



G E O T E C H N I C A L ■ E N V I R O N M E N T A L ■ M A T E R I A L S



Proposal No. SD-26-0020-P-GT
January 12, 2026
Revised January 20, 2025

City of Oceanside
Water Utilities Department
300 North Coast Highway
Oceanside, California 92054

Attention: Ms. Robin Huber

Subject: PROPOSAL FOR GEOTECHNICAL INVESTIGATION FOR DEWATERING
BUCCANEER LIFT STATION
1424 S. PACIFIC STREET
OCEANSIDE, CALIFORNIA

Dear Ms. Huber:

In accordance with your request, we herewith submit our proposal to perform a geotechnical investigation for the Buccaneer lift station project located in Oceanside, California. To aid in preparing this proposal, we have reviewed the following documents.

- RFP: *Scope of Work: Geotechnical Investigation for Dewatering, buccaneer Lift Station Design and La Salina Wastewater Treatment Plant Decommissioning Project, City of Oceanside: Water Utilities Department.*
- *Contextual Site Plan, La Salina Wastewater Treatment Plant Decommissioning and Buccaneer Lift Station – Conditional Use Permit, prepared by Tetra Tech, dated February 20, 2025.*
- *Geotechnical Exploration Report, La Salina Sewer Lift Station Design and Wastewater Treatment Plant Decommissioning Project, 1330 South Tait Street, City of Oceanside, California, prepared by Leighton Consulting, Inc.. dated May 25, 2106 (Project No. 11224.001).*
- *Field Percolation Testing, La Salina Sewer Lift Station, 1330 South Tait Street, Oceanside, California, prepared by Leighton Consulting, Inc., dated November 4, 2021 (Project No. 11224.002).*
- *Summary of NPDES Groundwater Sampling, La Salina Sewer Lift Station, 1330 South Tait Street, Oceanside, California, prepared by Leighton Consulting, Inc., dated November 4, 2021 (Project No. 11224.002).*

We understand the City will be constructing Buccaneer Lift Station as part of the decommissioning of the La Salina Wastewater Treatment Plant. Based on the provided scope of work, our services are expected to consist of field exploration, groundwater monitoring well installation, geotechnical laboratory testing, hydraulic calculations and groundwater analysis, and preparing a report that can be used in the bedding process for dewatering, shoring, and construction of the lift station.

SCOPE OF WORK

Geotechnical and Groundwater Investigation

Based on the above discussion and our understanding of the project, we recommend that the scope of our services consist of the following:

Task 1: Pre-Fieldwork Activities

Review available geotechnical reports, literature, and maps relevant to the site, including previous geotechnical reports and information provided by the City. We will obtain a boring permit through the County of San Diego Department of Environmental Health to install the groundwater well and piezometers that will be needed for well testing.

Task 2: Boring and Groundwater Monitoring Well Installation

- We will drill and install 1 groundwater test well to a depth of at least 80 feet below ground surface (bgs). As this well will be utilized for groundwater pumping, we are proposing to install a 6-inch-diameter well screen and casing. The screened interval will be from 10 feet to 75 feet bgs.
- We will install 4 groundwater monitoring piezometers at various locations to be used during the aquifer pumping test. The piezometers will be 2-inch-diameter. The piezometers will be drilled to the following depths:
 - PZ-1a and PZ-1b (near the location of Leighton's (2016) CPT-1. This borehole will include two piezometers paired in the same borehole. PZ-1A will be screened from 10 feet to 37 feet bgs. The lower piezometer (PZ-1b) will be screen from 45 feet to 75 feet bgs. The interval from 38 feet to 44 feet bgs will be filled with neat cement or a cement-bentonite grout. These screen intervals will allow aquifer tests analysis to evaluate variations in the hydraulic conductivity, transmissivity, and storage coefficient of the upper and lower parts of the younger alluvium (Qa).
 - PZ-2a and PZ-2B will be located in the mapped area of the older alluvium (Qol). The piezometers will be 2-inch-diameter and will be constructed in separate boreholes. Upper piezometer (PZ-2A) to be screened from 10 ft bgs to 35 ft bgs, or the base of the older alluvium as identified during drilling. Lower piezometer (PZ-1B) will be screened from 40 ft bgs, or 5 ft below the top of the Santiago Sandstone (Tsa) as identified during drilling, to 75 ft bgs. Screened intervals are based on CPT-2 and LB-8 lithology from Leighton (2016). These screened intervals will allow the aquifer test analysis to evaluate variations in the hydraulic conductivity, transmissivity, and storage coefficient of the older alluvium (Qol) and the Santiago Formation (Tsa) sandstone.

