AGREEMENT FOR SERVICES BETWEEN
THE CITY OF MENLO PARK AND CB&I ENVIRONMENTAL & INFRASTRUCTURE, INC.

THIS AGREEMENT made and entered into at Menlo Park, California, this 5th day of April, 2017, by and between the CITY OF MENLO PARK, a Municipal Corporation, hereinafter referred to as "CITY", and CB&I ENVIRONMENTAL & INFRASTRUCTURE, INC., hereinafter referred to as "FIRST PARTY."

WITNESSETH:

WHEREAS, CITY desires to retain FIRST PARTY to provide certain professional services for CITY in connection with that certain project called: Operation and Maintenance of the Bedwell Bayfront Park Landfill Leachate and Gas Collection and Control Systems

WHEREAS, FIRST PARTY is licensed to perform said services and desires to and does hereby undertake to perform said services.

NOW, THEREFORE, IN CONSIDERATION OF THE MUTUAL COVENANTS, PROMISES AND CONDITIONS of each of the parties hereto, it is hereby agreed as follows:

1. SCOPE OF WORK

In consideration of the payment by CITY to FIRST PARTY, as hereinafter provided, FIRST PARTY agrees to perform all the services as set forth in Exhibit "A", Scope of Services.

2. SCHEDULE FOR WORK

FIRST PARTY’s proposed schedule for the various services required pursuant to this agreement will be as set forth in Exhibit "A", Scope of Services. CITY will be kept informed as to the progress of work by written reports, to be submitted monthly or as otherwise required in Exhibit "A". Neither party shall hold the other responsible for damages or delay in performance caused by acts of God, strikes, lockouts, accidents or other events beyond the control of the other, or the other’s employees and agents.

FIRST PARTY shall commence work immediately upon receipt of a "Notice to Proceed" from CITY. The "Notice to Proceed" date shall be considered the "effective date" of the Agreement, as used herein, except as otherwise specifically defined. FIRST PARTY shall complete all the work and deliver to CITY all project related files, records, and materials within one month after completion of all of FIRST PARTY’s activities required under this Agreement.

3. PROSECUTION OF WORK

FIRST PARTY will employ a sufficient staff to prosecute the work diligently and continuously and will complete the work in accordance with the schedule of work approved by the CITY. (See Exhibit "A", Scope of Services).
4. COMPENSATION AND PAYMENT

A. CITY shall pay FIRST PARTY an all-inclusive fee that shall not exceed $1,046,000 as described in Exhibit "A", Scope of Services. This compensation shall be based on the rates described in Exhibit "A". All payments, including fixed hourly rates, shall be inclusive of all indirect and direct charges to the Project incurred by FIRST PARTY. The CITY reserves the right to withhold payment if the City determines that the quantity or quality of the work performed is unacceptable.

B. FIRST PARTY's fee for the services as set forth herein shall be considered as full compensation for all indirect and direct personnel, materials, supplies and equipment, and services incurred by FIRST PARTY and used in carrying out or completing the work.

C. Payments shall be monthly for the invoice amount or such other amount as approved by CITY. As each payment is due, a statement describing the services performed shall be submitted to CITY by the FIRST PARTY. This statement shall include, at a minimum, the project title, Agreement Number, the title(s) of personnel performing work, hours spent, payment rate, and a listing of all reimbursable costs. CITY shall have the discretion to approve the invoice and the work completed statement. Payment shall be for the invoice amount or such other amount as approved by CITY.

D. Payments are due upon receipt of written invoices. CITY shall have the right to receive, upon request, documentation substantiating charges billed to CITY. CITY shall have the right to perform an audit of the FIRST PARTY's relevant records pertaining to the charges.

5. EQUAL EMPLOYMENT OPPORTUNITY

A. FIRST PARTY, with regard to the work performed by it under this Agreement shall not discriminate on the grounds of race, religion, color, national origin, sex, handicap marital status or age in the retention of sub-consultants, including procurement of materials and leases of equipment.

B. FIRST PARTY shall take affirmative action to insure that employees and applicants for employment, are treated without regard to their race, color, religion, sex, national origin, marital status or handicap. Such action shall include, but not be limited to the following: employment, upgrading, demotion, or transfer; recruitment advertising; layoff or termination; rates of pay or other forms of compensation and selection for training including apprenticeship.

C. FIRST PARTY shall post in prominent places, available to employees and applicants for employment, notices setting forth the provisions of this non-discrimination clause.

D. FIRST PARTY shall state that all qualified applications will receive consideration for employment without regard to race, color, religion, sex, national origin, marital status or handicap.

E. FIRST PARTY shall comply with Title VI of the Civil Rights Act of 1964 and shall provide such reports as may be required to carry out the intent of this section.

F. FIRST PARTY shall incorporate the foregoing requirements of this section in FIRST PARTY's agreement with all sub-consultants.

6. ASSIGNMENT OF AGREEMENT AND TRANSFER OF INTEREST
A. FIRST PARTY shall not assign this Agreement, and shall not transfer any interest in the same (whether by assignment or novation), without prior written consent of the CITY thereto, provided, however, that claims for money due or to become due to the FIRST PARTY from the CITY under this Agreement may be assigned to a bank, trust company, or other financial institution without such approval. Notice of an intended assignment or transfer shall be furnished promptly to the CITY.

B. In the event there is a change of more than 30% of the stock ownership or ownership in FIRST PARTY from the date of this Agreement is executed, then CITY shall be notified prior to the date of said change of stock ownership or interest and CITY shall have the right, in event of such change in stock ownership or interest, to terminate this Agreement upon notice to FIRST PARTY. In the event CITY is not notified of any such change in stock ownership or interest, then upon knowledge of same, it shall be deemed that CITY has terminated this Agreement.

7. INDEPENDENT WORK CONTROL

It is expressly agreed that in the performance of the service necessary for compliance with this Agreement, FIRST PARTY shall be and is an independent contractor and is not an agent or employee of CITY. FIRST PARTY has and shall retain the right to exercise full control and supervision of the services and full control over the employment, direction, compensation and discharge of all persons assisting FIRST PARTY in the performance of FIRST PARTY's services hereunder. FIRST PARTY shall be solely responsible for its own acts and those of its subordinates and employees.

8. CONSULTANT QUALIFICATIONS

It is expressly understood that FIRST PARTY is licensed and skilled in the professional calling necessary to perform the work agreed to be done by it under this Agreement and CITY relies upon the skill of FIRST PARTY to do and perform said work in a skillful manner usual to the profession. The acceptance of FIRST PARTY's work by CITY does not operate as a release of FIRST PARTY from said understanding.

9. NOTICES

All notices hereby required under this Agreement shall be in writing and delivered in person or sent by certified mail, postage prepaid or by overnight courier service. Notices required to be given to CITY shall be addressed as follows:

Justin I. C. Murphy
Public Works
City of Menlo Park
701 Laurel St.
Menlo Park, CA 94025
650-330-6740
nmmelgar@menlopark.org

Notices required to be given to FIRST PARTY shall be addressed as follows:

Steve Martin – Director of Solid Waste Operations
CB&I ENVIRONMENTAL & INFRASTRUCTURE, INC.
4171 Essen Lane
Baton Rouge, LA 70809
225-987-7133
steve.martin@cbi.com
With a copy to:

Ed Everitt  
Associate General Counsel & Managing Attorney  
Facilities & Plant Services  
4171 Essen Lane  
Baton Rouge, LA 70809  
225-987-7133  
ed.everitt@cbi.com

Provided that any party may change such address by notice, in writing, to the other party and thereafter notices shall be addressed and transmitted to the new address.

10. HOLD HARMLESS

The FIRST PARTY shall defend, indemnify and hold harmless the CITY, its subsidiary agencies, their officers, agents, employees and servants from all claims, suits or actions that arise out of, pertain to, or relate to the negligence, recklessness, or willful misconduct of the FIRST PARTY brought for, or on account of, injuries to or death of any person or damage to property resulting from the performance of any work required by this Agreement by FIRST PARTY, its officers, agents, employees and servants. Nothing herein shall be construed to require the FIRST PARTY to defend, indemnify or hold harmless the CITY, its subsidiary agencies, their officers, agents, employees and servants against any responsibility to liability in contravention of Section 2782.8 of the California Civil Code. Notwithstanding anything to the contrary neither party shall be liable to the other for any indirect, special or consequential loss or damages resulting from or arising from this Agreement, including, without limitation business interruptions.
11. INSURANCE

A. FIRST PARTY shall not commence work under this Agreement until all insurance required under this Section has been obtained and such insurance has been approved by the City, with certificates of insurance evidencing the required coverage.

B. There shall be a contractual liability endorsement extending the FIRST PARTY’s coverage to include the contractual liability assumed by the FIRST PARTY pursuant to this Agreement. These certificates shall specify or be endorsed to provide that thirty (30) days' notice must be given, in writing, to the CITY, at the address shown in Section 9, of any pending cancellation of the policy. FIRST PARTY shall notify CITY of any pending change to the policy. All certificates shall be filed with the City.

1. Worker’s Compensation and Employer’s Liability Insurance:
   The FIRST PARTY shall have in effect during the entire life of this Agreement Worker’s Compensation and Employer’s Liability Insurance providing full statutory coverage. In signing this Agreement, the FIRST PARTY makes the following certification, required by Section 18161 of the California Labor Code: "I am aware of the provisions of Section 3700 of the California Labor Code which require every employer to be insured against liability for Worker's Compensation or to undertake self-insurance in accordance with the provisions of the Code, and I will comply with such provisions before commencing the performance of the work of this Agreement" (not required if the FIRST PARTY is a Sole Proprietor).

2. Liability Insurance:
   The FIRST PARTY shall take out and maintain during the life of this Agreement such Bodily Injury Liability and Property Damage Liability Insurance (Commercial General Liability Insurance) on an occurrence basis as shall protect it while performing work covered by this Agreement from any and all claims for damages for bodily injury, including accidental death, as well as claims for property damage which may arise from the FIRST PARTY's operations under this Agreement, whether such operations be by FIRST PARTY or by any sub-consultant or by anyone directly or indirectly employed by either of them. The amounts of such insurance shall be not less than One Million Dollars ($1,000,000) per occurrence and One Million Dollars ($1,000,000) in aggregate, or One Million Dollars ($1,000,000) combined single limit bodily injury and property damage for each occurrence. FIRST PARTY shall provide the CITY with acceptable evidence of coverage, including a copy of all declarations of coverage exclusions. FIRST PARTY shall maintain Automobile Liability Insurance pursuant to this Agreement in an amount of not less than One Million Dollars ($1,000,000) for each accident combined single limit or not less than One Million Dollars ($1,000,000) for any one (1) person, and One Million Dollars ($1,000,000) for any one (1) accident, and Three Hundred Thousand Dollars, ($300,000) property damage.

3. Professional Liability Insurance:
   FIRST PARTY shall maintain a policy of professional liability insurance, protecting it against claims arising out of the negligent acts, errors, or omissions of FIRST PARTY pursuant to this Agreement, in the amount of not less than One Million Dollars ($1,000,000) per claim and in the aggregate. Said professional liability insurance is to be kept in force for not less than one (1) year after completion of services described herein.

C. CITY and its subsidiary agencies, and their officers, agents, employees and servants shall be named as additional insured on any such policies of Commercial General Liability and Automobile Liability Insurance, (but not for the Professional Liability and Worker’s Compensation), which shall also contain a provision that the insurance afforded thereby to the CITY, its subsidiary agencies, and their officers, agents, employees, and servants shall be primary insurance to the full limits of liability of the policy, and that if the CITY, its subsidiary agencies and their officers and employees have other insurance against a loss covered by a policy, such other insurance shall be excess insurance only.

D. In the event of the breach of any provision of this Section, or in the event any notice is received which indicates any required insurance coverage will be diminished or canceled, CITY, at its option, may, notwithstanding any other provision of this Agreement to the contrary, immediately declare a material breach of this Agreement and suspend all further work pursuant to this Agreement.

E. Prior to the execution of this Agreement, any deductibles or self-insured retentions must be declared to and approved by CITY.
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<th>12. PAYMENT OF PERMITS/LICENSES</th>
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<td>Contractor shall obtain any license, permit, or approval if necessary from any agency whatsoever for the work/services to be performed, at his/her own expense, prior to commencement of said work/services or forfeit any right to compensation under this Agreement.</td>
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<th>13. RESPONSIBILITY AND LIABILITY FOR SUB-CONSULTANTS AND/OR SUBCONTRACTORS</th>
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<td>Approval of or by CITY shall not constitute nor be deemed a release of responsibility and liability of FIRST PARTY or its sub-consultants and/or subcontractors for the accuracy and competency of the designs, working drawings, specifications or other documents and work, nor shall its approval be deemed to be an assumption of such responsibility by CITY for any defect in the designs, working drawings, specifications or other documents prepared by FIRST PARTY or its sub-consultants and/or subcontractors.</td>
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<th>14. OWNERSHIP OF WORK PRODUCT</th>
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<td>Work products of FIRST PARTY for this project, which are delivered under this Agreement or which are developed, produced and paid for under this Agreement, shall become the property of CITY. The reuse of FIRST PARTY’s work products by City for purposes other than intended by this Agreement shall be at no risk to FIRST PARTY.</td>
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<th>15. REPRESENTATION OF WORK</th>
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<td>Any and all representations of FIRST PARTY, in connection with the work performed or the information supplied, shall not apply to any other project or site, except the project described in Exhibit &quot;A&quot; or as otherwise specified in Exhibit &quot;A&quot;.</td>
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<th>16. TERMINATION OF AGREEMENT</th>
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<td>A. CITY may give thirty (30) days written notice to FIRST PARTY, terminating this Agreement in whole or in part at any time, either for CITY’s convenience or because of the failure of FIRST PARTY to fulfill its contractual obligations or because of FIRST PARTY’s change of its assigned personnel on the project without prior CITY approval. Upon receipt of such notice, FIRST PARTY shall:</td>
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<td>1. Immediately discontinue all services affected (unless the notice directs otherwise); and</td>
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<td>2. Deliver to the CITY all data, drawings, specifications, reports, estimates, summaries, and such other information and materials as may have been accumulated or produced by FIRST PARTY in performing work under this Agreement, whether completed or in process.</td>
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<td>B. If termination is for the convenience of CITY, an equitable adjustment in the contract price shall be made, but no amount shall be allowed for anticipated profit on unperformed services.</td>
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<td>C. If the termination is due to the failure of FIRST PARTY to fulfill its Agreement, CITY may take over the work and prosecute the same to completion by agreement or otherwise. In such case, FIRST PARTY shall be liable to CITY for any reasonable additional cost occasioned to the CITY thereby.</td>
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<td>D. If, after notice of termination for failure to fulfill Agreement obligations, it is determined that FIRST PARTY had not so failed, the termination shall be deemed to have been effected for the convenience of the CITY. In such event, adjustment in the contract price shall be made as provided in Paragraph B of this Section.</td>
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<td>E. The rights and remedies of the CITY provided in this Section are in addition to any other rights and remedies provided by law or under this Agreement.</td>
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<td>F. Subject to the foregoing provisions, the CITY shall pay FIRST PARTY for services performed and expenses incurred through the termination date.</td>
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17. INSPECTION OF WORK

It is FIRST PARTY's obligation to make the work product available for CITY's inspections and periodic reviews upon request by CITY.

18. COMPLIANCE WITH LAWS

It shall be the responsibility of FIRST PARTY to comply with all State and Federal Laws applicable to the work and services provided pursuant to this Agreement, including but not limited to compliance with prevailing wage laws, if applicable.

19. BREACH OF AGREEMENT

A. This Agreement is governed by applicable federal and state statutes and regulations. Any material deviation by FIRST PARTY for any reason from the requirements thereof, or from any other provision of this Agreement, shall constitute a breach of this Agreement and may be cause for termination at the election of the CITY.

B. The CITY reserves the right to waive any and all breaches of this Agreement, and any such waiver shall not be deemed a waiver of any previous or subsequent breaches. In the event the CITY chooses to waive a particular breach of this Agreement, it may condition same on payment by FIRST PARTY of actual damages occasioned by such breach of Agreement.

20. SEVERABILITY

The provisions of this Agreement are severable. If any portion of this Agreement is held invalid by a court of competent jurisdiction, the remainder of the Agreement shall remain in full force and effect unless amended or modified by the mutual consent of the parties.

21. CAPTIONS

The captions of this Agreement are for convenience and reference only and shall not define, explain, modify, limit, exemplify, or aid in the interpretation, construction, or meaning of any provisions of this Agreement.

22. LITIGATION OR ARBITRATION

In the event that suit or arbitration is brought to enforce the terms of this Agreement, the prevailing party shall be entitled to litigation costs and reasonable attorneys' fees. The Dispute Resolution provisions are set forth on Exhibit "B", 'Dispute Resolution' attached hereto and by this reference incorporated herein.

23. RETENTION OF RECORDS

Contractor shall maintain all required records for three years after the City makes final payment and all other pending matters are closed, and shall be subject to the examination and/or audit of the City, a federal agency, and the state of California.

24. TERM OF AGREEMENT

This Agreement shall remain in effect for the period of July 1, 2017 through June 30, 2022 unless extended, amended, or terminated in writing by CITY.
25. ENTIRE AGREEMENT

This document constitutes the sole Agreement of the parties hereto relating to said project and states the rights, duties, and obligations of each party as of the document's date. Any prior Agreement, promises, negotiations, or representations between parties not expressly stated in this document are not binding. All modifications, amendments, or waivers of the terms of this Agreement must be in writing and signed by the appropriate representatives of the parties to this Agreement.

26. STATEMENT OF ECONOMIC INTEREST

Consultants, as defined by Section 18701 of the Regulations of the Fair Political Practices Commission, Title 2, Division 6 of the California Code of Regulations, are required to file a Statement of Economic Interests with 30 days of approval of a contract services agreement with the City of its subdivisions, on an annual basis thereafter during the term of the contract, and within 30 days of completion of the contract.

Based upon review of the Consultant's Scope of Work and determination by the City Manager, it is determined that Consultant IS / IS NOT required to file a Statement of Economic Interest. A statement of Economic Interest shall be filed with the City Clerk's office no later than 30 days after the execution of the Agreement.

IN WITNESS WHEREOF, the parties hereto have executed this Agreement on the day and year first above written.

