SHANNON & WILSON
GEOTECHNICAL AND ENVIRONMENTAL CONSULTANTS

May 2, 2019

Ms. Mary Urback
c/o Mary J. Urback PLLC
Bethel School District
516 176th Street East
Spanaway, WA 98387-8399

RE: LIMITED PHASE II ENVIRONMENTAL SITE ASSESSMENT, APPROXIMATE 13.4 ACRES – WALLER ROAD, FREDERICKSON, WASHINGTON

Dear Ms. Urback:

Shannon & Wilson has completed a Limited Phase II Environmental Site Assessment (ESA) to support the Bethel School District's acquisition of the northern approximately 13.4-acre portion (the Property) of Pierce County parcel 0319262004, adjacent to and west of Waller Road East in Frederickson, Washington. This assessment was conducted in accordance with the scope of services presented within the revised proposal dated February 7, 2019.

BACKGROUND

The Property is approximately rectangular in shape (Figure 1) and is forested and/or heavily vegetated throughout with an unfinished access road running generally from south to north from the southern end of the Property to near the northern Property boundary. A north-south-oriented trench and an east-west-oriented trench are located near the western and northern ends of the property. The Property is fenced along its western, northern, and eastern boundaries with residential properties located to the west, north, and east (beyond Waller Road East).

The remaining portion of Pierce County parcel 0319262004, located to the south of the Property is operated by the Pierce County Planning and Public Works Road Operations Division (the Road Operations Division) as the Prairie Pit Maintenance Facility (Prairie Pit facility). The Prairie Pit facility was historically mined (between approximately 1931 and 1979) for sand and gravel and was subsequently used for storage of equipment and materials used for or generated by road maintenance activities.

In 2008, the Tacoma Pierce County Health Department (TPCHD) granted the Road Operations Division a Solid Waste Handling permit to allow for the facility to manage street sweeping waste material. The permit was obtained in response to changes in regulations;

the facility had previously handled street sweeping waste. While under TPCHD, the facility used street sweeping waste material as backfill within at least two areas of the Prairie Pit facility. There are records that the material was tested and approved by TPCHD. It is not known if street sweeping waste was used as backfill prior to TPCHD involvement; if so, it is not known if the material was tested prior to use. Geotechnical excavations were undertaken in the Prairie Pit and "street sweeping" material was observed. The Prairie Pit facility is believed to be upgradient of the Property and the subsurface is understood to be permeable; as such, if contaminated material was used as backfill within the Prairie Pit facility, groundwater contamination may be present below the Property.

Though bordered by residential properties, a racetrack known as the Spanaway Speedway was historically located approximately 500 feet to the west-northwest of the Property. The location of the racetrack has been redeveloped with a residential development. A historic landfill known as the Frederickson Dump (also known as the Spanaway Dump) was historically located adjacent to and south of the racetrack. The landfill was closed in 1953. Both locations are believed to be cross-gradient to the Property.

No evidence of mining or street sweeping waste material was observed during the reconnaissance at the Property. Scattered garbage was noted as evidence that the Property has been accessed. A piece of metal debris was observed near the northern end of the Property approximately 15 feet south of the northern fence line. The debris was partially buried and could not be removed for examination during the reconnaissance. The scattered garbage and the observed metal debris indicate that dumping may have occurred at the Property. Due to the heavy vegetation and forest cover, the ground surface could not be fully viewed, and other debris may be present.

SUMMARY OF FIELD ACTIVITIES

On March 19, 2019, Migizi Group, Inc. (Bethel School District's geotechnical consultant) completed nine test pits at the Property (TP-1 through TP-9, shown in Figure 2). TP-1 through TP-8 were placed randomly throughout the area to be developed on the Property. TP-9 was placed at the location of the metal debris observed during the Property reconnaissance. Shannon & Wilson observed the test pit excavation activities and collected soil samples for environmental analysis from each test pit.

