



STATE OF WASHINGTON  
DEPARTMENT OF ECOLOGY

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September 16, 2016

Tanya Girouard  
Progress Rail Services Corporation  
4012 SR 509 South Frontage Road  
Tacoma, WA 98421

**Re: No Further Action at the following Site:**

- **Site Name:** Coast Engine & Equipment Corp (aka Progress Rail)
- **Site Address:** 4012 SR 509 S. Frontage Road, Tacoma, 98421 WA Pierce Co.
- **Facility/Site No.:** 26693246
- **Cleanup Site ID No.:** 4267
- **VCP Project No.:** SW1474

Dear Ms. Girouard:

The Washington State Department of Ecology (Ecology) received your request for an opinion on your independent cleanup of the Coast Engine & Equipment Corp 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**

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

**No. Ecology has determined that no 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**

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

- Petroleum hydrocarbons and related constituents into the Soil and Groundwater.

**Enclosure A** includes a detailed description and diagram of the Site, as currently known to Ecology.

Please note the parcel(s) of real property associated with this Site are also located within the projected boundaries of the Tacoma Smelter Plume (Facility/Site No. 89267963). This opinion does not apply to any contamination associated with the Tacoma Smelter Plume.

### **Basis for the Opinion**

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

1. Additional Site Characterization Activities, Progress Rail, 4012 SR 509 South Frontage Road, prepared by Terracon Consultants Inc. (Terracon), dated April 29, 2016.
2. Annual Groundwater Monitoring Report, 2014, Progress Rail Spill Incident #12-0773, 4012 SR 509 South Frontage Road, prepared by Terracon, dated January 15, 2015.
3. Groundwater Monitoring Well Installation and Sampling, Progress Rail Spill Incident #12-0773, 4012 SR 509 South Frontage Road, prepared by Terracon, dated April 15, 2014.
4. Limited Soil Sampling Summary Letter, Progress Rail Spill Incident #12-0773, 4012 SR 509 South Frontage Road, prepared by Terracon, dated April 8, 2014.
5. Supplemental Investigation & Remedial Excavation, Progress Rail Spill Incident #12-0773, 4012 SR 509 South Frontage Road, prepared by Terracon, dated March 11, 2014.
6. Draft Limited Site Investigation, Progress Rail, Tacoma, WA Pierce County, prepared by Terracon, dated January 28, 2015.
7. Summary of Limited Investigation Activity, Progress Rail Services, Tacoma, WA, prepared by Terracon, dated July 17, 2013.
8. Soil Cleanup Activities at the Progress Rail Services Tacoma, Washington facility, prepared by Panhandle Geotechnical & Environmental, dated May 31, 2012.
9. Technical Memorandum, Soil Remediation Report for the Former CEECO Site, Tacoma, WA, prepared by Dalton, Olmsted & Fuglevand, Inc., dated December 29, 2009
10. Supplemental Phase II Environmental Site Assessment (ESA), Coast Engine and Equipment.
11. Corporation, 4012 East West Road, Tacoma, WA, prepared by AGRA Earth and Environmental, dated February 11, 1998.

Those documents are kept in the Central Files of the Southwest Regional Office of Ecology (SWRO) for review by appointment only. You can make an appointment by calling the SWRO resource contact at (360) 407-6365.

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

## **Analysis of the Cleanup**

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Ecology has concluded that **no 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 sufficient to establish cleanup standards and select a cleanup action. The Site is described above and in **Enclosure A**.

Progress Rail Services (PRS) purchased the facility and assumed the property lease from Coastal Engine and Equipment Company in April 2009. Since that time three diesel fuel releases have been reported at the property including a spill by the locomotive shop from an auxiliary locomotive fuel tank reported in March 2012 (ERTS Tracking #632477). This opinion letter applies only to this release.

In September 2015, Ecology issued a Further Action opinion letter requiring further characterization of the soil around several soil borings that were installed following the excavation and removal of soils impacted by the March 2012 diesel spill.

Analytical results for samples collected during the installation of these soil borings indicated groundwater concentrations of diesel above MTCA Method A cleanup levels (CULs) ranging from 760 micrograms per liter ( $\mu\text{g/L}$ ) to 9,800  $\mu\text{g/L}$ .

Groundwater samples from four monitoring wells (MW-1 through MW-4) that were subsequently installed indicated concentrations of diesel below MTCA Method A CULs; however, it was unclear whether analytical results from MW-4 indicated separate concentrations of diesel and oil; or whether the carbon fractions had been arbitrarily reported by the lab resulting in concentrations of diesel and oil below the respective CULs.

Ecology required further soil sampling to determine whether residual soil contamination from the March 2012 spill was the reason for the elevated groundwater concentrations, and analyses of the petroleum hydrocarbon fractions using Method NWTPH-HCID.

In March 2016, Terracon Consultants, Inc. on behalf of PRS, installed seven soil borings at locations approved by Ecology, and collected soil samples at the groundwater/soil interface. Analytical results indicated soil concentrations below MTCA Method CULs or laboratory detection levels. Results of the NWTPH-HCID indicated that both diesel and oil range hydrocarbons were present in the soil.

Ecology concludes that the four quarters of groundwater sampling at the four monitoring wells are representative of groundwater conditions and no further action is required at the Site.

**2. Establishment of cleanup standards.**

Ecology has determined the cleanup levels and points of compliance you established for the Site meet the substantive requirements of MTCA.

MTCA Method A CULs for unrestricted land use were used at the Site for soil and groundwater.

