STATE OF WASHINGTON
DEPARTMENT OF ECOLOGY
PO Box 47775 • Olympia, Washington 98504-7775 • (360) 407-6300
711 for Washington Relay Service • Persons with a speech disability can call 877-833-6341

Electronic Copy

May 23, 2017

Nathan West
City of Port Angeles
321 E 5th Street
Port Angeles, WA 98362

Re: **Proposed Activity and Use Restrictions at the following Cleanup Site:**

- **Site Name:** K Ply
- **Site Address:** 439 Marine Dr, Port Angeles, WA 98363
- **Cleanup Site ID:** 28
- **Facility/Site ID:** 1002
- **Tax Parcels:** Parcel 06300000-1035
  Parcel 06300000-1305
  Parcel 06300000-3600
  Parcel 06300000-3542
  Parcel 06300000-3533
  Parcel 06300000-3527
  Parcel 06300000-3518
  Parcel 06300000-3512
  Parcel 06300000-3700
  Parcel 06309900-3710
  Parcel 06309907-9400
  Parcel 06300000-1000

Dear Mr. West:

The purpose of this letter is to notify your agency that the Department of Ecology (Ecology) is proposing an environmental covenant to restrict certain activities and uses on the above-referenced property as part of the cleanup of the K Ply Site (Site). The proposed covenant is necessary because some residual contamination in the soil and groundwater will be left on the property after the cleanup is completed. As the local land use planning authority with jurisdiction over the property, Ecology is seeking your input on the proposed covenant (enclosed) in accordance with RCW 70.105D.030(1)(f).

Under the covenant, the following restrictions are proposed for this property:

General restrictions and requirements including:

- Not engaging in activities that may impact or interfere with the remedial action,
- Continued protection of human health and the environment,
- Continued compliance with this covenant after any conveyance of the property,
- Notifying lease holders of restrictions, and
- Preservation of reference monuments.

Specific prohibitions and requirements, including:

- Using the property in perpetuity only for industrial uses,
- Following the approved Soil Management Plan during activities that disturb subsurface material in areas of remaining contamination,
- Performing a vapor intrusion assessment prior to construction of buildings on site,
- Restrictions on groundwater use,
- Long term monitoring of soil and groundwater until cleanup levels are achieved, and
- Protecting monitoring wells and infiltration galleries.

In addition, this covenant includes standard language regarding;

- Access,
- Notice requirements,
- Modification or termination, and
- Enforcement and construction.

Are any of these restrictions incompatible with your current comprehensive plan, zoning ordinances, and development requirements encompassing the above-referenced property?

Ecology would appreciate your response to this question in writing by letter or e-mail by June 7, 2017. If we do not hear from you by this date, we will assume you have no concerns. A copy of the environmental covenant will be sent to you after it is recorded.

If you have any questions regarding this letter or the cleanup of this property, please feel free to contact me at Connie.Groven@ecy.wa.gov or (360)407-6254.

Sincerely,

Connie G. Groven, P.E.
Cleanup Project Manager
Department of Ecology
Southwest Regional Office Toxics Cleanup Program

By Certified Mail: [91 7199 9991 7037 0287 2134]

Enclosure: Proposed Environmental Covenant

Cc: Jesse Waknitz, Port of Port Angeles
Tom Colligan, Floyd | Snider

After Recording Return
Original Signed Covenant to:
Connie Groven
Toxics Cleanup Program/Southwest Regional Office
Department of Ecology
300 Desmond Drive SE, Lacey, WA 98503

Environmental Covenant

Grantor: Port of Port Angeles

Grantee: State of Washington, Department of Ecology (hereafter "Ecology")

Brief Legal Description:

FOR KPLY PROPERTY:

Portions of Lots 1 – 10, Tideland Block 4;
Lots 1, 2, 3, 4, 17, 18, 19, 20, Block 10
Lots 1 – 20, Block 11;
Lots 1 -20, Block 12;
Lot 10 and Portions of Lots 4 – 9 lying north of Marine Drive; Block 35;
Lots 1 – 10, Block 36; and
Fill material extending from Pine Street to Cedar Street between the Ordinary High Tide line and the Inner Harbor Line within Port Management Agreement 22-080013, Parcel 2; and
Associated vacated sections of Cedar Street, Pine Street, Valley Street, Front Street and First Street.