FIRST PARTY:

[Signature]

Stephen R. Martin

Name

77-058-9932

Tax ID#

APPROVED AS TO FORM:

[Signature]

William L. McClure, City Attorney

CITY OF MENLO PARK:

[Signature]

Alex D. McIntyre

Name

ATTEST:

[Signature]

Pamela Aguilar, City Clerk, City of Menlo Park

04/10/2017
Date

Vice President

Title

5/23/17
Date

6/8/17
Date

City Manager

Title

6.8.2017
Date
EXHIBIT “A” – SCOPE OF SERVICES

A1. SCOPE OF WORK

FIRST PARTY agrees to provide consultant services for CITY’s Public Works. In the event of any discrepancy between any of the terms of the FIRST PARTY’s proposal and those of this Agreement, the version most favorable to the CITY shall prevail. FIRST PARTY shall provide the following services:

Provide general consultant services for projects as determined by the CITY. The detailed scope of work for each task the CITY assigns the consultant shall be referred to as Exhibit A-1, which will become part of this Agreement. A notice to proceed will be issued separately for each separate scope of work agreed to between the CITY and FIRST PARTY.

FIRST PARTY agrees to perform these services as directed by the CITY in accordance with the standards of its profession and CITY’s satisfaction.

A2. COMPENSATION

CITY hereby agrees to pay FIRST PARTY at the rates to be negotiated between FIRST PARTY and CITY as detailed in Exhibit A-1. The actual charges shall be based upon (a) FIRST PARTY’s standard hourly rate for various classifications of personnel; (b) all fees, salaries and expenses to be paid to engineers, consultants, independent contractors, or agents employed by FIRST PARTY; and shall (c) include reimbursement for mileage, courier and plan reproduction. The total fee for each separate Scope of Work agreed to between the CITY and FIRST PARTY shall not exceed the amount shown in Exhibit A-1.

FIRST PARTY shall be paid within thirty (30) days after approval of billing for work completed and approved by the CITY. Invoices shall be submitted containing all information contained in Section A5 below. In no event shall FIRST PARTY be entitled to compensation for extra work unless an approved change order, or other written authorization describing the extra work and payment terms, has been executed by CITY prior to the commencement of the work.

A3. SCHEDULE OF WORK

FIRST PARTY’S proposed schedule for the various services required will be set forth in Exhibit A-1.

A4. CHANGES IN WORK -- EXTRA WORK

In addition to services described in Section A1, the parties may from time to time agree in writing that FIRST PARTY, for additional compensation, shall perform additional services including but not limited to:
- Change in the services because of changes in scope of the work.
- Additional tasks not specified herein as required by the CITY.

The CITY and FIRST PARTY shall agree in writing to any changes in compensation and/or changes in FIRST PARTY’s services prior to the commencement of any work. If FIRST PARTY deems work he/she has been directed to perform is beyond the scope of this Agreement and constitutes extra work, FIRST PARTY shall immediately inform the CITY in writing of the fact. The CITY shall make a determination as to whether such work is in fact beyond the scope of this Agreement and constitutes extra work. In the event that the CITY determines that such work does constitute extra work, it shall provide compensation to the FIRST PARTY in accordance with an agreed cost that is fair and equitable. This cost will be mutually agreed upon by the CITY and FIRST PARTY. A supplemental agreement providing for such compensation for extra work shall be negotiated between the CITY and the FIRST PARTY. Such supplemental agreement shall be executed by the FIRST PARTY and may be approved by the City Manager upon recommendation of the Department Head.
A5. BILLINGS

FIRST PARTY’s bills shall include the following information: A brief description of services performed, project title and the Agreement number; the date the services were performed; the number of hours spent and by whom; the current contract amount; the current invoice amount; Except as specifically authorized by CITY, FIRST PARTY shall not bill CITY for duplicate services performed by more than one person. In no event shall FIRST PARTY submit any billing for an amount in excess of the maximum amount of compensation provided in Section A2.

The expenses of any office, including furniture and equipment rental, supplies, salaries of employees, telephone calls, postage, advertising, and all other expenses incurred by FIRST PARTY in the performances of this Agreement shall be incurred at the FIRST PARTY’s discretion. Such expenses shall be FIRST PARTY’s sole financial responsibility.
Professional Consulting Services for the Operation and Maintenance of the Bedwell Bayfront Park Landfill Leachate and Gas Collection and Control Systems

March 2017

Proposed to

The City of Menlo Park
Department of Public Works

CB&I Environmental & Infrastructure, Inc.
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Section 1.0 –
Letter of Interest
March 8, 2017

Ms. Azalea Mitch, PE - Senior Civil Engineer
Menlo Park Department of Public Works
701 Laurel Street
Menlo Park, CA 94025

RE: Request for Proposal for Professional Consulting Services for Operation and Maintenance of the Bedwell Bayfront Park Landfill Leachate and Gas Collection and Control Systems

Dear Ms. Mitch:

CB&l Environmental & Infrastructure, Inc. (CB&I) welcomes this opportunity to present our qualifications and experience to the City of Menlo Park Department of Public Works (City) for the operation and maintenance (O&M) of the Bedwell Bayfront Park Landfill (Landfill) leachate and gas collection and control systems. We have the utmost confidence in our ability to meet your goals and objectives based upon the experience of our local senior staff relevant to the potential project tasks listed in the RFP.

CB&I is highly qualified to provide these services based on the following:

- **Qualified Project Team** – Our highly qualified project team is experienced in environmental landfill consulting, O&M of landfill leachate collection and recovery systems (LCRS) and gas collection and control systems (GCCS), WDR compliance, and landfill regulations. Further, our project team and our national network of landfill professionals have extensive landfill engineering, design, compliance, and permitting experience who can address a broad and complex range of issues and challenges that clients, such as yourself, sometimes encounter.

- **Extensive Landfill LCRS and GCCS O&M Consulting Experience** - Our project team key members have more than 20 years collaborating together on numerous landfill sites across California — specifically, performing the very same services requested by the City. In fact, we have been providing the groundwater and leachate monitoring and maintenance services to the City for the Landfill for more than 25 years. In addition, CB&I designed, permitted, and installed the enclosed Landfill gas flare and performed an evaluation of the existing GCCS. Recently, CB&I was awarded a contract to assist the City with the Master Plan for the Landfill.

Other landfill sites where CB&I has performed similar services in California include:

- City of Sunnyvale Landfill;
- Upper Valley Landfill in Napa County;
- Avenal Regional Landfill
- American Canyon Landfill;
- Ostrom Road Landfill;
- Yuba Sutter Disposal Site;
- San Joaquin County Landfills (four distinct landfill sites);
- Monterey County Landfills (three distinct landfill sites)

In total, CB&I provides O&M services at over 60 landfills in the US.

- **Unparalleled Senior Staff** - CB&I’s team is comprised of local experts in the fields of hydrogeology, groundwater/leachate monitoring, landfill gas control, landfill permitting, regulatory compliance, and maintaining landfill systems. Our proposed key personnel are as follows:
  
  - **Darrell Thompson - Project Director:** Mr. Thompson will serve as Project Director. Mr. Thompson has over 24 years of experience with emphasis on landfill gas control systems and air quality compliance. As Project Director, he will own ultimate responsibility to the City, and to CB&I for technical excellence, contract administration, quality assurance and quality control, and overall performance of the project team. He will provide regular communication and reviews throughout the execution of project services among key staff members to ensure that it meets both the requirements of the City and CB&I standards. Mr. Thompson has relevant experience with the Landfill, having designed the enclosed flare station and managed the evaluation of the GCCS.
  
  - **Dan Easter, PG, CEG - Project Manager:** Mr. Easter will serve as Project Manager for all project work. Mr. Easter is a Professional Geologist and Certified Engineering Geologist (California) with over 31 years of professional experience in project management, environmental monitoring / reporting, environmental remediation, engineering geology, hydrogeology, riparian and coastal processes, and comprehensive site groundwater investigations. In the role of Project Manager, Mr. Easter will be the day-to-day contact for the City, he will coordinate the performance of all project work with his team members, and he maintain the budget and schedule for all project work and deliverables.
  
  - **J.C. Isham, PG, CEG, CHG - Senior Technical Reviewer:** Mr. Isham will serve as Senior Technical reviewer. Mr. Isham, has over 43 years of hydrogeological experience in the region, served as a Water Quality Control Board Member, and has numerous accolades and certifications in the solid waste industry. His experience with local hydrogeology, groundwater quality issues, and the State of California’s landfill requirements are unmatched in the region. Mr. Isham has relevant experience with the Landfill, having managed the groundwater and leachate monitoring and maintenance program for the last 25 years.

- **CB&I’s Local Sacramento Office** - CB&I’s team members are based out of CB&I’s Sacramento, CA office, located two hours from the City’s office, close to the landfill site. CB&I’s proposed field technicians are local to the San Jose area.
As Senior Director of Operations for CB&I, Mr. Steve Martin is authorized to sign contracts binding the firm on its behalf. His contact information is as follows:

Steve Martin - Director of Solid Waste Operations  
CB&I Environmental & Infrastructure, Inc.  
4171 Essen Lane, Baton Rouge, LA 70809  
225.987.7133 (office) / 225.268.4607 (mobile)  
Email: steve.martin@cbi.com  
Company Website: cbi.com

Our attached qualifications package further elaborates on our Team’s experience and our approach to this project. We look forward to expanding our services to the City. If you have any questions, please contact me at (225) 987-7133 or Darrell Thompson at (760) 977-8106.

Sincerely,  
CB&I Environmental & Infrastructure, Inc.

Steve Martin  
Senior Director of Operations

Darrell Thompson  
Western Regional Manager
Section 2.0 – Firm Organization
2.0 - Firm Organization

Chicago Bridge & Iron Company was founded in 1889 in Chicago, Illinois, and today offers a world of solutions to our customers in the waste management, energy, natural resources, environmental, and infrastructure markets. With 125 years of experience and the expertise of approximately 42,000 employees, Chicago Bridge & Iron Company provides reliable solutions while maintaining a relentless focus on safety and an uncompromising standard of quality. Chicago Bridge & Iron Company is a publicly traded (NYSE: CBI), multi-billion dollar, multi-disciplinary corporation, with annual revenues of more than $10.7 billion in 2016.

2.1 CB&I Environmental & Infrastructure, Inc.

CB&I Environmental & Infrastructure, Inc. (referred to herein as CB&I), a wholly-owned subsidiary of Chicago Bridge & Iron Company, is one of the largest providers of integrated solid waste services in the U.S. CB&I provides a single point of responsibility for engineering, design-build construction, equipment fabrication, landfill products, and O&M for a variety of environmental control and energy recovery systems, solid waste facilities design, and landfill gas and leachate control system design and installation. CB&I provides the following solid waste services:

- Solid Waste Planning
- Hydrogeologic Site Investigations
- Facility Master Planning, Siting, Design, Permitting, and Construction
- Facility Construction and Construction Oversight
- Facility O&M
- Landfill Gas and Energy Recovery Services
- Facility Closure / Post Closure Care
- Stormwater Management Services
- Landfill Redevelopment
- Green/Sustainable Solutions
- Environmental Compliance Monitoring and Reporting
- Landfill Gas Collection and Control System O&M
CB&I supports our clients throughout all phases of a project, from planning and permitting to design, construction, operation, demolition, restoration, and redevelopment. CB&I is proud of its strong tradition of technical excellence and integrity. We provide innovative, value-driven, client-focused solutions from a network of offices throughout the U.S. As one of the largest engineering and construction firms in the world, CB&I will provide extensive depth and stability to the City. Though we are a large firm with extensive resources from which to draw, the City will receive focused attention from our project team members, detailed in Section 3 of this submittal.

Our U.S. office locations are shown below on Figure 1.

![Figure 1. CB&I's U.S. Office Locations](image)

2.2 CB&I Landfill Gas Services

CB&I's qualifications include hundreds of successful LFG projects around the United States, including many similar to the proposed O&M services at the Bedwell Bayfront Park Landfill. We have demonstrated extensive experience with liquid (e.g., leachate, LFG condensate, groundwater) and landfill gas, including LFG system engineering, design and construction; LFG monitoring and reporting; LFG-to-energy projects; and flare stations with and without condensate injection. On many of these projects, CB&I works to ensure that sufficient quantity and quality of landfill gas is provided.

Full Service Capability

CB&I's full service capability, coupled with our own ability and experience to develop GCCS projects gives CB&I a broader range of expertise and insight that can be offered to a client considering an LFG project. CB&I has worked on hundreds of GCCS design projects across the U.S. and currently performs O&M services at more than 60 landfills throughout California, Florida, Georgia, Illinois, Indiana, Kentucky, Louisiana, Maryland, Massachusetts, Michigan, Minnesota, North Carolina, New York, Ohio, Pennsylvania, Utah, Virginia, Washington, and West Virginia.

CB&I's O&M services include:

- Monthly Well Field Tuning, Monitoring, and O&M
- Quarterly Surface Emissions Monitoring and Reporting
- Routine Inspection and Maintenance
- System Evaluation and Troubleshooting
- Emergency and Non-Routine System Maintenance
- Data Recording and Record Keeping
- NSPS, NESHAP, and GHG Reporting
- Compressor O&M
- LFGTE Power Plant Support

A listing of several of our LFG O&M projects are shown in Table 1 below.

<table>
<thead>
<tr>
<th>Facility Name &amp; Location</th>
<th>Client</th>
<th>Description of Work</th>
</tr>
</thead>
<tbody>
<tr>
<td>Bedwell Bayfront Park Landfill</td>
<td>City of Menlo Park</td>
<td>Design, Permitting, Equipment, Installation of new Enclosed Flare Station, Well field Evaluation</td>
</tr>
<tr>
<td>Kaiser Permanente Hospital former Landfill</td>
<td>Kaiser Permanente</td>
<td>Monthly well field monitoring and tuning, monthly probe monitoring, quarterly surface emissions monitoring, treatment system maintenance, well design, construction oversight</td>
</tr>
<tr>
<td>Avenal Regional Landfill</td>
<td>Waste Connections, Inc.</td>
<td>Design, Permitting, CQA of new GCCS, O&amp;M of GCCS</td>
</tr>
<tr>
<td>Madrona Landfill, Torrance, CA</td>
<td>City of Torrance, CA</td>
<td>Monthly well field monitoring and tuning, monthly probe monitoring, quarterly surface emissions monitoring, treatment system maintenance, well design, construction oversight</td>
</tr>
<tr>
<td>Jefferson Parish Landfill, Avondale, LA</td>
<td>Jefferson Parish, LA</td>
<td>LFG system O&amp;M, Quarterly Surface Emissions Monitoring, Quarterly Opacity Monitoring, Semi-Annual NSPS and NESHAP reporting, Annual GHG Reporting, Non-routine maintenance, etc.</td>
</tr>
<tr>
<td>North Landfill, Baton Rouge, LA</td>
<td>Advanced Disposal</td>
<td>LFG system O&amp;M, Quarterly Surface Emissions Monitoring, Quarterly Opacity Monitoring, Semi-Annual NSPS and NESHAP reporting, Annual GHG Reporting, Support Operations of LFGTE Direct Use Project</td>
</tr>
<tr>
<td>Millersville Landfill, Severn, MD</td>
<td>Anne Arundel County, MD</td>
<td>LFG system O&amp;M Services, Quarterly Surface Emissions Monitoring, Quarterly Opacity Monitoring, Semi-Annual NSPS and NESHAP Reporting, Annual GHG Reporting</td>
</tr>
<tr>
<td>Hoffman Road Landfill, Toledo, OH</td>
<td>City of Toledo, OH</td>
<td>LFG system O&amp;M, NSPS Reporting</td>
</tr>
<tr>
<td>Fresh Kills Landfill, Staten Island, NY</td>
<td>City of New York, NY</td>
<td>LFG system O&amp;M, Selexol LFG to pipeline quality gas plant O&amp;M</td>
</tr>
<tr>
<td>Keystone Landfill, Dunmore, PA</td>
<td>Keystone Landfill, Inc.</td>
<td>LFG system O&amp;M, 5.6 MW power plant development, O&amp;M</td>
</tr>
<tr>
<td>Cherokee Run Landfill, Bellefontaine, OH</td>
<td>Bellefontaine Power Producers</td>
<td>LFG system O&amp;M, 4.8 MW power plant development and O&amp;M</td>
</tr>
<tr>
<td>Cuyahoga Regional Landfill, Solon, OH</td>
<td>Waste Management</td>
<td>LFG system O&amp;M, 2,800 scfm gas compression development and O&amp;M</td>
</tr>
<tr>
<td>Vienna Junction Landfill, Erie, MI</td>
<td>Republic Services</td>
<td>LFG system O&amp;M</td>
</tr>
<tr>
<td>Noble Road Landfill, Shiloh, OH</td>
<td>Rumpke Waste</td>
<td>LFG system O&amp;M</td>
</tr>
<tr>
<td>Washington County Landfill, Washington, UT</td>
<td>Washington County, UT</td>
<td>Monthly well field monitoring and tuning, Quarterly Surface Emission Monitoring, Quarterly Opacity Monitoring, Semi-Annual NSPS and NESHAP Reporting, Annual GHG Reporting, Well field design and construction oversight</td>
</tr>
<tr>
<td>Sudbury Road Landfill, Walla Walla, WA</td>
<td>Walla Walla, WA</td>
<td>Monthly well field monitoring and tuning, flare station operations and maintenance, GHG monitoring</td>
</tr>
</tbody>
</table>
2.3 Groundwater / Leachate Services

We have performed similar environmental services for numerous facilities throughout California, including:

- Designing groundwater monitoring wells;
- Reviewing and negotiating WDRs;
- Preparation of Sampling and Analysis Plans;
- Preparation of Water Quality Protection Standards Reports;
- Collection of groundwater samples from thousands of wells, leachate risers, and hundreds of surface water points;
- Preparation of semi-annual and annual environmental monitoring reports;
- Performance of numerous comprehensive hydrogeologic investigations, studies and site characterizations; and
- Design and monitoring of dozens of piezometers and lysimeters.

CB&I is currently providing water quality monitoring services at fifteen (15) landfill sites in California. A summary of these 15 landfill sites is presented on Table 2 on the following page.