Standard points of compliance were used for the Site. The point of compliance for protection of groundwater was established in the soils throughout the Site. For soil cleanup levels based on human exposure via direct contact or other exposure pathways where contact with the soil is required to complete the pathway, the point of compliance was established in the soils throughout the Site from the ground surface to 15 feet below ground surface (bgs). In addition, the point of compliance for the groundwater was established throughout the Site from the uppermost level of the saturated zone extending vertically to the lowest most depth that could potentially be affected by the Site.

**3. Selection of cleanup action.**

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

Cleanup actions at the Site to date have included the excavation and off-Site disposal of diesel and oil contaminated water and soil, and the application of a remedial amendment (ORC Advanced®) prior to backfilling the open excavation.

**4. Cleanup.**

Ecology has determined the cleanup you performed meets the cleanup standards established for the Site. Cleanup work performed to date at the Site has consisted of the following:

In March 2012, following a spill of diesel fuel, an unknown amount of impacted soil was excavated from an area approximately 10 feet by 50 feet. Following the excavation and removal of contaminated soil, an enhanced bio-remediation agent (Advanced ORC-A®) was added to the open excavation prior to backfilling with clean soil.

**Listing of the Site**

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Based on this opinion, Ecology will initiate the process of removing the Site from our lists of hazardous waste sites, including:

- Hazardous Sites List.
- Confirmed and Suspected Contaminated Sites List.

That process includes public notice and opportunity to comment. Based on the comments received, Ecology will either remove the Site from the applicable lists or withdraw this opinion.

## Limitations of the Opinion

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### 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 MTCRA, 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).

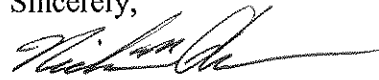
## Contact Information

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Thank you for cleaning up the Site under the Voluntary Cleanup Program (VCP). This opinion terminates the VCP Agreement governing this project (#SW1474).

For more information about the VCP and the cleanup process, please visit our web site: [www.ecy.wa.gov/programs/tcp/vcp/vcpmain.htm](http://www.ecy.wa.gov/programs/tcp/vcp/vcpmain.htm). If you have any questions about this opinion or the termination of the Agreement, please contact me by phone at (360) 407-6347 or e-mail at [nicholas.acklam@ecy.wa.gov](mailto:nicholas.acklam@ecy.wa.gov).

Sincerely,



Nicholas M. Acklam  
SWRO Toxics Cleanup Program

By certified mail [9171082133393970427391]

NA: hd

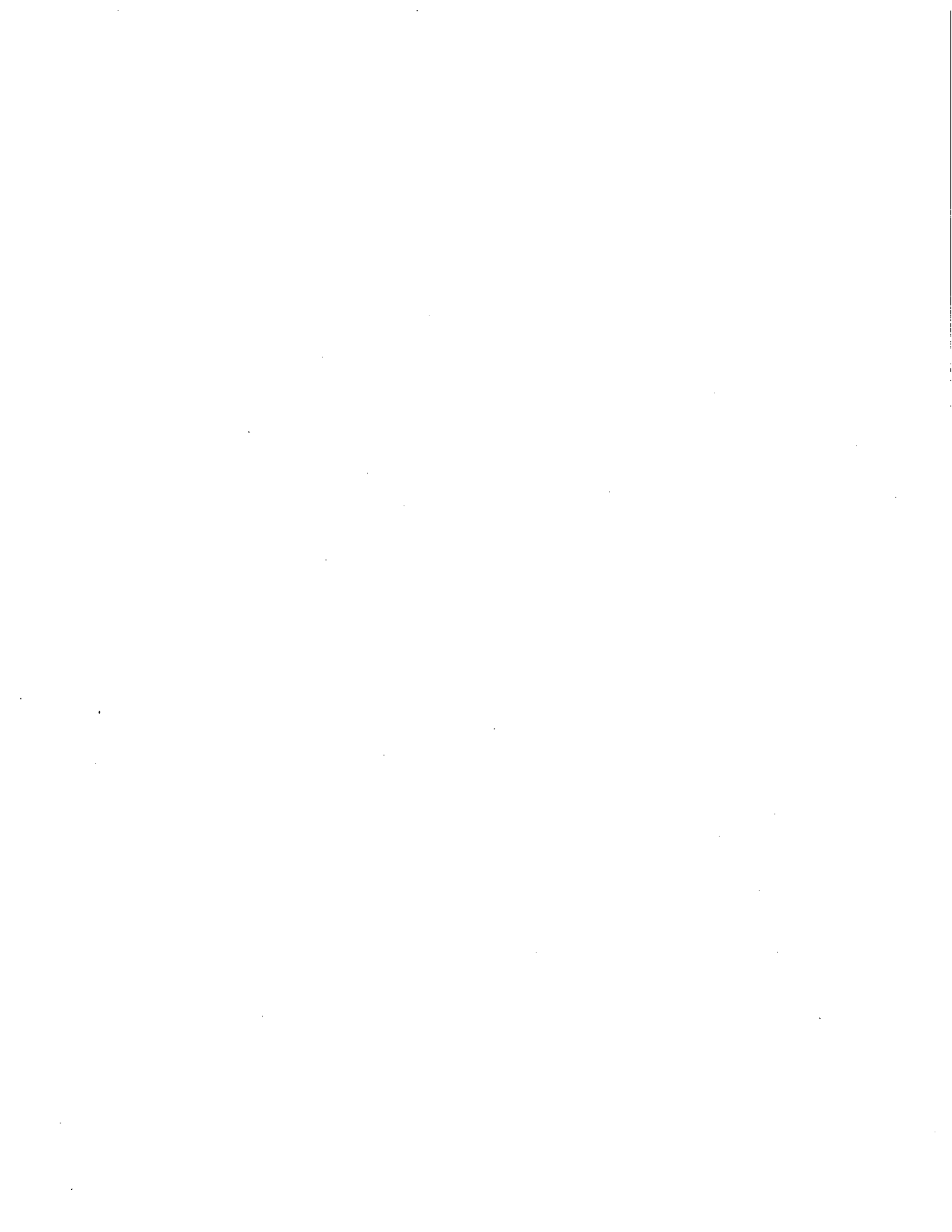
Enclosures: A – Description and Diagrams of the Site

cc: Michael Noll – Terracon Consultants, Inc.,  
Rob Healy – Port of Tacoma  
George Seifert- Progress Rail Services Corp.  
Matt Alexander – Ecology



