

REMEDIAL INVESTIGATION/FOCUSED FEASIBILITY STUDY

COMFORT SUITES PROPERTY 7200 FUN CENTER WAY TUKWILA, WASHINGTON

**Submitted by:
Farallon Consulting, L.L.C.
975 5th Avenue Northwest
Issaquah, Washington 98027**

Farallon PN: 2812-001

**For:
Eastwind Investments, Inc.
Comfort Suites
7200 Fun Center Way
Tukwila, Washington 98188-5508**

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Prepared by:



Brittany Train
Staff Geologist



Amanda Meugniot, L.G.
Associate Geologist

Reviewed by:



Mark Havighorst, P.E.
Principal Engineer



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ACRONYMS AND ABBREVIATIONS

AEG	Associated Environmental Group, LLC
AOPC	area of potential concern
ARAR	applicable or relevant and appropriate requirement
AST	aboveground storage tank
bgs	below ground surface
BTEX	benzene, toluene, ethylbenzene, and total xylenes
CMMP	Contaminated Media Management Plan
COC	constituent of concern
COPC	constituent of potential concern
cPAH	carcinogenic polynuclear aromatic hydrocarbon
DRO	diesel-range organics
Eastwind	Eastwind Investments, Inc.
Ecology	Washington State Department of Ecology
EPA	U.S. Environmental Protection Agency
EPH	extractable petroleum hydrocarbon
ESA	Environmental Site Assessment
Farallon	Farallon Consulting, L.L.C.
FFS	Focused Feasibility Study
GeoEngineers	GeoEngineers, Inc.
GPR	ground-penetrating radar
GRO	gasoline-range organics
µg/l	micrograms per liter



mg/kg	milligrams per kilogram
MTCA	Washington State Model Toxics Control Act Cleanup Regulation
NFA	No Further Action
ORO	oil-range organics
PAH	polynuclear aromatic hydrocarbon
PCB	polychlorinated biphenyl
PQL	practical quantitation limit
RI	Remedial Investigation
SHA	Site Hazard Assessment
TEE	Terrestrial Ecological Evaluation
TPH	total petroleum hydrocarbons
UST	underground storage tank
VCP	Voluntary Cleanup Program
VOC	volatile organic compound
VPH	volatile petroleum hydrocarbon
WAC	Washington Administrative Code



1.0 INTRODUCTION

Farallon Consulting, L.L.C. (Farallon) has prepared this Remedial Investigation (RI) and Focused Feasibility Study (FFS) (collectively referred to herein as the RI/FFS) on behalf of Eastwind Investments, Inc. (Eastwind) for the Comfort Suites Property at 7200 Fun Center Way in Tukwila, Washington (herein referred to as the Comfort Suites Property) (Figure 1). The Comfort Suites Property is part of the cleanup site known to the Washington State Department of Ecology (Ecology) as the Family Fun Center Site (Cleanup Site Identification No. 385). As defined by Ecology (2019), the Family Fun Center Site consists of the following three parcels, which historically were owned by Family Fun Center Tukwila LLC:

- Parcel 1 is King County Parcel No. 2423049092 at 7100 Fun Center Way and currently is owned by H2 Office LLC;
- Parcel 2, the Comfort Suites Property, is King County Parcel No. 2423049013 at 7200 Fun Center Way and currently is owned by Eastwind;
- Parcel 3, the Fun Center Property, is King County Parcel No. 2423049063 at 7300 Fun Center Way and currently is owned by Family Fun Center Tukwila LLC; and
- Potentially a portion of the South Grady Way right-of-way owned by the City of Tukwila (Figure 2).

The Family Fun Center Site historically was enrolled in Ecology's Voluntary Cleanup Program (VCP) by the former owner, Family Fun Center Tukwila LLC. A limited cleanup to remove underground storage tanks (USTs), aboveground storage tanks (ASTs), and related petroleum-contaminated soil at the Family Fun Center Site was performed by Family Fun Centers Tukwila LLC in 1997 and 1998. The results of this limited cleanup were described in the *Report of Environmental Services, Underground Storage Tank Removal, Monitoring, Supplemental Subsurface Assessment and Research Findings, Family Fun Centers, Tukwila, Washington*, dated April 22, 1998, prepared by GeoEngineers for Family Fun Centers (1998b), which was submitted to Ecology for review.

Family Fun Centers initiated an independent remedial action at the Family Fun Center Site from 1997 to 1999 in anticipation of the sale of Parcel 1 and the Comfort Suites Property, and of redevelopment of the Fun Center Property. Parcel 1, the Comfort Suites Property, and the Fun Center Property were redeveloped for their current uses in 1998 and 1999. The Comfort Suites Property was acquired by Eastwind in 2004.

The results of the independent remedial action were submitted to Ecology for review. In response, Ecology issued a Further Action Determination (Ecology 2004) indicating that additional confirmational groundwater monitoring would be required prior to Ecology issuing a No Further Action (NFA) determination for the Family Fun Center Site.



Additional confirmational groundwater monitoring was conducted at the Family Fun Center Site in 2004 and 2005, and the results were submitted to Ecology in 2005 (GeoEngineers 2005). Ecology has not issued a further action or NFA determination based on this submittal.

In 2019, Ecology conducted a Site Hazard Assessment and assigned the Family Fun Center Site a hazard ranking of 1. The basis for the ranking is the confirmed detections of arsenic, chromium, and lead at concentrations exceeding the Washington State Model Toxics Control Act Cleanup Regulation (MTCA) Method A cleanup levels for groundwater and the potential for metals-contaminated groundwater to migrate from the Family Fun Center Site to the Green River. No additional remedial activities apparently have been performed at the Family Fun Center Site and an NFA determination for the Family Fun Center Site has not been issued by Ecology.

The purpose of this RI/FFS is to present the RI and FFS completed for the Comfort Suites Property and to support selection of a permanent cleanup alternative for the Comfort Suites Property with the goal of obtaining a property-specific NFA determination for the Comfort Suites Property from Ecology. This RI/FFS addresses items required by Ecology (2016a) and listed in the Feasibility Study Checklist (2016b) and Remedial Investigation Checklist (2016c). The Comfort Suites Property is part of the Family Fun Center Site; therefore, this RI/FFS presents information obtained from previous investigations and remedial actions performed at the Family Fun Center Site relevant for the Comfort Suites Property.

1.1 PURPOSE AND OBJECTIVES

The purpose of an RI is to collect and evaluate sufficient information to support the development and evaluation of technically feasible cleanup alternatives in accordance with Sections 360 through 390 of Chapter 173-340 of the Washington Administrative Code (WAC 173-340-360 through 173-340-390). The RI completed by Farallon and presented in this RI/FFS provided sufficient data for use in evaluating potentially feasible cleanup alternatives for the Comfort Suites Property.

The purpose of an FFS is to develop and evaluate cleanup action alternatives to facilitate selection of a final cleanup action at a site in accordance with WAC 173-340-350(8). The FFS completed by Farallon and presented in this RI/FFS was conducted to screen remediation technologies, eliminate those deemed not technically practicable in accordance with applicable MTCA regulations, and identify a final cleanup action for the Comfort Suites Property.

1.2 REPORT ORGANIZATION

This RI/FFS includes the following sections:

Section 2, Site Description and Background, presents relevant background information pertaining to the Comfort Suites Property and the Family Fun Center Site, including a description of their locations and features, and a summary of current and historical uses of Parcel 1, the Comfort Suites Property, the Fun Center Property, and surrounding area.



Section 3, Remedial Investigation, summarizes the results of the subsurface investigations relevant for the Comfort Suites Property that together constitute the RI for the Comfort Suites Property, including the results for soil and groundwater samples collected at Parcel 1, the Comfort Suites Property, and the Fun Center Property; the local geology and hydrogeology; the nature and extent of contamination at the Comfort Suites Property; and the known or suspected sources of contamination, a conceptual site model, and the cleanup standards for the Comfort Suites Property.

Section 4, Focused Feasibility Study, presents the FFS for the Comfort Suites Property. As described in WAC 173-340-350(8)(a), the purpose of the FFS was to develop and evaluate cleanup alternatives to enable a cleanup action to be selected for the Comfort Suites Property according to WAC 173-340-360. The objective of a selected cleanup action is to protect human health and the environment, and to meet the requirements of MTCA.

Section 5, Summary and Conclusions, provides a summary of the RI/FFS and conclusions regarding the appropriate proposed cleanup alternative.

Section 6, References, lists the documents used in preparing this RI/FFS.

Section 7, Limitations, provides the limitations associated with this RI/FFS.



2.0 SITE DESCRIPTION AND BACKGROUND

This section presents relevant background information pertaining to the Comfort Suites Property and the Family Fun Center Site, including a description of their locations and features; and a summary of current and historical uses of Parcel 1, the Comfort Suites Property, the Fun Center Property, and the surrounding area.

2.1 SITE DESCRIPTION

The Family Fun Center Site comprises approximately 14.38 acres of land zoned for commercial/light industrial use. As defined by Ecology, the Family Fun Center Site consists of the following areas shown on Figure 2:

- Parcel 1 (King County Parcel No. 2423049092 at 7100 Fun Center Way) is west-adjacent to the Comfort Suites Property, totals approximately 2.56 acres of land currently owned by H2 Office LLC, and is occupied by a one-story retail and office building;
- Parcel 2, the Comfort Suites Property (King County Parcel No. 2423049013 at 7200 Fun Center Way) totals approximately 3.57 acres of land currently owned by Eastwind, and is developed as a four-story hotel building and associated parking lot;
- Parcel 3, the Fun Center Property (King County Parcel No. 2423049063 at 7300 Fun Center Way) is east-adjacent to the Comfort Suites Property, totals approximately 8.25 acres of land currently owned by Family Fun Center Tukwila LLC, and is occupied by an amusement park (Family Fun Center); and
- Potentially a portion of the South Grady Way right-of-way, which is owned by the City of Tukwila.

The Family Fun Center Site is bounded by the Interurban Trail and the Green River to the north, Burlington Northern Santa Fe railway tracks and Monster Road Southwest to the east, South Grady Way and Interstate 405 to the south, and Fun Center Way to the west (Figure 2).

2.2 CURRENT AND HISTORICAL USES OF THE SITE

Parcel 1, the Comfort Suites Property, and the Fun Center Property were redeveloped for their current uses in 1998 and 1999. Parcel 1 currently is used for retail and commercial purposes. The Comfort Suites Property currently is used as a hotel, and the Fun Center Property currently is used as an amusement park. The parcels are entirely paved and covered with buildings except for landscaped areas. Groundwater at and proximate to the Family Fun Center Site is not used for domestic, industrial, or irrigation purposes. Prior to redevelopment, Parcel 1 was mostly vegetated with a steel tower for high-voltage power lines located near the center of the northern portion of the parcel and a wooden building formerly operated as the J.G. Nursery located on the southern portion of the parcel; the Comfort Suites Property was mostly vegetated with a wooden barn and stable located in the southwestern corner of the parcel; and the Fun Center Property was developed with several wooden structures on the western half of the parcel (including residential buildings,



an automotive repair shop, a barn, and a shed) and a milk bottling plant on the southern portion of the parcel. The eastern portion of the Fun Center Property was covered with an approximately 80,000-cubic-yard stockpile of soil from a former commercial topsoil manufacturing business. A detention pond was in the northern portion of the Fun Center Property. The approximate locations of the historical features at the Family Fun Center Site are shown on Figure 3.

2.3 ENVIRONMENTAL SETTING

This section provides a summary of the environmental setting of the Comfort Suites Property. The information presented here has been obtained from national, state, and local records, including national census statistics. Information related to the environmental setting of Parcel 1 and the Fun Center Property was not reviewed as part of this RI/FFS; however, it is assumed based on location and land use, that the environmental settings of Parcel 1, the Fun Center Property, and the Comfort Suites Property are similar.

2.3.1 Land Use and Demographics

According to King County Parcel Records, the Comfort Suites Property is owned by Eastwinds, and the present use is as a hotel (King County Department of Assessment 2022). Land use in the vicinity of the Comfort Suites Property is primarily a mix of commercial and industrial.

2.3.2 Meteorology

Tukwila is a Seattle suburb. The climate of Tukwila is maritime, characterized by cool summers and mild winters influenced by ocean air. The average annual minimum temperature is 41.9 degrees Fahrenheit, and the average annual maximum temperature is 61.7 degrees Fahrenheit. The average annual precipitation in Tukwila is 38.36 inches, with over 3.86 inches of precipitation per month from November through March (Western Regional Climate Center 2017).

2.3.3 Topography

The Comfort Suites Property is relatively flat, sloping slightly down toward the north and the Green River. The ground surface elevation at the Comfort Suites Property is approximately 185 feet above mean sea level (U.S. Geological Survey 2020).

2.3.4 Surface Water

The Comfort Suites Property is less than 100 feet south of the Green River. No wetlands are present on the Comfort Suites Property. The Comfort Suites Property is paved, and precipitation that falls on the Comfort Suites Property primarily is collected in catch basins at the Comfort Suites Property.

2.3.5 Subsurface Utilities

The following utilities are known to be present in the vicinity of the Comfort Suites Property:

- Puget Sound Energy provides electricity to the Comfort Suites Property.



- The City of Tukwila provides potable water to the Comfort Suites Property. The water is acquired through the Cascade Water Alliance, which purchases water from the City of Seattle Public Utilities. The water is sourced from the Cedar River watershed. No drinking water supply wells are located within a 1-mile radius of the Family Fun Center Site (King County 2018). Stormwater collects in catch basins in the paved driveways and parking areas of the Comfort Suites Property and discharges to the City of Tukwila municipal sewer system.
- The City of Tukwila provides sanitary sewer services to the Comfort Suites Property.

2.4 REGULATORY STATUS

The Ecology Toxics Cleanup Program maintains environmental information pertaining to properties with known environmental concerns and provides such information in a number of lists available on the Ecology website. The Cleanup Site Details report (Ecology 2022b) included on the Ecology website indicated that the Family Fun Center Site was listed with Cleanup Site Identification No. 385 and Facility Identification No. 18434384. The Ecology Northwest Regional Office was assigned as the Ecology Project Manager for the Site. The Cleanup Site Details report indicated that a Site Discovery/Release Report for the Family Fun Center Site was received by Ecology on August 30, 1995 and an initial investigation was performed on September 28, 1995. The VCP enrollment date is not listed. A VCP opinion on the remedial investigation for the Family Fun Center Site was completed on January 8, 2004 and a Site Hazard Assessment (SHA) for the Family Fun Center Site was completed on March 26, 2018. The Family Fun Center Site was added to the Ecology Hazardous Sites Listing on January 20, 2019.



3.0 REMEDIAL INVESTIGATION

Multiple subsurface investigations and groundwater monitoring events have been conducted at the Family Fun Center Site since 1997. The subsurface investigations have assessed the condition of environmental media at and characterized the sources, nature, and extent of the hazardous substances at the Family Fun Center Site, which includes Parcel 1, the Comfort Suites Property, and the Fun Center Property. This section summarizes the results of the subsurface investigations relevant for the Comfort Suites Property that together constitute the RI for the Comfort Suites Property, including the results for soil and groundwater samples collected at Parcel 1, the Comfort Suites Property, the Fun Center Property; the local geology and hydrogeology, the nature and extent of contamination at the Comfort Suites Property; and the known or suspected sources of contamination, a conceptual site model, and the cleanup standards for the Comfort Suites Property.

3.1 ENVIRONMENTAL INVESTIGATIONS AND CLEANUP ACTIVITIES

This section describes previous environmental investigations and cleanup activities conducted by Farallon and other consultants at the Family Fun Center Site. The results of these investigations were presented to Ecology previously in the following documents:

- *Geotechnical Engineering Services, Family Fun Center, Tukwila, Washington* dated June 30, 1997 prepared by GeoEngineers, Inc. for Family Fun Centers (GeoEngineers) (1997a);
- *Phase II Environmental Site Assessment Report, Proposed Family Fun Center, Tukwila, Washington* dated November 17, 1997 prepared by GeoEngineers for Family Fun Centers (1997 Phase II ESA Report);
- Letter Regarding Site-Specific Method B Soil Cleanup Level for Petroleum Hydrocarbons, Proposed Family Fun Center, Tukwila, Washington dated January 6, 1998 from Lisa J. Bona and Kurt S. Anderson of GeoEngineers to Gail Colburn of Ecology (1998a);
- *Report of Environmental Services, Underground Storage Tank Removal Monitoring, Supplemental Subsurface Assessment, and Research Findings, Family Fun Centers, Tukwila, Washington* dated April 22, 1998 prepared by GeoEngineers for Family Fun Centers (1998 UST Removal Report);
- *Cleanup Action Plan and Engineering Report, Proposed Family Fun Center, Tukwila, Washington* dated September 14, 1998 prepared by GeoEngineers for Family Fun Centers (1998c) (1998 Cleanup Action Plan Report);
- Off-Site Placement of On-Site Soils, Family Fun Center Site, 7300 Fun Center Way, Tukwila, Washington, File No. 5925-003-01, dated October 15, 1998, prepared by GeoEngineers (1998c);
- Placement of Soils on City of Tukwila Property, Family Fun Center Site, 7300 Fun Center Way, Tukwila, Washington, File No. 5925-003-01, dated January 15, 1999, prepared by GeoEngineers (1999a);



- Methane Sampling, Family Fun Center Site, Tukwila, Washington, File No. 5925-003-01, dated February 17, 1999, prepared by GeoEngineers (1999b);
- *Cleanup Action Report, Family Fun Center Site, Tukwila, Washington* dated May 1, 2000 prepared by GeoEngineers for Family Fun Centers (2000);
- *Revised Cleanup Action Report, Family Fun Center Site, Tukwila, Washington* dated February 19, 2002 prepared by GeoEngineers for Family Fun Centers (2002a) (2002 Revised Cleanup Action Report);
- *Report of Environmental Services, Compliance Monitoring Well Installation and 2002 Groundwater Sampling, Family Fun Center Site, Tukwila, Washington* dated November 15, 2002 prepared by GeoEngineers for X-Change Solutions (2002b); and
- *2004/2005 Compliance Groundwater Sampling, Family Fun Center Site, Tukwila, Washington* dated July 6, 2005 prepared by GeoEngineers for Family Fun Centers (2005) (2005 Compliance Groundwater Sampling Report).

Additional information on the investigation procedures and results are provided in the referenced reports and summarized as follows.

3.1.1 1997 Geotechnical Investigation

GeoEngineers conducted a geotechnical investigation at the Family Fun Center Site in June 1997 to evaluate subsurface conditions and develop geotechnical recommendations and design criteria for redevelopment of the Family Fun Center Site. For the geotechnical investigation, GeoEngineers advanced two borings (GB-1 and GB-2) to depths of 44 and 49 feet below ground surface (bgs), excavated 12 test pits (GT-1 through GT-12) to depths of 8.5 to 13 feet bgs, and reviewed the results of previous geotechnical investigations completed by Applied Geotechnology in 1989 and Geotech Consultants in 1997 (GeoEngineers 1997a). The geotechnical investigation completed by Applied Geotechnology in 1989 included excavation of eight test pits (AT-1 through AT-8). The geotechnical investigation completed by Geotech Consultants in 1997 included advancement of 17 borings (GCW-1 through GCW-17) and construction of three monitoring wells (GCW-14, GCW-16, and GCW-17). GeoEngineers reported the presence of slag fill at the following locations at the Comfort Suites Property and Fun Center Property:

- Comfort Suites Property: test pits AT-4 at depths of 0 to 2 feet bgs, AT-5 at depths of 0 to 0.5 foot bgs, and AT-6 at depths of 0 to 4.5 feet bgs; and borings GCW-16 and GCW-17 at depths of 2.5 to 4 feet bgs; and
- Fun Center Property: boring GB-1 at a depth of 1.5 feet bgs and at the ground surface surrounding the boring; and boring AB-3 (depth not indicated).

The locations of the geotechnical borings and test pits are depicted on Figure 2.



3.1.2 1997 Phase I Environmental Site Assessment

GeoEngineers completed a Phase I Environmental Site Assessment (ESA) for the Family Fun Center Site in July 1997. A report describing the Phase I ESA was not available for review by Farallon; however, the findings of the Phase I ESA were summarized by GeoEngineers in its Phase II ESA Report (GeoEngineers 1997b). According to the Phase II ESA Report, the following recognized environmental conditions associated with the Family Fun Center Site were identified by GeoEngineers:

- Petroleum-impacted soil in samples collected from the 80,000-cubic-yard stockpile on the Family Fun Center Site and the presence of containers of lubricants near the AST located on the eastern portion of the Family Fun Center Site;
- Chromium and barium detected at concentrations exceeding the MTCA Method A and B cleanup levels for soil in samples of slag fill collected from the Family Fun Center Site;
- Total arsenic detected at concentrations exceeding the MTCA Method A cleanup level in groundwater samples collected from monitoring well GCW-16 at the Family Fun Center Site;
- Potential releases of petroleum from former and existing USTs and ASTs at the Family Fun Center Site to soil and/or groundwater;
- Potential releases of petroleum and/or solvent in the vicinity of the automotive repair shop at the Family Fun Center Site to soil and groundwater; and
- Methane detected in borings B-14 and B-15 completed at the Family Fun Center Site in 1994. The presence of methane was attributed to the presence of organic matter in the soil.

3.1.3 1997 Phase II Environmental Site Assessment

GeoEngineers conducted a Phase II ESA at the Family Fun Center Site in October 1997 to assess the subsurface conditions in areas of potential concern (AOPCs) that were identified as part of a Phase I ESA completed by GeoEngineers for the Family Fun Center Site, and to assess further subsurface contamination reportedly encountered by others during previous environmental and geotechnical studies. The Phase II ESA included a limited subsurface investigation to evaluate AOPCs at Parcel 1, the Comfort Suites Property, and the Fun Center Property. The scope of work for the subsurface investigation included the following:

- Conducting a ground-penetrating radar (GPR) survey of selected areas to locate potential USTs as described below.
- Completing 12 shallow hand borings proximate to surface oil stains, discarded batteries, discarded railroad ties, and two potential USTs.
- Advancing 20 direct-push borings (SP-1 through SP-20) to depths ranging from approximately 3 to 51 feet bgs and collecting soil samples from depth intervals of 1 to 5 feet bgs at the 80,000-cubic-yard soil stockpile, detention pond, slag fill, automotive



repair shop, former milk processing facility, former agricultural fields, and UST and AST locations.

- Collecting reconnaissance groundwater samples from borings SP-5 through SP-15, SP-18, SP-19, and SP-23.
- Conducting groundwater monitoring at well GCW-16.
- Submitting soil, reconnaissance groundwater, and groundwater samples for laboratory analysis for total petroleum hydrocarbons (TPH) as diesel-, oil-, and gasoline-range organics (DRO, ORO, and GRO, respectively); extractable and volatile petroleum hydrocarbons (EPH and VPH, respectively), benzene, toluene, ethylbenzene, and total xylene (BTEX) metals, volatile organic compounds (VOCs), semivolatile organic compounds, polychlorinated biphenyls (PCBs), and/or pesticides.
- The results of the 1997 Phase II ESA are described in detail in the 1997 Phase II ESA Report. The sampling locations are shown on Figure 2. Laboratory analytical results are summarized in Tables 2 through 8.

The results of the 1997 Phase II ESA relevant for Parcel 1, the Comfort Suites Property, and Fun Center Property are summarized as follows.

3.1.3.1 Parcel 1

The GPR survey identified no potential USTs at Parcel 1.

GeoEngineers completed two direct-push borings (SP-2 and SP-3) to evaluate soil and groundwater conditions near the northern property boundary. The boring locations are shown on Figure 2.

Boring SP-2 was completed to a depth of approximately 13 feet bgs and boring SP-3 was completed to a depth of approximately 10 feet bgs. A soil sample was collected only from boring SP-2 from a depth of 10 feet bgs and analyzed for DRO and ORO. DRO and ORO were not detected at the laboratory practical quantitation limit (PQL).

Reconnaissance groundwater samples were collected from borings SP-2 and SP-3 and analyzed for DRO, ORO, VOCs, total priority pollutant metals, and barium. All analytes either were reported not detected at the laboratory PQL or were detected at concentrations less than the applicable MTCA Method A or B cleanup levels.

3.1.3.2 Comfort Suites Property

The GPR survey identified no potential USTs at the Comfort Suites Property.

GeoEngineers completed five hand-auger borings (HA-1 and HA-3 through HA-6) and two direct-push borings (SP-4 and SP-25) at the Comfort Suites Property. The boring



locations and results of soil and reconnaissance groundwater sampling are shown on Figure 2 and described by AOPC as follows.

Agricultural Area

Boring HA-1 was advanced to a depth of approximately 1.5 feet bgs in the northwestern portion of the Comfort Suites Property in an area used for agriculture. A soil sample was collected from the boring and analyzed for PCBs and pesticides. PCBs and pesticides were not detected at the laboratory PQL, except for pesticides gamma-chlordane and 4,4-dichlorodiphenyldichloroethane, which were detected at concentrations less than the MTCA Method A cleanup levels for unrestricted land use.

Oil Staining

Borings HA-3 through HA-5 were advanced to a maximum depth of approximately 1 foot bgs in the southern portion of the Comfort Suites Property adjacent to the garage and in an area of observed oil staining. Soil samples were collected at depths of 1 foot bgs from boring HA-3 and 0.5 foot bgs from borings HA-4 and HA-5 and analyzed for GRO, DRO, ORO, BTEX, VOCs, priority pollutant metals (antimony, arsenic, beryllium, cadmium, chromium, copper, lead, mercury, nickel, selenium, silver, titanium, and zinc); and barium. DRO and/or ORO were detected at concentrations exceeding the MTCA Method A cleanup level for unrestricted land use in only the soil samples collected from borings HA-4 and HA-5. All other analytes either were not detected at the laboratory PQL or were detected at concentrations less than the applicable MTCA Method A or B cleanup levels. The soil samples also were analyzed for VPH and EPH for the calculation of a site-specific cleanup level for TPH.