- Excavated soils from the well and piezometer construction will be placed in a bin. The soils will be removed from the site after laboratory testing is completed. The costs for removal of the soils assumes the soil can be taken to a normal non-hazardous disposal site. If impacted soil is encountered, additional costs would be incurred for disposal. These costs would be an extra to the contract and can be identified once laboratory testing is completed.
- We will perform groundwater sampling and laboratory testing in support of a groundwater discharge permit.
- If the aquifer pumping test outlined in Task 6 will be performed at a later date, we will perform 1-hour air lift tests in the monitoring well and piezometers to evaluate aquifer characteristics. Groundwater will be discharged into the sewer system under the discharge permit that will be obtained during this task.

Task 3: Geotechnical Laboratory Testing:

During drilling of the monitoring well and piezometers, we will collect soil samples to evaluate soil classification and engineering properties necessary to evaluate appropriate design parameters. Testing will include in-situ moisture content and dry density, Atterberg Limits, shear strength, consolidation, soil corrosivity and sieve analysis. We will also perform environmental laboratory testing to evaluate soil collected in drums/bins for future disposal. These tests are expected to consist of TPH, metals, and VOCs.

Task 4: Hydraulic Calculations and Groundwater Analytical:

Geocon will compile the available data obtained during this investigation and from prior investigations to define the aquifer hydraulic properties appropriate to calculate a preliminary and approximate theoretical dewatering rate for the proposed improvements.

The most critical parameters are the transmissivity and storage coefficients for each geologic unit, which would be provided through the evaluation of the Task 6 aquifer pumping test, if performed at this time. If the aquifer pumping test will be performed later, we would utilize the preliminary aquifer test information for the air lift test proposed in Task 2. These values will be incorporated into an analytical model that we have used on numerous projects in southern California to estimate temporary construction dewatering rates.

In addition, as part of our analysis we will provide a narrative discussion of, and present in tabular and graphical format, the following data:

- Measured groundwater levels and depths during field investigation and the aquifer pumping test described in the Task 6 or alternatively, using data from the air lift tests proposed in Task 2;
- Water level data;
- Soil classification and stratification information from field samples (Task 2) and the geotechnical laboratory testing (Task 3) and discuss their implications relative to groundwater flow and dewatering; and
- Discussion of local hydrogeologic conditions, including proximity to Loma Alta Creek and the Pacific Ocean.

The narrative and data will be organized in a manner appropriate to support the City's design-build bid package, in a format suitable for potential contractors to use during the bidding process and subsequent construction activities.

Task 5: Analysis and Report Preparation

Groundwater Analysis Report: Geocon will provide an analysis of potential dewatering requirements in a report to support the City's anticipated "design-build package that will be advertised for public bidding", as stated in the RFP. This analysis stems from results of drilling efforts in Task 2, aquifer testing with the pertaining hydraulic evaluation carried out in Addendum Task, as well as from additional hydraulic calculations and groundwater analysis carried out in Task 4.

The report will summarize the results of piezometer and test well drilling including copies of associated permits, logs of the borings, well construction details, pump test logs, data and analysis, photographs, and well completion reports.

We will email a draft report for your review, followed by a signed and stamped electronic copy (PDF format) of our final report.

Geotechnical Report: Geocon will prepare a geotechnical report presenting our findings and conclusions and recommendations regarding geotechnical aspects of constructing the proposed lift station. The report will include a summary of subsurface conditions including soil stratigraphy, soil types and engineering properties. We will also provide foundation design criteria (allowable soil bearing pressures, lateral earth pressures), excavation characteristics and ground stabilization measures. We will also include supporting calculations. The report will include a map showing the location of the borings and boring logs.

Task 6: Aquifer Pumping Test

As stated in the City of Oceanside's *Scope of Work: Geotechnical investigation for Dewatering*, the final report will be included as part of a design-build package that will be advertised for public bidding. It is Geocon's experience that prospective bidders will need the results of an aquifer pumping test and estimates of potential dewatering rates to complete adequate bids and to minimize the potential for change orders related to differing or changing conditions. The depths and construction details for the test well and piezometers identified in our Task 2 scope in this proposal have been specifically developed to support the aquifer pumping test scope described below. However, if the aquifer pumping test will be performed at a later date, we will perform air lift tests to get preliminary aquifer information to support analysis and calculations in Task 4 and 5.

Pumping will occur from the test well TW-1. The target pumping rate will be identified during well installation and development, based on water production rates reported by the C-57 contractor.

