

August 7, 2024

Mr. Ahmad Alkhayyat, P.E., MBA
Assistant Director
Solid Waste Management Division
City of Fresno Department of Public Utilities
1325 El Dorado Street
Fresno, CA 93706

Re: Proposal to provide Emergency Landfill Gas Collection and Control System Repairs and Improvements and Operations, Maintenance, and Monitoring services at the Fresno Municipal Sanitary Landfill Superfund Site in Fresno, California

Dear Mr. Alkhayyat:

Tetra Tech is pleased to provide you with this proposal for providing Emergency Landfill Gas Collection and Control System (LFGCCS) repairs and improvements and Operations, Maintenance and Monitoring (OM&M) services at the LFGCCS at the Fresno Municipal Sanitary Landfill (FSL) Superfund Site in Fresno, California. This proposal provides our project understanding, based on our recent meetings with the City of Fresno (City) where we discussed the proposed scope of services, assumptions, and anticipated costs for completion of this project. Tetra Tech understands that FSL is an Environmental Protection Agency (EPA) Superfund site and this work is in accordance with Tetra Tech and the City's meeting with the EPA on Friday, August 2, 2024.

SCOPE OF WORK

Tetra Tech prepared this proposal and developed the proposed tasks below based on discussions with the City, the EPA, knowledge of the FSL LFGCCS, and experience with LFGCCS evaluations, design, and Landfill Gas (LFG) OM&M (routine and non-routine) services.

Tetra Tech will perform the following tasks, at the frequencies stated below:

- Task 1 – LFG Collection System Wellfield Monitoring and Tuning (Frequency: Monthly);
- Task 2 – LFG Condensate Sumps Monitoring (Frequency: Monthly);
- Task 3 – LFG Treatment System Monitoring (Frequency: Monthly);
- Task 4 – Perimeter Probe Monitoring for Probes MMW4, MMW5 and MMW6 (Frequency: Twice per Week);
- Task 5 – Non-Routine and Emergency OM&M Services;
- Task 6 – Blower Inspection and Repairs;
- Task 7 – Air Compressor Inspection and Maintenance;
- Task 8 – Flare Louver Motor Replacement;
- Task 9 – Procure Spare Sample Ports and Caps;
- Task 10 – Emergency Wellfield Repairs; and
- Task 11 – LFGCCS Emergency Jumper Line Installation.

Task 1 – LFG Collection System Wellfield Monitoring and Tuning - (Frequency: Monthly)

The site has one-hundred and fifteen (115) LFG extraction wells part of the LFGCCS. Tetra Tech will monitor and tune the LFG extraction wells and inspect the above-grade collection system piping monthly. The following data will be collected and recorded on site-specific forms in an electronic format. Collected well monitoring data will include, but not be limited to, the following parameters:

1. Well ID;
2. Date/Time;
3. Header Static Pressure;
4. Monitoring Equipment Calibration Form;
5. Initial/Adjusted Well Static Pressure;
6. Methane concentration;
7. Carbon dioxide concentration;
8. Oxygen concentration;
9. Balance gas concentration;
10. LFG Temperature;
11. Initial/adjusted extraction Flow Rate;
12. Initial/adjusted valve position;
13. Atmospheric Temperature;
14. Atmospheric Pressure; and
15. Weather Conditions.

Wellfield monitoring and tuning will be completed by an experienced engineering technician to improve LFG collection efficiency and attempt to maintain continuous flare operation. Any potential issues observed regarding the LFGCCS performance will be noted and shared with the City along with recommendations to address these potential issues.

This proposal assumes that the City will continue to perform draining of the LFG header low spots on a weekly basis to maintain vacuum across the site. Should the City require Tetra Tech to perform draining of the LFG header low spots, this work can be completed under a separate Non-Routine work order upon prior approval by the City.

All monitoring data will be submitted electronically in a letter report, by the 10th of the following month, which will include a brief write-up on our findings, and will provide recommendations to improve the overall operation/condition of the LFGCCS. This task will be completed starting September 1, 2024 through June 30, 2025 (10-months).

Task 2 – LFG Condensate Sumps Monitoring (Frequency: Monthly)

The site has six (6) LFG condensate sumps part of the LFGCCS. Once per month, Tetra Tech will monitor the six (6) LFG condensate sumps located within the system to verify proper operation. Condensate sump monitoring will include the observation and recording of the following data as applicable:

1. Compressed Air pressure;
2. Pump Cycle Counter;
3. General pump operational status; and
4. Check for air/condensate leaks.

