



**PERIODIC REVIEW REPORT  
FINAL**

**Pacific Plaza Garage  
Facility Site ID#: 9198  
Cleanup Site ID# 1367**

**1250 Pacific Avenue  
Tacoma, Washington**

**Southwest Regional Office  
TOXICS CLEANUP PROGRAM**

**February 2019**

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## 1.0 INTRODUCTION

This document is a review by the Washington State Department of Ecology (Ecology) of post-cleanup site conditions and monitoring data to ensure that human health and the environment are being protected at the Pacific Plaza Garage site (Site). Cleanup at this Site was implemented under the Model Toxics Control Act (MTCA) regulations, Chapter 173-340 Washington Administrative Code (WAC).

Cleanup activities at this Site were completed under the Voluntary Cleanup Program (VCP). The cleanup actions resulted in concentrations of petroleum hydrocarbons remaining at the Site in soil that exceed MTCA Method A cleanup levels. The MTCA Method A cleanup levels for soil are established under WAC 173-340-740(2). WAC 173-340-420 (2) requires that Ecology conduct a periodic review of a site every five years under the following conditions:

- (a) Whenever the department conducts a cleanup action.
- (b) Whenever the department approves a cleanup action under an order, agreed order or consent decree.
- (c) Or, as resources permit, whenever the department issues a no further action (NFA) opinion
- (d) And one of the following conditions exists:
  - 1. Institutional controls or financial assurance are required as part of the cleanup.
  - 2. Where the cleanup level is based on a practical quantitation limit.
  - 3. Where, in the department's judgment, modifications to the default equations or assumptions using site-specific information would significantly increase the concentration of hazardous substances remaining at the site after cleanup or the uncertainty in the ecological evaluation or the reliability of the cleanup action is such that additional review is necessary to assure long-term protection of human health and the environment.

When evaluating whether human health and the environment are being protected, the factors the department shall consider include [WAC 173-340-420(4)]:

- (a) The effectiveness of ongoing or completed cleanup actions, including the effectiveness of engineered controls and institutional controls in limiting exposure to hazardous substances remaining at the Site.
- (b) New scientific information for individual hazardous substances or mixtures present at the Site.
- (c) New applicable state and federal laws for hazardous substances present at the Site.
- (d) Current and projected Site use.
- (e) Availability and practicability of higher preference technologies.
- (f) The availability of improved analytical techniques to evaluate compliance with cleanup levels.

The department shall publish a notice of all periodic reviews in the Site Register and provide an opportunity for public comment.

## **2.0 SUMMARY OF SITE CONDITIONS**

### **2.1 Site History**

The Pacific Plaza Garage Site is located at 1250 Pacific Avenue in Tacoma, in Pierce County in Washington. The property is currently owned by the City of Tacoma and managed by the City's Public Works Services. It occupies approximately 0.22 acres that is entirely occupied by a multi-level parking garage and office space. The Site is located among urban commercial and businesses properties. The Site is bounded by Pacific Avenue to the east, South 13<sup>th</sup> Street to the south, and Commerce Street to the west. The topography slopes slightly downward along South 13<sup>th</sup> Street. The Thea Foss Waterway of Commencement Bay, Puget Sound is approximately one thousand feet down gradient to the east of the property. Offices, retail, and food services businesses occupy the properties surrounding Pacific Plaza Garage. A vicinity map and Site Plan are available as Appendix 6.1 and Appendix 6.2, respectively.

Based on the Phase I Environmental Assessment conducted in 2007, the property consisted of a building that was constructed at least in 1885. In 1970s, the building was demolished and the existing parking structure was constructed. The parking structure was remodeled in 2008, which included the addition of office space built on the top of the parking structure. During the remodeling, one heating fuel/Bunker C single-walled underground storage tank (UST) was encountered at the Site. The UST was located beneath the Pacific Avenue sidewalk and appeared to be associated with former building. As a result of the releases from the UST, soils surrounding the UST appeared to have been impacted. The use of the UST was unknown.

### **2.2 Site Geology**

Based on the Geologic Map of Tacoma, and other available geologic maps, they indicate that Site and the surrounding area is underlain by glacial sediments predominantly consists of glacial till. This unit typically is comprised of a poorly sorted, non-stratified mixture of clay, silt, sand, pebbles, cobbles and occasional boulders. The downtown Tacoma area has been remapped in the Draft Geologic Map of the Tacoma South 7.5 minute Quadrangle, Washington, as ice-contact deposits. The ice-contact despitess can consists of several materials including glacial till, fluvial sand and gravel.

A total of 14 soil borings was completed to a depth of approximately ranging from 20 feet to 40 feet below the Pacific Avenue elevation in the vicinity of the Site. Detailed logs of the borings were not available for all the borings. However, based on the few boring logs, the Site geology consists of a surficial fill soils to depths ranging from 4 to 10 feet. The fill comprises of loose to medium dense sand with gravel and silt to silty sand with gravel. The fill was underlain by very dense gray silty sand with gravel interpreted as dense glacial deposits. The dense glacial deposits were encountered at a depth of approximately 10 feet below ground surface (bgs) followed by a stiff to hard gray silt. In general, Site geology consists of a fill overlying dense glacial deposits. A geological cross-section is available as Appendix 6.3.

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### 2.3 Underground Storage Tank Removal and Cleanup Activities

The former UST was approximately 12 feet in length and 5 feet in diameter with an approximate capacity of 1,750 gallons. A petroleum product was observed to be inside the UST. During the UST removal, several holes that ranged from 1/8 inch to 1.5 inch were observed throughout the UST. It appeared that the fill pipe had been removed and the access port located on the UST was covered with a rock prior to excavation activities. A Comcast line was located on top of the eastern side of the UST and the product pipe was observed north of the UST. The piping inside the building was reportedly removed during the construction activities. The approximate location of the former UST is shown on Figure 3 in Appendix 6.3.

Approximately 700 gallons of oil and 100 gallons of sludge was removed from the UST with a vector truck and the UST was rinsed three times prior to its removal and disposal. In addition, three product lines (1 to 2 inches diameter) were also removed north of the UST including the over excavation of approximately one foot of material below the product lines. Soils surrounding the UST appear to have been impacted from the leaking from the UST. Majority of petroleum contaminated soil was removed during the UST removal. Approximately 472 tons of contaminated soil was excavated and transported to LRI Landfill in Graham, Oregon, for disposal. The final dimensions of the excavation were approximately 15 feet long by 14.5 feet wide and 11 feet deep. However, some petroleum contaminated soil was left-in-place towards the north and south ends of the excavation base, because of the presence of the Comcast utility line, parking garage foundation footings, and Pacific Avenue sidewalk.

A total of ten discrete confirmation soil samples was collected for the laboratory analysis. These soil samples included four bottom samples [base of the excavation; Conf-btm-NW, Conf-Btm-SW, Conf-Btm-E, and Conf-Btm-E-02 (after additional excavation)], five side wall samples (Conf-W. Wall-01, Conf-W. Wall-02, Conf-E. Wall, Conf-N. Wall, Conf-S. Wall), and one sample beneath the former product line (Conf-pipe). Following the collection of confirmation soil samples, the excavation pit was backfilled with controlled density fill.

All the soil samples were analyzed for diesel-and oil-range total petroleum hydrocarbons (TPH-D and TPH-O), volatile organic compounds (VOCs), semivolatile organic compounds (SVOCs), carcinogenic polycyclic aromatic hydrocarbons (cPAHs), and metals. The results indicated that the TPH-D and TPH-O concentrations were greater than MTCA Method A cleanup level of 2,000 milligrams per kilogram (mg/kg) in two confirmation soil samples (Conf-Btm-E: TPH-D: 5,700 mg/kg, TPH-O: 9,030 mg/kg; Conf-Btm-NW: TPH-D: 2,540 mg/kg, TPH-O: 5,740 mg/kg) collected at the base of the northeast and northwest portions of the excavation. All other contaminants were either not detected or were detected at concentrations less than the respective MTCA Method A cleanup levels. The approximate extent of contaminated soil excavation, confirmation soil sampling locations and their results are available as Appendix 6.4.

