



STATE OF WASHINGTON
DEPARTMENT OF ECOLOGY

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March 6, 2018

MR. WALTER BRAUN
SENIOR VICE PRESIDENT DEVELOPMENT
AEGIS LIVING
415 118TH AVENUE SE
BELLEVUE, WA 98005

Re: No Further Action at a Property associated with a Site:

- **Property Address:** 21 10th Avenue South, 1006 Lake Street South and 6700 Lake Washington Blvd NE, Kirkland, Washington
- **Facility/Site No.:** 4595
- **VCP Project No.:** NW2850
- **Cleanup Site ID No.:** 12329

Dear Mr. Braun:

The Washington State Department of Ecology (Ecology) received your request for an opinion on your independent cleanup of a Property associated with the **Potala Village** facility (Site). This letter provides our opinion. We are providing this opinion under the authority of the Model Toxics Control Act (MTCA), Chapter 70.105D RCW.

Issues Presented and Opinion

1. Is further remedial action necessary at the Property to clean up contamination associated with the Site?

NO. Ecology has determined that no further remedial action is necessary at the Property to clean up contamination associated with the Site.

This opinion is dependent on the continued performance and effectiveness of the post-cleanup controls and monitoring specified below.

2. Is further remedial action still necessary elsewhere at the Site?

YES. Ecology has determined that further remedial action is still necessary elsewhere at the Site.



This opinion is based on an analysis of whether the remedial action meets the substantive requirements of MTCA, Chapter 70.105D RCW, and its implementing regulations, Chapter 173-340 WAC (collectively “substantive requirements of MTCA”). The analysis is provided below.

Description of the Property and the Site

This opinion applies only to the Property and the Site described below. This opinion does not apply to any other sites that may affect the Property. Any such sites, if known, are identified separately below.

1. Description of the Property.

The Property includes the following tax parcels in King County, which were affected by the Site and addressed by your cleanup:

- 9354900220
- 0825059233
- 9354900240

The Property does not include the following right-of-way easement, which is located west of a portion of parcel number 0825059233:

- Lake Washington Boulevard

Enclosure A includes a legal description of the Property. **Enclosure B** includes a diagram of the Site that illustrates the location of the Property within the Site.

2. Description of the Site.

The Site is defined by the nature and extent of contamination associated with the following releases:

- Total petroleum hydrocarbons in the gasoline- (TPH-G), diesel- (TPH-D), and heavy oil- (TPH-O) ranges, benzene, toluene, ethylbenzene and xylenes (BTEX), tetrachloroethene (PCE), trichloroethene (TCE), cis-1,2-dichloroethene (cis-1,2-DCE) and chromium III into the Soil.
- Perchloroethylene (PCE), trichloroethylene (TCE) and cis-1,2-dichloroethene (cis-1,2-DCE) into the Ground Water.

Those releases have affected more than one parcel of real property, including the parcels identified above.

Enclosure B includes a detailed description and diagrams of the Site, as currently known to Ecology.

3. Identification of Other Sites that may affect the Property.

Please note a parcel of real property can be affected by multiple sites. At this time, we have no information that the Property is affected by other sites.

Basis for the Opinion

This opinion is based on the information contained in the following documents:

1. Earth Solutions NW LLC, 2016. *Supplemental Groundwater Monitoring Report, Potala Village Property, 21 10th Avenue South, 1006 Lake Street South and 6700 Lake Washington Blvd., Kirkland, Washington.* October 11.
2. Earth Solutions NW LLC, 2015. *Fourth Quarter Groundwater Monitoring Report, Former Dry Cleaning Building, 1006 Lake Street South, Kirkland, Washington.* January 7.
3. Earth Solutions NW LLC, 2014. *Third Quarter Groundwater Monitoring Report, Former Dry Cleaning Building, 1006 Lake Street South, Kirkland, Washington.* October 3.
4. Earth Solutions NW LLC, 2014. *Cleanup Action Report, Potala Village Property, 21 10th Avenue South, 1006 Lake Street South and 6700 Lake Washington Blvd., Kirkland, Washington.* May 16.
5. Environmental Partners, Inc., 2014. *Underground Storage Tank Closure and Remedial Action Report, Potala Village Kirkland, 21 Tenth Avenue South, 6700 Lake Washington Boulevard, Kirkland, Washington.* May 16.
6. Earth Solutions NW LLC, 2013. *Geotechnical Engineering Study, Proposed Potala Village Property, 21 10th Avenue South, 1006 Lake Street South and 6700 Lake Washington Blvd., Kirkland, Washington.* May 16.
7. Environmental Partners, Inc., 2014. *Request for "Contained In Determination", Former Michael's Fine Dry Cleaning, 1006 South Lake Street, Kirkland, Washington.* March 28.

8. Earth Solutions NW LLC, 2013. *Cleanup Action Plan, Proposed Potala Village, 21 10th Avenue South, 1006 Lake Street South and 6700 Lake Washington Blvd., Kirkland, Washington.* September 19.
9. GeoEngineers, 2010. *Geotechnical Engineering Services, Potala Village Kirkland, Kirkland, Washington.* December 1.
10. Aspect Consulting, 2010. *Phase I Environmental Site Assessment, Potala Village: 1006 Lake Street South, 21 Tenth Avenue South and 6700 Lake Washington Boulevard, Kirkland, Washington.* October 15.
11. Aspect Consulting, 2008. *Additional Soil and Groundwater Sampling Results, 1006 Lake Street, Kirkland, Washington.* April 25.
12. Aspect Consulting, 2008. *Soil and Groundwater Sampling Results, 1006 Lake Street, Kirkland, Washington.* February 27.
13. Environmental Associates, Inc., 2006. *Preliminary Subsurface Sampling & Testing, Dry Cleaning Facility, 1006 Lake Street South, Kirkland, Washington 98033.* August 8.

Those documents are kept in the Central Files of the Northwest Regional Office of Ecology (NWRO) for review by appointment only. You can make an appointment by calling the NWRO resource contact at (425) 649-7235 or sending an email to: nwro_public_request@ecy.wa.gov.

This opinion is void if any of the information contained in those documents is materially false or misleading.

Analysis of the Cleanup

1. Cleanup of the Property located within the Site.

Ecology has concluded that **no further remedial action** is necessary at the Property to clean up contamination associated with the Site. That conclusion is based on the following analysis:

a. Characterization of the Site.

Ecology has determined your characterization of the Site is sufficient to establish cleanup standards for the Site and select a cleanup for the Property. The Site is described above and in **Enclosure B**.

Soil and ground water on the Property were first characterized at 1006 Lake Street South in 2006 and 2008 with soil borings, grab ground water samples and 3 monitoring wells (MW-1 through MW-3). Later in 2013 and 2014, the results of soil samples collected in test pits were used to estimate the locations of contaminated soil on the Property.

Two additional Site monitoring wells (MW-4 and MW-5) were installed west of 6700 Lake Washington Boulevard NE in 2014.

No contamination related to the Site was found in any of the five Site monitoring wells.

b. Establishment of cleanup standards for the Site.

Ecology has determined the cleanup levels and points of compliance you established for the Site **meet** the substantive requirements of MTCA.

a. Cleanup Levels

Soil

The Site does not meet the MTCA definition of an industrial property; therefore soil cleanup levels suitable for unrestricted land uses are appropriate. Ground water at this Site has been impacted by the identified releases. Soil cleanup levels based on leaching (protection of ground water) and protection of direct contact are appropriate.

Cleanup levels protective of terrestrial ecological receptors are not necessary because the Site meets the initial Terrestrial Ecological Evaluation (TEE) exclusion criteria (MTCA WAC 173-340-7491(1)(c)(i)). There are less than 1.5 acres of contiguous undeveloped land on or within 500 feet of any part of the Site.

MTCA Method A cleanup levels were selected for this Site. Ecology concurs for this exposure pathway.

Ground Water

The ground water at this Site is classified as potable to protect drinking water beneficial uses. For potable ground water, either Method A or Method B cleanup levels could be used. MTCA Method A cleanup levels were selected. Ecology concurs for this exposure pathway.

Air

Analytical results indicated that following the remedial excavations, soil on the Property meets Method A cleanup levels. However, soil with TPH-G at concentrations above the Method A cleanup level remains in place at depths of approximately 4 to 6 feet along an approximately 40-foot long portion of the western Property boundary. Confirmation soil samples collected along the west Property line contained concentrations of TPH-G up to 1,800 milligrams per kilogram (mg/kg). The contamination extends for some distance beneath Lake Washington Boulevard but was not removable due to the presence of multiple underlying utilities.

The excavation at this location reached a maximum depth of 12 feet and was backfilled with clean fill materials. Prior to backfilling and in an effort to isolate the contaminated zone and prevent potential vapor migration back onto the Property, a ½-inch thick continuous bentonite ‘volclay’ panel was installed along the Property line from 0 to 12 feet, covering the contaminated zone and extending approximately 15 to 20 feet on either side. At the bottom of the excavation, the panel was folded and wrapped to the east for 6 to 12 inches. An HDPE sheet drain was also installed next to (east of) the volclay panel to allow for the upward dissipation of any volatile contaminants that may migrate through, around or under the volclay panel. The tops of the panel and the sheet drain are under the edge of the 4-inch thick concrete sidewalk which extends onto the Property and thus serves as a cap for the vapor shield (panel plus sheet drain). A schematic diagram of this vapor shield is included in the Site Diagrams.

In November 2016, Ecology requested that soil gas samples be collected east of the barrier described above to demonstrate the effectiveness of the barrier and to assure that no vapors were migrating back onto the Property.

An attempt to advance vapor probes along the western Property line was curtailed by standing water encountered on the Property that prevented the probes from being advanced no deeper than 2 feet bgs. The standing water was in the backfilled materials. In December 2016, three soil vapor probes (PV-PV-1 through PV-PV-3) were advanced to 2 feet bgs, sealed and sampled; the samples were analyzed for BTEX and volatile petroleum hydrocarbons. The samples contained BTEX and aliphatic hydrocarbons but no concentrations exceeded the MTCA Method B sub-slab soil gas screening levels. Because the contaminated zone was overlain by two feet of water that may be acting as a cap, the soil gas samples were not considered representative of what would be in the unsaturated zone. However, it was considered unlikely that the standing water would dissipate seasonally in order to collect soil gas samples from an unsaturated zone

near the contaminated soil left in place along the Property boundary.

The above-described engineered control requires that an Environmental Covenant (EC) be placed on the Property in order to prevent the removal or damage to the volclay panels, sheet drain and sidewalk capping the vapor shield. The EC requires that any future building constructed on the Property have additional vapor barrier protection in the foundation walls. Collection and analysis of soil gas samples between the building foundation and the vapor shield will be required after building construction and to maintain the EC through the periodic review process.

b. Points of Compliance

Soil

The point of compliance based on the protection of ground water is Site-wide throughout the soil profile and may extend below the water table. This is the appropriate point of compliance for the Site.

Ground Water

The standard point of compliance for ground water is throughout the Site from the uppermost level of the saturated zone extending vertically to the lowest depth which could potentially be affected.

Air

The standard point of compliance for air is in ambient air throughout the Site.

c. Selection of cleanup for the Property.

Ecology has determined the cleanup you selected for the Property **meets** the substantive requirements of MTCA. The cleanup meets the minimum cleanup requirements and does not exacerbate conditions or preclude reasonable cleanup alternatives elsewhere at the Site.

d. Cleanup of the Property.

Ecology has determined the cleanup you performed **meets** the applicable Site cleanup standards within the Property. This determination is dependent on the continued performance and effectiveness of the post-cleanup controls and monitoring specified below.

The cleanup selected for the Property was excavation of all contaminated soil at concentrations above Method A on each of the three parcels with removal from the Site and disposal. A total of 3,586 tons of contaminated soil was removed from the Site.

Ground water in five Site monitoring wells was not found to contain any Site-related contaminants over multiple consecutive quarterly sampling rounds.

2. Cleanup of the Site as a whole.

Ecology has concluded that **further remedial action** under MTCA is still necessary elsewhere at the Site. In other words, while your cleanup constitutes the final action for the Property, it constitutes only an **“interim action”** for the Site as a whole.

Post-Cleanup Controls and Monitoring

Post-cleanup controls and monitoring are remedial actions performed after the cleanup to maintain compliance with cleanup standards. This opinion is dependent on the continued performance and effectiveness of the following:

1. Operation and maintenance of engineered controls.

To implement that control, an Environmental Covenant (Covenant) has been recorded on the following parcel of real property in King County:

- 0825059233

Ecology approved the recorded Covenant. A copy of the Covenant is included in **Enclosure C**.

Engineered controls prevent or limit movement of, or exposure to, hazardous substances. The following engineered control is necessary at the Property:

- Maintenance of a vertical vapor shield installed along the west Property line consisting of a 0.5” thick Volclay bentonite panel and a high-density polyethylene sheet drain.
- Effectiveness of the vapor shield will be confirmed by installation of three permanent soil gas probes which will be installed between the west Property line and any building constructed on the Property. The soil gas probes will be sampled initially following installation to establish baseline conditions and then every 5 years to provide data for Ecology’s periodic review process. The samples will be analyzed

using EPA Method TO-15 and MA-DEP APH or comparable methods to analyze for all constituents volatilizing from TPH-G.

Ecology has approved the operation and maintenance plan you submitted for these engineered control. A copy of the plan is included in **Enclosure C**.

3. Performance of confirmational monitoring.

Confirmational monitoring is necessary at the Property to confirm the long-term effectiveness of the cleanup. The monitoring data will be used by Ecology during periodic reviews of post-cleanup conditions. Ecology has approved the monitoring plan you submitted. A copy of the plan is included in **Enclosure D**.

Periodic Review of Post-Cleanup Conditions

Ecology will conduct periodic reviews of post-cleanup conditions at the Property to ensure that they remain protective of human health and the environment. The periodic review will include an inspection of the Property to ensure maintenance of the sidewalk cap and review of soil gas sampling data from the three permanent probes. If Ecology determines, based on a periodic review, that further remedial action is necessary at the Property, then Ecology will withdraw this opinion.

Listing of the Site

Based on this opinion, Ecology will update the status of remedial action at the Site on our database of hazardous waste sites. However, because further remedial action is still necessary elsewhere at the Site, we will not remove the Site from our lists of hazardous waste sites. Furthermore, the Property will remain listed as part of the Site because the cleanup of the Property does not change the boundaries of the Site.

Limitations of the Opinion

1. Opinion does not settle liability with the state.

Liable persons are strictly liable, jointly and severally, for all remedial action costs and for all natural resource damages resulting from the release or releases of hazardous substances at the Site. This opinion **does not**:

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- Change the boundaries of the Site.
- Resolve or alter a person's liability to the state.
- Protect liable persons from contribution claims by third parties.

To settle liability with the state and obtain protection from contribution claims, a person must enter into a consent decree with Ecology under RCW 70.105D.040(4).

2. Opinion does not constitute a determination of substantial equivalence.

To recover remedial action costs from other liable persons under MTCA, one must demonstrate that the action is the substantial equivalent of an Ecology-conducted or Ecology-supervised action. This opinion does not determine whether the action you performed is substantially equivalent. Courts make that determination. *See* RCW 70.105D.080 and WAC 173-340-545.

3. State is immune from liability.

The state, Ecology, and its officers and employees are immune from all liability, and no cause of action of any nature may arise from any act or omission in providing this opinion. *See* RCW 70.105D.030(1)(i).

Termination of Agreement

Thank you for cleaning up your Property under the Voluntary Cleanup Program (VCP). This opinion terminates the VCP Agreement governing this project (#NW2850). If you should decide to clean up the remainder of the Site, please do not hesitate to reapply and request additional services under the VCP.

For more information about the VCP and the cleanup process, please visit our web site: www.ecy.wa.gov/programs/tcp/vcp/vcpmain.htm. If you have any questions about this opinion, please contact me by phone at (425) 649-7064 or by e-mail at heather.vick@ecy.wa.gov.

Sincerely,



Heather Vick, LHg
NWRO Toxics Cleanup Program

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Enclosures (5): A – Legal Descriptions of the Property
 B – Description and Diagrams of the Site (including the Property)
 C – Environmental Covenant for Engineered Controls
 D – Operation and Maintenance Plan for Engineered Controls
 E – Confirmational Monitoring Plan

cc: Ted Sykes, Earth Solutions NW
 Sonia Fernandez, VCP Coordinator, Ecology
 Matt Alexander, VCP Financial Manager, Ecology (without enclosures)

Enclosure A

Legal Descriptions of the Property

Parcel number 9354900220:

WHITE HARRY & COS COMMERCIAL ADD LOTS 1 THRU 4 & W 5 FT OF LOT 5
LESS POR FOR RD IF ANY

Parcel number 0825059233:

W 200 FT OF FOLG N 165 FT OF S 2257 FT OF SW 1/4 LY E OF LAKE WASH BLVD
& W OF 3RD ST

Parcel number 9354900240:

WHITE HARRY & COS COMMERCIAL ADD LESS W 5 FT OF 5

Enclosure B

Description and Diagrams of the Site (including the Property)

Site Description

This section provides Ecology's understanding and interpretation of Site conditions, and is the basis for the opinions expressed in the body of the letter.

Site: The Site is defined as total petroleum hydrocarbons in the gasoline- (TPH-G), diesel- (TPH-D) and oil- (TPH-O) ranges, benzene, toluene, ethylbenzene and xylenes (BTEX), tetrachloroethene (PCE) and related degradation compounds including trichloroethylene (TCE), cis-1,2-dichloroethene (cis-1,2-DCE) and chromium III in soil; the Site is also defined as perchloroethylene (PCE), trichloroethylene (TCE) and cis-1,2-dichloroethene (cis-1,2-DCE) in ground water.

The Site contamination resulted from underground storage tanks (USTs), fuel pumps, fuel lines and hydraulic hoists related to a former gasoline station located at 6700 Lake Washington Boulevard NE, two residential home heating oil USTs formerly located at 21 10th Avenue South and a former dry cleaning operation formerly located at 1006 Lake Avenue South in Kirkland, Washington. The three addresses listed above correspond to three King County tax parcels which comprise the Property (see Table on next page). Based on TPH-G in soil at concentrations exceeding the MTCA Method A cleanup level, the Site extends off-Property to the west onto a City of Kirkland (City) right-of-way and beneath Lake Washington Boulevard (see Site Diagrams).

Area and Property Description: The Property comprises 1.21 acres of land located in the Feriton neighborhood south of downtown Kirkland. The Property area is densely developed with primarily residential and some commercial land uses. The Property is bordered to the north by 10th Avenue South and residential properties. The Property is bordered to the east by a private residence and Park Bay Condominiums. The Property is bordered to the south by Pleasant Bay Condominiums. The Property is bordered to the west by Lake Washington Boulevard NE, condominiums and residential properties. The Property is sloped to the west and ranges in elevation from approximately 32 to 57 feet above mean sea level.

Property History and Current Use: The history of land use on the Property is summarized in the table on the next page. Each of the three parcels is labeled with a capital letter (A, B and C) as shown in the first column and referred to elsewhere in the Site Description. A 1936 aerial photograph (King County IMAP) shows the Property as undeveloped land. At that time, the Property was surrounded by rural residential and agricultural land uses to the north, east and south. A bulk fuel plant was located directly west of the Property across Lake Street.

A building was constructed on Parcel A in 1958 to house the OK Tire Store, which provided new tire sales, recapping, wheel alignment and batteries and was in operation from 1958 to the mid-1970s. At a later time, a restaurant and dry cleaners were located on Parcel A from at least the mid-1990s to 2013 when cleanup of the Property was initiated.

Parcel B is the former location of an ARCO gasoline service station that was built in 1957 and was equipped with two 4,000-gallon USTs and one 275-gallon waste oil UST. The service station was demolished in 1973 and the two gasoline USTs, piping and fuel pumps were

reportedly removed at that time. A waste oil UST was reportedly left on the Property which was vacant until the cleanup in 2013.