Test pit logs generated by Migizi Group are provided in Appendix A. Photographs taken during the field activities are provided in Appendix B. At TP-1 through TP-8, observed geology included 1.5 to 2.5 feet of brown to black, silty sand with organics overlying

approximately 1 to 2 feet of weathered, medium dense outwash, which was comprised of a gravel with silts, sand, cobbles, and boulders and occasionally roots. Photograph 5 of Appendix B shows the transition between the upper two layers. A dense, unweathered outwash was observed below the weathered layer.

At TP-9, the top silty sand layer was approximately 7 feet thick. Between 7 and 8 feet, native, dense outwash was observed. The reason for the thicker top layer at TP-9 appears to be because the pit was completed within the raised area adjacent to the trench observed near the northern Property boundary. The thicker top layer likely included material, which had historically been excavated to from the trench.

Composite samples were taken from each of TP-1 through TP-8. No signs of dumping or indication of contamination (visual or olfactory) were observed within TP-1 through TP-8. Near TP-4, remnants of an abandoned automobile body were observed above ground (Photograph 12 of Appendix B).

Within TP-9, dumped items including tires, electrical wire, rusted metal (including a crushed and ripped drum of approximately 32-gallon capacity), rubber, foam, concrete block, bricks, and treated wood were observed (Photographs 6 through 9 of Appendix B). The metal debris observed during the Phase I ESA was discovered to be a drum lid and the surrounding soil was observed to be stained blue-gray and had a pungent petroleum odor. The pit was completed to a depth of 8 feet below ground surface (bgs) in an attempt to delineate the impacted depth. The excavation stopped when dense, unweathered outwash was encountered (Photograph 10 of Appendix B). A sample of the stained soil was taken from 2.5 feet bgs and a bottom sample was taken from 8 feet bgs. Following completion of the test pit, the removed soil was replaced in the test pit (Photograph 11 of Appendix B).

SAMPLE ANALYSES

The samples were submitted to Fremont Analytical of Seattle, Washington, under standard chain of custody procedures. All ten samples were analyzed for petroleum hydrocarbon identification using Northwest Total Petroleum Hydrocarbon (NWTPH) Hydrocarbon Identification and for polycyclic aromatic hydrocarbons (PAHs) using Environmental Protection Agency (EPA) Method 8270 SIM. The samples collected from TP-1, -3, -5, and -7 and the 2.5 feet bgs sample taken from TP-9 were analyzed for priority pollutant metals (antimony, arsenic, beryllium, cadmium, chromium, copper, lead, mercury, nickel, selenium, silver, thallium, and zinc) using EPA Methods 6020 and 7471.

The results from the laboratory analyses are presented in Table 1 and the laboratory certificates are provided as Appendix C.

Petroleum Hydrocarbons

Total petroleum hydrocarbons were not detected within the samples taken from TP-1 through TP-8. Both samples taken from TP-9 (2.5 and 8 feet bgs) contained petroleum hydrocarbons identified as lube oil.

Follow-up analysis was requested on the TP-9 samples using NWTPH diesel extended. The 2.5 feet bgs sample contained lube oil at a concentration of 130,000 milligrams per kilogram (mg/kg) and the 8 feet bgs sample contained lube oil at 2,990 mg/kg. Both detections exceed the Model Toxics Control Act (MTCA) Method A Cleanup Level (CUL) for unrestricted land use of 2,000 mg/kg.

Polycyclic Aromatic Hydrocarbons (PAHs)

The samples taken from TP-1 through TP-8 did not contain detectable concentrations of PAHs. As shown in Table 1, the 2.5 feet bgs sample taken from TP-9 contained detectable concentrations of all analyzed PAHs. The 8 feet bgs sample contained detectable concentrations of benzo(g,h,i)perylene, pyrene, and chrysene. The concentrations detected within the deeper sample were one to two orders of magnitude lower than concentrations measured within the 2.5 feet bgs sample.

The total carcinogenic PAH (cPAH) toxic equivalent concentration (TEQ) was calculated for both TP-9 samples. The 2.5 feet bgs sample total cPAH TEQ was calculated at 3,385 micrograms per kilogram (µg/kg), exceeding the MTCA Method A CUL of 100 µg/kg. The 8 feet bgs sample total cPAH TEQ was calculated at 32 µg/kg, below the MTCA Method A CUL.