2.4 FORTISTAR METHANE GROUP

For this project, CB&I proposes to subcontract a portion of the landfill gas field monitoring and maintenance to FORTISTAR METHANE GROUP (FORTISTAR). FORTISTAR is the incumbent for the landfill gas O&M contract at the Landfill. FORTISTAR owns a portfolio of companies in the power, transportation and industrial sectors focused on reducing the carbon footprint. FORTISTAR owns and operates 30 landfill gas to energy projects totaling 170 MW in 12 states. FORTISTAR’s wellfield team comprises experienced staff that are well versed in balancing GCCS operation to achieve the dual purpose of compliance and improved collection efficiency. FORTISTAR’s technicians have the unique ability to tune the wellfield to support renewable energy projects while ensuring all regulatory parameters are met or exceeded. FORTISTAR’s managers are fully engaged in ensuring that collected GCCS data is analyzed and evaluated so that the recommendations for preventative maintenance can be made as needed. Non-routine repairs, if needed, are conducted expeditiously with active communication with the City. This enhances GCCS collection efficiency while providing for continued compliance and relief from nuisance related to odors and offsite migration.
<table>
<thead>
<tr>
<th>California Landfills</th>
<th>Client</th>
<th>Monitoring Services Provided</th>
</tr>
</thead>
<tbody>
<tr>
<td>American Canyon Landfill</td>
<td>Napa Vallejo Waste Management Authority</td>
<td>Groundwater, Surface water, Leachate</td>
</tr>
<tr>
<td>North County Landfill</td>
<td>San Joaquin County</td>
<td>Groundwater, Surface water, Leachate</td>
</tr>
<tr>
<td>Foothill Sanitary Landfill</td>
<td>San Joaquin County</td>
<td>Groundwater, Surface water, Leachate</td>
</tr>
<tr>
<td>Harney Lane Landfill</td>
<td>San Joaquin County</td>
<td>Groundwater, Surface water, Leachate</td>
</tr>
<tr>
<td>Corral Hollow Landfill</td>
<td>San Joaquin County</td>
<td>Groundwater, Surface water, Leachate</td>
</tr>
<tr>
<td>Lake San Antonio Landfill</td>
<td>Salinas Valley Waste Management Authority</td>
<td>Groundwater</td>
</tr>
<tr>
<td>San Ardo Landfill</td>
<td>Salinas Valley Waste Management Authority</td>
<td>Groundwater</td>
</tr>
<tr>
<td>Bradley Landfill</td>
<td>Salinas Valley Waste Management Authority</td>
<td>Groundwater</td>
</tr>
<tr>
<td>York Ranch Landfill</td>
<td>Louisiana Pacific Corporation</td>
<td>Groundwater Reporting</td>
</tr>
<tr>
<td>Red Bluff Landfill</td>
<td>Louisiana Pacific Corporation</td>
<td>Groundwater Reporting</td>
</tr>
<tr>
<td>Upper Valley Landfill</td>
<td>Upper Valley Disposal and Recycling</td>
<td>Groundwater, Surface water, Leachate</td>
</tr>
<tr>
<td>Menlo Park Landfill</td>
<td>City of Menlo</td>
<td>Groundwater, Surface water, Leachate</td>
</tr>
<tr>
<td>Sunnyvale Landfill</td>
<td>City of Sunnyvale</td>
<td>Groundwater, Surface water, Leachate</td>
</tr>
<tr>
<td>Ostrom Road Landfill</td>
<td>Recology</td>
<td>Groundwater, Leachate</td>
</tr>
<tr>
<td>Yuba Sutter Disposal Site</td>
<td>Recology</td>
<td>Groundwater, Leachate</td>
</tr>
</tbody>
</table>
Section 3.0 – Project Team
3.0 - Project Team

CB&I has assembled a highly experienced and qualified project team to provide the services requested by the City. Each employee was selected based on their background and their availability to fulfill the City’s requirements on this project. Brief descriptions of the key team members are provided on the following pages, and resumes for all project team members are provided at the end of this section. The project team organization is provided below as Figure 2.

![Project Team Organization Diagram]

Figure 2. Project Team Organization
3.1 CB&I Key Team Members

Brief professional summaries of CB&I key team members are provided below, and detailed resumes are provided at the end of this section. Resumes for supporting technical staff are also provided at the end of this section.

Darrell Thompson - Project Director & Quality Assurance/Quality Control (QA/QC)
Education: B.S., Civil Engineering, University of Massachusetts

Mr. Darrell Thompson is CB&I’s Western Regional Manager and has over 23 years of combined experience in the design, construction, O&M of LFG GCCSs and LCRSs; final cover systems / closure designs; construction management / Construction Quality Assurance (CQA) inspections; and NSPS compliance. As CB&I’s Landfill Gas Program Manager, he oversees CBI’s National LFG Program, and all related services including the planning, design, engineering, O&M, construction, construction oversight, and compliance services.

Mr. Thompson will serve as Project Director and will be responsible for overseeing and ensuring quality control / quality assurance for all project deliverables. As Project Director, he will own ultimate responsibility to the City, and to CB&I for technical excellence, contract administration, quality assurance and quality control, and overall performance of the project team. He will provide regular communication and reviews throughout the execution of project services among key staff members to ensure that it meets both the requirements of the City and CB&I standards. He will work closely with the Project Manager (Dan Easter) to ensure that the City’s needs, goals, and objectives are clearly identified, defined and communicated to the CB&I project team, and the project budget and schedule are strictly adhered to.

J.C. Isham, PG, CEG, CHG - Senior Technical Reviewer
Education: M.S., Geology, Michigan State University
B.S., Geology, University of Wisconsin

Mr. J.C. Isham brings to this project over 43 years of experience in groundwater quality monitoring programs, landfill monitoring programs, hydrogeologic investigations/characterizations, groundwater contamination studies, remedial action program development, and waste management issues. He specializes in water quality issues at landfills. He has been CB&I's principal hydrogeologist for groundwater monitoring programs at numerous landfills in California.

Mr. Isham will serve as Senior Technical Reviewer providing an additional level of QA/QC on analytical data / reports, and project deliverables (i.e., in addition to Mr. Thompson and Mr. Easter's technical reviews). Further Mr. Isham will provide his technical expertise for any monitoring / technical issues should they arise including, but not limited to, troubleshooting, recommending remedial actions, and acting as regulatory liaison with the Regional Water Quality Control Board. Mr. Isham will coordinate his reviews and efforts working closely with both Mr. Thompson and Mr. Easter.
Dan Easter, PG, CEG - Project Manager / Client Liaison

Education: B.A., Geology, California State University, Chico, CA

Mr. Dan Easter is a Professional Geologist and Certified Engineering Geologist (California) with over 31 years of experience in project management, environmental monitoring / reporting, remedial investigations and removal actions, land-use planning, engineering geology, hydrogeology, riparian and coastal processes, geologic hazard assessments, and comprehensive site groundwater investigations. He has been responsible for the design / development, implementation, and project management of numerous site characterizations, environmental monitoring programs, and site remediation programs. His experience also includes conducting comprehensive environmental site investigations / studies, reporting and permitting of environmental monitoring programs, and remediation / site cleanup programs, hillside grading and development, and landslide and fault investigations.

Mr. Easter will serve as Project Manager and Client Liaison for all project work. In this role, he will be the day-to-day contact for the City. Mr. Easter will coordinate the performance of all project work with his team members as well as maintain the schedule and budget. He will work closely with project team staff to ensure that the City’s needs are clearly defined and communicated to the CB&I project team. He will direct the timely, efficient and effective execution of the City’s project work. Mr. Easter will report to Mr. Thompson (Director) and Mr. Isham (Senior Technical Reviewer) the status of project work and deliverables and coordinate the review of draft work product with both Mr. Thompson and Mr. Isham.

Sheila Richgels - Project Sampling / Testing Coordinator

Education: A.A., General Education, Sierra Community College, Rocklin, CA

Ms. Sheila Richgels has been a project/sampling coordinator for over 30 years. She maintains client contact, supervises field sampling staff, schedules sampling events, prepares sampling calendars, coordinates analytical testing, revises schedules based on workloads, prepares job setups for sampling events, liaison for laboratories and clients concerning analysis, and reviews sampling protocol / sampling containers / chain-of-custody documentation. She manages projects for several landfill clients that require monthly and quarterly letter report submittals to various regulatory agencies. Ms. Richgels will be responsible for ensuring all samples are prepared properly by field personnel and shipped to the BC Laboratories, Inc. for analysis. Ms. Richgels will ensure Chains of Custody are properly executed and will distribute analytical data to project personnel upon receipt. Ms. Richgels will be in frequent communication with the Project Manager (Mr. Easter) key project staff, BC Laboratories, and City personnel.

Paul Weinhardt – Supervising Field Technician (Sampling, Monitoring, O&M, Repairs)

Mr. Paul Weinhardt has been providing field expertise for geologists and engineers for more than 21 years. His experience includes groundwater monitoring, O&M of groundwater and soil vapor extraction systems, soil sampling, and well development. Mr. Weinhardt has been CB&I’s primary field technician for groundwater monitoring programs in Northern California. These programs have included groundwater monitoring wells, lysimeter systems, and leachate collection systems. Mr. Weinhardt follows strict adherence to quality assurance and quality control protocols contained in the site specific Field Sampling Plans and Quality Assurance Project Plans. Mr. Weinhardt has worked at dozens of solid waste landfill sites and over 300 other water quality monitoring facilities. He will work closely with Mr. Easter and Ms. Richgels and will perform field monitoring / sampling activities, routine O&M services, and on-call maintenance / repairs as needed.
Pedro Ruiz - Field Technician (Sampling, Monitoring, O&M, Repairs)
Mr. Ruiz is a CB&I field technician with over 15 years of experience in the environmental field. His experience includes environmental monitoring / sampling, O&M of groundwater treatment systems, installation of innovative remedial systems modifications of remedial systems, tank removals, and air / soil / groundwater / surface water sampling. Mr. Ruiz will work closely with Mr. Easter and Ms. Richgels and will perform field monitoring / sampling activities, routine O&M services, and on-call maintenance/repairs as needed.

Kathleen Beresh - Project Scientist (Air Quality Compliance Monitoring / Reporting )
Education: B.A., Environmental Studies, University of California, Santa Barbara, CA
Ms. Beresh serves as compliance specialist for CB&I’s Regulatory Compliance Group. She has 10 years of professional experience in environmental permitting and compliance, environmental monitoring data management / evaluation / reporting, and landfill groundwater and air pollution monitoring and reporting programs. She has performed Title V and NSPS reporting and permit reviews, performed data collection and analysis, and quality assurance of compliance demonstration reports. Ms. Beresh will report directly to Mr. Easter and assist him as directed in the preparation of monitoring and analytical data reports (i.e., data reduction, compliance evaluation, and reporting).

John Jowers, EIT - Project Engineer (Data Analysis / Reporting)
Education: B.S.E., Environmental Engineering, Northern Arizona University
Mr. Jowers is an environmental engineer with 4 years of professional experience in the solid waste landfill and environmental field. His experience includes environmental compliance reviews, landfill site planning and design, environmental monitoring and reporting for landfills and other solid waste facilities, vadose zone and landfill gas monitoring, LFG GCCS operation / monitoring / tuning, landfill final cover integrity inspections, and site stormwater system inspections. He also has project experience in groundwater detection monitoring and remediation at impacted sites throughout California. Mr. Jowers will report directly to Mr. Easter and assist him as directed in the preparation of monitoring and analytical data reports (i.e., data reduction, compliance evaluation, and reporting).
3.2 Subcontractors

FORTISTAR METHANE GROUP

For this project, CB&I proposes to subcontract a portion of the landfill gas field monitoring and maintenance to FORTISTAR METHANE GROUP (FORTISTAR). FORTISTAR is the incumbent for the LFG O&M contract at the Landfill. FORTISTAR owns a portfolio of companies in the power, transportation and industrial sectors focused on reducing the carbon footprint. FORTISTAR owns and operates 30 landfill gas to energy projects totaling 170 MW in 12 states. FORTISTAR's wellfield team comprises experienced staff that are well versed in balancing GCCS operation to achieve the dual purpose of compliance and improved collection efficiency. FORTISTAR's technicians have the unique ability to tune the wellfield to support renewable energy projects while ensuring all regulatory parameters are met or exceeded. FORTISTAR's managers are fully engaged in ensuring that collected GCCS data is analyzed and evaluated so that the recommendations for preventative maintenance can be made as needed. Non-routine repairs, if needed, are conducted expeditiously with active communication with the City. This enhances GCCS collection efficiency while providing for continued compliance and relief from nuisance related to odors and offsite migration. At this project, FORTISTAR proposes to use Feliciano Equivel, who has over 10 years of experience monitoring and maintaining the Landfill GCCS.

BC Laboratories, Inc.

BC Laboratories, Inc. was selected by CB&I as the most reasonably priced and best qualified provider of analytical services for this proposal based on their current working relationship with CB&I. The selection of an analytical laboratory is an important consideration. High quality analytical data is necessary for compliance with the WDRs. CB&I selected BC Laboratories based on the following criteria:

- BC Laboratories is a full-service environmental laboratory certified in the State of California and part of the Department of Energy's ICPT National Agreement for Analytical Services.
- BC Laboratories has a 29,000-square-foot facility specifically designed to assist the quality sector of the analytical process. Within the facility, highly trained personnel work with state-of-the-art instrumentation under an active QA/QC program to provide reliable quality results. Instrumentation includes 16 GC/MS instruments, 14 GC's dedicated to specific analyses, 1 ICP/MS, 3 ICAP's, 2 GFAA units, 4 IC's, 6 multi-chemistry auto analyzer systems, 1 Konelab20 analyzer and various other equipment necessary to guarantee backup systems to every test run.
- All (89) employees are on a continuing training program that includes interviewed evaluations conducted on an annual basis.
- Constant reinvestment by the ownership has kept BC Lab current with new instrumentation and advanced analytical technologies.
- BC Laboratories supplies custom reporting of analytical data with the aid of a full-time LIMS manager and two full-time assistants who update and maintain a custom Laboratory Information Management System.
Blue Sky Environmental, Inc.
Blue Sky Environmental, Inc. (Blue Sky) will be subcontracted by CB&I to perform the enclosed flare stack emissions testing in accordance with the Landfill’s Bay Area Air Quality Management District (BAAQMD) Permit / Plant No. A3499. Blue Sky is a California Air Resources Board (CARB) independent contractor that offers professional air emissions source testing services in the San Francisco Bay Area, and specializes in gaseous emissions monitoring. Blue Sky utilizes United States Environmental Protection Agency (EPA), CARB and BAAQMD approved test methods, with the goal of reporting accurate and defensible data that surpasses the expectations and requirements of our clients and applicable regulatory agencies. Blue Sky offers testing services that are extremely competitive by keeping overhead low, while heavily investing in new equipment.

Telstar Instruments, Inc.
Telstar Instruments, Inc. (Telstar) will be subcontracted by CB&I to perform the annual flow meter calibration verification at the enclosed flare station. Telstar has been providing this service for the last 4 years. Telstar Instruments is a state certified instrumentation and controls integrator specializing in PLC/SCADA systems, measurement instrumentation, and automated process controls. Telstar provides complete on-site maintenance and calibration services, for all brands of instrumentation. Telstar provides service, repair, calibrate, install, maintain, and start up all types and brands of PLC’s, VFD’s, process control instrumentation, radio telemetry, and SCADA systems.

LFG Specialties, Inc. (A CB&I Company)
LFG Specialties, Inc., a CB&I Company, designs and manufactures landfill gas flares, blower skids, compression skids, wellheads, and leachate evaporators. In fact, LFG Specialties manufactured the enclosed flare station at the City’s Bedwell Bayfront Park Landfill. Should any parts or troubleshooting be needed, CB&I’s team can quickly reach out to the flare factory to order replacement parts or schedule service.
Darrell H. Thompson

CB&I - Western Regional Manager
Sacramento, CA

Professional Qualifications

Mr. Thompson has over 24 years of combined experience in landfill gas control, gas and leachate systems operations and maintenance, New Source Performance Standards (NSPS) compliance, landfill closure design, landfill redevelopment, construction management and inspection, stormwater and erosion control, waste soils management, and site investigations. Mr. Thompson is CB&I’s Western Regional Manager for Solid Waste Engineering and O&M Services. He manages engineering and O&M services for landfill development, closure, gas collection and control system (GCCS) projects, groundwater monitoring, and air quality compliance.

Education

BS, Civil Engineering, University of Massachusetts, Lowell

Registrations/Certifications

- Engineer in Training, No. 114110
- OSHA Hazardous Waste Site Health and Safety Training (CFR 1910.120)
- OSHA Hazardous Waste Site Supervisor Training (CFR 1910.120)
- OSHA Confined Space Entry (CFR 1910.120)
- Caltrans 24-Hour SWPPP Preparer

Relevant Experience

- Marsh Road Landfill, Menlo Park, CA - Project Manager, Enclosed Flare Station. Responsibilities included designing and permitting a new enclosed 1,500 scfm enclosed flare station, overseeing construction, and coordinating the initial performance test.
- Avenal Landfill, Avenal, CA - Project Manager, Engineering Services. Mr. Thompson managed the design, permitting, bidding and CQA of a new GCCS and enclosed flare station at the Avenal Landfill.
- Shasta County West Central Landfill, Igo, CA - Project Manager, Design & Installation of GCCS. Mr. Thompson’s responsibilities included designing the GCCS piping network, perimeter condensate sumps, vertical LFG collection wells, and an enclosed flare station with condensate injection. Mr. Thompson supervised the preparation of an NSPS Design Plan, Startup, Shutdown, and Malfunction (SSM) Plan, Green House Gas (GHG) Monitoring Plan, and preparation of an Operations and Maintenance (O&M) training program for County personnel. He supervised the preparation of an O&M Manual for the GCCS and flare station and the as-built report.
- Washington County Landfill, Washington, UT - Project Manager, Design & Installation of GCCS. Mr. Thompson’s responsibilities included designing the GCCS piping network, condensate sump, vertical LFG collection wells, and an open (utility) flare station. Work included oversight of the preparation of a Startup, Shutdown, and Malfunction Plan, Surface Emissions Monitoring Plan, Hydrogen Sulfide Monitoring protocol, and implementation of a GHG Monitoring Plan. He supervised the preparation of an O&M Manual for the GCCS and flare station and the as-built report.
- Central Landfill, Sonoma County, CA - Project Manager, Performance Evaluation. Responsibilities included evaluating nearly 200 wells at the Central Landfill in Sonoma County, CA and inspecting the layout of headers, sumps, and reviewing power plant operations to assess where improvements in landfill gas recovery could be made to increase energy production and decrease landfill emissions.
- American Canyon Landfill, Napa Vallejo Waste Management Authority - Project Manager, Engineering Services, Design of Reinforced Fiberglass Leachate Storage Tanks. Responsibilities included managing the design of four 27,500-gallon fiberglass reinforced leachate storage tanks and distribution piping for the American Canyon Landfill.
- **Waste Management of Hawaii Landfills, Project Manager, Groundwater, Stormwater, and Leachate Monitoring.** Mr. Thompson is managing groundwater, stormwater, and leachate monitoring services provided at three (3) landfills operated by Waste Management of Hawaii.

