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DEPARTMENT OF ECOLOGY
Northwest Region Office
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May 23, 2023

Jerry-Alan Murakami
12424 83rd Avenue South
Seattle, WA 98178
(jerryskii@yahoo.com)

Re: Opinion pursuant to WAC 173-340-515(5) on Remedial Action for the following Hazardous Waste Site:

- **Site Name:** Morningside Acres
- **Site Address:** 5021 Rainier Avenue S, Seattle, WA 98118
- **Facility/Site No.:** 4321
- **Cleanup Site ID No.:** 12408
- **VCP Project No.:** NW3345

Dear Jerry-Alan Murakami:

The Washington State Department of Ecology (Ecology) received your request for an opinion on work completed at the Morningside Acres facility (Site). This letter provides our opinion. We are providing this opinion under the authority of the Model Toxics Control Act (MTCA), Chapter 70A.305 RCW.

Issue Presented and Opinion

Pursuant to completion of the Site characterization work described in *Remedial Investigation and Feasibility Study Addendum Morningside Acres Tracts, 5001, 2015, and 5021 Rainier Avenue South, Seattle, Washington*, dated April 5, 2023 (*April 2023 RI/FS Addendum*), is additional work necessary to resolve data gaps?

YES. Ecology has determined that additional work is necessary to characterize soil and groundwater at the Site. Limited additional site characterization is necessary to confirm the proposed remedial actions will meet MTCA cleanup requirements.

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:

- Gasoline- (TPH-G), diesel- (TPH-D), and oil-range (TPH-O) total petroleum hydrocarbons, benzene, trichloroethylene (TCE), and vinyl chloride into the Soil.
- TPH-G; TPH-D; TPH-O; benzene; TCE; cis-1,2-dichloroethylene (DCE); 1,2-dichloroethane (EDC); 1,2-

dichloropropane (DCP); and vinyl chloride into the Groundwater.
- TCE; cis-1,2-DCE; and vinyl chloride into the Air.

Ecology previously differentiated between releases at 5001 and 5021 Rainier Avenue and managed the cleanup of these two releases under two separate cleanup sites. Based on a review of the current data, Ecology determined to combine the two cleanup sites into one "Morningside Acres" Site (Site). The cleanup of the Site is managed under the current VCP NW3345. **Enclosure A** includes a detailed description and diagrams 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 parcels associated with this Site are affected by other sites.

Basis for the Opinion

This opinion is based on the information contained in the documents listed in **Enclosure B**.
A number of these documents are accessible in electronic form from the Site web page.[1] The complete records are kept in the Central Files of the Northwest Regional Office of Ecology (NWRO) for review by appointment only. Visit our Public Records Request page[2] to submit a public records request or get more information about the process. If you require assistance with this process, you may contact the Public Records Officer at publicrecordsofficer@ecy.wa.gov or 360-407-6040.

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

Analysis and Opinion

Based on a review of the *April 2023 RI/FS Addendum*, Ecology has determined:

- **Limited additional soil characterization is necessary.**
  Historical uses of the Site include a service station on the northern parcel (5001 Rainier Ave S; 5001 Parcel), a lumberyard on the central parcel (5015 Rainier Ave S; 5015 Parcel), and an auto maintenance shop on the southern parcel (5021 Rainier Ave S; 5021 Parcel). Investigations conducted from 2006 to 2022 confirm soil at the Site contains TPH-G, TPH-D, TPH-O, benzene, TCE, and vinyl chloride above the applicable Method A and Method B cleanup levels.

  Releases of chlorinated solvents to soil are confined to the 5015 and 5021 Parcels. Soil at a depth of approximately 15 feet bgs in the vicinity of MW-17 and MW-19 in the 5015 parcel contains TCE and vinyl chloride above their respective Method A and Method B cleanup levels (see **Enclosure A**, **Figure 4**). This area of contamination is defined vertically and laterally, to the south by MW-5, to the west by MW-21, and to the north by FB-30. Ecology recommends collecting additional soil samples to the east of MW-17 to define the eastern extent of TCE and vinyl chloride contamination in soil.

  A release of TCE and vinyl chloride on the southern parcel is present in the vicinity of a floor

[1] https://apps.ecology.wa.gov/cleanupsearch/site/12408
[2] https://ecology.wa.gov/publicrecords

drain in the basement of the building on that property. Soil from depths of 6 to greater than 12 feet bgs contains TCE and vinyl chloride above the applicable cleanup levels. This area of contamination is bounded horizontally, but not vertically as all borings in this area were installed using a limited-access drill rig. In an email communication on 1/26/2023, Ecology concurred that assessment of the vertical extent of chlorinated solvents in soils in this area could be assessed after the building has been demolished. Ecology recommends collecting soil samples from this area prior to remedial excavation to ensure that sufficient data are collected to effectively design the remedial excavation such that all soil containing vinyl chloride above the cleanup level can be removed.

Releases from historic service station operations resulted in the presence of TPH-G, TPH-D, TPH-O, and benzene above the Method A cleanup level in soil. A release of TPH-G and benzene in soil is present at approximately 10 feet bgs in the vicinity of GP-3/MW-6 (see **Enclosure A**, **Figure 6**). The release is bounded to the south by FB-22, but is not defined to the north, east, or west. Based on observations from other borings, contamination in soil is unlikely to extend deeper than 18 feet bgs in this area.

Releases from former pump islands in the vicinity of MW-10 and MW-18 resulted in the presence of TPH-G, TPH-D, TPH-O, and benzene in soil above the Method A cleanup level from approximately 5 to 18 feet bgs. This release is bounded vertically and laterally to the north by MW-9, to the west by MW-23 and partially to the south by GLP-06. Ecology recommends collecting additional samples off property to the east of MW-18 and FB-30 and south of FB-23 to define the extent of TPH contamination in soil at the Site. Explorations east of MW-18 and FB-30 may be combined with recommended groundwater investigations recommended below.

- **Limited additional characterization of CVOCs in groundwater is needed.**
  Releases of TCE, cis-1,2-DCE, EDC, 1,2-DCP, and vinyl chloride (collectively CVOCs) to groundwater are present below the 5015 and 5021 Parcels. The release is bounded to the south by MW-14, to the west by MW-13, MW-22, and MW-23, and to the north by FB-30 and MW-24. The groundwater plume is partially bounded to the east by MW-5 and MW-8. Ecology recommends installing additional monitoring wells east MW-17, with screen intervals in shallow and deep depths, to define the extent of groundwater contamination in this portion of the Site.

  The vertical extent of CVOCs exceeding cleanup levels in groundwater has also not been defined. The most recent groundwater samples collected from MW-21, screened at a depth of 35 to 45 feet bgs, contained vinyl chloride above the Method A cleanup level. As discussed above, Ecology recommends installing an additional monitoring well in the source area of the CVOC plume to define the vertical extent of vinyl chloride in groundwater.

- **Additional characterization is needed to define the extent of TPHs in groundwater.**
  As discussed in the Ecology's *Guidance for Remediation of Petroleum Contaminated Sites*, revised June 2016[3], and *Implementation Memorandum #4 Determining Compliance with Method A Cleanup Levels for Diesel and Heavy Oil*, published June 2004[4], reported concentrations of TPH-D and TPH-O analyzed using laboratory method NWTPH-Dx should be added when comparing these ranges to the Method A cleanup levels for soil and groundwater.

[3] https://apps.ecology.wa.gov/publications/SummaryPages/1009057.html
[4] https://apps.ecology.wa.gov/publications/SummaryPages/0409086.html

Alternatively, Ecology recommends requesting the laboratory report results of NWTPH-Dx analysis as a single result for future sampling efforts.

Petroleum hydrocarbon contamination in groundwater is present in the vicinity of GLP-07, MW-11, and MW-12 on the 5021 Parcel. This release is bounded to the north by MW-7 and to the south by MW-14. A groundwater sample collected from MW-19 in October 2018 contained benzene above the Method A cleanup level. Ecology recommends collecting additional groundwater samples from existing monitoring wells MW-11, MW-12, and MW-19 to determine the current concentrations of TPH-D+O and benzene in these areas.

Petroleum hydrocarbon contamination in groundwater on the 5001 Parcel is present in two areas. Groundwater in the vicinity of MW-6 contains TPH-D+O above the Method A cleanup level. The lateral extent of this release is defined vertically to the north by MW-2, but not to the south, east, or west. Ecology recommends collecting additional groundwater samples in this area to define the extent of contaminated groundwater.

Groundwater contaminated with TPH-G and TPH-D+O is present in the vicinity of MW-10, in the vicinity of the former pump islands. Observations at MW-10 from its installation to the present have indicated the presence of light non-aqueous phase liquid (LNAPL) in this well. Sampling results and observations do not indicate LNAPL is present in groundwater in any other wells on the Site. This release is bounded to the north by MW-9 and MW-18, to the south by MW-19, and vertically by MW-24 (well screen interval approximately 35 to 45 feet bgs). A groundwater sample collected from MW-22 in February 2023 contained TPH-D+O above the Method A cleanup level. A groundwater sample collected from a temporary well installed in boring FB-23 in August 2018 did not contain TPH-G above the Method A cleanup level, but was not analyzed for TPH-D and TPH-O.

