

**AMENDMENT NO. 2 TO THE AGREEMENT
WITH GEOSYNTEC CONSULTANTS, INC (BC22054)**

THIS AMENDMENT to the Agreement for Services of Independent Contractor entered into on July 1, 2022 (hereafter Amendment No. 2), is made by and between the County of Santa Barbara, a political subdivision of the State of California (hereafter COUNTY) and Geosyntec Consultants, Inc. with an address at 924 Anacapa Street, Suite 4A, Santa Barbara, CA 93101 (hereafter CONTRACTOR).

WHEREAS, the parties hereto, entered into an Agreement (BC22054) for regulatory compliance consulting services as requested by the COUNTY, commencing on July 1, 2022; and

WHEREAS, these amendments are being made pursuant to Article 25 of the Agreement, which allows for the Agreement to be amended; and

WHEREAS, the original Agreement amount for the project was in the amount of \$369,370; and

WHEREAS, additional work is necessary to support regulatory compliance pertaining to the optimization of the leachate collection and recovery systems, and geotechnical evaluations for the Tajiguas Landfill;

NOW THEREFORE, COUNTY and CONTRACTOR agree to amend the Agreement as follows:

1. EXHIBIT A, First Paragraph, is hereby amended to read:

CONTRACTOR shall provide professional services as set forth in the CONTRACTOR'S proposal dated April 28, 2022 included as Attachment A-1, and as set forth in the CONTRACTOR'S proposal dated October 28, 2022 included as Attachment A-2, and as set forth in the CONTRACTOR'S proposal dated October 21, 2022 included as Attachment A-3, as herein attached and incorporated by reference.

2. Attachment A-3 is added in its entirety as attached hereto and incorporated herein by reference.

3. EXHIBIT B, Paragraph A, is hereby amended to read:

For CONTRACTOR services to be rendered under this Agreement, CONTRACTOR shall be paid a total contract amount, including cost reimbursements, up to but not to exceed \$581,260.

4. The terms and provisions set forth in this Amendment No. 2 shall modify and supersede all inconsistent terms and provisions set forth in the Agreement (BC22054). The terms and provisions of the Agreement, except as expressly modified and superseded by this Amendment No. 2, are confirmed and shall continue in full force and effect, and shall continue to be legal, valid, binding and enforceable obligations of the parties.

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IN WITNESS WHEREOF, the parties have executed this Amendment No. 2 to be effective on the date executed by COUNTY.

ATTEST:

Mona Miyasato
County Executive Officer
Clerk of the Board

COUNTY OF SANTA BARBARA:

Das Williams, Chair
Board of Supervisors

By: _____
Deputy Clerk

By: _____

RECOMMENDED FOR APPROVAL:

Scott D. McGolpin, Director
Santa Barbara County Public Works

CONTRACTOR:

Geosyntec Consultants

By: _____

DocuSigned by:
By: Morgan Cline
Morgan Cline, P.G.
Principal Geologist

APPROVED AS TO FORM:

Rachel Van Mullem
County Counsel

APPROVED AS TO ACCOUNTING FORM:

Betsy M. Schaffer, CPA
Auditor-Controller

By: _____
Johannah Hartley
Deputy County Counsel

By: _____
Deputy

APPROVED AS TO FORM:

Gregory Milligan, ARM
Risk Manager

By: _____
Risk Management

ATTACHMENT A-3
CONTRACTOR'S PROPOSAL DATED OCTOBER 21, 2022



924 Anacapa Street
Suite 4A
Santa Barbara, CA 93101
PH 805.897.3800
www.geosyntec.com

21 October 2022

Ms. Jamie Reyes, P.E.
Resource Recovery and Waste Management Division
Santa Barbara County Public Works
130 E Victoria Street, Suite 100
Santa Barbara, CA 93101

**Subject: Geotechnical Evaluations in Support of Environmental Impact Report
Tajiguas Sanitary Landfill, Capacity Increase Project
Santa Barbara, California**

Dear Ms. Reyes,

Geosyntec Consultants, Inc. (Geosyntec), is pleased to present this proposal in response to a request from Santa Barbara County Public Works Resource Recovery and Waste Management Division (RRWMD) to provide geotechnical evaluations in support of the Draft Environmental Impact Report for the Capacity Increase Project (the Project) at Tajiguas Sanitary Landfill (TSL). TSL is located in the County of Santa Barbara at 14470 Calle Real, Goleta, California, approximately 26 miles west of the City of Santa Barbara.