## **Enclosure A**

### **Description and Diagrams of the Site**





## Site Description

The Site is located at 4012 SR 509 South Frontage Road in Tacoma, Washington (Pierce County Parcel No. 2001867000), which is located on a larger parent tract of land owned by the Port of Tacoma (Pierce County Parcel No. 0320021002) and leased by Progress Rail Services (*Attachment No. 1*).

In March 2012, there was a release of diesel from an auxiliary locomotive fuel tank that resulted in soil contamination between the locomotive shop and the locomotive wash pad. Following the spill, an area approximately 10 feet by 50 feet was excavated to remove accessible impacted soils (*Attachment No. 2*).

On March 7, 2012, four soil borings (DP-1 through DP-4) were advanced to the west, east, north of the wash pad, and south of the shop to evaluate the impacts to the soil and shallow groundwater (*Attachment No. 3*). Groundwater samples were collected on May 22, 2012.

Analytical results for the March 2012 soil samples collected during the installation of the soil borings indicated concentrations of diesel-range petroleum (TPH-D) above the MTCA Method A Cleanup Level (CULs) in the sample collected along the east end of the impacted area. Analytical results for the May 2012 groundwater samples collected at each soil boring indicated concentrations of TPH-D and oil-range petroleum hydrocarbons (TPH-O) above the MTCA Method A CULs (*Attachment Nos. 4 and 5*).

In January 2013, nine soil borings (B-1 through B-9) were advanced in the vicinity of the fuel spill to further delineate the lateral and vertical extents of the impacts from the spill. A total of ten soil samples and seven groundwater samples were collected for laboratory analysis (*Attachment No. 3*).

Analytical results for the January 2013 soil samples were all below laboratory detection limits for TPH-D and TPH-O. Groundwater samples collected from soil borings B-5 and B-7 had concentrations of TPH-D and TPH-O above the MTCA Method A CULs (*Attachment Nos. 4 and 5*).

On August 3, 2013 two additional soil borings (B-10 and B-11) were installed and completed as permanent groundwater monitoring wells (MW-1 and MW-2) (*Attachment No. 3*). Analytical results for soil samples collected during the installation of the two soil borings were below laboratory detection levels for TPH-D and TPH-O (*Attachment Nos. 4 and 5*).

On February 11, 2014 two additional soil borings (B-12 and B-13) were installed and completed as permanent groundwater monitoring wells (MW-3 and MW-4) (*Attachment No. 3*). Analytical results for soil samples collected during the installation of the two soil borings were below laboratory detection levels for TPH-D and TPH-O (*Attachment Nos. 4 and 5*).



Between August 2013 and November 2014, groundwater samples were collected on a quarterly basis from monitoring wells MW-1 through MW-4. Analytical results showed that all four wells for four consecutive quarters were below MTCA Method A CULs for TPH-D and TPH-O with the exception of MW-4. Analytical results for samples collected during February and May 2014 from MW-4 exceeded the MTCA Method A CUL (*Attachment Nos. 4 and 5*).

Additionally, analytical results for benzene, toluene, ethylbenzene, and xylene (BTEX) naphthalenes, and carcinogenic polycyclic aromatic hydrocarbons (cPAHs) were all below laboratory detection levels for sample dates August 14, 2014 and November 13, 2014 (*Attachment Nos. 4 and 5*).

In September 2015, Ecology issued a Further Action opinion letter requiring further characterization of the soil around several soil borings that were installed following the excavation and removal of soils impacted by the March 2012 diesel spill.

### **Site Hydrogeology**

In general, subsurface soil conditions consisted of approximately 1 to 5 feet of non-native fill material consisting of gravel with sand, silty sand, and sand overlying native sand with varying amounts of silt to maximum depths explored. Soils were generally found to be in a moist grading to saturated condition. During drilling activities groundwater was encountered at approximately 4 feet bgs. During groundwater sampling activities the groundwater level in the wells was measured between 2.4 and 2.7 feet bgs.

