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Southwest Regional Office  
Toxics Cleanup Program  
PO Box 47775  
Olympia, WA 98504-7775  
360-407-6240

### TRANSMITTAL MEMO

Date: June 12, 2006

TO: Mr. Steven Johnson  
Olympia Inn Properties LLC

RE: *Phoenix Inn*  
*SW0747*

Subject: Explanation of Timeline

**NOTE: The date on the determination letter reflects the date the decision was made and the billing process began. We do not release determination letters until payment has been received.**

Ecology Determination date: May 23, 2006

Ecology Billing Sent: May 30, 2006

Your Payment Processed: June 9, 2006

Ecology Determination letter mailed/sent: June 12, 2006



STATE OF WASHINGTON  
DEPARTMENT OF ECOLOGY

PO Box 47775 • Olympia, Washington 98504-7775 • (360) 407-6300

**CERTIFIED MAIL**

May 23, 2006

Mr. Steven Johnson  
Olympia Inn Properties LLC  
29755 SW Boones Ferry Road  
Wilsonville, OR 97070-7202

**Re: Opinion under WAC 173-340-515(5) on Proposed Cleanup Action for the following Hazardous Waste Site:**

- Name: Phoenix Inn
- Address: 415 Capitol Way N, Olympia, WA
- Facility/Site No.: 1571525
- VCP No.: SW0747

Dear Mr. Johnson:

Thank you for submitting documents regarding your proposed cleanup action for the Phoenix Inn facility (Site) for review by the Washington State Department of Ecology (Ecology) under the Voluntary Cleanup Program (VCP). Ecology appreciates your initiative in pursuing this administrative option for cleaning up hazardous waste sites under the Model Toxics Control Act (MTCA), Chapter 70.105D RCW.

This letter constitutes an advisory opinion regarding whether your proposed cleanup action is likely to be sufficient to meet the substantive requirements of MTCA and its implementing regulations, Chapter 70.105D RCW and Chapter 173-340 WAC. Ecology is providing this advisory opinion under the specific authority of RCW 70.105D.030(1)(i) and WAC 173-340-515(5).

This opinion does not resolve a person's liability to the state under MTCA or protect a person from contribution claims by third parties for matters addressed by the opinion. The state does not have the authority to settle with any person potentially liable under MTCA except in accordance with RCW 70.105D.040(4). The opinion is advisory only and not binding on Ecology.



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Ecology's Toxics Cleanup Program has reviewed the following information regarding your proposed cleanup action and, as applicable, any remedial actions previously conducted at the Site:

1. Scope of Work for Proposed Remedial Corrective Actions, Remedial Corrective Actions Monitoring, and Groundwater Monitoring Project for Phoenix Inn Site, Olympia, Washington, dated March 24, 2006 by Stemen Environmental, Inc.
2. Limited Phase II Environmental Site Assessment Report, The Phoenix Inn Property, 415 Capitol Way N., Olympia, Washington, dated March 26, 2006 by Stemen Environmental, Inc.
3. Groundwater Gradients, Phoenix Inn Property, 415 Capitol Way North, Olympia, Washington, dated March 22, 2006 by KTA Associates, Inc.

The documents listed above will be kept in the Central Files of the Southwest Regional Office of Ecology (SWRO) for review by appointment only. Appointments can be made by calling the SWRO resource contact at (360) 407-6365.

The Site is defined by the extent of contamination caused by the following release(s):

- Documented release of gasoline-range petroleum hydrocarbons (TPH-G), diesel-range petroleum hydrocarbons (TPH-D), and benzene, toluene, ethylbenzene, and xylene (BTEX) compounds in soil;
- Documented release of TPH-G, TPH-D, and BTEX compounds in groundwater.

The Site is more particularly described in Enclosure A to this letter, which includes a detailed Site diagram. The description of the Site is based solely on the information contained in the documents listed above.

