

**FOURTH AMENDMENT TO THE  
AGREEMENT**

THIS FOURTH AMENDMENT TO AGREEMENT (Amendment) made and entered into effect the \_\_\_\_ day of \_\_\_\_\_ 2019 (Effective Date) between the CITY OF FRESNO, a California municipal corporation (City), and PROVOST & PRITCHARD CONSULTING GROUP, a California Corporation (Consultant).

**RECITALS**

WHEREAS, the City and the Consultant entered into an agreement, on January 31, 2017 (Agreement) to provide professional civil engineering consulting services for Engineering Design and Feasibility Analysis for Removal of Trichloropropane (TCP) from Groundwater Extraction Wells for a total fee of \$268,000 (Project); and

WHEREAS, the City and the Consultant executed a First Amendment, dated December 8, 2017, to increase the Consultant's compensation by \$99,000 for additional services to provide engineering design for removal of TCP from groundwater at Water Well Pump Station 70; and

WHEREAS, the City and the Consultant executed a Second Amendment, dated February 8, 2018, to extend the Agreement to September 1, 2018 (also identified as First Amendment to Agreement); and

WHEREAS, the City and the Consultant executed a Third Amendment, dated October 4, 2018, to increase the Consultant's compensation by \$677,000 for additional services to provide engineering design for removal of TCP from groundwater at five Well Sites and to extend the Agreement to January 31, 2020; and

WHEREAS, City and Consultant desire to modify the Scope of Services described in EXHIBIT A; and

WHEREAS, with entry into this Agreement, Consultant agrees Consultant has no claim, demand, or dispute against City.

**AGREEMENT**

NOW, THEREFORE, in consideration of the above recitals, which recitals are contractual in nature, the mutual promises herein conditioned, and for other good and valuable consideration hereby acknowledge, the parties agree that the aforesaid Agreement be amended as follows:

1. The recitals to this Amendment are incorporated and made a part of this Amendment.
2. CONSULTANT shall perform to the satisfaction of CITY the scope of services described in **EXHIBIT A**, including all work incidental to, or necessary to perform, such services even though not specifically described in **EXHIBIT A**.
3. Except as otherwise provided herein, the Agreement entered into by City and Consultant on January 31, 2017, the first amendment entered into by the City and the Consultant on December 8, 2017, the first amendment entered into by the City

and the Consultant on February 8, 2018, and the third amendment entered into by the City and the Consultant on October 4, 2018, remains in full force and effect.


[Signatures appear on the next page.]

IN WITNESS WHEREOF, the parties have executed this Amendment at Fresno, California, the day and year first above written.

CITY OF FRESNO,  
A municipal corporation

Provost & Pritchard Consulting Group,  
A California corporation


By: \_\_\_\_\_  
Michael Carbajal  
Director of Public Utilities

By:   
Name: KEITH MORTENSEN

APPROVED AS TO FORM:  
DOUGLAS T. SLOAN  
City Attorney

Title: VICE PRESIDENT  
(If corporation or LLC, Board Chair,  
Pres. or Vice Pres.)

By:  5/29/19  
Brandon M. Collet Date  
Senior Deputy City Attorney

By:   
Name: MICHAEL TAYLOR

ATTEST:  
YVONNE SPENCE, MMC CRM  
City Clerk

Title: CORPORATE SECRETARY  
(If corporation or LLC, CFO,  
Treasurer, Secretary or Assistant  
Secretary)

By: \_\_\_\_\_  
Date

Addresses:  
CITY:  
City of Fresno  
Department of Public Utilities  
Utilities Planning & Engineering  
Attention: Matthew L. Bullis  
Professional Engineer  
2101 G Street, Building A  
Fresno, CA 93706  
Phone: (559) 621-1632  
FAX: (559) 498-4126

CONSULTANT:  
Provost & Pritchard Consulting Group Inc.  
Attention: Keith Mortensen, PE  
Vice President  
286 W. Cromwell Avenue  
Fresno, CA 93711  
Phone: (559) 449-2700  
FAX (559) 449-2715

Attachment: Exhibit A

## EXHIBIT A

### TCP Mitigation Design

#### Three Well Sites GAC Design Services

#### Scope of Services

##### Project Understanding

On February 2, 2017, the City of Fresno authorized Provost & Pritchard to proceed with feasibility study work as specified in the agreement dated January 31, 2017 titled "Engineering Design and Feasibility Analysis for Removal of Trichloropropane from Groundwater Extraction Wells". The purpose of the study was to provide engineering services needed to define the required mitigation measures associated with the contamination of forty-five (45) of the one-hundred (100) wells contaminated from the synthetic organic chemical (SOC) 1,2,3-Trichloropropane (TCP).

