

THE BOARD OF SUPERVISORS OF THE COUNTY OF STANISLAUS  
ACTION AGENDA SUMMARY

DEPT: Environmental Resources

BOARD AGENDA # B-8

Urgent  Routine

AGENDA DATE February 12, 2013

CEO Concurs with Recommendation YES  NO   
(Information Attached)

4/5 Vote Required YES  NO

SUBJECT:

Approval to Ratify and Amend the Contract for Professional Design Services with Shaw Environmental, Inc., for Landfill 2, Cell 5, at the Fink Road Landfill

STAFF RECOMMENDATIONS:

1. Ratify and approve an Amendment to the Professional Design Services Agreement with Shaw Environmental, Inc., to increase the not to exceed contract amount to \$55,127 for construction quality assurance engineering support during an Electronic Leak Location Survey at the Fink Road Landfill 2, Cell 5.
2. Authorize the Director of the Department of Environmental Resources, or designee, to sign the Amendment.

FISCAL IMPACT:

The original contract with Shaw Environmental, Inc., for construction quality assurance engineering support was for \$19,853, dated April 5, 2012. Amendment 1 to the contract for additional construction quality assurance engineering support was for \$3,717, dated August, 21, 2012. Amendment 2 to the contract for additional construction quality assurance engineering support was for \$12,884, dated October 22, 2012, for a total not to exceed limit of \$36,454.

(Continued next page)

BOARD ACTION AS FOLLOWS:

No. 2013-68

On motion of Supervisor O'Brien, Seconded by Supervisor Monteith

and approved by the following vote,

Ayes: Supervisors: O'Brien, Withrow, Monteith, De Martini and Chairman Chiesa

Noes: Supervisors: None

Excused or Absent: Supervisors: None

Abstaining: Supervisor: None

1)      Approved as recommended

2)      Denied

3)      Approved as amended

4)   X   Other:

MOTION: **Amended** the item to direct the Director of DER to negotiate a resolution of this issue with Shaw Environmental, Inc. and to bring back further action to the Board if necessary

ATTEST: Christine Ferraro  
CHRISTINE FERRARO TALLMAN, Clerk

File No.

Approval to Ratify and Amend the Contract for Professional Design Services with Shaw Environmental, Inc., for Landfill 2, Cell 5, at the Fink Road Landfill

**FISCAL IMPACTS (Continued):**

To complete the construction quality assurance engineering support services, an additional \$18,673 is necessary at this time. If this contract is ratified and amended, the maximum amount to be paid for services provided by Shaw Environmental, Inc., under this Agreement will not exceed \$55,127.

The Fink Road Landfill is an Enterprise Fund that is fully funded through the collection of tipping fees. Capital improvement costs are incorporated into the tipping fee calculations and funds for this purpose are accounted for in the Department of Environmental Resources Fink Road Landfill Fiscal Year budget for 2012-2013.

**DISCUSSION:**

The Department of Environmental Resources (DER), Landfill Division, maintains and operates the Fink Road Landfill. This facility is located at 4000 Fink Road, Crows Landing, in western Stanislaus County. The Fink Road Landfill provides landfill services for Class III municipal solid waste (MSW) for all of Stanislaus County as well as Class II disposal of the combustion ash that results from the incineration of MSW at the adjacent Waste-to-Energy facility.

On March 18, 2008, the Board of Supervisors awarded a contract to Shaw Environmental, Inc. (Shaw), to provide professional engineering services and related work necessary to conceptualize, design, and permit the construction of a base liner system for Landfill (LF) 2, Cell 5, including ancillary components, and to administer its construction. Construction management/administration is commonly referred to in the industry as construction quality assurance (CQA) and is required by California regulations. In addition, CQA is necessary to ensure that the general contractor builds the project according to state-mandated specifications.

On October 21, 2008, the Board of Supervisors approved and adopted the plans and specifications for this project and directed the Clerk of the Board to publish the notice inviting bids for the construction of LF-2, Cell No. 5, with a closing date of November 26, 2008. Under the advisement of County Counsel, the Board rejected the initial bids for this project on February 10, 2009, and put it back out to bid with a closing date of April 1, 2009. Eleven sealed bids were received and the construction contract was awarded to DeSilva Gates Construction (DSG), LP, on April 28, 2009.

Construction began in late June 2009, the project was accepted on November 15, 2010, and a Notice of Completion was prepared on November 22, 2010. Since this time, Cell 5 had not been used for waste disposal because the Regional Water Quality Control Board (RWQCB) had not yet granted approval for waste placement. This was due to their belief that a leak existed in the bottom-most plastic liner of the Cell.

Shaw Environmental, Inc., is the engineer-of-record for the containment system design for Cell 5 in partnership with Golder Associates. The original construction included completion of an

Approval to Ratify and Amend the Contract for Professional Design Services with Shaw Environmental, Inc., for Landfill 2, Cell 5, at the Fink Road Landfill

electronic leak location survey (ELLS) performed by a DSG subcontractor. The results of the initial ELLS (conducted with a sensitivity of about ½ inch) did not locate any leaks.

In the winter and spring of 2010/2011, it was noted by DER that water collected in the pan lysimeter below the Cell. Subsequently, an independent third party ELLS was completed by Applied Soil Water Technologies, LLC, with a greater sensitivity of approximately ¼ inch. The results of the second survey did not locate any leaks ¼ inch or larger. Following this, DER sought approval from RWQCB to begin waste placement in Cell 5, but approval was withheld pending the winter rains to further rule out the possibility of a leak.

During the winter of 2011/2012, the lined Cell was again partially filled with accumulated stormwater from storm events on or about January 23, 2012. Shortly after the rains, water was again determined to be present in the pan lysimeter. DER indicated that pumping the lysimeter resulted in roughly 60 gallons of water per day. At this time, DER measured approximately 55 inches of water on the leachate depth gauge for the primary liner sump. After detecting water in the pan lysimeter during pumping, DER introduced red food dye into the primary liner sump to determine if water was leaking from the primary liner into the pan lysimeter. DER observed red dye in water pumped from the pan lysimeter which suggests at least one leak existed in the primary liner.

DER sought additional advice from Shaw Environmental, Inc., on steps DER could take to identify the exact location of the leak and repair it. As Shaw Environmental, Inc., is the engineer-of-record for the containment system design for Cell 5, DER entered into a Professional Design Service Agreement, dated April 5, 2012, with Shaw Environmental, Inc., for CQA engineering support services during the ELLS to be performed by a third party leak location firm, Applied Soil Water Technologies, LLC. The ELLS conducted on July 10<sup>th</sup> and 11<sup>th</sup>, 2012, was again unsuccessful in locating the leak.

Additional CQA engineering support to devise an alternate plan, continued efforts to locate the leak, and inclusion of the results of the liner exposure and flooding of the lysimeter in the final report to DER were authorized under Amendment 1, dated August 21, 2012. The Agreement was later increased by \$3,717 for a total not to exceed amount of \$23,570.

In August 2012, water was identified beneath the primary liner. Due to this unforeseen field circumstance, additional CQA engineering support to oversee repairs to the sump and pan lysimeter, and additional field work were necessary until all leaks were located and/or the primary liner and pan lysimeter were fully repaired. Amendment 2, dated October 22, 2012, was issued to authorize the additional CQA engineering support, and increased the Agreement by \$12,884, for a total not to exceed amount of \$36,454.

The work authorized under Amendment 2 was for repairs to the liner components and not the entire replacement and reconstruction of the double liner system within the trough area which ultimately became necessary. For the leaks to be sealed completely, it required the entire double liner system within the bottom-most trough area to be replaced and reconstructed. Because of the timing and nature of the work being performed, it was not feasible to have the DSG construction crew, as well as Shaw Environmental, Inc., demobilized and then re-

Approval to Ratify and Amend the Contract for Professional Design Services with Shaw Environmental, Inc., for Landfill 2, Cell 5, at the Fink Road Landfill

mobilized. Shaw Environmental, Inc., proceeded with the CQA which necessitates this one final request to increase the Agreement by \$18,673 for work already completed. The increase to the Agreement results in a total not to exceed amount of \$55,127. DeSilva Gates and their subcontractor, Viking Environmental who performed the actual liner reconstruction, provided their services at no cost to the County; however, the County was still obligated to have the work overseen by CQA personnel.

California Constitution, Article XI Local Government, Section 10. (a), states that an elective governing body has the authority to approve extra compensation or extra allowance to a contractor after service has been rendered or a contract has been entered into or performed in whole or in part, or pay a claim under an agreement.

Shaw's continued role in this project was critical for maintaining quality assurance, completing the project's final report, and ultimately obtaining the State's approval of Cell 5 in order for the County to begin its use for waste disposal. Following the receipt of Shaw's final report, the RWQCB issued an approval letter for waste placement in Cell 5 in November 2012. Given that the existing not to exceed amount of \$36,454 is insufficient to cover these additional costs and the necessary work performed by Shaw Environmental, Inc., was completed prior to obtaining written authorization, staff recommends ratification and approval of this contract Amendment (Attachment A).

**POLICY ISSUES:**

This action supports the Board's priorities of A Safe Community, A Healthy Community, A Well Planned Infrastructure System, and Efficient Delivery of Public Services. Landfill services are critical to supporting the Department's mission to promote a safe and healthy environment and improve the quality of life in the community through a balance of science, education, partnerships and environmental regulation.

**STAFFING IMPACTS:**

There are no staffing impacts associated with this item.