Even though some limited soil contamination was left-in-place at two localized areas because of its inaccessibility (in the vicinity of structural foundation columns and the Pacific Avenue right-

of-way), Ecology has determined that it was cost-prohibitive (and also to maintain the structural integrity of the parking garage plaza and the City's right-of-way) to do any further remedial

action at the Site, and the most feasible alternative is to place restrictions on the usage of the property via an Restrictive Covenant with no groundwater requirements based on the following reasons:

- The UST with source of petroleum product, and product lines were removed. Most of the contaminated soil was also excavated, and only localized pockets of petroleum contaminated soil was left at the Site.
- The soil contamination left-in-place was aged Bunker-C oil, which has very limited mobility in soil and the remaining contamination in soil will not be readily mobile and lead to further soil and groundwater contamination.
- The excavation pit was backfilled with control density fill, and the rest of the soil contamination left-in-place was covered by an asphalt/concrete paved surface, located within the parking structure, and below the Pacific Avenue sidewalk, which will serve as engineer control and eliminates the direct contact of contaminated soils with humans.
- The aged Bunker C oil has limited potential to produce vapors. Though volatile organic compounds (VOCs) detected, all the concentrations were below MTCA cleanup levels and therefore, VOCs are not a concern at the Site.
- Groundwater contamination is not a concern at this Site because of the above factors and the fact that the depth of groundwater was 50 feet below ground surface (bgs) at the Site while the soil contamination was mostly found at about 10 feet bgs; and the dense glacial deposits between soil contamination and groundwater table is more than 30 feet thick at the Site, which may effectively contain the remaining soil contamination from leaching into groundwater.

#### **2.4 Cleanup Levels**

WAC 173-340-704 states that MTCA Method A may be used to establish cleanup levels at sites that have few hazardous substances, are undergoing a routine cleanup action, and where numerical standards are available for all indicator hazardous substances in the media for which the Method A cleanup level is being used.

MTCA Method A cleanup levels for unrestricted land use were determined to be appropriate for this Site. The cleanup actions conducted at the Site were determined to be “routine”, few hazardous substances were found at the Site, and numerical standards were available for each hazardous substance. The table below presents the current MTCA Method A cleanup levels.

**Table-1: MTCA Method A Soil and Groundwater Cleanup Levels**

<b>Chemical</b>	<b>Soil Cleanup Level (mg/kg)</b>	<b>Groundwater Cleanup Level (µg/L)</b>
TPH-Gas	30/100*	800/1000*
TPH-Diesel	2,000	500
TPH-Oil	2,000	500
Benzene	0.03	5
Toluene	7	1,000
Ethylbenzene	6	700
Xylenes	9	1,000
Lead	250	15

**Note:** mg/kg: milligrams per kilogram  
 µg/L: micrograms per liter  
 \*benzene present/benzene not present

## 2.5 Restrictive Covenant

Following remedial activities, a Restrictive Covenant was recorded for the Site on February 21, 2013, and a no further action letter was issued on March 26, 2013. The Restrictive Covenant imposes the following limitations:

**Section 1:** A portion of the property contains TPH-D and TPH-O contaminated soil located approximately 12 feet below ground surface at the main entry of the structure located on the Pacific Avenue level (Exhibit B). The Owner shall not alter, modify, or remove the existing structures in a manner that may result in the release or exposure to the environment of that contaminated soil or create a new exposure pathway without prior written approval from Ecology.

**Section 2:** Any activity on the property that may interfere with the integrity of the Remedial Action and continued protection of human health and the environment is prohibited.

**Section 3:** Any activity on the Property that may result in the release or exposure to the environment of a hazardous substance that remains on the Property as part of the Remedial Action, or create a new exposure pathway, is prohibited without prior written approval from Ecology.

**Section 4:** The owner of the Property must give thirty (30) day advance written notice to Ecology of the Owner's intent to convey any interest in the Property. No conveyance of title, easement, lease, or other interest in the Property shall be consummated by the Owner without adequate and complete provision for continued monitoring, operation, and maintenance of the Remedial Action.

**Section 5:** The Owner must restrict leases to uses and activities consistent with the Restrictive Covenant and notify all lessees of the restrictions on the use of the Property.

**Section 6:** The owner must notify and obtain approval from Ecology prior to any use of the Property that is inconsistent with the terms of this Restrictive Covenant. Ecology may approve any inconsistent use only after public notice and comment.

**Section 7:** The Owner shall allow authorized representatives of Ecology the right to enter the Property at reasonable times for the purpose of evaluating the Remedial Action, to take samples, to inspect remedial actions conducted at the Property, and to inspect records that are related to the Remedial Action.

**Section 8:** The Owner of the Property reserves the right under WAC 173-340-440 to record an instrument that provides that this Restrictive Covenant shall no longer limit use of the Property or be of any further force or effect. However, such an instrument may be recorded only if Ecology, after public notice and opportunity for comment, concurs.

The Restrictive Covenant is available as Appendix 6.5.



### **3.0 PERIODIC REVIEW**

#### **3.1 Effectiveness of Completed Cleanup Actions**

Based upon the Site visit conducted on May 23, 2018 the Plaza Building and asphalt cover and/or the concrete sidewalk on the City's right-of-way at the Site continue to eliminate exposure pathways (ingestion, contact) to contaminated soils. The asphalt and/or concrete are in satisfactory condition and no repair, maintenance or contingency actions have been required. Currently the Site is an active parking garage attached to an office building. A photo log is available as Appendix 6.6.

The Restrictive Covenant for the Site was recorded and is in place. This Restrictive Covenant prohibits activities that will result in the release of contaminants contained as part of the cleanup without Ecology's approval, and prohibits any use of the property that is inconsistent with the Covenant. This Restrictive Covenant serves to assure the long term property use and integrity of the property surface.

#### **3.2 New Scientific Information for Individual Hazardous Substances for Mixtures Present at the Site**

Cleanup levels at the Site were based on regulatory standards rather than calculated risk for chemicals and/or media. These standards were sufficient to be protective of Site-specific conditions.

#### **3.3 New Applicable State and Federal Laws for Hazardous Substances Present at the Site**

The Model Toxics Control Act cleanup levels have not changed since the no further action determination letter was issued for the Site on March 26, 2013.

#### **3.4 Current and Projected Site Use**

The Site is currently used for commercial purposes. This use is not likely to have a negative impact on the risk posed by hazardous substances contained at the Site.

#### **3.5 Availability and Practicability of Higher Preference Technologies**

The remedy implemented included the excavation of majority of the contaminated soils and containment of remaining residual hazardous substances and it continues to be protective of human health and the environment. While higher preference cleanup technologies may be available, they are still not practicable at this Site.

### **3.6 Availability of Improved Analytical Techniques to Evaluate Compliance with Cleanup Levels**

The analytical methods used at the time of the remedial actions were capable of detection below MTCA Method A cleanup levels. The presence of improved analytical techniques would not affect decisions or recommendations made for the Site.

## **4.0 CONCLUSIONS**

- The cleanup actions completed at the Site are continue to be protective of human health and the environment.
- Soil cleanup levels have not been met at the Site; however, under WAC 173-340-740(6)(f), the cleanup action is determined to comply with cleanup standards, since the long-term integrity of the containment system is ensured and the requirements for containment technologies have been met.
- The Restrictive Covenant for the property is in place and will be effective in protecting public health from exposure to hazardous substances and protecting the integrity of the cleanup action.