Based on a review of your proposed cleanup action and supporting documentation listed above, **Ecology has determined that the proposed cleanup action is not likely to be sufficient to meet the substantive requirements contained in MTCA and its implementing regulations, Chapter 70.105D RCW and Chapter 173-340 WAC, for characterizing and addressing the contamination at the Site.**

Based upon my review of the Cleanup Action Plan, my comments are as follows:

- As part of the Phase II, concentrations of TPH-G, TPH-D, and benzene were detected in PMW-2 in excess of MTCA Method A cleanup levels. None of the other wells in the immediate vicinity of PMW-2 were sampled, only those around the perimeter of the site, which were non-detect for the contaminants analyzed for. In addition, aside from PMW-2, none of the other wells in the vicinity of PMW-2 are proposed to be sampled as part of quarterly monitoring. Only those wells around the perimeter of the site were included. If those perimeter wells continue to be non-detect for the contaminants analyzed for, that data doesn't seem like it would be useful in determining whether the in-situ bioremediation is actually working. It only illustrates that contaminants are not migrating off site. Based on this information, Ecology does not feel that the proposed cleanup remedy can be determined to be adequate based on the performance of the remedy in one well (PMW-2). As a result, Ecology suggests that all of the wells on the southwestern portion of the site be sampled at least once to determine the extent of the plume beneath the site. Only then can it be determined which wells make sense to sample as part of the quarterly monitoring to determine whether the in-situ bioremediation is an adequate remedy.
- Based on a review of the above-listed documentation, it does not appear that soil and groundwater samples were analyzed for the full suite of constituents listed in MTCA Table 830-1 for Gasoline Range Organics, Diesel Range Organics, and Heavy Oils. Based on the historical use of the site and the surrounding area as former bulk fuel storage facilities, and on the concentrations of contaminants detected beneath the site, it is possible that other contaminants that have not been analyzed for to date could be present in on-site soil and/or groundwater. In an effort to better characterize groundwater contamination beneath the site, groundwater samples should be collected from selected monitoring well locations on site (including PMW-2) and analyzed for the constituents identified in MTCA Table 830-1 for Gasoline-Range Organics, Diesel Range Organics, and Heavy Oils, including analyses for methyl tert-butyl ether (MTBE), 1,2-dichloroethane (EDC), 1,2-dibromoethane (EDB), total lead, and carcinogenic polycyclic aromatic hydrocarbons (cPAHs), which doesn't appear to have been done to date. If these contaminants are detected in the monitoring wells, their presence in on-site soil will need to be determined.
- Ecology requires that at least four rounds of quarterly groundwater sampling be conducted showing concentrations of contaminants below Method A MTCA cleanup levels to meet the substantive requirements of MTCA. The reason for this is to determine any seasonal variations in the contaminant concentrations, so that Ecology can determine whether the implemented remedy is permanent.

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- In accordance with WAC 173-340-840(5) and Ecology Toxics Cleanup Program Policy 840 (Data Submittal Requirements), data generated for Independent Remedial Actions shall be submitted in both a written and electronic format. For additional information regarding electronic format requirements, see the website <http://www.ecy.wa.gov/eim>. Please ensure that data generated during on site activities is submitted pursuant to this policy.

Please also note that this opinion is based solely on the information contained in the documents listed above. Therefore, if any of the information contained in those documents is materially false or misleading, then this opinion will automatically be rendered null and void.

The state, Ecology, and its officers and employees make no guarantees or assurances by providing this opinion, and no cause of action against the state, Ecology, its officers or employees may arise from any act or omission in providing this opinion.

Again, Ecology appreciates your initiative in conducting independent remedial action and requesting technical consultation under the VCP. As the cleanup of the Site progresses, you may request additional consultative services under the VCP, including assistance in identifying applicable regulatory requirements and opinions regarding whether remedial actions proposed for or conducted at the Site meet those requirements.

If you have any questions regarding this opinion, please contact me at (360) 407-6347.

Sincerely,



Scott Rose  
SWRO Toxics Cleanup Program

SR/ksc:Phoenix Inn Opinion on Proposed Cleanup Action

Enclosures: Site Summary, Site Location Map, Site Diagram

Cc: Paul Stemen, Stemen Environmental, Inc.  
Colin C. O'Brien, Sidley Austin LLP  
Bob Warren, Ecology  
Carol Johnston, Ecology  
Chuck Cline, Ecology

## Enclosure A

### Site Description

The Phoenix Inn site is located at 415 Capitol Way N in Olympia, Thurston County, Washington. The 1.38-acre parcel is currently occupied by the Phoenix Inn hotel. The two-story hotel building, constructed on site in 1999, occupies the eastern portion of the parcel and the hotel's asphalt-paved parking lot occupies the western portion. The site is bordered to the north by A Avenue, to the east by Capitol Way N, to the south by Thurston Avenue, and to the west by Columbia Street NW. The site is located in an area that was formerly a marine intertidal zone, until filling for commercial purposes occurred in the late 1800s/early 1900s.

