

Remedial Investigation and Feasibility Study

Sterling Realty Organization
Bellevue Corner Property
10605 and 10619 NE 8th Street
Bellevue, Washington

for
**Sterling Realty Organization
Bellevue, Washington**

June 10, 2014

Deleted: May 16



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File No. 9227-004-00

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 - Added non-target compounds: methylene chloride, chloroform, chloromethane, MTBE to footnote.
 - Added ND VOC data for selected samples.
 - Modified soil cleanup levels to reflect added chemicals and Ecology comments.
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 - Added note re non-target compound: naphthalenes
 - Added detection limits not presented.
 - Added MW-19 and MW-20 complete data.
- Commented [A3]: Table 4:** Table was modified as follows:
 - Added CULs for nontarget compounds including chloroform, methylene chloride, chloromethane, MTBE, naphthalenes.
 - For nontargets compounds without a Method A cleanup level, calculated Method B protective of groundwater.
 - Added cleanup levels for compounds with low level/trace detections.
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ACRONYMS AND ABBREVIATIONS

µg/L	micrograms per liter
bgs	below ground surface
BTEX	benzene, toluene, ethylbenzene, and total xylenes
COC	contaminant of concern
CAO	cleanup action objective
CAP	cleanup action plan
CSM	conceptual site model
DCE	dichloroethylene
DRPH	diesel-range petroleum hydrocarbons
Ecology	Washington State Department of Ecology
EPA	U.S. Environmental Protection Agency
GRPH	gasoline-range petroleum hydrocarbons
HCID	hydrocarbon identification
mg/kg	milligrams per kilogram
MTCA	Washington State Model Toxics Control Act
NWTPH	Northwest Total Petroleum Hydrocarbon
ORPH	oil-range petroleum hydrocarbons
PCE	tetrachloroethylene
PCS	petroleum-contaminated soil
RI/FS	remedial investigation/feasibility study
TCE	trichloroethylene
TEE	Terrestrial Ecological Evaluation
UST	underground storage tank
VCP	Voluntary Cleanup Program
VOC	volatile organic compound
WAC	Washington Administrative Code

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EXECUTIVE SUMMARY

This report presents the remedial investigation and feasibility study (RI/FS) for the Sterling Realty Organization (SRO) Property located at 10605 and 10619 NE 8th Street in Bellevue, Washington (the Property). This Property, also known as the Bellevue Corner Property, is a portion of a larger property that is proposed for a re-development project that will include a multistory commercial building with up to seven levels of underground parking. This report was prepared (1) to meet the requirements for submittal of the Property into the Washington State Department of Ecology's Voluntary Cleanup Program (VCP) and (2) in accordance with RI/FS requirements defined in the Model Toxics Control Act (MTCA), WAC 174-340- sections 350 through 370. SRO's objective is to obtain a property-specific No Further Action determination for the Property.

~~SRO plans to carry out cleanup of the Property during redevelopment. Specific cleanup measures will be addressed with Ecology through a cleanup action plan (CAP). Notwithstanding anything herein to the contrary, the plan will only include: (1) excavation and removal of all soil on the Property to a depth of approximately 70 feet below the ground surface, lot-line to lot-line, with capping and institutional controls to address any residual contamination in soil below that depth; (2) wall drains designed, on standard construction practices, to capture, as much as possible, perched ground water flowing toward the Property, from a source across NE 8th Street to the north, to limit, as much as possible, the potential for downward migration of contaminated water; (3) groundwater monitoring; and (4) a vapor barrier on the base slab and sidewalls of the building to control potential intrusion of subsurface volatile organic vapors.~~

~~The Property's environmental conditions have been analyzed through nine separate soil and groundwater sampling investigations dating back to 1990, with the investigations building upon preceding results. Those investigations (the most recent was completed in 2011) have yielded considerable data for use in characterizing the Property's environmental conditions. GeoEngineers did not perform any of the prior investigations. We have used the data from these investigations to prepare this report. This report summarizes those investigations in chronological order.~~

The Property was undeveloped prior to construction of a retail gas station in 1958. Retail gasoline and automotive repair activities continued until at least 1986. Gas station facilities in the west half of the Property were removed in 1991 and 1992, including two 10,000 gallon gasoline Underground Storage Tanks (USTs), three hydraulic hoists, a drywell, an oil-water separator, a heating oil UST, two waste oil USTs, and two pump islands. Following the facilities' removal, approximately ~~2,000~~ cubic yards of petroleum-contaminated soil (PCS) were removed from the Property and disposed at a permitted landfill. An opinion of No Further Action regarding the cleanup status for petroleum hydrocarbons on the Property was issued by the Washington State Department of Ecology. A supplemental investigation in 2010 detected ~~shallow~~ petroleum hydrocarbons in soil at concentrations exceeding the MTCA cleanup level in ~~four~~ borings at depths between 1 and 9 feet below ground surface (bgs). ~~In many other borings completed at the Property, petroleum hydrocarbons either were not detected or were detected at concentrations less than cleanup levels. Except for a low level detection of naphthalene,~~ petroleum-impacted groundwater has not been detected at the Property.

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Properties surrounding the subject Property have been primarily commercial retail and office space since first development in the 1950s.

In addition to the gas station investigation and cleanup, seven separate environmental investigations of soil and groundwater conditions at the Property have been completed by various consultants between 2000 and 2011. Additional investigations were completed on the north-adjacent property at 10610 NE 8th Street, also known as the (former) Thinker Toys property. The investigations indicate that chlorinated solvent contamination of soil and groundwater beneath the SRO Property are attributable to releases of tetrachloroethylene (PCE) originating at a former dry cleaning facility on the Thinker Toys property. PCE has been detected at the Property in soil and groundwater between approximately 12 and 65 feet bgs and historically in the deeper regional aquifer. The highest concentrations of PCE in soil and groundwater on the SRO Property were detected in the northwest corner, the portion of the Property closest to the Thinker Toys property. There is no evidence of a historic on-Property source for PCE, and several factors, including contaminant plume profiles and the absence of PCE in the upper 12 feet of soil, indicate that PCE was not released at the SRO Property.

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The contaminant of concern (COC) driving remedial action at the Property is PCE. Other less prevalent COCs on the Property include breakdown products of PCE and petroleum hydrocarbons. Volatile organic compounds (VOCs) that were not detected or were detected infrequently at low levels/estimated concentrations less than laboratory reporting limits that were evaluated during the RI, but are not considered COCs moving forward for the purpose of the FS and cleanup action. Media of concern include soil, groundwater and soil vapor. Potential exposure pathways that are evaluated include direct contact/ingestion of PCE-impacted soil and groundwater and breathing of PCE-impacted indoor air in the proposed building at the Property. Proposed cleanup levels for the COCs are MTCA Method A for unrestricted land use in the soil and MTCA Method A for groundwater. If there is no Method A cleanup level for a COC, the proposed cleanup levels are MTCA Method B.

A Feasibility Study was conducted in accordance with WAC 173-340-350(8) to develop a cleanup alternative that will be completed as part of redevelopment plans for the Property. Remedial alternatives were identified and assessed based on their ability to achieve threshold requirements for a cleanup action as specified in MTCA. Remedial alternatives were further assessed based on additional criteria specified under MTCA (overall protectiveness, permanence, long-term effectiveness, short-term risk management, and implementability). The preferred cleanup alternative includes soil excavation that extends from lot-line to lot-line during construction to varying depths required for the Property development. Excavation at the Property will be limited to a depth equivalent to an elevation of 84 feet above mean sea level (AMSL) (about 70 feet bgs) except for localized excavations for elevator pits to elevation 82 feet AMSL. A large number of soil samples will be collected/analyzed for petroleum and PCE during construction excavation to provide additional site characterization information and guidance regarding soil segregation/disposal.

In order to limit the potential for inadvertent effects on the regional aquifer, permanent drainage elements at the Property will be limited to no deeper than elevation 86 feet AMSL in the western and northern portions of the Property and no deeper than 84 feet AMSL in the eastern and southern portions of the property (hereinafter "Planned Development Excavation"). The depth of permanent drainage elements will be above the regional aquifer as identified in March 2013. Based on the Planned Development Excavation and considering available data, it is unlikely that soil impacted by

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PCE at a concentration greater than the cleanup level will remain at the vertical limits of the excavation. If PCE-contaminated soil remains at the margins of the development project excavation, the garage's concrete bottom and side walls will eliminate the potential for direct contact with the impacted soil, Petroleum-contaminated soil exceeding MTCA cleanup levels also will be removed by the preferred cleanup alternative. The preferred cleanup alternative includes off-site disposal of contaminated soil at permitted facilities; an engineered wall drain system to passively capture contaminated groundwater migrating to the Property and entering the exterior subsurface wall drains, the permitted discharge of contaminated water captured by the wall drains to the sanitary sewer; and a vapor barrier on exterior walls and beneath the floor slab at the bottom of the proposed underground parking structure. These combined measures are considered the most conservative, permanent, and effective measures to remediate the Property while allowing re-development of the Property in a manner that protects human health and the environment. Detailed information regarding implementation of the preferred remedial alternative is presented in a separate CAP.

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1.0 INTRODUCTION

This report presents the Remedial Investigation and Feasibility Study (RI/FS) for the Sterling Realty Organization (SRO) property located at 10605 and 10619 NE 8th Street in Bellevue, Washington (the Property). This report was prepared (1) to meet the requirements for submittal of the Property into the Washington State Department of Ecology’s (Ecology) Voluntary Cleanup Program (VCP) and (2) in accordance with RI/FS requirements defined in the Model Toxics Control Act (MTCA), WAC 174-340- sections 350 through 370. SRO’s objective is to obtain a property-specific No Further Action determination for the Property by conducting a MTCA-compliant cleanup action during construction of a multistory commercial building with up to seven levels of underground parking.

The location of the Property relative to surrounding physical features is shown on Figure 1. The Property, also known as the SRO Bellevue Corner Property, is defined by the boundaries of the King County tax parcels addressed 10605 and 10619 NE 8th Street (Figure 2). ~~The Property has been impacted via passive migration from releases of dry cleaning solvent transported by groundwater from the upgradient former Thinker Toys property located across NE 8th Street north of the SRO Property.~~ Based on ~~a long history of environmental~~ investigations, soil and groundwater at depth on the Property is contaminated ~~primarily~~ with tetrachloroethylene (PCE), ~~and to a lesser extent~~ trichloroethylene (TCE) and cis-1,2-dichloroethylene (cis-1,2-DCE). ~~The large number of soil borings and monitoring wells completed throughout the Property during these investigations are shown on Figure 3. A service station was located on the Property, and a cleanup of petroleum-contaminated soil associated with it received Ecology’s “no further action” approval in 1992. Subsequent investigations have revealed residual petroleum contamination in shallow soil that was not removed during 1990s cleanup activities.~~ Both the PCE-related contamination and the ~~residual~~ petroleum-related contamination will be addressed by remediation during concurrent redevelopment of the Property.

This RI/FS was prepared in accordance with our proposal for environmental services at SRO’s Bellevue Corner Property (GeoEngineers, 2012). The purpose of this report is to summarize and present environmental data, characterize the Property, evaluate cleanup alternatives, and identify a preferred cleanup alternative. The Remedial Investigation (RI) portion of the report presents information regarding the former use of the Property and surrounding parcels, summarizes the findings of previous site assessments and subsurface investigations, and presents a Conceptual Site Model (CSM). The Feasibility Study (FS) evaluates cleanup alternatives and identifies the preferred cleanup alternative that is most appropriate based on the future Property use and the requirements in WAC 174-340-360(2). Those requirements include protection of human health and the environment; compliance with cleanup standards; compliance with state and federal laws; use of permanent solutions to the maximum extent practicable; and providing for a reasonable restoration time frame.

Special Note: GeoEngineers did not conduct any field studies or explorations for this report. Rather, GeoEngineers has prepared this report by gathering information and data from multiple historic environmental reports by other consultants which studied conditions at the Property and surrounding properties. These previous reports were reviewed and assessed for completeness and consistency and deemed adequate to sufficiently characterize the Property. Limited portions of text from several previous reports were reused for this report, notably in Sections 2, 3 and 4. Any historic data that

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~~Deleted:~~ The sole source of the PCE and related VOC contaminants at the Property is via passive migration from releases of dry cleaning solvent transported by groundwater from the upgradient former Thinker Toys property to the SRO Property. As such, under the applicable provision of MTCA (RCW 70.105D.020(17)(b)(iv) (e.g., the “Plume Clause”) SRO is not responsible for the PCE contamination at the Property.

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was considered to be non-defensible, incomplete, or not applicable to the Property were not included in this report. A list of the previous studies upon which this report is based is provided in Section 7.

2.0 BACKGROUND

2.1. Descriptions and Land Use History of the Property and Surrounding Properties

The property descriptions and histories provided below were obtained from the previous reports discussed in Section 3 of this document. The current land use of the Property and surrounding properties is primarily a mix of offices and retail commercial businesses. According to the City of Bellevue's zoning map, the Property and adjacent properties are all zoned as Downtown-Office (DNTNO-1 and DNTNO-2). This zoning precludes the possibility of ground floor residential uses and therefore reduces potential residential exposure to contaminants of concern including VOC soil vapors.

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2.1.1. The Property, 10605 and 10619 NE 8th Street, Bellevue, Washington

The Property consists of two tax parcels, King County parcel numbers 154410-0221 and 154410-0216, which cover approximately 0.43 and 0.28 acres, respectively (Figure 2). The Property does not include surrounding properties or adjacent rights of way (ROW). The Property is owned by SRO and is currently occupied by a commercial parking lot and commercial building with retail businesses. Improvements include an 11,250 square foot two-story wood and masonry building, perimeter landscaping, and gravel and asphalt paved parking.

PARCEL 154410-0221

This parcel was undeveloped until 1958, when a retail gasoline station was constructed on the Property, the operator of which was not identified. The original service station had several USTs for fuel and waste oil, a drywell, vehicle hoists, pump islands etc. The parcel was redeveloped in 1969 as a Union 76 station and equipped with two 10,000-gallon gasoline underground storage tanks (USTs), pump islands, one heating oil and one waste oil UST of unknown sizes, an oil/water separator, and three hydraulic vehicle hoists. Historical gas station features are shown on Figure 4. Retail gasoline sales and automotive repair activities continued on the Property until 1991 when the station was demolished. Following demolition, 2,000 cubic yards of petroleum-contaminated soil (PCS) were removed from the parcel during a remedial cleanup action that occurred in two phases. During the first phase of excavation in February 1992, USTs, product lines and other service station facilities and approximately 500 cubic yards of impacted soil were excavated and removed from the Property. A second phase of excavation was performed at the Property in April 1992 and an additional 1,500 cubic yards of PCS were removed. Chemical analysis of soil samples obtained from the final limits of the remedial excavations performed during the service station cleanup did not detect petroleum contaminants at concentrations exceeding cleanup levels. Subsequently, an opinion of No Further Action regarding the cleanup status for petroleum hydrocarbons on the parcel was issued by the Washington State Department of Ecology (Ecology, 1992).

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PARCEL 154410-0216

Prior to 1953 this parcel was part of a nine acre parcel that was occupied by the Cheriton Fruit Gardens. The Cheriton Gardens site had berry plants, fruit trees and fields in agricultural use, a single-family residence and out-buildings constructed beginning in 1931. In 1963, the current commercial building was constructed on this parcel and the parcel adjacent to the east. Initial

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tenants included a music store, furniture store, women's apparel store, and offices. The basic features/land use of the parcel have remained unchanged since that time.

2.1.2. North-Adjoining Property, 10610 NE 8th Street (Across NE 8th Street)

This 0.3 acre parcel is listed as 10610 NE 8th Street (King County parcel number 068570-0055). The parcel is currently operated as a private parking lot owned by BV Holdings, LLC. Improvements include asphalt paving and perimeter landscaping.

This property was initially developed in 1955 as a retail gasoline station and automotive repair facility equipped with two 5,000-gallon gasoline USTs, a 200-gallon waste oil UST, and a 250-gallon heating oil UST. In 1968, the station was demolished and replaced with a new retail station equipped with two 10,000-gallon gasoline USTs and 550-gallon heating oil UST. The second gas station operated until 1976. Between 1976 and 1986 a One-Hour Martinizing dry cleaning facility operated at the property. A sump was located within the footprint of the former building. Between 1986 and 2007 the property was occupied by small retail businesses, including the Thinker Toys store. In 2007 the remaining structures were demolished and the property was paved with asphalt for parking.

This property has been identified as the source of the chlorinated solvents (VOCs) that contaminated soil and groundwater on the SRO Property. An opinion letter from Ecology on the proposed interim cleanup action at the Thinker Toys property states that releases of dry cleaning solvent from the former dry cleaner are the apparent source of the PCE contamination on the SRO Property (Ecology, 2011). As discussed in Section 3, soil and groundwater investigations to delineate VOC contamination on the Property and on the adjacent Thinker Toys property have demonstrated how VOCs released at the 10610 NE 8th Street property migrated onto the SRO Property.

2.1.3. South-Adjoining Property, 606 and 620 106th Avenue NE

This 4.0 acre property (King County parcel numbers 154410-0214 and 154410-0217) is occupied by a 28,000 square foot retail bookstore (Barnes and Noble), a 40,250 square foot 2-story commercial building (Mars Hill Church), and paved parking. The property was farmland until 1957 when a bowling alley (now the bookstore) with an oil-fired heater was constructed. The commercial building (aka, the John Danz Building) was constructed in 1961 and originally operated as a theater. Parking areas were paved in 1963.

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2.1.4. East-Adjoining Property, 10635 NE 8th Street

This 0.75 acre parcel (King County parcel number 154410-0215) is developed with an 18,400 square foot commercial wood and masonry building that is occupied by small retail businesses. A house and two associated structures surrounded by farmland were present on this property between 1937 and 1956; farmland was cleared by 1954. The present building was constructed in 1963, and tenants have included an automotive parts store, insurance agency, stereo store, and travel agency.

2.1.5. West-Adjoining Property, 10555 NE 8th Street

This 1.24 acre parcel (King County parcel number 154410-0209) is developed with a 28,500 square foot 2-story structural steel office building currently occupied by Bank of America. Additional improvements include a drive-through teller kiosk and an asphalt-paved parking lot with perimeter

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landscaping. The property was undeveloped until it was paved for parking in 1960. The current office building was constructed in 1970.

2.2. Future Land Use

It is anticipated that the two parcels which make up the Property, and the adjacent parcel to the east, will be redeveloped within the next 1 to 5 years as a high rise commercial building with below-grade parking. The Planned Development Excavation anticipates about seven levels of underground parking. Permanent drainage elements associated with the Planned Development Excavation will not extend below the top of the regional aquifer at the Property. The specific excavation depths and elevations will be further clarified in a subsequent CAP.

This RI/FS has been prepared with those development plans in mind, and the development plans play an important role in evaluating the cleanup alternatives presented in the FS.

A soil vapor extraction-air sparge system is currently operating on the north-adjoining (Thinker Toys) property. We understand that operation of the system is being conducted as an interim remedial action to prepare that property for a subsequent cleanup action that includes excavation and off-site disposal of PCE-contaminated soil. The Thinker Toys property is being cleaned up under the VCP program; the timing of the subsequent cleanup action at the Thinker Toys property is not known.

2.3. Environmental Setting

2.3.1. Topography

The Property and vicinity are located within the Puget Trough (lowlands) of the Pacific Border Physiographic Province (USGS, 2013). The Puget Lowland is a broad, low-lying region situated between the Cascade Range to the east and the Olympic Mountains and Willapa Hills to the west. The province is characterized by roughly north-south oriented valleys and ridges; the ridges locally form an upland plain at elevations of up to about 500 feet above mean sea level (AMSL). The moderately to steeply sloped ridges are separated by swales, which are often occupied by wetlands, streams, and lakes. The physiographic nature of the Puget Lowland was prominently formed during the last retreat of the Vashon Stade of the Fraser Glaciation, which is estimated to have occurred between 14,000 and 18,000 years before present (Waitt Jr. and Thorson, 1983).

The Property is located within the City of Bellevue at elevations ranging from approximately 150 to 160 feet AMSL. Ground surface slopes gently toward the south (King County iMAP, 2011). Lake Bellevue is located approximately 0.75 miles northeast of the Property; Lake Washington is located approximately 0.75 miles southwest.

2.3.2. Regional Geology, Hydrogeology, and Groundwater Use

The geology of the region is generally characterized by a thick sequence of glacial soil overlying Tertiary bedrock, with local areas of exposed surficial bedrock. The glacial soil is thickest in areas north of the Seattle Fault zone, where they range up to 5,000 feet thick (Galster and Laprade 1991). The glacial stratigraphic sequence of the Puget Lowland consists of generally fine-grained, low-energy, non-glacial and glacial lacustrine and fluvial deposits overlain by sandy glacial advance outwash. The advance outwash sand is overlain by glacially compacted till, which locally may be

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overlain by glacial recessional sand, organic peat, lacustrine, and alluvial deposits (Troost and Booth, 2008).

The quaternary glacial soils of the Puget Lowland include near-surface, nonglacial alluvial deposits, perched water-bearing zones located above and within glacial till, and higher yielding water-bearing zones in the underlying glacial advance outwash or older granular glacial and non-glacial deposits. Outwash sand deposits can be an important source of potable water supplies, particularly in suburban and rural locations within the Puget Lowland. Sandier soil intervals within glacial till can be water-bearing, but these are not usually used for potable water because they tend to be limited in extent, have low yield, and are more susceptible to water quality degradation.

According to the Ecology Water Well Logs database (Ecology 2013), there are two water supply wells located within the same township, section and range as the Property; the distance between these wells and the Property is not known. The wells are owned by King County Water District #68 and were installed in 1946 and 1947. Records indicate that these wells were completed to depths of 1,125 and 1,056 feet and screened no shallower than 250 feet bgs. The wells were installed before the City of Bellevue incorporated in 1953, and it is not apparent if these wells are still in use.

City of Seattle is the main source of potable water for the City of Bellevue; Seattle collects surface water from the Cascade Mountains (City of Bellevue, 2005). Current water supply wells within the City of Bellevue serve less than 50 people a day on average and are located more than one mile from the Property. There are no designated aquifer recharge areas within one mile of the Property.

2.3.3. Property Geology

Figures 5 and 6 are geologic cross sections that depict soil and groundwater conditions beneath the Property, the north-adjointing properties, NE 8th Street and 106th Avenue NE. Cross section locations are shown on Figure 2. Previous investigations on and adjacent to the Property encountered approximately 5 to 7 feet of loose to medium-dense silty sand with gravel varying locally to gravel with sand that is interpreted to be fill material. The fill appears to consist primarily of reworked native soil and imported structural fill. Below the fill, the Property is underlain by Vashon Till (Pacific NW Geologic Mapping, 2007), a unit of dense to very dense glacially compacted, poorly sorted and locally cemented silt, sand, gravel, and cobbles with localized silt-rich and sand-rich zones. Sand-rich beds or zones within the glacial till were encountered at depths of about 20 to 30 feet and with thicknesses ranging from 2 to 5 feet. These sand-rich zones are associated with the shallow perched groundwater. The glacial till typically extends to depths of 35 to 40 feet bgs, and is underlain by the more permeable sand and gravelly sand deposits of the Vashon Advance Outwash. Outwash extends to depths of approximately 75 to 90 feet bgs (Terra Associates, 2008). A dense, silty sand to sandy silt layer was encountered beneath the advance outwash in the deepest explorations that extended to depths of 101.5 feet bgs.

2.3.4. Property Hydrogeology

Previous investigations identified at least two water-bearing zones beneath the Property: a shallow discontinuous water-bearing zone perched within the Vashon Till, and a deeper regional aquifer located in the lower portions of the underlying Vashon Advance Outwash (see Section 3). The shallow water is associated with sandier lenses interbedded within the glacial till at depths ranging between approximately 22 and 30 feet bgs. Seven shallow wells at the Property are screened in the perched

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water zone; two deep wells are screened in the Advance Outwash aquifer. Two additional monitoring wells are completed in the Advance Outwash on the adjacent parcel to the east. Based on May 2010 measurements (the most comprehensive data set for the area) in the shallow wells and upgradient wells located on the Thinker Toys property, the perched groundwater is inferred to flow to the south-southwest with a gradient of 0.046 feet per foot. The groundwater data suggest a southeasterly component to groundwater flow on a seasonal basis. Table 1 summarizes depth to groundwater and groundwater elevations in nine monitoring wells on the Property and two deep wells located on the adjacent parcel to the east. Perched groundwater elevation contours and inferred groundwater flow direction in May 2010 are shown on Figure 7.

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Two wells at the Property (URS-MW-8 and B2/MW-2) were completed in the regional aquifer located in the Advance Outwash along with two deep wells (B1/MW1, B4/MW4) that were completed on the adjacent parcel to the east. Depths to groundwater in the regional aquifer ranged between 68 and 93 feet bgs from 2008 to 2011. Based on measurements in these four wells in October 2011, groundwater in the regional aquifer is inferred to flow to the south-southeast. Groundwater elevation contours for the Advance Outwash aquifer are shown on Figure 8.

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3.0 PREVIOUS ENVIRONMENTAL INVESTIGATIONS

The following section summarizes previous environmental investigations at the Property and/or the upgradient source property (also known as the Thinker Toys or BV Holdings Property). A summary of two investigations on the north-adjacent property is included to document how that property is the source of PCE contamination on the SRO Property. Chemical analytical data for soil and groundwater samples obtained from the Property between 2000 and 2011 are summarized in Tables 2 and 3, respectively. Soil and groundwater conditions have been characterized extensively at the Property. From 2000 to 2011, approximately 50 soil/well borings have been completed throughout the SRO Property. From these borings, 263 soil samples were analyzed for PCE and other VOCs. Forty-seven soil samples from 23 borings were analyzed for petroleum hydrocarbons. Groundwater samples were collected for chemical analysis from 16 borings/wells on the Property. Forty-four groundwater samples from the wells were analyzed for PCE and other VOCs. Twenty-two groundwater samples were analyzed for BTEX, 18 groundwater samples were analyzed for GRPH and four groundwater samples were analyzed for DRPH and ORPH.

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Figure 3 shows the exploration/sample locations on the Property that are described in this Section. The locations of PCE detections in soil at the Property are shown in Figure 9. Cross-sections showing PCE contamination in soil on the Property and the Thinker Toys source property to the north are provided in Figures 10 and 11. A plan view map and cross-section showing PCE contamination in groundwater at the SRO Property and the Thinker Toys property are provided in Figures 12 and 13, respectively. Copies of boring logs that were obtained for this report are included in Appendix A. Copies of laboratory analytical reports that were obtained for this report are included in Appendix B.

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3.1. 1992 UST Removal, Soil Excavation and Off-Property Disposal (SRO Property)

Environmental investigations and a cleanup action were performed at the Property in 1990 and 1992; the report for the 1990 investigation was not available for review. The soil sample results for the cleanup action are presented in the UST closure report (EMCON Northwest, 1992) that is in

Ecology files. Two 10,000-gallon fuel USTs and associated piping, the heating oil and waste oil USTs, a drywell, three hydraulic hoists, and an oil/water separator were removed from the Unocal gas station at the Property in 1991 and 1992 (EMCON Northwest, 1992). The historical layout of service station facilities is shown on Figure 4. Approximately 2,000 cubic yards of petroleum-contaminated soil (PCS) were removed from the Property in February and April 1992 during two separate phases of excavation. PCS was removed from the former locations of the USTs, western pump island, hydraulic hoists, and drywell. Excavated soils were hauled to Rabanco's Seattle facility for disposal. Soil samples were collected from the base and sidewalls of the remedial excavations following removal of the PCS to confirm that remaining soil met MTCA Method A Cleanup Levels. Petroleum contaminants either were not detected in the base and sidewall samples obtained from the final limits of the excavations or were detected at concentrations below cleanup levels. Subsequently, an opinion of No Further Action (NFA) regarding the PCS cleanup action was issued by Ecology (Ecology, 1992).

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3.2. 2000 Phase II Soil and Groundwater Investigation, URS (SRO Property)

URS conducted a soil and groundwater investigation on the Property in March 2000 to evaluate the potential environmental impacts from gasoline station operations on the subject property as well as dry cleaner and gasoline station operations on the north-adjacent property. The findings presented here were reported in the RI/FS for the north-adjointing property (SES, 2011). Eight soil borings (URSSB-OP1 through URSSB-OP8) were completed using a direct push rig. Soil samples were collected from each boring at depths of 6 and 18 feet bgs. Eleven of the soil samples were submitted for analysis of benzene, toluene, ethylbenzene, and xylenes (BTEX) and gasoline-range petroleum hydrocarbons (GRPH); diesel-range petroleum hydrocarbons (DRPH) and oil-range petroleum hydrocarbons (ORPH). Four of the samples were analyzed for VOCs and two of the samples were analyzed for metals. Groundwater samples were collected from borings URSSB-OP1 and URSSB-OP3, which were advanced along the south edge of the Property. The groundwater samples were analyzed for BTEX, GRPH, DRPH, ORPH, VOCs and metals.

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Soil Results. None of the soil samples contained detectable concentrations of GRPH, DRPH, BTEX, or VOCs. A low concentration of ORPH was detected in URSSB-OP7, which was completed in the northwest corner of the Property. None of the samples contained elevated concentrations of metals.

Groundwater Results. No petroleum hydrocarbons were detected in the groundwater samples collected from borings URSSB-OP1 and URSSB-OP3. These borings were located downgradient of the former service station facilities. URSSB-OP3 was drilled near the former waste oil tank and drywell, facilities that were located near one another on the south side of the former service station.

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Groundwater samples from borings URSSB-OP1 and URSSB-OP3 contained concentrations of PCE below the MTCA Method A cleanup level of 5 micrograms per liter (µg/L). PCE concentrations ranged from 1.7 to 2.1 µg/L. PCE was not detected in soil samples collected from 6 to 27 feet bgs at boring SRO-4 in the drywell-waste oil tank area. These data are evidence that the drywell and waste oil UST were not the source of the PCE detected on the Property. A concentration of arsenic exceeding the cleanup level was detected in the groundwater sample collected from URSSB-OP1. However, the field duplicate from URSSB-OP1 and the sample from URSSB-OP3, did not contain detectable concentrations of metals.

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3.3. 2004 Phase II ESA, 10610 NE 8th Street, Golder Associates (Thinker Toys Property)

Golder conducted Phase II ESA investigations of soil and groundwater in January and February 2003 on the north-adjointing property to evaluate whether contamination was present from former dry cleaner and retail gasoline service station operations (Golder, 2004). Eight soil borings were advanced on the property, two of which were completed as monitoring wells. Selected soil samples were submitted for laboratory analyses including GRPH, DRPH, and ORPH; metals; and VOCs including BTEX, PCE, TCE, DCE, and vinyl chloride. Groundwater samples were collected from an existing piezometer and two monitoring wells. The groundwater samples were submitted for analysis of VOCs; the groundwater sample from MW-B2 also was analyzed for petroleum hydrocarbons. The soil and groundwater data are not tabulated in this report.

Soil Results. Soil samples from six borings contained detectable concentrations of PCE to the maximum depths explored. Soil from three borings at depths between 7.5 and 20 feet bgs contained concentrations of PCE exceeding the 0.05 milligrams/kilogram (mg/kg) MTCA Method A cleanup level. One sample collected at a depth of 7.5 feet bgs also exceeded the MTCA Method B cleanup level (1.9 mg/kg at the time of the study). Soil from two borings did not contain detectable concentrations of Contaminants of Concern (COCs).

Groundwater Results. PCE concentrations exceeded the MTCA Method A cleanup level in groundwater samples collected from two wells. The remaining VOC analytes were not detected or were detected at concentrations less than cleanup levels. Petroleum hydrocarbons were not detected in the groundwater sample collected from the one well in which they were analyzed.

3.4. 2008 Limited Phase II ESA, Terra Associates (SRO Property)

The 1992 petroleum soil cleanup at the Property predated the 2001 revision of MTCA cleanup levels. In 2008, soil and groundwater conditions were investigated by Terra Associates to evaluate whether contaminant levels in soil and groundwater at the Property met the revised 2001 cleanup standards. Four soil borings were advanced and completed as monitoring wells; borings B1/MW-1 and B4/MW-4 were located off-Property to the east and borings B2/MW-2 and B3/MW-3 were located in the northwest portion of the Property (Figure 3). Boring B2/MW-2 was advanced to a depth of 101.5 feet bgs and screened within the regional aquifer. Boring B3/MW-3 was advanced to a depth of 30 feet bgs and was screened within the perched groundwater interval.

Field screening of soil cuttings did not detect any VOCs. Soil samples collected from boring B2/MW-2 at depths of 5, 15, and 25 feet bgs were submitted for analysis of GRPH, DRPH, and ORPH. Groundwater samples were collected from monitoring wells B2/MW-2 through B4/MW-4 and submitted for analysis of GRPH, DRPH, and ORPH and VOCs. Soil and groundwater samples from B1/MW-1 were not submitted for chemical testing.

Soil Results. Soil samples from boring B2/MW-2 did not contain detectable concentrations of GRPH, DRPH, or ORPH.

Groundwater Results. The groundwater sample from well B3/MW-3 had a concentration of PCE that exceeded the MTCA Method A cleanup level; GRPH, DRPH, and ORPH were not detected. No COCs were detected in deep wells B2/MW-2 and B4/MW-4.

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3.5. 2008 Limited Phase II Site Investigation, URS (SRO Property)

In August and September of 2008, URS completed an investigation at the Property to further delineate VOC contamination in soil and groundwater (URS, 2008). Eight soil borings were drilled to depths between 28 and 75 feet bgs. A temporary well was used to collect a groundwater sample from URS-SB-3; four of the borings were completed as monitoring wells (URS-MW-1 through URS-MW-4). Soil samples were collected from each boring; water samples were collected from four wells (wells URS-MW-2 and URS-MW-4 were dry).

Soil Results. PCE was detected in soil at concentrations exceeding the MTCA Method A cleanup level between 12.5 and 45 feet in five borings (URS-SB-1 through SB-3 and URS-MW-1, URS-MW-4). The PCE concentrations in samples from these five borings ranged between 0.05 and 0.41 mg/kg, and concentrations were highest near the northern property boundary. Soil collected from URS-MW-2, URS-MW-3 and URS-SB-4 did not contain detectable concentrations of PCE. PCE concentrations generally declined with depth. BTEX and petroleum hydrocarbons were not detected in any of the samples that were tested.

Groundwater Results. PCE concentrations in groundwater exceeded the MTCA Method A cleanup level in three out of four wells that were tested. The concentrations in the wells with exceedances ranged between 21 and 340 µg/L; concentrations were highest in the northern side of the Property. PCE was not detected in URS-MW-3, a well located southeast (downgradient) of the former service station facilities. BTEX and gasoline-range hydrocarbons were not detected in groundwater samples from four borings, wells including URS-SB-3 and URS-MW-3 which are located downgradient of shallow PCS detections. These groundwater data indicate that shallow groundwater at the Property has not been impacted by the residual shallow PCS.

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3.6. 2010 Supplemental Subsurface Investigation, Farallon (SRO Property and Thinker Toys Property)

Soil and groundwater on the Property were investigated in 2010 by Farallon Consulting as part of a larger study examining the extent of the PCE plume originating from the north-adjacent Thinker Toys property (Farallon, 2010). The summary presented here was based on review of the Thinker Toys RI/FS report (SES, 2011). A summary of soil and groundwater analytical data collected at the SRO Property during this study is provided in this section. A brief summary of soil and groundwater results for the Thinker Toys property is also provided below.

Two monitoring wells (MW-19 and MW-20) were completed at the SRO Property in the perched groundwater zone, and 21 soil borings (SRO-1 through SRO-21) were completed between depths of 6 and 30 feet bgs. On the Thinker Toys property, eight monitoring wells and 22 soil borings were completed between depths of 19 and 51 feet bgs.

Soil Results on the SRO Property. Soil samples collected from borings SRO-1, SRO-2, SRO-3, SRO-7, SRO-8, and SRO-9 at depths of 20 to 30 feet bgs contained PCE at concentrations between 0.05 and 0.43 mg/kg that exceeded the MTCA Method A cleanup level. Contaminant concentrations were highest in the northwest corner of the Property. Gasoline concentrations exceeded the MTCA Method A cleanup level in soil collected from SRO-3, SRO-7 and SRO-17 at depths between 1 and 9 feet bgs. Diesel- and oil-range petroleum concentrations exceeding cleanup levels were detected in the soil sample collected from boring SRO-13 at a depth of 0.5 feet bgs. Petroleum hydrocarbons were not

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detected in the samples collected below nine feet bgs. Gasoline-, diesel- and oil-range exceedances appear to be localized areas of residual petroleum that remained after the 1992 cleanup (Table 2). Trace concentrations of ethylbenzene and xylenes were detected at 1.8 feet bgs in SRO-17. BTEX was not detected in any of the remaining samples.

Boring SRO-4 was drilled near the former location of a drywell and a waste oil tank that were removed in 1992 during closure-cleanup of the former service station. Six soil samples were collected from SRO-4 between 6 and 30 feet bgs and submitted for chemical analysis of VOCs. PCE was not detected in the samples between 6 and 27 feet bgs. PCE was detected at a concentration of 0.038 mg/kg (less than cleanup level) in the sample collected from 30 feet bgs. Based on depth to water measured in nearby monitoring well MW-20, this soil sample was collected below the perched groundwater level. Because PCE was not detected in soil samples from the unsaturated zone at this location, the data indicate that PCE detected at 30 feet in SRO-4 did not come from the nearby waste oil tank or drywell.

Groundwater Results on the SRO Property. Concentrations of PCE exceeding the MTCA Method A cleanup level in groundwater were detected in samples from wells B3/MW-3, MW-19, and URS-MW-1. The highest concentration of PCE (460 micrograms per liter) was detected in well URS-MW-1 in the northwest corner of the Property. TCE concentrations exceeded the cleanup level in groundwater from monitoring well URS-MW-1. COC concentrations were below cleanup levels and/or the laboratory reporting limits in groundwater samples from wells B2/MW-2, MW-20, URS-MW-2, and URS-MW-3.

Soil Results from 10610 NE 8th Street (Thinker Toys Property). PCE concentrations exceeded the cleanup level in soil collected across the property to depths of 25 to 35 feet bgs. The highest concentrations of PCE in soil exceeded the MTCA Method B cleanup level (1.9 mg/kg at the time) and were encountered at depths between 2.5 and 20 feet bgs in the central-north portion of the property. Soil containing PCE exceeding the RCRA Land Ban Value of 60 mg/kg was encountered in two shallow samples beneath the former building at the property. TCE concentrations in soil exceeded the cleanup level at depths between 2.5 and 28 feet bgs. Gasoline concentrations in soil exceeded the MTCA Method A cleanup in the central portion of the property between depths of 0.8 and 15 feet bgs. Diesel and oil concentrations in soil exceeded the cleanup level in two borings at depths ranging from 0.8 to 4.5 feet bgs. These data are not tabulated in this report.

Groundwater Results on 10610 NE 8th Street (Thinker Toys Property). Concentrations of PCE exceeding the cleanup level were detected in groundwater samples from 11 wells located across the property. Concentrations of PCE ranging between 5,700 and 9,800 µg/L were detected in two wells located in the central portion of the property. TCE and/or cis-1,2-DCE concentrations exceeding the cleanup level were detected in groundwater from six wells. Gasoline-range petroleum was detected at a concentration exceeding the cleanup level in groundwater from one monitoring well. These data are not tabulated in this report.

3.7. 2011 Soil Investigation, Hart Crowser (SRO Property)

In August 2011, Hart Crowser (HC) conducted an investigation at the SRO Property to evaluate the vertical extent of PCE contamination deeper than 30 feet bgs (AAL, 2011; Hart Crowser, 2011; URS, 2011a). The HC sample locations were communicated by URS in a proposal to SRO to conduct a

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data gap investigation. Information available to review from the HC study was limited to sample locations, sample depths, and laboratory analytical results.

Three borings (HC-1, HC-2 and HC-3) were completed to 50 feet bgs in the northwest portion of the Property. Soil samples were collected for analysis between 20 and 50 feet bgs. PCE was detected in all three borings from approximately 22 to 50 feet bgs at concentrations exceeding the MTCA Method A cleanup level. The highest concentrations ranged from 0.9 to 2.3 mg/kg and were detected at depths ranging between 37 and 50 feet bgs.

3.8. 2011 Supplemental Data Gap Investigation, URS (SRO Property)

In October-November 2011, URS conducted a soil and groundwater investigation at the Property to address data gaps identified from previous investigations (URS, 2011a). The results of this investigation were submitted in a data transmittal to SRO (URS, 2011b). Nine soil borings were completed at the Property to 80 feet bgs; boring URS-SB-11 in the southwest corner was completed as monitoring well URS-MW-8. Soil samples were submitted from all the borings for VOC analysis; groundwater samples from 11 temporary and permanent wells at the Property were analyzed for VOCs.

Soil Results. PCE was detected at concentrations (approximately 0.05 to 0.3 mg/kg) exceeding the MTCA Method A cleanup level in borings URS-SB-9, SB-13 and SB-14 at depths of 40 to 65 feet bgs. PCE was not detected or was detected at low levels in the remaining six borings.