Based on this review, Ecology has determined that the requirements of the Restrictive Covenant have been satisfactorily completed. No additional remedial action is necessary at this time. It is the property owner's responsibility to continue to inspect the Site to assure that the integrity of the Site cover is maintained.

### **4.1 Next Review**

The next review for the Site will be scheduled five years from the date of this periodic review. In the event that additional cleanup actions or institutional controls are required, the next periodic review will be scheduled five years from the completion of those activities.

## **5.0 REFERENCES**

GeoEngineers, Inc., Technical Memorandum (Letter to Tacoma Public Works, Facility Management), December 18, 2009.

GeoEngineers, Inc., Underground Storage Tank Removal Report, December 31, 2008.

Tacoma/Pierce County Health Department, Underground Storage Tank Removal: Site Closure Determination Letter, August 20, 2011.

Department of Ecology Southwest Regional Office. Initial Investigation Report (ERTS# 605007).

Department of Ecology Southwest Regional Office. Site Hazard Assessment Worksheet 1 Summary Score Sheet.

Department of Ecology Southwest Regional Office. Opinion Letter, October 8, 2012.

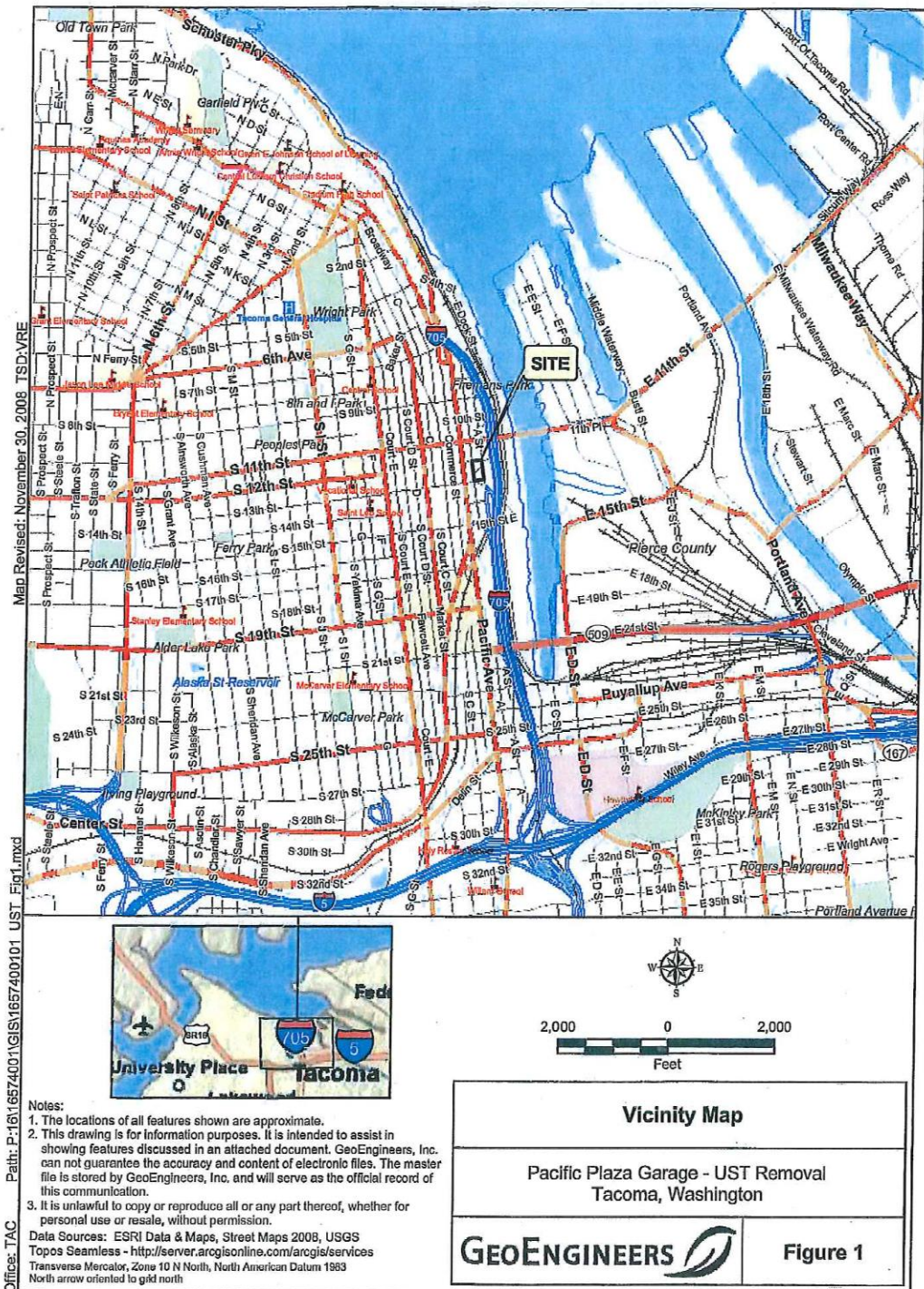
City of Tacoma. Environmental Covenant No. A356-Pacific Plaza, February 21, 2013.

Department of Ecology Southwest Regional Office. No Further Action Letter, Pacific Plaza Garage, March 26, 2013.

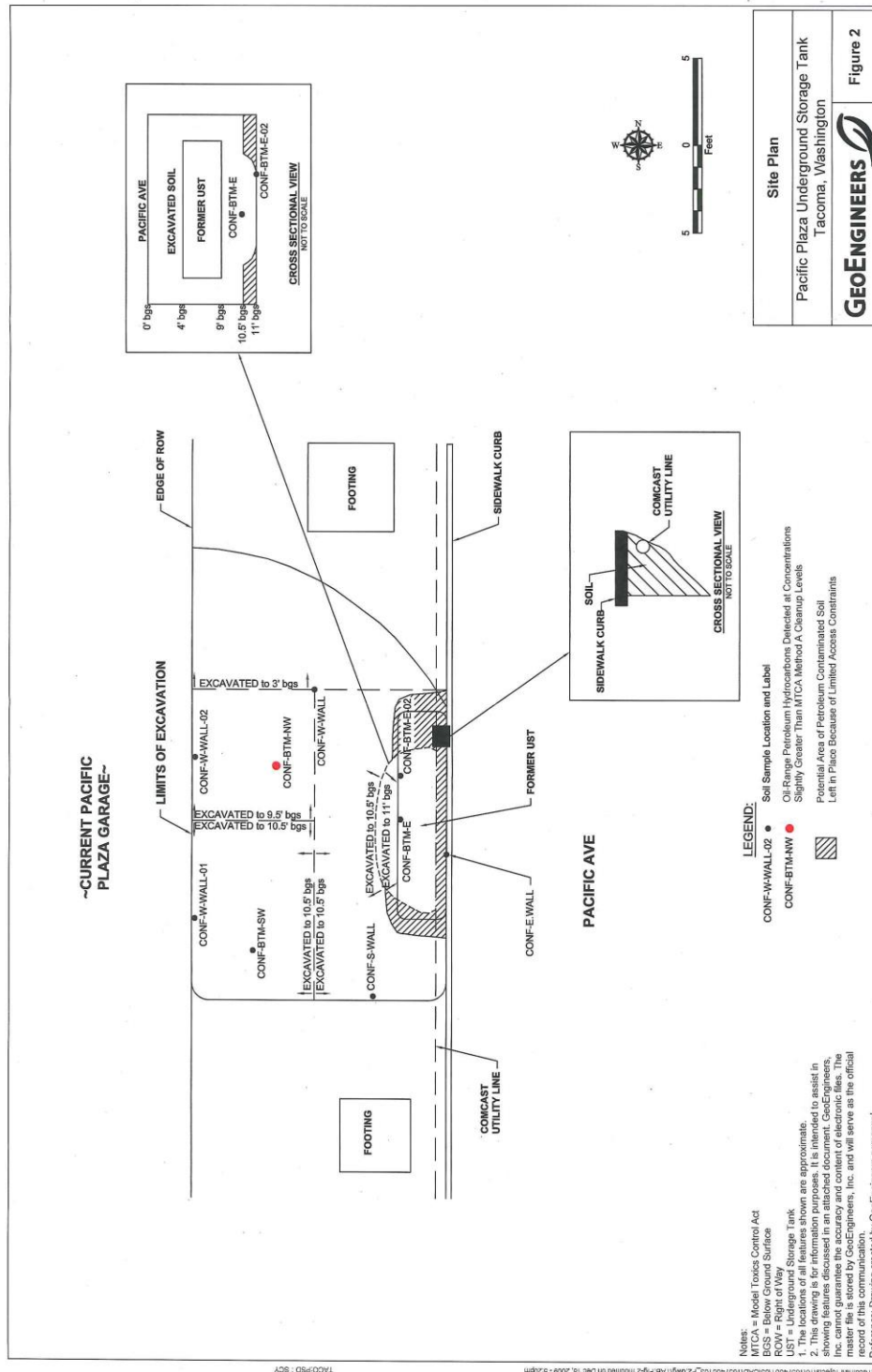
Department of Ecology. Site Visit May 23, 2018.