Based on currently available data, the extent of contaminated groundwater in the area of the former pump islands is not defined to the east or west. Ecology recommends collecting additional groundwater samples from MW-22. Depending on results of additional sampling from MW-22, additional delineation of contaminated groundwater to the west of MW-22 may be necessary. The eastern edge of the plume is not defined. If feasible, Ecology recommends installing additional monitoring wells in the sidewalk east of FB-30 to define the extent of contaminated groundwater and soil in this area.

As discussed in **Enclosure A**, depth to groundwater in MW-23 has been measured more than 15 feet deeper than other Site monitoring wells. Additional discussion of this discrepancy, potentially including an additional cross section through this area, is recommended.

- **Additional support for proposed remedial action is needed.**

In your *Remedial Investigation and Feasibility Study Report, Morningside Acres Tracts, 5001, 5015, and 5021 Rainier Avenue South, Seattle, Washington*, dated June 20, 2022 (*2022 RI/FS*), you identified remedial excavation of soils contaminated with CVOCs and TPH paired with in-situ treatment of contaminated groundwater as the preferred remedial alternative. In Ecology's letter *Re: Opinion pursuant to WAC 173-340-515(5) on Remedial action for the following Hazardous Waste Site: Morningside Acres Tracts South, 5021 Rainier Avenue S, Seattle, Washington*, dated December 12, 2022, Ecology recommended aquifer testing and/or pilot

testing for the proposed in-situ groundwater treatments prior to implementation.

- **Next steps.**

  Ecology appreciates your significant efforts in characterizing the Site to date. As discussed above, limited additional soil and groundwater investigations are necessary to fully define the extent of contamination at the Site and evaluate the efficacy of the proposed remedial actions. Ecology recommends the development of a work plan to ensure that sufficient data for soil and groundwater characterization described above is collected.

  Depending on the results of recommended additional characterization, a revised Feasibility Study (FS) may be necessary. Ecology can work with you to assess the need for revision of the FS following additional recommended soil and groundwater characterization. We look forward to working with you to bring this site to closure.

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 70A.305.040(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 70A.305.080 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 70A.305.170(6).

Contact Information

Thank you for choosing to clean up the Site under the Voluntary Cleanup Program (VCP). After you have addressed our concerns, you may request another review of your cleanup. Please do not hesitate to request additional services as your cleanup progresses. We look forward to working with you.

For more information about the VCP and the cleanup process, please visit our web site: www.ecy.wa.gov/vcp. If you have any questions about this opinion, please contact me by phone at (206) 459-6287 or e-mail at david.unruh@ecy.wa.gov.

Sincerely,

David Unruh, LG
Site Manager
Toxics Cleanup Program, NWRO

Enclosures (2): A – Description and Diagrams of the Site
B – Basis for the Opinion: List of Documents

cc: Branislav Jurista, Farallon Consulting (bjurista@farallonconsulting.com)
Sonia Fernández, VCP Coordinator (sonia.fernandez@ecy.wa.gov)

Enclosure A

Description and Diagrams of the Site

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 by releases of the following at 5001, 5015, and 5021 Rainier Avenue South in Seattle, King County, Washington (Property; **Figure 1**, **Figure 2**):

- TPH-G, TPH-D, TPH-O, benzene, TCE, and vinyl chloride into the Soil.
- TPH-G; TPH-D; TPH-O; benzene; TCE; cis-1,2-DCE; EDC; 1,2-DCP; and vinyl chloride into the Groundwater.
- TCE; 1,2-DCE; and vinyl chloride into the Air.

The Site is located on the west side of Rainier Avenue South at South Hudson Street, and consists of three irregularly-shaped King County tax parcels totaling 0.51 acres in area with the following King County parcel numbers:

- 564960-0135 (5001 Rainier Avenue S; 5001 Parcel)
- 564960-0133 (5015 Rainier Avenue S; 5015 Parcel)
- 564960-0130 (5021 Rainier Avenue S; 5021 Parcel)

According to MTCA, the Site is defined as all areas where contamination has come to be located. Based on the currently available site characterization data, the western and eastern boundaries of the Site have not been fully delineated.

Area and Property Description: The Site is located in a mixed commercial and residential area in Seattle. The Property is currently developed with two single-story commercial buildings occupied by retail businesses. The Property is bounded by the following:

- North: S Hudson Street, with community organizations and restaurants beyond.
- East: Rainier Avenue S, with restaurants and an event venue beyond.
- South: Restaurants, retail stores, and office buildings, with S Dawson Street beyond.
- West: Warehouses, fitness facilities, and apartments, with 37th Avenue S beyond.

Property History and Current Use: The Property was developed with a service station on the 5001 Parcel in 1927, including underground storage tanks (USTs) used for storage of gasoline and diesel and pump islands (**Figure 2**). Two generations of service stations occupied this parcel from the 1920s until the late 1970s, when it was converted to a parking lot. Gasoline and diesel USTs

were closed in place and service station infrastructure was removed at that time. The 5001 Parcel remains in operation as a parking lot.

A single-story retail building was constructed on the 5015 Parcel in approximately 1926 (5015 Building; **Figure 2**). The parcel was in use as a lumberyard from 1926 to approximately 1965. It was used as an office building from approximately 1966 to 1980. From 1980 to the present, the 5015 Building has been occupied by a convenience store.

A single-story warehouse building with a basement was constructed on the 5021 Parcel in the 1920s (5021 Building; **Figure 2**). Historical uses of the 5021 Building included plumbing supply, social club, fitness center, and auto and boat dealerships. A "fuel oil" UST is located on the southern side of the building (**Figure 2**). From 1964 until 2012, the building was used for auto maintenance. Aboveground storage tanks (ASTs) used for storage of solvents, waste oil, and hydraulic oil for auto maintenance operations were located in the basement of the 5021 Building. The building is currently partially occupied by a bookstore and community space on the first floor. The basement of the building was primarily used for auto maintenance in the past but is currently unoccupied.

Sources of Contamination: The source of TCE; cis-1,2-DCE; 1,2-DCP; EDC; and vinyl chloride (collectively CVOCs) contamination at the Site is associated with historical use for auto maintenance on the 5021 Parcel. A sediment sample collected in January 2007 from a floor drain in the 5021 Parcel contained tetrachloroethene (PCE) and TCE. Soil and groundwater samples collected from the subsurface in the vicinity of the floor drain contained the highest concentration of CVOCs (**Figure 3**, **Figure 4**, **Figure 5**). The distribution of CVOCs in soil and groundwater at the Site indicates that the floor drain is the source of contamination for these compounds.

The source of petroleum contamination at the Site is likely associated with former service station operations on the 5001 Parcel. Soil and/or groundwater samples collected from GP-3/MW-6, GLP-04/MW-9, GLP-05/MW-10, and GLP-18/MW-18 contained TPH-G, TPH-D, TPH-O, and benzene above the Method A cleanup level (**Figure 3, Figure 6, Figure 7**). The highest concentrations of these contaminants are around the location of the first-generation service station building and the second-generation service station pump islands (**Figure 2**).

A groundwater sample collected from a temporary well installed near or potentially through the fuel oil UST on the 5021 Parcel contained TPH-D above the Method A cleanup level (GLP-07; **Figure 7**). During the collection of the groundwater sample, light non-aqueous phase liquid (LNAPL) was noted in groundwater purged from the well. Soil samples were not collected from this boring. Groundwater samples collected from nearby monitoring wells MW-11 and MW-12 were also contaminated with petroleum hydrocarbons.

Physiographic Setting: In general, the Seattle area sits on a complex and incomplete succession of glacial and nonglacial deposits that overlie an irregular bedrock surface. The City straddles the

Seattle uplift, the Seattle fault zone, and the Seattle basin, three major bedrock structures that reflect north-south crustal shortening in the Puget Sound Lowland. The landforms and near-surface deposits that cover much of the Seattle area include the upland glacial till that in many areas was cut into channels during glaciation by recessional meltwater.

The glacial till can display north-south axes oriented in the former ice-flow direction. Glacially overridden deposits underlie most of the uplands, whereas loosely consolidated postglacial deposits fill deep valleys and recessional meltwater channels. Soft organic-rich deposits have filled former lakes, bogs, and sloughs.

The Property is located in the Rainier Valley between two uplands to the east and west. The Property is located on roughly level ground at an elevation of approximately 115 feet above mean sea level (amsl; **Figure 1**).

Surface/Storm Water System: Stormwater runoff on and in the vicinity of the Property disperses via sheet flow to catch basins connected to the City of Seattle stormwater system located on Rainier Avenue S. The nearest surface water body is Lake Washington, located approximately 0.9 miles northeast of the Property.

Ecological Setting: The Site is zoned for mixed commercial and residential use. Adjoining properties to the north, south, east and west are also zoned for mixed commercial and residential use. Land surfaces on the Property and adjacent parcels are primarily covered by buildings, asphalt, and concrete pavement with some small, landscaped areas.

Geology: The geologic map of the area[5] indicates that the Site is underlain by Vashon-Age recessional lacustrine deposits, a series of finely bedded to laminated sands, silts and clays. Boring logs for explorations completed at the Site indicate that the Property is underlain by fill materials to a maximum depth of 12 feet below ground surface (bgs). Fill materials are underlain by clays, silts, sandy silts, and silty sands to the maximum explored depth of 48 feet bgs, interpreted to be recessional lacustrine deposits.