Geocon will coordinate with the contractor to obtain and install a pump capable of producing the target pumping rate from TW-1. The contractor will install a sounding tube and connect the pump to temporary power. Pumping will occur for a minimum of 24 hours so that the effects of pumping can be monitored at the piezometers, as discussed further below. Pumping rates will be monitored by an instantaneous and cumulative flow meter. We will periodically measure pH, temperature, electric conductivity, and turbidity using a portable water quality multimeter. This yields information on dynamic groundwater characteristics over the course of pumping. Aquifer recovery will be monitored by staff onsite preliminarily up to 12 hours after cessation of pumping. Water levels will be measured in TW-1 and in each of the four piezometers (PZ-1A & B and PZ-2A & B) using downhole combined electronic pressure transducers and dataloggers. The dataloggers will be installed in the test well and each piezometer at least one week prior to the aquifer pumping test to monitor the potential for tidal fluctuations in each geologic formation and to identify any potential seasonal trends in groundwater levels. Similarly, at the end of the aquifer pumping test, the dataloggers will be left in the test well and piezometers for at least a week to record water level recovery and post-test tidal and seasonal fluctuations.

In addition, a datalogger will also be temporarily placed in Alta Loma Marsh adjacent to the project site to monitor any changes in the water level in the marsh. The data will be assessed to determine if the pumping had any effect on the marsh, or whether the water in the marsh had any effect on groundwater levels.

Following completion of the aquifer testing, the contractor will remove the temporary pump assembly.

The aquifer test data will be interpreted using the computer program AQTESOLV, which is a standard technique for aquifer test evaluation and interpretation. The test results will be used to estimate aquifer properties such as hydraulic conductivity, transmissivity, and storage coefficient for each of the primary geologic formations in the subsurface. These results will be incorporated into the analyses and discussions in Tasks 4 and 5.

The produced groundwater will need to be managed in accordance with applicable regulations. Options for management and disposal include:

- Discharge to Alta Loma Marsh under a permit from the San Diego Regional Water Quality Control Board. In 2021, Leighton conducted a groundwater sampling event from temporary groundwater monitoring well LG-1, completed in the younger alluvium (Qa). Ammonia, total nitrogen, and total phosphorus exceeded the Regional Water Board standards for discharge of groundwater to surface waters. Therefore, this option does not appear to be feasible. Moreover, discharge to Alta Loma Marsh would disturb the water level in the marsh, complicating an analysis of surface water influence upon the groundwater.
- Discharge to the City's sanitary sewer system under a temporary permit. Groundwater samples obtained under Task 2 will be sampled and tested in support of a discharge permit. It is preliminarily anticipated that the discharge rate would be less than 100 gallons per minute (0.223 cubic feet per second). Adequate sewer and treatment plant capacity would need to be confirmed prior to implementing this option.
- Temporary onsite storage in a portable tank or series of Baker tanks. At 100 gpm and a 24-hour pumping duration, storage for up to 144,000 gallons would be required. After the aquifer pumping test is completed, disposal of the water would occur based on one of the above two options, depending on water quality and total volume.

Selection of the final method for water management and disposal will be based on the City's analysis of adequate sewer and treatment plant capacity, and the City's preferred option. Costs for a discharge permit to the San Diego Regional Water Quality Board or temporary storage with Baker tanks has not been included in this proposal.

Assumptions

- water disposal costs are not included (except for groundwater sampling and testing in support of a discharge permit to the sewer system), pending the City's determination of the preferable and viable option.
- adequate power to operate the pump will be provided onsite.
- We assume that water generated during yield testing can be discharged to the sanitary sewer system or on site in compliance with a Notice of Intent to comply with State Water Resources Control Board Water Quality Order No. 2003 0003-DWQ for Discharges to Land With a Low Threat to Water Quality.

PROPOSED FEE

Based upon the scope of services recommended above and assumptions made, we have summarized the cost per task on the following table. A breakout of costs is provided on our *Estimated Fee Analysis* (EFA) at the end of this proposal.

Item	Estimated Cost
Geotechnical and Groundwater Investigation	
Task 1:	\$4,695
Task 2:	56,499
Task 3:	7,830
Task 4:	7,200
Task 5:	<u>21,645</u>
Total Estimated Cost (Tasks 1 – 5) =	<u>\$97,869</u>
Task 6: (Aquifer Pump Testing)	<u>\$38,371</u>
Total Estimated Cost (Tasks 1 – 6) =	<u>\$136,240</u>

We propose to perform the scope of work outlined herein for a not to exceed fee of **\$97,869** for Tasks 1 through 5 as outlined above and on the attached EFA. If Task 6 is authorized, we will perform the aquifer pumping test for a not to exceed fee of **\$38,869**. We prepared this proposal with the understanding that the fieldwork will be performed Monday through Friday. Our services would be provided in accordance with the enclosed *Schedule of Fees/Terms and Conditions*, which is incorporated into and made part of this proposal. Invoices would be submitted at four-week intervals and would be itemized to reflect only the actual costs incurred. If unanticipated field conditions are encountered that require a significant modification to the recommended scope of work, we would not proceed with the modified scope without obtaining your verbal authorization. The proposed scope of services does not include the evaluation or identification of the potential presence of hazardous or corrosive materials on the site. We have based this proposal on prevailing wage rates.

