



STATE OF WASHINGTON
DEPARTMENT OF ECOLOGY

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June 19, 2013

Mr. Alan Lee
Barker Pacific
626 Wilshire Blvd #1150
Los Angeles, CA 90017

Re: No Further Action at the following Site:

- **Site Name:** Lakeshore Village Apartments
- **Site Address:** 9061 Seward Park Avenue South
- **Facility/Site No.:** 2285
- **VCP Project No.:** NW2570
- **Cleanup Site ID No.:** 2050

Dear Mr. Lee:

The Washington State Department of Ecology (Ecology) received your request for an opinion on your independent cleanup of the Lakeshore Village Apartments 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.

Issue Presented and Opinion

Is further remedial action necessary to clean up contamination at the Site?

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

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

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 Site

This opinion applies only to the Site described below. The Site is defined by the nature and extent of contamination associated with the following releases:

- Diesel and oil range petroleum hydrocarbons (DRPH, ORPH) into the soil and ground water.

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

Please note a parcel of real property can be affected by multiple sites. At this time, we have no information that the parcel(s) associated with this Site are affected by other sites.

Basis for the Opinion

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

1. Periodic Review, Lakeshore Village Apartments, aka Lake Washington Apartments, Seward Park Estates, prepared by Department of Ecology, publication date February 2010.
2. Sampling and Analysis Plan, Lake Washington Apartments, Phase II Environmental Assessment, Seattle, Washington, prepared by Herrera Environmental Consultants, Inc. (Herrera), publication date December 2011.
3. Site Characterization Report, Lake Washington Apartments, Phase II Environmental Site Assessment, Seattle, Washington, Prepared by Herrera, publication date May 10, 2012.
4. Compliance Monitoring Well Installation and Sampling Plan, Lake Washington Apartments, Seattle, Washington, prepared by Herrera, publication date December 3, 2012.
5. Compliance Groundwater Monitoring Technical Report, Lake Washington Apartments, Seattle, Washington, prepared by Herrera, publication date January 31, 2013.

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

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

1. Characterization of the Site.

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

The site consisted of 18 underground storage tanks (USTs) at nine locations at the Property. The USTs held diesel heating oil and PS300 heating oil. During remediation during the late 1990s, the tanks were removed and contaminated soil was excavated around the tank locations indicating that the tanks had leaked. Some of the heating oil was left in place beneath buildings. Soil samples collected from bottom and sidewall locations in the excavated pits showed that heating oil concentrations were below MTCA Method A cleanup levels at all tank locations except for samples in excavations near buildings 2, 5, 12, and 35. At those locations, sidewall soil samples contained ORPH at concentrations above the MTCA cleanup level.

During the 1990s characterization, three of five borings intercepted ground water at 12, 17, and 32 feet below ground surface. Because water levels varied between 12 and 35 feet below ground surface, these data were interpreted to not provide a definitive water table throughout the Site. Therefore, further ground water characterization was not performed at this Site.

In 2010, the Department of Ecology determined that groundwater could potentially be impacted by the residual heating oil that was left beneath the buildings at the Site. Therefore, the No Further Action determination dated 1998 at this Site was rescinded in 2010 so that ground water impacts could be evaluated further.

During March of 2012, work was performed to assess the extent of contamination remaining in soil and ground water at this Site. The work consisted of a focused sampling study performed at the buildings where sidewall samples collected in 1990 exceeded the MTCA Method A cleanup levels. These isolated locations, if found to be still contaminated, would be considered "hotspots". Soil borings and ground water samples were collected adjacent to each of the potentially impacted buildings. Soil

boring locations adequately defined the lateral and vertical extent of the “hotspot” investigation.

2. Establishment of cleanup standards.

The MTCA Method A cleanup level was selected for this Site to be protective of human health and the environment.

The Site qualified for an exclusion of the Terrestrial Ecological Evaluation based on scoring criteria listed in WAC 173-340-7491(1)(C)(i and ii). The MTCA method A cleanup levels for ORPH and DRPH are appropriate to be protective of human health and the environment.

The standard point of compliance for soils shall be throughout the Site from ground surface to fifteen feet below ground surface.

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

3. Selection of cleanup action.

Ecology has determined the cleanup action you selected for the Site meets the substantive requirements of MTCA.

There was no cleanup performed at this Site during 2012. Characterization of soil and ground water in 2012 revealed that contamination exceeding MTCA cleanup levels in soil is isolated beneath the buildings and has not migrated to any great extent into the ground water.

