



CONDOR EARTH TECHNOLOGIES, INC.
21663 Brian Lane, P.O. Box 3905
Sonoma, CA 95370
Phone 209.532.0361
Fax 209.532.0773
www.condorearth.com

Condor Proposal No. 6865B

March 10, 2015

Robert Griffith
Summerville Union High School District
17555 Tuolumne Rd
Tuolumne, CA 95379

**Subject: Proposal for a Geotechnical Engineering Study
Increment #2 – Path of Travel – Summerville High School
17555 Tuolumne Road
Tuolumne, California**

Dear Mr. Griffith:

Condor Earth Technologies, Inc. (Condor) is pleased to present this Proposal to perform a geotechnical engineering study for the Increment #2 project. The purpose of our work will be to develop recommendations for earthwork and pavement for use by your other design professionals and contractors, and to provide a report required for permitting.

Condor based our proposed scope of work on the following:

- Our brief review of the preliminary drawings.
- Our brief review of the April 27, 2014 Updated Geotechnical Investigation report by CTE Cal Inc. (CTE).
- Our discussions with the design team.
- Our experience working on your Increment #4 project and other projects similar to the proposed Increment #2 project.

Condor appreciates the opportunity to work on your project. We will discuss the possibility of modifying our proposed scope of work and the corresponding cost estimate, as necessary, to meet your needs best.

PROJECT AND SITE DESCRIPTION

The project will consist of demolishing existing pavement and constructing new pavement for a path of travel over an approximate length of 1,000 feet. Pavement types will consist of asphalt and concrete, and that traffic imposed on the pavement will be from pedestrians and vehicles.

Over most of its length, the proposed pavement surfaces will be near the existing and relatively level ground surface. The exceptions to this is a portion of the pavement southwest of Building “A”, where the pavement will be over an existing slope, and southwest of Building “E”, where there may be a cut down to subgrade.

The ground surface of the existing slope southwest of Building “A” descends to the southeast at an approximate inclination of 3-3/4 horizontal to 1 vertical (3-3/4:1). We anticipate that this existing slope consist of an undocumented artificial fill up to about 3 feet thick over natural ground. Condor understands that earthwork for this area will consist of placing a new fill-slope over the existing fill-slope. We understand that the design team proposes a fill-slope up to 6 feet high with a ground surface inclination as steep as 2:1.

Condor understands that the project Civil Engineer is currently updating their drawings.

If the geotechnical engineering aspects of the project that you will construct vary significantly from those described herein, then Condor should re-evaluate our proposed scope of work and corresponding cost estimate.

ANTICIPATED SUBSURFACE CONDITIONS AND GEOTECHNICAL ISSUES

Condor anticipates that the soil beneath the proposed pavement will be natural soil and artificial fill consisting of sand with varying amounts of clay, silt and gravel and clay or silt with varying amounts of sand and gravel. We anticipate that over the portion of the path of travel southwest of Building “E”, that the subgrade will be weathered granodiorite. We anticipate that over portions of the path of travel, that the subgrade soil will have a medium to high expansion potential.

Condor anticipates that the following will be the primary geotechnical engineering issues to address:

- Estimating the potential for expansive soil at various portions of the path of travel and evaluating options for mitigating pavement distress and movement from soil shrink/swell (from soil moisture content changes caused by weather conditions and other causes).
- Evaluating the stability of the proposed fill slope and providing recommendations for mitigating instability (such as re-compacting existing fill beneath the proposed fill).
- Evaluating excavatability of any rock to be excavated southwest of Building “E”.

PROPOSED SCOPE OF WORK

Condor proposes performing an initial project review and site investigation consisting of the following work:

- Perform a detailed review of updated Civil Engineering drawings.
- Perform a detailed review of the CTE report.
- Observe, evaluate and document the engineering properties of exposed ground along and/or adjacent to the proposed path of travel.
- Observe, evaluate and document the geotechnical engineering aspects of existing site improvements along and/or adjacent to the proposed path of travel (such as pavement cracks that may indicate the presence of expansive soil).
- Retrieve disturbed soil samples by hand-digging at areas with exposed ground or by using a hand-auger.
- Perform liquid limit, plastic limit and plasticity index tests on the soil samples (to evaluate soil expansion potential).



