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STATE OF WASHINGTON
DEPARTMENT OF ECOLOGY
Northwest Region Office
PO Box 330316, Shoreline, WA 98133-9716 • 206-594-0000

April 12, 2023

London Kemp
Acorn Development Group, LLC
P.O. Box 81226
Seattle, WA 98108
(ldkemp@amazon.com)

Re: No Further Action opinion for the following Property associated with a contaminated Site

Site name:	Block 20 Amazon 8th & Blanchard
Site address:	2101, 2121 8th Avenue & 2130, 2100 7th Avenue, Seattle, Washington
Facility/Site ID:	23876
Cleanup Site ID:	13061
VCP Project No.:	NW3343

Dear London Kemp:

The Washington State Department of Ecology (Ecology) received your request on June 8, 2022 for an opinion regarding the sufficiency of the Property cleanup associated with the Block 20 Amazon 8th & Blanchard facility (Site) under the Voluntary Cleanup Program (VCP) [1]. This letter provides our opinion and analysis. We are providing this opinion under the authority of the Model Toxics Control Act (MTCA), Chapter 70A.305 RCW.[2]

Opinion

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

Ecology bases this opinion on an analysis of whether the remedial action meets the substantive requirements of MTCA and its implementing regulations, which are specified in Chapter 70A.305 RCW and Chapter 173-340 WAC[3] (collectively called "MTCA").

[1] https://ecology.wa.gov/Spills-Cleanup/Contamination-cleanup/Voluntary-Cleanup-Program
[2] https://app.leg.wa.gov/RCW/default.aspx?cite=70A.305
[3] https://apps.ecology.wa.gov/cleanupsearch/site/13061

Property Description

This opinion applies only to the Property described in this section, which was affected by release(s) at the Site and addressed by your cleanup. The Property includes the following parcels of real property in King County:

- Tax Parcel 066000-0270
- Tax Parcel 066000-0275
- Tax Parcel 066000-0280
- Tax Parcel 066000-0320

Enclosure A includes a legal description of the Property. **Enclosure B** includes a diagram that shows where the Property is located within the Site.

Site Description

This opinion applies to only the Site described in this section. The Site is defined by the nature and extent of contamination associated with the following release(s):

- Total petroleum hydrocarbons as diesel and heavy oil (TPH-D and TPH-O), carcinogenic polycyclic aromatic hydrocarbons (cPAHs), cadmium, and lead in soil.

Enclosure B includes Site description, history, and diagrams.

This opinion does not apply to any other sites that may affect the Property. Please note that releases from multiple sites can affect a parcel of real property. At this time, Ecology has no information that other sites affect the parcels associated with this Site.

Basis for the Opinion

Ecology bases this opinion on information in the documents listed in **Enclosure B**.
You can request these documents by filing a records request.[4] For help making a request, contact the Public Records Officer at recordsofficer@ecy.wa.gov or call (360) 407-6040.
Before making a request, check whether the documents are available on the Site webpage.[5]

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

[4] https://ecology.wa.gov/About-us/Accountability-transparency/Public-records-requests
[5] https://apps.ecology.wa.gov/cleanupsearch/site/16643

Analysis of the Cleanup

Ecology has concluded that no further remedial action is necessary at the Property to clean up contamination associated with the Site. However, Ecology has also concluded that further remedial action is still necessary to clean up contamination elsewhere at the Site. Ecology bases its conclusions on the following analysis:

Characterizing the Site

Ecology has determined your completed Site characterization is sufficient for setting cleanup standards and selecting a cleanup action for the Property. **Enclosure B** describes the Site.

Investigations conducted on the Property in 2012 to 2016 discovered and delineated soil contamination on the Property. Subsequent redevelopment activities in 2016 discovered and removed two underground storage tanks (USTs) and removed contaminated soil from the Property.

Soil sampling conducted before and during Property construction activities delineated the lateral and vertical extents of soil contamination and confirmed that all contaminated soil has been removed from the Property. Groundwater sampling confirmed that the discontinuous shallow perched groundwater (no longer present on Property) and deep regional groundwater are not impacted by the contaminated soil.

Setting cleanup standards

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

Cleanup Levels

Soil

The Site is in an area with limited terrestrial habitat and qualified for a Terrestrial Ecological Evaluation (TEE) exclusion, based on WAC 173-340-7491(1)(c)(i). There are less than 1.5 acres of contiguous undeveloped land on the Site or within 500 feet of any area of the Site. Land use at the Site and surrounding area makes substantial wildlife exposure unlikely. Therefore, cleanup levels protective of terrestrial species are not needed at this Site.

The Site is in the central business district of downtown Seattle and is zoned Downtown Mixed Commercial (DMC). MTCA Method A soil cleanup levels for unrestricted land uses are appropriate for the Site. These Method A soil cleanup levels are based on protection of groundwater.

Groundwater

The highest beneficial use for groundwater under MTCA is considered to be as a drinking water source, unless it can be demonstrated that the groundwater is not potable. MTCA Method A groundwater cleanup levels are protective of potable use and are therefore appropriate.

Points of Compliance

Soil

The point of compliance for soil at the Site for the protection of groundwater is soils throughout the Site.

Groundwater

The point of compliance for groundwater is throughout the Site, from the uppermost level of the saturated zone extending vertically and horizontally to the lowest depth, which could potentially be affected.

Selecting the cleanup action

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

The cleanup action selected for the Property consisted of the following:

- Removal of two heating oil USTs containing diesel and oil;
- Excavation and off-Site disposal of contaminated soil; and
- Confirmational sampling of soil to document compliance with cleanup levels.

Implementing the cleanup action

Ecology has determined your cleanup meets the standards set for the Property. The cleanup consisted of the following activities:

- Two USTs were decommissioned by removal in 2016:
    - 450-gallon heating oil UST; and
    - 900-gallon heating oil UST.
- A total of 38,714 tons of soil contaminated with TPH-D, TPH-O, cPAHs, cadmium, and lead were removed from the UST excavation and other remedial excavations located on the Property during redevelopment activities.

- Soil sampling conducted in the limits of the remedial excavations confirmed compliance with Method A soil cleanup levels throughout the Property.
- Site data has been uploaded to the Ecology Environmental Management (EIM) database.

The Site extends off the Property into the Blanchard Street right-of-way (ROW) to the northwest, represented by two samples collected at the shoring wall along Blanchard Street. The residual soil contamination in the ROW does not extend to the property across Blanchard Street, based on the data collected from that property.

Listing of the Site

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

Limitations of the Opinion

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**:

- 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 70A.305.040(4).[6]

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[7] and WAC 173-340-545.[8]

[6] https://app.leg.wa.gov/RCW/default.aspx?cite=70A.305.040
[7] https://app.leg.wa.gov/RCW/default.aspx?cite=70A.305.080
[8] https://apps.leg.wa.gov/WAC/default.aspx?cite=173-340-545

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).[9]

Continuation of Agreement

Thank you for cleaning up the Property under the Standard VCP process. This opinion terminates the VCP Agreement governing VCP Project No. NW3343. If you should decide to clean up the remainder of the Site, you can re-apply and request additional services under the VCP.

Questions

If you have any questions about this opinion or the termination of the Agreement, please contact me by phone at (206) 556-5258 or email at kim.vik@ecy.wa.gov.

Sincerely,

Kim Vik
NWRO, Toxics Cleanup Program

Enclosures (2):

A – Property Legal Description
B – Site Description, History, and Diagrams
C – Basis for the Opinion: List of Documents

cc: London Kemp, Acorn Development Group (ldkemp@amazon.com)
Kristin Rincon, Acorn Development Group (krisrinc@amazon.com)
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Kelli Barker, VCP Fiscal Analyst (w/o encl) (ecyrevcp@ecy.wa.gov)
Sonia Fernandez, VCP Coordinator (sonia.fernandez@ecy.wa.gov)

[9] https://app.leg.wa.gov/RCW/default.aspx?cite=70A.305.170

Enclosure A

Property Legal Description

King County Parcel 066000-0280

BELL HEIRS OF S A 2ND ADD LESS POR FOR ST TGW 13000 SQ FT OF TRANSFERABLE DEVELOPMENT RIGHTS TO PLC# 066000-0270, 0275, 0280 & 0320 PER DEED REC #20151221001194 TGW POR OF VAC ALLEY PER ORD #126416 & AGREEMENT REC #20201210002757

King County Parcel 066000-0320

BELL HEIRS OF S A 2ND ADD LESS FOR WESTLAKE BLVD & LESS POR FOR 8TH AVE TGW 13000 SQ FT OF TRANSFERABLE DEVELOPMENT RIGHTS TO PLC# 066000-0270, 0275, 0280 & 0320 PER DEED REC #20151221001194 TGW POR OF VAC ALLEY PER ORD #126416 & AGREEMENT REC #20201210002757

King County Parcel 066000-0275

BELL HEIRS OF S A 2ND ADD LESS POR FOR ST TGW 13000 SQ FT OF TRANSFERABLE DEVELOPMENT RIGHTS TO PLC# 066000-0270, 0275, 0280 & 0320 PER DEED REC #20151221001194 TGW POR OF VAC ALLEY PER ORD #126416 & AGREEMENT REC #20201210002757

King County Parcel 066000-0270

BELL HEIRS OF S A 2ND ADD LOTS 1 THRU 5 LESS POR FOR ST TGW 13000 SQ FT OF TRANSFERABLE DEVELOPMENT RIGHTS TO PLC# 066000-0270, 0275, 0280 & 0320 PER DEED REC #20151221001194 TGW POR OF VAC ALLEY PER ORD #126416 & AGREEMENT REC #20201210002757

Enclosure B

Site Description, History, and Diagrams

Site Description

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

Site: The Property is located at a full city block (Block 20) bound by 8th Avenue to the northeast, 7th Avenue to the southwest, Blanchard Street to the northwest, and Lenora Street to the southeast in the Denny Triangle neighborhood of Seattle, Washington (Property, **Figure 1**). The Property also borders Westlake Avenue on the east (at the intersection of Westlake Avenue, 8th Avenue, and Lenora Street). The Property includes four King County Parcels covering a total of 82,656 square feet (1.9 acres):

- Parcel 066000-0280 (21,029 square feet)
- Parcel 066000-0320 (19,867 square feet)
- Parcel 066000-0275 (6,960 square feet)
- Parcel 066000-0270 (34,800 square feet)

The Site is defined by the projected extent of contamination caused by TPH-D, TPH-O, cPAHs, cadmium, and lead in soil. Based on the available data, the Site consists of the Property and the ROW to the northwest.

