



MA

STATE OF WASHINGTON
DEPARTMENT OF ECOLOGY

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September 10, 2009

Mr. Dee McGonigle
SRMK, LLC
111 N. Post, Suite 200
Spokane, Washington 99201

Re: Further Action at the following Site:

- **Site Name:** Mowhawk Flush Doors (also, Seattle Door, SEEDORCO, Sauder Door, Premdor)
- **Site Address:** 747, 777, and 787 - 6th Street South (formerly 733 and 815), Kirkland, Washington
- **Facility/Site No.:** 98437118
- **VCP Project No.:** NW 1543

Dear Mr. McGonigle:

The Washington State Department of Ecology (Ecology) received your request for an opinion on your independent cleanup of the Mowhawk Flush Doors facility (Site). This letter provides our opinion. We are providing this opinion under the authority of the Model Toxics Control Act (MTCA), Chapter 70.105D RCW.

Issue Presented and Opinion

Is further remedial action necessary to clean up contamination at the Site?

YES. Ecology has determined that further remedial action is necessary to clean up contamination at the Site.

This opinion is based on an analysis of whether the remedial action meets the substantive requirements of MTCA, Chapter 70.105D RCW, and its implementing regulations, Chapter 173-340 WAC (collectively "substantive requirements of MTCA"). The analysis is provided below.

Description of the Site

This opinion applies only to the Site described below. The Site is defined by the nature and extent of contamination associated with the following:

- Pentachlorophenol, carcinogenic polycyclic aromatic hydrocarbons (cPAHs), petroleum hydrocarbons (diesel/oil-range (TPH-d/TPH-o), ethylbenzene, xylenes), metals (cadmium, mercury), chlorinated solvents (tetrachloroethylene), and painting solvents (methyl ethyl ketone, toluene) into the Soil



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Enclosure A includes a detailed description and diagram of the Site, as currently known to Ecology. The Site comprises most of the Seattle Door property (the Property), and may extend a short way westward onto the adjoining railroad right-of-way. A separate site occurs at the extreme southern end of the Property. This second site is associated with a specific release of pentachlorophenol and diesel-range carrier oil from a dip tank. Pentachlorophenol was also detected across the Site, but appears to have been associated with a different type of release.

Please note a parcel of real property can be affected by multiple sites. At this time, we have no information that the parcel(s) associated with this Site are affected by other sites.

Basis for the Opinion

This opinion is based on the information contained in the following documents:

1. 2009, September 10, *Subject: FW: Google/Campus*, email from Tim Johnson, Geotech Consultants to Mark Adams, Ecology
2. 2009, April 14, *Subject: Sampling Summary, Possible Impacted Subsurface Utilities Near Intersection of 5th Place South and 7th Avenue South, Kirkland, WA*, letter report by G-Logics, Inc.
3. 2009, June 4, *Voluntary Cleanup Program Report, Former Seattle Door (SEEDORCO) Property, 733 – 6th Street South Kirkland, Kirkland, Washington TCP ID#1543*, report by Geotech Consultants, Inc.
4. 2008, October 30, *Subject: RE: Permission to pump storm to Metro Sewer system*, email from Timothy Johnson, Geotech NW to Mark Adams, Ecology and Jon Morrow, City of Kirkland.
5. 2008, September 29, *Subject: FW: AmTest*, email from Timothy Johnson, Geotech NW to Rob Jammerman, Jenny Gaus, Mark Adams, Dave Haberman
6. 2008, September 26, *Subject: Emailing TCE odor map*, email from Jon Morrow, City of Kirkland, to Mark Adams, Ecology, Timothy Johnson, Geotech NW
7. 2008, September 23, *Memo, To: File, From: Mark Adams, Date: 9/23/08, Re: Site Visit on 9/22/08 to Sauder Door Site, VCP # NW1543*, prepared by Mark Adams, Ecology
8. 2008, September 23, *Subject: FW: AmTest chromatograms*, email from Jon Morrow, City of Kirkland, to Mark Adams, Ecology
9. 2006, April 13, *Contaminated Soil Remediation Plan, Former Seattle Door (SEEDORCO) Property, 733 – 6th Street South Kirkland, Kirkland, Washington TCP ID#1543*, letter by Geotech Consultants, Inc.

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10. 1998, April 27, *Limited Site Investigation, Former Sauder Door Property, 815 – 6th Street South, Kirkland, Washington TCP ID#1543*, letter by Geotech Consultants, Inc.
11. 1997, July 29, *Observation of Contaminated Soil Excavation and Sampling, Former Sauder Door Property, 815 – 6th Street South, Kirkland, Washington TCP ID#1543*, letter report by Geotech Consultants, Inc.
12. 1994, August 5, *Environmental Recommendations, Sauder Door Property, 815 – 6th Street South, Kirkland, Washington*, letter from Geotech Consultants, Inc.
13. 1994, July 11, *Phase I Environmental Site Assessment, Sauder Door Property, 815 – 6th Street South, Kirkland, Washington*, report by Geotech Consultants, Inc.
14. 1991, June, *Site Investigation Study, Sauder Door Facility, Kirkland, Washington*, report by Parametrix, Inc.
15. 1990, August, *Expanded Site Investigation, Phase II Sampling, Sauder Door Corporation, 815 6th Avenue South, Kirkland, Washington 98032*, report by Roy F. Weston, Inc.
16. 1990, May, *Manufacturing Building Subfloor Sampling Report*, by Roy F. Weston, Inc.

Those documents are kept in the Central Files of the Northwest Regional Office of Ecology (NWRO) for review by appointment only. You can make an appointment by calling the NWRO resource contact, Sally Perkins, at 425 649-9190.