Groundwater: From 2006 to 2023, 24 wells were installed on the Property (MW-1 to MW-24; **Figure 3**, **Figure 8**). Wells were equipped with 4 to 10-foot screens installed between depths of 3 and 48 feet bgs.

Groundwater is present at the Site at depths ranging from 0.48 to 13.37 feet bgs with the exception of MW-23. MW-23 is screened from 38 to 48 feet bgs and, since its installation in February 2023, depth to water measurements have ranged from 30 to 42 feet bgs. Groundwater flow at the Site is generally oriented northwest. Due to the location of the Site in a valley, groundwater flow is oriented to the northeast on the west side of the Site, and to the west on the east side of the Site (**Figure 8**).

[5] https://pubs.usgs.gov/of/2005/1252/

Water Supply: Drinking water is supplied to the Property by water mains operated by the City of Seattle. Water for the City is sourced from the Cedar and Tolt River watersheds, located approximately 27 miles southeast and 29 miles northeast of the Site, respectively. The Site is located approximately 3.75 miles northwest of the closest 10-year wellhead protection zone for a municipal supply well.

Release and Extent of Contamination:

Soil: A Phase II Environmental Site Assessment (ESA) was conducted on the Site in May and June 2006. Six borings were advanced on the 5001 and 5015 Parcels to a maximum depth of 29 feet bgs (SB-1/MW-1, SB-2/MW-2, SB-3/MW-3, SB-4/MW-4, GP-1, GP-2/MW-5; **Figure 3**). Soil samples collected from GP-1/MW-4 and GP-2/MW-5 did not contain CVOCs or TPH above laboratory detection limits. Soil samples were not collected from SB-1 to SB-4.

Three additional borings were advanced on the Property in August 2006 to a maximum of 14.5 feet bgs (GP-3/MW-6, GP-4/MW-7, GP-5/MW-8; **Figure 3**, **Figure 9**). A soil sample collected from GP-3 at 10 feet bgs contained TPH-G and benzene above the Method A cleanup levels. A soil sample collected from 8 feet bgs in GP-4/MW-7 contained TCE above the Method A cleanup level. Soil samples collected from GP-5/MW-8 did not contain CVOCs or TPH above their respective Method A or B cleanup levels.

Additional subsurface investigation occurred on the Property in January and February 2007. A total of 11 borings were installed to a maximum depth of 26 feet bgs (GLP-01 to GLP-03, GLP-04/MW-9, GLP-05/MW-10, GLP-06 to GLP-08, GLP-09/MW-11, GLP-10/MW-12, GLP-11, GLP-12/MW-13, GLP-13, GLP-14/MW-14, GLP-15/MW-15, GLP-16/MW-16, and GLP-17/MW-17, GLP-18/MW-18; **Figure 3**, **Figure 9**). With the exception of GLP-05, GLP-13, GLP-17, and GLP-18, CVOCs and TPH were not detected above Method A or Method B cleanup levels. Soil samples collected from GLP-05 and GLP-18 contained TPH-G, TPH-D, TPH-O, and/or benzene above their respective Method A cleanup levels at depths from 5 to 18 feet bgs (**Figure 6**). Soil samples collected from 4 feet to 12 feet bgs in GLP-13 and from 15 feet bgs in GLP-17 contained vinyl chloride above the Method B cleanup level for protection of groundwater (**Figure 4**).

Supplemental soil sampling was conducted in 2017 through 2023 to further delineate the extent of TPH and CVOCs in soil at the Site. Eleven borings were advanced on the Property (MW-19, MW-21 to MW-24; FB-22 through FB-30) and one boring was completed on the east side of Rainier Ave S to the east of the Site (MW-20, **Figure 3**). Soil samples collected from MW-19, FB-25, FB-26, and FB-28 contained TCE and/or vinyl chloride above the applicable Method A and B cleanup levels at depths ranging from 6 to 15 feet bgs (**Figure 4**, **Figure 9**). Soil samples collected from FB-23 and FB-30 contained TPH-G and/or TPH-D above the Method A cleanup level at depths ranging from 5 to 13 feet bgs (**Figure 6**).

Groundwater: Groundwater samples were collected from 2006 to 2023, from monitoring wells and a few temporary wells.

Current groundwater analytical data indicate that vinyl chloride was above the Method A cleanup level in MW-4, MW-7, MW-12, MW-16, MW-17, MW-19, and MW-21 (**Figure 5**, **Figure 9**). Vinyl chloride was also detected above the Method A cleanup level in a groundwater sample collected from a temporary well installed in FB-22 in August 2018. Groundwater samples collected from MW-7, MW-12, MW-17, and MW-19 also contained TCE and cis-1,2-DCE above their Method A and Method B cleanup levels (**Figure 5**). 1,2-DCP was also detected above the Method B cleanup level in groundwater samples collected from MW-7. Groundwater samples collected from the remaining wells at the Site did not contain CVOCs above Method A or Method B cleanup levels (**Figure 5**).

Groundwater samples collected from MW-6, MW-9, MW-22, and temporary wells installed in borings FB-22 and FB-30 from 2017 to 2023 contained TPH-D+O above the Method A cleanup level (**Figure 7**). Groundwater samples collected from MW-19 in October 2018 contained benzene above the Method A cleanup level. Groundwater samples collected from MW-11 and MW-12 in August 2019 TPH-D+O above the Method A cleanup level (**Figure 7**).

A groundwater sample collected from monitoring well MW-10 contained TPH-G, TPH-D, and TPH-O above the Method A cleanup level. Field notes collected during sampling efforts in February 2007 indicated the presence of light non-aqueous phase liquid (LNAPL; **Figure 7**).

A soil boring GLP-07 was advanced in the vicinity of a former "fuel oil" UST of unknown size on the 5021 Parcel (**Figure 7**). A groundwater sample was collected from a temporary well installed in the boring. Purge water was noted to contain LNAPL. Analytical results indicated that the sample contained TPH-D above the Method A cleanup level. The boring log for the exploration notes soils encountered are potentially backfill material for the UST.

Air: Based on the analytical results of groundwater sampling, groundwater under the Property contained TCE and vinyl chloride above the Method B screening level for vapor intrusion. Air sampling was conducted on the Property in July 2019 to address the potential for CVOCs to be present in indoor air in buildings. One indoor air sample was collected from the 5015 Building on and five from the 5021 Building. One ambient air sample was collected from the open space between the two buildings (OA-1; **Figure 3**).

Air samples IA-1, IA-2, and IA-6, collected from the 5015 Building and the first floor of the 5021 Building contained 1,2-DCE above the Method B cleanup level for unrestricted use (**Figure 3**). Air samples IA-3 through IA-5, collected from the basement of the 5021 Building, contained TCE above the Method B cleanup level for unrestricted use. Sample IA-4 also contained vinyl chloride above the Method B cleanup level for unrestricted use.

REFERENCE: 7.5 MINUTE USGS QUADRANGLE SEATTLE SOUTH, WASHINGTON, DATED 2013

Enclosure A Figure 1

0 5,000
SCALE IN FEET

N

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Washington
Issaquah | Bellingham | Seattle