## **6.0 APPENDICES**

### 6.1 Vicinity Map



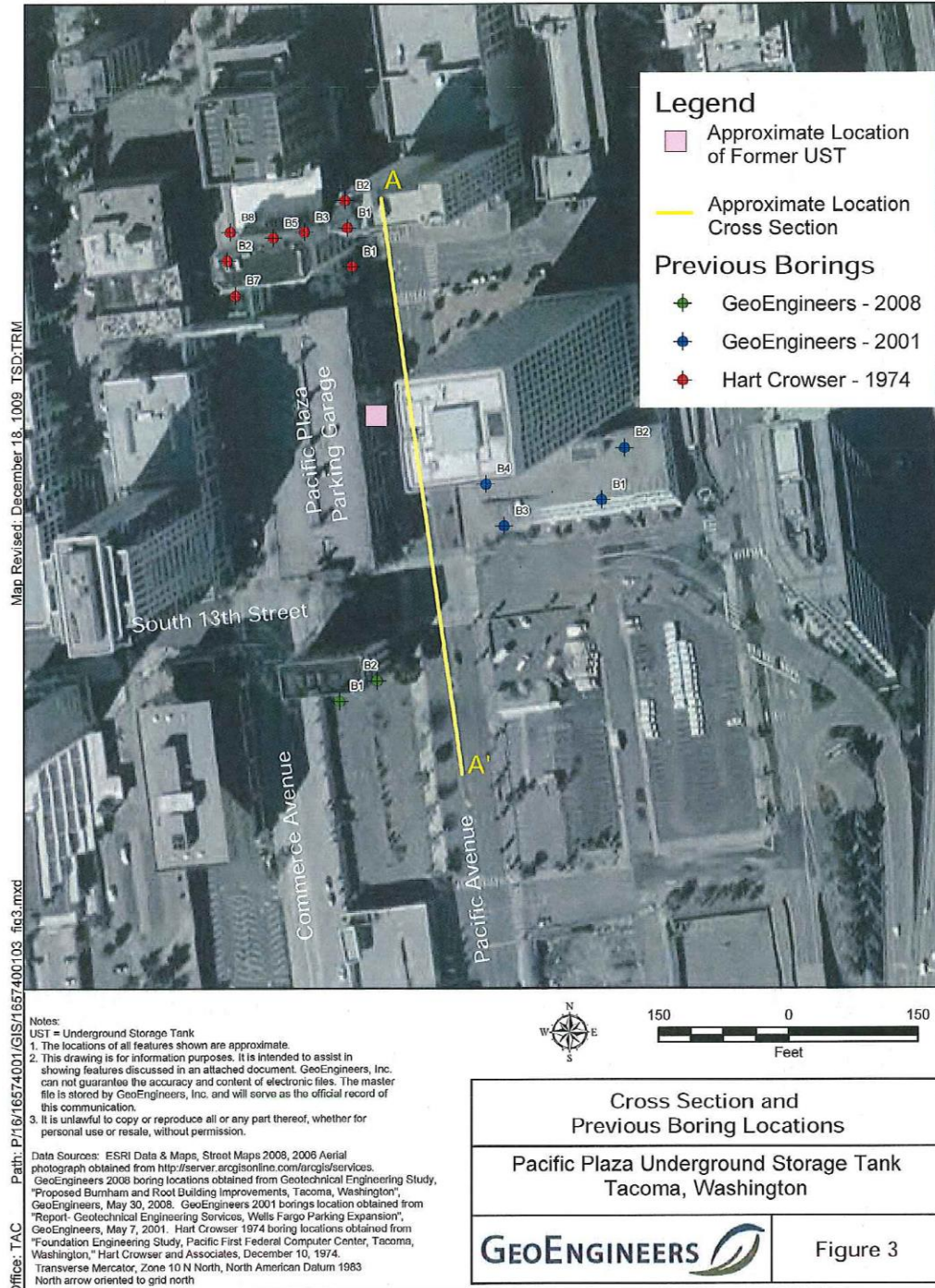
6.2 Site Plan



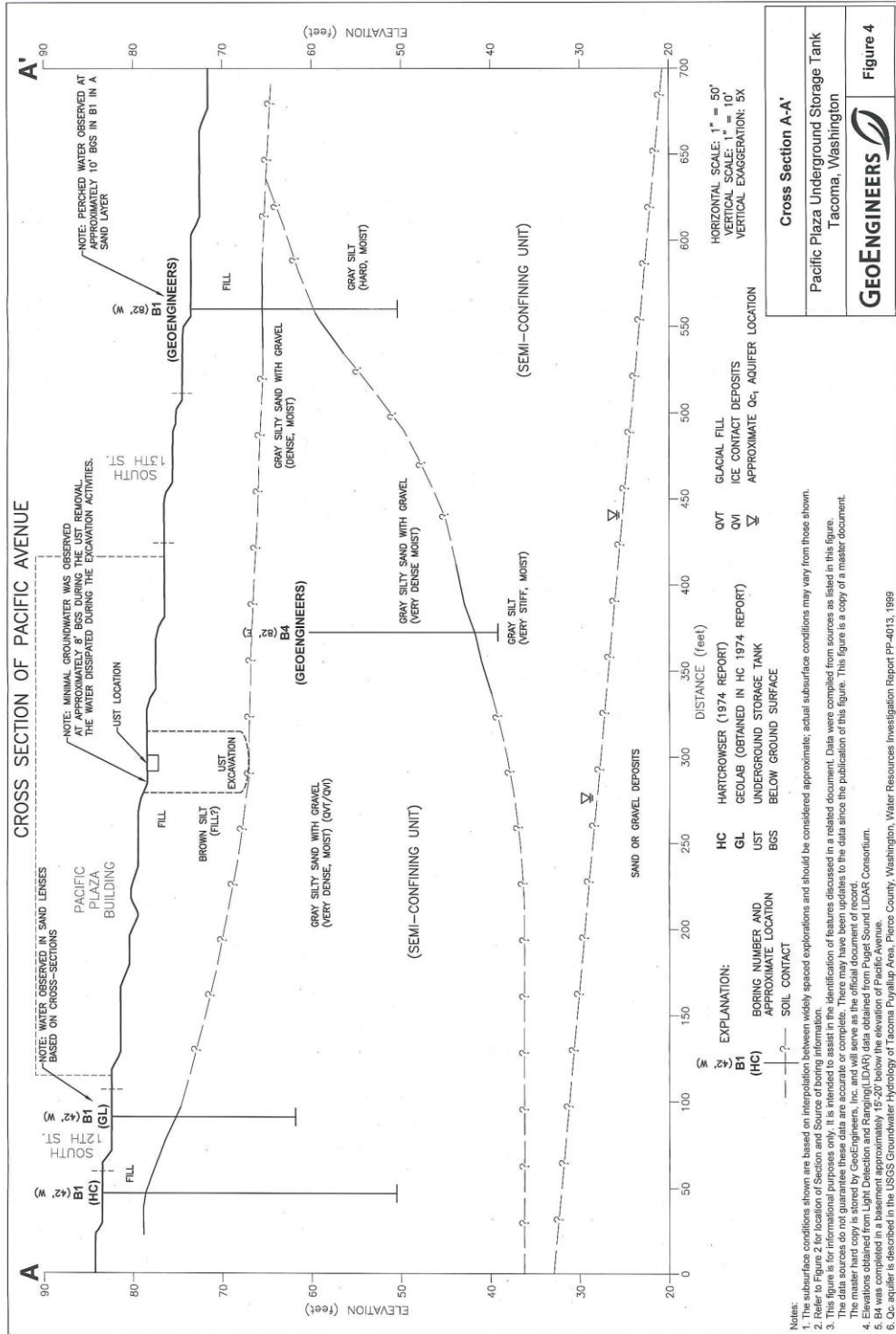
Site Plan  
 Pacific Plaza Underground Storage Tank  
 Tacoma, Washington  
**GEOENGINEERS**  
 Figure 2