**CONTACT PERSON:**

Jami Aggers, Director of Environmental Resources

Telephone: 209-525-6770



DEPARTMENT OF ENVIRONMENTAL RESOURCES  
3800 Cornucopia Way, Suite C,  
Modesto, Ca 95358-9492  
Phone: (209) 525-6700  
Fax: (209) 525-6774

**AMENDMENT 3  
TO  
PROFESSIONAL DESIGN SERVICES AGREEMENT  
SHAW ENVIRONMENTAL INC.**

This Amendment No. 3 to the Agreement for Professional Design Service (Amendment No. 3) by and between the County of Stanislaus (County) and Shaw Environmental, Inc., (Consultant) is made and entered into on \_\_\_\_\_, 2013.

Whereas, the County and Contractor entered into an Agreement for Professional Design Service dated May 7, 2012, (the Agreement); and

Whereas, Paragraph 7.1 of the Professional Design Services Agreement provides for the Agreement to be modified only in writing and signed by the parties in interest at the time of such modification ; and

Whereas, Amendment 1, dated August 21, 2012, increased the 'not to exceed' Agreement amount to \$23,570.00 for additional Scope of Work added to the Agreement; and

Whereas, Amendment 2, dated October 22, 2012, increased the 'not to exceed' Agreement amount to \$36,454.00 to address unforeseen field circumstances related to investigating the water beneath the primary liner; and

Whereas the County has need to ratify Consultant's additional, necessary work performed and completed at the site prior to receiving written authorization from the County. County verbally authorized Consultant to perform the necessary, additional engineering assistance and field work related to oversight, guidance and reporting for the exposure and replacement of the primary and secondary liner systems within the trough of Cell 5 followed by the oversight of the replacement of geotextiles, pan lysimeter rock, drainage rock, and operations layer. The work authorized in Amendment 2 was for oversight and reporting of the repair of the primary liner and site conditions required the primary and secondary liner systems to be entirely replaced and reconstructed instead of repaired; and

Whereas, the County has a need to increase the Compensation to the Consultant by \$18,673.00, for the necessary additional engineering assistance and field work performed; and

Whereas, this amendment is for the mutual benefit of County and Consultant;

Now, therefore, the County and Consultant agree as follows:

- 1. Paragraph 2.1 "Compensation" is amended to add the following:

"The maximum amount to be paid by the County for the additional services provided for in Amendment 3, shall not exceed Eighteen Thousand, Six-Hundred and Seventy-Three Dollars (\$18,673.00), including, without limitation, the cost of any subcontractors, consultants, experts or investigators retained by the Consultant to perform or to assist in the performance of its work under this Agreement.

Consultant's total compensation for work under this Agreement shall not exceed Fifty-Five Thousand, One-Hundred and Twenty-Seven Dollars (\$55,127.00)"

- 2. The following is added to Exhibit A--Section B, Scope of Work/Specifications:

"Additional CQA Services to Oversee, Guide and Report on Double Liner System Replacement and Reconstruction Related to Water Found Beneath Primary Liner

Consultant shall provide all the labor and supervision to provide oversight and guidance, and reporting to the Regional Water Quality Control Board (RWQCB) for the exposure and replacement of the primary and secondary liner systems within the trough of Cell 5 Followed by the oversight of the replacement of geotextiles, pan lysimeter rock, drainage rock, and operations layer."

3. Exhibit B- Fee Schedule, Section A – Price Schedule, Item 1 - Fee, is amended to add the following:

"Additional CQA Services to Oversee, Guide and Report on Double Liner System Replacement and Reconstruction Related to Water Found Beneath Primary Liner

TASK NO.	DESCRIPTION	TOTAL NOT TO EXCEED AMOUNT PER TASK
1	Field Observation Services Labor	\$14,345.00
2	Field Observation Reimbursable Items	\$1,000.00
3	Letter Report and Recertification	\$3,328.00
	<b>ADDITIONAL SERVICE TOTAL</b>	<b>\$18,673.00</b>

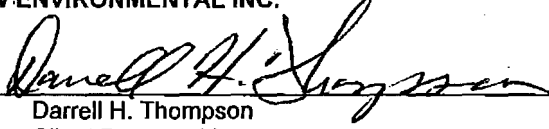
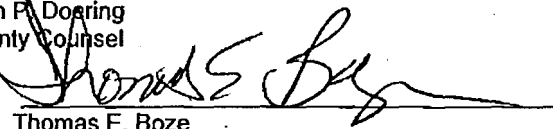
4. Exhibit B- Fee Schedule, Section A – Price Schedule, Item 3 – Detailed Project Price is amended to add the following:

"Additional CQA Services to Oversee, Guide and Report on Double Liner System Replacement and Reconstruction Related to Water Found Beneath Primary Liner

TASK	TITLE	QUANTITY	UNIT	RATE	EXTENDED TOTAL NOT TO EXCEED PRICE
1	<i>Field Observation Services</i>				
	Thompson	0	Hour	\$147.00	\$0.00
	Cope	95	Hour	\$151.00	\$14,345.00
	Flores	0	Hour	\$70.00	\$0.00
	<b>Task 1 Total</b>				<b>\$14,345.00</b>
	<i>Reimbursable</i>				
	Mileage, meals, incidentals and lodging				\$1,000.00
	<b>Task 1 Total Reimbursable</b>				<b>\$1,000.00</b>
2	<i>Letter Report and Recertification</i>				
	Thompson	4	Hour	\$147.00	\$588.00
	Cope	12	Hour	\$151.00	\$1,812.00
	Flores	0	Hour	\$70.00	\$0.00
	King	16	Hour	\$58.00	\$928.00
	<b>Task 2 Total</b>				<b>\$3,328.00</b>
	<b>Amendment 3 - Additional CQA Total</b>				<b>\$18,673.00</b>
	<b>CUMULATIVE NOT TO EXCEED PROJECT TOTAL \$55,127.00</b>				

5. Except as stated herein, all other terms and conditions of the Agreement remain unchanged.

IN WITNESS WHEREOF, the parties hereto have caused this Agreement to be executed by and through their respective authorized officers:

<p>COUNTY OF STANISLAUS Department of Environmental Resources</p> <p>By: _____ Jami Aggers Director</p> <p style="text-align: center;">"County"</p>	<p>SHAW ENVIRONMENTAL INC.</p> <p>By:  Darrell H. Thompson Client Program Manager</p> <p style="text-align: center;">"Consultant"</p>
<p>APPROVED AS TO FORM: John P. Doering County Counsel</p> <p>By:  Thomas E. Boze Deputy County Counsel</p>	



RECEIVED

APR 05 2012

DEPARTMENT OF ENVIRONMENTAL RESOURCES

3800 Cornucopia Way, Suite C,

Modesto, Ca 95358-9492

Phone: (209) 525-6700

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GENERAL SERVICES AGENCY  
STANISLAUS COUNTY

## PROFESSIONAL DESIGN SERVICES AGREEMENT

This Agreement is made and entered into by and between the County of Stanislaus, a political subdivision of the State of California, hereinafter referred to as ("County") and Shaw Environmental, Inc. (Shaw), a Louisiana corporation authorized to conduct business in California, hereinafter referred to as ("Consultant").

**NOW, THEREFORE**, for and in consideration of the mutual covenants and conditions contained herein, the parties hereby agree as follows:

### 1.0 PROFESSIONAL SERVICES TO BE PROVIDED BY CONSULTANT

1.1. Scope of Services: Consultant shall provide the professional services described in the Scope of Work attached hereto as Exhibits "A, B and C."

1.2. Professional Practices: All professional services to be provided by Consultant pursuant to this Agreement shall be provided by personnel experienced in their respective fields and in a manner consistent with the standards of care, diligence and skill ordinarily exercised by professional consultants in similar fields and circumstances in accordance with sound professional practices. Consultant also represents that it is familiar with all laws that may affect its performance of this Agreement and shall advise County of any changes in any laws that may affect Consultant's performance of this Agreement.

1.3. Representations: Consultant represents that it has reviewed the RFP and that in its professional judgment the services to be performed under this Agreement can be performed within the maximum fee set forth herein below and within the time specified in the Project Schedule attached hereto. Consultant represents that it is qualified to perform the professional services required by this Agreement and possesses the necessary licenses and permits required to perform said services. Consultant represents that it has no interest and shall not acquire any interest direct or indirect which conflicts, or has the appearance of conflicting, in any manner or degree with the performance of the work and services under this Agreement.

1.4. Compliance with Laws. Consultant agrees that it shall perform the services required by this Agreement in compliance with all applicable Federal and California laws including, but not limited to, those laws related to minimum hours and wages; occupational health and safety; fair employment and employment practices; workers' compensation insurance and safety in employment; and all other Federal, State and local laws and ordinances applicable to the services required under this Agreement.

1.5. Non-Discrimination. During the performance of this Agreement, Consultant and its officers, employees, agents, representatives or subcontractors shall not unlawfully discriminate in violation of any federal, state or local law, rule or regulation against any employee, applicant for employment or person receiving services under this Agreement because of race, religion, color, national origin, ancestry, physical or mental disability, medical condition (including genetic



characteristics), marital status, age, political affiliation, sex or sexual orientation. Consultant and its officers, employees, agents, representatives or subcontractors shall comply with all applicable Federal, State and local laws and regulations related to non-discrimination and equal opportunity, including without limitation the County's nondiscrimination policy; the Fair Employment and Housing Act (Government Code sections 12900 et seq.); California Labor Code sections 1101, 1102 and 1102.1; the Federal Civil Rights Act of 1964 (P.L. 88-352), as amended; and all applicable regulations promulgated in the California Code of Regulations or the Code of Federal Regulations.