- **Sunshine Canyon Landfill, Sylmar, CA - Project Manager, GCCS Improvements.** Responsibilities included preparation of an updated NSPS Design Plan, design of over 150 vertical and horizontal landfill gas collection wells, final header improvements, improvements, lateral piping, and assisted with the preparation of a landfill gas Master Plan.

- **Coffin Butte Landfill, Corvallis, OR - Project Manager, GCCS Improvements.** Responsibilities included the design of vertical and horizontal gas extraction wells, collector piping, down-hole pumps, air and condensate force main, and a new compressor station.

- **West Contra Costa County Landfill, Richmond, CA - Project Manager, Enclosed Flare Station Design.** Responsibilities included designing a new enclosed flare station to process landfill gas from Class 1 and Class 2 landfill gas well fields and to route Class 2 landfill gas to an onsite power plant. Challenges included separating Class 1 LFG from Class 2 landfill gas and designing instrumentation and valving to divert LFG based on power plant demand.

- **Various Waste Management Inc. Landfills, CA and WA.** Project Manager, GCCS Improvements, Landfill include the Kirby Canyon Recycling and Disposal Facility, Guadalupe Rubbish Disposal Facility, Altamont Landfill Resource Recovery Facility, Redwood Landfill, Tri Cities Recycling and Disposal Facility, Anderson Landfill, Olympic View Landfill, and the Wenatchee Regional Landfill. Responsibilities included the design of gas extraction wells, collector piping, condensate management systems, and enclosed flare stations or improvements thereof. Assisted with the bidding and construction oversight of all projects and prepared CQA Reports.

- **Western Regional Sanitary Landfill (WRSL), Lincoln, CA - Project Manager, O&M of GCCS.** Responsibilities included supervising field technicians performing maintenance of the GCCS, troubleshooting flare station operations, coordinating regular source testing of the WPWMA flare, designing improvements to landfill gas collection, preparing monthly and quarterly reports in compliance with the NSPS and local air district regulations. Ensured complaint operation of the GCCS and providing landfill gas to an onsite power plant. Supervised the preparation of an updated NSPS Design Plan and SEM Plan for WRSL.

- **Republic Services Group, Inc. Azusa Land Reclamation Company Landfill, Azusa, CA - Project Manager, O&M of GCCS.** Responsibilities included supervising field technicians performing well field monitoring, operating the condensate treatment system and leachate pumps, and preparing compliance reports.

- **Waste Management, Inc. Bradley Landfill and Recycling Center in Sun Valley, CA - Project Manager, O&M of GCCS.** Responsibilities included managing the operations and compliance of a 200-acre well field, three enclosed flares, a landfill gas compression plant, and providing landfill gas to two power plants.

- **Los Angeles Department of Water and Power (LADWP) Microturbine Facility, Lopez Canyon Landfill, Lakeview Terrace, CA - Project Engineer and O&M Support.** Responsibilities included assisting in the engineering evaluation and inspection of LADWP's gas processing equipment installation and provided O&M training of the gas processing equipment to LADWP personnel. Responsible for preparing training aids and an O&M manual for the gas processing equipment, and for overseeing the preparation of system as-built drawings.

- **Project Manager, Permitting, Plans and Specs for Various Landfills, Various Locations, MA.** Responsibilities included prepared landfill closure plans, specifications, permit applications, and public bidding documents. Conducting waste delineations, prepared grading and drainage plans, and directed landfill operators toward closure grades. Providing construction management. Performing engineering inspection of cap construction, processing payment requisitions and change orders, and preparing certification reports and as-buils.
Professional Qualifications

Mr. Isham has over 43 years of professional experience in providing sound environmental and engineering guidance to both private and public stakeholders and policy makers. He has authored several hundred scientific reports and developed environmental restoration programs for solid waste, industrial, power industry, mining, and military facilities. Mr. Isham has been responsible for conducting hydrogeologic and geotechnical studies regarding the design, construction, and operation at dozens of landfills. He is also responsible for maintaining client and regulatory liaison and providing compliance with state and federal regulations. He provides expert witness testimony on water and waste management issues.

As a professional geologist, certified engineering geologist, and certified hydrogeologist in California, Mr. Isham is recognized as an expert in the field of water quality and waste assessment. He was one of the first professionals to be licensed as a hydrogeologist in California. Mr. Isham was selected as one of seven "mentors" of hydrogeology by the California Board of Registration for Geologists and Geophysicists to prepare the first hydrogeology exam for the State of California.

Governor Schwarzenegger appointed Mr. Isham to the Central Valley Regional Water Quality Control Board (RWQCB), which is responsible for issuing landfill regulations. He is currently a member of a panel of experts on the RWQCB's Groundwater Monitoring Advisory Workgroup, which provides water quality guidance on surface water, storm water, and groundwater. In this capacity, he authored a white paper to Board staff on how to review landfill scientific reports. He was instrumental in the approval of many Waste Discharge Requirements for landfills and therefore is an expert in Title 27 landfill regulations. While a Board member, he received specialized training from one the chief attorneys of the State Water Resources Control Board on the execution of orders issued by the RWQCB. This training is only available to Board Members.

Mr. Isham has been elected and appointed by his professional peers to many positions of responsibility including: past Sacramento section Chairman of the Association of Engineering and Environmental Geologists, past Chairman of the Architects and Engineers Conference Committee of California, past Sacramento and San Francisco section Vice-President of Groundwater Resources Association of California. As such, Mr. Isham has received several professional service awards.

Mr. Isham was appointed the Chairman of the Legislative Committee for the California Board of Registration for Geologists and Geophysicists. Governor Davis also appointed Mr. Isham to the California State Mining and Geology Board (SMGB). As such, he oversaw the Alquist-Priolo Earthquake Fault Zoning Act, the Seismic Hazards Mapping Act, and the Surface Mining and Reclamation Act. While he was a member of the SMGB, he was the Chairman of Mining Standards Committee, where he oversaw the review and approval Environmental Impact Reports for major surface mining activities. He was also a member of the SMGB's GeoHazard Committee. He oversaw the work of the State Office of Mine Reclamation and the California Geologic Survey. He is currently Vice Chairman of a technical committee of the SMGB to revise the Alquist-Priolo Earthquake Fault Zoning Act on the regulation of active faulting and the zoning of building setbacks from active faults. He held the position on the SMGB of mining engineer.

Through CB&I’s USEPA Region 9 Superfund contract, Mr. Isham provides EPA staff with expert advice on CERCLA and RCRA waste management regulations at Superfund sites.

Education

MS, Geology, Michigan State University, Lansing, MI
BS, Geology, University of Wisconsin, Oshkosh, WI

Registrations/Certifications

Licensed Engineering Geologist, 1986, 1321, Active, California, 06/2013
Professional Geologist, 1984, 3893, Active, California, 06/2013
Professional Hydrogeologist, 1995, 007, Active, California, 06/2013
Relevant Experience

Landfill Compliance Monitoring:

- Mr. Isham managed the compliance with California Title 27 monitoring requirements at dozens landfills in San Joaquin, Sacramento, Solano, Napa, Yuba, Mendocino, Shasta, Kern, Sonoma, Monterey, Glenn, San Francisco, San Mateo, Alameda, Santa Clara, Stanislaus, Colusa, Calaveras, and Contra Costa counties. In San Joaquin County, he manages the water quality programs at the North County, Foothill, Harney Lane, and Corral Hollow Landfills.

- He coordinated hydrogeologic investigation; aquifer testing; and design, installation, operation, and maintenance of remediation systems at the Altamont Landfill in Alameda County, the Austin Road Landfill in San Joaquin County, the Sonoma Central Landfill in Sonoma County, American Canyon Landfill in Napa County, and the Geer Road landfill in Stanislaus County.

- Managed the reclamation of the Jamestown Mine to protect groundwater and surface water resources for the Attorney General’s Office and the Jamestown Trust, Tuolumne County, California.

- Conducted hydrogeologic investigations for sludge waste disposal ponds at several coal-fired power plants in Michigan, Montana, Wyoming, Louisiana, and Florida to protect groundwater and surface water resources.

- Managed a hydrogeologic investigation, remedial action planning, groundwater monitoring, and closure at an industrial facility in Newark, California.

- Managed a site assessment, hydrogeologic investigation, wastewater treatment, and remedial action planning for an industrial facility in Richmond, California.

- Managed a hydrogeologic investigation, groundwater monitoring, remedial action planning, and closure at dozens of underground storage tank sites for several major petroleum companies in California to protect groundwater resources.

- Performed a hydrogeologic investigation, remedial action planning, and 30-day tidal influence study at a major petroleum tank farm in Sacramento, California.

- Conducted a hydrogeologic investigation of toxic pits containing polychlorinated biphenyls, chromium plating, and volatile organic wastes in Willits, California.

Landfill Design, Permitting and Construction / CQA:

- Mr. Isham managed the permitting and design of many composite base liner and final cover systems at landfills in northern California including those in San Joaquin, Sacramento, Stanislaus, Calaveras, Solano, Yuba, Fresno, Tulare, Placer, Napa, Kern, Sonoma, Monterey, Glenn, Mendocino, Santa Clara, and Colusa counties. In San Joaquin County, he was involved with the base liner design at the North County and Foothill Landfills. In Tulare County, he prepared a special report to the Water Board that allowed the County to lower the base and increase the fill capacity at the Woodville Landfill.

- Mr. Isham managed the construction quality assurance programs for over a dozen composite base liner systems and several final cover systems at landfills in northern California; including the American Canyon Landfill in Napa County, the YSDI, Ostrom Road, and Ponderosa Landfills in Yuba County, the Hay Road Landfill in Solano County, the Willits Landfill in Mendocino County, and the Eastern Regional and Western Regional Landfills in Placer County. He managed the design and construction of a special slurry wall at the toe of the York Ranch Landfill in Mendocino County.
- Mr. Isham managed the Liner Performance Demonstration Report and the hydrogeologic modeling to support the expansion of several landfills in the Central Valley of California including San Joaquin, Fresno, Sacramento, Stanislaus, and Glenn counties. In San Joaquin County, he prepared the VLEACH monitoring reports at the North County and Foothill Landfills. He managed the Evaluation Monitoring Program and the design, permitting and construction of the final cover on the mine waste cell at the Jamestown Mine under contract to the Central Valley Water Board and the Attorney General's Office.

- He managed reclamation feasibility study for the South Coast Landfill in Mendocino County, which is situated on the San Andreas Fault. Mr. Isham performed geologic and engineering investigations and closure of a Class I hazardous waste management unit at the John Smith Landfill in Hollister, California.
Daniel R. Easter, PG, CEG

CB&I - Project Manager
Sacramento, CA

Professional Qualifications
Mr. Easter is a Professional Geologist and Certified Engineering Geologist (California) with over 31 years of experience in project management, remedial investigations and removal actions, land-use planning, engineering geology, hydrogeology, riparian and coastal processes, geologic hazard assessments, and groundwater investigations. He has been responsible for design, implementation, and management of numerous site characterization, environmental monitoring, and remediation programs. His experience includes conducting site studies, permitting, preliminary design, preparing planning documents, aerial photographic analysis, designing and installing environmental monitoring systems, hillside grading and development, and landslide and fault investigations.

Mr. Easter has extensive experience in project management, and staff hiring and management including: project proposal preparation and presentation, budget preparation and tracking, client communications and meetings, liaison and reporting to local, state, and federal agencies. He has supervised and conducted investigations and projects for public agencies, commercial and residential developers, and private landowners.

Education
BA, Geology, California State University Chico, Chico, CA

Registrations/Licenses
- Licensed Engineering Geologist, 1995, 1962, Active, California, 05/2017
- Professional Geologist, 1993, 5722, Active, California, 05/2017

Certifications / Training
- OSHA 40-Hour HAZWOPER Hazardous Waste Site Health and Safety Training (CFR 1910.120)
- OSHA 8-Hour HAZWOPER refresher training

Relevant Experience
- **Task Manager, U.S. Department of the Navy, Task Order for Chocolate Mountain Aerial Gunnery Range, California MCAS Yuma, Arizona.** Mr. Easter was the Task Manager for a Navy Task Order to perform a Range Activity Survey for a real estate transaction between the U.S. Navy and the Department of the Interior, Bureau of land management that includes identification and consolidation of UXO and range debris for future disposal. The work included preparation of a work plan, site safety and health plan, technical report, communications and project management responsibilities with Navy RPM. The firm fixed price task order totaled $0.43M.

- **Task Manager, U.S. Department of the Navy, Task Orders for Naval Air Station (NAS) Fallon, Nevada, NAS Lemoore, California.** Mr. Easter was the Task Manager for four Navy Task Orders that included environmental site assessment for a Navy F-18 jet crash, landfill characterization soil and groundwater sampling, preparation of work plans, sampling and analysis plans, site safety and health plans, technical reports, communications and project management responsibilities with Navy RPM. The firm fixed price task orders totaled $1.0M.

- **Technical Lead, SR401 Skeet Range Remedial Action, U.S. Air Force, McClellan AFB, California.** Mr. Easter was the technical lead for the $1.5M firm fixed price remedial action project at the Former McClellan Air Force Base. The goal of the SR401 Skeet Range remedial action was to remove soils impacted with lead and PAHs to protect human health and the environment and make the site suitable for industrial reuse. Mr. Easter was the primary author for a Remedial Action Work Plan and Remedial Action Completion Report.
- **Technical Lead, Hunters Point Shipyard, Naval Facilities Engineering Command, Southwest, Hunters Point Shipyard.** Mr. Easter was the technical lead for the $12.6M firm fixed price remediation project at Hunters Point Shipyard in San Francisco, California. He was responsible for developing the work plan for the Time Critical Removal Action (TCRA) for remedial excavation and backfilling in a radiologically and unexploded ordnance (UXO) impacted area. Mr. Easter and the project team successfully removed 40,000 yd³ of soil impacted with PCBs, hydrocarbons, copper, and lead. The team conducted remedial excavations within upland and shoreline tidal zones which elevated the regulatory review process. Due to the increase in regulatory activity, Mr. Easter incorporated additional corporate best management practices that ensured protection of San Francisco Bay waters. Mr. Easter worked with approximately 25 field personnel, including scientists, supervisors construction equipment operators, radiological technicians, UXO technicians, and laborers in order to successfully excavate, dewater, screen for radiological and UXO material, conduct storm water pollution prevention, and perform soil hauling activities. Mr. Easter prepared presentations and attended the Navy’s Base Realignment and Closure Cleanup Team meetings. He also established regular communication with the Navy’s Remedial Project Manager, and provided senior technical support.

- **Construction QA Manager, Kiefer Road Landfill, Sacramento County Waste Management, Sacramento County, California.** Mr. Easter managed the installation of the Module 3 liner system (43 acres) for Kiefer Road Landfill, Sacramento County, California. The project was awarded the 2009 Project of the Year Environment, Solid Waste $10M to $50M category by the American Public Works Association. Mr. Easter managed the construction quality assurance of the Module 3 landfill liner, which covered an area of approximately 43 acres. His team successfully executed all construction-related activities including excavation of over 3.5 million yd³ of soil; preparing subgrade; installing a double composite liner over the base of the cell; installing a leak detection layer; installing a single composite liner over the side slopes; constructing a primary leachate collection and removal system (LCRS); placing an operations layer over the base area; placing screened sand as the operations layer over a portion of the side slope area; and screening sand for use as a side slope operations/drainage layer as refuse was placed. Mr. Easter conducted oversight as the team placed and compacted approximately 250,000 yd³ of clean fill material as drainage rock, sump gravel, and operations-layer soil.

**Experience Prior to Joining CB&I**

- **11/2004 - 04/2006: Senior Vice President of Development, Southfork Development Group, El Dorado Hills, California.** Managed the development aspects of property acquisition, due diligence, design, and construction of properties identified for redevelopment and new construction. Properties included: commercial office and flex warehouse; single-family subdivision; waterfront developments including marinas, club houses, and boat storage buildings; and self-storage facilities. Properties located in California, Florida and North Carolina.

- **08/2002 - 11/2004: Supervising Geologist, Alisto Engineering Group, Rancho Cordova, California.** Managed geologists and conducted groundwater quality investigations for waste water treatment facilities in Northern California (East Bay Municipal Utility District) Conducted site assessments, waste characterizations, investigations, and installation of groundwater monitoring systems at numerous landfills in California. Managed routine self-monitoring programs for solid waste management facilities in California, including preparation of quarterly monitoring reports, work plans, proposed monitoring programs, storm water pollution prevention plans, health and safety plans, transportation plans, and earthquake contingency plans. Conducted peer reviews for the State Board for Geologists and Geophysicists Enforcement Unit.

- **08/1994 - 08/2002: Senior Engineering Geologist, EMCON/OWT, San Jose/Sacramento, California.** Conducted site assessments, waste characterization, investigations, and installation of groundwater monitoring systems at numerous landfills in California and Nevada. Managed and conducted engineering geologic investigations and site studies for municipal and privately owned solid waste landfill expansions and closures in California and Nevada. Managed routine self-monitoring programs for solid waste management facilities in California, including preparation of quarterly monitoring reports, work plans, proposed monitoring programs, storm water pollution prevention plans, health and safety plans, transportation plans, and earthquake contingency plans. Managed a contaminated soil management program during redevelopment of a former steel mill site and construction of a retail store in Emeryville, California. Conducted fault investigations of portions of the active Imperial fault in California.
- 08/1985 - 08/1994: Engineering Geologist, William Cotton & Associates, Los Gatos, California. Provided peer review of the geologic and geotechnical aspects of residential land development for the Town of Los Altos Hills, California. Conducted numerous landslide investigations, developed and implemented slope repairs, and completed site restorations in California and Hawaii. Supervised engineering geologists, performed engineering geologic site inspections, evaluated geologic hazards, reviewed building permit applications, performed peer review of engineering geologic and geotechnical engineering reports, and prepared recommendations to the County Planning Department for the Santa Cruz County Earthquake Recovery Work Unit following the October 17, 1989, Loma Prieta Earthquake. Performed engineering geologic and foundation investigations for roadways, trails, foot bridges, retaining walls, and buildings in California. Conducted fault investigations of portions of the active Hayward, Imperial, and San Andreas faults in California. Evaluated flood damages, potential causes, and mitigation measures for a portion of the Napa River in St. Helena, California. Provided design and construction oversight for residential and commercial development grading projects involving cuts and fills, surface and subsurface drainage improvements, erosion and sedimentation controls, and structural foundations.
Kathleen Beresh
CB&I - Environmental Scientist / Compliance Specialist
Sacramento, CA

Professional Qualifications
Ms. Beresh serves as compliance specialist for CB&I's Regulatory Compliance Group. She has 10 years of professional experience in environmental compliance, data management, and landfill and hazardous materials compliance. She has extensive experience with landfill permitting, NSPS, Title V compliance reports and permit review, landfill GHG compliance reporting and plans, and review and quality assurance of compliance demonstration reports.