All monitoring data will be submitted electronically in a letter report, by the 10th of the following month, which will include a brief write-up on our findings, and will provide recommendations to improve the overall operation/condition of the LFGCCS. This task will be completed starting September 1, 2024 through June 30, 2025 (10-months).

Task 3 – LFG Treatment System Monitoring (Frequency: Monthly)

Once per month, Tetra Tech will monitor the flare station and record the following parameters at a minimum:

1. Atmospheric temperature;
2. Atmospheric pressure;
3. LFG temperature at the inlet to the flare station;

4. LFG pressure at the inlet to the flare station;
5. Totalized landfill gas flow;
6. Methane concentration;
7. Carbon dioxide concentration;
8. Oxygen concentration;
9. Balance gas concentration;
10. LFG temperature at the blower inlet;
11. LFG temperature at the blower outlet;
12. Knock-out vessel inlet static pressure;
13. Knock-out vessel outlet static pressure;
14. Blower run time and identification of operating blowers;
15. Flame arrestor inlet static pressure;
16. Flame arrestor outlet static pressure; and
17. Air compressor oil level check.

All monitoring data will be submitted electronically in a letter report, by the 10th of the following month, which will include a brief write-up on our findings, and will provide recommendations to improve the overall operation/condition of the LFGCCS. This task will be completed starting September 1, 2024 through June 30, 2025 (10-months).

Task 4 – Perimeter Probe Monitoring for Probes MMW4, MMW5 and MMW6 (Frequency: Twice per Week)

Starting August 5, 2024, perimeter probes MMW4, MMW5, and MMW6 will be monitored twice per week in accordance with Title 27 of the California Code of Regulations (CCR) and the EPA letters submitted to the City on July 31, 2024. The following information will be recorded by Tetra Tech at a minimum:

1. Date and time of the monitoring event;
2. Monitoring Equipment Calibration Form;
3. Type of monitoring equipment used and serial number;
4. Weather Condition;
5. Initial static pressure of the perimeter monitoring probe;
6. Purge time for probe casing;
7. Methane concentration;
8. Carbon dioxide concentration; and
9. Oxygen concentration.

Probe monitoring data will be submitted to the City by the end of each week by the end of each week along with calibration logs for probe monitoring. The City will be responsible to submit the probe monitoring data and calibration logs to the EPA on a weekly basis.

All monitoring data will be submitted electronically in a letter report, by the 10th of the following month, which will include a brief write-up on our findings, and will provide recommendations to improve the overall operation/condition of the LFGCCS. This task will be completed starting September 1, 2024 through June 30, 2025 (10-months).

Task 5 – Non-Routine and Emergency OM&M Services

During the normal life of an LFGCCS OM&M project, repairs and other activities will occur that will require actions above and beyond the typical routine scope. These events cannot be predicted and are collectively called Non-Routine Activities and they consist of two categories:

1. Scheduled Non-Routine; and
2. Emergency Non-Routine.

Since it is very hard to predict when such events will happen, separate budgets are set aside to address non-routine activities. Unless it is an emergency, before mobilizing a team to respond to a Non-Routine event, the Tetra Tech project manager (PM) will prepare a work order and submit for approval by the City before any non-routine work is completed. The work order will include a description of the work required and an estimate of the cost to complete it. All non-routine services will be completed on a Time and Material (T&M) basis.

Task 6 – Blower Inspection and Repairs

Tetra Tech has received a quote from “The Fan Doctors” for the inspection and repair for the seized blower at the flare station. Based on discussions with the City, this backup blower has not been operated in over two years and will likely need a complete overhaul of parts.

While The Fan Doctors are on-site, they will also inspect the actively running blower for recommended maintenance. Any additional recommended repairs identified by The Fan Doctors (for the functioning blower) will be reported to the City and can be completed under a separate scope and cost with prior authorization from the City. Tetra Tech will coordinate this work with The Fan Doctors and the City so that the City staff can be present if desired.

Task 6 – Deliverables, Meetings and Conference Calls:

The following summarizes the items to be performed for this task:

- Inspection of the existing blowers by The Fan Doctors;
- Repair kits will be brought out to FSL to repair the seized blower on-site; and
- Reassembly, reinstallation, and testing of the currently seized blower.