Oregon
Portland | Baker City

California
Oakland | Irvine

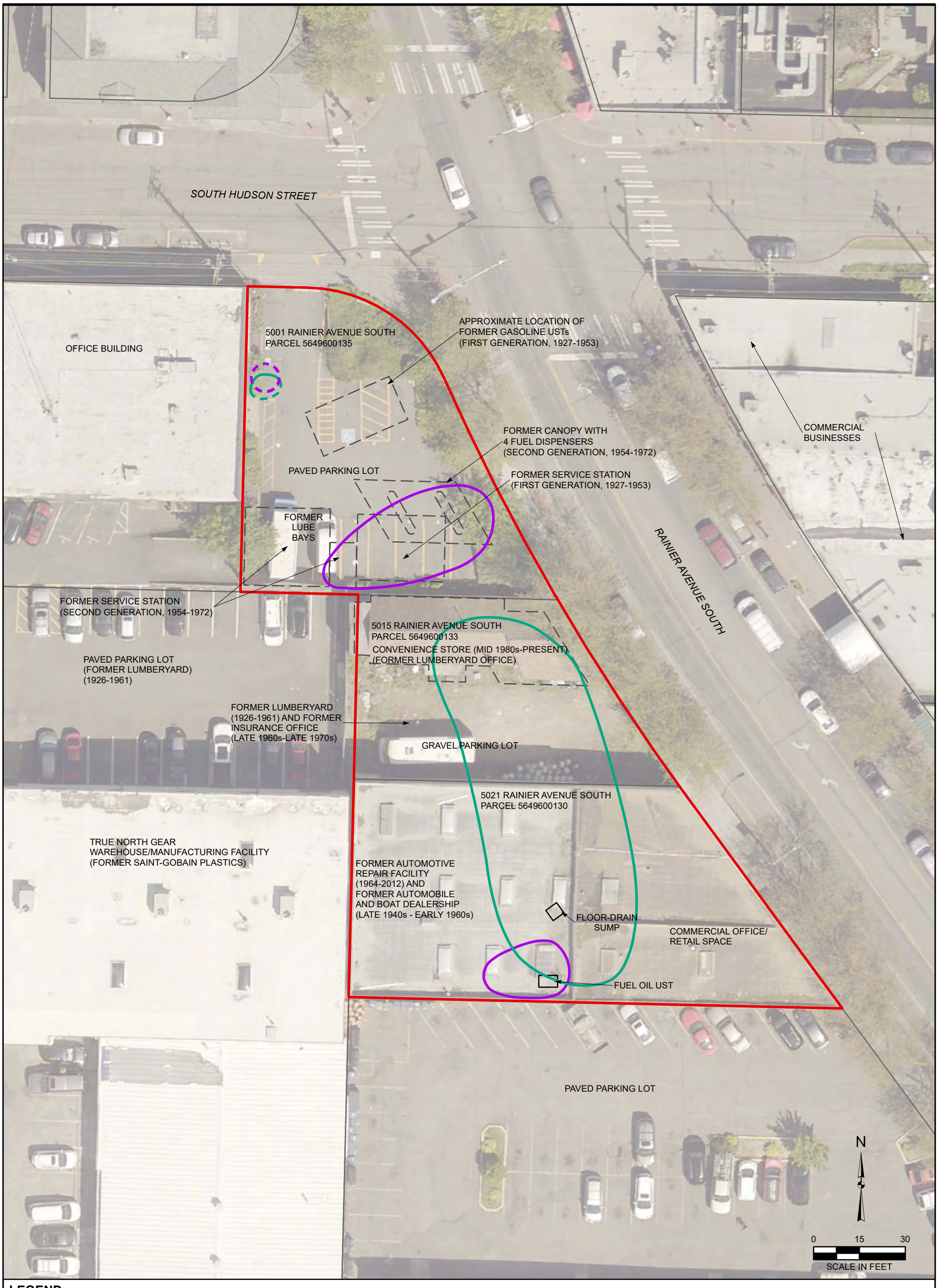
FIGURE 1

PROPERTY VICINITY MAP
MORNINGSIDE ACRES TRACTS
5001, 5015, AND 5021
RAINIER AVENUE SOUTH
SEATTLE, WASHINGTON

FARALLON PN: 1355-001

Drawn By: lmurock Checked By: YP Date: 3/28/2023 Disc Reference:

Document Path: Q:\Projects\1355 Morningside\001 RainierAveS\Mapfiles\018\Figure-01 VicinityMap.mxd



LEGEND

- APPROXIMATE EXTENT OF CHLORINATED VOC CONTAMINATION (DASHED WHERE INFERRED)
- APPROXIMATE EXTENT OF PETROLEUM CONTAMINATION (DASHED WHERE INFERRED)
- PROPERTY BOUNDARY
- KING COUNTY PARCEL BOUNDARY

UST = UNDERGROUND STORAGE TANK
VOC = VOLATILE ORGANIC COMPOUND

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

Enclosure A Figure 2

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Washington
Issaquah | Bellingham | Seattle

Oregon
Portland | Baker City

California
Oakland | Irvine

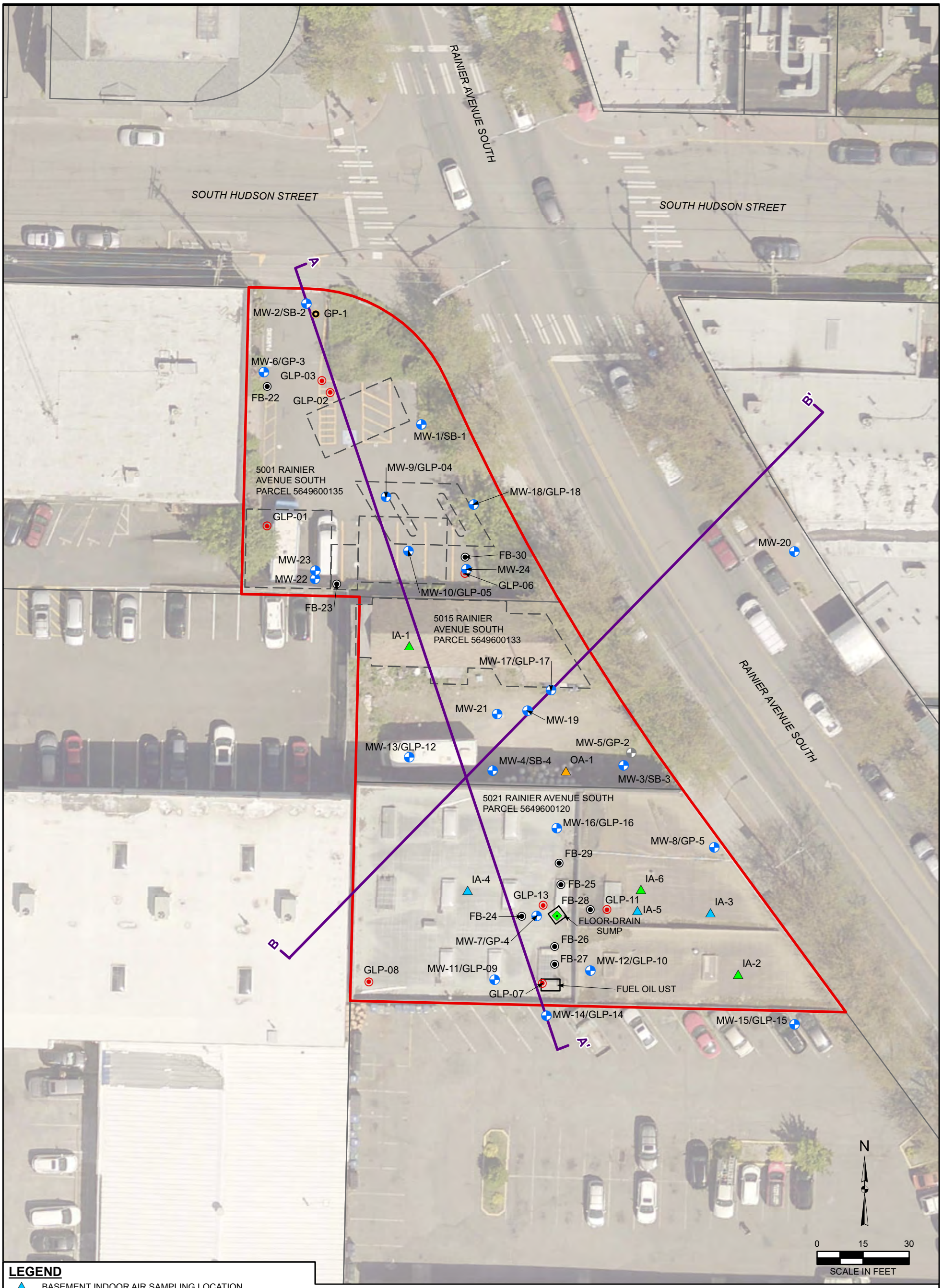
FIGURE 2

CURRENT AND HISTORICAL PROPERTY FEATURES
MORNINGSIDE ACRES TRACTS
5001, 5015, AND 5021
RAINIER AVENUE SOUTH
SEATTLE, WASHINGTON

FARALLON PN: 1355-001

Drawn By: lmurock | Checked By: YP | Date: 4/3/2023 | Disc Reference:

Document Path: Q:\Projects\1355 Morningside\001 RainierAveS\Mapfiles\018\Figure-02_PropertyFeatures.mxd



LEGEND

- BASEMENT INDOOR AIR SAMPLING LOCATION
- FIRST FLOOR INDOOR AIR SAMPLING LOCATION
- OUTDOOR AIR SAMPLING LOCATION
- DECOMMISSIONED MONITORING WELL
- MONITORING WELL
- BORING (FARALLON)
- BORING (G-LOGICS)
- BORING (KLEINFELDER)
- SUMP SEDIMENT SAMPLE
- PROPERTY BOUNDARY
- KING COUNTY PARCEL BOUNDARY
- A A' LINE OF CROSS SECTION
- UST = UNDERGROUND STORAGE TANK

NOTES:
1. ALL LOCATIONS ARE APPROXIMATE.
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Enclosure A Figure 3