Parcel Number (Label)	Street Address	Former Land Use	Contaminant Source; Confirmed Contamination	Parcel Size
9354900220 (Parcel A)	1006 Lake Street S	OK Tire Store (1958 – mid-1970s); Michael’s Fine Dry Cleaning and Asian Kitchen (at least 1990s – cleanup in 2013)	Dry cleaner; PCE and related byproducts in soil and perched ground water	0.24 acre
0825059233 (Parcel B)	6700 Lake Washington Blvd NE	Gas station (1957 – 1973); vacant/parking lot until cleanup in 2013	Two former gasoline USTs; waste oil UST; gasoline and oil in soil	0.75 acre
9354900240 (Parcel C)	21 10 th Avenue S	Single-family residence (1953 – cleanup in 2013)	Two heating oil USTs; diesel in soil	0.22 acre

Parcel C was formerly the location of a 2,350-square foot private residence built in 1953. Two heating oil USTs were located on Parcel C. The building was demolished in early 2014 as part of redevelopment of the Property. The two USTs and related soil contaminated with TPH-D were removed in April 2014.

The Property is currently vacant. The Property will be redeveloped as an assisted living center.

Sources of Contamination: Each of the three parcels comprising the Property is associated with a separate contaminant source. A 2010 Phase I Environmental Site Assessment conducted on the Property identified the former dry cleaners, former gasoline service station and a suspected residential heating oil UST as separate recognized environmental conditions. Parcel A was the location of Michael’s Fine Dry Cleaning, a dry cleaner operation using PCE-based solvents in operation from at least the 1990s to the time of the 2013 cleanup. Parcel B was the location of a gasoline station from 1957 to the early 1970s which had gasoline and waste oil USTs, related piping, fuel pumps and hydraulic hoists. Parcel C was the location of a private residence which had two heating oil USTs that released fuel into the underlying soil.

Physiographic Setting: The Site is located within the Puget Sound Lowland Physiographic Province, a north-south trending structural and topographic depression bordered on the west by the Olympic Mountains, and to the east by the Cascade Mountain foothills. The Puget Sound Lowland is underlain by Tertiary volcanic and sedimentary bedrock, and has been filled to the present day land surface with Pleistocene glacial and nonglacial sediments. The Site is located in the Interlake Drift Upland sub-physiographic province of metropolitan Seattle.

Surface/Storm Water System: The Property is located approximately 250 feet east of Lake Washington. Storm water runoff on and in the vicinity of the Property disperses via sheet flow to catch basins connected to the City of Kirkland storm water system which is then routed to Lake Washington.

Ecological Setting: The Property is located in an area that has been heavily developed with primarily residential and some commercial land uses. The land surface is covered by buildings and landscaped yards with asphalt and concrete streets and parking areas. A 4.18-acre park, Marsh Park, is located on the Lake Washington shoreline approximately 150 feet southeast of the Property and contains minimal undeveloped land.

Geology: Native geologic materials at the Site are primarily composed of dense glacial till overlying glacially-overridden silt to the maximum depth explored on the Property of 55 feet bgs. In three monitoring well borings drilled on Parcel A in 2008, 19 feet of dense silty sand occurred above hard, slightly sandy silt to a depth of 30 feet when a transition to a silt unit was encountered. The silt extended to at least 45 feet bgs in the boring location drilled for MW-1.

Ground Water: Based on investigations conducted at the Site, shallow ground water occurs as a discontinuous perched zone within fill materials (and recessional outwash in eastern part of the Property) above the Vashon till. Ground water also occurs within the more permeable, sandy zones at depth within the silt unit as evidenced by water columns in monitoring wells MW-1 through MW-3 and seepages noted in the 2013 geotechnical borings. Water levels in the three monitoring wells eventually equilibrated to depths of 0.1 to 1.7 feet bgs. Based on one round of ground water elevation data collected in 2008, ground water on the Site flows to the west-northwest. The 2008 water levels also suggested that ground water seepage zones in the silt intersecting the screened intervals of the wells most likely occur under semi-confined or confined conditions due to the low hydraulic conductivities of the silt unit and the overlying till. If so, these materials would also presumably act as a barrier to vertical contaminant migration.

A 2010 geotechnical study encountered isolated perched ground water in Parcel B in recessional outwash deposits that occurred above the Vashon till. A 2013 geotechnical study on the Site advanced two soil borings (B1 and B2) along the eastern boundary of the Property to a total depth of 51.5 feet bgs. Ground water seepage was encountered at varying depths in the two borings between approximately 4 and 51.5 feet bgs.

A test pit (TP-101) was excavated on May 7, 2014 to investigate the presence of ground water on the Property. The test pit was dug to a depth of 22 feet bgs and encountered very dense glacial till to a depth of about 15 feet which was underlain by dense silt. No ground water seepage was observed in the 30 minutes that the pit was left open. This amount of time may not have been sufficient to allow ground water in the sand lenses in the silt, if intersected, to flow into the excavation.

Water Supply: Kirkland's water supply is obtained primarily from the South Fork Tolt River Watershed. On rare occasions, the Tolt River water is supplemented with water from the Cedar River watershed. According to Ecology's well log database, no water supply wells are located within 0.5 mile of the Site.

Release and Extent of Soil and Ground Water Contamination:

In July 2006, four direct push borings were advanced on Parcel A to depths ranging from 3.5 to 11 feet bgs. Two of the borings (B-1 and B-2) were completed outside of the former dry

cleaning facility to the west and south of the dry cleaners. The other two borings (B-3 and B-4) were completed inside the dry cleaning facility. Soil samples collected from each of the borings contained non-detectable concentrations of volatile organic compounds (VOCs). Ground water was encountered at depths of 3.5 to 4 feet bgs in two of nine borings advanced on Parcel A suggesting the lack of a continuous, perched water bearing zone. One boring (B-4) encountered perched ground water at approximately 4 feet bgs. A sample from B-4 contained PCE at 10 µg/L and DCE at 5.5 µg/L, both exceeding MTCA Method A cleanup levels. TCE and cis-1,2-DCE were also detected in the B-4 ground water sample at concentrations below Method A cleanup levels. These results indicated that a release of dry cleaning solvent had occurred.

In 2008, five additional soil borings (B-5 through B-9) were drilled to depths ranging from 4.5 to 8 feet bgs. Shallow ground water was encountered at 3.5 feet bgs in one of the borings, B-5, which was located adjacent to the sanitary sewer line at the Property. Soil samples collected from the five borings and a ground water sample from boring B-5 contained non-detectable levels of VOCs. Based on the results, the extent of chlorinated solvents on Parcel A appeared to be limited to the area near the former dry cleaning machine.

In January 2008, three monitoring wells (MW-1 through MW-3) were installed on Parcel A. No soil samples from the monitoring well borings were submitted for laboratory analysis. One well (MW-1) was screened from 25 to 45 feet bgs; two wells (MW-2 and MW-3) were screened from 10 to 30 feet bgs. The wells were slow to recharge after installation which was attributed to the low hydraulic conductivity of the silt-rich materials screened. Ground water samples collected from the three monitoring wells in March 2008 contained no detectable VOCs. Monitoring well MW-3 was reportedly damaged during remediation activities and was decommissioned on August 25, 2014. Ground water samples collected from the two remaining wells (MW-1 and MW-2) in 2014 contained no detectable VOCs. MW-1 and MW-2 were left in place and continued to be sampled.

Site Remediation:

In 2013 and 2014, the Property was remediated as follows:

Parcel A. In December 2013 and March 2014, a test pit (No. 8) measuring 18 feet by 34 feet was excavated in the area of the former dry cleaner building. A total of ten soil samples were collected from the bottom of test pit No. 8 at depths of 1 and 3 feet bgs. Five of the ten soil samples contained detectable PCE, TCE, DCE or acetone. One sample, TP8@E at a depth of 1 foot bgs on the east side of the excavation contained PCE at a concentration exceeding the Method A cleanup level of 0.05 mg/kg. The sample also contained TCE and cis-1,2-DCE at concentrations below their respective Method A cleanup levels. The excavation footprint was later over-excavated 2 feet wider to the north and to a total depth of 3 feet with sidewall and bottom samples confirming soil containing VOCs at concentrations exceeding Method A cleanup levels had been removed. A total of approximately 140 tons of soil contaminated containing PCE and related chlorinated compounds were removed from the Site. Monitoring well MW-3 had to be decommissioned in August 2014 due to damage during the remedial activities.

Parcel B. In December 2013 and March 2014, a 185-gallon waste oil tank was removed from the central portion of Parcel B. In addition, approximately 3,216 tons of petroleum-contaminated soil were removed and transported off-Property for treatment and disposal. The excavation was confirmed with soil samples collected on the sidewalls and bottom that contained TPH-G, TPH-D, TPH-O, VOCs and MTCA 5 metals at concentrations below MTCA Method A cleanup levels. Even though the gas station operated at a time when tetraethyl lead was added to gasoline to prevent engine knock, no lead was detected in any of the confirmation soil samples collected in Parcel B.

Parcel C. Two nested (one on top of the other) heating oil USTs (265-gallon and 330-gallon) were removed from Parcel C in April 2014. Soil contaminated with TPH-D exceeding MTCA Method A cleanup levels was detected underlying the two USTs. The soil was excavated to a depth of 7.5 feet. Confirmation soil samples verified that soil exceeding Method A cleanup levels were removed from the Property.

Confirmation soil samples collected at the excavation edges contained total chromium at concentrations of 21 to 84 mg/kg which exceed the Method A cleanup level for hexavalent chromium (chromium VI) of 19 mg/kg. Two soil samples collected in Parcel B were also analyzed for chromium VI speciation with non-detectable results.

Site Diagrams

Enclosure C

Environmental Covenant for Engineered Controls

Enclosure D

Operation and Maintenance Plan for Engineered Controls

Enclosure E

Confirmational Monitoring Plan



Reference:
King County, Washington
Map 536
By The Thomas Guide
Rand McNally
32nd Edition



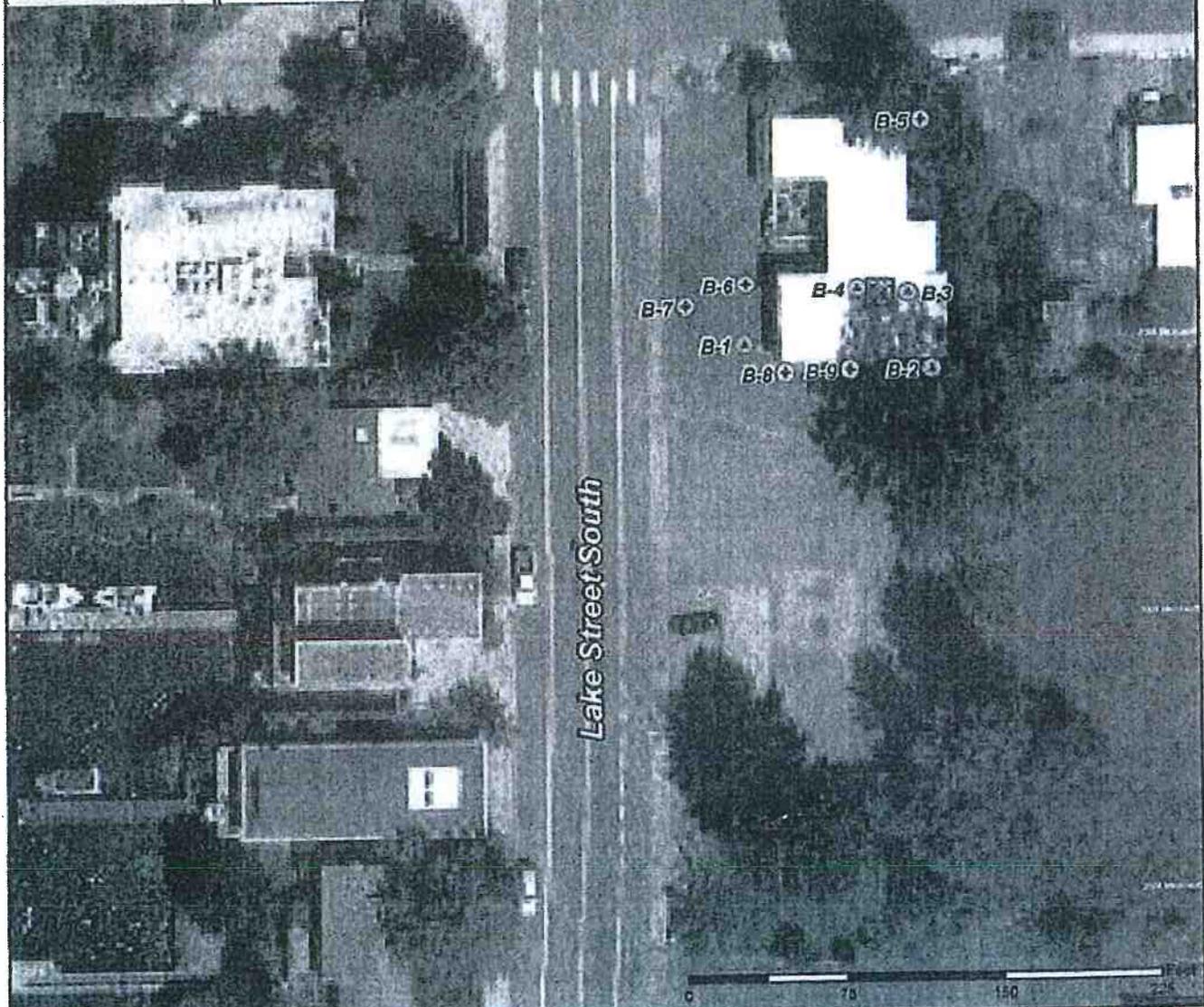
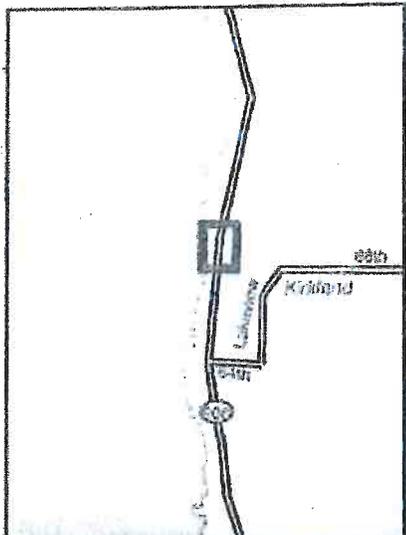


Earth Solutions NW LLC
Mechanical Engineering Construction Monitoring
and Environmental Sciences

**Vicinity Map
Potlatch Village
Kirkland, Washington**

NOTE: This plate may contain areas of color. ESNW cannot be responsible for any subsequent misinterpretation of the information resulting from black & white reproductions of this plate.

Drwn. MRS	Date 05/10/2017	Proj. No. 2880.10
Checked TWS	Date May 2017	Plate 1



T:\Projects_01\1006_LakeStreet\map.mxd

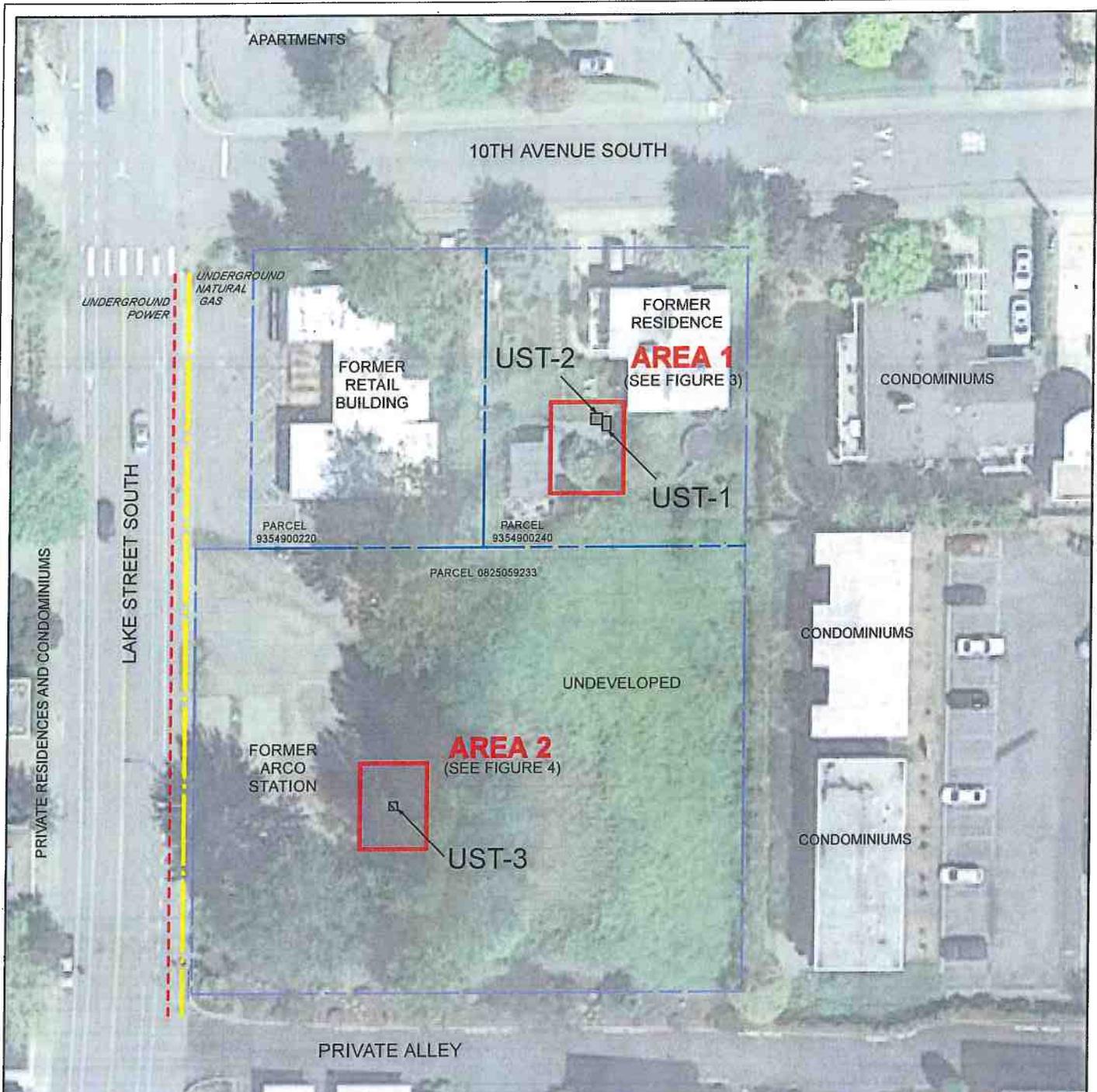
Soil Borings

- Aspd
- EP
- City Cluster Warning

Aspect consulting
www.aspectconsulting.com

Site Location and Exploration Locations
1006 Lake St. Kirkland, WA

Feb 2023	PROJECT NO
FPW	080009
FPW	ISSUE NO
FPW	1



NOTES:

AERIAL SOURCE: GOOGLE EARTH
 FLIGHT DATE: MAY 4, 2013

- APPROXIMATE PROPERTY BOUNDARY
- APPROXIMATE PARCEL BOUNDARY

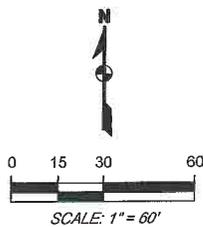
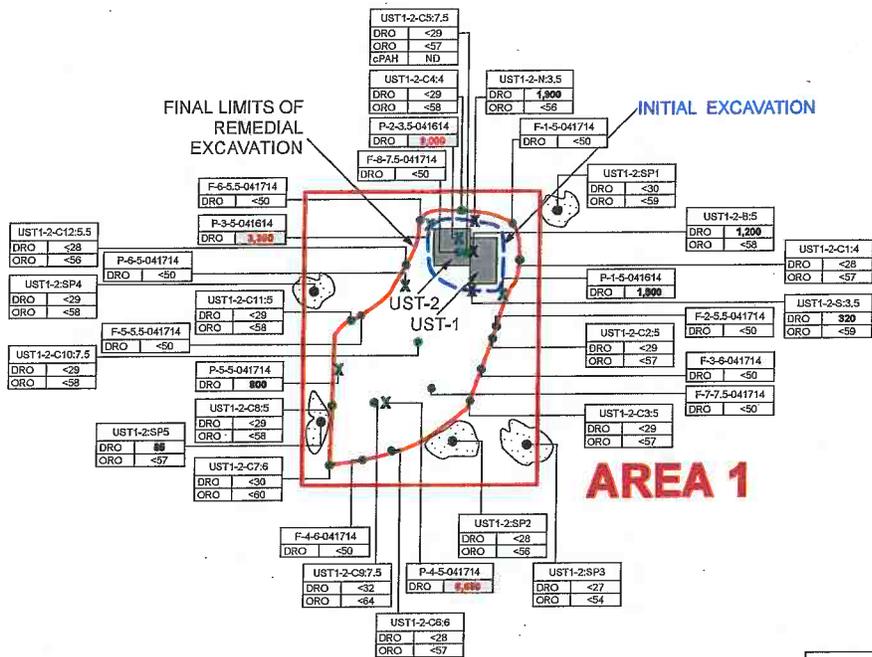