Task 7 – Air Compressor Inspection and Maintenance

Tetra Tech has received a quote from Haringa Compressors Inc. (Haringa) to perform an inspection and maintenance of the air compressor at the flare station. Any repairs, discovered by Haringa, which are required outside of preventative maintenance for the air compressor (ie. not included in preventative maintenance quote) will need to be completed during a separate visit and will only be completed with prior authorization from the City.

Task 7 – Deliverables, Meetings and Conference Calls:

The following summarizes the items to be performed for this task:

- Haringa inspection and maintenance of the existing air compressor on-site.

Task 8 – Flare Louver Motor Replacement

Tetra Tech noticed that the motors for the flare louvers were not functioning properly and require replacement. Tetra Tech will procure three (3) flare louver motors and associated materials such as control arms and ball joint assemblies. Two (2) louver motors will be replaced on the flare while one (1) will be stored on-site as a spare. The installation and testing will be completed by Tetra Tech field staff. This scope of work does not include programming of the louvers which will be manually set for consistent operation.

Task 8 – Deliverables, Meetings and Conference Calls:

The following summarizes the items to be performed for this task:

- Procurement of three (3) flare louver motors and associated materials; and
- Replacement of two (2) flare louver motors (and storing one on-site as a spare) and testing for operation.

Task 9 – Procure Spare Sample Ports and Caps

Tetra Tech will procure 500 sample ports and 500 sample port caps for use at the FSL. These materials will be used to replace damaged sample ports that are causing air intrusion, leading to increase oxygen concentrations in the Landfill Gas (LFG), and causing other operational issues with the LFGCCS. Replacement of these sample ports and caps will be completed by Tetra Tech during the Emergency Wellfield Repairs task (Task 10). Extra materials will be stored onsite for later use by Tetra Tech or the City at FSL.

Task 9 – Deliverables, Meetings and Conference Calls:

The following summarizes the items to be performed for this task:

- Procure replacement sample ports and caps for use at the FSL while completing repairs of the LFGCCS.

Task 10 – Emergency Wellfield Repairs

Tetra Tech will procure materials to complete necessary wellfield repairs, including 400 feet of flex hose, 115 sets of clamps, 7 wellheads, and 7 well plates. These materials will be utilized to complete the repair of 29 LFG extraction wells that were identified to have deficiencies in Tetra Tech’s Final Report of Findings submitted to the City on July 17, 2024. Additionally, Tetra Tech will replace aging flex hoses as needed throughout the entire wellfield. Any parts that are not used will be stored on-site for future repairs. The total quantity of parts is based on the field inspection completed by Tetra Tech during the routine wellfield monitoring from February through May 2024. Any additional repairs identified will be reported to the City and can be completed under a separate budget with prior authorization from the City.

Task 10 – Deliverables, Meetings and Conference Calls:

The following summarizes the items to be performed for this task:

- Procure flex hoses, clamps, wellheads, and well plates for Tetra Tech’s while completing wellfield repairs and maintenance;
- Complete repairs of the 29 LFG extraction well deficiencies identified in the Final Report of Findings; and
- Replace aging flex hoses as needed throughout the entire wellfield.

Task 11 – LFGCCS Emergency Jumper Line Installation

Tetra Tech will complete the installation of the Emergency LFGCCS jumper line, which includes LFG lateral piping and associated components, per the conceptual design drawings, “City of Fresno – Emergency Landfill Gas Collection and Control System Plan – 08-2024” prepared by Tetra Tech.

Task 11 – Deliverables, Meetings and Conference Calls:

The following summarizes the items to be performed for this task:

- Installation of the Emergency LFGCCS jumper line, which includes LFG lateral piping and associated components, per the conceptual design drawings, “City of Fresno – Emergency Landfill Gas Collection and Control System Plan – 08-2024” prepared by Tetra Tech.

BUDGET

Tetra Tech proposes to perform this scope of work on a Lump Sum basis for Tasks 1 through 4, for a total of 10-months (September 1, 2024 through June 30, 2025). Tetra Tech will submit a monthly Lump Sum invoice for Tasks 1 through 4, for the Routine LFG OM&M services. For Tasks 5 through 11, Tetra Tech proposes to perform this scope of work on a T&M basis. Tetra Tech will invoice according to the completed portion of the respective tasks, as per the not-to-exceed task budgets shown below. Additional repairs discovered by Tetra Tech staff will be reported to the City and can be implemented using the contingency budget below (included in Task 11) upon the City’s approval.