Priority Pollutant Metals

The TP-1, -3, -5, -7, and -9 (2.5 feet bgs) samples contained detectable concentrations of arsenic, beryllium, chromium, copper, lead, nickel, selenium, and zinc. The TP-9 (2.5 feet bgs) sample also contained detectable concentrations of antimony, cadmium, and silver.

Metal detections within the TP-1, -3, -5, and -7 samples were below MTCA Method A or B (when Method A was not available) CULs. With the exception of selenium, the metal detections (within TP-1, -3, -5, and -7 samples) were within natural background ranges

provided within the *Natural Background Soil Metals Concentrations in Washington State* study prepared by the Department of Ecology (Ecology) in 1994[1]. Selenium was detected at concentrations ranging from 1.32 to 1.71 mg/kg. It should be noted that the background level established within the Ecology study (0.78 mg/kg) was based on a limited dataset and other sources suggest concentrations of up to 2.0 mg/kg as typical for surficial soils.

The 2.5 feet bgs sample from TP-9 contained cadmium, copper, lead, selenium, and zinc at concentrations above natural background ranges. Cadmium and lead were detected at 14.5 and 7,950 mg/kg, respectively, above the MTCA Method A CULs of 2.0 and 250 mg/kg. Shannon & Wilson requested that the laboratory analyze the 8 feet bgs sample from TP- 9 for cadmium and lead. The 8 feet bgs sample contained cadmium at 0.694 mg/kg, below the MTCA Method A CUL, and lead at 1,680 mg/kg, above the MTCA Method A CUL.

According to the "Rule of 20", soil concentrations (in mg/kg) at above 20 times the Toxicity Characteristic Leaching Procedure (TCLP) limit (in milligram per liter [mg/L]) can result in TCLP limit exceedance (and therefore would be considered hazardous waste). For example, the TCLP limit for cadmium is 1 mg/L. Using the "Rule of 20", soil concentrations below 20 mg/kg (1 x 20) are not generally expected to exceed the TCLP limit. TCLP testing was not requested for cadmium because the detection was below 20 mg/kg. The TCLP limit for lead is 5 mg/L. Soil concentrations below 100 mg/kg (5 x 20) are not generally expected to exceed the TCLP limit. Because lead was detected at 7,950 mg/kg, follow-up analysis on the 2.5 feet bgs sample from TP-9 was requested using the TCLP extraction method. The sample contained lead at 6.01 mg/L, above the TCLP limit of 5 mg/L indicating that the material is hazardous waste due to the toxicity characteristic.

CONCLUSION AND RECOMMENDATIONS

Field observations and the results of environmental analyses performed on samples taken from TP-1 through TP-8 did not suggest the presence of soil contamination at these locations.

At TP-9, soil contaminated with lube oil, PAHs, and metals (specifically cadmium and lead) is present. The full depth of contamination was not identified; a sample taken from the base

[1] Washington State Department of Ecology, Toxics Cleanup Program, 1994, Natural background soil metals concentrations in Washington State, Publication No. 94-115, October.

of the test pit (8 feet bgs) contained lube oil and lead at concentrations above MTCA Method A CULs; however, the concentrations were significantly lower than detected values in the sample from 2.5 feet bgs. Based on the analytical results and observations made in the field, it appears that the contamination may be from a dumped drum (possibly an approximately 32-gallon drum) that contained waste oil.

Shannon & Wilson recommends that the Bethel School District request that the material encountered at TP-9 be removed by the Road Operations Division prior to the purchase of the Property. Based on the results of the lead TCLP analysis, the material encountered at 2.5 feet bgs is hazardous waste. Further TCLP testing was not completed to determine the extent at which lead was present at hazardous waste levels. Following excavation of the test pit, the material was replaced within the pit. Additional analyses including, but not limited to, polychlorinated biphenyls, volatile organic compounds (full list), and gasoline-range petroleum hydrocarbons may be necessary to support waste disposal characterization.

Confirmation sampling (base and sidewall) should be completed to verify that the full extent of contamination has been removed at TP-9 to below MTCA Method A CULs. It is unknown if groundwater has been contaminated by the detected hydrocarbons and metals.