Former Oil Dump

Borings HA-6 and SP-25 were advanced to depths of approximately 0.5 foot bgs and 1 foot bgs, respectively, in the southeastern portion of the Comfort Suites Property in the vicinity of a former oil dump. Soil samples collected from borings HA-6 and SP-25 from depths of 0.5 foot and 1 foot bgs, respectively, were analyzed for VOCs, GRO, DRO, ORO, VPH, and EPH. Soil samples from boring SP-25 also were analyzed for priority pollutant metals and barium. DRO and/or ORO were detected at concentrations exceeding the MTCA Method A cleanup level for unrestricted land use in the samples collected from borings HA-6 and SP-25. All other analytes either were not detected at the laboratory PQL or were detected at concentrations less than the applicable MTCA cleanup levels. Soil samples also were analyzed for VPH and EPH for the calculation of a site-specific MTCA Method B cleanup level for TPH in soil, which GeoEngineers determined to be 2,984 milligrams per kilogram (mg/kg).

Groundwater Conditions

Boring SP-4 was advanced to a depth of approximately 21 feet bgs in the northeastern corner of the Comfort Suites Property for evaluation of groundwater conditions near the



northern Comfort Suites Property boundary. A reconnaissance groundwater sample was collected from boring SP-4 and analyzed for GRO, DRO, ORO, VOCs, dissolved priority pollutant metals, and dissolved barium. Dissolved arsenic was detected at a concentration of 69.4 micrograms per liter ($\mu\text{g/l}$) in the reconnaissance groundwater sample, which exceeds the Puget Sound Basin natural background concentration of 8 $\mu\text{g/l}$ (Ecology 2022a). All other analytes either were not detected at the laboratory PQL or were detected at concentrations less than the applicable MTCA Method A or B cleanup levels.

Additionally, a groundwater sample was collected from monitoring well GCW-16 that was previously installed at the northwestern corner of the Comfort Suites Property. The groundwater sample was analyzed for GRO, DRO, ORO, VOCs, dissolved priority pollutant metals, and dissolved barium. Dissolved arsenic was detected at a concentration of 6.6 $\mu\text{g/l}$ in the groundwater sample, which is less than the natural background concentration of 8 $\mu\text{g/l}$.

3.1.3.3 Fun Center Property

The GPR survey identified four potential USTs at the Fun Center Property.

GeoEngineers completed seven hand-auger borings (HA-2 and HA-7 through HA-12) and 15 direct-push borings (SP-1 through SP-3 and SP-5 through SP-25) at the Fun Center Property. The boring locations are shown on Figure 2 and described by AOPC as follows.

Former Agricultural Field Chemicals and Storage of Agricultural Chemicals

Boring HA-2 was completed to a depth of approximately 0.5 foot bgs proximate to the southern Comfort Suites Property boundary with the Fun Center Property in an area where agricultural chemicals had been stored near the former barn. A soil sample was collected from the boring at a depth of 0.5 feet bgs and analyzed for PCBs and pesticides. PCBs and pesticides were not detected at the PQL, except for pesticides gamma-chlordane, 4,4-dichlorodiphenyldichloroethane, and dieldrin, which were detected at concentrations less than the MTCA Method A cleanup levels.

Soil Stockpile

Borings SP-6, SP-7, SP-9, SP-10, SP-11, SP-13, and SP-15 were advanced in the soil stockpile. Samples were collected from the borings at depths ranging from 0.5 to 30 feet bgs and analyzed for DRO, ORO, priority pollutant metals, and/or PCBs. All analytes either were not detected at the laboratory PQL or were detected at concentrations less than the applicable MTCA Method A or B cleanup levels.

Slag Fill

Boring SP-21 was advanced through an area of slag fill. A sample was collected from the boring at a depth of 1 foot bgs and analyzed for DRO, ORO, priority pollutant metals, and



PCBs. All analytes either were not detected at the laboratory PQL or were detected at concentrations less than the applicable MTCA Method A or B cleanup levels.

Detention Pond

Boring SP-5 was advanced near the detention pond. A soil sample was collected at a depth of 18 feet bgs and analyzed for DRO and ORO. ORO was detected at a concentration of 1,570 mg/kg, and field screening results indicated that petroleum-related contamination may be present in the vicinity of SP-5 at depths ranging from approximately 13 to 21 feet bgs. A reconnaissance groundwater sample was collected from the boring and analyzed for DRO, ORO, and total priority pollutant metals. All analytes either were not detected at the laboratory PQL or were detected at concentrations less than the applicable MTCA Method A or B cleanup levels in the reconnaissance groundwater sample except arsenic, which was detected at a concentration of 68.4 µg/l in the reconnaissance water sample collected from boring SP-5.

Former Automotive Repair Shop/Automobile and Boat Parking and Repair

Borings HA-3, HA-4, HA-5, and SP-23 were completed in the vicinity of the former automotive repair shop. Borings HA-7 and HA-8 were completed in the vicinity of former automobile and boat parking and repair areas. Soil samples were collected from the borings at a depth of 0.5 feet bgs and analyzed for DRO, ORO, polynuclear aromatic hydrocarbons (PAHs), and/or priority pollutant metals. All analytes either were not detected at the laboratory PQL or were detected at concentrations less than the applicable MTCA Method A or B cleanup levels; except DRO in the samples collected from borings HA-4, ORO in the sample collected from boring HA-5, and arsenic in the sample collected from boring SP-23, which exceeded MTCA Method A cleanup levels. The toxic equivalent concentration of carcinogenic PAHs (cPAHs) exceeded the MTCA Method A cleanup level for unrestricted land use in the soil sample collected from boring HA-4.

Oil Dump

Borings HA-6 and SP-25 were completed in the vicinity of an oil dump. Soil samples were collected from borings HA-6 and SP-25 at depths of 0.5 and 1 foot bgs, respectively, and analyzed for DRO, ORO, PAHs, and/or priority pollutant metals. All analytes either were not detected at the laboratory PQL or were detected at concentrations less than the applicable MTCA Method A or B cleanup levels, except DRO and ORO, which exceeded MTCA Method A cleanup levels in the sample collected from SP-25.

USTs and ASTs

Borings HA-11, HA-12, SP-18, SP-19, SP-20, and SP-22 were completed near known or potential ASTs and USTs. Soil samples were collected from the borings at depths ranging from 0.5 foot to 10 feet bgs and analyzed for DRO, ORO, GRO, and/or BTEX. All analytes either were not detected at the laboratory PQL or were detected at concentrations less than the applicable MTCA Method A or B cleanup levels. Reconnaissance groundwater samples



were collected from borings SP-18 and SP-19 and analyzed for DRO, ORO, GRO, and dissolved priority pollutant metals. All analytes either were not detected at the laboratory PQL or were detected at concentrations less than the applicable MTCA Method A or B cleanup levels in the reconnaissance groundwater samples except DRO and ORO, which exceeded MTCA Method A cleanup levels in the sample collected from boring SP-19.

Former Milk Processing Facility

Borings SP-16 and SP-17 were completed near the former milk processing facility. Soil samples were collected from the borings at a depth of 2 feet bgs and analyzed for DRO, ORO, and BTEX. All analytes either were not detected at the laboratory PQL or were detected at concentrations less than the applicable MTCA Method A or B cleanup levels.

Used Battery Area

Boring HA-10 was completed in an area where used batteries had accumulated. A soil sample was collected from this boring at a depth of 2 feet bgs and analyzed for priority pollutant metals. All analytes either were not detected at the laboratory PQL or were detected at concentrations less than the applicable MTCA Method A or B cleanup levels.

Railroad Tie Storage

Boring HA-9 was completed adjacent to a railroad tie storage area. A soil sample was collected from this boring at a depth of 2 feet bgs and analyzed for priority pollutant metals. All analytes either were not detected at the laboratory PQL or were detected at concentrations less than the applicable MTCA Method A or B cleanup levels.

3.1.4 1997–1998 Underground Storage Tank Removal Monitoring and Supplemental Subsurface Assessment

GeoEngineers conducted the following investigation and remediation activities at the Family Fun Center Site in 1997 and 1998:

- Performing supplemental subsurface investigation activities to further investigate potential on- and off-site sources of arsenic in groundwater;
- Removing USTs identified at the Fun Center Property; and
- Performing additional assessment requested to close data gaps identified by Ecology.

The results of these activities are described in detail in the 1998 UST Removal Report. The activities were performed at the Comfort Suites Property and Fun Center Property as described below.

3.1.4.1 Comfort Suites Property

To evaluate potential sources of arsenic in groundwater, GeoEngineers advanced two hand-auger borings (98012301-1 and 8012301-2) to a depth of approximately 8 feet bgs at the



Comfort Suites Property adjacent to the location of the former barn on the Comfort Suites Property. The boring locations are shown on Figure 2. A soil sample was collected from each boring at a depth of 8 feet bgs and field screened for evidence of petroleum hydrocarbons. Field screening reportedly did not indicate the presence of petroleum hydrocarbon contamination in the samples. The soil samples were submitted for laboratory analysis of total lead and arsenic. Laboratory analytical results are summarized in Table 6. Lead and arsenic were detected at concentrations less than MTCA Method A cleanup levels.

3.1.4.2 Fun Center Property

To evaluate potential sources of arsenic in groundwater, GeoEngineers completed the following tasks.

- Advanced one hand-auger boring (98012301-3) to a depth of approximately 8 feet bgs on the western portion of the Fun Center Property. The sampling location is shown on Figure 2. A soil sample was collected from the boring at a depth of 8 feet bgs and field screened for evidence of petroleum hydrocarbons. Field screening reportedly did not indicate the presence of petroleum hydrocarbon contamination in the sample. The soil sample was submitted for laboratory analysis of total lead and arsenic. Laboratory analytical results are summarized in Table 6. Lead and arsenic were detected at concentrations less than MTCA Method A cleanup levels.
- Installed and collected a groundwater sample from monitoring well MW-19 at a location up-gradient of the AOPCs designated in the 1997 Phase II ESA Report and proximate to Southwest Grady Way (Figure 2). Monitoring well construction details and monitoring well survey data are summarized in Table 1. The groundwater was analyzed for dissolved priority pollutant metals. Laboratory results are summarized in Table 8. All analytes either were not detected at the laboratory PQLs or were detected at concentrations less than applicable cleanup levels. GeoEngineers performed a literature review and reportedly consulted with Charles San Juan of Ecology on February 20, 1998 regarding naturally occurring (background) concentrations of arsenic in groundwater proximate to the Family Fun Center Site.

Based on the results of soil and groundwater sampling performed at the Family Fun Center Site, GeoEngineers concluded that it did not encounter a source of arsenic in soil or slag fill at the Family Fun Center Site. Arsenic was detected at concentrations ranging from 5.2 to 22 µg/l in groundwater samples collected from monitoring wells at the Family Fun Center Site. Based on their review and consultation with Charles San Juan, GeoEngineers determined that these arsenic concentrations were within the range of naturally occurring concentrations in groundwater proximate to the Family Fun Center Site.

Three heating oil USTs and one gasoline UST identified by the GPR survey, three ASTs, and related piping at the Fun Center Property were decommissioned. Decommissioning included the excavation of approximately 15 cubic yards of petroleum-contaminated soil



and collection of confirmation samples from the UST excavation pits. Groundwater was not encountered in the excavation pits. GRO, DRO, ORO, and/or BTEX reportedly were not detected at concentrations exceeding MTCA Method A or B cleanup levels in confirmation samples collected from the UST excavation pits. The locations of the USTs and ASTs, the excavation extents, and laboratory data for confirmation samples are included in the 1998 UST Removal Report. Excavated petroleum-contaminated soil reportedly was treated at the Fun Center Property and not transported off the site for disposal.

GeoEngineers performed an additional assessment to close data gaps identified by Ecology. The additional assessment included the following investigation activities.

- Evaluated whether the Green River may have been dredged historically, and if dredging did occur, whether dredge spoils were placed at the Family Fun Center Site. The results of the evaluation were inconclusive.
- Evaluated whether the presence of slag fill in soil may be lowering the pH of groundwater at the Family Fun Center Site. GeoEngineers concluded based on a comparison of groundwater pH in areas where slag fill is and is not present that the presence of slag fill does not result in lowering groundwater pH.
- Advanced hand-auger borings HA-1, HA-2, and HA-3 proximate to the detention pond (HA-1) and the drainage ditch on the eastern property boundary (HA-2 and HA-3) to a depth of approximately 0.5 foot bgs. Test pit TP-1 was completed north of the soil stockpile to depth of 8 feet bgs and test pit TP-2 was completed west of the soil stockpile to a depth of 12 feet bgs. The approximate locations of the hand-auger borings are shown on Figure 2. Soil samples were collected from borings HA-1, HA-2, and HA-3 at depths ranging from 0.5 to 1 foot bgs and from test pit TP-2 at depths of 5 and 8 feet bgs. The soil samples were analyzed for DRO, ORO, and/or priority pollutant metals. DRO, ORO, and priority pollutant metals reportedly were not detected at concentrations exceeding MTCA Method A or B cleanup levels in the soil samples collected from borings HA-1, HA-2, HA-3, and TP-2.
- Constructed test pits proximate to geophysical anomalies detected by the GPR survey. The test pits encountered no evidence of USTs or petroleum hydrocarbons.

3.1.5 1998–1999 Cleanup Action

GeoEngineers conducted cleanup action activities in accordance with the 1998 Cleanup Action Plan Report, at the Family Fun Center Site before and during redevelopment of the Family Fun Center Site in 1998 and 1999. As described in the 2022 Revised Cleanup Action Report (Appendix A), the cleanup action was performed at only the Comfort Suites Property and Fun Center Property.

The cleanup action activities included excavation of “hot spots” and areas of slag fill, characterization and reuse of the approximately 80,000-cubic-yard soil stockpile, construction of a containment and capping area of the Fun Center Property, and recording a restrictive covenant



for only the Fun Center Property. The excavation of “hot spots” was conducted to remove soil and sediment with concentrations of constituents of concern (COCs) exceeding remediation levels from the Comfort Suites Property and the Fun Center Property. These remediation levels were as follows:

- DRO and ORO: The MTCA Method B site-specific cleanup level for petroleum hydrocarbons was 2,984 mg/kg, of which no more than 1,786 mg/kg may consist of aromatic compounds.
- Benzene and GRO: MTCA Method A cleanup levels were selected for benzene and GRO at the Fun Center Property. No gasoline-range hydrocarbons or benzene were detected on Parcel 1 or the Comfort Suites Property.
- Other COCs: MTCA Method A or the most stringent MTCA Method B cleanup level were selected for COCs other than petroleum hydrocarbons and benzene.

At Ecology’s request, slag fill was excavated to a maximum depth of approximately 2 feet bgs from gravel roads and driveways on the Comfort Suites Property and Fun Center Property.

The approximate locations of the excavation areas are shown on Figures 4, 4A, 4B, and 4C. Confirmation soil samples were collected from the excavation extents and submitted for laboratory analysis for the relevant COCs. Laboratory results are summarized in Tables 2, 3, 5, and 6.

Soil in the approximately 80,000-cubic-yard stockpile was characterized by field screening for the presence of petroleum hydrocarbons by visual observation, testing for water sheen, and headspace vapors.

Soil and sediment excavated from “hot spots,” excavated slag fill, and stockpiled soil was handled as follows:

- Excavated “hot spot” and stockpiled soil with field screening results suggesting that petroleum hydrocarbon concentrations were less than the remediation levels in fill on the Comfort Suites Property and Fun Center Property.
- Excavated “hot spot” and stockpiled soil with field screening results suggesting that petroleum hydrocarbon concentrations were above the remediation levels, and sediments and slag fill were placed in the containment and capping area of the Fun Center Property. Slag fill identified in stockpiled soil was segregated and placed in the containment and capping area of the Fun Center Property.
- Excavated “hot spot” soil with apparent GRO contamination based on field screening was treated by aeration in the southern portion of the Fun Center Property and then capped with asphalt pavement.
- Excavated “hot spot” soil and sediment with nonpetroleum COCs was transported off-site for recycling or disposal.



- Approximately 4,100 cubic yards of soil from the approximately 80,000-cubic-yard stockpile were emplaced with the approval of the City of Tukwila (GeoEngineers 1999) on the City of Tukwila property adjacent to the Fun Center Property. The approximate location of the emplaced soil is shown on Figure 4. DRO and ORO reportedly were detected at maximum concentrations of 300 mg/kg and 1,000 mg/kg in soil samples collected from the stockpile (GeoEngineers 1999).
- “Hot spots” from which soil was removed reportedly were backfilled with soil from the approximately 80,000-cubic-yard stockpile. “Hot spots” from which sediment was removed were backfilled with silty sand from a borrow pit on the Fun Center Property. The 2022 Revised Cleanup Action Report does not indicate whether the silty sand backfill was characterized.
- The containment and capping area of the Fun Center Property was constructed by placing imported base course material over the emplaced soil and covering the base course with approximately 4 inches of asphalt-concrete. The approximate extent of the containment and capping area is shown of Figure 4. The restrictive covenant for the Fun Center Property was recorded on September 15, 1999. The restrictive covenant prohibits the use of groundwater and implementation of a cap maintenance and compliance monitoring and that includes maintenance of the containment and capping area and long-term monitoring of groundwater at the points-of-compliance. A Compliance Monitoring Plan and Cap Maintenance and Soils Handling Plan were included as Appendices E and F, respectively, of the 2022 Revised Cleanup Action Report (Appendix A).

Additional details regarding excavation activities conducted at the Comfort Suites Property and Fun Center Property are as follows.

3.1.5.1 Comfort Suites Property

Excavation was conducted at the following five areas at the Comfort Suites Property:

- “Hot Spots” A, C, and D, which encompass the five borings (HA-2, HA-4, HA-5, HA-6, and SP-25) on or proximate to the Comfort Suites Property where COCs were detected at concentrations exceeding MTCA Method A cleanup levels for unrestricted land use in soil during the 1997 Phase II Environmental Site Assessment;
- Hot Spot F, which encompasses boring HA-1 and portions of the Fun Center Property where COCs were detected at concentrations exceeding MTCA Method A cleanup levels for unrestricted land use in soil during the 1997 Phase II Environmental Site Assessment; and
- A portion of the Comfort Suites Property where slag fill was known to have been emplaced in gravel roadways.



The locations of these excavation areas and confirmation samples are shown on Figures 4, 4A, 4B, and 4C and in the 2022 Revised Cleanup Action Report (Appendix A). The excavations and confirmation sampling are described as follows.

“Hot Spot A” – Former Pesticides Storage Area

“Hot Spot A” encompasses approximately 1,100 square feet near the location of the October 1997 hand-auger boring HA-2. Approximately 725 square feet of “Hot Spot A” is located on the Comfort Suites Property and approximately 375 square feet is located on the Fun Center Property. “Hot Spot A” was excavated to a depth of approximately 1.5 feet bgs.

Three confirmation soil samples were collected from the “Hot Spot A” excavation area on the Comfort Suites Property and submitted for laboratory analysis of pesticides. All analytes were not detected at the laboratory PQL in the soil samples. Approximately 40 cubic yards of soil was removed from the portion of “Hot Spot A” on the Comfort Suites Property and transported to TPS Technologies, Inc. in Tacoma, Washington for recycling.

“Hot Spot C”

An area of approximately 180 square feet was excavated to a depth of approximately 1.5 feet bgs near the location of the October 1997 hand-auger boring HA-4 to remove petroleum-impacted soil. Three confirmation soil samples collected from the excavation were field screened for the potential presence of petroleum hydrocarbons, and one was submitted for laboratory analysis of DRO, ORO, and PAHs to confirm the removal of impacted soils. All analytes were not detected at the laboratory PQL in the soil samples. Approximately 10 cubic yards of soil was excavated from “Hot Spot C” and transported to TPS Technologies, Inc. in Tacoma, Washington for recycling.

“Hot Spot D” – Former Oil Dump Area

An area of approximately 90 square feet was excavated to a depth of approximately 3 feet bgs near the locations of the October 1997 hand-auger boring HA-4 and direct-push boring SP-25 (identified as “Hot Spot D”) to remove petroleum-impacted soil. A total of 10 confirmation soil samples collected from the excavation were field screened for the potential presence of petroleum hydrocarbons, and five were submitted for laboratory analysis of DRO and ORO. DRO and ORO were detected at concentrations less than the MTCA Method A cleanup levels for unrestricted land use in the soil samples. Approximately 10 cubic yards of soil was removed from “Hot Spot D” and placed as fill in the containment and capping area of the Fun Center Property.

“Hot Spot F” – Sediment Excavation/Creosote-Impacted Area

The excavation of the former retention pond on the Fun Center Property extended onto approximately 48 square feet of the eastern portion of the Comfort Suites Property. The portion of the excavation on the Comfort Suites Property was completed to a depth of approximately 1.5 feet bgs. One confirmation sample was collected from the bottom of the



portion of the excavation on the Comfort Suites Property and submitted for laboratory analysis of DRO and ORO. DRO and ORO were detected at concentrations less than the MTCA Method A cleanup levels for unrestricted land use in the soil sample. Approximately 2.5 cubic yards of soil was removed from “Hot Spot F” on the Comfort Suites Property and placed as fill in the containment and capping area of the Fun Center Property.

Slag Fill

Slag fill was excavated from existing gravel roads and driveways to an approximate depth of 2 feet bgs at the Family Fun Center Site, including an area of approximately 86 square feet in the southern portion of the Comfort Suites Property. Two discrete soil samples were collected from the limits of the slag fill excavation on the Comfort Suites Property and were field screened for the potential presence of petroleum hydrocarbons. One confirmation soil sample was submitted for analysis of DRO and ORO to characterize soil beneath the roadway. DRO and ORO were detected at concentrations less than the MTCA Method A cleanup level in the confirmation soil samples. A composite confirmation soil sample was collected from the bottom of the slag fill excavation and submitted for analysis of priority pollutant metals. The analytes were detected at concentrations less than the MTCA Method A cleanup levels for unrestricted land use and the Method B cleanup levels for protection of groundwater. Approximately 150 cubic yards of slag fill and soil were removed from the existing roads and driveways and placed as fill in the containment and capping area of the Fun Center Property.

3.1.5.2 Fun Center Property

Excavation was performed at the following eight areas at the Family Fun Center Property:

- “Hot Spots” A, B, E, F, G, H, and I, which encompass the six borings (HA-1, HA-2, HA-3, SP-5, SP-7, and SP-23) on the Family Fun Center Property where COCs were detected at concentrations exceeding MTCA Method A cleanup levels for unrestricted land use in soil during the 1997 Phase II Environmental Site Assessment; and
- A portion of the Family Fun Center Property where slag fill was known to have been emplaced.

The locations of these excavation areas and confirmation samples are shown on Figures 4, 4A, 4B, and 4C and in the 2022 Revised Cleanup Action Report (Appendix A). The excavations are described as follows.

“Hot Spot A” – Former Pesticides Storage Area

As described in Section 3.1.5.1, approximately 375 square feet of “Hot Spot A” is located on the Fun Center Property. “Hot Spot A” was excavated to a depth of approximately 1.5 feet bgs. Two confirmation soil samples were collected from the excavation area on the Family Fun Center Property and submitted for laboratory analysis of pesticides. All



analytes were not detected at the laboratory PQL in the soil samples. Approximately 40 cubic yards of soil was removed from the portion of “Hot Spot A” on the Fun Center Property and transported to TPS Technologies, Inc. in Tacoma, Washington for recycling.

“Hot Spot B” – Former Automotive Repair Shop

“Hot Spot B” was excavated to a depth of approximately 2 feet bgs near the location of the October 1997 direct-push boring SP-23 to remove petroleum-, arsenic-, nickel-, and chromium-impacted soil. Six confirmation soil samples collected from the excavation area and submitted for laboratory analysis of DRO, ORO, BTEX, priority pollutant metals, and barium. All analytes were detected at concentrations less than the MTCA Method A cleanup levels for soil or were not detected at the laboratory PQL in the soil samples, except lead, which was detected at a concentration exceeding the MTCA Method A cleanup level for unrestricted land use in soil sample EX-B4-1.0. Approximately 35 cubic yards of soil was excavated from “Hot Spot B” and transported to TPS Technologies, Inc. in Tacoma, Washington for recycling.

“Hot Spot E” – Chromium

“Hot Spot E” was excavated to a depth of approximately 15.5 feet bgs near the location of the October 1997 direct-push boring SP-7 to remove chromium-impacted soil. Two confirmation soil samples were collected from the excavation area and submitted for laboratory analysis of chromium. Chromium was detected at concentrations less than the MTCA Method A cleanup levels for soil in the samples. Approximately 20 cubic yards of soil was excavated from “Hot Spot E” and transported to TPS Technologies, Inc. in Tacoma, Washington for recycling.

“Hot Spot F” – Sediment Excavation/Creosote-Impacted Area

“Hot Spot F” feet was excavated to a depth of approximately 18 feet bgs on the northern portion of “Hot Spot F” to remove PAH-impacted soil and to an average depth ranging from 1 to 10 feet bgs on the remaining areas to remove former retention pond sediments impacted with petroleum hydrocarbons. A portion of the excavated area extended onto the adjacent Comfort Suites Property. A total of 18 confirmation soil samples were collected from the excavation area on the Family Fun Center Property; 13 soil samples were submitted for laboratory analysis of DRO and ORO; six soil samples were submitted for laboratory analysis of PAHs. DRO, ORO, and PAHs were detected at concentrations less than the MTCA Method A cleanup levels for soil in the samples or were not detected at the laboratory PQL in the soil samples. The toxic equivalent concentration for cPAHs exceeded the MTCA Method A cleanup level for unrestricted land use in one soil sample. Approximately 50 cubic yards of soil from the northern portion of “Hot Spot F” was transported to TPS Technologies, Inc. in Tacoma, Washington for recycling. Approximately 350 cubic yards of sediment was removed from the pond sediment portion of “Hot Spot F” and placed as fill in the containment and capping area of the Family Fun Center Property.



“Hot Spot G”

“Hot Spot G” was excavated to a depth of approximately 12 feet bgs near the limits of the February 1998 gasoline UST excavation area to remove benzene- and GRO-impacted soil. Four confirmation soil samples were collected from the excavation area and submitted for laboratory analysis of GRO and BTEX. All analytes were not detected at the laboratory PQL in the soil samples. Approximately 15 cubic yards of soil was removed from “Hot Spot G” and placed as construction fill on the Family Fun Center Property.

“Hot Spot H” – Soil at Eastern Property Boundary

“Hot Spot H” was excavated to a depth of approximately 2 feet bgs near the locations of the October 1998 hand-auger boring HA-3-0.5 to remove petroleum-impacted soil. Three confirmation soil samples collected from the excavation were field screened for the potential presence of petroleum hydrocarbons and submitted for laboratory analysis of DRO and ORO. DRO and ORO were detected at concentrations less than the MTCA Method A cleanup levels for soil in the samples. Approximately 20 cubic yards of soil was removed from “Hot Spot H” and placed as fill in the containment and capping area of the Family Fun Center Property.

