

February 26, 2015

2015-01-323

Mr. Mark Chandler
Vice President of Environmental Services
TOC Holdings Company
2737 W. Commodore Way
Seattle, WA 98199

Subject: **Site Assessment Scope of Work**
TOC Holdings Co. Site 01-323
301 North Central Ave
Kent, WA

Dear Mr. Chandler

In accordance with your request, HydroCon Environmental, LLC (HydroCon) has conducted a review of available environmental assessment documentation for the property located at 301 North Central Ave, Kent, Washington (the Property, Figure 1). The purpose of this letter is to propose a scope of work for additional assessment tasks.

BACKGROUND

The current land use of the Property consists of a restaurant with drive-through and parking. A gasoline service station that previously occupied the Property operated six underground storage tanks (USTs) and associated product piping and pumps. Terracon Consultants, Inc. completed a Limited Site Investigation (LSI) in 2013¹. The primary objective of this effort was to investigate the Recognized Environmental Conditions (RECs) identified in a prior Phase I Environmental Site Assessment (ESA) completed by Aerotech Environmental Consulting Inc. (Aerotech). The scope of work for the LSI included a review of historical reports, investigation of known and suspected UST locations by geophysical survey, and exploratory excavations with concurrent assessment of potential impacts to soil and groundwater from releases from existing or previously undocumented USTs. The LSI confirmed a minimum of four USTs and impacts to soil and groundwater from releases from these USTs. UST removal activities were postponed in order to prepare for the removal/closure of all tanks at once and to ensure sufficient time to address the City of Kent permitting requirements.

The interim remedial action to permanently close five of the USTs by removal and offsite disposal, and one of the USTs by closure-in-place was completed in June 2014. Sampling conducted during the interim

¹ Terracon Consultants, Inc. 2013. *Limited Site Investigation; Taqueria El Rinconsito Restaurant; 301 and 305 Central Avenue North & 215 East Smith Street; Kent; King County, Washington. Prepared for Vivolo Family Trust LLC c/o Union Bank, N.A. as Trustee, Orange, California. November 20.*

remedial action confirmed the presence of gasoline-range petroleum hydrocarbon compounds in soil, the extent of which was not fully delineated during the remedial action.²

Figure 2 illustrates the locations of current improvements, the historical service station USTs and piping, and the locations of the three UST excavations completed in June 2014. Figures 3, 4, and 5 summarize the locations of and laboratory results for the Northern, Southern, and Drive-Through Excavation locations, respectively.

SCOPE OF WORK

The Washington State Department of Ecology (Ecology) will require more complete site characterization (i.e., the chemical composition and extent of fuel hydrocarbons in soil and groundwater, and groundwater flow direction and velocity), as well as remediation activities, in order to achieve regulatory closure.

HydroCon recommends that site assessment activities be conducted with the goal of producing a Remedial Investigation (RI) Report per WAC 173-340-450. The purpose of the RI is to collect and present data necessary to adequately characterize the site for the purposes of developing and evaluating cleanup action alternatives. In order to evaluate remedial alternatives, several site assessment tasks are required:

- A review of the historical subsurface investigation data indicates that areas to the east and southeast of the Southern Excavation Location; areas to the west and northwest of the Drive-Through Excavation Location, and the area near the former pump islands (located to the north of the Drive-Through Excavation) as shown on Figure 6, still require additional investigation. Additional soil and groundwater testing will be needed to evaluate the extent of these impacts.
- The groundwater flow direction and gradient need to be determined for the site by installing a minimum of three groundwater monitoring wells.
- If concentrations of volatile organic compounds in groundwater are found to exceed the State of Washington Tier I vapor intrusion screening levels³ within 100 feet of the site building, a subsequent vapor intrusion study should be scoped and implemented.
- An underground utility mapping exercise will be performed to locate utilities that are present onsite and near the property (i.e., potential contaminant pathways).
- Ecology has requirements for analytical testing for petroleum releases (WAC 173-340-900 Table 830-1) which includes initial testing to determine the presence or absence of several compounds. Additional testing may be required for fuel additives [ethylene dibromide (EDB), ethylene dichloride (EDC), methyl tertiary butyl ether (MTBE), naphthalene, lead, and carcinogenic polynuclear aromatic hydrocarbons (PAHs)].

² Farallon Consulting, L.L.C. 2014. *Proposal for Subsurface Investigation; 301 Central Avenue North; Kent, Washington. Prepared for: Ms. Melissa Schafer; Partners In Care, Manager of Vivolo Family, LLC. August 14.*

³ Washington State Department of Ecology. 2009. *Guidance for Evaluating Soil Vapor Intrusion in Washington State: Investigation and Remedial Action. Toxics Cleanup Program. Review Draft. October. Publication No. 09-09-047*

- A simplified terrestrial ecological evaluation (TEE) will be required for the site per WAC 173-340-7492.
- In the event that impacted soil and/or groundwater is present beneath the adjacent streets, options for leaving these materials in place (e.g., Restrictive Covenant, WAV 173-340-440) will need to be explored with the City of Kent.