1.6. Non-Exclusive Agreement. Consultant acknowledges that County may enter into agreements with other consultants for services similar to the services that are subject to this Agreement or may have its own employees perform services similar to those services contemplated by this Agreement.

1.7. Delegation and Assignment. This is a personal service contract, and the duties set forth herein shall not be delegated or assigned to any person or entity without the prior written consent of County. Consultant may engage a subcontractor(s) as permitted by law and may employ other personnel to perform services contemplated by this Agreement at Consultant's sole cost and expense.

1.8. Covenant Against Contingent Fees. Consultant warrants that he/she has not employed or retained any company or person, other than a bona fide employee working for the consultant; to solicit or secure this agreement; and that he/she has not paid or agreed to pay any company or person other than a bona fide employee, any fee, commission, percentage, brokerage fee, gift, or any other consideration, contingent upon or resulting from the award, or formation of this agreement. For breach or violation of this warranty, the local agency shall have the right to annul this agreement without liability, or at its discretion; to deduct from the agreement price or consideration, or otherwise recover the full amount of such fee, commission, percentage, brokerage fee, gift, or contingent fee.

## 2.0 COMPENSATION AND BILLING

2.1. Compensation. Consultant shall be paid in accordance with the fee schedule set forth in Exhibit "B", attached hereto and made a part of this Agreement (the "Fee Schedule"). Consultant's compensation shall in no case exceed **Nineteen-Thousand Eight-Hundred-Fifty-Three Dollars (\$19,853.00)**. Consultant will be compensated on a time and materials basis, based on the hours worked by the Consultant's employees or subcontractors at the hourly rates specified in the Fee Schedule. The Fee Schedule rates include direct salary costs, employee benefits, and overhead. The rates stated in the Fee Schedule are not adjustable during the term of this Agreement. The County may retain ten percent of all periodic or progress payments made to the Consultant until completion and acceptance of all work tasks and County shall have right to withhold payment from Consultant for any unsatisfactory service until such time service is performed satisfactorily.

2.2. Reimbursements. In addition to the aforementioned fees, Consultant will be reimbursed for any expenses specifically set forth in each Project Scope of Work. All such reimbursement amounts are limited to those costs and expenses that are reasonable, necessary and actually incurred by the Consultant in connection with the services provided. The County shall not pay a mark up on any item of reimbursement. The County shall not pay for any item of overhead such as telephone, facsimile, postage, etc. All requests for reimbursement shall be accompanied by a copy of the original invoice.

2.3. Additional Services. Consultant shall not receive compensation for any services provided outside the scope of services specified in Exhibits A and B unless the County or the Project Manager for this Project, prior to Consultant performing the additional services, approves such additional services in writing. It is specifically understood that oral requests and/or approvals of such additional services or additional compensation shall be barred and are unenforceable.

2.4. Method of Billing. Consultant may submit invoices to County's Project Manager for approval on a progress basis, but no more often than once each calendar month. Said invoice shall be based on the total of all Consultants' services that have been completed to County's sole satisfaction. County shall pay Consultant's invoice within forty-five (45) days from the date County receives said invoice. Each invoice shall describe in detail, the services performed and the associated percentage of tasks completed. Any additional services approved and performed pursuant to this Agreement shall be designated as "Additional Services" and shall identify the number of the authorized change order, where applicable, on all invoices.

2.5. Records and Audits. Records of Consultant's services relating to this Agreement shall be maintained in accordance with generally recognized accounting principles and shall be made available to County or its Project Manager for inspection and/or audit at mutually convenient times for a period of three (3) years from the termination of this Agreement.

### **3.0 TIME OF PERFORMANCE**

3.1. Commencement and Completion of Work. The professional services to be performed pursuant to this Agreement shall commence immediately after the County delivers its Notice to Proceed. Said services shall be performed in strict compliance with the Project Schedule approved by County as set forth in Exhibit "C", attached hereto and incorporated herein by this reference. The Project Schedule may be amended by mutual agreement of the parties. Failure to commence work in a timely manner and/or diligently pursue work to completion may be grounds for termination of this Agreement.

3.2. Excusable Delays. Neither party shall be responsible for delays or lack of performance resulting from acts beyond the reasonable control of the party or parties. Such acts shall include, but not be limited to, acts of God, fire, strikes, material shortages, compliance with laws or regulations, riots, acts of war, or any other conditions beyond the reasonable control of a party.

### **4.0 TERM OF CONTRACT AND TERMINATION**

4.1. Term. This Agreement shall commence **upon award and end on April 30, 2012**, or upon completing the agreed upon services, unless previously terminated as provided herein or as otherwise agreed to in writing by the parties.

4.2. Notice of Termination. The County reserves and has the right and privilege of canceling, suspending or abandoning the execution of all or any part of the work contemplated by this Agreement, with or without cause, at any time, by providing written notice to Consultant. The termination of this Agreement shall be deemed effective upon receipt of the notice of termination. In the event of such termination, Consultant shall immediately stop rendering services under this Agreement unless directed otherwise by the County.

4.3. Compensation. In the event of termination, County shall pay Consultant for reasonable costs incurred and professional services satisfactorily performed up to and including the date of County's written notice of termination. Compensation for work in progress shall be prorated as to the percentage of work completed as of the effective date of termination in accordance with the fees set forth in Exhibit "C". In ascertaining the professional services actually rendered hereunder up to the effective date of termination of this Agreement, consideration shall be given to both completed work and work in progress, to complete and incomplete drawings, and to other documents pertaining to the services contemplated herein whether delivered to the County or in the possession of the Consultant.

4.4. Documents. In the event of termination of this Agreement, all documents prepared by Consultant in its performance of this Agreement including, but not limited to, finished or unfinished design, development and construction documents, data studies, drawings, maps and reports, shall be delivered to the County within ten (10) days of delivery of termination notice to Consultant, at no cost to County. Any use of uncompleted documents without specific written authorization from Consultant shall be at County's sole risk and without liability or legal expense to Consultant.

## 5.0 INSURANCE REQUIREMENTS

5.1. Minimum Scope and Limits of Insurance. Consultant, at its sole cost and expense, for the full term of this Agreement (and any extensions thereof), shall obtain and maintain, at minimum, compliance with all of the following insurance coverage(s) and requirements. If Consultant normally carries insurance in an amount greater than the minimum amount listed below, that greater amount shall become the minimum required amount of insurance for purposes of this Agreement. The insurance listed below shall have a retroactive date of placement prior to, or coinciding with, the date services are first provided that are governed by the terms of this Agreement:

- (a) Comprehensive general liability, including premises-operations, products/ completed operations, broad form property damage, blanket contractual liability, independent contractors, personal injury with a policy limit of not less than One Million Dollars (\$1,000,000.00), combined single limits, per occurrence and aggregate. If Commercial General Liability Insurance or other form with a general aggregate limit is used, either the general aggregate limit shall apply separately to any act or omission by Consultant under this Agreement or the general aggregate limit shall be twice the required occurrence limit.
- (b) Automobile liability for owned vehicles, hired, and non-owned vehicles, with a policy limit of not less than One Million Dollars (\$1,000,000.00), combined single limits, per occurrence and aggregate.
- (c) Workers' compensation insurance as required by the State of California.
- (d) Professional errors and omissions ("E&O") liability insurance with policy limits of not less than Two Million Dollars (\$2,000,000.00) combined single limit for each occurrence. If Consultant cannot provide an occurrence policy, Consultant shall provide insurance covering claims made as a result of performance of Work on this Project and shall maintain such insurance in effect for not less than three years following Final Completion of the Project.

5.2. Endorsements. The Consultant shall obtain a specific endorsement to all required insurance policies, except Professional Liability insurance, naming the County of Stanislaus, its Officers, Directors, Officials, Agents, Employees and Volunteers as additional insureds for at least three years after the completion of the work to be performed under this Agreement, but, to the extent that any insurance issued to Consultant in effect after the expiration of three years provides additional

insured coverage to parties Consultant agreed in writing to name as an additional insured, then Consultant shall have the obligation under this contract to obtain such additional insured coverage for the County, under any and all policies Consultant has regarding:

- (a) Liability arising from or in connection with the performance or omission to perform any term or condition of this Agreement by or on behalf of the Consultant, including the insured's general supervision of its subcontractors;
- (b) Ongoing services, products and completed operations of the Consultant;
- (c) Premises owned, occupied or used by the Consultant; and
- (d) Automobiles owned, leased, hired or borrowed by the Consultant.
- (e) For Workers' Compensation insurance, the insurance carrier shall agree to waive all rights of subrogation against the County, its officers, officials and employees for losses arising from the performance of or the omission to perform any term or condition of this Agreement by the Consultant.

5.3. Deductibles: Any deductibles, self-insured retentions or named insureds must be declared in writing and approved by County. At the option of the County, either: (a) the insurer shall reduce or eliminate such deductibles, self-insured retentions or named insureds, or (b) the Consultant shall provide a bond, cash, letter of credit, guaranty or other security satisfactory to the County guaranteeing payment of the self-insured retention or deductible and payment of any and all costs, losses, related investigations, claim administration and defense expenses. The County, in its sole discretion, may waive the requirement to reduce or eliminate deductibles or self-insured retentions, in which case, the Consultant agrees that it will be responsible for and pay any self-insured retention or deductible and will pay any and all costs, losses, related investigations, claim administration and defense expenses related to or arising out of the Consultant's defense and indemnification obligations as set forth in this Agreement.