FOR PLATYPUS Leasehold:

Lots 2, 3 17, 18, 19, and Portions of Lot 4, Block 10
Associated vacated sections of First Street and Front Street.

Tax Parcel Nos.:

FOR KPLY PROPERTY:

Parcel 06300000-1035
Parcel 06300000-1305
Parcel 06300000-3600
Parcel 06300000-3542
Parcel 06300000-3533
Parcel 06300000-3527
Parcel 06300000-3518
Parcel 06300000-3512
Parcel 06300000-3700
Parcel 06309900-3710

Parcel 06300007-9400
Parcel 06300000-1000

FOR PLATYPUS Leasehold:

Parcel 06309900-3710

Cross Reference:

Ecology Agreed Order No. DE 11302

RECITALS

a. This document is an environmental (restrictive) covenant (hereafter "Covenant") executed pursuant to the Model Toxics Control Act ("MTCA"), chapter 70.105D RCW, and Uniform Environmental Covenants Act ("UECA"), chapter 64.70 RCW.

b. The Property that is the subject of this Covenant is part or all of a site commonly known as **K PLY, (Facility Site ID #1002).** The Property is legally described in Exhibit A, and illustrated in Exhibit B, both of which are attached (hereafter "Property"). If there are differences between these two Exhibits, the legal description in Exhibit A shall prevail.

c. The Property is the subject of remedial action conducted under MTCA. This Covenant is required because residual contamination remains on the Property after completion of remedial actions. Specifically, the following principal contaminants remain on the Property:

Medium	Principal Contaminants Present
Soil	Benzene, Petroleum Hydrocarbons (Gasoline, Diesel, and Heavy Oil Range); Dioxin
Groundwater	Benzene, Petroleum Hydrocarbons (Gasoline, Diesel, and Heavy Oil Range)
Surface Water/Sediment	None

d. It is the purpose of this Covenant to restrict certain activities and uses of the Property to protect human health and the environment and the integrity of remedial actions conducted at the site. Records describing the extent of residual contamination and remedial actions conducted are available through Ecology. This includes the following documents;

Remedial Investigation and Feasibility Study- May 2015

Cleanup Action Plan - May 2015

Engineering Design Report - August 2015

Construction Completion Report -December 2016

e. This Covenant grants Ecology certain rights under UECA and as specified in this Covenant. As a Holder of this Covenant under UECA, Ecology has an interest in real property,

however, this is not an ownership interest which equates to liability under MTCA or the Comprehensive Environmental Response, Compensation, and Liability Act, 42 U.S.C. § 9601 *et seq.* The rights of Ecology as an "agency" under UECA, other than its' right as a holder, are not an interest in real property.

f. This Covenant supersedes and replaces the existing Environmental (Restrictive) Covenant, which was recorded by Clallam County on August 14th, 2000 as Document # 2000 1051033.

COVENANT

The Port of Port Angeles, as Grantor and Fee Simple owner of the Property hereby grants to the Washington State Department of Ecology, and its successors and assignees, the following covenants. Furthermore, it is the intent of the Grantor that such covenants shall supersede any prior interests the GRANTOR has in the property and run with the land and be binding on all current and future owners of any portion of, or interest in, the Property.

Section 1. General Restrictions and Requirements.

The following general restrictions and requirements shall apply to the Property:

a. Interference with Remedial Action. The Grantor shall not engage in any activity on the Property that may impact or interfere with the remedial action and any operation, maintenance, inspection or monitoring of that remedial action without prior written approval from Ecology.

b. Protection of Human Health and the Environment. The Grantor shall not engage in any activity on the Property that may threaten continued protection of human health or the environment without prior written approval from Ecology. This includes, but is not limited to, any activity that results in the release of residual contamination that was contained as a part of the remedial action or that exacerbates or creates a new exposure to residual contamination remaining on the Property.

c. Continued Compliance Required. Grantor shall not convey any interest in any portion of the Property without providing for the continued adequate and complete operation, maintenance and monitoring of remedial actions and continued compliance with this Covenant.

d. Leases. Grantor shall restrict any lease for any portion of the Property to uses and activities consistent with this Covenant and notify all lessees of the restrictions on the use of the Property.

e. Preservation of Reference Monuments. Grantor shall make a good faith effort to preserve any survey markers used to define the areal extent of coverage of this Covenant. Should a monument or marker be damaged or destroyed, Grantor shall have it replaced by a licensed professional surveyor within 30 days of discovery of the damage or destruction.