HydroCon proposes to conduct follow-up investigations to collect soil and groundwater samples to refine the understanding of the nature and extent of impacted soil and groundwater. The proposed analytical testing under this work scope will include test methods approved by Ecology for preliminary site assessment and cleanup evaluation. The proposed scope of work includes the following tasks:

- Update HydroCon's Health and Safety Plan.
- Subcontract a qualified analytical laboratory (Friedman & Bruya, Inc. of Seattle, Washington) to provide soil and groundwater testing services.
- Attempt to identify buried utilities and piping in advance of field work by requesting underground locating by the public Utility Notification Service, by subcontracting a private utility locator, and communicating with the City of Kent.
- Subcontract, schedule, and coordinate geoprobe drilling services with a qualified and licensed drilling contractor for a duration of two to three days.
- Determine the approximate groundwater flow direction from the review of files at the Washington Department of Ecology.
- Advance several soil borings in areas requiring additional characterization to a depth of approximately 15 feet bgs each. These boring will be exploratory in nature. Initial borings will be completed in the area identified by others as impacted then moving out to attempt to define the extent of impacts. Permits will be obtained from the City of Kent to advance borings in Central Avenue N. and E. Smith Street, if necessary.
- Collect continuous soil samples at each boring location and field screen the soil using PID, which measures relative organic vapor concentrations. The results of this screening will be used to guide laboratory testing and to determine additional boring locations.
- Collect up to three soil samples from each boring location for laboratory analysis.
- Collect groundwater samples from selected borings for laboratory analysis. Water samples will be collected from a temporary well constructed with a new 5' length of 1-inch diameter schedule 40 PVC slotted pipe installed to a depth that intercepts the groundwater table. Groundwater samples analyzed for fuel hydrocarbons and volatile organic compounds will be collected using disposable polyethylene tubing, fitted with a ball check-valve. Lead samples will be collected using a low-flow peristaltic pump; the dissolved lead sample will be field-filtered using a 0.45-micron filter.
- Install up to 6 permanent monitoring wells. Two monitoring wells will be placed on the west and north sides of the restaurant building and the other 4 monitoring wells will be located at the discretion of the field investigators to evaluate groundwater quality and groundwater flow. Each boring will be completed with a 2-inch diameter monitoring well. Monitoring wells will be

constructed in accordance with Ecology well drilling and installation guidelines as outlined in WAC 173-360 WAC, Minimum Standards for Construction and Maintenance of Wells. Each well will be fitted with 2-inch diameter threaded Schedule 40 PVC casings, a pre-packed 10-foot length of 0.010-inch machine-slotted casing with a flush threaded 0.5 foot long sump. The well screen will be placed so that it intercepts the water table. The annular space between the filter screen and the borehole will be filled with clean graded 10-20 sand pack up to three feet above the top of the screen, and then filled with a hydrated bentonite seal. The bentonite seal will be placed to within approximately one foot below ground surface, with a concrete or asphalt surface patch constructed.

- Each monitoring well assembly will be measured prior to placement in the borehole. The well materials will be steam-cleaned prior to placement. Each well will be fitted with a locking compression cap and the wells will be covered with a traffic-rated steel or aluminum monument set in concrete and finished flush to grade
- Each well will be developed by surging and pumping techniques. A clean stainless steel bailer will be used to surge the wells and remove sediment. A new length of LDPE tubing will be attached to a peristaltic pump to remove water after surging. This process will be repeated until no further improvement in water clarity is observed and groundwater parameters (pH, temperature, specific conductivity, and turbidity) have stabilized.
- HydroCon will contract with a licensed surveyor to measure the elevation of the top of the PVC casing of each monitoring well at the scribed reference mark, the top of each well monument lid, and key features at the site so that a scaled map can be produced for the site. Ecology requires that the measuring point must be accurately located in both the latitude and longitude plane relative to the Washington State plane [South Zone NAD83]] as well as the vertical dimension using the North American Vertical Datum of 1988 (NAVD88).
- Groundwater samples will be collected from the site monitoring wells on a quarterly basis. Prior to sampling, the well cap on each well will be removed and the water level allowed to equilibrate prior to measuring the depth to water. The depth to water in each well will be measured using a clean electronic water level indicator from the scribed reference mark (north side of the top of the PVC casing) at each well. Prior to groundwater sampling, the wells will be purged using a low-flow peristaltic pump equipped with a new length of low-density polyethylene tubing attached to a new length of silicone tubing. The tubing intake will be placed approximately 2 to 3 feet below the surface of the groundwater or mid-screen in each well. During purging, water quality will be monitored using a multi-parameter water quality meter equipped with a flow-through cell. The water quality parameters monitored will include temperature, pH, specific conductance, dissolved oxygen, turbidity, and oxidation-reduction potential. Each well will be purged until all six water quality parameters stabilize or the minimum parameter subset of pH, specific conductance, temperature, and turbidity and/or dissolved oxygen stabilize. Samples will be placed in uniquely labeled laboratory-prepared containers. The sample bottles will be placed in a chilled cooler along with chain-of-custody documentation and transported to Friedman & Bruya laboratory in Seattle, Washington for analysis.
- Submit all soil and groundwater samples for the following chemical analyses:

- GRPH by Ecology Method NWTPH-Gx
- DRPH and ORPH by Ecology Method NWTPH-Dx
- Benzene, toluene, ethylbenzene, and xylenes (BTEX) by EPA Method 8260B
- Total (and dissolved, in water) lead by EPA Method 6010/7000.
- Submit up to 5 soil and groundwater samples for the following chemical analysis:
 - Table 830-1 VOCs (BTEX, EDB, EDC, MTBE, and Naphthalene) by EPA Method 8260C.
 - Carcinogenic PAHs by EPA Method 8270
- Prepare a RI Report describing the results of the investigations. The report will include the following elements:
 - General Site information (locations, current and historical land use, current and historical ownership, operational history, etc.)
 - Geological and hydrological characteristics.
 - Underground utilities
 - Tabulated analytical results, figures showing sampling locations, and a narrative discussion of investigation methods and results.
 - Soil and groundwater conditions and extent of impacts.
 - A conceptual site model.
 - A simplified TEE
 - Identification of cleanup levels for the site
 - Identification of cleanup alternatives for the site.

