State of Oregon
Department of Environmental Quality Memorandum

Date: September 18, 2025

To: FILE

Through: Brad Shultz (WR Cleanup Program Manager) and Don Hanson (Lead Worker)

From: Tina Elayer (Cleanup Project Manager)
Western Region

Subject: Witham's Truck Stop Oil Spill, LUST # 15-20-0238 (DEQ UST Facility ID # 1571); Staff Memorandum in support of a No Further Action determination

This document presents the basis for the Oregon Department of Environmental Quality's (DEQ's) recommended No Further Action (NFA) determination for the Witham's Truck Stop Oil Spill, in Medford. As discussed in this report, contaminant concentrations in soil and groundwater are below acceptable risk levels.

The proposed NFA determination meets the requirements of Oregon Administrative Rules Chapter 340, Division 122, Sections 0205 to 360; and ORS 465.200 through 465.455.

The proposal is based on information documented in the administrative record for this site. A copy of the administrative record index is presented at the end of this report.

1. BACKGROUND

Site location.
The site's location can be described as follows:
- Address: 2341 Biddle Road, Medford, Jackson County, Oregon.
- Latitude 42.353239º North, longitude -122.876335º West
- Map and Tax lot 372W13DA 101, Township 37 South, Range 2 West, Section 13

Site setting.
The Witham's Truck Stop Oil Spill site (Site) occupies approximately 4.31 acres of developed land. The main structure on Site is a 30,790 sq ft. service station with retail operations. Property is zoned Commercial Improved, property class 201. Adjacent properties are primarily commercial with right of way public roads and highways, and vacant land.

Physical setting.
Site elevation is approximately 1,321 feet above mean sea level (amsl). Topography of the Site and adjacent properties is relatively flat but slopes slightly towards the north and west. Shallow static groundwater in the vicinity of the Site was observed at about 10 feet below ground surface (bgs) in August 2015 and August 2020. Groundwater at the Site is assumed to flow to the west

and northwest towards Bear Creek. Bear Creek is situated approximately 800 feet to the west of the Site and flows towards the north-northwest. Lithology at the Site consists of a mixture of gravel, clay, and sand to the maximum drilled depth of 25 feet bgs.

Site history.
Truck stop history. The property has been used as a tractor-trailer and refueling facility since 1966. Underground storage tank (UST) database records indicate eight tanks were installed at the Site in April of 1966 (DEQ UST Facility ID # 1571).

Previous LUST# 15-15-1692 (Witham Truck Parts & Equipment) – In October 2015, a site investigation was conducted on-site. Releases associated with underground storage tank system and hydraulic lifts were discovered. Both soil and groundwater were impacted from those releases. In March 2018, a final on-site investigation was conducted to determine the extent of the soil and groundwater contamination. Contaminant concentrations in soil and groundwater were below risk-based concentrations for applicable pathways, and LUST# 15-15-1692 was closed with an NFA on June 19, 2018.

Previous ECSI 4312 (Witham's Truck Stop Oil Spill) – In October 2004, after a heavy rainfall the oil/water separator was overwhelmed and discharged oil material into the storm drain, which impacted the off-site swale along Bear Creek. In a follow up investigation in March 2018, the swale area was evaluated. It was determined there was no long-lasting effect on the environment (DEQ file ECSI 4312). Incident was closed with same NFA as the LUST incident in 2018.

The facility was sold in 2018 after removal of seven (7) underground storage tanks (USTs) and the new owners focus on truck repair and do not sell fuel. The current tenant for the site is L and V Properties LLC (Pacific Truck Centers), a division of Gordon Truck Centers, Inc. Current uses for the site include Western Star Northwest Truck Sales, Freightliner Northwest (truck accessory store), and ATM Witham Freightliner.

2. BENEFICIAL LAND AND WATER USE DETERMINATIONS

Land use.
The Site is currently a truck repair facility with retail space. There are no plans to sell the property or change the Site use. The Site and surrounding area are zoned commercial, and it is likely that the Site will continue to be used for commercial uses in the future.

Groundwater use.
In 2018 when a previous project manager was working on LUST #15-15-1692 the Medford Water Commission confirmed that all developed properties within 800 feet of the Site were connected and on the municipal water system. A search of the Oregon Water Resources Department (WRD) database was performed and identified 38 water wells within Township 37 South, Range 02 West, Section 13AD and the adjacent Township 37 South, Range 01 West, Section 18BC. Four potential wells lie within a quarter mile of the Site that are not listed as abandoned. (Jack 11766, JACK12918, Jack 11768, and JACK 11769) Screened intervals for these wells range from 26 feet below grade to 46 feet below grade. Jack 11766 was a water well

used during highway construction to keep concrete wet and does not pose a consumption risk. Jack 11768 and JACK 11769 appear to have been installed more than 1,000 feet north of the Site.

In September 2025, Alpine Environmental Consultants, LLC (AEC) submitted a beneficial water use survey (BWUS) for the Site. One well log for a water supply well was identified within a ¼ - mile radius north of the Site. The single water supply well was identified as an irrigation well (JACK12915). The inferred horizontal hydraulic gradient is to the west-northwest towards Bear Creek according to AEC and the well to the north is inferred to be hydraulically cross-gradient of the Site. Accordingly, it is not reasonable and likely that residual petroleum hydrocarbon impacts to groundwater near the tank pit at the Site will generate unacceptable health risks to human receptors using water from the well to the north.