“Hot Spot I” – Creosote-Treated Timbers in Detention Pond Excavation

“Hot Spot I” was excavated to a depth of approximately 5 feet bgs near the location of the fish habitat pond where buried treated wood timbers were encountered. One confirmation soil sample collected from the excavation was field screened for the potential presence of petroleum hydrocarbons and submitted for laboratory analysis of pollutant metals and PAHs. All analytes were detected at concentrations less than the MTCA Method A cleanup levels for soil in the sample. Approximately 20 cubic yards of soil was removed from “Hot Spot I” and transported to TPS Technologies, Inc. in Tacoma, Washington for recycling.

Metal Slag Fill

Metal slag fill was excavated from existing gravel roads and driveways to a depth of approximately 2 feet bgs on the Fun Center Property, including an area of approximately 86 square feet in the southern portion of the Fun Center Property. Two discrete soil samples were collected on the adjacent Comfort Suites Property and were field screened for the potential presence of petroleum hydrocarbons. One soil sample was submitted for analysis of DRO and ORO to characterize soil beneath the roadway. DRO and ORO were detected at concentrations less than the MTCA Method A cleanup level in the samples. A composite confirmation soil sample was collected from the bottom of the slag fill excavation and submitted for analysis of priority pollutant metals. The analytes were detected at concentrations less than the MTCA Method A cleanup levels and the Method B cleanup levels for protection of groundwater. Approximately 150 cubic yards of slag fill and soil were removed from the existing roads and driveways and placed as fill in the containment and capping area of the Family Fun Center Property.



3.1.6 1998 Off-Site Soil Sampling

GeoEngineers collected soil samples to evaluate further the approximately 4,100 cubic yards of soil emplaced at the City of Tukwila property adjacent to the Fun Center Property. GeoEngineers collected discrete soil samples at location GWS-1 on September 23, 1998 and FFC-1 through FFC-7 on December 21, 1998. The approximate locations of the soil samples are shown on Figure 2. The soil samples were analyzed for DRO and ORO. DRO and ORO were detected at concentrations less than the MTCA Method A cleanup levels for unrestricted land use and the Method B cleanup level of 2,984 mg/kg established for the Family Fun Center Site in soil samples.

3.1.7 2002–2005 Monitoring Well Installation and Groundwater Sampling

Consistent with the Compliance Monitoring Plan, GeoEngineers installed groundwater monitoring well MW-22 on the northern portion of the Comfort Suites Property and monitoring wells MW-20 and MW-21 on the northern portion of the Fun Center Property in March 2002. The approximate locations of monitoring wells MW-20, MW-21, and MW-22 are shown on Figure 2. Monitoring well construction details are summarized in Table 1. GeoEngineers conducted groundwater monitoring at monitoring wells MW-20, MW-21, and MW-22 in April and October 2002; April, July, and November 2004; and January 2005. Based on monitoring results, GeoEngineers concluded that the groundwater flow direction generally is north-northwest at the Family Fun Center Site.

Groundwater samples were submitted for laboratory analysis of GRO, DRO, ORO, BTEX, and total and dissolved arsenic, chromium, nickel, and lead. The groundwater monitoring results were presented in the 2005 Compliance Groundwater Sampling Report (Appendix A). The laboratory analytical results are summarized in a table that was included in the letter regarding Site Hazard Assessment – Family Fun Center dated March 26, 2018, from Donna Musa of Ecology to Family Fun Center Tukwila (2018 Site Hazard Assessment [SHA]).

The laboratory results for groundwater samples collected from monitoring wells MW-20, MW-21, and MW-22 also are presented in Tables 7 and 8 of this RI/FFS report. GRO, DRO, ORO, and BTEX were not detected at the laboratory PQL in groundwater samples collected from monitoring wells MW-20, MW-21, and MW-22. The following metals were detected at concentrations exceeding the MTCA Method A cleanup levels in groundwater samples collected from monitoring wells MW-20, MW-21, and MW-22:

- Monitoring well MW-20: total and dissolved arsenic, total chromium, total and dissolved lead, and total nickel;
- Monitoring well MW-21: total and dissolved arsenic, total chromium, and total lead; and
- Monitoring well MW-22: total and dissolved arsenic and total lead.

3.1.8 2019 Site Hazard Assessment

In 2019, Ecology conducted an SHA for the Family Fun Center Site. Ecology assigned the Family Fun Center Site a hazard ranking of 1, which represents the highest level of concern. The basis for



the ranking was arsenic, chromium, and lead detected at concentrations exceeding the MTCA Method A cleanup levels for groundwater and the potential for metals-contaminated groundwater to migrate from the Family Fun Center Site to the Green River.

3.1.9 2020 Phase I Environmental Site Assessment

Associated Environmental Group, LLC (AEG) conducted a Phase I ESA for the Comfort Suites Property in 2020, described in *Phase I Environmental Site Assessment, Conducted on: Comfort Inn Suites, 7200 Fun Center Way, Tukwila, Washington 98188* dated September 23, 2020 prepared by AEG for UniBank. AEG identified the following recognized environmental conditions for the Comfort Suites Property related to the 1998–1999 Cleanup Action at the Family Fun Center Site:

- **The presence of metals-contaminated shallow soil near the former automotive repair shop.** Historical investigations included collection of soil samples from four borings proximate to the former automotive repair shop in 1997: borings HA-3 and HA-5 at the Comfort Suites Property and borings SP-22 and SP-23 at the Fun Center Property. Samples collected only from borings HA-3, HA-5, and SP-23 were analyzed for priority pollutant metals. Only arsenic and nickel were detected at concentrations exceeding MTCA Method A cleanup levels in the soil sample collected from only boring SP-23 at a depth of 0.5 feet bgs. Boring SP-23 is within the footprint of “Hot Spot B” on the Fun Center Property. As described in Section 3.1.5.2, soil in “Hot Spot B” was excavated to a depth of approximately 2 feet bgs near the location of boring SP-23 during the 1998–1999 Cleanup Action, and the results of excavation confirmation soil sampling confirmed that priority pollutant metals were not present at concentrations exceeding the MTCA Method A cleanup levels for soil except lead. Because metals were not detected in soil samples collected from the Comfort Suites Property and metals-contaminated soil largely was removed from “Hot Spot B” on the Fun Center Property, it is unclear why AEG believed that metals-contaminated shallow soil may be present at the Comfort Suites Property near the former automotive repair shop.
- **Arsenic- and lead-contaminated groundwater in monitoring well MW-22.** Dissolved arsenic was detected at concentrations ranging from 5 to 10 µg/l in groundwater samples collected from monitoring well MW-22 from 2002 through 2005. The MTCA Method A cleanup level for dissolved arsenic in groundwater is 5 µg/l. Dissolved lead was not detected at concentrations exceeding the MTCA Method A cleanup level of 15 µg/l in groundwater samples collected from monitoring well MW-22 from 2002 through 2005.

3.1.10 2021 Phase II Environmental Site Assessment

AEG conducted a Phase II ESA at the Comfort Suites Property in February 2021 to evaluate further the impacts to soil and groundwater identified in the Phase I ESA. The Phase II ESA activities were described in the *Phase II Environmental Site Assessment, Comfort Suites Airport, 7200 Fun Center Way, Tukwila, Washington 98188-5508* dated March 15, 2021, prepared by AEG for East Winds Investments, Inc. Five borings (B-1 through B-5) were completed at the Comfort Suites Property for the collection of soil and reconnaissance groundwater samples. Borings B-1 through



B-4 were advanced to a depth of approximately 26.5 feet bgs and boring B-5 was advanced to a depth of approximately 9 feet bgs at the locations described below:

- Borings B-1, B-2, B-4, and B-5 were advanced proximate to the boundary between the Comfort Suites Property and the Fun Center Property; and
- Boring B-3 was advanced proximate to the former automotive repair shop and “Hot Spot C.”

The locations of the borings are shown on Figures 2, 6, and 7. The soil and reconnaissance groundwater sampling results are summarized as follows.

3.1.10.1 Soil Sampling

Soil samples were collected from borings B-1 through B-4, at the apparent depth of shallow groundwater, at a depth of approximately 21 feet bgs and from boring B-5 at a depth of 6 feet bgs. Soil samples were submitted for laboratory analysis of MTCA 5 metals (arsenic, cadmium, chromium, lead, and mercury). The laboratory analytical results are summarized in Table 6. Selected analytical data are depicted on Figure 6. MTCA 5 metals were detected at concentrations less than MTCA cleanup levels in all soil samples except arsenic in the soil sample collected from boring B-5, which was located proximate to the eastern Comfort Suites Property boundary. Arsenic was detected at a concentration of 31 mg/kg, which exceeds the MTCA Method A cleanup level for unrestricted land use of 20 mg/kg and the naturally occurring (background) concentration of 7 mg/kg (Ecology 1994), in the soil sample collected from boring B-5. However, this concentration is within the predicted range of arsenic concentrations (20 to 40 mg/kg) in surface soil in the Tukwila area resulting from historical operation of the Asarco smelter in Tacoma. The depth of the soil sample collected from boring B-5, 6 feet bgs, does not represent current soil conditions. However, the base elevation of the Comfort Suites Property prior to filling and grading during redevelopment in 1998 and 1999 is not known; therefore, the soil sample collected from boring B-5 from a depth of 6 feet bgs may represent surface soil conditions prior to redevelopment that may have been impacted by historical operation of the Asarco smelter.

3.1.10.2 Reconnaissance Groundwater Sampling

Reconnaissance groundwater samples were collected from temporary monitoring wells installed in borings B-1 through B-4. Reconnaissance groundwater samples were submitted for laboratory analysis of total but not dissolved MTCA 5 metals. The laboratory analytical results are summarized in Table 8. Selected analytical data is depicted on Figure 7. Total chromium and mercury were not detected at concentrations exceeding the laboratory PQL in the reconnaissance groundwater samples. Total arsenic, lead, and/or cadmium were detected at concentrations exceeding the MTCA Method A cleanup levels in reconnaissance groundwater samples collected from borings B-1 through B-4. However, these samples were collected from temporary well points, not from monitoring wells, and were not filtered; therefore, the laboratory results likely are biased high results over actual



concentrations of metals in groundwater. Furthermore, the analysis for MTCA 5 metals arsenic, cadmium, chromium, and lead was done using U.S. Environmental Protection Agency (EPA) Method 7010 instead of 6010D, which is the method prescribed by Ecology for the analysis of MTCA 5 metals (Ecology 2016a); therefore, the results of these analyses may not be appropriate for evaluating conditions at the Comfort Suites Property.

3.1.11 2022 Limited Subsurface Investigation

Farallon conducted a limited subsurface investigation at the Comfort Suites Property in May 2022 to evaluate further the current environmental conditions of the Comfort Suites Property that may not have been addressed by the 1997–1998 Underground Storage Tank Removal Monitoring and Supplemental Subsurface Assessment and 1998–1999 Cleanup Action and may be relevant for pursuing a property-specific NFA determination for the Comfort Suites Property from Ecology. These environmental conditions included the following:

Residual Metal Slag Fill

Some slag fill reportedly was removed from “hot spots,” driveways, and roads on the Comfort Suites Property during the 1998–1999 Cleanup Action. However, based on historical investigations, metals slag fill is present at other portions of the Comfort Suites Property. The limited subsurface investigation was performed to evaluate further the potential presence of slag fill at other portions of the Comfort Suites Property.

Petroleum-Impacted Soil and Groundwater

Soil with DRO and ORO detected at concentrations less than MTCA cleanup levels (petroleum-impacted soil) historically present on the Fun Center Property was relocated to the Comfort Suites Property during the 1998–1999 Cleanup Action. The limited subsurface investigation was conducted to evaluate further the potential presence of petroleum-impacted soil and groundwater at some portions of the Comfort Suites Property.

Arsenic-Contaminated Soil

Arsenic was detected at a concentration exceeding the MTCA Method A cleanup level in the soil sample collected from boring B-5, which was proximate to the eastern Comfort Suites Property boundary and “Hot Spot F” at a depth of 6 feet bgs. The limited subsurface investigation was conducted to evaluate further the extent of arsenic-contaminated soil proximate to boring B-5.

Metals-Contaminated Groundwater

Previous environmental investigations indicated that groundwater at the Family Fun Center Site may be flowing toward the Green River; dissolved arsenic and lead were detected at concentrations exceeding MTCA Method A cleanup levels in groundwater samples collected from monitoring well MW-22, which is proximate to the Green River, as recently as 2005. Total arsenic, lead, and/or cadmium were detected at concentrations exceeding the MTCA Method A cleanup level in reconnaissance groundwater samples collected from



borings B-1 through B-4; however, the sampling methodology and the laboratory analytical method used likely biased high results over actual concentrations of metals in groundwater. The limited subsurface investigation was conducted to evaluate current groundwater conditions at the Comfort Suites Property.

The limited subsurface investigation activities were described in the letter regarding Limited Subsurface Investigation Report, Family Fun Center Site – Parcel 2, 7200 Fun Center Way, Tukwila, Washington dated July 8, 2022, from Amanda Meugniot and Mark Havighorst of Farallon to Charles Lee of East Wind Investment, Inc. (Appendix A). The subsurface investigation activities consisted of advancing borings, installing groundwater monitoring wells, and collecting soil and groundwater samples for laboratory analysis. These activities are described as follows.

3.1.12 Boring and Soil Sampling

The locations of the borings and monitoring wells are shown on Figures 2, 6, and 7 and are described below:

- Monitoring well FMW-01 was installed proximate to boring B-1 and the boundary with the Fun Center Property to evaluate the potential presence of metals-contaminated groundwater;
- Monitoring well FMW-02 was installed proximate to historical boring B-5 and the boundary with the Fun Center Property to evaluate further the extent of arsenic-contaminated soil and the potential presence of metals-contaminated groundwater;
- Monitoring well FMW-03 was installed proximate to boring B-3 and the boundary with the Fun Center Property to evaluate the potential presence of metals-contaminated groundwater; and
- Monitoring well FMW-04 was installed proximate to the northwestern property boundary to evaluate potential migration of metals-contaminated groundwater from the Comfort Suites Property to the Green River.

The borings were formed to a depth of approximately 30 feet bgs. Soil samples from the borings were collected continuously at approximately 1.5-foot intervals at a depth of 5 feet bgs to first-encountered groundwater and at the bottom of each boring for geological logging and potential laboratory analysis. Soil samples were screened for visual and olfactory evidence of contamination, VOC concentrations were measured using a photoionization detector, and metals concentrations as measured using a hand-held X-ray fluorescence analyzer. The completed boring logs are included in Appendix B. No indications of metals slag fill or potential petroleum contamination were observed or measured in the soil samples collected from borings FMW-01 through FMW-04. The soil sampling activities are described below. Laboratory analytical reports are included in Appendix C, results are summarized in Tables 2 and 7, and selected analytical results are depicted on Figure 6.

Soil samples were collected from borings FMW-01, FMW-02, and FMW-04 at a depth of 2.5 feet bgs and from boring FMW-03 from a depth of 5 feet bgs to evaluate further the potential presence



of petroleum-impacted soil at the Comfort Suites Property. These samples were analyzed for DRO and ORO by Northwest Method NWTPH-Dx. DRO and ORO were detected at concentrations less than MTCA Method A cleanup levels for unrestricted land use in the soil samples collected from borings FMW-01, FMW-02, and FMW-04, which confirms that petroleum-impacted shallow soil transferred from the Fun Center Property to the Comfort Suites Property during the 1998–1999 Cleanup Action is present at the Comfort Suites Property proximate to these borings.

A soil sample was collected from boring FMW-02 at a depth of 7 feet bgs to evaluate further the extent of arsenic-contaminated soil proximate to boring B-5. This sample was analyzed for MTCA 5 metals by EPA Method 6010D/7471B. MTCA 5 metals were not detected at concentrations exceeding the laboratory PQL in the soil sample, which indicates that the extent of arsenic-contaminated soil proximate to boring B-5 may not extend east to the boundary with the Fun Center Property.

Soil samples were collected from each boring at depths of 15 to 18 feet bgs, immediately above first-encountered groundwater, for the evaluation of the potential for leaching of metals in soil to groundwater at the Comfort Suites Property. The soil samples were analyzed for MTCA 5 metals by EPA Method 6010D/7471B. Arsenic was not detected at concentrations exceeding the laboratory PQLs in the soil samples. However, the PQLs for arsenic, which ranged from 12 to 14 mg/kg, exceeded the MTCA Method B cleanup levels for protection of groundwater; therefore, it could not be determined whether arsenic that may be present in these soil samples poses a potential risk for leaching to groundwater. The PQLs for the other MTCA 5 metals, cadmium, chromium, lead, and mercury were less than the MTCA Method B cleanup levels for protection of groundwater. Cadmium, chromium, lead, and mercury either were not detected at the laboratory PQL or were detected at concentrations less than the applicable MTCA Method B cleanup levels for protection of groundwater. These results indicate that potential leaching of cadmium, chromium, lead, and mercury in soil to groundwater at the Comfort Suites Property is not a concern.

3.1.13 Monitoring Well Installation and Groundwater Sampling

Borings FMW-01 through FMW-04 were completed as groundwater monitoring wells constructed in accordance with the Minimum Standards for Construction and Maintenance of Wells, as established in WAC Chapter 173-160. The maximum depths of the monitoring wells were 30 feet bgs.

Newly installed monitoring wells FMW-01 through FMW-04 and existing monitoring well MW-22 were developed using a submersible pump until the majority of fine-grained sediment had been removed from the well screen and adjacent sand pack. Monitoring well GCW-16, which was installed at the Comfort Suites Property in 1997, could not be located by Farallon.

The horizontal locations, ground surface or protective monument elevations, and top of the polyvinyl chloride well casing of each monitoring well were surveyed to an accuracy of 0.01 feet by Apex Engineering, PLLC of Tacoma, Washington on May 16, 2022. Monitoring well



construction details and monitoring well survey data are summarized in Table 1. Monitoring well construction logs are provided in Appendix B.

Groundwater monitoring was conducted on May 16, 2022 to evaluate groundwater quality, groundwater flow direction, and hydraulic gradient. The groundwater monitoring event included measuring depth to groundwater and collecting groundwater samples from monitoring wells FMW-01 through FMW-04 and previously installed monitoring well MW-22. The monitoring wells were opened, and the water levels were allowed to equilibrate with atmospheric pressure before groundwater level measurements were obtained. Groundwater levels were measured to the surveyed reference point on the top of the monitoring well casing to an accuracy of 0.01 foot using an electric water-level meter. The depths to groundwater ranged from approximately 17.34 to 18.93 feet bgs. Depth-to-groundwater measurements and corresponding elevations are summarized in Table 1. Groundwater elevation contours are depicted on Figure 5. Based on groundwater elevations measured on May 16, 2022, groundwater on the Comfort Suites Property flows north-northwest toward the Green River with a gradient of 0.0016 feet per foot.

Groundwater samples were collected using EPA low-flow protocols and analyzed for total petroleum hydrocarbons (C10 to C36) by Northwest Method NWTPH-Dx, and dissolved MTCA 5 metals by EPA Methods 6010D/7471B.

Laboratory reports are included in Appendix C. A summary of the results of groundwater sampling is presented below and summarized on Figure 7 and in Tables 7 and 8.

- TPH (C10 to C36) either was not detected at the laboratory PQL or was detected at concentrations less than the MTCA Method A cleanup level in the groundwater samples collected from monitoring wells FMW-03, FMW-04, and MW-22. Monitoring wells FMW-04 and MW-22 are the wells closest to the Green River. TPH (C10 to C36) was detected at a concentration of 490 µg/l in the groundwater sample collected from monitoring well FMW-01 and 380 µg/l in the groundwater sample collected from monitoring well FMW-02. These monitoring wells are located proximate to the boundary with the Family Fun Center Property and “Hot Spots” D and F; the concentrations detected do not exceed the MTCA Method A cleanup level of 500 µg/l.
- Dissolved cadmium, chromium, lead, and mercury were not detected at concentrations exceeding the laboratory PQL in groundwater samples collected from monitoring wells FMW-01 through FMW-04 and MW-22.
- Dissolved arsenic was detected at concentrations exceeding the MTCA Method A cleanup level of 5 µg/l in the groundwater samples collected from monitoring wells FMW-01, FMW-02, and FMW-04 at concentrations ranging from 16 to 66 µg/l. Dissolved arsenic was detected at concentrations of 4.5 and 16 µg/l, respectively, in the groundwater samples from monitoring wells MW-22 and FMW-04, which are the monitoring wells closest to the Green River.



The concentrations of dissolved arsenic in monitoring wells FMW-01, FMW-02, and MW-22 also exceed the Puget Sound Basin natural background concentration of 8 µg/l described in Ecology's *Groundwater Arsenic Concentrations in Washington State* (Ecology 2022a). However, these concentrations do not exceed published local background concentrations, as described below.

- Farallon reviewed Ecology's Environmental Information Management database for information regarding background arsenic concentrations in groundwater at nearby properties. The review identified data collected as part of a background arsenic groundwater study requested by Ecology for the Boeing Striker South property at 21249 72nd Avenue South in Kent (Striker Property), approximately 3.8 miles from the Comfort Suites Property. The study results were described in letters dated October 11, 2011 and March 16, 2012 from The Boeing Company's consultant to Ecology (EHS Remediation Group 2011, 2012).
- The study indicated that although dissolved arsenic was detected at concentrations ranging from 0.3 to 114 µg/l in groundwater at the Striker Property, the investigations had not identified an anthropogenic arsenic source at the Striker Property.
- The study indicated further that dissolved arsenic was detected at concentrations ranging from 3.3 to 115 µg/l in shallow groundwater samples collected at Ecology-approved locations at nearby properties with no known impacts to groundwater. The study concluded that the dissolved arsenic detected in groundwater at the Striker Property and nearby locations is isolated and the result of regional background conditions, and does not pose a potential threat to human health or the environment. In *Public Comment Notice for Termination of Interim Status for the Boeing Space Center – Striker Property in Kent* issued in July 2012 by Ecology (2012), Ecology concluded that the dissolved arsenic present in groundwater at the Striker Property is localized, isolated in several different locations, and consistent with the area-wide pattern of arsenic in groundwater in the vicinity of the Boeing Kent Space Center.

Dissolved arsenic was detected at concentrations ranging from 16 to 66 µg/l in groundwater samples collected at the Comfort Suites Property, which is consistent with results from the background arsenic groundwater study performed for the nearby Striker Property. Therefore, it is reasonable to conclude that arsenic concentrations in groundwater at the Comfort Suites Property are representative of background conditions.

3.2 SUMMARY OF CURRENT ENVIRONMENTAL CONDITIONS

Multiple subsurface investigations and remedial actions were conducted at the Family Fun Center Site between 1997 and 2022 to evaluate soil and groundwater for the presence of hazardous substances and to clean up hazardous substances resulting from historical operations prior to redevelopment of Parcel 1, the Comfort Suites Property, and the Fun Center Property. Following is a summary of current environmental conditions for soil and groundwater at the Comfort Suites Property based on these subsurface investigations and remedial actions.



3.2.1 Soil

Investigation activities conducted at the Comfort Suites Property indicated the presence of soil with concentrations of COCs exceeding MTCA cleanup levels (contaminated soil). The contaminated soils were the result of historical operations conducted at the Family Fun Center Site prior to ownership of the Comfort Suites Property by Eastwind.

Remediation activities for soil at the Comfort Suites Property included the 1998–1999 Cleanup Action performed by GeoEngineers prior to ownership of the Comfort Suites Property by Eastwind. The information obtained from investigation activities performed by Farallon and other environmental consultants and the results of the 1998–1999 Cleanup Action indicate that the 1998–1999 Cleanup Action remediated some but not all contaminated soil at the Comfort Suites Property. Consequently, the following contaminated soil remains at the Comfort Suites Property:

- Soil with concentrations of COCs exceeding the MTCA Method A cleanup level for unrestricted land use is present proximate to boring B-5 at a depth of approximately 6 feet bgs but not greater than 18 feet bgs. Arsenic was detected at a concentration of 31 mg/kg, exceeding the MTCA Method A cleanup level for unrestricted land use of 20 mg/kg. This arsenic-contaminated soil is beneath the asphalt-paved parking lot that serves the hotel at the Comfort Suites Property.

3.2.2 Groundwater

Investigations performed by Farallon and others have included measurements of groundwater levels and collection and analysis for metals and petroleum hydrocarbons of groundwater samples from six monitoring wells (FMW-01 through FMW-04, MW-22, and GCW-16) at the Comfort Suites Property both prior to and after the 1998–1999 Cleanup Action. The results of these investigations indicate the following:

- Shallow groundwater is encountered at a depth of between approximately 15 to 20 feet bgs at the Comfort Suites Property; and
- Groundwater at the Family Fun Center Site flows north-northwest from the Fun Center Property toward the Comfort Suites Property and the Green River.

Only total lead, total arsenic, and dissolved arsenic have been detected in groundwater samples collected from monitoring wells at the Comfort Suites Property. These detections are summarized as follows.

- Total lead has been detected at concentrations ranging from 17 to 30 µg/l. However, these concentrations likely are biased high based on the sampling methods, and dissolved lead has been detected only at concentrations less than the MTCA Method A cleanup level of 15 µg/l.
- Dissolved arsenic been detected at concentrations ranging from 4.5 to 66 µg/l in groundwater samples collected from monitoring wells at the Comfort Suites Property. These conditions are similar to conditions at the Fun Center Property where concentrations



of dissolved arsenic in groundwater samples collected from monitoring wells have ranged from 9 to 77 µg/l (Table 8).

- Dissolved arsenic was detected at concentrations exceeding the MTCA Method A cleanup level of 5 µg/l and the Puget Sound Basin natural background concentration of 8 µg/l described in Ecology's *Groundwater Arsenic Concentrations in Washington State* (Ecology 2022a) in some groundwater samples collected from monitoring wells at the Comfort Suites Property. However, these concentrations do not exceed the range of local background concentration ranging from 0.3 to 114 µg/l acknowledged by Ecology (2012). Therefore, it is reasonable to conclude that arsenic concentrations in groundwater at the Comfort Suites Property are representative of background conditions.