HydroCon appreciates this opportunity to present this scope of work. If you have questions or comments regarding this scope of work, please feel free to contact the undersigned at (360) 703-6079.

Sincerely,

Craig Hultgren, LHG

Senior Geologist/Project Manager

Figures

Figure 1 - Site Location Map

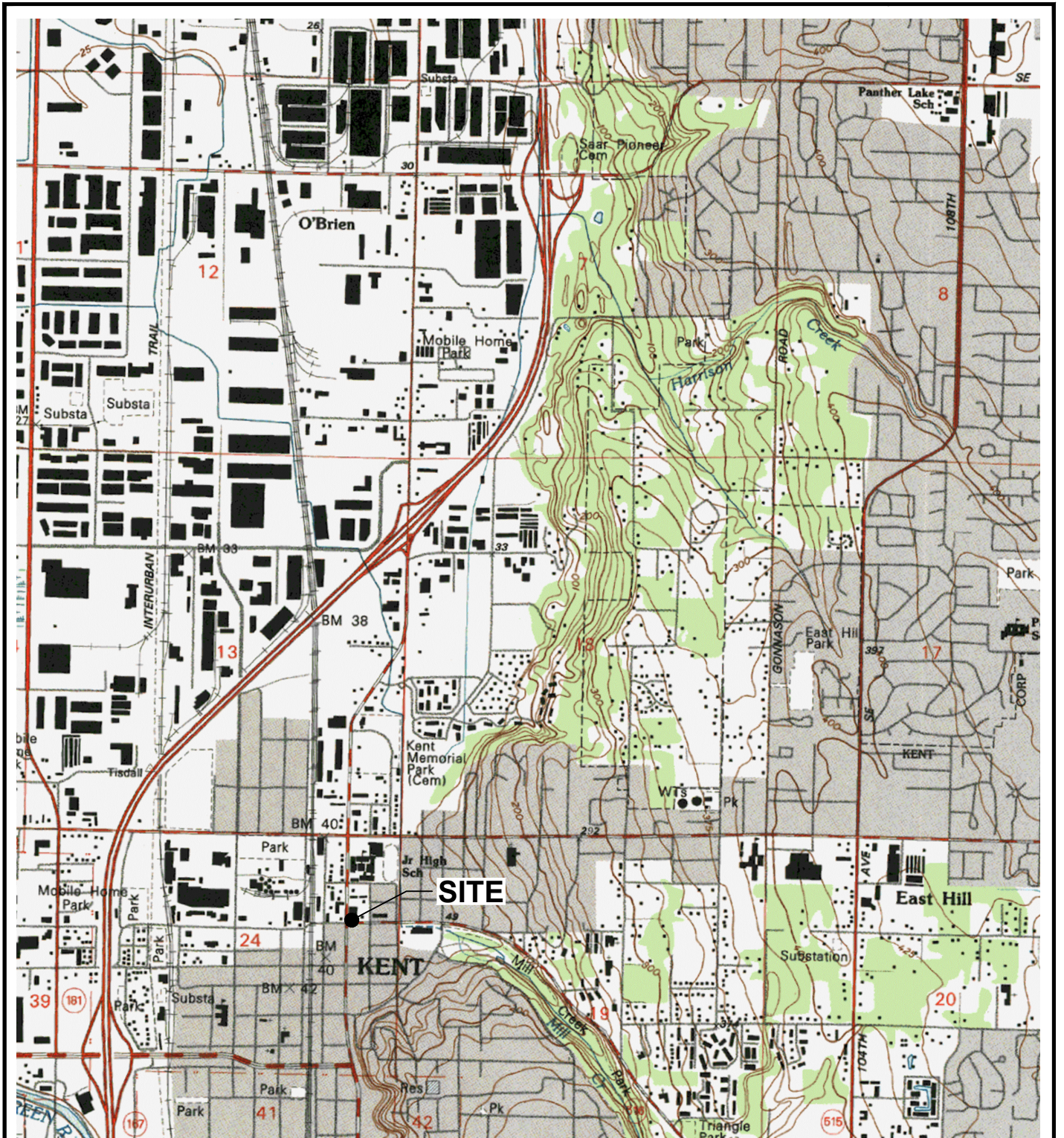
Figure 2 – Site Features

Figure 3 – North Excavation and Sample Locations and Analytical Results

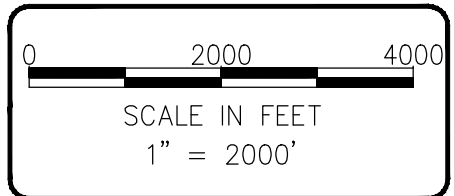
Figure 4 – South Excavation and Sample Locations and Analytical Results