LFG OM&M Services Budget			
Task	Labor Cost (10-Months)	Other Direct Costs (10-Months)	Total (10-Months)
Task 1 – LFG Collection System Wellfield Monitoring and Tuning (Monthly)	\$87,650	\$19,650	\$107,300
Task 2 – LFG Condensate Sumps Monitoring (Monthly)	\$11,970	-	\$11,970
Task 3 – LFG Treatment System Monitoring (Monthly)	\$11,545	-	\$11,545
Task 4 – Perimeter Probe Monitoring for Probes MMW4, MMW5 and MMW6 (Twice per week)	\$92,818	\$8,800	\$101,618
Tasks 1 through 4 10-Month Total	\$203,983	\$28,450	\$232,433
Monthly Lump Sum Total		\$23,243	
Task 5 – Non-Routine and Emergency OM&M Services (T&M)	\$25,000	\$25,000	\$50,000
Tasks 1 through 5 10-Month Total	\$228,983	\$53,450	\$282,433

Emergency Non-Routine LFG OM&M Services and Improvements Budget (T&M)			
Task	Labor Cost	Other Direct Costs	Total Task Cost
Task 6 – Blower Inspection and Repairs	\$3,012	\$12,570	\$15,582
Task 7 – Air Compressor Inspection and Maintenance	\$3,012	\$4,820	\$7,832
Task 8 – Flare Louver Motor Replacement	\$5,596	\$6,135	\$11,731
Task 9 – Procure Spare Sample Ports and Caps	-	\$649	\$649
Task 10 – Emergency Wellfield Repairs	\$27,484	\$26,088	\$53,572
Task 11 – LFGCCS Emergency Jumper Line Installation	\$112,414	\$87,486	\$199,900
Task 11 – 20% Contingency on Construction	\$22,483	\$17,497	\$39,980
Total	\$174,001	\$155,245	\$329,246

The estimated cost and proposed scope of work are based on information available to Tetra Tech at this time. If conditions change, unforeseen circumstances are encountered, or work efforts are redirected, the cost estimate may require modification.

ASSUMPTIONS

To develop a scope of services and cost estimate for this project, Tetra Tech has made the following assumptions:

1. Tetra Tech assumes that the City will provide all information necessary for completion of this scope of work in electronic format (i.e. Microsoft Word, Excel, AutoCAD, etc.) at no cost to Tetra Tech;
2. Tetra Tech is not responsible for the accuracy of site information provided by others;
3. Tetra Tech assumes that locations on site where field testing should be performed will be accessible;

4. This proposal does not include any LFG sampling or laboratory analysis. Should LFG sampling or laboratory analysis be required, Tetra Tech can perform these services on a time and expense basis under the non-routine budget;
5. Tetra Tech does not take responsibility for the overall quality or quantity of the collected LFG;
6. Repairs (e.g., replacement of failed blower, Knock-out vessel, Flame Arrestor, etc.) and system modifications will be evaluated on a case-by-case basis under a Non-Routine work order. Upon approval by the City, these repairs will be completed;
7. This proposal includes one (1) monthly meeting (1-hour Teleconference) between Tetra Tech and the City to go over the status of the site and to discuss/evaluate the data collected throughout the month;
8. This proposal does not include the preparation of any regulatory or technical reports under this budget;
9. Use of a calibrated LFG analyzer, Landtec GEM-5000 (or equivalent), and/or an Organic Vapor Analyzer (OVA) for all required monitoring per regulations are assumed to be acceptable;
10. All required surface maintenance necessary to achieve compliance will be conducted via a Non-Routine work order;
11. This proposal assumes that the City will continue to perform draining of the LFG header low spots on a weekly basis to maintain vacuum across the site. Should the City require Tetra Tech to perform draining of the LFG header low spots, this work can be completed under a separate Non-Routine work order upon prior approval by the City;
12. Any required materials outside of the quotes provided by vendors, included in this proposal, will need to be procured under a separate budget with prior authorization from the City;
13. Programming of the flare louver motor replacements is not anticipated or included in this proposal;
14. The pricing above is based on the vendor quotes being approved within the dates provided on the quote from the vendors;
15. Any additional repairs discovered in the field while completing this Scope of Work will be reported to the City with a cost and can be completed upon approval using the contingency budget above;
16. The Emergency Wellfield Repairs (Task 10) assumes that only hand tools will be required to complete repairs;
17. Site visits, calls, and other meetings are limited to those stated above;
18. The City will provide Tetra Tech, at no cost, all necessary documents, including the existing LFGCCS design plan permits, as-built information, topography, LFG composition data, surface emission monitoring data, and all necessary information in AutoCAD, Microsoft (MS) Word, or MS Excel electronic format to complete the proposed scope of work;
19. This proposal does not include additional report preparation or data submittals to the EPA or State Director;
20. Pricing assumes no permits are required. If permitting is required, permitting will be completed by others;
21. Pricing assumes no Construction Quality Assurance (CQA) is required for disturbing the final cover soils in project area;
22. Pricing assumes no National Pollutant Discharge Elimination System (NPDES) requirements apply to project work;
23. Pricing assumes excavated soil or trash encountered can be disposed of on site;
24. Pricing assumes there is a water source on site, if needed;
25. Pricing does not include updating site LFGCCS as-built or gas plan;
26. Tetra Tech will be responsible for work to the extent of task and labor hours included in the project cost estimate;
27. For Task 11, pricing assumes working on site for a total of eleven (11) days plus travel; and
28. Pricing assumes survey is not required. If survey is required, survey will be completed by others.