FIGURE 2

SITE REPRESENTATION

PREPARED BY	ENVIRONMENTAL PARTNERS INC		
REPORT	UST CLOSURE AND REMEDIAL ACTION REPORT		
LOCATION	21 TENTH AVENUE SOUTH AND 6700 LAKE WASHINGTON BLVD. KIRKLAND, WASHINGTON		
PREPARED FOR	EARTH SOLUTIONS NW, LLC		
DATE	DRAWN BY	REVIEWED BY	PROJECT NUMBER
5/16/14	CLM	ELC	48111.0



NOTES:

- X UST ASSESSMENT SOIL SAMPLE LOCATIONS (COLLECTED BY ENVIRONMENTAL PARTNERS, ETC.)
- X UST ASSESSMENT SOIL SAMPLE LOCATIONS (COLLECTED BY PACIFIC ENVIRONMENTAL SERVICES)
- CONFIRMATION SOIL SAMPLE LOCATIONS (COLLECTED BY ENVIRONMENTAL PARTNERS, ETC.)
- CONFIRMATION SOIL SAMPLE LOCATIONS (COLLECTED BY PACIFIC ENVIRONMENTAL SERVICES)
- STOCKPILE SAMPLE
- FORMER HEATING OIL LIST
- EXCAVATED SOIL STOCK PILE

SAMPLE NAME	UST1-2-C12.5.5
DIESEL-RANGE ORGANICS	DRO <29
OIL-RANGE ORGANICS	ORO <57
CARCINOGENIC POLYCYCLIC AROMATIC HYDROCARBONS	gPAH ND

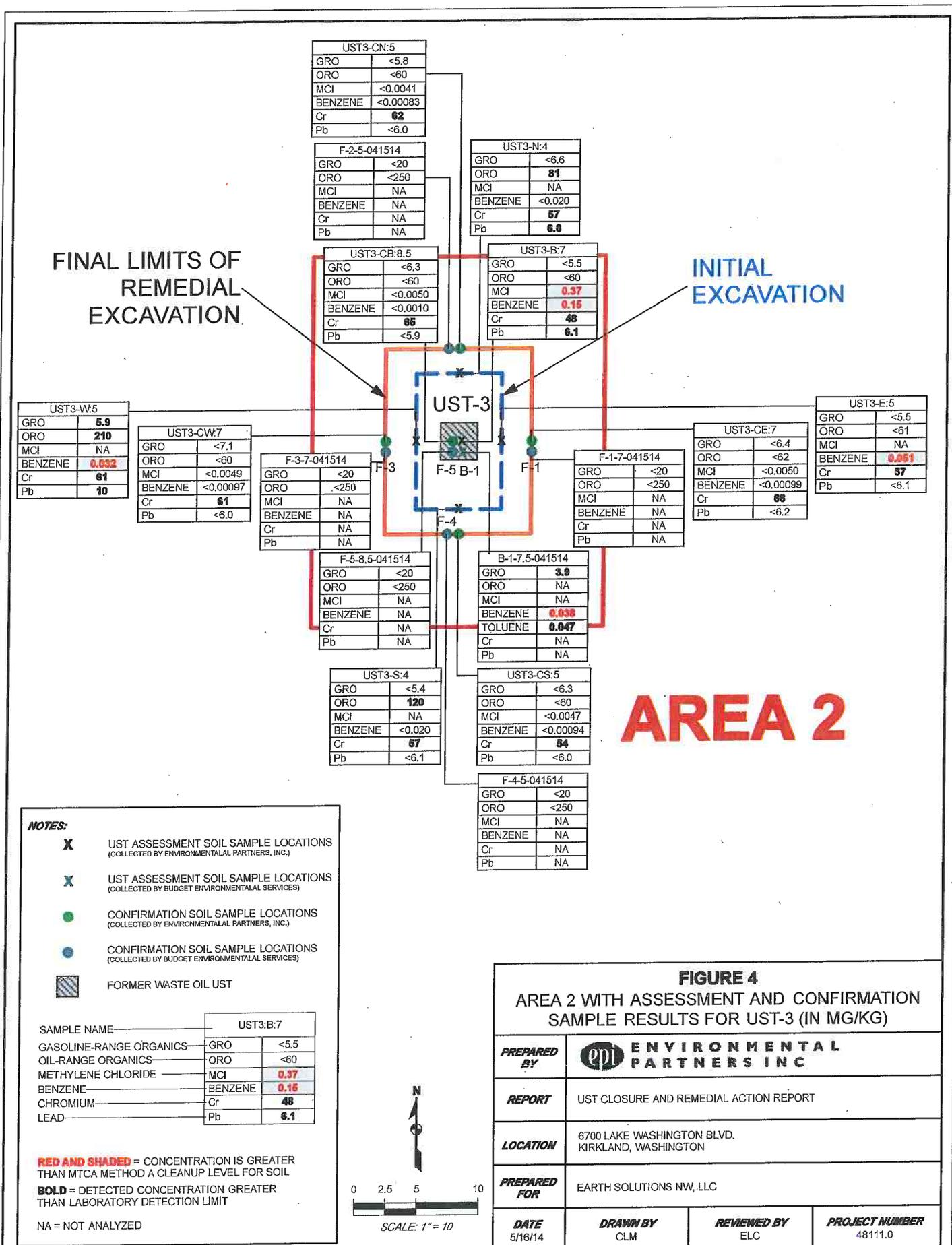
RED, BOLD TEXT: CONCENTRATION IS GREATER THAN MITCA METHOD A CLEANUP LEVEL FOR SOIL

BOLD = DETECTED CONCENTRATION GREATER THAN LABORATORY DETECTION LIMIT

ND = NOT DETECTED

FIGURE 3
AREA 1 WITH ASSESSMENT AND CONFIRMATION SOIL SAMPLE RESULTS FOR UST-1 AND -2 (IN MG/KG)

PREPARED BY	ENVIRONMENTAL PARTNERS INC
REPORT	UST CLOSURE AND REMEDIAL ACTION REPORT
LOCATION	21 TENTH AVENUE SOUTH KIRKLAND, WASHINGTON
PREPARED FOR	EARTH SOLUTIONS NW, LLC
DATE	5/15/14
DRAWN BY	CLM
REVIEWED BY	ELC
PROJECT NUMBER	481110



UST3-CN:5	
GRO	<5.8
ORO	<60
MCI	<0.0041
BENZENE	<0.00083
Cr	62
Pb	<6.0

F-2-5-041514	
GRO	<20
ORO	<250
MCI	NA
BENZENE	NA
Cr	NA
Pb	NA

UST3-N:4	
GRO	<6.6
ORO	81
MCI	NA
BENZENE	<0.020
Cr	57
Pb	6.8

FINAL LIMITS OF
REMEDIAL
EXCAVATION

INITIAL
EXCAVATION

UST3-CB:8.5	
GRO	<6.3
ORO	<60
MCI	<0.0050
BENZENE	<0.0010
Cr	65
Pb	<5.9

UST3-B:7	
GRO	<5.5
ORO	<60
MCI	0.37
BENZENE	0.15
Cr	48
Pb	6.1

UST3-W:5	
GRO	5.9
ORO	210
MCI	NA
BENZENE	0.032
Cr	61
Pb	10

UST3-CW:7	
GRO	<7.1
ORO	<60
MCI	<0.0049
BENZENE	<0.00097
Cr	61
Pb	<6.0

F-3-7-041514	
GRO	<20
ORO	<250
MCI	NA
BENZENE	NA
Cr	NA
Pb	NA

UST-3

F-1-7-041514	
GRO	<20
ORO	<250
MCI	NA
BENZENE	NA
Cr	NA
Pb	NA

UST3-CE:7	
GRO	<6.4
ORO	<62
MCI	<0.0050
BENZENE	<0.00099
Cr	66
Pb	<6.2

UST3-E:5	
GRO	<5.5
ORO	<61
MCI	NA
BENZENE	0.051
Cr	57
Pb	<6.1

F-5-8.5-041514	
GRO	<20
ORO	<250
MCI	NA
BENZENE	NA
Cr	NA
Pb	NA

B-1-7.5-041514	
GRO	3.9
ORO	NA
MCI	NA
BENZENE	0.038
TOLUENE	0.047
Cr	NA
Pb	NA

UST3-S:4	
GRO	<5.4
ORO	120
MCI	NA
BENZENE	<0.020
Cr	67
Pb	<6.1

UST3-CS:5	
GRO	<6.3
ORO	<60
MCI	<0.0047
BENZENE	<0.00094
Cr	54
Pb	<6.0

AREA 2

F-4-5-041514	
GRO	<20
ORO	<250
MCI	NA
BENZENE	NA
Cr	NA
Pb	NA

NOTES:

- X** UST ASSESSMENT SOIL SAMPLE LOCATIONS (COLLECTED BY ENVIRONMENTAL PARTNERS, INC.)
- X** UST ASSESSMENT SOIL SAMPLE LOCATIONS (COLLECTED BY BUDGET ENVIRONMENTAL SERVICES)
- CONFIRMATION SOIL SAMPLE LOCATIONS (COLLECTED BY ENVIRONMENTAL PARTNERS, INC.)
- CONFIRMATION SOIL SAMPLE LOCATIONS (COLLECTED BY BUDGET ENVIRONMENTAL SERVICES)
- FORMER WASTE OIL UST

SAMPLE NAME		UST3:B:7	
GASOLINE-RANGE ORGANICS	GRO	<5.5	
OIL-RANGE ORGANICS	ORO	<60	
METHYLENE CHLORIDE	MCI	0.37	
BENZENE	BENZENE	0.15	
CHROMIUM	Cr	48	
LEAD	Pb	6.1	

RED AND SHADED = CONCENTRATION IS GREATER THAN MTCA METHOD A CLEANUP LEVEL FOR SOIL
BOLD = DETECTED CONCENTRATION GREATER THAN LABORATORY DETECTION LIMIT
 NA = NOT ANALYZED

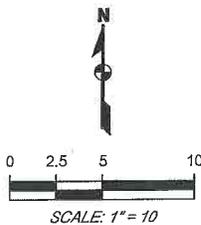
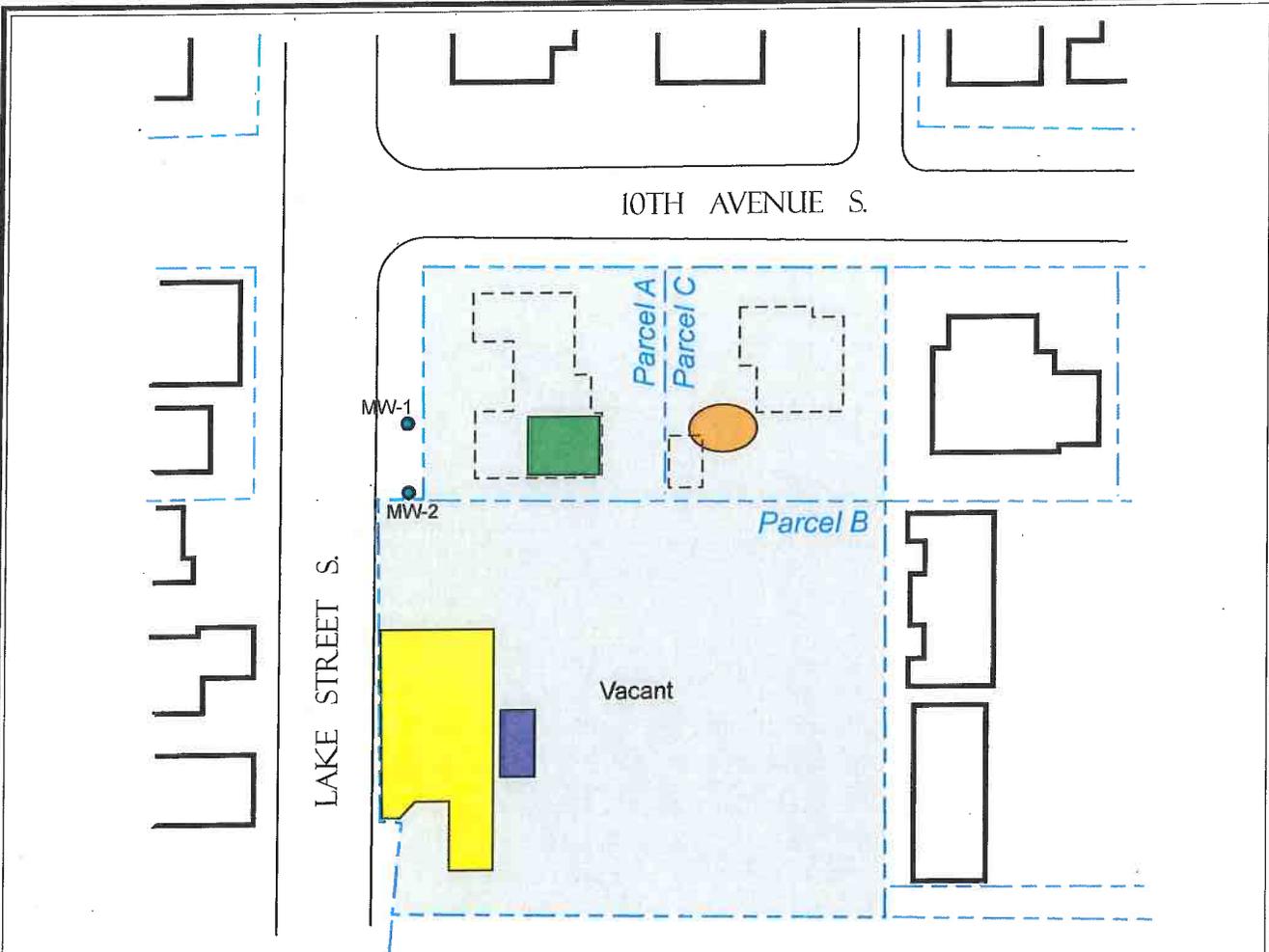


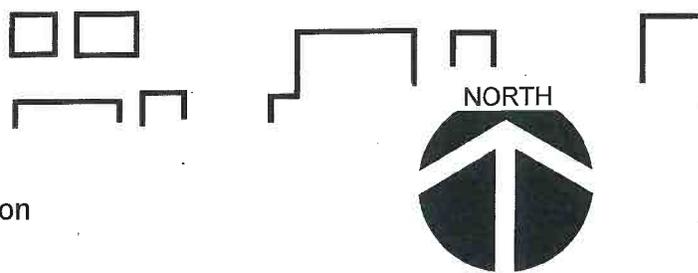
FIGURE 4
 AREA 2 WITH ASSESSMENT AND CONFIRMATION
 SAMPLE RESULTS FOR UST-3 (IN MG/KG)

PREPARED BY	ENVIRONMENTAL PARTNERS INC		
REPORT	UST CLOSURE AND REMEDIAL ACTION REPORT		
LOCATION	6700 LAKE WASHINGTON BLVD. KIRKLAND, WASHINGTON		
PREPARED FOR	EARTH SOLUTIONS NW, LLC		
DATE	DRAWN BY	REVIEWED BY	PROJECT NUMBER
5/16/14	CLM	ELC	48111.0



LEGEND

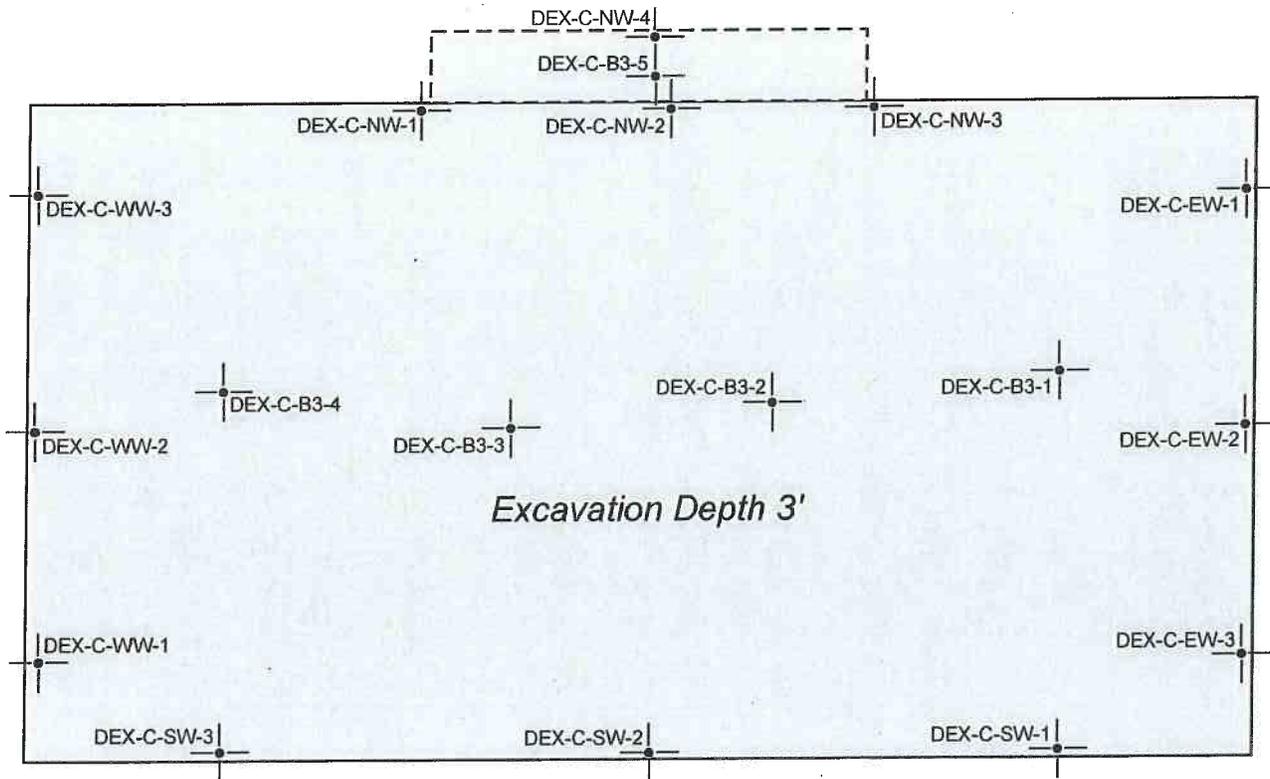
-  Subject Site
-  Former Building Location (Demolished)
- MW-1 ● Approximate Location of Monitoring Well (Aspect, 2008)
-  Area 1 - Heating Fuel UST Excavation
-  Area 2 - Waste Oil UST Excavation
-  Area 3 - Former Dry Cleaner Excavation
-  Area 4 - Former Gasoline Service Station Excavation



Not - To - Scale

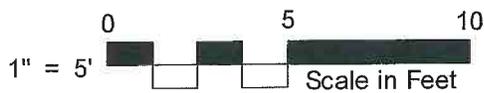
	Earth Solutions NW LLC <small>Geotechnical Engineering, Construction Monitoring and Environmental Sciences</small>	
	Site Plan Potala Village Kirkland, Washington	
Drwn. GLS	Date 05/13/2014	Proj. No. 2880.05 & 07
Checked TWS	Date May 2014	Plate 2