Shannon & Wilson recommends that the Bethel School District request that the abandoned automobile body remnants observed near TP-4 be removed prior to purchasing the Property. A surface and/or near-surface soil sample should be collected following removal to evaluate for contamination (hydrocarbon identification, PAHs, and priority pollutant metals) resulting from fluids potentially left present within the vehicle at the time of dumping. If contaminated soil is detected at the abandoned car location, we recommend the soil is also excavated, disposed off-site, and confirmation samples tested.

Though no other impacted areas were encountered during the field investigation, other similar areas may be present at the Property. Shannon & Wilson recommends that Bethel School District have a Soil Management Plan in place during construction to inform actions to take in the occurrence of encountered contamination.

Shannon & Wilson has prepared the enclosure, "Important Information About Your Environmental Site Assessment/Evaluation Report," to assist you and others in understanding the use and limitations of our report.

Sincerely,

SHANNON & WILSON

Meg Strong, LG, LHG
Vice President

SKH:MJS/skh

Enc. Table 1 – Summary of Soil Analytical Results (2 pages)
Table 2 – Total cPAH TEQ Calculations
Figure 1 – Vicinity Map
Figure 2 – Property Plan
Appendix A – Test Pit Logs
Appendix B – Photographs
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Important Information About Your Environmental Site Assessment/Evaluation Report