TERMS AND CONDITIONS/APPROVAL

This work will be governed in accordance with Tetra Tech's Standard Terms and Conditions and 2024 Schedule of Charges which are included as attachments to this proposal. Please indicate your approval by signing below. Approval indicates your acceptance of the scope of work and pricing. Any modifications to the attached language must be accepted by both parties.

Mr. Ahmad Alkhayyat, P.E., MBA
August 7, 2024

We appreciate the opportunity to present this proposal for your review. Do not hesitate to contact us if you have any questions or comments or require additional information. We look forward to providing the City of Fresno with these services should you find this proposal acceptable.

TETRA TECH



Sami H Ayass, P.E.
Director, Engineering and Field Services
Methane Gas Group



Paul Stout, P.E.
Vice President of Operations
Methane Gas Group

This proposal and all enclosures have been reviewed and are hereby agreed to and approved.

City of Fresno

By _____

Date _____

Name _____

Title _____

Enclosure: Standard Terms and Conditions
Schedule of Charges – 2024

STANDARD TERMS & CONDITIONS

1. SERVICES. TETRA TECH BAS, INC. (BAS) shall provide professional services in accordance with the agreed upon scope of work.

2. EXECUTION. This Agreement becomes effective upon signatures by authorized representatives of the Client and BAS and upon receipt by BAS of a signed original or facsimile transmittal. If facsimile transmittal is initially sent to BAS, Client will provide BAS with a signed original for record as soon as practicable.

3. INITIATION. BAS is authorized to proceed with services upon receipt of an executed Agreement or written Notice to Proceed.

4. COMPLETION/TERMINATION. This Agreement shall remain in force until completion and acceptance of the services or until terminated by mutual agreement. This contract may be terminated by the Client and/or BAS upon 10 days written notice. In the event of such termination, BAS will be paid the portion of the compensation (and fixed fee, if applicable) for services performed in accordance with the scope of services under the terms of this Agreement to the date of termination together with all costs arising out of such termination.

Continuing Service Agreements shall be reviewed annually for rates and shall remain in force until terminated in writing by either party, or otherwise stipulated contractually.

5. STANDARD OF CARE. Services provided by BAS under this Agreement will be performed in a manner consistent with that degree of care and skill ordinarily exercised by members of the same profession currently practicing under similar circumstances. BAS makes no warranty or guaranty, either express or implied.

6. INDEPENDENT CONSULTANT. BAS is and shall be at all times during the term of this Agreement an independent consultant and not an employee or agent of the Client.

7. COMPLIANCE WITH LAWS. BAS will endeavor to comply with Federal, State, and local laws and ordinances applicable to the services to be provided under this Agreement.

8. SCHEDULE OF PAYMENTS: BAS shall be paid monthly on the basis of invoices submitted. These invoices will be for the portion of the agreed upon compensation earned by BAS during that month. (Cost plus Fixed Fee will be for costs incurred during the invoice period plus the portion of the agreed upon fixed fee earned by BAS during that month. Lump Sum will be based on percent of effort completed as estimated by BAS.) BAS shall be paid for all invoices within 30 days of submittal. In the event the Client disputes the invoice or any portion thereof, the undisputed portion shall be paid to BAS based on contractual terms. Invoices not in dispute and unpaid after 30 days shall accrue interest at the rate of one and one-half percent per month (or the maximum percentage allowed by law, whichever is the lesser).