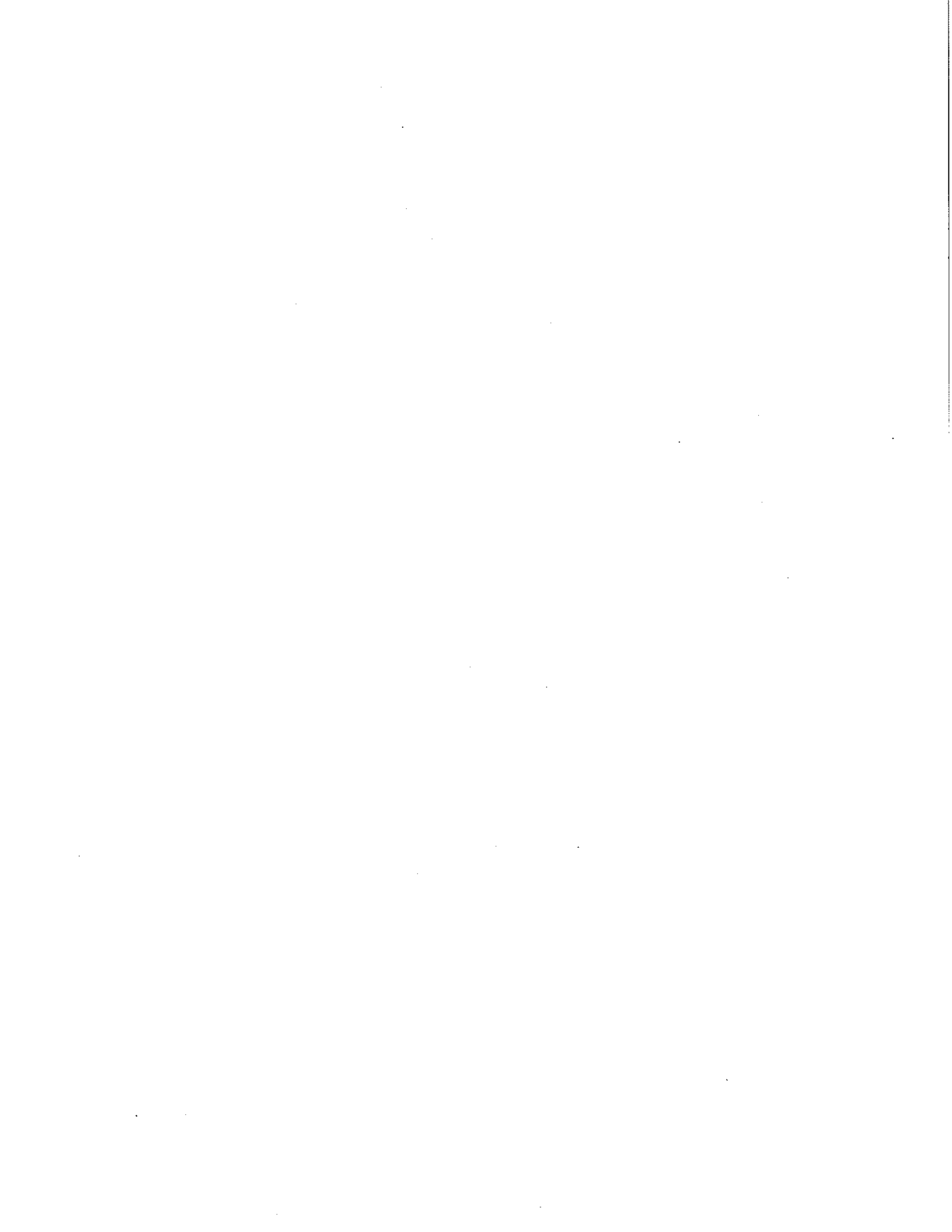
Although based on topography the groundwater gradient had been estimated to flow towards the east-northeast, based on our interpretation of the elevation data and depth to groundwater measurements, groundwater appears to flow towards the west-southwest; however, groundwater conditions can fluctuate seasonally. In addition, due to the close proximity to Commencement Bay, the site vicinity may be influenced by tidal processes (*Attachment No. 5*).