Based on the information provided above, DEQ concludes that groundwater is not currently, and is not likely to be, used in the future for beneficial uses at the Site and in the immediate vicinity of the Site.

Surface water use.
Bear Creek is situated approximately 800 feet to the west of the Site. The Site is predominantly paved, and stormwater is captured in a series of storm drains. Stormwater flows to the north and on the northern edge of the Site there is an oil-water separator that captures soils and sediments. Site stormwater then eventually routes to Bear Creek. Land use between Site and Bear Creek consists of I-5, I-5 rights-of-way, and green space (i.e. the Bear Creek Greenway Bike Path) on the east side of Bear Creek. Stormwater ultimately discharges to Bear Creek.

3. INVESTIGATION AND CLEANUP WORK

Due to an identified petroleum (gasoline and diesel) release during UST decommissioning activities, LUST#15-20-0238 was created for the Site. There are three areas of concern (AOCs) at this Site, which are described in more detail below.

<u>AOC 1- Former Retail Gasoline UST Area (Figure 3) - Eastern UST Pit</u>
Soil samples. AOC 1 had one UST (UST 7A- 8,000-gallon gasoline UST). Two soil samples (UST1-N and UST1-SW) were collected from the UST pit (Figure 3). There were no detections of gasoline or diesel exceeding risk-based concentrations (RBCs) at the UST pit. However, there were relatively mild vapors and relatively low level shallow soil contamination (< 3 feet bgs) identified in some areas beneath the dispensers and fuel lines, and there is a 4” diameter sewer line running from north to south along the UST pit, therefore approximately 30 cubic yards of petroleum contaminated soil was excavated from the UST pit and stockpiled over and under Visqueen plastic sheeting prior to being hauled to and disposed of at the Dry Creek Landfill in Eagle Point, Oregon.

No known monitoring wells are located at the Site, however, six (6) observation wells were identified by M&M personnel prior to the UST decommissioning activities. The wells were likely installed in the pea gravel of the UST pits during tank installation. Wells OBW-5 and

OBW-6 were located at UST 7A (AOC 1, Figure 3). Groundwater samples were collected from the observation wells on February 19, 2020. Groundwater samples were submitted for the following analysis: TPH-d, TPH-o, TPH-g, PAHs, and VOCs. In addition, OBW-6 was tested for total lead.

There were detections of TPH-d, TPH-o and TPH-g in OBW-5 and OBW-6 in the groundwater samples, but none of the results exceeded any RBCs. No PAHs were detected, and trace amounts of lead were detected.

AOC 2 –Truck Fueling Area (Figure 4). Associated Dispensers and Piping Runs
Soil samples. A total of ten (10) soil samples were collected beneath the ten (10) fuel dispensers present at the Site (D6 through D10, Figure 4). D6, D8, and D-10 had detections oil-range hydrocarbons when screened by DEQ Method NWTPH-HCID. DEQ Method NWTPH Gx and Dx were then tested. Diesel range constituents were found in D6, D8, D10 but did not exceed RBCs.

A total of nineteen (19) fuel piping run soil samples were collected beneath the piping runs in shallow soil (via hand sampling) from the USTs to the dispensers (P1 through P19, Figure 4). P14 had detections of diesel range total petroleum hydrocarbons (8,120 mg/kg) exceeding RBCs for ingestion, dermal contact, and inhalation for construction worker receptors (4,600 mg/kg). P15 had detections of gasoline (255 mg/kg) exceeding the RBC for leaching to groundwater.

P14 and P15 also had detections of naphthalene (1.30 mg/kg, 0.51 mg/kg) exceeding the RBC for leaching to groundwater pathway (0.34 mg/kg). In the P15 soil sample benzene and ethylbenzene (0.145 mg/kg, 1.53 mg/kg) were also detected exceeding the RBC for leaching to groundwater pathway (0.10 mg/kg).

In July 2020, DEQ reviewed the documents and requested additional characterization of soil and groundwater to better document the extent of the contamination. The supplemental investigation was conducted from August 20 and 21, 2020. SB1 through SB3 were advanced to approximately ten (10) feet bgs in the truck fueling area. No soil samples were collected from SB4 due to the presence of gravel fill in the UST pit and poor native soil recovery.

TPH-d was detected in several soil samples, including SB2-3’ (124 mg/kg) SB3-1’ (1,120 mg/kg), and SB3-8’ (650 mg/kg). None of the analytes sampled in soil borings SB1-SB3 exceeded any applicable RBCs.