5.4. Certificates of Insurance: At least ten (10) days prior to the date the Consultant begins performance of its obligations under this Agreement, Consultant shall furnish County with certificates of insurance, and with original endorsements, showing coverage required by this Agreement, including, without limitation, those that verify coverage for subcontractors of the Consultant. The certificates and endorsements for each insurance policy are to be signed by a person authorized by that insurer to bind coverage on its behalf. All certificates and endorsements shall be received and, in County's sole and absolute discretion, approved by County. County reserves the right to require complete copies of all required insurance policies and endorsements, at any time.

5.5. Non-limiting: Nothing in this Section or the insurance described herein shall be construed as limiting in any way, the indemnification provisions contained in this Agreement, or the liability of Consultant and Consultant's officers, employees, agents, representatives or subcontractors for payments of damages to persons or property.

5.6. Primary Insurance: The Consultant's insurance coverage shall be primary insurance regarding the County of Stanislaus, its Officers, Directors, Officials, Agents, Employees and Volunteers. Any insurance or self-insurance maintained by the County of Stanislaus, its Officers, Directors, Officials, Agents, Employees and Volunteers shall be excess of the Consultant's insurance and shall not contribute with Consultant's insurance. Any failure to comply with reporting provisions of the policies shall not affect coverage provided to the County or its officers, officials and employees. The Consultant's insurance shall apply separately to each insured against whom claim is made or suit is

brought, except with respect to the limits of the insurer's liability. Any and all insurances cared by it shall be deemed liability coverage for any and all actions it performs in connection with this Contract.

5.7. Cancellation of Insurance: Each insurance policy required by this section shall be endorsed to state that coverage shall not be suspended, voided, canceled by either party except after thirty (30) days prior written notice has been given to County. The Consultant shall promptly notify, or cause the insurance carrier to promptly notify, the County of any change in the insurance policy or policies required under this Agreement, including, without limitation, any reduction in coverage or in limits of the required policy or policies. Consultant shall maintain such coverage in effect for three (3) years after substantial completion of the project to the extent it is commercially available at reasonable rates.

5.8. California Admitted Insurer: Insurance shall be placed with California admitted insurers (licensed to do business in California) with a current rating by Best's Key Rating Guide of no less than A-:VII; provided, however, that if no California admitted insurance company provides the required insurance, it is acceptable to provide the required insurance through a United States domiciled carrier that meets the required Best's rating and that is listed on the current List of Eligible Surplus Line Insurers maintained by the California Department of Insurance.

5.9. Subcontractors: Consultant shall require that all of its subcontractors are subject to the insurance and indemnity requirements stated herein, or shall include all subcontractors as additional insureds under its insurance policies.

## 6.0 INDEMNIFICATION

6.1. Indemnification: To the fullest extent allowed by law, Consultant shall defend, indemnify, and hold harmless the County and its officers, directors, officials, agents, employees, volunteers and representatives (collectively, "Indemnitee") from and against any and all claims, suits, actions, losses, injuries, damages or expenses of every name, kind, and description, including litigation costs and reasonable attorney's fees incurred, (collectively, "losses") which are founded upon, arise out of, pertain to, or relate to, directly or indirectly, in whole or in part, the alleged negligence, recklessness, or willful misconduct of Consultant, its officers, agents, employees, volunteers, representatives, contractors and subcontractors, excluding, however, such liabilities caused in part by the sole negligence, active negligence or willful misconduct of the County, its agents, employees, and representatives. These indemnification obligations shall not be limited by any assertion or finding that (1) the person or entity indemnified is liable by reason of non-delegable duty, or (2) the losses were caused in part by the negligence of, breach of contract by, or violation of law by Indemnitee. Nothing in this Agreement, including the provisions of this paragraph, shall constitute a waiver or limitation of any rights which Indemnitee may have under applicable law, including without limitation, the right to implied indemnity.

6.2. Duty to Defend: The duty of Consultant to indemnify and save harmless as set forth herein, shall include both the duty to indemnify and at Consultant's own cost and expense the duty to defend as set forth in Section 2778 of the California Civil Code and as limited in section 2782.8 of the California Civil Code. This duty to defend arises immediately when such claim is made and shall be independent of any finding of negligence and shall arise regardless of any claim or assertion that Indemnitee caused or contributed to the Losses. Consultant shall provide legal counsel acceptable to the County.

6.3. Duty to Cooperate: Each party shall notify the other party within ten (10) days in writing of any claim or damage related to activities performed under this Agreement. The parties shall cooperate with each other in the investigation and disposition of any claim arising out of the activities under this Agreement. Specifically, Consultant shall take all steps necessary to assist the County in the defense of any claim brought by a contractor hired to construct the Project regarding any errors, flaws, and/or omissions in the plans or specifications of the Project.

6.4. Patent Rights: Consultant represents that professional services provided by Consultant pursuant to this Agreement does not infringe on any other copyrighted work. Consultant shall defend, indemnify and hold harmless the County from all loss, cost, damage, expense, liability or claims, including attorneys' fees, court costs, litigation expenses and expert consultant or witness fees, that may at any time arise for any infringement of the patent rights, copyright, trade secret, trade name, trademark, service mark or any other proprietary right of any person or persons in consequence of the use by the County of any articles or services supplied under this agreement.

6.5. The foregoing provisions shall survive the term and termination of this Agreement.

## 7.0 GENERAL PROVISIONS

7.1. Entire Agreement: This Agreement constitutes the entire Agreement between the parties with respect to any matter referenced herein and supersedes any and all other prior writings and oral negotiations. This Agreement may be modified only in writing, and signed by the parties in interest at the time of such modification. The terms of this Agreement shall prevail over any inconsistent provision in any other contract document appurtenant hereto, including exhibits to this Agreement.

7.2. Representatives. The Director of the Stanislaus County Department of Environmental Resources, or her designee, shall be the representative of County for purposes of this Agreement and may issue all consents, approvals, directives and agreements on behalf of the County, called for by this Agreement, except as otherwise expressly provided in this Agreement. Consultant shall designate a representative for purposes of this Agreement who shall be authorized to issue all consents, approvals, directives and agreements on behalf of Consultant called for by this Agreement, except as otherwise expressly provided in this Agreement.

7.3. Project Managers. County shall designate a Project Manager to work directly with Consultant in the performance of this Agreement. Consultant shall designate a Project Manager who shall represent it and be its agent in all consultations with County during the term of this Agreement. Consultant or its Project Manager shall attend and assist in all coordination meetings called by County.

7.4. Designated Personnel: A material covenant of this agreement is that the Consultant shall assign the individuals designated below to perform the functions designated so long as they continue in the employ of the Consultant. The designated individuals shall, so long as their performance continues to be acceptable to County, remain in charge of the services for the Project from beginning through completion of services.

- a. Project Manager: Darrell H. Thompson, Client Program Manager; and
- b. Lead/Manager: Fred Cope, P.E.

7.5. Removal of Personnel or Sub-Consultants: If the County, in its sole discretion at any time during the term of this agreement, desires the removal of any person or sub-consultant assigned by Consultant to perform services, then the Consultant shall remove such person or consultant immediately upon receiving notice from the County.

7.6. Notices: Any notices, documents, correspondence or other communications concerning this Agreement or the work hereunder may be provided by personal delivery, facsimile or mail and shall be addressed as set forth below. Such communication shall be deemed served or delivered: a) at the time of delivery if such communication is sent by personal delivery; b) at the time of transmission if such communication is sent by facsimile; and c) 48 hours after deposit in the U.S. Mail as reflected by the official U.S. postmark if such communication is sent through regular United States mail.

**If to County:**

Stanislaus County  
Dept. of Environmental Resources  
Attn: Jami Aggers  
Assistant Director  
3800 Cornucopia Way, Ste C  
Modesto, California 95358  
(209) 525-6768  
Fax: (209) 525-6773

**If to Consultant:**

Shaw Environmental, Inc.  
Darrell H. Thompson  
Client Program Manager  
180 Promenade Circle, Suite 320  
Sacramento, California 95834  
(916) 928-3300  
Fax: (916) 656-4356

7.7. Attorneys' Fees: In the event that litigation is brought by any party in connection with this Agreement, the prevailing party shall be entitled to recover from the opposing party all costs and expenses, including reasonable attorneys' fees, incurred by the prevailing party in the exercise of any of its rights or remedies hereunder or the enforcement of any of the terms, conditions, or provisions hereof.

7.8. Governing Law: This Agreement shall be governed by and construed under the laws of the State of California without giving effect to that body of laws pertaining to conflict of laws. In the event of any legal action to enforce or interpret this Agreement, the parties hereto agree that the sole and exclusive venue shall be a court of competent jurisdiction located in Stanislaus County, California.

7.9. Assignment: Consultant shall not voluntarily or by operation of law assign, transfer, sublet or encumber all or any part of Consultant's interest in this Agreement without County's prior written consent. Any attempted assignment, transfer, subletting or encumbrance shall be void and shall constitute a breach of this Agreement and cause for termination of this Agreement. Regardless of County's consent, no subletting or assignment shall release Consultant of Consultant's obligation to perform all other obligations to be performed by Consultant hereunder for the term of this Agreement.