PROJECT DESCRIPTION

TSL is a Class III landfill. The current total permitted airspace for the TSL is 23.3 million cubic yards (mcy) with remaining capacity of approximately 1.7 mcy as of April 2022 based on the Increased Capacity at the Tajiguas Sanitary Landfill 2022 Updated Report Memorandum dated October 2, 2022. Based on information provided by the RRWMD, we understand, the proposed Project is expected to increase the permitted top elevation from 620 feet msl to 650 feet msl and the permitted disposal area footprint 118 acres to 132 acres. The proposed height and permitted footprint increase is expected to increase the design capacity of the landfill and extend the estimated closure date from 2026 to 2038. Based on the description provided in the Updated Report Memorandum dated October 2, 2022, Geosyntec understands that RRWMD evaluated five (5) Options for the Project and selected Option 5.

Mr. Jamie Reyes, P.E.
21 October 2022
Page 2

The RRWMD has requested a Geosyntec support the Environmental Impact Report (EIR) for the Capacity Increase by preparing technical studies related to Geology and Soils aspects of the project. The primary focus of these efforts will be to conduct stability evaluations of the proposed reconfigured landfill. Geosyntec will also provide input to the RRWMD's selected EIR consultant during the preparation of the mitigation discussion in the Geology and Soils section of the EIR. Geosyntec anticipates conducting a review and providing input on this section of the Draft and Final EIR.

Geosyntec has developed following scope of work to provide these services.

SCOPE OF WORK

Task 1: Site Reconnaissance and geologic mapping

Geosyntec's registered geologist perform a one-day geologic reconnaissance in the areas of the Project's proposed lateral extension. The reconnaissance will consist of visual observations, collecting relevant photos, and documenting/measuring observed geologic bedding attitudes and conditions, where exposed geologic formations are encountered. Geosyntec will also review available and relevant existing geologic information for the Project area in our file on TSL and regional geology data available in California Geological Survey's (CGS's) online database. This task will also involve the preparation of an updated geology map of the lateral expansion area based on these field observation

Task 2: Data Compilation

Geosyntec will review previously performed slope stability analyses at TSL including the documentation regarding soil properties and interface shear strength test data for the base and slope liner systems for the existing waste cells. Soil parameters compiled/documented under this task will serve as the input values for the slope stability analysis of the proposed expansion as described in this proposal.

Task 3: Seismic Hazard Analysis

The most recent seismic hazard assessment prepared by Geosyntec for TSL was conducted in 2008. In support of the EIR, Geosyntec will update the seismic hazard analysis at TSL based on the most recent published fault and seismicity data and procedures. The seismic hazard analyses will involve updating the MCE and MPE earthquake parameters, updating acceleration response spectrum, selecting and scaling a minimum of three earthquake time histories. The time histories will be used in permanent seismic displacement analyses of the cut slopes and final waste slopes.

Mr. Jamie Reyes, P.E.
21 October 2022
Page 3

Task 4: Site Response Analysis

Geosyntec will perform one-dimensional site response analyses of the representative waste column. Under this task, Geosyntec will review and update site response analyses performed in 2008 to reflect the increased total waste thickness and the geometry of new proposed waste fills. The analyses will be performed using selected/scaled time histories generated under Task 3.

Task 5: Slope Stability Analyses

Geosyntec will perform slope stability analyses based on the selected Option. Geosyntec will review and update the location of the previously analyzed cross sections and add new sections as appropriate based on the revised base liner grades and final waste grades. Geosyntec anticipates analyzing up to five cross sections for representative final waste grade and liner grade combinations and two cross sections for the representative cut slopes. Static and pseudostatic slope stability analyses will be performed for each cross-section.

Task 6: Seismic Displacement Analyses

Geosyntec will perform permanent seismic displacement analyses for the waste mass over the base liner and for cut slope critical slip surfaces. The site response analysis results from Task 4 will be used to account for the response of the waste mass to the imposed shear waves. Newmark type displacement analyses will be performed, and permanent displacements estimated based on the yield coefficients estimated in Task 5. We understand blasting is proposed to remove material from the excavation area to the north, directly adjacent to the current landfill expansion area. Blasting is not anticipated to pose a stability threat to existing slopes/waste fill and no specific evaluation of that is considered necessary and thus is not proposed. Discussion of non-geology/soils related potential environmental impacts of blasting is outside of our scope of work.

