



STATE OF WASHINGTON
DEPARTMENT OF ECOLOGY

15 W Yakima Ave, Ste 200 • Yakima, WA 98902-3452 • (509) 575-2490

February 20, 2015

Phil Pinard, Planning & Construction Manager
City of Richland, Parks and Recreation
PO Box 190
Richland, WA 99352

Re: Further Action at the following Site:

Site Name: Columbia Park Marina
Site Address: 1776 Columbia Park Trail, Richland
Facility/Site No.: 84244226
VCP Project No.: CE0396

Dear Mr. Pinard:

The Washington State Department of Ecology (Ecology) received your request for an opinion on your independent cleanup of the Columbia Park Marina 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 release:

- Petroleum hydrocarbons into both soil and groundwater.

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



Basis for the Opinion

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

1. White Shield, Inc., 1994, *Lust Closure/ Interim Cleanup Report, The Boat Shop, WSDOE Site #009266, Richland, WA*, June 1994.
2. WA Dept. of Ecology, 2000, *Voluntary Cleanup Review, The Boat Shop, 1238 Columbia Drive, Richland, WA*, May 2000.
3. WA Dept. of Ecology, 2006, *Site File Review – The Boat Shop Marina, Richland, WA*, September 2006.
4. WA Dept. of Ecology, 2010, *Site Hazard Assessment – Columbia Park Marina, Ecology Facility/Site ID #84244226, Cleanup site ID #6750*, August 2010.
5. Shannon & Wilson, 2014, *Remedial Investigation, Columbia Park West Marina, Ecology Site 84244226, Richland, Washington*, April 2014.
6. Shannon & Wilson, 2014, *Groundwater Monitoring, Columbia Park West Marina, Ecology Site 84244226, Richland, Washington*, November 2014.

Those documents are kept at the Central Regional Office (CRO) of Ecology for review by appointment only. You can make an appointment by calling the CRO resource contact, Jackie Cameron, at 509-575-2027.

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. The Site is described above and in **Enclosure A**.

- a. In 1994, two, 1,000-gallon Underground Storage Tanks (USTs) were removed from the Columbia Park Marina. The USTs stored gasoline from the late 1960s until the late 1980s when they were decommissioned in favor of new above ground storage tanks (ASTs).
 - i. Soil samples were collected from the sidewalls and base of the tank excavation at the time of the removal. The samples were analyzed for Gasoline Range Petroleum Hydrocarbons (GRPH), Benzene, Toluene, Ethylbenzene, and Xylenes (BTEX). The

sample collected from base exceeded the Model Toxics Control Act (MTCA) Method A cleanup levels.

- ii. A groundwater sample was collected from the tank excavation and analyzed for GRPH, BTEX, and lead (Pb). All analytes were reported at concentrations exceeding MTCA Method A cleanup levels.
 - iii. A water aeration system was operated in the tank basin for approximately a week post UST removal. Water was pumped from the excavation and allowed to recharge before resampling. Approximately seven cubic yards of soil were over-excavated from the base of the tank basin. Both soil and groundwater were resampled and analyzed for GRPH and BTEX only. No samples exceeding cleanup levels were reported.
- b. In 2000, Ecology provided an opinion on sampling and analyses described in the Leaking Underground Storage Tank (LUST) Closure/Interim Cleanup Report prepared by White Shield, Inc. Ecology determined the characterization was not sufficient to define the nature and extent of contamination at the Site. The installation of at least three groundwater monitoring wells was recommended.
 - c. In 2014, a remedial investigation was performed. The investigation consisted of the installation of three monitoring wells, soil sampling during well installation, and two groundwater sampling events seven months apart (1st and 3rd Quarters). All samples collected were analyzed for GRPH, BTEX, and lead.
 - i. No soil or groundwater sample collected had concentrations above the lab reporting limits for GRPH or BTEX. One groundwater sample collected in the first event had a Pb concentration exceeding the cleanup level, but this was equated to turbidity resulting from the sampling method (bailers). The consultant used low-flow sampling procedures during the second event and all analytes were below lab reporting limits for all samples.
 - d. To date, Ecology has not been provided analytical results as for fuel additives and blending compounds as required under MTCA Table 830-1: Required Testing for Petroleum Releases. The required analytes are: Dibromoethane, 1-2 (EDB); Dichloroethane, 1-2 (EDC); Methyl Tertiary-Butyl Ether (MTBE), Tertiary-Butyl Alcohol (TBA), Tertiary-Amyl Methyl Ether (TAME), and Ethyl Tertiary-Butyl Ether (ETBE).