Condor will evaluate data in the CTE report, the field and laboratory data from our propose site investigation, perform engineering evaluations, and develop geotechnical engineering conclusions and recommendations for the project. We will summarize the results of our site investigation, laboratory tests, and engineering evaluations in a report. The report will include the following items:

- Vicinity map.
- Site map showing the approximate sample locations and pertinent aspects of surface conditions (on a site plan with the topographic conditions, existing improvements and proposed improvements provided to us in electronic format by others).
- Results of laboratory tests.
- Discussion of general surface conditions.
- Geotechnical engineering conclusions and recommendations for the following:
 - Anticipated ground conditions at pavement subgrades.
 - Discussion regarding the most appropriate options to mitigate pavement distress from shrink/swell of expansive soil.
 - Discussion regarding requirements to improve stability for the proposed fill-slope.
 - Recommendations for earthwork, including the suitability of using onsite material for use as engineered fill (or any processing required), site and subgrade preparation (including preparation for fillslopes), fill compaction, and ground surface inclinations for fillslopes.
 - General recommendations for surface drainage.
 - Recommendations for vehicular and pedestrian asphalt pavement Recommendations for vehicular and pedestrian concrete pavement.
 - Discussion regarding any construction considerations.

Condor will submit a draft report to the team as a .PDF file. We will then perform the following work for final review/final report:

- Review up to one round of comments on our draft report from the team.
- Discuss with the team the possibility of incorporating their comments in our report (by telephone conference).
- Review final Civil Engineering Drawings prior to permit submittal and provide any comments to the team (by email).
- Finalize and submit our report to the team (as .PDF file).

Our scope of work excludes the following:

- Performing fieldwork outside of normal business hours.
- Performing any training or registration to meet Department of Justice requirements – Condor assumes that the District will provide a staff person to accompany us on campus during one workday.
- Evaluating geologic hazards to meet requirements of California Geological Survey Note 48 - Condor assumes that CTE's previous work will satisfy those requirements for permit.
- Performing any services after we issue our final report.



COST ESTIMATE

Condor will charge our fees on a time-and-expense basis according to the attached Schedule of Fees. The attached table presents an approximate breakdown of our cost estimate, and is estimated at \$6,200.

If we mutually agree that additional geotechnical engineering work that is beyond our scope of work is required, then we will perform such work on a time-and-expense basis in addition to our estimated cost. However, we will not exceed our cost estimate without your prior written approval.

Condor's cost estimate is valid for 60 days following the date of this Proposal. After this time, we should review and update our estimate, as necessary. Our Schedule of Fees is subject to change over time.

SCHEDULE

Condor should be complete our fieldwork within 1 to 2 weeks following your authorization, pending the occurrence of dry weather conditions and the District's availability to escort Condor on the campus. We should complete our fieldwork during 1 workday. We should submit our draft report within 2 weeks after our fieldwork is completed. We should submit our final report within 1 week after the team sends us comments and their updated drawings.

TERMS AND AUTHORIZATION

Condor will perform our work under the previously authorized Terms for Geotechnical and Civil Engineering Services, dated May 7, 2014 (Condor Project Number 6865). The fees and scope for the current proposed work is discussed above. Please authorize our work by sending Condor a signed copy of this Proposal.

ADDITIONAL GEOTECHNICAL SERVICES

Condor should review the grading and Civil Engineering drawings and specifications to check that the designers incorporate the intent of our recommendations in their designs. We should also perform observations and testing during construction to check that subsurface conditions encountered in excavations and at subgrades are similar to those encountered during our investigation, to provide supplemental geotechnical engineering recommendations resulting from unanticipated conditions, if necessary, and to check that construction is performed in general conformance with our recommendations and the project design. These services would include observing earthwork, excavations, and testing compaction of fill and subgrades. The geotechnical engineering recommendations presented in our report depend on plan review as well as observation and testing by Condor during construction, and they will be invalid if Condor is not retained to provide these services. Otherwise, another geotechnical engineer should review and agree with our recommendations and the design documents, perform observations and testing during construction, and provide any supplemental recommendations.

Condor can also provide the Materials Testing and Special Inspections required during construction.



CLOSURE

Condor appreciates the opportunity to submit this Proposal and we look forward to working with you on this project. Please contact us if you have any questions.

Sincerely,

CONDOR EARTH TECHNOLOGIES, INC.



Andrew S. Kositsky, GE No. 2532
Senior Geotechnical Engineer



Ron Skaggs, GE No. 2295
Principal Geotechnical Engineer

Authorized by:

Name

Signature

Date

Attached: Table 1 – Cost Estimate Summary
Prevailing Wage Schedule of Fees



**Table 1 - Cost Estimate Summary
Condor Earth Technologies, Inc.**

Project Name: Geotechnical Engineering Study Increment #2 - Path of Travel - Summerville High School 17555 Tuolumne Road Tuolumne, California				
Condor Project Number: 6865B				
Prepared by: A. Kositsky				
Date: 3/10/2015				
Description	Quantity	Rate Type	Rate	Cost Estimate
Task 1 - Initial Review				
Personnel				
Principal Engineer/Engineering Geologist	1	hr.	\$195	\$195
Senior Geotechnical Engineer	3	hr.	\$185	\$555
Staff Engineer/Geologist	2	hr.	\$120	\$240
Project Coordinator	0.5	hr.	\$85	\$43
Subtotal				\$1,033
Task 2 - Site Investigation				
Personnel				
Senior Geotechnical Engineer	3	hr.	\$185	\$555
Staff Engineer/Geologist	6	hr.	\$120	\$720
Project Coordinator	0.5	hr.	\$85	\$43
Administrative Assistant	0.5	hr.	\$65	\$33
Unit Billing				
Company Vehicle	1.25	days	\$50.00	\$63
Mileage	50	ea.	\$0.50	\$25
Liquid Limit, Plastic Limit, and Plasticity Index Tests	2	ea.	\$160	\$320
Subtotal				\$1,758
Task 3 - Draft Report				
Personnel				
Principal Engineer/Engineering Geologist	1.5	hr.	\$195	\$293
Senior Geotechnical Engineer	4	hr.	\$185	\$740
Staff Engineer/Geologist	6	hr.	\$120	\$720
Draftsperson	4	hr.	\$90	\$360
Project Coordinator	1	hr.	\$85	\$85
Administrative Assistant	2	hr.	\$65	\$130
Subtotal				\$2,328
Task 4 - Final Review/Final Report				
Personnel				
Principal Engineer/Engineering Geologist	0.5	hr.	\$195	\$98
Senior Geotechnical Engineer	4	hr.	\$160	\$640
Staff Engineer/Geologist	1	hr.	\$100	\$100
Draftsperson	1	hr.	\$90	\$90
Project Coordinator	1	hr.	\$85	\$85
Administrative Assistant	1	hr.	\$65	\$65
Subtotal				\$1,078
Total Cost Estimate				\$6,195

**CONDOR EARTH TECHNOLOGIES, INC.
PREVAILING WAGE SCHEDULE OF FEES
2015**

<u>STAFF MEMBER</u>	<u>RATE PER HOUR (\$)</u>
PRINCIPALS/PROJECT MANAGEMENT	
Senior Principal	220.00
Principal Engineer/Geologist.....	195.00
Project/Senior Manager	160.00
TECHNICAL	
Senior Tunneling Consultant	200.00
Senior Geotechnical Engineer	185.00
Certified Hydrogeologist/Engineering Geologist	175.00
Senior Geologist/Engineer/Environmental Specialist	165.00
Associate Geologist/Engineer/Environmental Specialist	135.00
Staff Geologist/Engineer/Environmental Specialist	120.00
Engineering Assistant.....	100.00
Field Environmental Services (Group 2).....	111.00
Draftsperson	90.00
MATERIALS TESTING	
Lead Inspection (Group 1).....	117.00
DSA Masonry/Shotcrete (Group 1).....	117.00
ICC Certified Structural Inspections and AWS Welding (Group 2)	111.00
Soils-Asphalt Monitoring/Testing (Group 3)	98.00
Concrete Sampling/Miscellaneous Testing (Group 4)	91.00
Senior Materials Technician (non-PW)	85.00
SUPPORT STAFF	
MTSI Project/Laboratory Manager	105.00
Administrative Specialist.....	95.00
Project Coordinator	85.00
Technical Editor	75.00
Administrative Assistant	65.00
MISCELLANEOUS	
Overtime (all Saturday work is overtime)	(1.3 times base rate)
Double-time (all Sundays and Holidays).....	(1.7 times base rate)
Litigation Support.....	250.00 – 350.00

NON-LABOR CHARGES

Vehicle charge:
 \$50 per day plus 50 cents per mile
Laboratory Charges per Condor Laboratory Fee Schedule
Billable Field Equipment per Condor Billable Field Equipment Schedule

OUT-OF-POCKET EXPENSES

Billed at cost plus 15% and includes such items as travel expenses, equipment rental, laboratory fees, subcontractors, postage and freight, subcontracted printing or reproduction fees, supplies, etc.

CALIFORNIA DEPARTMENT OF INDUSTRIAL RELATIONS GROUP CLASSIFICATIONS

<u>Group 1</u>	<u>Group 2</u>	<u>Group 3</u>	<u>Group 4</u>
ASNT Level II-III	AWS-CWI	Geotechnical Driller	ACI
DSA Masonry	ICC Certified Structural	Soils/Asphalt	Drillers Helper
DSA Shotcrete	Inspector	Earthwork Grading	ICC Fireproofing
Lead Inspector		Excavation and Backfill	Proofload Testing
			Torque Testing
			NDT Level One