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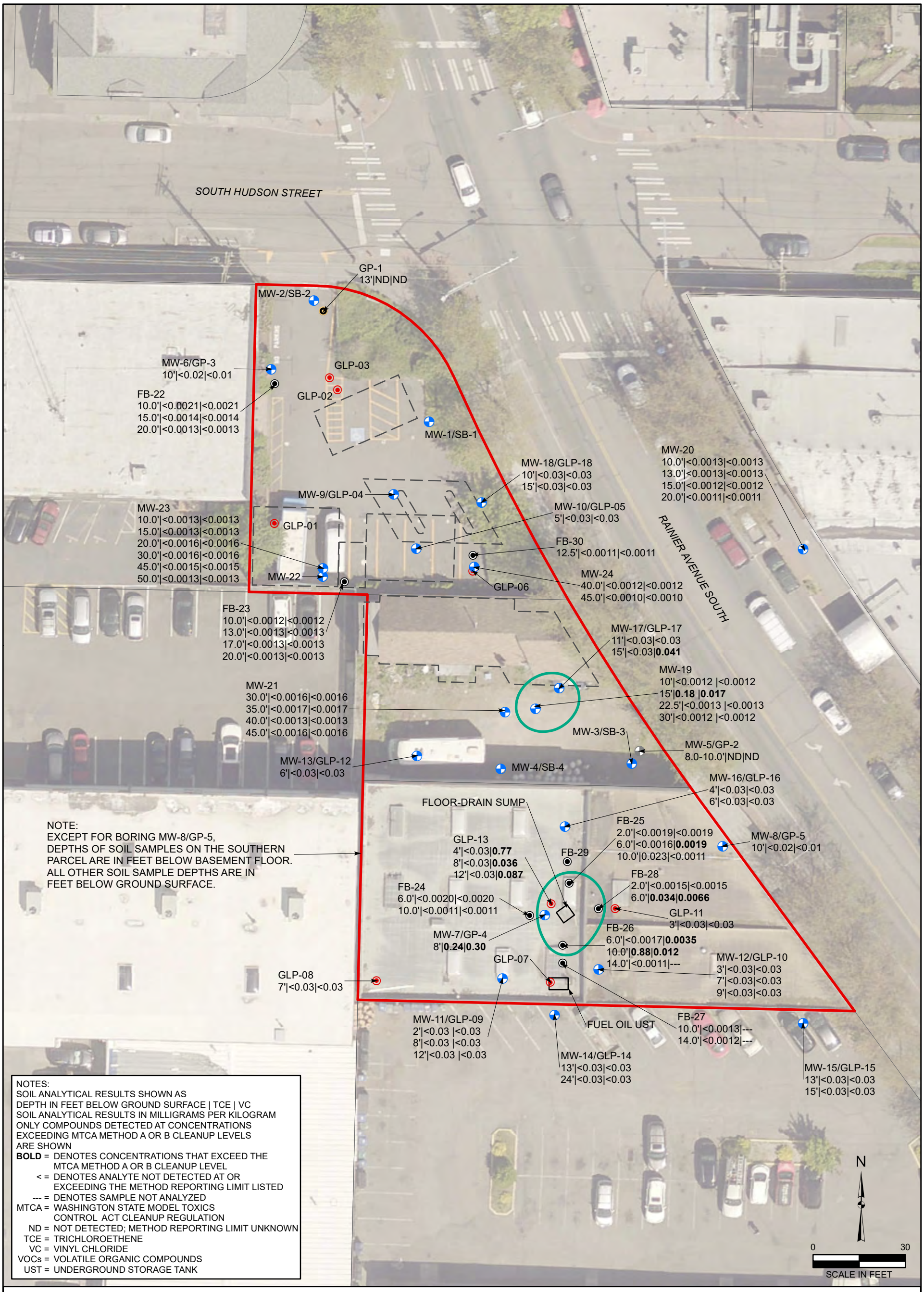
FIGURE 3

SAMPLING LOCATIONS
MORNINGSIDE ACRES TRACTS
5001, 5015, AND 5021
RAINIER AVENUE SOUTH
SEATTLE, WASHINGTON

FARALLON PN: 1355-001

Drawn By: lmurock | Checked By: YP | Date: 3/29/2023 | Disc Reference:

Document Path: Q:\Projects\1355 Morningside\001 RainierAveS\Mapfiles\018\Figure-03_SamplingLocations.mxd



NOTES:
SOIL ANALYTICAL RESULTS SHOWN AS
DEPTH IN FEET BELOW GROUND SURFACE | TCE | VC
SOIL ANALYTICAL RESULTS IN MILLIGRAMS PER KILOGRAM
ONLY COMPOUNDS DETECTED AT CONCENTRATIONS
EXCEEDING MTCA METHOD A OR B CLEANUP LEVELS
ARE SHOWN

BOLD = DENOTES CONCENTRATIONS THAT EXCEED THE MTCA METHOD A OR B CLEANUP LEVEL
< = DENOTES ANALYTE NOT DETECTED AT OR EXCEEDING THE METHOD REPORTING LIMIT LISTED
--- = DENOTES SAMPLE NOT ANALYZED
MTCA = WASHINGTON STATE MODEL TOXICS CONTROL ACT CLEANUP REGULATION
ND = NOT DETECTED; METHOD REPORTING LIMIT UNKNOWN
TCE = TRICHLOROETHENE
VC = VINYL CHLORIDE
VOCs = VOLATILE ORGANIC COMPOUNDS
UST = UNDERGROUND STORAGE TANK

LEGEND

- MONITORING WELL
- BORING (FARALLON)
- BORING (G-LOGICS)
- BORING (KLEINFELDER)
- ESTIMATED EXTENT OF CHLORINATED VOCs IN SOIL EXCEEDING MTCA METHOD A OR B CLEANUP LEVELS (DASHED WHERE INFERRED)
- PROPERTY BOUNDARY
- KING COUNTY PARCEL BOUNDARY

NOTES:
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Enclosure A Figure 4

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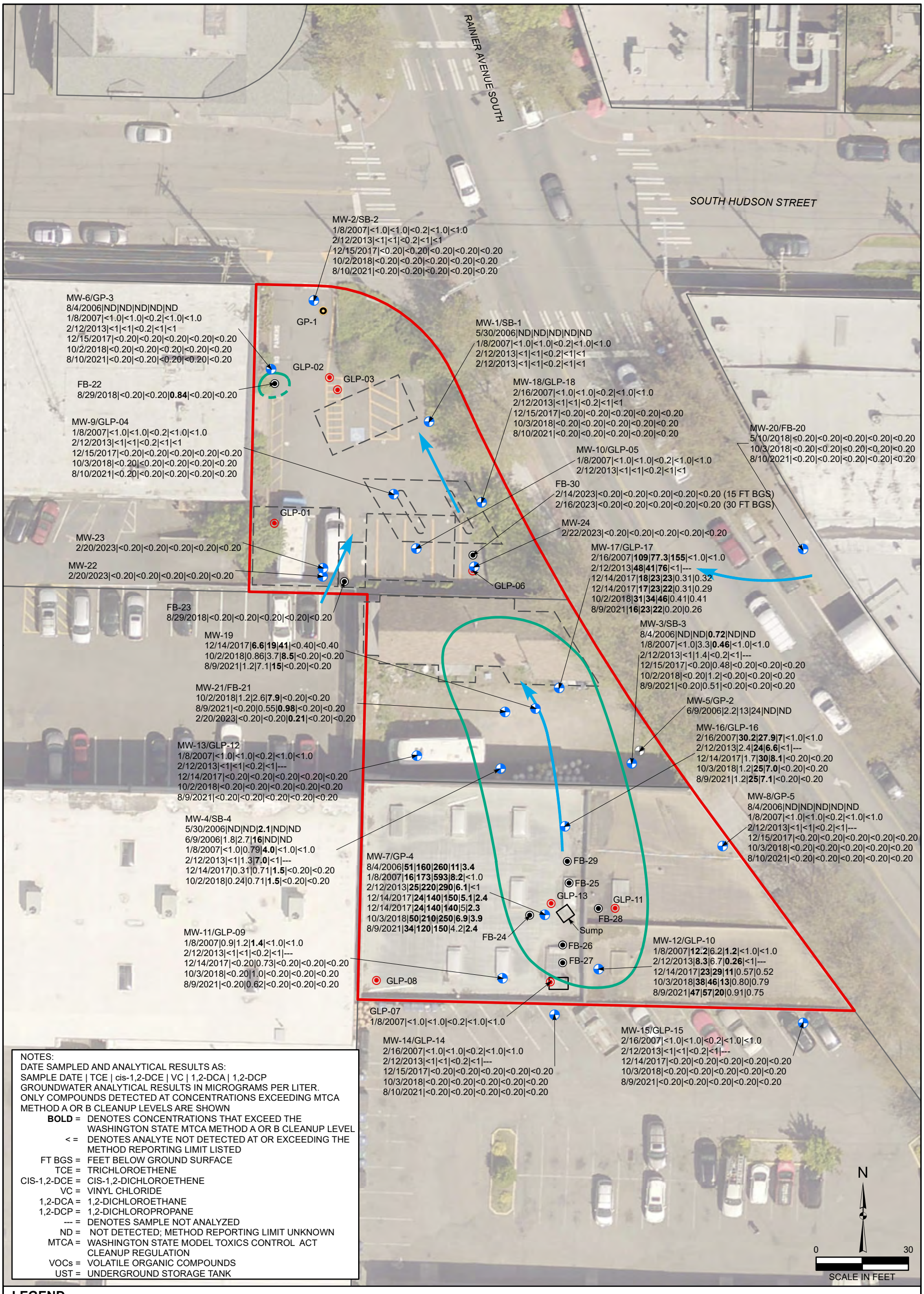
FIGURE 5

ESTIMATED AREAL EXTENT OF CHLORINATED VOCs IN SOIL
MORNINGSIDE ACRES TRACTS
5001, 5015, AND 5021
RAINIER AVENUE SOUTH
SEATTLE, WASHINGTON

FARALLON PN: 1355-001

Drawn By: lmurock | Checked By: YP | Date: 3/31/2023 | Disc Reference:

Document Path: Q:\Projects\1355 Morningside\001 RainierAveS\Mapfiles\018\Figure-05_Soil_VOCs.mxd



NOTES:
DATE SAMPLED AND ANALYTICAL RESULTS AS:
SAMPLE DATE | TCE | cis-1,2-DCE | VC | 1,2-DCA | 1,2-DCP
GROUNDWATER ANALYTICAL RESULTS IN MICROGRAMS PER LITER.
ONLY COMPOUNDS DETECTED AT CONCENTRATIONS EXCEEDING MTCA METHOD A OR B CLEANUP LEVELS ARE SHOWN