Task 7: Slope Stability Report

Geosyntec will prepare a stability evaluation report. The report will include description of the work performed, including geologic reconnaissance and slope stability analysis methods, and a summary of findings. Slope stability analyses will include exhibits and relevant analysis data and outputs will be provided in appendices. As mentioned above, the detailed analyses will be based on the selected Option. We will also provide commentary/qualitative input regarding the potential impact of up to two of the other identified options 1 through 4 as selected by RRWMD.

Mr. Jamie Reyes, P.E.
21 October 2022
Page 4

Task 8: Support for EIR

Geosyntec will also provide engineering support for reporting requirements during the environmental impact report preparation (EIR) tasks in support of the RRWMD. Geosyntec will support the RRWMD's selected EIR consultant's preparation of mitigation discussion in the Geology and Soils section of the EIR. Geosyntec anticipates conducting a review and providing input on this section of the Draft and Final EIRs. For budgeting purposes, Geosyntec's cost estimate includes up to 40 professional hours of various categories as shown on attached Cost Estimate Table, Table 1.

Task 9: Miscellaneous Engineering Services

It is anticipated that several miscellaneous engineering and technical support services will be needed to support the Project. Geosyntec will provide these miscellaneous engineering support services including engineering services in support of the Joint Technical Document (JTD) preparation, laboratory testing services, or other geotechnical engineering support services to RRWMD on as needed basis. Since the scope of the miscellaneous engineering technical support services is not known at this time, Geosyntec proposes to perform these tasks on an on-call/as needed basis and on a Time and Materials payment basis, in accordance with our existing professional services agreement with RRWMD. Geosyntec suggests funding this task with an initial budget of \$16,600 that will be used toward future as needed miscellaneous engineering and technical services.

COST ESTIMATE

We propose to complete the proposed scope of services herein under the terms and conditions of the Service Agreement contract between Geosyntec and RRWMD dated June 28, 2022, on a time and materials basis for a **not-to-exceed cost of \$120,300**. Additionally, to account for potential changes for unforeseen scope of services, Geosyntec recommends an **additional 20 percent** contingency to the estimated total cost estimate which brings the total cost estimate, **including the proposed 20 percent contingency to a not to exceed amount of \$148,900**. Use of the additional contingency budget requires prior approval from RRWMD's Project Manager. A breakdown of the estimated costs is shown on the attached Table 1. Geosyntec's rate schedule for 2022-2023 fiscal year per the contract is included as Attachment 1.

Mr. Jamie Reyes, P.E.
21 October 2022
Page 5

SCHEDULE

We anticipate submitting a draft stability report to the RRWMD within 6 to 8 weeks of receiving written notice to proceed. The final report will be completed within 1 to 2 weeks of receipt of RRWMD's comments. Ongoing engineering support related to the preparation of the draft and final EIR efforts will be provide as needed during the preparation of the EIR between October 2022 and September 2023. However, based on our discussion with RRWMD, Geosyntec understands that time is of the essence for this project. Geosyntec will work closely with RRWMD and/or its selected consultants and will attempt to convey informal draft results of relevant engineering analysis performed by Geosyntec to help inform the initial conceptual design prepared by others.

ASSUMPTIONS

The following general assumptions apply to this proposal:

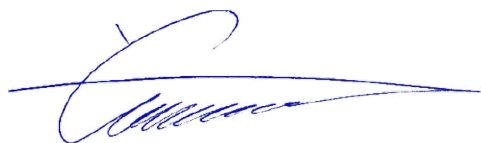
- We have not included attendance at staff or public meetings after the release of the reports in our scope and cost. Meeting attendance, if needed, would be billed on a time-and-materials basis under a separate authorization.
- For the given deliverables, we have assumed one round of review comments from the project team.
- The scope outlined in this proposal is intended to provide information regarding appropriate seismic hazard and ground motions for the purposes of developing the draft EIR. This report is not intended to provide detailed engineering design recommendations for the Project regarding these hazards.
- No subsurface or site-specific investigations or laboratory testing is included in the proposed scope of work.

Mr. Jamie Reyes, P.E.
21 October 2022
Page 6

CLOSING

Geosyntec appreciates this opportunity to continue to provide engineering services for the RRWMD. If you have any questions or require additional information regarding this proposal, please contact Bora Baturay, (714) 290-9246.