3.3 GEOLOGY AND HYDROGEOLOGY

A summary of the geology and hydrology relevant to the Comfort Suites Property is provided below.

3.3.1 Geology

The Comfort Suites Property is in the Puget Sound region, which is underlain by Quaternary sediments deposited by a number of glacial episodes (Mullineaux 1965). Deposition occurred prior to, during, and following glacial advances and retreats, creating the existing subsurface conditions. The sediments in the Puget Sound region consist primarily of interlayered and/or sequential deposits of alluvial clays, silts, and sands that typically are situated over deposits of glacial till that consist of silty sand to sandy silt with gravel. Outwash sediments consisting of sands, silts, clays, and gravels were deposited by rivers, streams, and post-glacial lakes during glacial advances and recessions. Advance outwash sediments have been largely over-consolidated by the overriding ice sheets. These advance outwash sediments are overlain by a till-like layer and recessional outwash sediments that are less consolidated.

The Comfort Suites Property is in the Green River Valley and is underlain by alluvium deposited by the Green River and its tributary streams. The Green River flows south-southeast to north-northwest through the Comfort Suites Property vicinity. The alluvium consists mostly of sand, silt, and clay, and contains curvilinear lenticular deposits of gravels and thin peat lenses. The uppermost deposits typically consist of clayey silt and fine sand with local peat deposits. These deposits are 10 to 20 feet thick near Kent and increase in thickness to the north to nearly 20 to 40 feet near Tukwila. The lower portions of the alluvium predominantly consist of medium and coarse sand deposits more than 75 feet thick.

Soil encountered during Farallon's limited subsurface investigation in May 2022 consisted primarily of silty sand to depths between approximately 8 and 17 feet bgs. Poorly graded sand was encountered below the sandy silt to the maximum depth explored of 30 feet bgs. The lithology is described in detail in the boring and monitoring well construction logs included in Appendix B. Geological cross sections of the Comfort Suites Property are shown in Figures 2A and 2B.



3.3.2 Hydrogeology

Local groundwater occurs within the uppermost alluvial deposits at depths generally less than 20 feet bgs (Luzier 1969). Groundwater flow in the Green River Valley generally follows the same gradient as the land and surface water and flows toward the north or northwest (Luzier 1969). Localized and/or seasonal variations in groundwater flow direction are not uncommon.

Groundwater was encountered during the 2022 limited subsurface investigation at the Comfort Suites Property at depths ranging from approximately 17 to 18.5 feet bgs. Based on groundwater elevations calculated using depth-to-water measurements (Table 1) collected on May 16, 2022, the interpreted groundwater flow direction is north-northwest toward the Green River. Groundwater contours from May 16, 2022 are depicted on Figure 5. Based on groundwater elevations measured on May 16, 2022, groundwater on the Comfort Suites Property flows toward the Green River to the north-northwest with a gradient of 0.0016 feet per foot.

Groundwater at the Comfort Suites Property is not used for drinking water, and no drinking water supply wells are located within 0.25 mile of the site. The Green River is north-adjointing to the Property. No surface water bodies are present on the Comfort Suites Property.

3.4 CONCEPTUAL SITE MODEL

This section provides a summary of the conceptual site model for the Comfort Suites Property derived from the results of the RI. Included in this section is a discussion of the constituents of potential concern (COPCs), confirmed and suspected source areas, the media of concern, the nature and extent of contamination, contaminant fate and transport, and an exposure assessment that included a human health risk evaluation and a Terrestrial Ecological Evaluation (TEE). The conceptual site model is used as a basis for developing technically feasible cleanup action alternatives and selecting a final cleanup action in accordance with applicable MTCA regulations.

3.4.1 Constituents of Potential Concern

The COPCs for the Comfort Suites Property include hazardous substances exceeding MTCA cleanup levels that have been detected in soil samples and groundwater samples collected from monitoring wells at the Comfort Suites Property. The COPCs for soil are DRO, ORO, cPAHs, and arsenic. The results of investigations and cleanup activities at the Comfort Suites Property indicate that soil with DRO, ORO, and cPAHs exceeding MTCA cleanup levels has been removed from the Comfort Suites Property and that soil with only arsenic concentrations exceeding MTCA cleanup levels remains at the Comfort Suites Property only proximate to boring B-5 (Figure 2).

The COPC for groundwater is arsenic due to the detection of dissolved arsenic at concentrations exceeding the MTCA Method A cleanup level but not the regional background concentration in groundwater samples collected from monitoring wells FMW-01 through FMW-04 and MW-22.



3.4.2 Confirmed and Suspected Source Areas

Historical operations at the Comfort Suites Property reportedly were limited to operation of a barn, and the Comfort Suites Property currently is used as a hotel. No confirmed or suspected sources of COPCs related to these historical or current operations have been confirmed. Slag fill from Renton Sand and Gravel reportedly was brought to the Comfort Suites Property by a former owner. This slag fill may be a source of COPCs at the Comfort Suites Property.

The adjoining Fun Center Property historically was developed with several wooden structures on the western half of the parcel (including residential buildings, an automotive repair shop, a barn, and a shed) and a milk bottling plant on the southern portion of Fun Center Property. Several USTs and ASTs historically were located at the Fun Center Property. The automotive repair shop was located at the Fun Center Property proximate to the eastern portion of the Comfort Suites Property. Drums and debris, an oil dump, and areas of oil-stained soil historically were present in the eastern portion of the Comfort Suites Property and likely were associated with the automobile shop. As part of the 1998–1999 Cleanup Action, “Hot Spots” A, C, and D (Figure 4) on the Comfort Suites Property were excavated to remove pesticide- (“Hot Spot A”) and petroleum-impacted (“Hot Spots” C and D) soil proximate to the drums and debris, oil dump, and areas of oil-stained soil. Therefore, the drums and debris, oil dump, and areas of oil-stained soil are historical but not current source areas.

The eastern portion of the Fun Center Property was covered with an approximately 80,000-cubic-yard stockpile reportedly containing petroleum-impacted soil. Soil from the stockpile was used to backfill excavation pits for “Hot Spots” A, C, and D and raise the grade of the Comfort Suites Property. However, COPCs were detected at concentrations less than MTCA Method A cleanup levels for unrestricted land use in samples collected from the soil stockpile; therefore, the approximately 80,000-cubic-yard stockpile is not a source of COPCs for the Comfort Suites Property.

Slag fill from Renton Sand and Gravel reportedly was brought to the Comfort Suites Property by a former owner. COPCs were detected at concentrations exceeding MTCA Method A cleanup levels for unrestricted land use in a sample collected from slag fill; therefore, the slag fill is not a source of COPCs for the Comfort Suites Property.

The Comfort Suites Property is within the area impacted by arsenic, lead, and other heavy metals resulting from historical operation of the Asarco smelter in Tacoma as defined by Ecology. Therefore, operation of the Asarco smelter is a suspected source of COPCs for the Comfort Suites Property.

3.4.3 Media of Concern

The media of concern for the Comfort Suites Property are as follows:

- Soil due to the current presence of arsenic at a concentration exceeding the MTCA Method A cleanup level in soil proximate to boring B-5 (Figure 4); and



- Shallow groundwater, due to the presence of dissolved arsenic at concentrations exceeding MTCA Method A cleanup levels in groundwater samples collected from monitoring wells at the Comfort Suites Property.

The Comfort Suites Property is mostly covered by impermeable surfaces with an established stormwater conveyance system, and surface water features are sufficiently distant from the site; therefore, surface water and sediments are not media of concern for the Comfort Suites Property.

3.4.4 Nature and Extent of Contamination

Based on the analytical results for soil and groundwater samples, the nature and extent of soil and groundwater contamination at the Family Fun Center have been characterized sufficiently to support an FS for the evaluation and recommendation of a cleanup action for the Family Fun Center. The nature and extent of COPC contamination in soil and groundwater are as follows.

- Arsenic was detected at a concentration exceeding the MTCA Method A cleanup level in the soil sample collected from boring B-5 (Table 6), which was proximate to the eastern Comfort Suites Property boundary and “Hot Spot F,” at a depth of 6 feet bgs (Figure 6). Based on the results of the limited subsurface investigation conducted by Fallon in 2022, the arsenic-contaminated soil proximate to boring B-5 does not extend east to the boundary with the Fun Center Property. This arsenic-contaminated soil is beneath the asphalt-paved parking lot that serves the hotel at the Comfort Suites Property.
- The results of the limited subsurface investigation performed by Farallon in May 2022 indicate that concentrations of dissolved arsenic exceed the MTCA Method A cleanup level in groundwater samples collected from monitoring wells FMW-01 through FMW-04 (Figure 7, Table 8). However, the concentrations of dissolved arsenic are within the range of regional background concentrations; therefore, it can be concluded that the concentrations of arsenic in groundwater at the Comfort Suites Property are the result of naturally-occurring background arsenic in groundwater throughout the Comfort Suite Property.

3.4.5 Contaminant Fate and Transport

Dissolved COPCs potentially can be transported in groundwater from the source areas to down-gradient areas. Groundwater flow at the Family Fun Center Site and Comfort Suites Property is toward the north-northwest and the Green River.

3.4.6 Exposure Pathways Assessment

This section presents the assessment and conclusions pertaining to possible exposure pathways at the Comfort Suites Property and in the near vicinity. The two types of possible exposure risk associated with the presence of COPCs at the Comfort Suites Property are human health risk and terrestrial ecological risk. This section identifies potential exposure scenarios, which will assist in the evaluation of potential feasible remediation technologies.



3.4.6.1 Human Health Risk

Potential exposure pathways for the Comfort Suites Property include soil and groundwater exposure via the direct contact pathway, which comprises both dermal contact and ingestion pathways. Direct contact with soil and groundwater would require excavation through the existing surface cover to encounter concentrations of COPCs that could pose a human health risk.

Ingestion of groundwater would require use of groundwater at the Comfort Suites Property as a potable water supply. Potable water is supplied to the Comfort Suites Property and vicinity by the City of Tukwila; therefore, there is a low probability that groundwater at the Comfort Suites Property or adjacent properties would be used as a potable water source. Furthermore, a review of maps maintained by the King County GIS Center indicates that no supply wells are located within 0.25 mile of the Comfort Suites Property; therefore, it is unlikely that groundwater in the vicinity of the Comfort Suites Property is used as a supply of potable, irrigation, or process water. Because no practical and likely use for groundwater exists at the Comfort Suites Property, an exposure pathway via groundwater ingestion is unlikely to present a potential risk to human health; however, without an environmental covenant prohibiting groundwater use at the Comfort Suites Property, groundwater ingestion is a potential pathway.

3.4.6.2 Terrestrial Ecological Evaluation

A TEE is required by WAC 173-340-7490 at any site where a release of hazardous substances to soil has occurred. The regulation requires that one of the following actions be taken:

- Document a TEE exclusion using the criteria presented in WAC 173-340-7491;
- Conduct a simplified TEE in accordance with WAC 173-340-7492; or
- Conduct a site-specific TEE in accordance with WAC 173-340-7493.

Based on the criteria for TEE exclusion in WAC 173-340-7491(1)(b), the Comfort Suites Property is excluded from a TEE because all contaminated soil is covered by physical barriers consisting of buildings and paved surfaces that prevent exposure to plants and wildlife, provided that institutional controls are used to manage remaining contamination. Under these conditions, no further consideration of terrestrial ecological impacts is required under MTCA. The Ecology TEE form for the Comfort Suites Property is provided in Appendix D.

3.5 CLEANUP STANDARDS

The following is a discussion of the proposed cleanup standards for the Comfort Suites Property: media of concern; COCs; cleanup levels; and the points of compliance for soil and groundwater, the media of concern. These cleanup standards for the Comfort Suites Property have been



established to be protective of human health and the environment in accordance with WAC 173-340-700 through 173-340-760.

3.5.1 Media of Concern

The media of concern for the Comfort Suites Property are soil and groundwater. Affected media, soil gas, indoor air, and surface water are not media of concern for the Comfort Suites Property.

3.5.2 Constituents of Concern

COPCs occurring at concentrations exceeding selected cleanup levels within the selected points of compliance are considered to be COCs for the cleanup action. The COC for the Comfort Suites Property is arsenic, which has been detected at a concentration exceeding the MTCA Method A cleanup level for unrestricted land use in a soil sample collected from boring B-5 and as a dissolved constituent of groundwater at a concentration exceeding the MTCA Method A cleanup level.

3.5.3 Cleanup Levels

The cleanup levels are the concentrations of COCs that are to be met for the media of concern at the points of compliance defined for the Comfort Suites Property. The cleanup levels for arsenic in soil and groundwater are presented below.

- The preliminary cleanup level for arsenic in soil is 20 mg/kg, which is the MTCA Method A cleanup level for unrestricted land use; and
- Consistent with WAC 173-340-700(6)(d), the preliminary cleanup level for arsenic in groundwater is 115 µg/l, which is the natural background concentration for arsenic in groundwater for the Kent-Tukwila area.

3.5.4 Points of Compliance

The points of compliance are the locations at which the preliminary cleanup levels for the COCs in each medium of concern must be attained to meet the requirements of MTCA and support the issuance of an NFA determination from Ecology for the Comfort Suites Property. The points of compliance for the Comfort Suites Property were established in accordance with WAC 173-340-720(8) for soil and groundwater.

The standard point of compliance for soil is defined as all soil and groundwater throughout the Comfort Suites Property.

The standard point of compliance for groundwater is defined as the uppermost level of the saturated zone extending vertically to the lowest depth that potentially could be impacted by COCs throughout the Comfort Suites Property. This groundwater interval consists of the shallow groundwater-bearing zone at the Comfort Suites Property.



4.0 FOCUSED FEASIBILITY STUDY

This section presents the FFS for the Comfort Suites Property. As described in WAC 173-340-350(8)(a), the purpose of the FFS was to develop and evaluate cleanup alternatives to enable a cleanup action to be selected for the Comfort Suites Property according to WAC 173-340-360. The objective of a selected cleanup action is to protect human health and the environment and to meet the requirements of MTCA. The FFS considered and evaluated two potential cleanup alternatives for the Comfort Suites Property. Each of the potential cleanup action alternatives evaluated in the FFS would constitute the final remedy for the Comfort Suites Property. This section identifies viable cleanup alternatives for the Comfort Suites Property, discusses applicable or relevant and appropriate requirement (ARARs) for the cleanup alternatives, evaluates the identified cleanup alternatives, and identifies a preferred cleanup alternative that would provide the highest degree of permanence to the maximum extent practicable and would constitute the final remedy for the Comfort Suites Property.

4.1 APPLICABLE OR RELEVANT AND APPROPRIATE REQUIREMENTS

Per MTCA (WAC 173-340-710), all cleanup actions must comply with applicable state and federal laws (i.e., ARARs). Other relevant and appropriate requirements are to be considered for addressing problems or situations sufficiently similar to those to be encountered that their use is well suited.

The following ARARs are anticipated to be the primary applicable requirements for cleanup of the Comfort Suites Property:

- MTCA, Chapter 70.105D of the Revised Code of Washington;
- MTCA, WAC 173-340;
- Occupational Safety and Health Act, Part 1910 of Title 29 of the Code of Federal Regulations;
- Washington State General Occupational Health Standards, WAC 296-62;
- Safety Standards for Construction Work, WAC 296-155;
- Accreditation of Environmental Laboratories, WAC 173-50;
- Washington State Solid Waste Management Laws and Regulations, Chapter 70.95 of the Revised Code of Washington, WAC 173-351, and WAC 173-304;
- Dangerous Waste Regulations, WAC 173-303; and
- Applicable local permits and ordinances indicated by the City of Tukwila Municipal Code and King County Code.



4.2 SCREENING OF REMEDIATION TECHNOLOGIES

As part of the FFS, Farallon screened the following types of remediation technologies for the Comfort Suites Property:

- No action/natural attenuation;
- Monitored natural attenuation;
- Institutional controls;
- Engineered controls; and
- Excavation.

Farallon identified methods and process options for each technology, and then scored each with regard to compliance with MTCA criteria for evaluation of permanence to the maximum extent practicable, and reasonable restoration time frame (WAC 173-340-360[3] and 173-340-360[4]). Criteria used for scoring included implementability, protectiveness, permanence, effectiveness, short-term risk management, restoration time frame, consideration of public concerns, and cost. Individual scores for each remediation technology were totaled, and the remediation technologies were ranked according to score. The screening results are presented in Table 9. The highest-scoring remediation technologies were compiled into viable cleanup alternatives for the Comfort Suites Property, as discussed in Section 4.3, Cleanup Alternatives.

The following potential soil and groundwater remediation technologies were retained for consideration after the preliminary screening:

- No action/natural attenuation;
- Monitored natural attenuation;
- Institutional controls; and
- Engineered controls.

4.3 CLEANUP ALTERNATIVES

The FFS considered the requirements for feasibility studies under WAC 173-340-350, the requirements for selection of cleanup actions under WAC 173-340-360, current conditions at the Comfort Suites Property, and planned future use of the Comfort Suites Property.

Farallon compiled potentially viable cleanup alternatives using the results from the remediation technology screen in Table 9. A description of the cleanup alternatives evaluated during the FFS is provided below. Evaluation of the cleanup alternatives is discussed in Section 4.4, Cleanup Alternative Evaluation, and shown in further detail in Table 10.

Farallon assembled the following two cleanup alternatives as potentially applicable to the Comfort Suites Property.



Cleanup Alternative 1: No Action/Natural Attenuation and Institutional Controls. Cleanup Alternative 1 includes the following measures:

- Preparation of a Contaminated Media Management Plan (CMMP) describing procedures for management of known and potential contaminated and impacted soil, groundwater, and slag fill at the Comfort Suites Property.
- Preparation and recording of an environmental covenant against the title for the Comfort Suites Property to prohibit withdrawal of groundwater at the Comfort Suites Property without advance approval of Ecology and requiring implementation of the CMMP. Potential exposure to COCs in groundwater and soil would be mitigated by the environmental covenant.

Cleanup Alternative 2: Monitored Natural Attenuation, Engineered Controls, and Institutional Controls. Cleanup Alternative 2 includes the following measures:

- Conducting four quarters of groundwater monitoring at monitoring wells MW-22 and FMW-01 through -04 for dissolved arsenic to confirm further that groundwater conditions are stable.
- Maintenance of the asphalt-concrete pavement at the Comfort Suites Property proximate to boring B-5 where concentrations of arsenic exceeding the MTCA Method A cleanup level for unrestricted land use were detected in soil samples.
- Preparation of a CMMP describing procedures for management of known and potential contaminated and impacted soil and groundwater and slag fill at the Comfort Suites Property and management of arsenic-contaminated soil proximate to boring B-5 if the asphalt-concrete pavement is removed.
- Preparation and recording of an environmental covenant against the title for the Comfort Suites Property to prohibit withdrawal of groundwater at the Comfort Suites Property without advance approval of Ecology and requiring implementation of the CMMP. Potential exposure to COCs in groundwater and soil would be mitigated by the environmental covenant.

4.4 CLEANUP ALTERNATIVE EVALUATION

A cleanup alternative must satisfy the following threshold criteria, as specified in WAC 173-340-360(2)(a):

- Protect human health and the environment;
- Comply with cleanup standards;
- Comply with applicable state and federal laws; and
- Provide for compliance monitoring.



These criteria represent the minimum standards for an acceptable cleanup action. In addition to meeting the threshold criteria, cleanup actions under MTCA must:

- Provide for a reasonable restoration time frame based on the factors provided in WAC 173-340-360(4)(b);
- Use permanent solutions to the maximum extent practicable based on the criteria defined in WAC 173-340-360(3)(f); and
- Consider public concerns raised during public comment on the Cleanup Action Plan (WAC 173-340-600).

Farallon evaluated each cleanup alternative according to threshold and other requirements established by MTCA. The FS considered the requirements under WAC 173-340-350 and the criteria defined in WAC 173-340-360 for screening potentially feasible cleanup alternatives for the Comfort Suites Property. Specific details regarding the cleanup alternatives evaluation and associated scoring are provided in Table 10. Based on the evaluation, cleanup alternatives 1 and 2 both meet the threshold requirements specified in MTCA and are appropriate for the Comfort Suites Property.

4.5 PREFERRED CLEANUP ALTERNATIVE

Cleanup Alternative 2, Monitored Natural Attenuation, Engineered Controls, and Institutional Controls is the preferred cleanup alternative for the Comfort Suites Property. An evaluation of the preferred cleanup action alternative to demonstrate that it meets MTCA threshold requirements is provided below.

4.5.1 Protection of Human Health and the Environment

The only exposure pathways of concern, as discussed in Section 3.4.6, Exposure Pathways Assessment, is direct contact with soil and groundwater in which arsenic has been detected at concentrations exceeding the selected cleanup levels. These exposure pathways become complete only if groundwater is withdrawn for potable use, or if a construction worker contacts contaminated soil or groundwater during utilities work or future redevelopment of the Comfort Suites Property.

Because there is no practical use for groundwater at the Comfort Suites Property, an exposure pathway via groundwater ingestion is unlikely to present a potential risk to human health. The environmental covenant prohibiting the withdrawal of groundwater will protect further against the groundwater ingestion exposure pathway. In this manner, Cleanup Alternative 2 will protect human health and the environment over the long term by permanently restricting future withdrawal of groundwater at the Comfort Suites Property.

Implementation of the CMMP will mitigate potential future risk for construction workers who may conduct utilities or future redevelopment work at the Comfort Suites Property. The environmental covenant requiring implementation of the CMMP will protect further against the direct contact



exposure pathway. In this manner, Cleanup Alternative 2 will protect human health and the environment over the long term by implementing a program for appropriate management of COC-contaminated soil and groundwater at the Comfort Suites Property.

4.5.2 Compliance with Cleanup Standards

Cleanup Alternative 2 will comply with the cleanup levels established in Section 3.5.3, Cleanup Levels, by meeting the local and regional background concentrations for COCs in groundwater at the points of compliance and providing a CMMP for management of COC-contaminated soil and groundwater.

4.5.3 Compliance with Applicable State and Federal Laws

Cleanup Alternative 2 will comply with the requirements of ARARs. The cleanup action will be conducted as an independent cleanup action in accordance with applicable MTCA requirements.

4.5.4 Provision for Compliance Monitoring

Cleanup Alternative 2 includes compliance monitoring to demonstrate that groundwater conditions are stable and concentrations of arsenic in groundwater are consistent with background concentrations; therefore, the provision for compliance monitoring has been met.

4.5.5 Permanence to the Maximum Extent Practicable

Cleanup Alternative 2 is the more protective of the cleanup alternatives evaluated. Cleanup Alternative 2 will result in achievement of cleanup standards in shallow groundwater at the Comfort Suites Property by eliminating the exposure pathway. Cleanup Alternative 2 presents a minor and controllable risk for short-term exposure and can be implemented readily.

4.5.6 Restoration Time Frame

The preferred cleanup alternative will meet the requirements for cleanup actions under MTCA within approximately 1 year (i.e., the presumed time required to complete a total of four quarters of groundwater monitoring, prepare a CMMP, and file an environmental covenant), which is a reasonable restoration time frame.



5.0 SUMMARY AND CONCLUSIONS

The information provided in this RI/FFS Report is sufficient to assess the nature and extent of contamination at the Comfort Suites Property, screen cleanup technologies, evaluate technically feasible cleanup alternatives, and identify a preferred cleanup alternative for the Comfort Suites Property that meets MTCA requirements. The media of concern for the Comfort Suites Property are limited to soil and groundwater. Soil and groundwater conditions based on the RI performed by Farallon are as follows.

- Soil at the Comfort Suites Property historically was impacted by releases resulting from operations at the Family Fun Center Site. The AOPCs associated with these operations at the Comfort Suites Property included an agricultural area, an area of oil staining, and a former oil dump. Contaminated soil with concentrations of COPCs exceeding remediation levels for the Family Fun Center Site at these AOPCs was removed by excavating “hot spots” and disposed of the soil off the site during the 1998–1999 Cleanup Action. Groundwater was not encountered in the excavation pits.
- The results of investigations conducted after the 1998–1999 Cleanup Action indicate that contaminated soil with arsenic detected at concentrations exceeding relevant MTCA cleanup levels remains at the Comfort Suites Property only near boring B-5 at a depth of approximately 6 feet bgs. Arsenic was detected at a concentration of 31 mg/kg, which exceeds the MTCA Method A cleanup level of 20 mg/kg for unrestricted land use and the naturally occurring concentration of 7 mg/kg for the Puget Sound Region (Ecology 1994), in the soil sample collected from boring B-5. The results of investigation activities conducted in 2022 indicate that arsenic-contaminated soil proximate to boring B-5 does not extend to the boundary with the Fun Center Property. The portion of the Comfort Suites Property proximate to boring B-5 is covered with asphalt-concrete pavement.
- No anthropogenic sources of arsenic are known to be present in soil at the Comfort Suites Property. Arsenic was not detected at concentrations exceeding the laboratory PQL in soil samples collected from the approximately 80,000-cubic-yard soil stockpile that was used to backfill “hot spot” excavations and to grade the Comfort Suites Property or in samples collected from slag fill. Arsenic was detected at a concentration of 31 mg/kg, which is within the predicted range of arsenic concentrations of 20 to 40 mg/kg in surface soil in the Tukwila area resulting from historical operation of the Asarco smelter in Tacoma. The depth of the soil sample collected from boring B-5, 6 feet bgs, does not represent current surface soil conditions. However, the elevation of the Comfort Suites Property prior to filling and grading during redevelopment in 1998 and 1999 is not known; therefore, the soil sample collected from boring B-5 from a depth of 6 feet bgs may represent surface soil conditions prior to redevelopment that may have been impacted by historical operation of the Asarco smelter.
- Groundwater samples have been collected from five monitoring wells at the Fun Center Property: GCW-16, MW-22, and FMW-01 through FMW-04. These monitoring wells provide adequate coverage for the entire Comfort Suites Property; specifically, monitoring



wells FMW-01 through FMW-03 were installed proximate to “hot spots” that were excavated during 1998–1999 Cleanup Action; and monitoring wells GCW-16, FMW-04, and MW-22 were installed down-gradient of the “hot spots” and proximate to the Green River.