Area and Property Description: The Property is in the central business district of Seattle in an area zoned as DMC (Downtown Mixed Commercial). The Property slopes down to the east with elevations ranging from 98 feet above mean sea level (amsl) in the northwest corner to 80 feet amsl in the southeast corner. The Property is currently occupied by a multi-level (37-floor) high-rise office building (Amazon Re:Invent Building). The Property was excavated to approximately 85 feet below the ground surface (bgs) to accommodate multiple levels of underground parking beneath the building. The building is owned by Amazon and is part of the Amazon Headquarters Campus.

Site History and Current Use: The Property is located within the Denny Regrade area of Seattle (currently known as the Denny Triangle neighborhood) which included the area bound by Denny Way to the north, 3rd Avenue to the southwest, and Olive Way to the southeast. The Denny Regrade was a major regrading and filling project from 1897 to 1930 that included the removal of Denny Hill, essentially reducing the elevation approximately 100 feet. During regrade activities, the land at and around the Property was cut in elevation up to 20 feet and

subsequently filled with up to 25 feet of fill soil from nearby hills and other sources. The fill soil in the area have been found to contain PAHs.

The Property originally consisted of 12 lots (Lots 1 through 12). Lots 1 through 6 were located along 7th Avenue and Lots 7 through 12 were located along 8th Avenue (**Figure 2 and Figure 3**). Possible or known underground storage tanks (USTs) were formerly located on multiple lots of the Property (**Figure 3 and Figure 4**).

- **Lots 1 and 2:** A former gasoline station was located on these lots from the 1940s to the early 1950s when the gas station was removed. The lots were used as parking lots after the removal of the gas station.
- **Lots 3 through 6:** Residential houses occupied these lots in the 1910s through 1950s. USTs associated with heating oil for the houses were suspected to have been present on the lots. The houses were demolished in the late 1960s and replaced with two small used car sales businesses and parking lots. Fueling and/or car service activities were not documented for these businesses; however, a UST is documented to have been present on Lot 6.
- **Lots 7 through 10:** Various car sales and service businesses operated on these lots from 1960 to the time the Property was redeveloped in 2016. Hydraulic hoists and USTs (two 1,000-gallon and one 2,000-gallon) were associated with the former dealerships. The three USTs (gasoline, diesel, and waste oil) were removed in 1989.
- **Lots 11 and 12:** Two commercial buildings were located on these lots. Various businesses occupied the buildings including a hotel (1909), Gray Line Bus Tours (1920s through 1960s), a trucking/transfer company (1920s), a tire shop (1920s through 1944), and an oil burner company (1930 through 1966). USTs were suspected to be associated with the former bus tour business on Lot 11. The buildings on these lots were demolished in 1971 and the lots were subsequently used for parking.

The Property was redeveloped from 2016 to 2019 into the current configuration. The redevelopment of the Property is one phase of a multi-office-tower redevelopment project that spanned five contiguous city blocks, known as the Rufus 2.0 Development.

Sources of Contamination: Soil contamination on the Property is a result of releases from former USTs and other facilities located on the Property. Releases of TPH-D, TPH-O, cPAHs, cadmium, and lead have been confirmed in soil. PAH contamination may also be the result of fill from unknown sources that was placed on the Property during the Denny Regrade project.

Physiographic Setting: The Property is located within the Puget Sound Lowland Physiographic Province, a north-south trending structural and topographic depression that is bordered on its west side 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 non-glacial deposits.

In the early 1900's, soil was moved into the area where the Property is located from what was formerly Denny Hill during the Denny Regrade project. The Denny Regrade consisted of the removal of a steep hill (Denny Hill) north of downtown Seattle as part of a large development project in the early part of the 20th century.

Surface/Storm Water System: The nearest surface water is Elliot Bay located approximately 0.56 miles to the southwest. Lake Union is located approximately 0.67 miles to the north. Surface water runoff in the area is captured in municipal storm drains and transported to the nearest surface water drainage.

Ecological Setting: The Property is in the downtown area of Seattle in a typical urban setting. The surface of the Property is covered by a building and associated, surrounding paved areas. Denny Park, a 4.6-acre city park, is located approximately 450 feet north of the Property. Other surrounding areas are covered with asphalt, concrete, or buildings.

Geology: The Site is located within the Puget Sound Lowlands geologic region which is characterized by complex sequences of glacial and non-glacial sediments that overlie bedrock. A west-east trending cross section A-A' depicting the geological information in the middle of the Property is shown on **Figure 5**; the section line is shown on **Figure 6.**

The Property is underlain by approximately 2 to 20 feet of fill consisting of silty sand with gravel and cobbles with a significant presence of construction debris (charred wood, brick, rubble, etc.). The thickest fill (15 to 20 feet) was encountered in the northeast corner of the Property. The fill is underlain by a discontinuous layer silt and clay interbedded with sand lenses and varying amounts of gravel and silty sand (approximately 4 to 14 feet thick). Underneath are glacial deposits of very dense fine to medium sand with silt and gravel interbedded with very dense silty fine sand with gravel (glacial till). The glacial deposits extended to the maximum explored depth of approximately 85 feet bgs.

Groundwater: Deep groundwater is present beneath the Property from 60 to 69 feet bgs and inferred to flow to the west. Discontinuous perched shallow groundwater occurs in localized areas on Property at 12 feet bgs.

These observations were based on data from four on-Property groundwater monitoring wells (MW20-1 through MW20-3, and MW20-5; **Figure 4**). Among them, wells MW20-1 through MW20-3 were completed to approximately 85 feet bgs, and well MW20-5 was completed to 20 feet bgs. The monitoring wells were decommissioned prior to redevelopment activities. Groundwater was not encountered during redevelopment mass excavation activities up to the maximum excavated depth of 85 feet bgs.

Water Supply: Drinking water for the area is supplied by Seattle Public Utilities (SPU) and is provided by the Cedar River Municipal Watershed. The Cedar River originates in the Cascade Mountains and drains into Lake Washington. Chester Lake is the main storage reservoir for the Cedar River Watershed system. No drinking water wells were identified within 500 feet of the Property.

Extent of Soil and Groundwater Contamination: The lateral extent of soil contamination has been limited to the within the Property boundary with the exception of two areas along the northwest Property boundary where contamination appears to extend into the Blanchard Street ROW. The soil contamination in the ROW does not appear to extend to the property across Blanchard Street. The vertical extent of soil contamination has been defined and is limited to approximately 25 feet bgs. Contaminants have not been detected in groundwater beneath the Property. Volatile organic compounds (VOCs) have not been detected in soil; therefore, vapor intrusion is not a risk.

Previous Investigations:

2012 Initial Property Subsurface Investigation.

Six borings (MW20-1 through MW20-3 and B20-1 and B21-3) were advanced up to 86.4 feet bgs; MW20-1 through MW20-3 were completed as groundwater monitoring wells (**Figure 4**). Eighteen borings (MW20-4 through MW20-6 and B20-4 through B20-18) were advanced up to 30 feet bgs; MW20-5 was completed as a shallow groundwater monitoring well. Soil and groundwater samples were analyzed for total petroleum hydrocarbons as gasoline (TPH-G), TPH-D, TPH-O, polychlorinated biphenyls (PCBs), VOC, PAHs, and metals.

TPH-O, cPAHs, and lead were detected in soil at concentrations exceeding the MTCA Method A cleanup levels from B20-3 and MW20-5 in samples collected between 2.5 and 20 feet bgs. TPH-G, TPH-D, VOCs, and other metals were either below the cleanup levels or below the method reporting limits (MRLs). Metals were the only analytes detected above the MRLs in the groundwater samples from the four monitoring wells; however, concentrations were below the cleanup levels. The distribution of TPH-O, lead, and cPAH contamination in soil is shown on **Figure 6, Figure 7, and Figure 8**, respectively.

2014 Right-of Way Soil Sampling.

Soil samples were collected from the Property ROWs along 8th Avenue, Blanchard Street, and Lenora Street in July 2014 (**Figure 9**). The ROW area was divided into 10 sections labeled A through J. A total of 25 shallow soil samples were collected from the ROWs up to 6 feet bgs and analyzed for TPH-G, TPH-D, TPH-O, and metals. Results for all of the soil samples were either below the MTCA Method A cleanup levels, or below the MRLs.

2015 Property Subsurface Investigation.

Fourteen borings (B20-19 through B20-32) were advanced up to 25 feet bgs in 2015 (**Figure 4**). Selected soil samples were collected from the borings and analyzed for TPH-G, TPH-D, TPH-O, VOCs, PAHs, and metals. TPH-O exceeding the MTCA Method A cleanup level was present in soil collected from 10.5 feet bgs from B20-21; however, the sample collected from the same boring at 13 feet bgs did not contain TPH-O above the cleanup level (**Figure 6**).

Shallow soil (3.5 to 10.5 feet bgs) collected from B20-21, B20-24, and B20-27 contained cPAHs exceeding the MTCA Method A cleanup level. The sample from B20-24 (3.5 feet bgs) also contained tetrachloroethene (PCE) at a concentration slightly exceeding the MTCA Method A cleanup level. The sample collected at 8.5 feet bgs from B20-24 did not contain cPAHs or PCE above the MRLs. No other results exceeded the MTCA Method A cleanup levels (**Figure 8**).

2016 Pre-Construction Soil Characterization.

In October 2016, contaminated soil was observed in soldier piles W6, W9, and W10 during soldier pile installation activities. Soil samples were collected from the soldier pile cuttings extracted between 15 and 45 feet bgs and analyzed for TPH-G, TPH-D, TPH-O, cPAHs, VOCs, and metals. The sample collected from soldier pile W9 cuttings (estimated 25 feet bgs) contained cPAHs exceeding the MTCA Method A cleanup level. Two borings (W6S46 and W9S46) were advanced near soldier piles W6, W9, and W10 and soil samples were collected up to 30 feet bgs. cPAHs in soil samples from these borings were not detected at the MRLs (**Figure 8**).