Groundwater Results. PCE concentrations in the shallow, perched groundwater exceeded the MTCA Method A cleanup level in three wells located in the northwest corner of the Property (URS-MW-1, MW-19 and B3/MW-3). PCE concentrations in these wells ranged between 23 and 114 µg/L. PCE was not detected or was detected at low levels in the eight remaining wells. The groundwater flow direction in the perched zone was to the south-southwest.

A deep groundwater sample collected from a temporary well in boring URS-SB-9 at 77 feet bgs was analyzed for VOCs. Boring URS-SB-9 is located in the northwest portion of the SRO Property, immediately downgradient of the Thinker Toys property, in an area that has high levels of PCE in soil and shallow perched groundwater. PCE was detected in this groundwater sample at an estimated concentration of 0.27 µg/L, well below the laboratory reporting limit and the MTCA cleanup level.

Naphthalene was detected at an estimated concentration of 0.23 µg/L in a deep groundwater sample collected from URS-SB-15. This concentration is below the laboratory reporting limit of 1.0 µg/L and several orders of magnitude below the 160 µg/L cleanup level.

3.9. Data Gap Analysis

Previous investigations have delineated the lateral and vertical extent of PCE- and petroleum-contaminated soil and PCE-contaminated groundwater beneath the Property. Although the environmental investigations at the Property have focused on the extent of VOC/PCE contamination, the extent of residual petroleum contamination also has been thoroughly evaluated. Thirty-eight soil samples were analyzed for GRPH, DRPH, and ORPH on the Property during the environmental investigations summarized above. An additional 32 soil samples were analyzed for GRPH only. These 70 soil samples were collected from 23 borings at depths ranging from 0.5 to 40

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feet bgs. Three of the 70 samples contained GRPH at concentrations exceeding the cleanup level, and one sample contained ORPH at a concentration exceeding the cleanup level. Three of the four samples that had petroleum exceedances were collected less than 2 feet below ground surface. The fourth sample was collected from 9 feet bgs. At each boring, a soil sample collected below the contaminated sample did not contain petroleum at concentrations exceeding cleanup levels. Petroleum either was not detected or was detected at concentrations well below cleanup levels in sixty-six out of 70 soil samples that were tested. As described in the draft Cleanup Action Plan, a large number of soil samples will be collected and analyzed during excavation/cleanup to further characterize the lateral and vertical extent of PCE and residual petroleum contamination during excavation. In our opinion, the Property has been adequately characterized and no significant data gaps remain for the purpose of this RI/FS. The extent of PCE-contaminated soil and groundwater west and south of the Property has not been fully delineated; however those areas are beyond the boundary of the subject Property being addressed in this RI/FS report.

4.0 CONCEPTUAL SITE MODEL

A Conceptual Site Model (CSM) has been developed for the Property from historical research and multiple phases of investigation conducted by others as discussed in Section 3. The CSM includes discussion of contaminant sources, the chemicals and media of concern, the fate and transport of those chemicals, and potential exposure pathways that could affect human or environmental health. The CSM is the basis for developing feasible cleanup options and selecting a preferred cleanup action. Figures 10, through 13, provide a graphic display of PCE contamination extent in soil and groundwater at the subject Property and adjacent parcels.

4.1. Source Area

The investigations conducted on the Property and surrounding properties indicate that chlorinated solvent (VOC) contamination of soil and groundwater beneath the Property resulted from releases at the dry cleaning facility that operated on the north-adjacent property (10610 NE 8th Street, also known as the Thinker Toys or BV Holdings Property) from 1976 to 1986. The VOCs released on the Thinker Toys source property migrated passively to the south with groundwater and resulted in VOC contamination on the SRO Property. The highest VOC concentrations in soil on the former Thinker Toys property were detected at depths ranging from 4 to 19 feet bgs, near an existing sump. The highest concentrations of PCE in groundwater also were detected in this same area beneath the former dry cleaner building. The presence of PCE as dense non-aqueous phase liquid (DNAPL) has not been identified beneath the former dry cleaner building or nearby areas, but DNAPL may be present beneath the Thinker Toys property based on the high concentrations of PCE that have been detected in soil and groundwater.

At the SRO Property, PCE has been detected in soils at depths ranging between 12 and 65 feet bgs, in perched groundwater from approximately 20 to 30 feet bgs and historically at low concentrations in the deeper regional aquifer. As discussed in section 3.6, PCE was not detected in soil samples collected throughout the unsaturated zone in boring SRO-4, located immediately adjacent to the former service station drywell and waste oil UST, indicating that these facilities were not sources of PCE releases. The lack of historic on-Property PCE sources, contaminant plume profiles, the distribution of PCE detected in soil and groundwater samples, and the absence of PCE between 12

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feet bgs and the ground surface at numerous soil sample locations indicates that PCE impacting the Property originated from the Tinker Toys property.

A gasoline service station that operated at the Property for more than 30 years was demolished in the early 1990s. Several studies indicate that petroleum releases from USTs and other gas station facilities impacted shallow soil at the Property. USTs, associated facilities and most of the petroleum-contaminated soil (PCS) were removed during a cleanup action in 1992. Gasoline-, diesel- and/or oil-range PCS was detected in four borings on the Property in 2010 at concentrations exceeding MTCA cleanup levels (MTCA exceedances at depths of less than two feet in three borings; an exceedance at a depth of 9 feet at one location). BTEX and petroleum hydrocarbons have not been detected in groundwater samples collected from five shallow borings/wells located downgradient of the former service station facilities. The data indicate that shallow petroleum contamination has not migrated downward from the unsaturated (vadose) zone at levels of regulatory concern.

Naphthalene was detected at an estimated concentration of 0.23 ug/L in a groundwater sample from boring URS-SB-15 at 75 feet bgs. BTEX compounds were detected at low concentrations in soil samples from borings SRO-8, URS-SB-10 and URS-SB-13 at depths of 22 to 75 feet bgs. Except for these estimated/low level detections, naphthalenes, BTEX and petroleum hydrocarbons have not been detected in the large number of soil samples collected in and below the perched groundwater at the Property. These data provide strong evidence that the shallow petroleum contamination at the Property has not mixed/co-mingled with the underlying PCE plume that migrated to the Property from the Thinker Toys site.

4.2. Contaminants of Concern

The COCs for the Property include potentially hazardous or toxic compounds which have a history of use at or upgradient of the Property, or which were detected in environmental media during previous investigations. Several potential COCs that were evaluated by extensive chemical testing at the Property had non-detect results or low/estimated concentrations well below cleanup levels in soil and groundwater. Based on the soil and groundwater data from these analyses, potential COCs that have been screened out as COCs for purposes of the FS and cleanup action include naphthalenes, chloroform, chloromethane, vinyl chloride, methylene chloride, DCA, MTBE and BETX. Based on these criteria, the COCs at the Property that are considered in the FS and cleanup action are PCE, TCE, cis-1,2 DCE, GRPH, DRPH, and ORPH.

4.3. Media of Concern

Soil, perched shallow groundwater, deeper groundwater in the underlying advance outwash aquifer and soil vapor are the media of concern at the Property.

4.4. Contaminant Fate and Transport

This section discusses transport processes and environmental fate of chlorinated solvents in the subsurface. The discussion focuses on PCE because it is the most widespread COC at the Property. The data show that other less prevalent VOC contaminants (e.g. TCE, DCE) will be addressed by any remedial action that addresses PCE. Because residual petroleum in shallow soil appears to be

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limited in extent and has not impacted groundwater, and because it will be removed and disposed appropriately during redevelopment, it will not be discussed in this section.

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Soil and groundwater data indicate that contaminated perched groundwater on the north-adjointing Thinker Toys property has transported PCE by advective flow to the south and southwest onto the subject Property. Soil within and below the primary zone of perched groundwater has been contaminated by direct adsorption of PCE from groundwater onto soil. Soil above the perched groundwater appears to have been contaminated by vapor-phase transport of PCE from groundwater to the unsaturated (vadose) zone soil.

Transport of PCE by perched groundwater flow from the source property to the SRO Property is supported by the south-southwest groundwater flow direction in the area and the PCE plume map and cross-section shown in Figures 12 and 13, respectively. Transport of PCE by advective groundwater flow also is supported by the PCE concentrations in soil and groundwater that decrease with distance away from the source area as a function of mixing with unaffected groundwater and sorption of dissolved-phase PCE onto soil particles.

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Based on available VOC groundwater data collected from [deep boring URS-SB-9](#) and five wells screened in the Advance Outwash aquifer beneath and adjacent to the SRO Property and on the Thinker Toys (source) property, the regional aquifer has been impacted by PCE to some extent. In 2008, PCE was detected at concentrations less than the MTCA cleanup level in deep wells B2/MW-2 located in the north portion of the SRO Property and B4/MW-4 located approximately 60 feet east of the subject Property. [PCE was detected at an estimated concentration less than laboratory reporting limits in a deep groundwater sample collected from boring URS-SB-9 in the northwest portion of the SRO Property immediately downgradient of the Thinker Toys site.](#) PCE has not been detected in the other three deep wells located on SRO property and the Thinker Toys property, and was not detected in wells B2/MW-2 and B4/MW-4 during more recent sampling events in 2010 and 2011. The dense glacial till and [dense silty outwash soil](#) overlying the aquifer has relatively low permeability and may act as an aquitard to limit contaminant migration to the deeper groundwater beneath the Property. [This is supported by dry soil observed in soil borings at the Property at depths beneath the perched groundwater and above the deeper groundwater in the Advance Outwash. In an opinion letter dated July 27, 2011 for the Thinker Toys RI/FS and Interim CAP, Ecology stated "...this suggests the till and outwash sediments between the Perched Interval and the Shallow Aquifer are an effective aquitard and barrier to PCE migration".](#) However, the PCE detections in [groundwater samples from two deep wells in 2008](#) and [the groundwater sample from URS-SB-9](#) indicate that there is hydraulic connection between the shallow perched water and the deeper groundwater in the regional aquifer. The potential still exists for the regional aquifer at the Property to be further contaminated by PCE in the future if effective remedial action is not taken at the source (Thinker Toys) property.

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After PCE is released to the subsurface, naturally-occurring processes such as hydrolysis and reductive dehalogenation can attenuate PCE and result in gradually decreasing concentrations and breakdown into non-toxic components such as chloride and carbon dioxide. PCE also can be attenuated biologically by reductive dechlorination and degradation under the right conditions.

By-products of biologic and chemical attenuation (TCE and DCE) have been detected in soil and shallow groundwater at the Property indicating that biological and/or chemical attenuation

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processes are occurring. These processes tend to occur slowly and can take decades to result in substantial decreases in chlorinated solvent concentrations. Natural attenuation can be especially slow in dense, silty glacial till soils like those present at the Property.

4.5. Exposure Pathways

This section identifies the confirmed and potential human health and ecological exposure pathways at the Property related to PCE contamination. The objective is to identify those pathways requiring mitigation/remediation and apply the findings to potential cleanup actions. Potential short-term exposure of workers to PCE contamination during construction of the proposed development is not discussed here because that will be addressed in worker health and safety plans. Workers handling soil and groundwater with PCE levels exceeding MTCA cleanup levels will need to be Hazardous Waste Operations and Emergency Response (HAZWOPER) trained.

4.5.1. Soil Pathway

Potential pathways of exposure from PCE-contaminated soil include volatilization and potential inhalation of PCE-impacted air (covered in Section 4.5.3), and dermal contact/ingestion. Another potential pathway is leaching of PCE from contaminated soil to groundwater. These potential pathways are retained for consideration in the FS. Protection from the direct contact exposure pathways would require capping or excavation. Mitigation of the soil-to-groundwater pathway would require treatment or removal of contaminated soil.

4.5.2. Groundwater Pathway

Potential pathways of exposure from PCE-contaminated groundwater include volatilization and subsequent exposure through the vapor pathway (covered in Section 4.5.3), direct contact, or ingestion. These potential pathways are retained for consideration in the FS. There are no potable water supply wells in the vicinity of the Property. The Advance Outwash (regional) aquifer underlying the perched groundwater zone may qualify as a potential future source of potable water. However, because of the availability of the municipal water supply in the vicinity of the Property, there is clearly a low probability that this aquifer would be used as a potable water source.

Existing utility corridors are present at elevations higher than the perched groundwater at the Property. Utility corridors do not appear to provide preferential pathways for contaminant migration via groundwater.

It is important to note that SRO is not a PLP for PCE impacts to groundwater, either within the perched groundwater or within the regional aquifer. The source of any such impacts is the Former Thinker Toys Site. The planned remediation concurrent with redevelopment, as discussed in the FS, will remediate impacts on the Property and the development will eliminate the possibility for the extraction and use of groundwater at the Property.

4.5.3. Vapor Pathway

Soil vapor (i.e. the air in the pore space between soil grains in the unsaturated zone) can be impacted by volatilization of PCE from soil and groundwater. In areas with no structures, vapors rising to the surface would be dispersed into the atmosphere, where dilution and degradation would occur rapidly. The risk of exposure from soil gas is by intrusion/seepage into enclosed structures and

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inhalation of PCE-impacted air by building occupants. No structures currently exist on the portion of the Property where the groundwater plume is located, so the vapor pathway is not considered a high exposure risk under current conditions. According to MTCA Method B screening levels calculated following methods outlined in Ecology (2009), the presence of PCE concentrations in groundwater exceeding 24 µg/L or in soil vapor beneath a building structure exceeding 96 micrograms per cubic meter (µg/m³) has the potential to impact indoor air through a concrete floor slab. An exposure pathway could be created during future redevelopment of the Property, particularly in the northwest corner where PCE concentrations are highest in soil and groundwater. Therefore, the soil vapor pathway will be considered during evaluation of remedial cleanup alternatives.

4.6. Terrestrial Ecological Evaluation

WAC 173-340-7940 requires a Terrestrial Ecological Evaluation (TEE) to be completed at sites where there has been a release of hazardous substances to soil. The TEE is intended to assess potential ecological risks (i.e., plants and animals that could be affected by contamination). A copy of the TEE form that was completed for the [Property](#) is included in Appendix C. According to the criteria in WAC 173-340-7491(1)(c)(i), the Property qualifies for an exclusion from a TEE because: "There is less than 1.5 acres of contiguous undeveloped land on the site or within 500 feet of any area of the site."

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5.0 RI SUMMARY, CAOS, ARARS AND CLEANUP STANDARDS

RI summary statements, cleanup action objectives (CAOs), applicable or relevant and appropriate requirements (ARARs), and Cleanup Standards for the SRO Property are presented in this section. These elements are used to screen, evaluate and select remedial alternatives in the Feasibility Study (FS).

5.1. RI Summary

Multiple investigations have delineated the lateral and vertical extent of PCE- and petroleum-contaminated soil (PCS) and PCE-contaminated groundwater at the Property. The presence of residual PCS appears to be shallow and petroleum-impacted groundwater has not been detected at the Property except for a low level detection of naphthalene in one sample. The source of the shallow PCS is attributed to a former service station that operated on the SRO Property for many years. PCE-contaminated soil and groundwater exists beneath the SRO Property from releases of chlorinated solvent at a former dry cleaning facility on the upgradient Thinker Toys property. The SRO Property is continuing to be affected by PCE through transport-passive migration of groundwater flowing from the Thinker Toys Property to the SRO Property. PCE has been detected at concentrations exceeding MTCA cleanup levels in soil and groundwater at the Property between approximately 12 and 65 feet bgs.

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Based on the soil data presented in Table 2 and discussed in this report, PCE, TCE and petroleum hydrocarbons were the only compounds detected in soil at concentrations exceeding MTCA cleanup levels. Compounds that were not detected, or were detected at concentrations less than the laboratory reporting limits/below MTCA cleanup levels are not carried forward as COCs for the FS and cleanup action. These compounds include methylene chloride, chloroform, chloromethane, DCE, DCA, vinyl chloride, MTBE, naphthalenes and BTEX. Based on the groundwater data in Table 3, PCE, TCE, and cis-1,2-DCE were the only compounds detected in groundwater samples at

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concentrations exceeding or close to MTCA cleanup levels. As discussed in the draft Cleanup Action Plan, petroleum hydrocarbons, PCE and TCE are the proposed indicator compounds for soil characterization and confirmation sampling conducted during excavation/cleanup. PCE, TCE and cis-1,2, DCE are the proposed indicator compounds for post-construction groundwater monitoring.

In our opinion, the Property has been characterized sufficiently to establish cleanup standards and allow selection of a MTCA-compliant cleanup action.

5.2. Cleanup Action Objectives

The overall objective of the cleanup action is to achieve compliance with MTCA in conjunction with development of the planned high rise commercial building that is proposed for the Property. The primary goal will be to complete a cleanup action that is protective of human health and the environment. It is anticipated that all soil exceeding MTCA cleanup levels will be removed via the Planned Development Excavation. However unlikely, it is possible that PCE-contaminated soil may remain in limited areas at the bottom of the Planned Development Excavation. Confirmation soil samples will be collected to evaluate/document soil conditions at the vertical and lateral limits of the Planned Development Excavation. Groundwater originating outside the Property with VOC concentrations exceeding cleanup levels will be captured at the north, south and west Property boundaries in subsurface building wall drains for permitted discharge during construction and long-term post-construction.

CAOs define the benchmarks that remedial alternatives should meet to be selected for further consideration in the Feasibility Study. Those benchmarks include:

- Implement administrative principles for cleanup (WAC 173-340-130);
- Meet the requirements, procedures, and expectations for conducting an FS and developing cleanup action alternatives as discussed in WAC 173-340-350 through 173-340-370; and
- Develop cleanup levels (WAC 173-340-700 through 173-340-760) and remedial alternatives that are protective of human health and the environment.

Property-specific CAOs that take into account the proposed future property redevelopment include:

- Avoid generating dangerous waste by obtaining a Contained-In Determination from Ecology for PCE-contaminated soil. The Contained-In Determination will allow for proper disposal of PCE-impacted soils at permitted landfills that are protective but less costly than dangerous waste disposal facilities.
- Remove contaminated soil and groundwater throughout the Property to achieve cleanup levels for unrestricted land use.
- Develop and implement engineering controls to capture off-Property PCE-contaminated groundwater from the perched zone. The intent is to capture water along the north, south, and west boundaries of the Property and dispose the water to prevent recontamination of the Property. The wall drainage system in the portion of the Property impacted by the PCE plume will be designed to prevent migration of the contaminated perched water to the deeper advance outwash aquifer. These engineering controls will need to be operated for many years until

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groundwater in the vicinity of the Property no longer contains PCE at concentrations exceeding the MTCA Method A cleanup level.

- Develop and implement engineering controls as needed at the Property to mitigate risk of vapor intrusion in the proposed building/underground parking structure.
- Obtain a property-specific No Further Action opinion from Ecology for the SRO Property.

5.3. Applicable or Relevant and Appropriate Requirements

As required by WAC 173-340-710, the selected cleanup action for the Property will comply with applicable local, state and federal laws and regulations. MTCA (173-340 WAC) represents the primary regulation that establishes cleanup standards, cleanup levels and other requirements for cleanup of the Property. Cleanup standards and applicable cleanup concentrations (screening levels) for contaminants of concern in soil and groundwater are presented in Section 5.4.

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In addition to the MTCA cleanup regulation, key ARARs that are applicable to the cleanup action at the SRO Property include:

- Washington Dangerous Waste Regulations; WAC 173-303.
- Solid Waste Management Act; RCW 70.95; WAC 173-304 and 173-351.
- Occupational Safety and Health Administration Regulations (OSHA); 29 CFR Parts 1910 and 1926.
- Washington Department of Labor and Industries Regulations; WAC 296.
- City of Bellevue and King County regulations and codes.

5.4. Cleanup Standards

Cleanup standards developed under MTCA must also meet the statutory requirement to be at least as stringent as other applicable state and federal laws. The cleanup standards discussed in this section include cleanup levels and points of compliance.

5.4.1. Cleanup Levels

Cleanup levels for the Property were selected to be consistent with the CAOs and address the petroleum and chlorinated solvent COCs. Soil and groundwater cleanup levels and their regulatory source are presented in Table 4. The proposed soil cleanup levels generally are MTCA Method A for Unrestricted Land Use for COCs that have a Method A cleanup level. The proposed groundwater cleanup levels generally are MTCA Method A. If there is no Method A soil cleanup level for a particular COC, the proposed cleanup level is MTCA Method B-derived for protection of groundwater. If there is no Method A groundwater cleanup level for a particular COC, the proposed cleanup level is MTCA Method B Standard Formula for drinking water (carcinogen or noncarcinogen as appropriate).

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5.4.2. Points of Compliance

Points of compliance are the points on the Property where soil and groundwater cleanup levels shall be attained.

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5.4.2.1. POINT OF COMPLIANCE FOR GROUNDWATER

The point of compliance for groundwater is defined in MTCA as the uppermost level of the saturated zone extending vertically to the lowest depth that could potentially be impacted by the COCs (WAC 173-340-720[8]). The point of compliance for the SRO Property is applicable to groundwater located within the Property boundaries. As discussed in the RI, PCE and TCE have been detected in shallow perched groundwater at the Property at concentrations exceeding MTCA cleanup levels. PCE was detected at concentrations less than the MTCA cleanup level in deeper groundwater from the underlying advance outwash aquifer on/adjacent to the subject Property during a sampling event in 2008 and in a boring completed in 2011. The PCE/TCE contamination in the shallow perched groundwater and low level impacts to the deep aquifer are attributed to releases of dry cleaning solvent on the north-adjacent Thinker Toys property that migrated passively with groundwater onto the SRO Property. As discussed in the FS, the shallow groundwater contamination will be removed from the subject Property during cleanup and engineering controls will be used to capture/manage contaminated shallow groundwater that continues to flow from the upgradient Thinker Toys property. Also as discussed in the FS, engineering controls will be implemented on the SRO Property to limit, to the extent practicable, the potential for the vertical migration of shallow groundwater to the regional aquifer as a result of the redevelopment. The vertical migration of the upgradient, shallow perched groundwater to the outwash aquifer beneath the Thinker Toys source property may occur naturally as a result of the off-property release.

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5.4.2.2. POINT OF COMPLIANCE FOR SOIL

The point of compliance for direct contact with soil is from the ground surface to 15 feet bgs (per WAC 173-340-740[6]). Current redevelopment plans indicate that soil in the portion of the Property where PCE-contaminated soil has been identified will be removed to the maximum depths of the Planned Development Excavation. Contaminated soil will be disposed at a permitted facility in accordance with a Contained-In Determination that will be obtained from Ecology.

5.4.2.3. POINT OF COMPLIANCE FOR SOIL VAPOR

Cleanup standards and points of compliance for soil vapor have not been established in Washington State. However, Ecology (2009) has published draft guidance that includes soil gas screening levels. The draft guidance identifies two points of compliance for soil vapor: sub-slab (immediately below a structure) and soil gas that is 15 feet or more bgs. The sub-slab screening levels are also applicable to soil vapor samples obtained at depths between 5 and 15 feet bgs.

6.0 FEASIBILITY STUDY

This FS is being performed in support of the proposed development at the Property to assure that the remedial action will be protective of human health and the environment. The primary purpose of the FS is to develop and evaluate cleanup action alternatives and select a preferred cleanup alternative that meets the MTCA requirements for cleanup actions described in WAC 173-340-360. The remedial alternatives evaluation assumes that cleanup will take place during redevelopment of the Property. Current development plans call for construction of a multi-story commercial building with up to seven levels of underground parking. The planned redevelopment will require demolition of existing buildings, installation of an engineered shoring system along the Property boundary, and the Planned Development Excavation to allow for about 7 floors of underground parking. It is anticipated that the Planned Development Excavation will result in the complete or near-complete

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removal of PCE-impacted soil throughout the Property. Screening of remedial alternatives and selection of the preferred remedial alternative are presented in the following sections. Detailed information regarding the Planned Development Excavation and implementation of the preferred remedial alternative are presented in a separate CAP (GeoEngineers, 2014).

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6.1 Remedial Alternative Screening Criteria

6.1.1. Threshold Requirements

MTCA specifies threshold (minimum) requirements for cleanup actions that are useful for evaluating remedial alternatives. The threshold requirements for cleanup actions specified in WAC 173-340-360 are:

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

6.1.2. Additional Requirements

MTCA states that remedial alternatives which meet the threshold requirements shall also be evaluated against the following criteria:

- I. Use permanent solutions to the maximum extent practicable based on the following criteria from WAC 173-340-360(3)(f):
 - **Protectiveness** – Overall protectiveness of human health and the environment, including the degree to which existing risks are reduced, time required to reduce risk and reach cleanup levels, on-site and off-site risks resulting from implementing the alternative, and improvement of the overall environmental quality.
 - **Permanence** – The degree to which the alternative permanently reduces the toxicity, mobility or volume of hazardous substances, including the adequacy of the alternative in destroying hazardous substances, the reduction or elimination of hazardous substance releases and sources, the degree of irreversibility of waste treatment processes, and the characteristic and quantity of treatment residuals generated.
 - **Cost** – The cost to implement the alternative, including the cost of construction, the net present value of any long-term costs, and agency oversight costs that are cost recoverable. Long-term costs include operations and maintenance (O&M), monitoring, equipment replacement, and maintaining institutional controls. Cost estimates for treatment technologies will describe pretreatment, analytical, labor, and waste management costs. The design life of the cleanup action will be estimated and the cost of replacement or repair of major elements will be included.
 - **Long-term effectiveness** – Long-term effectiveness includes the degree of certainty that the alternative will be successful, the reliability of the alternative while hazardous substances are expected to remain on-site, magnitude of residual risk with the alternative in place, and the effectiveness of controls required to manage treatment residues or remaining wastes. MTCA

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provides a list of cleanup action components, in order of decreasing long-term effectiveness, to guide evaluation:

- Reuse or recycling;
 - Destruction or detoxification;
 - Immobilization or solidification;
 - On-site or off-site disposal in an engineered, lined and monitored facility;
 - On-site isolation or containment with attendant engineering controls; and
 - Institutional controls and monitoring.
- **Short-term risk management** –The risk to human health and the environment associated with the alternative during construction and implementation, and the effectiveness of measures that will be taken to manage such risks.
- **Implementability** – Consideration of whether the alternative is technically possible, including availability of necessary facilities, services and materials, administrative and regulatory requirements, scheduling, size, complexity, monitoring requirements, site access, and integration with existing facility operations and other current/potential remedial actions.
- II. Provide for a reasonable restoration time frame per WAC 173-340-360(4).
- III. Consider public concerns per WAC 173-340-600.

6.2 Identification and Screening of Remedial Alternatives

Based on the RI results, the following remedial alternatives were considered for the Property to address soil and groundwater contaminated with chlorinated solvents and petroleum:

1. No action;
2. Excavation of contaminated soil exceeding MTCA cleanup levels with on-site treatment and reuse;
3. Excavation of contaminated soil exceeding MTCA cleanup levels with off-site disposal at a permitted facility;
4. Capture of contaminated, perched groundwater using perimeter wells and permitted water discharge;
5. Capture of contaminated, perched groundwater using subsurface wall drains, and permitted water discharge;
6. Soil Vapor Extraction and Treatment system at the perimeter of the Property; and
7. Installation of a vapor barrier on subsurface, perimeter building walls and concrete slab at bottom of the underground parking structure.

In our opinion, alternatives 1, 2, 4 and 6 would not achieve the cleanup action objectives of this project or satisfy the MTCA requirements for cleanup actions described in Section 6.1. As a result of the following rationale, these four remedial alternatives were eliminated from further consideration:

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- **Alternative 1 - No action.** The “no action” alternative would not achieve compliance with MTCA because contaminant concentrations in soil and groundwater at the Property would not be reduced or isolated and exposure pathways would not be mitigated.
- **Alternative 2 - Excavation of contaminated soil with on-site treatment and reuse.** This alternative would be 1) relatively high in cost, 2) require extensive space for soil treatment, and 3) require a relatively long period of time to achieve MTCA cleanup levels for the most contaminated soil. Additionally, the redevelopment project calls for export of nearly all the excavated soil, so reuse of the treated soil would not be feasible.
- **Alternative 4 - Capture of contaminated, perched groundwater using perimeter wells, and permitted water discharge.** The sole source of groundwater contamination is the north-adjointing (upgradient) Thinker Toys property. Any cleanup alternatives for the SRO Property must consider the ongoing source of upgradient contamination and the continued transport of contaminated groundwater to the Property. Groundwater extraction with perimeter wells would likely increase the migration rate of upgradient contamination onto the Property without a barrier wall system to cut off groundwater. A barrier wall system would need to tie into a low permeability soil layer at a depth of 90 feet or more and would be prohibitively expensive to construct. Constructing a barrier wall could also provide a pathway for VOC contamination to impact the regional aquifer. This option is not retained because of difficulty to implement, environmental risk, and prohibitive cost compared to other alternatives.
- **Alternative 6 - Soil Vapor Extraction (SVE) and Treatment system at the perimeter of the Property.** Based on 1) the concentrations of VOCs in soil and groundwater at the Property, and 2) the planned construction of underground parking that incorporates a perimeter wall and sub-slab vapor barrier, impacts to indoor air quality are not anticipated. Active vapor intrusion mitigation measures like a SVE system are not considered necessary elements of a complete remedy.

6.3 Preferred Remedial Alternative

Based on evaluation of the remedial alternatives, the preferred remedial alternative is a combination of alternatives 3, 5, and 7 below. Taken together, these alternatives best meet MTCA requirements for a permanent, protective cleanup action of the Property. These measures (except long-term monitoring and operation of the groundwater capture and permitted discharge system) are anticipated to require 1 to 2 years to implement following start of construction of the proposed redevelopment.

- **Alternative 3 - Excavation of contaminated soil with off-Property disposal at a permitted facility:**
 - Demolish the existing building in the east portion of the Property. Install shoring around the perimeter of the Property to allow excavation of contaminated soil during the Planned Development Excavation. The construction excavation is planned to extend from property line to property line to comply with City of Bellevue requirements.
 - Remove petroleum- and PCE-contaminated soil from the Property for disposal at a permitted landfill facility. The PCE-contaminated soil will be disposed in accordance with a Contained-In Determination issued by Ecology. Based on the results of the RI, all of the contaminated soil at the Property is expected to be removed from the Property by

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implementing Alternative 3. Based on the Planned Development Excavation, and considering available data, it is unlikely that PCE-impacted soil will remain at the vertical limits of the excavation. The remedial excavation will not extend beyond the lateral or vertical limits of the Planned Development Excavation. In the event that performance sampling indicates that PCE-contaminated soil remains at the limits of the excavation, a concrete slab at the bottom of the parking garage and the subsurface concrete walls of the garage will eliminate the potential for direct contact with any remaining impacted soils. Collection of additional soil characterization samples and soil confirmation sampling at the limits of the excavation is discussed in the draft CAP (GeoEngineers 2014).

- If contaminated soil remains at the vertical limits of the excavation, institutional controls would be necessary to complete the cleanup action. Institutional controls would include cap maintenance (i.e., maintaining the building walls and foundation), land use restrictions, post-cleanup soil and groundwater handling protocols, prohibiting the use of groundwater beneath the Property for drinking water etc. If institutional controls are required, they will be stipulated in an environmental covenant.

■ **Alternative 5 - Capture of contaminated, perched groundwater using subsurface wall drains, and permitted water discharge:**

- Design and build a system to capture any VOC-contaminated perched groundwater encountered during construction and contaminated water that continues to passively migrate from the upgradient source property toward the SRO Property post-construction. The water capture system will be incorporated into the engineered wall drains that will be designed by the developer's engineers to relieve hydrostatic pressure on the external building walls. The perched groundwater capture system will need to be designed to minimize the potential for downward migration of contaminated water to the underlying regional aquifer. The presence of VOCs in the captured groundwater will require that water to be disposed under a permitted discharge authorization that is described in the draft CAP (GeoEngineers 2014).
- Provide financial assurance for the operation and maintenance of the contaminated groundwater capture/discharge system for many years until the upgradient groundwater migrating to the Property no longer exceeds groundwater cleanup levels.

■ **Alternative 7- Install a vapor barrier on perimeter walls and concrete slab at bottom of the underground parking structure:**

- Install a vapor barrier on subsurface perimeter walls and the concrete slab at the bottom of the parking structure to minimize potential migration of chlorinated solvent vapors into the underground parking structure.

Post-cleanup groundwater monitoring wells will be installed at the perimeter of the Property in both the perched groundwater zone and the deeper Advance Outwash aquifer. Deep monitoring wells will be drilled using methods that minimize the potential for cross-contamination between the water bearing units.

The post-construction compliance monitoring approach will be presented in a groundwater monitoring plan that will be submitted to Ecology.

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Taken together, these remedial actions meet the requirements for conducting a MTCA-compliant cleanup action:

- **Protectiveness** – The proposed cleanup action will be protective of human health and the environment. Soil and groundwater that exceeds MTCA cleanup levels will be removed from the Property. Redevelopment that includes a below-ground parking garage that extends property line to property line will eliminate the possibility that groundwater supply wells could be installed in the future at the Property and potentially draw from the outwash aquifer. At the completion of development there will be no open area on the Property where a water well could be installed.
- **Permanence and long-term effectiveness** – Excavation and disposal of contaminated soil at a permitted facility is considered a permanent solution. Contaminated groundwater capture/discharge is considered the most permanent solution achievable considering the presence of the adjacent, separately-owned upgradient source property. Establish financial assurance (e.g. bond, escrow account) to ensure the long-term O&M of the groundwater capture/discharge system. A vapor barrier is expected to provide effective vapor control/mitigation for the life of the building.
- **Cost** – Based on discussions with Ecology at a December 2012 meeting, a disproportionate cost analysis is not required for this evaluation because the most permanent and protective measures were selected for each of the environmental media of concern.
- **Short-term risk management** – The preferred remedial alternative will be implemented during redevelopment of the Property. The proposed cleanup action does not result in a significant amount of additional short-term risk beyond what is typical for a large construction project in an urban setting.
- **Implementability** – The cleanup actions proposed for the Property are technically feasible and have been successfully implemented at other sites with similar COCs and subsurface conditions.
- **Reasonable restoration timeframe** – These measures (except long-term monitoring and operation of the groundwater capture/treatment/discharge system) are anticipated to require 1 to 2 years to implement following start of construction of the proposed redevelopment. This represents a reasonable restoration timeframe in our opinion.
- **Consider Public Concerns** – Public notice of the proposed cleanup action at the Property will be provided in accordance with WAC 173-340-360(4). The proposed cleanup action will be completed under the VCP, will take place during redevelopment/construction, and is considered routine. The cleanup action is not expected to generate significant public concern or comment.

7.0 LIMITATIONS

We have prepared this RI/FS report for use by Sterling Realty Organization as part of their evaluation of and planning for environmental conditions at the subject Property.

Within the limitations of scope, schedule and budget, our services have been executed in accordance with generally accepted environmental science practices in this area at the time this report was prepared. No warranty or other conditions, express or implied, should be understood. This report was

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prepared based on previous investigations and data collected by others. GeoEngineers is not responsible for any data that was inaccurately reported by others and reproduced here.

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Please refer to Appendix D titled "Report Limitations and Guidelines for Use" for important additional information pertaining to the use of this report.

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Table 1

Monitoring Well Groundwater Elevation Data, 2008 - 2011
Sterling Realty Organization Property at 10605 and 10619 NE 8th Street
Bellevue, Washington

SRO Property Well ID	Well Screen Interval (feet, bgs)	Top of Casing Elevation (feet above datum)	Well Screen Elevation (feet above datum)	Groundwater Depth (feet, bgs)										Groundwater Elevation (feet, msl)									
				6/26/08	7/7/08	9/10/08	11/21/08	3/16/10	3/17/10	5/3/10	8/23/10	10/19/11	10/21/11	6/26/08	7/7/08	9/10/08	11/21/08	3/16/10	3/17/10	5/3/10	8/23/10	10/19/2011	10/21/2011
URS-MW-1	20-30	157.87	137.87 - 127.87	NM	NM	26.41	27.21	22.50	22.66	22.49	22.95	NM	24.53	NM	NM	131.46	130.66	135.37	135.21	135.38	134.92	NM	133.34
URS-MW-2	20-30	160.22	140.22 - 130.22	NM	NM	Dry	Dry	24.64	25.05	24.45	25.89	NM	28.61	NM	NM	Dry	Dry	135.58	135.17	135.77	134.33	NM	131.61
URS-MW-3	20-30	153.98	133.98 - 123.98	NM	NM	27.36	28.75	22.28	22.54	22.40	23.24	NM	25.52	NM	NM	126.62	125.23	131.70	131.44	131.58	NM	NM	128.46
URS-MW-4	20-30	152.99	132.99 - 122.99	NM	NM	Dry	Dry	NM	29.87	29.85	30.08	NM	29.89	NM	NM	Dry	Dry	NM	123.12	123.14	122.91	NM	123.10
URS-MW-8	70-80	152.35	82.35 - 72.35	NM	NM	NM	NM	NM	NM	NM	NM	68.62	68.40	NM	NM	NM	NM	NM	NM	NM	NM	83.73	83.95
B1/MW-1	70-90	169.63	99.63 - 79.63	NM	NM	NM	NM	90.77	92.81	NM	NM	NM	85.49	NM	NM	NM	NM	78.86	76.82	NM	NM	NM	84.14
B2/MW-2	70-90	159.02	89.02 - 69.02	74.30	74.62	NM	74.95	75.90	75.97	75.69	75.50	NM	73.15	84.72	84.40	NM	84.07	83.12	83.05	83.33	83.52	NM	85.87
B3/MW-3	20-30	158.89	138.89 - 128.89	23.89	23.93	24.68	28.93	23.45	23.40	23.43	23.70	NM	23.79	135	134.96	134.21	129.96	135.44	135.49	135.46	135.19	NM	135.10
B4/MW-4	70-90	157.06	87.06-67.06	82.31	82.29	NM	79.30	76.58	76.58	76.60	76.61	NM	75.12	123.14	122.91	NM	77.76	80.48	80.48	80.46	80.45	NM	81.94
MW-19	10-30	156.31	146.31-126.31	NM	NM	NM	NM	NM	NM	NM	27.21	NM	29.18	NM	NM	NM	NM	NM	NM	NM	NM	129.10	127.13
MW-20	15-30	152.63	137.63 - 122.63	NM	NM	NM	NM	NM	NM	NM	21.93	NM	23.40	NM	NM	NM	NM	NM	NM	NM	NM	130.70	129.23
Data Source	Farallon ¹	Farallon ¹	Farallon ¹	Farallon ¹	Farallon ¹	URS ²	URS ²	URS ²	URS ²	Farallon ¹	Farallon ¹	URS ²	URS ²	Farallon ¹	Farallon ¹	URS ²	URS ²	URS ²	URS ²	URS ²	URS ²	URS ²	URS ²

Notes:

¹As reported (SES, 2011)

²As reported (URS, 2011B)

NM = not measured

ft, bgs = feet below ground surface

ft, msl = feet above mean sea level

Vertical datum based on City of Bellevue - NAVD 88

Wells labeled "URS" were completed by URS Corporation.

Wells B1/MW-1, B2/MW-2, B3/MW-3, and B4/MW-4 were completed by Terra Associates.

Wells MW-19 and MW-20 were completed by Farallon.

May 3, 2010 groundwater elevations in perched zone are shown on Figure 7.