Historically, bulk fuel storage facilities were operated on the properties located directly southwest and north of the site. Available information documents the release of petroleum products to the soil and/or groundwater beneath these properties. A commercial office building is currently located on the northerly property, while a public park occupies the southwesterly property.

Available information indicated that the site has historically been occupied by a bulk fuel storage facility, a furniture store, a variety store, a marine sales/service/repair facility, a storage warehouse, a vehicle fueling station, and the Farmers Market. Underground and aboveground storage tanks (USTs and ASTs) were used in conjunction with the operations of some of the former occupants of the site.

Soils underlying the site consist of marine fill deposits of fine-grained sand, clay, and organic silt containing seashells at certain depths. The source of these fill materials are likely, at least in part, dredged sediments from Budd Inlet.

The depth to groundwater on site is between 4 and 7 feet below ground surface (bgs). A groundwater elevation survey with respect to tidal fluctuations was conducted on site in March 2006. Groundwater measurements were collected at two separate times in one day over the course of a 15.5-foot tide. The results of the study indicated that groundwater flows to the northeast across a majority of the site, with an anomaly in the southwest corner that appeared to direct groundwater easterly and possibly southerly. The evaluation attributed the anomaly to development filling and regrading, and indicated that it was possible that it could be the result of a preferential pathway such as utility pipe bedding in the fill. Tidal influence did not reverse the groundwater flow direction on site; however, it did influence groundwater elevations in the southwest corner of the site sufficiently to reduce the anomaly in that area. Under the influence of a low tide, groundwater flow in the southwest portion of the site appeared to be to the east, with a negligible southerly component.

### Soil Contamination

In January 2006, 11 soil borings (S-1 through S-11) were advanced throughout the parking lot on the western portion of the site. One to two soil samples were collected from each soil boring and submitted for laboratory analysis for gasoline-range petroleum hydrocarbons by Ecology Method NWTPH-Gx,

diesel- and heavy oil- range petroleum hydrocarbons by Ecology Method NWTPH-DX/Extended, and benzene, toluene, ethylbenzene, and xylene (BTEX) compounds by EPA Method 8021B.

Analytical results indicated the presence of BTEX compounds and petroleum hydrocarbons in excess of their respective Model Toxics Control Act (MTCA) Method A cleanup levels. Benzene concentrations ranged from 0.08 milligrams per kilogram (mg/kg) in S-8 to 17 mg/kg in S-6, which exceeds its cleanup level of 0.03 mg/kg. Toluene was detected at 12 mg/kg in S-6 and 17 mg/kg in S-7, which exceeds its cleanup level of 7 mg/kg. Ethylbenzene concentrations ranged from 16 mg/kg in S-6 (8 feet bgs) to 55 mg/kg in S-6 (11 feet bgs), which exceeds its cleanup level of 6 mg/kg. Total xylenes were detected at 20 mg/kg in S-6 and 35 mg/kg in S-7, which exceeds its cleanup level of 9 mg/kg. Gasoline-range petroleum hydrocarbons ranged from 40 mg/kg in S-8 to 2,500 mg/kg in S-6, which exceeds its cleanup level of 30 mg/kg. Diesel-range petroleum hydrocarbons ranged from 2,300 mg/kg in S-6 to 9,700 mg/kg in S-11, which exceeds its cleanup level of 2,000 mg/kg.

### **Groundwater Contamination**

In January 2006, during the advancement of the soil borings, grab groundwater samples were collected from selected boring locations (all borings, except S-7 and S-11) and submitted for laboratory analysis for gasoline-range petroleum hydrocarbons by Ecology Method NWTPH-Gx, diesel- and heavy oil- range petroleum hydrocarbons by Ecology Method NWTPH-DX/Extended, and BTEX compounds by EPA Method 8021B. Analytical results of the sample collected from S-6 indicated the presence of benzene [250 micrograms per liter ( $\mu\text{g/L}$ )], ethylbenzene (830  $\mu\text{g/L}$ ), gasoline-range petroleum hydrocarbons (19,000  $\mu\text{g/L}$ ), and diesel-range petroleum hydrocarbons (18,000  $\mu\text{g/L}$ ), which exceeds their respective MTCA Method A cleanup levels of 5  $\mu\text{g/L}$ , 700  $\mu\text{g/L}$ , 800  $\mu\text{g/L}$ , and 500  $\mu\text{g/L}$ . Diesel-range petroleum hydrocarbons were also detected in excess of its cleanup level in S-10 at 42,000  $\mu\text{g/L}$ .