### 6.3 Geological Cross-Section

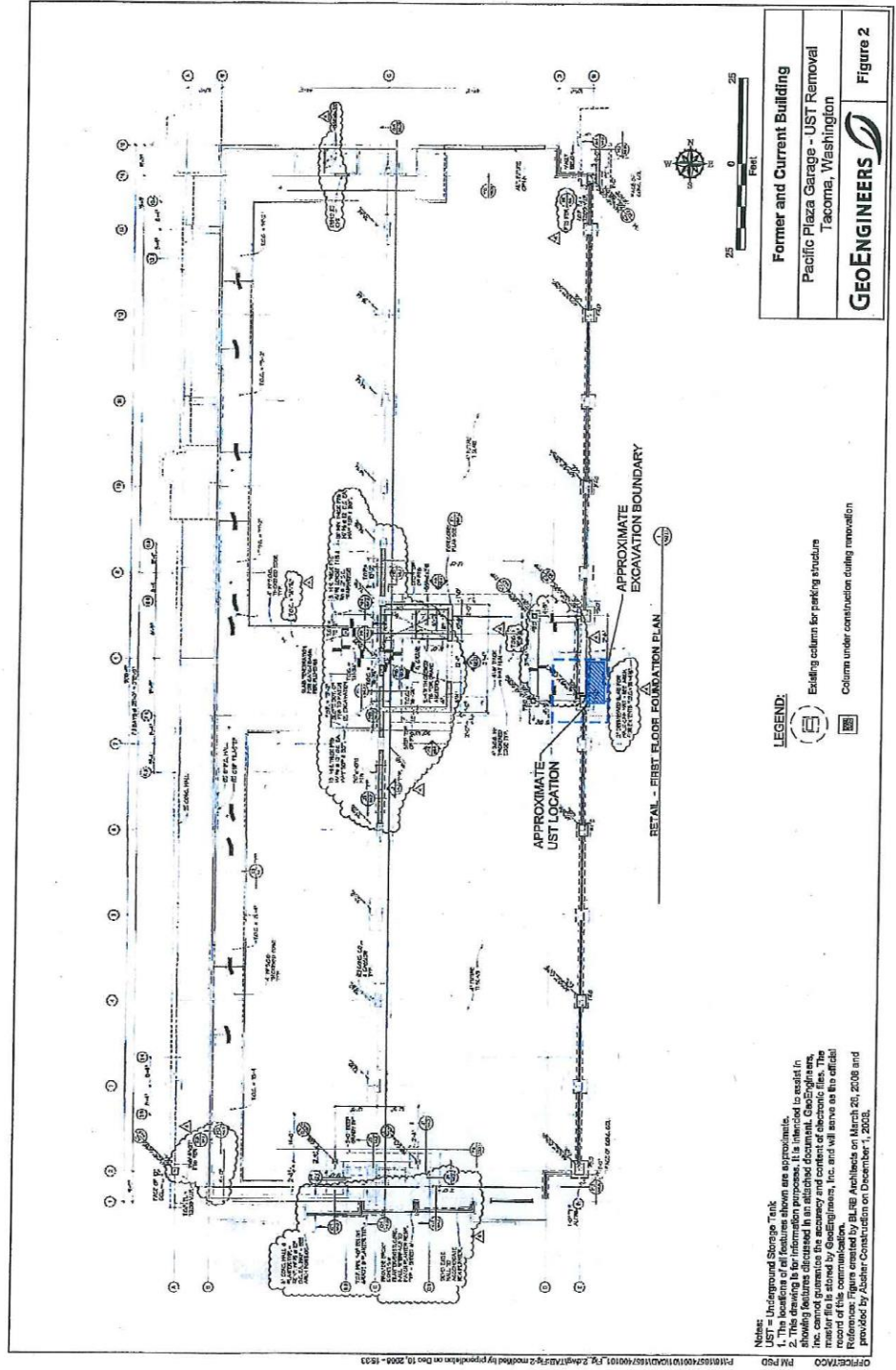


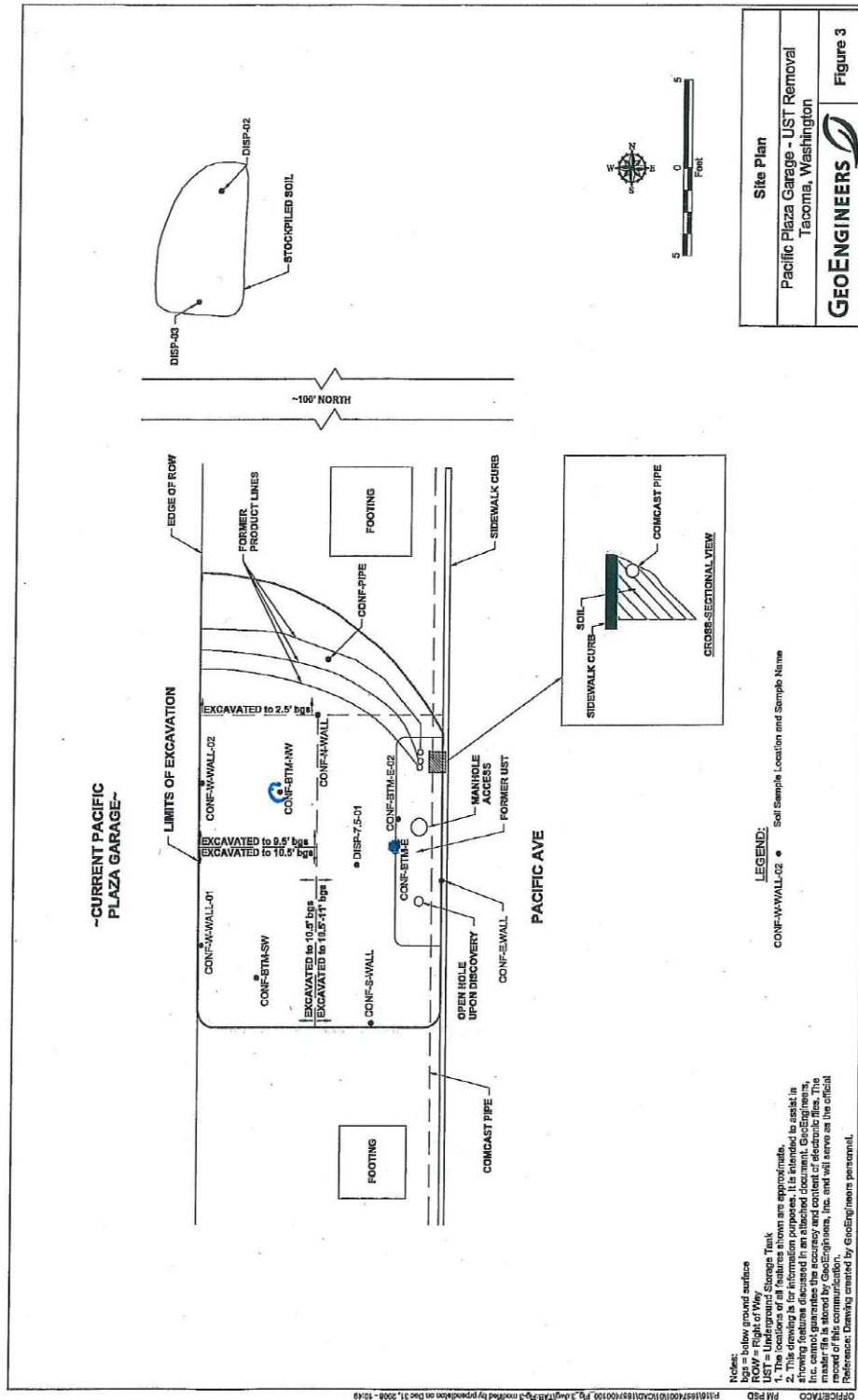




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### 6.4 Approximate Extent of Contaminated Soil Excavation, Confirmation Soil Sample Locations, and Soil Sample Results





Notes:  
 bgs = below ground surface  
 ROW = Right of Way  
 1. The locations of all features shown are approximate.  
 2. This drawing is for information purposes. It is intended to assist in showing features discovered in an attached document. GeoEngineers, Inc. is not responsible for 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: Drawing created by GeoEngineers personnel.

LEGEND:  
 CONF-WALL-02 • Soil Sample Location and Sample Name

<b>Site Plan</b>
Pacific Plaza Garage - UST Removal Tacoma, Washington
<b>GEOENGINEERS</b>
<b>Figure 3</b>

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TABLE 1  
 SUMMARY OF CHEMICAL ANALYTICAL RESULTS FOR PETROLEUM AND METALS<sup>1</sup> - SOIL  
 PACIFIC PLAZA PARKING GARAGE - LIST REMOVAL  
 TACOMA, WASHINGTON

Product Sample	Sample ID <sup>5</sup>	Sample Date	Approximate Depth (feet bgs)	NWTPH - HClD <sup>2</sup>		NWTPH-D <sup>3</sup> (mg/kg)		RCRA <sup>4</sup> Metals (mg/kg)										
				Diesel Range	Oil Range	Gasoline Range	Diesel Range	Oil Range	Asenic	Barium	Cadmium	Total Chromium	Lead	Mercury	Selenium	Silver		
LIST-Product/080410		4/10/08	N/A	U	Delisted <sup>6</sup>	U	--	--	--	--	--	--	--	--	--	--	--	--
Confirmation Samples																		
Cont-Elim-E	4/4/08	10.5	--	--	--	5,790	9,030	U(5)	34	U(0.3)	19	U(4)	U(0.05)	U(6)	U(0.7)	--	--	--
Cont-Elim-E-02	4/15/08	11	--	--	--	203	294	--	--	--	--	--	--	--	--	--	--	--
Cont-Elim-SW	4/4/08	10.5	--	--	--	U(10.0)	U(7.00)	--	--	--	--	--	--	--	--	--	--	--
Cont-Elim-NW	4/4/08	9.5	--	--	--	1,340	2,810	--	--	--	--	--	--	--	--	--	--	--
Cont-Pipe	4/21/08	3	--	--	--	U(10.0)	U(7.00)	--	--	--	--	--	--	--	--	--	--	--
Cont-S Well	4/21/08	9.5	--	--	--	839	1,060	--	--	--	--	--	--	--	--	--	--	--
Cont-M Well -01	4/7/08	10	--	--	--	U(10.0)	U(7.00)	U(5)	42	U(0.3)	24	U(4)	U(0.05)	U(6)	U(0.7)	--	--	--
