

SECTION 4. LIMITATIONS

The analyses and recommendations submitted herein are based, in part, upon information obtained from the field borings. Variations of subsurface conditions between and beyond the field borings may occur, and the nature and extent of these variations may not become evident until construction is underway. If variations then appear evident, it will be necessary to re-evaluate the recommendations provided herein.

The field boring test locations indicated herein are approximate, having been estimated using a hand-held Garmin™ eTrex Vista HCx. Elevations noted on the borings were estimated from Google Earth™. The physical locations and elevations of the borings should be considered accurate only to the degree implied by the methods used.

The stratification breaks shown on the graphic representations of the borings depict the approximate boundaries between soil types and, as such, may denote a gradual transition. Groundwater was not encountered at the time of our field exploration. However, it must be noted that water level fluctuation may occur due to variations in seasonal rainfall, and other factors.

This report has been prepared for the exclusive use of KSF, Inc., their client and their project consultants for specific application to the *Interstate Route H-1 Guardrail and Shoulder Improvements, Kapiolani Interchange to Ainakoa Avenue* project in accordance with generally accepted geotechnical engineering principles and practices. No warranty is expressed or implied.

This report has been prepared solely for the purpose of assisting the engineers in the design of the project. Therefore, this report may not contain sufficient data, or the proper information, to form the basis for preparation of construction cost estimates or contract bidding. A contractor wishing to bid on this project should retain a competent geotechnical engineer to assist in the interpretation of this report and/or performance of site-specific exploration for bid estimating purposes.

The owner/client should be aware that unanticipated subsurface conditions are commonly encountered. Unforeseen subsurface conditions, such as perched

groundwater, soft deposits, hard layers, or loose fills, may occur in localized areas and may require additional probing or corrections in the field (which may result in construction delays) to attain a properly constructed project. Therefore, a sufficient contingency fund is recommended to accommodate these possible extra costs.

This geotechnical engineering exploration conducted at the project site was not intended to investigate the potential for presence of hazardous materials existing at the site. It should be noted that the equipment, techniques, and personnel used to conduct a geo-environmental exploration differ substantially from those applied in geotechnical engineering.

END OF LIMITATIONS