Area 3 Former Dry Cleaner Excavation



LEGEND


 Confirmation Soil Sample Location

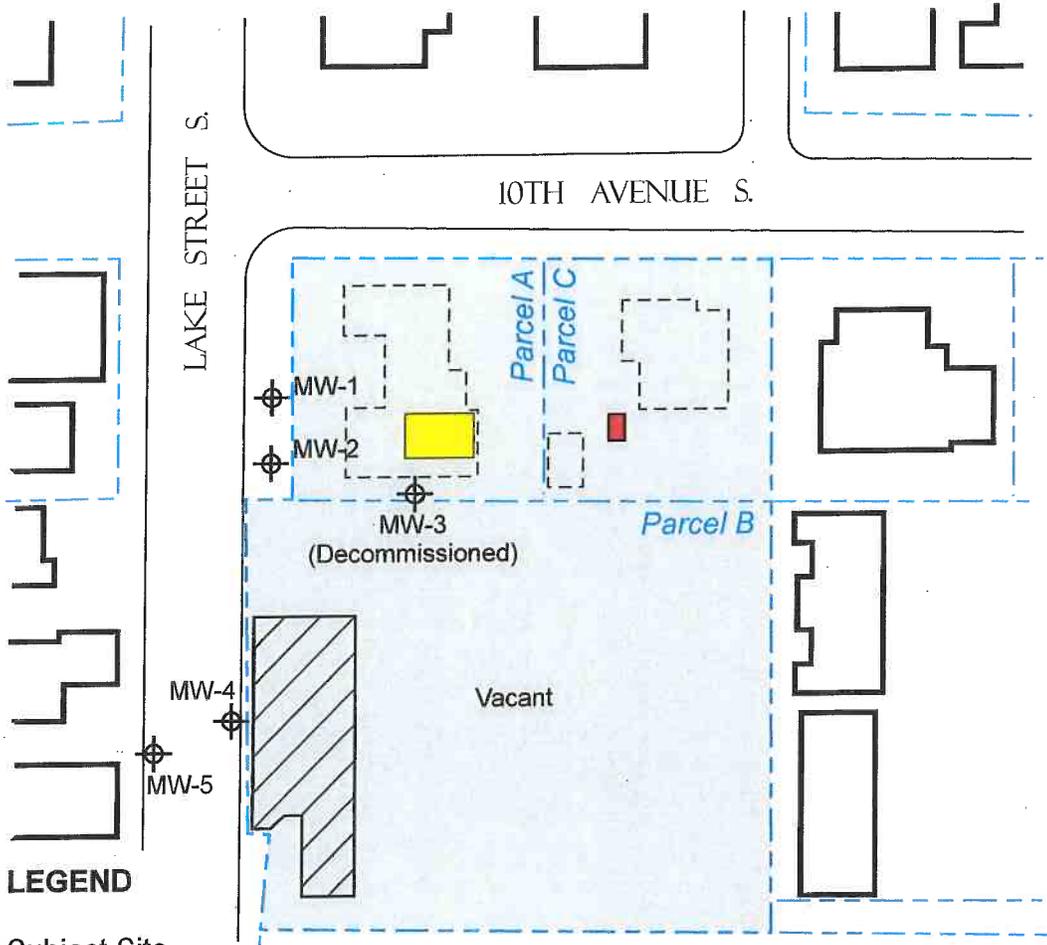




Earth Solutions NW LLC
Geotechnical Engineering, Construction Monitoring
and Environmental Sciences

Soil Sample Location Plan
Former Dry Cleaner Excavation - Potala Village
Kirkland, Washington

Drwn. GLS	Date 05/13/2014	Proj. No. 2880.05 & 07
Checked TWS	Date May 2014	Plate 3



LEGEND

-  Subject Site
-  Former Building Location (Demolished)
-  Former Dry Cleaner Excavation Area
-  Former Heating Fuel UST Excavation Area
-  Former Gasoline Service Station Excavation Area
-  Groundwater Monitoring Well Location

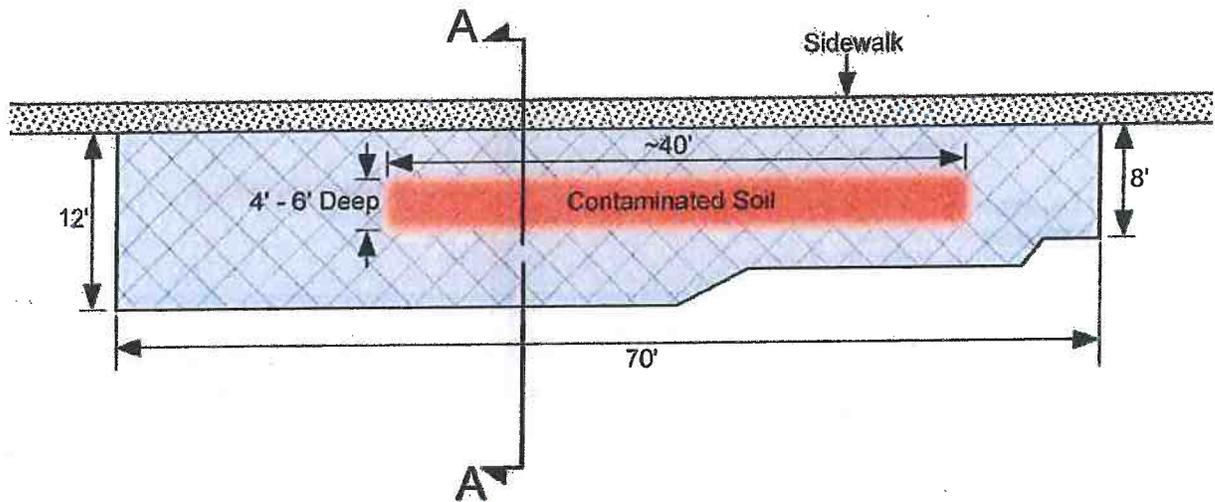
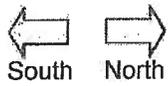


Not - To - Scale

NOTE: The graphics shown on this plate are not intended for design purposes or precise scale measurements, but only to illustrate the approximate test locations relative to the approximate locations of existing and / or proposed site features. The information illustrated is largely based on data provided by the client at the time of our study. ESNW cannot be responsible for subsequent design changes or interpretation of the data by others.

NOTE: This plate may contain areas of color. ESNW cannot be responsible for any subsequent misinterpretation of the information resulting from black & white reproductions of this plate.

	Earth Solutions NW LLC Geotechnical Engineering, Construction Monitoring and Environmental Sciences	
	Site Plan / Well Location Plan Potala Village Kirkland, Washington	
Drwn. MRS	Date 10/07/2016	Proj. No. 2880.10
Checked TWS	Date Oct. 2016	Plate 2



LEGEND

-  Limits of Excavation
-  Limits of Clay Membrane Panels and HDPE "Sheet Drain" for Vapor Dissipation
-  Contaminated Soil



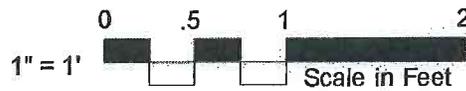
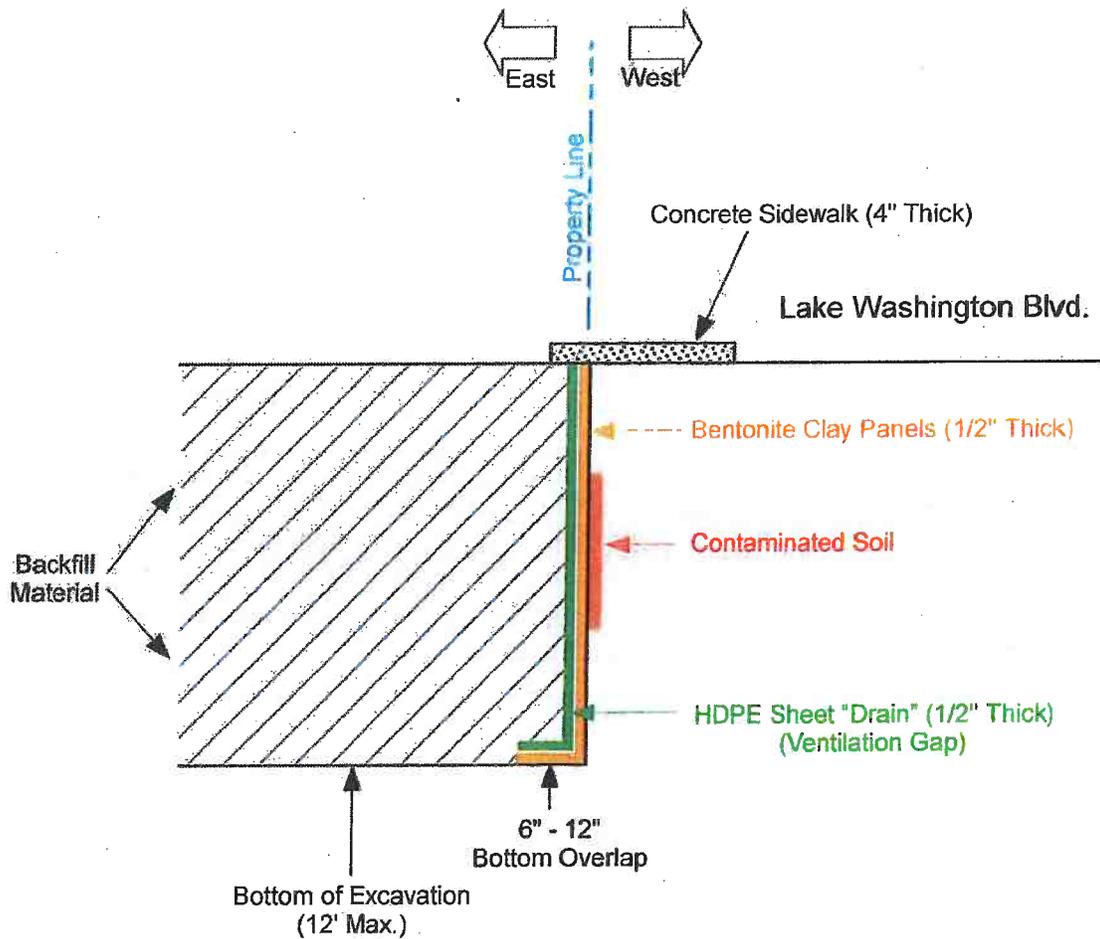
Earth Solutions NW LLC

Solutions NW LLC

Engineering Construction Monitoring
Environmental Sciences

**Cross Section of West Excavation Sidewall
Potlatch Village
Kirkland, Washington**

Drwn. GLS	Date 11/14/2014	Proj. No. 2880.07
Checked TWS	Date Nov. 2014	Plate 1

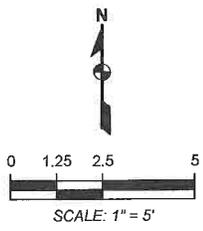
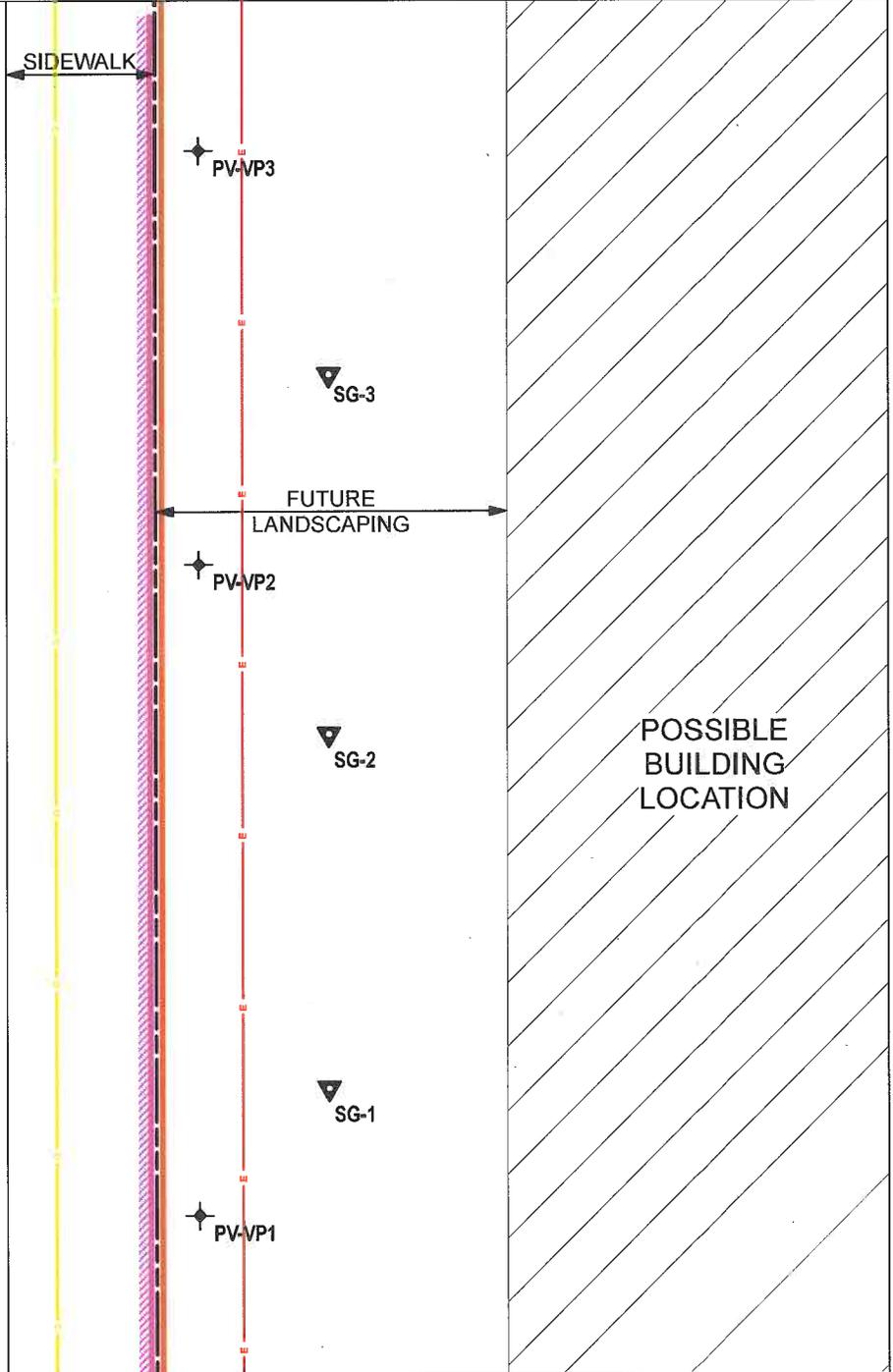


	Solutions NW LLC <small>Investigating, Construction Monitoring and Environmental Sciences</small>	
	<p>Cross Section A of West Excavation Sidewall Potala Village Kirkland, Washington</p>	

Cross Section A of West Excavation Sidewall
 Potala Village
 Kirkland, Washington

Drwn. GLS	Date 11/17/2014	Proj. No. 2880.07
Checked TWS	Date Nov. 2014	Plate 2

LAKE WASHINGTON BLVD



NOTES:

	APPROXIMATE SUBJECT PROPERTY BOUNDARY
	UNDERGROUND NATURAL GAS
	UNDERGROUND ELECTRIC
	AREA OF RESIDUAL PETROLEUM SOIL IMPACTS
	VOLCLAY-BENTONITE PANAL
	PROPOSED PERMANENT SOIL GAS PROBE LOCATION
	VAPOR PROBE LOCATION

FIGURE 3 PROPOSED LOCATIONS FOR PERMANENT SOIL VAPOR WELLS			
PREPARED BY ENVIRONMENTAL PARTNERS INC			
REPORT	CONFIRMATION MONITORING PLAN - SOIL VAPOR SAMPLING		
LOCATION	POTOLA VILLAGE 6700 LAKE WASHINGTON BLVD, KIRKLAND, WASHINGTON		
PREPARED FOR	EARTH SOLUTIONS NW, LLC		
DATE 2/22/18	DRAWN BY CLM	REVIEWED BY ELC	PROJECT NUMBER 48111.1

Enclosure C

Environmental Covenant for Engineered Controls

After Recording Return
Original Signed Covenant to:

Heather Vick, Site Manager
Toxics Cleanup Program
Department of Ecology
Northwest Regional Office
3190 160th Ave SE
Bellevue, WA 98008

Environmental Covenant

Grantor: ASC Kirkland LLC

Grantee: State of Washington, Department of Ecology

Brief Legal Description: Ptn Sec 8 Twp 25N Rge 5E, NW Qtr SW Qtr

Tax Parcel No.: 0825059233

RECITALS

a. This document is an environmental (restrictive) covenant (hereafter "Covenant") executed pursuant to the Model Toxics Control Act ("MTCA"), chapter 70.105D RCW, and Uniform Environmental Covenants Act ("UECA"), chapter 64.70 RCW.

b. The property that is the subject of this Covenant is part or all of a site commonly known as Potala Village (Ecology Facility Site ID No. 4595; Cleanup Site ID No. 12329). The property, as designated by King County Assessor as Tax Parcel No. 0825059233, is legally described in Exhibit A, and illustrated in Exhibit B, both of which are attached (hereafter "Property"). If there are differences between these two Exhibits, the legal description in Exhibit A shall prevail.

c. The Property is the subject of remedial action conducted under MTCA. This Covenant is required because engineered controls and monitoring devices remain on the Property after completion of remedial actions and residual soil contamination remains under Lake Street South (hereafter "Right of Way"), which abuts the western boundary of the Property.

d. It is the purpose of this Covenant to restrict certain activities and uses of the Property to protect human health and the environment and the integrity of remedial actions conducted at the site. Records describing the remedial actions conducted are available through the Washington State Department of Ecology ("Ecology").

e. This Covenant grants Ecology certain rights under UECA and as specified in this Covenant. As a holder of this Covenant under UECA, Ecology has an interest in real property, however, this is not an ownership interest which equates to liability under MTCA or the Comprehensive Environmental Response, Compensation, and Liability Act, 42 U.S.C. § 9601 *et seq.* The rights of Ecology as an "agency" under UECA, other than its right as a holder, are not an interest in real property.

COVENANT

ASC Kirkland LLC, a Washington limited liability company, as Grantor and fee simple owner of the Property, hereby grants to Ecology and its successors and assignees, as Grantee, the following covenants. Furthermore, it is the intent of Grantor that such covenants shall supersede any prior interests Grantor has in the Property and run with the land and be binding on all current and future owners of any portion of, or interest in, the Property.

Section 1. General Restrictions and Requirements.

The following general restrictions and requirements shall apply to the Property:

a. Interference with Remedial Action. Grantor shall not engage in any activity on the Property that may impact or interfere with the remedial action and any operation, maintenance, inspection or monitoring of that remedial action without prior written approval from Ecology.

b. Protection of Human Health and the Environment. Grantor shall not engage in any activity on the Property that may threaten continued protection of human health or the environment without prior written approval from Ecology.

c. Continued Compliance Required. Grantor shall not convey any interest in any portion of the Property without providing for the continued adequate and complete operation, maintenance and monitoring of remedial actions and continued compliance with this Covenant.

d. Leases. Grantor shall restrict any lease for any portion of the Property to uses and activities consistent with this Covenant and notify all lessees of the restrictions on the use of the Property.

e. Preservation of Reference Monuments. Grantor shall make a good faith effort to preserve any reference monuments and boundary markers used to define the areal extent of coverage of this Covenant. Should a monument or marker be damaged or destroyed, Grantor shall have it replaced by a licensed professional surveyor within thirty (30) days after discovery of the damage or destruction.

Section 2. Specific Prohibitions and Requirements.