Cont-M Well -02	4/7/08	9	--	--	--	U(10.0)	U(7.00)	--	--	--	--	--	--	--	--	--	--	--
Cont-E Well	4/7/08	9.5	--	--	--	U(10.0)	U(7.00)	--	--	--	--	--	--	--	--	--	--	--
Cont-N Well	4/7/08	9	--	--	--	U(10.0)	U(7.00)	--	--	--	--	--	--	--	--	--	--	--
Storage Samples																		
Disp-05-01	4/11/08	7.5	--	--	--	2,540	5,740	--	--	--	--	--	--	--	--	--	--	--
Disp-02	4/15/08	Stockpile	--	--	--	407	447	--	--	--	--	--	--	--	--	--	--	--
Disp-03	4/15/08	Stockpile	--	--	--	76.5	104	--	--	--	--	--	--	--	--	--	--	--
MTCA Method A Soil Cleanup Levels for Unrestricted Land Use (ULU)						N/A	N/A	20	5,600 <sup>7</sup>	2.0	2,000	250	2.0	400 <sup>7</sup>	400 <sup>7</sup>	2.0	17,500 <sup>8</sup>	
MTCA Method A Soil Cleanup Levels for Industrial Land Use (ILU)						N/A	N/A	20	245,000 <sup>8</sup>	2.0	2,000	1,000	2.0	400 <sup>7</sup>	400 <sup>7</sup>	2.0	17,500 <sup>8</sup>	

Notes:  
 1. Chemical analysis performed by Spectra Laboratories of Tacoma, Washington.  
 2. Hydrocarbon identification by Washington State Department of Ecology Method NWTPH-HClD.  
 3. Washington State Department of Ecology Method NWTPH-D with radiolabelled gel cleanup.  
 4. Resource Conservation Recovery Act (RCRA) metals analyzed by EPA 600/7-000 Status Method.  
 5. Sample ID - Confirmation sample - Well or bottom - Location or sample number (i.e., Confirmation well sample = Cont-W, Well-01).  
 6. Laboratory report indicates product sample contains heavy oil that appears to be Bunker C.  
 7. MTCA Method B ULU cleanup level represented because MTCA Method A cleanup level has not been established.  
 8. MTCA Method C ULU cleanup level represented because MTCA Method A cleanup level has not been established.  
 mg/kg = milligram per kilogram  
 U = Not Analyzed  
 -- = Average not detected at or greater than the listed reporting limit  
 MTCA = Method A Soil Cleanup Levels for Unrestricted Land Use  
 ILU = Method A Soil Cleanup Levels for Industrial Land Use  
 Bold type indicates that the detected concentration is greater than the respective MTCA Cleanup Level.





