

SECTION 4. LIMITATIONS

The analyses and recommendations submitted herein are based in part upon information obtained from the field borings. Variations of the 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 presented herein.

The boring locations indicated herein are approximate, having been staked out in the field using a hand-held Global Positioning System (GPS) device. Elevations of the borings were interpolated based on the spot elevations shown on the Topographic Survey Map prepared by Fukumoto Engineering, Inc. dated December 27, 2021. The field boring locations and elevations should be considered accurate only to the degree implied by the methods used.

The stratification lines shown on the graphic representations of the borings depict the approximate boundaries between the soil types and, as such, may denote a gradual transition. We did not encounter groundwater in the borings at the time of our field exploration. However, it must be noted that fluctuation may occur due to variation in seasonal rainfall, surface water runoff and other factors.

This report has been prepared for the exclusive use of AECOM and their client, State of Hawaii – Department of Transportation, Highways Division, for specific application to the design of the *Kekaulike Avenue, Emergency Repairs at MP 8.2* 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 preparation of the design for the emergency repairs project. Therefore, this report may not contain sufficient data, or the proper information, for use 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 soil conditions are commonly encountered. Unforeseen subsurface conditions, such as perched groundwater, soft deposits, cobbles/boulders, hard layers or cavities, 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.

END OF LIMITATIONS