



MILLER PACIFIC ENGINEERING GROUP

August 17, 2016
File: 779.231pro.doc

Carducci Landscape Architects
555 Beach Street
San Francisco, California 94133
Attn: Mr. Bill Fee

Re: Budget Update
San Rafael High School – Stadium Improvements
San Rafael, California

Introduction

This letter provides a budget update for the planned stadium improvements project at San Rafael High School located in Marin County, California. The purpose of our additional services is to address comments made by CGS in a letter dated July 20, 2016 which was a response to our Response to CGS Comments letter dated June 24, 2016. The CGS letter required performing an additional boring to determine if significant (greater than 10-feet) organic soils underlie the project site. If significant organic soils underlie the project site then CGS requires a sophisticated site specific ground motion analysis to develop a seismic response spectrum.

Phase 3 –Supplemental Subsurface Exploration

We will perform a supplemental subsurface exploration with one soil boring drilled with truck mounted drilling equipment. We anticipate the boring will extend 30 to 40-feet below the ground surface or 5-feet into firm materials. During our exploration we will collect select soil samples for laboratory testing. We anticipate our additional laboratory testing will include 4-plasticity index tests to determine if the soil profile is organic. We will present the results of our supplemental subsurface exploration in a brief letter that will address the comments made by CGS.

Phase 3a – Site Specific Response Spectra

If the results of our supplemental subsurface exploration indicates the site is underlain by at least 10-feet of organic soil, we will provide a site specific response spectra based on the procedures outlined in Section 21.1 of ASCE 7-10. Based on the results of our subsurface explorations we will develop a soil profile to input into a unified 1D equivalent linear and nonlinear site response analysis computer program. Per CGS and ASCE 7-10, we will input at input at least 5-ground motions with similar magnitudes and site distances to the project site at the base of the soil profile to determine the seismic response at the ground surface. We will include the results of our analyses in the letter described in Phase 3 above.

Contractual Arrangements

We will provide our services in accordance with the attached Agreement and Schedule of Charges. Note that, for the purpose of this proposal, we have assumed that all fees associated with encroachment permitting will be waived by the City. Based on our understanding of the project and the scope of services described above, we propose the following fee arrangements:

Phase 3 – Supplemental Investigation.....Fixed Fee, \$5,400

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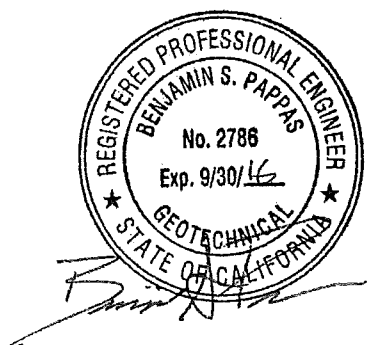
Carducci & Associates
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Phase 3a – Site Specific Response Spectra..... Fixed Fee, \$3,800

We are ready to begin work soon after authorization. Please sign and return a copy of this letter to authorize us to begin work. Please do not hesitate to contact us with any questions or concerns.

Very truly yours,
MILLER PACIFIC ENGINEERING GROUP



Benjamin S. Pappas,
Geotechnical Engineer No. 2786
(Expires 9/30/16)

Agreed: _____

Date