7.10. Independent Contractor: Consultant is and shall be acting at all times as an independent contractor and not as an employee of County. Consultant shall secure, at his expense, and be responsible for any and all payment of Income Tax, Social Security, State Disability Insurance Compensation, Unemployment Compensation, and other payroll deductions for Consultant and its officers, agents, and employees, and all business licenses, if any are required, in connection with the services to be performed hereunder. Consultant hereby indemnifies and holds County harmless from any and all claims that may be made against County based upon any contention by any third party that an employer-employee relationship exists by reason of this Agreement.

7.11. Confidentiality: The Consultant agrees to keep confidential all information obtained or learned during the course of furnishing services under this Agreement and to not disclose or reveal such information for any purpose not directly connected with the matter for which services are provided.

7.12. Ownership of Documents: Any interest, including copyright interests, of Consultant or its contractors or subconsultants in studies, reports, memoranda, computational sheets, drawings, plans or any other documents, including electronic data, prepared in connection with the Services, shall be the property of County. To the extent permitted by law, work product produced under this Agreement shall be deemed works for hire and all copyrights in such works shall be the property of the County. In the event that it is ever determined that any works created by Consultant or its subconsultants under this Agreement are not works for hire, Consultant hereby assigns to County all copyrights to such works. With the County's prior written approval, Consultant may retain and use copies of such works for reference and as documentation of experience and capabilities.

7.13. Reuse of Design Documents: Should the County desire to reuse the documents specified above and not use the services of the Consultant, then the County agrees to require the new consultant to assume any and all obligations for the reuse of the documents, and the County releases Consultant and its subconsultants from all liability associated with the reuse of such documents.

7.14. Public Records Act Disclosure: Consultant has been advised and is aware that all reports, documents, information and data including, but not limited to, computer tapes, discs or files furnished or prepared by Consultant, or any of its subcontractors, and provided to County may be subject to public disclosure as required by the California Public Records Act (California Government Code Section 6250 et. seq.). Exceptions to public disclosure may be those documents or information that qualifies as trade secrets, as that term is defined in the California Government Code Section 6254.7, and of which Consultant informs County of such trade secret. The County will endeavor to maintain as confidential all information obtained by it that is designated as a trade secret. The County shall not, in any way, be liable or responsible for the disclosure of any trade secret including, without limitation, those records so marked if disclosure is deemed to be required by law or by order of the Court.

7.15. Responsibility for Errors: Consultant shall be responsible for its work and results under this Agreement. Consultant, when requested, shall furnish clarification and/or explanation as may be required by the County's representative, regarding any services rendered under this Agreement at no additional cost to County. In the event that an error or omission attributable to Consultant occurs, then Consultant shall, at no cost to County, provide all necessary design drawings, estimates and other Consultant professional services necessary to rectify and correct the matter to the sole satisfaction of County and to participate in any meeting required with regard to the correction.

7.16. Order of Precedence: In the event of an inconsistency in this Agreement and any of the attached Exhibits, the terms set forth in this Agreement shall prevail. If, and to the extent this Agreement incorporates by reference any provision of the RFP or the Response, such provision shall be deemed a part of this Agreement. Nevertheless, if there is any conflict among the terms and conditions of this Agreement and those of any such provision or provisions so incorporated by reference, this Agreement shall govern over both the Response and the RFP and the Response shall govern over the RFP.



7.17. Costs: Each party shall bear its own costs and fees incurred in the preparation and negotiation of this Agreement and in the performance of its obligations hereunder except as expressly provided herein.

7.18. No Third Party Beneficiary Rights: This Agreement is entered into for the sole benefit of County and Consultant and no other parties are intended to be direct or incidental beneficiaries of this Agreement and no third party shall have any right in, under or to this Agreement.

7.19. Construction: The parties have participated jointly in the negotiation and drafting of this Agreement. In the event an ambiguity or question of intent or interpretation arises with respect to this Agreement, this Agreement shall be construed as if drafted jointly by the parties and in accordance with its fair meaning. There shall be no presumption or burden of proof favoring or disfavoring any party by virtue of the authorship of any of the provisions of this Agreement.

7.20. Amendments: This Agreement may be amend only by a writing executed by the parties hereto or their respective successors and assigns.

7.21. Waiver: The delay or failure of either party at any time to require performance or compliance by the other of any of its obligations or agreements shall in no way be deemed a waiver of those rights to require such performance or compliance. No waiver of any provision of this Agreement shall be effective unless in writing and signed by a duly authorized representative of the party against whom enforcement of a waiver is sought. The waiver of any right or remedy in respect to any occurrence or event shall not be deemed a waiver of any right or remedy in respect to any other occurrence or event, nor shall any waiver constitute a continuing waiver.

7.22. Severability: If any provision of this Agreement is determined by a court of competent jurisdiction to be unenforceable in any circumstance, such determination shall not affect the validity or enforceability of the remaining terms and provisions hereof or of the offending provision in any other circumstance. Notwithstanding the foregoing, if the value of this Agreement, based upon the substantial benefit of the bargain for any party is materially impaired, which determination as made by the presiding court or arbitrator of competent jurisdiction shall be binding, then both parties agree to substitute such provision(s) through good faith negotiations.

7.23. Counterparts: This Agreement may be executed in one or more counterparts, each of which shall be deemed an original. All counterparts shall be construed together and shall constitute one agreement.

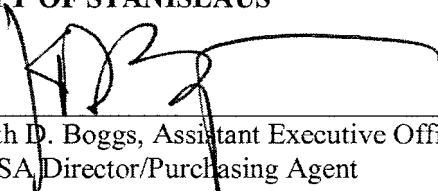
7.24. Corporate Authority: The persons executing this Agreement on behalf of the parties hereto warrant that they are duly authorized to execute this Agreement on behalf of said parties and that by doing so, the parties hereto are formally bound to the provisions of this Agreement.

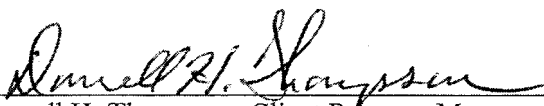
[SIGNATURES SET FORTH ON FOLLOWING PAGE]

IN WITNESS WHEREOF, the parties hereto have caused this Agreement to be executed by and through their respective authorized officers:

COUNTY OF STANISLAUS

SHAW ENVIRONMENTAL, INC.


By:   
Keith D. Boggs, Assistant Executive Officer,  
GSA Director/Purchasing Agent

By:   
Darrell H. Thompson, Client Program Manager

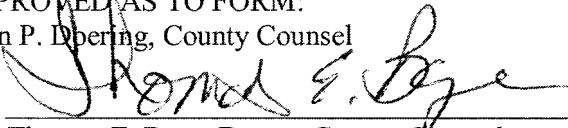
"County"

"Consultant"

APPROVED AS TO CONTENT:  
Department of Environmental Resources

By:   
Sonya K. Harrigfeld, Director

APPROVED AS TO FORM:  
John P. Dbering, County Counsel

By:   
Thomas E. Boze, Deputy County Counsel

**EXHIBIT A**  
**SCOPE OF WORK/SPECIFICATIONS**

**A. HISTORY**

The Fink Road Landfill was developed in 1973 as a Class III landfill, primarily to serve western Stanislaus County. At that time the disposal rate was less than 50 tons per day. The original site contained 219 acres and was purchased by Stanislaus County. The original landfill, which is referred to as Landfill No.1 (LF-1), consisted of a 40-acre portion of the total site located in the northwest quadrant of the parcel. Of the original 40-acre permitted landfill, only 18.5 acres had been used for disposal purposes.

In 1988 a 16.5-acre parcel, located in the southwest corner of the site, was leased to Ogden Martin, Inc., now Covanta Energy, for the construction of a mass burn Waste-to-Energy plant. The plant began operations in October 1989, and burns an average of 800 tons of municipal solid waste per day.

In conjunction with the construction of the Waste-to-Energy facility, the Fink Road Landfill was re-permitted to include a Class II disposal area, which is dedicated to the disposal of combustion ash from the Waste-to-Energy plant. The Class II landfill is located along the south boundary of the 219-acre site and contains 31.4 acres of disposal area in a 38.5-acre parcel. The Class II landfill is referred to as Landfill No. 3 (LF-3) and receives an average of 75,000 tons of ash per year.

The remaining 124 acres of the site is referred to as Landfill No. 2 (LF-2) and was permitted as a Class III Landfill in July 1988. This area contains a net disposal area of 100 acres. Waste was disposed of in LF-2 beginning in August of 1993.

Landfill 2, Cell 5, Baseline System Design

The County contracted with Shaw Environmental Inc. (Shaw), on April 7, 2008, to design a baseliner system for Landfill 2, Cell 5, at Fink Road Landfill. The design was completed and on April 28, 2009. The liner system consists of a single composite liner system over the base and side slope areas and a second single-composite liner with a sandwiched geocomposite drainage net acting as a leak detection layer below the main Leachate Collection and Removal System (LCRS) collection pipe and below the LCRS sump. This secondary system serves as a pan lysimeter. The pan lysimeter is comprised of a 2-foot deep gravel filled sump with average plan dimensions of 16 feet by 19 feet and an approximately 6 foot wide strip of geocomposite located above a secondary liner seamed to the overlying primary liner.

