



**THE RILEY GROUP, INC.**

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January 4, 2005

Mr. Matt Segrest  
912 Dexter Avenue North, LLC  
500 Wall Street  
Suite #216  
Seattle, WA 98121

**RE: Environmental Excavation Final Work Plan  
The Neptune Redevelopment Project  
912 Dexter Avenue North  
Seattle, Washington  
Riley Project #: 2003-140**

Dear Mr. Segrest:

The Riley Group, Inc. (Riley) has prepared this excavation work plan to coordinate activities associated with the excavation, characterization, and disposal of petroleum-affected soils and shallow perched groundwater or storm water encountered during Neptune redevelopment project (referred to herein as the "Site"). In addition, this work plan describes our environmental sampling and laboratory analysis plan for the project. This work plan is neither a Site Specific Health and Safety Plan nor is it meant to address any geotechnical-related site development issues.

**I. SITE LOCATION & DESCRIPTION**

The Site includes the former Jarvie Paint Facility and the former Diamond Tank Facility located on the northeast corner of Aloha Street and Dexter Avenue North (Figure 1). The Site address is 912 Dexter Avenue North, Seattle, Washington. The Site is currently vacant, with a few small areas of remnant concrete and asphalt paving. The Site is owned by 912 Dexter Avenue North, LLC who plans to construct on-Site a multi-story mixed-use building from lot line to lot line with two to three levels of underground parking.

Historical activities at the Site included paint manufacturing operations (e.g., paint solvent storage and mixing) and taxicab fleet parking and maintenance. These former Site uses have led to the release(s) of paint solvents (primarily ethylbenzene, toluene and xylenes) and gasoline, diesel, and/or heavy oil petroleum hydrocarbons to the subsurface environment.

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## II. PROJECT SUMMARY

During Site earthwork for the proposed redevelopment, petroleum-affected soil and perhaps shallow perched groundwater will be encountered at various locations. The estimated lateral extent of these known or suspect areas are outlined in the attached Figure 1 and are based on our subsurface investigations and review of existing data reported by others. It is estimated that 2,325 to 4,300 tons of petroleum-affected soil will be excavated at the former Jarvie Parcel and an estimated 10,470 tons at the former Diamond Tank Parcel.

Petroleum-affected soil will be excavated and immediately transported off-site and disposed of and/or treated at a licensed facility. Once all petroleum-affected soil has been removed, or the boundaries of the Site are reached, a series of confirmation soil samples will be collected by Riley to determine and/or confirm that the remaining soil quality meets the applicable Washington State Department of Ecology (Ecology) Model Toxics Control Act (MTCA) Cleanup Standards (i.e., 173-340 WAC, amended August 15, 2001). The cleanup of petroleum-affected soils and assessment will be performed as a voluntary independent cleanup under the MTCA Cleanup Regulations.

## III. OBJECTIVES

The purpose of this cleanup action is to restore beneficial uses of soil and groundwater at the Site, as defined by Chapter 70.105D.020(4) of the Revised Code of Washington and the Ecology MTCA to protect human health and the environment. Riley understands that at this time, Owner chooses not to enroll in Ecology Voluntary Cleanup Program (VCP). The VCP is a voluntary program administrated by Ecology to assist in the cleanup and closure of contaminated sites and is often enrolled in an attempt to obtain a *No Further Action* (NFA), or substantial equivalent, letter from Ecology.

The primary objectives for this work plan are to define project protocols and coordinate the following activities:

- The excavation, segregation, characterization, and disposal of clean and petroleum-affected soils encountered during earthwork;
- Confirmation soil sample collection and laboratory analysis to substantiate that petroleum hydrocarbons and other contaminants of concern at the Site have been remediated.
- Interim project communication, data analysis, final report writing and distribution.