In November 2016, prior to the mass excavation for the Property redevelopment, five test pits (TP-W14S36, TP-W4S35, TP-W14S9, TP-W4S20, and TP-W3S5) were completed up to 15 feet bgs to characterize fill soil in the previously unexplored areas. Cadmium, lead, and/or cPAHs were detected in samples from test pits TP-W14S9 (5 feet bgs) and TP-W3S5 (5 feet bgs) at concentrations exceeding the cleanup levels (**Figure 8**).

Property Cleanup Actions:

UST Discovery, Closure and Removal.

During Property mass excavation activities in December 2016, two previously unknown and undocumented USTs (450-gallon and 900-gallon) were discovered adjacent to each other in the southwest portion of the Property (Lot 4). Both USTs contained heating oil and were likely associated with the houses historically located on Lot 4. Soil samples beneath the USTs contained TPH-D, TPH-O, and cPAHs exceeding the MTCA Method A cleanup levels. The USTs and associated contaminated soil were subsequently excavated. The UST excavation measured 24 feet by 36 feet by 17 feet deep. Confirmation soil samples collected from the limits of the UST remedial excavation were analyzed for TPH-D, TPH-O, cPAHs, VOCs, and metals. None of the results exceeded MTCA Method A cleanup levels (**Figure 10**).

Remedial Excavation and Confirmation Sampling During Mass Excavation.

During mass excavation activities in 2016 and 2017, previously identified areas of petroleum-, metals-, and cPAH-contaminated soil were excavated to depths ranging from 8.5 to 25 feet bgs (**Figures 10, 11, and 12**). Approximately 38,714 tons of contaminated soil (exceeding Method A cleanup levels) were removed from the Property and disposed off-Site.

Confirmation soil samples were collected from the limits of the remedial excavations and analyzed for TPH-D, TPH-O, metals, and cPAHs. Two samples collected along the shoring wall along Blanchard Street (sample W30-2.5 and W9-SP-25) contained cPAHs above the Method A cleanup level (**Figure 12**). Samples collected beneath these samples did not contain cPAHs above the cleanup level. All other confirmation soil samples were below the MTCA Method A cleanups levels.

FIGURE 1
Reference: "Remedial Investigation/Feasibility Study and Cleanup Action Report," by GeoEngineers, dated February 3, 2020.

Path: \\redfp\projects\20\20434001\GIS\20434001160_F1_VicinityMap_Block20.mxd Map Revised: May 23, 2013 EL
Office: Redmond

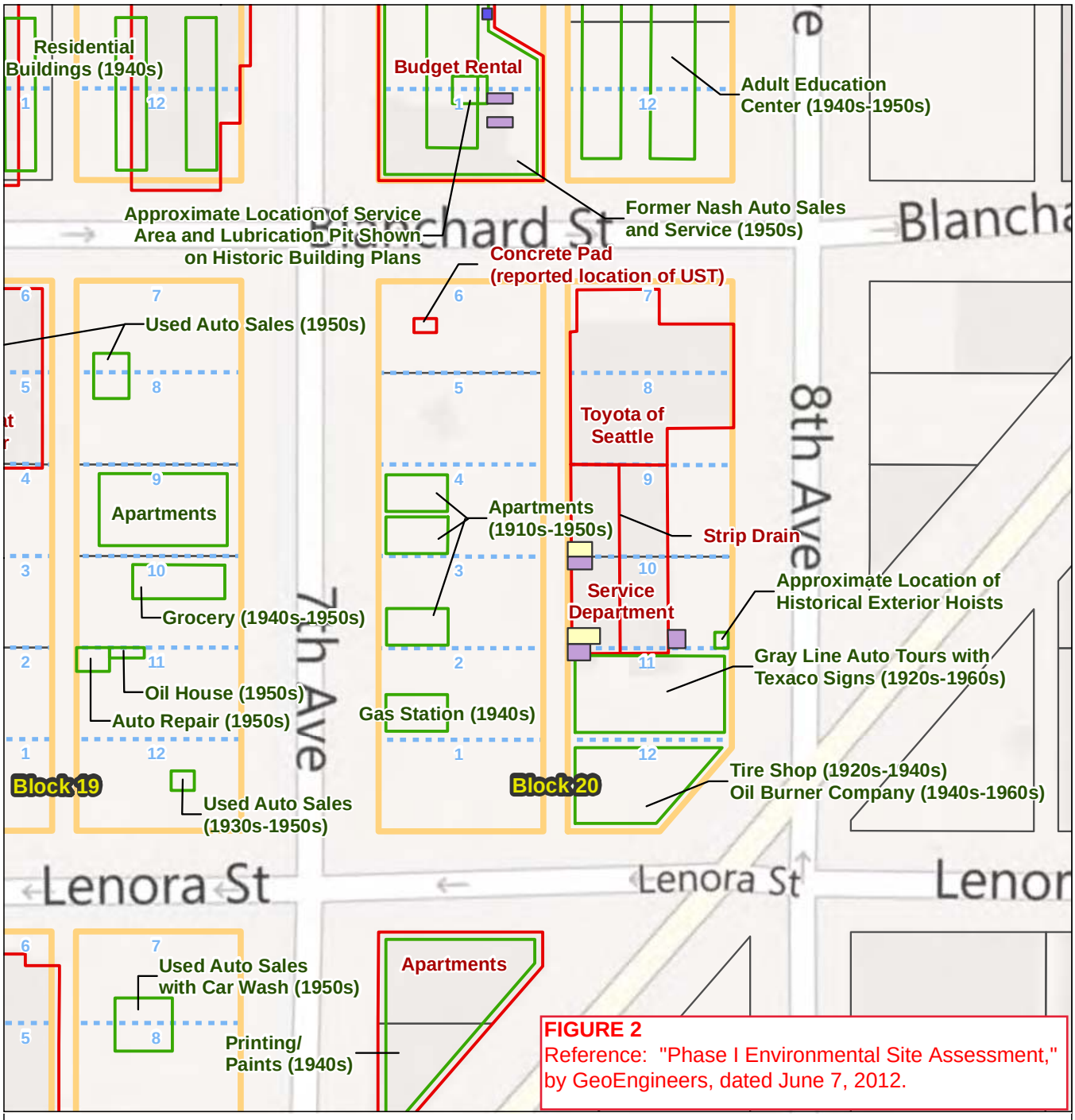


FIGURE 2
Reference: "Phase I Environmental Site Assessment," by GeoEngineers, dated June 7, 2012.

Subject Property
King County Parcel Boundary
Lot Boundary
Existing Building
Historical Commercial Building (Approximate Footprint)
Chemical Storage Area
Possible UST Area
Sump Location

0 50 100 200
Feet

Data Source: Aerial Image, parcel boundaries and street lines from King County GIS. Bing Maps Road, 2011.

Projection: NAD 1983 StatePlane Washington North FIPS 4601 Feet

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

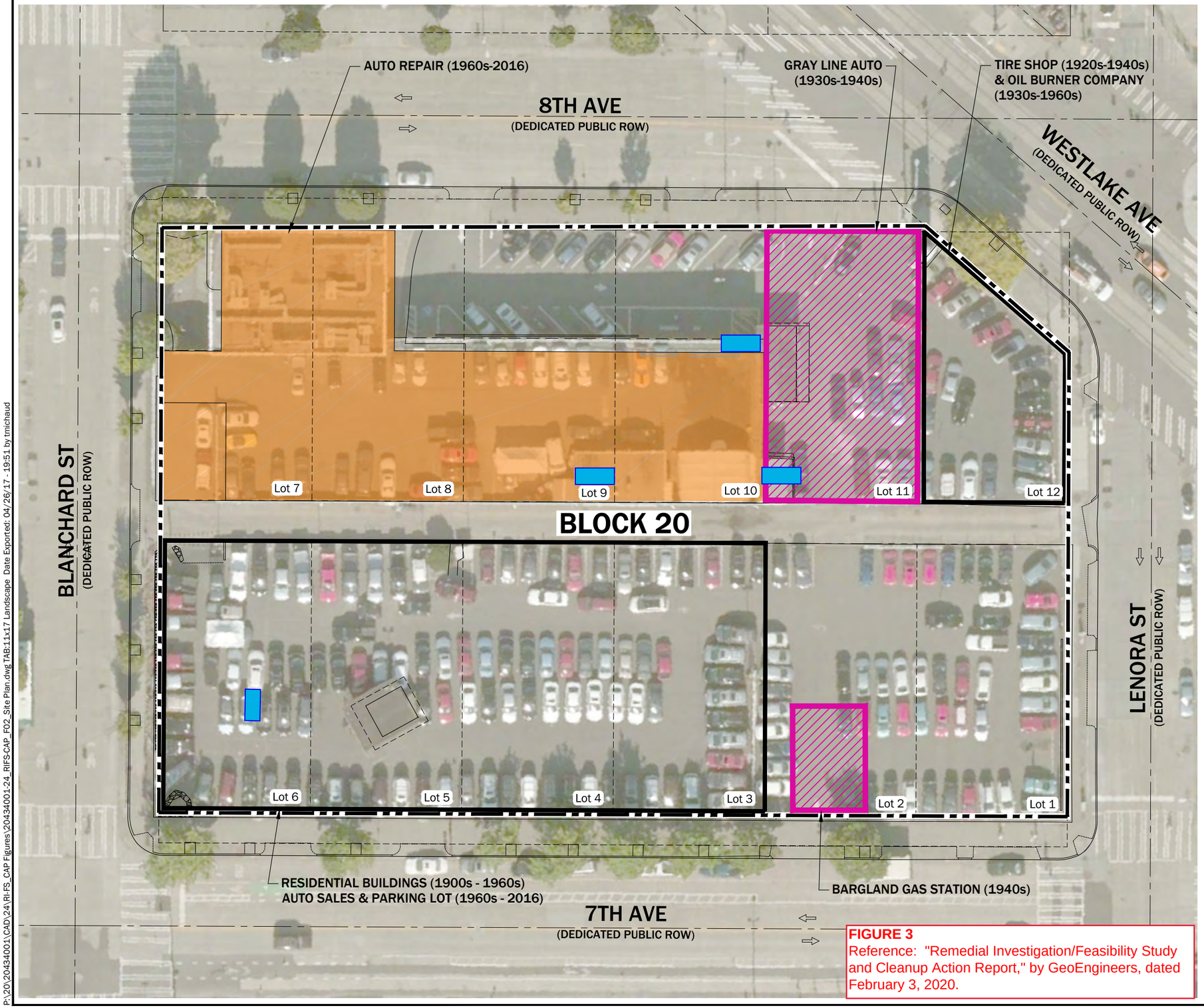
Site Plan - Block 20

Rufus 2.0
Seattle, Washington

GeoEngineers

Figure 4

Path: \\sea\projects\20\20434001\GIS\20434001_ESA_BlockFigures.mxd Map Revised: 12 April 2012 amanza



Legend

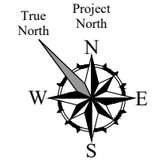
- Subject Property Boundary
- Historical Auto Repair Building Footprint
- Former Gas Station General Location
- Possible or Known Former (Removed) UST Location
- Site Use of Potential Concern as Indicated

Notes:

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

Data Source: Site survey CAD file "XS-SUR.dwg" provided by Bush, Roed & Hitchings , Inc., dated March 2012. Aerial photo from Microsoft Bing server.