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

Analysis of the Cleanup

Ecology has concluded that **further remedial action** is necessary to clean up contamination at the Site. That conclusion is based on the following analysis:

1. Characterization of the Site.

Ecology has determined your characterization of the Site is not sufficient to establish cleanup standards and select a cleanup action. Specifically, the following are missing:

- The potential nature and extent of contamination associated with the "Interior Central Area – Another UST" (see Enclosure A) has not been determined in soil.

- Exterior Parking Lot Area: Initial sampling showed that shallow soils across much of the former parking areas contained PAHs and pentachlorophenol at concentrations below cleanup levels, except possibly at one location at the south driveway where total PAH concentrations were relatively high (3.2 mg/Kg) (see Enclosure A). Additional sampling was undertaken in the main parking lot, but not the south driveway area, and showed elevated concentrations of cPAHs and oil-range hydrocarbons. Further evaluation is needed of the potential for soil contamination to be present in the south driveway area, specifically near sample number S-20 (from Weston, August 1990).
- The potential impact of Site contamination on ground water needs further evaluation. Specifically, at least three ground water samples are needed from either "geoprobes" or monitoring wells located along the western edge of the Property.

2. Establishment of cleanup standards.

a. Soil Cleanup Levels

The Site is located in an area of mixed commercial and residential use. Soil cleanup levels protective of unrestricted uses are therefore appropriate. The Site is also located near a small area of urban forest, warranting cleanup levels protective of terrestrial species. Because the Site is on a commercial property, only wildlife cleanup levels need to be established (WAC 173-340-7490 (3)(b)). Soil cleanup levels protective of air and surface water are not needed, but cleanup levels protective of ground water may be needed if the investigations described above for the Exterior Northern Area show a ground water impact. Current cleanup levels are therefore as follows:

Pentachlorophenol:	8.3 mg/Kg	Method B, carcinogen, direct contact
cPAHs:	0.1 mg/Kg	Method A, unrestricted use
TPH-d	2,000 mg/Kg	Method A, unrestricted use
TPH-o	2,000 mg/Kg	Method A, unrestricted use
Ethylbenzene	6 mg/Kg	Method A, unrestricted use
Xylenes	9 mg/Kg	Method A, unrestricted use
Toluene	7 mg/Kg	Method A, unrestricted use
Methyl ethyl ketone	48,000 mg/Kg	Method B, non-carcinogen, direct contact
Cadmium	2 mg/Kg	Method A, unrestricted use
Mercury	2 mg/Kg	Method A, unrestricted use
Tetrachloroethylene	.05 mg/Kg	Method A, unrestricted use

b. Soil Point of Compliance

The point of compliance for this Site is throughout the upper 15 feet of soil, unless ground water protection requires an expansion of the point of compliance to throughout the Site.

3. Selection of cleanup action.

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

The cleanup action selected for the Site was complete removal of all impacted soil and offsite disposal. This action meets MTCA's requirement for a cleanup that is permanent to the maximum extent practicable.

4. Cleanup.

Ecology has determined the cleanup you performed does not meet cleanup standards at the Site, although cleanups were completed in some areas of the Property. Specifics are as follows:

- **Interior Central Area – Sumps:** An interim cleanup occurred in this area in 1996, consisting of the excavation and removal of approximately 259 cubic yards of contaminated soil. Confirmation samples obtained at the time showed oil-range hydrocarbons remaining above the cleanup level on the northern and western edges of the excavation. Further excavation and removal occurred in 2006. Confirmation samples showed that remaining soils contained hydrocarbons at concentrations below the cleanup level.
- **Interior Central Area - Hydraulic Lift:** Oil-contaminated soils were located beneath the southern portion of the main building associated with a hydraulic lift sump. Up to 29,000 mg/kg of oil-range hydrocarbons were initially detected in soil in this area (testing via Method 418.1). The sump was excavated and associated contaminated soils were removed to a depth of 9 feet during the construction of the new buildings. Confirmation base and sidewall samples were obtained and showed no detectable TPH or PAHs.
- **Exterior Northern Area:** Surface soils were excavated from this area in 2006 and transported offsite to Waste Management's permitted landfill in Arlington, Oregon. Confirmation samples were obtained from the base and sides of the resulting excavation and showed no exceedance of applicable cleanup levels. However, the number and depth of samples on the western edge of the excavation were inadequate to determine if the cleanup was complete. Confirmation samples obtained along this edge were typically taken at a depth of 2 to 3 feet below ground surface, whereas the contamination was originally noted as being within the top foot. At least three additional surface soil samples are necessary in this area to show the contamination does not extend off-Property to the west.

- Exterior Parking Lot Area: Initial sampling showed that shallow soils across much of the former parking areas contained PAHs and pentachlorophenol at concentrations below cleanup levels, except possibly at one location at the south driveway where total PAH concentrations were relatively high (3.2 mg/Kg) (see Enclosure A). Anecdotal reports indicated that oil was spread in just a portion of the parking areas - the main parking lot in the central eastern portion of the Property. Additional sampling was therefore undertaken in the main parking lot, and showed elevated concentrations of cPAHs and oil-range hydrocarbons. Remediation of the main parking lot area therefore occurred in 2006 through excavation and removal of 12 to 18 inches of soil. Confirmation samples showed that cleanup levels had been achieved throughout this area.

Limitations of the Opinion

1. Opinion does not settle liability with the state.

Liable persons are strictly liable, jointly and severally, for all remedial action costs and for all natural resource damages resulting from the release or releases of hazardous substances at the Site. This opinion **does not**:

- Resolve or alter a person's liability to the state.
- Protect liable persons from contribution claims by third parties.

To settle liability with the state and obtain protection from contribution claims, a person must enter into a consent decree with Ecology under RCW 70.105D.040(4).

2. Opinion does not constitute a determination of substantial equivalence.

To recover remedial action costs from other liable persons under MTCA, one must demonstrate that the action is the substantial equivalent of an Ecology-conducted or Ecology-supervised action. This opinion does not determine whether the action you performed is substantially equivalent. Courts make that determination. *See* RCW 70.105D.080 and WAC 173-340-545.