BOLD =	DENOTES CONCENTRATIONS THAT EXCEED THE WASHINGTON STATE MTCA METHOD A OR B CLEANUP LEVEL
< =	DENOTES ANALYTE NOT DETECTED AT OR EXCEEDING THE METHOD REPORTING LIMIT LISTED
FT BGS =	FEET BELOW GROUND SURFACE
TCE =	TRICHLOROETHENE
CIS-1,2-DCE =	CIS-1,2-DICHLOROETHENE
VC =	VINYL CHLORIDE
1,2-DCA =	1,2-DICHLOROETHANE
1,2-DCP =	1,2-DICHLOROPROPANE
--- =	DENOTES SAMPLE NOT ANALYZED
ND =	NOT DETECTED; METHOD REPORTING LIMIT UNKNOWN
MTCA =	WASHINGTON STATE MODEL TOXICS CONTROL ACT CLEANUP REGULATION
VOCs =	VOLATILE ORGANIC COMPOUNDS
UST =	UNDERGROUND STORAGE TANK

LEGEND

- DECOMMISSIONED MONITORING WELL
- MONITORING WELL
- BORING (FARALLON)
- BORING (G-LOGICS)
- BORING (KLEINFELDER)
- ESTIMATED EXTENT OF CHLORINATED VOCs EXCEEDING MTCA METHOD A OR B CLEANUP LEVELS IN GROUNDWATER (BASED ON MOST RECENT DATA), DASHED WHERE INFERRED
- INFERRED GROUNDWATER FLOW
- PROPERTY BOUNDARY
- KING COUNTY PARCEL BOUNDARY

NOTES:
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FIGURE 9

ESTIMATED AREAL EXTENT OF CHLORINATED VOCS IN GROUNDWATER
MORNINGSIDE ACRES TRACTS
5001, 5015, AND 5021
RAINIER AVENUE SOUTH
SEATTLE, WASHINGTON

FARALLON PN: 1355-001

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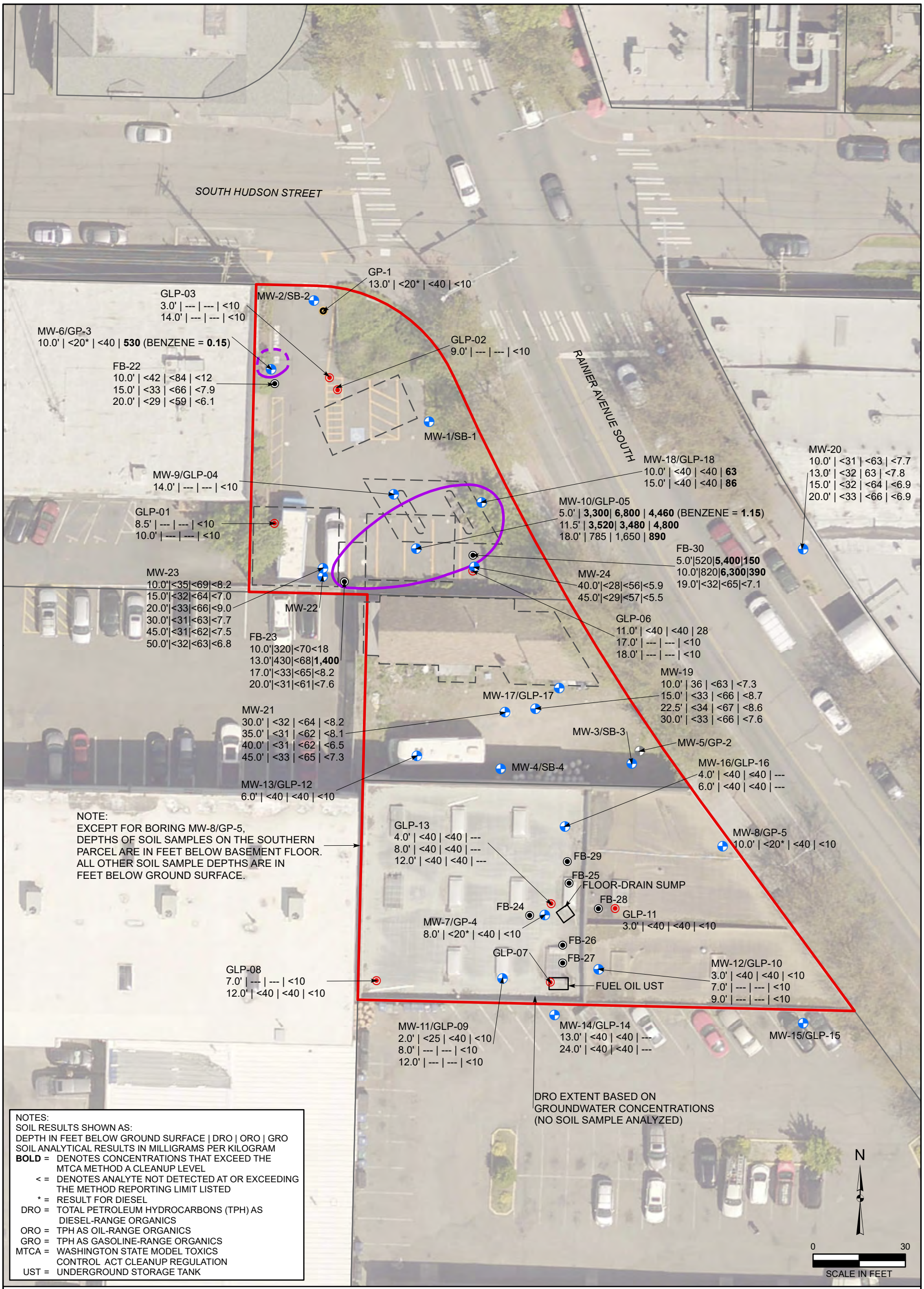
Document Path: Q:\Projects\1355 Morningside\001 RainierAveS\Mapfiles\018\Figure-09_GW_VOCs.mxd



NOTES:
SOIL RESULTS SHOWN AS:
DEPTH IN FEET BELOW GROUND SURFACE | DRO | ORO | GRO
SOIL ANALYTICAL RESULTS IN MILLIGRAMS PER KILOGRAM

BOLD = DENOTES CONCENTRATIONS THAT EXCEED THE MTCA METHOD A CLEANUP LEVEL
< = DENOTES ANALYTE NOT DETECTED AT OR EXCEEDING THE METHOD REPORTING LIMIT LISTED
* = RESULT FOR DIESEL
DRO = TOTAL PETROLEUM HYDROCARBONS (TPH) AS DIESEL-RANGE ORGANICS
ORO = TPH AS OIL-RANGE ORGANICS
GRO = TPH AS GASOLINE-RANGE ORGANICS
MTCA = WASHINGTON STATE MODEL TOXICS CONTROL ACT CLEANUP REGULATION
UST = UNDERGROUND STORAGE TANK

LEGEND

- DECOMMISSIONED MONITORING WELL
- MONITORING WELL
- BORING (FARALLON)
- BORING (G-LOGICS)
- BORING (KLEINFELDER)
- ESTIMATED EXTENT OF PETROLEUM IMPACTS IN SOIL EXCEEDING MTCA METHOD A CLEANUP LEVEL (DASHED WHERE INFERRED)
- PROPERTY BOUNDARY
- KING COUNTY PARCEL BOUNDARY

NOTES:
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FIGURE 7

ESTIMATED AREAL EXTENT OF
PETROLEUM HYDROCARBONS IN SOIL
MORNINGSIDE ACRES TRACTS
5001, 5015, AND 5021
RAINIER AVENUE SOUTH
SEATTLE, WASHINGTON

FARALLON PN: 1355-001

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Document Path: Q:\Projects\1355 Morningside\001 RainierAveS\Mapfiles\018\Figure-07_Soil_TPH.mxd

RAINIER AVENUE SOUTH

SOUTH HUDSON STREET

MW-2/SB-2
1/8/2007|---|---|<100
2/12/2013|190|<250|<100
12/15/2017|<260|<420|<100
10/2/2018|<250|<400|<100
8/10/2021|<200|<200|<100

MW-6/GP-3
8/4/2006|<200|<400|<100
1/8/2007|<200|<400|<100
2/12/2013|**600**|430|100
12/15/2017|<260|<420|<100
10/2/2018|260|<410|<100
8/10/2021|460|**520**|<100

GP-1

FB-22
8/29/2018|330|**510**|<100

GLP-03

GLP-02

MW-1/SB-1
5/30/2006|ND|ND|ND
1/8/2007|---|---|<100
2/12/2013|72|<250|<100

MW-18/GLP-18
2/16/2007|<200|<400|<100
2/12/2013|83|<250|<100
12/15/2017|<260|<410|<100
10/3/2018|<260|<410|<100
8/10/2021|<210|260|<100

MW-9/GLP-04
1/8/2007|---|---|<100
2/12/2013|430|280|<100
12/15/2017|<260|<410|<100
10/3/2018|<250|<400|<100
8/10/2021|280|330|<100

MW-10/GLP-05
1/8/2007|**283,000**|**230,000**|**298,000***
2/12/2013|**39,000**|**53,000**|**1,700**

MW-23
2/20/2023|---[1]|---[1]|<100
3/23/2023|<160|250|---

GLP-01

FB-30
2/14/2023|**1,100**|**5,700**|<400 (15 FT BGS)
2/16/2023|**520**|420|<100 (30 FT BGS)