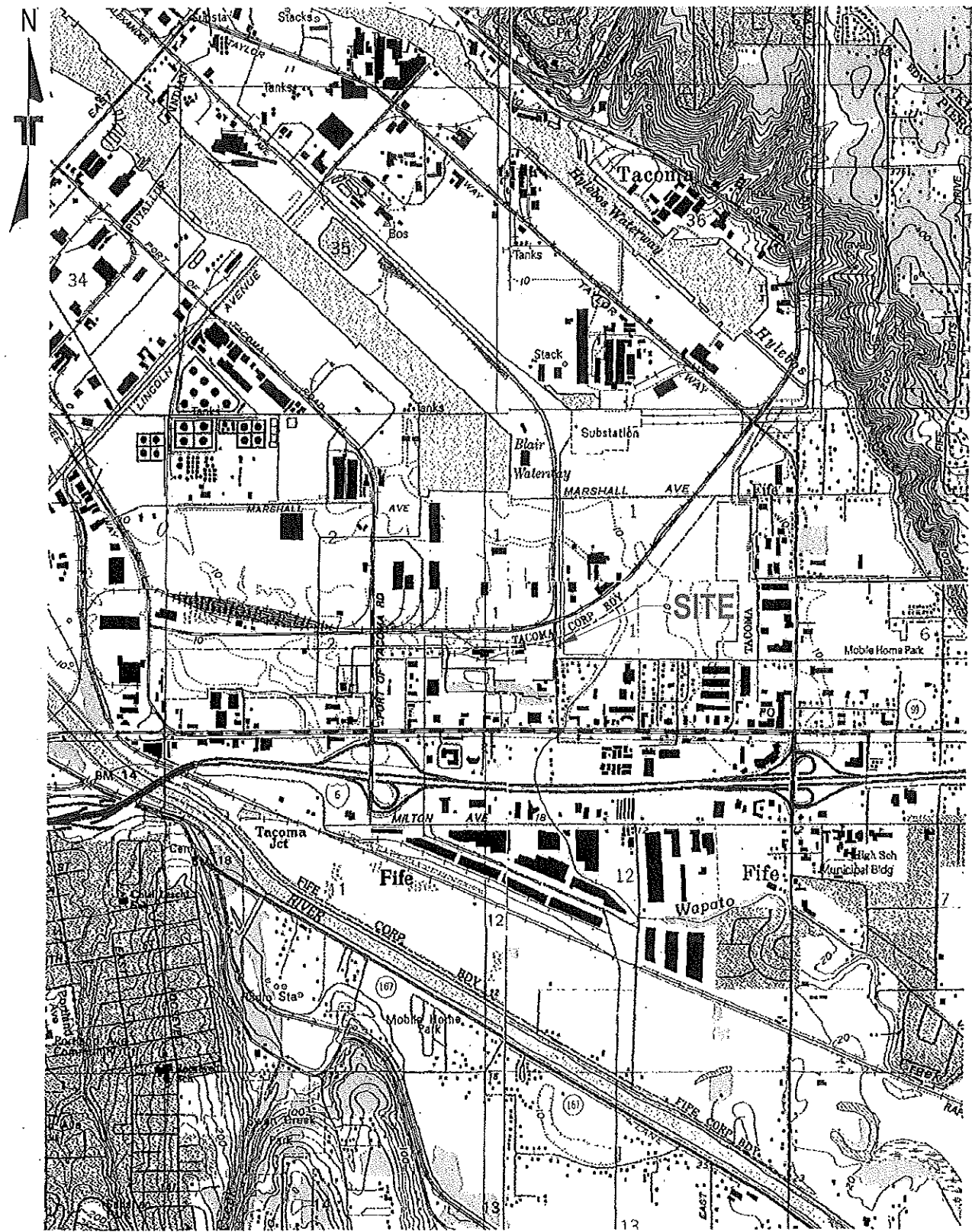


# Site Diagrams

## Attachments:

1. Site Location
2. Site Diagram
3. Site Diagram with Boring Locations
4. Summary of Soil Analytical Results
5. Summary of Groundwater Results
6. Groundwater contour map March 2016





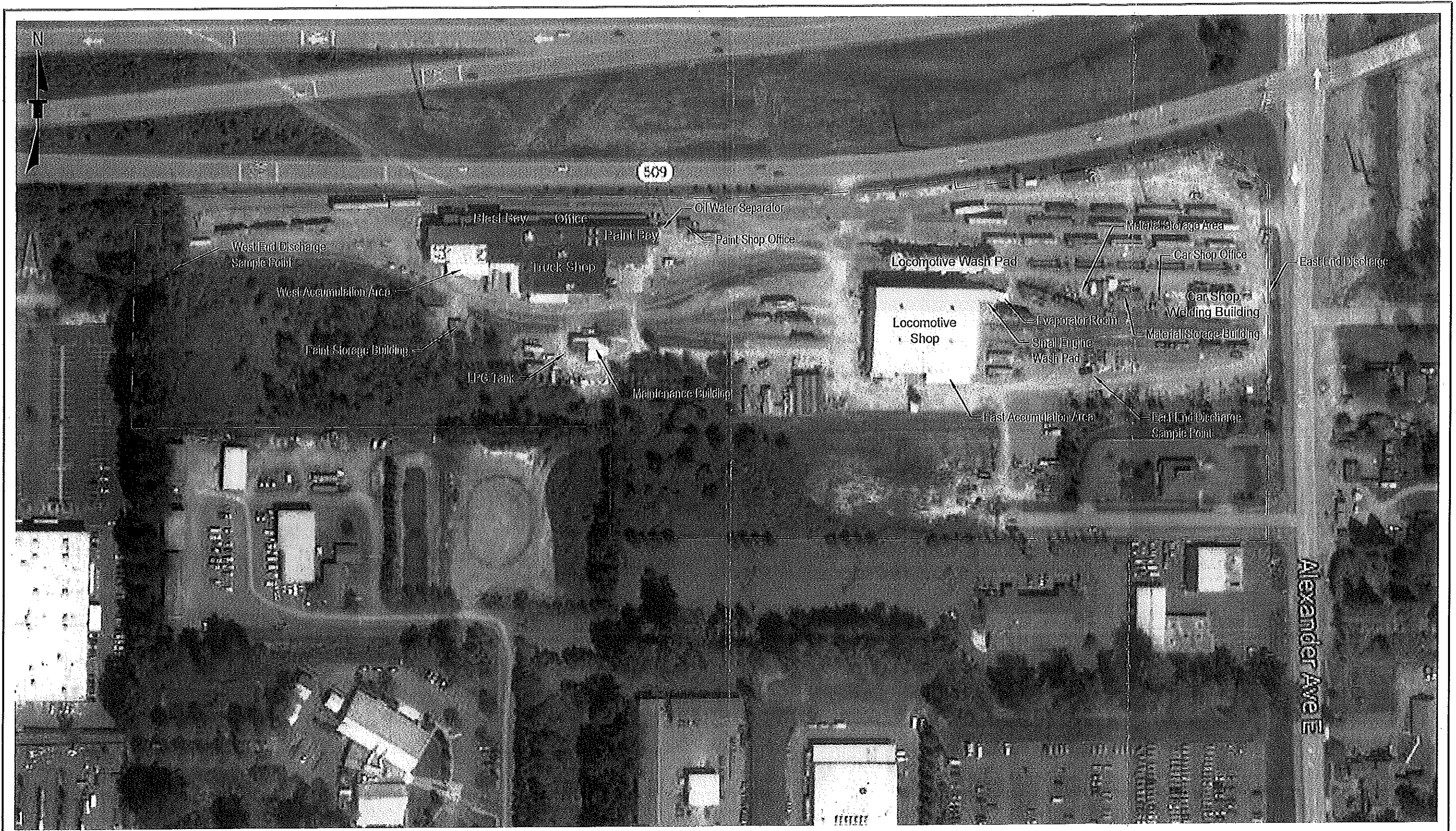
**LEGEND:**

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Approximate site boundary

USGS Topographic Map, Tacoma North, Tacoma South, Poverty Bay, and Puyallup Quadrangles, 1994