3. State is immune from liability.

The state, Ecology, and its officers and employees are immune from all liability, and no cause of action of any nature may arise from any act or omission in providing this opinion. *See* RCW 70.105D.030(1)(i).

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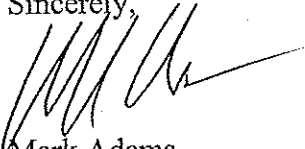
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Contact Information

Thank you for choosing to clean up the Site under the Voluntary Cleanup Program (VCP). After you have addressed our concerns, you may request another review of your cleanup. Please do not hesitate to request additional services as your cleanup progresses. We look forward to working with you.

For more information about the VCP and the cleanup process, please visit our web site: www.ecy.wa.gov/programs/tcp/vcp/vcpmain.htm. If you have any questions about this opinion, please contact me by phone at 425.649.7107 or e-mail at mada461@ecy.wa.gov.

Sincerely,



Mark Adams

NWRO Toxics Cleanup Program

ma/kp

Enclosures (1): A – Description and Diagrams of the Site

cc: Timothy Johnson, Geotech Consultants, Inc.
Jon Morrow, City of Kirkland

Enclosure A

Description and Diagrams of the Site

Site Description

Site Definition and Location: The Site is associated with a variety of contaminant releases at a door manufacturing facility formerly located at 733 and 815 - 6th Street South in Kirkland, Washington (the Property). The Property is currently occupied by new office buildings with the addresses: 747, 777, and 787 - 6th Street South. Diesel- and oil-range hydrocarbons, ethylbenzene, carcinogenic polycyclic aromatic hydrocarbons (cPAHs), metals (mercury, cadmium), pentachlorophenol, painting solvents (xylenes, toluene, methyl ethyl ketone), and a chlorinated solvent (tetrachloroethylene) were released to soil at the Property and comprise the Site, as shown on the attached figures. A separate site, associated with the release of pentachlorophenol from a specific source (a dip tank), also exists in the extreme southwestern corner of the Property.

Area Description: The approximately 7-acre Property is located near downtown Kirkland in an area of mixed industrial, commercial, retail, and residential land use. The businesses are located along 6th St. S., and are backed by residential housing. An elementary school is located about 200 feet southwest of the Property. The area west of 6th St. S. has historically been used for industrial purposes, but is changing. Only a few industrial operations are still present. One of them, Western Pneumatic, adjoins the Property to the south. Western Pneumatic is conducting cleanup actions in the VCP. An active BNRR rail line also bounds the Property to the west. Across the railroad tracks to the west is the former Pace National property, a chemical mixing and packaging business. Pace National is being cleaned up under an Order with Ecology.

Property History and Current Use: The Property was initially developed in the 1940s, and was reported to have been used variously as a depot for the U.S. Navy or a cabinet factory. In the 1950s, a lumber mill operated at the Property. Seattle Door (SEDORCO) purchased the Property in 1956 and began door manufacturing operations. These operations continued under various names (Sauder Door, Premdoor, and Mowhawk Flush Door) until about 2005. Numerous buildings were constructed on the Property, but the main structures were a large manufacturing facility (the main building) and a much smaller office building (the office). Asphalt pavement surrounded these structures. The buildings were demolished in 2006, as part of constructing new office buildings from 2007 through 2009. The former and new buildings are shown on the attached figures.

Physiographic Setting: The Site is situated on a hillside above the eastern edge of Lake Washington. The land surface at the Property slopes down gently to the west, from about Elevation 195 feet along 6th St. S. to about Elevation 165 feet along the BNRR railroad tracks. The railroad is relatively level with the Property and the former Pace National facility where it passes between the two. Further south, near the elementary school, the land surface drops off steeply down to the school grounds. Above 6th St. S., the hillside continues upward reaching an Elevation of over 500 feet at the crest of an upland separating Lake Washington from the Sammamish River valley.

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Surface/Storm Water System: Most of the Property and surrounding area is paved or covered with buildings, except for the railroad right-of-way, a wooded area to the southwest, and the elementary school grounds. Storm water in these non-covered areas infiltrates or flows down slope. In the covered areas, storm water is captured in storm drains and discharged to Lake Washington either directly or via urban creeks.

One of these creeks, Houghton Creek, passes a few hundred feet south of the Property. The upper portion of the creek is mostly buried in pipes, but daylights on the elementary school property. A small tributary to the creek originates at a culvert opening closer to the Property just below the railroad tracks on the eastern edge of the elementary school property. Storm water from Western Pneumatic discharges directly into this culvert.

Storm water runoff from the Property, by contrast, currently enters a different storm drain system further north and discharges separately into Lake Washington. It is not clear where surface water runoff historically discharged from the Property, although a map from 1990 shows at least one drainage ditch at the north end of the main building. The ditch appeared to drain onto railroad right-of-way. Surface water runoff from that point is less clear given the lack of clearly defined drainage channels or ditches in this portion of the right-of-way. Some of the runoff may have drained southward towards Houghton Creek.

Ecological Setting: The City of Kirkland has mapped a small wetland area at the culvert discharge point mentioned above, and a larger wetland has been constructed on Houghton Creek further downstream on school property. A small wooded area of about 3-acres in size occurs west of the Property across the railroad tracks. Otherwise the area is developed.

Geology: Shallow geologic conditions at the Property consist of a few feet of fill overlying hard glaciolacustrine deposits – clayey silts and fine sandy silts. These deposits extend to the depth explored, about 30 feet, and likely go considerably deeper based on explorations at other properties in the area.