In addition to the general restrictions in Section 1 of this Covenant, the following additional specific restrictions and requirements shall apply to the Property.

a. Containment of Soil. The remedial action for the Property is based on containing contaminated soil in the Right of Way, behind a barrier and vapor shield consisting of a 0.5-inch thick Volclay bentonite panel located as illustrated in Exhibit C. The barrier and vapor shield is equipped with a high-density polyethylene sheet drain for ventilation. An approximately 4-inch thick concrete sidewalk acts as a cap over the top of the barrier and vapor shield. The primary purpose of the barrier and vapor shield is to prevent contaminated soil that remains in the Right of Way from recontaminating the Property and to prevent harmful vapors associated with the contaminated soil from migrating onto the Property. As such, the following restrictions apply within the "Restricted Area" of the Property, as illustrated in Exhibit C:

i. Any activity that will compromise the integrity of the remedial action components at the Property (i.e., the barrier and vapor shield, soil gas probes (see Section 2(c) below), and portion of the sidewalk within the Restricted Area) is prohibited without prior written approval by Ecology. Such activities include: drilling; digging; piercing the remedial action

components with any sampling device, post, stake or similar device; grading; excavation; installation of underground utilities; removal of the remedial action components; or, application of loads in excess of the bearing capacity of the remedial action components.

ii. Grantor shall report to Ecology within forty-eight (48) hours of the discovery of any damage to the remedial action components at the Property. Unless an alternative plan has been approved by Ecology in writing, Grantor shall promptly repair the damage and submit a report documenting this work to Ecology within thirty (30) days of completing the repairs.

b. Vapor Controls. The residual soil contamination in the Right of Way includes volatile chemicals that may generate harmful vapors. As such, the following restrictions shall apply within the Restricted Area of the Property to minimize the potential for exposure to these vapors:

i. No building or other enclosed structure shall be constructed within the Restricted Area unless approved by Ecology.

ii. If a building or other enclosed structure is approved, it shall be constructed with a sealed foundation with a vapor barrier and a vapor control system that is operated and maintained to prevent the migration of vapors into the building or structure, unless an alternative approach is approved by Ecology.

c. Monitoring. A minimum of three (3) permanent soil gas probes shall be installed within the Restricted Area of the Property sited halfway between the western boundary of the Property and the foundation wall of any building constructed on the Property. The anticipated location of the soil gas probes is depicted on Exhibit C. The purpose of the soil gas probes is to monitor the effectiveness of the barrier and vapor shield in preventing harmful vapors from migrating to the Property. The soil gas probes should have 1-foot long screens set at approximately four to five feet below the ground surface (or above the water table, if encountered). Grantor shall maintain clear access to the soil gas probes and protect them from damage.

i. The soil gas probes shall be sampled once as a baseline event after installation. The samples should be analyzed for all constituents that could potentially volatilize from total petroleum hydrocarbons in the gasoline range. The results of the baseline sampling event should be sent to Ecology.

ii. After installation, the soil gas probes shall be sampled once every five years and the data provided to Ecology for periodic review. The analysis shall be the same as for the baseline sampling described above.

iii. Any building constructed on the Property will include information about the soil gas probes in the building maintenance guidelines.

Section 3. Access.

a. Grantor shall maintain clear access to all remedial action components necessary to construct, operate, inspect, monitor and maintain the remedial action.

b. Grantor freely and voluntarily grants Ecology and its authorized representatives, upon reasonable notice, the right to enter the Property at reasonable times to evaluate the effectiveness of this Covenant and associated remedial actions, and enforce compliance with this Covenant and those actions, including the right to take samples, inspect any remedial actions conducted on the Property, and to inspect related records.

c. No right of access or use by a third party to any portion of the Property is conveyed by this instrument.

Section 4. Notice Requirements.

a. **Conveyance of Any Interest.** Grantor, when conveying any interest within the Restricted Area of the Property, including but not limited to title, easement, leases, and security or other interests, must:

i. Provide written notice to Ecology of the intended conveyance at least thirty (30) days in advance of the conveyance.

ii. Include in the conveying document a notice in substantially the following form, as well as a complete copy of this Covenant:

NOTICE: THIS PROPERTY IS SUBJECT TO AN ENVIRONMENTAL COVENANT GRANTED TO THE WASHINGTON STATE DEPARTMENT OF ECOLOGY ON *(INSERT DATE)* AND RECORDED WITH THE KING COUNTY AUDITOR UNDER RECORDING NUMBER *(INSERT RECORDING NUMBER)*. USES AND ACTIVITIES ON THIS PROPERTY MUST COMPLY WITH THAT COVENANT.

iii. Unless otherwise agreed to in writing by Ecology, provide Ecology with a complete copy of the executed document within thirty (30) days after the date of recording of such document.

b. **Reporting Violations.** Should Grantor become aware of any violation of this Covenant, Grantor shall promptly report such violation in writing to Ecology.

c. **Emergencies.** For any emergency or significant change in site conditions due to an unanticipated event or an acts of nature (for example, vehicular accident, flood or fire) resulting in a violation of this Covenant, Grantor is authorized to respond to such an event or act of nature in accordance with state and federal law. Grantor must notify Ecology in writing of the event or act of nature and response actions planned or taken as soon as practical but no later than within twenty four (24) hours of the discovery of the event or act of nature.

d. **Notification procedure.** Any written notice, approval, report, or other communication required by this Covenant shall be personally delivered or sent by electronic mail or first class mail to the following persons:

If to Grantor: ASC Kirkland LLC
415 – 118th Avenue SE
Bellevue, WA 98005

If to Grantee: Environmental Covenants Coordinator
Washington State Department of Ecology
Toxics Cleanup Program
P.O. Box 47600
Olympia, WA 98504 – 7600
ToxicsCleanupProgramHQ@ecy.wa.gov

Any change in the contact information for Grantor or Grantee shall be submitted in writing to all parties to this Covenant.

Section 5. Modification or Termination.

a. Grantor must provide written notice and obtain approval from Ecology at least sixty (60) days in advance of any proposed activity or use of the Property in a manner that is inconsistent with this Covenant. For any proposal that is inconsistent with this Covenant and permanently modifies an activity or use restriction at the Property:

i. Ecology must issue a public notice and provide an opportunity for the public to comment on the proposal; and

ii. If Ecology approves of the proposal, this Covenant must be amended to reflect the change before the activity or use can proceed.

b. If the conditions at the Property requiring a Covenant have changed or no longer exist, then Grantor may submit a request to Ecology that this Covenant be amended or terminated. Any amendment or termination of this Covenant must follow the procedures in MTCA and UECA and any rules promulgated under these chapters.

c. By signing this Covenant, per RCW 64.70.100, the original Grantor to this Covenant, if no longer the fee simple owner of the Property, agrees to waive all rights to sign amendments to and termination of this Covenant.

Section 6. Enforcement and Construction.

a. This Covenant is being freely and voluntarily granted by Grantor.

b. Within ten (10) days after execution of this Covenant, Grantor shall provide Ecology with an original signed Covenant and proof of recording and a copy of this Covenant and proof of recording to others required by RCW 64.70.070.

c. Ecology shall be entitled to enforce the terms of this Covenant by resort to specific performance or legal process. All remedies available in this Covenant shall be in addition to any and all remedies at law or in equity, including MTCA and UECA. Enforcement of the terms of this Covenant shall be at the discretion of Ecology, and any forbearance, delay or omission to exercise its rights under this Covenant in the event of a breach of any term of this Covenant is not a waiver by Ecology of that term or of any subsequent breach of that term, or any other term in this Covenant, or of any rights of Ecology under this Covenant.

d. Grantor shall be responsible for all costs associated with implementation of this Covenant. Furthermore, Grantor, upon request by Ecology, shall be obligated to pay for Ecology's costs to process a request for any modification or termination of this Covenant and any approval required by this Covenant.

e. This Covenant shall be liberally construed to meet the intent of MTCA and UECA.

f. The provisions of this Covenant shall be severable. If any provision in this Covenant or its application to any person or circumstance is held invalid, the remainder of this Covenant or its application to any person or circumstance is not affected and shall continue in full force and effect as though such void provision had not been contained herein.

g. A heading used at the beginning of any section or paragraph or exhibit of this Covenant may be used to aid in the interpretation of that section or paragraph or exhibit but does not override the specific requirements in that section or paragraph.

h. The undersigned warrants he/she has authority to execute this Covenant.

EXECUTED this 9 day of February, 2018.

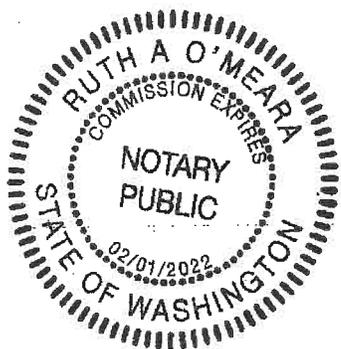
ASC KIRKLAND LLC

By: Aegis Senior Communities LLC
Title: Manager

By: _____
Printed Name: Dwayne Clark
Title: CFO/Manager

STATE OF Washington
COUNTY OF King

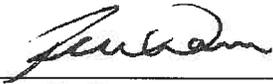
On this 9 day of February 2018, I certify that Dwayne Clark personally appeared before me, acknowledged that he/she is the Manager of Aegis Senior Communities LLC, the Washington limited liability company that executed the within and foregoing instrument on behalf of ASC Kirkland LLC, and signed said instrument by free and voluntary act and deed, for the uses and purposes therein mentioned, and on oath stated that he/she was authorized to execute said instrument for ASC Kirkland LLC.



Ruth A O'Meara
Notary Public in and for the State of Washington
Residing at Sammamish
My appointment expires 2/1/2022

Ecology hereby accepts its status as Grantee and holder of this Covenant.

STATE OF WASHINGTON
DEPARTMENT OF ECOLOGY



Robert W. Warren

Title: Regional Manager, Toxics Cleanup Program, Northwest Regional Office

Date: 2-16-18

STATE OF WASHINGTON

COUNTY OF KING

On this 16 day of February, 2018, I certify that Robert W. Warren personally appeared before me, acknowledged that he is the Regional Manager, Toxics Cleanup Program, Northwest Regional Office of the state agency that executed the within and foregoing instrument, and signed said instrument by free and voluntary act and deed, for the uses and purposes therein mentioned, and on oath stated that he was authorized to execute said instrument for said state agency.



Notary Public in and for the State of Washington

Residing at King county

My appointment expires 12-20-20

Exhibit A

LEGAL DESCRIPTION

THE WEST 200 FEET OF THE FOLLOWING DESCRIBED PROPERTY:
THAT PORTION OF THE FOLLOWING DESCRIBED PROPERTY LYING EAST OF THE
COUNTY ROAD;
BEGINNING AT A POINT 2,092 FEET NORTH OF THE SOUTHWEST CORNER OF
GOVERNMENT LOT 4 IN SECTION 8, TOWNSHIP 25 NORTH, RANGE 5 EAST,
WILLAMETTE MERIDIAN, IN KING COUNTY, WASHINGTON;
AND RUNNING THENCE DUE WEST TO AN INTERSECTION WITH THE MEANDER
LINE OF SAID SECTION 8;
THENCE RUNNING FROM SAID POINT OF INTERSECTION NORTH ALONG AND
FOLLOWING SAID MEANDER LINE 165 FEET;
THENCE RUNNING EAST 1,186 ½ FEET;
THENCE RUNNING SOUTH 165 FEET;
THENCE RUNNING WEST TO POINT OF BEGINNING;
EXCEPT ANY PORTION THEREOF LYING NORTH OF THE SOUTH LINE OF THE PLAT
OF HARRY WHITE & COMPANY'S COMMERCIAL ADDITION TO KIRKLAND
ACCORDING TO THE PLAT THEREOF, RECORDED IN VOLUME 8 OF PLATS, PAGE 16,
IN KING COUNTY, WASHINGTON;
EXCEPT ANY PORTION THEREOF LYING WITHIN LAKE STREET SOUTH (SR 908).

Exhibit B
DEPICTION OF PROPERTY

[ATTACHED]

- LEGEND**
- BOUNDARY OF PROPERTY
 - ▨ RESTRICTED AREA
 - SIDEWALK

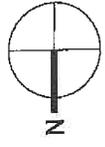
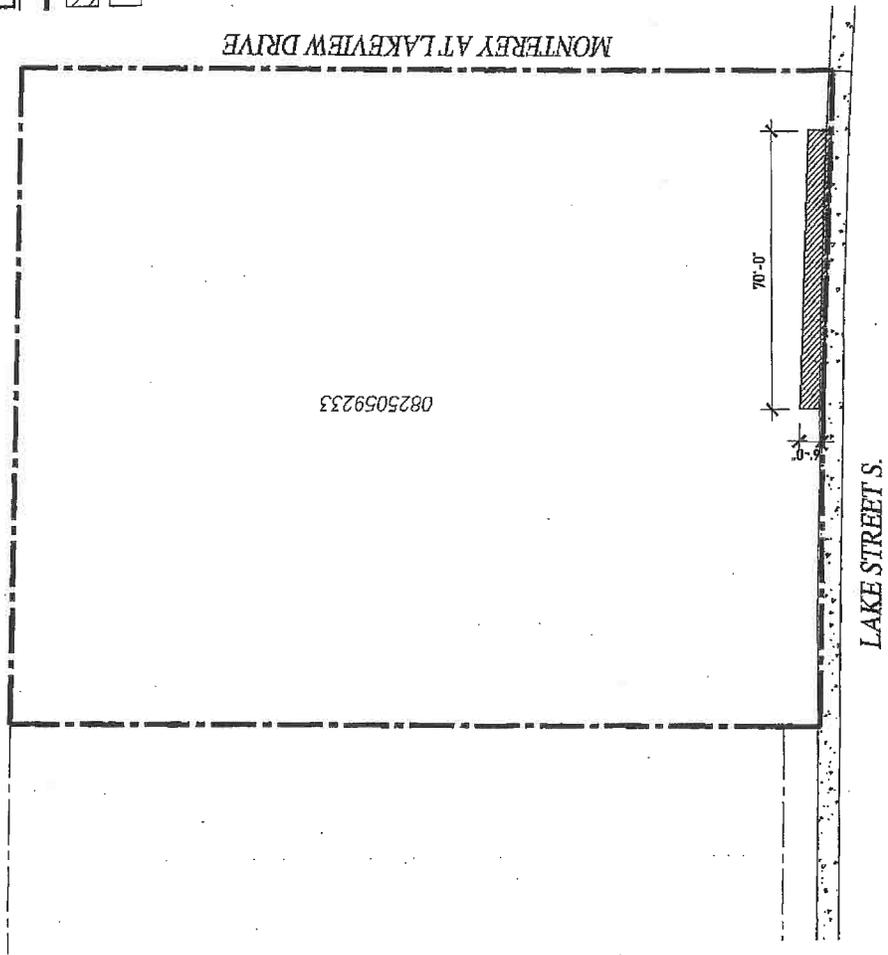


EXHIBIT B - DEPICTION OF PROPERTY
 1" = 30'-0"

Exhibit C
DEPICTION OF RESTRICTED AREA AND REMEDIAL ACTION COMPONENTS

[ATTACHED]

4845-5342-6760, v. 9

MONTEREY AT LAKEVIEW DRIVE

15'-0"

0'-9"

70'-0"

A

A

SOIL GAS PROBES

LAKE STREET S.

SHEET DRAIN
BENTONITE CLAY PANELS
SIDEWALK

LEGEND

--- BOUNDARY OF PROPERTY

▨ BENTONITE PANEL

○ SOIL GAS PROBES

▩ RESIDUAL SOIL CONTAMINATION

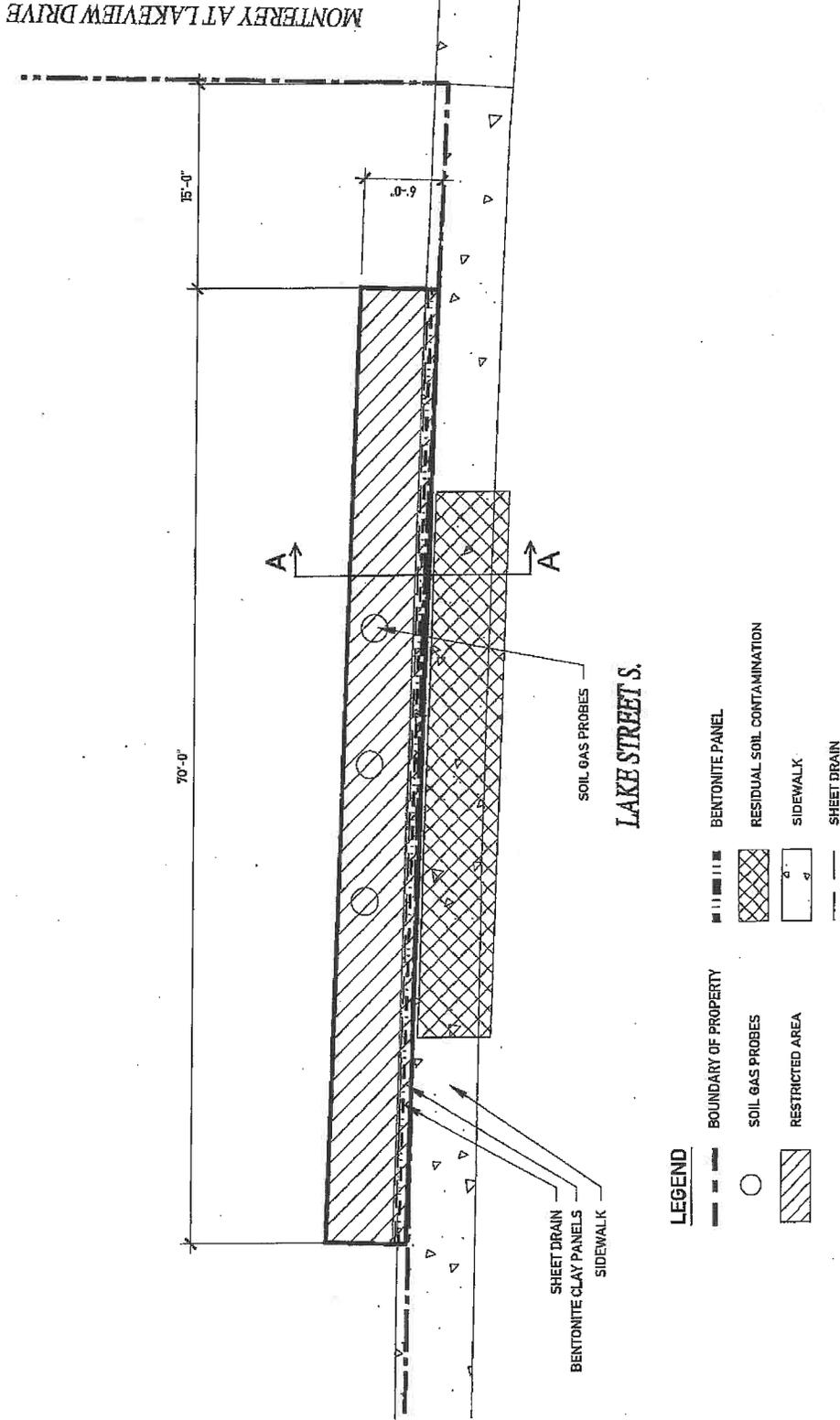
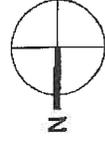
▨ RESTRICTED AREA

□ SIDEWALK

--- SHEET DRAIN

**EXHIBIT C - DEPICTION OF RESTRICTED AREA &
REMEDIAL ACTION COMPONENTS (PLAN VIEW)**

1/8" = 1' - 0"



