

Robbie Lyng
Alameda Unified School District
2060 Challenger Drive
Alameda, California 94501

October 3, 2017

RE: Franklin Elementary School Liquefaction Settlement

Robbie,

ZFA has reviewed the report titled "Geotechnical Engineering Investigation Evaluation of Liquefaction Risk and Liquefaction Induced Settlement Potential at Franklin Elementary School Campus" Report by Miller Pacific dated August 4, 2017. The site is expected to experience some level of liquefaction during the maximum credible earthquake. This is the earthquake that is expected to occur once every 2475 years on average. The expected total settlement at the school site is expected to be between 1.5-2.5 inches. The total differential settlement is expected to be between 0.75-1.5 inches. While some impact on the buildings could occur, we do not believe it will significantly impact the overall building performance during a large seismic event. Based on current standard of practice we do not believe additional steps need to be taken at this time.

Should you have questions, please contact the undersigned.

Regards,



Chris Warner, SE 4613
ZFA STRUCTURAL ENGINEERS
Senior Principal