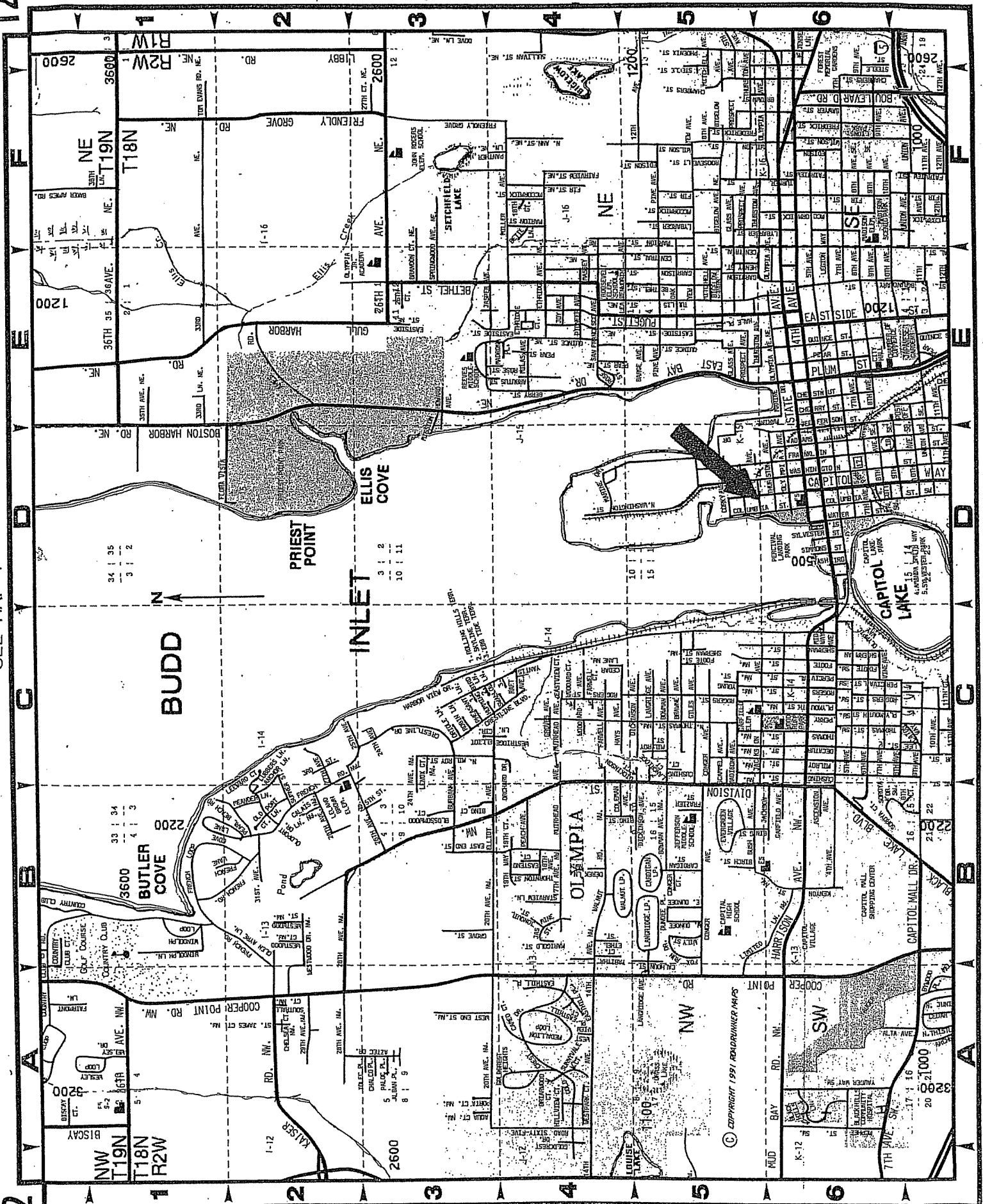
Between January and March 2006, 18 monitoring wells/microbe injection wells (PMW-1 through PMW-18) were installed on site and along public right-of-ways located adjacent to the site boundaries. Groundwater samples were collected from selected newly installed monitoring wells and from selected existing monitoring wells installed as part of previous investigations. The wells selected for sampling were predominantly located along the site boundary on all sides, except for PMW-2, which was located in the area of the highest detected petroleum contaminant concentrations. The groundwater samples were submitted for laboratory analysis for gasoline-range petroleum hydrocarbons by Ecology Method NWTPH-Gx, diesel- and heavy oil- range petroleum hydrocarbons by Ecology Method NWTPH-DX/Extended, and BTEX compounds by EPA Method 8021B. Analytical results of the sample collected from PMW-2 indicated the presence of benzene (15  $\mu\text{g/L}$ ), gasoline-range petroleum hydrocarbons (3,800  $\mu\text{g/L}$ ), and diesel-range petroleum hydrocarbons (3,000  $\mu\text{g/L}$ ), which exceeds their respective MTCA Method A cleanup levels of 5  $\mu\text{g/L}$ , 800  $\mu\text{g/L}$ , and 500  $\mu\text{g/L}$ . No other contaminants were detected in excess of MTCA Method A cleanup levels in any of the other groundwater samples.