AOC 3 – UST Farm (6 USTs) Area (Figure 5) - Western UST Pit
The following list of USTs were decommissioned and removed from the period of February through April 2020:

- UST 1 – 15,000 gallons of diesel;
- UST 2 – 15,000 gallons of diesel;
- UST 3 – 10,000 gallons of gasoline;
- UST 4 – 10,000 gallons of gasoline;

- UST 5 – 8,000 gallons of new oil; and
- UST 6 – 2,000 gallons of used oil

Prior to the decommissioning of the 2,000-gallon capacity waste oil tank identified as UST 6, residual liquid needed to be removed. Two (2) fluid samples were collected from UST 6 using a peristaltic pump. AEC anticipated the UST would only contain used oil, but while pumping out the fluid identified two types of fluid. Some oil (sample WOT-FL2) was at the top of the liquid profile, yet AEC also identified a green liquid beneath the oil. Green fluid presumed to be antifreeze (sample WOT-FL1). Both samples were analyzed for PCBs.

WOT-FL2 did not have an adequate amount of particulate matter to run TCLP and was analyzed for total metals. WOTFL-1 had enough particulate matter to run TCLP. PCBs did not exceed any RBCs in both samples and had no detections above the analytical method reporting limit. WOT-FL2 sample had detections of arsenic, barium, chromium III, and lead but did not exceed RBCs.

Soil samples collected from the tank pit had diesel detections ranging from 151 mg/kg (UST6-S) to 1,590 mg/kg (UST4-N). These detections did not exceed RBCs for any occupational or construction worker receptors.

Groundwater samples. Observation wells OBW-1 through OBW-4 were in the UST pit (AOC 3, Figure 5). Groundwater samples collected from the observation wells on February 19, 2020, were submitted for the following analysis: TPH-d, TPH-o, TPH-g, PAHs, and VOCs. In addition, OBW-4 was tested for total lead.

Groundwater samples from OBW-2 through OBW-4 had detections of diesel using DEQ Method NWTPH-Dx, ranging from 1,120 µg/L to 2,320 µg/L . There were no exceedances for PAHs in wells OBW-1 through OBW-4. Total lead was detected in OBW-4 at a very low level, below the method reporting limit.

Temporary wells were constructed in borings SB4 through SB13. Groundwater samples GW-SB4 and GW-SB6 through GW-SB13 tested for TPH-d, TPH-o, TPH-g, PAHs, VOCs, and total and dissolved lead in groundwater. The concentration of TPH-d reported in groundwater samples GW-SB9 through GW-SB13 ranged between 560 and 10,500 µg/L. Several petroleum contaminants were reported in groundwater in the western UST pit and vicinity (AOC 3) with only TPH-d in groundwater exceeding RBCs for the ingestion and inhalation from tapwater pathway.

Furthermore, the highest reported concentration of TPH-d in groundwater was 10,500 µg/L in the groundwater sample collected from boring SB9, which is located on the northwest corner of the tank pit. The reported concentration of TPH-d in the groundwater sample collected from boring SB13 was 560 µg/L. The relatively large decrease in TPH-d concentrations (i.e. from 10,500 µg/L to 560 µg/L) over approximately 50 feet demonstrates a significant amount of natural attenuation to the west of the tank pit.

Nature and extent of contamination.
TPH-d in groundwater is the main contaminant of concern at this Site. Boring SB13 is located approximately 50 feet to the north-northwest of boring SB9 with groundwater flowing to the west (Figure 5). The extent of diesel-impacted groundwater north and west of SB9 has not been determined. Based on the nature of diesel contamination in groundwater, it is unlikely that the diesel contamination plume would flow toward and/or beneath the administrative office and warehouse building. The diesel contamination in groundwater at AOC 3 appears to also be migrating off-site, beneath the I-5 right-of-way (ROW) in the vicinity of soil boring SB13 on the west side of the Site. Based on the nature of diesel contamination in groundwater, DEQ feels that it is unlikely that this contamination would extend very far beneath the ROW, or beyond it.

4. RISK EVALUATION

Conceptual site model.
To evaluate human exposure to residual chemical contamination requires an assessment of the type and extent of that exposure. This is based on current and reasonably likely future site use. DEQ publishes risk-based concentrations (RBCs) for contaminants commonly encountered, for different types of exposure scenarios. These RBCs are conservative estimates of protective levels of contaminants in soil, groundwater and air.

Table 1 (Figure 6) shows potential exposure pathways and receptors for this Site. Based on this, applicable RBCs are identified and used for risk screening.

Complete exposure pathways include direct contact with contaminated soil for occupational, construction and excavation workers; trench worker groundwater direct contact; and vapor intrusion from contaminated groundwater and soil to occupational workers.

Contaminant concentrations.
AOC 1. There were detections of gasoline and diesel in the shallow soil samples. There were also detections of gasoline, diesel, and oil in the groundwater samples.

AOC 2. There was relatively low-level shallow soil contamination (< 3 feet bgs) identified in some areas beneath the fuel piping runs from the USTs to the dispensers exceeding RBCs for ingestion, dermal contact, and inhalation for construction worker receptors. There were also detections of gasoline and naphthalene in soil samples exceeding the leaching to groundwater pathway. Supplemental investigation was conducted and found diesel detections in several soil samples at approximately ten (10) feet bgs.

AOC 3. The highest reported concentration of diesel in groundwater is located at the northwest corner of the tank pit. The diesel contamination in one groundwater sample from AOC 3 (GW-SB9) exceeded DEQ's RBCs for occupational vapor intrusion (VI). Samples from observation wells at AOC 3 also exceeded the VI RBC.