MW-22
2/20/2023|260|450|<100

MW-24
2/22/2023|<230|<230|<100

GLP-06

MW-20
5/10/2018|<260|<420|<100
10/3/2018|<250|<400|<100
8/10/2021|<210|<210|<100

FB-23
8/29/2018|---|---|<100

MW-17/GLP-17
2/16/2007|<200|<400|---
2/12/2013|<50|<250|<100
12/14/2017|<290|<460|<100
10/2/2018|<250|<400|<100
8/9/2021|<210|<210|<100

MW-19
12/14/2017|<260|<410|<100 (BENZENE=<1.0)
10/2/2018|<250|<400|<100 (BENZENE=**5.9**)
8/9/2021|<200|<200|<100 (BENZENE=2.8)

MW-21
10/2/2018|380|<400|<100
8/9/2021|<210|260|<100

MW-5/GP-2
6/14/2006|ND|ND|ND

MW-3/SB-3
8/4/2006|---|---|---
1/8/2007|<200|<400|<100
2/12/2013|<50|<250|<100
12/15/2017|<260|<410|<100
10/2/2018|<250|<400|<100
8/9/2021|<210|<210|<100

MW-13/GLP-12
1/8/2007|<200|<400|<100
2/12/2013|<50|<250|<100
12/14/2017|<260|<420|<100
10/2/2018|<260|<410|<100
8/9/2021|<210|<210|<100

MW-16/GLP-16
2/16/2007|<200|<400|<100
2/12/2013|<50|<250|<100
12/14/2017|<260|<410|<100
10/3/2018|<260|<410|<100
8/9/2021|<210|<210|<100

MW-4/SB-4
5/30/2006|ND|ND|ND
6/14/2006|---|---|---
1/8/2007|---|---|<100
2/12/2013|<50|<250|<100
12/14/2017|<250|<410|<100
10/2/2018|<250|<400|<100

MW-8/GP-5
8/4/2006|---|---|---
1/8/2007|<200|<400|<100
2/12/2013|<85|<430|<100
12/15/2017|<250|<400|<100
10/3/2018|---|---|<100
8/10/2021|<260|<260|<100

MW-7/GP-4
8/4/2006|<200|<400|<100
1/8/2007|<200|<400|<100
2/12/2013|<50|<250|<100
12/14/2017|<260|<420|<100
10/3/2018|<250|<400|<100
8/9/2021|<210|<210|<100

GLP-13

FB-29

FB-25

FLOOR-DRAIN SUMP

GLP-11

FB-28

FB-24

MW-12/GLP-10
1/8/2007|---|---|<100
2/12/2013|88|<250|<100
12/14/2017|320|<410|<100
10/3/2018|260|<410|<100
8/9/2021|400|230|<100

MW-11/GLP-09
1/8/2007|<200|<400|<100
2/12/2013|230|<250|<100
12/14/2017|<260|<420|<100
10/3/2018|<280|<440|<100
8/9/2021|320|**690**|<100

FB-26

FB-27

GLP-08

FUEL OIL UST

GLP-07
1/8/2007|**52,800**|<400|<100

MW-15/GLP-15
2/16/2007|<200|<400|---
2/12/2013|<50|<250|<100
12/14/2017|<290|<470|<100
10/3/2018|<250|<400|<100
8/9/2021|<210|<210|<100

MW-14/GLP-14
2/16/2007|<200|<400|---
2/12/2013|<50|<250|<100
12/15/2017|<270|<440|<100
10/3/2018|<250|<400|<100
8/10/2021|<210|<210|<100

N

0 30

SCALE IN FEET

NOTES:
GROUNDWATER SAMPLE DATE AND ANALYTICAL RESULTS AS:
DATE SAMPLED | DRO | ORO | GRO
GROUNDWATER ANALYTICAL RESULTS IN MICROGRAMS PER LITER.

BOLD = DENOTES CONCENTRATIONS THAT EXCEED THE WASHINGTON STATE MTCA METHOD A CLEANUP LEVEL
< = DENOTES ANALYTE NOT DETECTED AT OR EXCEEDING THE METHOD REPORTING LIMIT LISTED
--- = DENOTES SAMPLE NOT ANALYZED
* = QUANTIFIED AS MINERAL SPIRITS
[1] = ORIGINAL DRO AND ORO RESULTS FOR SAMPLE MW-23-022023 WERE 690 AND 190 MICROGRAMS PER LITER, RESPECTIVELY. THIS SAMPLE CONTAINED HIGH TURBIDITY AT 1,414 NEPHELOMETRIC TURBIDITY UNITS (NTU) THAT APPEARED TO IMPACT RESULTS. ANOTHER GROUNDWATER SAMPLE WAS COLLECTED FROM MW-23 ON 3/23/2023 WITH A TURBIDITY MEASUREMENT OF 180 NTU THAT WAS SUBMITTED FOR NWTPH-Dx ANALYSIS. THE RESULTS FROM THE SAMPLE COLLECTED ON 3/23/2023 ARE SHOWN ON THE FIGURE.
DRO = TOTAL PETROLEUM HYDROCARBONS (TPH) AS DIESEL-RANGE ORGANICS
ORO = TPH AS OIL-RANGE ORGANICS
GRO = TPH AS GASOLINE-RANGE ORGANICS
FT BGS = FEET BELOW GROUND SURFACE
ND = NOT DETECTED; METHOD REPORTING LIMIT UNKNOWN
MTCA = WASHINGTON STATE MODEL TOXICS CONTROL ACT CLEANUP REGULATION
UST = UNDERGROUND STORAGE TANK

LEGEND

- DECOMMISSIONED MONITORING WELL
- MONITORING WELL
- BORING (FARALLON)
- BORING (G-LOGICS)
- BORING (KLEINFELDER)
- ESTIMATED EXTENT OF PETROLEUM IMPACTS IN GROUNDWATER EXCEEDING MTCA METHOD A CLEANUP LEVEL (DASHED WHERE INFERRED)
- INFERRED GROUNDWATER FLOW DIRECTION
- APPROXIMATE PROPERTY BOUNDARY
- KING COUNTY PARCEL BOUNDARY

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

Enclosure A Figure 7

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FIGURE 10

ESTIMATED AREAL EXTENT OF
PETROLEUM HYDROCARBONS IN GROUNDWATER
MORNINGSIDE ACRES TRACTS
5001, 5015, AND 5021
RAINIER AVENUE SOUTH
SEATTLE, WASHINGTON

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RAINIER AVENUE SOUTH

SOUTH HUDSON STREET

SOUTH HUDSON STREET

RAINIER AVENUE SOUTH

A

A'

B

B'

MW-2/SB-2
(105.00)

GP-1

105.00

105.00

MW-6/GP-3
(105.35)

GLP-03

FB-22

GLP-02

MW-1/SB-1
(105.17)

105.50

105.50

5001 RAINIER
AVENUE SOUTH
PARCEL 5649600135

MW-18/GLP-18
(105.72)

MW-9/GLP-04
(105.74)

GLP-01

MW-23
[86.87]

MW-10/GLP-05
[104.26]

FB-30

MW-24
(105.77) 3/16/2023

MW-22
(105.85)

FB-23

GLP-06

106.00

106.00

MW-20/FB-20
(106.03)

106.00

106.50

IA-1

5015 RAINIER
AVENUE SOUTH
PARCEL 5649600133

MW-19
(105.59)

107.00

107.50

MW-21/FB-21
(105.57)

MW-17/GLP-17
(105.59)

MW-5/GP-2

MW-3/SB-3
(105.75)

MW-13/GLP-12
(107.56)

MW-4/SB-4
(105.90)

OA-1

5021 RAINIER AVENUE SOUTH
PARCEL 5649600120

MW-16/GLP-16
(107.32)

MW-8/GP-5
(105.96)

FB-29

GLP-13

FB-25

GLP-11

IA-6

IA-4

FB-28

IA-3

FB-24
(107.51)

IA-5

MW-7/GP-4

FB-26

FLOOR-DRAIN
SUMP

FB-27

MW-12/GLP-10
(107.36)

GLP-08

MW-11/GLP-09
(107.87)

GLP-07

IA-2

FUEL OIL UST

107.50

107.00

106.50

MW-15/GLP-15
(106.11)

MW-14/GLP-14
(106.93)

N

0 15 30

SCALE IN FEET

LEGEND

- BASEMENT INDOOR AIR SAMPLING LOCATION
- FIRST FLOOR INDOOR AIR SAMPLING LOCATION
- OUTDOOR AIR SAMPLING LOCATION
- DECOMMISSIONED MONITORING WELL
- MONITORING WELL
- BORING (FARALLON)
- BORING (G-LOGICS)
- BORING (KLEINFELDER)
- SUMP SEDIMENT SAMPLE
- PROPERTY BOUNDARY
- KING COUNTY PARCEL BOUNDARY
- A A' LINE OF CROSS SECTION
- UST = UNDERGROUND STORAGE TANK
- (107.87) GROUNDWATER ELEVATION MEASURED IN FEET REFERENCED TO NORTH AMERICAN VERTICAL DATUM OF 1988 (NAVD88)
- [104.26] GROUNDWATER ELEVATION NOT USED IN CONTOURING
- 107.50 GROUNDWATER ELEVATION CONTOUR (DASHED WHERE INFERRED)
- APPROXIMATE GROUNDWATER FLOW DIRECTION