## IV. EXCAVATION AND DEWATERING

General contractor's earthwork subcontractor, City Transfer, Inc. (City Transfer), will excavate soils during development. Construction schedules estimate between 600 to 1,800 cubic yards of soil excavated and transported off-site per day. It is understood and anticipated that the excavation, characterization, and segregation of petroleum-affected soils will slow the process. It is anticipated that excavation will not be performed on rainy days. Weather permitting, weekend work will be performed.

Since to excavation for the underground parking structures is essentially lot line to lot line, all excavated soils (petroleum hydrocarbon-affected and clean soils) will be transported and disposed of off-site (see Section 5 for a discussion regarding the selected off-site disposal/treatment locations).

Best management practices (BMPs) will be followed which will prevent dirt and turbid storm water run-off from leaving the site. BMPs will include removing loose dirt from trucks and other vehicles leaving the site, street sweeping, silt fences, straw bales, wash stations (if needed), etc.

Riley understands that initial excavations (approx. two weeks in duration) will include lowering site grades 6 to 8 feet with a 1:1 cut slope along the project boundaries. Temporary shoring will be installed and excavations continued to reach final grades for the underground parking garage (approximately 25 feet bgs). The shoring and excavations to reach final grades will require approximately 35 to 40 working days.

Riley will direct the excavation and segregate soils in the known or suspect petroleum hydrocarbon-affected soil areas. Riley be on-site at all times while excavating in these areas. If apparent petroleum-affected soils are encountered in other areas, excavation should cease and general contractor site superintendent and/or Riley should be notified immediately.

Riley anticipates that either (1) the excavation may intercept perched groundwater at about 10 to 15 feet bgs; or (2) that surface water run-off entering and ponding during excavations may become contaminated from the petroleum-impacted soils. Based on existing analytical data for on-Site soils, Riley anticipates that any perched groundwater or storm water will have concentrations of the contaminants of concern well below the King County Metro discharge permits. Any groundwater or standing water inside the excavation and site grading limits will be pumped using conventional trench and sump pumps into a 10,000 to 20,000 gallon holding tank (or temporary pond) pending discharge to the King County METRO sewer. The temporary holding tank or pond will allow solids (silt or other suspected solids) to settle out before discharge and allow for water sampling and laboratory analysis as needed.

All water handling, pumping, storage, discharge, metering, etc. will be handled by others. Per request, Riley can assist in water sampling, water quality testing, and reporting as required by the construction-dewatering permit.

All water discharged to the King County METRO combined system at 8<sup>th</sup> Street Avenue North will be metered and will meet the following King County METRO discharge criteria:

<u>Parameter</u>	<u>Discharge Limit</u>
Benzene	0.13 mg/L
Toluene	1.5 mg/L
Ethyl benzene	1.4 mg/L
Non-Polar fats, oils, and grease (FOG)	100.0 mg/L
Settleable Solids (by Imhoff Cone)	7.0 ml/L
Petroleum, Solvent or Hydrogen Sulfide Odors or Sheen	No Odors or Sheen Allowed
Unusual Color or Visible Turbidity	None Allowed

Riley will assist General Contractor in verifying that the water satisfies the permit requirements prior to discharge to the sewer as requested.

## V. SOIL SEGREGATION AND END USES

The petroleum-affected soil will be segregated during excavation into three classes (clean soil, Class I/II petroleum affected soils, and Class III/IV petroleum affected soils). These soil classes are based on Ecology's *Guidance for Remediation of Petroleum Contaminated Soils* document (revised November 1995). A copy of the recognized end uses and concentration ranges for petroleum-contaminated soil (Table 5 of the *guidance* document) is attached to this work plan for reference. The three classes of petroleum-affected soils are as follows:

- 1) **Clean Soil** - Clean soil is any soil that is considered neither affected in any way by a petroleum hydrocarbon release nor suspected to contain any concentrations of the petroleum hydrocarbon-related contaminants of concern.
- 2) **Class I/II Petroleum-Affected Soil (Slightly Contaminated Soil)** - soil known or suspected to contain concentrations of contaminants of concern less than those concentrations published in Ecology's *Guidance for Remediation of Petroleum Contaminated Soils*. Class I/II soils have gasoline TPH, diesel TPH, and oil TPH concentrations in soils less than 100 mg/kg, 200 mg/kg, and 200 mg/kg, respectively. Benzene, Toluene, Ethylbenzene and total Xylenes concentrations in Class I/II soils are less than 0.5 mg/kg, 40 mg/kg, 20 mg/kg, and 20 mg/kg, respectively.

