

November 5, 2021 CSA Proj No: SMC6427A

TO: Gregory Smith PG REHS

Supervisor, Water Protection and Land Use Programs

San Mateo County Environment Health Services

2000 Alameda de las Pulgas, Suite 100

San Mateo, California 94403

SUBJECT: Supplemental Geotechnical Peer Review

RE: Onsite Wastewater Treatment System (OWTS)

PLN2020-00251 634 Palomar Drive

At your request, we have completed a supplemental geotechnical peer review of the OWTS application using:

- Supplemental Engineering Geologic Study (letter-report) prepared by Atlas Consultants, Inc., dated October 4, 2021;
- Engineering Geologic Consultations (report) prepared by Steven F.
 Connelly, CEG., dated August 10, 2021; and
- Onsite Systems Manual (OSM) prepared by the County Department of Environmental Health dated May, 2016.

In addition, we have reviewed pertinent technical documents, maps, and reports from our office files, as well as photographs and letters provided to us by the County.

DISCUSSION

We understand the applicant proposes to construct a new residence serviced by an Onsite Wastewater Treatment System (OWTS). This geotechnical peer review is limited to aspects of the proposed septic system, and is not intended to address all geotechnical aspects of the proposed project. In our previous geotechnical peer review letter dated June 14, 2021, we recommended completion of supplemental engineering geologic evaluations and clarifications in conformance with the Onsite System Manual prepared by the County Department of Environmental Health. We refer to our previous geotechnical peer review letter dated June 14, 2021 for a more detailed description of our understanding of the proposed project as well as a description of the site conditions.

CONCLUSIONS AND RECOMMENDED ACTION

The Project Engineering Geologist (Atlas) has completed a supplemental study at the subject property to address the items presented in our prior peer review letter. The applicant's Consultant has completed additional evaluation of local topographic and geologic conditions including a review of available LiDAR resources and supplemental subsurface investigative borings to a maximum depth of 19 feet below the ground surface in the vicinity of the proposed primary and expansion leachfields. We understand groundwater was not encountered in the recent borings. Based on mapping completed by the Project Engineering Geologist, we understand that proposed leachfields are to be located at least 70 feet from slope mitigation improvements on the site, and over 100 feet from slope mitigation projects on neighboring properties. The applicant's Engineering Geologist also finds that the OWTS is not within 100 feet of unmitigated landslides, and presents a low risk of surfacing effluent, contaminating water quality, or influencing drainage or slope issues on 738 Loma Court which is located one property to the northwest of the subject property.

The County Onsite Systems Manual (OSM) includes general guidelines for geotechnical or geologic reports. The OSM notes that these reports should collect and use topographic, geologic and groundwater data to evaluate slopes, proximity of cuts or embankments, areas of fill, adequate spacing of trenches, as well as impacts to water quality, stability and set-backs from existing unstable geologic features (i.e., unmitigated landslides). Based on our review of the referenced letter-report dated October 4, 2021, we find that the Project Engineering Geologist has completed a supplemental study and provides recommendations and findings that adequately address the items raised in our previous geotechnical peer review letter, and complies with the requirements of the County OSM.

Consequently, we do not have engineering geologic or geotechnical engineering objections to approval of the subject OWTS application.

LIMITATIONS

This supplemental geotechnical peer review has been performed to provide technical advice to assist the County with its discretionary permit decisions. Our services have been limited to review of the documents previously identified, and a visual review of the property. Our opinions and conclusions are made in accordance with generally accepted principles and practices of the geotechnical profession. This warranty is in lieu of all other warranties, either expressed or implied.

Respectfully submitted,

COTTON, SHIRES AND ASSOCIATES, INC. COUNTY GEOTECHNICAL CONSULTANT

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DTS:CS:TS