Figure 5 – Drive-Through Excavation and Sample Locations and Analytical Results

Figure 6 – Areas Proposed for Additional Investigation

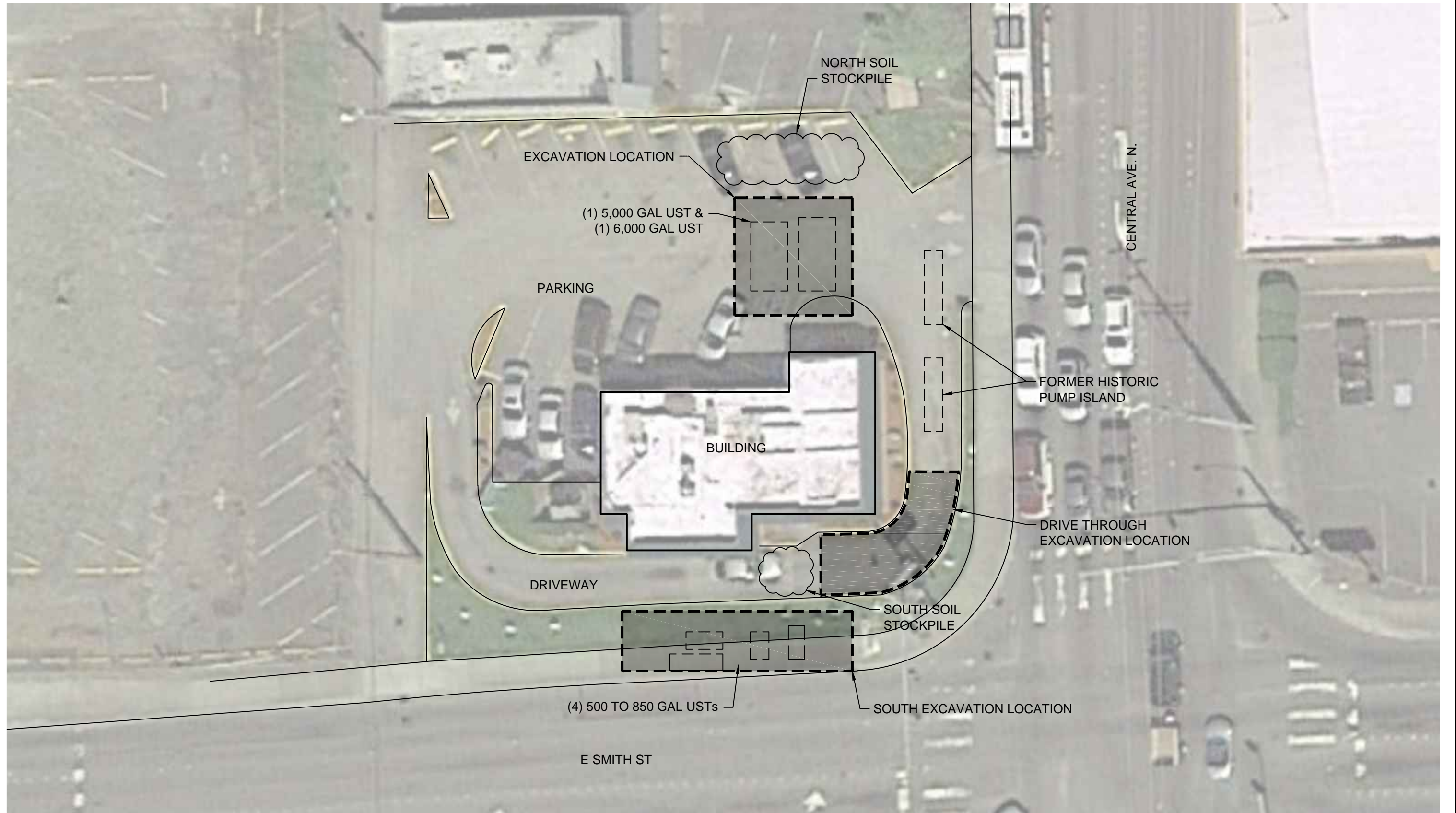


NOTE(S):
 USGS, RENTON QUADRANGLE
 WASHINGTON-KING CO.
 7.5 MINUTE SERIES (TOPOGRAPHIC)



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 DWN: JJT
 CHK: NV
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 PRJ. MGR: RH
 PROJECT NO:
 01-323

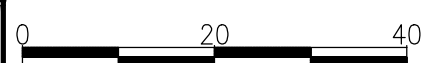
FIGURE 1
 SITE LOCATION MAP
 TOC HOLDING CO. FACILITY NO. 01-323
 301 N CENTRAL AVE
 KENT, WA.



LEGEND



EXCAVATION LOCATIONS



SCALE IN FEET
1" = 20'