Projection: NAD83 WA State Planes, N Zone, US Foot



40 0 40
Feet

FIGURE 3
Reference: "Remedial Investigation/Feasibility Study and Cleanup Action Report," by GeoEngineers, dated February 3, 2020.

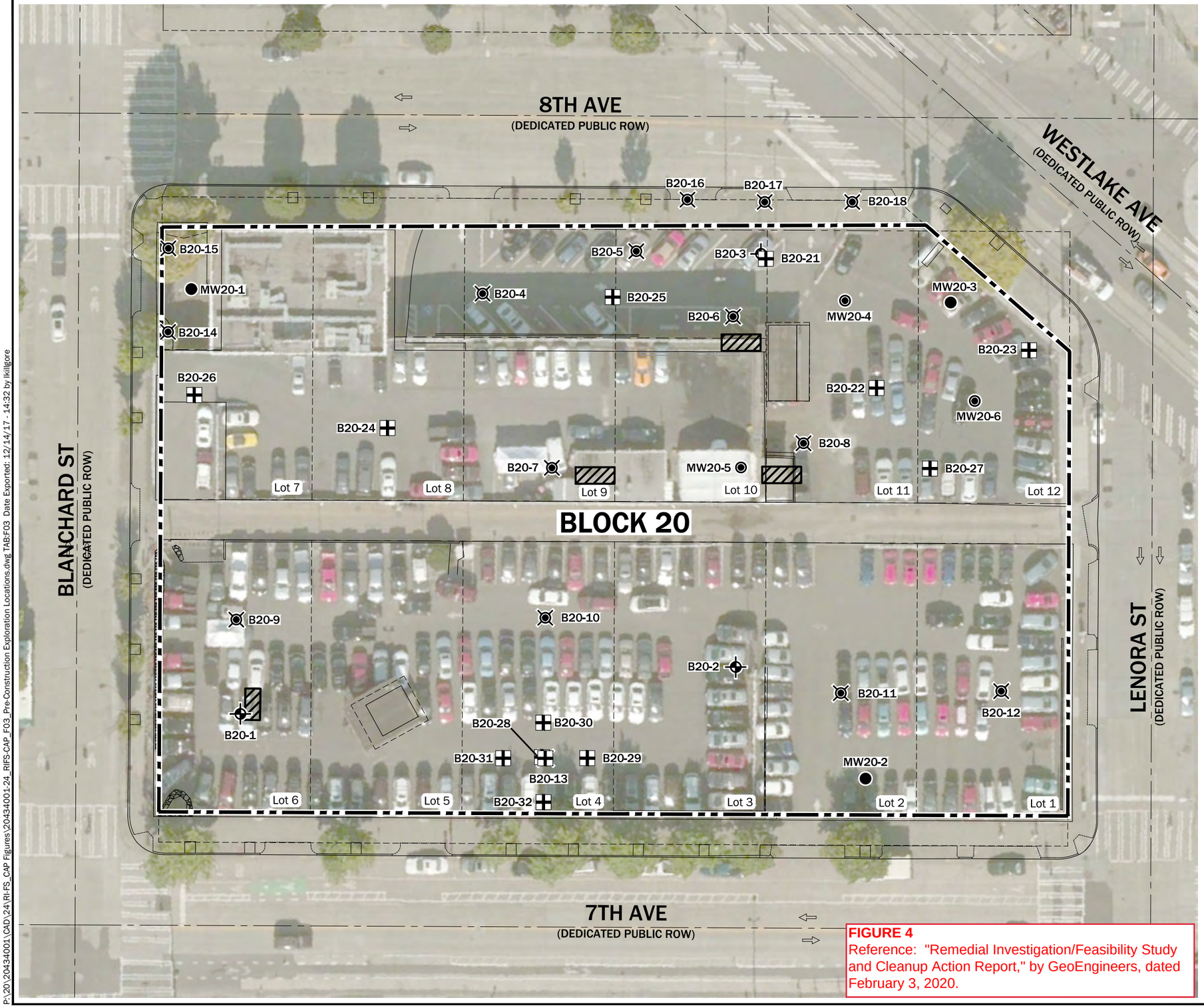
Site Plan

Rufus 2.0 Development - Block 20
Seattle, Washington

GeoEngineers

Figure 2

P:\20\20434001\CAD\24\RI-FS_CAP Figures\20434001-24_RIFS-CAP_F02_Site Plan.dwg TAB:11x17 Landscape Date Exported: 04/26/17 - 19:51 by tmichaud



P:\20\20434001\CAD\24\RI-FS_CAP Figures\20434001-24_RIFS-CAP_F03_Pre-Construction Exploration Locations.dwg TAB:F03 Date Exported: 12/14/17 - 14:32 by lkilgore

Legend

- Subject Property Boundary
- B20-21 — Direct Push Borings Completed in April 2015
- MW20-3 — Shallow Monitoring Wells Completed in April 2012
- B20-6 — Direct-Push Borings Completed in April 2012
- B20-1 — Hollow-stem Auger Borings Completed in February 2012
- MW20-1 — Monitoring Well Completed in February 2012
- Possible or Known Former UST Location

Notes:

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

Data Source: Site survey CAD file "XS-SUR.dwg" provided by Bush, Roed & Hitchings , Inc., dated March 2012. Aerial photo from Microsoft Bing server.

Projection: NAD83 WA State Planes, N Zone, US Foot

True North / Project North

40 0 40
Feet

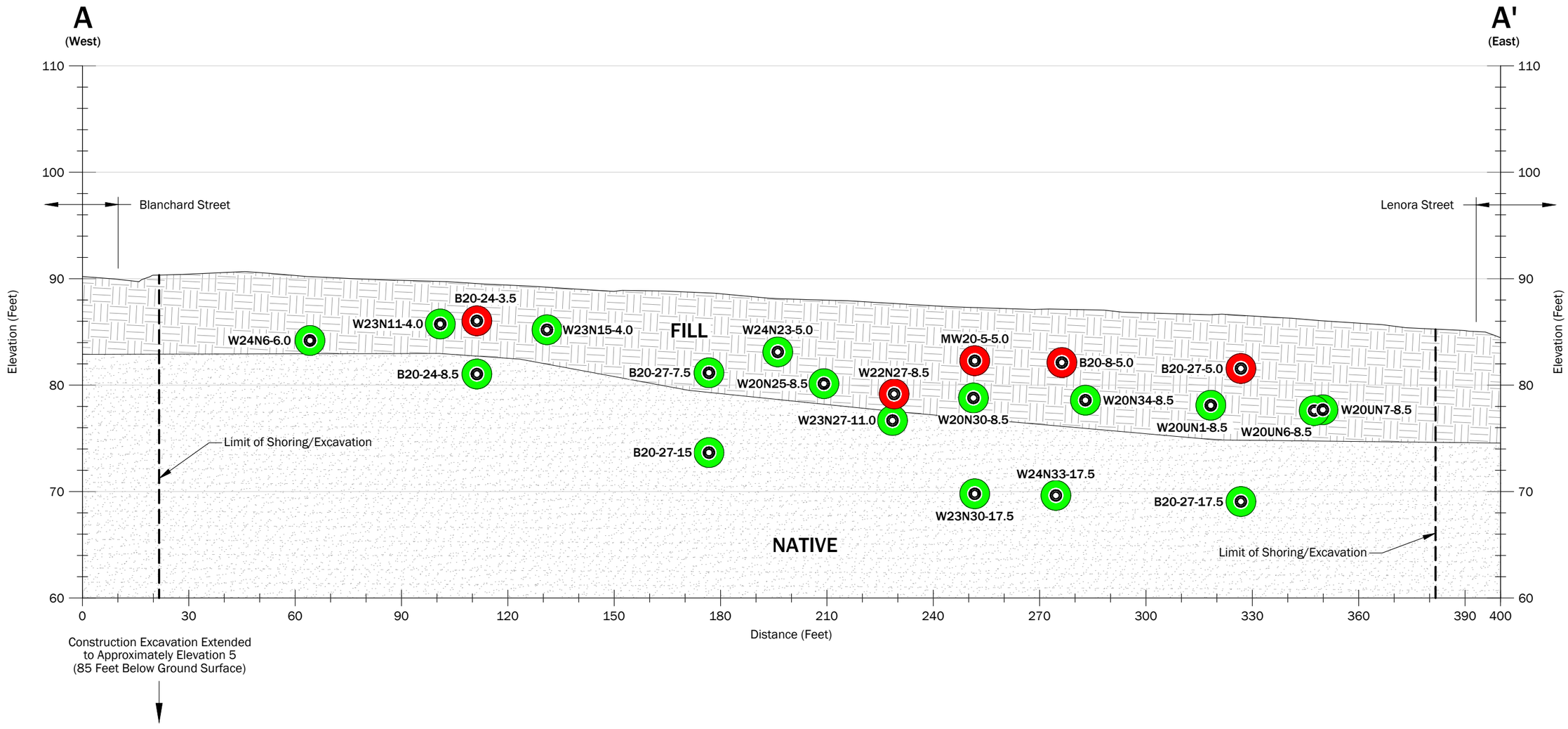
FIGURE 4
Reference: "Remedial Investigation/Feasibility Study and Cleanup Action Report," by GeoEngineers, dated February 3, 2020.