*Note: a Class I/II soil may have concentrations of petroleum hydrocarbons below the analytical detection limits. In addition, Class I/II soils may or may not exhibit obvious petroleum odors or give a positive water sheen test.*

- 3) **Class III/IV Petroleum-Affected Soil** - soil known or suspected to contain concentrations of contaminants of concern exceeding those concentrations published in Ecology's *Guidance for Remediation of Petroleum Contaminated Soils*. Class III/IV soils have gasoline TPH, diesel TPH, and oil TPH concentrations in soil exceeding 100 mg/kg, 200 mg/kg, and 200 mg/kg, respectively. Benzene, toluene, ethylbenzene and total xylenes concentrations in Class III/IV soils are equal to or greater than 0.5 mg/kg, 40 mg/kg, 20 mg/kg, and 20 mg/kg, respectively.

During soil excavation, Riley will use one or all of the following criteria to classify the petroleum-affected soil:

1. **Existing Soil Quality Data.** For example, if existing soil quality data indicates that soil in a particular area of the Site classifies as a Class III/IV soil, it will be excavated, loaded, and transported off-site as a Class III/IV soil (unless field screening data suggests otherwise). If existing data indicates that soil in a particular area of the Site classifies as a Class I/II soil, this soil will be excavated, loaded and transported off-site as a Class I/II soil (unless field screening data suggests otherwise).
2. **Field Screening Data.** Field screening methods will include a portable gas analyzer equipped with a photoionization detector (PID), to determine total volatile organic compounds (TVOCs), and water sheen tests. Field screening data will be most useful at the former Jarvie Paint parcel since the primary contaminants of concern in soil are volatile organic compounds (e.g., toluene, ethylbenzene, and xylenes) associated with the former Jarvie paint manufacturing facility. However, the contaminants of concern at the former Diamond Tank parcel are oil range TPH and are less detectable using conventional field screening techniques. Therefore, an on-site laboratory will be used for this project.

For example, if TVOC concentrations in the soil exceeds 100 parts per million (mg/kg), this soil will be designated as Class III/IV. If the TVOC concentrations are between 10 mg/kg and 100 mg/kg, the soil will be designated as Class I/II soil. *Note: the 100 mg/kg concentration is an arbitrary value and will be verified at the start of the project by comparing PID results to actual laboratory analytical results. Verifications will be performed during the course of the project as determined necessary.* If TVOCs are not detected in the soil, or if the water sheen test is negative, the soil will be designated as a clean soil following verification from a third party analytical laboratory.

3. **On-Site Analytical Laboratory.** An on-Site mobile analytical laboratory will be utilized for this project to assist in confirming and determining the Class of petroleum hydrocarbon affected soils encountered and in verifying clean soils (i.e., soils having non-detectable concentrations of petroleum hydrocarbons). This will enable rapid data turnaround. The mobile analytical laboratory is currently scheduled for Friday January 7, 2005 through at least Thursday January 13, 2005. Additional days may be required depending on site conditions and as authorized by Client. The mobile analytical laboratory is owned and operated by Libby Environmental and is fully

accredited by Ecology. The mobile laboratory is fully enclosed in a modified RV and will require "permanent" and suitable street or off-street parking for the duration of their involvement in the project.