Human health risk.
Soil samples had detections of diesel above 500 mg/kg, the level II soil matrix level, indicating that vapor intrusion (VI) could be a concern from contaminated soil. Diesel concentrations in shallow groundwater samples from one observation well (OBW-4) and boring SB9 in AOC 3 exceeded the occupational RBC for vapor intrusion (1,700 µg/L).

These areas are currently not located near any buildings that could accumulate vapors, and concentrations should decline over time.

The ingestion and inhalation from tapwater exposure pathway was exceeded by TPH-d in groundwater. However, the Site and the surrounding properties are provided with municipal water, and it is highly likely they will continue to use municipal water; therefore, it is reasonable and likely to assume future occupants of the Site would not use groundwater for their primary water supply. For this reason, the ingestion and inhalation from tapwater exposure pathway is incomplete and tapwater RBCs do not apply.

The leaching to groundwater pathway was exceeded for naphthalene, benzene, and ethylbenzene in P14 and P15 soil samples. However, there were no exceedances of these contaminants of concern in the groundwater samples and groundwater is not used at the Site for beneficial uses, therefore the leaching to groundwater RBCs do not apply.

Ecological risk.
The Site is hardscaped and mostly capped with asphalt. Most of the remaining low levels of soil contamination are relatively deep, and there is no potential for run-off impacting surface water from contaminated soil. Therefore, soil contamination should not affect downstream, off-site ecological receptors.

5. RECOMMENDATION

Following removal of the most contaminated soil, and based on sample results for soil and groundwater, acceptable risk levels are generally not exceeded, however there may be a potential for vapor intrusion at and north of AOC 3 from diesel contamination remaining in that area. The risk from these areas is currently low, but a contaminated media management plan (CMMP) should be prepared before DEQ will recommend a No Further Action (NFA) determination for this Site. Buildings for human use should not be constructed over the AOC 3 area without further investigation or vapor resistant construction. DEQ will solicit public comments on this recommendation, including from the Oregon Department of Transportation, because of the off-site impacts to their ROW.

The CMMP and No Further Action determination should be recorded in DEQ's Your DEQ Online (YDO) database, Facility No. 1571 and LUST No. 15-20-0238.

6. ADMINISTRATIVE RECORD

Initial (Twenty Day) Report Form for UST Cleanup Projects. DEQ. April 17, 2020.

No Further Action Determination for Witham Truck Parts & Equipment LUST#15-15-1692, and Witham's Truck Stop Oil Spill, ECSI#4312. DEQ. June 19, 2018.

Pacific Truck Centers Underground Storage Tanks Decommissioning Sampling Technical Memorandum; LUST# 15-20-0238; Pacific Truck Centers Located At 2341 Biddle Road in Medford, Oregon. Alpine Environmental Consultants (AEC), May 20, 2020.

Supplemental Investigation Leaking Underground Storage Tank, Facility 15-20-0238, Pacific Truck Centers, 2343 Biddle Road, Medford, Oregon 97504. Alpine Environmental Consultants (AEC), April 8, 2021.

Technical Memorandum Describing the Groundwater Beneficial Use Survey for the Pacific Truck Centers Property at 2343 Biddle Road in Medford, Oregon; LUST facility 15-20-0238. Alpine Environmental Consultants (AEC), September 12, 2025.

Witham Truck Parts & Equipment LUST# 15-15-1692, Witham's Truck Stop Oil Spill ECSI# 4312; Staff Memorandum in Support of Further Investigation. DEQ. June 8, 2018.