Landfill 2, Cell 5 Construction

Stanislaus County awarded a Bid for the Construction of Landfill 2, Cell 5, at the Fink Road Landfill to DeSilva Gates. The project was accepted on Nov. 15, 2010, and a Notice of Completion was prepared on Nov. 22, 2010.

Cell 5 has not been used for waste disposal by the County as of the date of this Agreement because the Regional Water Quality Control Board (RWQCB) has not yet granted approval to do so.

Shaw is the engineer-of-record for the containment system design for Cell 5 in partnership with Golder Associates. Shaw also performed construction quality assurance (CQA) services during the excavation and liner construction performed by DSG and its subcontractors in 2009 and 2010. The original construction included completion of an electronic leak location survey (ELLS) performed by a firm as a subcontractor to DSG. The results of the initial ELLS (conducted with a sensitivity of about ½ inch) did not locate any leaks.

#### Fluid Present in the Pan Lysimeter

In the winter and spring of 2010/2011 (the rainy season), it was noted by County personnel that water collected in the pan lysimeter. Subsequently, an independent third party ELLS was completed by Applied Soil Water Technologies, LLC, with a greater sensitivity of approximately ¼ inch. To prepare for the second ELLS, the County loosened the operations layer over the sump and LCRS trench areas and wetted the soil to improve the operations layer's conductivity. The results of the second survey did not locate any leaks (¼ inch or larger). Following this, the County again sought approval from RWQCB to begin waste placement in Cell 5, but approval was withheld pending the winter rains to further rule out the possibility of a leak.

During the winter of 2011/2012, the lined Cell was again partially filled with accumulated stormwater from storm events on or about January 23, 2012. Shortly after the rains, water was determined to be present in the pan lysimeter. County personnel indicated that pumping the lysimeter resulted in roughly 60 gallons of water per day. At this time, County personnel measured approximately 55 inches of water on the leachate depth gauge for the primary liner sump. After detecting water in the pan lysimeter during pumping, the County introduced red food dye into the primary liner sump to determine if water was leaking from the primary liner into the pan lysimeter. At approximately 4:30 pm on February 15, 2012, County personnel observed red dye in water pumped from the pan lysimeter. The presence of dye in the lysimeter suggests at least one leak exists in the primary liner.

#### County Seeks Additional Advice From CQA Consultant

Given the above information, the County must again attempt to identify any potential leak(s) in the primary geomembrane liner, and until this can be ruled out, the County will be prevented from obtaining approval from the RWQCB to place waste in Cell 5. The County sought additional advice from Shaw, its CQA Contractor.

Based on the presence of the dye in the lysimeter water, and following discussions with the third party leak location firm, Applied Soil Water Technologies, LLC, Shaw recommends the following steps:

- 1) confirm the water chemistry of the lysimeter water versus the primary liner water by reanalyzing both water bodies using filtered methods to rule out the contribution of sediment to the metals content in the waters;

2) locate the suspected leak; and

3) confirm the water appearing in the lysimeter following pumping (dry) is representative of the water in the primary liner.

Shaw recommends the County contract again with an independent ELLS firm to perform another, even more focused survey over the LCRS sump and LCRS trench above the pan lysimeter.

#### Recommended Steps to Locate the Suspected Leak(s) and Confirm Water Chemistry

1. Reanalyze the lysimeter water and primary sump water using filtered samples.
2. Pump the pan lysimeter and LCRS primary liner to the lowest level attainable.
3. Install pressure transducers in the lysimeter and the primary liner sumps.
4. Flood the primary liner in documented increments and monitor the pressure transducers in both the primary sump and the lysimeter sump.
5. During the application of water to the primary liner, monitor the pressure head in the primary sump and lysimeter sump.
6. Resample the water in the lysimeter and the primary liner to confirm it is the same water.
7. Flood the lysimeter to its extent and flood the primary liner up to the elevation corresponding to the limit of the lysimeter.
8. Contract a third party ELLS contractor to perform an additional ELLS focused on the both the elevation in the primary liner that corresponded to water reappearing in the lysimeter and conduct an ELLS along the entire extent of the lysimeter below the primary liner.
9. Document all activities for summarizing the investigation and repairs for submittal to the RWQCB.

The ELLS contractor will attempt to reconnect to the ground wire system installed within the pan lysimeter system, which was successfully used during the previous ELLS in October 2011.

#### **B. SCOPE OF WORK**

The Consultant shall provide all the labor and supervision to provide Construction Quality Assurance (CQA) engineering support services during the Electronic Leak Location Survey (ELLS) to be performed by Applied Soil Water Technologies, LLC, at the Fink Road Landfill 2, Cell 5, 4000 Fink Road, Crows Landing, CA.

The Consultant shall provide the following:

##### Task 1 – Engineering Services

Consultant shall provide engineering support services to the County, including but not limited to the following:

1. Guidance on the County's portion of the preparation for the additional Electronic Leak Location Survey (ELLS), including the selection of a new portable pump.
2. Guidance to the County on additional recommended water chemistry analyses and dye test write-up requirements and review of the July 2011 water chemistry analyses.
3. Review of the fourth quarter 2011 groundwater monitoring report to determine if groundwater was anywhere near the elevation of the liner system.
4. Support to County staff in the form of phone and conference calls, emails, memos, and development of recommended steps to further evaluate the condition of the liner system of Cell 5.
5. Review RWQCB inspection report dated January 18, 2012, regarding concerns for the exposed high-density polyethylene (HDPE) liner on the side walls of Cell 5 and prepare a summary memorandum with recommendations.
6. Preparation of a Memorandum summarizing the steps taken or to be taken with sufficient detail for submission to the RWQCB for their approval. Following the anticipated location and assessment of the leak(s), Contractor will amend the Memorandum as necessary to include repair, inspection, and recertification measures.

#### Deliverables

- A. One (1) copy of Summary Memorandum with recommendations to address the RWQCB Inspection Report dated Jan. 18, 2012 for County file.
- B. One (1) copy of Memorandum of recommended field activities to locate suspected leak(s) for County file and one (1) copy for each regulatory agency;
- C. One (1) copy of Final Memorandum for liner repair, inspection, and recertification (if required) for County file and one (1) copy for each regulatory agency.
- D. One (1) electronic copy of each Memorandum listed in items A-C, above (including all tables, figures, CAD drawings, appendices, etc.) for County file in PDF, MS Word and/or Excel formats.

#### Task 2 – Field Observation CQA Services

Consultant shall observe and coordinate with the ELLS contractor during the survey. Consultant shall also observe the calibration process and the actual survey. Consultant shall observe any excavation of the operations layer (soil) that is required to expose the LCRS gravel, and any hand excavation through the LCRS gravel to the liner system for investigative purposes or to repair any identified leak(s). Consultant shall observe and document all liner repairs and replacement of LCRS gravel and operations layer.

Deliverable: Field documentation of work conducted.

### Task 3 – Letter Report

Consultant shall review the following data: conclusions of the ELLS, results of confirmation water chemistry analyses, results of monitoring for the reappearance of water in the lysimeter corresponding with elevation of water in the primary liner, and relevant data provided by County staff.

Consultant shall prepare a letter report for submission to the RWQCB summarizing the aforementioned data in addition to the liner exposure methods, the liner repairs and recertification (if required), and documentation of the replacement of the LCRS gravel and operations layer. County comments shall be incorporated following the review of the Draft Letter Report. Consultant shall also include photographs and shall respond to minor comments from the RWQCB.

#### Deliverables:

1. One (1) Draft copy of each Letter Report for County file and one (1) for each regulatory agency after approvals.
2. One (1) Final copy of each Letter Report for County file and one (1) for each regulatory agency after approvals
3. One (1) copy of each Recertification of liner repairs (if required) for County file and one (1) for each regulatory agency after approvals.
4. One (1) electronic copy of both Letter Reports (including all tables, figures, CAD drawings appendices etc.) for County file in PDF, MS Word, and/or Excel formats.

### **C. COMPENSATION**

The Consultant shall be compensated for the services provided under this Agreement as follows:

1. Consultant shall be compensated on a time and material, not to exceed basis for the not to exceed limits in each task, as set forth in Exhibit B attached hereto and, by this reference, made a part hereof. The not-to-exceed amounts for each task are comprised of the hourly billable rates set forth in Exhibit B. In addition to the aforementioned fees, Consultant shall be reimbursed for the following expenses, plus any expenses agreed to by the parties as set forth in a Schedule of Rates – Exhibit B attached hereto, that are reasonable, necessary and actually incurred by the Consultant in connection with the services:
  - (a) Any filing fees, permit fees, or other fees paid or advanced by the Consultant at actual costs no mark up.
  - (b) Expenses, fees or charges for printing, reproduction or binding of documents at actual costs no mark up.
  - (c) Travel expenses shall be reimbursed in accordance with the County's travel policy, which is incorporated herein by reference (see <http://www.stancounty.com/auditor/pdf/travel-policy-approved-2009.pdf>). The County shall not pay a mark-up on travel expenses.

Fees plus reimbursable expenses shall not exceed the amounts set forth in Exhibit B and a copy of the original invoice for the items listed in a, b or c above shall be attached to the invoice submitted to the County for reimbursement. Payments shall be based upon work documents submitted by the Consultant to the County and accepted by the County, as being satisfactory to County's needs, not work in process. The County shall not pay a mark-up on any of the above items listed in a, b or c or any item identified in Exhibit B. Items such as a telephone, cell phone, fuel, company car, copies, fax, postage or freight are already included in the billable hourly rate.