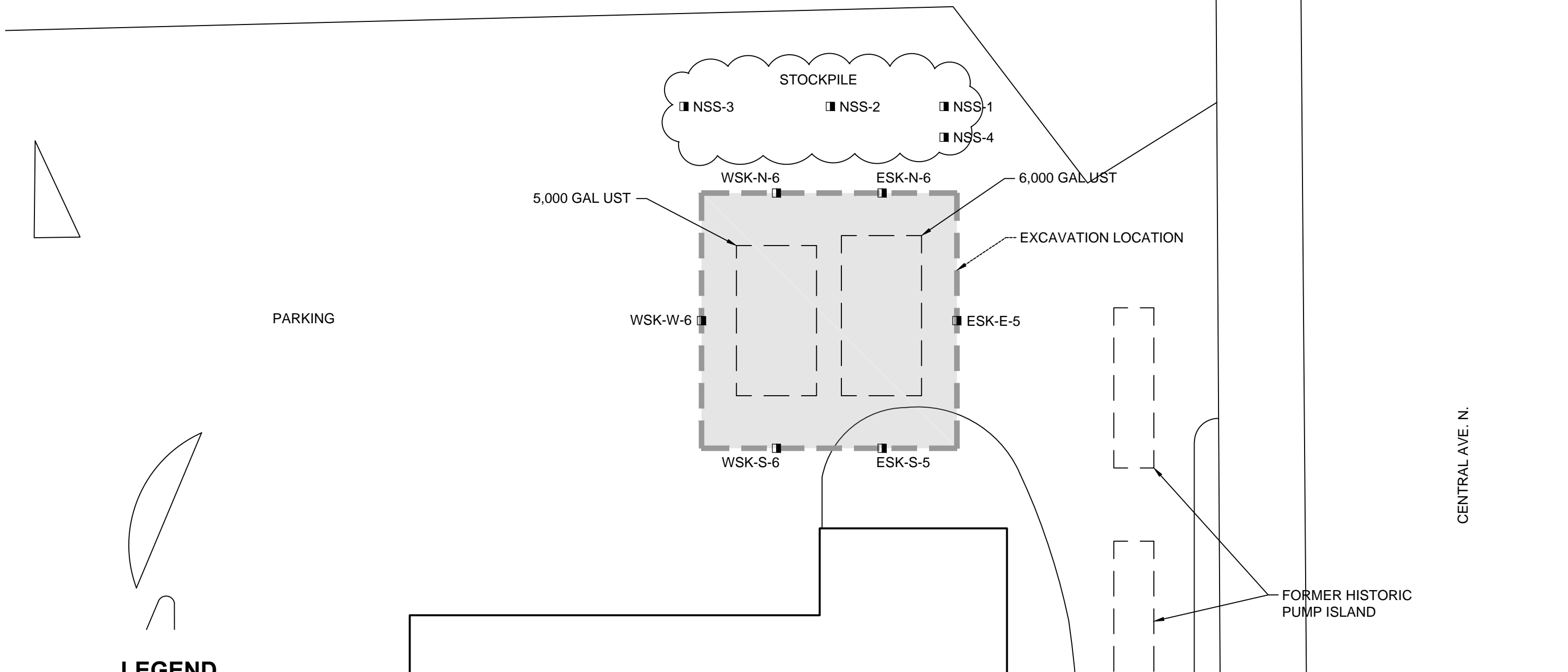


510 Allen St. Suite B Kelso, Wa 98626, Ph(360)-703-6086




DATE: 12-31-14
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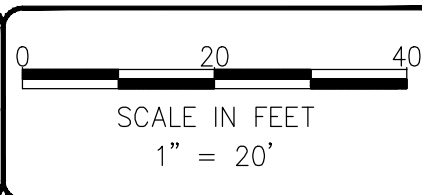
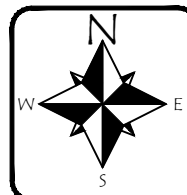
FIGURE 2
SITE FEATURES &
EXCAVATION LOCATIONS
TOC HOLDING CO. FACILITY NO. 01-323
301 N CENTRAL AVE
KENT, WA.

Sample ID	Analytical Results for Soil in Milligrams per Kilogram						
	GRPH	Benzene	Toluene	Ethylbenzene	Total Xylenes	DRPH	ORPH
W5K-W-6	<2	<0.03	<0.05	<0.05	<0.15	<50	<250
W5K-S-6	<2	<0.03	<0.05	<0.05	<0.15	<50	<250
W5K-N-6	<2	<0.03	<0.05	<0.05	<0.15	<50	<250
E5K-S-5	<2	<0.03	<0.05	<0.05	<0.15	<50	<250
E5K-E-5	<2	<0.03	<0.05	<0.05	<0.15	<50	<250
E5K-N-5	<2	<0.03	<0.05	<0.05	<0.15	<50	<250