7. ATTACHMENTS

1. Vicinity map
2. Site map
3. AOC 1-3 Figures
4. Conceptual Site Model

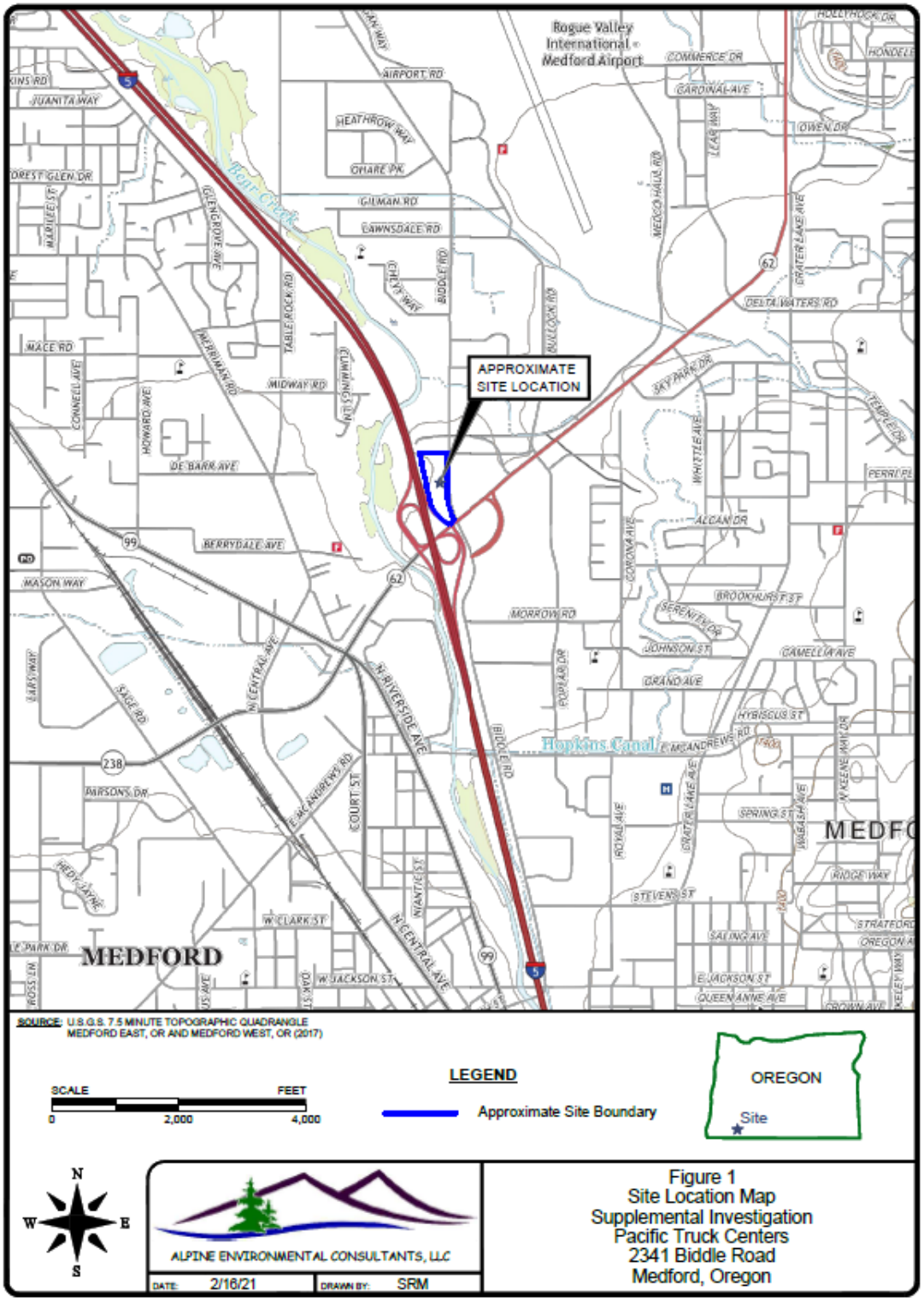

Figure 1. Vicinity Map (Provided by Alpine Environmental Consultants, LLC, 2/16/2021).