**D. INVOICE TO ADDRESS**

Consultant shall submit a detailed invoice for work actually completed. The invoice is to include but not be limited to the following information: hours worked by Consultant's Staff, the title of the Staff, billable rate and reimbursable items that are reasonable, necessary and actually incurred by the Consultant in connection with the services.

Invoices shall be sent to:

Stanislaus County Dept. of Environmental Resources  
3800 Cornucopia Way, Suite C  
Modesto, CA 95358  
Attn: Jami Aggers

**E. REPRESENTATIVE**

The County's Project Manager is Jami Aggers (209-525-6768) or Gerry Garcia (209-837-4816).

**F. SAFETY REQUIREMENTS**

All services and merchandise must comply with current California State Division of Industrial Safety Orders and OSHA.

**G. LABOR CODE COMPLIANCE**

Prevailing Wage: Pursuant to Labor Code Section 1771, certain work under this Agreement is subject to the provision of Article 2 (commencing with section 1770) of Chapter 1 of Part 7 of Division 2 of the Labor Code, and the Consultant shall pay all workers the general prevailing rate per diem wages applicable to the work to be done for straight time, overtime, Saturday, Sunday and holiday work. These wage rates, which are set forth by the Director of the Department of Industrial Relations, are now on file with the Department of Public Works and are a part of this Agreement. The Consultant shall post a copy of these prevailing wage rates on the job site.

1. Payroll Records: Pursuant to and in accordance with the provisions Labor Code Section 1776, the Consultant shall keep accurate payroll records of employees performing work under this Agreement and shall make available for inspection a certified copy such payroll records.



2. **8 Hour Day:** Pursuant to and in accordance with the provisions of Labor Code Section 1810, 1811 and 1815, the time of service of any laborer, workman, or mechanic employed upon any of the work under this Agreement is limited and restricted to eight (8) hours during any one calendar day, and 40 hours during any one calendar week, except that work performed by employees of contractors in excess of eight (8) hours per day and 40 hours during any one week, shall be permitted upon compensation for all hours worked in excess of eight (8) hours per day at not less than one and one-half (1-1/2) times the basic rate of pay.
3. **Apprentices:** The Contractor shall comply with all applicable provisions of the Labor Code, including without limitations Section 1777.5 and 1777.6, related to employment of apprentices by the Consultant and all subcontractors, and Consultant shall be subject to all applicable penalties for non-compliance.
4. **Penalties:** The Consultant shall comply with Labor Code Section 1775. In accordance with Labor Code Sections 1775 and 1813, the Consultant shall forfeit, as a penalty to the County of Stanislaus \$25.00 for (a) each calendar day or portion thereof for each workman paid less than the stipulated prevailing rates for such work or craft in which such workman is employed for any work done under the contract by him or by any subcontractor under him; and (b) each calendar day or week during which any laborer workman or mechanic is required or permitted to labor more than eight hours in any one calendar day or 40 hours in any one calendar week in violation of the provisions of Article 3 (commencing with Section 1810) of Chapter 1, Part 7, Division 2 of the Labor Code. In addition to said penalties, the difference between such stipulated prevailing wage rates and the amount paid to each workman for each calendar day or portion thereof for which each workman was paid less than the stipulated prevailing wage rate shall be paid to each workman by the Consultant.

## **H. WORK SCHEDULE**

Consultant is obligated to perform, in a timely manner, the services and work provided for under this Agreement. It is understood by Consultant that the performance of these services and work shall require the Consultant to perform the services and work in conformance with a work schedule agreed to by the parties.

## **I. EXPERTISE**

The Consultant shall provide staff and expertise in all areas defined within this Agreement through their own staff or by the use of designated sub-consultants. The Consultant shall utilize sub-consultants identified in their proposal with the expertise in all areas as defined in this Agreement. On occasion, the Consultant may need to hire specialty sub-consultants not previously identified in their proposal. In either case, County reserves the right to approve the use of sub-consultant firms proposed for specialty work.

The Consultant may provide staff with varying levels of expertise, however, work performed by subordinate staff members shall only be done under the direction of the designated responsible engineers, specified in the contract with the expertise in the required technical areas.

**J. PROJECT WORK EFFORT**

The Consultant shall perform services and provide staff adequate to meet the anticipated workload for the project.

**K. PROJECT COORDINATION**

The Consultant shall coordinate and cooperate with State, County, local cities and agencies, and public and franchise utility companies.

The Consultant shall notify the County Project Manager immediately of any problems having an impact on either the project schedule or budget.

*(End of Exhibit A)*

## **EXHIBIT B**

### **FEE SCHEDULE**

The Consultant shall provide all the labor, material, transportation, equipment and supervision to perform services in accordance with this Agreement and Exhibit A of this Agreement.

The charges for the work shall be in accordance with this fee schedule. **The below fee schedule is in effect through the end of this Agreement.** The following billable rates include: labor, benefits, taxes, overhead/general & administrative (G&A), profit, and ancillary charges such as copies, faxes, telephones, postage, paper clips, binders, company cars, fuel, insurance, vehicle or equipment maintenance, cellular phone charges, computer charges (CADD, word-processing, mapping), etc.

It is important that the Consultant use only the appropriate staff levels for the tasks performed. The Consultant may use a higher billing staff person to perform tasks commonly performed by a lower billing staff person if the billing rate is adjusted downward to correspond to the task performed.

#### **Certain types of work may require Prevailing Wage:**

Under Section 1720 (a)(1) of the California Labor Code, As used in this chapter, "public works" means: (1) Construction, alteration, demolition, installation, or repair work done under contract and paid for in whole or in part out of public funds, except work done directly by any public utility company pursuant to order of the Public Utilities Commission or other public authority. For purposes of this paragraph, "construction" includes work performed during the design and preconstruction phases of construction including, but not limited to, inspection and land surveying work. It is important that the billable hourly rates include prevailing wage requirements where appropriate.

"Projects are subject to payment of prevailing wages when paid for in whole or in part out of public funds. Public Funds includes state, local and/or federal monies." Remediation (i.e., soil boring, sampling surface soil treatment, removal and remediation of soil that is contaminated with hazardous substance and disposal of contaminated material) work constitutes alteration and demolition of the land and the work is being paid for by public funds."

#### **Labor Code Compliance**

Prevailing Wage Pursuant to Labor Code Section 1771, certain work under this Agreement is subject to the provision of Article 2 (commencing with section 1770) of Chapter 1 of Part 7 of Division 2 of the Labor Code, and the Contractor shall pay all workers the general prevailing rate per diem wages applicable to the work to be done for straight time, overtime, Saturday, Sunday and holiday work. These wage rates, which are set forth by the Director of the Department of Industrial Relations, are now on file with the Department of Public Works and are a part of this Agreement. The Contractor shall post a copy of these prevailing wage rates on the job site.

#### **A. PRICE SCHEDULE:**

The Consultant shall provide all the labor, materials and supervision necessary to perform the services identified in Exhibit A – Scope of Work/Specifications in accordance with the rate schedule below.

1. **FEE**

The Consultant shall be compensated for the completion of the fixed fee portions of the services described in Exhibit A, and the not to exceed amounts for each task as set forth below. The below not to exceed amounts include fees (Hourly Billable Rates) and shall not exceed the amounts set forth below.

<b>TASK NO.</b>	<b>DESCRIPTION</b>	<b>TOTAL NOT TO EXCEED AMOUNT PER TASK</b>
1	Engineering Support	\$10,058.00
2	Field Observation Services	\$4,983.00
3	Letter Report	\$4,812.00
	<b>TOTAL</b>	<b>\$19,853.00</b>

2. **HOURLY BILLABLE RATES**

The Consultant shall be compensated on a time and material not to exceed basis, based on the hourly billable rates, and the not to exceed amounts for each task as set forth above.

<b>TITLE</b>	<b>HOURLY BILLABLE RATE</b>
Thompson	\$147.00
Cope	\$151.00
Flores (standard)	\$70.00
King	\$58.00

3. **DETAILED PROJECT PRICE**

A detailed breakdown of estimated hours for Tasks 1-3 is set forth on the following page:

Task	Title	Quantity	Unit	Rate	Extended Total Not to Exceed Price
1	<i>Engineering Support</i>				
	Thompson	36	Hour	\$147.00	\$5,292.00
	Cope	26	Hour	\$151.00	\$3,926.00
	Flores	12	Hour	\$70.00	\$840.00
<b>Task 1 Subtotal</b>					<b>\$10,058.00</b>
2	<i>Field Observation Services</i>				
	Thompson	4	Hour	\$147.00	\$588.00
	Cope	4	Hour	\$151.00	\$604.00
	Flores (Reg. Time)	40	Hour	\$70.00	\$2,800.00
<b>Task 2 Labor Subtotal</b>					<b>\$3,992.00</b>
	<b>Reimbursables *</b>				
	4 WD Truck (Rental)	4	Days	\$75.00	\$300.00
	Fuel	1	LS	\$250.00	\$250.00
	Meals & Incidentals	4	Days	\$39.00	\$156.00
	Lodging	3	Days	\$95.00	\$285.00
<b>Task 2 Reimbursable Subtotal</b>					<b>\$991.00</b>
3	<i>Letter Report</i>				
	Thompson	8	Hour	\$147.00	\$1,176.00
	Cope	4	Hour	\$151.00	\$ 604.00
	Flores (Reg. Time)	40	Hour	\$ 70.00	\$2,800.00
	King	4	Hour	\$ 58.00	\$ 232.00
<b>Task 3 Labor Subtotal</b>					<b>\$4,812.00</b>
<b>PROJECT TOTAL</b>					<b>\$19,853.00</b>

**\*REIMBURSABLES**

Consultant shall be reimbursed for any expenses specifically set forth in this Agreement. All such reimbursement amounts are limited to those costs and expenses that are reasonable, necessary and actually incurred by the Consultant in connection with the services provided. The County shall not pay a mark up on any item of reimbursement. The County shall not pay for any item of overhead such as telephone, cell phone, mileage, facsimile, postage, etc. All requests for reimbursement shall be accompanied by a copy of the original invoice. Travel expenses shall be reimbursed in accordance with the County's travel policy, which is incorporated herein by reference.