4. **Off-Site Laboratory Analytical.** An off-site analytical laboratory will be used for interim and conformational soil sampling analysis. Soil samples will be collected, stored and analyzed in accordance with the procedures discussed in Section VIII below.
5. If free product is visible in soil, the soil will designate as a Class III/IV soil. *Note: if free product is present, free product removal may be necessary before soil is loaded and transported off-site.*

The objective during soil excavation is to minimize the handling of clean or petroleum hydrocarbon-affected soil. All excavated soil will be classified, based on field observations and/or laboratory analytical data, and transported off-site to the appropriate end use facility. Each truck driver will be notified which soil class they are transporting. Riley will record the number of each truck loaded and time leaving the site.

## VI. RINKER DISPOSAL/TREATMENT FACILITY

### *Petroleum Hydrocarbon Affected Soils*

All excavated Class I/II and Class III/IV petroleum hydrocarbon affected soils will be transported by City Transfer and its' trucking subcontractors to Rinker Materials located in Everett, Washington. All trucks will weigh-in at Rinker's scale house and receive the appropriate truck tickets. Rinker can anticipate receiving up to 850 to 1,500 tons per day of clean, Class I/II, or Class III/IV designated soils.

Class I/II soils will be stockpiled at Rinker Materials "Class I/II" soils area of the Inert Demolition Waste Landfill. Class III/IV soils will be stockpiled and treated via Rinker Materials thermal desorption unit. Following thermal treatment, the treated Class III/IV soils will be transported by Rinker to its Inert Demolition Waste Landfill.

Riley understands that Rinker Materials will collect representative samples from the Class I/II soil stockpiles. Samples will be analyzed for gasoline TPH/BTEX and/or diesel and oil TPH by its in-house analytical laboratory. Analytical laboratory results will be available within 24 to 48-hours of stockpiling. Riley recommends that samples analyzed for diesel and heavy oil TPH be prepared using the triple silica gel cleanup to remove any naturally occurring biogenic material prior to analysis. Their sample frequency for Class III/IV soil stockpiles are as follows:

- Nine samples for the first 1,000 tons from the project; and
- One sample per additional 500 tons during the project duration.

Rinker will not collect samples from the Class III/IV designated soils for laboratory analysis. Rinker will handle and process the Class III/IV designated soils per its standard protocols. 912 Dexter Avenue North, LLC reserves the right to re-sample any Class I/II stockpile before final end use selection.

### ***Clean Soils***

Riley understands that clean soil is to be transported and stockpiled at City Transfers' facility or sold for use as fill at other construction sites. Riley understands that all trucks will weigh-in at their receiving scale house and forward to Owner or Owners representative copies of the appropriate truck tickets.

Prior to off-site transportation of clean soil, Riley will collect a representative number of samples for lab analysis to document the quality of the apparent clean soils. Analytical result turnaround times will be from 30 to 45 minutes (using an on-Site mobile laboratory) to 24 hours (for an off-site lab) after sample collection. Riley's soil sample collection frequency will meet or exceed Ecology's *Guidance For The Remediation of Petroleum Contaminated Soils Table 1*, Revised 1995 (Table 1 attached). Analytical results and a soil sample location map will be forwarded to City Transfer, Owner, and Owners representative for review.

Riley understands that after City Transfers receipt and review of the analytical results, City Transfer has opted to obtain, transport, and stockpile the deemed clean soil to their facility or other off-site property for re-use as fill. City Transfer will accept the deemed clean soil at their sole discretion.

## **VII. PROJECT COMMUNICATION**

Riley's field memos (carbon copy) will be left on-site daily with General Contractor's site superintendent. Field memos will be returned to the office, typed, and distributed within 24-hours, via email, to the following 912 Dexter Avenue North, LLC representatives for review and comment (1) Matt Segrest and (2) Doug McCall.

## **VIII. CONFIRMATION SOIL SAMPLING**

Once soil has been excavated to the excavation limits (Figure 1), Riley will collect confirmation soil samples at various depths along the cut slopes, excavation sidewalls, and excavation floor. Samples collected from the excavation sidewalls will be collected prior to placing the wood lagging or shotcrete for temporary or permanent retaining walls. Analytical results for each confirmation sample will be used to confirm the soil quality at the limits of the excavation. The proposed sampling locations are presented in the attached Figure 1. The location and depth of each confirmation sample will be based on subsurface soil conditions (e.g., at the contact between sand and silty-clay units), the presence of residual petroleum-affected soils, field screening results, and/or professional judgment. Soil samples with the highest field screening result will be selected for laboratory analysis.