The cleanup performed has not yet achieved cleanup standards at the Site. The following actions are necessary to achieve compliance with cleanup standards:

- Groundwater samples should be collected from all monitoring wells for four consecutive quarters.
- Groundwater samples should be analyzed for GRPH, BTEX, and Pb for all four quarters.

- Groundwater samples should be analyzed for fuel additives and blending compounds (EDB, EDC, MTBE, TBA, TAME, and ETBE) for at least one quarter.
- Additional monitoring and/or remedial actions may be necessary if groundwater results exceeded cleanup levels.
- All environmental data must be submitted to Ecology's EIM database before a final opinion letter can be issued for the Site.
- A Terrestrial Ecological Evaluation (TEE) Form must be submitted before a final opinion letter can be issued for the Site.

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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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 (509) 454-7839 or e-mail at jeli461@ecy.wa.gov.

Sincerely,



Jennifer Lind
CRO Toxics Cleanup Program

Enclosures: A. Description and Diagrams of the Site

cc:

Amy Ford

Mr. Lynne Koehler

Joe Schiessl, Director, City of Richland - Parks and Recreation Department

Paul Shampine, Realty Specialist

Damian Walter, Environmental Compliance Coordinator

Dolores Mitchell, VCP Financial Manager

Enclosure A

Description and Diagrams of the Site

Site Description

- The Site is located within the larger Benton County Assessor's Parcel Number (APN) 129992000001000.

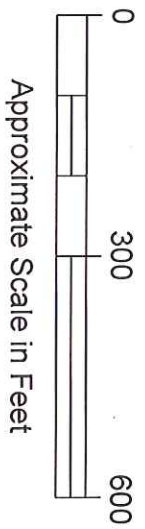
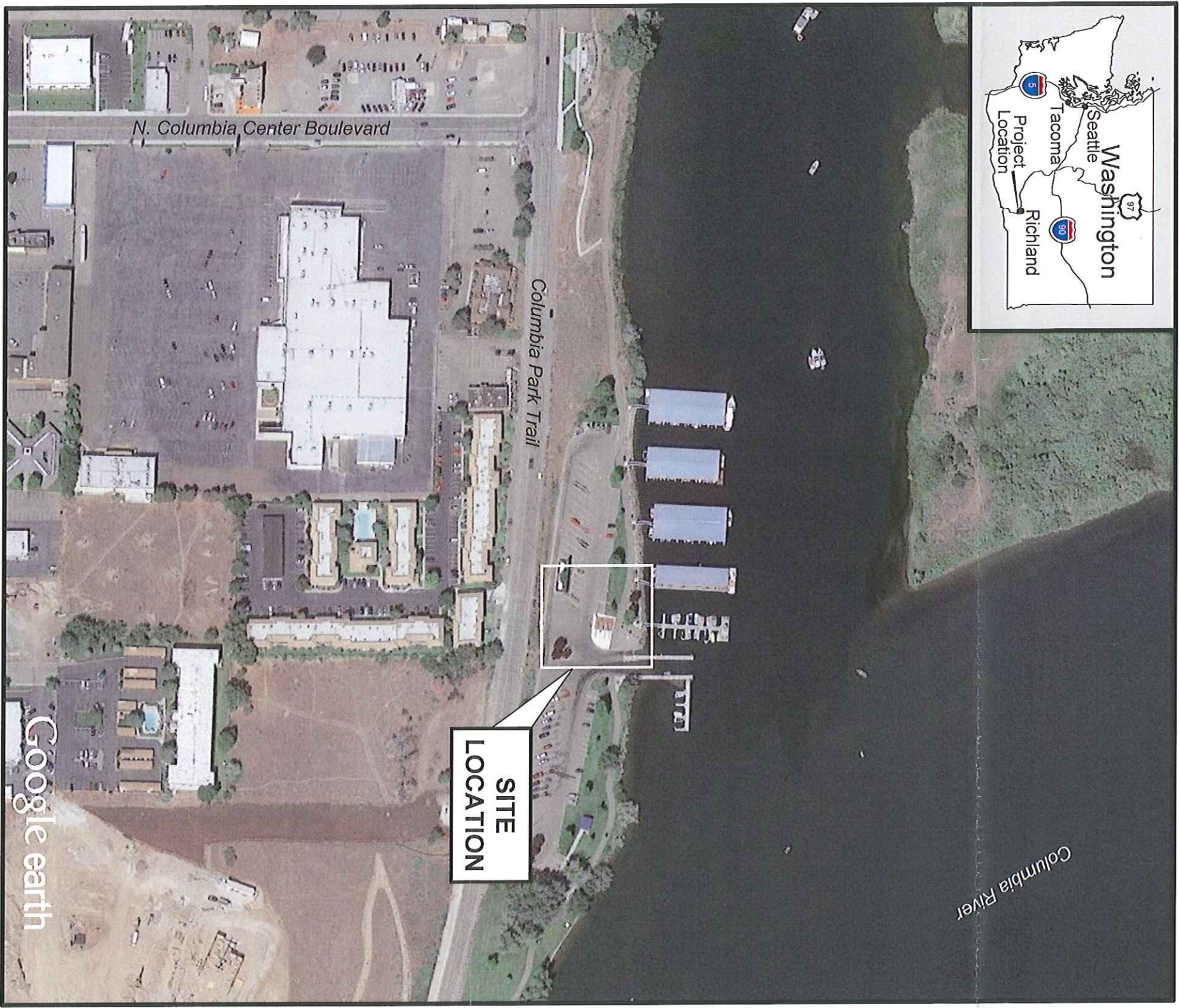
- The legal description of the greater parcel is:

SECTION 29 TOWNSHIP 9 NORTH RANGE 29: ALL, EXCEPT SUBSEQUENT DESCRIPTIONS.
CERTIFICATE OF GROUND WATER RIGHT IN GOVERNMENT LOT 6, 8-6-68.(COLUMBIA PARK)
SUBJECT TO EASEMENTS AND RESTRICTIONS OF RECORD 8.

- The source of the release at the Site is was from two, 1,000 gallon USTs affiliated with the Columbia Park Marina located at 1776 Columbia Park Trail, Richland, WA.
- The hazardous substances released at the Site were petroleum products. Specifically, gasoline and constituents, BTEX and lead.
- The media affected by the releases at the Site was soil within the tank basin, and likely groundwater confined to the tank basin (pending four quarters of monitoring).
- The horizontal and vertical extent of soil contamination located at the Site was confined to the limits of the tank excavation. The final extent of the tank excavation was approximately 23 by 10 feet length and width, and 9 feet at the base.
- Groundwater sampled from monitoring wells for two quarters appears to be clean, with the exception of one turbid sample with a concentration of Pb above the cleanup level.
- Potential exposure pathways at the Site include the discharge of groundwater to surface waters, and contact by persons and aquatic organisms with contaminated sediments and surface water. The exposure pathways will be re-evaluated based on additional data.
- No human or ecological receptors are known to be affected by the release at the Site, but will be confirmed with the TEE.
- Groundwater at the Site is present between 6 to 9.7 feet below ground surface based on two quarters of groundwater monitoring. In February and September 2014, the measured elevations show a hydraulic gradient toward the north and the river. The hydraulic gradient in March is essentially flat across the Site and likely represents a rising river-water recharge scenario.

(White Shield, Inc., 1994; Shannon & Wilson, 2014; Benton County, 2015)

Site Diagrams



NOTE

Map adapted from aerial imagery provided by Google Earth Pro, reproduced by permission granted by Google Earth™ Mapping Service.