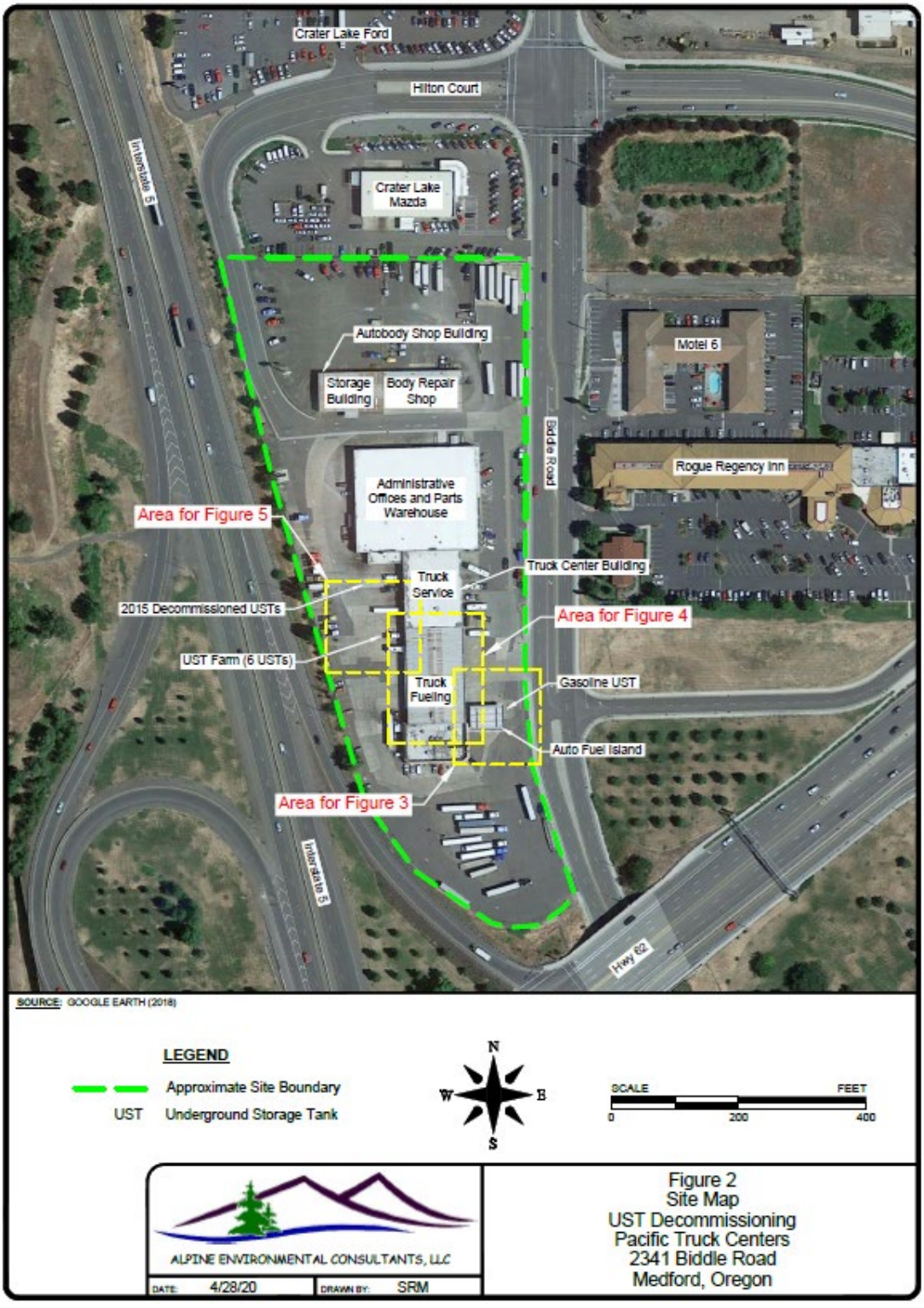

Figure 2. Site Map (Provided by Alpine Environmental Consultants, LLC, 4/28/2020).

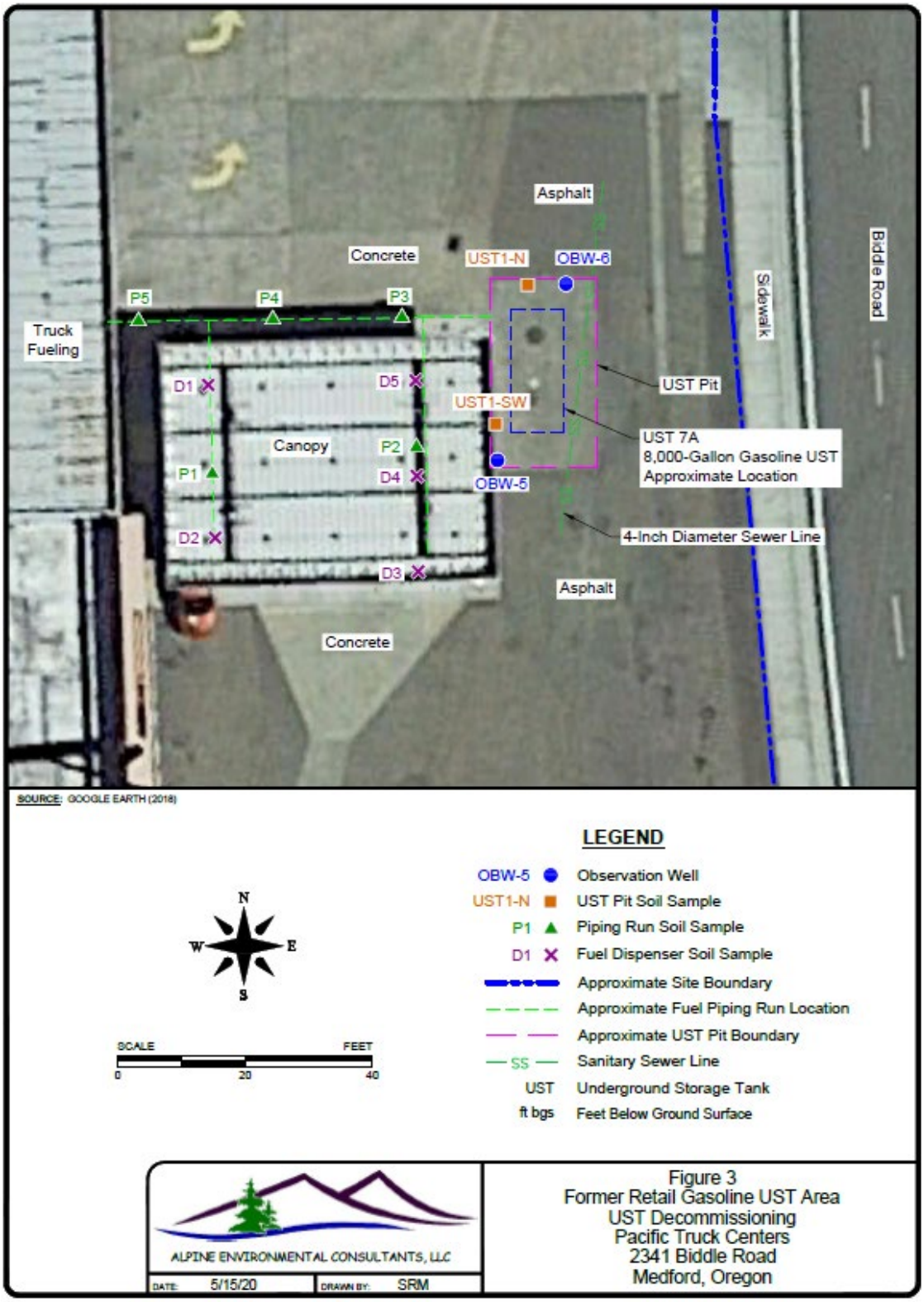

Figure 3. AOC 1 – Former Retail Gasoline UST Area (Provided by Alpine Environmental Consultants, LLC, 5/15/2020).