Table 1 - Summary of Soil Analytical Results

	Sample Results										Regulatory Criteria			
Boring/Well Number:	**Test Pit 1**	**Test Pit 2**	**Test Pit 3**	**Test Pit 4**	**Test Pit 5**	**Test Pit 6**	**Test Pit 7**	**Test Pit 8**	**Test Pit 9**					
Sample Number:	**TP1:C**	**TP2:C**	**TP3:C**	**TP4:C**	**TP5:C**	**TP6:C**	**TP7:C**	**TP8:C**	**TP9:2.5**	**TP9:8**				
Sample Depth:	**--**	**--**	**--**	**--**	**--**	**--**	**--**	**--**	**2.5**	**8**				
Sample Date:	**03/19/19**	**03/19/19**	**03/19/19**	**03/19/19**	**03/19/19**	**03/19/19**	**03/19/19**	**03/19/19**	**03/19/19**	**03/19/19**	**MTCA Method A CUL for Unrestricted Land Use**	**MTCA Method B CUL for Direct Contact[1]**	**Natural Background Levels[2]**	**Toxicity Characteristic Regulatory Limit (mg/L)[3]**
Metals (mg/kg)														
Antimony	< 0.192	--	< 0.224	--	< 0.195	--	< 0.184	--	**0.552**	--	--	32	5	--
Arsenic	**3.56**	--	**3.69**	--	**3.75**	--	**3.96**	--	**5.98**	--	20.0	--	7	--
Beryllium	**0.286**	--	**0.332**	--	**0.317**	--	**0.276**	--	**0.267**	--	--	160	2	--
Cadmium	< 0.192	--	< 0.224	--	< 0.195	--	< 0.184	--	**14.5**	**0.694**	2.00	--	1	--
Chromium	**16.1**	--	**16.4**	--	**14**	--	**27.1**	--	**19**	--	2,000	--	42	--
Copper	**16.3**	--	**13.7**	--	**13.7**	--	**18.1**	--	**68.8**	--	--	3,200	36	--
Lead	**3.29**	--	**5.11**	--	**5.28**	--	**3.44**	--	**7,950**	**1,680**	250	--	17	--
Mercury	< 0.285	--	< 0.329	--	< 0.284	--	< 0.277	--	< 0.306	--	2.00	--	0.07	--
Nickel	**19.9**	--	**17**	--	**16.6**	--	**23.9**	--	**15.2**	--	1,600	--	38	--
Selenium	**1.44**	--	**1.71**	--	**1.46**	--	**1.32**	--	**1.37**	--	--	400	0.78/2*	--
Silver	< 0.0959	--	< 0.112	--	< 0.0976	--	< 0.0921	--	**0.179**	--	--	400	0.61	--
Thallium	< 0.192	--	< 0.224	--	< 0.195	--	< 0.184	--	< 0.194	--	--	0.80	--	--
Zinc	**30.7**	--	**33.3**	--	**37.8**	--	**39.0**	--	**2,450**	--	--	24,000	86	--
Toxicity Characteristic Leaching Procedure (mg/L)														
Lead	--	--	--	--	--	--	--	--	**6.01**	--	--	--	--	5
Hydrcarbon Identification (mg/kg)														
#2 Diesel	**< 55.3**	**< 66.3**	**< 69**	**< 61.9**	**< 57.2**	< 53.1	< 53.3	< 60.1	< 62.6	< 53.1	2,000	--	--	--
Gasoline	**< 22.1**	**< 26.5**	**< 27.6**	**< 24.7**	**< 22.9**	< 21.3	< 21.3	< 24	< 25	< 21.3	30/100*	--	--	--
Kerosene	**< 55.3**	**< 66.3**	**< 69**	**< 61.9**	**< 57.2**	< 53.1	< 53.3	< 60.1	< 62.6	< 53.1	--	--	--	--
Lube Oil	**< 111**	**< 133**	**< 138**	**< 124**	**< 114**	< 106	< 107	< 120	**DETECT**	**DETECT**	2,000	--	--	--
Mineral Spirits	**< 33.2**	**< 39.8**	**< 41.4**	**< 37.1**	**< 34.3**	< 31.9	< 32	< 36	< 37.6	< 31.9	--	--	--	--
Paraffin oils	**< 111**	**< 133**	**< 138**	**< 124**	**< 114**	< 106	< 107	< 120	< 125	< 106	--	--	--	--
Total Petroleum Hydrocarbons (mg/kg)														
#2 Diesel	--	--	--	--	--	--	--	--	< 2,500	< 213	2,000	--	--	--
Lube Oil	--	--	--	--	--	--	--	--	**130,000**	**2,990**	2,000	--	--	--
Polycyclic Aromatic Hydrocarbons (µg/kg)														
1-Methylnaphthalene	< 47.5	< 53.4	< 54.3	< 48.7	< 48.2	< 41.4	< 46.7	< 48.5	**3,780**	< 41.3	--	--	--	--
2-Methylnaphthalene	< 47.5	< 53.4	< 54.3	< 48.7	< 48.2	< 41.4	< 46.7	< 48.5	**5,280**	< 41.3	--	--	--	--
Acenaphthene	< 47.5	< 53.4	< 54.3	< 48.7	< 48.2	< 41.4	< 46.7	< 48.5	**312**	< 41.3	--	4,800,000	--	--
Acenaphthylene	< 47.5	< 53.4	< 54.3	< 48.7	< 48.2	< 41.4	< 46.7	< 48.5	**88**	< 41.3	--	--	--	--
Anthracene	< 47.5	< 53.4	< 54.3	< 48.7	< 48.2	< 41.4	< 46.7	< 48.5	**456**	< 41.3	--	24,000,000	--	--
Benzo[g,h,i]perylene	< 47.5	< 53.4	< 54.3	< 48.7	< 48.2	< 41.4	< 46.7	< 48.5	**945**	**56.3**	--	--	--	--