Section 2. Specific Prohibitions and Requirements.

In addition to the general restrictions in Section 1 of this Covenant, the following additional specific restrictions and requirements shall apply to the Property.

a. **Land use**. The remedial action for the Property is based on a cleanup designed for industrial property. As such, the Property shall be used in perpetuity only for industrial uses, as that term is defined in the rules promulgated under Chapter 70.105D RCW. Prohibited uses on the Property include but are not limited to residential uses, childcare facilities, K-12 public or private schools, parks, grazing of animals, growing of food crops, and non-industrial commercial uses.

b. **Management of Soil/Waste Materials.** The Ecology-approved Soil Management Plan (Exnibit C) specifying soil management procedures and health and safety requirements for any Site redevelopment or maintenance that involves removal or disturbance of subsurface material in areas of the Site exceeding MTCA Method A or C soil cleanup levels C must be followed.

c. **Stormwater facilities.** None.

d. **Vapor Intrusion Assessment and Mitigation.** The residual contamination on the Property includes volatile chemicals that may generate harmful vapors. As such, the following restrictions shall apply on the Property-

A vapor intrusion assessment must be performed consistent with current Ecology guidance or regulation prior to the construction of buildings on site. If the assessment indicates a risk of vapor intrusion from either contaminated soil or groundwater, then further assessment/mitigation of that risk must occur before or as part of building construction.

e. **Groundwater use.** The groundwater beneath the Property remains contaminated and shall not be extracted for any purpose other than temporary construction dewatering, investigation, monitoring or remediation. Drilling of a well for any water supply purpose is strictly prohibited. Groundwater extracted from the Property for any purpose shall be considered potentially contaminated and any discharge of this water shall be done in accordance with state and federal law.

f. **Sediments.** None.

g. **Monitoring.** Per the terms of the Agreed Order (Section VII, para. A), long term monitoring is required until soil and groundwater cleanup levels are achieved. The groundwater monitoring wells are located on and off the Property to monitor the performance of the remedial action. Exhibit D shows the locations of the monitoring wells. Groundwater and soil monitoring will continue until cleanup levels are achieved in each media. Groundwater monitoring is required following the schedule outlined in the Compliance Monitoring Plan in the Engineering Design Plan. Monitoring frequency may decrease to if results are stable or decreasing according to the Compliance Monitoring Plan and once four quarters of compliance are reached at the groundwater points of compliance.

In addition, there are four infiltration galleries within the property as shown on Exhibit D. The galleries are to be used to add bioamendments as necessary to increase the rate of natural attenuation of residual hydrocarbons in soil and groundwater. The Grantor shall maintain clear access to these devices and protect them from damage. The Grantor shall report to Ecology within forty-eight (48) hours of the discovery of any damage to any monitoring device. Unless Ecology approves of an alternative plan in writing, the Grantor shall promptly repair the damage and submit a report documenting this work to Ecology within thirty (30) days of completing the repairs.

Section 3. Access.

a. The Grantor shall maintain clear access to all remedial action components necessary to construct, operate, inspect, monitor and maintain the remedial action.

b. The Grantor freely and voluntarily grants Ecology and its authorized representatives, upon reasonable notice, the right to enter the Property at reasonable times to evaluate the effectiveness of this Covenant and associated remedial actions, and enforce compliance with this Covenant and those actions, including the right to take samples, inspect any remedial actions conducted on the Property, and to inspect related records.

c. No right of access or use by a third party to any portion of the Property is conveyed by this instrument.

Section 4. Notice Requirements.

a. Conveyance of Any Interest. The Grantor, when conveying any interest in any part of the property including but not limited to title, easement, leases, and security or other interests, must:

i. Provide written notice to Ecology of the intended conveyance at least thirty (30) days in advance of the conveyance.

ii. Include in the conveying document a notice in substantially the following form, as well as a complete copy of this Covenant:

NOTICE: THIS PROPERTY IS SUBJECT TO AN ENVIRONMENTAL COVENANT GRANTED TO THE WASHINGTON STATE DEPARTMENT OF ECOLOGY ON [DATE] AND RECORDED WITH THE CLALLAM COUNTY AUDITOR UNDER RECORDING NUMBER [RECORDING NUMBER]. USES AND ACTIVITIES ON THIS PROPERTY MUST COMPLY WITH THAT COVENANT, A COMPLETE COPY OF WHICH IS ATTACHED TO THIS DOCUMENT.