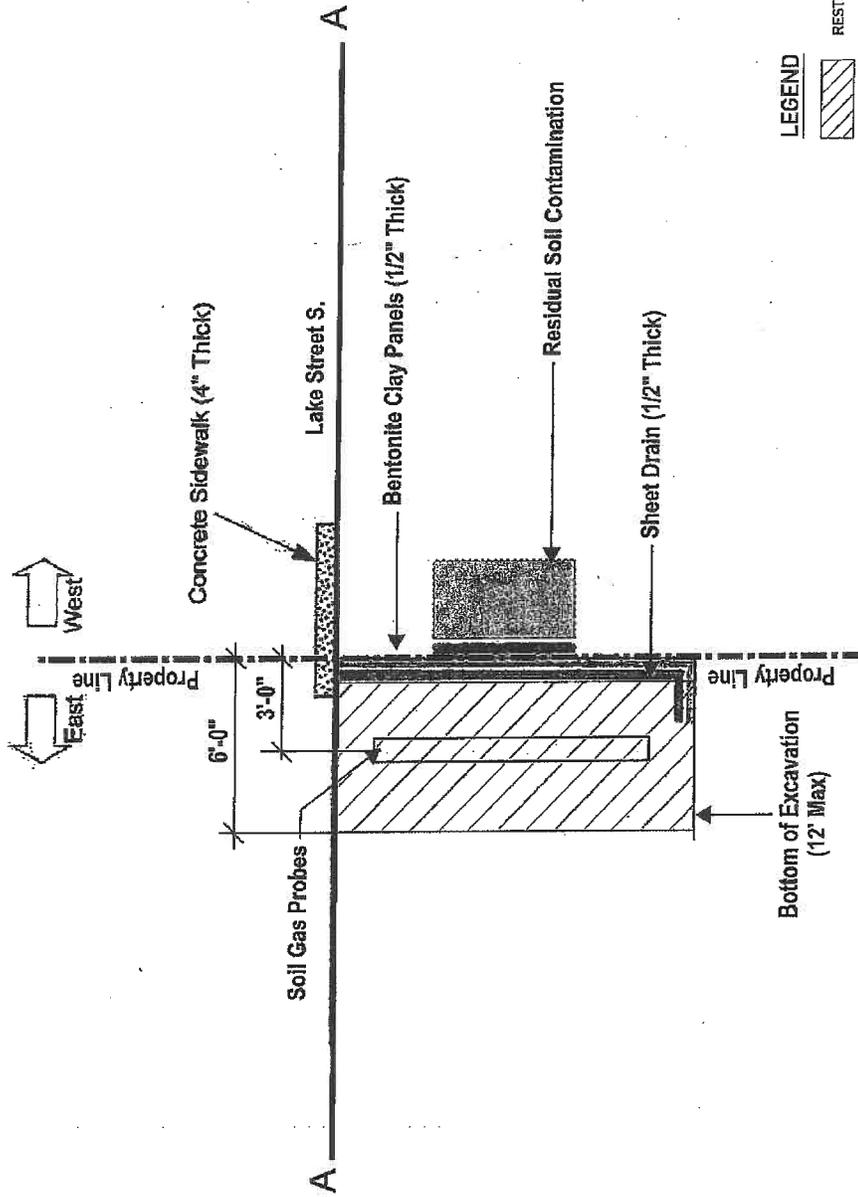


EXHIBIT C - DEPICTION OF RESTRICTED AREA & REMEDIAL ACTION COMPONENTS (CROSS SECTION VIEW)

Enclosure D

Operation and Maintenance Plan for Engineered Controls



Geotechnical Engineering
Geology
Environmental Scientists
Construction Monitoring



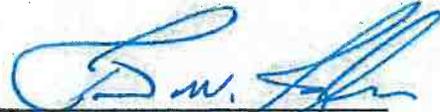
**OPERATION & MAINTENANCE PLAN
POTALA VILLAGE PROPERTY
6700 LAKE WASHINGTON BOULEVARD
KIRKLAND, WASHINGTON**

ES-2880.10

1805 - 136th Place N.E., Suite 201 - Bellevue, WA 98005
(425) 449-4704 - Fax (425) 449-4711
www.eartholutionsnw.com

PREPARED FOR
ASC KIRKLAND, LLC
C/O AEGIS SENIOR COMMUNITIES, LLC

January 15, 2018



Ted W. Sykes
Environmental Senior Project Manager



Raymond A. Coglas, P.E.
Principal Engineer

**OPERATION & MAINTENANCE PLAN
POTALA VILLAGE PROPERTY
6700 LAKE WASHINGTON BOULEVARD
KIRKLAND, WASHINGTON**

ES-2880.10

**Earth Solutions NW, LLC
1805 – 136th Place Northeast, Suite 201
Bellevue, Washington 98005
Phone: 425-449-4704 | Fax: 425-449-4711
www.earthsolutionsnw.com**

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ES-2880.10

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PLATES

- 1 Vicinity Map
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- 3 Vertical Cross-Section of Contaminated Soil Capped with Bentonite Barrier
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APPENDICES

- A Bentonite Wall Barrier Installation Specification
- B Bentonite Wall Barrier Inspection Checklist

1.0 INTRODUCTION AND BACKGROUND

Earth Solutions NW, LLC (ESNW) has prepared this Operations & Maintenance Plan (O&M Plan) on behalf of ASC Kirkland, LLC for Potala Village Property located at 6700 Lake Washington Boulevard in Kirkland, Washington (subject property). The general location of the subject property is illustrated on Plate 1 (Vicinity Map).

The subject property includes three tax parcels (King County tax parcel nos. 9354900220, 0825059233, and 9354900240) as shown on Plate 2 (Site Plan), and is comprised of approximately 52,600 square feet (1.21 acres) of land. The property addresses were formerly listed as 1006 Lake Street South, 21 Tenth Street South, and 6700 Lake Washington Boulevard, Kirkland, Washington. For the purposes of this O&M Plan, the three parcels are designated as Parcels 'A', 'B', and 'C'. See Plate 2 (Site Plan) for the locations of Parcels 'A', 'B', and 'C'.

The subject property was formerly developed with three structures prior to being demolished immediately prior to the on-set of remediation activities.

Parcel A (1006 Lake Street South) was developed with a 2,114 square foot single-story building with two commercial tenants, a restaurant and a dry cleaners. The commercial building was constructed in 1958 and was demolished in early 2014. Parcel B (6700 Lake Washington Boulevard) was formerly occupied by a gasoline service station from 1957 until the service station was demolished during the early 1970s. Subsequently, Parcel B was an asphalt paved parking lot from the early 1970s until early 2014. Parcel C (21 – Tenth Avenue South) formerly included a 2,370 square foot single-family residential home with detached garage that was constructed in 1953 and was demolished in early 2014.

During September 2013, an independent remedial action plan was developed by ESNW and implemented by Potala Village Kirkland, LLC (previous owner of the property at that time) as part of Department of Ecology's (Ecology) Voluntary Cleanup Program (VCP) in accordance with the Washington State Model Toxics Control Act (MTCA) and the requirements of WAC 173-340-350 (Remedial Investigation and Feasibility Study) and WAC 173-340-515 (Independent Remedial Actions). The VCP identity was NW2850.

The Cleanup Action Plan (CAP) developed by ESNW outlined the planned remedial actions for the removal of underground fuel storage tanks (USTs) and the removal of impacted soil and shallow perched water on site.

Between April 15, 2014 and May 2, 2014, the following cleanup activities occurred on the site:

1. The excavation and removal of two heating fuel underground storage tanks (USTs) and approximately 167 tons of heating fuel impacted soil adjacent to a former single family residential home at the northeast end of the site (21 Tenth Avenue South).
2. The excavation and removal of approximately 140 tons of tetrachloroethene (PCE) impacted soil located underneath a former dry cleaning building located at the northwest end of the site (1006 Lake Street South).
3. The excavation and removal of one waste oil UST and approximately 3,216 tons of petroleum impacted oil at the former ARCO gasoline service station at the southwest end of the site (6700 Lake Washington Boulevard).

At the conclusion of cleanup activities, several confirmatory soil samples were collected throughout each of the excavations noted above and were submitted to a State Certified laboratory for chemical analysis. Based on analytical results indicating that all confirmatory soil sample results were below Ecology's Model Toxics Cleanup Act (MTCA) Method A unrestricted soil cleanup levels, no further remedial activities took place. However, residual gasoline petroleum hydrocarbon soil contamination remains beyond the site's southwestern property boundary, fronting Lake Washington Boulevard (see Plate 2). On May 2, 2014, the sidewall along the southwest property boundary was sealed with bentonite (volclay) wall panels to prevent off-site contaminants from migrating back on-site. Groundwater monitoring from wells installed within Lake Washington Boulevard have not revealed the presence of petroleum hydrocarbons.

The MTCA Site location includes the above-referenced tax parcels as well as gasoline range petroleum soil contamination that migrated from a gasoline service station that formerly occupied the southern end of the property to underneath a portion of Lake Washington Boulevard and its adjoining sidewalk. The distance of gasoline range petroleum soil contamination underneath Lake Washington Boulevard is currently unknown, however, based on soil boring data obtained from the roadway, the contamination does not appear to cross beyond Lake Washington Boulevard.

This O&M Plan will outline prohibitions and other requirements as a result of the residual gasoline petroleum hydrocarbon soil contamination remaining beyond the site's southwestern property boundary and associated protective bentonite wall panels that shall remain in-place and not be disturbed for the duration of the property's use.

1.1 Site Location

The subject property is located southeast of the intersection between Lake Washington Boulevard and Tenth Avenue South in Kirkland, Washington. The subject property consists of three tax parcels comprising a total of approximately 52,600 square feet (1.21 acres) of land. The property addresses were formerly listed as 1006 Lake Street South, 21 Tenth Street South, and 6700 Lake Washington Boulevard, Kirkland, Washington. No building structures currently exist on the property.

Sewer and water services are provided to the site by the City of Kirkland. The surrounding land use consists primarily of multi-family apartments and single-family residential homes.

1.2 Site Geology and Hydrogeology

Based on observations during the course of soil remediation activities between April 15, 2014 and May 2, 2014, soil conditions at the subject property consisted of dense to very dense (cemented) glacial till and transitional bed silts.

Based on a December 13, 2013 Geotechnical Engineering Study report prepared for the subject property by ESNW, localized and discrete zones of groundwater seepage exist at depths of approximately 4 to 51.5 feet below the ground surface (bgs). Groundwater flow across the property is generally to the west. Throughout the westerly portions of the property where remedial activities occurred, groundwater conditions are characterized as a near surface (shallow) perched condition. This conclusion was supported by the observed dense to very dense native soils, and absence of an established groundwater table during soil remediation activities.

To further characterize the site hydrogeology where remedial activities occurred, a deep test pit was excavated in the west – central portion of the property. The test pit was excavated on May 7, 2014 (following unusually heavy March and April rainfall amounts). Very dense (and cemented) glacial till underlain by dense transitional bed silt (below 15 feet) was encountered to the maximum exploration depth of 22 feet bgs. No groundwater seepage was observed. The test excavation was left open for 30 minutes following excavation to further assess potential groundwater seepage condition. No evidence of groundwater seepage (or associated excavation instability) was observed.

Based on the above findings, shallow zones of perched groundwater seepage develop seasonally along the upper contact of the very dense till and transitional bed deposits. These shallow zones of seepage are discrete and not indicative of a regional groundwater table.

2.0 PURPOSE OF OPERATIONS & MAINTENANCE PLAN

The purpose of this document is to establish an Operations & Maintenance Plan to monitor and provide for the long-term performance of the protective bentonite wall panel system. O&M activities will generally include bentonite wall panel inspections, documentation, and reporting. Bentonite wall panel inspections will be conducted annually to assess and document the integrity of the protective barrier system.

3.0 BENTONITE WALL BARRIER SYSTEM CONSTRUCTION

All identified sources of site contamination within the subject property boundaries were successfully removed and transported off-site for treatment or disposal between April and May 2014. Residual gasoline range petroleum hydrocarbon soil contamination remains beyond the site's southwestern property boundary, fronting Lake Washington Boulevard. The likely source of the off-site contamination migrated from the former on-site gasoline service station located at the southwestern end of the property from 1957 until the gasoline service station was demolished during the early 1970s.

On May 2, 2014, the sidewall along the southwest property boundary was sealed with bentonite (volclay) wall panels and a vapor sheet drain to prevent off-site contaminants and petroleum vapors from migrating back on-site. Details concerning the make-up and installation of the bentonite panels and vapor sheet drain are presented in an April 28, 2014 design letter prepared by ESNW (see Appendix A). Plates 3 and 4 include the lateral and vertical extent of contaminated soil remaining beyond the site's southwestern property boundary and the associated bentonite (volclay) wall panels and vapor sheet drain that were installed to cap the contaminated soil.

4.0 MAINTENANCE ISSUES

Taking into account the location and construction of the bentonite wall barrier, the following are the anticipated possible maintenance issues:

4.1 Natural

Damage to the bentonite wall barrier can occur from the following natural impacts:

- Vegetation – Vegetation with deep root systems (i.e. trees) can degrade or puncture the bentonite wall barrier system and compromise its integrity.
- Earthquake – If an earthquake, major landslide, or other geotechnical event occurs that significantly moves or damages the bentonite wall barrier by differential movement of the bentonite wall layer system, and causes a breach or other significant structural damage to the wall barrier system, replacement or repairs will be required.

4.2 Anthropogenic

Damage to the bentonite wall barrier can be caused by people via the following:

- Utility installation – Penetrating through the bentonite wall barrier to connect subsurface utilities will damage the integrity of the barrier system and is therefore prohibited.
- Excavation/grading – mechanical excavation and grading equipment used on top of or immediately adjacent to the bentonite wall barrier at the site can cause damage to the barrier system and will require repairs or replacement.

Additional events or interactions at the site may adversely impact the bentonite wall barrier system. If the bentonite wall barrier and/or vapor sheet drain is damaged due to an event or interaction not discussed in this O&M Plan, action will be taken to repair or replace the bentonite wall barrier system and the damage and repairs will be noted in the annual checklist submitted to Ecology. See Section 6.0 for further details concerning the annual checklist to be submitted to Ecology.

5.0 MONITORING AND REPAIR

The following sections provide guidance for the personnel responsible for monitoring and maintaining the bentonite wall barrier system. Field personnel will gather and convey information regarding the current site conditions and functionality of the bentonite wall barrier system components to engineering staff and management for evaluation. Monitoring tasks include, but may not be limited to:

- Visual observations, with written records logged in field notebooks or on specific forms, and;
- Photo-documentation of the bentonite wall barrier conditions with a still camera or video recorder.

5.1 Monitoring Plan

The bentonite wall barrier system will be monitored once annually for five years. After five years the monitoring frequency can be re-evaluated and adjusted if Department of Ecology determines it prudent. If natural or anthropogenic events that may damage the bentonite wall barrier system occur between monitoring events, the bentonite wall barrier should be inspected for damage and repairs (or replacement) should be made if necessary.

Results of monitoring events will be recorded on the Bentonite Wall Barrier System Inspection Checklist (see Appendix B) and will be included in annual Maintenance and Repair Reports (described in Section 6.0).

Routine monitoring of the bentonite wall barrier system and surrounding areas provides information regarding the overall performance of the wall barrier components. Annual monitoring should be performed once each year.

5.2 Site Monitoring Activities

To provide for accurate and thorough site monitoring, copies of the following documents should accompany monitoring personnel during site visits:

- A copy of this document;
- Prior photographs (for site visual comparisons);
- As-built construction plans and final photographs, and;
- Prior field monitoring reports/forms.

Bentonite wall barrier monitoring observations are to be recorded on the Inspection Checklist included in Appendix B. Visual monitoring is to be performed in a manner that allows for observation of the entire area of the barrier system. A walkover pattern across the top of the bentonite wall barrier is recommended. Monitoring staff are to look for the following indications that the integrity and function of the bentonite wall barrier system may be compromised:

- Vegetation with deep root systems establishing on or immediately adjacent to the bentonite wall barrier;
- Soil excavations on top of or immediately adjacent to the bentonite wall barrier;
- Erosion or land sliding on or immediately surrounding the subject property that affects, or may eventually affect the bentonite wall barrier system, and;
- Other evidence suggesting damage to the bentonite wall barrier system.

In order to make a reasonable comparison with prior visual monitoring events, the monitoring staff shall take, at a minimum, digital photographs of the bentonite wall barrier system from the ground surface at all four sides from a distance sufficient to show the entire bentonite wall barrier system area. Photographs from previous monitoring events should be used in the field to allow for a uniform comparison of past wall barrier conditions with the current conditions.

5.3 Repair Plan

Repairs will be designed and implemented to restore the bentonite wall barrier system to proper functioning conditions immediately after initial identification. Repairs required to address a breach or other damage to the bentonite wall barrier may require that temporary measures be implemented until a more permanent remedy can be designed and constructed.

5.3.1 Soil Excavations and Erosion

The protective bentonite wall barrier capping the contaminated soil will be repaired when erosion or other disturbances (i.e. excavation or grading) penetrates the barrier or indicates a mass movement of the bentonite wall barrier material.

If the erosion/disturbance has penetrated the protective bentonite wall barrier system then sampling and analysis will be performed adjacent to the eroded/damaged area to document that contaminated material is removed during repairs and that the site has not been contaminated. The bentonite wall barrier system shall be reconstructed to its original specifications.

5.3.2 Vegetation

Plants with deep root systems must be removed from the immediate vicinity of the bentonite wall barrier system and damages to the bentonite wall barrier, if any, be repaired.

6.0 REPORTING

Reporting requirements for this O&M Plan include an annual report submitted to Ecology. This report is described in this section. Required replacement or repair activities must be reported to Ecology as soon as practicable after being noted.

Monitoring event personnel employed or otherwise retained by the current property owner shall complete the bentonite wall barrier system Inspections and associated inspection checklist (Appendix B) documenting the results of the monitoring events as prescribed in this plan, and the status of any repairs or replacement performed during the reporting period. These should be submitted to Ecology with the annual O&M reports, which should include:

- Completed Inspection Checklist;
- Photographic log of bentonite wall barrier conditions;
- Brief summary of the bentonite wall barrier inspection activities and condition of the barrier system, and;
- Description of any repairs or replacement performed.

The reports shall be submitted to Ecology on an annual basis.

Plates

ES-2880.10



Reference:
King County, Washington
Map 536
By The Thomas Guide
Rand McNally
32nd Edition



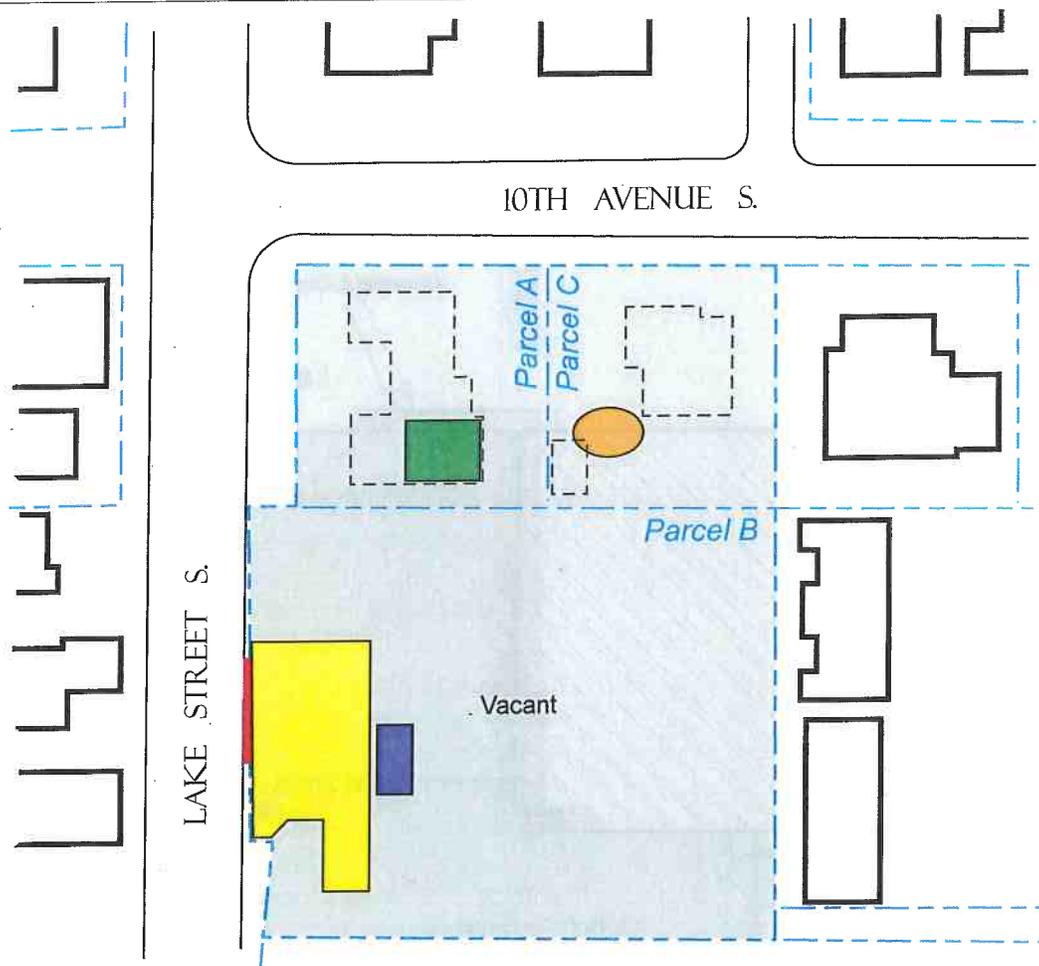


Earth Solutions NW LLC
Geotechnical Engineering, Construction Monitoring
and Environmental Sciences

Vicinity Map
Potlatch Village
Kirkland, Washington

NOTE: This plate may contain areas of color. ESNW cannot be responsible for any subsequent misinterpretation of the information resulting from black & white reproductions of this plate.