Table 2

Chemical Analytical Data for Soil Samples

Sterling Realty Organization Property at 10605 and 10619 NE 8th Street
Bellevue, Washington

Sample ID	Sample Collected By	Sample Date	Depth (ft bgs)	VOCs (mg/kg) ¹										Gasoline-range Petroleum Hydrocarbons (mg/kg) ²	Diesel-range Petroleum Hydrocarbons (mg/kg) ³	Oil-range Petroleum Hydrocarbons (mg/kg) ³	Lead (mg/kg)			
				PCE	TCE	cis-1,2 DCE	trans-1,2 DCE	1,1-DCE	1,2-DCA	Vinyl Chloride	Benzene	Toluene	Ethyl-benzene					Xylenes, total		
Soil samples collected in 2000 (URS, 2000)																				
URSSB-OP1 URSSB-OP2 URSSB-OP3 URSSB-OP4 URSSB-OP5 URSSB-OP6 URSSB-OP7 URSSB-OP8	URS	3/11/2000	6	--	--	--	--	--	--	--	--	< 0.056	< 0.056	< 0.056	< 0.112	< 5.6	< 28	< 56	--	
		3/11/2000	18	< 0.056	< 0.056	< 0.056	< 0.056	< 0.056	< 0.056	< 0.056	< 0.056	< 0.056	< 0.056	< 0.056	< 0.056	< 0.112	< 5.6	< 28	< 56	--
		3/11/2000	12	< 0.054	< 0.054	< 0.054	< 0.054	< 0.054	< 0.054	< 0.054	< 0.054	< 0.054	< 0.054	< 0.054	< 0.054	< 0.108	< 5.4	< 27	< 56	--
		3/11/2000	6	--	--	--	--	--	--	--	--	--	< 0.059	< 0.059	< 0.059	< 0.118	< 5.9	< 29	< 59	--
		3/11/2000	18	--	--	--	--	--	--	--	--	--	< 0.056	< 0.056	< 0.056	< 0.112	< 5.6	< 28	< 56	--
		3/11/2000	8	--	--	--	--	--	--	--	--	--	< 0.054	< 0.054	< 0.054	< 0.108	< 5.4	< 27	< 54	--
		3/11/2000	12	< 0.054	< 0.054	< 0.054	< 0.054	< 0.054	< 0.054	< 0.054	< 0.054	< 0.054	< 0.054	< 0.054	< 0.054	< 0.108	< 5.4	< 27	< 54	--
		3/11/2000	20	< 0.054	< 0.054	< 0.054	< 0.054	< 0.054	< 0.054	< 0.054	< 0.054	< 0.054	< 0.054	< 0.054	< 0.054	< 0.108	< 5.4	< 27	< 54	<5.4
3/11/2000	16	--	--	--	--	--	--	--	--	--	< 0.054	< 0.054	< 0.054	< 0.108	< 5.4	< 28	88	--		
3/11/2000	8	--	--	--	--	--	--	--	--	--	< 0.056	< 0.056	< 0.056	< 0.112	< 5.6	< 28	< 56	--		
3/11/2000	18	--	--	--	--	--	--	--	--	--	< 0.055	< 0.055	< 0.055	< 0.110	< 5.5	< 28	< 55	<5.5		
Soil samples collected in 2008 (Terra, 2008; URS, 2008)																				
B2/MW-2	Terra Associates	6/23/2008	5	--	--	--	--	--	--	--	--	--	--	--	--	<22	<56	<110	--	
		6/23/2008	15	--	--	--	--	--	--	--	--	--	--	--	--	<22	<55	<110	--	
		6/23/2008	25	--	--	--	--	--	--	--	--	--	--	--	--	<22	<54	<110	--	
URS-MW-1	URS	8/25/2008	15	< 0.02	<0.03	<0.02	<0.02	<0.05	<0.03	<0.002	< 0.02	< 0.02	< 0.03	< 0.03	<10	--	--	--	--	
		8/25/2008	27.5	0.41	<0.03	<0.02	<0.02	<0.05	<0.03	<0.002	< 0.02	< 0.02	< 0.03	< 0.03	<10	--	--	--	--	
URS-MW-2	URS	8/27/2008	15	< 0.02	<0.03	<0.02	<0.02	<0.05	<0.03	<0.002	< 0.02	< 0.02	< 0.03	< 0.03	<10	--	--	--	--	
		8/27/2008	27.5	< 0.02	<0.03	<0.02	<0.02	<0.05	<0.03	<0.002	< 0.02	< 0.02	< 0.03	< 0.03	<10	--	--	--	--	
URS-MW-3	URS	8/26/2008	17.5	< 0.02	<0.03	<0.02	<0.02	<0.05	<0.03	<0.002	< 0.02	< 0.02	< 0.03	< 0.03	<10	--	--	--	--	
		8/26/2008	27.5	< 0.02	<0.03	<0.02	<0.02	<0.05	<0.03	<0.002	< 0.02	< 0.02	< 0.03	< 0.03	<10	--	--	--	--	
URS-MW-4	URS	8/26/2008	12.5	0.17	<0.03	<0.02	<0.02	<0.05	<0.03	<0.002	< 0.02	< 0.02	< 0.03	< 0.03	<10	--	--	--	--	
		8/26/2008	30	0.12	<0.03	<0.02	<0.02	<0.05	<0.03	<0.002	< 0.02	< 0.02	< 0.03	< 0.03	<10	--	--	--	--	
URS-SB-1	URS	8/25/2008	10	< 0.02	<0.03	<0.02	<0.02	<0.05	<0.03	<0.002	< 0.02	< 0.02	< 0.03	< 0.03	<10	--	--	--	--	
		8/25/2008	30	0.22	<0.03	<0.02	<0.02	<0.05	<0.03	<0.002	< 0.02	< 0.02	< 0.03	< 0.03	<10	--	--	--	--	
		8/25/2008	45	0.05	<0.03	<0.02	<0.02	<0.05	<0.03	<0.002	< 0.02	< 0.02	< 0.03	< 0.03	<10	--	--	--	--	
		8/25/2008	75	< 0.02	<0.03	<0.02	<0.02	<0.05	<0.03	<0.002	< 0.02	< 0.02	< 0.03	< 0.03	<10	--	--	--	--	
URS-SB-2	URS	8/25/2008	10	< 0.02	<0.03	<0.02	<0.02	<0.05	<0.03	<0.002	< 0.02	< 0.02	< 0.03	< 0.03	<10	--	--	--	--	
		8/25/2008	27.5	0.07	<0.03	<0.02	<0.02	<0.05	<0.03	<0.002	< 0.02	< 0.02	< 0.03	< 0.03	<10	--	--	--	--	
URS-SB-3	URS	8/26/2008	17.5	0.05	<0.03	<0.02	<0.02	<0.05	<0.03	<0.002	< 0.02	< 0.02	< 0.03	< 0.03	<10	--	--	--	--	
		8/26/2008	22.5	0.07	<0.03	<0.02	<0.02	<0.05	<0.03	<0.002	< 0.02	< 0.02	< 0.03	< 0.03	<10	--	--	--	--	
URS-SB-4	URS	8/27/2008	17.5	< 0.02	<0.03	<0.02	<0.02	<0.05	<0.03	<0.002	< 0.02	< 0.02	< 0.03	< 0.03	<10	--	--	--	--	
		8/27/2008	30	< 0.02	<0.03	<0.02	<0.02	<0.05	<0.03	<0.002	< 0.02	< 0.02	< 0.03	< 0.03	<10	--	--	--	--	
URS-SB-8	URS	11/19/2008	21.5	< 0.02	<0.03	<0.02	<0.02	<0.05	<0.03	<0.002	< 0.02	< 0.02	< 0.03	< 0.03	--	--	--	--	--	
		11/19/2008	29	< 0.02	<0.03	<0.02	<0.02	<0.05	<0.03	<0.002	< 0.02	< 0.02	< 0.03	< 0.03	--	--	--	--	--	
		11/19/2008	41.5	< 0.02	<0.03	<0.02	<0.02	<0.05	<0.03	<0.002	< 0.02	< 0.02	< 0.03	< 0.03	--	--	--	--	--	
Soil samples collected in 2010 (Farallon, 2010)																				
MW-19	Farallon	8/5/2010	4.5	<0.025	<0.03	<0.05	<0.05	<0.05	<0.05	<0.05	--	--	--	--	--	--	--	--	--	
		8/5/2010	9	<0.025	<0.03	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	--	--	--	--	--	--	--	--	
		8/5/2010	24	<0.025	<0.03	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.03	<0.05	<0.05	<0.1	<2	<50	<250	--	
		8/5/2010	29	<0.025	<0.03	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	--	--	--	--	--	--	--	--	
MTCA Method A or B Cleanup Levels				0.05 (A)	0.03 (A)	0.076 (B)	0.48 (B)	0.037 (B)	0.0023 (B)	0.0012 (B)	0.03 (A)	7 (A)	6 (A)	9 (A)	100 (A)	2,000 (A)	2,000 (A)	250 (A)		

Sample ID	Sample Collected By	Sample Date	Depth (ft bgs)	VOCs (mg/kg) ¹										Gasoline-range Petroleum Hydrocarbons (mg/kg) ²	Diesel-range Petroleum Hydrocarbons (mg/kg) ³	Oil-range Petroleum Hydrocarbons (mg/kg) ³	Lead (mg/kg)		
				PCE	TCE	cis-1,2 DCE	trans-1,2 DCE	1,1-DCE	1,2-DCA	Vinyl Chloride	Benzene	Toluene	Ethyl-benzene					Xylenes, total	
MW-20	Farallon	8/6/2010	4.5	<0.025	<0.03	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	--	--	--	--	--	--	--	
		8/6/2010	10	<0.025	<0.03	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	--	--	--	--	--	--	--	
		8/6/2010	14.5	<0.025	<0.03	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	--	--	--	--	--	--	--	
		8/6/2010	19.5	<0.025	<0.03	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	--	--	--	--	--	--	--	
		8/6/2010	25	0.026	<0.03	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.03	<0.05	<0.05	<0.15	<2	--	--	--
SRO-1	Farallon	8/5/2010	1	<0.025	<0.03	<0.05	<0.05	<0.05	<0.05	<0.05	<0.03	<0.05	<0.05	<0.15	6	--	--	--	
		8/5/2010	11	<0.025	<0.03	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	--	--	--	--	--	--	--	
		8/5/2010	16	<0.025	<0.03	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	--	--	--	--	--	--	--	
		8/5/2010	20	0.28	<0.03	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.03	<0.05	<0.05	<0.15	<2	<50	<250	--
		8/5/2010	22	0.43	<0.03	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.03	<0.05	<0.05	<0.15	<2	<50	<250	--
SRO-2	Farallon	8/5/2010	26	0.25	<0.03	<0.05	<0.05	<0.05	<0.05	<0.05	--	--	--	--	--	--	--	--	
		8/5/2010	1	<0.025	<0.03	<0.05	<0.05	<0.05	<0.05	<0.05	<0.03	<0.05	<0.05	<0.15	3	67	760	--	
		8/5/2010	5.5	<0.025	<0.03	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	--	--	--	--	--	--	--	
		8/5/2010	9	<0.025	<0.03	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	--	--	--	--	--	--	--	
		8/5/2010	14	<0.025	<0.03	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	--	--	--	--	--	--	--	
		8/5/2010	19	<0.025	<0.03	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	--	--	--	--	--	--	--	
SRO-3	Farallon	8/5/2010	23.5	0.12	<0.03	<0.05	<0.05	<0.05	<0.05	<0.05	<0.03	<0.05	<0.05	<0.15	<2	<50	<250	--	
		8/5/2010	27	0.34	<0.03	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	--	--	--	--	--	--	--	
		8/5/2010	1	<0.025	<0.03	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.03	<0.05	<0.05	<0.15	610	140	270	5.79
		8/5/2010	3	<0.025	<0.03	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.03	<0.05	<0.05	<0.15	<2	<50	<250	--
		8/5/2010	7	<0.025	<0.03	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	--	--	--	--	--	--	--	
		8/5/2010	13	<0.025	<0.03	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	--	--	--	--	--	--	--	
		8/5/2010	18	<0.025	<0.03	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	--	--	--	--	--	--	--	
		8/5/2010	21	0.057	<0.03	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.03	<0.05	<0.05	<0.15	<2	<50	<250	--
SRO-4	Farallon	8/5/2010	22.5	0.06	<0.03	<0.05	<0.05	<0.05	<0.05	<0.05	--	--	--	--	--	--	--		
		8/5/2010	27	0.17	<0.03	<0.05	<0.05	<0.05	<0.05	<0.05	--	--	--	--	--	--	--		
		8/5/2010	30	0.16	<0.03	<0.05	<0.05	<0.05	<0.05	<0.05	--	--	--	--	--	--	--		
		8/6/2010	6	<0.025	<0.03	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	--	--	--	--	--	--	--	
		8/6/2010	12	<0.025	<0.03	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	--	--	--	--	--	--	--	
		8/6/2010	17	<0.025	<0.03	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	--	--	--	--	--	--	--	
SRO-5	Farallon	8/6/2010	22	<0.025	<0.03	<0.05	<0.05	<0.05	<0.05	<0.05	<0.03	<0.05	<0.05	<0.15	<2	<50	<250	--	
		8/6/2010	27	<0.025	<0.03	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	--	--	--	--	--	--	--	
		8/6/2010	30	0.038	<0.03	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	--	--	--	--	--	--	--	
		8/6/2010	3	<0.025	<0.03	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	--	--	--	--	--	--	--	
		8/6/2010	6	<0.025	<0.03	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	--	--	--	--	--	--	--	
SRO-6	Farallon	8/6/2010	11	<0.025	<0.03	<0.05	<0.05	<0.05	<0.05	<0.05	<0.03	<0.05	<0.05	<0.15	7	<50	<250	--	
		8/6/2010	16	<0.025	<0.03	<0.05	<0.05	<0.05	<0.05	<0.05	--	--	--	--	--	--	--		
		8/6/2010	21	<0.025	<0.03	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	--	--	--	--	--	--	--	
		8/6/2010	30	<0.025	<0.03	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	--	--	--	--	--	--	--	
		8/6/2010	5.2	<0.025	<0.03	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.03	<0.05	<0.05	<0.15	<2	<50	<250	--
		8/6/2010	12	<0.025	<0.03	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.03	<0.05	<0.05	<0.15	<2	<50	<250	--
SRO-6	Farallon	8/6/2010	15	<0.025	<0.03	<0.05	<0.05	<0.05	<0.05	<0.05	<0.03	<0.05	<0.05	<0.15	<2	<50	610	--	
		8/6/2010	17	<0.025	<0.03	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.03	<0.05	<0.05	<0.15	<2	70	870	--
		8/6/2010	20.5	<0.025	<0.03	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.03	<0.05	<0.05	<0.15	<2	<50	<250	--
		8/6/2010	25	<0.025	<0.03	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	--	--	--	--	--	--	--	
		8/6/2010	30	<0.025	<0.03	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	--	--	--	--	--	--	--	
MTCA Method A or B Cleanup Levels				0.05 (A)	0.03 (A)	0.076 (B)	0.48 (B)	0.037 (B)	0.0023 (B)	0.0012 (B)	0.03 (A)	7 (A)	6 (A)	9 (A)	100 (A)	2,000 (A)	2,000 (A)	250 (A)	

Sample ID	Sample Collected By	Sample Date	Depth (ft bgs)	VOCs (mg/kg) ¹											Gasoline-range Petroleum Hydrocarbons (mg/kg) ²	Diesel-range Petroleum Hydrocarbons (mg/kg) ³	Oil-range Petroleum Hydrocarbons (mg/kg) ³	Lead (mg/kg)	
				PCE	TCE	cis-1,2 DCE	trans-1,2 DCE	1,1-DCE	1,2-DCA	Vinyl Chloride	Benzene	Toluene	Ethyl-benzene	Xylenes, total					
SRO-7	Farallon	8/6/2010	9	<0.025	<0.03	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.03	<0.05	<0.05	<0.15	1,100	<50	<250	--
		8/6/2010	12.5	<0.025	<0.03	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.03	<0.05	<0.05	<0.15	<2	<50	<250	--
		8/6/2010	19	<0.025	<0.03	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	--	--	--	--	--	--	--	--
		8/6/2010	22.5	<0.025	<0.03	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.03	<0.05	<0.05	<0.15	<2	--	--	--
		8/6/2010	26	0.046	<0.03	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	--	--	--	--	--	--	--	--
8/6/2010	30	0.080	<0.03	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	--	--	--	--	--	--	--	--		
SRO-8	Farallon	8/6/2010	4	<0.025	<0.03	<0.05	<0.05	<0.05	<0.05	<0.05	--	--	--	--	--	--	--	--	
		8/6/2010	8	<0.025	<0.03	<0.05	<0.05	<0.05	<0.05	<0.05	--	--	--	--	--	--	--	--	
		8/6/2010	13.5	<0.025	<0.03	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.03	<0.05	<0.05	<0.15	4	--	--	
		8/6/2010	14.5	<0.025	<0.03	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.03	<0.05	<0.05	<0.15	<2.0	<50	<250	
		8/6/2010	18	<0.025	<0.03	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.03	<0.05	<0.05	<0.15	<2.0	--	--	
		8/6/2010	22	<0.025	<0.03	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.03	<0.05	0.1	0.21	3	<50	<250	
		8/6/2010	23.5	0.15	<0.03	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	--	--	--	--	--	--	--	
8/6/2010	26	0.16	<0.03	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	--	--	--	--	--	--	--			
8/6/2010	29	0.19	<0.03	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	--	--	--	--	--	--	--			
SRO-9	Farallon	8/9/2010	3	<0.025	<0.03	<0.05	<0.05	<0.05	<0.05	<0.05	<0.03	<0.05	<0.05	<0.15	<2	--	--		
		8/9/2010	8	<0.025	<0.03	<0.05	<0.05	<0.05	<0.05	<0.05	<0.03	<0.05	<0.05	<0.15	<2	--	--		
		8/9/2010	13	<0.625	<0.03	<0.05	<0.05	<0.05	<0.05	<0.05	--	--	--	--	--	--	--		
		8/9/2010	17.5	<0.025	<0.03	<0.05	<0.05	<0.05	<0.05	<0.05	<0.03	<0.05	<0.05	<0.15	<2	--	--		
		8/9/2010	21.5	<0.025	<0.03	<0.05	<0.05	<0.05	<0.05	<0.05	<0.03	<0.05	<0.05	<0.15	<2	--	--		
		8/9/2010	26	0.037	<0.03	<0.05	<0.05	<0.05	<0.05	<0.05	<0.03	<0.05	<0.05	<0.15	<2	--	--		
8/9/2010	29.5	0.057	<0.03	<0.05	<0.05	<0.05	<0.05	<0.05	<0.03	<0.05	<0.05	<0.15	<2	--	--				
SRO-10	Farallon	8/9/2010	1	<0.025	<0.03	<0.05	<0.05	<0.05	<0.05	<0.05	--	--	--	--	--	--	--		
		8/9/2010	7	<0.025	<0.03	<0.05	<0.05	<0.05	<0.05	<0.05	--	--	--	--	--	--	--		
		8/9/2010	10	<0.025	<0.03	<0.05	<0.05	<0.05	<0.05	<0.05	<0.03	<0.05	<0.05	<0.15	<2	--	--		
		8/9/2010	16	<0.025	<0.03	<0.05	<0.05	<0.05	<0.05	<0.05	--	--	--	--	--	--	--		
		8/9/2010	21	<0.025	<0.03	<0.05	<0.05	<0.05	<0.05	<0.05	<0.03	<0.05	<0.05	<0.15	<2	--	--		
		8/9/2010	23.5	<0.025	<0.03	<0.05	<0.05	<0.05	<0.05	<0.05	--	--	--	--	--	--	--		
8/9/2010	29	<0.025	<0.03	<0.05	<0.05	<0.05	<0.05	<0.05	<0.03	<0.05	<0.05	<0.15	<2	--	--				
SRO-11	Farallon	8/9/2010	1	<0.025	<0.03	<0.05	<0.05	<0.05	<0.05	<0.05	--	--	--	--	--	--	--		
		8/9/2010	5	<0.025	<0.03	<0.05	<0.05	<0.05	<0.05	<0.05	--	--	--	--	--	--	--		
		8/9/2010	10	<0.025	<0.03	<0.05	<0.05	<0.05	<0.05	<0.05	<0.03	<0.05	<0.05	<0.15	<2	--	--		
		8/9/2010	15	<0.025	<0.03	<0.05	<0.05	<0.05	<0.05	<0.05	--	--	--	--	--	--	--		
		8/9/2010	20	<0.025	<0.03	<0.05	<0.05	<0.05	<0.05	<0.05	<0.03	<0.05	<0.05	<0.15	<2	--	--		
		8/9/2010	25	<0.025	<0.03	<0.05	<0.05	<0.05	<0.05	<0.05	--	--	--	--	--	--	--		
8/9/2010	28	<0.025	<0.03	<0.05	<0.05	<0.05	<0.05	<0.05	<0.03	<0.05	<0.05	<0.15	<2	--	--				
SRO-12	Farallon	8/9/2010	5	<0.025	<0.03	<0.05	<0.05	<0.05	<0.05	<0.05	--	--	--	--	--	--	--		
		8/9/2010	8	<0.025	<0.03	<0.05	<0.05	<0.05	<0.05	<0.05	<0.03	<0.05	<0.05	<0.15	<2	--	--		
		8/9/2010	13	<0.025	<0.03	<0.05	<0.05	<0.05	<0.05	<0.05	--	--	--	--	--	--	--		
		8/9/2010	17	<0.025	<0.03	<0.05	<0.05	<0.05	<0.05	<0.05	--	--	--	--	--	--	--		
		8/9/2010	21	<0.025	<0.03	<0.05	<0.05	<0.05	<0.05	<0.05	<0.03	<0.05	<0.05	<0.15	<2	--	--		
		8/9/2010	23.5	<0.025	<0.03	<0.05	<0.05	<0.05	<0.05	<0.05	--	--	--	--	--	--	--		
8/9/2010	29.5	<0.025	<0.03	<0.05	<0.05	<0.05	<0.05	<0.05	<0.03	<0.05	<0.05	<0.15	<2	--	--				
SRO-13	Farallon	8/9/2010	0.5	<0.025	<0.03	<0.05	<0.05	<0.05	<0.05	<0.05	<0.03	<0.05	<0.05	<0.15	<2	280	3,100		
		8/9/2010	5.5	<0.025	<0.03	<0.05	<0.05	<0.05	<0.05	<0.05	<0.03	<0.05	<0.05	<0.15	<2	<50	<250		
		8/9/2010	11	<0.025	<0.03	<0.05	<0.05	<0.05	<0.05	<0.05	<0.03	<0.05	<0.05	<0.15	<2	<50	<250		
		8/9/2010	15.5	<0.025	<0.03	<0.05	<0.05	<0.05	<0.05	<0.05	<0.03	<0.05	<0.05	<0.15	<2	<50	400		
		8/9/2010	20.5	<0.025	<0.03	<0.05	<0.05	<0.05	<0.05	<0.05	<0.03	<0.05	<0.05	<0.15	<2	<50	<250		
		8/9/2010	24.5	<0.025	<0.03	<0.05	<0.05	<0.05	<0.05	<0.05	--	--	--	--	--	--	--		
8/9/2010	29.5	<0.025	<0.03	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	--	--	--	--	--	--				
MTCA Method A or B Cleanup Levels				0.05 (A)	0.03 (A)	0.076 (B)	0.48 (B)	0.037 (B)	0.0023 (B)	0.0012 (B)	0.03 (A)	7 (A)	6 (A)	9 (A)	100 (A)	2,000 (A)	2,000 (A)	250 (A)	

Sample ID	Sample Collected By	Sample Date	Depth (ft bgs)	VOCs (mg/kg) ¹											Gasoline-range Petroleum Hydrocarbons (mg/kg) ²	Diesel-range Petroleum Hydrocarbons (mg/kg) ³	Oil-range Petroleum Hydrocarbons (mg/kg) ³	Lead (mg/kg)
				PCE	TCE	cis-1,2 DCE	trans-1,2 DCE	1,1-DCE	1,2-DCA	Vinyl Chloride	Benzene	Toluene	Ethyl-benzene	Xylenes, total				
SRO-14	Farallon	8/10/2010	1.5	<0.025	<0.03	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	--	--	--	--	--	--	--
		8/10/2010	6.5	<0.025	<0.03	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	--	--	--	--	--	--	--
		8/10/2010	12	<0.025	<0.03	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	--	--	--	--	--	--	--
		8/10/2010	17	<0.025	<0.03	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	--	--	--	--	--	--	--
		8/10/2010	22	<0.025	<0.03	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	--	--	--	--	--	--	--
		8/10/2010	25.2	0.035	<0.03	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	--	--	--	--	--	--	--
SRO-15	Farallon	8/10/2010	1	<0.025	<0.03	<0.05	<0.05	<0.05	<0.05	<0.05	--	--	--	--	--	--	--	
		8/10/2010	5	<0.025	<0.03	<0.05	<0.05	<0.05	<0.05	<0.05	--	--	--	--	--	--	--	
		8/10/2010	10	<0.025	<0.03	<0.05	<0.05	<0.05	<0.05	<0.05	--	--	--	--	--	--	--	
		8/10/2010	15	<0.025	<0.03	<0.05	<0.05	<0.05	<0.05	<0.05	--	--	--	--	--	--	--	
		8/10/2010	20	<0.025	<0.03	<0.05	<0.05	<0.05	<0.05	<0.05	--	--	--	--	--	--	--	
		8/10/2010	29.5	<0.025	<0.03	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	--	--	--	--	--	--	
SRO-16	Farallon	8/10/2010	2	<0.025	<0.03	<0.05	<0.05	<0.05	<0.05	<0.05	--	--	--	--	--	--	--	
		8/10/2010	7	<0.025	<0.03	<0.05	<0.05	<0.05	<0.05	<0.05	--	--	--	--	--	--	--	
		8/10/2010	12	<0.025	<0.03	<0.05	<0.05	<0.05	<0.05	<0.05	--	--	--	--	--	--	--	
		8/10/2010	17	<0.025	<0.03	<0.05	<0.05	<0.05	<0.05	<0.05	--	--	--	--	--	--	--	
		8/10/2010	22	<0.025	<0.03	<0.05	<0.05	<0.05	<0.05	<0.05	--	--	--	--	--	--	--	
		8/10/2010	29.5	0.039	<0.03	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	--	--	--	--	--	--	
SRO-17	Farallon	8/10/2010	1.8	<0.025	<0.03	<0.05	<0.05	<0.05	<0.05	<0.05	<0.03	<0.05	0.55	0.77	2,800	130	<250	
		8/10/2010	5.5	<0.025	<0.03	<0.05	<0.05	<0.05	<0.05	<0.05	<0.03	<0.05	<0.05	<0.15	2	<50	<250	
		8/10/2010	10.5	<0.025	<0.03	<0.05	<0.05	<0.05	<0.05	<0.05	<0.03	<0.05	<0.05	<0.15	<2	<50	<250	
		8/10/2010	16	<0.025	<0.03	<0.05	<0.05	<0.05	<0.05	<0.05	<0.03	<0.05	<0.05	<0.15	<2	<50	<250	
		8/10/2010	21	<0.025	<0.03	<0.05	<0.05	<0.05	<0.05	<0.05	<0.03	<0.05	<0.05	<0.15	<2	<50	<250	
		8/10/2010	30	<0.025	<0.03	<0.05	<0.05	<0.05	<0.05	<0.05	<0.03	<0.05	<0.05	<0.15	<2	<50	<250	
SRO-18	Farallon	8/10/2010	2	<0.025	<0.03	<0.05	<0.05	<0.05	<0.05	<0.05	--	--	--	--	--	--	--	
		8/10/2010	5.5	<0.025	<0.03	<0.05	<0.05	<0.05	<0.05	<0.05	--	--	--	--	--	--	--	
SRO-19	Farallon	8/10/2010	2	<0.025	<0.03	<0.05	<0.05	<0.05	<0.05	<0.05	--	--	--	--	--	--	--	
		8/10/2010	5.5	<0.025	<0.03	<0.05	<0.05	<0.05	<0.05	<0.05	--	--	--	--	--	--	--	
SRO-20	Farallon	8/10/2010	2	<0.025	<0.03	<0.05	<0.05	<0.05	<0.05	<0.05	--	--	--	--	--	--	--	
		8/10/2010	6	<0.025	<0.03	<0.05	<0.05	<0.05	<0.05	<0.05	--	--	--	--	--	--	--	
SRO-21	Farallon	8/10/2010	6.5	<0.025	<0.03	<0.05	<0.05	<0.05	<0.05	<0.05	--	--	--	--	--	--	--	
Soil samples collected in 2011 (Hart Crowser, 2011; URS, 2011b)																		
HC-1-1	Hart Crowser	8/13/2011	20	<0.05	<0.02	<0.05	<0.05	<0.05	<0.02	<0.05	<0.02	<0.05	<0.05	<0.05	--	--	--	
HC-1-2		8/13/2011	22.5	0.092	<0.02	<0.05	<0.05	<0.05	<0.02	<0.05	<0.02	<0.05	<0.05	<0.05	--	--	--	
HC-1-3		8/13/2011	25	0.36	<0.02	<0.05	<0.05	<0.05	<0.02	<0.05	<0.02	<0.05	<0.05	<0.05	--	--	--	
HC-1-4		8/13/2011	27.5	0.46	<0.02	<0.05	<0.05	<0.05	<0.02	<0.05	<0.02	<0.05	<0.05	<0.05	--	--	--	
HC-1-5		8/13/2011	30	0.43	<0.02	<0.05	<0.05	<0.05	<0.02	<0.05	<0.02	<0.05	<0.05	<0.05	--	--	--	
HC-1-6		8/13/2011	32.5	0.74	<0.02	<0.05	<0.05	<0.05	<0.02	<0.05	<0.02	<0.05	<0.05	<0.05	--	--	--	
HC-1-7		8/13/2011	35	0.38	<0.02	<0.05	<0.05	<0.05	<0.02	<0.05	<0.02	<0.05	<0.05	<0.05	--	--	--	
HC-1-8		8/13/2011	37.5	0.92	<0.02	<0.05	<0.05	<0.05	<0.02	<0.05	<0.02	<0.05	<0.05	<0.05	--	--	--	
HC-1-9		8/13/2011	40	1.10	<0.02	<0.05	<0.05	<0.05	<0.02	<0.05	<0.02	<0.05	<0.05	<0.05	<5	<20	<50	
HC-1-10		8/13/2011	42.5	0.41	<0.02	<0.05	<0.05	<0.05	<0.02	<0.05	<0.02	<0.05	<0.05	<0.05	--	--	--	
HC-1-11		8/13/2011	45	2.30	<0.02	<0.05	<0.05	<0.05	<0.02	<0.05	<0.02	<0.05	<0.05	<0.05	--	--	--	
HC-1-12		8/13/2011	47.5	1.80	<0.02	<0.05	<0.05	<0.05	<0.02	<0.05	<0.02	<0.05	<0.05	<0.05	--	--	--	
HC-1-13		8/13/2011	50	0.07	<0.02	<0.05	<0.05	<0.05	<0.02	<0.05	<0.02	<0.05	<0.05	<0.05	--	--	--	
MTCA Method A or B Cleanup Levels				0.05 (A)	0.03 (A)	0.076 (B)	0.48 (B)	0.037 (B)	0.0023 (B)	0.0012 (B)	0.03 (A)	7 (A)	6 (A)	9 (A)	100 (A)	2,000 (A)	2,000 (A)	250 (A)

Sample ID	Sample Collected By	Sample Date	Depth (ft bgs)	VOCs (mg/kg) ¹											Gasoline-range Petroleum Hydrocarbons (mg/kg) ²	Diesel-range Petroleum Hydrocarbons (mg/kg) ³	Oil-range Petroleum Hydrocarbons (mg/kg) ³	Lead (mg/kg)
				PCE	TCE	cis-1,2 DCE	trans-1,2 DCE	1,1-DCE	1,2-DCA	Vinyl Chloride	Benzene	Toluene	Ethyl-benzene	Xylenes, total				
HC-2-1	Hart Crowser	8/13/2011	20	<0.05	<0.02	<0.05	<0.05	<0.05	<0.02	<0.05	<0.02	<0.05	<0.05	<0.05	--	--	--	--
HC-2-2		8/13/2011	22.5	0.11	<0.02	<0.05	<0.05	<0.05	<0.02	<0.05	<0.02	<0.05	<0.05	<0.05	--	--	--	--
HC-2-3		8/13/2011	25	0.29	<0.02	<0.05	<0.05	<0.05	<0.02	<0.05	<0.02	<0.05	<0.05	<0.05	--	--	--	--
HC-2-4		8/13/2011	27.5	0.33	<0.02	<0.05	<0.05	<0.05	<0.02	<0.05	<0.02	<0.05	<0.05	<0.05	--	--	--	--
HC-2-5		8/13/2011	30	0.31	<0.02	<0.05	<0.05	<0.05	<0.02	<0.05	<0.02	<0.05	<0.05	<0.05	--	--	--	--
HC-2-6		8/13/2011	32.5	0.22	<0.02	<0.05	<0.05	<0.05	<0.02	<0.05	<0.02	<0.05	<0.05	<0.05	--	--	--	--
HC-2-7		8/13/2011	35	0.23	<0.02	<0.05	<0.05	<0.05	<0.02	<0.05	<0.02	<0.05	<0.05	<0.05	--	--	--	--
HC-2-8		8/13/2011	37.5	0.46	<0.02	<0.05	<0.05	<0.05	<0.02	<0.05	<0.02	<0.05	<0.05	<0.05	--	--	--	--
HC-2-9		8/13/2011	40	0.60	<0.02	<0.05	<0.05	<0.05	<0.02	<0.05	<0.02	<0.05	<0.05	<0.05	<5	<20	<50	<1
HC-2-10		8/13/2011	42.5	1.20	<0.02	<0.05	<0.05	<0.05	<0.02	<0.05	<0.02	<0.05	<0.05	<0.05	--	--	--	--
HC-2-11		8/13/2011	45	0.58	<0.02	<0.05	<0.05	<0.05	<0.02	<0.05	<0.02	<0.05	<0.05	<0.05	--	--	--	--
HC-2-12		8/13/2011	47.5	2.00	0.044	0.061	<0.05	<0.05	<0.02	<0.05	<0.02	<0.05	<0.05	<0.05	--	--	--	--
HC-2-13		8/13/2011	50	0.11	<0.02	<0.05	<0.05	<0.05	<0.02	<0.05	<0.02	<0.05	<0.05	<0.05	--	--	--	--
HC-3-1	Hart Crowser	8/13/2011	20	<0.05	<0.02	<0.05	<0.05	<0.05	<0.02	<0.05	<0.02	<0.05	<0.05	<0.05	--	--	--	--
HC-3-2		8/13/2011	22.5	0.13	<0.02	<0.05	<0.05	<0.05	<0.02	<0.05	<0.02	<0.05	<0.05	<0.05	--	--	--	--
HC-3-3		8/13/2011	25	0.16	<0.02	<0.05	<0.05	<0.05	<0.02	<0.05	<0.02	<0.05	<0.05	<0.05	--	--	--	--
HC-3-4		8/13/2011	27.5	0.061	<0.02	<0.05	<0.05	<0.05	<0.02	<0.05	<0.02	<0.05	<0.05	<0.05	--	--	--	--
HC-3-5		8/13/2011	30	0.18	<0.02	<0.05	<0.05	<0.05	<0.02	<0.05	<0.02	<0.05	<0.05	<0.05	--	--	--	--
HC-3-6		8/13/2011	32.5	0.13	<0.02	<0.05	<0.05	<0.05	<0.02	<0.05	<0.02	<0.05	<0.05	<0.05	--	--	--	--
HC-3-7		8/13/2011	35	0.10	<0.02	<0.05	<0.05	<0.05	<0.02	<0.05	<0.02	<0.05	<0.05	<0.05	--	--	--	--
HC-3-8		8/13/2011	37.5	0.37	<0.02	<0.05	<0.05	<0.05	<0.02	<0.05	<0.02	<0.05	<0.05	<0.05	--	--	--	--
HC-3-9		8/13/2011	40	0.27	<0.02	<0.05	<0.05	<0.05	<0.02	<0.05	<0.02	<0.05	<0.05	<0.05	<5	<20	<50	1.3
HC-3-10		8/13/2011	42.5	0.17	<0.02	<0.05	<0.05	<0.05	<0.02	<0.05	<0.02	<0.05	<0.05	<0.05	--	--	--	--
HC-3-11		8/13/2011	45	0.05	<0.02	0.067	<0.05	<0.05	<0.02	<0.05	<0.02	<0.05	<0.05	<0.05	--	--	--	--
HC-3-12		8/13/2011	47.5	<0.05	<0.02	<0.05	<0.05	<0.05	<0.02	<0.05	<0.02	<0.05	<0.05	<0.05	--	--	--	--
HC-3-13		8/13/2011	50	0.91	0.087	0.059	<0.05	<0.05	<0.02	<0.05	<0.02	<0.05	<0.05	<0.05	--	--	--	--
URS-SB-9	URS	10/10/2011	50	0.0218	<0.0213	0.00217 J	<0.0142	<0.0355	<0.0213	<0.00142	<0.0142	<0.0142	<0.0213	<0.0284	--	--	--	--
		10/10/2011	55	0.276	0.00624 J	0.00708 J	<0.0139	<0.0347	<0.0208	<0.00139	<0.0139	<0.0139	<0.0208	<0.0278	--	--	--	--
		10/10/2011	60	0.00720 J	<0.0204	<0.0136	<0.0136	<0.0340	<0.0204	<0.00136	<0.0136	<0.0136	<0.0204	<0.0272	--	--	--	--
		10/10/2011	65	<0.0126	<0.0189	<0.0126	<0.0126	<0.0315	<0.0189	<0.00126	<0.0126	<0.0126	<0.0189	<0.0252	--	--	--	--
		10/10/2011	70	<0.0143	<0.0214	<0.0143	<0.0143	<0.0357	<0.0214	<0.00143	<0.0143	<0.0143	<0.0214	<0.0286	--	--	--	--
		10/10/2011	75	<0.0151	<0.0226	<0.0151	<0.0151	<0.0376	<0.0226	<0.00151	<0.0151	<0.0151	<0.0226	<0.0302	--	--	--	--
URS-SB-10	URS	10/10/2011	80	<0.0142	<0.0213	<0.0142	<0.0142	<0.0354	<0.0213	<0.00142	<0.0142	<0.0142	<0.0213	<0.0284	--	--	--	--
		10/11/2011	50	<0.0117	<0.0175	<0.0117	<0.0117	<0.0292	<0.0175	<0.00117	<0.0117	<0.0117	<0.0175	<0.0234	--	--	--	--
		10/11/2011	55	<0.0111	<0.0167	<0.0111	<0.0111	<0.0278	<0.0167	<0.00111	<0.0111	<0.0111	<0.0167	<0.0222	--	--	--	--
		10/11/2011	60	0.00160 J	<0.00145	<0.00967	<0.00967	<0.0242	<0.00145	<0.00967	<0.00967	<0.00967	<0.00145	<0.01934	--	--	--	--
		10/11/2011	65	<0.0142	<0.0213	<0.0142	<0.0142	<0.0355	<0.0213	<0.00142	<0.0142	<0.0142	<0.0213	<0.0284	--	--	--	--
		10/11/2011	70	<0.0148	<0.0221	<0.0148	<0.0148	<0.0369	<0.0221	<0.00148	0.000413 J	0.000546 J	<0.0221	<0.0296	--	--	--	--
URS-MW8 (SB-11)	URS	10/11/2011	75	<0.00952	<0.0143	<0.00952	<0.00952	<0.0238	<0.0143	<0.000952	<0.00952	0.000438 J	<0.0143	<0.01904	--	--	--	--
		10/12/2011	35	0.00148 J	<0.0190	<0.0126	<0.0126	<0.0316	<0.0190	<0.00126	<0.0126	<0.0126	<0.0190	<0.0252	--	--	--	--
		10/12/2011	40	0.000383 J	<0.0164	<0.0109	<0.0109	<0.0273	<0.0164	<0.00109	<0.0109	<0.0109	<0.0164	<0.0218	--	--	--	--
		10/12/2011	45	<0.0112	<0.0168	<0.0112	<0.0112	<0.0280	<0.0168	<0.00112	<0.0112	<0.0112	<0.0168	<0.0224	--	--	--	--
		10/12/2011	50	<0.0124	<0.0186	0.000497 J	<0.0124	<0.0311	<0.0186	<0.00124	<0.0124	<0.0124	<0.0186	<0.0248	--	--	--	--
		10/12/2011	55	<0.0124	<0.0186	0.000867 J	<0.0124	<0.0310	<0.0186	<0.00124	<0.0124	<0.0124	<0.0186	<0.0248	--	--	--	--
		10/12/2011	60	<0.0105	<0.0158	<0.0105	<0.0105	<0.0264	<0.0158	<0.00105	<0.0105	<0.0105	<0.0158	<0.021	--	--	--	--
		10/12/2011	65	<0.0104	<0.0156	<0.0104	<0.0104	<0.0259	<0.0156	<0.00104	<0.0104	<0.0104	<0.0156	<0.0208	--	--	--	--
		10/12/2011	70	<0.0105	<0.0158	<0.0105	<0.0105	<0.0263	<0.0158	<0.00105	<0.0105	<0.0105	<0.0158	<0.021	--	--	--	--
10/12/2011	75	<0.0138	<0.0207	<0.0138	<0.0138	<0.0345	<0.0207	<0.00138	<0.0138	<0.0138	<0.0207	<0.0276	--	--	--	--		
10/12/2011	80	<0.0113	<0.0170	<0.0113	<0.0113	<0.0283	<0.0170	<0.00113	<0.0113	<0.0113	<0.0170	<0.0226	--	--	--	--		
MTCA Method A or B Cleanup Levels				0.05 (A)	0.03 (A)	0.076 (B)	0.48 (B)	0.037 (B)	0.0023 (B)	0.0012 (B)	0.03 (A)	7 (A)	6 (A)	9 (A)	100 (A)	2,000 (A)	2,000 (A)	250 (A)