Table 1 - Summary of Soil Analytical Results

	Sample Results										Regulatory Criteria			
Boring/Well Number:	Test Pit 1	Test Pit 2	Test Pit 3	Test Pit 4	Test Pit 5	Test Pit 6	Test Pit 7	Test Pit 8	Test Pit 9					
Sample Number:	TP1:C	TP2:C	TP3:C	TP4:C	TP5:C	TP6:C	TP7:C	TP8:C	TP9:2.5	TP9:8	MTCA Method A CUL for Unrestricted	MTCA Method B CUL for Direct	Natural Background	Toxicity Characteristic Regulatory
Sample Depth:	--	--	--	--	--	--	--	--	2.5	8				
Fluoranthene	< 47.5	< 53.4	< 54.3	< 48.7	< 48.2	< 41.4	< 46.7	< 48.5	**5,010**	< 41.3	--	3,200,000	--	--
Fluorene	< 47.5	< 53.4	< 54.3	< 48.7	< 48.2	< 41.4	< 46.7	< 48.5	**606**	< 41.3	--	3,200,000	--	--
Naphthalene	< 47.5	< 53.4	< 54.3	< 48.7	< 48.2	< 41.4	< 46.7	< 48.5	**2,070**	< 41.3	5,000	--	--	--
Phenanthrene	< 47.5	< 53.4	< 54.3	< 48.7	< 48.2	< 41.4	< 46.7	< 48.5	**3,640**	< 41.3	--	--	--	--
Pyrene	< 47.5	< 53.4	< 54.3	< 48.7	< 48.2	< 41.4	< 46.7	< 48.5	**7,370**	**56.1**	--	2,400,000	--	--
Carcinogenic Polycyclic Aromatic Hydrocarbons (µg/kg)														
benzo(a)pyrene	< 47.5	< 53.4	< 54.3	< 48.7	< 48.2	< 41.4	< 46.7	< 48.5	**2,680**	< 41.3	100	--	--	--
benzo(a)anthracene	< 47.5	< 53.4	< 54.3	< 48.7	< 48.2	< 41.4	< 46.7	< 48.5	**3,530**	< 41.3	--	1,370	--	--
benzo(b)fluoranthene	< 47.5	< 53.4	< 54.3	< 48.7	< 48.2	< 41.4	< 46.7	< 48.5	**1,650**	< 41.3	--	1,370	--	--
benzo(k)fluoranthene	< 47.5	< 53.4	< 54.3	< 48.7	< 48.2	< 41.4	< 46.7	< 48.5	**978**	< 41.3	--	137	--	--
chrysene	< 47.5	< 53.4	< 54.3	< 48.7	< 48.2	< 41.4	< 46.7	< 48.5	**4,670**	**57.9**	--	137,000	--	--
dibenzo[a,h]anthracene	< 47.5	< 53.4	< 54.3	< 48.7	< 48.2	< 41.4	< 46.7	< 48.5	**128**	< 41.3	--	137	--	--
indeno[1,2,3-cd]pyrene	< 47.5	< 53.4	< 54.3	< 48.7	< 48.2	< 41.4	< 46.7	< 48.5	**294**	< 41.3	--	1,370	--	--
Total cPAH TEQ (See Table 2)									**3,384.7**	**31.6**	100	--	--	--

NOTES:

1 MTCA Method B CUL included when Method A CUL was not available.

2 Natural background soil metals concentrations (90th percentile values) established by Ecology in 1994.

3 Regulatory limit corresponding to hazardous waste due to toxicity characteristic.

* 0.78 mg/kg concentration established by Ecology (in 1994) was based on limited dataset. Other sources indicate levels up to 2 mg/kg as typical for surficial soil.

Bold text indicates detected analyte.

Shaded text indicates concentrations exceeds cleanup criterion.

< indicates that the compound was not detected above the indicated laboratory reporting limit.

-- indicates not analyzed or not applicable.

DETECT indicates a positive identification by Hydrocarbon Identifification method; method does not produce concentration result.

µg/kg = micrograms per kilogram; mg/kg = milligrams per kilogram; mg/L = milligrams per liter; cPAH = carcinogenic polycyclic aromatic hydrocarbon; CUL = cleanup level; MTCA = Model Toxics Control Act; TEQ = toxic equivalent concentration.

Table 2 - Total cPAH TEQ Calculations

Total cPAH TEQ Calculation for Sample TP9:2.5				
Analyte	Result (µg/kg)	Method Detection Limit (µg/kg)	Toxicity Equivalency Factor	Adjusted Concentration[1] (µg/kg)
benzo(a)pyrene	2,680	--	1	2,680
benzo(a)anthracene	3,530	--	0.1	353
benzo(b)fluoranthene	1,650	--	0.1	165
benzo(k)fluoranthene	978	--	0.1	97.8
chrysene	4,670	--	0.01	46.7
dibenzo[a,h]anthracene	128	--	0.1	12.8
indeno[1,2,3-cd]pyrene	294	--	0.1	29.4
Total cPAH TEQ[2]				**3,384.7**
MTCA Method A Cleanup Level for Unrestricted Land Use				100