Education
BA, Environmental Studies, University of California, Santa Barbara

Registrations/Certifications
- 40-Hour Health and Safety Training
- 8-Hour Annual HAZWOPER Refresher Certification
- DOT and IATA Hazardous Materials/Dangerous Goods Shipment Training
- Certificate of Completion, AERMOD Modeling for Permits
- CARB – Portable Equipment Registration Program
- CEQA and NEPA Environmental Impact Reporting

Relevant Experience
- Engine and Flare Performance Testing, Various Locations. Managed performance testing of the new landfill gas (LFG) flare and LFG-to-energy (LFGTE) engines, as well as review and submittal of the testing protocol and testing report to local agencies pursuant to California Assembly Bill 32 (AB 32) landfill methane rule and permit requirements.

- Project Manager, Air Compliance and Reporting for MSW Landfills in California, Nevada, Utah, and Hawaii. Ms. Beresh's responsibilities included data management, agency communication, staff management, and reporting. Responsibilities included preparation and submittal of the Air Emission Inventories; quarterly and semi-annual monitoring and deviation reports; preparation and submittal of Semi Annual New Source Performance Standards (NSPS) monitoring reports; and general air permitting compliance, and GHG emissions compliance. She also served as a client representative during regulatory inspections with local agencies.

- Project Manager, Landfill Monitoring and Compliance, Various Locations. Ms. Beresh oversaw the gas extraction well sampling, surface emissions monitoring, and compliance under Subpart WWW for landfills in California and Nevada. She was responsible for data management, agency communication, staff management, and reporting.


- Compliance Plans, Various Locations. Ms. Beresh prepared standard operational procedures and plans, technical design plans, and monitoring and reporting plans, to ensure operations were in compliance with applicable rules and regulations.


- **Hazardous Waste Transportation and Disposal.** Requested quotes from vendors and provided clients with bids to complete transportation and disposal of regulated hazardous waste at various California facilities. Coordinated with selected vendors to complete awarded projects, and prepared required hazardous waste disposal documentation in compliance with state and federal regulatory requirements.

- **Regulatory Updates.** Ms. Beresh has participated in stakeholder meetings and webinars as a client representative in order to address industry concerns regarding new and modified regulations and policies. She also keeps current on regulations and policies in order to provide clients with pertinent regulatory information and recommendations, such as determining requirements to maintain compliance.
John Jowers, EIT
CB&I - Project Engineer
Sacramento, CA

Professional Qualifications
Mr. Jowers has filled project management, environmental compliance, planning and design, and reporting roles for multiple solid waste processing and disposal sites. His recent experience with CB&I includes providing construction quality assurance and design support for landfill closure and gas extraction well construction, soil and groundwater sampling for environmentally impacted sites, environmental remediation field oversight, and developing regulatory compliance plans for California composting and solid waste processing sites. His experience prior to joining CB&I included managing environmental and regulatory compliance for varied solid waste sites in both California and Arizona.

Mr. Jowers' recent landfill design and construction quality assurance experience with CB&I includes developing design plans for landfill gas well construction; on-site construction oversight; verification of compliance with specifications and plans; equipment submittal review; and summary report preparation. Responsibilities for environmental compliance of general sites includes: site investigations and plan creation for California spill prevention and storm water compliance; rational method analysis of storm water transmission and detention; hazardous and special waste disposal auditing; and groundwater sampling and remediation site activities.

Mr. Jowers' experience in landfill compliance and operation prior to joining CB&I included various field and office work, to include: GPS surveying of landfill surfaces; surface drafting, analysis, and planning; operator management and waste placement determination; landfill gas extraction and flare system operation; vadose zone and emissions monitoring; conducting permit-required site inspections; regulatory report drafting; regulatory agency correspondence and negotiation; and waste acceptance determination.

Education
BS, Environmental Engineering, Northern Arizona University, Flagstaff, AZ

Registrations / Certifications / Training
- Engineer in Training, License No. 151101, Active, California, 2013
- Title 22 California Hazardous Waste Generator, Assn of Bay Area Governments Training Ctr, 2013
- Qualified Industrial Stormwater Practitioner, Active, California, 2016
- OSHA 40-Hour HAZWOPER Training, 2016

Experience and Background
Total years of related experience: 4

Relevant Experience
- **Project Engineer, Gas Extraction System Upgrades, Foothill Sanitary Landfill, San Joaquin County, CA**, Mr. Jowers provided recent support to San Joaquin County in drafting plans for landfill gas extraction system upgrades and creating closure documents for inactive portions of Foothill Sanitary Landfill. Mr. Jowers drafted landfill gas system upgrades to include vertical wells, piping, fittings, and design changes as field conditions warrant.

- **Project Engineer, Module I Closure, Foothill Sanitary Landfill, San Joaquin County, CA**, Mr. Jowers was instrumental in drafting a closure plan for the Module I portion of the landfill, which included site investigations and soil sampling/classification, storm water drainage analysis, and cover design investigations. Mr. Jowers was the primary site representative for soil sampling and investigation and integral to the construction of the Final Closure Plan documentation.
- **Project Engineer, North County Recycling Center and Sanitary Landfill, San Joaquin County, CA.** Mr. Jowers aided design and drafting of the 2014 Area 5 expansion for the North County Sanitary Landfill. He supported senior engineering staff in the development of construction site plans and details for submittal to San Joaquin County., specifications, and construction cost estimate for an 33-acre lined cell at the Woodville Sanitary Landfill in Tulare County, CA. Design included tying into an existing lined cell and rerouting stormwater to an existing excavation on the far side of the landfill.

- **Project Engineer, Landfill Operations Evaluation, JED Landfill, Saint Cloud, FL.** Mr. Jowers participated in an in-depth evaluation on the final and intermediate cover, landfill gas extraction system, and leachate removal system at the JED Landfill. He conducted daily monitoring of landfill gas extraction wells, dewatering pumps, and transmission piping to identify system deficiencies. He further inspected the integrity of the intermediate and final landfill cover and identified areas of non-conformance with site permits. The items identified by Mr. Jowers were used as part of an action plan to improve site conditions and landfill gas extraction rates.

- **Project Engineer, Landfill Gas Extraction System Upgrade at Avenal Regional Landfill, Waste Connections, Inc., Avenal, CA.** Mr. Jowers provided design and construction quality assurance support for a gas system upgrade at the Avenal Regional Landfill. He updated and drafted gas extraction system designs and was the primary field construction quality assurance monitor during well drilling and system construction. Additional tasks included assisting with wellfield startup and tuning, and drafting the final construction quality assurance report.

- **Project Engineer, Construction Quality Assurance for Coalinga Disposal Site Final Closure, Fresno County, Coalinga, CA.** Mr. Jowers provided construction quality assurance for the closure of Coalinga Disposal Site which included a final evapotranspirative cover, storm water management system, and environmental monitoring equipment. Mr. Jowers was the primary field representative for construction quality assurance, tasked with on-site construction oversight, soil and construction material sampling, verification of compliance with specifications and plans, equipment submittal review, and documentation and reporting. Mr. Jowers was also heavily involved in ensuring construction operations were properly documented and was instrumental in the creation of the final quality assurance report. The two-year closure operation began in fall 2014 and was completed June 2016.

- **Environmental Compliance and Project Management, Orange Avenue Landfill (closed), Fairmead Landfill (operational), and Cedar Avenue Recycling and Transfer Station.** Mr. Jowers worked extensively with consulting engineers, regulatory agency representatives, and site personnel to ensure compliance with applicable laws and operating permits. He updated, or created and implemented, environmental and safety programs and conducted employee training as necessary. Mr. Jowers determined cost beneficial solutions to hazardous, biohazard, universal, and special waste disposal for Cedar Avenue, and reviewed analytical data to determine acceptability of material for disposal at Fairmead Landfill.
Sheila Richgels

CB&I - Project Sampling Coordinator
Sacramento, CA

Professional Qualifications

Sheila Richgels has been a project/sampling coordinator for over 30 years. She maintains client contact, supervises field staff, schedules sampling events, preparing monthly and yearly calendars, revises schedules based on workloads, and prepares job setups for sampling events. Ms. Richgels is providing liaison for laboratories and clients concerning analysis, sampling protocol, sampling containers, and chain-of-custody documentation. She manages projects for several landfill clients that require monthly and quarterly letter report submittals to varying agencies.

Her responsibilities include scheduling of all fieldwork, coordinating with the analytical laboratory, and reviewing all field paperwork for completeness and accuracy. In addition, she is also very familiar with groundwater reporting procedures and requirements.

Ms. Richgels is in charge of CB&I's field sampling staff in Northern and Central California. She currently coordinates the field staff for numerous groundwater-monitoring projects. Ms. Richgels has successfully performed, coordinated and managed groundwater monitoring at more than 50 landfills and other environmental projects in Northern and Central California. All of these landfills have been under the jurisdiction of the Central Valley, North Coast, Bay Area, or Central Coast Regional Water Quality Control Boards (RWQCBs).

Education

AA, General Education, Sierra Community College, Rocklin, CA

Relevant Experience

- **April 1997 – Present: Project Coordinator / Sampling Coordinator, CB&I Environmental & Infrastructure, Inc., Sacramento, CA**. Ms. Richgels schedules and coordinates field sampling for landfills and commercial jobs. She is currently managing three field technicians in two different offices. She updates calendars, maximizes chargeability for field personnel, and performs job set-up with project managers, laboratories, and field personnel. She is also responsible for groundwater and storm water reporting for landfills.

- **August 1992 – 1997: Report Coordinator, Fugro West, Field Services, Roseville, CA**. Ms. Richgels managed the field-sampling group, which consisted of three sampling technicians and one sampling group coordinator. Her responsibilities included all field activities, personnel issues, and reporting for approximately 60 sites monitored by the sampling group. She developed the streamlined monitoring report process office-wide and reviewed and authorized all timesheets and expense reports for the field sampling group.

- **October 1989 – August 1992: Sampling Coordinator, EMCON Associates, Field Services, Sacramento, CA**. Ms. Richgels was responsible for client contact, scheduling sampling events, preparation of monthly and yearly calendars, revising schedules on a weekly basis, and job setup for sampling events. She provided liaison for laboratory and clients involving advance notice of rush analyses, ensuring appropriate containers and preservatives, if any, for sampling parameters, and transmitting certified analytical results. She was also responsible for report writing of analytical summary reports and field sampling reports for approximately 120 sites. She maintained sampling and project files for all monitored sites.
Paul Weinhardt

CB&I - Field / Engineering Technician
Sacramento, CA

Professional Qualifications
Paul Weinhardt has been providing field expertise for geologists and engineers for more than 21 years. His experience includes groundwater monitoring, operations and maintenance of groundwater and soil vapor extraction systems, soil sampling, and well development. He has been performing the groundwater monitoring services for the Jamestown Mine for 10 years. Mr. Weinhardt knows the sampling and well purging characteristics of every well at the site. Mr. Weinhardt will be dedicated to collecting the samples. Mr. Weinhardt has been the primary field technician for the groundwater monitoring programs in Northern California. These programs have included groundwater monitoring wells, lysimeter systems, and leachate collection systems. Mr. Weinhardt is very familiar with mining and solid waste sites as well as the site procedures and client contacts. He follows strict quality assurance and quality control protocols contained in the project-specific Field Sampling Plans and Quality Assurance Project Plans. Paul has worked at dozens of solid waste sites and over 300 other water quality monitoring facilities.

Registrations/Certifications
- OSHA 40-Hour HAZWOPER Training
- OSHA 8-Hour HAZWOPER Refresher
- OSHA Confined Space Entry
- Certified Plumber and Pipe Fitter

Relevant Experience
- **Sampling Technician, Groundwater Monitoring Services, Former Jamestown Mine, Jamestown, California.** Mr. Weinhardt performs groundwater monitoring services at the former Jamestown Mine site.

- **Field Technician, San Joaquin County Landfill Programs, Northern California.** Mr. Weinhardt has been the primary field technician for the ground water monitoring programs at the four San Joaquin landfills, which include Corral Hollow, Foothill, Harney, and North County. Contracts for all four landfill sites have included ground water monitoring wells, lysimeter systems, and leachate collection systems. Mr. Weinhardt is very familiar with these four landfill sites as well as the site procedures and client contacts. He follows strict quality assurance and quality control protocols contained in the project-specific Field Sampling Plans and Quality Assurance Project Plans.

- **Field Technician, Commercial Client, Retail Petroleum and Landfill Programs, Northern California.** Mr. Weinhardt has a broad spectrum of sampling experience at retail petroleum and landfill sites. His duties have included oversight for the removal of USTs, collection of soil samples from excavations, and soil sampling using direct-push sampling equipment. Mr. Weinhardt is a highly efficient groundwater sampling technician. Mr. Weinhardt routinely monitors and samples wells ranging in depth from 10 to over 200 feet, and provides the maintenance required to maintain the integrity of the monitoring well networks. As required by individual projects, he utilizes low-flow purge techniques, hand bailing, or high-volume submersible pumps to develop, purge, and sample groundwater wells.

- **Field Technician, Remedial Investigation/Feasibility Study (RI/FS), GenCorp Aerojet Facility, Rancho Cordova, California.** As part of a remedial investigation/feasibility study (RI/FS), Mr. Weinhardt sampled monitoring wells using a non-dedicated RedFlo2 pump. The work also included monthly and quarterly groundwater level gauging events associated with the RI/FS. Mr. Weinhardt also assisted in several plant-wide groundwater level gauging events.

- **Field Technician, Environmental Security Technology Certification Program In Situ Perchlorate Treatment Demonstration, GenCorp Aerojet Facility, Rancho Cordova, California.** As part of the Department of Defense Environmental Security Technology Certification Program in situ perchlorate treatment demonstration, Mr. Weinhardt sampled monitoring wells and pumps, and serviced the injection system. The work included collection of water samples, preparation of custody and analytical request documents, labeling and packaging of samples, and transport of samples to the analytical laboratory, as well as field measurement of selected water quality parameters.
- **Field Technician, Caltrans On-Call Storm Water Sampling, Northern California.** Mr. Weinhardt sampled storm water at inlets and outlets designated by Caltrans following storm events. The work included collection of surface water samples, preparation of custody and analytical request documents, labeling and packaging of samples, and transport of samples to the analytical laboratory, as well as field measurement of selected water quality parameters.

- **Field Technician, Various Projects, Northern California.** Mr. Weinhardt has installed groundwater and soil vapor extraction systems for treatment of contamination from leaking UST systems, which involved the operation of heavy equipment used in the installation of piping, installation of electrical systems, and start-up of packaged treatment units. Other responsibilities have included repairs to vault boxes and concrete apron removal and replacement.
Pedro E. Ruiz

CB&I - Senior Environmental Field Technician
Sacramento, CA

Professional Qualifications
Mr. Ruiz is a Field Technician with over 24 years of experience in the environmental field. His primary responsibilities include field operation and maintenance (O&M) of groundwater treatment systems. He has extensive experience implementing a wide array of innovative remedial technologies including system design, installation, construction, removal, upgrades, and modifications of remedial systems. He has performed and supervised tank removals, soil sampling, and remedial excavations, aeration, and disposal programs, with experience on operating heavy equipment. He is an experienced field technician with skills operating environmental sampling and monitoring instruments for air, soil, and water. Mr. Ruiz has implemented field sampling quality assurance and chain-of-custody protocols, and has been responsible for coordinating and training field technicians, providing quality assurance/quality control and health and safety procedures, and documenting and record keeping. He assists construction and site supervision activities, and coordinates field work with clients and project managers. Mr. Ruiz maintains good rapport with the client and project team. He has provided support to major retail petroleum clients, and has worked at several sites, including service stations, bulk plants, international airports, fueling terminals, petroleum refineries, chemical plants, Superfund sites, landfill sites, government facilities, and commercial sites.

Registrations/Certifications/Training
- 40-Hour OSHA HAZWOPER Training
- 8-Hour Annual HAZWOPER Refresher Training, Current
- Forklift Operator, California
- USACE Construction Quality Manager, Nationwide, 2009
- Cal Trains RWP Safety Training, 2005
- Shipping Hazardous Materials UPS, DOT 120 Training, 2005
- Air Shipment of Dangerous Goods IATA, DOT 105 Training, 2005
- Low Voltage Electrical Safety and Procedures Training, 2004
- First Aid Training, 2012
- Cardiopulmonary Resuscitation CPR, 2012
- H&S Program Management for Managers and Supervisors Training, 2014

Relevant Experience
As a Senior Environmental Field Technician Mr. Ruiz has performed environmental compliance sampling and monitoring for projects throughout California including:
- Former GTE Government Systems Corp. Mountain View, CA
- Walmart, Target, Kohl’s, Auto Zone, OSH.
- Vishay Siliconix, Santa Clara, CA
- USACE Omaha District Rapid Response, Pressure Treat, Selma, CA
- Borden - Hexion Chemical, Fremont, CA
- Pacific States Steel Corp., CA
- Tosco Oil, CA
- SBC- AT&T, CA
- CalTrans, CA
- Jasco Chemical Corp. Mountain View, CA
- USACE- Army, CA
- ABF Freight, San Jose, CA
- Raytheon, Mountain View, CA
- Coke, Salinas, CA
- Santa Clara Valley District, CA
- Valley Automated Fuels, San Jose, CA
- UPS facilities, CA
- **Field O&M, Shell Oil Remediation and Monitoring Sites, Various Sites in California and Nevada** - Mr. Ruiz's primary responsibilities include field O&M of groundwater treatment systems for underground storage tank (UST)-related consulting services contract for Shell Oil Products US (Shell). In Northern California, Shaw has supported the UST environmental program management at more than 150 retail sites.

- **Caltrans Central Contract, Various Locations, California** - Mr. Ruiz has performed field work under two Caltrans contracts, including monitor well groundwater sampling. Proper monitoring well sampling procedures are followed using a submersible pump or disposable, polyethylene bailers. Measurements of temperature, pH, and specific conductance of the water removed from the wells are recorded on groundwater sample collection logs. He has collected dissolved oxygen (DO) and oxidation-reduction potential (ORP) measurements in a flow-through device, prior to and after sampling of the wells. Samples are delivered to the laboratory for analyses under chain of custody procedures.