Pre-Construction Exploration Locations

Rufus 2.0 Development - Block 20
Seattle, Washington

GeoEngineers

Figure 3



Notes:

1. Sample nomenclature for construction phase soil samples and test pits used a project-specific grid system based on soldier pile IDs from the temporary shoring design (ex. N9 is a soldier pile along the north shoring wall). Soldier pile IDs are shown along the Property boundary. The final number in all sample IDs represents the depth the sample was obtained from (ex. W32N21-5.0 was obtained from a depth of 5.0 ft below ground surface).
2. The locations of all features shown are approximate.
3. This drawing is for information purposes. It is intended to assist in showing features discussed in an attached document. GeoEngineers, Inc. cannot guarantee the accuracy and content of electronic files. The master file is stored by GeoEngineers, Inc. and will serve as the official record of this communication.

Data Source: Base survey and shoring design CAD files provided by Sellen on 8-10-2016.

Legend

Contaminants of concern detected at concentrations above MTCA CUL

Contaminants of concern were not detected or were detected at concentrations below MTCA CUL

CUL Cleanup Level

30 0 30
Horizontal Scale in Feet
10 0 10

FIGURE 5
Reference: "Remedial Investigation/Feasibility Study and Cleanup Action Report," by GeoEngineers, dated February 3, 2020.

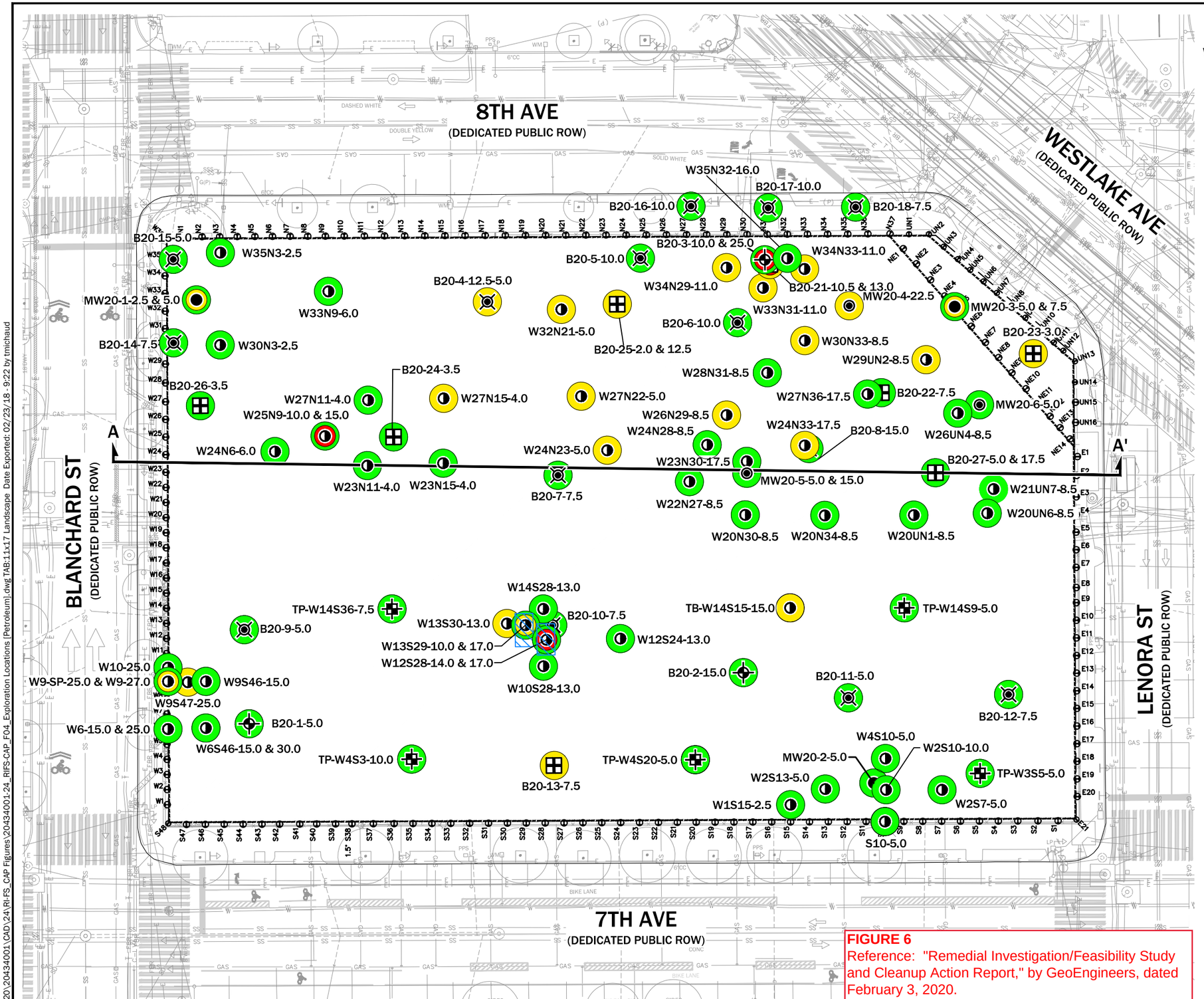
Cross-Section A-A'

Rufus 2.0 Development - Block 20
Seattle, Washington

GeoEngineers

Figure 10

P:\20\20434001\CAD\24\RI-FS_CAP Figures\20434001-24_RIFS-CAP_F10_Cross-Section AA.dwg TAB:11x17 Landscape Date Exported: 02/23/18 - 9:34 by tmichaud



Legend

- W27N22-5.0 — Approximate Location of Soil Sample Obtained During Construction, 2016-2017
- TP-W14S36 — Approximate Location of Test Pit Completed in November, 2016
- B20-21 — Direct Push Borings Completed in April 2015
- MW20-4 — Shallow Monitoring Wells Completed in April 2012
- B20-4 — Direct-Push Borings Completed in April 2012
- B20-1 — Hollow-stem Auger Borings Completed in February 2012
- MW20-1 — Monitoring Well Completed in February 2012
- Petroleum Hydrocarbons detected at concentrations above MTCA CUL.
- Petroleum Hydrocarbons detected at concentrations below MTCA CUL.
- Petroleum Hydrocarbons were not detected
- CUL — Cleanup Level
- Approximate location of USTs encountered during construction (removed in 2016)
- A A' — Cross-Section Location

Notes:

1. Sample nomenclature for construction phase soil samples and test pits used a project-specific grid system based on soldier pile IDs from the temporary shoring design (ex. N9 is a soldier pile along the north shoring wall). Soldier pile IDs are shown along the Property boundary. The final number in all sample IDs represents the depth the sample was obtained from (ex. W32N21-5.0 was obtained from a depth of 5.0 ft below ground surface).
2. The locations of all features shown are approximate.
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Data Source: Base survey and shoring design CAD files provided by Sellen on 8-10-2016.

Projection: NAD83 WA State Planes, N Zone, US Foot

True North / Project North

40 0 40
Feet

Exploration Locations and Petroleum Hydrocarbons Analytical Results

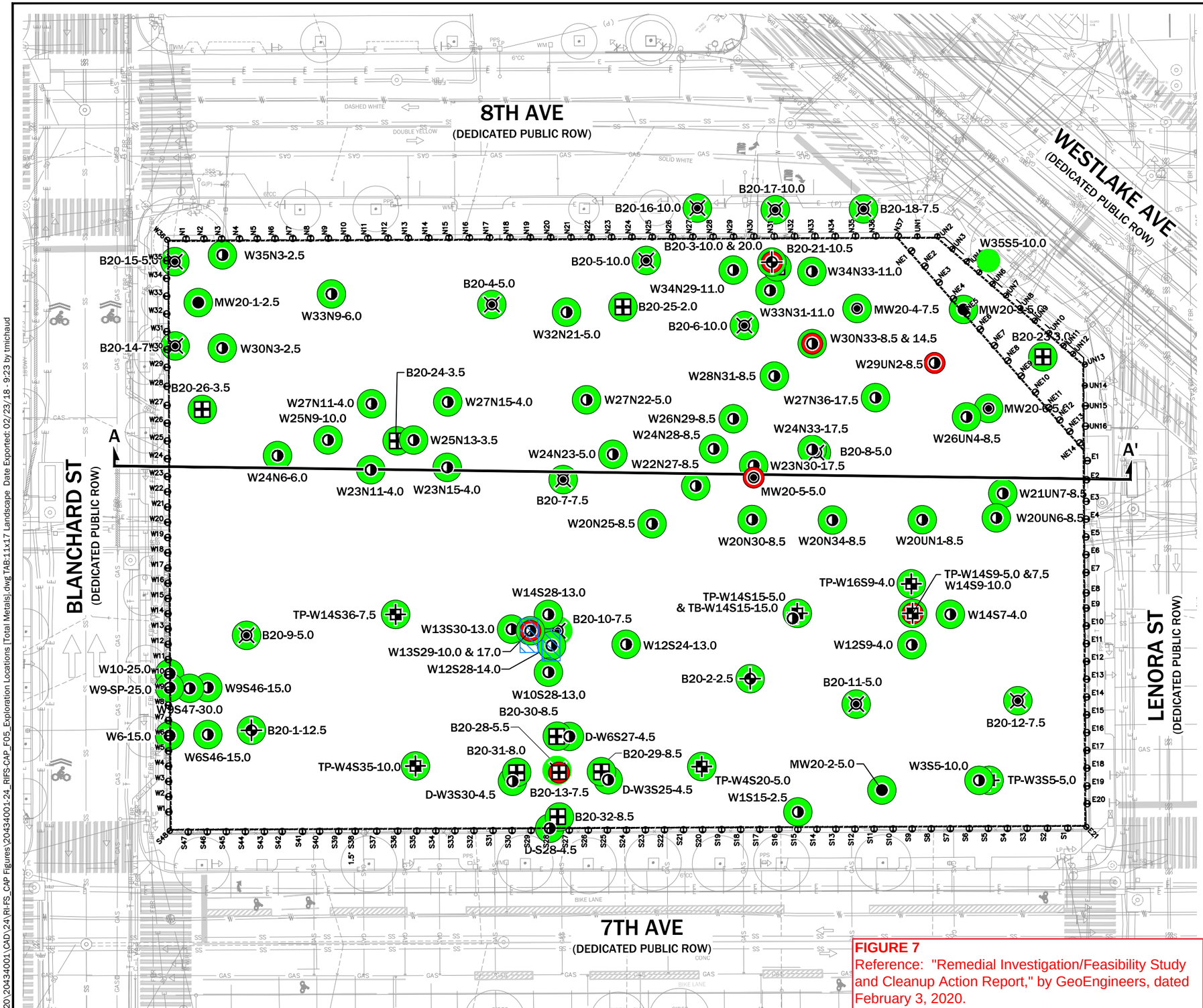
Rufus 2.0 Development - Block 20
Seattle, Washington

GeoEngineers

Figure 4

FIGURE 6
Reference: "Remedial Investigation/Feasibility Study and Cleanup Action Report," by GeoEngineers, dated February 3, 2020.