Total cPAH TEQ Calculation for Sample TP-9:8				
Analyte	Result (µg/kg)	Method Detection Limit (µg/kg)	Toxicity Equivalency Factor	Adjusted Concentration[1] (µg/kg)
benzo(a)pyrene	ND	41.3	1	20.65
benzo(a)anthracene	ND	41.3	0.1	2.065
benzo(b)fluoranthene	ND	41.3	0.1	2.065
benzo(k)fluoranthene	ND	41.3	0.1	2.065
chrysene	57.9	--	0.01	0.579
dibenzo[a,h]anthracene	ND	41.3	0.1	2.065
indeno[1,2,3-cd]pyrene	ND	41.3	0.1	2.065
Total cPAH TEQ[2]				**31.6**
MTCA Method A Cleanup Level for Unrestricted Land Use				100

NOTES:

1 For detected compounds, calculated as the detected concentration multiplied by the compound's TEF.
For compounds that are ND, calculated as 1/2 of the MDL multiplied by the compound's TEF.

2 Sum of the TEF adjusted concentration for each cPAH.

Shaded text indicates a concentration exceeding the MTCA Cleanup Level.

< = ND = not detected above the MDL; µg/kg = microgram per kilogram; cPAH = carcinogenic polycyclic aromatic hydrocarbon; MDL = Method Detection Limit; MTCA = Model Toxics Control Act; TEF = toxicity equivalency factor; TEQ = toxic equivalent concentration

Appendix A

Test Pit Logs

Appendix B

Photographs

Photograph 1: Excavation of Test Pit 7 (TP-7).

Photograph 2: Excavation of Test Pit 6 (TP-6).

Photograph 3: Excavation of Infiltration Trench 1 (INF-1).

Photograph 4: Excavation of Test Pit 8 (TP-8). Approximately 2feet of brown, poorly graded sand with organics over a foot of weathered outwash over unweathered outwash, extending the bottom of excavation.

Photograph 5: Transition from brown sand with organics to weathered outwash.

Photograph 6: Beginning excavation of Test Pit 9 (TP-9). Electrical wire was uncovered.

Photograph 7: Rubber tube-tire uncovered at TP-9. Blue-gray soil staining with a pungent petroleum odor.

Photograph 8: Steel object uncovered at TP-9. Object appeared to be a drum lid with heavy petroleum odor.

Photograph 9: Rubber tire uncovered at TP-9.

Photograph 10: TP-9 was excavated to 8 feet below ground surface. This is when outwash was observed.

Photograph 11: TP-9 was filled in and can be seen in photo as the dark brown soil in the trees shadows. The northern boundary fence is present on the left side of the photo.

Photograph 12: Remnants of a vehicle were found above-ground near TP-4.

Appendix C

Laboratory Certificates

SHANNON & WILSON
GEOTECHNICAL AND ENVIRONMENTAL CONSULTANTS

Attachment to and part of Report: 102438-001
Date: May 2, 2019
To: Ms. Mary Urback
c/o Mary J. Urback PLLC
Bethel School District

Important Information About Your Environmental Site Assessment/Evaluation Report

ENVIRONMENTAL SITE ASSESSMENTS/EVALUATIONS ARE PERFORMED FOR SPECIFIC PURPOSES AND FOR SPECIFIC CLIENTS.

This report was prepared to meet the needs you specified with respect to your specific site and your risk management preferences. Unless indicated otherwise, we prepared your report expressly for you and for the purposes you indicated. No one other than you should use this report for any purpose without first conferring with us. No one is authorized to use this report for any purpose other than that originally contemplated without our prior written consent.

The findings and conclusions documented in this site assessment/evaluation have been prepared for specific application to this project and have been developed in a manner consistent with that level of care and skill normally exercised by members of the environmental science profession currently practicing under similar conditions in this area. The conclusions presented are based on interpretation of information currently available to us and are made within the operational scope, budget, and schedule constraints of this project. No warranty, express or implied, is made.

OUR REPORT IS BASED ON PROJECT-SPECIFIC FACTORS.