We assume that the site plans provided for our use will show the locations of all underground utility lines and structures. We will not be responsible for damage to any such lines or structures that are not shown accurately on the plans provided to us. In addition, some disturbance to the existing pavement and landscape areas will occur as a result of the subsurface exploration. Although we will be careful to limit the extent of such occurrences, they cannot be avoided and this proposal does not include any costs to repave or landscape disturbed areas.

It is mutually agreed between Client and Geocon that all services afforded and work performed by Geocon are provided pursuant to Civil Code Section 2782, *et seq.*, and such agreement is expressly

integrated into and made a part of any and all contracts or agreements entered into between the parties.

Please carefully review the contents of this proposal, and the enclosed *Schedule of Fees/Terms and Conditions*. If they meet with your approval, please prepare the appropriate contract documents and forward them to us for review and signature.

If Geocon is required to provide an immediate defense to Client pursuant to a claim alleging the negligence of Geocon, Client will be billed on a time and materials basis for such defense in accordance with our *Schedule of Fees/Terms and Conditions*. If there is a final determination by a court of competent jurisdiction that a portion of the damages awarded in connection with a claim were caused by or attributable to Geocon, then Geocon shall be obligated to reimburse Client for that portion of the defense costs reasonably incurred by Client which is attributable to the portion of the damages caused by or attributable to Geocon. Notwithstanding the foregoing, under no circumstances shall Geocon be liable for providing an immediate defense to Client for any claim not alleging the negligence or other liability of Geocon.

Should you have any questions regarding this proposal, or if we may be of further service, please contact the undersigned at your convenience.