- Groundwater monitoring has been conducted at the Comfort Suites Property since 1997. Groundwater samples were collected from monitoring well GCW-16 only in 1997, MW-22 from 2002 through 2022, and FMW-01 through FMW-04 only in 2022. Dissolved arsenic is the only COPC that has been detected at concentrations exceeding MTCA cleanup levels in groundwater samples collected from these monitoring wells. No anthropogenic sources of arsenic are known to be present in groundwater at the Comfort Suites Property.
- Dissolved arsenic was detected at concentrations ranging from 4.5 to 10 µg/l in groundwater samples collected from monitoring well MW-22 from 2002 to 2022, which suggests that groundwater conditions at the Comfort Suites Property and proximate to the Green River are stable.
- Dissolved arsenic was detected at concentrations ranging from 6 to 66 µg/l, which exceed the MTCA Method A cleanup level of 5 µg/l, in groundwater samples collected from monitoring wells MW-22 and FMW-01 through FMW-04, respectively. However, these concentrations are within the range of 0.3 to 115 µg/l, which is the range of naturally occurring concentrations of dissolved arsenic in groundwater in the vicinity of the Boeing Kent Space Center cited by Ecology. The Comfort Suites Property is approximately 4 miles north of the Boeing Kent Space Center. Based on this distance, it is reasonable to conclude that the range of naturally occurring dissolved arsenic concentrations of 0.3 to 115 µg/l also are applicable for the Comfort Suites Property. Therefore, the range of concentrations of dissolved arsenic detected in groundwater samples collected from monitoring wells at the Comfort Suites Property represents background conditions.

The preferred cleanup alternative for the Comfort Suites Property includes conducting four quarters of groundwater monitoring from the active monitoring wells at the Comfort Suites Property, FMW-01 through FMW-04 and MW-22, for dissolved arsenic; maintaining the asphalt-concrete pavement at the Comfort Suites Property proximate to boring B-5; preparing a CMMP describing procedures for management of known and potential contaminated and impacted soil and groundwater at Comfort Suites Property; and preparing and recording an environmental covenant against the title for the Comfort Suites Property to prohibit withdrawal of groundwater at the Comfort Suites Property without advance approval of Ecology and requiring implementation of the CMMP. This cleanup alternative meets MTCA requirements and will serve as the final remedy for the Comfort Suites Property. This cleanup alternative is appropriate in part because regional background levels of dissolved arsenic in groundwater exceed the MTCA cleanup level, and it is unlikely that dissolved arsenic concentrations in groundwater at the Comfort Suites Property will decrease to less than the MTCA cleanup level, regardless of the selected remedial alternative.



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7.0 LIMITATIONS

7.1 GENERAL LIMITATIONS

The conclusions contained in this report/assessment are based on professional opinions with regard to the subject matter. These opinions have been arrived at in accordance with currently accepted hydrogeologic and engineering standards and practices applicable to this location. The conclusions contained herein are subject to the following inherent limitations:

- **Accuracy of Information.** Farallon obtained, reviewed, and evaluated certain information used in this report/assessment from sources that were believed to be reliable. Farallon's conclusions, opinions, and recommendations are based in part on such information. Farallon's services did not include verification of its accuracy or authenticity. Should the information upon which Farallon relied prove to be inaccurate or unreliable, Farallon reserves the right to amend or revise its conclusions, opinions, and/or recommendations.
- **Reconnaissance and/or Characterization.** Farallon performed a reconnaissance and/or characterization of the Site that is the subject of this report/assessment to document current conditions. Farallon focused on areas deemed more likely to exhibit hazardous materials conditions. Contamination may exist in other areas of the Site that were not investigated or were inaccessible. Site activities beyond Farallon's control could change at any time after the completion of this report/assessment.

For the foregoing reasons, Farallon cannot and does not warrant or guarantee that the Site is free of hazardous or potentially hazardous substances or conditions, or that latent or undiscovered conditions will not become evident in the future. Farallon's observations, findings, and opinions can be considered valid only as of the date of the report.

This report/assessment has been prepared in accordance with the contract for services between Farallon and Eastwind Investments, Inc., and currently accepted industry standards. No other warranties, representations, or certifications are made.

7.2 LIMITATION ON RELIANCE BY THIRD PARTIES

Reliance by third parties is prohibited. This report/assessment has been prepared for the exclusive use of Eastwind Investments, Inc. to address the unique needs of Eastwind Investments, Inc. at the Comfort Suites Property at a specific point in time.

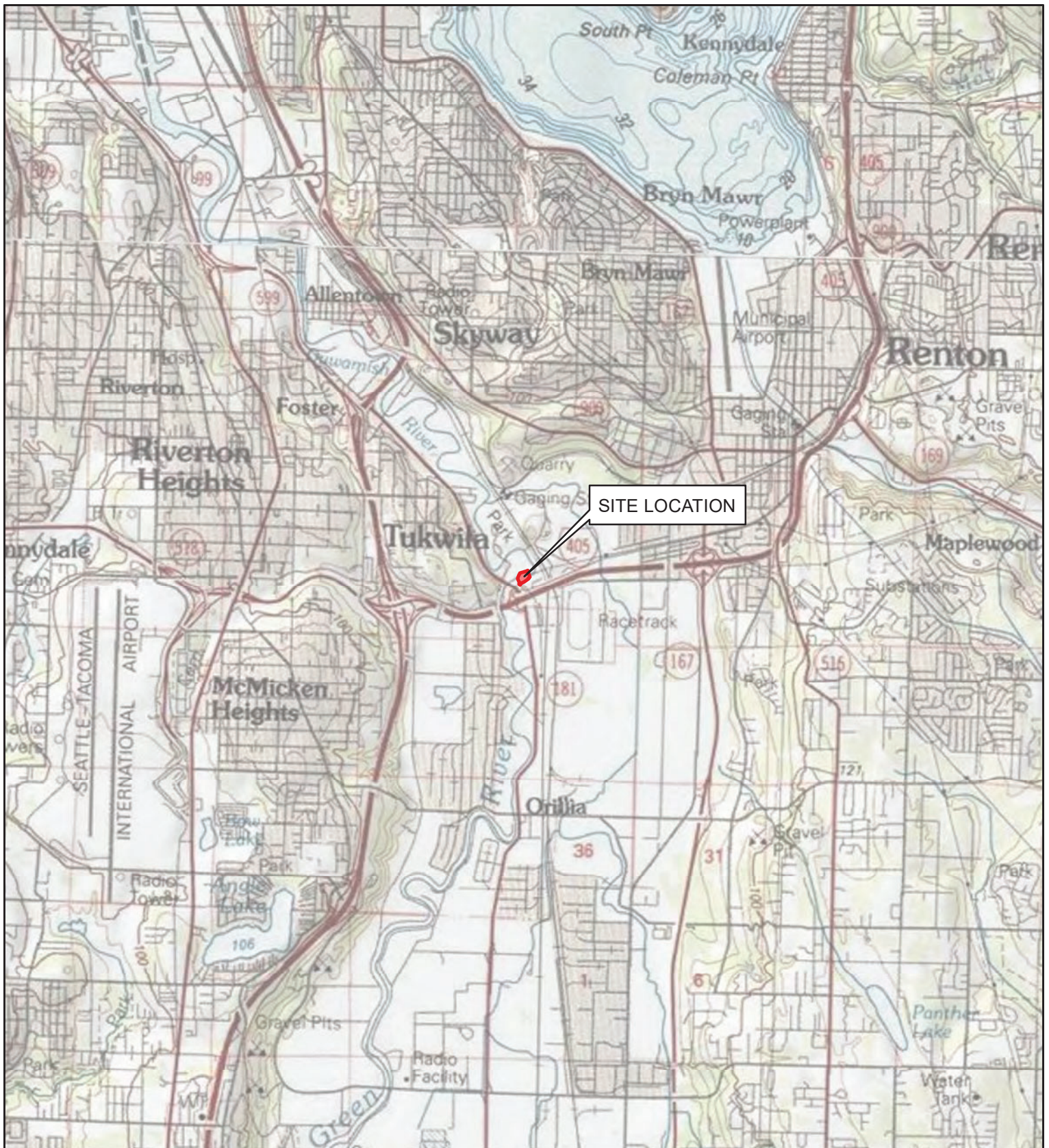
This is not a general grant of reliance. No one other than Eastwind Investments, Inc. may rely on this report unless Farallon agrees in advance to such reliance in writing. Any unauthorized use, interpretation, or reliance on this report/assessment is at the sole risk of that party and Farallon will have no liability for such unauthorized use, interpretation, or reliance.

FIGURES

REMEDIAL INVESTIGATION/FOCUSED FEASIBILITY STUDY

Comfort Suites Property
7200 Fun Center Way
Tukwila, Washington

Farallon PN: 2812-001



REFERENCE: 7.5 MINUTE USGS QUADRANGLE RENTON, WASHINGTON, DATED 2013



0 5,000
SCALE IN FEET



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Washington
Issaquah | Bellingham | Seattle

Oregon
Portland | Baker City

California
Oakland | Irvine

FIGURE 1

SITE VICINITY MAP
2700 FUN CENTER WAY
TUKWILA, WASHINGTON

FARALLON PN: 2812-001

Drawn By: Imurock

Checked By: AM

Date: 6/22/2022

Disc Reference:

Path: \\edgfs02\GIS\Projects\2812 Eastwind Investments Inc\001 Parcel 2 Comfort Suites\Mapfiles\003\Figure-01_VicinityMap.mxd



LEGEND

- SURFACE SOIL SAMPLE (GEOENGINEERS, 1998)
- BORING (AEG, 2021)
- + DIRECT PUSH BORING (GEOENGINEERS, 1997)
- + DIRECT PUSH BORING (GEOTECH CONSULTANTS, 1997)
- BORING (GEOENGINEERS, 1997)
- HAND AUGER BORING (GEOENGINEERS, 1997)
- BORING (APPLIED GEOTECHNOLOGY, 1989)
- + MONITORING WELL (FARALLON, 2022)
- + MONITORING WELL (GEOENGINEERS, 2002)
- + MONITORING WELL (GEOENGINEERS, 1998)
- + MONITORING WELL (GEOTECH CONSULTANTS, 1997)
- + TEST PIT (APPLIED GEOTECHNOLOGY, 1989)
- + TEST PIT (GEOENGINEERS, 1997)
- + TEST PIT (GEOTECH CONSULTANTS, 1997)

- A EXCAVATION EXTENT AND HOT SPOT ID
- A PROPERTY BOUNDARY
- A FAMILY FUN CENTER SITE BOUNDARY
- A KING COUNTY PARCEL BOUNDARY
- CROSS-SECTION LINE

ALL LOCATIONS ARE APPROXIMATE.
FIGURES WERE PRODUCED IN COLOR.
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ALL ORIGINAL INFORMATION.



0 100
SCALE IN FEET



Drawn By: Imurock

Washington
Issaquah | Bellingham | Seattle
Oregon
Portland | Baker City
California
Oakland | Irvine

Disc Reference:

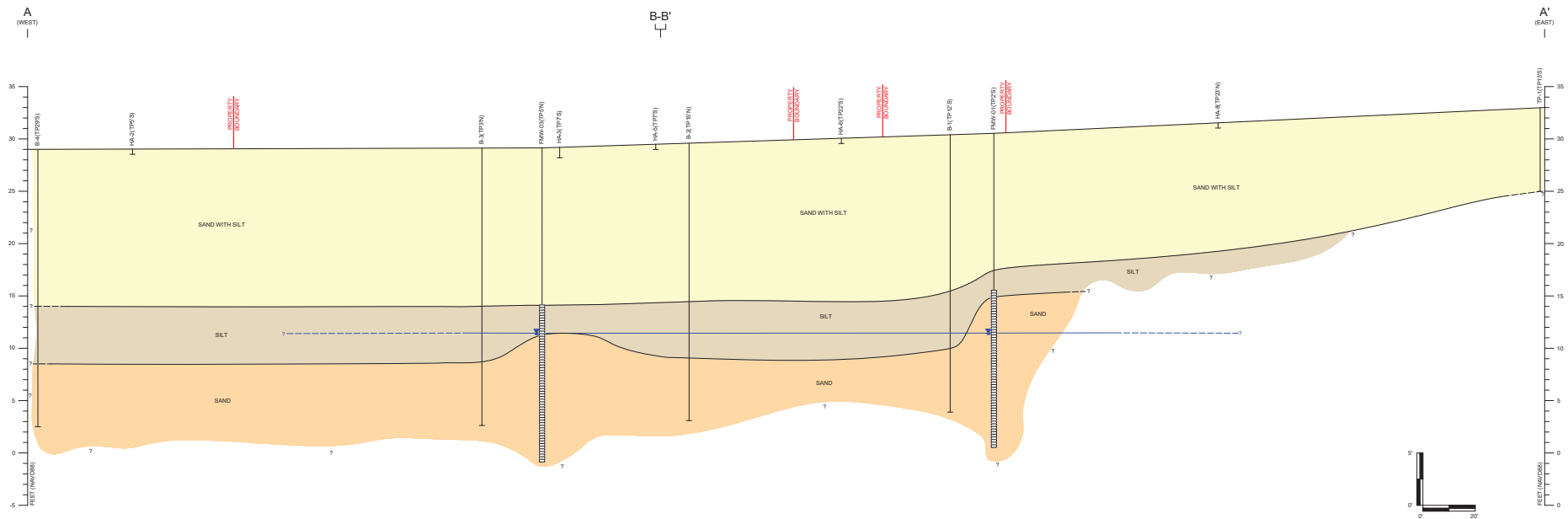
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Date: 9/22/2022

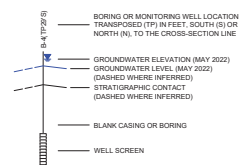
FIGURE 2

SITE PLAN WITH SAMPLE LOCATIONS
AND CROSS SECTION LINES
7200 FUN CENTER WAY
TUKWILA, WASHINGTON

FARALLON PN: 2812-001



LEGEND



NOTES:
 1. ALL LOCATIONS ARE APPROXIMATE
 2. FIGURES WERE PRODUCED IN COLOR. GRAYSCALE COPIES MAY NOT REPRODUCE ALL ORIGINAL INFORMATION.

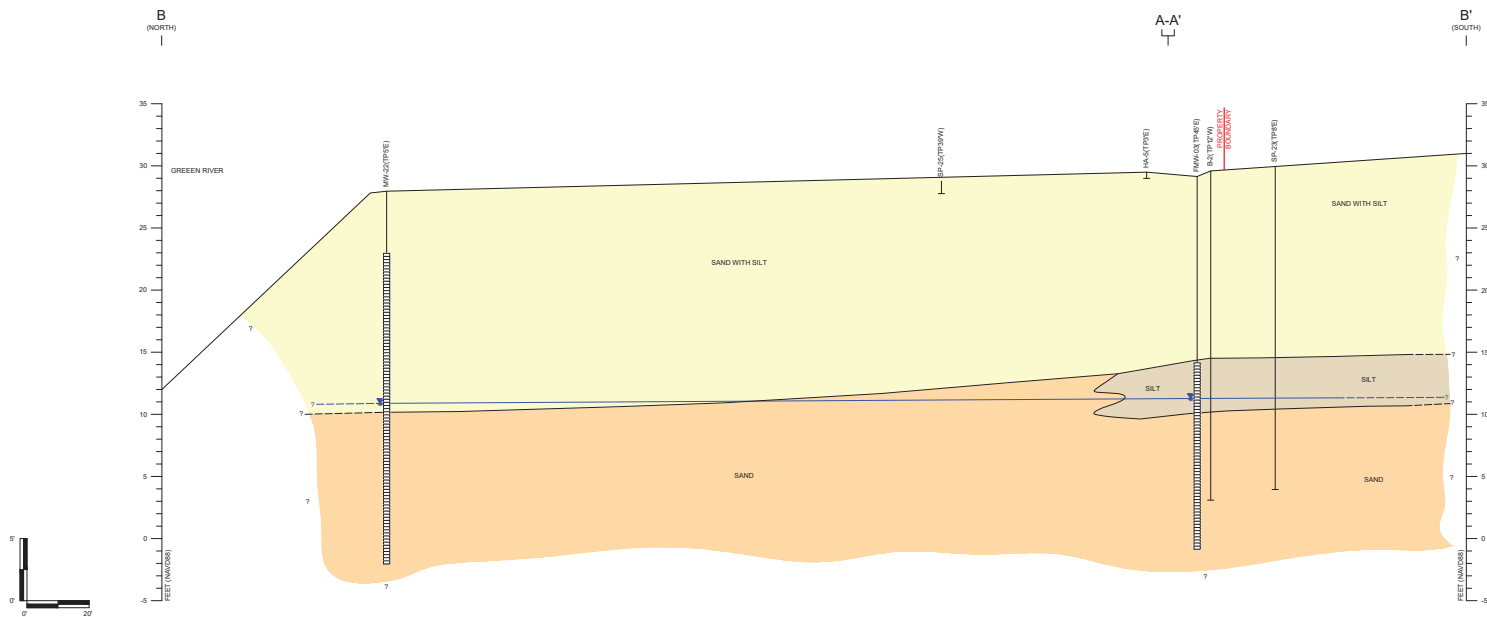


FIGURE 2A
 CROSS SECTION A-A'
 2700 FUN CENTER WAY
 TUKWILA, WASHINGTON

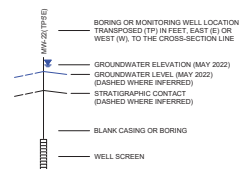
FARALLON PN-2812-001

Drawn By: NM Checked By: JM

Date: 8/18/2022



LEGEND



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FIGURE 2B
 CROSS SECTION B-B'
 2700 FUN CENTER WAY
 TUKWILA, WASHINGTON

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LEGEND

- T FORMER PAD-MOUNTED TRANSFORMER
- T FORMER POLE-MOUNTED TRANSFORMER
- FORMER SITE FEATURE
- PROPERTY BOUNDARY
- FAMILY FUN CENTER SITE BOUNDARY
- KING COUNTY PARCEL BOUNDARY

0 100
SCALE IN FEET



Washington
Issaquah | Bellingham | Seattle
Oregon
Portland | Baker City
California
Oakland | Irvine

FIGURE 3

HISTORICAL SITE FEATURES
7200 FUN CENTER WAY
TUKWILA, WASHINGTON

FARALLON PN: 2812-001

ALL LOCATIONS ARE APPROXIMATE.
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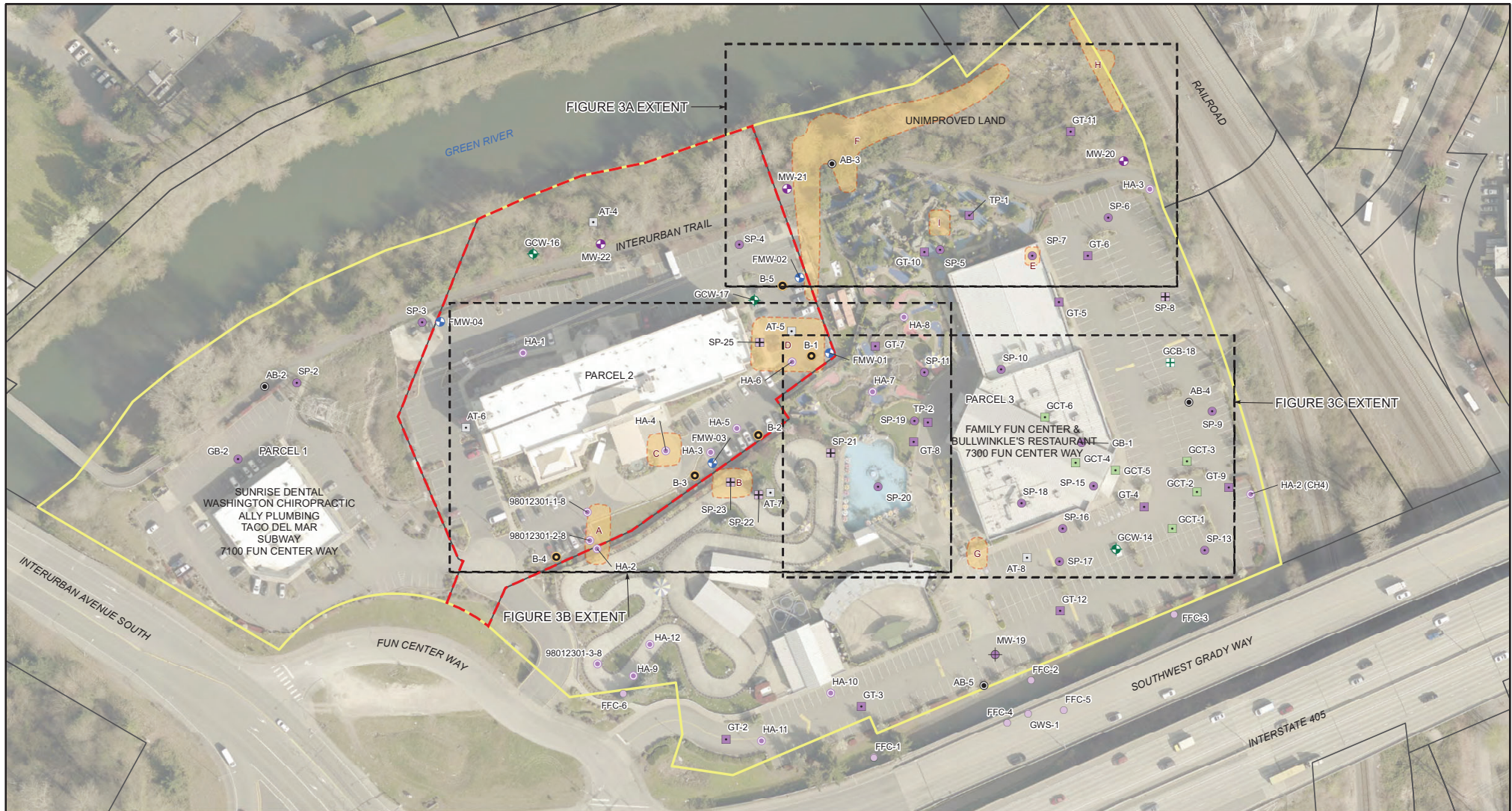
Drawn By: Imurock

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Date: 9/9/2022

Disc Reference:

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LEGEND

- SURFACE SOIL SAMPLE (GEOENGINEERS, 1998)
- BORING (AEG, 2021)
- + DIRECT PUSH BORING (GEOENGINEERS, 1997)
- + DIRECT PUSH BORING (GEOTECH CONSULTANTS, 1997)
- BORING (GEOENGINEERS, 1997)
- HAND AUGER BORING (GEOENGINEERS, 1997)
- BORING (APPLIED GEOTECHNOLOGY, 1989)
- + MONITORING WELL (FARALLON, 2022)
- + MONITORING WELL (GEOENGINEERS, 2002)
- + MONITORING WELL (GEOENGINEERS, 1998)
- + MONITORING WELL (GEOTECH CONSULTANTS, 1997)
- + TEST PIT (APPLIED GEOTECHNOLOGY, 1989)
- + TEST PIT (GEOENGINEERS, 1997)
- + TEST PIT (GEOTECH CONSULTANTS, 1997)

- A EXCAVATION EXTENT AND HOT SPOT ID
- PROPERTY BOUNDARY
- FAMILY FUN CENTER SITE BOUNDARY
- KING COUNTY PARCEL BOUNDARY

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0 100
SCALE IN FEET



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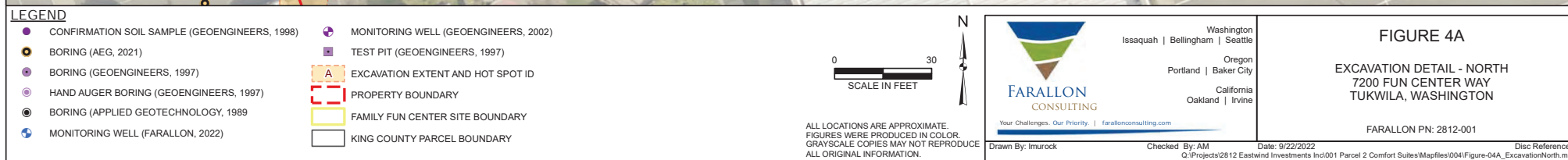
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FIGURE 4

EXCAVATION EXTENTS
7200 FUN CENTER WAY
TUKWILA, WASHINGTON

FARALLON PN: 2812-001

Disc Reference:





LEGEND

- CONFIRMATION SOIL SAMPLE (GEOENGINEERS, 1998)
- BORING (AEG, 2021)
- DIRECT PUSH BORING (GEOENGINEERS, 1997)
- BORING (GEOENGINEERS, 1997)
- HAND AUGER BORING (GEOENGINEERS, 1997)
- MONITORING WELL (FARALLON, 2022)
- TEST PIT (APPLIED GEOTECHNOLOGY, 1989)
- TEST PIT (GEOENGINEERS, 1997)
- EXCAVATION EXTENT AND HOT SPOT ID
- PROPERTY BOUNDARY
- FAMILY FUN CENTER SITE BOUNDARY
- KING COUNTY PARCEL BOUNDARY

0 30
SCALE IN FEET

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FIGURE 4B

EXCAVATION DETAIL - SOUTHWEST
7200 FUN CENTER WAY
TUKWILA, WASHINGTON

FARALLON PN: 2812-001

Disc Reference:



LEGEND

- ✦ MONITORING WELL (GEOENGINEERS, 2002)
- ✦ MONITORING WELL (FARALLON, 2022)
- SITE BOUNDARY
- KING COUNTY PARCEL BOUNDARY
- (11.35) GROUNDWATER ELEVATION (05/16/2022) MEASURE IN FEET
RELATIVE TO NORTH AMERICAN VERTICAL DATUM 1988
- GROUNDWATER ELEVATION CONTOUR (DASHED WHERE INFERRED)
- ➔ APPROXIMATE DIRECTION OF GROUNDWATER FLOW

NOTES:

1. ALL LOCATIONS ARE APPROXIMATE.
2. FIGURES WERE PRODUCED IN COLOR. GRAYSCALE COPIES MAY NOT REPRODUCE ALL ORIGINAL INFORMATION.