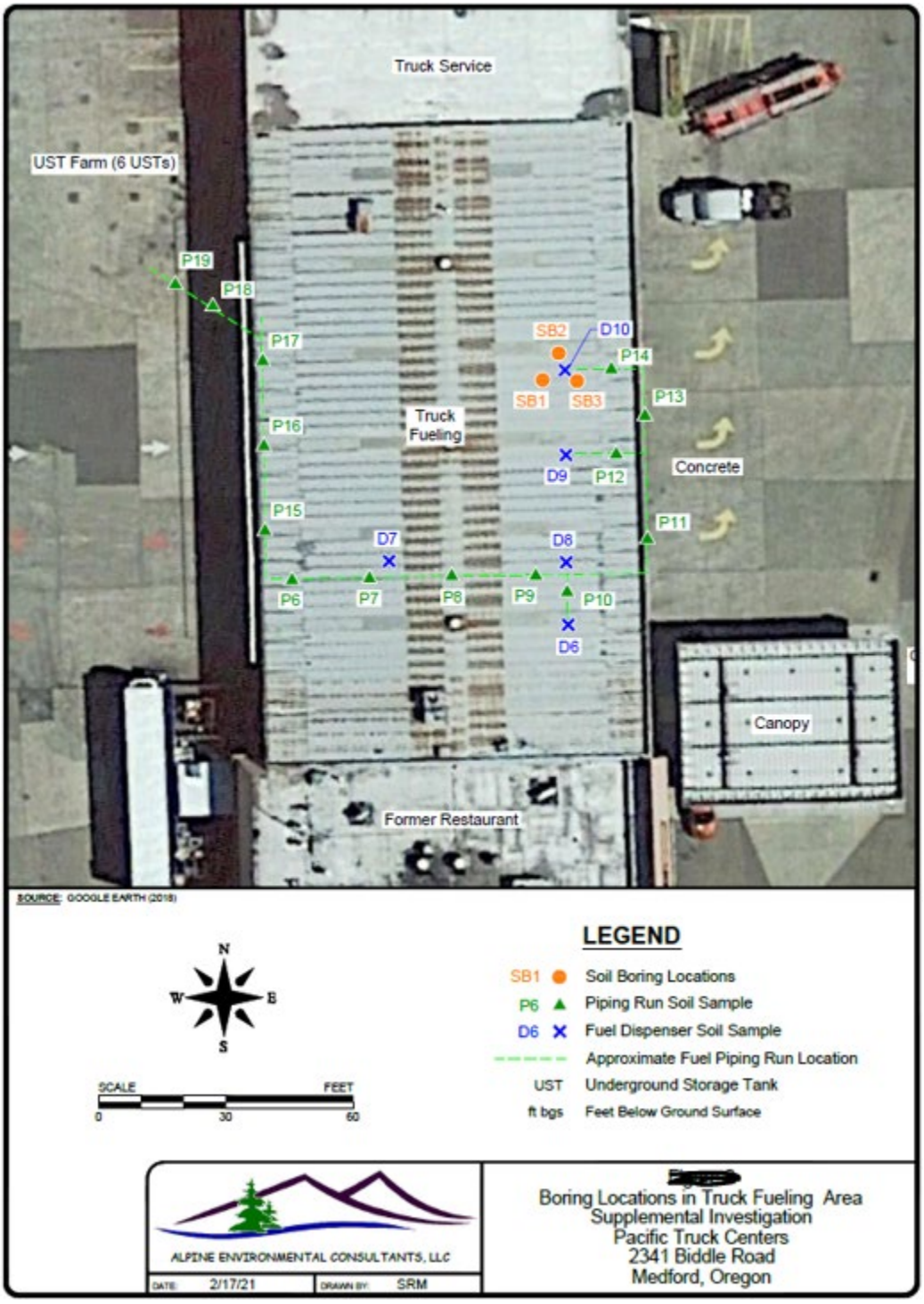

Figure 4. AOC 2 – Truck fueling area (Provided by Alpine Environmental Consultants, LLC, 2/17/2021).

