



June 29, 2015

Ms. Sharon Toland
Associate Project Manager
ATKINS
3570 Carmel Mountain Road, Suite 300
San Diego, CA 92130

**Subject: PEER REVIEW OF GEOTECHNICAL INVESTIGATION REPORT
PREPARED FOR THE SOLANA 101 MIXED USE PROJECT
Highway 101 and Dahlia Drive
Solana Beach, California
AGE Project No. 29C503**

Dear Ms. Toland:

In accordance with your request, we have performed a peer review of the geotechnical report that was prepared by NOVA Services, Inc. (NOVA) for the design of the above-referenced project. The report is entitled "Geotechnical Investigation Solana 101 Mixed Use Project, Highway 101 and Dahlia Drive, Solana Beach, California", and is dated May 31, 2012.

In addition, a representative from our firm performed a site reconnaissance visit on June 20, 2015. At the time of our site visit, the general conditions of the site appeared similar to those described by NOVA in their above-mentioned report.

REVIEW COMMENTS

Based on a review of the information provided to us and our understanding of the scope of the future development of the subject property, we would like to present our review comments and recommendations as follows:

1. The report was prepared more than 3 years ago. We recommend that NOVA review the final plans, specifications and shoring design for the project, and prepare an addendum report to confirm that their findings and recommendations were properly interpreted and are incorporated in the plans and specifications.

2. The report indicates that the project site is underlain by as much a 7 feet of undocumented fill materials (Section 5.2.1). We recommend that NOVA provides recommendations with regard to the removal and recompaction of any undocumented fill materials which remain in areas that are to receive shallow foundations, slabs-on-grade, sidewalks or driveways, and parking facilities.
3. The report recommends that a design groundwater level of 42 feet above mean sea level (msl) be used for the project site (Section 5.3). The cross section (Figure 5) indicates that the underground parking structures will have finish floor elevations of 39 feet to 40 feet msl. We recommend that NOVA provide recommendations with regard to the potential need for dewatering. Furthermore, the Old Paralac Deposits are known to locally contain shell beds and sandy lenses that generally possess higher groundwater infiltration rates.
4. We recommend that NOVA verify with the project structural engineer that uplift will not be an issue, and that additional recommendations for uplift resistance will not be required.
5. In the event that the same building is supported on a combination foundations which are partially supported on properly compacted fill and Old Paralac Deposits, we recommend that NOVA specify the use of seismic joints to reduce the potential for differential settlement.

LIMITATIONS

Allied Geotechnical Engineers, Inc. (AGE) scope of work for this project is limited to a third party review of the May 31, 2012 geotechnical report prepared by NOVA. Our firm did not perform an independent investigation to verify the accuracy of the information presented in the afore-mentioned report. Furthermore, no warranties or guarantees, either expressed or implied, are intended in connection with the work performed by AGE on this project.

The information provided in this letter is intended for the sole use of ATKINS and the City of Solana Beach. Any other person or party who relies on the information presented herein shall do so at their own risk.




CLOSURE


We appreciate the opportunity to be of service on this project. If you have any questions regarding the content of this letter or need further assistance, please feel free to give us a call.

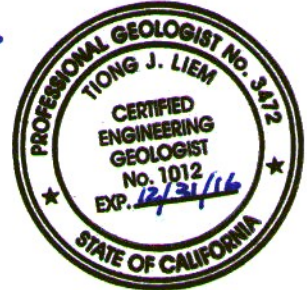
Very truly yours,

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