TABLE 2  
 SUMMARY OF CHEMICAL ANALYTICAL RESULTS FOR VOCs AND SVOCs<sup>1</sup> - SOIL  
 PACIFIC PLAZA PARKING GARAGE - UST REMOVAL  
 TACOMA, WASHINGTON

Chemical	Sample ID <sup>2</sup>		MTCA Method A ULU Cleanup Level	MTCA Method A ILU Cleanup Level
	Conf-W. Wall -01	Conf-Btm-E		
Depth (feet bgs)	10	10.5		
<b>VOCs<sup>3</sup> (mg/kg dry weight)</b>				
Benzene	U(0.005)	U(0.025)	30	30
Toluene	U(0.005)	U(0.05)	7,000	7,000
Ethylbenzene	U(0.005)	U(0.025)	6,000	6,000
Total Xylenes	U(0.01)	U(0.05)	9,000	9,000
Methylene chloride	U(0.01)	U(0.10)	20	20
sec-Butylbenzene	U(0.005)	0.75	NE	NE
tert-Butylbenzene	U(0.005)	0.046	NE	NE
N-Propylbenzene	U(0.005)	0.56	NE	NE
1,2,4 Trimethylbenzene	U(0.005)	U(0.025)	4,000 <sup>5</sup>	180,000 <sup>6</sup>
1,3,5 -Trimethylbenzene	U(0.005)	U(0.025)	4,000 <sup>5</sup>	180,000 <sup>6</sup>
Isopropylbenzene	U(0.005)	0.318	8,000 <sup>5</sup>	350,000 <sup>6</sup>
4-Isopropyltoluene	U(0.005)	0.046	NE	NE
n-Butylbenzene	U(0.005)	1.18	NE	NE
Naphthalene	U(0.003)	0.128	5	5
Tetrachloroethene	U(0.005)	U(0.025)	50	50
<b>SVOCs<sup>4</sup> (mg/kg dry weight)</b>				
Acenaphthene	U(0.003)	0.70	4,800 <sup>5</sup>	210,000 <sup>6</sup>
Acenaphthylene	U(0.003)	0.35	NE	NE
Anthracene	U(0.003)	0.13	24,000 <sup>5</sup>	1,050,000 <sup>6</sup>
Benzo (ghi) perylene	U(0.003)	0.038	NE	NE
Fluoranthene	U(0.003)	0.10	3,200 <sup>5</sup>	140,000 <sup>6</sup>
Fluorene	U(0.003)	0.65	3,200 <sup>5</sup>	140,000 <sup>6</sup>
Phenanthrene	U(0.003)	0.50	NE	NE
Pyrene	U(0.003)	0.22	2,400 <sup>5</sup>	105,000 <sup>6</sup>
Benzo (a) anthracene (TEF 0.1)	U(0.003)	0.12	MTCA ULU cleanup level for the sum of all cPAHs is 0.1 mg/kg	MTCA ILU cleanup level for the sum of all cPAHs is 2.0 mg/kg
Benzo (a) pyrene (TEF 1.0)	U(0.003)	0.054		
Benzo (b) fluoranthene (TEF 0.1)	U(0.003)	0.056		
Benzo (k) fluoranthene (TEF 0.1)	U(0.003)	0.032		
Chrysene (TEF 0.01)	U(0.003)	0.21		
Dibenz (a,h) anthracene (TEF 0.1)	U(0.003)	U(0.025)		
Indeno (1,2,3-cd) pyrene (TEF 0.1)	U(0.003)	U(0.025)		
Total TEF of cPAHs (detect only)	--	0.07690	0.1	2.0

Notes:

- Chemical analysis performed by Spectra Laboratories of Tacoma, Washington.
  - Sample ID - Confirmation sample - Wall or bottom - Location or sample number i.e. Confirmation west wall sample = Conf-W. Wall-01
  - Volatile organic compounds (VOCs) were analyzed by EPA Method 8035/8260B. Other VOCs were analyzed but not detected.
  - Semivolatile organic compounds (SVOCs) were analyzed by EPA Method 8270C. cPAHs were analyzed by Method 8270-SIM. Other SVOCs were analyzed but not detected.
  - MTCA Method B ULU cleanup level represented because MTCA Method A cleanup level has not been established.
  - MTCA Method C ILU cleanup level represented because MTCA Method A cleanup level has not been established.
- MTCA = Model Toxics Control Act  
 TEF = Toxicity Equivalency Factor  
 cPAHs = carcinogenic polycyclic aromatic hydrocarbons  
 mg/kg = milligram per kilogram  
 ULU = Unrestricted Land Use      ILU = Industrial Land Use  
 NE = Cleanup level not established for this compound  
 U = Analyte was not detected at or greater than the listed reporting limit

TACO:16\16574001\01\Finals\16574001\_UST\_Tables1\_2.xls

**6.5 Restrictive Covenant**

**CONFORMED COPY**

201302210732 CSHEARE 7 PGS  
02/21/2013 03:26:33 PM \$78.00  
AUDITOR, Pierce County, WASHINGTON

When Recorded, Return To:  
  
City of Tacoma  
Real Property Services  
747 Market Street, Room 737  
Tacoma, WA 98402

*Duplicate*  
**ORIGINAL**

<b>DOCUMENT TITLE</b> Environmental Covenant No. A356 - Pacific Plaza
<b>Grantor</b> City of Tacoma
<b>Grantee</b> State of Washington, Department of Ecology
<b>Legal Description -</b> SW1/4 of NW1/4 of Section 4, Township 20 North, Range 3 East, W.M.
<b>Reference Number</b>
<b>Assessor's Parcel Number</b> 201104-007-9

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## Model Restrictive (Environmental) Covenant

After Recording Return to:  
Attn: Hans Qiu, Site Manager  
Department of Ecology, Southwest Region  
PO Box 47775  
Olympia, WA 98504-7775

### Environmental Covenant

**Grantor:** City of Tacoma  
**Grantee:** State of Washington, Department of Ecology  
**Legal:** Pacific Plaza Garage Facility (Site), Exhibit A – Legal Description  
**Tax Parcel Nos.:** 2011040079

Grantor, City of Tacoma, hereby binds Grantor, its successors and assigns to the land use restrictions identified herein and grants such other rights under this environmental covenant ( hereafter "Covenant" ) made this 4<sup>th</sup> day of February, 2013 in favor of the State of Washington Department of Ecology (Ecology). Ecology shall have full right of enforcement of the rights conveyed under this Covenant pursuant to the Model Toxics Control Act, RCW 70.105D.030(1)(g), and the Uniform Environmental Covenants Act, Chapter 64.70 RCW .

This Declaration of Covenant is made and executed pursuant to RCW 70.105D.030(1)(f) and (g) and WAC 173-340-440 and Chapter 64.70 RCW by City of Tacoma, its successors and assigns, and Ecology, its successors and assigns.

A remedial action (hereafter "Remedial Action") occurred at the property that is the subject of this Covenant. The Remedial Action conducted at the property is described in the following document[s]:

- 1) GeoEngineers, Inc., Technical Memorandum (Letter Report to Tacoma Public Works, Facility Management), December 18, 2009.
- 2) GeoEngineers, Inc., Underground Storage Tank Removal Report, December 31, 2008.

- 3) Tacoma/Pierce County Health Department, Underground Storage Tank (UST) Removal: Site Closure Determination Letter, August 20, 2011.
- 4) Southwest Regional Office of Ecology, Initial Investigation Report (ERTS # 605007).
- 5) Southwest Regional Office of Ecology, Opinion Letter, October 8, 2012.

These documents are on file at Ecology's Southwest Regional Office.

This Covenant is required because the Remedial Action resulted in residual concentrations of diesel- and oil-range petroleum hydrocarbons (TPH-D and TPH-O) whose combined values exceed the Model Toxics Control Act Method A Cleanup Level(s) for soil established under WAC 173-340-704.

The undersigned, City of Tacoma, is the fee owner of real property (hereafter "Property") in the County of Pierce, State of Washington, that is subject to this Covenant. The Property is legally described in Exhibit A of this covenant and made a part hereof by reference.

City of Tacoma makes the following declaration as to limitations, restrictions, and uses to which the Property may be put and specifies that such declarations shall constitute covenants to run with the land, as provided by law and shall be binding on all parties and all persons claiming under them, including all current and future owners of any portion of or interest in the Property (hereafter "Owner").

Section 1. A portion of the Property contains TPH-D and TPH-O contaminated soil located approximately 12 feet below ground surface at the main entry of the structure located on the Pacific Avenue level (Exhibit B). The Owner shall not alter, modify, or remove the existing structure[s] in any manner that may result in the release or exposure to the environment of that contaminated soil or create a new exposure pathway without prior written approval from Ecology.