0 80
SCALE IN FEET



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FIGURE 5

GROUNDWATER ELEVATION AND CONTOURS
MAY 16, 2022
7200 FUN CENTER WAY
TUKWILA, WASHINGTON

FARALLON PN: 2812-001

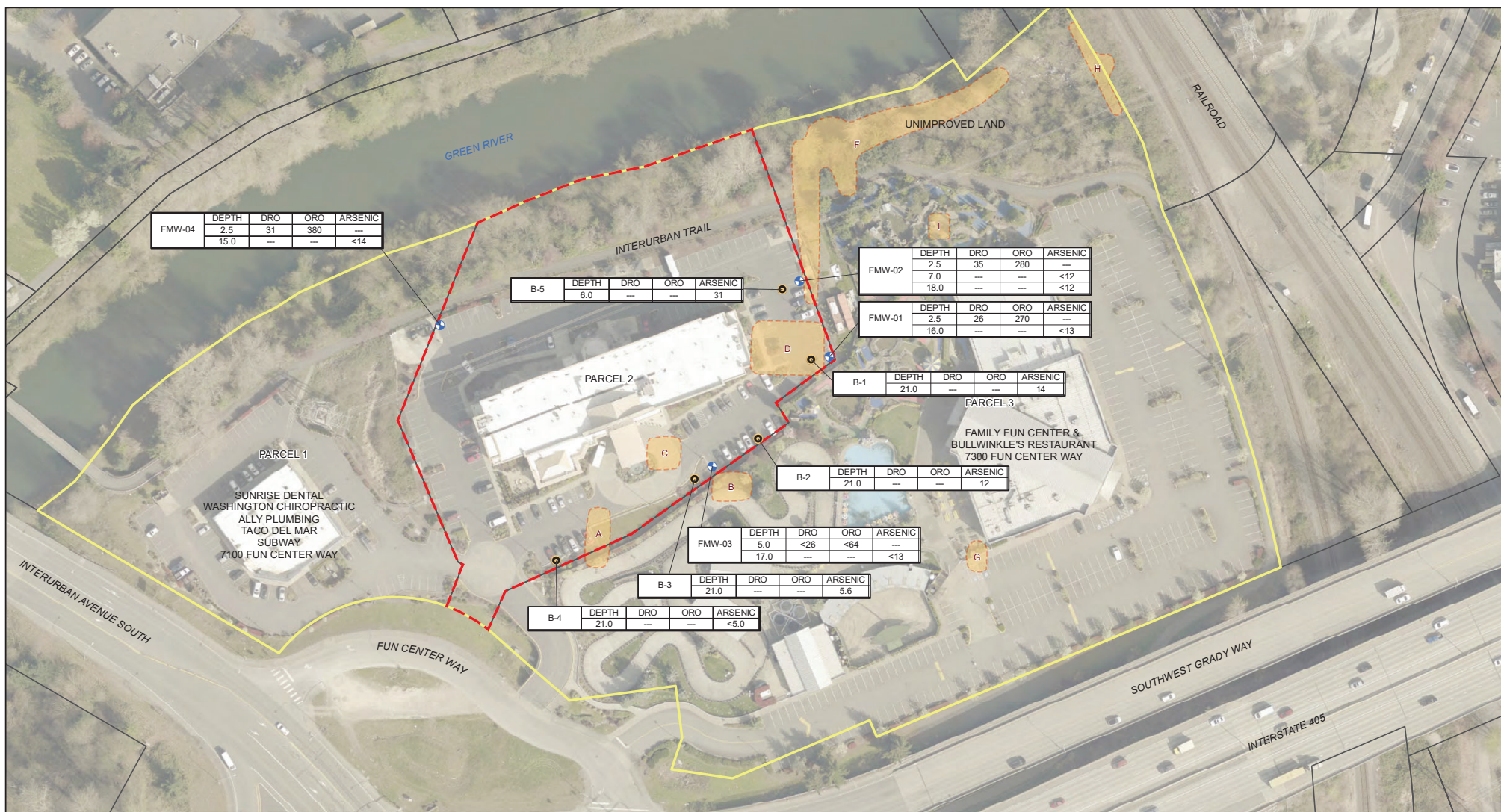
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\\edg02\GIS\Projects\2812 Eastwind Investments Inc\001 Parcel 2 Comfort Suites\Mapfiles\003\Figure-02_GW_Contours.mxd

Disc Reference:



LEGEND

- BORING (AEG, 2021)
- ⊕ MONITORING WELL (FARALLON, 2022)
- EXCAVATION EXTENT AND HOT SPOT ID
- PROPERTY BOUNDARY
- FAMILY FUN CENTER SITE BOUNDARY
- KING COUNTY PARCEL BOUNDARY

NOTES:
SOIL ANALYTICAL RESULTS IN MILLIGRAMS PER KILOGRAM.
DEPTH IN FEET BELOW GROUND SURFACE.
BOLD = DENOTES CONCENTRATIONS THAT EXCEED THE WASHINGTON STATE
MODEL TOXICS CONTROL ACT CLEANUP REGULATION CLEANUP LEVEL
< = DENOTES ANALYTE NOT DETECTED AT OR EXCEEDING
THE LISTED REPORTING LIMIT
--- = DENOTES SAMPLE NOT ANALYZED
DRO = TOTAL PETROLEUM HYDROCARBONS (TPH) AS
DIESEL-RANGE ORGANICS
ORO = TPH AS OIL-RANGE ORGANICS



ALL LOCATIONS ARE APPROXIMATE.
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FIGURE 6

**SAMPLE LOCATIONS AND
SOIL ANALYTICAL RESULTS**
7200 FUN CENTER WAY
TUKWILA, WASHINGTON

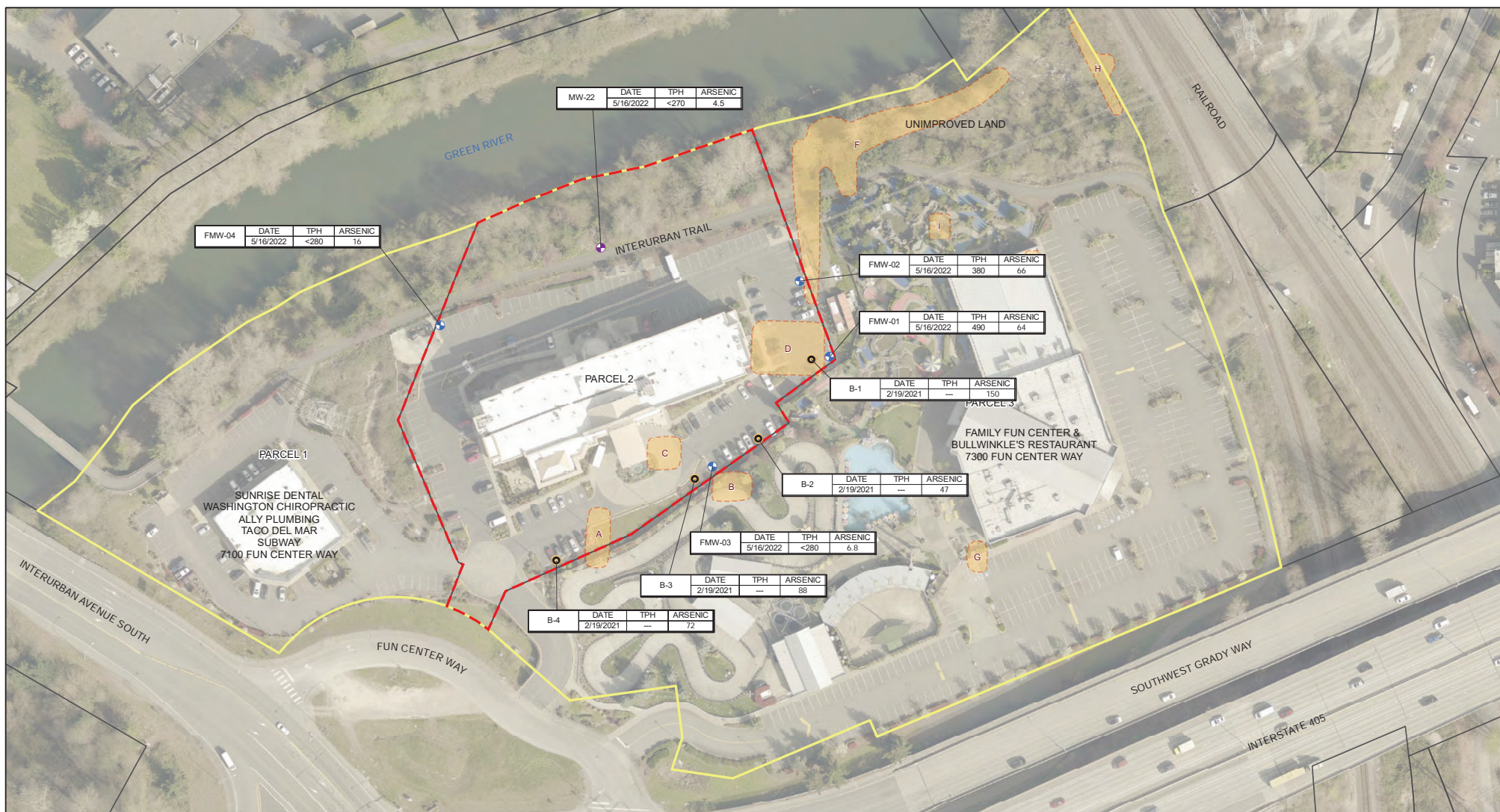
FARALLON PN: 2812-001

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Checked By: AM

Date: 9/22/2022

Disc Reference:
Q:\Projects\2812 Eastwind Investments Inc\001 Parcel 2 Comfort Suites\Mapfiles\004\Figure-06_SampleLocs_Soil.mxd



LEGEND

- BORING (AEG, 2021)
- MONITORING WELL (FARALLON, 2022)
- MONITORING WELL (GEOENGINEERS, 2002)
- EXCAVATION EXTENT AND HOT SPOT ID
- PROPERTY BOUNDARY
- FAMILY FUN CENTER SITE BOUNDARY

 KING COUNTY PARCEL BOUNDARY

NOTES:
GROUNDWATER ANALYTICAL RESULTS IN MICROGRAMS PER LITER.
FMW-01 THROUGH FMW-04 ARSENIC RESULTS ARE DISSOLVED ARSENIC,
AND THE B-1 THROUGH B-4 RESULTS ARE TOTAL ARSENIC.
BOLD = DENOTES CONCENTRATIONS THAT EXCEED THE
WASHINGTON STATE MODEL TOXICS CONTROL ACT
CLEANUP REGULATION CLEANUP LEVEL
< = DENOTES ANALYTE NOT DETECTED AT OR EXCEEDING
THE LISTED REPORTING LIMIT
--- = DENOTES SAMPLE NOT ANALYZED
TPH = TOTAL PETROLEUM HYDROCARBONS (TPH) IN THE C10
TO C36 CARBON RANGES (DIESEL- TO OIL-RANGE ORGANICS)

ALL LOCATIONS ARE APPROXIMATE.
FIGURES WERE PRODUCED IN COLOR.
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FIGURE 7
SAMPLE LOCATIONS AND
GROUNDWATER ANALYTICAL RESULTS
7200 FUN CENTER WAY
TUKWILA, WASHINGTON

FARALLON PN: 2812-001

Disc Reference:
Q:\Projects\2812 Eastwind Investments Inc\001 Parcel 2 Comfort Suites\Mapfiles\004\Figure-07_SampleLocs_GW.mxd

TABLES

REMEDIAL INVESTIGATION/FOCUSED FEASIBILITY STUDY

Comfort Suites Property
7200 Fun Center Way
Tukwila, Washington

Farallon PN: 2812-001

Table 1
Groundwater Elevations
Comfort Suites Property
Tukwila, Washington
Farallon PN: 2812-001

Location	Total Depth (feet bgs) ¹	Screened Interval (feet bgs) ¹	Top of Casing Elevation (feet NAVD88) ²	Monitoring Date	Depth to Water (feet) ³	Water Level Elevation (feet NAVD88) ²
MW-19	30	10 to 30	NS	11/20/1997	12.39	---
				1/26/1998	10.36	---
MW-20	30	10 to 30	NS	4/1/2002	19.82	---
				10/3/2002	23.17	---
MW-21	30	5 to 30	NS	4/1/2002	19.07	---
				10/3/2002	22.55	---
MW-22	30	5 to 30	27.63	4/1/2002	17.90	9.73
				10/3/2002	21.36	6.27
				5/16/2022	16.73	10.90
FMW-01	30	15 to 30	29.93	5/16/2022	18.60	11.33
FMW-02	30	15 to 30	30.11	5/16/2022	18.93	11.18
FMW-03	30	15 to 30	28.69	5/16/2022	17.34	11.35
FMW-04	30	15 to 30	28.78	5/16/2022	17.71	11.07

NOTES:

¹ In feet below ground surface (bgs).

NS = not surveyed

² In feet referenced to North American Vertical Datum of 1988 (NAVD88).

³ In feet below top of well casing.

Table 2
Soil Analytical Results for TPH and BTEX
Comfort Suites Property
Tukwila, Washington
Farallon PN: 2812-001

Sample Location	Sampled By	Sample Identification	Sample Depth (feet) ¹	Sample Date	Analytical Results (milligrams per kilogram)						
					DRO ²	ORO ²	GRO ³	Benzene ⁴	Toluene ⁴	Ethylbenzene ⁴	Xylenes ⁴
1997 Phase II Environmental Site Assessment											
HA-3	GEI	HA-3	0.5	10/6/1997	52.1	268	< 5.00	< 0.200	< 0.200	< 0.200	< 0.400
HA-4	GEI	HA-4	0.5	10/6/1997	3,530	< 2,530	---	< 0.200	< 0.200	< 0.200	< 0.400
HA-5	GEI	HA-5	0.5	10/6/1997	566	2,250	---	---	---	---	---
HA-6	GEI	HA-6	0.5	10/6/1997	< 110	701	36.0	< 0.200	< 0.200	< 0.200	< 0.400
HA-7	GEI	HA-7	0.5	10/6/1997	19.9	< 25.00	---	---	---	---	---
HA-8	GEI	HA-8	0.5	10/6/1997	24.0	< 25.00	---	---	---	---	---
HA-11	GEI	HA-11	0.5	10/8/1997	< 10.00	< 25.00	---	---	---	---	---
HA-12	GEI	HA-12	0.5	10/8/1997	< 10.00	< 25.00	---	---	---	---	---
SP-2	GEI	SP-2-10	10.0	10/2/1997	< 10.00	< 25.00	---	---	---	---	---
SP-4	GEI	SP-4-8	8.0	10/2/1997	15.0	25.4	---	---	---	---	---
SP-5	GEI	SP-5-18.0	18.0	10/3/1997	156	1,570	---	---	---	---	---
SP-6	GEI	SP-6-4.0	4.0	10/3/1997	< 10.00	50.6	---	---	---	---	---
SP-7	GEI	SP-7-30	30.0	10/2/1997	83.7	310	---	---	---	---	---
SP-9	GEI	SP-9-2.0	2.0	10/3/1997	44.8	455	---	---	---	---	---
SP-10	GEI	SP-10	0.5	10/6/1997	53.6	< 25.00	---	---	---	---	---
SP-11	GEI	SP-11-3.0	3.0	10/3/1997	14.5	81.0	---	---	---	---	---
SP-13	GEI	SP-13-4.0	4.0	10/3/1997	43.7	217	---	---	---	---	---
SP-15	GEI	SP-15-1.0	1.0	10/3/1997	40.9	285	---	---	---	---	---
SP-16	GEI	SP-16-2.0	2.0	10/3/1997	< 10.00	< 25.00	---	< 0.200	< 0.200	< 0.200	< 0.400
SP-17	GEI	SP-17-2.0	2.0	10/3/1997	< 10.00	< 25.00	---	< 0.200	< 0.200	< 0.200	< 0.400
SP-18	GEI	SP-18-10.0	10.0	10/3/1997	---	---	< 5.00	< 0.0500	< 0.0500	< 0.0500	< 0.100
SP-19	GEI	SP-19-10.0	10.0	10/3/1997	13.0	54.3	---	---	---	---	---
SP-20	GEI	SP-20-9.0	9.0	10/3/1997	< 10.00	< 25.00	---	---	---	---	---
SP-21	GEI	SP-21-1.0	1.0	10/3/1997	11.2	65.1	---	---	---	---	---
SP-22	GEI	SP-22-9.0	9.0	10/3/1997	< 10.00	< 25.00	---	---	---	---	---
SP-23	GEI	SP-23-0.5	0.5	10/3/1997	3,650	359	117	---	---	---	---
SP-25	GEI	SP-25	1.0	10/6/1997	6,860	31,700	---	< 0.200	< 0.200	< 0.200	< 0.400
MTCA Method A Cleanup Levels for Soil ⁵					2,000	2,000	30/100 ⁶	0.03	7	6	9

Table 2
Soil Analytical Results for TPH and BTEX
Comfort Suites Property
Tukwila, Washington
Farallon PN: 2812-001

Sample Location	Sampled By	Sample Identification	Sample Depth (feet) ¹	Sample Date	Analytical Results (milligrams per kilogram)						
					DRO ²	ORO ²	GRO ³	Benzene ⁴	Toluene ⁴	Ethylbenzene ⁴	Xylenes ⁴
1998 UST Removals and Supplemental Subsurface Investigation											
UST No. 1 - Heating Oil Tank at Former Residence 7160											
7160B-6	GEI	7160B-6	6.0	2/25/1998	< 10.0	< 25.0	---	---	---	---	---
UST Nos. 2 and 3 - Heating Oil Tanks at Former Residence 7140											
7140B-5	GEI	7140B-5.0	5.0	2/25/1998	13.6	< 25.0	---	---	---	---	---
7140EB-5.5	GEI	7140EB-5.5	5.5	2/25/1998	12.7	< 25.0	---	---	---	---	---
UST No. 4 - Gasoline UST											
EX-G1-7	GEI	EX-G1-7	7.0	2/25/1998	---	---	235	< 0.0500	< 0.100	< 0.0500	10.1
EX-G2-7	GEI	EX-G2-7	7.0	2/25/1998	---	---	37.1	0.101	0.739	0.0791	3.45
EX-G3-7	GEI	EX-G3-7	7.0	2/25/1998	---	---	1,990	1.16	55.5	24.5	208
EX-G4-7	GEI	EX-G4-7	7.0	2/25/1998	---	---	< 5.00	< 0.0500	< 0.0500	< 0.0500	0.159
B-G-12	GEI	B-G-12	12.0	2/25/1998	---	---	< 5.00	< 0.0500	< 0.0500	< 0.0500	< 0.100
1998-1999 Cleanup Action											
Excavation B - Former Auto Repair Shop											
EX-B1-0.5	GEI	EX-B1-0.5	0.5	5/5/1998	< 11	< 45	< 5.6	< 0.028	< 0.028	< 0.028	< 0.028
EX-B2-1.0	GEI	EX-B2-1.0	1.0	5/5/1998	22	58	< 6.3	< 0.032	< 0.032	< 0.032	< 0.032
EX-B3-1.0	GEI	EX-B3-1.0	1.0	5/5/1998	< 12	< 47	< 5.9	< 0.029	< 0.029	< 0.029	< 0.029
EX-B4-1.0	GEI	EX-B4-1.0	1.0	5/5/1998	19	120	< 6.5	< 0.032	< 0.032	< 0.032	< 0.032
EX-B5-0.5	GEI	EX-B5-0.5	0.5	5/5/1998	25	70	< 6.3	< 0.031	< 0.031	< 0.031	< 0.031
Excavation D - Former Oil Dump Area											
EX-D3-1.5	GEI	EX-D3-1.5	1.5	5/5/1998	80	250	---	---	---	---	---
EX-D5-1.5	GEI	EX-D5-1.5	1.5	5/5/1998	450	830	---	---	---	---	---
EX-D7-1.5	GEI	EX-D7-1.5	1.5	5/5/1998	41	190	---	---	---	---	---
EX-D9-1.5	GEI	EX-D9-1.5	1.5	5/5/1998	270	710	---	---	---	---	---
MTCA Method A Cleanup Levels for Soil ⁵					2,000	2,000	30/100 ⁶	0.03	7	6	9

Table 2
Soil Analytical Results for TPH and BTEX
Comfort Suites Property
Tukwila, Washington
Farallon PN: 2812-001

Sample Location	Sampled By	Sample Identification	Sample Depth (feet) ¹	Sample Date	Analytical Results (milligrams per kilogram)						
					DRO ²	ORO ²	GRO ³	Benzene ⁴	Toluene ⁴	Ethylbenzene ⁴	Xylenes ⁴
Excavation F - Sediment Excavation/Creosote-Impacted Soil											
EX-F1-1.5	GEI	EX-F1-1.5	1.5	8/11/1998	24.7	98.6	---	---	---	---	---
EX-F2-1.5	GEI	EX-F2-1.5	1.5	8/11/1998	34.6	123	---	---	---	---	---
EX-F3-2.0	GEI	EX-F3-2.0	2.0	8/11/1998	31.6	151	---	---	---	---	---
EX-F4-6	GEI	EX-F4-6	6.0	8/12/1998	36.0	116	---	---	---	---	---
EX-F5-4	GEI	EX-F5-4	4.0	8/12/1998	68.2	66.7	---	---	---	---	---
EX-F6-10	GEI	EX-F6-10	10.0	8/12/1998	926	503	---	---	---	---	---
EX-F7-1.5	GEI	EX-F7-1.5	1.5	8/12/1998	< 10.0	< 25.0	---	---	---	---	---
EX-F8-10	GEI	EX-F8-10	10.0	8/12/1998	13.8	45.5	---	---	---	---	---
EX-F9-5	GEI	EX-F9-5	5.0	8/12/1998	187	208	---	---	---	---	---
EX-F10-5	GEI	EX-F10-5	5.0	8/12/1998	54.5	153	---	---	---	---	---
EX-F11-1.5	GEI	EX-F11-1.5	1.5	8/12/1998	< 10.0	< 25.0	---	---	---	---	---
EX-F12-2.5	GEI	EX-F12-2.5	2.5	8/12/1998	26.4	32.3	---	---	---	---	---
EX-F13-1.5	GEI	EX-F13-1.5	1.5	8/12/1998	34.9	93.5	---	---	---	---	---
EX-F16-12	GEI	EX-F16-12	12.0	9/23/1998	160	236	---	---	---	---	---
Excavation H - Sediment along Eastern Property Boundary											
H1-1.5	GEI	H1-1.5	1.5	8/25/1998	14.0	134	---	---	---	---	---
H2-1.5	GEI	H2-1.5	1.5	8/25/1998	22.2	109	---	---	---	---	---
EX-H3-1.0	GEI	EX-H3-1.0	1.0	9/23/1998	54.3	171	---	---	---	---	---
Slag Excavation											
EX-S1-1.5	GEI	EX-S1-1.5	1.5	8/11/1998	45.0	96.9	---	---	---	---	---
MTCA Method A Cleanup Levels for Soil ⁵					2,000	2,000	30/100 ⁶	0.03	7	6	9

Table 2
Soil Analytical Results for TPH and BTEX
Comfort Suites Property
Tukwila, Washington
Farallon PN: 2812-001

Sample Location	Sampled By	Sample Identification	Sample Depth (feet) ¹	Sample Date	Analytical Results (milligrams per kilogram)						
					DRO ²	ORO ²	GRO ³	Benzene ⁴	Toluene ⁴	Ethylbenzene ⁴	Xylenes ⁴
Soil Placed Off the Site in City of Tukwila Property											
GWS-1	GEI	GWS-1	NA	9/23/1998	53.2	254	---	---	---	---	---
FFC-1	GEI	FFC-1	NA	12/21/1998	48.2	176	---	---	---	---	---
FFC-2	GEI	FFC-2	NA	12/21/1998	41.7	247	---	---	---	---	---
FFC-3	GEI	FFC-3	NA	12/21/1998	35.0	149	---	---	---	---	---
FFC-4	GEI	FFC-4	NA	12/21/1998	82.2	631	---	---	---	---	---
FFC-5	GEI	FFC-5	NA	12/21/1998	< 10.0	46.2	---	---	---	---	---
FFC-6	GEI	FFC-6	NA	12/21/1998	55.9	256	---	---	---	---	---
2022 Subsurface Investigation											
FMW-01	Farallon	FMW-01-2.5	2.5	5/12/2022	26 N	270	---	---	---	---	---
FMW-02	Farallon	FMW-02-2.5	2.5	5/12/2022	35 N	280	---	---	---	---	---
FMW-03	Farallon	FMW-03-5.0	5.0	5/12/2022	< 26	< 64	---	---	---	---	---
FMW-04	Farallon	FMW-04-2.5	2.5	5/12/2022	31 N	380	---	---	---	---	---
MTCA Method A Cleanup Levels for Soil ⁵					2,000	2,000	30/100 ⁶	0.03	7	6	9

NOTES:

Results in **bold** and highlighted **yellow** denote concentrations exceeding applicable cleanup levels.

< denotes analyte not detected at or exceeding the laboratory reporting limit listed.

— denotes sample not analyzed.

¹Depth in feet below ground surface.

²Analyzed by Washington Department of Ecology Method WDOE-TPH-D or Northwest Method NWTPH-Dx.

³Analyzed by Washington Department of Ecology Method WDOE-TPH-D or Northwest Method NWTPH-Gx.

⁴Analyzed by U.S. Environmental Protection Agency Method 8020/8021/8240.

⁵Washington State Model Toxics Control Act Cleanup Regulation (MTCA) Method A Soil Cleanup Levels for Unrestricted Land Uses, Table 740-1 of Section 900 of Chapter 173-340 of the Washington Administrative Code, as revised 2013.

⁶Cleanup level is 30 milligrams per kilogram if benzene is detected and 100 milligrams per kilogram if benzene is not detected.

BTEX = benzene, toluene, ethylbenzene and xylenes

DRO = total petroleum hydrocarbons (TPH) as diesel-range organics

Farallon = Farallon Consulting, L.L.C.

GEI = GeoEngineers, Inc.