9. COLLECTION COSTS. In the event legal action is necessary to enforce the payment provisions of this Agreement if Client fails to make payment within sixty (60) days of the invoice date, BAS shall be entitled to collect from the Client any judgment or settlement sums due, reasonable attorneys' fees, court costs and expenses incurred by BAS in connection therewith and, in addition, the reasonable value of BAS' time and expenses spent in connection with such collection action, computed at BAS' prevailing fee schedule and expense policies.

10. OWNERSHIP OF DOCUMENTS. Drawings, specifications, reports, programs, manuals, or other documents, including all documents on electronic media, prepared under this Agreement are instruments of service and are, and shall remain, the property of BAS. BAS will retain all common law, statutory, and other reserved rights, including the copyright thereto. BAS shall not be held liable for reuse of documents or modifications thereof by the Client or its representatives for any purpose other than the original intent of this Agreement, without written authorization of and appropriate compensation to BAS.

11. SITE VISITS/OBSERVATION. If included in the Scope of Work, BAS shall visit the project and/or construction site at appropriate intervals to become generally familiar with the progress, quality of work (contractors' work), and to determine if the work is proceeding in general accordance with the Contract Documents. Visits to the project site and observations made by BAS as part of services during construction under Agreement shall not make BAS responsible for, nor relieve the construction contractor(s) of the obligation to conduct comprehensive monitoring of the work sufficient to ensure conformance with the intent of the Contract Documents, and shall not make BAS responsible for, nor relieve the construction contractor(s) of the full responsibility for all construction means, methods, techniques, sequences, and procedures necessary for coordinating and completing all portions of the work under the construction contract(s) and for all safety precautions incidental thereto.

12. EQUAL OPPORTUNITY EMPLOYMENT. BAS will comply with federal regulations pertaining to Equal Opportunity Employment. BAS is in compliance with applicable local, state, and federal regulations concerning minority hiring. It is BAS policy to ensure that applicants and employees are treated equally without regard to race, creed, sex, age, color, religion, veteran status, ancestry, citizenship status, national origin, marital status, sexual

orientation, or disability. BAS expressly assures all employees, applicants for employment, and the community of its continuous commitment to equal opportunity and fair employment practices.

BAS equal opportunity employment policy applies to all phases of employment, including recruiting, hiring, job assignment, supervision, training, upgrading, transfer, compensation, benefits, promotion, education, recreation, layoff and termination.

13. INSURANCE. BAS will maintain the following levels of insurance during the term of this Agreement. The Client will be named as an additional insured on the Commercial General Liability and Automobile Liability insurance policies.

- Worker's Compensation (and Employer's Liability Insurance) — as required by applicable state statute.
- Commercial General Liability — \$1,000,000 per occurrence for bodily injury, including death and property damage, and \$2,000,000 in the aggregate.
- Automobile Liability — minimum of \$1,000,000 combined single limit for bodily injury and property damage.
- Professional Liability (E&O) and Professional Pollution Liability and Contractors' Pollution Liability — \$1,000,000 each claim and in the aggregate.

14. INDEMNIFICATION/HOLD HARMLESS. BAS shall indemnify and hold harmless the Client and its employees from any liability, settlements, loss, or costs (including reasonable attorneys' fees and costs of defense) to the extent caused by BAS negligent acts, errors, or omissions in services provided pursuant to this Agreement. Provided, however, that if any such liability, settlements, loss, or costs result from the concurrent negligence of BAS and the Client, this indemnification applies only to the extent of the negligence of BAS.

15. LIMITATION OF LIABILITY. In recognition of the relative risks and benefits of the project to both the Client and BAS, the risks have been allocated such that the Client agrees, to the fullest extent permitted by law, to limit the liability of BAS and its sub-consultants to the Client and to all construction contractors and subcontractors on the project for any and all claims, losses, costs, damages of any nature whatsoever or claims expenses from any cause or causes, so that the total aggregate liability of BAS and its sub-consultants to all those named shall not exceed \$50,000 or the amount of BAS total fee paid by the Client for services under this Agreement, whichever is the greater. Such claims and causes include, but are not limited to negligence, professional errors or omissions, strict liability, breach of contract or warranty.

16. DISPUTES. Any action for claims arising out of or relating to this Agreement and/or respective services shall be governed by the laws of the State of California. Venue shall be in Los Angeles County Superior Court. Mediation is an express condition precedent to the filing of any legal action. Unless the parties agree otherwise, the mediation shall be conducted pursuant to the Construction Mediation Rules of the American Arbitration Association.