In addition to the feasibility study the City has asked Provost & Pritchard for a separate scope and fee to provide a **Remedial Investigation/Feasibility Study (RI/FS)** and engineering design services for **three (3)** of the contaminated wells to design the necessary TCP treatment improvements (granular activated carbon, GAC). The design services will be reimbursed as part of Proposition 1 funding obtained by the City. The individual contaminated well sites have not yet been selected by the City and the locations will be determined **as part of the RI/FS**.

##### Approach

It is anticipated that each of the **three (3)** well sites will conform to typical City of Fresno GAC design guidelines including the following assumptions:

1. Up to three (3) pairs of vessels each operated in series (up to 6 vessels total) at each site
2. Masonry walls and wrought iron access gates
3. Five (5) foot deep vessel pits equipped with vessel skid manifolds, lighting, and a sump pump;
4. Backwash and flush to waste pipelines connected to Fresno Metropolitan Flood Control District (FMFCD) storm drains where feasible;
5. On-site delivery truck access driveways where feasible;
6. Delivery truck dewatering drain inlets
7. Three-way valves to direct sump pump water to either the storm drain or sewer
8. Landscaping to screen the GAC vessels

In keeping with the typical Water Division scope of services, the design services included in this proposal include three of the typical five parts included in the City's standard consulting agreement:

Part 1: Schematic Design Phase

Part 2: Design Development Phase

Part 3: Construction Document Phase

Part 4: Bidding Phase – Not included with this proposal, Provost & Pritchard will provide under separate contract

Part 5: Construction Phase - Not included with this proposal, Provost & Pritchard will provide under separate contract

Part 6: Planning Grant Assistance

Part 7: Remedial Investigation/Feasibility Study (RI/FS)

### **Scope of Services**

Our proposed scope of services for this project is segregated into several tasks and sub-tasks. Specific activities included in each task are described below. Recognize that the attached fee estimate reflects budget projections of our time and expenses required to perform the described work; while individual task budgets may be exceeded, the total budget estimate will not be exceeded without prior additional authorization.

### **SCOPE**

Part 1: Schematic Design Phase

#### **A. PROGRAMMING AND PROJECT MANAGEMENT**

1. Project management and administration
2. Prepare and maintain design and construction schedule
3. Attend kick-off meeting with City staff
4. Prepare and submit monthly billing

#### **B. SURVEYING**

1. Conduct right-of-way and boundary research for each project site (**3 sites total**).
2. Conduct field survey to locate sufficient monumentation to re-establish the right-of-way and property lines within the project (**3 sites total**).
3. Conduct topographic survey of each project site (**3 sites total**)

#### **C. UTILITY COORDINATION**

1. Utility Research - iVIEW
2. Review Record Information
3. Utility Research Letters

#### **D. DESIGN PARAMETERS MEMORANDUM**

1. Prepare Design Parameters Report containing the following information
  - A. Design flow rates of each well
  - B. Estimated head loss through each treatment system

- C. GAC design parameters (empty bed contact time, hydraulic loading rate, vessel quantity, and series/parallel operation)
  - D. A description of major site features including features to mitigate aesthetic impacts (e.g. pit and walls); chlorination system; carbon delivery access; and backwash water disposal method.
  - E. Vessel procurement method
  - F. Electrical construction responsibilities
  - G. Schematic site plan showing the proposed improvements (3 sites total).
  - H. Schematic design level opinion of probable construction cost.
- E. GEOTECHNICAL SERVICES
- 1. None.

Assumptions:

- a) The project management and programming budget is based on a total design duration of 12 months
- b) The project is assumed to be GAC wellhead treatment at **three** stand-alone existing well sites. There are no well site interconnecting pipelines as would be required for co-treatment of multiple pump stations at a single site.
- c) Offsite raw water lines and offsite backwash lines if required would not exceed 1,000 linear feet at any given site. Offsite raw water lines or backwash lines would not require encroachment permits from Caltrans or a railroad authority.
- d) The treatment plant is being constructed on an established City of Fresno well site or on property purchased by the City of Fresno for a remote treatment site location.
- e) The City will elect not to conduct a geotechnical investigation of the proposed treatment site.