4. Cleanup.

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

The cleanup action during 1990 at this Site consisted of tank removal and contaminated soil excavation. Contaminated soil beneath buildings was left in place and an environmental covenant was placed on the Property. Characterization during 2012 reveals that contamination is present in soil beneath the buildings but has not moved into

the ground water in concentrations in excess of MTCA cleanup levels beyond a limited area at building 35.

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. Compliance with institutional controls.

Institutional controls prohibit or limit activities that may interfere with the integrity of engineered controls or result in exposure to hazardous substances. The following institutional controls are necessary at the Site:

- Restriction on land use due to residual soil contamination.
- Restriction on groundwater use.

To implement those controls, a Restrictive Environmental Covenant (Covenant) has been recorded on the following parcel of real property in King County:

- 352404-9015.

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

2. Performance of confirmational monitoring.

Confirmational monitoring is necessary at the Site 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 C**.

Periodic Review of Post-Cleanup Conditions

Ecology will conduct periodic reviews of post-cleanup conditions at the Site to ensure that they remain protective of human health and the environment. If Ecology determines, based on a

periodic review, that further remedial action is necessary at the Site, then Ecology will withdraw this opinion.

Listing of the Site

Based on this opinion, Ecology will remove the Site from our Confirmed and Suspected Contaminated Sites List.

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**:

- 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).

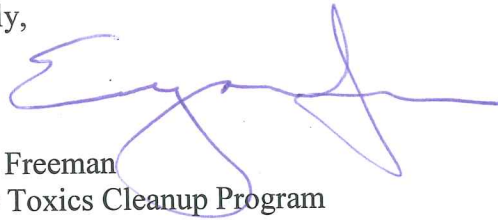
Termination of Agreement

Thank you for cleaning up the Site under the Voluntary Cleanup Program (VCP). This opinion terminates the VCP Agreement governing this project (#NW2570).

Alan Lee
June 19, 2013
Page 7

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 or the termination of the Agreement, please contact me by phone at 425-649-7191 or e-mail at eufr461@ecy.wa.gov.

Sincerely,



Eugene Freeman
NWRO Toxics Cleanup Program

Enclosures (3): A – Description and Diagrams of the Site
 B – Restrictive Environmental Covenant
 C – Confirmational Monitoring Plan

cc: Peter Jowise, Herrera Environmental Consultants, Inc.
 Sonia Fernandez, VCP Coordinator, NWRO Ecology
 Dolores Mitchell, VCP Financial Manager, Ecology

Enclosure A

Description and Diagrams of the Site

Site Description

Site Definition

The Site consists of diesel and oil range petroleum hydrocarbons (DRPH and ORPH) in soil and ground water at 9061 Seward Avenue South, Seattle, Washington (Property). The Site contamination resulted from 18 heating oil, underground storage tanks (UST) at 9 locations. The USTs and contaminated soil has been excavated and removed from the 9 locations, but some residual DRPH and ORPH remains beneath buildings. The locations of the USTs are distributed throughout the Property, shown as numbers 1 through 9 in Figure 1.

Area/Property Description

The Property is located at the corner of South Henderson Street and Seward Park Avenue South and is the location of multi-family apartment complexes near the southeast Lake Washington shoreline.

The Property is defined as King County tax parcel # 3524049015. The area surrounding the apartments is commercial and residential. Rainier Beach High School is directly to the north of the Property and the Parkshore Marina on Lake Washington and condominiums are to the east. Commercial businesses and residential housing border the Property on the west and south.

Property History and Current Use

The Property has been the location of apartments that were built in 1948. In the late 1990s, the apartments were renovated and the heat oil tanks were removed. At the time of the renovations, the Property entered the VCP. A no further action (NFA) opinion dated 1998 was issued which was later rescinded in 2010 subject to characterization of ground water at the Site.

Contaminant Source and History

Contamination at this Site consists of diesel- and oil-range petroleum hydrocarbons. The source of contamination is from leaking underground storage tanks and pipes. Release of DRPH and ORPH to the soil was discovered during excavation of the tanks in the late 1990s. The tanks were excavated and the contaminated soil was removed from the Site. Some contaminated soil was left beneath buildings and consequently the Site is currently subject to a restrictive environmental covenant.