### **Cleanup Activities To Date**

No cleanup activities are known to have been conducted to date for this site. The consultant has proposed to use in-situ bioremediation technologies to address the petroleum impacted soil and groundwater. This

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remedy is to include the introduction of a minimum of 200 gallons of microbes to the adversely impacted media on selected portions of the site on a bi-monthly basis via the recently installed monitoring wells/injection wells. Nutrients will be supplied to the microbes on a regular basis. Furthermore, approximately 2,000 gallons of oxygen-releasing solution will be introduced on a quarterly basis via the on-site injection wells. The solution will be introduced in small quantities throughout the 3-month period. Progress screening soil and groundwater samples are proposed to be collected twice per year, and the results will be presented in interim remediation project progress reports to be submitted to Ecology.



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E: =401318.82  
EL: =10.46

MW-1  
N: =634603.16  
E: =401420.55  
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MW-2  
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COLUMBIA ST.

"A" AVE.

CAPITOL WAY

PHOENIX INN

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EL: =11.37

PMW-3  
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PMW-15

THURSTON AVE.

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PMW-13



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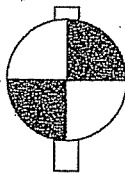
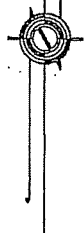
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LEGEND

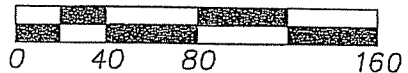
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-  MONITOR WELL



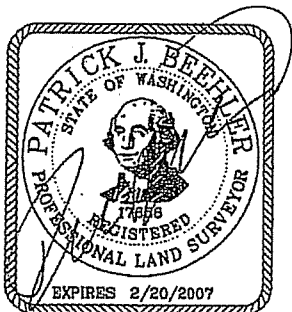
VERTICAL DATUM  
MEAN SEA LEVEL (MSL)  
EL. =10.63

FOUND CASSED MONUMENT, 6" DIA.  
CONCRETE MONUMENT WITH LEAD AND  
SCREW AT THE INTERSECTION OF  
COLUMBIA ST. AND THURSTON AVE.  
BENCH MARK NO. 180

SCALE: 1"=80 FEET



BASIS OF BEARING:  
PER CITY OF OLYMPIA HELD N04°05'06"W  
BETWEEN FOUND CASE MONUMENTS ON  
COLUMBIA STREET AS SHOWN



3-1A-2006

Office: OLYMPIA | System: WHP-OLY-3C7KCS91 | User: JIJAZEE | Time: 03/14/2006 13:33:50

DESIGNED BY:	JMM	CHECKED BY:	PJB		
DRAWN BY:	JMM	APPROVED BY:	PJB		
LAST EDIT:		PLOT DATE:	03/14/06		
DATE	BY	REV#	REVISION	CK'D	APPR.
3/14/06	JHL	1	ADDITIONAL WELLS		



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STEMEN ENVIRONMENTAL  
MONITOR WELL LOCATION/ELEVATIONS

OLYMPIA	WASHINGTON
SCALE: 1"=80'	PROJECT NO. 034507
DRAWING FILE NAME: 34507-SURV-SB01	1 SHEET 1