P:\20\20434001\CAD\24\RI-FS_CAP Figures\20434001-24_RIFS-CAP_F04_Exploration Locations [Petroleum].dwg TAB:11x17 Landscape Date Exported: 02/23/18 - 9:22 by tmichaud



Legend

- W27N22-5.0 — Approximate Location of Soil Sample Obtained During Construction, 2016-2017
- TP-W14S36 — Approximate Location of Test Pit Completed in November, 2016
- B20-21 — Direct Push Borings Completed in April 2015
- MW20-4 — Shallow Monitoring Wells Completed in April 2012
- B20-4 — Direct-Push Borings Completed in April 2012
- B20-1 — Hollow-stem Auger Borings Completed in February 2012
- MW20-1 — Monitoring Well Completed in February 2012
- Total Metals detected at concentrations above MTCA CUL
- Total Metals were not detected or were detected at concentrations below MTCA CUL
- CUL — Cleanup Level
- Approximate location of USTs encountered during construction (removed in 2016)
- A A' — Cross-Section Location

Notes:

1. Sample nomenclature for construction phase soil samples and test pits used a project-specific grid system based on soldier pile IDs from the temporary shoring design (ex. N9 is a soldier pile along the north shoring wall). Soldier pile IDs are shown along the Property boundary. The final number in all sample IDs represents the depth the sample was obtained from (ex. W32N21-5.0 was obtained from a depth of 5.0 ft below ground surface).
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Data Source: Base survey and shoring design CAD files provided by Sellen on 8-10-2016.

Projection: NAD83 WA State Planes, N Zone, US Foot

True North / Project North

40 0 40
Feet

Exploration Locations and Total Metals Analytical Results

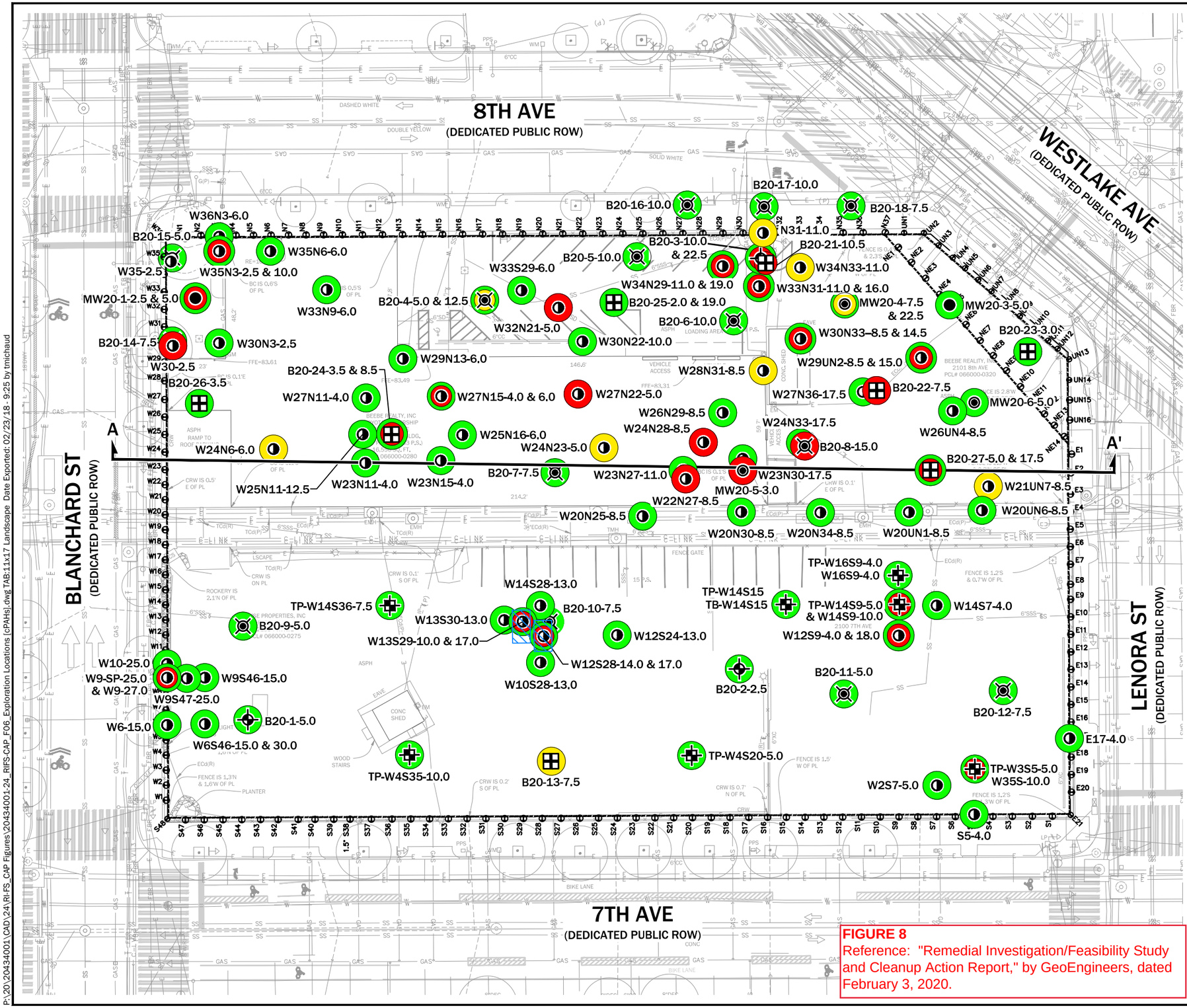
Rufus 2.0 Development - Block 20
Seattle, Washington

GeoEngineers

Figure 5

FIGURE 7
Reference: "Remedial Investigation/Feasibility Study and Cleanup Action Report," by GeoEngineers, dated February 3, 2020.

P:\20\20434001\CAD\24\RI-FS_CAP Figures\20434001-24_RIFS-CAP_F05_Exploration Locations [Total Metals].dwg TAB:11x17 Landscape Date Exported: 02/23/18 - 9:23 by tmichaud



Legend

- W27N22-5.0 — Approximate Location of Soil Sample Obtained During Construction, 2016-2017
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- B20-21 — Direct Push Borings Completed in April 2015
- MW20-4 — Shallow Monitoring Wells Completed in April 2012
- B20-4 — Direct-Push Borings Completed in April 2012
- B20-1 — Hollow-stem Auger Borings Completed in February 2012
- MW20-1 — Monitoring Well Completed in February 2012
- cPAHs detected at concentrations above MTCA CUL
- cPAHs not detected at concentrations below MTCA CUL
- cPAHs detected at concentrations below MTCA CUL
- cPAHs — Carcinogenic Polycyclic Aromatic Hydrocarbons
- CUL — Cleanup Level
- Approximate location of USTs encountered during construction (removed in 2016)
- A A' — Cross-Section Location

Notes:

1. Sample nomenclature for construction phase soil samples and test pits used a project-specific grid system based on soldier pile IDs from the temporary shoring design (ex. N9 is a soldier pile along the north shoring wall). Soldier pile IDs are shown along the Property boundary. The final number in all sample IDs represents the depth the sample was obtained from (ex. W32N21-5.0 was obtained from a depth of 5.0 ft below ground surface).
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Data Source: Base survey and shoring design CAD files provided by Sellen on 8-10-2016.

Projection: NAD83 WA State Planes, N Zone, US Foot

True North / Project North

40 0 40
Feet

FIGURE 8
Reference: "Remedial Investigation/Feasibility Study and Cleanup Action Report," by GeoEngineers, dated February 3, 2020.

Exploration Locations and cPAHs Analytical Results

Rufus 2.0 Development - Block 20
Seattle, Washington

GeoEngineers | Figure 6

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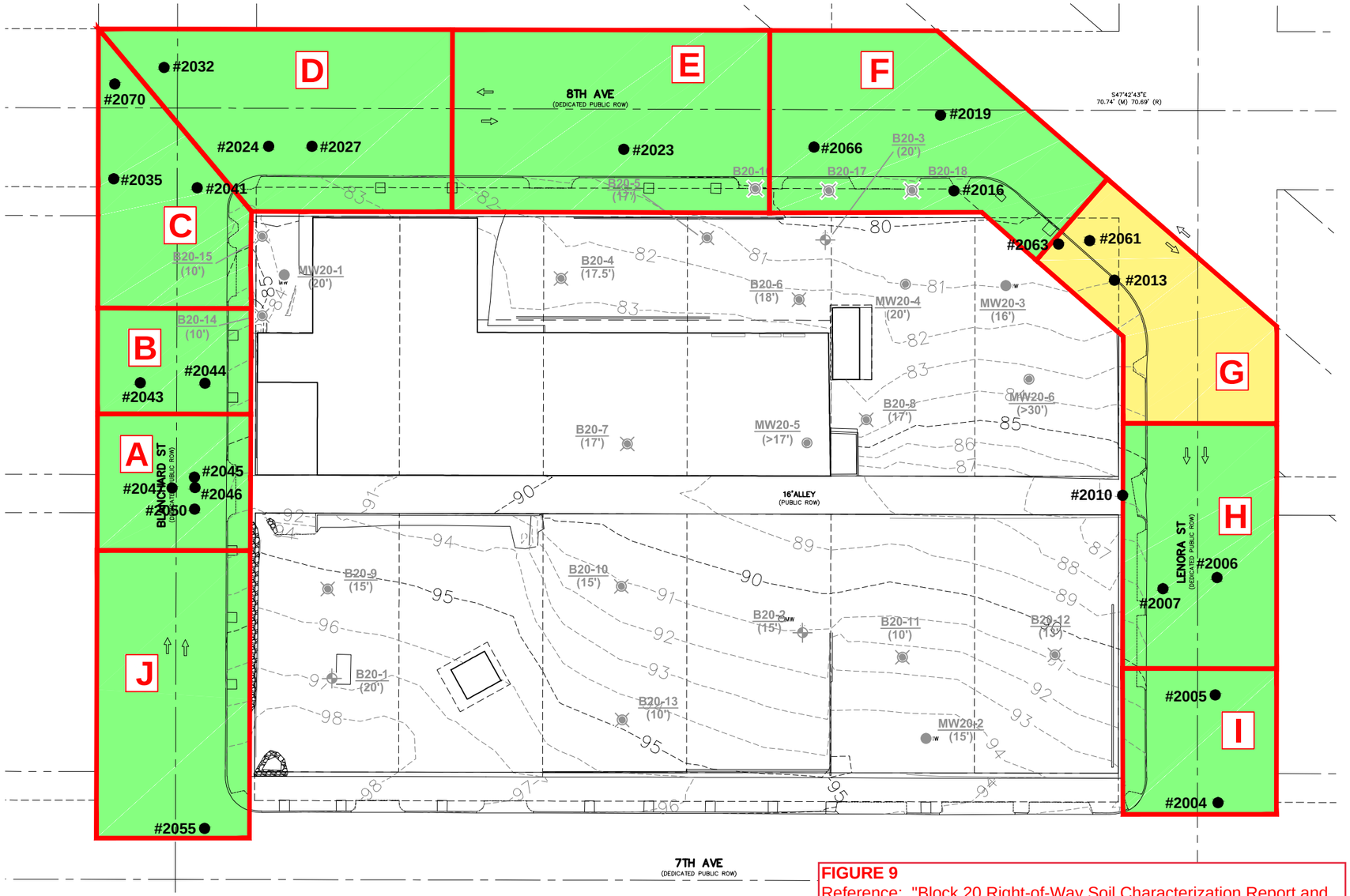