17. ATTORNEY FEES. Should there be any suit or action instituted to enforce any right granted in this contract, the substantially prevailing party shall be entitled to recover its costs, disbursements and reasonable attorney fees from the other party. The party who is awarded a net recovery against the other shall be deemed the substantially prevailing party unless such other party has previously made a bona fide offer of payment in settlement and the amount of recovery is the same or less than the amount offered in settlement. Reasonable attorney fees may be recovered regardless of the forum in which the dispute is heard, including an appeal.

18. FOREIGN CORRUPT PRACTICES ACT. In conformity with the United States Foreign Corrupt Practices Act of 1977, as amended (the "Act"), and with Seller's established policies regarding business practices, the Seller and its respective affiliates, officers, directors, agents and employees shall not directly or indirectly make an offer, payment, promise to pay, or authorize payment, or offer as a gift, promise to give, or authorize the giving of anything of value (whether in money, property, or services) to any person (whether directly or indirectly through a family member or any entity in which an employee or family member holds an interest or is affiliated, or otherwise), private or public, regardless of form for the purpose of influencing an act of decision (including a decision not to act) of an official of any government or of an employee of any company or inducing such a person to use his or her influence to affect any such act of decision in order (i) to assist the Seller in obtaining, retaining or directing any business, (ii) to pay for favorable treatment for business secured, (iii) to obtain special concessions or for special concessions already obtained, for or in respect of the business of the Seller, or (iv) in violation of any legal requirement of any governmental or regulatory body or any applicable order thereof. Seller shall defend, indemnify and hold harmless Buyer from and against the consequences of a violation of this paragraph by Seller.

SCHEDULE OF CHARGES

PERSONNEL	RATE	PERSONNEL	RATE
Administrative Assistant	\$99	Staff Env. Specialist/Scientist I	\$111
Project Clerk	\$88	Staff Env. Specialist/Scientist II	\$123
Project Data Analyst	\$81	Project Env. Specialist/Scientist I	\$134
Office Services Clerk	\$99	Project Env. Specialist/Scientist II	\$154
Project Coordinator	\$148	Project Env. Specialist/Scientist III	\$168
Senior Project Coordinator	\$169	Senior Env. Specialist/Scientist I	\$178
CAD Tech I	\$92	Senior Env. Specialist/Scientist II	\$187
CAD Tech II	\$107	Senior Env. Specialist/Scientist III	\$199
CAD Tech III	\$127	Field Data Collector	\$67
CAD Tech IV	\$146	Staff Planner/Permitter I	\$74
Designer I	\$164	Staff Planner/Permitter II	\$92
Designer II	\$178	Staff Planner/Permitter III	\$99
Designer III	\$197	Project Planner/Permitter I	\$115
Designer IV	\$214	Project Planner/Permitter II	\$127
Staff Engineer I	\$124	Project Planner/Permitter III	\$139
Staff Engineer II	\$134	Project Planner/Permitter IV	\$149
Staff Engineer III	\$146	Senior Planner/Permitter I	\$161
Project Engineer I	\$156	Senior Planner/Permitter II	\$175
Project Engineer II	\$167	Senior Planner/Permitter III	\$187
Project Engineer III	\$178	Senior Planner/Permitter IV	\$206
Senior Engineer I	\$188	Senior Planner/Permitter V	\$225
Senior Engineer II	\$199	Principal Planner/Permitter	\$285
Senior Engineer III	\$210	Architect I	\$134
Supervising Engineer I	\$221	Architect II	\$161
Supervising Engineer II	\$231	Architect III	\$188
Supervising Engineer III	\$242	Architect IV	\$215
Division Engineer I	\$263	Staff Geologist I	\$124
Division Engineer II	\$274	Staff Geologist II	\$134
Principal Engineer	\$300	Staff Geologist III	\$146
Principal	\$322	Project Geologist I	\$156
Senior Principal	\$338	Project Geologist II	\$167
Project Manager	\$176	Project Geologist III	\$178
Project Manager I	\$187	Senior Geologist I	\$188
Project Manager II	\$214	Senior Geologist II	\$199
Project Manager III	\$226	Senior Geologist III	\$210
Project Manager IV	\$236	Supervising Geologist I	\$221
Project Manager V	\$248	Supervising Geologist II	\$231
Senior Project Manager	\$258	Supervising Geologist III	\$242
Program Director	\$306	Principal Geotechnical Eng/Geologist	\$253
Project Advisor*	\$275-\$375	Principal Geotechnical Eng	\$280
Construction Supervisor I	\$178	Soils/Asphalt/Field Technician	\$116
Construction Supervisor II	\$188	Soils/Asphalt/Field Technician - Prevailing Wage	\$145
Construction Supervisor III	\$199	Technician	\$60
Construction Manager I	\$210	Technician I	\$90
Construction Manager II	\$226	Technician II	\$105
Senior Construction Manager	\$263	Senior Technician I	\$117
Principal Construction Manager	\$289	Senior Technician II	\$139
Chief of Survey Parties	\$197	Senior Technician III	\$152
1-Man Survey Party with GPS	\$237	Chief Technician	\$171
2-Man Survey Party	\$352	Senior Operator	\$173