Sample ID	Sample Collected By	Sample Date	Depth (ft bgs)	VOCs (mg/kg) ¹										Gasoline-range Petroleum Hydrocarbons (mg/kg) ²	Diesel-range Petroleum Hydrocarbons (mg/kg) ³	Oil-range Petroleum Hydrocarbons (mg/kg) ³	Lead (mg/kg)	
				PCE	TCE	cis-1,2 DCE	trans-1,2 DCE	1,1-DCE	1,2-DCA	Vinyl Chloride	Benzene	Toluene	Ethyl-benzene					Xylenes, total
URS-SB-12	URS	10/12/2011	35	<0.0129	<0.0193	<0.0129	<0.0129	<0.0322	0.000399 J	<0.00129	<0.0129	<0.0129	<0.0193	<0.0258	--	--	--	--
		10/12/2011	40	0.00436 J	<0.0192	0.000641 J	<0.0128	<0.0321	0.000667 J	<0.00128	<0.0128	<0.0128	<0.0192	<0.0256	--	--	--	--
		10/12/2011	45	0.00479 J	0.000403 J	0.000749 J	<0.0115	<0.0288	0.000645 J	<0.00115	<0.0115	<0.0115	<0.0173	<0.023	--	--	--	--
		10/12/2011	55	0.00606 J	0.000393 J	0.000393 J	<0.00667	<0.0167	<0.0100	<0.000667	<0.00667	<0.00667	<0.0100	<0.01334	--	--	--	--
		10/12/2011	60	0.00901 J	0.00120 J	0.00102 J	<0.00982	<0.0246	<0.0147	<0.000982	<0.00982	<0.00982	<0.0147	<0.01964	--	--	--	--
		10/12/2011	65	<0.0151	<0.0227	0.00153 J	<0.0151	<0.0378	<0.0227	<0.00151	<0.0151	<0.0151	<0.0227	<0.0302	--	--	--	--
		10/12/2011	70	<0.0159	<0.0239	<0.0159	<0.0159	<0.0398	<0.0239	<0.00159	<0.0159	<0.0159	<0.0239	<0.0318	--	--	--	--
URS-SB-13	URS	10/13/2011	35	0.0142	<0.0175	<0.0117	<0.0117	<0.0292	0.000548 J	<0.00117	<0.0117	<0.0117	<0.0175	<0.0234	--	--	--	--
		10/13/2011	40	0.0140 J	<0.0210	<0.0140	<0.0140	<0.0351	0.000842 J	<0.00140	<0.0140	<0.0140	<0.0210	<0.028	--	--	--	--
		10/13/2011	45	0.00347 J	<0.0213	<0.0142	<0.0142	<0.355	0.00128 J	<0.00142	<0.0142	<0.0142	<0.0213	<0.0284	--	--	--	--
		10/13/2011	60	0.0647	0.000382 J	<0.0116	<0.0116	<0.290	0.000858 J	<0.00116	<0.0116	0.000394 J	<0.0174	<0.0232	--	--	--	--
		10/13/2011	65	0.0861	<0.0204	<0.0136	<0.0136	<0.339	<0.0204	<0.00136	<0.0136	<0.0136	<0.0204	<0.0272	--	--	--	--
		10/13/2011	70	<0.0145	<0.0218	<0.0145	<0.0145	<0.0364	<0.0218	<0.00145	<0.0145	<0.0145	<0.0218	<0.029	--	--	--	--
URS-SB-14	URS	10/11/2011	35	<0.00954	<0.0143	<0.00954	<0.00954	<0.0239	<0.0143	<0.000954	<0.00954	<0.00954	<0.0143	<0.01908	--	--	--	--
		10/11/2011	40	0.0541	0.000659 J	<0.0112	<0.0112	0.0279	<0.0168	<0.00112	<0.0112	<0.0112	<0.0168	<0.0224	--	--	--	--
		10/11/2011	45	0.0712	0.00114 J	0.00172 J	<0.0117	<0.0293	<0.0176	<0.00117	<0.0117	<0.0117	<0.0176	<0.0234	--	--	--	--
		10/11/2011	50	0.166	0.00164 J	0.00346 J	<0.0101	<0.0253	<0.0152	<0.00101	<0.0101	<0.0101	<0.0152	<0.0202	--	--	--	--
		10/11/2011	55	0.105	0.00119 J	0.00475 J	<0.0126	<0.0314	<0.0189	<0.00126	<0.0126	<0.0126	<0.0189	<0.0252	--	--	--	--
		10/11/2011	60	0.000312 J	<0.0142	<0.00946	<0.00946	<0.0237	<0.0142	<0.000946	<0.00946	<0.00946	<0.0142	<0.01898	--	--	--	--
		10/11/2011	65	<0.00915	<0.0137	<0.00915	<0.00915	<0.0229	<0.0137	<0.00915	<0.00915	<0.00915	<0.0137	<0.0183	--	--	--	--
URS-SB-15	URS	10/11/2011	70	<0.0137	<0.0206	<0.0137	<0.0137	<0.0343	<0.0206	<0.00137	<0.0137	<0.0137	<0.0206	<0.0274	--	--	--	--
		10/11/2011	75	<0.0104	<0.0156	<0.0104	<0.0104	<0.0260	<0.0156	<0.00104	<0.0104	<0.0104	<0.0156	<0.0208	--	--	--	--
		10/11/2011	35	0.0331	<0.0189	<0.0126	<0.0126	<0.0316	<0.0189	<0.00126	<0.0126	<0.0126	<0.0189	<0.0252	--	--	--	--
		10/11/2011	40	0.00263 J	<0.0138	<0.00921	<0.00921	<0.0230	<0.0138	<0.000921	<0.00921	<0.00921	<0.0138	<0.01842	--	--	--	--
		10/11/2011	45	<0.0128	<0.0191	<0.0128	<0.0128	<0.0319	<0.0191	<0.00128	<0.0128	<0.0128	<0.0191	<0.0256	--	--	--	--
		10/10/2011	50	<0.0128	<0.0192	<0.0128	<0.0128	<0.0321	<0.0192	<0.00128	<0.0128	<0.0128	<0.0192	<0.0256	--	--	--	--
		10/10/2011	55	<0.00851	<0.0128	<0.00851	<0.00851	<0.0213	<0.0128	<0.000851	<0.00851	<0.00851	<0.0128	<0.01702	--	--	--	--
URS-SB-17	URS	10/10/2011	60	<0.0101	<0.0151	<0.0101	<0.0101	<0.0252	<0.0151	<0.00101	<0.0101	<0.0101	<0.0151	<0.0202	--	--	--	--
		10/10/2011	65	<0.0140	<0.0210	<0.0140	<0.0140	<0.0349	<0.0210	<0.00140	<0.0140	<0.0140	<0.0210	<0.028	--	--	--	--
		10/10/2011	70	<0.0127	<0.0190	<0.0127	<0.0127	<0.0317	<0.0190	<0.00127	<0.0127	<0.0127	<0.0190	<0.0254	--	--	--	--
		10/10/2011	75	<0.0119	<0.0179	<0.0119	<0.0119	<0.0298	<0.0179	<0.000119	<0.0119	<0.0119	<0.0179	<0.0238	--	--	--	--
		11/15/2011	40	<0.00937	<0.0141	<0.00937	<0.00937	<0.0234	<0.0141	<0.000937	--	--	--	--	--	--	--	--
		11/15/2011	45	<0.00915	<0.0137	<0.00915	<0.00915	<0.0229	<0.0137	<0.000915	--	--	--	--	--	--	--	--
URS-SB-21	URS	11/17/2011	30	0.00590 J	<0.0218	<0.0145	<0.0145	<0.0364	<0.0218	<0.00145	--	--	--	--	--	--	--	--
		11/17/2011	35	0.00560 J	<0.0174	<0.0116	<0.0116	<0.0290	<0.0174	<0.00116	--	--	--	--	--	--	--	--
		11/17/2011	40	<0.0116	<0.0174	<0.0116	<0.0116	<0.290	<0.0174	<0.00116	--	--	--	--	--	--	--	--
		11/17/2011	45	<0.0159	<0.0238	<0.0159	<0.0159	<0.0397	<0.0238	<0.00159	--	--	--	--	--	--	--	--
		11/17/2011	50	<0.0157	<0.0235	<0.0157	<0.0157	<0.0392	<0.0235	<0.00157	--	--	--	--	--	--	--	--
		11/17/2011	60	<0.0104	<0.0156	<0.0104	<0.0104	<0.259	<0.0156	<0.00104	--	--	--	--	--	--	--	--
		11/17/2011	65	<0.0192	<0.0288	<0.0192	<0.0192	<0.0480	<0.0288	<0.00192	--	--	--	--	--	--	--	--
		11/17/2011	70	<0.0203	<0.0304	<0.0203	<0.0203	<0.0507	<0.0304	<0.00203	--	--	--	--	--	--	--	--
		11/17/2011	71.5	<0.0170	<0.0255	<0.0170	<0.0170	<0.0425	<0.0255	<0.00170	--	--	--	--	--	--	--	--
		11/17/2011	73	<0.0156	<0.0234	<0.0156	<0.0156	<0.0391	<0.0234	<0.00156	--	--	--	--	--	--	--	--
MTCA Method A or B Cleanup Levels				0.05 (A)	0.03 (A)	0.076 (B)	0.48 (B)	0.037 (B)	0.0023 (B)	0.0012 (B)	0.03 (A)	7 (A)	6 (A)	9 (A)	100 (A)	2,000 (A)	2,000 (A)	250 (A)

Notes:

Compounds including methylene chloride, chloroform, chloromethane, and MTBE were analyzed for in numerous samples from the Property. These compounds either were not detected, were detected at J-flagged estimated values less than laboratory reporting limits, or detected at concentrations less than cleanup levels.

¹VOCs = Volatile organic compounds; analyzed by EPA Method 8260B.

² Gasoline-range petroleum hydrocarbons were analyzed by Ecology Method NWTPH-Gx

³ Diesel- and oil-range petroleum hydrocarbons were analyzed by Ecology Method NWTPH-Dx

-- = constituent not analyzed.

< = constituent not detected at or above the stated laboratory practical quantitation limit.

1,1,1-DCE = 1,1,1-dichloroethene

1,2-DCA = 1,2-dichloroethane

cis-1,2-DCE = cis-1,2-dichloroethene

trans 1,2-DCE = trans-1,2-dichloroethene

1,1-DCE = 1,1-Dichloroethene

PCE = Tetrachloroethene

TCE = Trichloroethene

VOCs = Volatile organic compounds

ft bgs = feet below ground surface

J = estimated value below laboratory Practical Quantitation Limit (PQL); for purpose of this report J-flagged values are considered not detected.

mg/kg = milligrams per kilogram

MTCA = Model Toxics Control Act (WAC 173-340).

(A) = MTCA Method A Cleanup Level

(B) = MTCA Method B cleanup for the protection of groundwater. See Table 4 for information on basis for cleanup levels.

Bold font indicates that the constituent was detected.

Shading indicates that the concentration exceeds the MTCA cleanup level.

Table 3

Chemical Analytical Data for Groundwater Samples
Sterling Realty Organization Property at 10605 and 10619 NE 8th Street
Bellevue, Washington

Sample ID	Sample Date	Depth (feet bgs)	VOCs (µg/L) ¹									Gasoline-range Petroleum Hydrocarbons (µg/L) ²	Diesel-range Petroleum Hydrocarbons (µg/L) ³	Oil-range Petroleum Hydrocarbons (µg/L) ³
			PCE	TCE	cis-1,2-DCE	1,1,1-TCA	1,2-DCA	Benzene	Toluene	Ethylbenzene	Xylenes, total			
Samples collected in 2000 (URS, 2000)														
URSSB-OP1	03/11/2000	NA	2.1	<1.0	<1.0	--	--	<1.0	<1.0	<1.0	<1.0	<100	<25	<50
URSSB-OP3	03/11/2000	NA	1.7	<1.0	<1.0	--	--	<1.0	<1.0	<1.0	<1.0	<100	<25	<50
Samples collected in 2008 and 2010 (Terra, 2008; URS, 2009; URS, 2010; SES, 2011)														
URS-SB-3	08/27/2008	NA	21	<1.0	<1.0	--	--	<1.0	<1.0	<1.0	<1.0	<100	--	--
URS-MW-1	09/10/2008	NA	340	3.5	<1.0	--	--	<1.0	<1.0	<1.0	<1.0	<100	--	--
	11/21/2008	NA	210	3.4	<1.0	--	--	<1.0	<1.0	<1.0	<1.0	--	--	--
	03/17/2010	NA	460	22	11	--	--	<1.0	<1.0	<1.0	<1.0	<50	--	--
	06/17/2010	NA	320	9.6	1.2	--	--	<1.0	<1.0	<1.0	<1.0	<50	--	--
	08/24/2010	NA	430	10	6.1	--	--	--	--	--	--	--	--	--
URS-MW-2	03/17/2010	NA	<1.0	<1.0	<1.0	--	--	<1.0	<1.0	<1.0	<1.0	<50	--	--
	06/17/2010	NA	<1.0	<1.0	<1.0	--	--	<1.0	<1.0	<1.0	<1.0	<50	--	--
	08/25/2010	NA	<1.0	<1.0	<1.0	--	--	--	--	--	--	--	--	--
URS-MW-3	09/10/2008	NA	<1.0	<1.0	<1.0	--	--	<1.0	<1.0	<1.0	<1.0	<100	--	--
	11/21/2008	NA	3.9	<1.0	<1.0	--	--	<1.0	<1.0	<1.0	<1.0	--	--	--
	03/17/2010	NA	<1.0	<1.0	<1.0	--	--	<1.0	<1.0	<1.0	<1.0	<50	--	--
	06/17/2010	NA	<1.0	<0.2	<1.0	--	--	<1.0	<1.0	<1.0	<1.0	<50	--	--
MW-19	08/25/2010	NA	33	1.1	<1.0	--	--	<0.35	<1	<1	<3	<100	<50	<250
	MW-20	08/25/2010	NA	4.6	<1.0	<1.0	--	--	<0.35	<1	<1	<3	<100	<50
B1/MW1	03/17/2010	NA	<1.0	<1.0	<1.0	--	--	<1.0	<1.0	<1.0	<1.0	<50	--	--
B-2/MW-2	07/07/2008	NA	<0.2	<0.2	--	--	--	<0.2	<0.2	<1.0	<0.6	<100	<250	<500
	11/21/2008	NA	2.0	<1.0	<1.0	--	--	<1.0	<1.0	<1.0	<1.0	--	--	--
	03/17/2010	NA	<1.0	<1.0	<1.0	--	--	<1.0	<1.0	<1.0	<1.0	<50	--	--
	06/17/2010	NA	<1.0	<1.0	<1.0	--	--	<1.0	<1.0	<1.0	<1.0	<50	--	--
B-3/MW-3	07/07/2008	NA	80	0.42	--	--	--	<0.4	<0.4	<2.0	<1.2	<100	<250	<500
	09/10/2008	NA	88	<1.0	<1.0	--	--	<1.0	<1.0	<1.0	<1.0	<100	--	--
	11/21/2008	NA	20	<1.0	<1.0	--	--	<1.0	<1.0	<1.0	<1.0	--	--	--
	03/17/2010	NA	68	<1.0	<1.0	--	--	<1.0	<1.0	<1.0	<1.0	<50	--	--
	06/17/2010	NA	44	<1.0	<1.0	--	--	<1.0	<1.0	<1.0	<1.0	<50	--	--
B-4/MW-4	08/23/2010	NA	50	<1.0	<1.0	--	--	--	--	--	--	--	--	--
	07/07/2008	NA	<0.2	<0.2	--	--	--	<0.2	<0.2	<1.0	<0.6	<100	<250	<500
	11/21/2008	NA	1.9	<1.0	<1.0	--	--	<1.0	<1.0	<1.0	<1.0	--	--	--
	03/17/2010	NA	<1.0	<1.0	<1.0	--	--	<1.0	<1.0	<1.0	<1.0	<50	--	--
URS-SB-21	06/17/2010	NA	<1.0	<1.0	<1.0	--	--	<1.0	<1.0	<1.0	<1.0	<50	--	--
	06/17/2010	NA	<1.0	<1.0	<1.0	--	--	<1.0	<1.0	<1.0	<1.0	<50	--	--
Samples collected in 2011 (URS, 2011b)														
URS-MW-1	11/22/2011	29	114	4.36	1.47	<1.0	<1.0	--	--	--	--	--	--	--
URS-MW-2	11/21/2011	28.6	<1.0	<1.0	<1.0	<1.0	<1.0	--	--	--	--	--	--	--
URS-MW-3	11/22/2011	28	<1.0	<1.0	<1.0	<1.0	<1.0	--	--	--	--	--	--	--
URS-MW-8	10/19/2011	73	<1.0	<1.0	<1.0	<1.0	<1.0	--	--	--	--	--	--	--
	10/19/2011	77	<1.0	<1.0	<1.0	<1.0	<1.0	--	--	--	--	--	--	--
	11/22/2011	70	<1.0	<1.0	<1.0	<1.0	<1.0	--	--	--	--	--	--	--
	11/22/2011	73	<1.0	<1.0	<1.0	<1.0	<1.0	--	--	--	--	--	--	--
	11/22/2011	75.5	<1.0	<1.0	<1.0	<1.0	<1.0	--	--	--	--	--	--	--
MW-19	11/21/2011	29.2	31.0	1.08	0.140 J	<1.0	<1.0	--	--	--	--	--	--	--
MW-20	11/22/2011	25	1.03	0.140 J		<1.0	<1.0	--	--	--	--	--	--	--
B1/MW-1	11/29/2011	90	<1.0	<1.0	<1.0	<1.0	<1.0	--	--	--	--	--	--	--
	11/29/2011	95	<1.0	<1.0	<1.0	<1.0	<1.0	--	--	--	--	--	--	--
B2/MW-2	11/29/2011	75	<1.0	<1.0	<1.0	<1.0	<1.0	--	--	--	--	--	--	--
	11/29/2011	80	<1.0	<1.0	<1.0	<1.0	<1.0	--	--	--	--	--	--	--
B3/MW-3	11/22/2011	27	23.7	<1.0	<1.0	<1.0	<1.0	--	--	--	--	--	--	--
B4/MW-4	11/29/2011	75	<1.0	<1.0	<1.0	<1.0	<1.0	--	--	--	--	--	--	--
	11/29/2011	80	<1.0	<1.0	<1.0	<1.0	<1.0	--	--	--	--	--	--	--
URS-SB-9	10/10/2011	77	0.270 J	<1.0	<1.0	<1.0	<1.0	--	--	--	--	--	--	--
URS-SB-15 ⁴	10/10/2011	75	<1.0	<1.0	<1.0	<1.0	<1.0	--	--	--	--	--	--	--
URS-SB-21	11/17/2011	74	<1.0	<1.0	<1.0	<1.0	<1.0	--	--	--	--	--	--	--
MTCA Method A or B Cleanup Level			5 (A)	5 (A)	16 (B)	200 (A)	5 (A)	5 (A)	1,000 (A)	700 (A)	1,000 (A)	800 / 1,000 ⁵ (A)	500 (A)	500 (A)

Notes:

- ¹VOCs = Volatile organic compounds; analyzed by EPA Method 8260B.
- ²Gasoline-range petroleum hydrocarbons were analyzed by Ecology Method NWTPH-Gx
- ³Diesel- and oil-range petroleum hydrocarbons were analyzed by Ecology Method NWTPH-Dx
- ⁴Naphthalene was detected at a trace concentration of 0.23 µg/L (J-flagged estimated value less than PQL). The cleanup level for naphthalenes is 160 µg/L.
- ⁵The groundwater cleanup level is 1,000 µg/L if benzene is not present. If benzene is present, the cleanup level is 800 µg/L.
- = constituent not analyzed.
- < = constituent not detected at or above the stated laboratory practical quantitation limit.
- 1,1,1-TCA = 1,1,1-trichloroethane
- 1,2-DCA = 1,2-dichloroethane
- cis-1,2-DCE = cis-1,2-dichloroethene
- DCE = Dichloroethene.
- PCE = Tetrachloroethene
- TCE = Trichloroethene
- ft bgs = feet below ground surface
- J = estimated value
- µg/L = micrograms per liter
- NA = not available
- MTCA = Model Toxics Control Act (WAC 173-340).
- (A) = MTCA Method A Cleanup Level
- (B) = Standard Method B cleanup levels from CLARC tables. See Table 4 for information on basis for cleanup levels.
- Bold** font indicates that the constituent was detected.
- Shading indicates that the concentration exceeds the MTCA cleanup level.
- Groundwater data from the Thinker Toys (source) property shown on Figures 12 and 13 are not included in this table.

Table 4
Soil and Groundwater Cleanup Levels
Sterling Realty Organization Property at 10605 and 10619 NE 8th Street
Bellevue, Washington

Contaminants of Concern	Media	Cleanup Level	Source
Gasoline-range Petroleum Hydrocarbons	Soil	100 (mg/kg)	MTCA Method A, Unrestricted
Diesel-range Petroleum Hydrocarbons		2,000 (mg/kg)	
Oil-range Petroleum Hydrocarbons		2,000 (mg/kg)	
PCE		0.05 (mg/kg)	
TCE		0.03 (mg/kg)	
Benzene		0.03 (mg/kg)	
Toluene		7 (mg/kg)	
Ethylbenzene		6 (mg/kg)	
Lead		250 (mg/kg)	
MTBE		0.1 (mg/kg)	
Xylenes		9 (mg/kg)	
cis-1,2-dichloroethene		Soil	
trans-1,2-dichloroethene	0.48 (mg/kg)		
1,1-dichloroethene	0.037 (mg/kg)		
1,2-dichloroethane	0.0023 (mg/kg)		
Vinyl chloride	0.0012 (mg/kg)		
Chloroform	0.4 (mg/kg)		
Chloromethane	N/A		
Gasoline-range Petroleum Hydrocarbons	Groundwater	1,000 (µg/L)	MTCA Method A
Diesel-range Petroleum Hydrocarbons		500 (µg/L)	
Oil-range Petroleum Hydrocarbons		500 (µg/L)	
Naphthalenes		160 (µg/L)	
MTBE		20 (µg/L)	
PCE		5 (µg/L)	
TCE		5 (µg/L)	
Benzene		5 (µg/L)	
Toluene		1,000 (µg/L)	
Ethylbenzene		700 (µg/L)	
Xylenes		1,000 (µg/L)	
1,1,1-trichloroethane		200 (µg/L)	
1,2-dichloroethane		5 (µg/L)	
cis-1,2-dichloroethene	Groundwater	16 (µg/L)	MTCA Method B, Standard Formula ²

Notes:

¹Based on Protection of Groundwater

²Based on Potable Groundwater (non-carcinogenic)

PCE = Tetrachloroethene

TCE = Trichloroethene

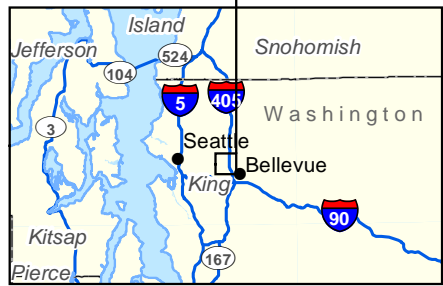
mg/kg = milligrams per kilogram

MTBE = methyl tert-butyl ether

N/A = none available

µg/L = micrograms per liter

Path: \\sear\projects\9\9227004\GIS\922700400_VicinityMap.mxd Map Revised: 25 March 2013 amanza

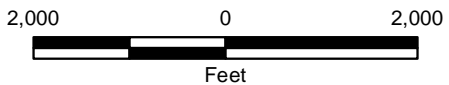



Data Source: Esri Street Map.

Projection: NAD 1983 UTM Zone 10N

Notes:

1. The locations of all features shown are approximate.
2. This drawing is for information purposes. It is intended to assist in showing features discussed in an attached document. GeoEngineers, Inc. cannot guarantee the accuracy and content of electronic files. The master file is stored by GeoEngineers, Inc. and will serve as the official record of this communication.



Vicinity Map	
SRO, 10605 and 10619 NE 8th Street Bellevue, Washington	
GEOENGINEERS 	Figure 1



Legend

- Bellevue Corner Property at 10605 and 10619 NE 8th Street
- Proposed Phase I Redevelopment Property
- Parcel Boundary
- Approximate Geologic Cross Section Location



Data Source: Aerial image from Microsoft, 2011.
Parcel boundaries from King County, 2013.

Notes:
 1. The locations of all features shown are approximate.
 2. This drawing is for information purposes. It is intended to assist in showing features discussed in an attached document. GeoEngineers, Inc. cannot guarantee the accuracy and content of electronic files. The master file is stored by GeoEngineers, Inc. and will serve as the official record of this communication.

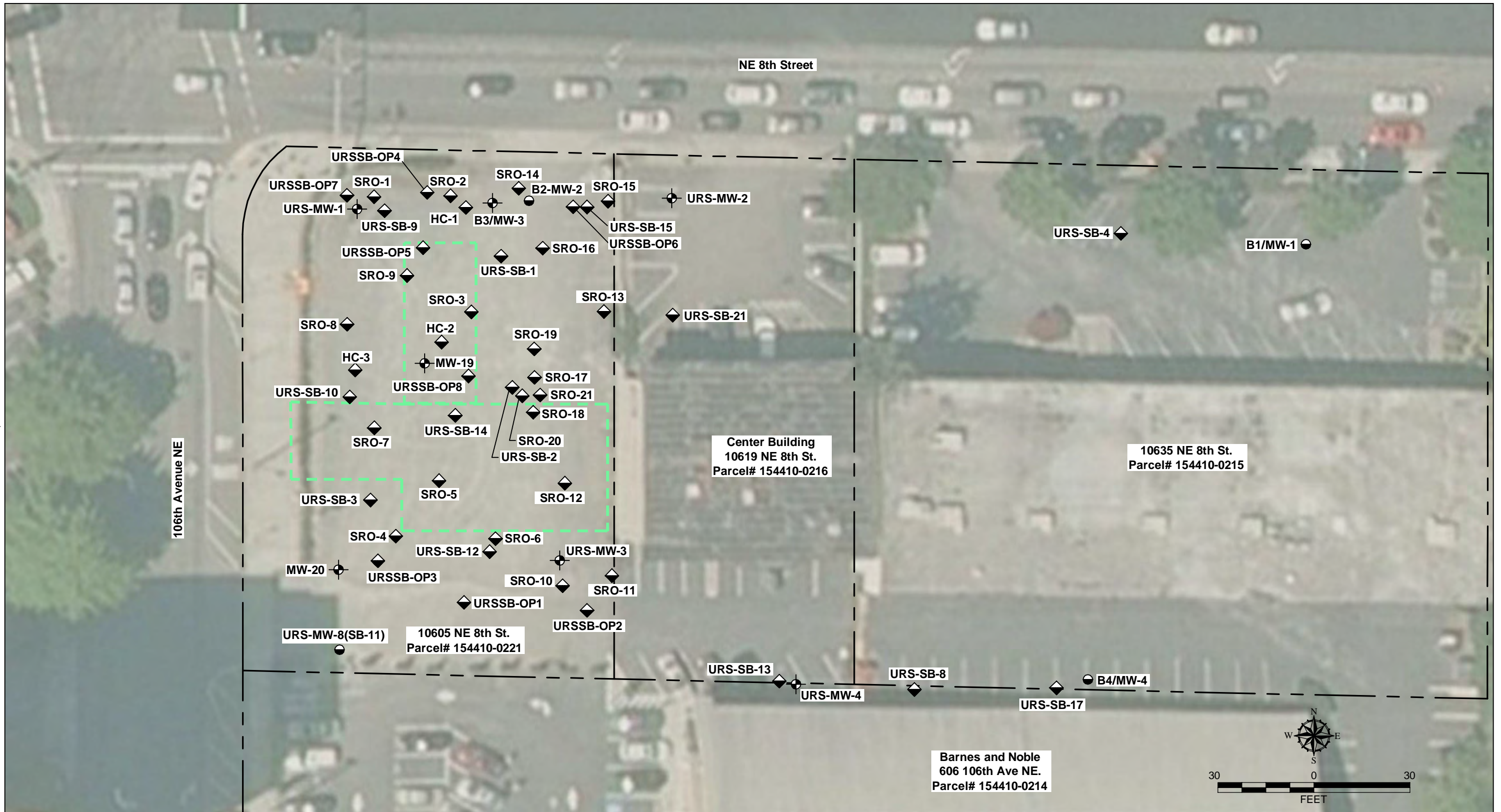
Bellevue Corner Property and Adjacent Parcels

SRO, 10605 and 10619 NE 8th Street
Bellevue, Washington



Figure 2

P:\1919227004\100\CAD\103_SHEET FILES\RIFS\FIGURE 3 SAMPLE LOCATION MAP.DWG\TAB:F1 MODIFIED BY TRICHAUD ON MAY 14, 2014 - 9:33



Notes

1. The locations of all features shown are approximate.
2. This drawing is for information purposes. It is intended to assist in showing features discussed in an attached document. GeoEngineers, Inc. cannot guarantee the accuracy and content of electronic files. The master file is stored by GeoEngineers, Inc. and will serve as the official record of this communication.

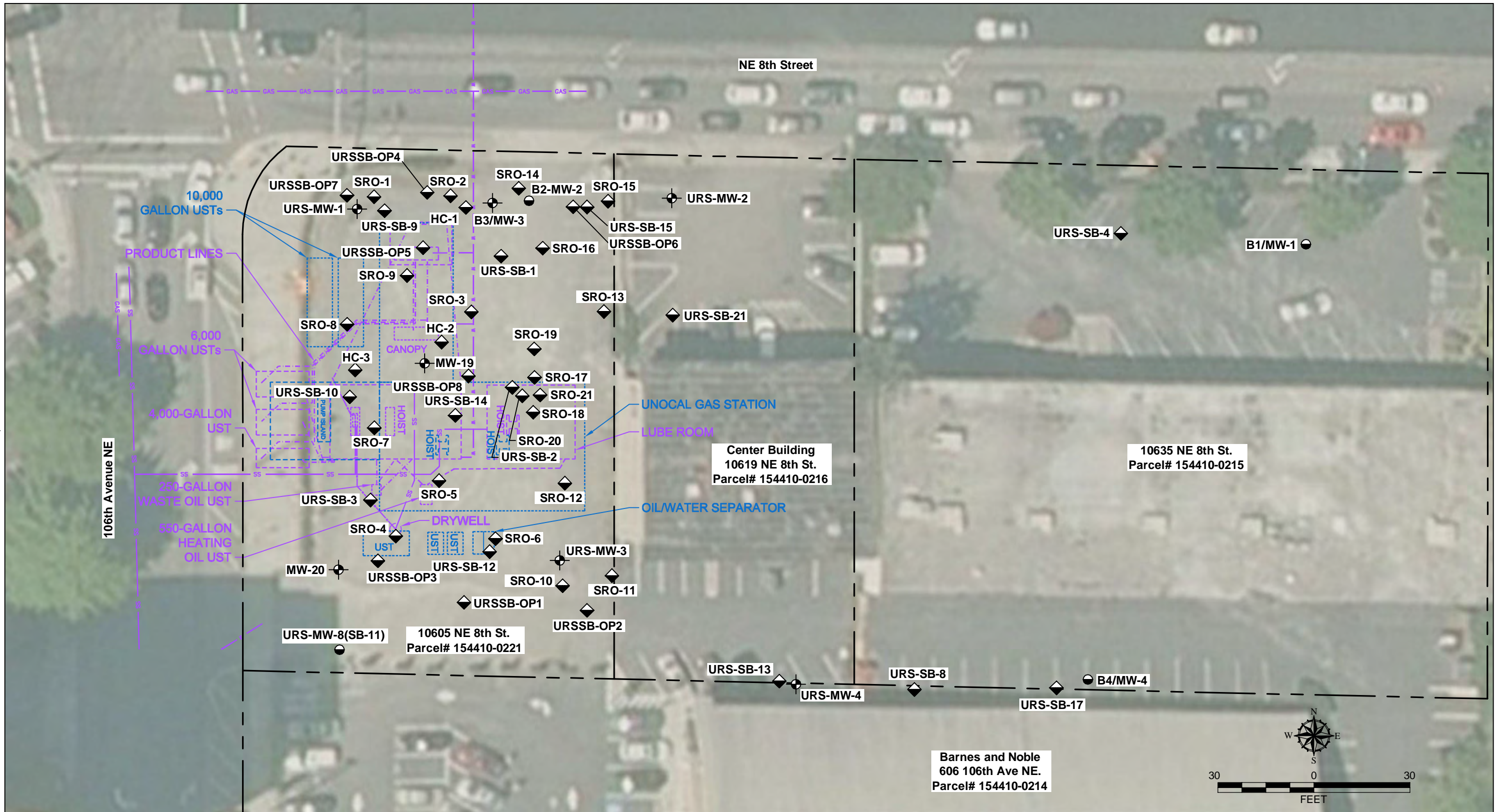
Reference: Background image obtained from Bing Images, 2012.

Legend

- Monitoring Well Location
- Deep Monitoring Well Location
- Soil Boring Location
- Approximate Parcel Boundaries
- HC Hart Crowser Soil Boring
- URS URS Soil Boring/Well
- SRO Farallon Soil Boring
- B1/MW-1 Terra Associates Soil Boring/Well
- Former Gas Station

Sample Location Map	
SRO, 10605 and 10619 NE 8th Street Bellevue, Washington	
	Figure 3

P:\1919227004\100\CAD\103_SHEET FILES\RIFS\FIGURE 4 HISTORICAL FEATURES.DWG\TAB:F1 MODIFIED BY TMICHAUD ON MAY 14, 2014 - 9:36



Notes

1. The locations of all features shown are approximate.
2. This drawing is for information purposes. It is intended to assist in showing features discussed in an attached document. GeoEngineers, Inc. cannot guarantee the accuracy and content of electronic files. The master file is stored by GeoEngineers, Inc. and will serve as the official record of this communication.

Reference: Background image obtained from Bing Images, 2012. Historical Site features from Sound Earth Strategies, Inc., 2011 figure.

Legend

- Monitoring Well Location
- Deep Monitoring Well Location
- Soil Boring Location
- Approximate Parcel Boundaries
- HC** Hart Crowser Soil Boring
- URS** URS Soil Boring/Well
- SRO** Farallon Soil Boring
- B1/MW-1** Terra Associates Soil Boring/Well
- PURPLE Historical Site Feature (1959-1962)
- BLUE Historical Site Feature (1969)

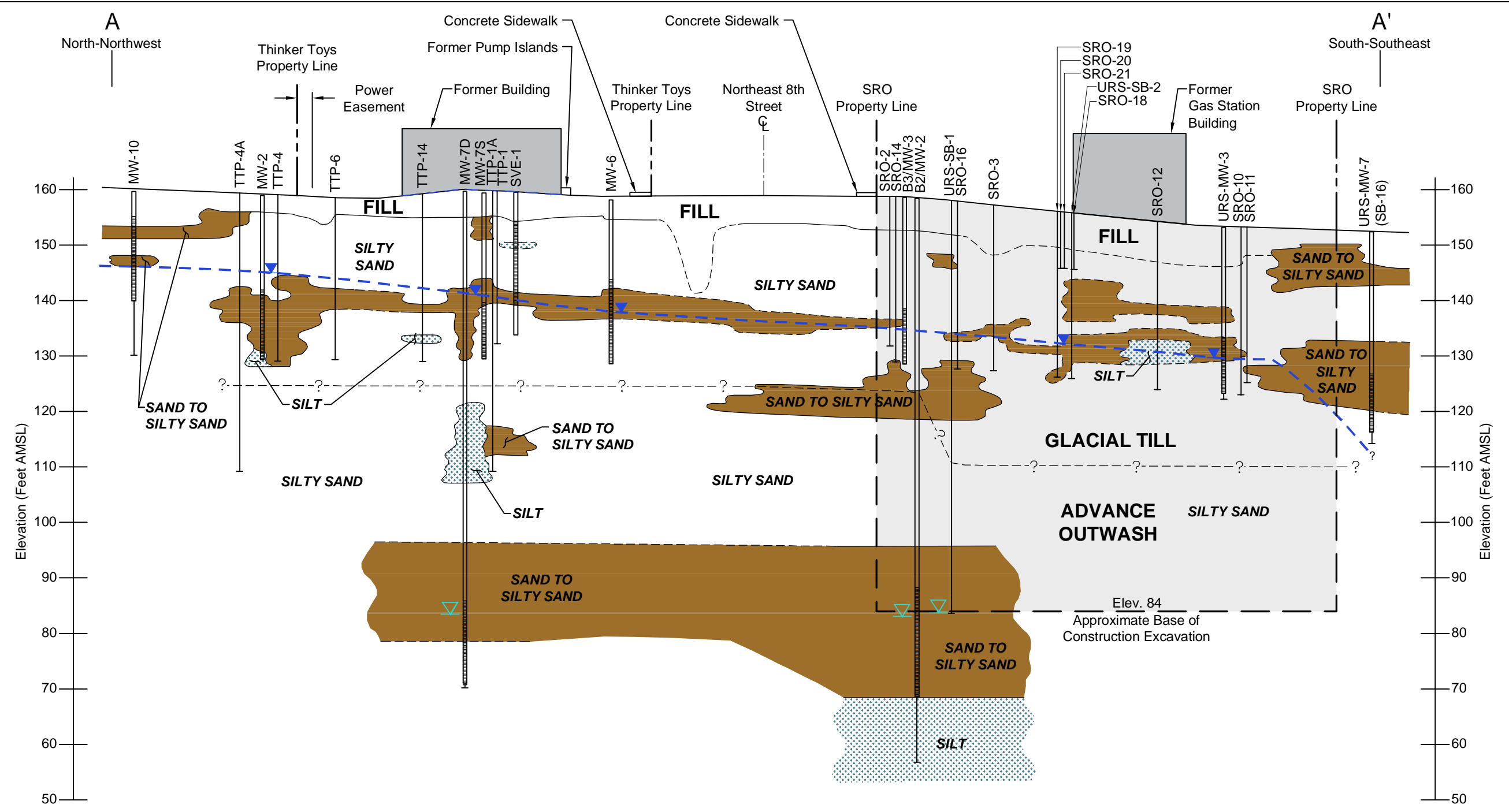
Historical Features and Sample Locations

SRO, 10605 and 10619 NE 8th Street
Bellevue, Washington



Figure 4

P:\1919227004\100\CAD\103_SHEET FILES\RIFS\FIGURE 5-6 Cross-SECTION AA_BB.DWG\TAB:AA MODIFIED BY THICHAUD ON MAY 14, 2014 - 9:54



Legend

- Boring/Monitoring Well Location Transposed (TP) in feet, North (N), South (S), East (E), or West (W) of Cross-Section Line
- Blank Casing
- Groundwater Level
- Water Table
- Well Screen Interval
- Bottom of Boring
- Inferred Geologic Contact
- Planned Development Excavation Extent

Notes

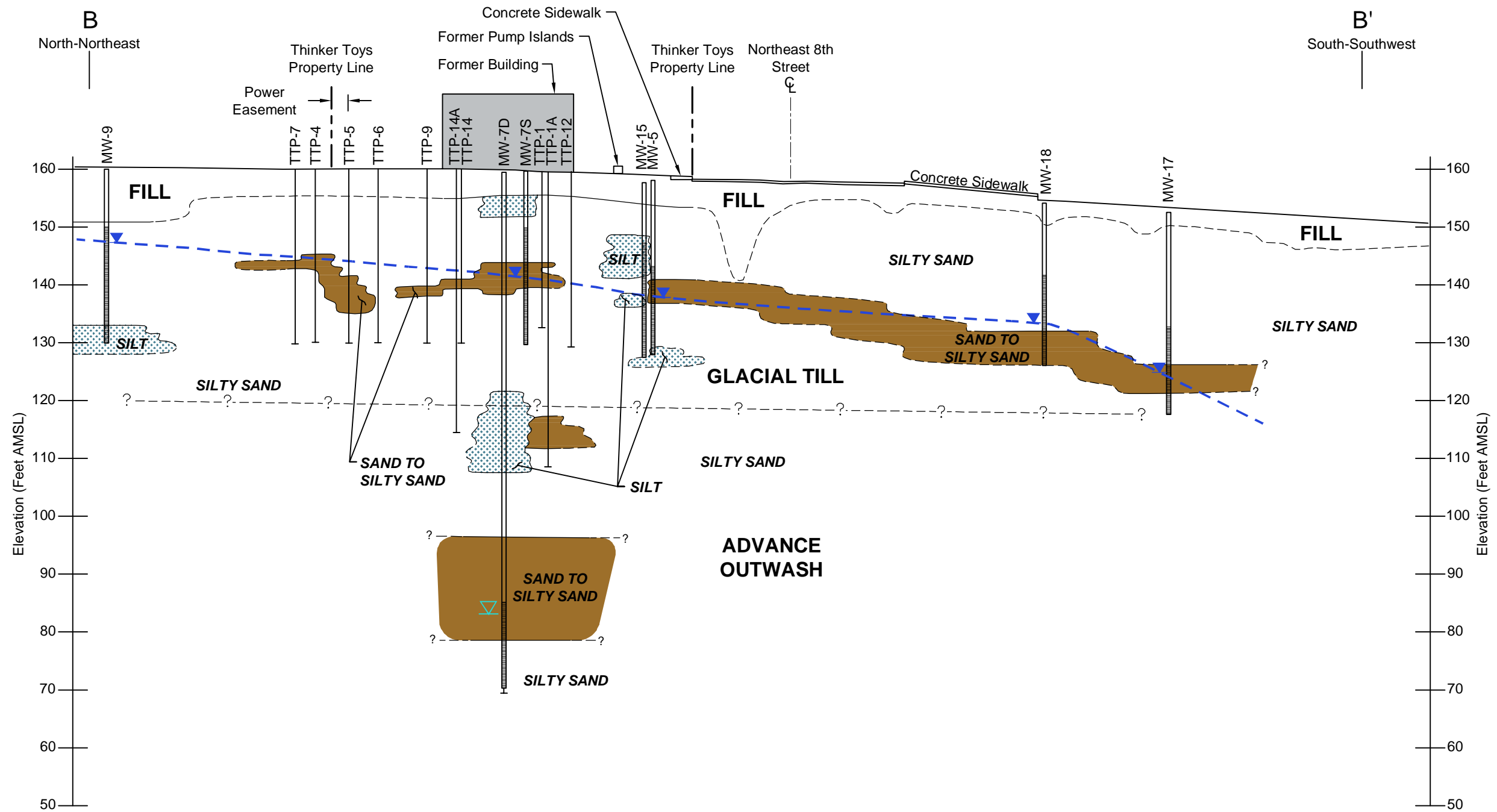
- The locations of all features shown are approximate.
- This drawing is for information purposes. It is intended to assist in showing features discussed in an attached document. GeoEngineers, Inc. cannot guarantee the accuracy and content of electronic files. The master file is stored by GeoEngineers, Inc. and will serve as the official record of this communication.
- Cross Section Location is shown on Figure 2.