Soil samples will be collected using standard decontamination procedures including disposable latex gloves, stainless-steel spoons, and Alconox wash prior to sampling events. Samples will be collected using the trackhoe bucket, while avoiding contact with the sidewalls and the bottom of

the bucket. Soil samples will be placed in preconditioned sterilized-glass jars provided by the project, Ecology-accredited, third-party analytical laboratory.

#### **Sample Storage, Packing, and Shipment**

All samples will be stored in an iced chest while at the Site and during transportation to the analytical laboratory. Samples will be stored in the dark at 4° C.

#### **Chain of Custody Procedures**

A chain of custody form will accompany each chest containing laboratory samples under standard sample chain of custody protocols.

#### **Chemical Analyses**

An estimated 35 to 55 confirmation soil samples (including five field duplicates) will be collected and analyzed for one or more of the following chemical parameters:

<b>Chemical Parameters</b>	<b>Test Method</b>
Gasoline Range Total Petroleum Hydrocarbons	Washington State Test Method NWTPH-Gx
Benzene, Toluene, Ethyl benzene, and Xylenes (BTEX)	EPA Test Method 8020
Diesel and Heavy Oil Total Petroleum Hydrocarbons	Washington State Test Method NWTPH-Dx
Semi-Volatile Organic Compounds	EPA Test Method 8270
Volatile Organic Compounds	EPA Test Method 8260

Additional analytical tests may be required, depending on site conditions and findings.

If select confirmation soil samples have concentrations of gasoline, diesel, and/or heavy oil TPH exceeding the applicable Method A Soil Cleanup Levels, Riley will notify Owner immediately to discuss the results and possible actions. Such possible actions could include: (1) no additional excavation; (2) excavating additional soils and sampling in an attempt to reach compliance with the MTCA Method A Soil Cleanup Levels; or (3) develop a TPH Method B cleanup level for the Site using Ecology's Method B TPH approach. This approach (referred to as the *fraction approach*) analyzes soil samples for volatile and/or extractable petroleum hydrocarbon fractions.

The fraction approach is to develop a TPH Method B cleanup level for the Site using Ecology's Method B TPH approach. The Method B approach for petroleum hydrocarbon contaminated sites is less conservative than the routine Method A Soil Cleanup Levels. If appropriate and agreed upon, select confirmation soil samples will be analyzed for the following chemical parameters using the following methods:

<b>Chemical Parameters</b>	<b>Test Method</b>
Extractable Petroleum Hydrocarbons:	Washington State Test Method EPH
Volatile Petroleum Hydrocarbons:	Washington State Test Method VPH
<sup>(1)</sup> Polynuclear Aromatic Hydrocarbons:	EPA Test Method 8270

(1) Analysis only required if samples analyzed for EPH



## IX. SITE CLOSURE AND REPORTING

Following excavations, sampling, and review of all laboratory data, Riley will prepare a final excavation and site cleanup action report. The report will present our findings, conclusions, and recommendations (if any). The report will include the following issues:

- Project Description, Purpose, and Background;
- Soil Removal Areas and Depths;
- Groundwater Treatment/Disposal;
- Confirmation Sampling and Analysis;
- Compliance with Cleanup Standards;
- Site Restoration and Future Land Use;
- Off-Site Disposal; and
- Conclusions and Recommendations.

Draft reports will be distributed to Client and/or Clients representative(s) for review and comment.