Very truly yours,

GEOCON INCORPORATED



Rodney C. Mikesell

GE 2533

mikesell@geoconinc.com

RCM:kv

Enclosures: SF 2024; EFA

(e-mail) Addressee

RATE SHEET

SCHEDULE OF FEES



2024 Schedule of Fees - Geotechnical & Environmental

Professional Services		Utility Location/Geophysical Services	
Word Processor/Technical Editor/CAD (/hr.)	\$ 105	Utility Locating - Half Day - Single Person	\$ 700
Engineering Assistant/Lab Technician (/hr.)	\$ 105	Utility Locating - Half Day - Two People	\$ 1,400
Special Inspector (/hr.)	\$ 95	Utility Locating - Full Day - Single Person	\$ 1,200
Engineering Field Technician (Incl. Vehicle and Nuclear Gauge) and Non-Destructive Testing (/hr.)	\$ 110	Utility Locating - Full Day - Two People	\$ 2,400
Senior Engineering Field Technician (Incl. Vehicle and Nuclear Gauge) (/hr.)	\$ 114	Seismic Remi Study - Half Day	\$ 1,500
Staff Engineer/Geologist (/hr.)	\$ 140	Seismic Remi Study - Full Day	\$ 2,500
Senior Staff Engineer/Geologist (/hr.)	\$ 155	Multichannel Analysis Of Surface Waves - Half Day	\$ 1,500
Project Engineer/Geologist (/hr.)	\$ 165	Multichannel Analysis Of Surface Waves - Full Day	\$ 2,500
Senior Project Engineer/Geologist (/hr.)	\$ 180	Electrical Resistivity Tomography - Half Day	\$ 1,500
Senior Engineer/Geologist (/hr.)	\$ 205	Electrical Resistivity Tomography - Full Day	\$ 2,500
Associate Engineer/Geologist (/hr.)	\$ 215	Refraction Study - Half Day	\$ 1,500
Principal Engineer/Geologist/Litigation Support	\$ 220	Refraction Study - Full Day	\$ 2,500
Deposition or Court Appearance (/hr.)	\$ 410	Underground Storage Tank Evaluation - Half Day	\$ 1,500
Attorney Fees (General) (/hr.)	\$ 400	Underground Storage Tank Evaluation - Full Day	\$ 2,500
Overtime and Saturday Rate = 1.5 X Regular Hourly Rate		Utility Locating - Half Day - Single Person*	\$ 1,000
Sunday and Holiday Rate = 2 X Regular Hourly Rate		Utility Locating - Full Day - Two People*	\$ 2,000
Minimum Professional Fee (Per Project)	\$ 500	Utility Locating - Full Day - Single Person*	\$ 1,700
Minimum Field Services Fee (per day or call-out)	4 hrs.	Utility Locating - Full Day - Two People*	\$ 3,500
Short-Notice Cancellation	4 hrs.	Seismic Remi Study - Half Day*	\$ 2,000
Prevailing Wage Hourly Surcharge per California Labor Code §1720, et seq. (/hr.)	\$ 55	Seismic Remi Study - Full Day	\$ 3,500
		Multichannel Analysis Of Surface Waves - Half Day*	\$ 2,000
		Multichannel Analysis Of Surface Waves - Full Day*	\$ 3,500
		Electrical Resistivity Tomography Study - Half Day*	\$ 2,000
		Electrical Resistivity Tomography Study - Full Day*	\$ 3,500
		Refraction Study - Half Day*	\$ 2,000
		Refraction Study - Full Day*	\$ 3,500
		Underground Storage Tank Evaluation - Half Day*	\$ 2,000
		Underground Storage Tank Evaluation - Full Day*	\$ 3,500
		Mobilization Fee (Per 2 Hours)	\$ 200
		*Prevailing Wage Rates	
		Seismic Processing Fee and Report	\$ 1,000
Travel		Laboratory Tests	
Personnel = Regular Hourly Rate		Soil and Aggregate Properties	
Subsistence (Per Diem/Day)	\$ 300	#200 Wash (D1140/C117)	\$ 70
		Wet Sieve Analysis to #200 (D422)	\$ 115
		Hydrometer Analysis (D422)	\$ 175
		Sieve Analysis with Hydrometer (D422)	\$ 199
		Specific Gravity, Soil (D854)	\$ 81
		Specific Gravity Coarse Aggregate (C127)	\$ 59
		Specific Gravity Fine Aggregate (C128)	\$ 79
		Moisture Determination, tube sample (D2216)	\$ 24
		Moisture Determination and Unit Weight (D2937)	\$ 47
		Atterberg Limits: Plasticity Index (D4318)	\$ 177
		Sand Equivalent (D2419)	\$ 120
		pH and Resistivity (CAL643)	\$ 140
		Sulfate Content (CAL417)	\$ 102
		Chloride Content (CAL422)	\$ 67
Equipment and Materials			
Nuclear Gauge = Included in Technician Rate	\$ -		
Coring Machine (concrete, asphalt, masonry) (/Day)	\$ 195		
Generator/Air Compressor (/Day)	\$ 115		
Asphalt Cold Patch, 60-lb. sack	\$ 20		
Concrete, 60-lb. sack	\$ 20		
GPS Unit	\$ 180		
Pick-Up Truck	\$ 135		
Equipment Truck	\$ 216		
Equipment Trailer	\$ 105		
pH/Conductivity/Temperature Meter (/Day)	\$ 65		
Drive-Tube Sampler or Hand Auger	\$ 45		
Soil Sample Tube (Brass or Stainless)	\$ 12		
Water Level Indicator	\$ 45		
Water Sampling Pump	\$ 85		
Photo-Ionization Meter	\$ 135		
Level D PPE/Decon Rinse Equipment	\$ 60		
Crack Monitor	\$ 35		
Moisture Dome Test Equipment	\$ 50		
55-Gallon Drum	\$ 75		
Outside Services/Equipment/Materials	+ 15%		