Reference: Cross-Section A-A' for the Former Thinker Toys site by Farallon Consulting, dated 11/02/10.

HORIZONTAL SCALE: 1"= 40'
 VERTICAL SCALE: 1"= 20'
 VERTICAL EXAGGERATION: 2X

Geologic Cross Section A-A'	
SRO, 10605 and 10619 NE 8th Street Bellevue, Washington	
	Figure 5

P:\19227004\100\CAD\103_SHEET FILES\RIFS\FIGURE 5-6 Cross-SECTION AA_BB.DWG\TAB:BB MODIFIED BY THICHAUD ON MAY 14, 2014 - 9:55



Notes

1. The locations of all features shown are approximate.
2. This drawing is for information purposes. It is intended to assist in showing features discussed in an attached document. GeoEngineers, Inc. cannot guarantee the accuracy and content of electronic files. The master file is stored by GeoEngineers, Inc. and will serve as the official record of this communication.
3. Cross Section location is shown on Figure 2.

Reference: Cross-Section B-B' for the Former Thinker Toys site by Farallon Consulting, dated 11/02/10.

Legend

- Boring/Monitoring Well Location Transposed (TP) in feet, North (N), South (S), East (E), or West (W) of Cross-Section Line
- Blank Casing
- Groundwater Level
- Water Table
- Well Screen Interval
- Bottom of Boring
- Inferred Geologic Contact

HORIZONTAL SCALE: 1"= 40'
 VERTICAL SCALE: 1"= 20'
 VERTICAL EXAGGERATION: 2X








Geologic Cross Section B-B'	
SRO, 10605 and 10619 NE 8th Street Bellevue, Washington	
GEOENGINEERS	Figure 6

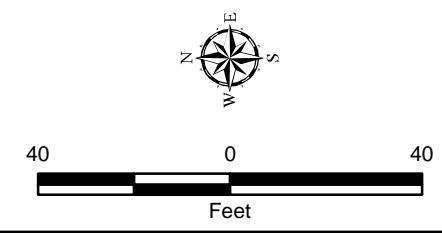



Path: W:\Seattle\Projects\9227004\GIS\922700400_PerchedGW.mxd Map Revised: 12 May 2014 ccabrera

Data Source: Aerial image from Microsoft, 2011.
 Monitoring well locations and groundwater contours digitized from Sound Earth Strategies, 2011.

Notes:
 1. Groundwater elevations are above mean sea level (NAVD88 Datum).
 2. May 3, 2010 groundwater elevation data for shallow wells on the SRO Property are shown in Table 1. Groundwater elevation data for the Thinker Toys property wells are not tabulated.
 3. The locations of all features shown are approximate.
 4. This drawing is for information purposes. It is intended to assist in showing features discussed in an attached document. GeoEngineers, Inc. cannot guarantee the accuracy and content of electronic files. The master file is stored by GeoEngineers, Inc. and will serve as the official record of this communication.

- Legend**
-  Monitoring Well
 -  Deep Monitoring Well
 -  Inferred Groundwater Elevation Contour
 -  Inferred Perched Groundwater Flow Direction (May 3, 2010)
 -  Approximate Parcel Boundary



Perched Groundwater Elevation Contours (May 3, 2010)	
SRO, 10605 and 10619 NE 8th Street Bellevue, Washington	
	Figure 7

P:\1919227004\100\CAD\103_SHEET FILES\RIFS\FIGURE 8 ADVANCED OUTWASH GW.DWG\TAB\FI MODIFIED BY THICHAUD ON MAY 16, 2014 - 11:21



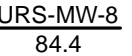



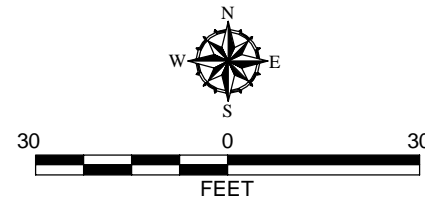
Notes

1. Groundwater elevations are above mean sea level (NAVD88 datum)
2. October 21, 2011, groundwater elevation data are shown on Table 1.
3. This drawing is for information purposes. It is intended to assist in showing features discussed in an attached document. GeoEngineers, Inc. cannot guarantee the accuracy and content of electronic files. The master file is stored by GeoEngineers, Inc. and will serve as the official record of this communication.
4. The locations of all features shown are approximate.

Reference: Background image obtained from Bing Images, 2012. Historical Site features from Sound Earth Strategies, Inc., 2011 figure.

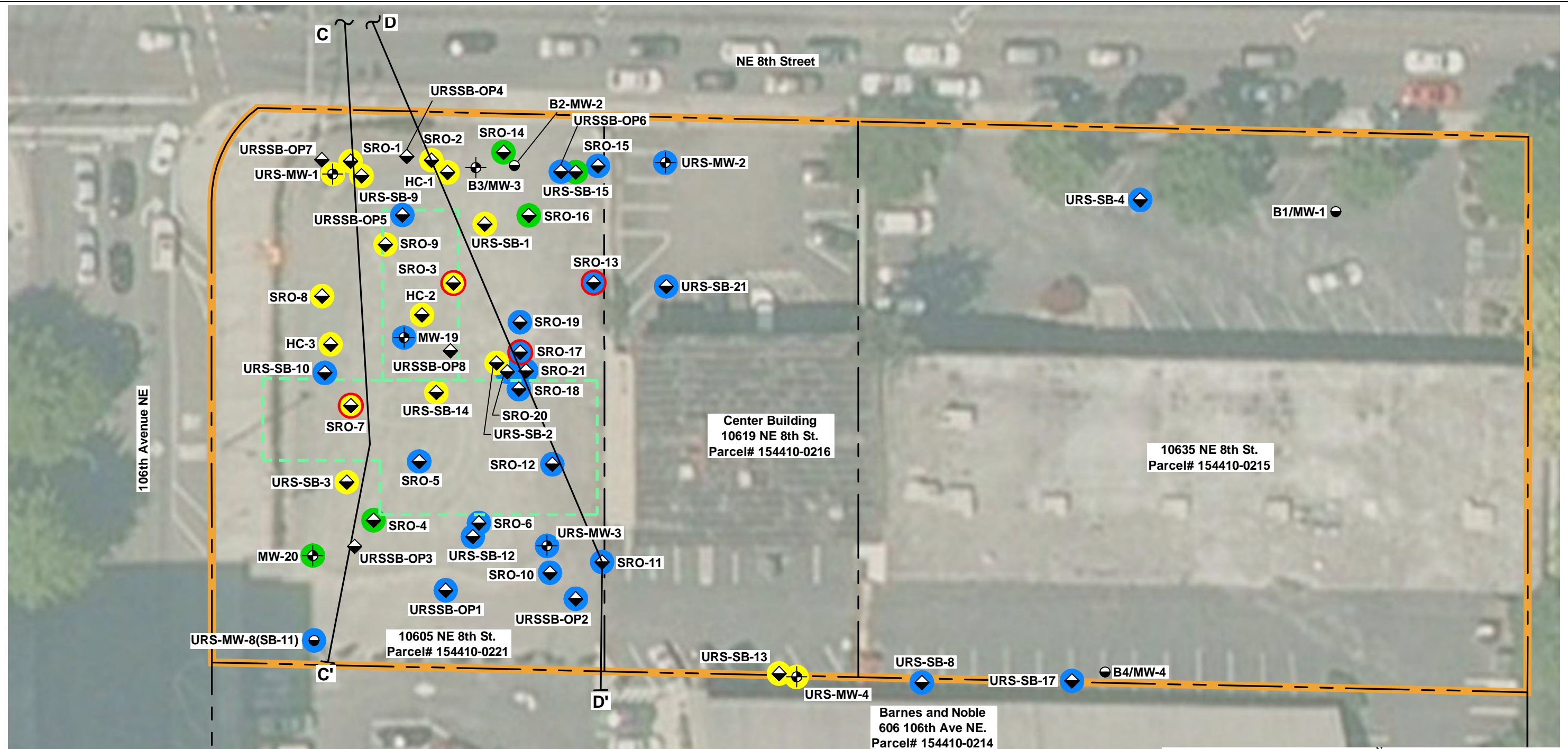
Legend

-  Inferred Groundwater Contour
-  Approximate Groundwater Flow Direction in Advance Outwash
-  Deep Well or Soil Boring Designation
Groundwater Elevation on October 21, 2011
-  Deep Monitoring Well Location



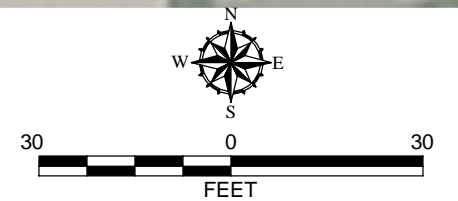
Advance Outwash Groundwater Elevation Contours (October 21, 2011)	
SRO, 10605 and 10619 NE 8th Street Bellevue, Washington	
GEOENGINEERS 	Figure 8

P:\19\227004\100\CAD\03_SHEET FILES\RIFS\FIGURE 9 PCE DETECTIONS IN SOIL.DWG\TAB:F7 MODIFIED BY TMICHAUD ON MAY 16, 2014 - 11:19



Legend

- Monitoring Well Location
 - Deep Monitoring Well Location
 - Soil Boring Location
 - Approximate Parcel Boundaries
 - Excavation Extent for Planned Phase I Development
 - HC** Hart Crowser Soil Boring
 - URS** URS Soil Boring/Well
 - SRO** Farallon Soil Boring
 - B1/MW-1** Terra Associates Boring/Well
 - Former Gas Station
 - C-C'** Cross-Section
-
- Highest PCE Concentration in Soil:
- Not detected above laboratory reporting limit
 - Detected at or below MTCA Method A Cleanup Level (0.05 mg/kg)
 - Detected above MTCA Method A Cleanup Level (0.05 mg/kg) and at or below 2.3 mg/kg
 - Gasoline or diesel/oil-range petroleum detected above MTCA Method A Cleanup level in shallow soil (<9' bgs)
 - No Color = Chemical analysis not performed



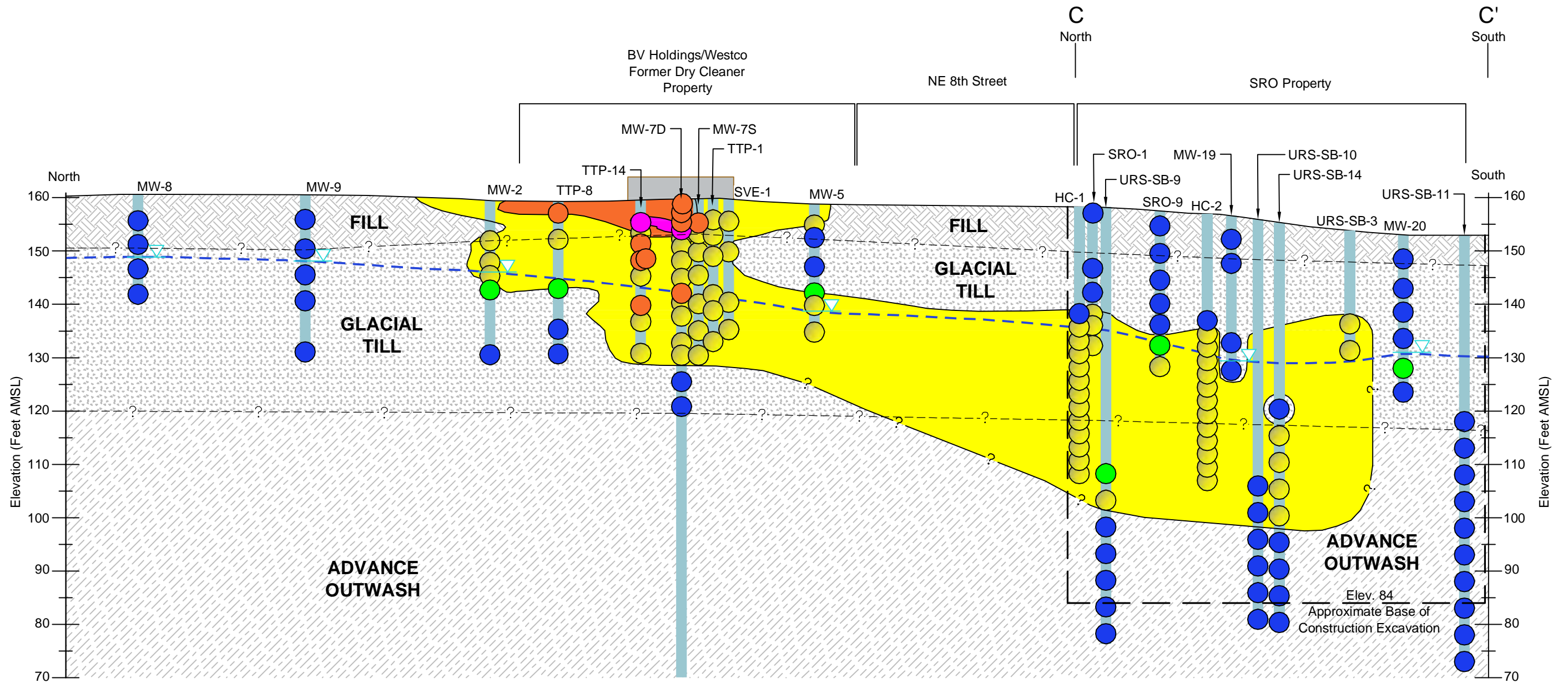
Notes

1. The locations of all features shown are approximate.
2. This drawing is for information purposes. It is intended to assist in showing features discussed in an attached document. GeoEngineers, Inc. cannot guarantee the accuracy and content of electronic files. The master file is stored by GeoEngineers, Inc. and will serve as the official record of this communication.

Reference: Background image obtained from Bing Images, 2012.

PCE Detections in Soil	
SRO, 10605 and 10619 NE 8th Street Bellevue, Washington	
	Figure 9

P:\19227004\00\CAD\03_SHEET FILES\RIFS\FIGURE 10_12_13.DWG\TAB\F10 MODIFIED BY TMICHAUD ON MAY 16, 2014 - 11:27



**Tetrachloroethene (PCE)
Concentrations**

- Not Detected Above Laboratory Reporting Limit
 - <0.05 mg/kg
 - and 0.05 to 2.3 mg/kg
 - and 2.3 to 60 mg/kg
 - and 60 mg/kg (RCRA Land Ban Value)
 - ? — Limit Uncertain
- MTCA Method A Cleanup Level = 0.05 mg/kg

Legend

- MW-8 Monitoring Well Location
- TTP-8/SRO-9 Soil Boring Location
- Approximate Soil Sampling Depth
- Former Dry Cleaners Building
- AMSL** Above Mean Sea Level
- Water table
- ▽ Groundwater Level Elevation (Feet AMSL; August 23, 2010)
- C-C'** Cross-Section Location Shown on Figure 9
- - - ? - - - Inferred Geologic Contact
- Planned Development Excavation Extent

Notes

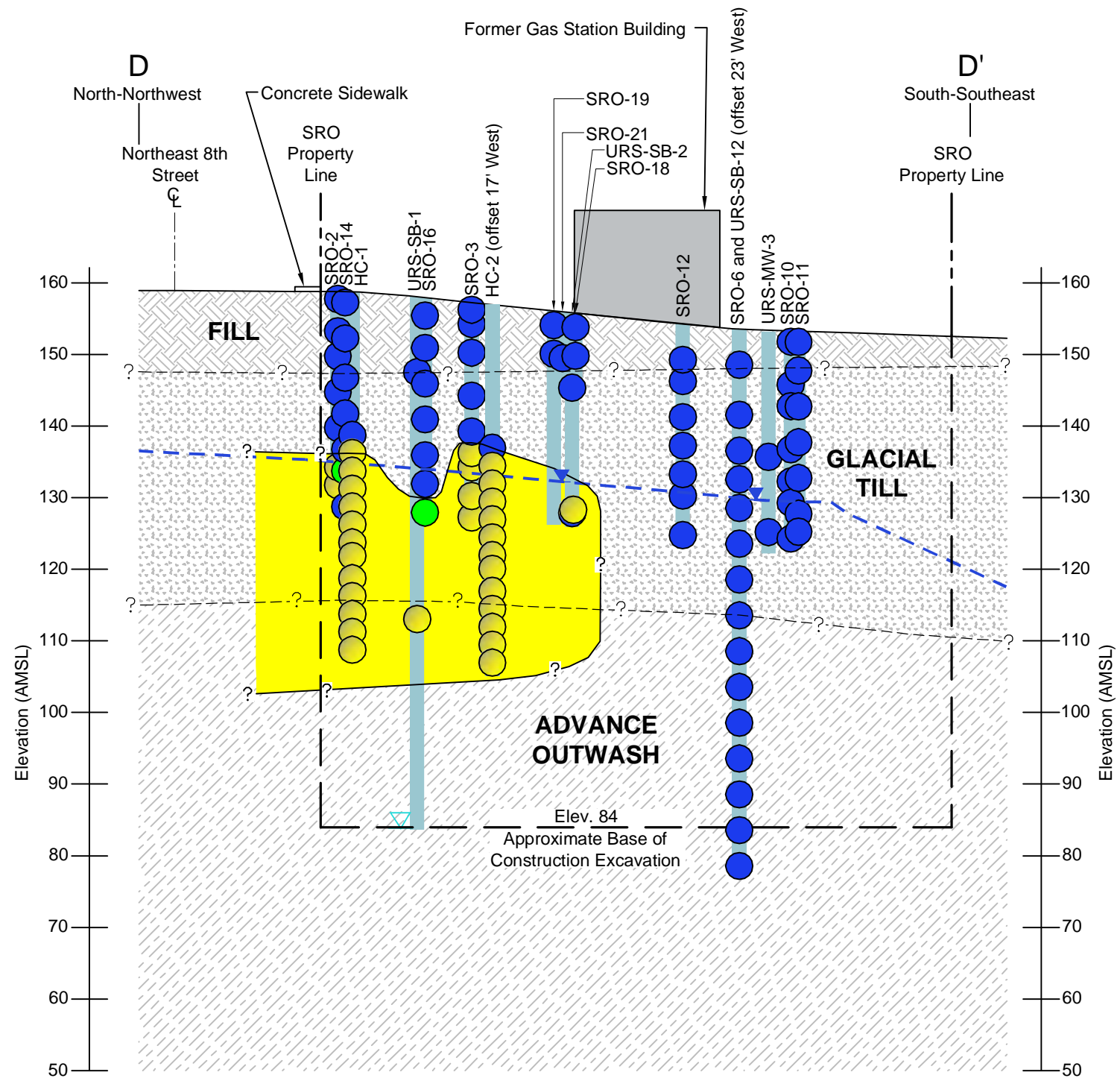
1. The locations of all features shown are approximate.
2. This drawing is for information purposes. It is intended to assist in showing features discussed in an attached document. GeoEngineers, Inc. cannot guarantee the accuracy and content of electronic files. The master file is stored by GeoEngineers, Inc. and will serve as the official record of this communication.

Reference: Background image provided by URS, dated 2011.
Modified by GeoEngineers.

HORIZONTAL SCALE: 1"= 40'
VERTICAL SCALE: 1"= 20'
VERTICAL EXAGGERATION: 2X

PCE Soil Contamination Cross Section C-C'	
SRO, 10605 and 10619 NE 8th Street Bellevue, Washington	
GEOENGINEERS	Figure 10

P:\19227004\100\CAD\103_SHEET FILES\RIFS\FIGURE 11 PCE SOIL CROSS-SECTION DD.DWG\TAB:AA MODIFIED BY TRICHAUD ON MAY 16, 2014 - 11:28

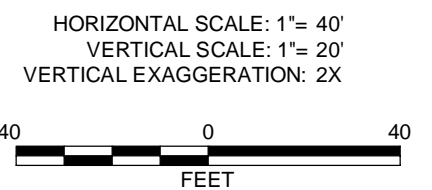


Legend

- MW-8** Monitoring Well Location
- SRO-9** Soil Boring Location
- Approximate Soil Sample Depth
- Perched Groundwater Level (August 23, 2010)
- Deep Groundwater Level (August 23, 2010)
- D-D' Cross-Section Location Shown on Figure 9
- AMSL Above Mean Sea Level (NAVD88 datum)
- ?--- Inferred Geologic Contact
- [] Planned Development Excavation Extent

Tetrachloroethene (PCE) Concentrations

- Not Detected Above the Laboratory Reporting Limit
- <0.05 mg/kg
- and ● ≥0.05 to 2.3 mg/kg
- MTCA Method A Cleanup Level = 0.05 mg/kg
- ?--- Limit Uncertain



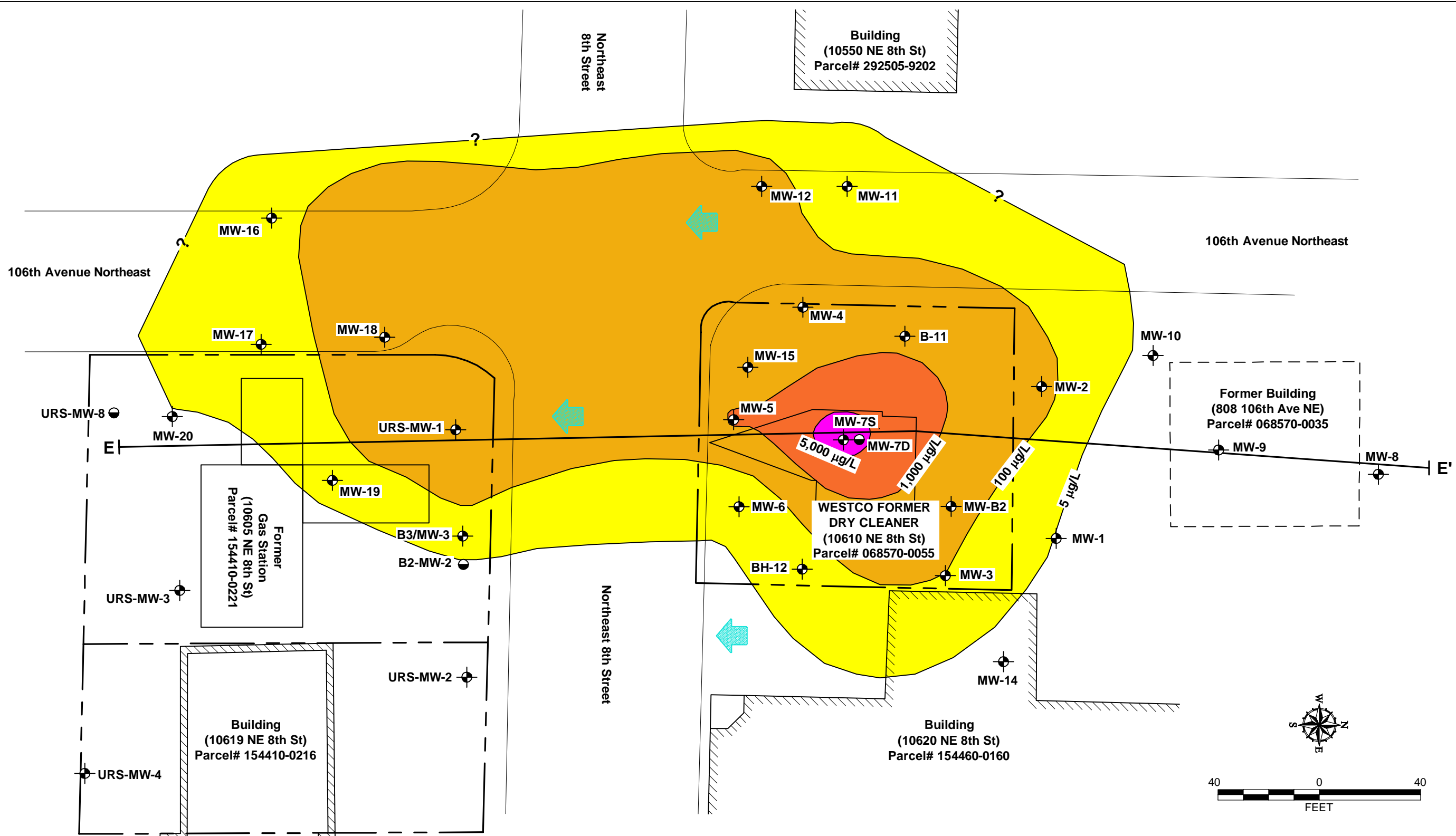
Notes

1. The locations of all features shown are approximate.
2. This drawing is for information purposes. It is intended to assist in showing features discussed in an attached document. GeoEngineers, Inc. cannot guarantee the accuracy and content of electronic files. The master file is stored by GeoEngineers, Inc. and will serve as the official record of this communication.

Reference: Cross-Section B-B' for the Former Thinker Toys site by Farallon Consulting, dated 11/02/10. Soil chemical data obtained between 2008 and 2011.

PCE Soil Contamination Cross Section D-D'	
SRO, 10605 and 10619 NE 8th Street Bellevue, Washington	
GEOENGINEERS	Figure 11

P:\1919227004\00\CAD\03_SHEET FILES\RIFS\FIGURE 10_12_13.DWG\TAB\F12 MODIFIED BY TMICHAUD ON MAY 14, 2014 - 10:22



Notes

1. PCE groundwater data for SRO Property Wells is shown in Table 3.
2. The locations of all features shown are approximate.
3. This drawing is for information purposes. It is intended to assist in showing features discussed in an attached document. GeoEngineers, Inc. cannot guarantee the accuracy and content of electronic files. The master file is stored by GeoEngineers, Inc. and will serve as the official record of this communication.

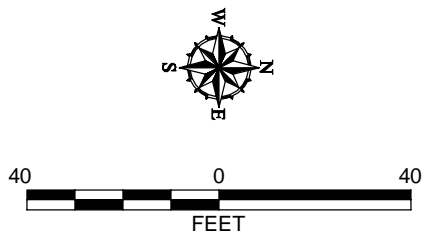
Reference: Background image provided by URS, dated 2011. Modified by GeoEngineers.

Tetrachloroethene (PCE) Concentrations

- 5 to 100 µg/L
 - 100 to 1,000 µg/L
 - 1,000 to 5,000 µg/L
 - > 5,000 µg/L
- MTCA Method A Cleanup Level = 5 µg/L

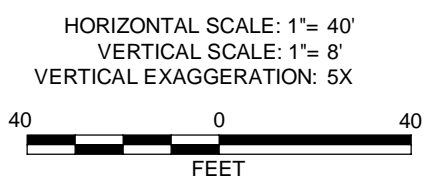
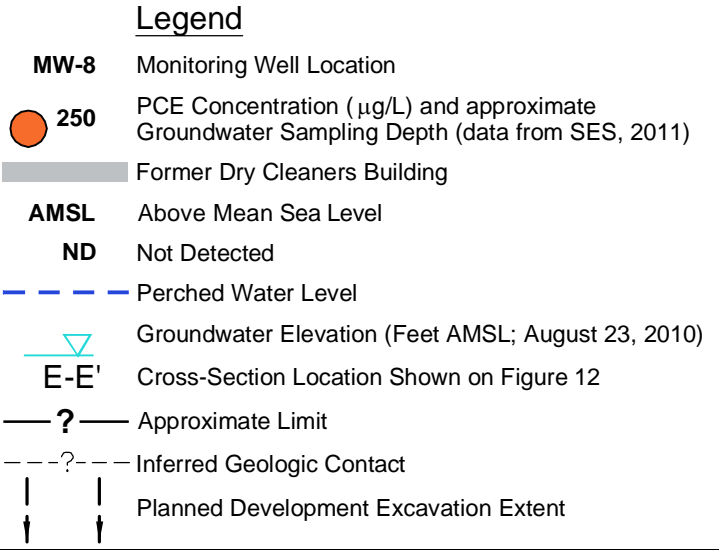
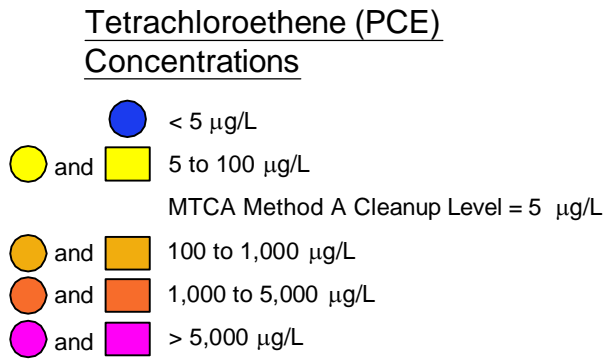
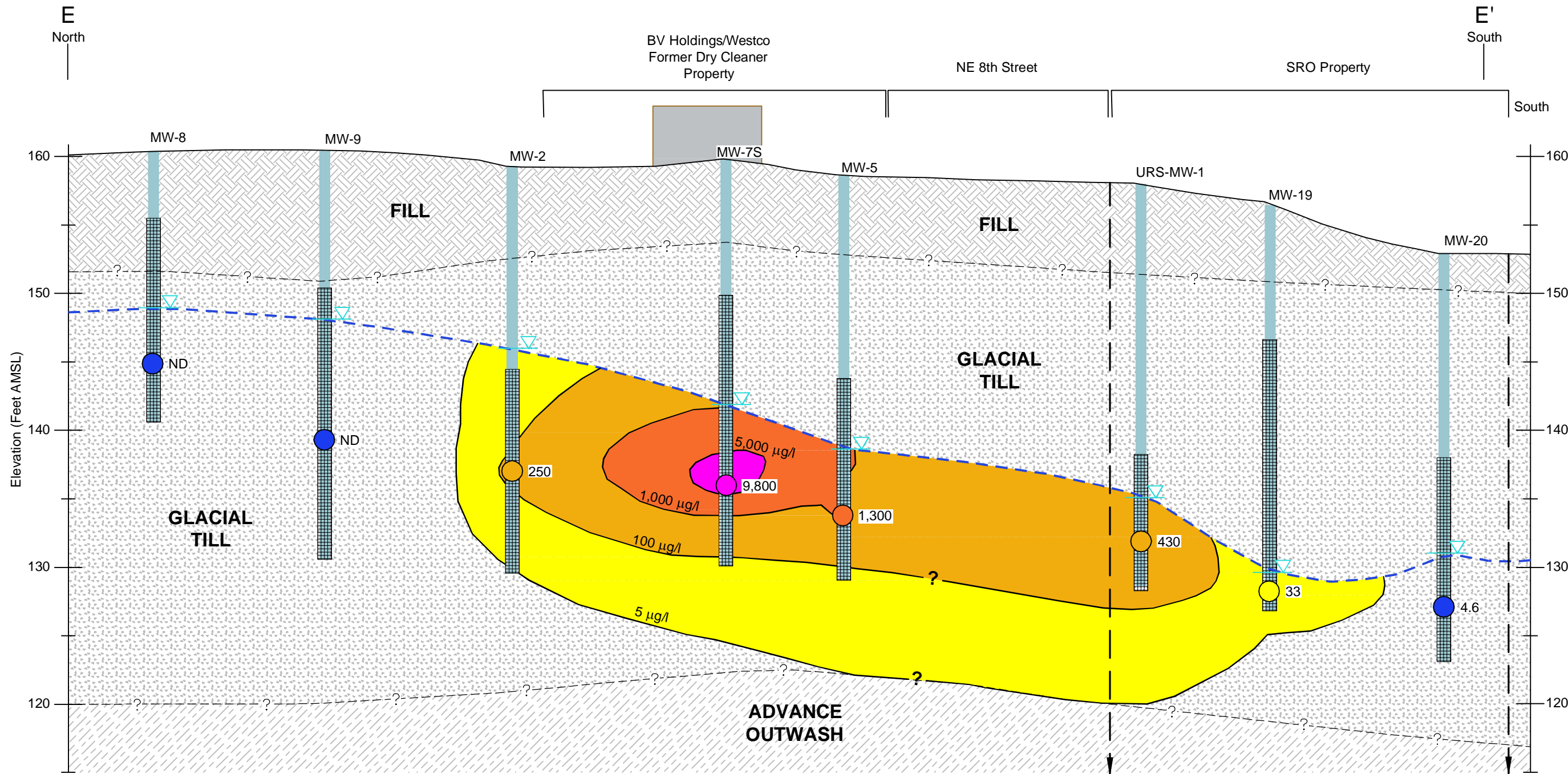
Legend

- + Monitoring Well Location
- Deep Monitoring Well Location
- Approximate Parcel Boundaries
- Approximate PCE Iso-Concentration Contours (µg/L) for August 2010
- Approximate Groundwater Flow Direction in Perched Interval



PCE Perched Groundwater Contamination Map (August 2010)	
SRO, 10605 and 10619 NE 8th Street Bellevue, Washington	
GEOENGINEERS	Figure 12

P:\19227004\00\CAD\03_SHEET FILES\RIFS\FIGURE 10_12_13.DWG\TAB\F13 MODIFIED BY TMICHAUD ON MAY 16, 2014 - 11:26



Notes

- The locations of all features shown are approximate.
- This drawing is for information purposes. It is intended to assist in showing features discussed in an attached document. GeoEngineers, Inc. cannot guarantee the accuracy and content of electronic files. The master file is stored by GeoEngineers, Inc. and will serve as the official record of this communication.

Reference: Background image provided by URS, dated 2011.
 Modifications by GeoEngineers.

PCE Perched Groundwater Contamination Cross Section E-E' (August 2010)

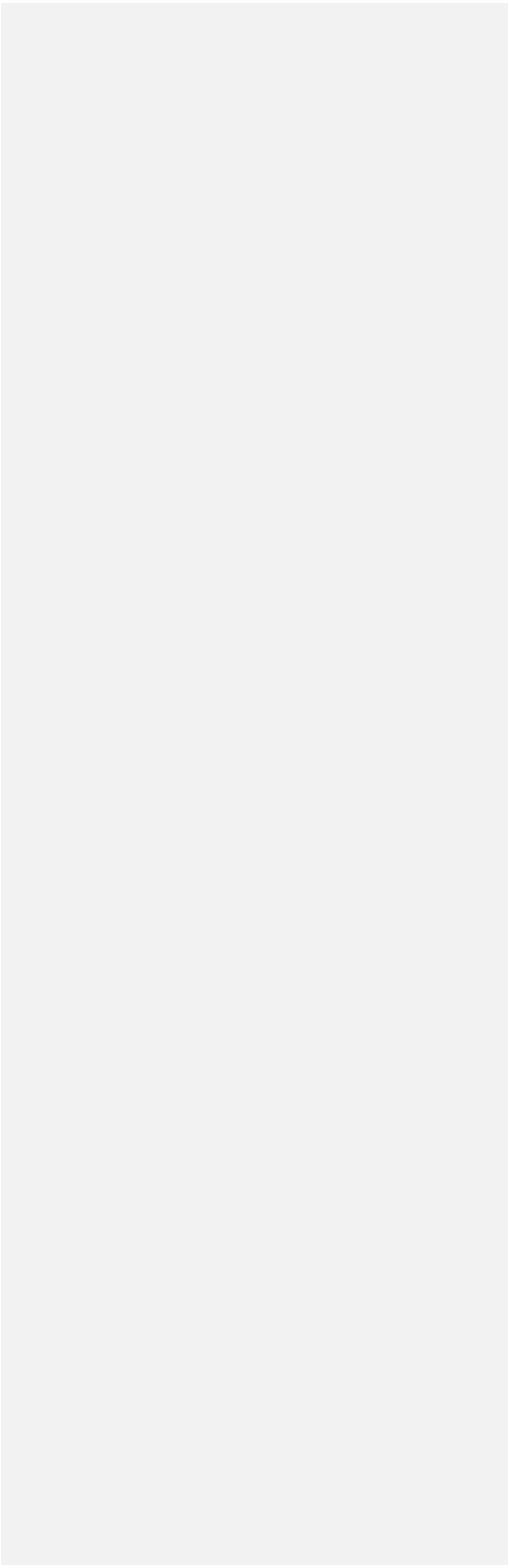
SRO, 10605 and 10619 NE 8th Street
 Bellevue, Washington

GEOENGINEERS

Figure 13



APPENDIX A
Boring Logs



Project: Cental Puget Sound Regional Transit Authority
Project Location: 10605 NE 8th Street, Bellevue, WA
Project Number: 54-09900024.12

Log of Boring URSSB-OP1

Sheet 1 of 1

Date(s) Drilled	3/11/00	Logged By	J. Rapp	Checked By	G. Davis
Drilling Method	Geoprobe	Drilling Contractor	TEG	Total Depth Drilled (feet)	23.0
Drill Rig Type	truck mounted	Sampler Type	Split Spoon	Surface Elevation	145 feet (MSL)
Groundwater Level	20	Hammer Weight and Drop	NA	Top of PVC Elevation	NA
Diameter of Hole (inches)	2"	Diameter of Well (inches)	NA	Type of Well Casing	NA
Type of Sand Pack	NA	Type and Depth of Seal(s)	NA	Screen Perforation	NA
Comments: boring backfilled with bentonite chips					

Elevation, feet	Depth, feet	SAMPLES				MATERIAL DESCRIPTION	Well Completion Log	PID scan (ppmv)	Drilling Rate (Time, 24-hour clock)	REMARKS
		Type	Number	Blows per 6-inch Interval	Percent Recovery					
0						asphalt surface Gravelly Silty SAND (SP-SM) - moist, brown, no odor, no sheen				
5					100%	Gravelly SAND (SP) - moist, medium dense, brown/tan, mottled, sub-rounded to sub-angular gravel, no odor, no sheen		0	0820	
10						same as above - gray, dense				
15					100%			0	0900	
20					NA			0	0920	water encountered at approximately 19' bgs screen set at 20' - 23' bgs
25										



URS Greiner Woodward Clyde

Project: Cental Puget Sound Regional Transit Authority
Project Location: 10605 NE 8th Street, Bellevue, WA
Project Number: 54-09900024.12

Log of Boring URSSB-OP2

Sheet 1 of 1

Date(s) Drilled	3/11/00	Logged By	J. Rapp	Checked By	G. Davis
Drilling Method	Geoprobe	Drilling Contractor	TEG	Total Depth Drilled (feet)	13.0
Drill Rig Type	truck mounted	Sampler Type	Split Spoon	Surface Elevation	145 feet (MSL)
Groundwater Level	13	Hammer Weight and Drop	NA	Top of PVC Elevation	
Diameter of Hole (inches)	2"	Diameter of Well (inches)	NA	Type of Well Casing	NA
Type of Sand Pack	NA	Type and Depth of Seal(s)	NA	Screen Perforation	NA
Comments	boring backfilled with bentonite chips				

Elevation, feet	Depth, feet	SAMPLES				MATERIAL DESCRIPTION	Well Completion Log	PID scan (ppmv)	Drilling Rate (Time, 24-hour clock)	REMARKS
		Type Number	Blows per 6-inch Interval	Percent Recovery	Graphic Log					
0						Silty Sandy GRAVEL (GP) - dry, reddish-brown, no odor, no sheen				
5			100%			Gravelly SAND (SP) - moist, medium dense, brown, large angular gravel, no odor, no sheen		0	0950	
10			100%					0	1010	
15										
20										water encountered @ approximately 13' bgs

Report: ENV_23A; Project File: C:\PROGRAMS\1\GINT\PROJECTS\OPTIMER.GPJ; Data Template: WC_CORP1.GDT Printed: 4/12/00

Project: Cental Puget Sound Regional Transit Authority
Project Location: 10605 NE 8th Street, Bellevue, WA
Project Number: 54-09900024.12

Log of Boring URSSB-OP3

Sheet 1 of 1

Date(s) Drilled	3/11/00	Logged By	J. Rapp	Checked By	G. Davis
Drilling Method	Geoprobe	Drilling Contractor	TEG	Total Depth Drilled (feet)	23.0
Drill Rig Type	truck mounted	Sampler Type	Split Spoon	Surface Elevation	145 feet (MSL)
Groundwater Level	20	Hammer Weight and Drop	NA	Top of PVC Elevation	
Diameter of Hole (inches)	2"	Diameter of Well (inches)	NA	Type of Well Casing	NA
Type of Sand Pack	NA	Type and Depth of Seal(s)	NA	Screen Perforation	NA
Comments: boring backfilled with bentonite chips					

Elevation, feet	Depth, feet	SAMPLES			Graphic Log	MATERIAL DESCRIPTION	Well Completion Log	PID scan (ppmv)	Drilling Rate (Time, 24-hour clock)	REMARKS
		Type	Number	Blows per 6-inch Interval						
0					asphalt surface					
					Silty Sandy GRAVEL (GP) - moist, red, mottled, no odor, no sheen					
	5			100%			0		1030	
					Gravelly SAND (SP) - moist, brown/gray, sub-rounded to sub-angular gravel, no odor, no sheen					
	10				same as above - no odor, no sheen					
	15			100%	same as above - no odor, no sheen		0		1100	
					same as above - no odor, no sheen					
	20			NA			0		1110	water encountered @ approximately 19' bgs
	25									duplicate water sample collected (OP10-W) @ 1700

Report W: Project File: C:\PROGRAM-1\GINT\PROJECTS\OPTIMER.GPJ; Data Template: WC_CORP1.GDT Print 0