The NFA was rescinded in 2010 because insufficient information was available to determine whether contamination had impacted ground water and if that ground water was in communication with Lake Washington. The purpose of characterization launched in 2012 was to determine if contamination was in ground water and migrating toward the Lake.

The approach taken to determine groundwater impact was to identify UST sites where contamination in the soil beneath buildings exceeded MTCA Method A cleanup levels after remediation in 1990. Former tank locations near four buildings were identified as candidate sites. The buildings were identified as numbers 2, 5, 12, and 35.

Physiographic Setting

The Site is part of the Lake Washington Trough physiographic province. The Property is located on a flat area that slopes gently toward Lake Washington to the east. The hills of the Skyway Uplands rise within 400 feet to the south and west. The Property is approximately 25 feet above mean sea level and the surface of Lake Washington is approximately 21 feet above mean sea level.

Ecological Setting

The area in which the Property is situated is zoned commercial and residential. Most land surfaces are covered by pavement, buildings and landscaped areas. There is no sensitive terrestrial habitat within 500 feet of the Property.

Geology

The geologic setting, in descending order is sedimentary, with silty sand fill at the surface, an organic peat layer, and lacustrine clay. Beneath the clay is a thick, compact, dense glacial till layer. The Site is located in the Lake Washington Trough, bounded to the south and west by hills of the Skyway Uplands.

Ground water

The ground water as defined in 1990 was in isolated lenses of permeable material above a denser less permeable material. Additional characterization during 2012 indicates that a clay layer exists at a depth of approximately 10 feet beneath the Property and may support a limited, perched groundwater unit. The extent of the clay layer is shown in the Figure 1 of Enclosure A.

Surface Water

Lake Washington is located topographically down slope, approximately 200 feet to the east of the property.

Release and Extent of Contamination – Soil

Diesel- and oil-range heating oil was released to soils from 18 tanks at 9 locations within this Property between 1948 and 1997. During renovation of this Site in the late 1990s, the

heating oil USTs were excavated and the contaminated soils were removed. Some residual heating oil remains above Method A cleanup levels and has migrated beneath buildings.

Extent of Contamination – Groundwater

Conceptually, ground water at this site is located in isolated, high permeability lenses within a low permeability material. Further characterization of the ground water at this site was conducted to better define spatial continuity and extent. Ground water was encountered at depths of approximately 8 feet below the ground surface.

During the 2012 characterization effort, four groundwater borings and two soil sample borings were drilled near building 35. One groundwater sample adjacent to the building had a DRPH sample concentration of 1,200 µg/L, which is above the 500 µg/L cleanup level. Ground water samples collected at bracketing locations were non-detectable for DRPH. At the three other buildings, three borings were drilled at each building and ground water was tested. One boring was drilled at the former tank location and two bracketing borings were drilled adjacent to the former tank location. None of the ground water samples from borings at these three buildings showed petroleum contamination.

Based on groundwater results at the Site, buildings 2, 5, and 12 were not considered for further action. There was contamination greater than Method A cleanup levels in one boring into groundwater at building 35. The ORPH in groundwater is confined to a small area in the peat, adjacent to building 35. Two bracketing borings to groundwater on either side of the contaminated sample did not encounter groundwater contamination. It will be necessary to install and monitor three groundwater wells that bracket the area where contamination is present in order to maintain compliance as stipulated in the Restrictive Environmental Covenant. Groundwater sampling is necessary no less than every five years as defined by WAC 173-340-420. Installation and monitoring of the wells is presented in Enclosure C, the Groundwater Confirmation Monitoring Plan.