NOTES:
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FIGURE 4

GROUNDWATER ELEVATION CONTOURS
FEBRUARY 2023
MORNINGSIDE ACRES TRACTS
5001, 5015, AND 5021
RAINIER AVENUE SOUTH
SEATTLE, WASHINGTON

FARALLON PN: 1355-001

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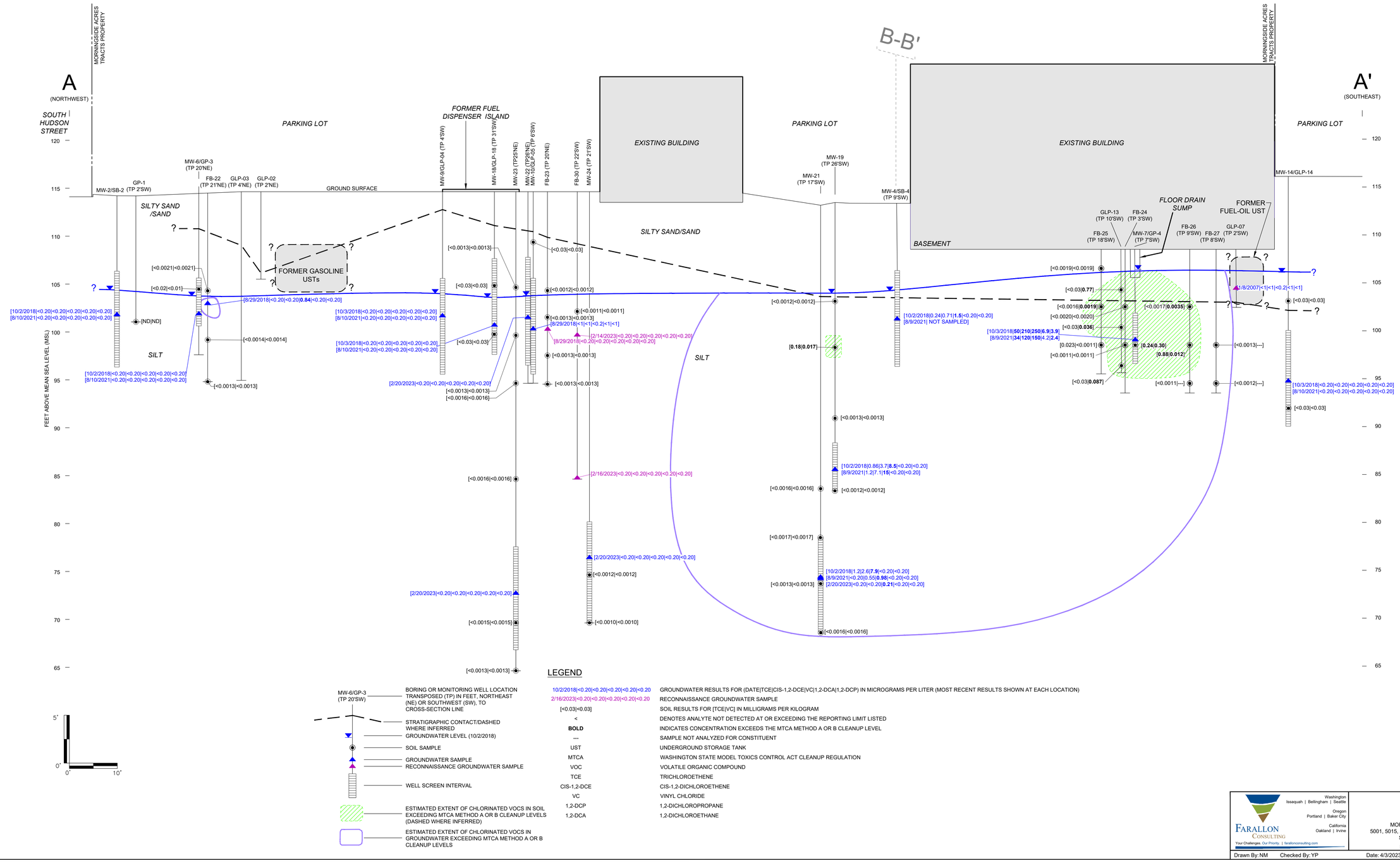
Document Path: Q:\Projects\1355 Morningside\001 RainierAveS\Mapfiles\018\Figure-04_GW_Contours_202302.mxd



LEGEND

10/2/2018|<0.20|<0.20|<0.20|<0.20|<0.20	GROUNDWATER RESULTS FOR (DATE|TCE|CIS-1,2-DCE|VC|1,2-DCA|1,2-DCP) IN MICROGRAMS PER LITER (MOST RECENT RESULTS SHOWN AT EACH LOCATION)
2/16/2023|<0.20|<0.20|<0.20|<0.20|<0.20	RECONNAISSANCE GROUNDWATER SAMPLE
[<0.03|<0.03]	SOIL RESULTS FOR [TCE|VC] IN MILLIGRAMS PER KILOGRAM
<	DENOTES ANALYTE NOT DETECTED AT OR EXCEEDING THE REPORTING LIMIT LISTED
BOLD	INDICATES CONCENTRATION EXCEEDS THE MTCA METHOD A OR B CLEANUP LEVEL
---	SAMPLE NOT ANALYZED FOR CONSTITUENT
UST	UNDERGROUND STORAGE TANK
MTCA	WASHINGTON STATE MODEL TOXICS CONTROL ACT CLEANUP REGULATION
VOC	VOLATILE ORGANIC COMPOUND
TCE	TRICHLOROETHENE
CIS-1,2-DCE	CIS-1,2-DICHLOROETHENE
VC	VINYL CHLORIDE
1,2-DCP	1,2-DICHLOROPROPANE
1,2-DCA	1,2-DICHLOROETHANE

Enclosure A Figure 9

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FIGURE 6

CROSS-SECTION A-A'
CHLORINATED VOCs
MORNINGSIDE ACRES TRACTS
5001, 5015, AND 5021 RAINIER AVENUE SOUTH
SEATTLE, WASHINGTON
FARALLON PN:1355-001

Drawn By: NM Checked By: YP Date: 4/3/2023

Enclosure B

Basis for the Opinion:
List of Documents

1. Farallon Consulting LLC, *Remedial Investigation and Feasibility Study Report, Morningside Acres Tracts, 5001, 5015, and 5021 Rainier Avenue South, Seattle, Washington*, April 5, 2023.

2. Ecology, *Re: Opinion Pursuant to WAC 173-340-515(5) on Remedial Action for the Following Hazardous Waste Site: Morningside Acres Tracts South, 5021 Rainier Avenue S, Seattle, Washington*, December 12, 2022.

3. Farallon Consulting LLC, *Remedial Investigation and Feasibility Study Report, Morningside Acres Tracts, 5001, 5015, and 5021 Rainier Avenue South, Seattle, Washington*, June 20, 2022.

4. Ecology, *Re: Response to Ecology's Request for Evaluation of Trichloroethylene Risks at the Following Site: Morningside Acres Tracts South, 5021 Rainier Avenue S, Seattle, WA 98119*, September 24, 2019.

5. Farallon Consulting, LLC *Vapor Intrusion Assessment, Morningside Acres Tracts, 5001, 5015, and 5021 Rainier Avenue South, Seattle, Washington*, September 5, 2019.

6. Ecology, *Re: Request for Evaluation of Trichloroethylene Risks at the following Site: Morningside Acres Tracts South, 5021 Rainier Avenue S, Seattle, WA 98118*, June 18, 2019.

7. Ecology, *Initial Investigation Field Report, Life Enrichment Bookstore, 5023 Rainier Avenue S, Seattle, WA 98118*, May 6, 2019.

8. Ecology, *Site Hazard Assessment, Morningside Acres Tracts South, 5021 Rainier Ave S, Seattle, King County, WA 98118*, August 19, 2015.

9. Ecology, *Initial Investigation Field Report, Morningside Acres Tracts North, 5001 Rainier Ave S, Seattle 98118, Morningside Acres Tracts South, 5015 & 5021 Rainier Ave S, Seattle 98118*, October 31, 2013.

10. The Riley Group, Inc., *Re: First Quarter 2013 Groundwater Sampling Report, Morningside Acres Tracts, 5001, 5015, and 5021 Rainier Avenue South, Seattle, Washington 98118*, April 19, 2013.

11. G-Logics, Inc., *Additional Site Exploration, Murakami-Morningside Acre Tracts, 5001, 5015, and 5021 Rainier Avenue South, Seattle, WA*, April 19, 2007.

12. Kleinfelder, Inc., *Re: Draft Supplemental Phase II Environmental Site Assessment, 5001, 5015, and 5021 Rainier Avenue South, Seattle, Washington*, August 28, 2006.

13. Kleinfelder, Inc., *Re: Limited Phase II Environmental Site Assessment, 5001, 5015, and 5021 Rainier Avenue South, Seattle, Washington*, June 26, 2006.

14. Kleinfelder, Inc., *Re: Letter Report, Geophysical Investigation Services, Proposed building Development, 5001, 5015, and 5021 Rainier Avenue South, Seattle, Washington*, May 1, 2006.