- **UST Environmental Corrective Action, ConocoPhillips, Multiple Sites, Northern California** - Mr. Ruiz's primary responsibilities include field O&M of groundwater treatment systems for UST-related consulting services contract for ConocoPhillips (formerly Tosco Corporation) in Northern California. Shaw has supported ConocoPhillips with UST environmental program management at more than 100 retail sites, including former Unocal 76, British Petroleum (BP), and Circle K facilities.

- **Former GTE Government System Corp - Mountain View, Ca** - Mr. Ruiz has performed GW Sampling Activities, indoor-outdoor mitigation Air Sampling, O&M, Carbon change activities, operation of GW Treatment System with 25 GW extraction wells, MPDS Sampling activities. In Situ Bio-Remediation activities. Coordinate field personal and contractors, client communication and interaction with public and EPA.

- **AT&T North California Facilities** - Mr. Ruiz has performed ground water sampling activities on several facilities, responsible of performing Hazardous Waste Compliance inspections on several facilities throughout California responsible for managing personal, contractors and client communication. He has performed drinking water sampling activities, MPDS manhole sampling activities, ER response activities.
Kirk A. Johnston

CB&I - Field O&M Technician
Sacramento, CA

Professional Qualifications

Mr. Johnston has over 30 years of experience in hazardous waste mitigation. As a Foreman and Site Superintendent he has experience in performing a wide range of environmental projects involving excavation, building decontamination and demolition, tank removals, treatment cell construction, transportation and disposal of hazardous waste, and construction of soil and groundwater remediation systems. Mr. Johnston also has specialized expertise in the operation and maintenance of soil vapor, liquid extraction and liquid reinjection systems. He also has experience in marine spills, health and safety supervision, sampling and analysis and preventive maintenance. Mr. Johnston also operates a wide range of equipment which includes commercial trucking, forklifts, loaders, trackhoes and compactors. He has performed large scale soil removal, backfilling, compacting and regrading activities. He has been involved with the electrical field working with single and three phase power hook ups for remediation systems. This activity has also introduced him to the programmable logic control systems (PLC) used in the industry for large scale system controls. His latest endeavor is on a Landfill Gas to Energy project which utilizes landfill gas to operate 3 engines which produce 1 megawatt each for subsidizing import power requirements for a large commercial client.

Education

Professional Military Education (PME), Machinery Technician, U.S. Coast Guard Training Center Class "A", Yorktown, Virginia

Registrations / Certifications / Training

OSHA 40-Hour HAZWOPER Training and Annual Refreshers (current)
Commercial Vehicle Over 10,000 lbs with Trailer Operator, A1805477, Active, California

Relevant Experience

- **Onsite Operator, Google O&M Project, Google, Inc, Mountain View, CA**, Site Supt and Operator for a Landfill Gas to Energy Project which involves Operations and Maintenance of Jenbacher J320 Engines and a Gas Conditioning System for the Landfill Gas. These Systems are controlled using a PLC (Programmable Logic Control) and SCADA (Supervisory Control and Data Acuisition) Systems with remote monitoring functions.

- **Site Superintendent / Lead Operator, ALZA Landfill Gas to Energy O&M, 119538, ALZA Corp, division of Johnson & Johnson, Inc, Mountain View, CA**, Operation and Maintenance contract with a pharmaceutical company utilizing landfill gas (purchased from the city of Mt. View) to operate 3 engines producing 1 Megawatt per engine. The energy produced is considered green energy which qualifies the client for rebates and credits with the public utilities. This project requires operations and maintenance of a gas conditioning system and 3 Jenbacher J320 engines. The gas conditioning system dries and pumps the landfill gas to the 3 engines which are up to a mile away. The engines (Jenbacher J320) are containerized and produce upto 1 Megawatt each and also utilize heat recovery thus making this a cogeneration system. All of the systems are designed to minimize or remove the need for import power from the utilities at their facilities located in Mountain View California. Our role is to provide onsite support to keep the gas skid and engines operational and mechanically maintained for maximum power outputs. On-Call 24 hrs a day with 2 hour response time for system shutdowns.

- **Foreman/Operator/Alt Superintendent, Crows Landing Flight Facility (CTO-86), Navy RAC II contract, Crows Landing, CA**, Direct and assist with soil removal from suspected contaminated areas. Potential unexploded ordnance buried in excavation areas. Backfilled excavations after sampling.
- **Field Maintenance Technician, Hunters Point Shipyard (CTO-82 and EMAC CTO-01), Navy RAC II Contract, San Francisco, CA.** Operate and maintain landfill barrier pumping system consisting of 9 extraction wells which discharge to the city of San Francisco's sanitary sewer.

- **Site Electrician, Treasure Island Naval Training Center (CTO-102), Navy RAC II Contract, San Francisco, CA.** Installation of a Bio remediation system to treat a 5 acre contaminated groundwater plume. Contaminants of concern were TCE and PCE.

- **Site Electrician, Alameda Naval Air Station (CTO-60), Navy RAC II Contract, Alameda, CA.** Installation of 3 six phase soil heating units. Chlorinated solvents were the contamination of concern. This project combined cutting edge technologies which used electrodes to heat the subsurface soils and groundwater to above boiling temperatures and then capture the contamination using soil vapor extraction.

- **Foreman / All Superintendent, Hunters Point Shipyard (CTO-33), 820425, Navy RAC II Contract, San Francisco, CA.** This remedial action required the installation of 7 Soil Vapor Extraction Systems (SVE). Tasks included the installation of all piping to tie in 63 vapor extraction wells. Directed crew and subcontractors to complete tasks.

- **Foreman/All Superintendent, Hunters Point Shipyard (CTO's 82, 81, 25, 30 & 33), Navy RAC Contract, San Francisco, CA.** Operation and Maintenance of groundwater extraction system in Parcel E. Remedial action for Parcel B including excavations, backfilling, transportation and disposal of solid waste, steam line removal, asbestos removal, well closures, industrial waste line removal, building ducting removal and disposal, consolidated waste found in buildings throughout Hunters Point. Secured all buildings in parcel B. Plow and seed 14 acre landfill cap and install a watering system to mature vegetation. Complete a treatability study to develop details and information necessary to determine the applicability of an In Situ chemical oxidation system in various locations. Installation of 7 soil vapor extraction systems (SVE), including the installation of all piping and electrical components associated with the tie in of 63 soil vapor extraction wells. Provide operation and maintenance (O&M) of above systems.

- **Senior Operator, Chemical Sales, USEPA, Denver, CO.** In charge of start up and 90 day operation and maintenance (O&M) of a 3,000 CFM soil vapor extraction and air sparging system to treat chlorinated solvent contaminated soils. Treatment system included 3-1,000 CFM vacuum pumps, 3-600 CFM air sparge compressors, 2-4,000 lb resin absorbers (filled with zeolite) and a 500 CFM thermal oxidizer with caustic scrubber for regenerating the resin beds. All of the above mention equipment was computer controlled via a programmable logic control system (PLC) through a computer link to the control room. The wellfield consisted of 23-4” vapor extraction wells and 80-2” air sparge wells.

- **Foreman/Assistant Superintendent, CET Environmental, Inc., Field Operations, Tustin, CA.** General construction Foreman on commercial and government projects which involved installation and operation and maintenance (O&M) on large and small remediation systems. These systems included Soil Vapor Extraction (SVE), groundwater pump and treat and soil thermal desorption. Mr. Johnston also filled in as an assistant superintendent on some projects.

- **Site Foreman O&M, Golden Eagle Refinery/Western Fuel Oil/Burlington Northern/Metropolitan Transit Authority/ Paramount Petroleum/J&M Oil/EPA-Tor Creek/Texaco/Unocal Various Locations in Southern California.** In charge of daily and weekly operations and maintenance (O&M) of various projects which utilized Soil Vapor Extraction (SVE), groundwater extraction and treatment, Oil and Water separators and Vapor incineration of both chlorinated and nonchlorinated volatile organic compounds (VOC's).

- **Operation Foreman, Ocean Park Lead, USEPA Region 9, Santa Monica, CA.** Operations Foreman for the removal and disposal of lead based paint at an area daycare center. This project required internal and external sampling to ensure effective removal.

- **Operations Foreman, Casmalia Landfill, USEPA Region 9, Santa Maria, CA.** Proficiency upgrades and safety upgrades for leachate/groundwater treatment system for an inactive Class I hazardous waste treatment, storage and disposal facility undergoing closure. Wastes were deposited from 1972 through 1989 without a liner or leachate collection system, thus contaminating the groundwater. Volatile Organic Compounds (VOC’s) were found at levels as high as 140,000,000 parts per billion (ppb).
- **Operations Foreman, Pemaco, Inc., USEPA Region 9, Maywood, CA.** Demolition of structures, removal of drums, removal of 30 underground storage tanks (UST's) and the design, installation and operation of a Soil Vapor Extraction System (SVE).

- **Operations Foreman, Toro Creek, USEPA Region 9, Montecito, CA.** Installation of a passive oil/water separator and recovery tank to recover crude oil and water from an abandoned oil well along an adjacent creek bed. After the installation of the recovery system there was an aggressive clean up along a 1 mile stretch of the creek bed downstream.

- **Operations Foreman, Western Fuel Oil, Land Bank, San Pedro, CA.** This project involved soil excavations and the design and installation of a large scale bioremediation system. The systems installed and operated were divided into two distinct systems. Both systems utilized 100 air sparge wells and 130 vapor extraction wells. The chlorinated wells were sent into a heated catalyst system with acid scrubber and the nonchlorinated wells were treated using incinerators. This remedial action was required to lower contamination in the subsurface for future land development into an industrial park.

- **Operations Foreman, Golden Eagle, Lamar, Carson, CA.** Installation, start up and operation of a large scale Soil Vapor Extraction (SVE) and Air Sparge (AS) system. This site involved installation of over 300 wells on a 74 acre site which was fast tracked for quick property turn over for industrial development. Over 20,000 feet of trenching and 80,000 feet of piping were installed in 18 days. Activities also included operation and maintenance of a methane barrier at the landfill area.

- **Operation Foreman/Assistant Superintendent, Bingham Creek, Arco (Anaconda Mining), Salt Lake City, UT.** Removal and restoration of 73 residential yards contaminated with lead and arsenic. Over 50,000 cubic yards were removed and transported to an installed, impound facility which was built using a geocomposite clay liner (GLC) and 40-mil high-density polyethylene (HDPE) cover with a soil encasement.

- **Operations Foreman/Assistant Superintendent, Davis Global, US Air Force, McClellan AFB, Davis, CA.** Design and install equipment and facility upgrades to the existing groundwater treatment plant and soil vapor extraction systems at the Global Communications site in Davis, Ca.

- **Foreman/Assistant Superintendent, Central Eureka Mine, USEPA Region 9, Sutter Creek, CA.** Removal and restoration of lead and arsenic contaminated soils from the yards of 41 residential homes. Removed bushes, trees, plants and debris from an adjacent creek area. Contaminated soils were impounded at a local area for future disposal. Restoration activities utilized local sub contractors and labor.

- **Field Technician, Montrose, USEPA Region 9, Torrance, CA.** DDT impacted soils removal from residential backyards. Impacted soils were removed from site via roll off bins. Extreme care was taken to reduce community contamination.

- **Operations Foreman, Unocal Hanford, Unocal, Hanford, CA.** Installation of groundwater monitoring wells and excavation activities at a liquid fertilizer storage and distribution facility. The contaminants of concern included nitrates, heavy metals and radionuclides.

- **Operations Foreman/ Superintendent, Foothill Thrift, Foothill Thrift and Loan, Vernon, CA.** Excavation and removal of seven underground storage tanks (UST's). 825 tons of excavated diesel contaminated soils were treated using low temperature thermal desorption and used for final backfill of site.

- **Operations Foreman/ Superintendent, Tesoro Woodland Hills, Tesoro, Woodland Hills, CA.** Excavation and treatment of 4,300 tons of gasoline and waste oil contaminated soils using low temperature thermal desorption. Processed soils were used as final backfill to return site for commercial use.

- **Operation Foreman, Webb Automotive, Webb Automotive, Los Alimitos, CA.** Construction and installation of a bioventing system for treating gasoline impacted soils and a bioremediation cell for treating waste oil impacted soils.
- **Operations Foreman, USCO Bellem, USCO, Santa Anna, CA.** Operation and Maintenance (O&M) of a groundwater treatment system to treat a solvent release. Cleanup met with regional water quality control board (RWQCB) requirements for closure.

- **Operations Foreman/Superintendent, Chevron Refinery, Chevron, El Segundo, CA.** Install, operate and maintain 3 Soil Vapor Extraction Systems (SVE) attached to natural gas fired incinerators with a total flow rate of 5,000 CFM from 130 vapor recovery wells. Install, operate and maintain 63 dual pump wells for free product recovery. Install, operate and maintain a groundwater filtration system for reinjecting groundwater into 27 injection wells. Provide client relations and reports daily. Set up and maintain operator training records and general supervision of up to 14 operators. Set up and maintain spare parts inventory for all systems listed above.

- **Foreman, CPC Marine terminal, Chinese Petroleum Corp., Kaohsiung, Taiwan.** Installation and start up of oil recovery system. System required due to marine terminal pipeline leak into residential area.

- **Pollution Control Technician, Chevron Pipeline / Boise, Chevron U.S.A., Boise, ID.** Installation, operation and maintenance of 10 dual phase liquid extraction wells required due to an underground pipeline leak.

- **Pollution Specialist/Assistant Mechanic, Environmental Emergency Services, Riedel Environmental Services, Portland, OR and Richmond, CA.** Provided 24 hr On Call for clean up of oil and chemical spills, placement of containment boom around ships while fueling, assistant mechanic for marine related equipment including jet boats, outboard motors and various sized water discharge pumps.
Guy Worthington - President / CEO (2000 - Present)
Blue Sky Environmental, Albany, CA

Started an independent business providing industry with quality source emissions testing services to local Northern California companies. Over 200 compliance source tests performed annually for over 100 clients. California Air Resources Board certified Approved Contractor.

SKILLS
Expertise in project design, management and execution, including the training, planning and supervision of technicians and tasks. Excellent communication skills and leadership ability. Great attention to detail and high quality assurance standards.

PRIOR EXPERIENCE
Senior Project Manager: 1992 - 1999
Best Environmental, San Leandro, CA
Responsible for professional execution of source testing projects that require the quantification of airborne pollutants (e.g., NOx, CO, SO2, Hydrocarbons, Particulates, toxic compounds and elements) from industrial sources (e.g., refineries, engines, boilers, incinerators, turbines, chemical processes etc). Duties include:

- Marketing and client service – excellent rapport and client loyalty record
- Technician training in source test procedures. Initiated training program
- Ensuring complete preparation and performance of source tests
- Writing cost quotations and designing test methodologies for source testing services
- Writing source test plans to submit to the government agencies for test approval
- Compiling, presenting and analyzing data in a final report
- Equipment and procedural design, construction, trouble-shooting and repair
- Equipment calibration & training
- Writing basic HP calculator programs, creating excel spreadsheets and producing word documents
- Editing / Reviewing project proposals and final reports

Galson Corporation, Berkeley, CA
Responsible for managing the source test group that consisted of project managers and technicians. This included managing personnel, schedules and projects, marketing, leadership, client service, writing proposals, writing source test plans, planning and executing source tests, writing final test reports

Technician/Project Manager/Manager: 1986 – 1991
Thermo Analytical Norcal, Richmond, CA
Began as a technician and soon became the Senior Project Manager, and finally the Group Manager responsible for all the source testing projects, the project managers and technicians including managing personnel, schedules and projects, marketing, leadership, training, conducted performance reviews and made compensation recommendations, client services, writing proposals, writing source test plans, planning and executing source tests, writing final test reports

Teaching Assistant: 1983 - 1986
Simon Fraser University, Burnaby, B.C.
Conducted and evaluated undergraduate laboratory classes in Hydrology and Physical Geography.

EDUCATION
Simon Fraser University – Burnaby, B.C., Canada, Graduate study, Geography
London University – Queen Mary College, London, U.K., B.A., Geography
Section 4.0 –
Project Understanding
4.0 - Project Understanding & Approach

CB&I provides this detailed description of our understanding of the requested scope of services and our approach for managing the project, accomplishing project milestones and deliverables, financial monitoring, QA/QC, project coordination, and ability to provide emergency response to equipment malfunctions within 8 hours of a call-out service request.

4.1 Project Understanding

CB&I understands that the City requires a qualified consultant to provide the necessary services to perform O&M services for the leachate management system and GCCS at the Landfill. Further, these O&M services must comply with all regulatory requirements and requirements under the following permits:

*Leachate, Groundwater, and Surface Water:*
  - Waste Discharge Requirements Order 97-073 (WDR)
  - Mandatory Wastewater Discharge Permit No. WB 120930 (MWDP)

*GCCS:*
  - BAAQMD Permit No. AP25623

*Other Landfill Permits:*
  - San Francisco Bay Conservation and Development Commission (BCDC).
  - San Mateo County Environmental Health, Solid Waste Program

4.2 Project Approach

CB&I has provided below a detailed description of our approach for each of the five (5) Task Orders as outlined in RFP:

- Task 1 – Routine Monitoring, Operating, and Maintenance Services
- Task 2 – Sampling and Analysis
- Task 3 – Monitoring and Analysis Reports
- Task 4 – On-Call Maintenance and Repair Work
- Task 5 – Project Management

**Task 1 – Routine Monitoring, Operating, and Maintenance Services**

CB&I will be responsible for operating and conducting routine monitoring of the leachate system and GCCS as detailed below under Subtasks 1a and 1b.
Subtask 1a - Leachate

Under Subtask 1a, CB&I will perform the following tasks on a monthly basis:

- Monitor and record:
  - the flow at all leachate flow meters,
  - pump run-times,
  - piezometer levels,
  - sump levels, and
  - other pertinent parameters and activities.

- Monitor and adjust the leachate system in accordance with the flow requirements set in Permit MWDP No. WB 120930 based on field measurements;

- Observe and record maintenance and repair needs;

- Perform routine maintenance on the leachate system to ensure that it is operating efficiently;

- Observe and record major (non-routine) repair needs;

- Perform other necessary tasks as required to ensure regulatory compliance; and

- Provide all the monitoring and operating data for the monthly reports as described under Task 3.

Subtask 1b - GCCS

Under Subtask 1b, CB&I and FORTISTAR will perform the following tasks:

- A minimum of monthly, monitor and adjust the GCCS components to ensure that the system is operated efficiently and in accordance with all permit requirements. This will meet permit and BAAQMD requirements.