Our environmental site assessment is based on several factors and may include (but not be limited to) reviewing public documents to chronicle site ownership for the past 30, 40, or more years; investigating the site's regulatory history to learn about permits granted or citations issued; determining prior uses of the site and those adjacent to it; reviewing available topographic and real estate maps, historical aerial photos, geologic information, and hydrologic data; reviewing readily available published information about surface and subsurface conditions; reviewing federal and state lists of known and potentially contaminated sites; evaluating the potential for naturally occurring hazards; and interviewing public officials, owners/operators, and/or adjacent owners with respect to local concerns and environmental conditions.

Except as noted within the text of the report, no sampling or quantitative laboratory testing was performed by us as part of this site assessment. Where such analyses were conducted by an outside laboratory, Shannon & Wilson relied upon the data provided and did not conduct an independent evaluation regarding the reliability of the data.

CONDITIONS CAN CHANGE.

Site conditions, both surface and subsurface, may be affected as a result of natural processes or human influence. An environmental site assessment/evaluation is based on conditions that existed at the time of the evaluation. Because so many aspects of a historical review rely on third-party information, most consultants will refuse to certify (warrant) that a site is free of contaminants, as it is impossible to know with absolute certainty if such a condition exists. Contaminants may be present in areas that were not surveyed or sampled or may migrate to areas that showed no signs of contamination at the time they were studied.

Unless your consultant indicates otherwise, your report should not be construed to represent geotechnical subsurface conditions at or adjacent to the site and does not provide sufficient information for construction-related activities. Your report also should not be used following floods, earthquakes, or other acts of nature; if the size or configuration of the site is altered; if the location of the site is modified; or if there is a change of ownership and/or use of the property.

INCIDENTAL DAMAGE MAY OCCUR DURING SAMPLING ACTIVITIES.

Incidental damage to a facility may occur during sampling activities. Asbestos and lead-based paint sampling often require destructive sampling of pipe insulation, floor tile, walls, doors, ceiling tile, roofing, and other building materials. Shannon & Wilson does not provide for paint repair. Limited repair of asbestos sample locations is provided. However, Shannon & Wilson neither warranties repairs made by our field personnel, nor are we held liable for injuries or damages as a result of those repairs. If you desire a specific form of repair, such as those provided by a licensed roofing contractor, you need to request the specific repair at the time of the proposal. The owner is responsible for repair methods that are not specified in the proposal.

READ RESPONSIBILITY CLAUSES CAREFULLY.

Environmental site assessments/evaluations are less exact than other design disciplines because they are based extensively on judgment and opinion and there may not have been any (or very limited) investigation of actual subsurface conditions. Wholly unwarranted claims have been lodged against consultants. To limit this exposure, consultants have developed a number of clauses for use in their contracts, reports, and other documents. These responsibility clauses are not exculpatory clauses designed to transfer the consultant's liabilities to other parties; rather, they are definitive clauses that identify where responsibilities begin and end. Their use helps all parties involved recognize their individual responsibilities and take appropriate action. Some of these definitive clauses may appear in this report, and you are encouraged to read them closely. Your consultant will be pleased to give full and frank answers to your questions.

Consultants cannot accept responsibility for problems that may develop if they are not consulted after factors considered in their reports have changed or conditions at the site have changed. Therefore, it is incumbent upon you to notify your consultant of any factors that may have changed prior to submission of the final assessment/evaluation.

An assessment/evaluation of a site helps reduce your risk but does not eliminate it. Even the most rigorous professional assessment may fail to identify all existing conditions.

ONE OF THE OBLIGATIONS OF YOUR CONSULTANT IS TO PROTECT THE SAFETY, HEALTH, PROPERTY, AND WELFARE OF THE PUBLIC.

If our environmental site assessment/evaluation discloses the existence of conditions that may endanger the safety, health, property, or welfare of the public, we may be obligated under rules of professional conduct, statutory law, or common law to notify you and others of these conditions.

The preceding paragraphs are based on information provided by the ASFE/Association of Engineering Firms Practicing in the Geosciences, Silver Spring, Maryland