Alan Lee
June 19, 2013
Page 6

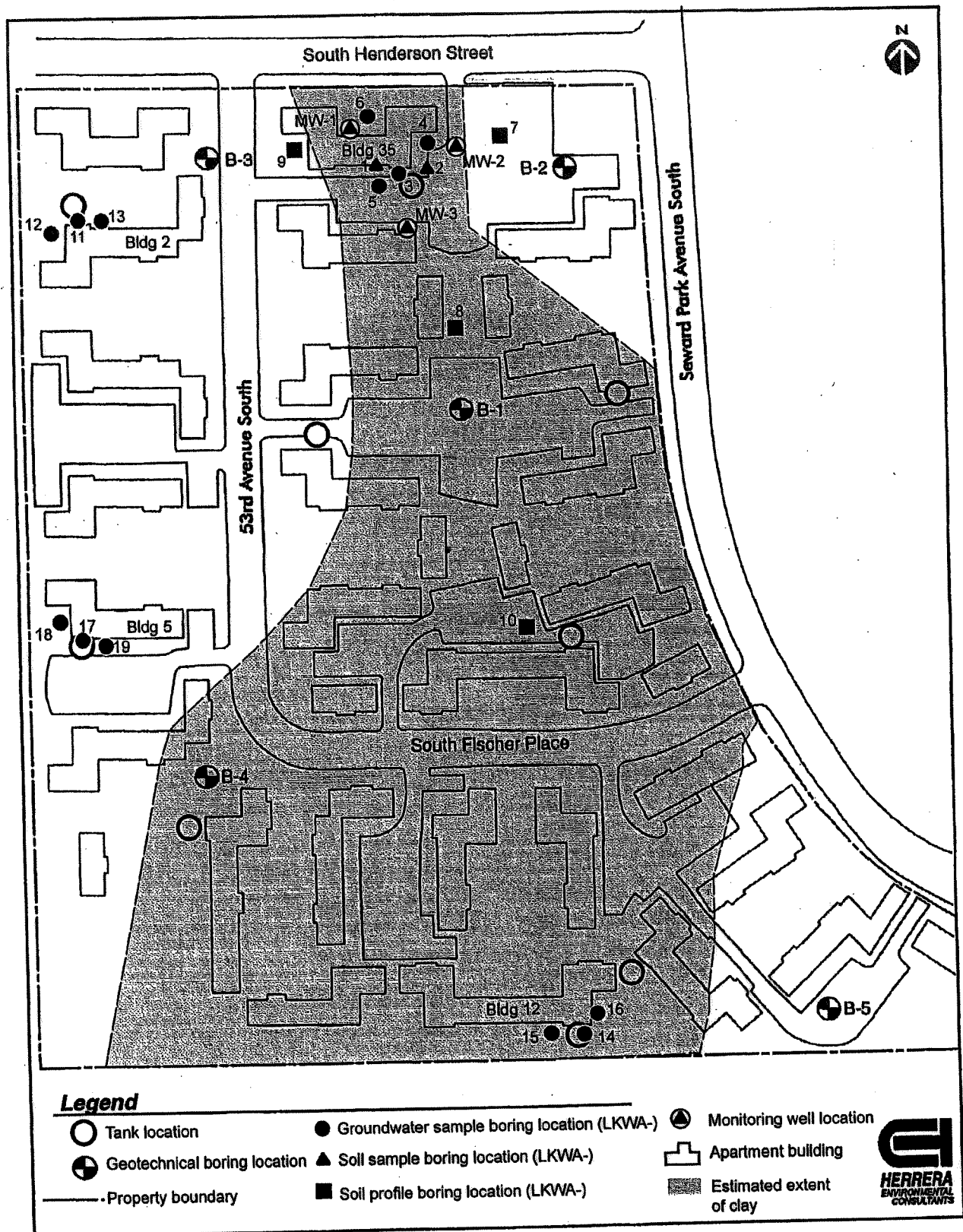
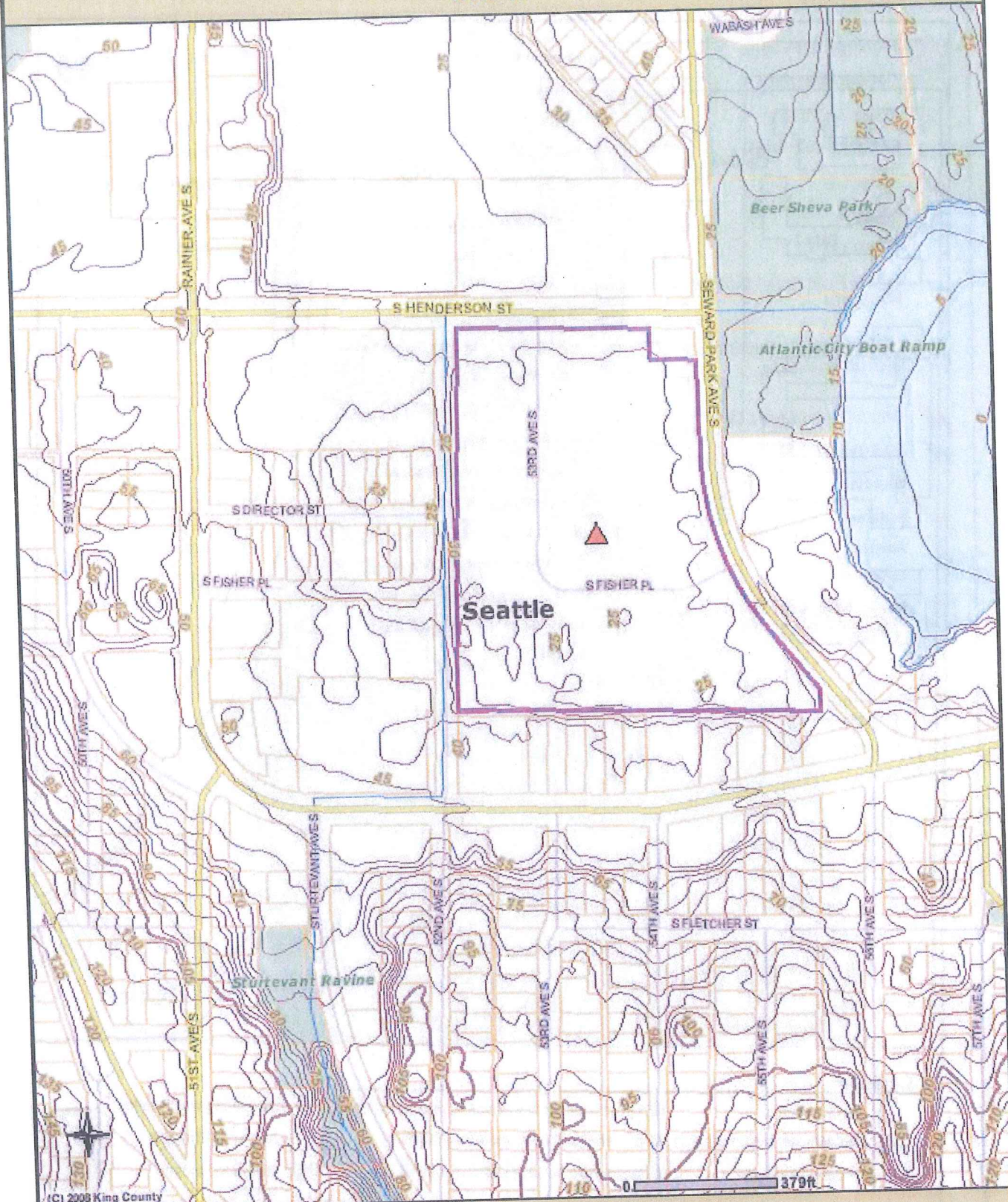