Site closure will be based in part on the concentration of contaminants of concern remaining in soil after limits of the excavation have been reached. The primary contaminants of concern at the Site and their associated Method A Soil Cleanup Levels (WAC 173-340-900, Table 740-1) are as follows:

Contaminant of Concern	Method A (mg/kg)
Benzene	0.03
Toluene	7
Ethyl benzene	6
Xylenes	9
TPH-gasoline range <sup>1</sup>	100
TPH-gasoline range <sup>2</sup>	30
TPH-diesel range	2,000
TPH-heavy oil range	2,000

(1) Cleanup level is for gasoline mixtures without benzene and total of ethylbenzene, toluene, and xylenes are less than 1% of the gasoline mixture.

(2) All other gasoline mixtures.

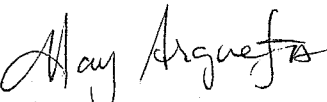
Method B Cleanup levels or other potential contaminants of concern not shown above.


Site closure will also be based on the depth and location of the remaining contamination at the Site and its potential impact on groundwater quality and human health.

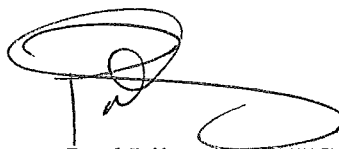
If we may provide you with any additional information or clarification of this work, please contact the undersigned at (206) 417-0551.

Sincerely,

**THE RILEY GROUP, INC.**

  
for Fredrick Becker, CHMM, LG, LHG  
Senior Geologist

  
Lannie Smith, CHMM  
Environmental Scientist

  
Paul Riley, LG, LHG  
Principal Geologist

*Attachments*     *Figure 1. Confirmation Soil Sample Location Map*  
                         *Table 5. Guidance for the Remediation of Petroleum Contaminated Soils*  
                         *Table 1. Guidance for the Remediation of Petroleum Contaminated Soils*

*Distribution*     *Mr. Jim Lindholm @ W.G. Clark Construction Company (email & hard copy)*  
                         *Mr. Matt Segrest @ Simpson Housing Limited Partnership (email & hard copy)*  
                         *Mr. Doug McCall @ Mc2 Architectural Consulting, Inc. (email & hard copy)*

**THE RILEY GROUP, INC.**

From: Guidance for Remediation of Petroleum contaminated  
Soils, Washington State Department of Ecology, Revised  
November 1995.

TABLE V. END USE CRITERIA FOR PETROLEUM-CONTAMINATED SOILS

Analyte	Analytical Method	Soil Class (ppm)			
		1	2	3	4
Heavy fuel hydrocarbons (C24-C30)	WTPH-418.1 mod.	<60	60-200	200-2000	>2000
Diesel (C12-C24)	WTPH-D	<25	25-200	200-500	>500
Gasoline (C6-C12)	WTPH-G	<5	5-100	100-250	>250
Benzene	8020	<0.005	0.005-0.5	≤0.5	>0.5
Ethylbenzene	8020	<0.005	0.005-20	≤20	>20
Toluene	8020	<0.005	0.005-40	≤40	>40
Xylenes (total)	8020	<0.005	0.005-20	≤20	>20

Treatment is strongly recommended prior to disposal for all Class 3 and 4 soils.

**NOTES:**

**Class 1 Soil Uses:**

Any use which will not cause threat to human health or the environment.

**Class 2 Soil Uses:**

Backfill at the original site

Fill in commercial or industrial areas

Cover or fill in permitted landfills

Road or parking lot construction material

Fill in or near: wetlands, surface water, groundwater, drinking water wells or utility trenches is NOT recommended. Use as residential topsoil is also NOT recommended.

**Class 3 Soil Uses:**

Treatment

Disposal at the original site (no solid waste disposal permit needed) note: If you use this option, there will still be hazardous substances above the cleanup levels on site.