Notes

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

Reference: Site survey CAD file "XS-SUR.dwg" provided by Bush, Roed & Hitchings , Inc., dated March 2012. Aerial photo from Aerial Express, 2009.

Legend

MW14-3	Shallow Monitoring Wells Completed in April 2012
B14-6	Direct-Push Borings Completed in April 2012
B14-1	Hollow-stem Auger Borings Completed in February 2012
MW19-1	Monitoring Well Completed in February 2012
TA-B-2	Boring/Monitoring Completed by Others
(2')	Approximate Fill Thickness Observed in the Boring
#2004	Approximate Pothole Locations

A	Soil Characterization Cell
	Contaminants of concern detected at concentrations less than the corresponding MTCA Method A cleanup levels. Soil located in these cells should be transported to an approved permitted soil disposal facility such as Waste Management, Allied Waste or CEMEX.
	Contaminants of concern were not detected. Metals were detected at concentrations similar to natural background concentrations.

FIGURE 9
Reference: "Block 20 Right-of-Way Soil Characterization Report and Environmental Construction Contingency Plan," by GeoEngineers, dated November 13, 2014.

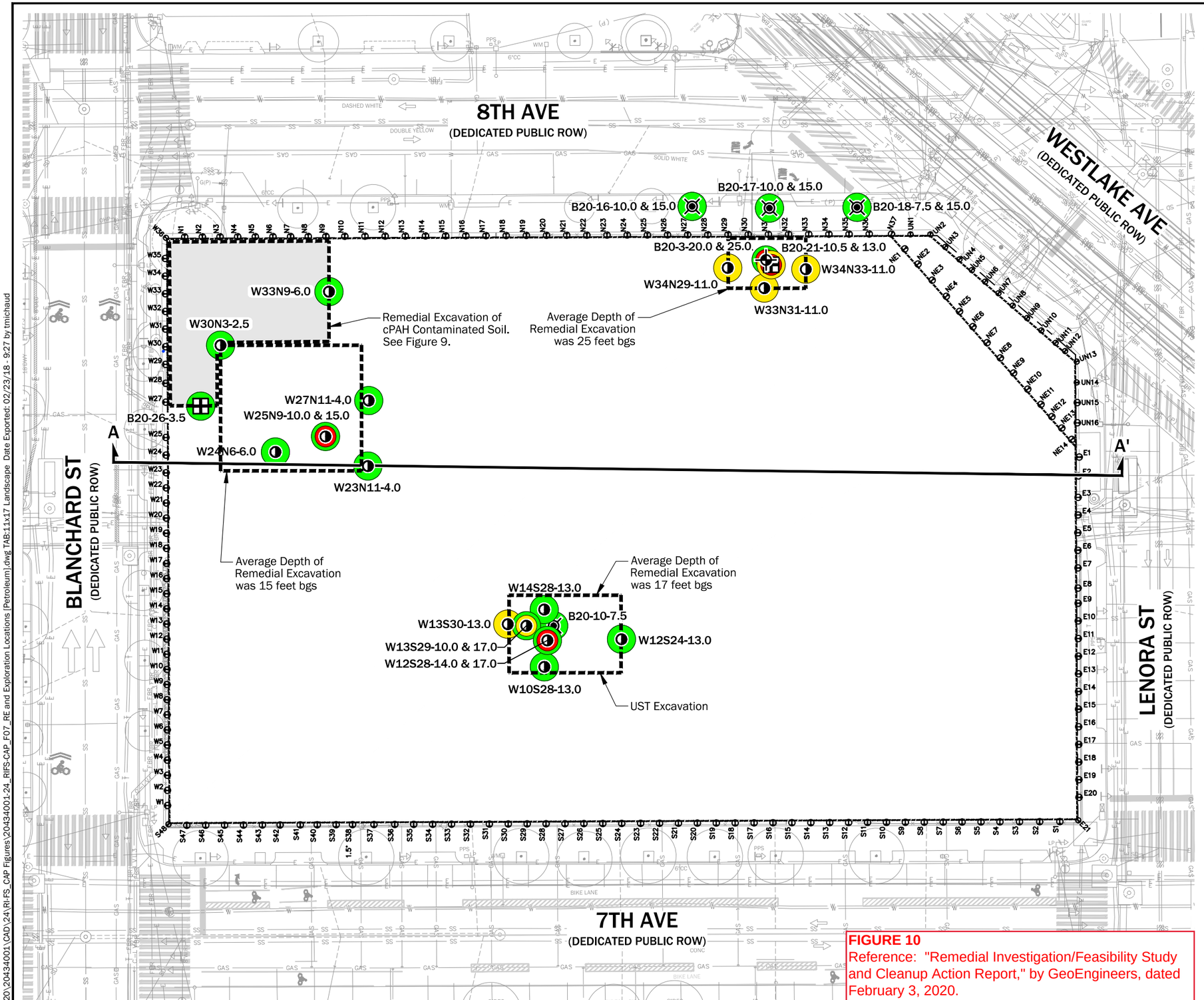
50 0 50
FEET

Right of Way
Soil Management Cells

Rufus 2.0 Development
Seattle, Washington

GeoEngineers | Figure 2

\\Sea\projects\20\20434001\CAD\23\20434001-23_T100_Fig 2_ROW Soil Characterization.dwg\TAB:Fig 2 Modified by MFORMOLO on Oct 27, 2014 - 13:07



Legend

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- MW20-1 — Monitoring Well Completed in February 2012
- Petroleum Hydrocarbons detected at concentrations above MTCA CUL.
- Petroleum Hydrocarbons detected at concentrations below MTCA CUL.
- Petroleum Hydrocarbons were not detected
- CUL — Cleanup Level
- Approximate location of remedial excavation area
- bgs — Below Ground Surface
- A A' — Cross-Section Location

Notes:

1. Refer to Table 4 for Petroleum Hydrocarbon MTCA Exceedances and Corresponding Vertical Confirmation Samples.
2. Sample nomenclature for construction phase soil samples and test pits used a project-specific grid system based on soldier pile IDs from the temporary shoring design (ex. N9 is a soldier pile along the north shoring wall). Soldier pile IDs are shown along the Property boundary. The final number in all sample IDs represents the depth the sample was obtained from (ex. W32N21-5.0 was obtained from a depth of 5.0 ft below ground surface).
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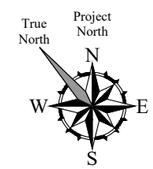
Data Source: Base survey and shoring design CAD files provided by Sellen on 8-10-2016.

Projection: NAD83 WA State Planes, N Zone, US Foot



40 0 40
Feet

Petroleum Hydrocarbon Remedial Excavation Location and Analytical Results

Rufus 2.0 Development - Block 20
Seattle, Washington

GeoEngineers

Figure 7

FIGURE 10
Reference: "Remedial Investigation/Feasibility Study and Cleanup Action Report," by GeoEngineers, dated February 3, 2020.