Part 2: Design Development Phase

A. PRELIMINARY PLANS, SPECIFICATIONS, AND COST ESTIMATE

- 1. Address any remaining comments on the site design parameters summarized during Part 1.
- 2. Prepare preliminary (60%) plans for wellhead treatment construction project, including the following sheets:
  - i. Cover and index (1 sheet)
  - ii. Legend and notes (1 sheet)
  - iii. Demolition plan (3 sheets)
  - iv. Site plan (3 sheets)
  - v. Grading plan (3 sheets)
  - vi. Site piping plan (3 sheets)
  - vii. Pit piping details (2 sheets)
  - viii. Pit structural details (1 sheet)
  - ix. Miscellaneous details (2 sheets)
  - x. Equipment Building details and sections (3 sheets)

- xi. Electrical sheets (6 sheets)
  - xii. Title 24 sheet (3 sheets)
  - xiii. Landscape plan (3 sheets)
  - xiv. Irrigation plan (3 sheets)
  - xv. Landscaping details (2 sheets)
3. Prepare preliminary technical specifications
  4. Prepare itemized estimate of quantities and cost
  5. Perform internal QA/QC review
  6. Submit preliminary (60%) plans, specifications and estimate (PS&E)

Assumptions:

- a) The wellhead treatment construction projects will be bid as a single project (3 well sites in one plan set)
- b) City-supplied up-front contract documents (Div 0 and 1) will be used
- c) New GAC vessels will be procured utilizing the City's standard GAC vessel procurement specifications.
- d) No new standby generators are included in the projects. Generators will be shown on Development Permit exhibits as future.

**B. PERMITTING ASSISTANCE**

1. Assist City with applying for and obtaining approval for a new or revised Development Permit (formerly known as a conditional use permit, CUP) for each site.
  - i. Prepare development permit exhibits consisting of Site Plan, Landscape Plan, and Elevation Views for each site (3 sites total)
  - ii. Assist Water Division with preparation of Planning & Development Department Master Application Form
  - iii. Submit application to Planning & Development Department
  - iv. Participate in up to three meetings or Planning & Development Department counter visits after the initial application to assist the City in obtaining an approved Development Permit
2. Submit off-site improvements plans to City of Fresno Public Works Department for review and approval
3. Coordinate with the State Water Resources Control Board – Division of Drinking Water (DDW) regarding the project.
4. Coordinate with Fresno Metropolitan Flood Control District (FMFCD) regarding acceptable location of backwash and flush-to-waste water discharge.
5. Establish whether project is subject to SJVAPCD Indirect Source Rule
6. Submit new electrical service application to PG&E if required to obtain new RULE 16 drawing

Assumptions:

- a) City will pay for all permit fees directly
- b) City will handle environmental compliance permitting and regulations (CEQA)

- c) No permits will be required other than those specifically identified above
- d) City will provide Preliminary Title Report and supporting Deed documents; Letter of Owner Authorization; and Operational Statement required for CUP application
- e) The City will handle coordination with residences adjacent to new treatment site regarding aesthetic impacts, and construction activities.
- f) Our fee assumes that no SJVAPCD permitting will be required.

**Part 3: Construction Document Phase**

**A. DRAFT FINAL (90%) DESIGN**

- 1. 60% submittal review meeting with City
- 2. Address Design Development Phase review comments
- 3. Prepare draft final plans, including the same sheets listed in the previous phase.
- 4. Prepare draft final technical specifications
- 5. Incorporate City up-front contract documents
- 6. Prepare draft final cost opinions
- 7. Submit draft final plans, specifications and estimate
- 8. Internal QA/QC review prior to submittal

**B. FINAL (100%) PLANS, SPECIFICATIONS AND ESTIMATES**

- 1. 90% submittal review meeting with City
- 2. Address draft final review comments
- 3. Prepare final plans
- 4. Prepare final technical specifications
- 5. Prepare final opinion of probable construction costs
- 6. Submit final plans, specifications and estimate
- 7. Internal QA/QC review prior to submittal

**C. BUILDING & SAFETY DEPARTMENT PLANCHECK**

- 1. Submit four full-size plansets and two sets of structural calculations for Building & Safety Department Plancheck
- 2. Complete backcheck process to obtain Building & Safety Department approval
- 3. Obtain FMFCD plan approval and signatures

**Assumptions:**

- a) The contractor will prepare and implement Storm Water Pollution Prevention Plan and Dust Control Plan if required

***Part 4: Bidding Phase***

*Not included with this proposal, Provost & Pritchard will provide under separate contract.*

**Part 5: Construction Phase**

*Not included with this proposal, Provost & Pritchard will provide under separate contract.*