Road or parking lot construction (subgrade material only)

Offsite disposal or use in an existing permitted municipal landfill

Offsite disposal at a new permitted PCS landfill

(An evaluation should be made to ensure that disposal will not cause a threat to human health or the environment, e.g., use near water bodies)

**Class 4 Soil Uses:**

Treatment

Offsite disposal in an existing permitted municipal landfill

Offsite disposal at a new permitted PCS landfill

TABLE I. NUMBER OF SAMPLES FOR EXCAVATED SOIL	
Cubic Yards of Soil	Minimum Number of Samples
0-100	3
101-500	5
501-1000	7
1001-2000	10
>2000	10 + 1 for each additional 500 cubic yards

### Field Instruments

The use of field instruments is recommended to help identify the location of contamination. Field instruments are also useful for monitoring potential exposures and determining health and safety precautions. A number of field instruments may be used for field screening purposes. These instruments include volatile gas meters with photoionization detectors (PIDs) and flame ionization detectors (FIDs), thin layer chromatography (TLC), portable gas chromatographs (GCs), calorimetric detector (Draeger tubes), and alkylation field chemistry kits (such as the "Hanby Field Test Kit").

PIDs and FIDs are useful for detecting and measuring released substances that have a volatile component (e.g. gasoline). PIDs and FIDs can measure groups of volatile organic vapors in soil (using a headspace technique) or in air. TLC offers the advantage of detection and semi-quantitative assessment of non-volatile petroleum residues. Portable Gcs and calorimetric indicator tubes can measure specific analytes (e.g. benzene). Although portable Gcs have a much greater potential sensitivity to low levels of contaminants than calorimetric tubes, they are more expensive and complex to operate.

### Soil Sampling Techniques

Depending on site conditions, soil samples can be collected by one or more of the following sampling techniques:

- \* Hand auger/soil corer;
- \* Split spoon or shelby tube;
- \* Backhoe and hand tools; or
- \* Other approved techniques.

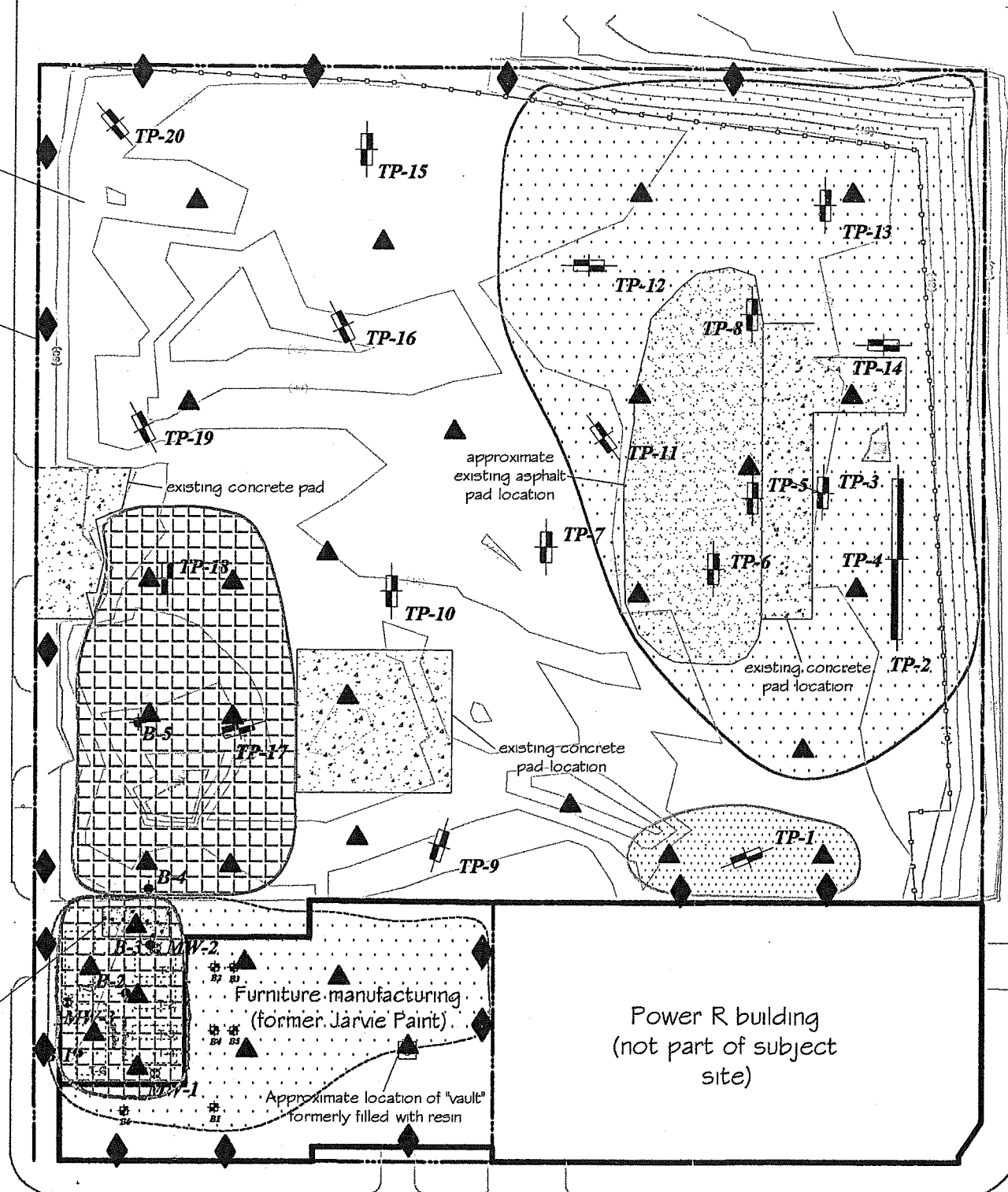
For more information about these sampling techniques see the Guidance for Site Checks and Site Assessment for Underground Storage Tanks, Section 5.2.2.