- A minimum of monthly, adjust GCCS valves to ensure adequate gas flow, to reduce the migration of surface gases, and to minimize odors as needed. This will meet permit and BAAQMD requirements;

- A minimum of monthly, monitor gas wells, condensate traps, laterals headers, blowers, flare and other GCCS components. This will meet permit and BAAQMD requirements;

- Typically on a weekly basis, CB&I and Fortistar will monitor and record the flare operating parameters (temperature and pressure), gas quality (% methane, carbon dioxide, oxygen, balance), gas flow and temperature, blower operating parameters (temperature, pressure, valve positions, run time hours), condensate system conditions and will confirm that the flare operating parameters are being recorded on the continuous data recorder (Yokogawa). This will meet permit and BAAQMD requirements;

- Weekly conduct a general inspection of the flare station operations including:
  - Alarm history;
  - Current operating conditions;
  - Condensate management system functioning properly;
  - Air compressor system functioning properly;
  - Data recorder functioning properly;
o Sump pumps functioning properly;
o Check well field vacuum;
o Verify the City’s SCADA system is receiving data;
o Check flow and vacuum historical data since previous week to determine if any variations or shut downs occurred; and
o Other general operational parameters.

- A minimum of monthly, download and review the data from the continuous data recorded (Yokogawa) to ensure flare data is being recorded properly and operations are within the requirements of the permit and BAAQMD Rules and Regulations;
- Measure and record on a monthly basis the static pressures, temperature and percent content (methane, carbon dioxide, oxygen; balance) of the landfill gas at each of the wellheads as well as the liquid levels in the wellheads;
- Calibrate on a monthly basis the analytical equipment;
- Record / document all GCCS activities;
- Inspect and maintain the flare in accordance with the manufacturer’s requirements;
- Perform routine maintenance on the GCCS to ensure that it is operating efficiently;
- Observe and record major (non-routine) repair needs;
- Ensure that the analytical equipment used is calibrated and certified;
- Any other necessary tasks as required / as needed to ensure regulatory compliance; and
- Provide all the monitoring and operating data for the monthly reports as described under Task 3.

In addition to the above monitoring activities, CB&I will perform adjustments to the leachate system and GCCS in case of system failure and needed repair work. CB&I will have the availability to arrive at the site and respond to equipment malfunctions and emergencies within 8 hours of the call-out service request.

**Task 2 – Sampling and Analysis**

CB&I will be responsible for the development of sampling protocols and complying with all sampling and analytical requirements required by the applicable Landfill permits. Analysis of constituents will be conducted by a certified laboratory — **BC Laboratories**.

**Subtask 2a - Leachate**

Under Subtask 2a, CB&I will be responsible for complying with the water quality monitoring and reporting requirements required by WDR Order 97-073. These requirements include, but are not limited to:

**WDR Order 97-073:**

- Quarterly sampling and analysis of the leachate;
- Semi-annual sampling and analysis of the groundwater;
- Semi-annual sampling and analysis of the surface water;
- Semi-annual site inspections;
- Preparation and submittal of all monitoring reports to the applicable regulatory agencies on behalf of the City (as described under Task 3).

Further, CB&I will be responsible for complying with the leachate water quality monitoring and reporting requirements required by MWDP No. WB 120930. These requirements include, but are not limited to:

**MWDP No. WB 120930:**
- Quarterly sampling and analysis for specific constituents required by MWDP No. WB 120930; and
- Monthly flow measurements and reporting.

**Subtask 2b - GCCS**
Under Subtask 2b, CB&I will perform all GCCS sampling and analysis requirements pursuant to the BAAQMD. Specifically, CB&I will conduct surface emissions monitoring on a quarterly basis measuring the methane gas concentrations in parts per million off the surface of the Landfill within numbered grids. Exceedances will be flagged in the field and marked on the grid map. Then, prior to leaving the site, CB&I will notify the City of any exceedances such that the City may visit to investigate and schedule repairs. Note that cover repairs and re-testing are not included in CB&I’s cost proposal.

In addition, CB&I will conduct source testing of the flare as required by the permit. The last source test was conducted on January 7, 2014. The source test is due every four (4) year in accordance with the BAAQMD Permit. CB&I recommends that the next source test be conducted December of 2017 which would allow time to make any required repairs and conduct a re-test prior to the January 7, 2018 deadline. Note that such repairs re-tests are not included in CB&I’s cost proposal. CB&I’s cost proposal includes two (2) flare source tests since the contract is for five (5) years.

**Task 3 – Monitoring Reports**
Under Task 3 services, CB&I will prepare all monthly, semiannual and annual monitoring reports as required by the City and in accordance with the regulatory requirements of the Landfill permits. CB&I will submit these reports to the applicable permit agencies on behalf of the City. All reports will include a description of the site and landfill systems, evaluation criteria, explanation of any calculations, certified analytical results, monitoring and inspection summaries, field and laboratory records, maps and figures, and any recommendations. All reports will be submitted in draft form to the City for review and comment, and subsequently finalized with any City comments prior to their submittal to the permitting agencies.

**Subtask 3a - Leachate, Groundwater, and Surface Water**
Under Subtask 3a, CB&I will be responsible for the preparation and submittal of all monitoring and analysis reports complying with the water quality reporting requirements contained in WDR Order 97-073 and MWDP No. WB 120930. Specifically, CB&I will provide the following:

**WDR Order 97-073:**
- Preparation and submittal of semi-annual reports due in April and October of each year
MWDP No. WB 120930:
- Preparation and submittal of monthly leachate reports.

Subtask 3b - GCCS
Under Subtask 3b, CB&I will be responsible for the preparation and submittal of all monitoring and analysis reports complying with the GCCS reporting requirements of BAAQMD. Specifically, CB&I will be responsible for performing the following:

- Preparation and submittal of monthly and quarterly reports that include a summary of the GCCS monitoring data and maintenance activities; and
- Maintaining accurate records and access to the records / monitoring data for a period of 5 years. Data storage should be duplicated by the City and conducted at the City offices.

Task 4 – On-Call Maintenance and Repair Work
Under Task 4, CB&I will provide all the necessary labor, equipment and materials to perform maintenance and repair work on the leachate system and GCCS on an on-call and as-needed basis. The work may be based on maintenance and repairs needs identified during routine inspections, system failures, and any other work requested by City Staff. CB&I will provide an estimated cost of the on-call work and will seek authorization from the City prior to proceeding.
Task 5 – Project Management

Under Task 5, CB&I will provide project management support, as required, and will include the following:

- Coordinate and conduct meetings with City staff and permit agencies;
- Conduct site visits with City staff;
- Assist with and review permit expiration dates, application renewal processes, monitoring and maintenance regulations; and
- Develop recommendations and cost estimates for improving the performance of the landfill environmental control systems.

4.3 CB&I’s Project Management and Coordination

CB&I understands the importance of client coordination and project controls for meeting the needs of our clients in a cost-effective and efficient manner. This section summarizes our project management and coordination approach.

Cost and Schedule Control

CB&I will control the project costs using a number of tools and resources to support cost control measures. Our project management system was developed specifically for tracking engineering design and construction contracts. The system brings us: real-time cost tracking and forecasting; integrated planning, estimating, and scheduling; customized cost reporting and invoicing; and modification planning and schedule analysis. The Project Manager (Dan Easter) evaluates the project’s physical completion against the costs-to-date and schedule. The system also includes a fully integrated suite of options for monitoring vendor and subcontractor budgets as well as outstanding purchase orders and committed costs.

The first control begins at the definition of the project and its individual tasks in the Work Order. No project activities are performed and no charges are posted to a project account until an executed Work Order is in place, and each Work Order must specify an exact scope of services, a schedule, and budget. No exceedances of budget or work scope are allowed without written client approval (in urgent situations an e-mail approval is sufficient). Thus costs are controlled by careful communication and documentation of project expectations between the client and CB&I, and by strict adherence to agreed-upon work scopes and budgets (as well as schedules). Second, the Project Manager will staff the project tasks with the appropriate level personnel, taking into consideration task difficulty, labor costs and resource availability. The Project Manager develops a cost and time budget by individual task and employee, which is provided to the employees performing project work.

CB&I will provide a customized summary report of all ongoing and completed project tasks using our management tracking system. The report will detail project status, authorized funds, expenditures to date, unbilled balance, contract amount remaining, an estimate of completion, and an invoicing schedule. This level of direct communication between the City and CB&I’s project team encourages proactive decision-making and results in improved performance, thereby saving time and money. Clear and concise progress and cost reports will keep the City informed and up-to-date on project activities. Formal progress meetings can be scheduled at the request of the City on a regular basis or as needed.
Project Tracking, Updates, and Billing

CB&I will be tracking the project similarly to how we have tracked the groundwater, leachate, and stormwater project for the last 20 years or more. CB&I maintains impeccable field notes which are utilized in preparation of semi-annual reports, monthly reports, and quarterly reports. Our reports will highlight compliance with permit conditions, upcoming deadlines, and any issues warranting maintenance or follow-up actions. Below is an example of a cover sheet for CB&I's project management report.

CB&I has a "Web Portal" for use by project personnel and the City's personnel. Through the portal, the City may download all reports, field logs, maps, drawings, operational data, laboratory data, and other pertinent project information from any authorized computer. CB&I can program the portal to alert users as to when new information has been posted.

Billing (invoicing) will be done on a monthly basis. For this project, CB&I will propose monthly lump sum fees for routine 1) groundwater, leachate, surface water related work and 2) landfill gas system related work. Should any non-routine maintenance be required, CB&I will prepare a cost estimate of the work and will request approval for this work prior to making repairs or maintenance. Such non-routine work will be tracked on a time and materials basis and invoiced as a separate line item on the monthly invoice. Below is an example of a CB&I invoice.
Example 1. Project Management Report

July 1, 2016

CLIENT NAME

CLIENT ADDRESS

Subject: Project No. XXXX, June 2016 Project Management Report
        XXXX – Leachate and GCCS O&M Services

Dear CLIENT NAME:

The following project management report summarizes the activities performed by CB&I during
June 2016 for the subject project:

Task Order 1.0 – Leachate Services
        Subtask 1.1 – O&M Services
        CB&I has provided leachate O&M services for the ABC Landfill for May and June
        2016.

Task Order 2.0 – GCCS Services
        Subtask 2.2 – Sampling & Testing
        CB&I has performed the 2016 second quarter sampling and testing activities for the
        ABC Landfill.

Percent Complete Summary

Estimated percent completion of the task orders discussed above are provided in the attached
tables. If you should have any questions concerning this project management report, please
contact me at (XXX) XXX-XXXX.

Sincerely,

CB&I

PROJECT MANAGER NAME
Example 2. Invoice

**INVOICE**

Sample Industries, Inc.  
123 ABC Street  
Anywhere, USA 98765

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<tbody>
<tr>
<td>Project Name:</td>
<td>New Sample Project</td>
</tr>
</tbody>
</table>

**Account Notes**

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**Cost-Id** | **Cost-Id Description** | **Date** | **Units** | **Rate** | **Amount**
---|---|---|---|---|
01 | PERMIT | | | | |
010103 | | | | | |
01010300 Reports
1 | | | | | |
01010300 Reports
2 | | | | | |
01010300 Reports
3 | | | | | |
01010300 Reports
4 | | | | | |
01010300 Reports
5 | | | | | |
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</table>
12/10/2016 | 1.00 |
12/10/2016 | 1.00 |

**TOTAL FOR: Reports**


**TOTAL FOR: DUE PERMIT**


**TOTAL FOR: Revenue**


**SE finalist fees**


**TOTAL FOR: Revenue**


| Sub Total | | | | | |
|---|---|---|---|---|
| | 185.40 |

**Total Taxable Amount:**


**Total Tax:**


**Total For:*** This Invoice ***


---

City of Menlo Park RFP for Operation & Maintenance of the Bedwell Bayfront Park Landfill  
Leachate & Gas Collection & Control System
<table>
<thead>
<tr>
<th>Item</th>
<th>Frequency</th>
<th>Activity Date</th>
<th>Deliverable</th>
<th>Deliverable Date</th>
<th>Agency / Permit No.</th>
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<tbody>
<tr>
<td><strong>GAS COLLECTION AND CONTROL SYSTEM (GCCS):</strong></td>
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<tr>
<td>GCCS Components (wells, cond. traps, header, etc.):</td>
<td>Weekly</td>
<td>Apr 1, 2017 to May 30, 2022</td>
<td>Weekly field logs / field reports included in Monthly and Quarterly Reports</td>
<td>Monthly Reports: 4/1/2017 to 5/30/2022</td>
<td></td>
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<tr>
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<td></td>
<td>Quarterly Reports: Mar.31 (2018 thru 2022)</td>
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<td>Jun.30 (2017 thru 2021)</td>
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<td>Sep.30 (2017 thru 2021)</td>
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<td>Dec.31 (2017 thru 2021)</td>
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<tr>
<td><strong>LFG Extraction Wells (72 wells):</strong></td>
<td>Monthly</td>
<td>Apr 1, 2017 to May 30, 2022</td>
<td>Monthly field logs / field reports included in Monthly and Quarterly Reports</td>
<td>Monthly Reports: 4/1/2017 to 5/30/2022</td>
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<td>Dec.31 (2017 thru 2021)</td>
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<td>Monthly Reports: 4/1/2017 to 5/30/2022</td>
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<td>Quarterly Reports: Mar.31 (2018 thru 2022)</td>
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<td>Dec.31 (2017 thru 2021)</td>
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<tr>
<td><strong>Other:</strong></td>
<td>Monthly</td>
<td>Apr 1, 2017 to May 30, 2022</td>
<td>Monthly field logs / field reports included in Monthly and Quarterly Reports</td>
<td>Monthly Reports: Mar.31 (2018 thru 2022)</td>
<td></td>
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<td></td>
<td></td>
<td>Dec.31 (2017 thru 2021)</td>
<td></td>
</tr>
</tbody>
</table>

Measure at wellheads - pressure, temperature, % gas content, liquid level

Weekly field logs / field reports included in Monthly and Quarterly Reports

Quarterly Reports:
- Mar.31 (2018 thru 2022)
- Jun.30 (2017 thru 2021)
- Sep.30 (2017 thru 2021)
- Dec.31 (2017 thru 2021)

Monthly field logs / field reports included in Monthly and Quarterly Reports
<table>
<thead>
<tr>
<th>Item</th>
<th>Frequency</th>
<th>Activity Date</th>
<th>Deliverable</th>
<th>Deliverable Date</th>
<th>Agency / Permit No.</th>
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<tbody>
<tr>
<td><strong>LEACHATE:</strong></td>
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<tr>
<td>Pump run-times</td>
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<tr>
<td>Sump liquid levels</td>
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<tr>
<td>Inspections and O&amp;M activities (as needed)</td>
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<tr>
<td>Monitor / adjust extraction system (as needed)</td>
<td></td>
<td></td>
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<td></td>
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<tr>
<td>Recordkeeping (maintenance, repairs, adjustments)</td>
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<td></td>
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<tr>
<td>Sampling and Analysis Reports</td>
<td></td>
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</tr>
<tr>
<td>Monitoring &amp; Analysis Reports</td>
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<tr>
<td>Leachate Monitoring Wells (6) GR-1, GR-3, GR-6 thru GR-9: Leachate liquid level measurements</td>
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<tr>
<td>Leachate Piezometers (5) P-1 thru P-5: Leachate liquid level measurements</td>
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<tr>
<td>Water Level Measurements</td>
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<tr>
<td>Sampling and Analysis</td>
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<tr>
<td>Surface Water Monitoring (2) SW-1 and SW-2: Sampling and Analysis</td>
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<tr>
<td>Seepage Monitoring and Site Inspections</td>
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<td>Item</td>
<td>Frequency</td>
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<td>Deliverable 1</td>
<td>Deliverable Date 1</td>
<td>Agency / Permit No. 2</td>
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<tr>
<td>Semi-Annual Monitoring &amp; Analysis Reports</td>
<td>Semi-Annually</td>
<td>4 to 6 weeks prior to due date</td>
<td>Draft &amp; Final Reports</td>
<td>Apr 30th and Oct 30th: Apr 2017 thru Apr 2022</td>
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<tr>
<td>Annual Monitoring &amp; Analysis Reports 3</td>
<td>Annually</td>
<td>4 to 6 weeks prior to due date</td>
<td>Draft &amp; Final Reports</td>
<td>Apr 30th: Apr 2017 thru Apr 2022</td>
<td></td>
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</tbody>
</table>

**Notes:**
1. ALL REPORTS will be submitted in DRAFT to the City for review, comment, and approval — a minimum of 3 to 4 weeks prior to the deliverable due date of the Final Report to the corresponding Agency / Authority.
2. Permitting Agency / Authority Acronyms are as follow:
   - BAAQMD - Bay Area Air Quality Management District
   - WBSD / SBSA - West Bay Sanitary District / South Bayside System Authority
   - MVDP (WB120930) - Mandatory Wastewater Discharge Permit (West Bay 120930)
   - RWQCB - WDR No. 97-093 - Regional Water Quality Control Board (Waste Discharge Requirements No. 97-093)
3. The Annual Monitoring & Analysis Reports will be submitted / combined with the Second Semi-Annual Reports.
4. The Semi-Annual Reports will include the Quarterly monitoring for Sanitary Sewer Manhole Monitoring at S-1.
Section 5.0 – Budget
5.0 - Proposed Budget

The table on the next page includes CB&I’s proposed fees on an annual basis. On an annual basis, CB&I will perform the Scope of Services requested for a lump sum fee of $159,200. On a monthly basis, this equates to $13,266 monthly. For a five-year contract, the total fee would be $796,000.

Note that the annual budget above includes:

- Two source tests (December 2017 and December 2021)
- Annual flow meter calibration check
- Weekly, monthly, quarterly monitoring, maintenance, and reporting tasks per scope.
# Project Estimate

## Detail By Task

<table>
<thead>
<tr>
<th>Task</th>
<th>Task Code</th>
<th>Task Description</th>
<th>Task Type</th>
<th>Task Status</th>
<th>Task Notes</th>
<th>Task ID</th>
<th>Task Start</th>
<th>Task Finish</th>
<th>Task Duration</th>
<th>Task Check</th>
<th>Task Approval</th>
</tr>
</thead>
</table>

## Task Details

### Task Details

- **Task 1**: Description of Task 1
  - Task Code: TaskCode1
  - Task Duration: 10 days
  - Task Notes: Description of Notes
- **Task 2**: Description of Task 2
  - Task Code: TaskCode2
  - Task Duration: 15 days
  - Task Notes: Description of Notes

### Task Notes

- Any relevant notes or additional information regarding the tasks.

## Task Approval

- Approval for Task 1
- Approval for Task 2

---

**Notes:**

- Additional comments or remarks related to the project estimate.
- Any updates or changes to the task list.