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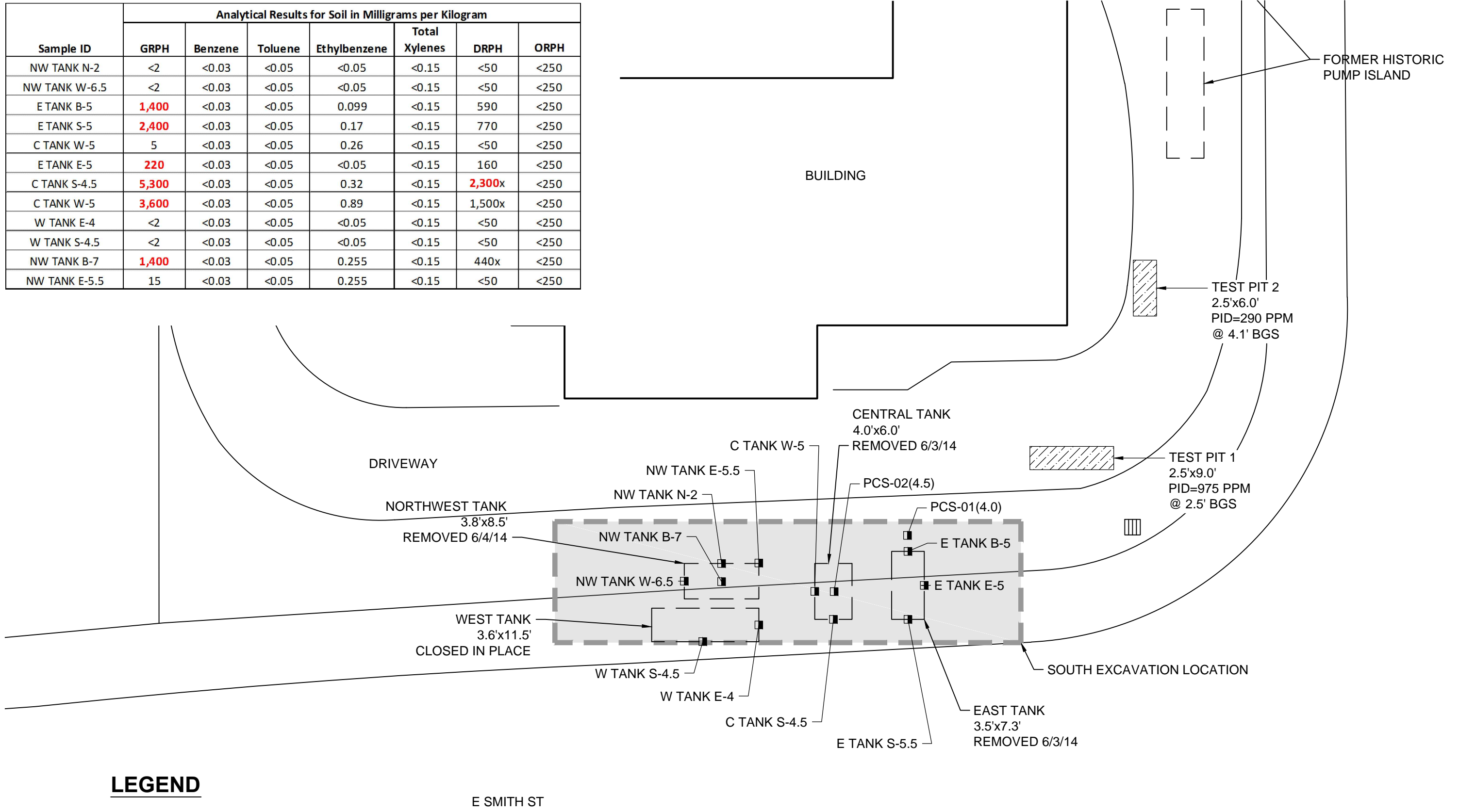
-  BUILDING
-  EXCAVATION LOCATIONS
-  EXCAVATION SOIL SAMPLE



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FIGURE 3
 NORTH UST EXCAVATION SAMPLE LOCATIONS
 AND ANALYTICAL RESULTS
 TOC HOLDING CO. FACILITY NO. 01-323
 301 N CENTRAL AVE
 KENT, WA.

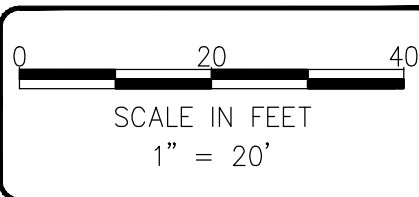
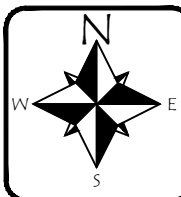
Sample ID	Analytical Results for Soil in Milligrams per Kilogram						
	GRPH	Benzene	Toluene	Ethylbenzene	Total Xylenes	DRPH	ORPH
NW TANK N-2	<2	<0.03	<0.05	<0.05	<0.15	<50	<250
NW TANK W-6.5	<2	<0.03	<0.05	<0.05	<0.15	<50	<250
E TANK B-5	1,400	<0.03	<0.05	0.099	<0.15	590	<250
E TANK S-5	2,400	<0.03	<0.05	0.17	<0.15	770	<250
C TANK W-5	5	<0.03	<0.05	0.26	<0.15	<50	<250
E TANK E-5	220	<0.03	<0.05	<0.05	<0.15	160	<250
C TANK S-4.5	5,300	<0.03	<0.05	0.32	<0.15	2,300x	<250
C TANK W-5	3,600	<0.03	<0.05	0.89	<0.15	1,500x	<250
W TANK E-4	<2	<0.03	<0.05	<0.05	<0.15	<50	<250
W TANK S-4.5	<2	<0.03	<0.05	<0.05	<0.15	<50	<250
NW TANK B-7	1,400	<0.03	<0.05	0.255	<0.15	440x	<250
NW TANK E-5.5	15	<0.03	<0.05	0.255	<0.15	<50	<250