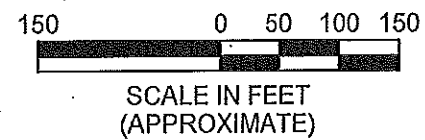
Project Mgr:	LCS	Project No.	81167031	 <b>Terracon</b> Consulting Engineers and Scientists <small>21905 64th Avenue W., Ste 100 Mountlake Terrace, WA 98043                  PH: (425) 771-3304 FAX: (425) 771-3543</small>	<b>Topographic Map</b> Progress Rail Services 4012 SR 509 South Frontage Road Tacoma, Pierce County, Washington	FIG. No.
Drawn By:	EMP	Scale:	Not to scale			1
Checked By:	LCS	File No.	81127060 Flg 1.dwg			
Approved By:	MYW	Date:	December 2012			





**LEGEND:**

APPROXIMATE SITE BOUNDARY



Project Mgr:	EAD	Project No.	81167031
Drawn By:	RMS	Scale:	AS SHOWN
Checked By:	MDN	File No.	Fig2_P2_Plan.dwg
Approved By:	MYW	Date:	September 2014

**Terracon**  
Consulting Engineers and Scientists

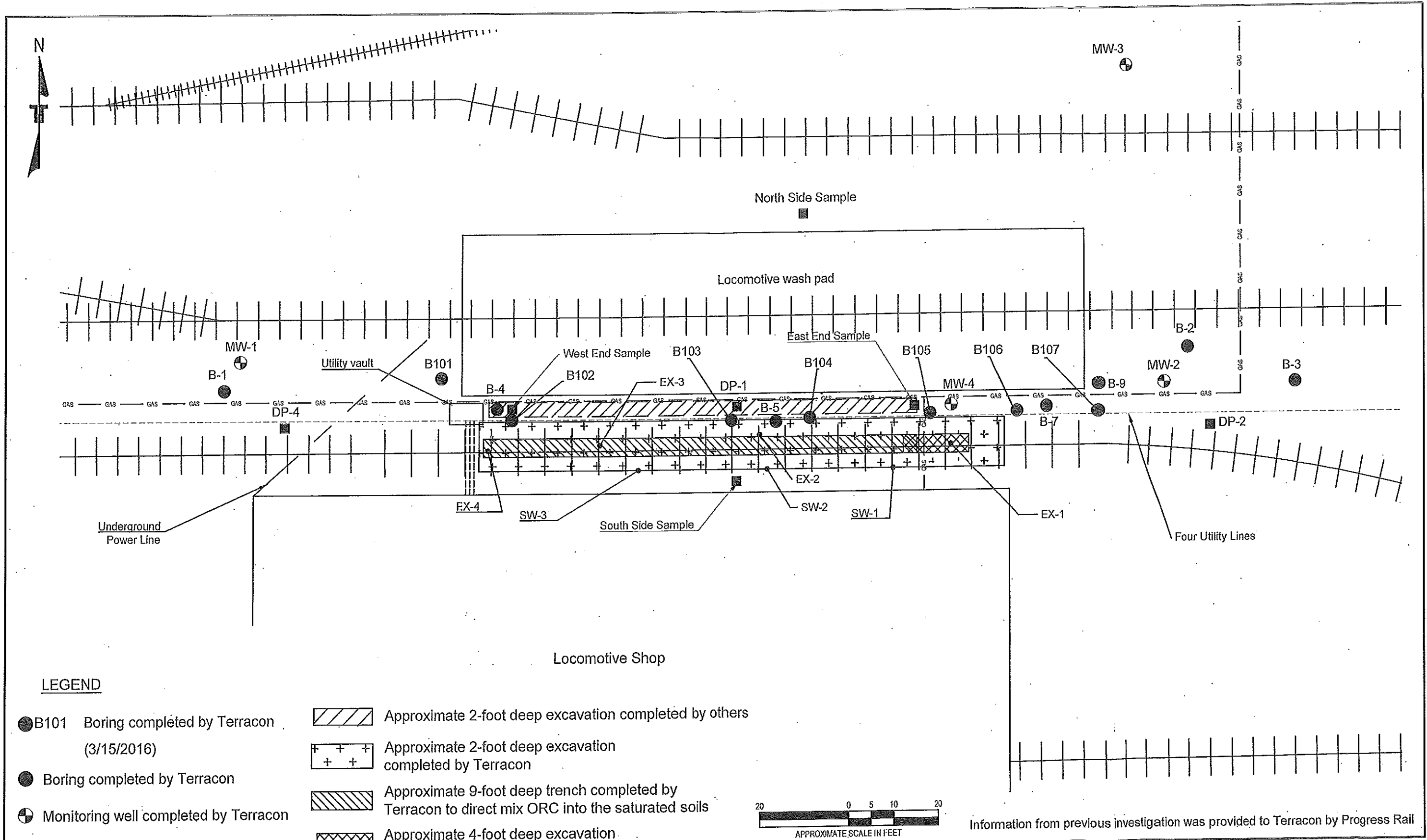
21505 64th Avenue W, Ste 100 Mountlake Terrace, WA 98043  
PH: (425) 771-3304 FAX: (206) 771-3549

**SITE DIAGRAM**

Progress Rail Services  
4012 SR 509 South Frontage Road  
Tacoma, Pierce County, Washington

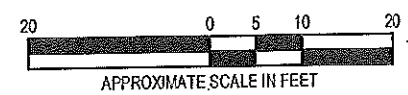
FIG. No.  
**2**





**LEGEND**

- B101 Boring completed by Terracon (3/15/2016)
- Boring completed by Terracon
- ⊕ Monitoring well completed by Terracon
- Boring completed by others
- ▨ Approximate 2-foot deep excavation completed by others
- + + + Approximate 2-foot deep excavation completed by Terracon
- ▩ Approximate 9-foot deep trench completed by Terracon to direct mix ORC into the saturated soils
- ▤ Approximate 4-foot deep excavation completed by Terracon