Ground Water: The uppermost ground water occurs sporadically perched within the fill on top of the silts. The depth to water in this zone is a few feet or less. Sparse water-bearing zones also occur beneath the fill within sandy layers in the hard silts. These water bearing zones are likely confined, but do not appear to be under much pressure. At the extreme southern edge of the Property, year-round ground water seepage was detected in several subsurface drain lines. These lines were installed beneath the former main building, and were likely put there to drain the perched zone.

Release and Extent of Contamination: The Site is defined by diesel- and oil-range hydrocarbons, polycyclic aromatic hydrocarbon (PAHs), metals (mercury, cadmium), and pentachlorophenol releases to soil, as mentioned above. Triphenylphosphine oxide (TPPO) was

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also detected on the adjoining railroad right-of-way, but is likely not part of the Site. These releases occurred in the following areas:

Interior Central Area - Hydraulic Lift: Oil-contaminated soils were located beneath the southern portion of the main building associated with a hydraulic lift sump. The sump was apparently unlined and opened directly to soil. Up to 29,000 mg/kg of oil-range hydrocarbons were initially detected in soil in this area (testing via Method 418.1). The full nature and extent of contamination had not been determined before the start of remediation.

One ground water monitoring well (MW3) installed in an area generally downgradient from the soil contamination showed no detectable diesel/oil-range hydrocarbons.

Interior Central Area - Sumps:

This area has been variously referred to as the marole sumps, hydraulic pits, hydraulic lift pits, hydraulic press sumps, and the press pits. Hydraulic oils and other contaminants were released to soil in this area via cracks and leaks in two concrete sumps within the central portion of the former main building. The two sumps served as the foundation for door fabrication equipment (i.e., the presses), and were about 4.5 feet deep relative to floor slab grade. In an early 1990 investigation, one of the sumps contained spent hydraulic fluid and the other contained some kind of resin.

The soil contamination was concentrated in the upper 10 feet of soil over an area of approximately 70' by 80'. Soil samples in this area were analyzed primarily for diesel- and/or oil-range hydrocarbons, although the earliest investigation (Weston, 1991) also reportedly checked for semi-volatiles, volatiles, PCBs, and metals. The PCBs, volatiles, and semi-volatiles analyses resulted in no reportable detections. Metals may or may not have been analyzed; the report is unclear. TPH, as oil-range hydrocarbons, was detected in the Weston investigation and in later investigations up to a maximum of 25,000 mg/kg.

One ground water monitoring well (MW2) installed in an area generally downgradient from the soil contamination showed no detectable diesel/oil-range hydrocarbons.

Interior Central Area - UST: A 1500-gallon heating oil tank, located within a concrete vault below the main building, was removed in 2007 during construction of the new buildings. There was no release to soil from this tank, based on visual observations and confirmatory sidewall and base sampling after the surrounding vault had been removed. Strictly speaking, this area is not part of the Site since no release occurred.

Glue Tank: The 1994 report by Geotech Consultants notes the existence of a 3000-gallon glue tank located somewhere beneath the main building. This tank was reportedly closed in place by filling it with concrete, in consultation with Ecology. Presumably this tank was removed in 2006

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during construction of the new buildings, and there must not have been any observed releases given that it was not mentioned in the final 2009 remediation report.

Interior Central Area – Another UST: A separate underground storage tank (perhaps the glue tank?) was also encountered beneath the main building during construction of the new buildings, according to information provided by the City of Kirkland (Jon Morrow, personal communication, 2008). A greenish fluid in the tank with a “cleaning solution odor” was released to the soil during tank removal. There are no extent-of-contamination or cleanup records associated with this release.

Exterior Area - Underground Storage Tanks: A 2,000-gallon heating oil tank and a 700-gallon diesel tank were removed in 1989 from one excavation in front of the eastern entrance to the main building, and a 2,000-gallon gasoline tank was removed at the same time from the northern end of the building. Confirmatory base and sidewall soil samples contained low or non-detectable concentrations of TPH as described in a 1989 report by Weston (as reported in the 1994 Phase 1 report by Geotech Consultants).

Exterior Northern Area: This area comprises a former drainage ditch at the north end of the property, just outside the former maintenance building. Sediment in the ditch and surrounding surface soils were contaminated with pentachlorophenol, PAHs, fuel hydrocarbons (gasoline- and diesel-range TPH, ethylbenzene, xylenes); metals (cadmium, mercury), chlorinated solvents (tetrachloroethene), and painting solvents (methyl ethyl ketone, and toluene). Of these, only cadmium and mercury exceeded an applicable cleanup level. The vertical and lateral extent of contamination within and off the property had not been fully determined prior to the start of remediation.

Ground water monitoring was not conducted in this area.

Exterior Parking Lot Area: Widespread contamination was detected in the parking lots and yard areas surrounding the main building and the office building. Initial sampling showed a variety of contaminants, but mostly PAHs and pentachlorophenol at concentrations below cleanup levels, except possibly at one location at the south driveway where total PAH concentrations were relatively high (3.2 mg/Kg). Anecdotal reports indicated that oil was spread in just a portion of the parking areas - the main parking lot in the central eastern portion of the Property. Additional sampling was therefore undertaken in the main parking lot and showed elevated concentrations of cPAHs and oil-range hydrocarbons in shallow soils. The maximum vertical extent of contamination was about three feet.

No further investigations were undertaken in soil along the south driveway.

Ground water monitoring was not conducted in these areas, although wells MW2 and MW3, and a dewatering well in the railroad right-of-way (see next bullet) are generally down gradient of the

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former parking lot areas. Samples from MW2 and MW3 were only analyzed for diesel/oil-range hydrocarbons; none were detected. The sample from the dewatering well was analyzed for chlorinated solvents, metals, semi-volatile organics, and TPPO (see next bullet); only pentachlorophenol was detected at 3.3 ug/L. Note that the dewatering well was essentially open to surface water, and was not properly constructed for monitoring purposes. The pentachlorophenol detection may therefore not be reflective of ground water conditions.

