geotechnical Investigation/Evaluate		1	4				\$850.00	\$25.50	\$875.50
2. Total	0	22	16	0	0	0	\$7,108.00	\$213.24	\$7,321.24
Task 3-Seismic and Structural Evaluation Phase									
3.1 Seismic Evaluation		24	80	40			\$23,184.00	\$695.52	\$23,879.52
3.2 Develop Strengthening Measures		6	20	12	8		\$7,080.00	\$212.40	\$7,292.40
3. Total	0	30	100	52	8	0	\$30,264.00	\$907.92	\$31,171.92
Task 4-Alternative Analysis									
4.1 Evaluate the Feasibility of the 3 Options		6	20	8	24		\$8,576.00	\$257.28	\$8,833.28
4.2 Cost Estimate for the 3 Options		2	24				\$4,276.00	\$128.28	\$4,404.28
4.3 Attend Alternative Analysis Review Mtg		8					\$1,648.00	\$49.44	\$1,697.44
4. Total	0	16	44	8	24	0	\$14,500.00	\$435.00	\$14,935.00
Task 5-Preliminary Design Report									
5.1 Prepare PDR		4	16		10	12	\$5,546.00	\$166.38	\$5,712.38
5.2 Attend PDR Review Meeting		8					\$1,648.00	\$49.44	\$1,697.44
5. Total	0	12	16	0	10	12	\$7,194.00	\$215.82	\$7,409.82
Other Direct Costs									
Geotechnical Services							\$12,000.00	\$360.00	\$12,360.00
Field Survey Work							\$3,000.00	\$90.00	\$3,090.00
SUBTOTAL ALL TASK	8	106	180	60	42	13	\$82,027.00	\$2,460.81	\$84,487.81

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Engineering expertise since 1975

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EXHIBIT C

BEYAZ & PATEL FEE SCHEDULE

Professional Classification	Hourly Billing Rates
Principal Engineer	\$236.00
Senior Structural Engineer	\$206.00
Senior Engineer	\$161.00
Engineer	\$134.00

Technical Classification	
CAD Designer	\$127.00

Administrative Classification	
Clerical/Word Processing	\$73.00

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

EXHIBIT D

City of Madera "D" Street Elevated Water Tower Project Schedule