Sincerely,



Yonas Zemuy, P.E. (CA, AZ, NV)
Principal Engineer



Bora Baturay, Ph.D., P.E., G.E.(CA)
Principal Engineer



Chris Conkle, P.E., G.E. (CA)
Principal Engineer

Attachments: Table 1 - Cost Estimate
Attachment 1 – Geosyntec Consultants 2022-2023 COSB Fiscal Year Rate
Schedule

ATTACHMENT A-3

Table 1
 Estimated Budget
 Geotechnical Evaluations in Support of CEQA
 Tajiguas Sanitary Landfill Capacity Increase Project
 Santa Barbara, California



Task Description	Senior Principal	Principal	Senior Professional	Project Professional	Professional	Sr. Staff Professional	Staff Professional	Designer	Admin. Assistant	Task Total
	\$275.00/hr	\$255.00/hr	\$235.00/hr	\$208.00/hr	\$185.00/hr	\$164.00/hr	\$140.00/hr	\$148.00/hr	\$78.00/hr	
Task 1: Site Reconnaissance and Geologic Map										\$ 9,800
Site reconnaissance	1			12						\$ 2,771
Review geology maps	1			8				4		\$ 2,531
Prepare geology write up	1			8						\$ 1,939
Prepare geology map	1			8				4		\$ 2,531
Task 2: Data Compilation										\$ 10,000
Review existing data		8				12				\$ 4,008
Prepare summary write up		8				24				\$ 5,976
Task 3: Seismic Hazard Analysis										\$ 14,900
Develop MPE/MCE parameters		2		12	16					\$ 5,966
Develop target spectrum		2		20	4					\$ 5,410
Time history selection and scaling		2		8		8				\$ 3,486
Task 4: Site Response Analysis										\$ 9,400
Review and Update existing models		2			12	12				\$ 4,698
Software iterations		2			12	12				\$ 4,698
Task 5: Slope Stability Analyses										\$ 28,900
Develop cross sections		6			6	46		8		\$ 11,368
Set up SlopeW files		6			8	46				\$ 10,554
Static and Pseudostatic runs		6			6	26				\$ 6,904
Task 6: Seismic Displacement Analyses										\$ 6,700
Newmark analyses		2			8	8				\$ 3,302
Estimate displacements for sections		2			8	8				\$ 3,302
Task 7: Slope Stability Report										\$ 15,800
Draft Report		12			16	24		16	4	\$ 12,636
Final Report		4			4	4		4	2	\$ 3,164
Task 8: Ongoing Support for EIR										\$ 8,500
Support		18			14	8				\$ 8,500
Task 9: Miscellaneous Engineering Services										\$ 16,600
Support		30			40			8	4	\$ 16,600
Total Hours:	4	112	0	76	154	238	0	44	10	
Subtotal Fee:	\$ 1,100	\$ 28,560	\$ -	\$ 15,808	\$ 28,490	\$ 39,032	\$ -	\$ 6,512	\$ 780	\$ 120,300

Expenses
Field Vehicle
Computer/CADD
Communication Fee (3% of Labor)
Added 20% Contingency

Rate
125
15
0.03
20%

Unit	Quantity	Total
day	2	\$ 250
hour	44	\$ 660
\$	120,300	\$ 3,609
\$	120,300	\$ 24,060
Total:		\$ 148,900

Added 20% Contingency

CONFIDENTIAL

Attachment 1
GEOSYNTEC CONSULTANTS
2022-2023 COSB FISCAL YEAR RATE SCHEDULE

Staff Professional	\$140
Senior Staff Professional	\$164
Professional	\$185
Project Professional	\$208
Senior Professional	\$235
Principal	\$255
Senior Principal	\$275
Technician I	\$ 77
Technician II	\$ 82
Senior Technician I	\$ 92
Senior Technician II	\$ 98
Site Manager I	\$108
Site Manager II	\$118
Construction Manager I	\$130
Construction Manager II	\$142
Senior Designer	\$178
Designer	\$148
Senior Drafter/Senior CADD Operator	\$ 136
Drafter/CADD Operator/Artist	\$ 122
Project Administrator	\$ 78
Clerical	\$ 60
Direct Expenses	Cost plus 12%
Subcontract Services	Cost plus 12%
Technology/Communications Fee	3% of Professional Fees
Specialized Computer Applications (per hour)	\$ 15
Personal Automobile (per mile)	Current Gov't Rate
Photocopies (per page)	\$.09

Rates are provided on a confidential basis and are client and project specific.
Unless otherwise agreed, rates will be adjusted annually based on a minimum of the Producer Price Index
for Engineering Services.

Rates for field equipment, health and safety equipment, and graphical supplies presented upon request.
Construction management fee presented upon request.