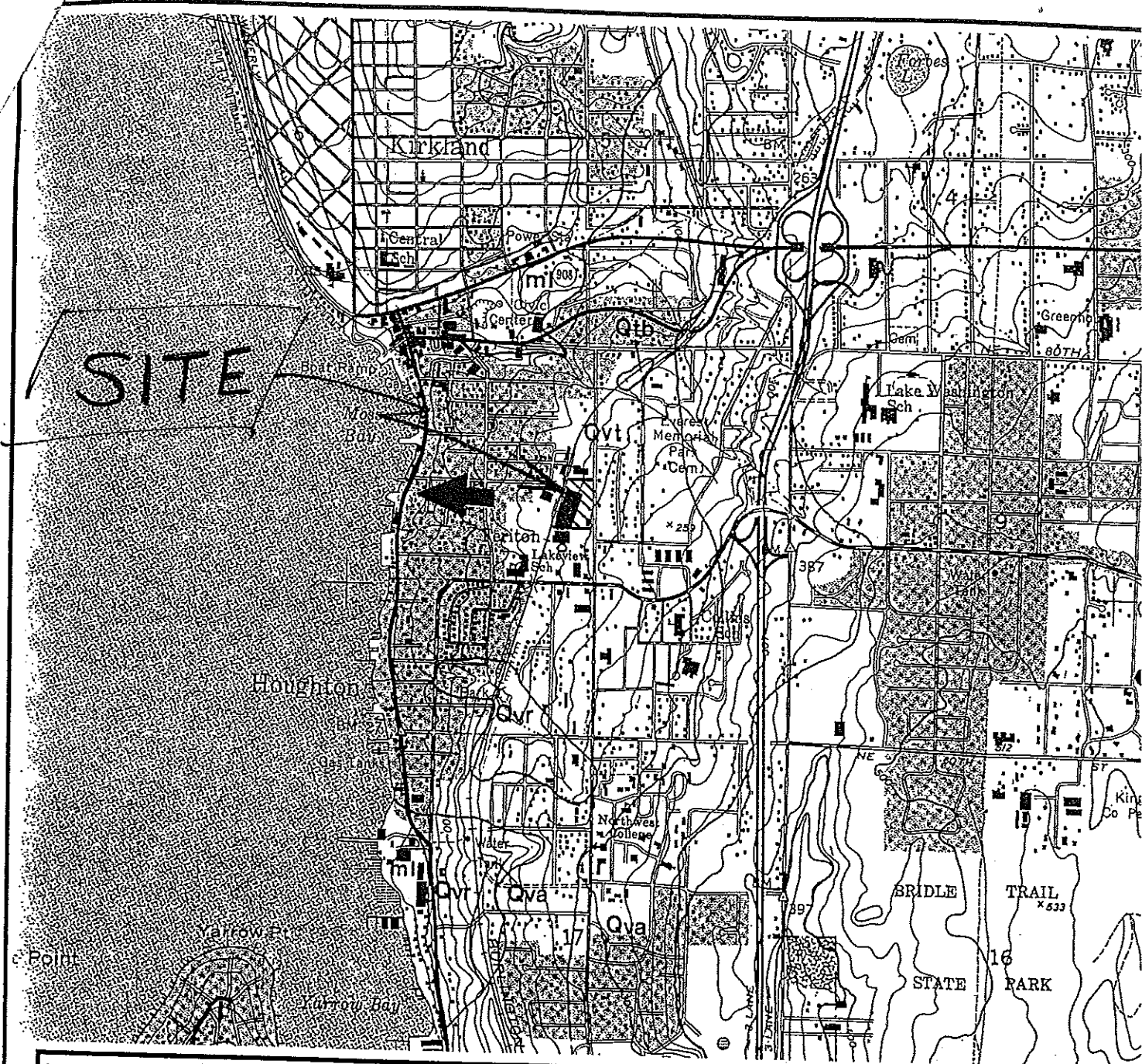
Off-Property Manhole: A new sanitary sewer manhole was constructed in 2008 in the railroad right-of-way between the Property and the former Pace facility. A City of Kirkland employee working in this manhole in mid-September 2008 became ill. Exposure to an unknown chemical compound was suspected. City personnel proceeded to sample a crystalline solid on the interior of the manhole, and the laboratory reported the detection of triphenylphosphine oxide (TPPO). Additional samples of water and/or sediment were subsequently obtained by the City from a catch basin on Western Pneumatic property, the new storm water detention vault on the Seattle Door property, and a dewatering well next to the sewer manhole. TPPO was also detected in all these samples. Ecology staff from the Manchester Laboratory looked at the raw analytical data for some of the samples and concluded that the detections were possible, but could not be verified or quantified. Resampling by both the City and Geotech Consultants a short time after the initial sampling round showed no TPPO. Ecology therefore concluded that no further investigation into the issue was warranted.

The City of Kirkland several months later retained an environmental consultant to conduct another round of sampling following strict field and laboratory protocols. This more rigorous study did confirm TPPO presence in the crystalline solid in the sewer manhole, but not in the other locations where TPPO had previously been detected. The consultant reported that the crystalline solid appeared to have been derived from ground water seepage into the manhole. Ecology also viewed the manhole and does not agree with this observation.

TPPO is an industrial chemical used in fire retardants, epoxy cure catalysts, and polymer bases. It does not have sufficient human health toxicity data or ecological toxicity data to readily establish cleanup levels under MTCA, according to Ecology toxicologists. However, Material Safety Data Sheets for TPPO indicate it can be irritating to the eyes, skin, respiratory system, and gastrointestinal tract, among other potential hazards.

No source for the TPPO has been established, although there are anecdotal reports of fire retardant use in the former door manufacturing process. Other possible sources in the area include accidental releases associated with railroad operations and the Pace facility.