iii. Unless otherwise agreed to in writing by Ecology, provide Ecology with a complete copy of the executed document within thirty (30) days of the date of execution of such document.

b. Reporting Violations. Should the Grantor become aware of any violation of this Covenant, Grantor shall promptly report such violation in writing to Ecology.

c. Emergencies. For any emergency or significant change in site conditions due to Acts of Nature (for example, flood or fire) resulting in a violation of this Covenant, the Grantor is authorized to respond to such an event in accordance with state and federal law. The Grantor must notify Ecology in writing of the event and response actions planned or taken as soon as practical but no later than within 24 hours of the discovery of the event.

d. Notification procedure. Any required written notice, approval, reporting or other communication shall be personally delivered or sent by first class mail to the following persons. Any change in this contact information shall be submitted in writing to all parties to this Covenant. Upon mutual agreement of the parties to this Covenant, an alternative to personal delivery or first class mail, such as e-mail or other electronic means, may be used for these communications.

Executive Director Port of Port Angeles 338 W. 1st Street Port Angeles, WA 98362 360-457-8527 info@portofpa.com	Environmental Covenants Coordinator Washington State Department of Ecology Toxics Cleanup Program P.O. Box 47600 Olympia, WA 98504 – 7600 (360) 407-6000 ToxicsCleanupProgramHQ@ecy.wa.gov

Section 5. Modification or Termination.

a. Grantor must provide written notice and obtain approval from Ecology at least sixty (60) days in advance of any proposed activity or use of the Property in a manner that is inconsistent with this Covenant. For any proposal that is inconsistent with this Covenant and permanently modifies an activity or use restriction at the site:

i. Ecology must issue a public notice and provide an opportunity for the public to comment on the proposal; and

ii. If Ecology approves of the proposal, the Covenant must be amended to reflect the change before the activity or use can proceed.

b. If the conditions at the site requiring a Covenant have changed or no longer exist, then the Grantor may submit a request to Ecology that this Covenant be amended or terminated. Any amendment or termination of this Covenant must follow the procedures in MTCA and UECA and any rules promulgated under these chapters.

Section 6. Enforcement and Construction.

a. This Covenant is being freely and voluntarily granted by the Grantor.

b. Within ten (10) days of execution of this Covenant, Grantor shall provide Ecology with an original signed Covenant and proof of recording and a copy of the Covenant and proof of recording to others required by RCW 64.70.070.

c. Ecology shall be entitled to enforce the terms of this Covenant by resort to specific performance or legal process. All remedies available in this Covenant shall be in addition to any and all remedies at law or in equity, including MTCA and UECA. Enforcement of the terms of this Covenant shall be at the discretion of Ecology, and any forbearance, delay or omission to exercise its rights under this Covenant in the event of a breach of any term of this Covenant is not a waiver by Ecology of that term or of any subsequent breach of that term, or any other term in this Covenant, or of any rights of Ecology under this Covenant.

d. The Grantor shall be responsible for all costs associated with implementation of this Covenant. Furthermore, the Grantor, upon request by Ecology, shall be obligated to pay for

Ecology's costs to process a request for any modification or termination of this Covenant and any approval required by this Covenant.

e. This Covenant shall be liberally construed to meet the intent of MTCA and UECA.

f. The provisions of this Covenant shall be severable. If any provision in this Covenant or its application to any person or circumstance is held invalid, the remainder of this Covenant or its application to any person or circumstance is not affected and shall continue in full force and effect as though such void provision had not been contained herein.

g. A heading used at the beginning of any section or paragraph or exhibit of this Covenant may be used to aid in the interpretation of that section or paragraph or exhibit but does not override the specific requirements in that section or paragraph.

The undersigned Grantor warrants he/she holds the title to the KPLY property and has authority to execute this Covenant.

EXECUTED this _____ day of _____, 20___.

_____

by: _____

Title: Executive Director, Port of Port Angeles

REPRESENTATIVE ACKNOWLEDGEMENT

STATE OF WASHINGTON
COUNTY OF CLALLAM

On this _____ day of _____, 20__, I certify that _____ personally appeared before me, acknowledged that **he/she** signed this instrument, on oath stated that **he/she** was authorized to execute this instrument, and acknowledged it as the Executive Director of the Port of Port Angeles to be the free and voluntary act and deed of such party for the uses and purposes mentioned in the instrument.

