3 SUMMARY OF SITE DATA

In 2018 and 2019, ACSI performed extensive sampling and analysis of soil within the Pali Highway Resurfacing and Lighting Replacement Project.

3.1 Field activities

ACSI began prescreening in July 2018, on an as needed basis depending on the project's excavation schedule. Pre-screening soils at the project site were conducted using MIS sampling techniques to determine which COC's may be present in soils at the site. Results of prescreening indicated TPH-Oil and Total lead were elevated in the soils, Diesel, semi-volatile organic compounds (SVOC's), and other metals (Resource Conservation and Recovery Act [RCRA] 8 metals) were not detected. Moving forward ACSI screened soil using Ex-situ soil sampling methods, and discrete collection to screen soils and confirm Lead and Oil were below the Tier 1 Unrestricted EAL in the Stations at the Pali-Highway. Between July and October ACSI carried on screening in this fashion.

Upon receipt of laboratory reports indicating total lead levels above the commercial/industrial EAL at Station 151, ACSI chose to delineate this area using step out discrete samples to determine the lateral extent of the elevated Lead contamination for disposal and characterization purposes. Multi-Combined Increment samples, and Multi Incremental samples (MIS) were used moving forward to characterize the soil better.

MIS decision units were planned based upon the depth being excavated or graded for work in the area, between 0" – 18" bgs, and the length of the Station being renovated. Whenever possible MIS samples were collected evenly spaced over a predetermined length of the median or guard rail, MIS samples were collected during May and June 2019 Mobilizations. Discrete bulk samples were provided to ACSI in Stations where median/guardrail soil was not readily accessible due to traffic and/or construction hours. All discrete bulk samples were subsampled to form one sample for analysis. Information from discrete screening sample results was used to determine whether soils needed to be investigated further.

3.2 Results

Based on results obtained during the sampling investigation between July 2018 and June 2019 at the Pali Highway Resurfacing Project, ACSI concluded that the soil in median Stations 40-65, 141-155, and 182-195 contained Hazardous Waste levels of lead that required disposal on the mainland at a permitted HW accepting facility.

Median Stations 65-75 (near Wyllie street), 35-45, and 69-80 (Mauka of Meleana Place) were cleared for disposal at PVT. Guardrail stations 42+50 through 80 Kailua Bound and 45-80 Town bound (Starting at Pali Lookout) were cleared for and disposed of at PVT landfill. Median Stations in this area including 48+50 – 59'00 were also cleared for disposal. Median Stations 99+00 – 108+00 town bound at Tunnel 1 were also tested and

cleared for on-island disposal. Stations 136+00 – 140+50, just after the end of the bridge, were cleared for disposal. These stations mark the town-side boundary of HW contamination. Station 196+93-200 was tested and cleared for disposal, marking the Kailua-side boundary of HW contamination.

3.3 Completed Remedial Actions

ACSI has delineated the boundary of two stretches of highway containing Hazardous Waste (HW) lead contamination. Boundaries of HW and Non-HW soils within the project scope were determined, and recommendations for disposal of soil based on results were made. However complete delineation, vertical and lateral, of HW contamination has not been completed. In accordance with recommendations provided to the General Site Contractor, Goodfellow Brothers, soil was excavated, removed, and shipped to Chemical Waste Management of the Northwest in Arlington Oregon, by Pacific Commercial Services LLC (PCS) for disposal.

Lead accumulated in soil on the Pali Highway median and shoulders over the span of many years by means of lead-based paint striping application and oil deposited by traffic. Therefore, it is likely that additional impacted soil remains on site. As a result, all earth disturbing work on the Pali Highway medians, or guardrails within two feet laterally on either side and up to three (3) feet below ground surface in the median and guardrails between the cross streets Vineyard Blvd. and Kamehameha Hwy. are considered potentially lead impacted and should be treated as such (See Figure 3 – Lead Impacted Area Map). Soil in the lead impacted area will require sampling, testing, and pending results, removal and disposal.