Rates are Effective January 1, 2024 - December 31, 2024. Court Appearance (Expert Witness, Deposition) and Overtime Premium is 150% of Personnel Hourly Rate. *Rate for Project Advisor to be based on specialized staff required.

IN-HOUSE EXPENSES

3% of Total Personnel Fees	
Personal Vehicle	\$0.65/mile
Company Vehicle	\$0.75/mile

OTHER EXPENSES

Company and Survey Vehicles	\$17/hour
Other Out-of-Pocket Expenses/Supplies/Travel	Cost + 15%
Consultants/Outside/Construction Services	Cost + 15%
Per Diem for Living Expenses	Federal +15%
Equipment Usage	See Attached Schedule

Outside services performed by others and direct expenses incurred on the Client's behalf are charged an administrative fee of fifteen (15%) to cover the cost to provide for administration, sub-consultant contract coordination and insurance. Fee to be added to the direct cost of all consultants, vendors, materials, equipment suppliers, other direct costs, and any other outside services.



EQUIPMENT RENTAL RATES

Rates are Effective January 1, 2024 - December 31, 2024

TYPE OF EQUIPMENT	DAY	WEEK	MONTH
4 Gas Range Meter CH4, H2S, CO, O2 (Sentinel 44)	\$75	\$200	\$500
Alpha - I Personal Sampling Pump	\$75	\$200	\$500
Disposable Bailer	\$20/each	n/a	n/a
CO2 Calorimetric Analysis Tubes	\$40	\$125	\$250
Downhole Camera	\$75/hr	n/a	n/a
Dupont Dosimeter Mark-3 (Personal Sample Pump)	\$50	\$150	\$300
Flow Calibrator (Gilian)	\$50	\$150	\$300
Gas Extraction Monitor (GEM 500 / 2000 / 2000 Plus)	\$125	\$350	\$900
Lung Sampler (Nutech 218)	\$100	\$300	\$800
Mini-Ram Data Logger	\$40	\$125	\$250
Mini-Ram Dust Meter	\$50	\$150	\$300
Organic Vapor Analyzer (OVA128)	\$125	\$400	\$1,000
Photo Ionization Detector (OVM580B)	\$125	\$400	\$1,000
Sample Train (Gas Extraction Pump)	\$50	\$150	\$300
Soil Auger/Sampler	\$30	\$90	\$180
Sounder (Liquid Level Indicator)	\$40	\$125	\$250
Horiba Meter	\$50	\$200	\$400
MiniRae 2000	\$75	\$200	\$500
GT Surveyor	\$75	\$200	\$500
GPS Enabled SEM Leak Detection Equipment	\$250	\$800	\$2,400
GPS Survey Equipment Services	n/a	\$200	n/a
Groundwater Sampling Equipment	\$30/hour	n/a	n/a
Company Vehicle	\$130	\$550	\$1,750
Field Sampling Supplies:	100/day	n/a	n/a
LEVEL C (Per Person)	\$150	n/a	n/a
Respirator with Cartridge (full or half faced), Tyvek Coveralls, Outer Gloves, Glove Liners, Neoprene Boots			
Sand Cone or Nuclear Density Gauge	\$14/hour	n/a	n/a
Hand auger and soil sampling equipment	\$70	n/a	n/a
BAT Permeameter	\$250	n/a	n/a
Double Ring Infiltrometer	\$250	n/a	n/a
Inclinometer data collection system	\$400	n/a	n/a
Infiltration test flowmeter		\$130 per day-test	
Floor level manometer	\$80	n/a	n/a
Moisture vapor emission test kit (material only)	\$40/kit	n/a	n/a
Field inspection kit (camera, recorder, GPS)	\$35	n/a	n/a