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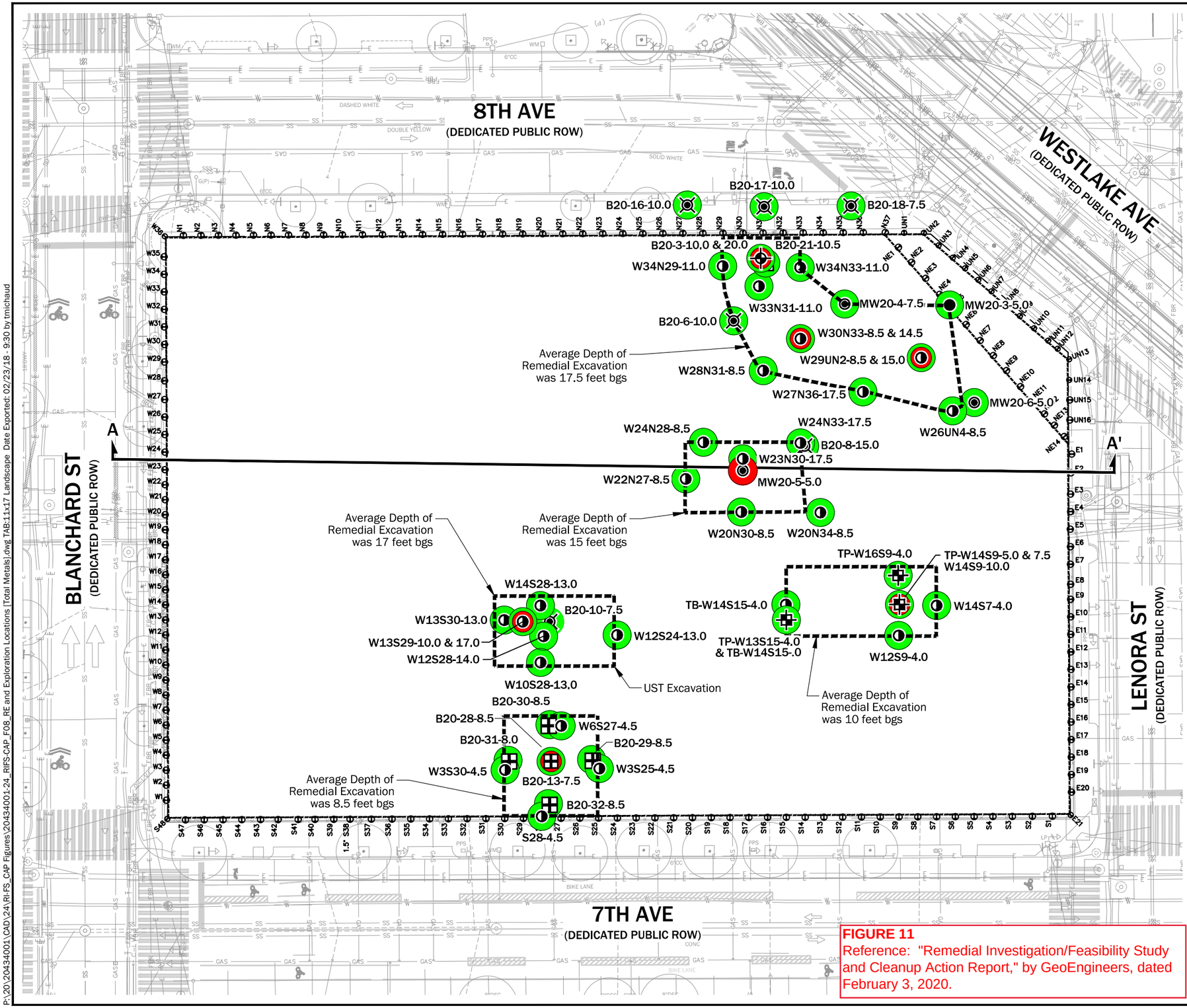

Legend

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- Total Metals were not detected or were detected at concentrations below MTCA CUL
- CUL — Cleanup Level
- Approximate location of remedial excavation area
- bgs — Below Ground Surface
- A A' — Cross-Section Location

Notes:

1. Refer to Table 5 for Total Metals MTCA Exceedances and Corresponding Vertical Confirmation Samples
2. Sample nomenclature for construction phase soil samples and test pits used a project-specific grid system based on soldier pile IDs from the temporary shoring design (ex. N9 is a soldier pile along the north shoring wall). Soldier pile IDs are shown along the Property boundary. The final number in all sample IDs represents the depth the sample was obtained from (ex. W32N21-5.0 was obtained from a depth of 5.0 ft below ground surface).
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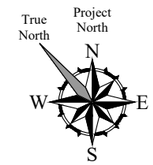
Projection: NAD83 WA State Planes, N Zone, US Foot



40 0 40
Feet

FIGURE 11
Reference: "Remedial Investigation/Feasibility Study and Cleanup Action Report," by GeoEngineers, dated February 3, 2020.

Total Metals Remedial Excavation Location and Analytical Results

Rufus 2.0 Development - Block 20
Seattle, Washington

GeoEngineers

Figure 8

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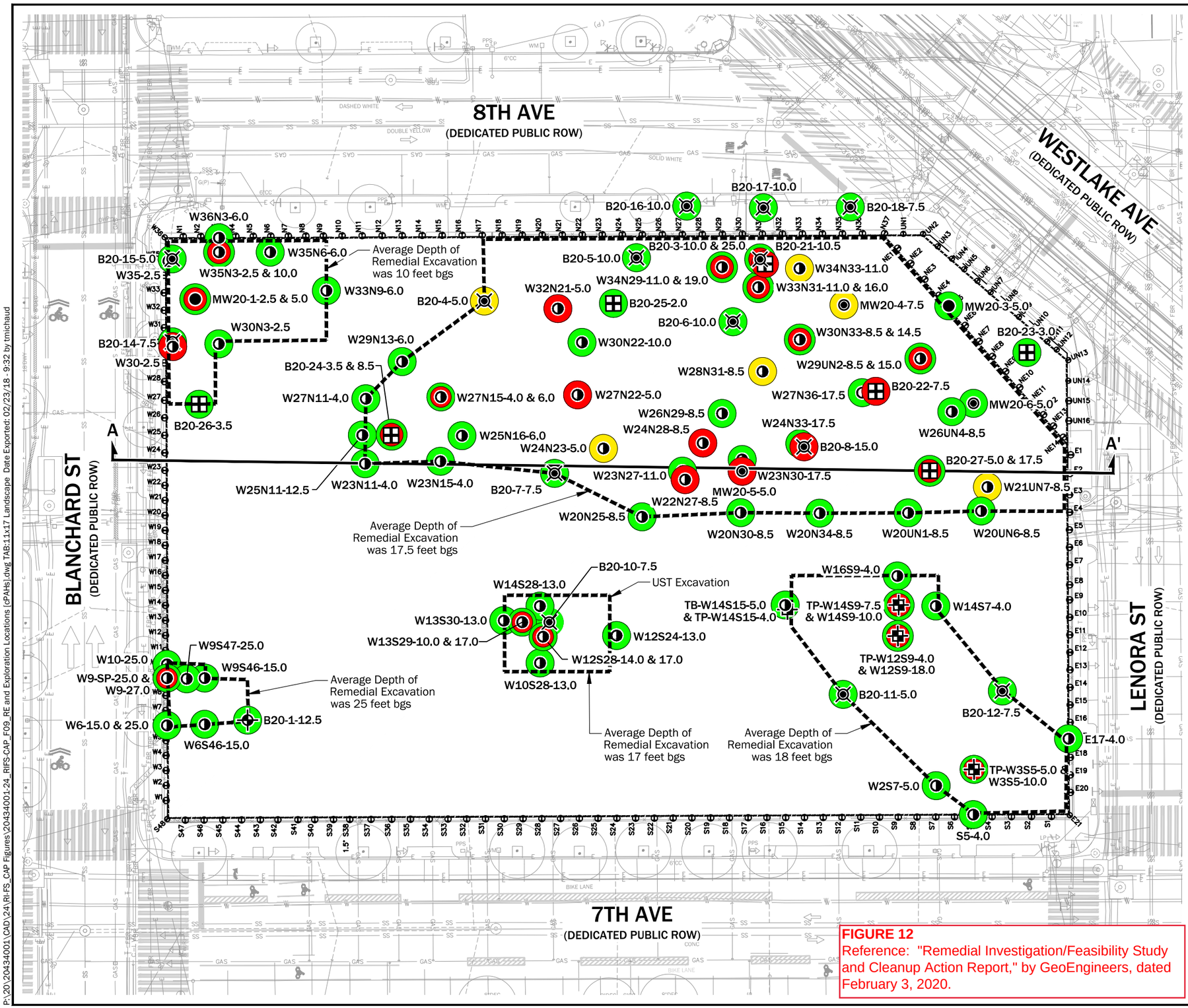

Legend

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- TP-W14S36 — Approximate Location of Test Pit Completed in November, 2016
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- MW20-1 — Monitoring Well Completed in February 2012
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- cPAHs detected at concentrations below MTCA CUL
- cPAHs were not detected
- cPAHs — Carcinogenic Polycyclic Aromatic Hydrocarbons
- CUL — Cleanup Level
- Approximate location of remedial excavation area
- bgs — Below Ground Surface
- A A' — Cross-Section Location

Notes:

1. Refer to Table 6 for cPAH MTCA Exceedances and Corresponding Vertical Confirmation Samples.
2. Sample nomenclature for construction phase soil samples and test pits used a project-specific grid system based on soldier pile IDs from the temporary shoring design (ex. N9 is a soldier pile along the north shoring wall). Soldier pile IDs are shown along the Property boundary. The final number in all sample IDs represents the depth the sample was obtained from (ex. W32N21-5.0 was obtained from a depth of 5.0 ft below ground surface).
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Data Source: Base survey and shoring design CAD files provided by Sellen on 8-10-2016.

Projection: NAD83 WA State Planes, N Zone, US Foot

True North / Project North

N W E S

40 0 40
Feet

cPAHs Remedial Excavation Location and Analytical Results

Rufus 2.0 Development - Block 20
Seattle, Washington

GeoEngineers

Figure 9

FIGURE 12
Reference: "Remedial Investigation/Feasibility Study and Cleanup Action Report," by GeoEngineers, dated February 3, 2020.

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Enclosure C

Basis for the Opinion: List of Documents

Basis for the Opinion: List of Documents

1. GeoEngineers, *Remedial Investigation/Feasibility Study and Cleanup Action Report, Rufus 2.0 Development, Block 20, Seattle, Washington*, February 3, 2020.

2. GeoEngineers, *Block 20 Environmental Construction Contingency Plan, Soil and Groundwater Management, Rufus 2.0 Development, Block 20 Denny Triangle, Seattle, Washington 98101*, December 7, 2016.

3. GeoEngineers, Supplemental Environmental Services Summary, Block 20, Denny Triangle, Seattle, Washington, dated December 7, 2016.

4. Ecology, Early Notice Letter: Facility Site #23876, Block 20 8th & Blanchard, dated June 15, 2016.

5. GeoEngineers, *Block 20 Environmental Construction Contingency Plan, Soil and Groundwater Management, Rufus 2.0 Development, Block 20 Denny Triangle, Seattle, Washington 98101*, November 13, 2014.

6. GeoEngineers, *Block 20 Right-of-Way Soil Characterization Report and Environmental Construction Contingency Plan, Rufus 2.0 Development, Block 20 Denny Triangle, Seattle, Washington 98101*, November 13, 2014.

7. GeoEngineers, *Phase II Environmental Site Assessment, Rufus 2.0, Blocks 14, 19 and 20, Denny Triangle, Seattle, Washington 98101*, dated June 7, 2012.

8. GeoEngineers, *Phase I Environmental Site Assessment, Rufus 2.0, Denny Triangle, Blocks 14, 19, 20, 18 and 21, Seattle, Washington*, June 7, 2012.