Drwn.	MRS	Date 05/10/2017	Proj. No. 2880.10
Checked	TWS	Date May 2017	Plate 1



LEGEND

-  Subject Site
-  Former Building Location (Demolished)
-  Area at property boundary where residual petroleum contamination remains

-  Area 1 - Heating Fuel UST Excavation
-  Area 2 - Waste Oil UST Excavation
-  Area 3 - Former Dry Cleaner Excavation
-  Area 4 - Former Gasoline Service Station Excavation



Not - To - Scale

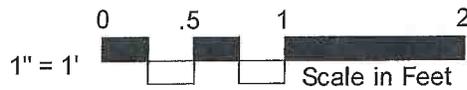
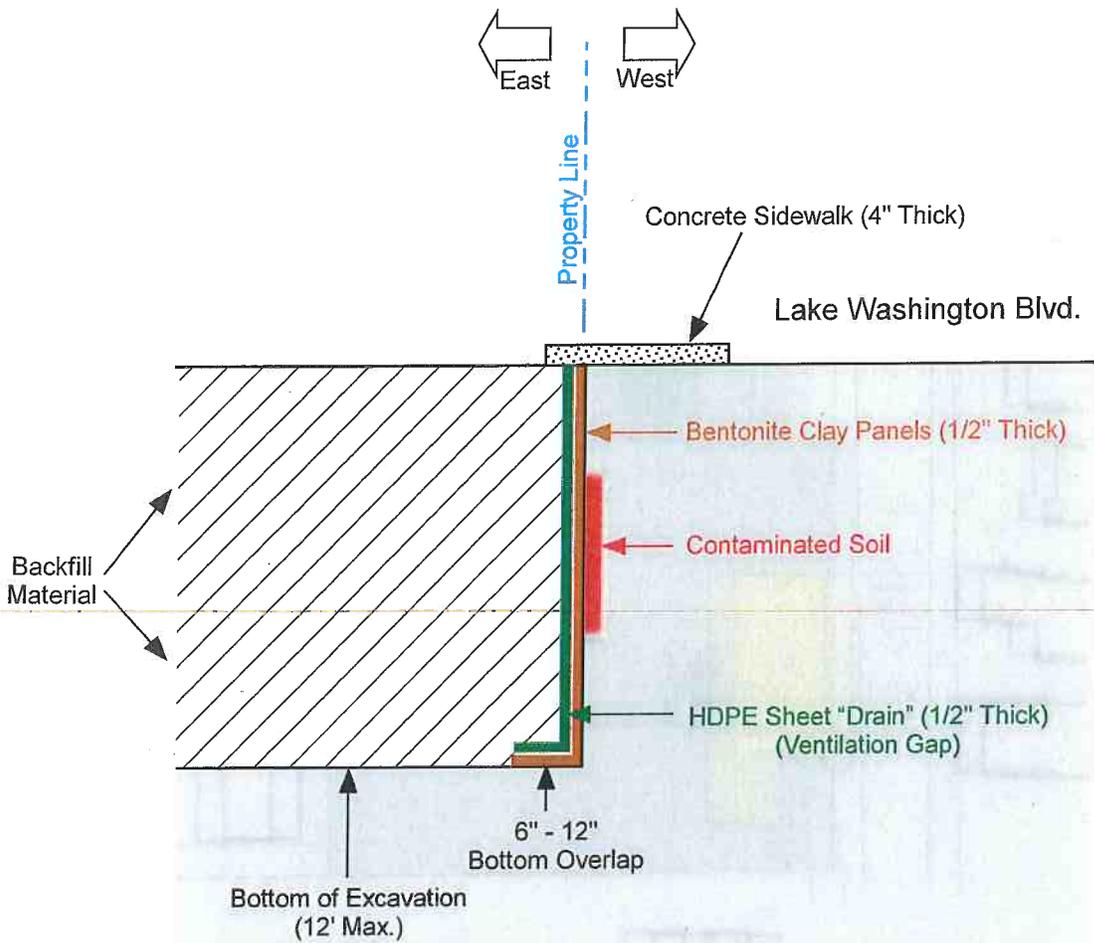


Earth Solutions NW LLC

Geotechnical Engineering, Construction Monitoring and Environmental Sciences

Site Plan
Potlatch Village
Kirkland, Washington

Drwn. MRS	Date 05/10/2017	Proj. No. 2880.10
Checked TWS	Date May 2017	Plate 2





Earth Solutions NW LLC

Geotechnical Engineering, Construction Monitoring and Environmental Sciences

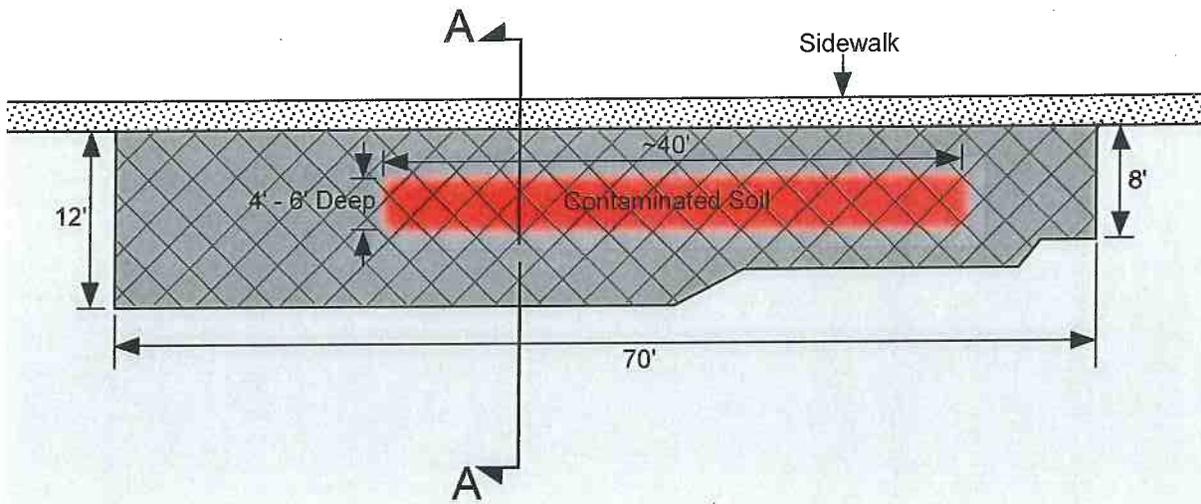
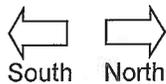
Earth Solutions NW LLC

Geotechnical Engineering, Construction Monitoring and Environmental Sciences

Vertical Cross-Section of Contaminated Soil Capped with Bentonite Barrier

Potala Village
Kirkland, Washington

Drwn. MRS	Date 05/10/2017	Proj. No. 2880.10
Checked TWS	Date May 2017	Plate 3



LEGEND

-  Limits of Excavation
-  Limits of Clay Membrane Panels and HDPE "Sheet Drain" for Vapor Dissipation
-  Contaminated Soil



Earth Solutions NW LLC

Geotechnical Engineering, Construction Monitoring and Environmental Sciences

Earth Solutions NW LLC

Geotechnical Engineering, Construction Monitoring and Environmental Sciences

Lateral Cross-Section of Contaminated Soil
Capped with Bentonite Barrier
Potala Village
Kirkland, Washington

Drwn. MRS	Date 05/10/2017	Proj. No. 2880.10
Checked TWS	Date May 2017	Plate 4

Appendix A

BENTONITE WALL BARRIER INSTALLATION SPECIFICATION

ES-2880.10



ES-2880.05
April 28, 2014

Earth Solutions NW LLC

- Geotechnical Engineering
- Construction Monitoring
- Environmental Sciences

Potala Village Kirkland, LLC
2804 Grand Avenue, Suite 308
Everett, Washington 98201

Attention: Mr. Joe Zlab

**Subject: Bentonite Barrier
Impacted Soil Removal
Potala Village
Kirkland, Washington**

Dear Mr. Zlab:

In accordance with your request, Earth Solutions NW (ESNW) has prepared this letter and recommendation for bentonite barrier installation. The ongoing removal of impacted soil associated with the prior fueling station will be accomplished up to the westerly limits of the property. Bentonite (Volclay) panels will be secured to the excavation face along the property line to improve certainty that offsite contaminants will not migrate onsite and impact the areas of restored soil. The attached detail (Plate 1) illustrates bentonite (Volclay) panel installation. Impacted soil exhibiting high concentrations of contaminant will necessitate installation of sheet drain strips to facilitate venting of vapors. ESNW will evaluate the need for venting strips based on confirmation testing of the excavation sidewalls.

We trust this letter and recommendation for bentonite barrier installation meet your current needs. If you have any questions, or if additional information is required, please call.

Sincerely,

EARTH SOLUTIONS NW, LLC



Raymond A. Coglas, P.E.
Principal

Attachment: Plate 1 – "Impermeable Membrane At Slot Cuts"

Appendix B

BENTONITE WALL BARRIER INSPECTION CHECKLIST

ES-2880.10

Potala Village Property

Bentonite Wall Barrier System Inspection Checklist

DATE OF INSPECTION:	INSPECTED BY:
TIME ARRIVED AT SITE:	TIME DEPARTED SITE:
CURRENT WEATHER:	TEMPERATURE:

ITEM	YES	NO	REMARKS
Visual evidence of damage to the bentonite wall barrier system?			
Visual evidence of damage to the sidewalk above bentonite wall barrier?			
Any work activities occur that penetrated or may have penetrated the bentonite wall barrier system?			
Trees or other plants with deep root systems beginning to root on top of or immediately adjacent to the bentonite wall barrier?			
Bentonite Wall Barrier exposed, not covered with soil?			
Visual evidence of land sliding in the vicinity of the bentonite wall barrier?			
Other?			
Other?			
Other?			
Describe other site observations or repairs made to cap area in the space below.			

Distribution

ES-2880.10

EMAIL ONLY

**ASC Kirkland, LLC
c/o Aegis Senior Communities, LLC
415 – 118th Avenue Southeast
Bellevue, Washington 98005**

Attention: Mr. Walter Braun

Enclosure E

Confirmational Monitoring Plan

January 22, 2018

Mr. Walter Braun
Aegis Living
415 118th Avenue Southeast
Bellevue, Washington 98005

Re: Confirmation Monitoring Plan for Soil Vapor Sampling
Aegis Kirkland (Formerly Potala Village)
6700 Lake Washington Boulevard
Kirkland, Washington 98033
Ecology VCP No. NW2850

Dear Mr. Braun:

Environmental Partners, Inc. (EPI) is pleased to present this Confirmation Monitoring Plan (CMP) for the former Potala Village property located at 6700 Lake Washington Boulevard, in Kirkland, Washington (Property). The location of the Property is identified on Figure 1, General Vicinity Map. EPI understands that ASC Kirkland, LLC, recently purchased the Property and plans to redevelop the Property as a senior living community.

INTRODUCTION

This CMP has been requested by Aegis Living in support of complying with the requirements of the Model Toxics Control Act (RCW 70.105D) and its implementing regulations (WAC 173-340; collectively "MTCA"). The Washington State Department of Ecology (Ecology) has requested this CMP as part of an Environmental Covenant to accompany a No Further Action Determination (NFA) through Ecology's Volunteer Cleanup Program (VCP) for residual petroleum impacts remaining in the soil under the City of Kirkland Right-Of-Way located beyond the southwestern Property boundary. All buildings have been demolished and the Property is currently vacant land with gravel cover. The general area of remaining soil impacts is shown on the Site Representation in Figure 2.

Petroleum impacted soil was identified during the removal of the underground storage tanks (USTs) associated with the former Arco Service Station located on the Property. Earth Solutions Northwest (ESNW) conducted remedial actions and removed the soil impacted with petroleum contaminants concentrations greater than the MTCA Method A Soil Cleanup Levels for Unrestricted Land Use (CULs). The results of confirmational soil sampling indicated gasoline-range organics (GRO) greater than the MTCA Method A CULs remained in the soils below and west of the sidewalk in the City of Kirkland Right-of-Way. ESNW constructed an impermeable Volclay bentonite panel along the southwestern property boundary to prevent vapors from migrating onto the Property from the City of Kirkland Right-Of-Way. The residual soil impacts are located at an approximate depth of 4-6 feet, and

a horizontal distance of approximately 40 feet along the Property boundary. The approximate location of the residual soil impacts and the Volclay panel is shown on Figure 3. ESNW's remedial actions are documented in their Cleanup Action Report dated May 16, 2014.

As part of the requirements of the Environmental Covenant, Ecology has required the preparation of this CMP for the installation and sampling of three permanent soil vapor probes, and periodic vapor sampling of the wells every five years.

Soil Vapor Well Installation

The three permanent soil vapor wells will be installed by a Washington State licensed well drilling company using a direct-push technology (DPT) drilling rig. The wells will be placed along the southwestern property boundary, east of the remaining residual impacts located in the City of Kirkland Right-Of-Way as shown on Figure 3. The wells will be placed half way between the existing Volclay wall panels and the concrete wall of the structure when it is constructed. The final location of the wells will be dependent on actual site conditions at the time of drilling as well as the location of subsurface utilities and the proposed building walls and footings. The vapor wells will be placed at locations that are accessible, yet protected from damage.

Three soil borings will be advanced to a maximum depth of five feet. Each vapor well will consist of one-foot of machine slotted, 0.010 slot $\frac{3}{4}$ -inch Schedule 40 PVC screen placed at a depth of 4 to 5 feet below the ground surface. A fitted end cap will be placed on the bottom of the screened interval. The top four feet of the well will consist of $\frac{3}{4}$ -inch blank Schedule 40 PVC and will be fitted with a hose barb or similar connection for the vapor sample tubing. A silica sand pack will be placed from the bottom of the well to the top of the screened interval. The remaining portion will be filled and sealed with hydrated bentonite chips. A 12-inch diameter layer of quick grout will be placed around the surface of the well to provide a seal to prevent ambient air from entering the well through the ground surface. The vapor wells will be set within a 12-inch flush-mount metal vault.

Initial Soil Vapor Sampling

An initial vapor sample (baseline sample) will be collected after well installation. Each well will be allowed to equilibrate for at least 30 minutes after construction. Prior to sample collection, the wells will be purged of three well volumes utilizing a peristaltic pump and a 6-Liter Tedlar bag. After purging, the wells will be connected to a three liter Summa canister equipped with a 30-minute sampling regulator. The tubing and valve system will be checked for leaks using the shut-in testing procedure.

After sample collection, sample containers will be labeled and transported under chain-of-custody procedures to a Washington State Certified laboratory for analysis of benzene, toluene, and total xylenes (BTEX) using EPA Method TO-15, and for gasoline-range organics (GRO) using EPA Method APH.

Prior to commencing any field activities, a site-specific Health and Safety Plan (HASP) will be prepared as required by the Code of Federal Regulations (CFR) Title 29 1910.120 and by the Washington State Department of Labor and Industries. The HASP is a document that establishes site objectives,

anticipates job hazards, provides implementation of a hazard communication and injuries/illness prevention program, and establishes policies and procedures to be followed in both routine and emergency situations.

Prior to drilling, the Washington One Call Service will be contacted to identify publicly-owned subsurface utilities at the Property. The notification will be initiated a minimum of 3 business days prior to scheduled field activities. In addition, a private utility locator will be used to clear each sampling location prior to advancing borings.

Any investigation-derived waste (IDW) in the form of soil cuttings and decontamination water generated during the installation of the wells will be disposed of as non-hazardous waste. The soil vapor wells will be placed within clean, imported backfill. As a precaution, drill cuttings will be screened with a Photo-ionization Detector (PID).

Periodic Soil Vapor Sampling

Soil vapor samples will be collected from the soil vapor wells every five years, with the first five year sampling event occurring five years after the collection of the baseline samples. Sampling and purging procedures will be the same as described above for the baseline samples. Sample analysis will be the same as described above.

Prior to sampling, each well will be inspected for cracks or visual damage. The wells will be repaired prior to sampling if damage is observed.

Reporting

A report documenting the well installation and baseline sampling results will be submitted to Ecology within 30 days of receipt of final analytical results. The report will include vapor sampling procedures, as-built well diagrams, actual well locations in relation to Property structures, and final laboratory reports. Any deviations from this CMP will also be discussed.

The five-year periodic sampling reports will be submitted within 30 days of receipt of final laboratory reports.

If damage to the well vaults or wells are discovered, the damage will be reported to Ecology within forty-eight (48) hours of discovery. Unless an alternative plan has been approved by Ecology in writing, the damage will be promptly repaired, and a report documenting the repairs will be submitted to Ecology within thirty (30) days of completing the repairs.

Mr. Walter Braun, Aegis Living
Confirmational Monitoring Plan for Soil Vapor Sampling
Aegis Kirkland, 6700 Washington Blvd., Kirkland, Washington
January 22, 2018

If you have any questions, please contact me at any time.