Project: Cental Puget Sound Regional Transit Authority
 Project Location: 10605 NE 8th Street, Bellevue, WA
 Project Number: 54-09900024.12

Log of Boring URSSB-OP4

Sheet 1 of 1

Date(s) Drilled	3/11/00	Logged By	J. Rapp	Checked By	G. Davis
Drilling Method	Geoprobe	Drilling Contractor	TEG	Total Depth Drilled (feet)	12.0
Drill Rig Type	truck mounted	Sampler Type	Split Spoon	Surface Elevation	145 feet (MSL)
Groundwater Level	not encountered	Hammer Weight and Drop	NA	Top of PVC Elevation	
Diameter of Hole (inches)	2"	Diameter of Well (inches)	NA	Type of Well Casing	NA
Type of Sand Pack	NA	Type and Depth of Seal(s)	NA	Screen Perforation	NA
Comments boring backfilled with bentonite chips					

Elevation, feet	Depth, feet	SAMPLES				Graphic Log	MATERIAL DESCRIPTION	Well Completion Log	PID scan (ppmv)	Drilling Rate (Time, 24-hour clock)	REMARKS
		Type	Number	Blows per 6-inch Interval	Percent Recovery						
0							Sandy GRAVEL (GP) - moist, brown-gray, no odor, no sheen				
5					100%		same as above - no odor, no sheen	0	1130		
10											
15											refusal @ 12' bgs, no water encountered
20											

Report: ENV_23A; Project File: C:\PROGRAM-1\GINT\PROJECTS\OPTIMER.GPJ; Data Template: WC_CORP1.GDT. Printed: 4/12/00

URS Greiner Woodward Clyde

Project: Cental Puget Sound Regional Transit Authority
Project Location: 10605 NE 8th Street, Bellevue, WA
Project Number: 54-09900024.12

Log of Boring URSSB-OP5

Sheet 1 of 1

Date(s) Drilled	3/11/00	Logged By	J. Rapp	Checked By	G. Davis
Drilling Method	Geoprobe	Drilling Contractor	TEG	Total Depth Drilled (feet)	15.0
Drill Rig Type	truck mounted	Sampler Type	Split Spoon	Surface Elevation	145 feet (MSL)
Groundwater Level	not encountered	Hammer Weight and Drop	NA	Top of PVC Elevation	
Diameter of Hole (inches)	2"	Diameter of Well (inches)	NA	Type of Well Casing	NA
Type of Sand Pack	NA	Type and Depth of Seal(s)	NA	Screen Perforation	NA
Comments boring backfilled with bentonite chips					

Elevation, feet	Depth, feet	SAMPLES				MATERIAL DESCRIPTION	Well Completion Log	PID scan (ppmv)	Drilling Rate (Time, 24-hour clock)	REMARKS
		Type	Number	Blows per 6-inch Interval	Percent Recovery					
0						Sandy GRAVEL (GP) - moist, brown, mottled, no odor, no sheen				
5										
10					100%	SAND (SP) - moist, trace gravel, brown, no odor, no sheen	0	1230		
15										refusal @ 15' bgs, no water encountered
20										

URS Greiner Woodward Clyde

Project: Cental Puget Sound Regional Transit Authority
 Project Location: 10605 NE 8th Street, Bellevue, WA
 Project Number: 54-09900024.12

Log of Boring URSSB-OP6

Sheet 1 of 1

Date(s) Drilled	3/11/00	Logged By	J. Rapp	Checked By	G. Davis
Drilling Method	Geoprobe	Drilling Contractor	TEG	Total Depth Drilled (feet)	25.0
Drill Rig Type	truck mounted	Sampler Type	Split Spoon	Surface Elevation	145 feet (MSL)
Groundwater Level	not encountered	Hammer Weight and Drop	NA	Top of PVC Elevation	
Diameter of Hole (inches)	2"	Diameter of Well (inches)	NA	Type of Well Casing	NA
Type of Sand Pack	NA	Type and Depth of Seal(s)	NA	Screen Perforation	NA
Comments: boring backfilled with bentonite chips					

Elevation, feet	Depth, feet	SAMPLES			Graphic Log	MATERIAL DESCRIPTION	Well Completion Log	PID scan (ppmv)	Drilling Rate (Time, 24-hour clock)	REMARKS
		Type	Number	Blows per 6-inch Interval						
0					asphalt surface					
					Silty Sandy GRAVEL (GP-GM) - dry, mottled, no odor, no sheen					
	5			100%	Gravelly SAND (SP) - moist, brown, mottled, some gravel, no odor, no sheen		0		1320	
	10				same as above - dense, no odor, no sheen					
	15				same as above - no odor, no sheen					
	20			100%	same as above - very dense, no odor, no sheen		0		1400	
	25									screen placed @ 21' - 25'; insufficient water to sample; unable to advance probe further
	30									

Report: ENW_23A; Project File: C:\PROGRAMS-1\GINT\PROJECTS\OPTIMER.GPJ; Data Template: WC_CORP1.GDT Printed: 4/12/00

URS Greiner Woodward Clyde

SRO_02378

Project: Cental Puget Sound Regional Transit Authority
Project Location: 10605 NE 8th Street, Bellevue, WA
Project Number: 54-09900024.12

Log of Boring URSSB-OP7

Sheet 1 of 1

Date(s) Drilled	3/11/00	Logged By	J. Rapp	Checked By	G. Davis
Drilling Method	Geoprobe	Drilling Contractor	TEG	Total Depth Drilled (feet)	16.0
Drill Rig Type	truck mounted	Sampler Type	Split Spoon	Surface Elevation	145 feet (MSL)
Groundwater Level	not encountered	Hammer Weight and Drop	NA	Top of PVC Elevation	
Diameter of Hole (inches)	2"	Diameter of Well (inches)	NA	Type of Well Casing	NA
Type of Sand Pack	NA	Type and Depth of Seal(s)	NA	Screen Perforation	NA
Comments boring backfilled with bentonite chips					

Elevation, feet	Depth, feet	SAMPLES				Graphic Log	MATERIAL DESCRIPTION	Well Completion Log	PID scan (ppmv)	Drilling Rate (Time: 24-hour clock)	REMARKS
		Type	Number	Blows per 6-inch Interval	Percent Recovery						
0						asphalt surface					
						Silly Sandy GRAVEL (GP) - red/brown, dry, no odor, no sheen					
	5				100%			0		1440	
						Gravelly SAND (SP) - moist, brown, dense, trace gravel, s. b-rounded to sub-angular gravel, no odor, no sheen					
	10										
	15				100%		same as above - very dense, no odor, no sheen		0	1505	
											refusal @ 16' bgs; no water encountered
20											

Report: A:\Project File: C:\PROGRAMS\1\GINT\PROJECTS\OPTIMER.GPJ; Data Template: WC_CORP1.GDT Printed: 3

Project: Cental Puget Sound Regional Transit Authority
Project Location: 10605 NE 8th Street, Bellevue, WA
Project Number: 54-09900024.12

Log of Boring URSSB-OP8

Sheet 1 of 1

Date(s) Drilled	3/11/00	Logged By	J. Rapp	Checked By	G. Davis
Drilling Method	Geoprobe	Drilling Contractor	TEG	Total Depth Drilled (feet)	20.0
Drill Rig Type	truck mounted	Sampler Type	Split Spoon	Surface Elevation	145 feet (MSL)
Groundwater Level	no encountered	Hammer Weight and Drop	NA	Top of PVC Elevation	
Diameter of Hole (inches)	2"	Diameter of Well (inches)	NA	Type of Well Casing	NA
Type of Sand Pack	NA	Type and Depth of Seal(s)	NA	Screen Perforation	NA
Comments boring backfilled with bentonite chips					

Elevation, feet	Depth, feet	SAMPLES				Graphic Log	MATERIAL DESCRIPTION	Well Completion Log	PID scan (ppmv)	Drilling Rate (Time, 24-hour clock)	REMARKS
		Type	Number	Blows per 6-inch Interval	Percent Recovery						
0						Sandy GRAVEL (GP) - dry, reddish-brown, no odor, no sheen					
5					100%	Gravelly SAND (SP) - moist, gray, mottled, no odor, no sheen		0	1530		
						same as above - dense, no odor, no sheen					
10						same as above - no odor, no sheen					
15					100%	same as above - very dense, no odor, no sheen		0	1550		
20											refusal @ 20' bgs, no water encountered
25											

Report: ENV_23A; Project File: C:\PROGRA-1\GINT\PROJECTS\OPTIMER.GPJ; Data Template: WC_CORP1.GDT Printed: 4/12/00

Project: SRO Bellevue Corner Property
Project Location: 10605/10610 NE 8th St. Bellevue, WA
Project Number: 33763233

Key to Log of Boring and Descriptive Terms for Soil

Unified Soil Classification System (ASTM D2487 & D2488)

Major Divisions		Symbols		Typical Descriptions			
		Graph	Letter				
Coarse Grained Soils More than 50% of No. 200 Sieve Size	Gravels More than 50% of Coarse Fraction Retained in No. 4 Sieve	Clean Gravels (less than 5% fines)		GW	Well-Graded Gravels, Gravel-Sand Mixtures, Little or no Fines		
		Gravels with Fines (more than 12% fines)		GP	Poorly-Graded Gravels, Gravel-Sand Mixtures, Little or no Fines		
		Gravels with Fines (more than 12% fines)		GM	Silty Gravels, Gravel-Sand-Silt Mixtures		
		Gravels with Fines (more than 12% fines)		GC	Clayey Gravels, Gravel-Sand-Clay Mixtures		
	Sands More than 50% of Coarse Fraction Passing through No. 4 Sieve	Clean Sand (less than 5% fines)		SW	Well-Graded Sands, Gravelly Sands, Little or no Fines		
		Sands with Fines (more than 12% fines)		SP	Poorly Graded Sands, Gravelly Sands, Little or no Fines		
		Sands with Fines (more than 12% fines)		SM	Silty Sands, Sand-Clay Mixtures		
		Sands with Fines (more than 12% fines)		SC	Clayey Sands, Sand-Clay Mixtures		
		Fine Grained Soils More than 50% of Material is Smaller than No. 200 Sieve Size	Silts and Clays Liquid Limit Less than 50%	Inorganic Silts and very Fine Sands, Rock Flour, Silty or Clayey Fine Sands or Clayey Silts with Slight Plasticity		ML	Inorganic Silts and very Fine Sands, Rock Flour, Silty or Clayey Fine Sands or Clayey Silts with Slight Plasticity
				Inorganic Clays of Low to Medium Plasticity, Gravelly Clays, Sandy Clays, Silty Clays, Lean Clays		CL	Inorganic Clays of Low to Medium Plasticity, Gravelly Clays, Sandy Clays, Silty Clays, Lean Clays
Organic Silts and Organic Silty Clays of Low Plasticity				OL	Organic Silts and Organic Silty Clays of Low Plasticity		
Silts and Clays Liquid Limit Greater than 50%	Inorganic Silts, Micaceous or Diatomaceous Fine Sand or Silty Soils			MH	Inorganic Silts, Micaceous or Diatomaceous Fine Sand or Silty Soils		
	Inorganic Clays of High Plasticity, Fat Clays			CH	Inorganic Clays of High Plasticity, Fat Clays		
Organic Clays of Medium to High Plasticity, Organic Silts		OH	Organic Clays of Medium to High Plasticity, Organic Silts				
Highly Organic Soils			PT	Peat, Humus, Swamp Soils with High Organic Contents (see ASTM D4427-92)			

Abbreviations

SA	Sieve Analysis
M	Moisture
DD	Dry Density
AL	Atterberg Limits
HA	Hydrometer Analysis
C	Consolidation
Pc	Constant Head Permeability
Pf	Falling Head Permeability
DS	Direct Shear
TX	Triaxial
TV	Torvane Shear
LV	Laboratory Vane Shear
PP	Pocket Penetrometer
OVA	Organic Vapor Analyzer
OC	Organic Content
Bkgd	Background
ID	Inner Diameter
Ft	Feet
Bgs	Below Ground Surface
AMSL	Above Mean Sea Level
NAVD 88	North American Vertical Datum of 1988

Relative Density or Consistency

Coarse-Grained Soils		Fine-Grained Soils	
Relative Density	N, SPT Blows / ft	Relative Consistency	N, SPT Blows / ft
Very loose sand	0 - 4	Very soft	< 2
Loose	4 - 10	Soft	2 - 4
Medium dense	10 - 30	Medium stiff	4 - 8
Dense	30 - 50	Stiff	8 - 15
Very dense	Over 50	Very stiff	15 - 30
		Hard	Over 30

Sampler Symbols

	3" O.D. Split Spoon Sample with brass rings		3" O.D. Shelby Tube Sample
	Core		Piston Sample
	Non-standard penetration test		Grab Sample
	3" O.D. D&M with 300 lb in-hole hammer		

Minor Descriptors

Trace	0 - 5%
Slightly (clayey, silty, sandy, gravelly)	5 - 12%
Clayey, silty, sandy, gravelly	12 - 30%
Very (clayey, silty, sandy, gravelly)	30 - 50%

Moisture Content

Dry	Absence of moisture, dusty
Moist	Damp but no visible water
Wet	Visible free water, from below the water table

Typical Well Graphic Symbols

	One pipe in bentonite pellets		One slotted pipe in filter pack
	One pipe in filter pack		Bentonite Seal

NOTES:

- Descriptions and stratum lines are interpretive; field descriptions may have been modified to reflect lab test results. Descriptions on these logs apply only at the specific boring locations and at the time the borings were advanced; they are not warranted to be representative of subsurface conditions at other locations or times.
- Dual Symbols are used to indicate borderline soil classifications

ENV2 WITH WELL T:STERLING REALTY ORGANIZATION\33761162 BELLEVUE CORNER PROPERTY\LITIGATION SUPPORT\2011 DATA GAP INVESTIGATION\GEO\TECHNICAL INVESTIGATION\BELLVUE CORNER.GPJ_URSS3.D\J.GLB_URSS3A3.GDT 1/13/12

Project: SRO Bellevue Corner Property Project Location: 10605/10610 NE 8th St. Bellevue, WA Project Number: 33763233	<h2 style="margin: 0;">Log of Boring SB-9</h2> <p style="margin: 0;">Sheet 1 of 4</p>
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Date(s) Drilled: 10-10-11	Logged By: AP/DR	Checked By: DRR
Drilling Method: Hollow-Stem Auger	Drilling Contractor: Cascade Drilling	Total Depth of Borehole: 85 feet
Drill Rig Type: CME 85	Drill Bit Size/Type: 8.25 inch	Ground Surface Elevation: AMSL NAVD 88
Groundwater Level: 77	Sampling Method: D&M	Hammer Data: 300-lb in-hole
Borehole Backfill: Bentonite Chips	Location:	

Elevation, feet	Downhole Depth, feet	SAMPLES					Graphic Log	USCS	MATERIAL DESCRIPTION	Well Completion Schematic	REMARKS AND WELL DETAILS
		Type Number	Blows/ 6in.	Recovery (%)	OVM (ppm)						
0								Drilled to 50 feet bgs, no sampling			
5											
10											
15											
20											
25											




ENV2 WITH WELL T:STERLING REALTY ORGANIZATION\33761162 BELLEVUE CORNER PROPERTY\LITIGATION SUPPORT\2011 DATA GAP INVESTIGATION\GEOTECHNICAL INVESTIGATION\BELLEVUE CORNER.GPJ_URSS3.D\J.GLB_URSS3A3.GDT 1/13/12

Project: SRO Bellevue Corner Property
Project Location: 10605/10610 NE 8th St. Bellevue, WA
Project Number: 33763233

Log of Boring SB-9

Sheet 2 of 4

Elevation, feet	Downhole Depth, feet	SAMPLES				Graphic Log	USCS	MATERIAL DESCRIPTION	REMARKS AND WELL DETAILS
		Type Number	Blows/ 6in.	Recovery (%)	OVM (ppm)				
25									
30									
35									
40									
45									
50		1	50 for 5"			SM	Brown/gray, silty fine SAND with trace gravel, moist, no odor		



ENV2 WITH WELL T:STERLING REALTY ORGANIZATION\33761162 BELLEVUE CORNER PROPERTY\LITIGATION SUPPORT\2011 DATA GAP INVESTIGATION\GEOTECHNICAL INVESTIGATION\BELLEVUE CORNER.GPJ_URSSEA3_D.J.GLB_URSSEA3.GDT 1/13/12

Project: SRO Bellevue Corner Property
Project Location: 10605/10610 NE 8th St. Bellevue, WA
Project Number: 33763233

Log of Boring SB-9
 Sheet 3 of 4

Elevation, feet	Downhole Depth, feet	SAMPLES				Graphic Log	USCS	MATERIAL DESCRIPTION	REMARKS AND WELL DETAILS
		Type	Number	Blows/6in.	Recovery (%)				
55	55	2	50 for 5"			[Dotted Pattern]	Grading less silt		
60	60	3	50 for 6"			[Dotted Pattern]			
65	65	4	50 for 6"			[Dotted Pattern]			
70	70	5	50 for 6"			[Dotted Pattern]	Grading increasing silt, moisture		
75	75	6	18 22 25 N=47			[Dotted Pattern]	Grading gray, silty fine SAND, wet	77 ft ▼	
80	80	7	20 21 20 N=41			[Dotted Pattern]			



ENV2 WITH WELL T:STERLING REALTY ORGANIZATION\33761152 BELLEVUE CORNER PROPERTY\LITIGATION SUPPORT\2011 DATA GAP INVESTIGATION\GEOTECHNICAL INVESTIGATION\BELLEVUE CORNER.GPJ_URSSEA3_D\J.GLB_URSSEA3.GDT 1/13/12

Project: SRO Bellevue Corner Property
Project Location: 10605/10610 NE 8th St. Bellevue, WA
Project Number: 33763233

Log of Boring SB-9
 Sheet 4 of 4

Elevation, feet	Downhole Depth, feet	SAMPLES				Graphic Log	USCS	MATERIAL DESCRIPTION	REMARKS AND WELL DETAILS
		Type Number	Blows/ 6in.	Recovery (%)	OVM (ppm)				
85							Boring completed to 85 feet bgs. Groundwater encountered at 77 feet bgs. Temporary well screen (0.10-inch PVC slotted) from 75-85 feet bgs. Water sample was very turbid, used bailer to collect (no odor). Borehole backfilled with bentonite (Cetco medium chips).		
90									
95									
100									
105									
110									



ENV2 WITH WELL T:STERLING REALTY ORGANIZATION\33761152 BELLEVUE CORNER PROPERTY\LITIGATION SUPPORT\2011 DATA GAP INVESTIGATION\GEOTECHNICAL INVESTIGATION\BELLEVUE CORNER.GPJ_URSS3.D\J.GLB_URSS3A3.GDT 1/13/11

Project: SRO Bellevue Corner Property Project Location: 10605/10610 NE 8th St. Bellevue, WA Project Number: 33763233	<h2 style="margin: 0;">Log of Boring SB-10</h2> <p style="margin: 0;">Sheet 1 of 3</p>
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Date(s) Drilled: 10-11-11	Logged By: AP	Checked By: DRR
Drilling Method: Hollow-Stem Auger	Drilling Contractor: Cascade Drilling	Total Depth of Borehole: 76.5 feet
Drill Rig Type: CME 85	Drill Bit Size/Type: 8.25 inch	Ground Surface Elevation: AMSL NAVD 88
Groundwater Level: 65	Sampling Method: D&M	Hammer Data: 300-lb in-hole
Borehole Backfill: Bentonite Chips	Location:	

Elevation, feet	Downhole Depth, feet	SAMPLES					Graphic Log	USCS	MATERIAL DESCRIPTION	Well Completion Schematic	REMARKS AND WELL DETAILS
		Type Number	Blows/ 6in.	Recovery (%)	OVM (ppm)						
0								Drilled to 50 feet bgs, no sampling			
5											
10											
15											
20											
25											



ENV2 WITH WELL T:STERLING REALTY ORGANIZATION\33761152 BELLEVUE CORNER PROPERTY\LITIGATION SUPPORT\2011 DATA GAP INVESTIGATION\GEOTECHNICAL INVESTIGATION\BELLEVUE CORNER.GPJ_URSSEA3_D.J.GLB_URSSEA3.GDT 1/13/12

Project: SRO Bellevue Corner Property
Project Location: 10605/10610 NE 8th St. Bellevue, WA
Project Number: 33763233

Log of Boring SB-10
 Sheet 2 of 3

Elevation, feet	Downhole Depth, feet	SAMPLES				Graphic Log	USCS	MATERIAL DESCRIPTION	REMARKS AND WELL DETAILS
		Type Number	Blows/6in.	Recovery (%)	OVM (ppm)				
25									
30									
35									
40									
45									
50		1	50 for 6"			SP	Gray, fine SAND with trace silt, gravelly, moist		



ENV2 WITH WELL T:STERLING REALTY ORGANIZATION\33761162 BELLEVUE CORNER PROPERTY\LITIGATION SUPPORT\2011 DATA GAP INVESTIGATION\GEOTECHNICAL INVESTIGATION\BELLEVUE CORNER.GPJ_URSSEA3_D\J.GLB_URSSEA3.GDT 1/13/12

Project: SRO Bellevue Corner Property
Project Location: 10605/10610 NE 8th St. Bellevue, WA
Project Number: 33763233

Log of Boring SB-10

Sheet 3 of 3

Elevation, feet	Downhole Depth, feet	SAMPLES				Graphic Log	USCS	MATERIAL DESCRIPTION	REMARKS AND WELL DETAILS
		Type	Number	Blows/6in.	Recovery (%)				
55	2	50 for 5"							
60	3	50 for 5"							
65	4	22 50 for 6"				SM	Gray, silty fine SAND, wet	65 ft ▼	
70	5	15 50 for 6"				SP	Gray, fine SAND with trace silt, wet		
75	6	18 18 20 N=38							
80							Boring completed to 76.5 feet bgs. Groundwater encountered at 65 feet bgs. Boring backfilled with bentonite (Cetco medium chips).		



ENV2 WITH WELL T:STERLING REALTY ORGANIZATION\33761162 BELLEVUE CORNER PROPERTY\LITIGATION SUPPORT\2011 DATA GAP INVESTIGATION\GEOTECHNICAL INVESTIGATION\BELLEVUE CORNER.GPJ_URSS3.D\J.GLB_URSS3A3.GDT 1/13/12

Project: SRO Bellevue Corner Property Project Location: 10605/10610 NE 8th St. Bellevue, WA Project Number: 33763233	<h2 style="margin: 0;">Log of Boring SB-11</h2> <p style="margin: 0;">Sheet 1 of 3</p>
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Date(s) Drilled: 10-12-11	Logged By: AP	Checked By: DRR
Drilling Method: Hollow-Stem Auger	Drilling Contractor: Cascade Drilling	Total Depth of Borehole: 81.5 feet
Drill Rig Type: CME 85	Drill Bit Size/Type: 8.25 inch	Ground Surface Elevation: AMSL NAVD 88
Groundwater Level: 70	Sampling Method: D&M	Hammer Data: 300-lb in-hole
Borehole Backfill: Bentonite Chips	Location:	

Elevation, feet	Downhole Depth, feet	SAMPLES					Graphic Log	USCS	MATERIAL DESCRIPTION	Well Completion Schematic	REMARKS AND WELL DETAILS
		Type	Number	Blows/ 6in.	Recovery (%)	OVM (ppm)					
0								Drilled to 35 feet bgs, no sampling			
5											
10											
15											
20											
25											



ENV2 WITH WELL T:STERLING REALTY ORGANIZATION\33761162 BELLEVUE CORNER PROPERTY\LITIGATION SUPPORT\2011 DATA GAP INVESTIGATION\GEOTECHNICAL INVESTIGATION\BELLEVUE CORNER.GPJ_URSSEA3_D\J.GLB_URSSEA3.GDT 1/13/12

Project: SRO Bellevue Corner Property
Project Location: 10605/10610 NE 8th St. Bellevue, WA
Project Number: 33763233

Log of Boring SB-11
 Sheet 2 of 3

Elevation, feet	Downhole Depth, feet	SAMPLES				Graphic Log	USCS	MATERIAL DESCRIPTION	REMARKS AND WELL DETAILS
		Type	Number	Blows/6in.	Recovery (%)				
25									
35	35	1	50 for 5"			SP	Brown, fine SAND with trace silt and gravel, moist		
40	40	2	50 for 5"						
45	45	3	50 for 5"			SM	Gray, sandy SILT with gravel, fine sand, dry		
50	50	4	50 for 4"				Grading gray, silty fine SAND with gravel, moist		



ENV2 WITH WELL T:STERLING REALTY ORGANIZATION\33761162 BELLEVUE CORNER PROPERTY\LITIGATION SUPPORT\2011 DATA GAP INVESTIGATION\GEOTECHNICAL INVESTIGATION\BELLEVUE CORNER.GPJ_URSSEA3_D.J.GLB_URSSEA3.GDT 1/13/12

Project: SRO Bellevue Corner Property
Project Location: 10605/10610 NE 8th St. Bellevue, WA
Project Number: 33763233

Log of Boring SB-11

Sheet 3 of 3

Elevation, feet	Downhole Depth, feet	SAMPLES				Graphic Log	USCS	MATERIAL DESCRIPTION	REMARKS AND WELL DETAILS
		Type	Number	Blows/6in.	Recovery (%)				
55	5	50 for 5"				SP	Brown, fine SAND, clean, moist		
60	6	26 30 35 N=65				ML/ SM	Gray, SILT with trace fine sand, dry		
65	7	19 20 24 N=44				SM	Gray, silty fine SAND, very moist		
70	8	19 26 35 N=61					Grading wet	70 ft ▼	
75	9	15 19 27 N=46				SP	Gray, fine SAND with trace silt, wet		
80	10	18 21 35 N=56							
Boring completed to 81.5 feet bgs. Groundwater encountered at 70 feet bgs. Boring completed as a permanent monitoring well.									




ENV2 WITH WELL T:STERLING REALTY ORGANIZATION\33761162 BELLEVUE CORNER PROPERTY\LITIGATION SUPPORT\2011 DATA GAP INVESTIGATION\GEO\TECHNICAL INVESTIGATION\BELLEVUE CORNER.GPJ_URSS\EA3_D\J.GLB_URSS\EA3.GDT 1/13/11

Project: SRO Bellevue Corner Property
Project Location: 10605/10610 NE 8th St. Bellevue, WA
Project Number: 33763233

Log of Boring SB-11 (URSMW-8)
 Sheet 1 of 3

Date(s) Drilled	10-12-11	Logged By	AP	Checked By	DRR
Drilling Method	Hollow-Stem Auger	Drilling Contractor	Cascade Drilling	Total Depth of Borehole	81.5 feet
Drill Rig Type	CME 85	Drill Bit Size/Type	8.25 inch	Ground Surface Elevation	AMSL NAVD 88
Groundwater Level	70	Sampling Method	D&M	Hammer Data	300-lb in-hole
Borehole Backfill	Monitoring Well	Location			

Elevation, feet	Downhole Depth, feet	SAMPLES					Graphic Log	USCS	MATERIAL DESCRIPTION	Well Completion Schematic	REMARKS AND WELL DETAILS
		Type Number	Blows/ 6in.	Recovery (%)	OVM (ppm)						
0								Drilled to 35 feet bgs, no sampling		Concrete	
5										Bentonite chips	
10											
15											
20											
25											



ENV2 WITH WELL T:STERLING REALTY ORGANIZATION\33761162 BELLEVUE CORNER PROPERTY\LITIGATION SUPPORT\2011 DATA GAP INVESTIGATION\GEOTECHNICAL INVESTIGATION\BELLEVUE CORNER.GPJ_URSSEA3_D\J.GLB_URSSEA3.GDT 1/13/12

Project: SRO Bellevue Corner Property
Project Location: 10605/10610 NE 8th St. Bellevue, WA
Project Number: 33763233

Log of Boring SB-11 (URSMW-8)
 Sheet 2 of 3

Elevation, feet	Downhole Depth, feet	SAMPLES				Graphic Log	USCS	MATERIAL DESCRIPTION	REMARKS AND WELL DETAILS
		Type	Number	Blows/6in.	Recovery (%)				
25									
35	35	1	50 for 5"			SP	Brown, fine SAND with trace silt and gravel, moist		
40	40	2	50 for 5"						
45	45	3	50 for 5"			SM	Gray, sandy SILT with gravel, fine sand, dry		
50	50	4	50 for 4"				Grading gray, silty fine SAND with gravel, moist		



ENV2 WITH WELL T:STERLING REALTY ORGANIZATION\33761162 BELLEVUE CORNER PROPERTY\LITIGATION SUPPORT\2011 DATA GAP INVESTIGATION\GEOTECHNICAL INVESTIGATION\BELLEVUE CORNER.GPJ_URSSEA3_D\J.GLB_URSSEA3.GDT 1/13/12

Project: SRO Bellevue Corner Property
Project Location: 10605/10610 NE 8th St. Bellevue, WA
Project Number: 33763233

Log of Boring SB-11 (URSMW-8)

Sheet 3 of 3

Elevation, feet	Downhole Depth, feet	SAMPLES				Graphic Log	USCS	MATERIAL DESCRIPTION	REMARKS AND WELL DETAILS
		Type	Number	Blows/6in.	Recovery (%)				
55	55	SP	5	50 for 5"			Brown, fine SAND, clean, moist		
60	60	ML/SM	6	26 30 35 N=65			Gray, SILT with trace fine sand, dry		
65	65	SM	7	19 20 24 N=44			Gray, silty fine SAND, very moist		
70	70		8	19 26 35 N=61			Grading wet	70 ft ▼ -2" ID, 0.020" - slotted screen	
75	75	SP	9	15 19 27 N=46			Gray, fine SAND with trace silt, wet		
80	80		10	18 21 35 N=56				-2/12 Sand	
Boring completed to 81.5 feet bgs. Groundwater encountered at 70 feet bgs. Boring completed as a permanent monitoring well (URS-MW8). Screen interval 70-80 ft bgs									



ENV2 WITH WELL T:STERLING REALTY ORGANIZATION\33761162 BELLEVUE CORNER PROPERTY\LITIGATION SUPPORT\2011 DATA GAP INVESTIGATION\GEOTECHNICAL INVESTIGATION\BELLEVUE CORNER.GPJ_URSS3.D\J.GLB_URSS3A3.GDT 1/13/12

Project: SRO Bellevue Corner Property Project Location: 10605/10610 NE 8th St. Bellevue, WA Project Number: 33763233	<h2 style="margin: 0;">Log of Boring SB-12</h2> <p style="margin: 0;">Sheet 1 of 3</p>
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Date(s) Drilled: 10-12-11	Logged By: AP	Checked By: DRR
Drilling Method: Hollow-Stem Auger	Drilling Contractor: Cascade Drilling	Total Depth of Borehole: 75.5 feet
Drill Rig Type: CME 85	Drill Bit Size/Type: 8.25 inch	Ground Surface Elevation: AMSL NAVD 88
Groundwater Level: 75	Sampling Method: D&M	Hammer Data: 300-lb in-hole
Borehole Backfill: Bentonite Chips	Location:	

Elevation, feet	Downhole Depth, feet	SAMPLES					Graphic Log	USCS	MATERIAL DESCRIPTION	Well Completion Schematic	REMARKS AND WELL DETAILS
		Type Number	Blows/ 6in.	Recovery (%)	OVM (ppm)						
0								Drilled to 35 feet bgs, no sampling			
5											
10											
15											
20											
25											



ENV2 WITH WELL T:STERLING REALTY ORGANIZATION\33761152 BELLEVUE CORNER PROPERTY\LITIGATION SUPPORT\2011 DATA GAP INVESTIGATION\GEOTECHNICAL INVESTIGATION\BELLEVUE CORNER.GPJ_URSSEA3_D\J.GLB_URSSEA3.GDT 1/13/12

Project: SRO Bellevue Corner Property
Project Location: 10605/10610 NE 8th St. Bellevue, WA
Project Number: 33763233

Log of Boring SB-12

Sheet 2 of 3

Elevation, feet	Downhole Depth, feet	SAMPLES				Graphic Log	USCS	MATERIAL DESCRIPTION	REMARKS AND WELL DETAILS
		Type Number	Blows/6in.	Recovery (%)	OVM (ppm)				
25									
35	▼	1	50 for 4"			SP	Brown, fine SAND with trace silt and gravel, moist		
40	▼	2	50 for 6"			SP/ GP	Brown, fine SAND with gravel, wet	40 ft ▼	
45	▼	3	50 for 6"						
50	▼	4	50 for 5"				No recovery, rock in SPT		



ENV2 WITH WELL T:STERLING REALTY ORGANIZATION\33761162 BELLEVUE CORNER PROPERTY\LITIGATION SUPPORT\2011 DATA GAP INVESTIGATION\GEOTECHNICAL INVESTIGATION\BELLEVUE CORNER.GPJ_URSSEA3_D.J.GLB_URSSEA3.GDT 1/13/12

Project: SRO Bellevue Corner Property
Project Location: 10605/10610 NE 8th St. Bellevue, WA
Project Number: 33763233

Log of Boring SB-12

Sheet 3 of 3

Elevation, feet	Downhole Depth, feet	SAMPLES				Graphic Log	USCS	MATERIAL DESCRIPTION	REMARKS AND WELL DETAILS
		Type	Number	Blows/6in.	Recovery (%)				
55	55	5	50 for 4"			SM	Brown, silty fine to coarse SAND with gravel, wet		
60	60	6	50 for 6"			SP	Brown, fine SAND, clean, moist		
65	65	7	28 50 for 6"				Grading fine SAND, trace silt, moist		
70	70	8	28 32 36 N=68			ML	Gray, SILT with trace fine sand, dry		
75	75	9	38 50 for 6"			SP	Gray, fine SAND, clean, wet	75 ft. ▼	
80	80						Boring completed to 75.5 feet bgs. Groundwater encountered at ~40 feet bgs and ~75 feet bgs. Boring backfilled with bentonite (Cetco medium chips).		



ENV2 WITH WELL T:STERLING REALTY ORGANIZATION\33761162 BELLEVUE CORNER PROPERTY\LITIGATION SUPPORT\2011 DATA GAP INVESTIGATION\GEOTECHNICAL INVESTIGATION\BELLEVUE CORNER.GPJ_URSS3.D\J.GLB_URSS3A3.GDT 1/13/11

Project: SRO Bellevue Corner Property Project Location: 10605/10610 NE 8th St. Bellevue, WA Project Number: 33763233	<h2 style="margin: 0;">Log of Boring SB-13</h2> <p style="margin: 0;">Sheet 1 of 3</p>
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Date(s) Drilled: 10-13-11	Logged By: AP	Checked By: DRR
Drilling Method: Hollow-Stem Auger	Drilling Contractor: Cascade Drilling	Total Depth of Borehole: 75.5 feet
Drill Rig Type: CME 85	Drill Bit Size/Type: 8.25 inch	Ground Surface Elevation: AMSL NAVD 88
Groundwater Level: 70	Sampling Method: D&M	Hammer Data: 300-lb in-hole
Borehole Backfill: Bentonite Chips	Location:	

Elevation, feet	Downhole Depth, feet	SAMPLES					Graphic Log	USCS	MATERIAL DESCRIPTION	Well Completion Schematic	REMARKS AND WELL DETAILS
		Type Number	Blows/ 6in.	Recovery (%)	OVM (ppm)						
0								Drilled to 35 feet bgs, no sampling			
5											
10											
15											
20											
25											



ENV2 WITH WELL T:STERLING REALTY ORGANIZATION\33761162 BELLEVUE CORNER PROPERTY\LITIGATION SUPPORT\2011 DATA GAP INVESTIGATION\GEOTECHNICAL INVESTIGATION\BELLEVUE CORNER.GPJ_URSSEA3_D.J.GLB_URSSEA3.GDT 1/13/12

Project: SRO Bellevue Corner Property
Project Location: 10605/10610 NE 8th St. Bellevue, WA
Project Number: 33763233

Log of Boring SB-13

Sheet 2 of 3

Elevation, feet	Downhole Depth, feet	SAMPLES				Graphic Log	USCS	MATERIAL DESCRIPTION	REMARKS AND WELL DETAILS
		Type Number	Blows/6in.	Recovery (%)	OVM (ppm)				
25									
35	35	1	50 for 6"			SP	Brown/gray, fine SAND, moist		
40	40	2	50 for 6"				Grading brown, fine SAND with trace gravel, moist		
45	45	3	50 for 4"				Grading brown, gravelly fine SAND with trace silt, moist		
50	50	4	50 for 3"				No recovery, rock in SPT		



ENV2 WITH WELL T:STERLING REALTY ORGANIZATION\33761162 BELLEVUE CORNER PROPERTY\LITIGATION SUPPORT\2011 DATA GAP INVESTIGATION\GEOTECHNICAL INVESTIGATION\BELLEVUE CORNER.GPJ_URSSEA3_D\J.GLB_URSSEA3.GDT 1/13/12

Project: SRO Bellevue Corner Property
Project Location: 10605/10610 NE 8th St. Bellevue, WA
Project Number: 33763233

Log of Boring SB-13

Sheet 3 of 3

Elevation, feet	Downhole Depth, feet	SAMPLES				Graphic Log	USCS	MATERIAL DESCRIPTION	REMARKS AND WELL DETAILS
		Type	Number	Blows/6in.	Recovery (%)				
55	5	50 for 3"					No recovery, rock in SPT		
60	6	50 for 6"				SM	Brown, silty fine SAND, moist		
65	7	22 50 for 6"				ML	Brown, SILT with trace fine sand, moist		
70	8	18 50 for 6"				SP	Gray, fine SAND, clean, wet	70 ft ▼	
75	9	50 for 6"					Grading brown, fine SAND, clean, wet		
80							Boring completed to 75.5 feet bgs. Groundwater encountered at 70 feet bgs. Boring backfilled with bentonite (Cetco medium chips).		