(End of Exhibit B)

**EXHIBIT C**  
**PROJECT SCHEDULE**

Consultant shall meet the following schedule:

<b>Description</b>	<b>Timeline</b>
Tasks 1-3	No later than April 30, 2012

*(End of Exhibit C)*

**Ratify and Amend: Contract  
for Professional Design  
Services with Shaw  
Environmental for Fink Road  
Landfill, LF 2-Cell 5**

Jami Aggers, Director  
Dept. of Environmental Resources  
February 12, 2013

# Background

- Dept. of Environmental Resources, Landfill Division, maintains and operates the Fink Road LF
- This facility provides the Class III disposal for municipal solid waste for all of Stanislaus County as well as Class II combustion ash from the WTE facility



# Background Cont'd.

- In March 2008, the Board awarded a contract to Shaw Environmental to provide professional engineering services for the following:
  - Design and permit the construction of the base liner system for LF 2, Cell 5
  - Administer/oversee construction (CQA)

# Background Cont'd.

- CQA services are required by California Regulations
- Necessary to ensure that the General Contractor builds the project to State-mandated specifications

# Background Cont'd.

- In October 2008, the Board approved and adopted the plans & specs, and the notice inviting bids for construction was published
- Closing date: November 26, 2008, however, the initial bids were rejected
- Project was put back out to bid with a closing date of April 1, 2009

# Background Cont'd.

- Contract was awarded to DeSilva Gates on April 28, 2009, and construction began in June
- Project was accepted as complete in November 2010, however, RWQCB had not yet granted approval for waste placement
- Why? Possibility of leak in the plastic liner

# Background Cont'd.

- Shaw was engineer of record for the project and an electronic leak location survey (ELLS) was performed following the placement of 2 ft of operations layer (soil)
- Sensitivity for the test was approx. 1/2" (detects a hole 1/2" or greater in size)
- Survey detected no leaks

# Background Cont'd.

- Winter/Spring of 2010/2011, staff noted that water had collected in the “pan” area in the bottom of the Cell (“V” shaped)
- Liken this bottom center design to double-bagging groceries in case the first bag leaks, and welding the seams together
- A little moisture collection is normal (condensate), a lot isn't
- Commissioned another test

# Background Cont'd.

- Specified ¼" = greater sensitivity
- No leaks detected
- Sought approval from RWQCB again
- Approval withheld pending 2011/2012 winter rains to rule out the possibility of a leak

# Background Cont'd.

- 2011/2012 winter rains finally hit in January 2012
- Shortly thereafter = more water in the pan, specifically: 60 gallons/day
- Injected red food dye into the sump area below the primary plastic liner
- Result? Red dye in the pan = leak



# Background Cont'd.

- Sought additional advice from Shaw, entered into contract April 2012
- Through some analyses and removal of a portion of the ops layer, felt we had pinpointed the area(s) of potential leaks
- Arranged for a 3<sup>rd</sup> leak test in July 2012
- Result? Unsuccessful in locating leak(s)

# Background Cont'd.

- In August 2012, amended Shaw's contract, increasing it \$3,717 to help us devise an alternate plan and continue trying to find the leak
- Shortly thereafter, we also discovered water under the bottom-most liner which meant leaks in both liners and more work to identify them

# Background Cont'd.

- Dictated a 2<sup>nd</sup> amendment to Shaw's contract in October, increasing it \$12,884 to oversee all work necessary to identify and repair the liner components
- As we uncovered ("exposed") more and more of the liner and did find some poorly welded seams, it quickly became evident that the only way to make this right was to deconstruct and reconstruct the bottom-most liner section ("trough" area)

# Background Cont'd.

- Racing against the clock as this type of work cannot be done in a moist environment
- Knew we must have our approval for waste placement by Spring 2013
- Knew we might run over on our CQA services costs, but did not make sense to demobilize and then remobilize the work crews

# Background Cont'd.

- We recognize that this isn't the County's preferred practice of getting authorization first and then doing the work, but it was unavoidable in this case
- Shaw's additional charges were \$18,673 bringing the total not to exceed amount to \$55,127
- Work performed by DeSilva Gates and their sub: Viking Environmental – no cost

# Background Cont'd.

- Shaw prepared their final report documenting every step of the work that had been done
- They and LF staff worked tirelessly on this project and we received approval for waste placement in Nov. 2012



























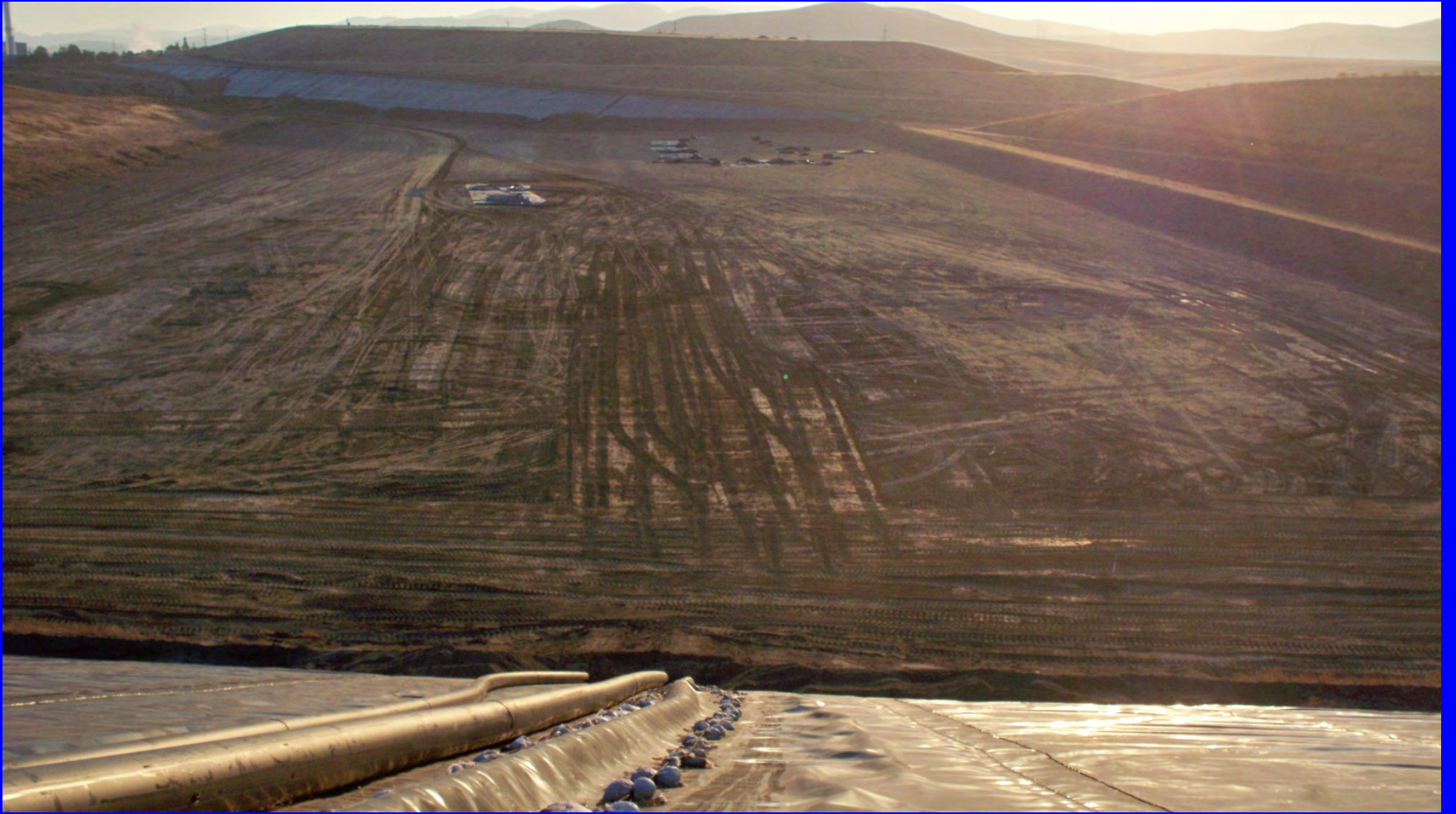














# Lessons Learned

1. ELLS survey, 1/4" sensitivity, done during construction on top of the gravel vs. ops layer
2. Require the Contractor's performance bond to remain in place until RWQCB sign-off is obtained
3. Always start early

# Staff Recommendation

- California Constitution gives the governing body the authority to additional compensation after service is rendered
- Ratify and Amend the Contract for Professional Design Services with Shaw Environmental for Landfill 2, Cell 5 at the Fink Road Landfill

Questions?