Ecology has concluded the TPPO detection is not part of the Site based on the lack of any plausible transport pathway between the Property and the sewer manhole, and on the lack of any direct evidence that the door manufacturing facility used TPPO.



LEGEND:



SITE



PROBABLE DIRECTION OF REGIONAL SHALLOW GROUNDWATER FLOW

Qvr

Quaternary Vashon Recessional Outwash

Qvt

Quaternary Vashon Till

Qtb

Quaternary Transitional Beds

(SOURCE: USGS GEOLOGIC MAP, KIRKLAND, WA. QUADRANGLE 1983)

N



CONTOUR INTERVAL: 25 FEET
SCALE: 1" = 2,000'



GEOTECH
CONSULTANTS, INC.

SITE VICINITY MAP
SAUDER DOOR PROPERTY
815 - 6th STREET SOUTH
KIRKLAND, WASHINGTON

Job No:

96416E

Date:

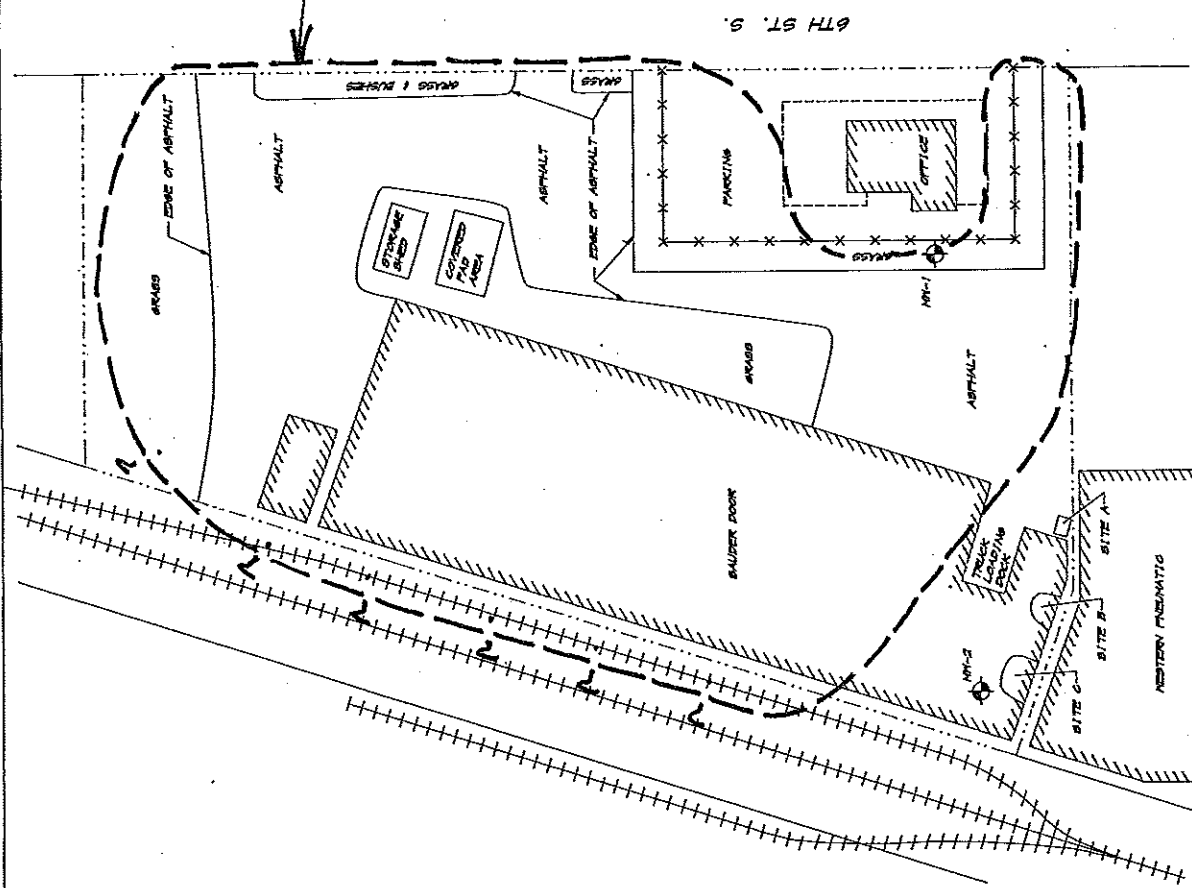
July 1997

Plate:

1

LEGEND	
SYMBOL	EXPLANATION
---	PROPERTY BOUNDARY
-X-X-X-	FENCE LINE
NH-1	MONITORING WELL LOCATION

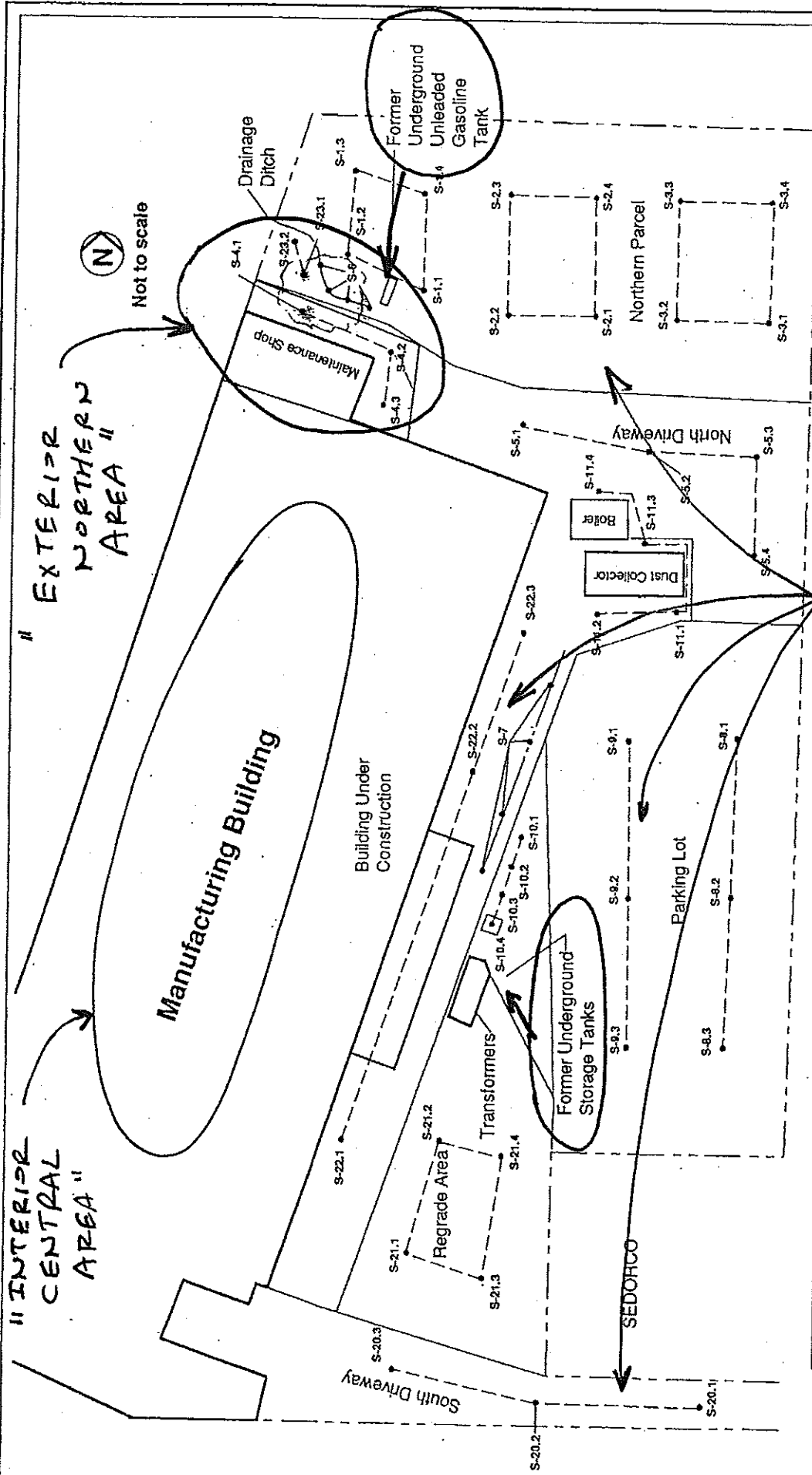
APPROXIMATE BOUNDARY
OF SITE
M. ADAMS, ECOLOGY
SEPT, 2009



SAUDER DOOR COMPANY
815 6TH ST. S.
KIRKLAND, WASH.

BASE MAP

DATE	PROJECT NO.	NO. 2
11-19-91	6-91-7104	
SCALE 1"=94'	DWG NO.	SD001B--
DRAWN BY	APPROVED BY	REV.
M. ARYSTROG	J. DAIGLE	



- Legend
- Discrete sampling locations
 - Composite samples formed by combining discrete samples at locations designated by •

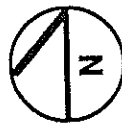
Surface Soil
Sampling Locations

FIGURE

1

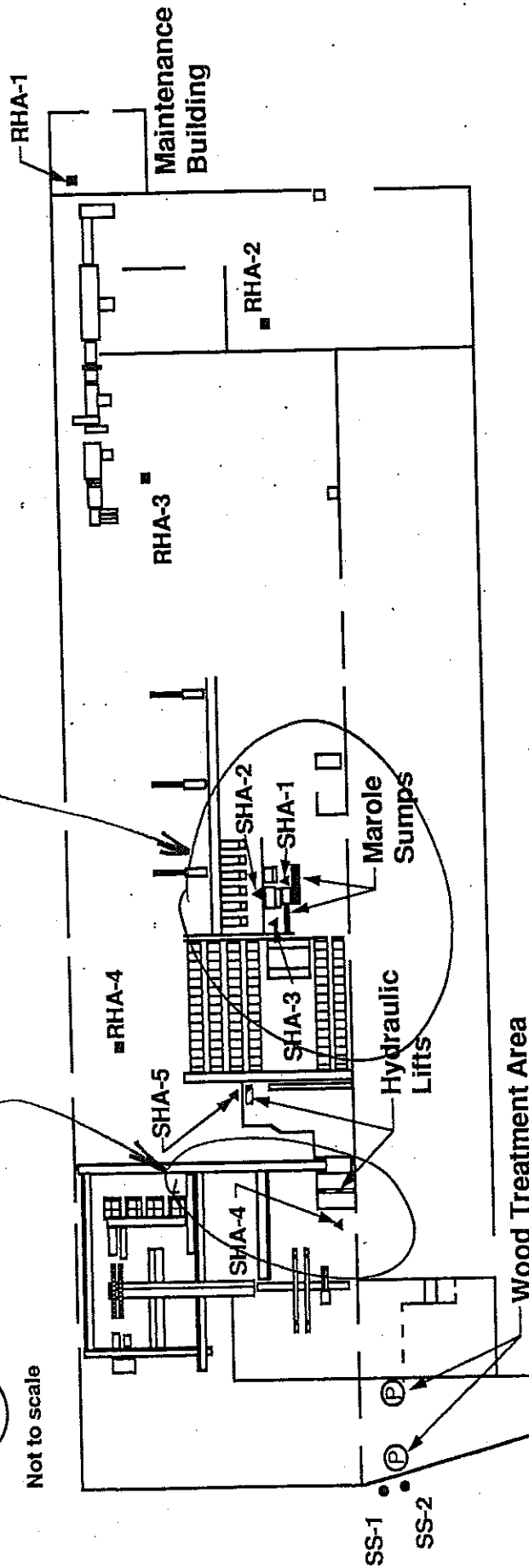


"INTERIOR
CENTRAL
AREA -
HYDRAULIC
LIFT"