ENV2 WITH WELL T:STERLING REALTY ORGANIZATION\33761162 BELLEVUE CORNER PROPERTY\LITIGATION SUPPORT\2011 DATA GAP INVESTIGATION\GEOTECHNICAL INVESTIGATION\BELLEVUE CORNER.GPJ_URSS3.D\J.GLB_URSS3A3.GDT 1/13/12

Project: SRO Bellevue Corner Property Project Location: 10605/10610 NE 8th St. Bellevue, WA Project Number: 33763233	<h2 style="margin: 0;">Log of Boring SB-14</h2> <p style="margin: 0;">Sheet 1 of 3</p>
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Date(s) Drilled: 10-11-11	Logged By: AP	Checked By: DRR
Drilling Method: Hollow-Stem Auger	Drilling Contractor: Cascade Drilling	Total Depth of Borehole: 76.5 feet
Drill Rig Type: CME 85	Drill Bit Size/Type: 8.25 inch	Ground Surface Elevation: AMSL NAVD 88
Groundwater Level: 70	Sampling Method: D&M	Hammer Data: 300-lb in-hole
Borehole Backfill: Bentonite Chips	Location:	

Elevation, feet	Downhole Depth, feet	SAMPLES					Graphic Log	USCS	MATERIAL DESCRIPTION	Well Completion Schematic	REMARKS AND WELL DETAILS
		Type Number	Blows/ 6in.	Recovery (%)	OVM (ppm)						
0								Drilled to 35 feet bgs, no sampling			
5											
10											
15											
20											
25											



ENV2 WITH WELL T:STERLING REALTY ORGANIZATION\33761152 BELLEVUE CORNER PROPERTY\LITIGATION SUPPORT\2011 DATA GAP INVESTIGATION\GEOTECHNICAL INVESTIGATION\BELLEVUE CORNER.GPJ_URSSEA3_D.J.GLB_URSSEA3.GDT 1/13/12

Project: SRO Bellevue Corner Property
Project Location: 10605/10610 NE 8th St. Bellevue, WA
Project Number: 33763233

Log of Boring SB-14
 Sheet 2 of 3

Elevation, feet	Downhole Depth, feet	SAMPLES				Graphic Log	USCS	MATERIAL DESCRIPTION	REMARKS AND WELL DETAILS
		Type	Number	Blows/6in.	Recovery (%)				
25									
35		1		50 for 6"			SP	Brown\gray, fine SAND with trace silt, gravel, moist	
40		2		50 for 5"				Grading brown/gray, fine SAND with trace silt, less gravel, moist	
45		3		50 for 6"					
50		4		50 for 5"					



ENV2 WITH WELL T:STERLING REALTY ORGANIZATION\33761162 BELLEVUE CORNER PROPERTY\LITIGATION SUPPORT\2011 DATA GAP INVESTIGATION\GEOTECHNICAL INVESTIGATION\BELLEVUE CORNER.GPJ_URSSEA3_D.J.GLB_URSSEA3.GDT 1/13/12

Project: SRO Bellevue Corner Property
Project Location: 10605/10610 NE 8th St. Bellevue, WA
Project Number: 33763233

Log of Boring SB-14
 Sheet 3 of 3

Elevation, feet	Downhole Depth, feet	SAMPLES				Graphic Log	USCS	MATERIAL DESCRIPTION	REMARKS AND WELL DETAILS
		Type	Number	Blows/6in.	Recovery (%)				
55	5	50 for 5"				SM	Gray, silty fine SAND with trace gravel, moist		
60	6	50 for 6"							
65	7	50 for 6"					Grading increasing, moist		
70	8	20 22 25 N=47					Grading wet	70 ft ▼	
75	9	10 30 23 N=53					Boring completed to 76.5 feet bgs. Groundwater encountered at 70 feet bgs. Boring backfilled with bentonite (Cetco medium chips).		
80									



ENV2 WITH WELL T:STERLING REALTY ORGANIZATION\33761162 BELLEVUE CORNER PROPERTY\LITIGATION SUPPORT\2011 DATA GAP INVESTIGATION\GEOTECHNICAL INVESTIGATION\BELLEVUE CORNER.GPJ_URSS3.D\J.GLB_URSS3A3.GDT 1/13/12

Project: SRO Bellevue Corner Property Project Location: 10605/10610 NE 8th St. Bellevue, WA Project Number: 33763233	<h2 style="margin: 0;">Log of Boring SB-15</h2> <p style="margin: 0;">Sheet 1 of 3</p>
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Date(s) Drilled: 10-10-11	Logged By: AP	Checked By: DRR
Drilling Method: Hollow-Stem Auger	Drilling Contractor: Cascade Drilling	Total Depth of Borehole: 80 feet
Drill Rig Type: CME 85	Drill Bit Size/Type: 8.25 inch	Ground Surface Elevation: AMSL NAVD 88
Groundwater Level: 75	Sampling Method: D&M	Hammer Data: 300-lb in-hole
Borehole Backfill: Bentonite Chips	Location:	

Elevation, feet	Downhole Depth, feet	SAMPLES					Graphic Log	USCS	MATERIAL DESCRIPTION	Well Completion Schematic	REMARKS AND WELL DETAILS
		Type	Number	Blows/ 6in.	Recovery (%)	OVM (ppm)					
0								Drilled to 35 feet bgs, no sampling			
5											
10											
15											
20											
25											



ENV2 WITH WELL T:STERLING REALTY ORGANIZATION\33761152 BELLEVUE CORNER PROPERTY\LITIGATION SUPPORT\2011 DATA GAP INVESTIGATION\GEOTECHNICAL INVESTIGATION\BELLEVUE CORNER.GPJ_URSSEA3_D\J.GLB_URSSEA3.GDT 1/13/12

Project: SRO Bellevue Corner Property
Project Location: 10605/10610 NE 8th St. Bellevue, WA
Project Number: 33763233

Log of Boring SB-15

Sheet 2 of 3

Elevation, feet	Downhole Depth, feet	SAMPLES				Graphic Log	USCS	MATERIAL DESCRIPTION	REMARKS AND WELL DETAILS
		Type Number	Blows/6in.	Recovery (%)	OVM (ppm)				
25									
35	35	1	50 for 6"			SP	Gray/brown, fine SAND with trace silt and gravel, moist		
40	40	2	50 for 5"				Grading decreasing silt		
45	45	3	50 for 5"						
50	50	4	50 for 6"			SM	Gray, silty fine SAND with trace gravel, dry		



ENV2 WITH WELL T:STERLING REALTY ORGANIZATION\33761162 BELLEVUE CORNER PROPERTY\LITIGATION SUPPORT\2011 DATA GAP INVESTIGATION\GEOTECHNICAL INVESTIGATION\BELLEVUE CORNER.GPJ_URSSEA3_D.J.GLB_URSSEA3.GDT 1/13/12

Project: SRO Bellevue Corner Property
Project Location: 10605/10610 NE 8th St. Bellevue, WA
Project Number: 33763233

Log of Boring SB-15

Sheet 3 of 3

Elevation, feet	Downhole Depth, feet	SAMPLES				Graphic Log	USCS	MATERIAL DESCRIPTION	REMARKS AND WELL DETAILS
		Type	Number	Blows/6in.	Recovery (%)				
55	55	5	50 for 6"			[Stippled Pattern]		Grading decreasing silt	
60	60	6	50 for 6"			[Stippled Pattern]			
65	65	7	50 for 6"			[Stippled Pattern]	SP	Gray, fine SAND with trace silt, moist	
70	70	8	20 23 22 for 12"			[Stippled Pattern]	SM	Gray, silty fine SAND, moist	
75	75	9	22 23 24 N=47			[Stippled Pattern]			75 ft. ▼
80	80							Boring completed to 80 feet bgs. Temporary well screen installed from 70-80 feet bgs. Groundwater sample collected using bailer, sample very turbid (no odor). Boring backfilled with bentonite (Cetco medium chips).	



ENV2 WITH WELL T:STERLING REALTY ORGANIZATION\33761162 BELLEVUE CORNER PROPERTY\LITIGATION SUPPORT\2011 DATA GAP INVESTIGATION\GEOTECHNICAL INVESTIGATION\BELLEVUE CORNER.GPJ_URSS3.D\J.GLB_URSS3A3.GDT 1/13/11

Project: SRO Bellevue Corner Property Project Location: 10605/10610 NE 8th St. Bellevue, WA Project Number: 33763233	<h2 style="margin: 0;">Log of Boring SB-17</h2> <p style="margin: 0;">Sheet 1 of 3</p>
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Date(s) Drilled: 11-15-11	Logged By: AP	Checked By: DRR
Drilling Method: Hollow-Stem Auger	Drilling Contractor: Cascade Drilling	Total Depth of Borehole: 75.5 feet
Drill Rig Type: CME 85	Drill Bit Size/Type: 8.25 inch	Ground Surface Elevation: AMSL NAVD 88
Groundwater Level: 75	Sampling Method: D&M	Hammer Data: 300-lb in-hole
Borehole Backfill: Bentonite Chips	Location:	

Elevation, feet	Downhole Depth, feet	SAMPLES					Graphic Log	USCS	MATERIAL DESCRIPTION	Well Completion Schematic	REMARKS AND WELL DETAILS
		Type Number	Blows/ 6in.	Recovery (%)	OVM (ppm)						
0								Drilled to 30 feet bgs, no sampling			
5											
10											
15											
20											
25											



Project: SRO Bellevue Corner Property
Project Location: 10605/10610 NE 8th St. Bellevue, WA
Project Number: 33763233

Log of Boring SB-17

Sheet 2 of 3

Elevation, feet	Downhole Depth, feet	SAMPLES				Graphic Log	USCS	MATERIAL DESCRIPTION	REMARKS AND WELL DETAILS
		Type Number	Blows/6in.	Recovery (%)	OVM (ppm)				
25									
30									
35									
40	40	1	50 for 4"			SP	Medium brown, fine SAND with gravel, trace silt, moist		
45	45	2	50 for 4"			SP/ GP	*Driller indicates very difficult drilling. Gravel surfacing in cuttings.		
50							No recovery		

ENV2 WITH WELL T:STERLING REALTY ORGANIZATION\33761162 BELLEVUE CORNER PROPERTY\LITIGATION SUPPORT\2011 DATA GAP INVESTIGATION\GEOTECHNICAL INVESTIGATION\BELLEVUE CORNER.GPJ_URSSEA3_D\J.GLB_URSSEA3.GDT 1/13/12

Project: SRO Bellevue Corner Property
Project Location: 10605/10610 NE 8th St. Bellevue, WA
Project Number: 33763233

Log of Boring SB-17
 Sheet 3 of 3

Elevation, feet	Downhole Depth, feet	SAMPLES				Graphic Log	USCS	MATERIAL DESCRIPTION	REMARKS AND WELL DETAILS
		Type	Number	Blows/6in.	Recovery (%)				
55			3	50 for 2"			No recovery		
60			4	50 for 0"			No recovery Driller indicates easier drilling, out of gravel		
65			5	50 for 6"		SP			
70			6	50 for 6"		ML	Light gray SILT with trace fine SAND, reddish/brown/orange oxidation, moist		
75			7	50 for 6"		SP	Light brown, fine SAND, clean, wet	75 ft ▼	
							Boring completed to 75.5 feet bgs. Groundwater encountered at 75 feet bgs. Boring backfilled with bentonite (Cetco medium chips).		
80									



ENV2 WITH WELL T:STERLING REALTY ORGANIZATION\33761162 BELLEVUE CORNER PROPERTY\LITIGATION SUPPORT\2011 DATA GAP INVESTIGATION\GEOTECHNICAL INVESTIGATION\BELLEVUE CORNER.GPJ_URSS3.D\J.GLB_URSS3A3.GDT 1/13/11

Project: SRO Bellevue Corner Property Project Location: 10605/10610 NE 8th St. Bellevue, WA Project Number: 33763233	<h2 style="margin: 0;">Log of Boring SB-21</h2> <p style="margin: 0;">Sheet 1 of 3</p>
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Date(s) Drilled: 11-17-11	Logged By: AP	Checked By: DRR
Drilling Method: Hollow-Stem Auger	Drilling Contractor: Cascade Drilling	Total Depth of Borehole: 80.5 feet
Drill Rig Type: CME 85	Drill Bit Size/Type: 8.25 inch	Ground Surface Elevation: AMSL NAVD 88
Groundwater Level: 75	Sampling Method: D&M	Hammer Data: 300-lb in-hole
Borehole Backfill: Bentonite ChipsBentonite ChipsBentonite ChipsBentonite Chips	Location:	

Elevation, feet	Downhole Depth, feet	SAMPLES					Graphic Log	USCS	MATERIAL DESCRIPTION	Well Completion Schematic	REMARKS AND WELL DETAILS
		Type	Number	Blows/ 6in.	Recovery (%)	OVM (ppm)					
0								Drilled to 30 feet bgs, no sampling			
5											
10											
15											
20											
25											



ENV2 WITH WELL T:STERLING REALTY ORGANIZATION\33761162 BELLEVUE CORNER PROPERTY\LITIGATION SUPPORT\2011 DATA GAP INVESTIGATION\GEOTECHNICAL INVESTIGATION\BELLEVUE CORNER.GPJ_URSSEA3_D\J.GLB_URSSEA3.GDT 1/13/12

Project: SRO Bellevue Corner Property
Project Location: 10605/10610 NE 8th St. Bellevue, WA
Project Number: 33763233

Log of Boring SB-21
 Sheet 2 of 3

Elevation, feet	Downhole Depth, feet	SAMPLES				Graphic Log	USCS	MATERIAL DESCRIPTION	REMARKS AND WELL DETAILS
		Type	Number	Blows/6in.	Recovery (%)				
25									
30	30	1	50 for 6"			SM	Light brown, Silty fine SAND, moist		
35	35	2	50 for 6"				Grading light brown, silty fine SAND with gravel, moist		
40	40	3	50 for 6"						
45	45	4	50 for 6"						
50	50	5	50 for 3"			ML	Medium gray, SILT with gravel, dry		



ENV2 WITH WELL T:STERLING REALTY ORGANIZATION\33761162 BELLEVUE CORNER PROPERTY\LITIGATION SUPPORT\2011 DATA GAP INVESTIGATION\GEOTECHNICAL INVESTIGATION\BELLEVUE CORNER.GPJ_URSSEA3_D.J.GLB_URSSEA3.GDT 1/13/12

Project: SRO Bellevue Corner Property
Project Location: 10605/10610 NE 8th St. Bellevue, WA
Project Number: 33763233

Log of Boring SB-21
 Sheet 3 of 3

Elevation, feet	Downhole Depth, feet	SAMPLES				Graphic Log	USCS	MATERIAL DESCRIPTION	REMARKS AND WELL DETAILS
		Type	Number	Blows/6in.	Recovery (%)				
55	6			50 for 0"			GP	Driller indicates difficult drilling gravel layer. No recovery	
	7			50 for 0"				No recovery	
	8			50 for 0"				No recovery	
	9			50 for 0"				No recovery	
60	10			50 for 0" 50 for 3"			SP/ GP	Medium brown, fine SAND with gravel, trace silt, moist	
	11			50 for 0"				No recovery	
65	12			50 for 2"			ML	Bottom of gravel Medium gray, SILT, trace fine sand, moist	
	13			50 for 6"					
70	14			50 for 6"			SM	Medium gray, silty fine SAND, moist	
	15			50 for 6"				Grading wet	75 ft. ▼
80	16			50 for 6"					
								Boring completed to 8.5 feet bgs Groundwater encountered at 75 feet bgs. Boring backfilled with bentonite (Cetco medium chips)	



Project: Sterling Realty Organization
 Project Location: Bellevue, Washington
 Project Number: 33761152

Log of Boring URS-MW-1

Sheet 1 of 1

Date(s) Drilled	8/25/08	Logged By	JW	Checked By	
Drilling Method	HSA	Drilling Contractor	Cascade Drilling	Total Depth of Borehole	30 feet bgs
Drill Rig Type		Drill Bit Size/Type	8"	Ground Surface Elevation	158.27 feet MSL
Groundwater Level	21 ft bgs	Sampling Method	Split Spoon - D&M	Hammer Data	
Borehole Backfill		Location			

Elevation, feet	Downhole Depth, feet	SAMPLES				Graphic Log	USCS	MATERIAL DESCRIPTION	Well Completion Schematic	REMARKS AND WELL DETAILS
		Type	Number	Blows/6in.	Recovery (%)					
0							SM	Surface: Asphalt Brown silty SAND with gravel, pea gravel, some wood debris (slightly damp) (fill)		Time: 0732
	5			5	94	12.1		No odor, no stain		0733
	10			7						
	5			9	89	4.4		Grading some gray sand		0741
	10			10						
-150				35	50	9.2		Grading gray with rust brown coarse SAND (dry)		0744
	10			50/6"						
	10			42	67	5.0	SP	Gray SAND, angular gravel (dry) (no odor, no stain)		0753
	15			50/6"						
	10			41	100	5.8		Grading coarse gravel/cobble pieces		0757
	15			50/6"						
	15	MW-1-15		36	100	6.1	SM	Light gray brown silty SAND with some gravel, mixed pea gravel (damp) (no odor, no stain) (fill)		0800
	20			50/6"						
-140				42	83	3.0				0808
	20			31	83	5.4		Grading wet		0811
	25			42						
	20			50						
	25			43	83	2.6		Grading silty SAND with gravel, rounded gravel/cobble to 1" diameter (dense) (wet) (no odor)		0816
	25			50/6"						
	25			50/6"	100	3.2				0820
	25			50/6"						
-130		MW-1-27.5		50/6"	100	8.4				0822
	30									
	30							Boring was completed to 30' bgs. Groundwater was encountered at 21' bgs. Monitoring well installed on 8/25/08 as follows: Screen: 20-slot 2" Sch 40 PVC 20'-30' bgs Riser: 0'-20' bgs Sand pack: 2/12 sand 18'-30' bgs Bentonite chips: 2'-18' bgs Surface completion: 6" flush mount set in concrete		0824
	35									

ENV2 WITH WELL T:\NEWOR\DC3761152 SRO PROPERTY\33761152.GPJ_URSSEA3.GLB_URSSEA3.GDT 9/17/08



Project: Sterling Realty Organization
 Project Location: Bellevue, Washington
 Project Number: 33761152

Log of Boring URS-MW-2

Sheet 1 of 1

Date(s) Drilled 8/27/08	Logged By JW	Checked By
Drilling Method HSA	Drilling Contractor Cascade Drilling	Total Depth of Borehole 30 feet bgs
Drill Rig Type	Drill Bit Size/Type 8"	Ground Surface Elevation 160.59 feet MSL
Groundwater Level ~25 ft bgs	Sampling Method Split Spoon - D&M	Hammer Data
Borehole Backfill	Location	

Elevation, feet	Downhole Depth, feet	SAMPLES				Graphic Log	USCS	MATERIAL DESCRIPTION	Well Completion Schematic	REMARKS AND WELL DETAILS
		Type	Number	Blows/6in.	Recovery (%)					
160	0						SW	Surface: Asphalt Brown gravelly SAND with pea gravel (loose) (no odor) (fill)		Time: 0737
	4			100	3.5					0741
	5									
	10							Grading some coarse gravel		0744
	28			100	9.8					
	30									
	35									
	27			100	4.3					0747
	30									
	30						SP	Pale brown fine SAND with some silt (dense) (dry) (no odor)		0750
150	10			100	6.4					
	27			100	6.4					
	30									
	38									
	50/6"			100	4.6		SM	Gray brown silty medium to fine SAND (dense) (dry)		0752
15	MW-2-15			100	5.8					0756
	50/6"			100	3.9		SP	Light gray-brown fine SAND (dense) (damp) (no odor)		0759
	50/6"			100	4.3					0804
140	20			100	4.3			Grading increasing gravel		0807
	37			100	4.2					
	50/6"									
	25			100	5.8			Grading lenses of fine sand (wet)	25 ft ▼	0810
	29			100	5.8					
	50/6"									
	MW-2-27.5			75	2.3		SM	Gray-brown silty SAND (dense) (wet)		0813
	35									
	50/6"			0						
130	30							Boring was completed to 30' bgs. Groundwater was encountered at 25' bgs. Monitoring well installed on 8/27/08 as follows: Screen: 20-slot 2" Sch 40 PVC 20'-30' bgs Riser: 0'-20' bgs Sand pack: 2/12 sand 18'-30' bgs Bentonite chips: 2'-18' bgs Surface completion: 6" flush mount set in concrete		0817
	35									

E:\MW2 WITH WELL - T:\ONEWORLD\33761152 SRO PROPERTY\33761152.GPJ_URSSCA3B.GLB_URSSCA3B.GDT_9/17/08

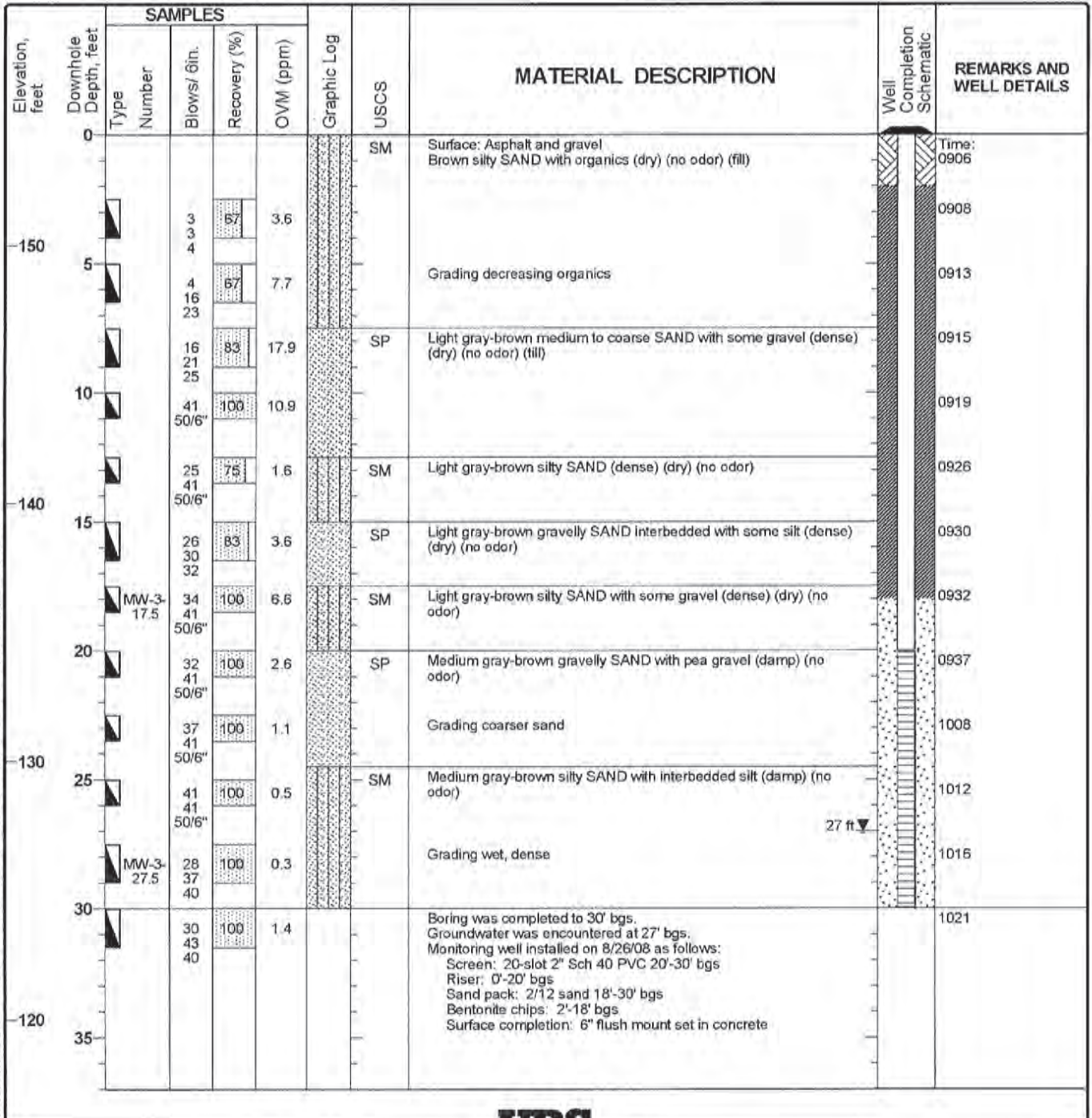


Project: Sterling Realty Organization
 Project Location: Bellevue, Washington
 Project Number: 33761152

Log of Boring URS-MW-3

Sheet 1 of 1

Date(s) Drilled 8/26/08	Logged By JW	Checked By
Drilling Method HSA	Drilling Contractor Cascade Drilling	Total Depth of Borehole 30 feet bgs
Drill Rig Type	Drill Bit Size/Type 8"	Ground Surface Elevation 154.30 feet MSL
Groundwater Level ~27 ft bgs	Sampling Method Split Spoon - D&M	Hammer Data
Borehole Backfill	Location	



Project: Sterling Realty Organization
 Project Location: Bellevue, Washington
 Project Number: 33761152

Log of Boring URS-MW-4

Sheet 1 of 1

Date(s) Drilled: 8/26/08	Logged By: JW	Checked By:
Drilling Method: HSA	Drilling Contractor: Cascade Drilling	Total Depth of Borehole: 30 feet bgs
Drill Rig Type:	Drill Bit Size/Type: 8"	Ground Surface Elevation: 153.41 feet MSL
Groundwater Level: ~27 ft bgs	Sampling Method: Split Spoon - D&M	Hammer Data:
Borehole Backfill:	Location:	

Elevation, feet	Downhole Depth, feet	SAMPLES				Graphic Log	USCS	MATERIAL DESCRIPTION	Well Completion Schematic	REMARKS AND WELL DETAILS
		Type	Number	Blows/ 6in.	Recovery (%)					
0	0						Surface: Asphalt Potholed to 6'		Time: 0715	
150	5									
	10					SP/SM	Light grayish-brown silty SAND/gravelly SAND with pea gravel (dense) (dry) (no odor) (fill)		0720	
	15					SM	Light grayish brown silty SAND with fine gravel (dense) (dry) (no odor)		0723	
140	20	MW-4	41	67	3.7		Grading decreasing fines		0726	
	25								0731	
	30								0734	
	35					SP	Light gray-brown fine SAND (dense) (damp) (no odor)		0737	
130	40						Grading medium to fine SAND (damp)		0740	
	45								0742	
	50						Grading wet		0744	
	55								0747	
120	60						Boring was completed to 30' bgs. Groundwater was encountered at 27' bgs. Monitoring well installed on 8/26/08 as follows: Screen: 20-slot 2" Sch 40 PVC 20'-30' bgs Riser: 0'-20' bgs Sand pack: 2/12 sand 18'-30' bgs Bentonite chips: 2'-18' bgs Surface completion: 6" flush mount set in concrete			

EW2 WITH WELL T:\0\NEWDR\153761152 SRD\PROPERTY\33761152.GPJ_URSSEA3.GLB_URSSEA3.GDT_9/7/08



Project: Sterling Realty Organization
 Project Location: Bellevue, Washington
 Project Number: 33761152

Log of Boring URS-SB-1

Sheet 1 of 2

Date(s) Drilled	8/25/08	Logged By	JW	Checked By	
Drilling Method	HSA	Drilling Contractor	Cascade Drilling	Total Depth of Borehole	75 feet bgs
Drill Rig Type		Drill Bit Size/Type	8"	Ground Surface Elevation	ft MSL
Groundwater Level (feet bgs)	35 ft and 75 ft bgs	Sampling Method	Split Spoon - D&M	Hammer Data	
Borehole Backfill		Location			

Elevation, feet	Downhole Depth, feet	SAMPLES				Graphic Log	USCS	MATERIAL DESCRIPTION	REMARKS AND OTHER TESTS
		Type	Number	Blows/ 6in.	Recovery (%)				
0							SM	Surface: Asphalt Gray-brown silty SAND with some organics (loose) (dry) (fill)	Time: 0935
	5			5	89	5.2			0940
	4			4					
5				8	89	2.2		Grading 6" of woody debris (denser)	0944
	20			20					
	28			28					
	23			23	67	2.8		Grading light gray-brown	0946
	24			24					
	25			25					
10		SB-1-10		31	83	4.7	SP	Light gray-brown SAND (dense) (dry)	0948
	50/6"			50/6"					
	50/6"			50/6"	100	2.5	SM	Light gray brown silty SAND, cobble fragments (no odor)	0952
15				31	83	2.0	SP	Light gray brown medium to fine SAND (dry) (no odor)	0955
	50/6"			50/6"					
	21			21	100	2.1			0958
	28			28					
	33			33					
20				32	75	1.0			1000
	50/6"			50/6"					
	38			38	100	1.5		Grading light gray brown interbedded sands, some silt (dry)	1003
	50/6"			50/6"					
25				44	75	1.7			1007
	50/6"			50/6"					
	44			44	100	1.6		Grading damp	1009
	50/6"			50/6"					
30		SB-1-30		42	100	1.7		Grading increasing moisture	1011
	50/6"			50/6"					
	50/6"			50/6"	100	3.0			1014
35				50/6"	100	1.2	SP	Light brown-gray gravelly SAND with large cobble fragments (dense) (wet)	1017

ENV2 WFO WELL T:\0\NEWORLD\33761152.SRO PROPERTY\33761152.GPJ_URSSEA3B.GLB_URSSEA3.GDT 9/17/08



Project: Sterling Realty Organization
 Project Location: Bellevue, Washington
 Project Number: 33761152

Log of Boring URS-SB-1

Sheet 2 of 2

Elevation, feet	Downhole Depth, feet	SAMPLES			Graphic Log	USCS	MATERIAL DESCRIPTION	REMARKS AND OTHER TESTS
		Type Number	Blows/6in.	Recovery (%)				
	40	SB-1-45	50/6"	100	1.8		Grading interbedded sand and gravel	1019
	40		50/6"	67	0.0	SP/SM	Gray-brown silty SAND with fine gravel (damp) (no odor)	1023
	45		50/6"	100	0.4		Grading interbedded sand and cobbles (no odor)	1026
	45		50/6"	100	2.6	SM	Medium gray silty SAND (dense) (dry) (no odor)	1039
	50		50/6"	100	3.1			1042
	50		43 50/6"	75	1.5			1045
	55		38 50/6"	75	2.2			1048
	55		50/6"	100	2.2		Grading silty medium to fine SAND (dense) (dry) (no odor)	1051
	60		50/6"	100	1.3			1054
	60		50/6"	67	0.9			1058
	65		50/6"	100	1.7	SP	Gray medium to fine SAND (homogenous) (dense) (damp) (no odor)	1100
	65		50/6"	100	1.3			1103
	70		42 50/6"	100	1.6			1106
	70		31 50/6"	100	2.5			1110
	75		27 35 40	100	2.9			1112
	75	SB-1-75	35 50/6"	50	2.3		Grading wet at very bottom of interval Boring was completed to 75' bgs. Groundwater was encountered at 35' and 75' bgs. Boring was backfilled with bentonite.	1115
	80							

ENV2.WD0.WELL: T:\0\NEWORLD\33761152_SRO_PROPERTY\03781152.GPJ_URSS-EA3E.GLB_URSS-EA3.CDT 9/17/08



Project: Sterling Realty Organization
 Project Location: Bellevue, Washington
 Project Number: 33761152

Log of Boring URS-SB-2

Sheet 1 of 1

Date(s) Drilled	8/25/08	Logged By	JW	Checked By	
Drilling Method	HSA	Drilling Contractor	Cascade Drilling	Total Depth of Borehole	30 feet bgs
Drill Rig Type		Drill Bit Size/Type	8"	Ground Surface Elevation	ft MSL
Groundwater Level (feet bgs)	-23 ft bgs	Sampling Method	Split Spoon - D&M	Hammer Data	
Borehole Backfill		Location			

Elevation, feet	Downhole Depth, feet	SAMPLES				Graphic Log	USCS	MATERIAL DESCRIPTION	REMARKS AND OTHER TESTS
		Type	Number	Blows/ 6in.	Recovery (%)				
0							SP	Surface: Asphalt with gravel cover Gray and brown SAND (no odor) (fill)	Time: 1308
	5			5	100	48.7			1310
	4			5					
5				3	100	2.9		Grading some wood debris	1314
	3			4					
	5			9	100	9.2	SM	Gray-brown silty SAND, rust colored in part (slightly damp) (no odor) (till)	1316
	9			23					
10		SB-2-10		16	67	10.5		Grading homogenous, denser (dry)	1318
	26			30					
	18			23	100	4.3	SP	Light gray-brown SAND, interbedded sand with gravel (no odor)	1323
	23			27					
15				23	67	1.9			1327
	38			23					
	43			50/6"	83	3.6		Grading interbedded gravel (damp) (no odor)	1329
20				28	50	2.4	SM	Brown silty SAND (damp) (no odor)	1332
	50/6"								
	34			50/6"	100	1.3	SP	Brown SAND (wet)	23 ft ▼ 1335
25				38	100	2.9		Grading increasing gravel	1338
	50/6"								
	42	SB-2-27.5		50/6"	100	15.8	SM	Brown silty SAND (dense) (no odor)	1348
30				43	100	2.4		Grading increasing gravel	1350
	50/6"							Boring was completed to 30' bgs. Groundwater was encountered at 23' bgs. Boring was backfilled with bentonite.	
35									

ENW2.WD.WELL.T:\NONNEWORLD\03761152.SRO.PROPERTY\03761152.CPJ.URSSEA3B.GLB.URSSEA3.GDT.9/17/08



Project: Sterling Realty Organization
 Project Location: Bellevue, Washington
 Project Number: 33761152

Log of Boring URS-SB-3

Sheet 1 of 1

Date(s) Drilled: 8/26/08	Logged By: JW	Checked By:
Drilling Method: HSA	Drilling Contractor: Cascade Drilling	Total Depth of Borehole: 30 feet bgs
Drill Rig Type:	Drill Bit Size/Type: 8"	Ground Surface Elevation: ft MSL
Groundwater Level (feet bgs): ~20 ft bgs	Sampling Method: Split Spoon - D&M	Hammer Data:
Borehole Backfill:	Location:	

Elevation, feet	Downhole Depth, feet	SAMPLES				Graphic Log	USCS	MATERIAL DESCRIPTION	REMARKS AND OTHER TESTS	
		Type	Number	Blows/ 6in.	Recovery (%)					OVM (ppm)
0							SP	Surface: Asphalt with gravel	Time: 1149	
	6			100	0.0			Brown medium to coarse SAND with pea gravel (loose) (dry) (no odor) (fill)	1153	
	7								1155	
	9			83	0.0				1157	
	5							Grading increasing gravel	1159	
	7			100	0.0				1201	
	10			100	0.2				1204	
	11			100	0.1		SP	Brown fine to coarse SAND with cobble pieces to 1.5" (dry) (no odor) (till)	1208	
	12			100	0.1			Brown GRAVEL and SAND	1211	
	15			83	0.0		GP		Grading with black staining (dry) (no odor)	1214
	17			56	0.0				1215	
	8	SB-3-17.5						Light gray-brown silty SAND with lenses of fines (dense) (wet) (no odor)	1211	
	13			100	2.8		SM		20 ft ▼	1214
	19			100	0.9		SP		Light gray brown SAND (dense) (wet) (no odor)	1215
	29	SB-3-22.5						Light gray to brown silty SAND (attempt to sample groundwater)	1215	
	50/6"			100	0.0		SM		1215	
	45			100	0.0				1215	
	50/6"			100	0.7			Grading increasing fines and cobbles (dense) (dry)	1350	
	44			100	0.7				1350	
	50/6"			100	0.0			Grading decreasing gravel (dense) (dry)	1353	
	41			100	0.0				1353	
	50/6"							Boring was completed to 30' bgs. Groundwater was encountered at 20' bgs. Set temporary well, groundwater sample SB-3-082708 at 7:04 am on 8/27/08. Boring was backfilled with bentonite.		
	35									

ENV2 WID WELL, T:\0NEWORLD\33761152 SRO PROPERTY\93761152.GPJ_URSSEA3B.GLB_URSSEA3.GDT_9/17/08



Project: Sterling Realty Organization
 Project Location: Bellevue, Washington
 Project Number: 33761152

Log of Boring URS-SB-4

Sheet 1 of 1

Date(s) Drilled: 8/27/08	Logged By: JW	Checked By:
Drilling Method: HSA	Drilling Contractor: Cascade Drilling	Total Depth of Borehole: 30 feet bgs
Drill Rig Type:	Drill Bit Size/Type: 8"	Ground Surface Elevation: ft MSL
Groundwater Level (feet bgs): ~29 ft bgs	Sampling Method: Split Spoon - D&M	Hammer Data:
Borehole Backfill:	Location:	

Elevation, feet	Downhole Depth, feet	SAMPLES			Graphic Log	USCS	MATERIAL DESCRIPTION	REMARKS AND OTHER TESTS
		Type	Number	Blows/ 6in.				
0						SP/ SM	Surface: Asphalt	Time: 0921
							Light gray-brown medium to fine SAND with large cobble fragments (dense) (dry) (no odor)	0925
	5							0929
								0932
	10					SP	Light brown medium to fine SAND with fine gravel (very dense) (dry)	0935
							Grading fine to coarse gravel	0937
	15							0940
								0943
	20					SM	Light gray-brown silty SAND, stratified (dense) (dry)	0946
								0949
	25					SP	Gray-brown SAND (dense) (slightly damp) (no odor)	0951
							Grading increasing moisture	0954
	30					SM	Silty SAND (dense) (dry at bottom of interval, wet just above)	0957
							Boring was completed to 30' bgs. Groundwater was encountered at 29' bgs. Boring was backfilled with bentonite.	* PID not zeroing out

ENV2.WVD.WELL_T:\ONEWORLD\33761152_SRO_PROPERTY\082708\URSS\SB-4.GLB_URSS\SB-4.GDT 8/17/08



Project: Sterling Realty Organization
 Project Location: Bellevue, Washington
 Project Number: 33761152

Log of Boring URS-SB-8

Sheet 1 of 2

Date(s) Drilled	11/17/08	Logged By	JW	Checked By	
Drilling Method	HSA	Drilling Contractor	Cascade Drilling	Total Depth of Borehole	49 feet bgs
Drill Rig Type		Drill Bit Size/Type		Ground Surface Elevation	
Groundwater Level (feet bgs)	41 ft bgs	Sampling Method	Split Spoon - D&M	Hammer Data	
Borehole Backfill		Location			

Elevation, feet	Downhole Depth, feet	SAMPLES				Graphic Log	USCS	MATERIAL DESCRIPTION	REMARKS AND OTHER TESTS
		Type	Number	Blows/ 6in.	Recovery (%)				
0							SP	Surface: Asphalt Brown SAND with gravel (damp) (Ull)	Time:
5			9 17	50/3	60	0.0		Grading gray-brown with 10% pea gravel (dry)	0820
10			17 24 26		89	0.0	SP/ SM	Brown silty SAND to sandy SILT with gravel up to 1" (no odor, no stain)	0824
15				50/6	100	0.0	SP	Grading (dry)	0829
20			30 50/6		100	0.0			0834
		SB-8-21.5	31 50/6		100	0.0			0837
25			34 50/5		100	0.0			0843
			31 50/6		100	0.0		Grading decreasing gravel (no odor, no stain)	0848
30		SB-8-29	34 50/6		83	0.0			0854
			32 50/6		100	0.0			0859
35			25 28 50/6		67	0.0			0906
				50/6	100	0.0			

ENV2 WID WELL T:\IONEWORLD\33761152 SRO PROPERTY\33761152.GPJ_URSSEA3B.GLB_URSSEA3.GDT 3/17/09



Project: Sterling Realty Organization
 Project Location: Bellevue, Washington
 Project Number: 33761152

Log of Boring URS-SB-8

Sheet 2 of 2

Elevation, feet	Downhole Depth, feet	SAMPLES				Graphic Log	USCS	MATERIAL DESCRIPTION	REMARKS AND OTHER TESTS
		Type	Number	Blows/ 6in.	Recovery (%)				
								0912	
	40	SB-8-39	19	75	0.0		Grading (damp to wet) (no odor, no stain)	0916	
			50/6			SP/SM		41 ft.	
			50/6	100	0.0	GP	Grading (wet)	1922	
	45		50/6	87	0.0			0925	
			50/3	100	0.0			0928	
	50		50/3	87	0.0		Boring was completed to 49' bgs. Groundwater was encountered at 41' bgs. Boring was backfilled with bentonite chips.		
	55								
	60							0933	
	65								
	70								
	75								
	80								

ENV2 W/O WELL T:\HOMEWORL D\33761152 SRO PROPERTY\33761152.GPJ URSSEA3B.CLB URSSEA3.GDT 3/17/09



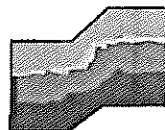
LOG OF BORING NO. 1

Figure No. A-2

Project: SRO Property Project No: T-6227 Date Drilled: June 22, 2008
 Client: Trammell Crow Company Driller: Gregory Drilling Logged By: DPL
 Location: Bellevue, Washington Approx. Elev: N/A

Depth (ft)	Sample Interval	Soil Description	Consistency/ Relative Density	Moisture Content % Wp -----x----- Wl 10 30 50 70 90	Pocket Penetrometer				Observ. Well
					1	2	3	4	
1		(4 inches ASPHALT)							
2		FILL: brown silty sand, fine grained, moist.	Medium Dense						
3									
4									
5				8.6				69	
6				x					
7									
8									
9				9.6				50/5"	
10				x					
11									
12									
13									
14				7.5				50/5"	
15				x					
16		Grayish-brown silty SAND with gravel, fine grained, moist. (SM) (Glacial Till)	Very Dense						
17									
18									
19									
20				10.2				50/5"	
21				x					
22		(Occasional silty sand to clean sand lenses)							
23									
24									
25				10.2				50/5"	
26				x					
27									
28									
29									
30				9.3				50/4"	
31				x					
32									
33									
34									
35				9.3				50/4"	
36				x					
37									
38									
39		Grayish-brown GRAVEL with silt and sand. (Advance outwash)	Very Dense					50/3"	
40									

Note: This borehole log has been prepared for geotechnical purposes. This information pertains only to this boring location and should not be interpreted as being indicative of other areas of the site.



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LOG OF BORING NO. 1

Figure No. 3

Project: SRO Property Project No: T-6227 Date Drilled: June 22, 2008
 Client: Trammell Crow Company Driller: Gregory Drilling Logged By: DPL
 Location: Bellevue, Washington Approx. Elev: N/A

Depth (ft)	Sample Interval	Soil Description	Consistency/ Relative Density	Moisture Content % Wp -----x----- Wl 10 30 50 70 90	Pocket Penetrometer				Monitor Well		
					1	2	3	4			
					TSF						
					SPT (N)						
					Blows/ft						
					10	20	30	40			
41		Grayish-brown to gray GRAVEL with sand and silt, occasional cobbles, fine to coarse grained, moist. (GM-GP) (Less silt with depth) (Advance outwash)	Very Dense	6.6							
42				x							
43											
44						6.4					50/4'
45						x					
46											
47											
48											
49						5.3					50/5'
50						x					
51											
52											
53											
54						8.3					50/4'
55				x							
56											
57											
58											
59				4.3					50/3'		
60				x							
61											
62											
63											
64				5.6					50/4'		
65				x							
66											
67											
68		Grayish-brown silty SAND to brown SAND with gravel, fine grained, dry to moist. (SM to SP) (Advance outwash)	Very Dense	2.7					50/2'		
69				x							
70											
71											
72											
73											
74				5.6					50/5'		
75				x							
76											
77											
78											
79		*Continued on Next Page.									
80											

Note: This borehole log has been prepared for geotechnical purposes. This information pertains only to this boring location and should not be interpreted as being indicative of other areas of the site.




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LOG OF BORING NO. 1

Figure No. 3

Project: SRO Property Project No: T-6227 Date Drilled: June 22, 2008
 Client: Trammell Crow Company Driller: Gregory Drilling Logged By: DPL
 Location: Bellevue, Washington Approx. Elev: N/A

Depth (ft)	Sample Interval	Soil Description	Consistency/ Relative Density	Moisture Content % Wp -----x----- Wl 10 30 50 70 90	Pocket Penetrometer				Monitor Well
					1	2	3	4	
81		Gray silty SAND, fine grained. (SM) (Trace iron stains at 85.5 feet)	Very Dense to Dense	21.8 *					
82									
83									
84				24.0 *					
85							43 *		
86									
87									
88									
89		Blue gray sandy SILT, wet to moist. (ML)	Very Stiff to Hard	24.3 *			31 *		
90									
91									
92									
93									
94									
95				27.6 *			37 *		
96									
97									
98									
99									
100									
101				25.1 *			39 *		
102									
103		Boring terminated at 101.5 feet. No groundwater seepage observed during drilling. 2-inch PVC monitoring well constructed as shown using 0.020 factory slotted screen. Groundwater measured at 97.05 feet on June 26, 2008.							
104									
105									
106									
107									
108									
109									
110									
111									
112									
113									
114									
115									
116									
117									
118									
119									
120									

Note: This borehole log has been prepared for geotechnical purposes. This information pertains only to this boring location and should not be interpreted as being indicative of other areas of the site.