Diamond Tank Property

Proposed Neptune Apartments property boundary

Dexter Ave. North



8th Avenue North

▲  
Proposed Excavation Bottom  
Soil Confirmation Sample Location  
(does not necessarily include  
interim or other sample locations)

◆  
Proposed Excavation Sidewall  
Soil Confirmation Sample Location

—  
Topographic contour line.  
Contour interval = 2 feet

● B-1  
Location of soil boring completed by Riley on  
November 20, 2000

■ TP-1  
Location of test pit excavation completed by  
Riley on December 18 & 19, 2000

⊗ MW-1  
Location of existing monitoring well (MW)  
completed by others

⊕ BI  
Location of Geoprobe soil boring completed  
by others in 1996

▨  
Estimated areal extent of soil containing solvent, gasoline-  
and/or diesel-range petroleum hydrocarbons at concentrations  
approaching or exceeding MTCA Method A cleanup guidelines  
(Class III/IV soils)

▤  
Estimated areal extent of soils containing  
concentrations of oil-range hydrocarbons approaching  
or exceeding MTCA Method A soil cleanup guidelines  
(Class III/IV Soils)

▥  
Estimated areal extent of soils exhibiting faint to strong odors of  
hydrocarbons, but having hydrocarbon concentrations well below  
MTCA Method A soil cleanup guidelines (Class I/II Soils)

Note: The majority of the fill material along the eastern side of the property exhibits odors of hydrocarbons, although the soil concentrations are not detectable or well below cleanup guidelines. This fill material may have to be disposed of as a Class I/II petroleum hydrocarbon affected soil.

North Aloha Street

0 40'  
Approximate scale: 1 inch = 40 feet

Plan modified from Topographic Survey completed by Bush, Roed & Hitchings, Inc.  
for Simpson Housing dated September 1999, revised March 9, 2000



**The Riley Group, Inc.**  
17522 BOTHELL WAY NE, SUITE A  
BOTHELL, WASHINGTON 98011

*Proposed Neptune Apartments*

**Proposed Soil Confirmation Soil Sampling Site Plan Figure 1**

Date: December 28, 2004

Riley Project #2003-140

Revised by: L. Smith

Site Address: NEC Dexter Ave. N & N Aloha St., Seattle, Washington 98109