LEGEND

- BUILDING
- EXCAVATION LOCATIONS
- EXCAVATION SOIL SAMPLE
- CATCH BASIN

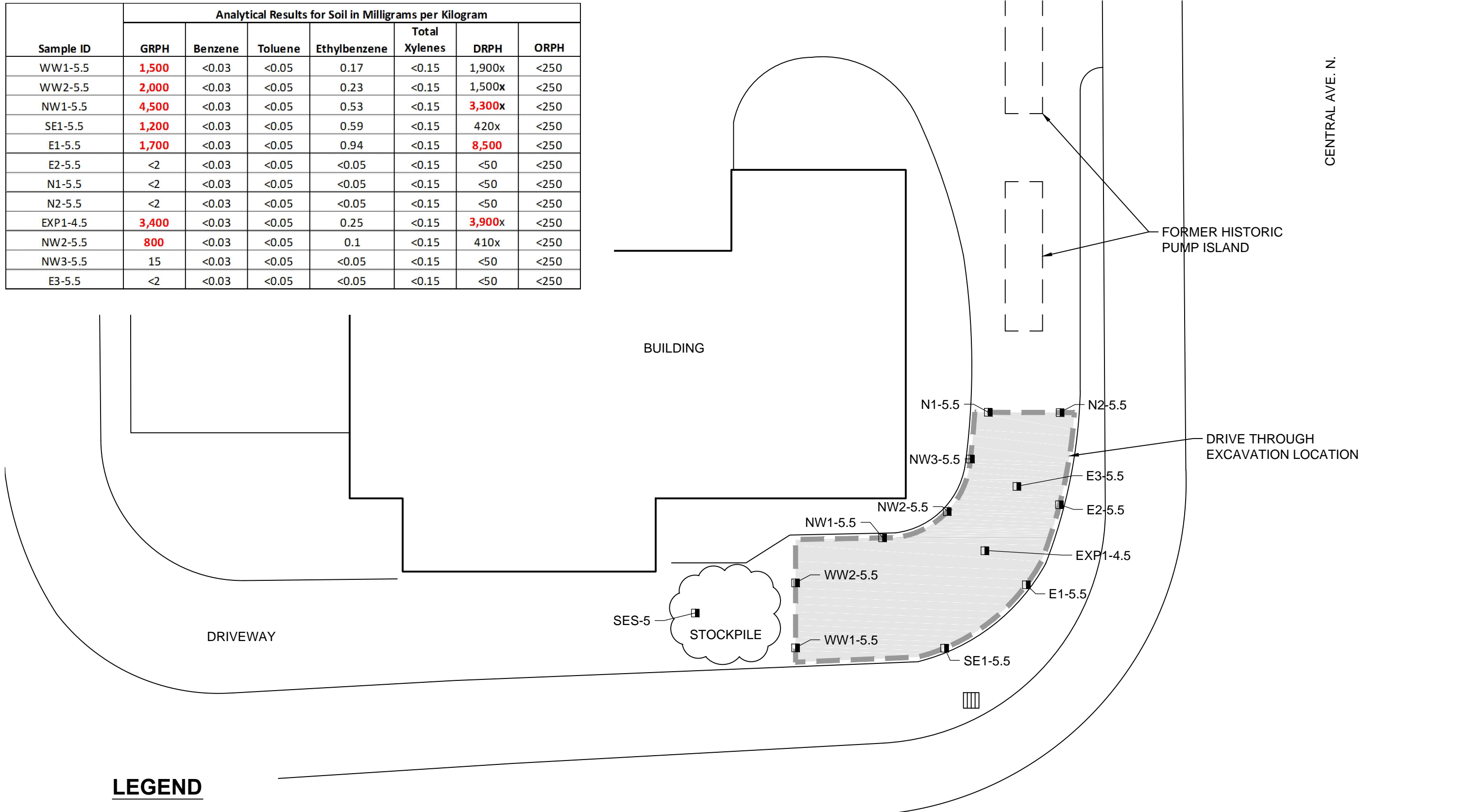
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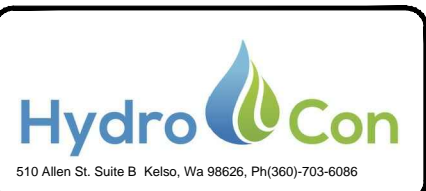
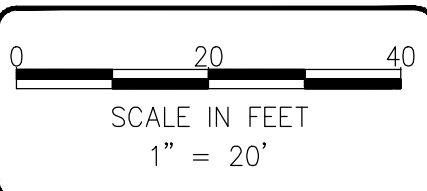
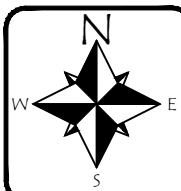
FIGURE 4
 SOUTH UST EXCAVATION SAMPLE LOCATIONS
 AND ANALYTICAL RESULTS
 TOC HOLDING CO. FACILITY NO. 01-323
 301 N CENTRAL AVE
 KENT, WA.

Sample ID	Analytical Results for Soil in Milligrams per Kilogram						
	GRPH	Benzene	Toluene	Ethylbenzene	Total Xylenes	DRPH	ORPH
WW1-5.5	1,500	<0.03	<0.05	0.17	<0.15	1,900x	<250
WW2-5.5	2,000	<0.03	<0.05	0.23	<0.15	1,500x	<250
NW1-5.5	4,500	<0.03	<0.05	0.53	<0.15	3,300x	<250
SE1-5.5	1,200	<0.03	<0.05	0.59	<0.15	420x	<250
E1-5.5	1,700	<0.03	<0.05	0.94	<0.15	8,500	<250
E2-5.5	<2	<0.03	<0.05	<0.05	<0.15	<50	<250
N1-5.5	<2	<0.03	<0.05	<0.05	<0.15	<50	<250
N2-5.5	<2	<0.03	<0.05	<0.05	<0.15	<50	<250
EXP1-4.5	3,400	<0.03	<0.05	0.25	<0.15	3,900x	<250
NW2-5.5	800	<0.03	<0.05	0.1	<0.15	410x	<250
NW3-5.5	15	<0.03	<0.05	<0.05	<0.15	<50	<250
E3-5.5	<2	<0.03	<0.05	<0.05	<0.15	<50	<250