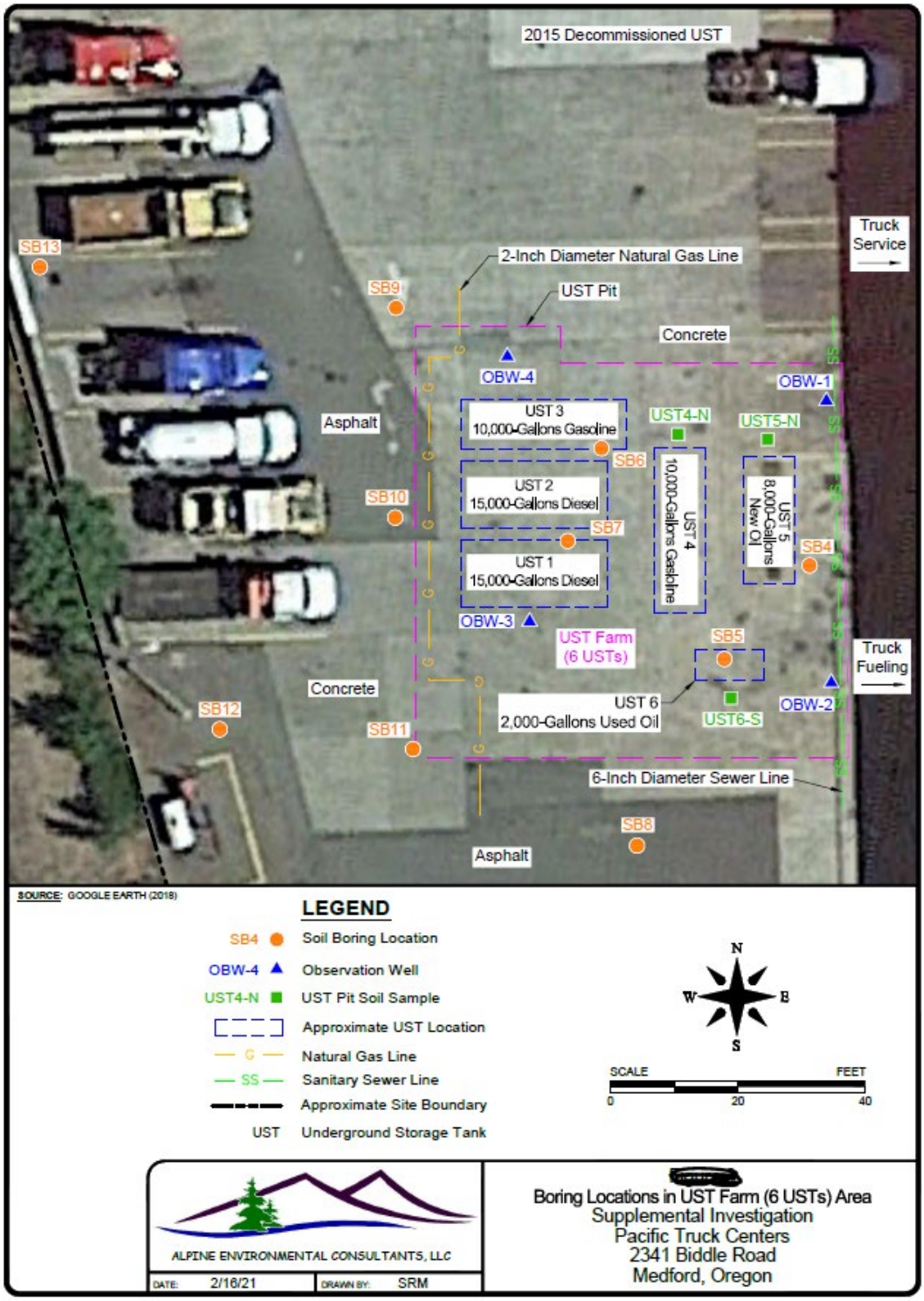

Figure 5. AOC 3 – UST Farm (6 USTs) Area (Provided by Alpine Environmental Consultants, LLC, 2/16/2021).

	Pathway	Receptor	Is pathway complete?	Is RBC Exceeded?	Comments
Soil	Ingestion, Dermal Contact, and Inhalation	Residential and/or Urban Residential	No	Yes	Site is zoned commercial.
		Occupational	Yes	No	CMMP will guide workers if contamination is encountered.
		Construction Worker	Yes	No	
		Excavation Worker	Yes	No	
	Volatilization to Outdoor Air	Residential and/or Urban residential	No	No	AOC 3 – risk from vapor intrusion is relatively low, but DEQ recommends if any new buildings are constructed further assessment should be conducted.
		Occupational	Yes	No	
	Leaching to Groundwater	Residential and/or Urban residential	No	Yes	City water is provided. Groundwater is not used for drinking. This pathway is therefore not considered, in accordance with Section B.3.2.4 of DEQ's RBDM guidance.
		Occupational	No	Yes	
Groundwater	Ingestion & Inhalation from Tap Water	Residential and/or Urban residential	No	Yes	City water is provided. Groundwater is not used for drinking. This pathway is therefore not considered, in accordance with Section B.3.2.4 of DEQ's RBDM guidance.
		Occupational	No	Yes	
	Vapor Intrusion into Buildings	Residential	No	No	AOC 3 – risk from vapor intrusion is relatively low, but DEQ recommends if any new buildings are constructed further assessment should be conducted.
		Commercial	Yes	Yes	
	Groundwater in Excavation	Occupational	Yes	No	CMMP will guide workers if contamination is encountered.
Soil Vapor	Vapor Intrusion into Buildings	Residential	NA	NA	Not Analyzed
		Commercial	NA	NA	
Ecological		Terrestrial & Surface Water			The subject property is devoid of ecologically valuable habitat and groundwater impacts are not expected to reach surface water.

Figure 6. Conceptual Site Model (CSM)