Information from previous investigation was provided to Terracon by Progress Rail

Project Mgr:	MDN	Project No.	81167031
Drawn By:	EAD/AAS	Scale:	As Shown
Checked By:	MDN	File No.	.dwg
Approved By:	MYW	Date:	March 2016

**Terracon**  
Consulting Engineers and Scientists  
21005 64th Avenue W, Ste 109 Mountlake Terrace, WA 98043  
PH: (425) 771-3304 FAX: (425) 771-3549

**SITE DIAGRAM WITH BORING LOCATIONS**  
Progress Rail Site  
4012 SR 509 South Frontage Road  
Tacoma, Pierce County, Washington

FIG. No.  
**3**

**TABLE 2 - SUMMARY OF SOIL ANALYTICAL RESULTS**  
 Progress Rail Spill Incident # 12-0773, 4012 SR 509 South Frontage Rd, Tacoma WA

all concentrations are in milligrams per kilogram (mg/kg)

Boring ID	Sample Number	Collected By:	Sample Date	Sample Depth (feet)	TPH			VOCs/SVOCs
					Gasoline-range	Diesel-Range	Oil-Range	
B101	B101-3'	Terracon	3/15/16	3	ND (<20)	ND (<50)	ND (<100)	NA
B102	B102-2'		3/15/16	2	ND (<20)	ND (<50)	ND (<100)	NA
B103	B103-1'		3/15/16	1	ND (<20)	120	410	ND
B104	B104-1'		3/15/16	1	ND (<20)	180	840	ND
B105	B105-2'		3/15/16	2	ND (<20)	ND (<50)	ND (<100)	NA
B106	B106-1.5'		3/15/16	1.5	ND (<20)	ND (<50)	ND (<100)	NA
B107	B107-1'		3/15/16	1	ND (<20)	ND (<50)	ND (<100)	NA
B-12	S-1		2/11/14	4.5-5.5	NA	ND (<50)	ND (<250)	NA
B-13	S-1		2/11/14	4.5-5.5	NA	ND (<50)	ND (<250)	NA
B-10	S-1		8/3/13	4.5-5.5	NA	ND (<50)	ND (<250)	NA
B-11	S-1		8/3/13	3.5-4.5	NA	ND (<50)	ND (<250)	NA
B-1	S-1		11/15/12	4.5	NA	ND (<50)	ND (<250)	NA
B-1	S-2		11/15/12	7.5	NA	ND (<50)	ND (<250)	NA
B-2	S-1		11/15/12	3.5	NA	ND (<50)	ND (<250)	NA
B-2	S-2		11/15/12	7.5	NA	ND (<50)	ND (<250)	NA
B-3	S-1		11/15/12	4	NA	ND (<50)	ND (<250)	NA
B-3	S-2		11/15/12	8	NA	ND (<50)	ND (<250)	NA
B-7	S-1		11/15/12	5.5	NA	ND (<50)	ND (<250)	NA
B-7	S-2		11/15/12	7.5	NA	ND (<50)	ND (<250)	NA
B-9	S-1		11/15/12	5.5	NA	ND (<50)	ND (<250)	NA
B-9	S-2	11/15/12	7.5	NA	ND (<50)	ND (<250)	NA	
West end Sample			3/7/12	NA	44	210	NA	
South side sample		Panhandle	3/7/12	NA <sup>c</sup>	ND<26	ND <51	NA	
East end sample			3/7/12	NA	5,500	900	NA	
North side sample			3/7/12	NA	ND <24	ND <54	NA	
<b>MTCA Method A Cleanup Level</b>								
					100	2,000	2,000	varies

Note: Concentrations reported above MDLs are in bold.  
Shaded cells are values that exceed cleanup levels.

- TPH - total petroleum hydrocarbons
- VOCs - volatile organic compounds
- SVOCS - semi-volatile organic compounds
- MTCA - Model Toxics Control Act
- ND - Not detected above MDL
- NA - Not analyzed

TABLE 3 - SUMMARY OF GROUNDWATER ANALYTICAL RESULTS

Progress Rail Spill Incident # 12-0773, 4012 SR 509 S Frontage Road, Tacoma WA

all concentrations are in micrograms per liter (ug/l)