GRO = TPH as gasoline-range organics

N = hydrocarbons in the oil-range are impacting the diesel-range result

NA = not applicable

ORO = TPH as oil-range organics

UST = underground storage tank

Table 3
Soil Analytical Results for PAHs
Comfort Suites Property
Tukwila, Washington
Farallon PN: 2812-001

Sample Location	Sampled By	Sample Identification	Sample Depth (feet) ¹	Sample Date	Analytical Results (milligrams per kilogram) ²																			
					Non-Carcinogenic PAHs												Carcinogenic PAHs							
					Naphthalene	2-Methylnaphthalene	Total Naphthalenes ³	Acenaphthene	Acenaphthylene	Anthracene	Benzo(a,h,i)Perylene	Fluoranthene	Fluorene	Phenanthrene	Pyrene	Benzo(a)Pyrene	Benzo(a)Anthracene	Benzo(b)Fluoranthene	Benzo(k)Fluoranthene	Chrysene	Dibenz(a,b)Anthracene	Indeno(1,2,3-cd)Pyrene	Total cPAHs TEC ^{4,5}	
1997 Phase II Environmental Site Assessment																								
HA-3	GEI	HA-3	0.5	10/6/1997	< 0.0100	< 0.0100	< 0.0200	< 0.0100	< 0.0100	< 0.0100	0.0601	0.0395	< 0.0100	0.0232	0.0635	0.0137	0.0137	0.0249	< 0.0100	0.0266	< 0.0100	0.0275	0.022	
HA-4	GEI	HA-4	0.5	10/6/1997	0.216	2.82	3.036	< 0.0800	< 0.0800	0.303	0.483	1.04	0.169	0.652	0.897	0.250	0.553	0.285	0.111	0.501	< 0.0800	0.140	0.370	
HA-5	GEI	HA-5	0.5	10/6/1997	< 0.0200	< 0.0200	< 0.0400	< 0.0200	< 0.0200	< 0.0200	0.470	0.0235	< 0.0200	< 0.0200	0.0587	0.0436	< 0.0200	0.0553	< 0.0200	< 0.0200	< 0.0200	0.101	0.062	
HA-6	GEI	HA-6	0.5	10/6/1997	< 0.0100	< 0.0100	< 0.0200	< 0.0100	0.0168	0.0124	0.0878	< 0.0100	< 0.0100	0.0154	0.105	0.0241	< 0.0100	0.0256	< 0.0100	0.0446	< 0.0100	0.0709	0.036	
SP-25	GEI	SP-25	1.0	10/6/1997	< 0.167	< 0.167	< 0.334	< 0.167	< 0.167	< 0.167	< 0.167	< 0.167	< 0.167	< 0.167	< 0.167	< 0.167	< 0.167	< 0.167	< 0.167	< 0.167	< 0.167	< 0.167	< 0.13	
1998 UST Removals and Supplemental Subsurface Investigation																								
UST No. 4 - Gasoline UST																								
EX-G3-7	GEI	EX-G3-7	7.0	2/25/1998	14.0	---	14.0	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	
1998-1999 Cleanup Action																								
Excavation F - Sediment Excavation/Creosote-Impacted Soil																								
EX-F13-12	GEI	EX-F13-12	12.0	10/8/1998	< 0.0200	---	< 0.0200	< 0.0200	< 0.0200	< 0.0200	< 0.0200	< 0.0200	< 0.0200	< 0.0200	< 0.0200	< 0.0200	< 0.0200	< 0.0200	< 0.0200	< 0.0200	< 0.0200	< 0.0200	< 0.015	
EX-F14-15	GEI	EX-F14-15	15.0	10/8/1998	< 0.0200	---	< 0.0200	< 0.0200	< 0.0200	< 0.0200	< 0.0200	< 0.0200	< 0.0200	< 0.0200	< 0.0200	< 0.0200	< 0.0200	< 0.0200	< 0.0200	< 0.0200	< 0.0200	< 0.0200	< 0.015	
EX-F15-12	GEI	EX-F15-12	12.0	10/8/1998	< 0.0200	---	< 0.0200	< 0.0200	< 0.0200	< 0.0200	0.0291	0.0200	< 0.0200	< 0.0200	0.0655	0.0236	< 0.0200	0.0218	< 0.0200	< 0.0200	< 0.0200	0.0218	0.031	
EX-F16-12	GEI	EX-F16-12	12.0	9/23/1998	0.171	---	0.171	0.161	0.834	0.417	1.63	3.25	0.256	1.51	4.77	2.41	1.51	2.82	0.768	1.50	0.218	1.73	3.10	
EX-F17-15	GEI	EX-F17-15	15.0	12/7/1998	0.0653	---	0.0653	< 0.0500	0.178	0.0914	0.270	0.235	< 0.0500	0.178	0.400	0.231	0.178	0.244	0.0609	0.144	< 0.0500	0.270	0.310	
EX-F18-12	GEI	EX-F18-12	12.0	12/7/1998	< 0.0500	---	< 0.0500	< 0.0500	< 0.0500	< 0.0500	< 0.0500	< 0.0500	< 0.0500	< 0.0500	< 0.0500	< 0.0500	< 0.0500	< 0.0500	< 0.0500	< 0.0500	< 0.0500	< 0.0500	< 0.038	
EX-F19-18	GEI	EX-F19-18	18.0	1/21/1999	< 0.0100	---	< 0.0100	< 0.0100	< 0.0100	< 0.0100	< 0.0100	< 0.0100	< 0.0100	0.0234	< 0.0100	< 0.0100	< 0.0100	< 0.0100	< 0.0100	< 0.0100	< 0.0100	< 0.0100	< 0.0076	
Excavation I - Creosote-Treated Timbers in Detention Pond Excavation																								
EX-I1-5	GEI	EX-I1-5	5.0	10/8/1998	< 0.0500	---	< 0.0500	< 0.0500	< 0.0500	< 0.0500	0.0755	< 0.0500	0.0666	0.102	< 0.0500	< 0.0500	0.0533	< 0.0500	< 0.0500	< 0.0500	< 0.0500	< 0.0500	0.041	
MTCA Method A Cleanup Level for Soil ⁶							5	4,800 ⁷	NE	24,000 ⁷	NE	3,200 ⁷	3,200 ⁷	NE	2,400 ⁷								0.1	
MTCA Method B Levels for Soil Protective of Groundwater Vadose @ 13 Degrees Celsius ⁸					4.5	NE	NE	49	NE	1,100	NE	630	51	NE	330								3.9	
MTCA Method B Levels for Soil Protective of Groundwater Saturated ⁷					0.24	NE	NE	2.5	NE	57	NE	32	2.6	NE	16								0.2	

NOTES:

Results in **bold** and highlighted **yellow** denote concentrations exceeding applicable cleanup levels.

< denotes analyte not detected at or exceeding the reporting limit listed.

¹Depth in feet below ground surface.

²Analyzed by U.S. Environmental Protection Agency Method 8270.

³Sum of naphthalene and 2-methylnaphthalene.

⁴Total cPAHs derived using the total toxicity equivalency method in Section 708(8) of Chapter 173-340 of the Washington Administrative Code.

⁵For concentrations reported at less than the laboratory reporting limit, half the reporting limit was used to calculate the TEC.

⁶Washington State Model Toxics Control Act Cleanup Regulation (MTCA) Method A Soil Cleanup Levels for Unrestricted Land Uses, Table 740-1 of Section 900 of Chapter 173-340 of the Washington Administrative Code, as revised 2013, unless otherwise noted.

⁷Washington State Cleanup Levels and Risk Calculations (CLARC) under Washington State MTCA, Standard Method B Formula Values for Soil from CLARC Master spreadsheet, <https://ecology.wa.gov/Regulations-Permits/Guidance-technical-assistance/Contamination-clean-up-tools/CLARC>

cPAHs = carcinogenic polycyclic aromatic hydrocarbons

GEI = GeoEngineers, Inc.

NA = not applicable

NE = not established

PAHs = polycyclic aromatic hydrocarbons

TEC = toxic equivalent concentration

Table 4
Soil Analytical Results for PCBs
Comfort Suites Property
Tukwila, Washington
Farallon PN: 2812-001

Sample Location	Sampled By	Sample Identification	Sample Depth (feet) ¹	Sample Date	Analytical Results (milligrams per kilogram) ²									
					Aroclor 1016	Aroclor 1221	Aroclor 1232	Aroclor 1242	Aroclor 1248	Aroclor 1254	Aroclor 1260	Aroclor 1262	Aroclor 1268	Total PCBs
1997 Phase II Environmental Site Assessment														
HA-1	GEI	HA-1	0.5	10/6/1997	< 0.0500	< 0.0500	< 0.0500	< 0.0500	< 0.0500	< 0.0500	< 0.0500	< 0.0500	< 0.0500	< 0.45
HA-2	GEI	HA-2	0.5	10/6/1997	< 0.0500	< 0.0500	< 0.0500	< 0.0500	< 0.0500	< 0.0500	< 0.0500	< 0.0500	< 0.0500	< 0.45
SP-15	GEI	SP-15-1.0	1.0	10/3/1997	< 0.0500	< 0.0500	< 0.0500	< 0.0500	< 0.0500	< 0.0500	< 0.0500	< 0.0500	< 0.0500	< 0.45
SP-21	GEI	SP-21-1.0	1.0	10/3/1997	< 0.0500	< 0.0500	< 0.0500	< 0.0500	< 0.0500	< 0.0500	< 0.0500	< 0.0500	< 0.0500	< 0.45
MTCA Method A Cleanup Level for Soil ³														1.0

NOTES:

< denotes analyte not detected at or exceeding the reporting limit listed.

¹Depth in feet below ground surface.

²Analyzed by U.S. Environmental Protection Agency Method 8081.

³Washington State Model Toxics Control Act Cleanup Regulation (MTCA) Method A Soil Cleanup Levels for Unrestricted Land Uses, Table 740-1 of Section 900 of Chapter 173-340 of the Washington Administrative Code, as revised 2013.

GEI = GeoEngineers, Inc.

PCB = polychlorinated biphenyl

Table 5
Soil Analytical Results for Organochlorine Pesticides
Comfort Suites Property
Tukwila, Washington
Farallon PN: 2812-001

Sample Location	Sampled By	Sample Identification	Sample Depth (feet) ¹	Sample Date	Analytical Results (milligrams per kilogram) ²											
					Aldrin	alpha-BHC	beta-BHC	delta-BHC	gamma-BHC (Lindane)	alpha-Chlordane	gamma-Chlordane	Chlordane	4,4'-DDD	4,4'-DDE	4,4'-DDT	Dieldrin
1997 Phase II Environmental Site Assessment																
HA-1	GEI	HA-1	0.5	10/6/1997	< 0.00100	< 0.000500	< 0.000900	< 0.000600	< 0.00100	< 0.000800	0.00169	< 0.00100	0.00553	< 0.00100	< 0.00100	< 0.00200
HA-2	GEI	HA-2	0.5	10/6/1997	< 0.00100	< 0.000500	< 0.000900	< 0.000600	< 0.00100	0.0496	0.0464	0.738	< 0.00100	< 0.00100	0.00936	0.00516
1998-1999 Cleanup Action																
Excavation A - Former Pesticide Storage Area																
EX-A1-1.5	GEI	EX-A1-1.5	1.5	5/5/1998	< 0.0020	< 0.0020	< 0.0020	< 0.0020	< 0.0020	---	---	< 0.0039	< 0.0039	< 0.0039	< 0.0039	< 0.0039
EX-A2-1.5	GEI	EX-A2-1.5	1.5	5/5/1998	< 0.0019	< 0.0019	< 0.0019	< 0.0019	< 0.0019	---	---	< 0.0038	< 0.0038	< 0.0038	< 0.0038	< 0.0038
EX-A3-1.5	GEI	EX-A3-1.5	1.5	5/5/1998	< 0.0018	< 0.0018	< 0.0018	< 0.0018	< 0.0018	---	---	< 0.0036	< 0.0036	< 0.0036	< 0.0036	< 0.0036
EX-A4-0.75	GEI	EX-A4-0.75	0.75	5/5/1998	< 0.0020	< 0.0020	< 0.0020	< 0.0020	< 0.0020	---	---	< 0.0040	< 0.0040	< 0.0040	< 0.0040	< 0.0040
EX-A5-0.75	GEI	EX-A5-0.75	0.75	5/5/1998	< 0.0019	< 0.0019	< 0.0019	< 0.0019	< 0.0019	---	---	< 0.0037	< 0.0037	< 0.0037	< 0.0037	< 0.0037
MTCA Cleanup Levels for Soil ³					0.059	0.16	0.56	NE	0.01 ⁴	40	40	2.9	2.4	2.9	3 ⁴	0.063

NOTES:

< denotes analyte not detected at or exceeding the reporting limit listed.

--- denotes sample not analyzed.

¹Depth in feet below ground surface.

²Analyzed by U.S. Environmental Protection Agency Method 8081.

³Washington State Cleanup Levels and Risk Calculations (CLARC) under Washington State Model Toxics Control Act Cleanup Regulation (MTCA), Standard Method B Formula Values for Soil from CLARC Master spreadsheet, <https://ecology.wa.gov/Regulations-Permits/Guidance-technical-assistance/Contamination-clean-up-tools/CLARC>, unless otherwise noted.

⁴Washington State MTCA Method A Soil Cleanup Levels for Unrestricted Land Uses, Table 740-1 of Section 900 of Chapter 173-340 of the Washington Administrative Code, as revised 2013.

BHC = hexachlorocyclohexane
DDD = dichlorodiphenyldichloroethane
DDE = dichlorodiphenyldichloroethylene
DDT = dichlorodiphenyltrichloroethane
GEI = GeoEngineers, Inc.
NE = not established

Table 5
Soil Analytical Results for Organochlorine Pesticides
Comfort Suites Property
Tukwila, Washington
Farallon PN: 2812-001

Sample Location	Sampled By	Sample Identification	Sample Depth (feet) ¹	Sample Date	Analytical Results (milligrams per kilogram) ²									
					Endosulfan I	Endosulfan II	Endosulfan Sulfate	Endrin	Endrin Aldehyde	Endrin Ketone	Heptachlor	Heptachlor Epoxide	Methoxychlor	Toxaphene
1997 Phase II Environmental Site Assessment														
HA-1	GEI	HA-1	0.5	10/6/1997	< 0.00100	< 0.00200	< 0.00100	< 0.00200	< 0.00200	--	< 0.00100	< 0.00100	< 0.00400	< 0.0500
HA-2	GEI	HA-2	0.5	10/6/1997	< 0.00100	< 0.00200	< 0.00100	< 0.00200	< 0.00200	--	< 0.00100	< 0.00100	< 0.00400	< 0.0500
1998-1999 Cleanup Action														
Excavation A - Former Pesticide Storage Area														
EX-A1-1.5	GEI	EX-A1-1.5	1.5	5/5/1998	< 0.0020	< 0.0039	< 0.0039	< 0.0039	< 0.0039	< 0.0039	< 0.0020	< 0.0020	< 0.20	< 0.39
EX-A2-1.5	GEI	EX-A2-1.5	1.5	5/5/1998	< 0.0019	< 0.0038	< 0.0038	< 0.0038	< 0.0038	< 0.0038	< 0.0019	< 0.0019	< 0.019	< 0.038
EX-A3-1.5	GEI	EX-A3-1.5	1.5	5/5/1998	< 0.0018	< 0.0036	< 0.0036	< 0.0036	< 0.0036	< 0.0036	< 0.0018	< 0.0018	< 0.18	< 0.36
EX-A4-0.75	GEI	EX-A4-0.75	0.75	5/5/1998	< 0.0020	< 0.0040	< 0.0040	< 0.0040	< 0.0040	< 0.0040	< 0.0020	< 0.0020	< 0.20	< 0.40
EX-A5-0.75	GEI	EX-A5-0.75	0.75	5/5/1998	< 0.0019	< 0.0037	< 0.0037	< 0.0037	< 0.0037	< 0.0037	< 0.0019	< 0.0019	< 0.19	< 0.37
MTCA Cleanup Levels for Soil ³					480		480	24	NE	NE	0.22	0.11	400	0.91

NOTES:

< denotes analyte not detected at or exceeding the reporting limit listed.

--- denotes sample not analyzed.

¹Depth in feet below ground surface.

²Analyzed by U.S. Environmental Protection Agency Method 8081.

³Washington State Cleanup Levels and Risk Calculations (CLARC) under Washington State Model Toxics Control Act Cleanup Regulation (MTCA), Standard Method B Formula Values for Soil from CLARC Master spreadsheet, <https://ecology.wa.gov/Regulations-Permits/Guidance-technical-assistance/Contamination-clean-up-tools/CLARC>, unless otherwise noted.

⁴Washington State MTCA Method A Soil Cleanup Levels for Unrestricted Land Uses, Table 740-1 of Section 900 of Chapter 173-340 of the Washington Administrative Code, as revised 2013.

BHC = hexachlorocyclohexane
 DDD = dichlorodiphenyldichloroethane
 DDE = dichlorodiphenyldichloroethylene
 DDT = dichlorodiphenyltrichloroethane
 GEI = GeoEngineers, Inc.
 NE = not established

Table 6
Soil Analytical Results for Metals
Comfort Suites Property
Tukwila, Washington
Farallon PN: 2812-001

Sample Location	Sampled By	Sample Identification	Sample Depth (feet) ¹	Sample Date	Analytical Results (milligrams per kilogram) ²													
					Antimony	Arsenic	Barium	Beryllium	Cadmium	Chromium	Copper	Lead	Mercury	Nickel	Selenium	Silver	Thallium	Zinc
1997 Phase II Environmental Site Assessment																		
HA-3	GEI	HA-3	0.5	10/6/1997	< 5.00	< 10.0	48.0	< 0.250	0.715	23.6	41.2	127	0.119	37.8	< 7.50	< 1.00	< 10.0	138
HA-4	GEI	HA-4	0.5	10/6/1997	< 5.00	< 10.0	36.0	< 0.250	0.664	12.6	29.2	146	0.0535	18.0	< 7.50	< 1.00	< 10.0	120
HA-5	GEI	HA-5	0.5	10/6/1997	< 5.00	< 10.0	58.3	< 0.250	< 0.250	24.0	28.1	71.8	0.0841	71.5	< 7.50	< 1.00	< 10.0	90.9
HA-9	GEI	HA-9	0.5	10/6/1997	< 5.00	< 10.0	19.1	< 0.250	< 0.250	18.9	62.3	15.1	0.0628	23.7	< 7.50	< 1.00	< 10.0	55.2
HA-10	GEI	HA-10	0.5	10/6/1997	< 5.00	< 10.0	63.4	< 0.250	< 0.250	14.2	24.9	< 10.0	0.103	11.9	< 7.50	< 1.00	< 10.0	60.2
SP-4	GEI	SP-4-8	8.0	10/2/1997	< 5.00	< 10.0	49.0	< 0.250	< 0.250	34.3	10.6	10.4	< 0.0500	22.5	< 7.50	< 1.0	< 10.0	37.5
SP-7	GEI	SP-7-30	30.0	10/2/1997	< 5.00	< 10.0	281	< 0.250	< 0.250	1,150	77.4	134	< 0.0500	131	< 7.50	2.17	< 10.0	103
SP-9	GEI	SP-9-2.0	2.0	10/3/1997	< 5.00	< 10.0	42.9	< 0.250	< 0.250	17.0	23.1	26.0	0.0842	17.9	< 7.50	< 1.00	< 10.0	55.7
SP-10	GEI	SP-10	0.5	10/6/1997	< 5.00	< 10.0	49.4	< 0.250	< 0.250	41.0	22.8	19.1	0.0814	18.2	< 7.50	< 1.00	< 10.0	47.8
SP-11	GEI	SP-11-3.0	3.0	10/3/1997	< 5.00	< 10.0	31.1	< 0.250	< 0.250	12.5	13.8	< 10.0	0.0645	10.0	< 7.50	< 1.00	< 10.0	30.1
SP-15	GEI	SP-15-1.0	1.0	10/3/1997	< 5.00	< 10.0	38.8	< 0.250	< 0.250	15.4	17.8	15.7	0.0860	15.5	< 7.50	< 1.00	< 10.0	38.6
SP-21	GEI	SP-21-1.0	1.0	10/3/1997	< 5.00	< 10.0	40.6	< 0.250	< 0.250	9.63	13.7	18.2	0.0538	8.94	< 7.50	< 1.00	< 10.0	33.9
SP-23	GEI	SP-23-0.5	0.5	10/3/1997	< 5.00	30.4	---	< 0.250	< 0.250	196	290	85.5	< 0.0500	2,720	< 7.50	< 1.00	< 10.0	46.0
SP-25	GEI	SP-25	1.0	10/6/1997	< 5.00	< 10.0	48.1	< 0.250	< 0.250	17.6	12.1	< 10.0	0.0575	22.6	< 7.50	< 1.00	< 10.0	27.5
1998 UST Removals and Supplemental Subsurface Investigation																		
98012301-1	GEI	98012301-1-8	8.0	11/20/1997	---	7.69	---	---	---	---	---	168	---	---	---	---	---	---
98012301-2	GEI	98012301-2-8	8.0	11/20/1997	---	4.5	---	---	---	---	---	6.14	---	---	---	---	---	---
98012301-3	GEI	98012301-3-8	8.0	11/20/1997	---	3.67	---	---	---	---	---	6.31	---	---	---	---	---	---
1998-1999 Cleanup Action																		
Excavation B - Former Auto Repair Shop																		
EX-B1-0.5	GEI	EX-B1-0.5	0.5	5/5/1998	< 3.0	4.2	52	< 0.30	< 0.30	8.6	16	15	< 0.11	8.7	< 0.60	< 0.61	< 0.30	84
EX-B2-1.0	GEI	EX-B2-1.0	1.0	5/5/1998	< 3.4	11	96	< 0.34	0.40	13	28	110	0.27	11	< 0.69	< 0.69	< 0.35	110
EX-B3-1.0	GEI	EX-B3-1.0	1.0	5/5/1998	< 3.2	3.8	58	< 0.32	< 0.32	11	20	25	< 0.11	9.5	< 0.64	< 0.63	< 0.32	55
EX-B4-1.0	GEI	EX-B4-1.0	1.0	5/5/1998	< 3.5	13	400	0.59	1.00	30	51	570	0.15	16	< 1.8	< 0.71	< 0.35	180
EX-B5-0.5	GEI	EX-B5-0.5	0.5	5/5/1998	< 3.3	10	300	0.33	0.87	15	47	210	0.13	21	< 0.64	< 0.67	< 0.32	290
Excavation E - Chromium Hot Spot																		
EX-E1-15.5	GEI	EX-E1-15.5	15.5	10/8/1998	---	---	---	---	---	95.9	---	---	---	---	---	---	---	---
EX-E2-14.0	GEI	EX-E2-14.0	14.0	10/8/1998	---	---	---	---	---	97.1	---	---	---	---	---	---	---	---
MTCA Cleanup Levels for Soil ³					32 ⁴	20	16,000 ⁴	160 ⁴	2	2,000	3,200 ⁴	250	2	1,600 ⁴	400 ⁴	400 ⁴	0.80 ⁴	24,000 ⁴
MTCA Method B Cleanup Levels for Soil Protective of Groundwater Vadose @ 13 Degrees Celsius ⁵					5.4	2.9	1,600	63	0.69	480,000	280	3,000	2.1	130	5.2	14	0.23	6,000
MTCA Method B Cleanup Levels for Soil Protective of Groundwater Saturated ⁵					0.27	0.15	83	3.2	0.035	24,000	14	150	0.1	6.5	0.26	0.69	0.011	300

Table 6
Soil Analytical Results for Metals
Comfort Suites Property
Tukwila, Washington
Farallon PN: 2812-001

Sample Location	Sampled By	Sample Identification	Sample Depth (feet) ¹	Sample Date	Analytical Results (milligrams per kilogram) ²													
					Antimony	Arsenic	Barium	Beryllium	Cadmium	Chromium	Copper	Lead	Mercury	Nickel	Selenium	Silver	Thallium	Zinc
Excavation F - Sediment Excavation/Creosote-Impacted Soil																		
EX-F6-10	GEI	EX-F6-10	10.0	8/12/1998	< 0.500	8.68	---	< 0.500	< 0.500	10.6	21.6	41.9	0.128	34.7	< 0.500	1.16	< 0.500	37.5
EX-F13-12	GEI	EX-F13-12	12.0	10/8/1998	< 0.500	5.82	---	< 0.500	< 0.500	38.4	38.0	40.8	0.116	37.6	< 0.500	< 0.500	< 0.500	65.7
EX-F14-15	GEI	EX-F14-15	15.0	10/8/1998	< 0.500	5.45	---	< 0.500	< 0.500	12.1	30.5	16.7	0.103	11.3	< 0.500	< 0.500	< 0.500	54.2
EX-F15-12	GEI	EX-F15-12	12.0	10/8/1998	< 0.500	3.65	---	< 0.500	< 0.500	22.8	40.0	23.9	< 0.100	25.7	< 0.500	< 0.500	< 0.500	46.7
EX-F16-12	GEI	EX-F16-12	12.0	9/23/1998	< 0.500	3.14	---	< 0.500	< 0.500	25.2	28.9	8.66	0.128	24.2	< 0.500	< 0.500	< 0.500	43.0
Excavation I - Creosote-Treated Timbers in Detention Pond Excavation																		
EX-I1-5	GEI	EX-I1-5	5.0	10/8/1998	< 0.500	3.70	---	< 0.500	0.543	22.9	25.3	24.5	< 0.100	25.3	< 0.500	< 0.500	< 0.500	45.5
Slag Excavation																		
EX-S3-2.0	GEI	EX-S3-2.0	2.0	8/15/1998	< 0.500	2.27	56.8	< 0.500	< 0.500	22.0	18.8	23.6	< 0.100	27.6	< 0.500	< 0.500	< 0.500	38.5
2021 Phase II Environmental Site Assessment																		
B-1	AEG	B1-21	21.0	2/19/2021	---	14	---	---	< 1.0	8.1	---	9.0	< 0.5	---	---	---	---	---
B-2	AEG	B2-21	21.0	2/19/2021	---	12	---	---	< 1.0	< 5.0	---	7.8	< 0.5	---	---	---	---	---
B-3	AEG	B3-21	21.0	2/19/2021	---	5.6	---	---	< 1.0	< 5.0	---	< 5.0	< 0.5	---	---	---	---	---
B-4	AEG	B4-21	21.0	2/19/2021	---	< 5.0	---	---	< 1.0	< 5.0	---	< 5.0	< 0.5	---	---	---	---	---
B-5	AEG	B5-6	6.0	2/19/2021	---	31	---	---	1.1	28	---	150	< 0.5	---	---	---	---	---
MTCA Cleanup Levels for Soil ³					32 ⁴	20	16,000 ⁴	160 ⁴	2	2,000	3,200 ⁴	250	2	1,600 ⁴	400 ⁴	400 ⁴	0.80 ⁴	24,000 ⁴
MTCA Method B Cleanup Levels for Soil Protective of Groundwater Vadose @ 13 Degrees Celsius ⁵					5.4	2.9	1,600	63	0.69	480,000	280	3,000	2.1	130	5.2	14	0.23	6,000
MTCA Method B Cleanup Levels for Soil Protective of Groundwater Saturated ⁵					0.27	0.15	83	3.2	0.035	24,000	14	150	0.1	6.5	0.26	0.69	0.011	300

Table 6
Soil Analytical Results for Metals
Comfort Suites Property
Tukwila, Washington
Farallon PN: 2812-001

Sample Location	Sampled By	Sample Identification	Sample Depth (feet) ¹	Sample Date	Analytical Results (milligrams per kilogram) ²													
					Antimony	Arsenic	Barium	Beryllium	Cadmium	Chromium	Copper	Lead	Mercury	Nickel	Selenium	Silver	Thallium	Zinc
2022 Subsurface Investigation																		
FMW-01	Farallon	FMW-01-16.0	16.0	5/12/2022	---	< 13	---	---	< 0.67	18	---	< 6.7	< 0.34	---	---	---	---	---
FMW-02	Farallon	FMW-02-18.0	18.0	5/12/2022	---	< 12	---	---	< 0.61	14	---	< 6.1	< 0.31	---	---	---	---	---
FMW-02	Farallon	FMW-02-7.0	7.0	5/12/2022	---	< 12	---	---	< 0.59	32	---	27	< 0.29	---	---	---	---	---
FMW-03	Farallon	FMW-03-17.0	17.0	5/12/2022	---	< 13	---	---	< 0.64	6.1	---	< 6.4	< 0.32	---	---	---	---	---
FMW-04	Farallon	FMW-04-15.0	15.0	5/12/2022	---	< 14	---	---	< 0.68	15	---	< 6.8	< 0.34	---	---	---	---	---
MTCA Cleanup Levels for Soil ³					32 ⁴	20	16,000 ⁴	160 ⁴	2	2,000	3,200 ⁴	250	2	1,600 ⁴	400 ⁴	400 ⁴	0.80 ⁴	24,000 ⁴
MTCA Method B Cleanup Levels for Soil Protective of Groundwater Vadose @ 13 Degrees Celsius ⁵					5.4	2.9	1,600	63	0.69	480,000	280	3,000	2.1	130	5.2	14	0.23	6,000
MTCA Method B Cleanup Levels for Soil Protective of Groundwater Saturated ⁵					0.27	0.15	83	3.2	0.035	24,000	14	150	0.1	6.5	0.26	0.69	0.011	300

NOTES:

Results in **bold** and highlighted **yellow** denote concentrations exceeding applicable cleanup levels.