Laboratory Tests		Laboratory Tests	
Shear Strength		Asphalt Concrete	
Unconfined Compression (D2166)	\$ 139	Density, Hveem (D2726/CAL308)	\$ 105
Direct Shear, Quick (D3080)	\$ 265	Stabilometer (D1560/CAL304)	\$ 115
Unconsolidated-Undrained Triaxial Shear/pt. (D2850)	\$ 172	Theoretical Max. Specific Gravity (D2041)	\$ 86
Unconsolidated-Undrained Triaxial Staged (D2850)	\$ 208	Sieve Analysis Extracted Aggregate (C136)	\$ 100
Consolidated-Undrained Triaxial Shear/pt. (D4767)	\$ 359	% Asphalt, Ignition Method (CAL382)	\$ 115
Consolidated-Undrained Triaxial Staged (D4767)	\$ 421	% Asphalt, Nuclear Gauge (CAL379)	\$ 122
Consolidated-Drained Triaxial Shear/pt. (EM1110)	\$ 447	Unit Weight, Core (D 1188)	\$ 67
Consolidated-Drained Triaxial Staged (EM1110)	\$ 634		
Permeability, Consolidation, and Expansion		Concrete	
Permeability, Flexible Wall (D5084)	\$ 343	Compressive Strength, Cylinders (C39)	\$ 29
Permeability, Rigid Wall (D5856)	\$ 296	Compressive Strength, Cylinders 6x12 (C39)	\$ 32
Consolidation, per point (D2435)	\$ 59	Compressive Strength, Cores (C42)	\$ 47
Expansion Index (D4829/UBC 29-2)	\$ 156	Unit Weight, Hardened Concrete (ASTM C642)	\$ 58
		Unit Weight, Lightweight Concrete (ASTM C567)	\$ 78
Compaction Curves		Flexural Strength Beam (C78/C293)	\$ 80
4-inch mold (D1557)	\$ 235	Splitting Tensile Test (C496)	\$ 78
6-inch mold (D1557)	\$ 275	Mix Design Review	\$ 231
California Impact (CAL216)	\$ 230	Trial Batch Preparation/Organization (/Hr.)	\$ 105
Check Point	\$ 100	Compressive Strength, 2x2 Cube (Soil Nail Grout)	\$ 29
		Compressive Strength, 2x2 Cube (Non-Shrink Grout)	\$ 29
Soil and Aggregate Stability		Tensile Strength Fabrication (ASTM C192)	\$ 1,000
Resistance Value, R-Value (D2844/CAL301)	\$ 320	Tensile Strength (ASTM C1583)	\$ 650
R-Value, Treated (CAL301)	\$ 338	Shrinkage (ASTM C159)	\$ 450
California Bearing Ratio (D1883)	\$ 607	MOE (ASTM C469)	\$ 300
Stabilization Ability of Lime (C977)	\$ 198	Chloride Ion Content (ASTM C1543/C1202)	\$ 275
Aggregate Quality		Steel Testing	
Dry Sieve Analysis to #200 (C13)	\$ 115	Tensile Strength & Elongation (A370)	
L.A. Rattler Test (500 rev.) (C131)	\$ 214	#11 Bar & Smaller	\$ 125
Sulfate Soundness (per sieve size) (C88)	\$ 115	#14 Bar	\$ 150
Durability (fine or coarse) (D3744)	\$ 191	#18 Bar (Proof Test)	\$ 175
Unit Weight (C142)	\$ 80	Bend Test (A370)	
Organic Impurities - Sand (C40)	\$ 65	#11 Bar & Smaller	\$ 75
Friable Particles (C142)	\$ 92	#14 & #18 Bar	\$ 100
Fine Aggregate Angularity (AASHTO T304)	\$ 300	Tensile - Mechanically Spliced Bar (A370)	
		#11 Bar & Smaller	\$ 200
Masonry		#14 Bar & Larger	\$ 250
CMU Compressive Strength (C140)	\$ 200	Tensile - Electric Resist. Butt Splice (A370)	\$ 200
Compressive Strength, Grout (C1019/UBC 21-19)	\$ 28	Straightening of Bar (A370)	\$ 75
Compressive Strength, Mortar (C109/UBC 21-15,16)	\$ 28	Tensile Strength & Elongation (A370)	
CMU Unit Wt., Dimen., Absorption (C140)	\$ 153	Up to 200,000 lbs	\$ 150
Compressive Strength, Masonry Prism (C1314)	\$ 200	200,000 – 300,000 lbs	\$ 175
Masonry Core Compression (C42)	\$ 68	300,000 – 400,000 lbs	\$ 200
Masonry Core Shear (CBC 2105A.4)	\$ 127		
Spray Applied Fireproofing			
Fireproofing Oven Dry Density/Thick (E605/E736)	\$ 90		



Laboratory Tests		Common Analytical Tests	
High Strength Bolt, Nut & Washer Testing		Total Petroleum Hydrocarbons (EPA 8015M)	\$ 105
Tensile Tests on Bolts (A325/A490)	\$ 125	Volatile Organic Compounds (EPA 8260B)	\$ 165
Proof Load Test on Nuts (A563)	\$ 125	Semi-Volatile Organic Compounds (EPA 8270)	\$ 300
Hardness Test on Bolts (A325/A490)	\$ 75	CAM 17 Metals (EPA 6010B)	\$ 180
Hardness Test on Nuts (A536)	\$ 75	Single Metal (EPA 6010B)	\$ 40
Hardness Test on Washers (F436)	\$ 75	Organochlorine Pesticides (EPA 8081)	\$ 140
		Polychlorinated Biphenyls (EPA 8082)	\$ 120
		Polynuclear Aromatic Hydrocarbons (EPA 8270)	\$ 180
		Soil pH (EPA 9045C)	\$ 40
		Asbestos-PLM	\$ 30
		STLC or TCLP Extraction	\$ 100
		Sample Compositing	\$ 35
		48-hour Turn-Around Time (Surcharge)	75%
		24-hour Turn-Around Time (Surcharge)	100%