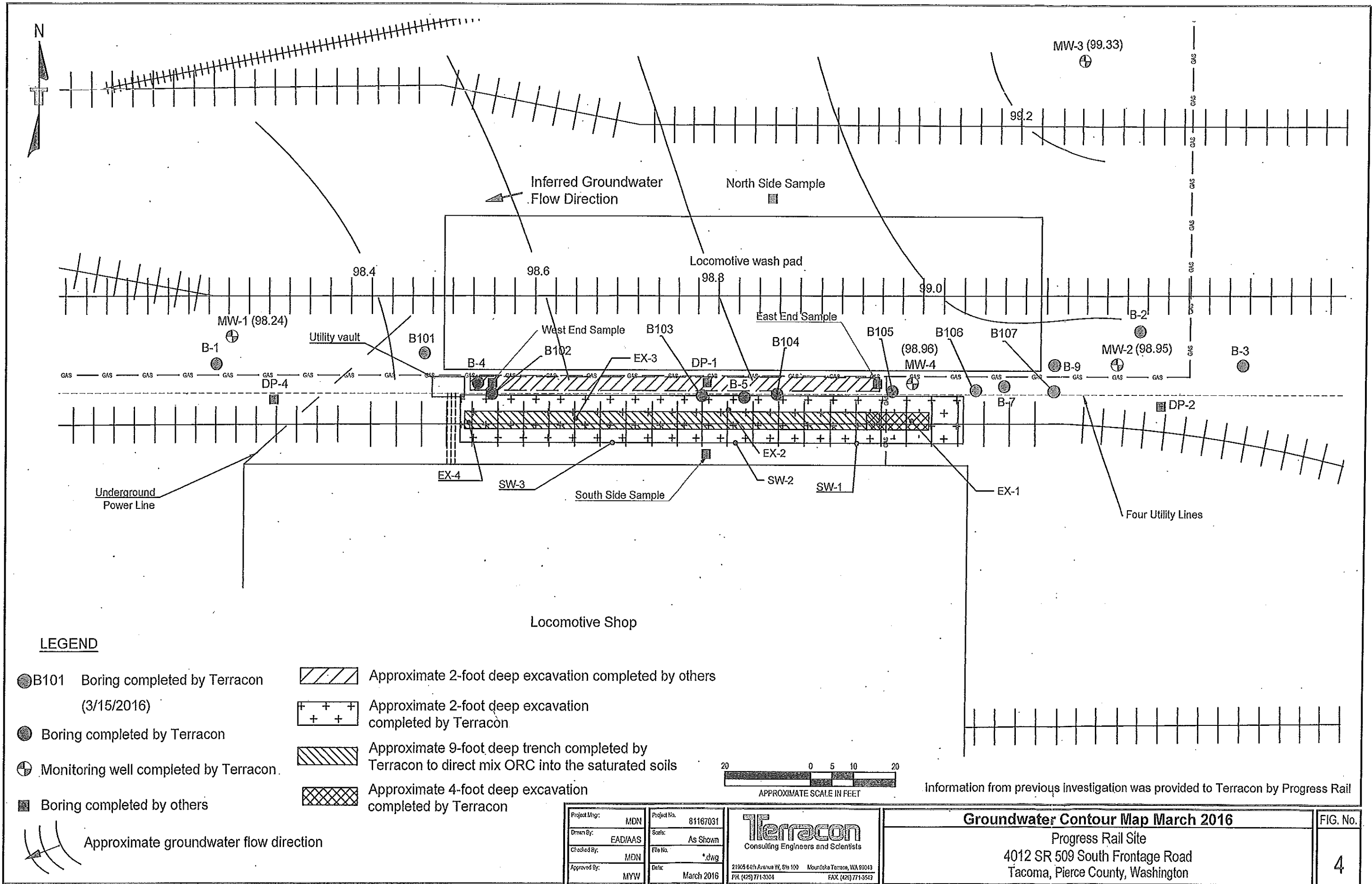
Sample	Collected By	Sample Date	TPH	
			Diesel-Range	Oil-Range
MW-1	Terracon	11/13/14	240x	ND <250
		8/14/14	120	ND <250
		5/15/14	220x	ND <250
		2/17/14	150x	ND <250
		8/16/13	62x	ND <250
MW-2		11/13/14	190x	ND <250
		8/14/14	120	ND <250
		5/15/14	270x	ND <250
		2/17/14	200x	ND <250
		8/16/13	94x	ND <250
MW-3		11/13/14	ND <50	ND <250
		8/14/14	ND <50	ND <250
		5/15/14	ND <50	ND <250
		2/17/14	74x	ND <250
MW-4		3/15/16	ND <310	ND <250
	11/13/14	300x	ND <250	
	8/14/14	250	ND <250	
	5/15/14	400x	260x	
	2/17/14	390x	410x	
B-1		11/15/12	220x	ND <250
B-2		11/15/12	140x	ND <250
B-3		11/15/12	380x	ND <250
B-4		11/15/12	330x	390x
B-5		11/15/12	5,800	9,800x
B-7		11/15/12	900x	760x
B-9		11/15/12	140x	ND <250
DP-1	Panhandle	5/22/12	2,300	1,000
DP-2		5/22/12	450	700
DP-4		5/22/12	560	1,500
MTCA Method A Cleanup Level			500	500

Note: Concentrations reported above MDLs are in bold.  
Shaded cells are values that exceed cleanup levels.

TPH - total petroleum hydrocarbons

MTCA - Model Toxics Control Act

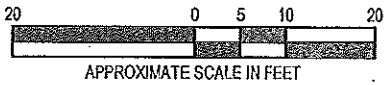
x - the sample chromatograph pattern does not resemble the fuel standard for quantitation



**LEGEND**

- B101 Boring completed by Terracon (3/15/2016)
- Boring completed by Terracon
- ⊕ Monitoring well completed by Terracon.
- Boring completed by others
- ▨ Approximate 2-foot deep excavation completed by others
- ⊕ ⊕ ⊕ Approximate 2-foot deep excavation completed by Terracon
- ▨ Approximate 9-foot deep trench completed by Terracon to direct mix ORC into the saturated soils
- ⊗ Approximate 4-foot deep excavation completed by Terracon

Approximate groundwater flow direction



Information from previous investigation was provided to Terracon by Progress Rail

Project Mgr: MDN	Project No: 81167031	<p>Consulting Engineers and Scientists</p> <p>21905 6th Avenue W, Ste 100 Mountlake Terrace, WA 98043                  PH: (425) 771-3304 FAX: (425) 771-3543</p>	<p><b>Groundwater Contour Map March 2016</b></p> <p>Progress Rail Site                  4012 SR 509 South Frontage Road                  Tacoma, Pierce County, Washington</p>	<p>FIG. No. <b>4</b></p>
Drawn By: EADIAAS	Scale: As Shown			
Checked By: MDN	File No: *.dwg			
Approved By: MYW	Date: March 2016			