Not to scale

"INTERIOR CENTRAL AREA - SUMPS"

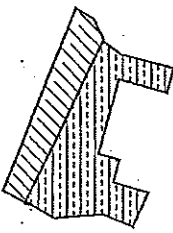


Explanation

- RHA-3 ■ Random Hand Auger Number and Location
- SHA-3 ▲ Sump Hand Auger Number and Location
- SS-1 ● Soil Sample Number and Location

Exploration and Sampling Plan for Sauder Door Company

Approximate location of patched concrete floor from Geotech Consultants limited cleanup December 1996 January 1997



Approximate limits of excavated soil from Geotech Consultants cleanup September - October 2006

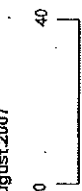
Approximate limits of excavated soil from Geotech Consultants cleanup September 2006

Approximate limits of additional excavated soil from Geotech Consultants cleanup October 2006

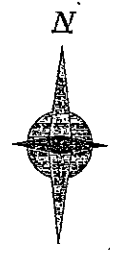
Approximate location of heating oil underground storage tank discovered June 2007

Approximate Location of Geotech Consultants Boring/Monitoring Well April 1998

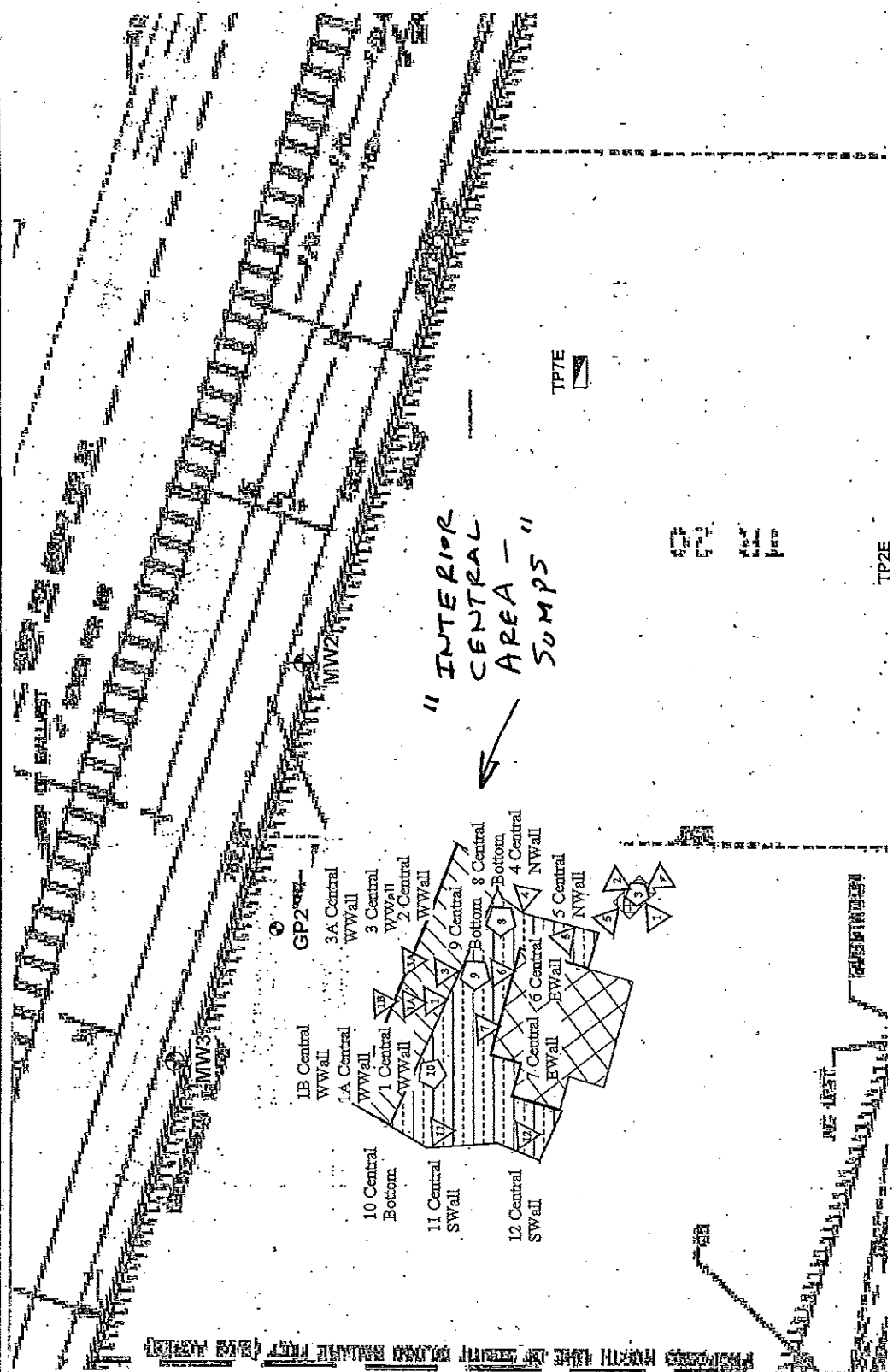
Approximate Location of Geotech Consultants Geoprobe Boring August 2007



Scale



GEOTECH
CONSULTANTS, INC.



Approximate location of test pit excavated September 2006.

Approximate location of wall confirmation sample

Approximate location of bottom confirmation sample

INTERIOR CENTRAL CONFIRMATION	
FORMER SEATTLE DOOR PROPERTY 733 - 6th STREET SOUTH KIRKLAND, WASHINGTON	
Job No: 05182E	Date: Revised Sept. 2009
	Placer: 5