## Part 6: Planning Grant Assistance

### A. Project Management

1. Assist City staff with Grant Project management and administration
2. Prepare and maintain design and construction schedule for the Grant Manager
3. Attend site visits with Grant Manager (assumed 2 site visits)
4. Photo monitoring of the site (assumed 3 site visits)

### B. General Compliance Requirements

1. Submit GPS data for project sites
2. Submit Geotracker/GAMA system data

### C. Technical Advisory Committee

1. Assist the City with creating a Technical Advisory Committee
2. Attend kickoff meeting at the City with the committee and prepare Draft summary memo for the City to review and submit to the grant manager
3. Attend additional committee meetings at the City as required (assumed 2 meetings)

### D. Feasibility Study Report ***See Task 7***

1. It is assumed that the Feasibility Study submitted in May of 2018 by Provost & Pritchard will ***not*** fulfill this requirement of the grant. ***An additional Remedial Investigation/Feasibility Study will be prepared under Task 7***

### E. Public Outreach

1. Assist the City with developing outreach materials by providing project photos, graphics, and data on the progress of the project (assumed 3 maps or schematics will be developed and delivered in electronic format)
2. Assist the City with conducting a public workshop. Provost & Pritchard will attend a public work shop meeting held at the city. Provost & Pritchard will prepare an agenda, sign in sheets, and summary of the meeting including photos of the workshop.

### F. Reporting Assistance

1. Provost & Pritchard will assist the City in providing information needed to submit the reports required by the grant:
  - i. Assumed 6 quarterly reports
  - ii. Assumed 2 "As Needed Information Reports" as requested by the Grant Manager
  - iii. Final Project Report and Summary

### Assumptions:

- a) The City will take the lead role in complying with the grant requirements and Provost & Pritchard will assist the City as identified in the above scope of services.

## Part 7: Remedial Investigation /Feasibility Study (RI/FS)

- A. The RI/FS will be prepared in limited general accordance with the EPA guidance on preparing Remedial Investigations and Feasibility Studies (EPA 540/G89/004) and will address at a minimum the following:
1. Nature and extent of TCP distribution in groundwater (based on existing City TCP data)
  2. Identify potential critical Study Areas (SA), assumed 3 total
  3. Geologic and hydrologic conditions in selected critical SA
  4. Well construction for wells which are in selected SAs
  5. Nature and extent of potential non-TCP contaminants that might affect potential Treatment designs.
  6. Develop site conceptual models for each SA
  7. Evaluation of mitigation by pumping strategy.
  8. Evaluation of potential treatment strategies for affected wells within SAs.

Assumptions:

- a) The RI portion of the RI/FS will be limited to a review and use of existing City and other publicly available data.
- b) No new field work, sampling or well drilling is anticipated for the RI data review.

**SPECIFIC EXCLUSIONS**

The following engineering services are specifically excluded from the scope of services but may be provided if requested by the City and following adjustment to this Scope of Services and corresponding fee estimate:

1. Support of any services related to litigation including, but not limited to, expert witness services, responding to subpoenas, participating in depositions, and testifying at trial.
2. Legal descriptions and exhibits
3. Applying for plan amendment, rezoning, or code variances
4. Geotechnical investigations and reports
5. Construction staking
6. Services associated with property acquisition
7. Preparation of dust control plans and storm water pollution prevention plans
8. Payment of agency plan check and permit fees
9. Payment of fees for outside laboratory, equipment, and testing services
10. Potholing and utility locating services
11. Environmental permitting assistance
12. Hydraulic modeling and/or surge analysis
13. Traffic control plans
14. Preparation of water treatment Operations Plan and Hazardous Materials Business Plan
15. Contractor prequalification
16. Construction management and inspection

## ESTIMATED FEE SUMMARY

We will perform these services on a time and materials basis, in accordance with our Standard Fee Schedule in effect at the time services are rendered. These fees will be invoiced monthly as they are accrued, and our total fees, including reimbursable expenses, will not exceed our estimate without additional authorization.

<b>Three Well Sites Fee Estimate</b>	
<b>Task</b>	<b>Estimated Fee</b>
Task 1 - Schematic Design	\$90,000
Task 2 - Design Development	\$170,000
Task 3 - Construction Documents	\$200,000
<i>Task 4 - Bidding Phase (not included with this proposal)</i>	-
<i>Task 5 - Construction Phase (not included with this proposal)</i>	-
Task 6 – Planning Grant Assistance	\$60,000
Task 7 – Remedial Investigation /Feasibility Study (RI/FS)	\$157,000
<b>Total Estimated Fee:</b>	<b>\$677,000</b>