Columbia Park West Marina
Richland, Washington

SITE LOCATION MAP

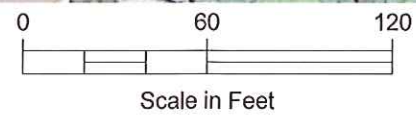
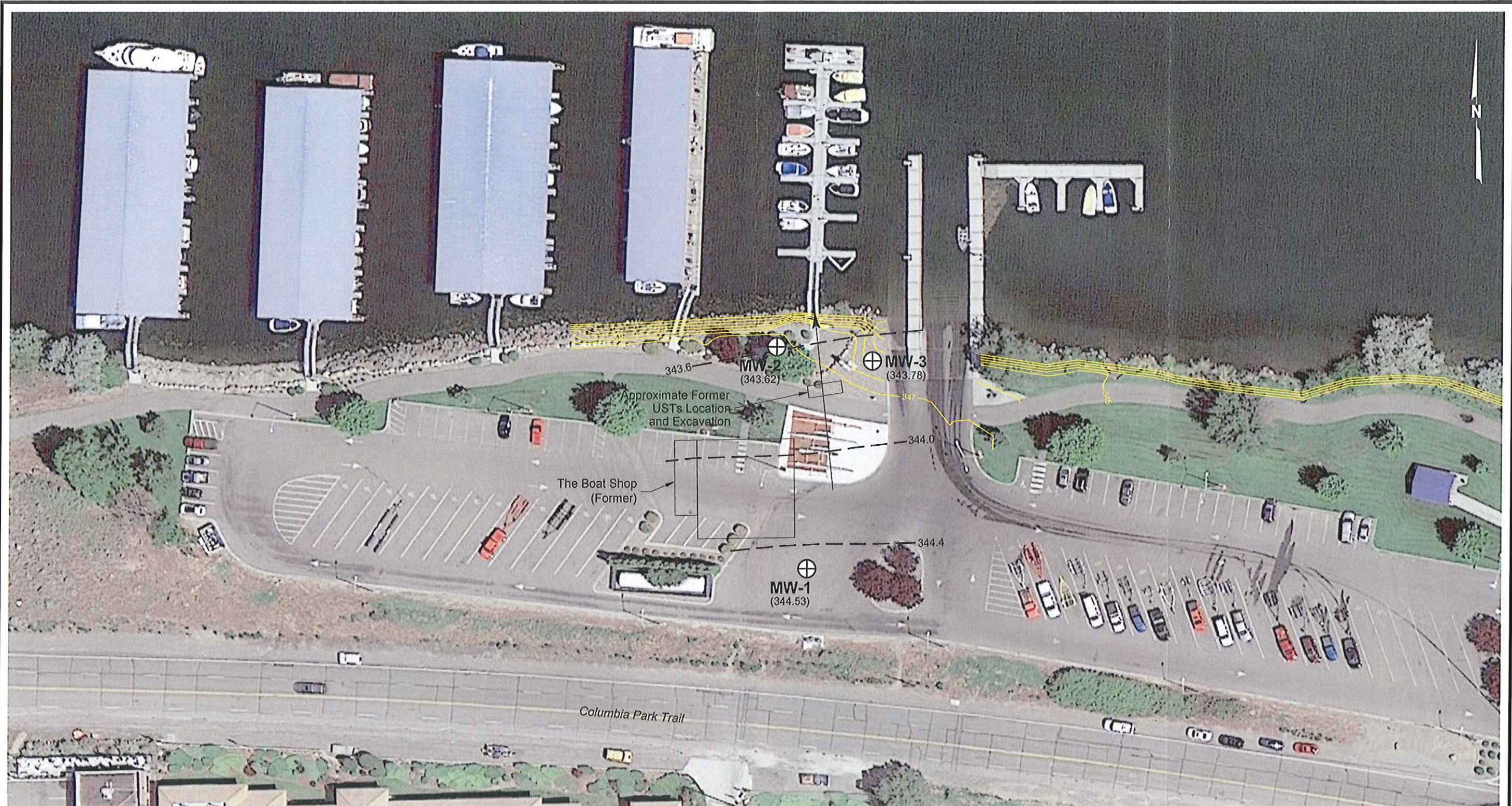
November 2014

22-1-11288-001

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FIG. 1

Filename: J:\22111288-001\22-1-11288-001 Fig 2.dwg Date: 11-03-2014 Login: sac



LEGEND

- MW-1 ⊕ Monitoring Well Designation and Approximate Location (Groundwater Elevation in Feet, 9-24-14)
- 343.6 — — Approximate Groundwater Elevation
- ← — — Approximate Groundwater Flow Direction

NOTE

This figure is adapted from *City of Richland Columbia Park West Parking Lot and Landscaping Improvements Site and Utility Plan*, dated June 1998.

Columbia Park West Marina
Richland, Washington

**SITE PLAN AND
MONITORING WELL LOCATIONS**

November 2014

22-1-11288-001

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FIG. 2