---

**Total:**

- **Task 1 Total:** $120,000
- **Task 2 Total:** $150,000

**Estimated Total:** $270,000

---

**Approval:**

- Signed by: [Name]
  - [Date]

---

**Compliance:**

- All tasks completed on time and within budget.
- Quality control measures in place.

---

**Contact:**

- For inquiries, please contact [Name] at [Contact Information]

---

**References:**

- [Reference 1]
- [Reference 2]
## CB&I Environmental & Infrastructure, Inc.
### 2017 - 2022 Fee Schedule

<table>
<thead>
<tr>
<th>Title</th>
<th>Rate Range</th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Professional Level V</strong></td>
<td></td>
<td><strong>Low</strong></td>
<td><strong>High</strong></td>
</tr>
<tr>
<td>Project Scientist</td>
<td>$172.00</td>
<td>$199.00</td>
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<tr>
<td>Engineer</td>
<td>$193.00</td>
<td>$202.00</td>
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<td><strong>Professional Level IV</strong></td>
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<tr>
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<tr>
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<td><strong>Professional Level II</strong></td>
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<tr>
<td>Project Manager</td>
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<td>Engineer</td>
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<td><strong>Professional Level I</strong></td>
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Depositions and expert witness testimony, including preparation time, will be charged at 1.5 times the above rates.
<table>
<thead>
<tr>
<th>Title</th>
<th>Rate Range</th>
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<tbody>
<tr>
<td>Vehicle (day) plus gas</td>
<td>$25.00</td>
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<tr>
<td>Vehicle Expense (Cost +7.5%)</td>
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<tr>
<td>Disposable Bailers (2&quot;)</td>
<td>$8.00</td>
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<tr>
<td>Disposable Bailers (1&quot;)</td>
<td>$7.00</td>
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<tr>
<td>Misc. Sampling Supplies (day)</td>
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<tr>
<td>Groundwater Sampling Tubing (foot)</td>
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<tr>
<td>Caution Tape (roll)</td>
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<tr>
<td>Encore Sampler (each)</td>
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<tr>
<td>QED 0.45 Micron Disposal Filters (each)</td>
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</tr>
<tr>
<td>Steel Well Lock (each)</td>
<td>$8.00</td>
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<tr>
<td>2&quot; Grippers (each)</td>
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<tr>
<td>Disposable Camera (each)</td>
<td>$10.00</td>
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<tr>
<td>Laptop Computer (day)</td>
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<td>LCD Projector (day)</td>
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<td>Projection Screen (day)</td>
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<tr>
<td>Digital Camera (day)</td>
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<tr>
<td>Camcorder (day)</td>
<td>$15.00</td>
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<tr>
<td>Tripod (day)</td>
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<td>Soil Probe (day)</td>
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<td>Interface Probe (day)</td>
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<td>Water Level Indicator (day)</td>
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<td>Air Compressor Controller Sampling System (day)</td>
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<td>Cond./Temp/pH Meter (day)</td>
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<td>Multi-Parameter Water Quality Meter (day)</td>
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<td>GEM-5000 (day)</td>
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<td>Drager Bellows Pump (day)</td>
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<td>Water Purge Pump (day)</td>
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<td>Lo-Flow Sampling Pump (Peristaltic Type) (day)</td>
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<td>4-Gas Meter (day)</td>
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<td>Tyvek Suit (Jump suit, gloves, boots) (day)</td>
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<td>Hand Auger (day)</td>
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<tr>
<td>Sludge Judge (day)</td>
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<tr>
<td>Laser Level (day)</td>
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<tr>
<td>Field Boat (day)</td>
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<tr>
<td>Reimbursables, (Cost +7.5%)</td>
<td>Cost 7.5%</td>
</tr>
</tbody>
</table>

Fee Schedule Rates are subject to change without notice.

Monthly invoices are to be paid according to the contract. Interest will be charged on late payments.
Section 6.0 – Experience
6.0 - Project Experience

CB&I has extensive project experience providing environmental monitoring, reporting, and O&M services at landfills across California and the U.S. We have provided below descriptions of relevant projects that we have completed within the past five (5) years or are currently providing services on. We encourage you to contact the included references to verify our capabilities.

American Canyon Landfill - Environmental Monitoring Services (Vallejo, CA)
Client: Napa Vallejo Waste Management Authority

CB&I provides the following environmental monitoring services:

- Sampling 11 monitoring groundwater wells quarterly
- Sampling 2 surface water points quarterly
- Monitoring 7 LFG probes quarterly
- Sampling leachate collection system quarterly
- Contracting with analytical laboratory to perform necessary analysis
- Preparing quarterly monitoring reports

CB&I has been performing the groundwater monitoring and reporting for this landfill since the mid-1980s. We have also prepared all engineering and geological reports for the landfill since the early 1970s. CB&I is currently providing final landfill cover management and O&M of the LFG extraction system.

**Relevant Experience:** Groundwater, surface water, leachate, gas, and stormwater monitoring.

**Dates of Service:** 1985 - present

**Key CB&I Staff:** Darrell Thompson (Principal), J.C. Isham (Project Manager), Sheila Richgels (Sampling Coordinator), and Paul Weinhardt (Field Technician).

**Client Contact:** Rich Luthy - Executive Director
Napa-Vallejo Waste Management Authority
1195 Third Street, Napa, CA 94559
Phone: (707) 299-1314
rich.luthy@countyofnapa.org
Upper Valley Compost Facility - Environmental Monitoring Services (Napa County, CA)
Client: Upper Valley Disposal & Recycling

CB&I provides the following environmental monitoring services:

- Sampling 6 groundwater monitoring wells quarterly
- Monitoring stormwater
- Contracting with analytical laboratory to perform necessary analysis
- Preparing quarterly monitoring reports

CB&I has been performing all engineering and groundwater monitoring and reporting for this facility since 1992.

Relevant Experience: Groundwater and stormwater monitoring.

Dates of Service: 1992 - present

Key CB&I Staff: Darrell Thompson (Project Manager), J.C. Isham (Senior Technical Review), Sheila Richgels (Sampling Coordinator), and Paul Weinhardt (Field Technician).

Client Contact: Bob Pestoni
Upper Valley Disposal & Recycling
1285 Whitehall Lane, St. Helena, CA 94574
Phone: (707) 963-7319
bob@uvds.com
CB&I provides the following environmental monitoring services:

- Sampling 8 groundwater monitoring wells semi-annually
- Sampling 2 surface water points semi-annually
- Maintaining the continuous operation of 12 leachate extraction sumps
- Sampling leachate collection system quarterly
- Contracting with analytical laboratory to perform necessary analysis
- Preparing semi-annual monitoring reports

CB&I has been performing the groundwater monitoring and reporting for this landfill since the mid-1980s. We have also been providing all landfill engineering.

**Relevant Experience:** Groundwater surface water, and leachate monitoring.

**Dates of Service:** 1992 - present

**Key CB&I Staff:** Darrell Thompson (Project Manager), J.C. Isham (Senior Technical Review), Sheila Richgels (Sampling Coordinator), and Paul Weinhardt (Field Technician).

**Client Contact:** Azalea A. Mitch - Senior Civil Engineer
City of Menlo Park - Engineering Division
701 Laurel Street, Menlo Park, CA 94025
Phone: (650) 330-6742
aamitch@menlopark.org
San Joaquin County Landfills - Environmental Monitoring Services (San Joaquin Co., CA)
Client: San Joaquin County

CB&I performs quarterly monitoring at four landfills operated by San Joaquin County: North County Landfill, Foothill Landfill, Harney Lane Landfill, and Corral Hollow Landfill. CB&I has provided monitoring services to San Joaquin County for more than 25 years. Our services include:

- Sampling 7 to 10 monitoring wells per site
- Collect surface water samples at each site
- Contracting with analytical laboratory to perform necessary analysis
- Submitting all field and analytical data in tables to client
- Additional landfill design services at sites

CB&I has also performed troubleshooting and repairs to the LFG collection system at the Harney Lane Landfill, and performed LFG migration to groundwater studies at the Corral Hollow and Foothill Landfills.

We have assisted the County to negotiate evaluation monitoring programs, performed engineering feasibility studies, and prepared corrective action plans. CB&I has also provided landfill liner and LFG engineering to the County at its landfills.

**Relevant Experience:** Groundwater, surface water, leachate, and vadose zone sampling at the County’s 4-landfill sites.

**Dates of Service:** 1999 - present

**Key CB&I Staff:** Darrell Thompson (Project Manager), J.C. Isham (Senior Technical Review), Sheila Richgels (Sampling Coordinator), and Paul Weinhardt (Field Technician).

**Client Contact:** Taj Bahadori - Senior Engineer
San Joaquin County - Department of Public Works
1810 E. Hazleton Ave, Stockton, CA 95201
Phone: (209) 953-7316
tbahadori@sjgov.org
JED LFGTE Utilization System - Operations, Maintenance, Monitoring (St. Cloud, FL)
Client: Waste Connections, Inc.

CB&I designed, constructed, owns and operates an $18.7 million, 9.6 MegaWatt LFG-to-Energy (LFGTE) Utilization System Project on the JED Solid Waste Management Landfill Facility located in St. Cloud, Florida. CB&I shares a portion of power sale proceeds with Progressive Waste over the course of a 20-year contract.

Relevant Experience: GCCS operations, maintenance, wellfield tuning, troubleshooting, repairs, and enhancements for improved recovery.

Dates of Service: 2014 - present

Key CB&I Staff: Darrell Thompson (LFG Engineer)

Client Contact: Benjamin Gray
Waste Connections
1501 Omni Way, St. Cloud FL 34773
(407) 932-8672
Bedwell Bayfront Park Landfill - Gas Wellfield Evaluation and Recommendations
Client: City of Menlo Park, CA

The City of Menlo Park, CA hired CB&I to evaluate the entire LFG well field which consists of roughly 75 active wells that were installed in the 1980's and have had minimal maintenance done since installation. CB&I sounded all wells and conducted independent monitoring. The evaluation indicated that many of the wells are watered in or damaged due to settlement over time. CB&I prepared a phased approach to implementing improvements which will consist of dewatering pumps, decommissioning wells, replacing wells, and replacing well heads and vaults.

Relevant Experience: LFG well field system evaluation, troubleshooting, and recommendations for improvements.

Dates of Service: 2014 - 2016

Key CB&I Staff: Darrell Thompson (Project Manager)

Client Contact: Azalea Mitch, PE - Civil Engineer
City of Menlo Park, CA
701 Laurel St., Menlo Park, CA 94025
(650) 330-6742
aamitch@menlopark.org
Jefferson Parish Sanitary Landfill - Comprehensive GCCS Services (Jefferson Parish, LA)
Client: Jefferson Parish, Louisiana

The Parish of Jefferson retained CB&I to redesign and permit the expansion of the Jefferson Parish Sanitary LFG GCCS. CB&I’s services included design, permitting, preparation of the construction drawings and specifications, and installation. CB&I currently performs GCCS O&M, monitoring, reporting, permitting, maintenance, and repairs at this active facility in accordance with NSPS regulations.

Relevant Experience: GCCS compliance monitoring / reporting, O&M, permitting, and repair services.

Dates of Service:
- Current GCCS O&M: 1999 - present
- GCCS Design / Build: 7/2010 - 12/2010

Key CB&I Staff:
Darrell Thompson (LFG Engineer)

Client Contact:
Rick Buller, PE – Landfill Engineer
Jefferson Parish Department of Environmental Affairs
4901 Jefferson Highway, Ste. E, Jefferson, LA 70121
Phone: (504) 736-6103
rbuller@jeffparish.net
Google, Inc. – LFGTE Power Plant and Treatment System O&M
Client: Google, Inc.

Google owns and contracts out to CB&I the O&M of three Jenbacher J320 engine/generators that are fueled from the City of Mountain View’s closed landfill. The engines are installed at three different office buildings locations and were designed to offset the purchase of power from the utility.

The City of Mountain View operates an old closed landfill. The City would normally burn the gas in flares, but with the installation of the engines there was a two mile pipeline installed in the public streets of Mountain View, a new compressor station and process skid to dry the gas prior to entering the pipeline. CB&I operates the compressor and process skid to send gas to the engines.

Each engine is operated independently of each other depending upon the load of each building. Each engine can produce approximately 1 MW of electrical power.

The engines have operated above 95% on-line run time, not including routine scheduled maintenance. This is remarkable considering:

- CB&I does not operate the LFG collection system
- The gas blower is operated 2 miles away from the engines
- The engines produce most of the power that the buildings use, but there is some interconnection with power from the utility
- On one of the units, the building utilizes waste heat to heat water for the building, this process is integral to the engine operations, and
- CB&I provides all monitoring for air compliance from the pipeline to engine exhaust source testing

**Relevant Experience:** GCCS O&M, Monitoring, Reporting, Source Testing

**Dates of Service:** 2006 - present

**Key CB&I Staff:** Darrell H. Thompson (Project Manager), Kirk Johnson, Kathleen Beresh

**Client Contact:** Tom Rea
Google, Inc.
650-253-6843
trea@google.com
Avenal Regional Landfill – GCCS Design, Permitting, CM/CQA, O&M (Avenal, CA)
Client: Waste Connections, Inc.

CB&I provided comprehensive engineering services including siting, planning, design, permitting, construction CQA, compliance, and monitoring services to the Avenal Regional Landfill located in central California, in support of LFG GCCS upgrades. Recent LFG system upgrades included installation of thirteen (13) vertical gas extraction wells, four (4) horizontal gas collectors, lateral and header gas transmission piping, tie-ins to existing leachate collectors and gas vapor wells, and installation of a factory fabricated blower skid and flare stack. Specific CB&I services for this project included:

- Prepared preliminary and final design of GCCS
- Title V air monitoring and permitting
- Prepared construction bid documents for GCCS
- Designed and constructed the flare stack and blower (completed by LFG Specialties, a subsidiary of CB&I)
- Designed and permitted the GCCS condensate collection, conveyance, treatment and monitoring system.
- Provided bid assistance for the GCCS, and condensate handling, storage and treatment system.
- Provided construction quality assurance during all phases of construction.
- Provided project certification report with as-built records for the GCCS expansion.
- Developed the GCCS O&M Manual.

**Relevant Experience:** GCCS design, monitoring, permitting, construction / installation, and flare startup / source testing.

**Dates of Service:** 2015 - present

**Key CB&I Staff:** Darrell H. Thompson (Project Manager), and John Jowers (Engineer).

**Client Contact:** Tom Reilly, California Engineering Manager
Waste Connections, Inc.
1385 Promontory Point Drive, El Dorado Hills, CA 95762
Phone: (916) 549-0443
TomR@WasteConnections.com
Exceptions to Contract Language
Requested Exceptions to the City of Menlo Park Agreement for Services. Note that these Exceptions have been previously agreed upon for existing Agreements with the City.

1. Insert our full name CB&I Environmental & Infrastructure, Inc.

2. Delete Paragraph 11. 8. 3

3. Replace Paragraph 10. Hold Harmless with:

The FIRST PARTY shall defend, indemnify and hold harmless the CITY, its subsidiary agencies, their officers, agents, employees and servants from all claims, suits or actions that arise out of, pertain to, or relate to the negligence, recklessness, or willful misconduct of the FIRST PARTY brought for, or on account of, injuries to or death of any person or damage to property resulting from the performance of any work required by this Agreement by FIRST PARTY, its officers, agents, employees and servants. Nothing herein shall be construed to require the FIRST PARTY to defend, indemnify or hold harmless the CITY, its subsidiary agencies, their officers, agents, employees and servants against any responsibility to liability in contravention of Section 2782.8 of the California Civil Code.
EXHIBIT “B” - DISPUTE RESOLUTION

B1.0 All claims, disputes and other matters in question between the FIRST PARTY and CITY arising out of, or relating to, the contract documents or the breach thereof, shall be resolved as follows:

B2.0 Mediation
B2.1 The parties shall attempt in good faith first to mediate such dispute and use their best efforts to reach agreement on the matters in dispute. After a written demand for non-binding mediation, which shall specify in detail the facts of the dispute, and within ten (10) days from the date of delivery of the demand, the matter shall be submitted to a mutually agreeable mediator. The Mediator shall hear the matter and provide an informal opinion and advice, none of which shall be binding upon the parties, but is expected by the parties to help resolve the dispute. Said informal opinion and advice shall be submitted to the parties within twenty (20) days following written demand for mediation. The Mediator’s fee shall be shared equally by the parties. If the dispute has not been resolved, the matter shall be submitted to arbitration in accordance with Paragraph B3.1.

B3.0 Arbitration
B3.1 Any dispute between the parties that is to be resolved by arbitration as provided in Paragraph B2.1 shall be settled and decided by arbitration conducted by the American Arbitration Association in accordance with the Construction Industry Arbitration Rules of the American Arbitration Association, as then in effect, except as provided below. Any such arbitration shall be held before three arbitrators who shall be selected by mutual agreement of the parties; if agreement is not reached on the selection of the arbitrators within fifteen (15) days, then such arbitrator(s) shall be appointed by the presiding Judge of the court of jurisdiction of the Agreement.

B3.2 The provisions of the Construction Industry Arbitration Rules of the American Arbitration Association shall apply and govern such arbitration, subject, however to the following:

B3.3 Any demand for arbitration shall be writing and must be made within a reasonable time after the claim, dispute or other matter in question as arisen. In no event shall the demand for arbitration be made after the date that institution of legal or equitable proceedings based on such claim, dispute or other matter would be barred by the applicable statute of limitations.

B3.4 The arbitrator or arbitrators appointed must be former or retired judges, or attorneys at law with last ten (10) years’ experience in construction litigation.

B3.5 All proceedings involving the parties shall be reported by a certified shorthand court reporter, and written transcripts of the proceedings shall be prepared and made available to the parties.

B3.6 The arbitrator or arbitrators must be made within and provide to the parties factual findings and the reasons on which the decisions of the arbitrator or arbitrators is based.

B3.7 Final decision by the arbitrator or arbitrators must be made within ninety (90) days from the date of the arbitration proceedings are initiated.

B3.8 The prevailing party shall be awarded reasonable attorneys’ fees, expert and non-expert witness costs and expenses, and other costs and expenses incurred in connection with the arbitration, unless the arbitrator or arbitrators for good cause determine otherwise.

B3.9 Costs and fees of the arbitrator or arbitrators shall be borne by the non-prevailing party, unless the arbitrator or arbitrators for good cause determine otherwise.

B3.10 The award or decision of the arbitrator or arbitrators, which may include equitable relief, shall be final, and judgment may be entered on it in accordance with applicable law in any court having jurisdiction over the matter.