LEGEND

- BUILDING
- EXCAVATION LOCATIONS
- EXCAVATION SOIL SAMPLE
- CATCH BASIN

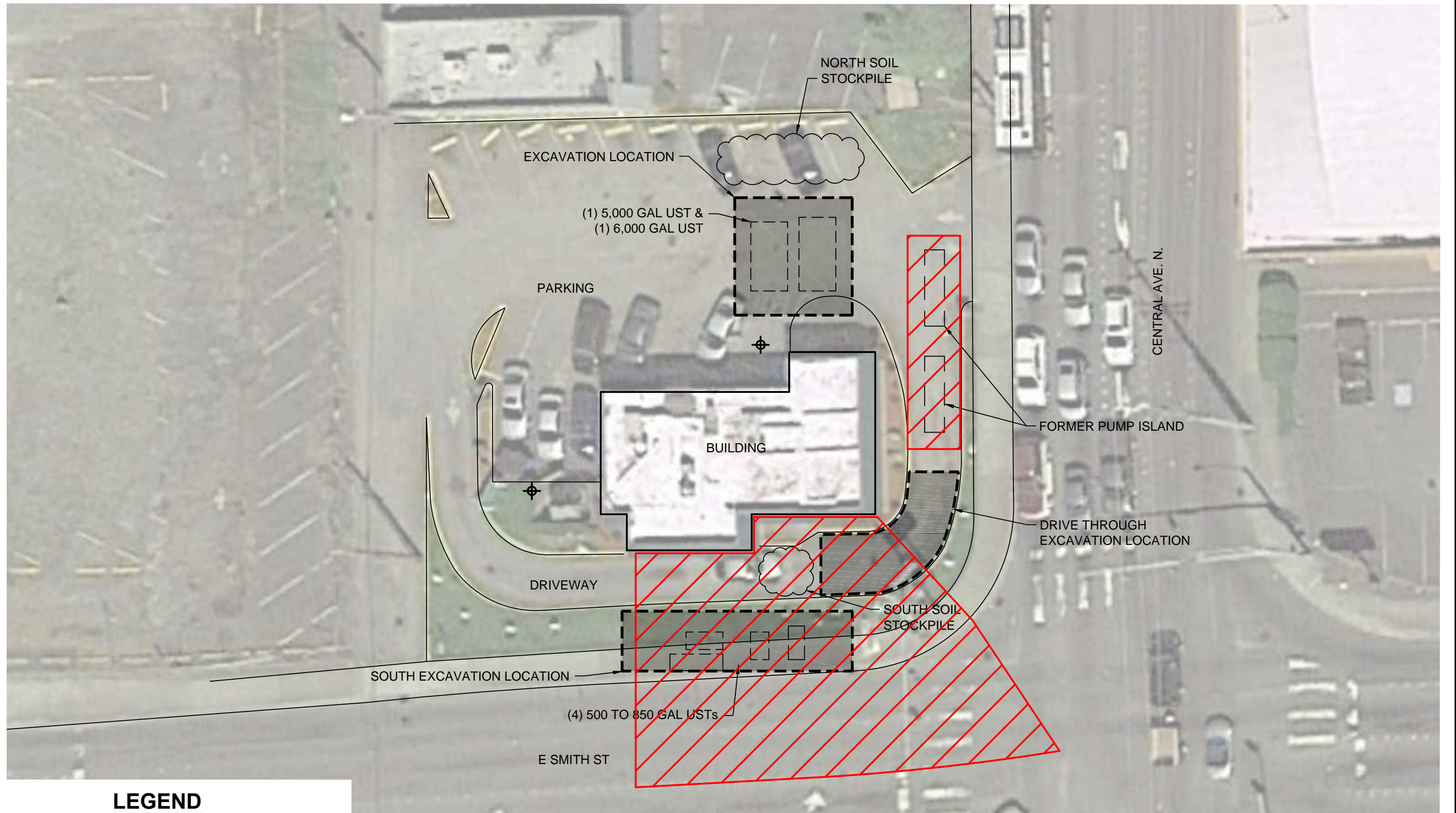


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FIGURE 5
 DRIVE THROUGH EXCAVATION SAMPLE LOCATIONS
 AND ANALYTICAL RESULTS
 TOC HOLDING CO. FACILITY NO. 01-323
 301 N CENTRAL AVE
 KENT, WA.

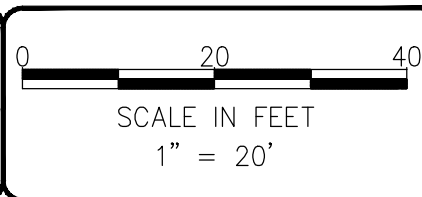
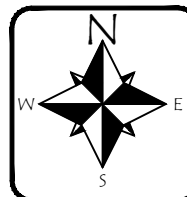
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-  EXCAVATION LOCATIONS
-  PROPOSED INVESTIGATION AREA
-  PROPOSED MONITORING WELL LOCATIONS



HydroCon
 510 Allen St. Suite B Kelso, Wa 98626, Ph(360)-703-6086

DATE: 3-2-15
 DWN: JJT
 CHK:
 APPROVED:
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FIGURE 6
 PROPOSED ADDITIONAL INVESTIGATION AREA
 AND PROPOSED MONITORING WELL LOCATIONS
 TOC HOLDING CO. FACILITY NO. 01-323
 301 N CENTRAL AVE
 KENT, WA.