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LOG OF BORING NO. 2

Figure No. 4

Project: SRO Property Project No: T-6227 Date Drilled: June 23, 2008
 Client: Trammell Crow Company Driller: Gregory Drilling Logged By: DPL
 Location: Bellevue, Washington Approx. Elev: N/A

Depth (ft)	Sample Interval	Soil Description	Consistency/ Relative Density	Moisture Content % Wp ---x--- Wl 10 30 50 70 90	Pocket Penetrometer				Observ. Well
					1	2	3	4	
1		(3 inches ASPHALT)							
2		FILL: brown silty sand with gravel, fine grained, moist. (SM)	Medium Dense						
3									
4									
5					11.6			22	
6					x				
7		Grayish-brown silty SAND with gravel, fine grained, moist. (SM) (Glacial Till) (Occasional thin sand lenses)	Very Dense						
8									
9									
10					8.2				80/11
11					x				
12									
13									
14					10.3				70
15					x				
16									
17		Gray silty SAND with gravel to GRAVEL with sand. (SM-GP) (Advance outwash)	Very Dense						
18									
19					6.1				50/1
20					x				
21									
22									
23									
24									
25					8.3				50/5'
26					x				
27									
28									
29			9.2				50/5'		
30			x						
31									
32									
33									
34									
35			9.9				50/5'		
36			x						
37									
38									
39		*Continued on Next Page.							
40							50/4'		

Note: This borehole log has been prepared for geotechnical purposes. This information pertains only to this boring location and should not be interpreted as being indicative of other areas of the site.



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LOG OF BORING NO. 2

Figure No. 4

Project: SRO Property Project No: T-6227 Date Drilled: June 23, 2008
 Client: Trammell Crow Company Driller: Gregory Drilling Logged By: DPL
 Location: Bellvue, Washington Approx. Elev: N/A

Depth (ft)	Sample Interval	Soil Description	Consistency/ Relative Density	Moisture Content % Wp -----x----- Wl 10 30 50 70 90	Pocket Penetrometer				Monitor Well		
					1	2	3	4			
					SPT (N) Blows/ft						
					10	20	30	40			
41		Gray silty SAND with gravel, fine grained, moist. (SM)	Very Dense	9.6 x							
42											
43											
44											
45						7.8 x					
46											
47											
48											
49											
50						22.9 x					
51											
52											
53											
54											
55				9.4 x							
56											
57											
58											
59											
60				9.1 x							
61											
62											
63											
64		Gray silty SAND, fine grained, moist to wet. (SM) (Advance outwash)	Very Dense								
65						20.8 x					
66											
67											
68											
69											
70						24.3 x					
71											
72											
73											
74											
75				25.6 x							
76											
77											
78											
79											
80											

*Continued on Next Page.

Note: This borehole log has been prepared for geotechnical purposes. This information pertains only to this boring location and should not be interpreted as being indicative of other areas of the site.



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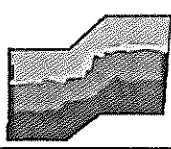
LOG OF BORING NO. 3

Figure No. A-4

Project: SRO Property Project No: T-6227 Date Drilled: June 24, 2008
 Client: Trammell Crow Company Driller: Gregory Drilling Logged By: DPL
 Location: Bellevue, Washington Approx. Elev: N/A

Depth (ft)	Sample Interval	Soil Description	Consistency/ Relative Density	Moisture Content % Wp -----x----- Wl 10 30 50 70 90	Pocket Penetrometer				Observ. Well
					Δ	TSF		Δ	
					1	2	3	4	
					SPT (N)				
					● Blows/ft ●				
					10	20	30	40	
1		FILL: brown silty sand with gravel, fine grained, moist. (SM)	Medium Dense						
2									
3									
4									
5									
6									
7		Grayish-brown silty SAND with gravel, fine grained, moist. (SM) (Glacial Till)	Dense to Very Dense						
8									
9									
10									
11									
12									
13									
14									
15									
16									
17									
18									
19									
20									
21									
22									
23									
24									
25									
26									
27									
28									
29									
30									
31		Boring terminated at 30 feet. 2-inch PVC monitoring well constructed as shown using 0.020 factory slotted screen pipe. Groundwater measured at 23.89 feet on June 26, 2008.							
32									
33									
34									
35									

Note: This borehole log has been prepared for geotechnical purposes. This information pertains only to this boring location and should not be interpreted as being indicative of other areas of the site.



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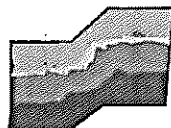
LOG OF BORING NO. 4

Figure No. A-5

Project: SRO Property Project No: T-6227 Date Drilled: June 24, 2008
 Client: Trammell Crow Company Driller: Gregory Drilling Logged By: DPL
 Location: Bellevue, Washington Approx. Elev: N/A

Depth (ft)	Sample Interval	Soil Description	Consistency/ Relative Density	Moisture Content % Wp -----x----- Wl 10 30 50 70 90	Pocket Penetrometer				Observ. Well	
					Δ	TSF	Δ	SPT (N) Blows/ft		
1		(4 inches ASPHALT)								
2		FILL: grayish-brown to brown silty sand with gravel, fine grained, moist.	Medium Dense							
3										
4										
5						7.1			42	
6						x				
7		Grayish-brown to gray silty SAND with gravel, fine grained, moist. (SM) (Glacial Till) (Trace Iron staining at 15 feet)	Very Dense							
8										
9						11.9			50/5'	
10						x				
11										
12										
13										
14						8.3			50/5'	
15						x				
16										
17										
18										
19						7.5			50/5.5'	
20						x				
21										
22										
23				9.1			50/5.5'			
24				x						
25										
26										
27										
28										
29				9.6			50/5'			
30				x						
31										
32										
33				4.8			50/5'			
34				x						
35										
36		Gray to brown GRAVEL with silt and sand. Some cobbles (Advance outwash)	Very Dense							
37										
38										
39					6.2			50/3'		
40		*Continued on Next Page.		x						

Note: This borehole log has been prepared for geotechnical purposes. This information pertains only to this boring location and should not be interpreted as being indicative of other areas of the site.



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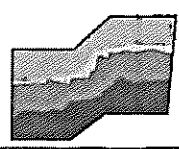
LOG OF BORING NO. 4

Figure No. A-5

Project: SRO Property Project No: T-6227 Date Drilled: June 24, 2008
 Client: Trammell Crow Company Driller: Gregory Drilling Logged By: DPL
 Location: Bellevue, Washington Approx. Elev: N/A

Depth (ft)	Sample Interval	Soil Description	Consistency/ Relative Density	Moisture Content %		Pocket Penetrometer				Monitor Well				
				Wp	WI	1	2	3	4		Blows/ft			
				10	30 50 70 90			10	20	30	40			
41		Gray to brown GRAVEL with silt and sand, fine to coarse grained, less silt with depth, moist. (GM-GP) (Advance outwash)	Very Dense											
42														
43														
44														
45						5.0								
46						x								
47														
48														
49														
50						5.7								50/5.3
51				x										
52														
53														
54														
55				4.9										
56				x										
57														
58														
59														
60				2.7										
61				x										
62		Brown SAND with silt and gravel, fine to coarse grained, cobbles, moist. (SP-SM) (Advance outwash)	Very Dense											
63														
64														
65				14.6										
66				x										
67		Grayish-brown silty SAND to SAND with silt, fine grained, moist. (SP-SM) (Some iron staining) (Advance outwash)	Dense to Very Dense											
68														
69														
70														
71														
72														
73														
74														
75				19.6										
76				x										
77		Bluish-gray silty SAND to sandy SILT, wet. (SM/ML)	Hard											
78														
79														
80														
		*Continued on Next Page.												

Note: This borehole log has been prepared for geotechnical purposes. This information pertains only to this boring location and should not be interpreted as being indicative of other areas of the site.

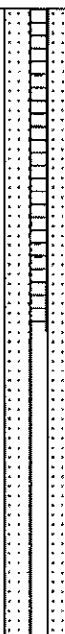


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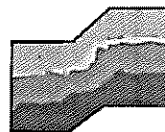
LOG OF BORING NO. 4

Figure No. A-5

Project: SRO Property Project No: T-6227 Date Drilled: June 24, 2008
 Client: Trammell Crow Company Driller: Gregory Drilling Logged By: DPL
 Location: Bellevue, Washington Approx. Elev: N/A

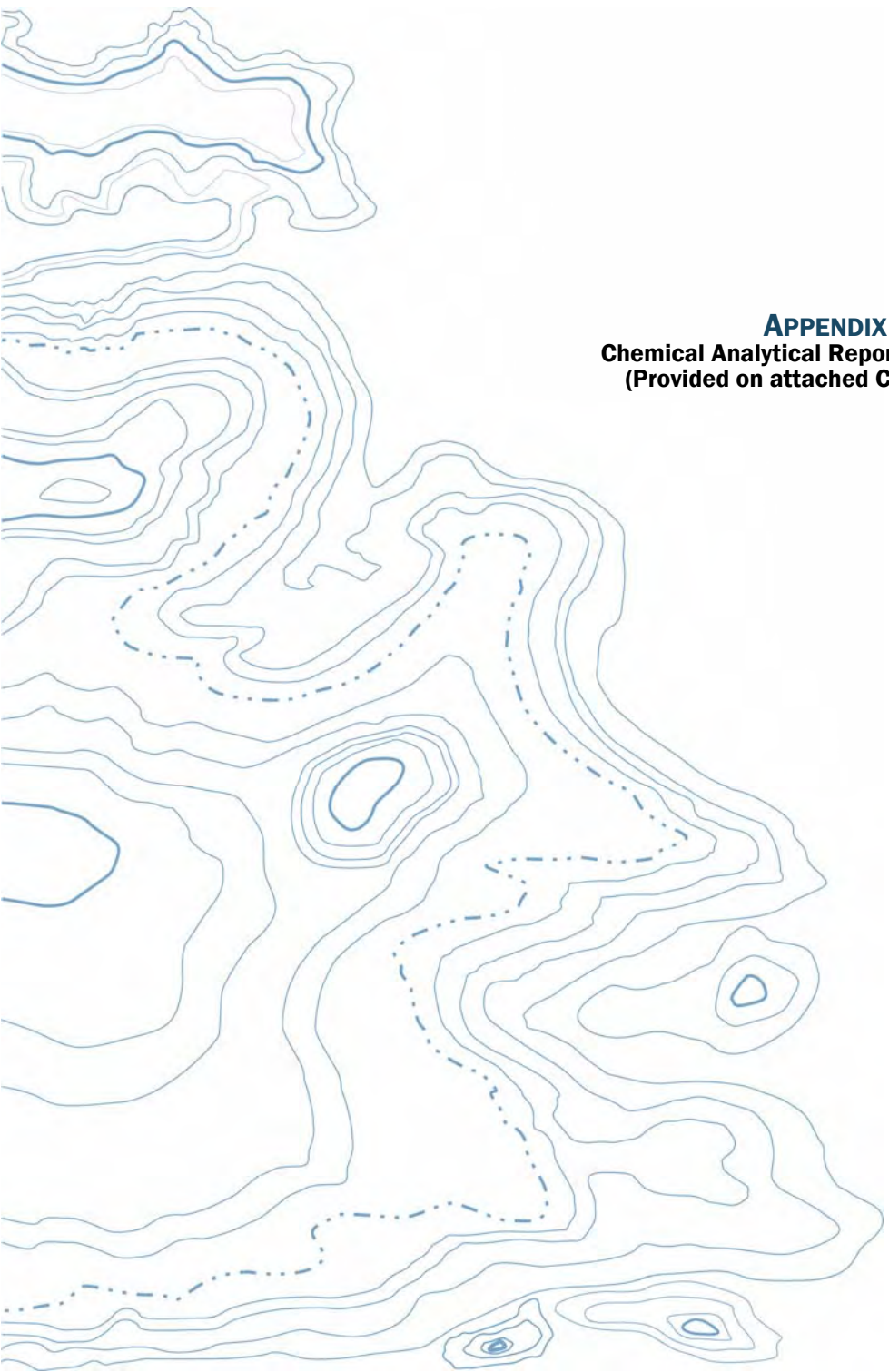
Depth (ft)	Sample Interval	Soil Description	Consistency/ Relative Density	Moisture Content %					Pocket Penetrometer				Monitor Well		
				Wp	x			Wl	1	TSF		4			
				10	30	50	70	90	10	20	30	40			
81		Bluish-gray sandy SILT, wet. (ML)	Hard	23.4								35			
82	x														
83															
84															
85						23.7								32	
86						x									
87															
88															
89															
90						24.9									43
91				x											
92															
93															
94															
95															
96				28.7								44			
97				x											
98															
99															
100															
101				25.1								46			
102				x											
103		Boring terminated at 101.5 feet. Groundwater observed at 75 feet. 2-inch PVC monitoring well constructed as shown using 0.020 factory slotted screen. Groundwater measured at 74.75 feet on June 26, 2008													
104															
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Note: This borehole log has been prepared for geotechnical purposes. This information pertains only to this boring location and should not be interpreted as being indicative of other areas of the site.

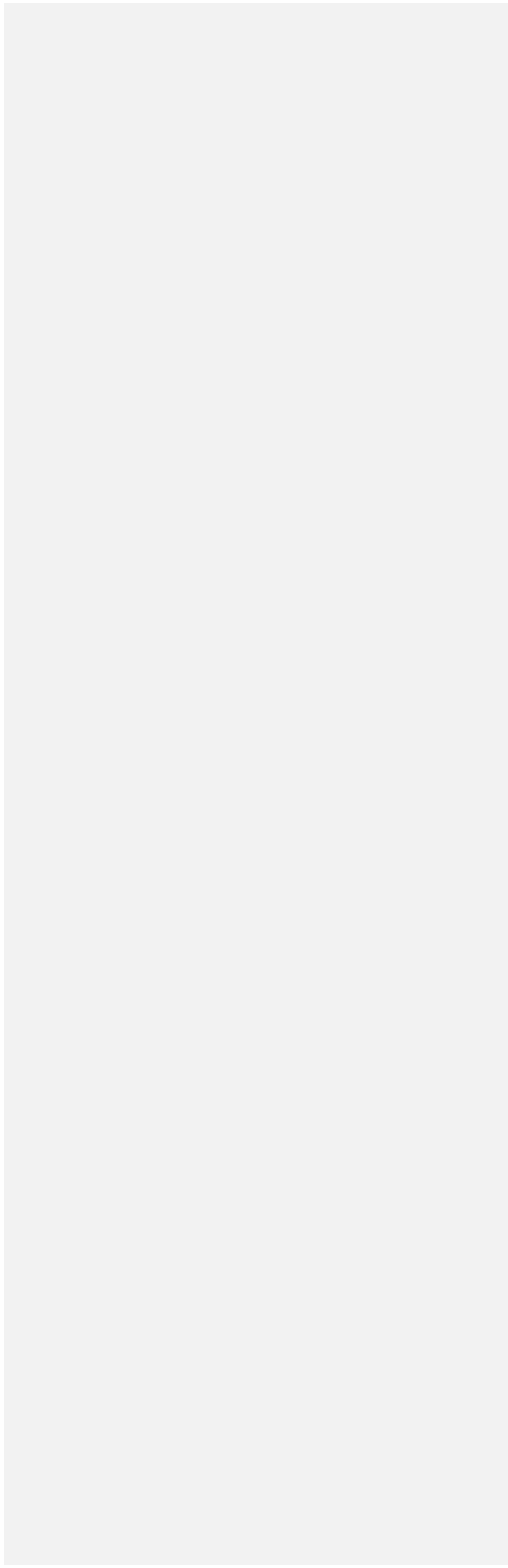


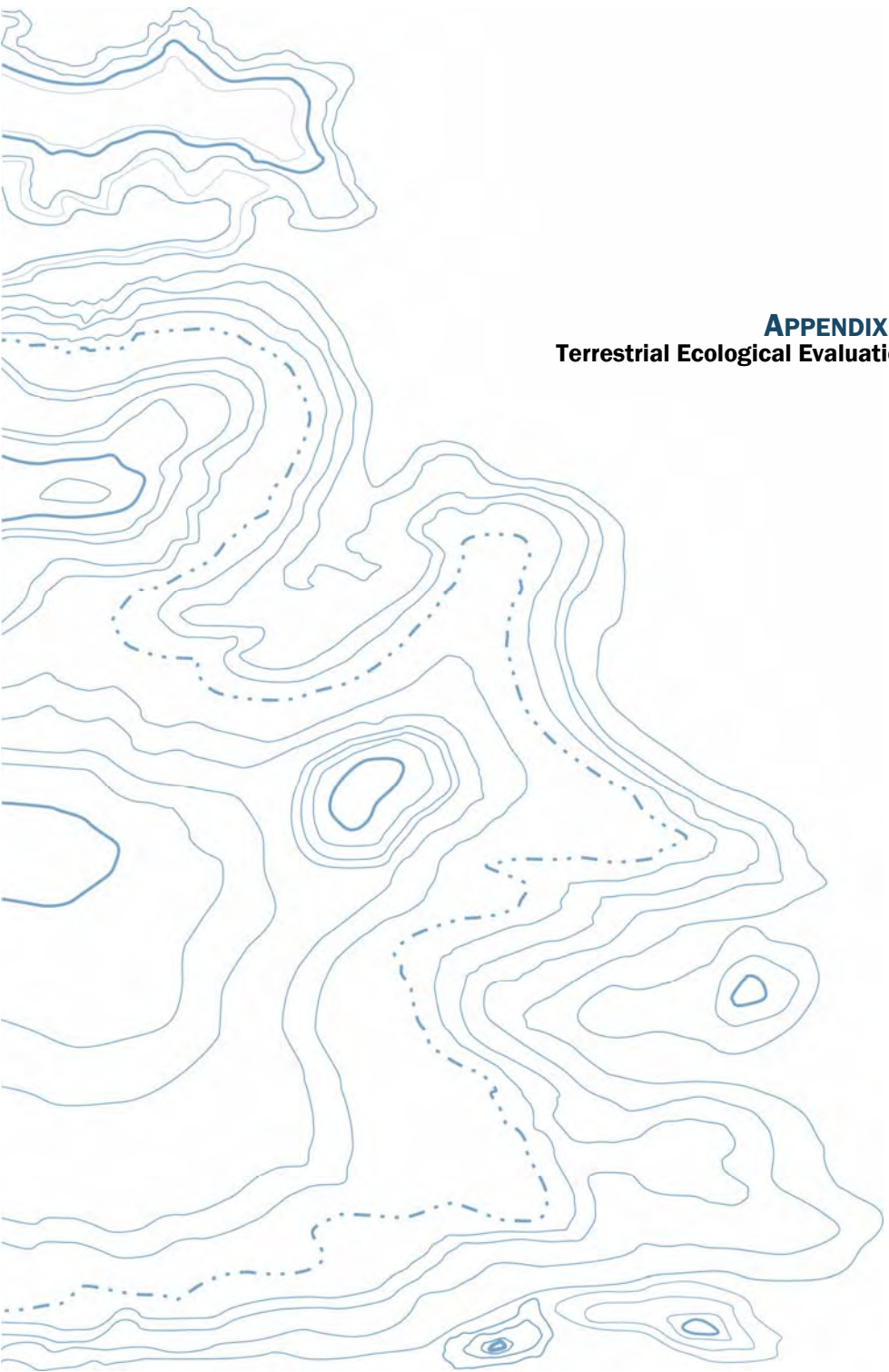
Terra Associates, Inc.

Consultants in Geotechnical Engineering, Geology and Environmental Earth Sciences

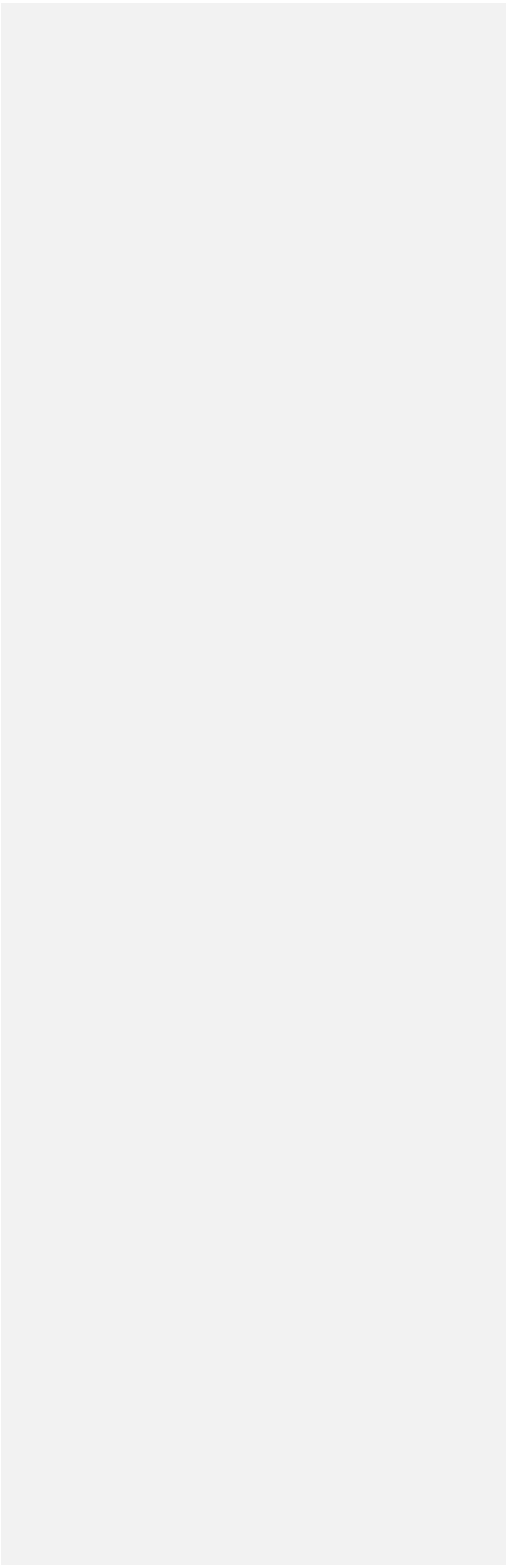


APPENDIX B
Chemical Analytical Reports
(Provided on attached CD)





APPENDIX C
Terrestrial Ecological Evaluation





Voluntary Cleanup Program

Washington State Department of Ecology Toxics Cleanup Program

TERRESTRIAL ECOLOGICAL EVALUATION FORM

Under the Model Toxics Control Act (MTCA), a terrestrial ecological evaluation is necessary if hazardous substances are released into the soils at a Site. In the event of such a release, you must take one of the following three actions as part of your investigation and cleanup of the Site:

1. Document an exclusion from further evaluation using the criteria in WAC 173-340-7491.
2. Conduct a simplified evaluation as set forth in WAC 173-340-7492.
3. Conduct a site-specific evaluation as set forth in WAC 173-340-7493.

When requesting a written opinion under the Voluntary Cleanup Program (VCP), you must complete this form and submit it to the Department of Ecology (Ecology). The form documents the type and results of your evaluation.

Completion of this form is not sufficient to document your evaluation. You still need to document your analysis and the basis for your conclusion in your cleanup plan or report.

If you have questions about how to conduct a terrestrial ecological evaluation, please contact the Ecology site manager assigned to your Site. For additional guidance, please refer to www.ecy.wa.gov/programs/tcp/policies/terrestrial/TEEHome.htm.

Step 1: IDENTIFY HAZARDOUS WASTE SITE

Please identify below the hazardous waste site for which you are documenting an evaluation.

Facility/Site Name: Bellevue Corner Property

Facility/Site Address: 10605 and 10619 NE 8th Street, Bellevue, Washington

Facility/Site No: N/A

VCP Project No.: N/A

Step 2: IDENTIFY EVALUATOR

Please identify below the person who conducted the evaluation and their contact information.

Name: Geoffrey H. Garrison, PhD

Title: Senior Geochemist

Organization: GeoEngineers, Inc.

Mailing address: 600 Stewart Street, Suite 1700

City: Seattle

State: WA

Zip code: 98101

Phone: 206.728.2674

Fax: 206.728.2732

E-mail: ggarrison@geoengineers.com

Step 3: DOCUMENT EVALUATION TYPE AND RESULTS

A. Exclusion from further evaluation.

1. Does the Site qualify for an exclusion from further evaluation?

- Yes *If you answered "YES," then answer **Question 2**.*
- No or Unknown *If you answered "NO" or "UNKNOWN," then skip to **Step 3B** of this form.*

2. What is the basis for the exclusion? Check all that apply. Then skip to **Step 4** of this form.

Point of Compliance: WAC 173-340-7491(1)(a)

- All soil contamination is, or will be,* at least 15 feet below the surface.
- All soil contamination is, or will be,* at least 6 feet below the surface (or alternative depth if approved by Ecology), and institutional controls are used to manage remaining contamination.

Barriers to Exposure: WAC 173-340-7491(1)(b)

- All contaminated soil, is or will be,* covered by physical barriers (such as buildings or paved roads) that prevent exposure to plants and wildlife, and institutional controls are used to manage remaining contamination.

Undeveloped Land: WAC 173-340-7491(1)(c)

- There is less than 0.25 acres of contiguous# undeveloped± land on or within 500 feet of any area of the Site and any of the following chemicals is present: chlorinated dioxins or furans, PCB mixtures, DDT, DDE, DDD, aldrin, chlordane, dieldrin, endosulfan, endrin, heptachlor, heptachlor epoxide, benzene hexachloride, toxaphene, hexachlorobenzene, pentachlorophenol, or pentachlorobenzene.
- For sites not containing any of the chemicals mentioned above, there is less than 1.5 acres of contiguous# undeveloped± land on or within 500 feet of any area of the Site.

Background Concentrations: WAC 173-340-7491(1)(d)

- Concentrations of hazardous substances in soil do not exceed natural background levels as described in WAC 173-340-200 and 173-340-709.

* An exclusion based on future land use must have a completion date for future development that is acceptable to Ecology.

± "Undeveloped land" is land that is not covered by building, roads, paved areas, or other barriers that would prevent wildlife from feeding on plants, earthworms, insects, or other food in or on the soil.

"Contiguous" undeveloped land is an area of undeveloped land that is not divided into smaller areas of highways, extensive paving, or similar structures that are likely to reduce the potential use of the overall area by wildlife.

B. Simplified evaluation.

1. Does the Site qualify for a simplified evaluation?

- Yes *If you answered "YES," then answer **Question 2** below.*
- No or Unknown *If you answered "NO" or "UNKNOWN," then skip to **Step 3C** of this form.*

2. Did you conduct a simplified evaluation?

- Yes *If you answered "YES," then answer **Question 3** below.*
- No *If you answered "NO," then skip to **Step 3C** of this form.*

3. Was further evaluation necessary?

- Yes *If you answered "YES," then answer **Question 4** below.*
- No *If you answered "NO," then answer **Question 5** below.*

4. If further evaluation was necessary, what did you do?

- Used the concentrations listed in Table 749-2 as cleanup levels. *If so, then skip to **Step 4** of this form.*
- Conducted a site-specific evaluation. *If so, then skip to **Step 3C** of this form.*

5. If no further evaluation was necessary, what was the reason? Check all that apply. Then skip to **Step 4** of this form.

Exposure Analysis: WAC 173-340-7492(2)(a)

- Area of soil contamination at the Site is not more than 350 square feet.
- Current or planned land use makes wildlife exposure unlikely. Used Table 749-1.

Pathway Analysis: WAC 173-340-7492(2)(b)

- No potential exposure pathways from soil contamination to ecological receptors.

Contaminant Analysis: WAC 173-340-7492(2)(c)

- No contaminant listed in Table 749-2 is, or will be, present in the upper 15 feet at concentrations that exceed the values listed in Table 749-2.
- No contaminant listed in Table 749-2 is, or will be, present in the upper 6 feet (or alternative depth if approved by Ecology) at concentrations that exceed the values listed in Table 749-2, and institutional controls are used to manage remaining contamination.
- No contaminant listed in Table 749-2 is, or will be, present in the upper 15 feet at concentrations likely to be toxic or have the potential to bioaccumulate as determined using Ecology-approved bioassays.
- No contaminant listed in Table 749-2 is, or will be, present in the upper 6 feet (or alternative depth if approved by Ecology) at concentrations likely to be toxic or have the potential to bioaccumulate as determined using Ecology-approved bioassays, and institutional controls are used to manage remaining contamination.

C. Site-specific evaluation. A site-specific evaluation process consists of two parts: (1) formulating the problem, and (2) selecting the methods for addressing the identified problem. Both steps require consultation with and approval by Ecology. See WAC 173-340-7493(1)(c).

1. Was there a problem? See WAC 173-340-7493(2).

- Yes *If you answered "YES," then answer **Question 2** below.*
- No *If you answered "NO," then identify the reason here and then skip to **Question 5** below:*
- No issues were identified during the problem formulation step.
 - While issues were identified, those issues were addressed by the cleanup actions for protecting human health.

2. What did you do to resolve the problem? See WAC 173-340-7493(3).

- Used the concentrations listed in Table 749-3 as cleanup levels. *If so, then skip to **Question 5** below.*
- Used one or more of the methods listed in WAC 173-340-7493(3) to evaluate and address the identified problem. *If so, then answer **Questions 3 and 4** below.*

3. If you conducted further site-specific evaluations, what methods did you use?

Check all that apply. See WAC 173-340-7493(3).

- Literature surveys.
- Soil bioassays.
- Wildlife exposure model.
- Biomarkers.
- Site-specific field studies.
- Weight of evidence.
- Other methods approved by Ecology. If so, please specify:

4. What was the result of those evaluations?

- Confirmed there was no problem.
- Confirmed there was a problem and established site-specific cleanup levels.

5. Have you already obtained Ecology's approval of both your problem formulation and problem resolution steps?

- Yes If so, please identify the Ecology staff who approved those steps:
- No

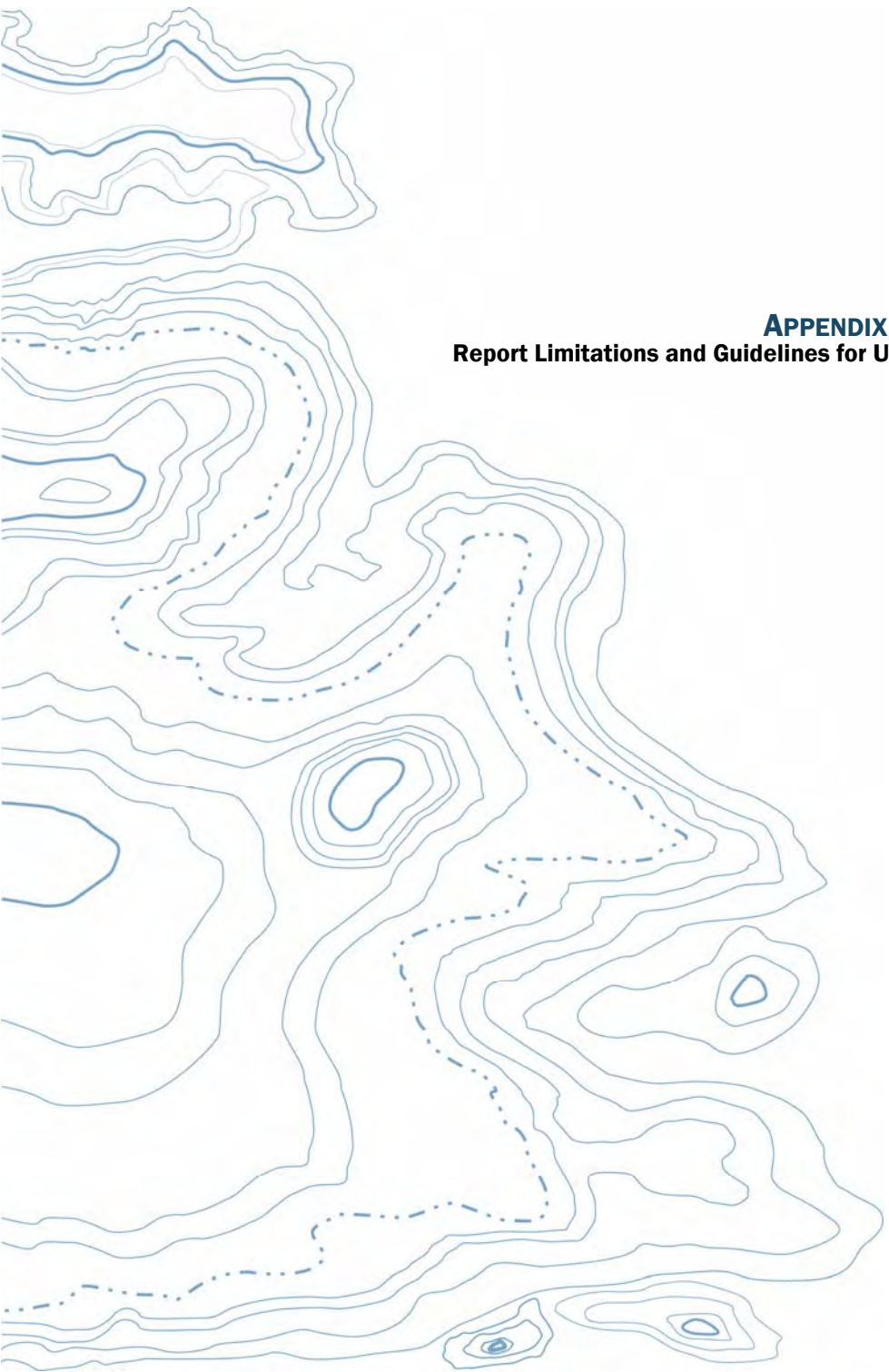
Step 4: SUBMITTAL

Please mail your completed form to the Ecology site manager assigned to your Site. If a site manager has not yet been assigned, please mail your completed form to the Ecology regional office for the County in which your Site is located.

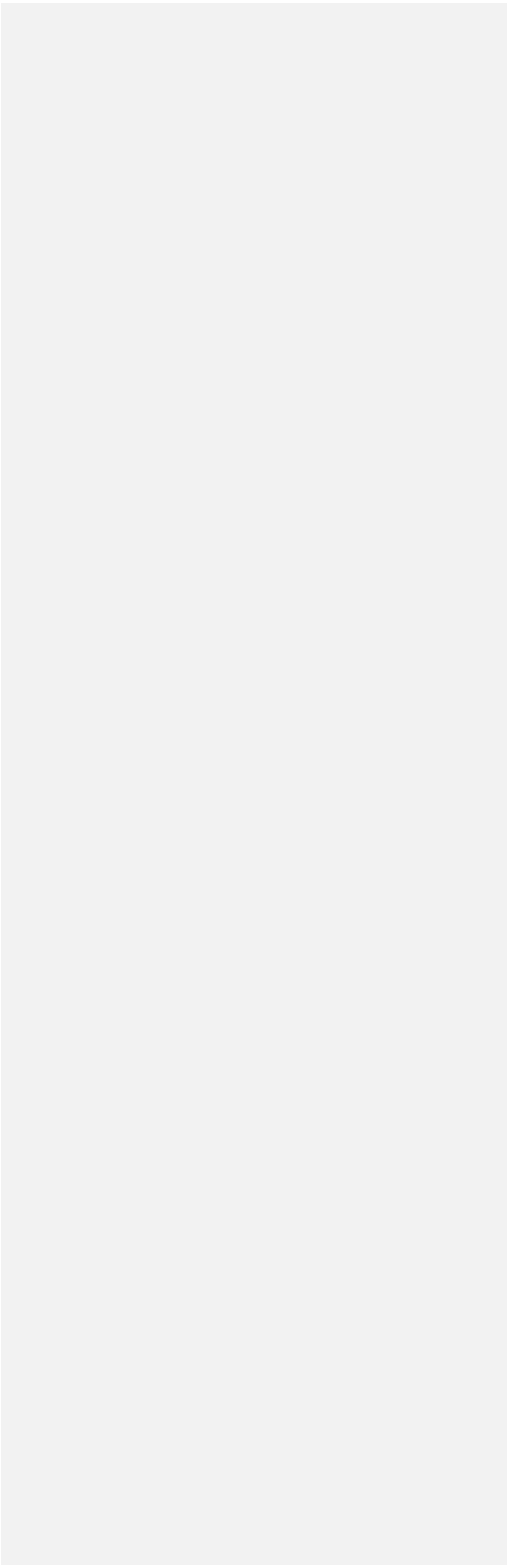


Northwest Region: Attn: VCP Coordinator 3190 160 th Ave. SE Bellevue, WA 98008-5452	Central Region: Attn: VCP Coordinator 15 W. Yakima Ave., Suite 200 Yakima, WA 98902
Southwest Region: Attn: VCP Coordinator P.O. Box 47775 Olympia, WA 98504-7775	Eastern Region: Attn: VCP Coordinator N. 4601 Monroe Spokane WA 99205-1295

If you need this publication in an alternate format, please call the Toxics Cleanup Program at 360-407-7170. Persons with hearing loss can call 711 for Washington Relay Service. Persons with a speech disability can call 877-833-6341.



APPENDIX D
Report Limitations and Guidelines for Use



APPENDIX D REPORT LIMITATIONS AND GUIDELINES FOR USE¹

This appendix provides information to help you manage your risks with respect to the use of this report.

Read These Provisions Closely

Some clients, design professionals and contractors may not recognize that the geoscience practices (geotechnical engineering, geology and environmental science) are far less exact than other engineering and natural science disciplines. This lack of understanding can create unrealistic expectations that could lead to disappointments, claims and disputes. GeoEngineers includes these explanatory “limitations” provisions in our reports to help reduce such risks. Please confer with GeoEngineers if you are unclear how these “Report Limitations and Guidelines for Use” apply to your project or Site.

Environmental Services Are Performed For Specific Purposes, Persons and Projects

This report has been prepared for use by SRO as part of their evaluation of environmental conditions at the subject Property. This report may be made available to SRO’s authorized agents and regulatory agencies for review. This report is not intended for use by others, and the information contained herein is not applicable to other sites.

GeoEngineers structures our services to meet the specific needs of our clients. For example, an environmental site assessment or remedial action study conducted for a property owner may not fulfill the needs of a prospective purchaser of the same property. Because each environmental study is unique, each environmental report is unique, prepared solely for the specific client and project site. No one except SRO should rely on this environmental report without first conferring with GeoEngineers. This report should not be applied for any purpose or project except the one originally contemplated.

This Environmental Report Is Based on a Unique Set of Project-Specific Factors

This report applies to SRO’s Bellevue Corner Property. GeoEngineers considered a number of unique, project-specific factors when establishing the scope of services for this project and report. Unless GeoEngineers specifically indicates otherwise, do not rely on this report if it was:

- not prepared for you,
- not prepared for your project,
- not prepared for the specific Property explored, or
- completed before important project changes were made.

¹ Developed based on material provided by ASFE, Professional Firms Practicing in the Geosciences, www.asfe.org.

If important changes are made after the date of this report, GeoEngineers should be given the opportunity to review our interpretations and recommendations and provide written modifications or confirmation, as appropriate.

Reliance Conditions for Third Parties

We have prepared this RI/FS for the exclusive use of SRO, their authorized agents and regulatory agencies. No other party may rely on the product of our services unless we agree in advance and in writing to such reliance.

This is to provide our firm with reasonable protection against open-ended liability claims by third parties with whom there would otherwise be no contractual limits to their actions.

Environmental Regulations Are Always Evolving

Some substances may be present in the Property vicinity in quantities or under conditions that may have led, or may lead, to contamination of the subject Property, but are not included in current local, state or federal regulatory definitions of hazardous substances or do not otherwise present current potential liability. GeoEngineers cannot be responsible if the standards for appropriate inquiry, or regulatory definitions of hazardous substance, change or if more stringent environmental standards are developed in the future.

Subsurface Conditions Can Change

This environmental report is based on conditions that existed at the time the study was performed. The findings and conclusions of this report may be affected by the passage of time, by manmade events such as construction on or adjacent to the Site, by new releases of hazardous substances, or by natural events such as floods, earthquakes, slope instability or groundwater fluctuations. Always contact GeoEngineers before applying this report to determine if it is still applicable.

Most Environmental Findings Are Professional Opinions

Our interpretations of subsurface conditions, remedial alternatives and remedial costs are based on field observations and chemical analytical data from the sampling locations at the Property documented in this report. Property exploration identifies subsurface conditions only at those points where subsurface tests are conducted or samples are taken. GeoEngineers reviewed field and laboratory data and then applied our professional judgment to render an opinion about subsurface conditions throughout the Property. Actual subsurface conditions may differ – sometimes significantly – from those indicated in this report. There is always a potential that areas of contamination exist in portions of the Property that were not sampled or tested during previous studies. Our report, conclusions and interpretations should not be construed as a warranty of the subsurface conditions or related remedial costs.

Do Not Redraw the Exploration Logs

Environmental scientists prepare final boring and testing logs based upon their interpretation of field logs and laboratory data. To prevent errors or omissions, the logs included in an environmental report should never be redrawn for inclusion in other design drawings. Only photographic or electronic reproduction is acceptable, and separating logs from the report can elevate risk.

Deleted: December 30, 2013