Figure 2. Monitoring well location map, Lake Washington Apartments.

iMAP

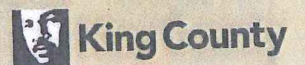


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COMMENTS: Lakeshore Apartments

















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














Date: 6/7/2012 Source: King County iMAP - Property Information (<http://www.metrokc.gov/GIS/iMAP>)











iMAP

Legend

-  Highlighted Feature
-  County Boundary
-  Mountain Peaks
-  Contours (5ft dark)
-  100;500;1000
-  Other
-  Highways
-  Forest Production District Boundary
-  Agricultural Production District Boundary
-  Urban Growth Area Line
-  Incorporated Area
-  Streets
-  Highway
-  Arterials
-  Local
-  Lakes and Large Rivers

-  Streams
-  Tribal Lands
-  Parcels
-  Parks
- Unincorporated KC Zoning**
-  A-10 - Agricultural, one DU per 10 acres
-  A-35 - Agricultural, one DU per 35 acres
-  F - Forest
-  M - Mineral
-  RA-2.5 - Rural Area, one DU per 5 acres
-  RA-5 - Rural Area, one DU per 5 acres
-  RA-10 - Rural Area, one DU per 10 acres
-  UR - Urban Reserve, one DU per 5 acres
-  R-1 - Residential, one DU per acre
-  R-4 - Residential, 4 DU per acre
-  R-6 - Residential, 6 DU per acre
-  R-8 - Residential, 8 DU per acre
-  R-12 - Residential, 12 DU per acre
-  R-18 - Residential, 18 DU per acre
- (cont)

-  R-24 - Residential, 24 DU per acre
-  R-48 - Residential, 48 DU per acre
-  NB - Neighborhood Business
-  CB - Community Business
-  RB - Regional Business
-  O - Office
-  I - Industrial
-  Other

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