Sincerely,



Eric L. Caddey, L.G.
Senior Geologist

FIGURES

Figure 1 – General Vicinity Map

Figure 2 – Site Representation

Figure 3 – Proposed Locations for Permanent Soil Vapor Wells

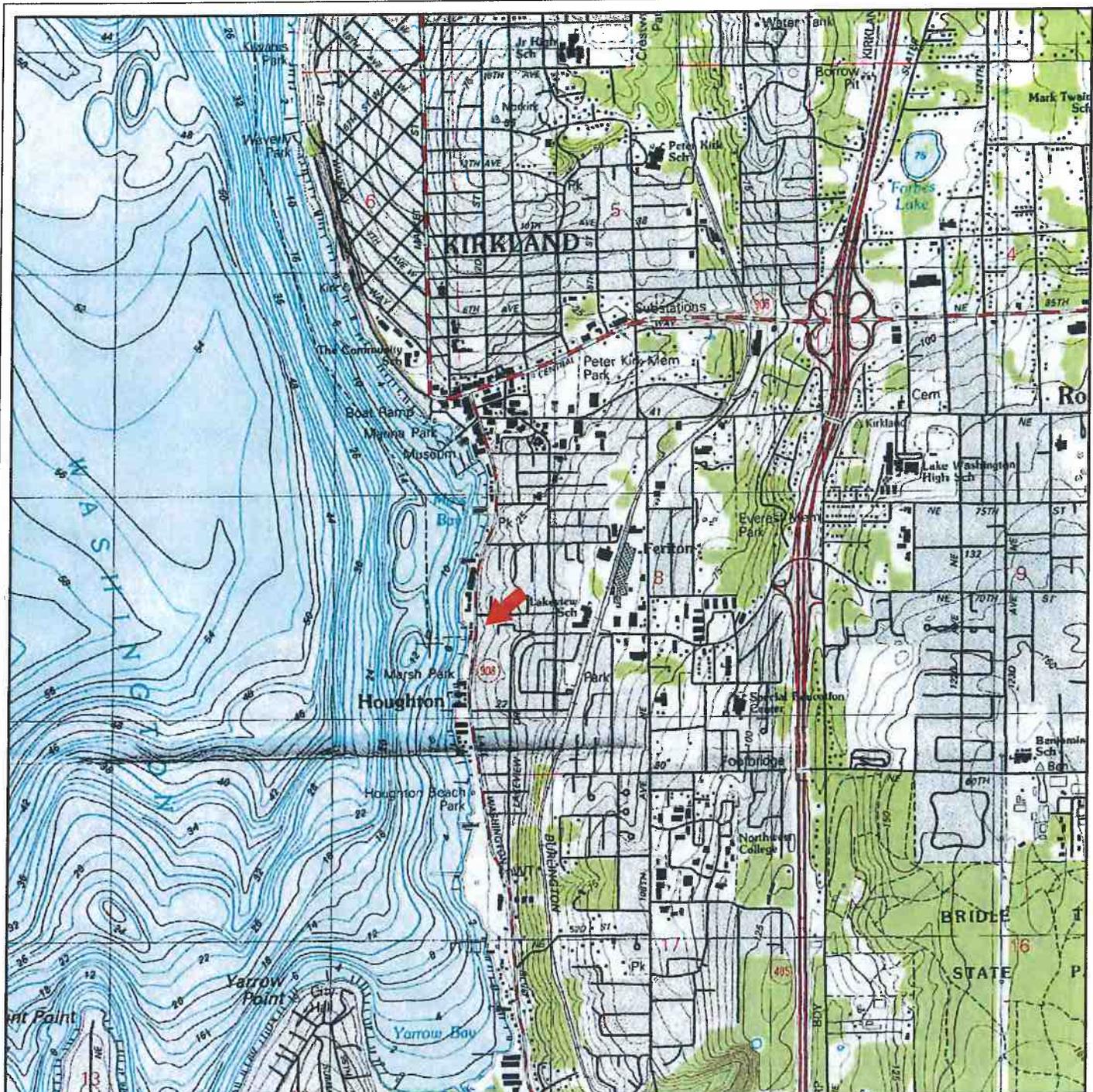


FIGURE 1
GENERAL VICINITY MAP

NOTES:
 SOURCE: USGS 7.5 MINUTE QUADRANGLE
 (TOPOGRAPHIC)
 BELLEVUE NORTH, WA
 1977
 REVISED 1982

SCALE = 1:25,000

PREPARED BY			
REPORT	CONFIRMATION MONITORING PLAN - SOIL VAPOR SAMPLING		
LOCATION	POTALA VILLAGE 6700 LAKE WASHINGTON BLVD, KIRKLAND, WASHINGTON		
PREPARED FOR	EARTH SOLUTIONS NW, LLC		
DATE	DRAWN BY	REVIEWED BY	PROJECT NUMBER
5/15/17	CLM	ELC	48111.1



10TH AVENUE SOUTH

LAKE WASHINGTON BLVD

FORMER ARCO STATION

PRIVATE ALLEY

FIGURE 2
SITE REPRESENTATION

NOTES:

- APPROXIMATE SUBJECT PROPERTY BOUNDARY
- APPROXIMATE PARCEL BOUNDARY
- AREA OF RESIDUAL PETROLEUM SOIL IMPACTS
- VOLCLAY-BENTONITE PANAL

AERIAL SOURCE: GOOGLE EARTH (6/28/2016)
PARCELS INTERPRETED FROM KING COUNTY WASHINGTON GIS DATA

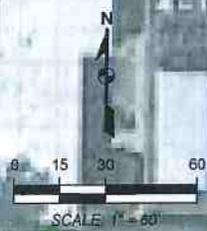
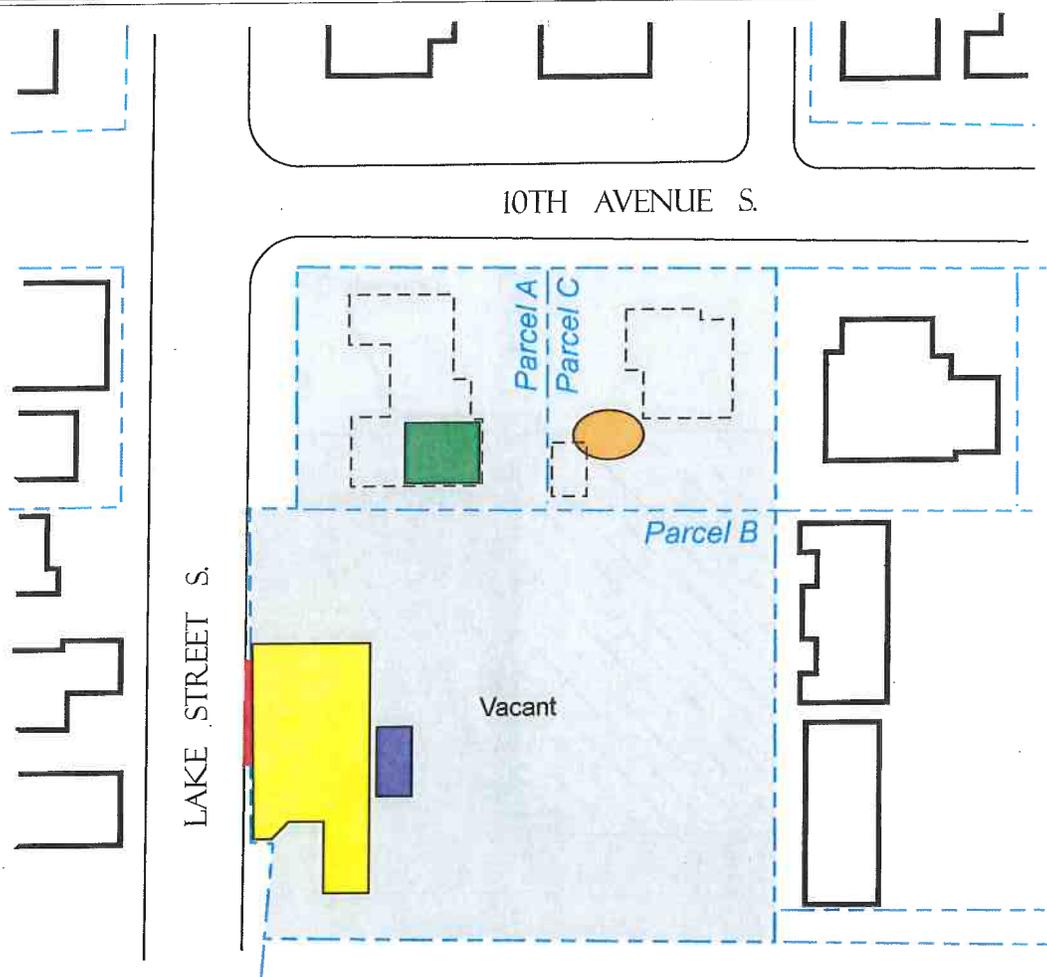


FIGURE 2			
SITE REPRESENTATION			
PREPARED BY	 ENVIRONMENTAL PARTNERS INC		
REPORT	CONFIRMATION MONITORING PLAN - SOIL VAPOR SAMPLING		
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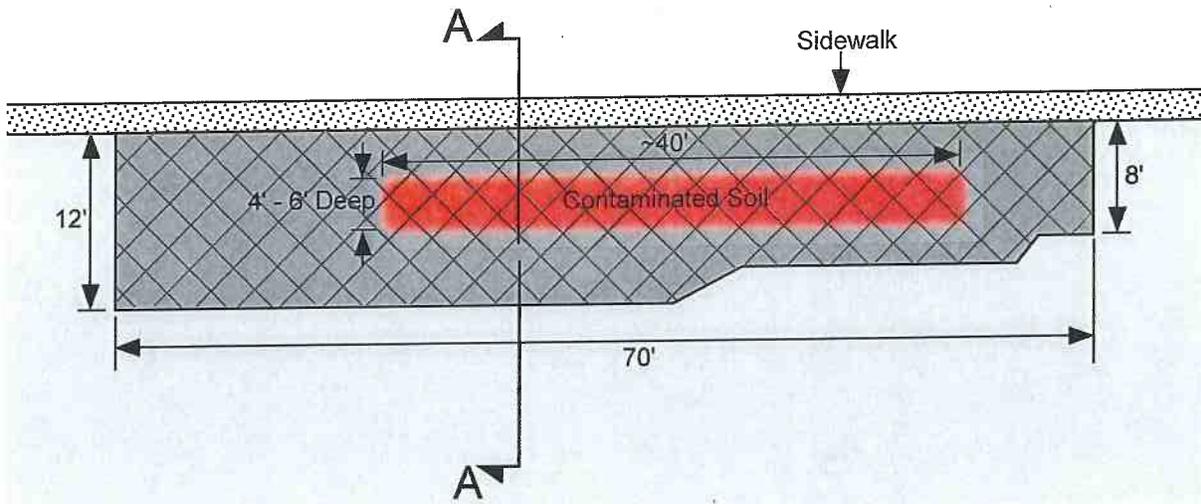
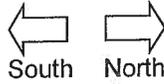
LEGEND

-  Subject Site
-  Former Building Location (Demolished)
-  Area at property boundary where residual petroleum contamination remains
-  Area 1 - Heating Fuel UST Excavation
-  Area 2 - Waste Oil UST Excavation
-  Area 3 - Former Dry Cleaner Excavation
-  Area 4 - Former Gasoline Service Station Excavation



Not - To - Scale

		Earth Solutions NW LLC Geotechnical Engineering, Construction Monitoring and Environmental Sciences	
Site Plan Potala Village Kirkland, Washington			
Drwn. MRS	Date 05/10/2017	Proj. No. 2880.10	
Checked TWS	Date May 2017	Plate	2



LEGEND

-  Limits of Excavation
-  Limits of Clay Membrane Panels and HDPE "Sheet Drain" for Vapor Dissipation
-  Contaminated Soil



Earth Solutions NW LLC

Earth Solutions NW LLC

Geotechnical Engineering, Construction Monitoring and Environmental Sciences

Lateral Cross-Section of Contaminated Soil
Capped with Bentonite Barrier
Potala Village
Kirkland, Washington

Drwn. MRS	Date 05/10/2017	Proj. No. 2880.10
Checked TWS	Date May 2017	Plate 4



ES-2880.05
April 28, 2014

Earth Solutions NW LLC

- Geotechnical Engineering
- Construction Monitoring
- Environmental Sciences

Potala Village Kirkland, LLC
2804 Grand Avenue, Suite 308
Everett, Washington 98201

Attention: Mr. Joe Zlab

**Subject: Bentonite Barrier
Impacted Soil Removal
Potala Village
Kirkland, Washington**

Dear Mr. Zlab:

In accordance with your request, Earth Solutions NW (ESNW) has prepared this letter and recommendation for bentonite barrier installation. The ongoing removal of impacted soil associated with the prior fueling station will be accomplished up to the westerly limits of the property. Bentonite (Volclay) panels will be secured to the excavation face along the property line to improve certainty that offsite contaminants will not migrate onsite and impact the areas of restored soil. The attached detail (Plate 1) illustrates bentonite (Volclay) panel installation. Impacted soil exhibiting high concentrations of contaminant will necessitate installation of sheet drain strips to facilitate venting of vapors. ESNW will evaluate the need for venting strips based on confirmation testing of the excavation sidewalls.

We trust this letter and recommendation for bentonite barrier installation meet your current needs. If you have any questions, or if additional information is required, please call.

Sincerely,

EARTH SOLUTIONS NW, LLC



Raymond A. Coglas, P.E.
Principal

Attachment: Plate 1 – "Impermeable Membrane At Slot Cuts"

Potala Village Property

Bentonite Wall Barrier System Inspection Checklist

DATE OF INSPECTION:	INSPECTED BY:
TIME ARRIVED AT SITE:	TIME DEPARTED SITE:
CURRENT WEATHER:	TEMPERATURE:

ITEM	YES	NO	REMARKS
Visual evidence of damage to the bentonite wall barrier system?			
Visual evidence of damage to the sidewalk above bentonite wall barrier?			
Any work activities occur that penetrated or may have penetrated the bentonite wall barrier system?			
Trees or other plants with deep root systems beginning to root on top of or immediately adjacent to the bentonite wall barrier?			
Bentonite Wall Barrier exposed, not covered with soil?			
Visual evidence of land sliding in the vicinity of the bentonite wall barrier?			
Other?			
Other?			
Other?			

Describe other site observations or repairs made to cap area in the space below.

Enclosure E

Confirmational Monitoring Plan

January 22, 2018

Mr. Walter Braun
Aegis Living
415 118th Avenue Southeast
Bellevue, Washington 98005

Re: Confirmation Monitoring Plan for Soil Vapor Sampling
Aegis Kirkland (Formerly Potala Village)
6700 Lake Washington Boulevard
Kirkland, Washington 98033
Ecology VCP No. NW2850

Dear Mr. Braun:

Environmental Partners, Inc. (EPI) is pleased to present this Confirmation Monitoring Plan (CMP) for the former Potala Village property located at 6700 Lake Washington Boulevard, in Kirkland, Washington (Property). The location of the Property is identified on Figure 1, General Vicinity Map. EPI understands that ASC Kirkland, LLC, recently purchased the Property and plans to redevelop the Property as a senior living community.

INTRODUCTION

This CMP has been requested by Aegis Living in support of complying with the requirements of the Model Toxics Control Act (RCW 70.105D) and its implementing regulations (WAC 173-340; collectively "MTCA"). The Washington State Department of Ecology (Ecology) has requested this CMP as part of an Environmental Covenant to accompany a No Further Action Determination (NFA) through Ecology's Volunteer Cleanup Program (VCP) for residual petroleum impacts remaining in the soil under the City of Kirkland Right-Of-Way located beyond the southwestern Property boundary. All buildings have been demolished and the Property is currently vacant land with gravel cover. The general area of remaining soil impacts is shown on the Site Representation in Figure 2.

Petroleum impacted soil was identified during the removal of the underground storage tanks (USTs) associated with the former Arco Service Station located on the Property. Earth Solutions Northwest (ESNW) conducted remedial actions and removed the soil impacted with petroleum contaminants concentrations greater than the MTCA Method A Soil Cleanup Levels for Unrestricted Land Use (CULs). The results of confirmational soil sampling indicated gasoline-range organics (GRO) greater than the MTCA Method A CULs remained in the soils below and west of the sidewalk in the City of Kirkland Right-of-Way. ESNW constructed an impermeable Volclay bentonite panel along the southwestern property boundary to prevent vapors from migrating onto the Property from the City of Kirkland Right-Of-Way. The residual soil impacts are located at an approximate depth of 4-6 feet, and

Mr. Walter Braun, Aegis Living
Confirmational Monitoring Plan for Soil Vapor Sampling
Aegis Kirkland, 6700 Washington Blvd., Kirkland, Washington
January 22, 2018

anticipates job hazards, provides implementation of a hazard communication and injuries/illness prevention program, and establishes policies and procedures to be followed in both routine and emergency situations.

Prior to drilling, the Washington One Call Service will be contacted to identify publicly-owned subsurface utilities at the Property. The notification will be initiated a minimum of 3 business days prior to scheduled field activities. In addition, a private utility locator will be used to clear each sampling location prior to advancing borings.

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If damage to the well vaults or wells are discovered, the damage will be reported to Ecology within forty-eight (48) hours of discovery. Unless an alternative plan has been approved by Ecology in writing, the damage will be promptly repaired, and a report documenting the repairs will be submitted to Ecology within thirty (30) days of completing the repairs.

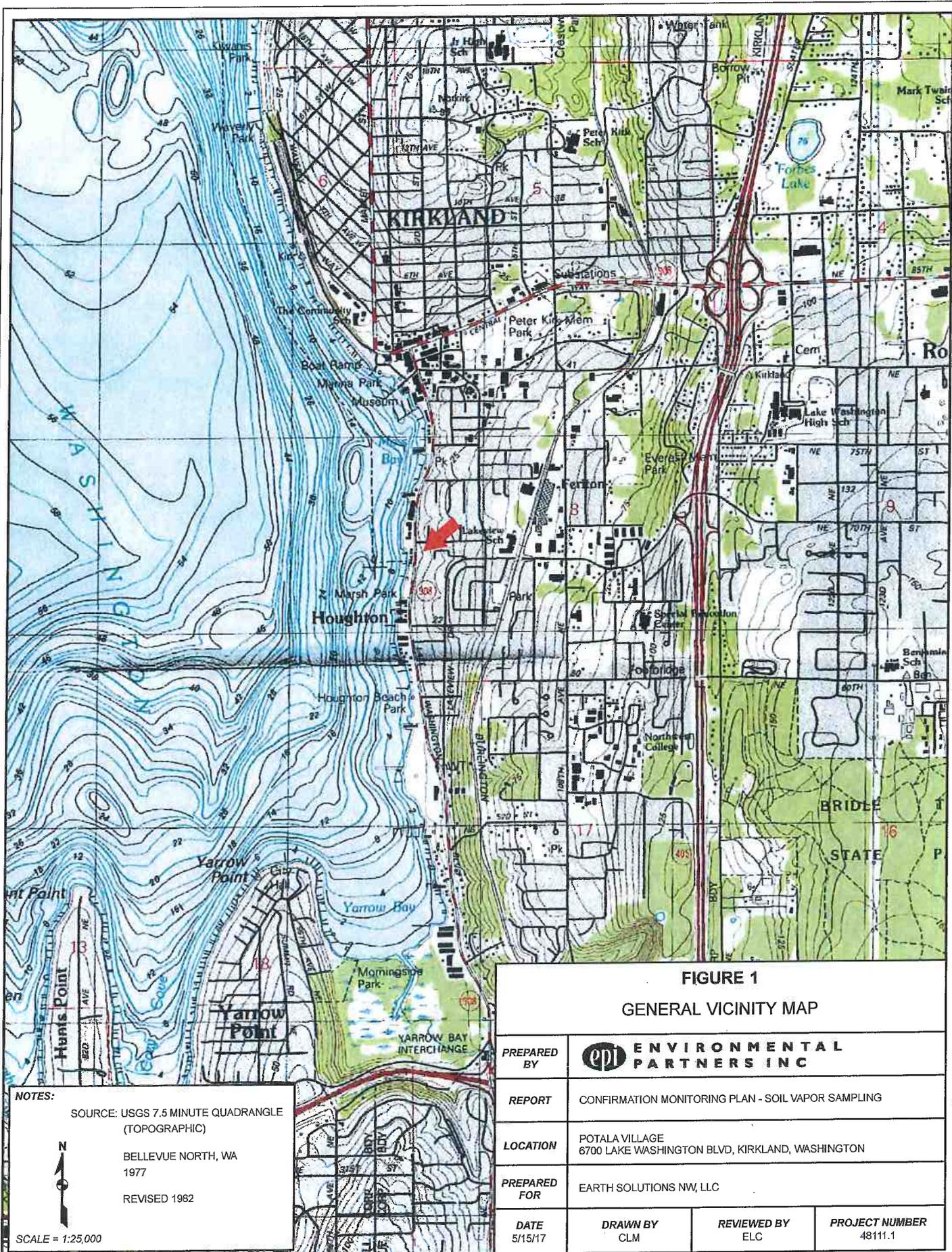


FIGURE 1
GENERAL VICINITY MAP

NOTES:
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SCALE = 1:25,000

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DATE	DRAWN BY	REVIEWED BY	PROJECT NUMBER
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LAKE WASHINGTON BLVD

SIDEWALK

SG-3

FUTURE
LANDSCAPING

SG-2

SG-1

POSSIBLE
BUILDING
LOCATION



SCALE: 1" = 5'

NOTES:

- APPROXIMATE SUBJECT PROPERTY BOUNDARY
- UNDERGROUND NATURAL GAS
- UNDERGROUND ELECTRIC
- AREA OF RESIDUAL PETROLEUM SOIL IMPACTS
- VOLCLAY-BENTONITE PANAL
- PROPOSED PERMANENT SOIL GAS PROBE LOCATION

SIDEWALK

FIGURE 3
PROPOSED LOCATIONS FOR PERMANENT
SOIL VAPOR WELLS

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