Section 2. Any activity on the Property that may interfere with the integrity of the Remedial Action and continued protection of human health and the environment is prohibited.

Section 3. Any activity on the Property that may result in the release or exposure to the environment of a hazardous substance that remains on the Property as part of the Remedial Action, or create a new exposure pathway, is prohibited without prior written approval from Ecology.



Section 4. The Owner of the property must give thirty (30) day advance written notice to Ecology of the Owner's intent to convey any interest in the Property. No conveyance of title, easement, lease, or other interest in the Property shall be consummated by the Owner without adequate and complete provision for continued monitoring, operation, and maintenance of the Remedial Action.

Section 5. The Owner must restrict leases to uses and activities consistent with the Covenant and notify all lessees of the restrictions on the use of the Property.

Section 6. The Owner must notify and obtain approval from Ecology prior to any use of the Property that is inconsistent with the terms of this Covenant. Ecology may approve any inconsistent use only after public notice and comment.

Section 7. The Owner shall allow authorized representatives of Ecology the right to enter the Property at reasonable times for the purpose of evaluating the Remedial Action; to take samples, to inspect remedial actions conducted at the property, to determine compliance with this Covenant, and to inspect records that are related to the Remedial Action.

Section 8. The Owner of the Property reserves the right under WAC 173-340-440 to record an instrument that provides that this Covenant shall no longer limit use of the Property or be of any further force or effect. However, such an instrument may be recorded only if Ecology, after public notice and opportunity for comment, concurs.

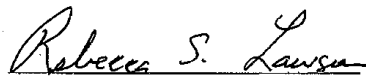
City of Tacoma



Jeffrey A. Jenkins  
Facilities Division Manager

Dated: 2/25/13

STATE OF WASHINGTON  
DEPARTMENT OF ECOLOGY



Rebecca S. Lawson, P.E., LHG  
Section Manager  
Toxics Cleanup Program  
Southwest Regional Office

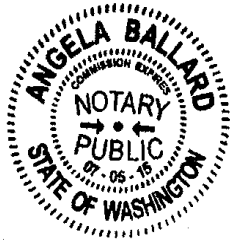
Dated: 2/4/2013

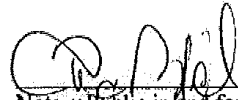
[REPRESENTATIVE ACKNOWLEDGEMENT]

STATE OF WASHINGTON

COUNTY OF PIERCE

On this 28<sup>th</sup> day of January, 2013, I certify that Jeffrey A. Jenkins personally appeared before me, acknowledged that he signed this instrument, on oath stated that he was authorized to execute this instrument, and acknowledged it as the Facilities Division Manager of City of Tacoma to be the free and voluntary act and deed of such party for the uses and purposes mentioned in the instrument.

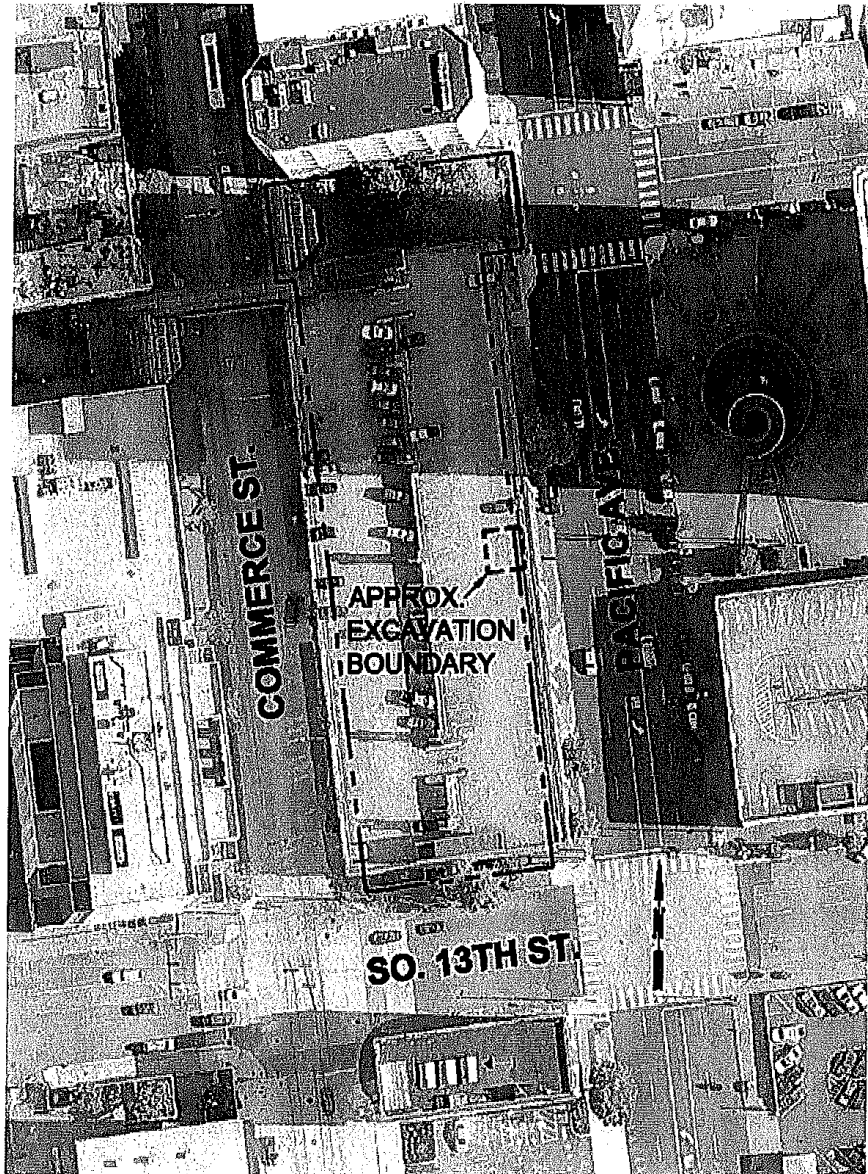


  
Notary Public in and for the State of  
Washington, residing at Tacoma.  
My appointment expires 7/5/2015.

**Exhibit A**  
**Legal Description**

A PORTION OF THE SOUTHWEST QUARTER OF THE NORTHWEST QUARTER OF SECTION 4, TOWNSHIP 20 NORTH, RANGE 03 EAST, W.M. MORE PARTICULARLY DESCRIBED AS FOLLOWS: UNITS 1 THROUGH 4 OF PACIFIC PLAZA, A CONDOMINIUM, CREATED PURSUANT TO THAT CERTAIN DECLARATION OF COVENANTS, CONDITIONS AND RESTRICTIONS RECORDED UNDER AUDITOR'S FILE NUMBER 201104010529 AND THAT CERTAIN SURVEY MAP AND PLANS RECORDED UNDER AUDITOR'S FILE NUMBER 201104015002, RECORDS OF PIERCE COUNTY, STATE OF WASHINGTON.

Exhibit B  
Site Figure



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## 6.6 Photo Log

**Photo 1: Pacific Plaza Garage Building – from the North**



**Photo 2: Pacific Plaza Garage Building– from the Southwest**





**Photo 3: Pacific Plaza Garage Building – from the Northeast**



**Photo 4: Pacific Plaza Garage Building, Soil Contamination Left-in-Place (in Front of the Building and below Pacific Avenue sidewalk) and Concrete/Asphalt Cap – from the North**





**Photo 5: Pacific Plaza Garage Building, Soil Contamination Left-in-Place [in Front and under the Building (foundation columns) and below the Sidewalk] and Concrete Cap – from the Northeast**



**Photo 6: Soil Contamination Left-in-Place below the Sidewalk and Pacific Avenue – from the South**