Terms and Conditions

- Listed are typical charges for the services most frequently performed by Geocon. Prices for unlisted services as well as special quotations for programs involving volume work will be provided upon request. Laboratory test prices shown are for laboratory work only, and include reporting of routine results not calling for comments, recommendations or conclusions.
- Sampling and testing is conducted in substantial conformance with the latest applicable or designated specifications of the American Society for Testing and Materials, Caltrans, American Association of State Highway and Transportation Officials, or other pertinent agencies.
- Saturday, night work, and overtime hours are charged at time and one-half; Sundays and holidays at double time. Per diem is \$155.00 per day when location of work dictates.
- Equipment and materials will be billed at cost plus 15%. Outside services including subcontractors and rental of special equipment are billed at cost plus 15%. Hourly services are billed portal to portal from closest office in accordance with the stated hourly rates herein, with a minimum two-hour charge.
- Invoices will be submitted at four-week intervals. Terms of payment are met upon presentation of invoice. Invoices become delinquent thirty (30) days from invoice date and subject to one and one-half percent (1-1/2%) service charge per month, or the maximum rate allowed by law, whichever is lower. If Client objects to all or any portion of any invoice, Client will so notify Geocon in writing within fourteen (14) calendar days of the invoice date, identify the cause of disagreement, and pay that portion of the invoice not in dispute. The parties will immediately make every effort to settle the disputed portion of the invoice. Payment on delinquent invoices will first be applied to accrued interest and then to the principal amount. All time spent and expenses incurred (including any attorney's fees and costs) in connection with collection of any delinquent amount will be paid by Client to Geocon per Geocon's current fee schedule.
- Client and Geocon shall allocate certain of the risks so that, to the fullest extent permitted by law, Geocon's (the term "Geocon" includes Geocon's partners, officers, directors, employees, agents, affiliates, subcontractors and subconsultants) total aggregate liability to Client is limited to the greater of \$50,000 or the total compensation received from Client by Geocon for services rendered on this project, for any and all of Client's injuries, damages, claims, losses, expenses, or claim expenses arising out of this Agreement from any cause or causes, including attorneys' fees and costs which may be awarded to the prevailing party, and Client agrees to indemnify and hold harmless Geocon from and against all liabilities in excess of the monetary limit established above.
- Client and Geocon shall allocate certain of the other risks so that, to the fullest extent permitted by law, Client shall limit Geocon's total aggregate liability to all third parties, including contractors, subcontractors of all tiers, materialmen, and others involved in Client's project, as well as persons and other entities not involved in the project, to the greater of \$100,000 or the total compensation received from Client by Geocon for services rendered on this project, for any and all injuries, damages, cause or causes, including attorneys' fees and costs which may be awarded to the prevailing party, and Client agrees to indemnify and hold harmless Geocon from and against all liabilities in excess of the monetary limit established above, including all liability incurred by Geocon for acts, errors, or omissions, pursuant to entering into agreements with third parties on behalf of Client in order to obtain access or entry onto property not owned by Client. Client agrees to notify all contractors and subcontractors of any limitation of Geocon's liability to them, and require them to abide by such limitation for damages suffered by any contractor or subcontractor arising from Geocon's actions or inactions. Neither the contractor nor any subcontractor assumes any liability for damages to others which may arise on account of Geocon's actions or inactions.

ESTIMATED FEE ANALYSIS

Project Name: Buccaneer Lift Station Design and La Salina Wastewater Treatment Plant Decommissioning Project
 Project Scope: GEOTECHNICAL INVESTIGATION FOR DEWATERING
 Proposal Number: SD-26-0020-P-GT