< denotes analyte not detected at or exceeding the laboratory reporting limit listed.

--- denotes sample not analyzed.

¹Depth in feet below ground surface.

²Analyzed by U.S. Environmental Protection Agency 6000/7000 series methods.

³Washington State Model Toxics Control Act Cleanup Regulation (MTCA) Method A Soil Cleanup Levels for Unrestricted Land Uses, Table 740-1 of Section 900 of Chapter 173-340 of the Washington Administrative Code, as amended 2013, unless otherwise noted.

⁴Washington State Department of Ecology Cleanup Levels and Risk Calculations under MTCA Standard Method B Formula Values for Soil (Unrestricted Land Use) - Direct Contact (Ingestion Only) and Leaching Pathway, <https://ecology.wa.gov/Regulations-Permits/Guidance-technical-assistance/Contamination-clean-up-tools/CLARC>

⁵Washington State Cleanup Levels and Risk Calculations under the MTCA Standard Method B Formula Values for Soil from CLARC Master spreadsheet, <https://ecology.wa.gov/Regulations-Permits/Guidance-technical-assistance/Contamination-clean-up-tools/CLARC>

AEG = Associated Environmental Group, LLC

Farallon = Farallon Consulting, L.L.C.

GEI = GeoEngineers, Inc.

UST = underground storage tank

Table 7
Groundwater Analytical Results for TPH and BTEX
Comfort Suites Property
Tukwila, Washington
Farallon PN: 2812-001

Sample Location	Sampled By	Sample Date	Sample Identification	Analytical Results (micrograms per liter)								
				DRO ¹	ORO ¹	TPH ¹ (C10 to C36)	GRO ²	Benzene ³	Toluene ³	Ethylbenzene ³	Xylenes ³	
Reconnaissance Boring Groundwater Samples												
SP-2	GEI	10/2/1997	SP-2	< 250	< 750	---	---	---	---	---	---	
SP-3	GEI	10/2/1997	SP-3	< 250	< 750	---	---	---	---	---	---	
SP-4	GEI	10/2/1997	SP-4	< 250	< 750	---	< 50.00	< 1.00	1.32	< 1.00	< 2.00	
SP-5	GEI	10/3/1997	SP-5	< 250	< 750	---	< 50.00	< 1.00	< 1.00	< 1.00	< 2.00	
SP-18	GEI	10/3/1997	SP-18	---	---	---	< 50.00	---	---	---	---	
SP-19	GEI	10/3/1997	SP-19	982	1,350	---	---	---	---	---	---	
SP-23	GEI	10/3/1997	SP-23	448	< 750	---	58.9	---	---	---	---	
Monitoring Well Groundwater Samples												
GCW-16	GEI	10/8/1997	GCW-16	< 250	< 500	---	< 50.00	---	---	---	---	
MW-20	GEI	4/1/2002	MW-20	< 130	< 250	---	< 50.0	< 1.00	< 1.00	< 1.00	< 3.00	
	GEI	10/3/2002	MW-20	< 130	< 250	---	< 50.0	< 1.00	< 1.00	< 1.00	< 3.00	
	GEI	4/14/2004	MW-20	< 130	< 250	---	< 50.0	< 1.00	< 1.00	< 1.00	< 3.00	
	GEI	7/15/2004	MW-20	< 130	< 250	---	< 50.0	< 1.00	< 1.00	< 1.00	< 3.00	
	GEI	11/4/2004	MW-20	< 130	< 250	---	< 50.0	< 1.00	< 1.00	< 1.00	< 3.00	
MW-21	GEI	1/19/2005	MW-20	< 130	< 250	---	< 50.0	< 1.00	< 1.00	< 1.00	< 3.00	
	GEI	4/1/2002	MW-21	< 130	< 250	---	< 50.0	< 1.00	< 1.00	< 1.00	< 3.00	
	GEI	10/3/2002	MW-21	< 130	< 250	---	< 50.0	< 1.00	< 1.00	< 1.00	< 3.00	
	GEI	4/14/2004	MW-21	< 130	< 250	---	< 50.0	< 1.00	< 1.00	< 1.00	< 3.00	
	GEI	7/15/2004	MW-21	< 130	< 250	---	< 50.0	< 1.00	< 1.00	< 1.00	< 3.00	
MW-22	GEI	11/4/2004	MW-21	< 130	< 250	---	< 50.0	< 1.00	< 1.00	< 1.00	< 3.00	
	GEI	1/19/2005	MW-21	< 130	< 250	---	< 50.0	< 1.00	< 1.00	< 1.00	< 3.00	
	GEI	4/1/2002	MW-22	< 130	< 250	---	< 50.0	< 1.00	< 1.00	< 1.00	< 3.00	
	GEI	10/3/2002	MW-22	< 130	< 250	---	< 50.0	< 1.00	< 1.00	< 1.00	< 3.00	
	GEI	4/14/2004	MW-22	< 130	< 250	---	< 50.0	< 1.00	< 1.00	< 1.00	< 3.00	
	GEI	7/15/2004	MW-22	< 130	< 250	---	< 50.0	< 1.00	< 1.00	< 1.00	< 3.00	
MW-22	GEI	11/4/2004	MW-22	< 130	< 250	---	< 50.0	< 1.00	< 1.00	< 1.00	< 3.00	
	GEI	1/19/2005	MW-22	< 130	< 250	---	< 50.0	< 1.00	< 1.00	< 1.00	< 3.00	
	Farallon	5/16/2022	MW-22-051622	---	---	< 270	---	---	---	---	---	
	MTCA Method A Cleanup Level for Groundwater ⁴				500	500	500	800/1,000 ⁵	5	1,000	700	1,000

Table 7
Groundwater Analytical Results for TPH and BTEX
Comfort Suites Property
Tukwila, Washington
Farallon PN: 2812-001

Sample Location	Sampled By	Sample Date	Sample Identification	Analytical Results (micrograms per liter)							
				DRO ¹	ORO ¹	TPH ¹ (C10 to C36)	GRO ²	Benzene ³	Toluene ³	Ethylbenzene ³	Xylenes ³
FMW-01	Farallon	5/16/2022	FMW-01-051622	---	---	490	---	---	---	---	---
FMW-02	Farallon	5/16/2022	FMW-02-051622	---	---	380	---	---	---	---	---
FMW-03	Farallon	5/16/2022	FMW-03-051622	---	---	< 280	---	---	---	---	---
FMW-04	Farallon	5/16/2022	FMW-04-051622	---	---	< 280	---	---	---	---	---
MTCA Method A Cleanup Level for Groundwater⁴				500	500	500	800/1,000⁵	5	1,000	700	1,000

NOTES:

Results in **bold** and highlighted **yellow** denote concentrations exceeding applicable cleanup levels.
 < denotes analyte not detected at or above the reporting limit listed.

--- denotes sample not analyzed.

¹Analyzed by Washington Department of Ecology Method WDOE-TPH-D or Northwest Method NWTPH-Dx.

²Analyzed by Washington Department of Ecology Method WDOE-TPH-D or Northwest Method NWTPH-Gx.

³Analyzed by U.S. Environmental Protection Agency Method 8021/8240.

⁴Washington State Model Toxics Control Act Cleanup Regulation Method A Cleanup Levels for Groundwater, Table 720-1 of Section 900 of Chapter 173-340 of the Washington Administrative Code, as amended 2013.

⁵Cleanup level is 800 micrograms per liter if benzene is detected and 1,000 micrograms per liter if benzene is not detected.

BTEX = benzene, toluene, ethylbenzene, and xylenes

DRO = total petroleum hydrocarbons (TPH) as diesel-range organics

Farallon = Farallon Consulting, L.L.C.

GEI = GeoEngineers, Inc.

GRO = TPH as gasoline-range organics

ORO = TPH as oil-range organics

TPH (C10 to C36) = total petroleum hydrocarbons quantified as a single product within the carbon range of C10 to C36 (diesel- and oil-range)

Table 8
Groundwater Analytical Results for Metals
Comfort Suites Property
Tukwila, Washington
Farallon PN: 2812-001

Sample Location	Sampled By	Sample Date	Sample Identification	Analytical Results (micrograms per liter) ¹																											
				Total Antimony	Dissolved Antimony	Total Arsenic	Dissolved Arsenic	Total Barium	Dissolved Barium	Total Beryllium	Dissolved Beryllium	Total Cadmium	Dissolved Cadmium	Total Chromium	Dissolved Chromium	Total Copper	Dissolved Copper	Total Lead	Dissolved Lead	Total Mercury	Dissolved Mercury	Total Nickel	Dissolved Nickel	Total Selenium	Dissolved Selenium	Total Silver	Dissolved Silver	Total Thallium	Dissolved Thallium	Total Zinc	Dissolved Zinc
Reconnaissance Boring Groundwater Samples																															
SP-2	GEI	10/2/1997	SP-2	< 100	---	< 4.00	---	< 10.0	---	< 5.00	---	< 5.00	---	< 10.0	---	< 30.0	---	< 2.00	---	< 1.00	---	< 30.0	---	< 5.00	---	< 20.0	---	< 200	---	< 20.0	---
SP-3	GEI	10/2/1997	SP-3	< 100	---	< 4.00	---	16.5	---	< 5.00	---	< 5.00	---	< 10.0	---	< 30.0	---	< 2.00	---	< 1.00	---	< 30.0	---	< 5.00	---	< 20.0	---	< 200	---	172	---
SP-4	GEI	10/2/1997	SP-4	< 100	---	69.4	---	19.6	---	< 5.00	---	< 5.00	---	< 10.0	---	< 30.0	---	< 2.00	---	< 1.00	---	< 30.0	---	< 5.00	---	< 20.0	---	< 200	---	< 20.0	---
SP-5	GEI	10/3/1997	SP-5	< 100	---	68.4	---	54.2	---	< 5.00	---	< 5.00	---	< 10.0	---	< 30.0	---	< 2.00	---	< 1.00	---	< 30.0	---	< 5.00	---	< 20.0	---	< 200	---	< 20.0	---
SP-18	GEI	10/3/1997	SP-18	---	---	---	---	---	---	---	---	---	---	---	---	---	---	< 100	---	---	---	---	---	---	---	---	---	---	---	---	---
SP-19	GEI	10/3/1997	SP-19	---	< 100	---	< 4.00	---	38.3	---	< 5.00	---	< 5.00	---	< 10.0	---	< 30.0	---	< 2.00	---	< 1.00	---	< 30.0	---	< 5.00	---	< 20.0	---	< 2.00	---	< 20.0
SP-23	GEI	10/3/1997	SP-23	---	< 100	---	< 4.00	---	13.3	---	< 5.00	---	< 5.00	---	< 10.0	---	< 30.0	---	< 2.00	---	< 1.00	---	59.4	---	< 5.00	---	< 20.0	---	< 2.00	---	< 20.0
B-1	AEG	2/19/2021	B1-W	---	---	150	---	---	---	---	---	4	---	21	---	---	---	150	---	< 0.100	---	---	---	---	---	---	---	---	---	---	---
B-2	AEG	2/19/2021	B2-W	---	---	47	---	---	---	---	---	10	---	< 5.0	---	---	---	79	---	< 0.100	---	---	---	---	---	---	---	---	---	---	---
B-3	AEG	2/19/2021	B3-W	---	---	88	---	---	---	---	---	4.1	---	13	---	---	---	84	---	< 0.100	---	---	---	---	---	---	---	---	---	---	---
B-4	AEG	2/19/2021	B4-W	---	---	72	---	---	---	---	---	1.5	---	< 5.0	---	---	---	15	---	< 0.100	---	---	---	---	---	---	---	---	---	---	---
Monitoring Well Groundwater Samples																															
GCW-16	GEI	10/8/1997	GCW-16	< 100	---	6.60	---	42.3	---	< 5.00	---	< 5.00	---	< 10.0	---	< 30.0	---	< 2.00	---	< 1.00	---	< 30.0	---	35.0	---	< 20.0	---	< 200	---	< 20.0	---
MW-19	GEI	11/20/1997	MW-19	---	< 100	---	< 4.00	---	---	---	< 5.00	---	< 5.00	---	< 10.0	---	< 30.0	---	< 2.00	---	< 1.00	---	< 30.0	---	< 5.00	---	< 20.0	---	< 2.00	---	< 20.0
	GEI	1/23/1998	MW-19	---	---	---	< 1.00	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
MW-20	GEI	4/1/2002	MW-20	---	---	33	25	---	---	---	---	---	---	< 10	< 10	---	---	7	< 4	---	---	< 20	< 20	---	---	---	---	---	---	---	
	GEI	10/3/2002	MW-20	---	---	72	55	---	---	---	---	---	---	< 10	< 10	---	---	< 3	< 3	---	---	< 20	< 20	---	---	---	---	---	---	---	
	GEI	4/14/2004	MW-20	---	---	20	< 5	---	---	---	---	---	---	9	< 7	---	---	7	< 3	---	---	20	< 20	---	---	---	---	---	---	---	
	GEI	7/15/2004	MW-20	---	---	40	26	---	---	---	---	---	---	62	< 7	---	---	58	< 3	---	---	400	< 20	---	---	---	---	---	---	---	
	GEI	11/4/2004	MW-20	---	---	20	11	---	---	---	---	---	---	76	10	---	---	68	17	---	---	100	20	---	---	---	---	---	---	---	
	GEI	1/19/2005	MW-20	---	---	15	10	---	---	---	---	---	---	45	< 7	---	---	20	< 3	---	---	20	< 20	---	---	---	---	---	---	---	
MW-21	GEI	4/1/2002	MW-21	---	---	170	77	---	---	---	---	---	---	10	< 10	---	---	< 4	< 4	---	---	< 20	< 20	---	---	---	---	---	---	---	
	GEI	10/3/2002	MW-21	---	---	62	41	---	---	---	---	---	---	< 10	< 10	---	---	< 3	< 3	---	---	< 20	< 20	---	---	---	---	---	---	---	
	GEI	4/14/2004	MW-21	---	---	21	9	---	---	---	---	---	---	100	< 7	---	---	4	< 3	---	---	< 20	< 20	---	---	---	---	---	---	---	
	GEI	7/15/2004	MW-21	---	---	19	10	---	---	---	---	---	---	59	< 7	---	---	17	< 3	---	---	< 20	< 20	---	---	---	---	---	---	---	
	GEI	11/4/2004	MW-21	---	---	21	21	---	---	---	---	---	---	15	7	---	---	7	5	---	---	< 20	< 20	---	---	---	---	---	---	---	
	GEI	1/19/2005	MW-21	---	---	50	15	---	---	---	---	---	---	< 7	< 7	---	---	3	< 3	---	---	< 20	< 20	---	---	---	---	---	---	---	
MW-22	GEI	4/1/2002	MW-22	---	---	5	< 5	---	---	---	---	---	---	< 10	< 10	---	---	< 4	< 4	---	---	< 20	< 20	---	---	---	---	---	---	---	
	GEI	10/3/2002	MW-22	---	---	12	6	---	---	---	---	---	---	< 10	< 10	---	---	< 3	< 3	---	---	< 20	< 20	---	---	---	---	---	---	---	
	GEI	4/14/2004	MW-22	---	---	9	< 5	---	---	---	---	---	---	10	< 7	---	---	9	< 3	---	---	< 20	< 20	---	---	---	---	---	---	---	
	GEI	7/15/2004	MW-22	---	---	15	7	---	---	---	---	---	---	33	< 7	---	---	30	< 3	---	---	< 20	< 20	---	---	---	---	---	---	---	
	GEI	11/4/2004	MW-22	---	---	12	10	---	---	---	---	---	---	22	< 7	---	---	17	14	---	---	20	< 20	---	---	---	---	---	---	---	
	GEI	1/19/2005	MW-22	---	---	6	< 5	---	---	---	---	---	---	10	< 7	---	---	17	< 3	---	---	30	< 20	---	---	---	---	---	---	---	
Farallon	5/16/2022	MW-22-051622	---	---	---	4.5	---	---	---	---	---	---	< 4.0	---	< 10	---	---	---	< 1.0	---	< 0.50	---	---	---	---	---	---	---	---	---	
FMW-01	Farallon	5/16/2022	FMW-01-051622	---	---	---	64	---	---	---	---	---	< 4.0	---	< 10	---	---	---	< 1.0	---	< 0.50	---	---	---	---	---	---	---	---	---	---
FMW-02	Farallon	5/16/2022	FMW-02-051622	---	---	---	66	---	---	---	---	---	< 4.0	---	< 10	---	---	---	< 1.0	---	< 0.50	---	---	---	---	---	---	---	---	---	---
FMW-03	Farallon	5/16/2022	FMW-03-051622	---	---	---	6.8	---	---	---	---	---	< 4.0	---	< 10	---	---	---	< 1.0	---	< 0.50	---	---	---	---	---	---	---	---	---	---
FMW-04	Farallon	5/16/2022	FMW-04-051622	---	---	---	16	---	---	---	---	---	< 4.0	---	< 10	---	---	---	< 1.0	---	< 0.50	---	---	---	---	---	---	---	---	---	---
MTCA Cleanup Levels for Groundwater ²				6.4 ³		5		3,200 ³		32 ³		5		50		640 ³		15		2		320 ³		80 ³		80 ³		0.16 ³		4,800 ³	

NOTES:

Results in **bold** and highlighted **yellow** denote concentrations exceeding applicable cleanup levels.

< denotes analyte not detected at or exceeding the reporting limit listed.

--- denotes sample not analyzed.

¹ Analyzed by U.S. Environmental Protection Agency Methods 200.8/6000/7000 Series.

² Washington State Model Toxics Control Act Cleanup Regulation (MTCA) Method A Cleanup Levels for Groundwater, Table 720-1 of Section 900 of Chapter 173-340 of the Washington Administrative Code, as revised 2013, unless otherwise noted.

³ Washington State Cleanup Levels and Risk Calculations (CLARC) under MTCA Standard Method B Formula Values for Groundwater from CLARC Master spreadsheet, <https://ecology.wa.gov/Regulations-Permits/Guidance-technical-assistance/Contamination-clean-up-tools/CLARC>

Table 9
Technology Screening for Cleanup Alternatives
Comfort Suites Property
Tukwila, Washington
Farallon PN: 2812-001

Remediation Technology	Description	Score									Rank	Retain (Y/N)
		Implementability	Protectiveness	Permanence	Effectiveness	Short-Term Risk Management	Restoration Time Frame	Consideration of Public Concerns	Cost	Total Score		
No Action/Natural Attenuation	Natural attenuation with no monitoring	4	2	3	3	4	3	2	4	25	2	Y
Monitored Natural Attenuation	Groundwater monitoring and sampling for monitored natural attenuation parameters	4	2	3	3	3	3	3	2	23	3	Y
Institutional Controls	Recording an Environmental Covenant requiring implementation of a Contaminated Media Management Plan for petroleum-impacted and COC-contaminated soil, slag fill, and groundwater, and prohibiting use of groundwater from the Comfort Suites Property.	3	3	4	3	4	3	4	3	27	1	Y
Engineered Controls	Maintaining the asphalt-concrete pavement over existing petroleum-impacted and COC-contaminated soil and slag fill.	3	3	3	3	3	3	4	2	24	4	Y
Excavation	Excavation and off-site disposal of COC-contaminated soil	0	4	4	4	1	4	2	1	20	5	N

NOTES:

Scores = 0 least favorable, 4 most favorable.

Rank = Relative position to other technologies based on total score.

Total Score = Sum of individual scores.

Y = Retained for consideration in cleanup alternative(s).

N = Not retained for consideration in cleanup alternative(s).

COC = constituent of concern

Table 10
Evaluation of Cleanup Alternatives
Comfort Suites Property
Tukwila, Washington
Farallon PN: 2812-001

	Cleanup Alternative 1 No Action/Natural Attenuation and Institutional Controls	Cleanup Alternative 2 Monitored Natural Attenuation
Description	No additional investigation or remediation activities.	Periodic groundwater sampling and collection of monitored natural attenuation parameters to confirm that groundwater conditions are stable.
THRESHOLD REQUIREMENTS		
Protective of Human Health and the Environment	Yes - Cleanup alternative will protect human health and the environment. Worker protections will be needed if future construction or utility work occurs in areas where dissolved arsenic in groundwater or soil is present at concentrations exceeding MTCA cleanup levels in groundwater.	Yes - Cleanup alternative will protect human health and the environment. Worker protections will be needed if future construction or utility work occurs in areas where dissolved arsenic in groundwater or soil is present at concentrations exceeding MTCA cleanup levels in groundwater.
Compliant with Cleanup Standards	Yes - Cleanup alternative will eventually comply with cleanup standards. COCs in groundwater are present at background levels and soil with COCs exceeding cleanup levels at the point of compliance will be contained.	Yes - Cleanup alternative will eventually comply with cleanup standards. COCs in groundwater are present at background levels and soil with COCs exceeding cleanup levels at the point of compliance will be contained.
Compliant with Applicable State and Federal Laws	Yes - Cleanup alternative complies with applicable laws.	Yes - Cleanup alternative complies with applicable laws.
Provision for Compliance Monitoring	No - Cleanup alternative does not include provisions for compliance monitoring of groundwater.	Yes - Cleanup alternative includes provisions for compliance monitoring (i.e., compliance groundwater sampling).
OTHER REQUIREMENTS		
Permanent to the Maximum Extent Practicable (see detail below)	Yes - Cleanup alternative is permanent to the maximum extent practicable.	Yes - Cleanup alternative is permanent to the maximum extent practicable.
Reasonable Restoration Time Frame	Restoration time frame is 0 years. The asphalt-concrete pavement currently in place will prevent exposure to COC-contaminated soil and be protective of human health and the environment.	Restoration time frame is 0 year. The asphalt-concrete pavement currently in place will prevent exposure to COC-contaminated soil and be protective of human health and the environment.
EVALUATION CRITERIA FOR PERMANENCE TO THE MAXIMUM EXTENT PRACTICABLE		
Protectiveness (30% Weighted Factor)	Cleanup alternative will achieve overall protection unless the asphalt-concrete pavement currently in place proximate to boring B-5 is removed. = 3	Cleanup alternative will achieve overall protection. = 4
Permanence (20% Weighted Factor)	Concentrations of COCs in groundwater represent naturally occurring (background) conditions. There is no provision to maintain the asphalt-concrete pavement currently in place, which would prevent exposure to COC-contaminated soil and be protective of human health and the environment. = 2	Concentrations of COCs in groundwater represent naturally occurring (background) conditions. The asphalt-concrete pavement currently in place will prevent exposure to COC-contaminated soil and be protective of human health and the environment. = 4
Long-Term Effectiveness (20% Weighted Factor)	Cleanup alternative generally is effective over the long term unless the asphalt-concrete pavement currently in place proximate to boring B-5 is removed. = 3	Cleanup alternative is generally effective over the long term. = 4
Short-Term Risk Management (10% Weighted Factor)	Cleanup alternative would pose no short-term risk. = 4	Cleanup alternative would pose a short-term risk for personnel performing field work. = 3
Technical and Administrative Implementability (10% Weighted Factor)	Cleanup alternative requires some legal administrative matters. = 3	Cleanup alternative requires some field work, reporting, and administrative matters. = 2
Public Concerns (10% Weighted Factor)	Cleanup alternative may cause some limited public concern due to the ongoing presence of groundwater and soil with concentrations of COCs exceeding established MTCA cleanup levels. = 3	Cleanup alternative may cause some limited public concern due to the ongoing presence of groundwater and soil with concentrations of COCs exceeding established MTCA cleanup levels. = 3
Overall Score	2.9	3.6

NOTES:

COCs retained for evaluation through the focused feasibility study include total petroleum hydrocarbons as oil-range organics, carcinogenic polycyclic aromatic hydrocarbons, and lead in soil; and total petroleum hydrocarbons as diesel- and as oil-range organics and arsenic in groundwater.

COCs = constituents of concern
MTCA = Washington State Model Toxics Control Act Regulation