TASK	QUANTITY	UNITS	RATE	MARKUP	AMOUNT
Task 1: Pre-Field Activities					
DEH Well Permit:	1	each	\$3,100.00	1.05	\$3,255
Well Application - Sr. Staff Geologist	4	Hours	\$155.00	1.00	\$620
Review of Reports - Sr. Engineer/Geologist	4	Hours	\$205.00	1.00	\$820
Task 1 Total:					\$4,695
Task 2: Boring and Groundwater Monitoring Well Installation					
Dig Alert Markout (Sr. Staff Geologist)	4	Hours	\$155.00	1.00	\$620
Drill Rig (Drilling and Supplies and Well Development for Air Lift Test)*	1	each	\$37,000.00	1.05	\$38,850
Sr. Staff Geologist (PW)	40	Hours	\$210.00	1.00	\$8,400
Sr. Engineer/Geologist	10	Hours	\$205.00	1.00	\$2,050
Bin Dropoff	4	Hours	\$155.00	1.05	\$651
Bin Disposal	1	each	\$3,900.00	1.05	\$4,095
Environmental Testing of Groundwater	1	each	\$1,746.00	1.05	\$1,833
Task 2 Total:					\$56,499
Task 3: Geotechnical Laboratory Testing					
Geotechnical Laboratory Testing	1	each	\$4,500.00	1.00	\$4,500
Groundwater Analysis Lab (Grainsize) for Task 4	1	each	\$2,700.00	1.00	\$2,700
Environmental Laboratory Testing (soil for bin disposal)	1	each	\$600.00	1.05	\$630
Task 3 Total:					\$7,830
Task 4 - Hydraulic Calculations and Groundwater Analytical - compilation and discussion of results and analysis					
Senior Hydrogeologist	8	Hours	\$240.00	1.00	\$1,920
Project Geologist	32	Hours	\$165.00	1.00	\$5,280
Task 4 Total:					\$7,200
Task 5 - Analysis and Report Preparation					
Groundwater Analysis Report					
Senior Hydrogeologist - Dewatering Drawdown Analysis	20	Hours	\$240.00	1.00	\$4,800
Senior Hydrogeologist - Report Preparation	12	Hours	\$240.00	1.00	\$2,880
Senior Engineer/Geologist	6	Hours	\$205.00	1.00	\$1,230
Project Geologist	40	Hours	\$165.00	1.00	\$6,600
Senior Staff Geologist	10	Hours	\$155.00	1.00	\$1,550
Drafting	5	Hours	\$105.00	1.00	\$525
Admin/Word Processing	2	Hours	\$105.00	1.00	\$210
Subtotal:					\$17,795
Geotechnical Investigation Report					
Project Engineer - Geotechnical Analysis	8	Hours	\$165.00	1.00	\$1,320
Project Engineer - Report Preparation	12	Hours	\$165.00	1.00	\$1,980
Senior Engineer/Geologist - Report Review	4	Hours	\$205.00	1.00	\$820
Drafting/CAD	8	Hours	\$105.00	1.00	\$840
Admin/Word Processing	2	Hours	\$105.00	1.00	\$210
Subtotal					\$3,850
Total Task 5:					\$21,645
TOTAL TASKS 1 THROUGH 5:					\$97,869

ESTIMATED FEE ANALYSIS

Project Name: Buccaneer Lift Station Design and La Salina Wastewater Treatment Plant Decommissioning Project
 Project Scope: GEOTECHNICAL INVESTIGATION FOR DEWATERING
 Proposal Number: SD-26-0020-P-GT

TASK	QUANTITY	UNITS	RATE	MARKUP	AMOUNT
<u>Task 6 – Aquifer Pumping Test</u>					
Senior Hydrogeologist	8	Hours	\$240.00	1.00	\$1,920
Project Geologist (Office Time)	32	Hours	\$165.00	1.00	\$5,280
Project Geologist (PW - Day Shift Regular Time) (incl. hydraulic evaluation)	16	Hours	\$220.00	1.00	\$3,520
Project Geologist (PW - Day Shift Overtime)	4	Hours	\$330.00	1.00	\$1,320
Project Geologist (PW - Night Shift Regular Time)	8	Hours	\$220.00	1.00	\$1,760
Project Geologist (PW - Night Shift Overtime)	4	Hours	\$330.00	1.00	\$1,320
Per diem	2	Days	\$350.00	1.00	\$700
Hotel	2	nights	\$200.00	1.00	\$400
Mileage (Site Visit)	424	Mile	\$0.75	1.00	\$318
Water Level Indicator	4	Day	\$50.00	1.00	\$200
ph/Conductivity/Temperature Meter	2	Day	\$75.00	1.00	\$150
Turbidity Meter	2	Day	\$85.00	1.00	\$170
Decon Rinse Equipment	2	Day	\$50.00	1.00	\$100
7 Water Level Dataloggers (uncabled) (incl 1 baro)	15	Day	\$420.00	1.00	\$6,300
Mobile Data Processing	4	Day	\$100.00	1.00	\$400
C-57/D-21 Contractor - includes pump rental, sounding tube, and new totalizer	1	Est	\$13,000.00	1.05	\$13,650

Total Task 6: \$38,371

TOTAL ESTIMATED PROJECT COST (TASKS 1 THROUGH 6): \$136,240