_____
Notary Public in and for the State of Washington [15]
Residing at _____
My appointment expires _____

The Department of Ecology**,** hereby accepts the status as GRANTEE and HOLDER of the above Environmental Covenant.

STATE OF WASHINGTON
DEPARTMENT OF ECOLOGY

_____

by: _____

Title: _____

Dated: _____

STATE ACKNOWLEDGMENT

STATE OF _____

COUNTY OF _____

On this _____ day of _____, 20__, I certify that _____ personally appeared before me, acknowledged that **he/she** is the _____ of the state agency that executed the within and foregoing instrument, and signed said instrument by free and voluntary act and deed, for the uses and purposes therein mentioned, and on oath stated that **he/she** was authorized to execute said instrument for said state agency.

_____
Notary Public in and for the State of Washington

Residing at _____

My appointment expires _____

Exhibit A

LEGAL DESCRIPTION:

Parcel A:

That portion of the Townsite of Port Angeles and that portion of the First Class Tidelands (West of Laurel Street) as shown on the supplemental maps of the Port Angeles Tidelands, filed May 1, 1935 in the office of Public Lands, described as follows:

Commencing at the Southeast corner of Lot 1, Block 3, of said First Class Tidelands; Thence North 33°22'06" East, 149.99 feet along the Easterly line of said Lot 1 to the Northeast corner of said Lot 1; Thence continuing North 33°22'06" East, 173.09 feet; Thence North 64°46'09" West, 330.33 feet; Thence North 63°59'21" West, 175.13 feet to the Point of Beginning; Thence continuing North 63°59'21" West, 103.42 feet; Thence North 26°00'39" East, 111.11 feet; Thence North 63°59'21" West, 36.00 feet; Thence South 26°00'39" West, 111.53 feet; Thence North 64°39'09" West 131.11 feet; Thence North 66°05'04" West, 386.52 feet; Thence South 33°22'24" West 30.37 feet; Thence North 62°59'12" West, 16.13 feet; Thence North 65°22'19" West, 200.19 feet; Thence North 64°59'14" West, 209.05 feet; Thence North 63°46'44" West, 80.00 feet; Thence South 82°20'07" West, 106.89 feet; Thence South 32°48'39" West 303.76 feet; Thence South 27°49'02" West, 56.32 feet; Thence South 20°59'17" West, 65.58 feet; Thence South 26°50'22" West, 41.45 feet; Thence South 20°44'32" West, 45.68 feet; Thence South 20°40'13" West, 62.47 feet to an intersection with the Northwesterly prolongation of the Northeasterly right-of-way line of the alley in Block 36 of Townsite of Port Angeles; Thence along said prolongation and the Northeasterly right-of-way lines of the alleys in Blocks 35 and 36, said Townsite of Port Angeles; Thence along said prolongation and the Northeasterly right of way lines of the alleys in Blocks 35 and 36, said Townsite of Port Angeles, South 56°37'36" East, 734.59 feet to the Northerly line of Marine Drive; Thence along said Northerly line, South 87°09'30" East, 348.12 feet; North 81°56'59" East, 86.28 feet; Thence departing said Northerly line, North 33°22'03" East, 180.00 feet; Thence North 70°24'18" East, 132.82 feet; Thence North 33°22'06" East, 323.81 feet to the Point of Beginning.

(For reference purposes the above described property is located within Blocks 11 and 12 and the North half of Blocks 35 and 36, Townsite of Port Angeles; And Block 4 Tidelands West of Laurel Street;

TOGETHER WITH vacated streets adjoining and also together with Harbor Area in front of said Blocks 4 and 11).

Situate in the County of Clallam, State of Washington.

Parcel B:

Lots 1, 2, 3, 4, 17, 18, 19 and 20, Block 10, Townsite of Port Angeles, Clallam County, Washington;

TOGETHER WITH that portion of vacated alley lying between said lots;

EXCEPT that portion lying within Parcel A described above.

Situate in the County of Clallam, State of Washington.

VESTED IN:

The State of Washington, as to that portion lying within the habor area in front of Block 4 Tidelands West of Laurel Street and Block 11 Townsite of Port Angeles and vacated streets adjoining; and The Port of Port Angeles, a municipal corporation, as to the remainder

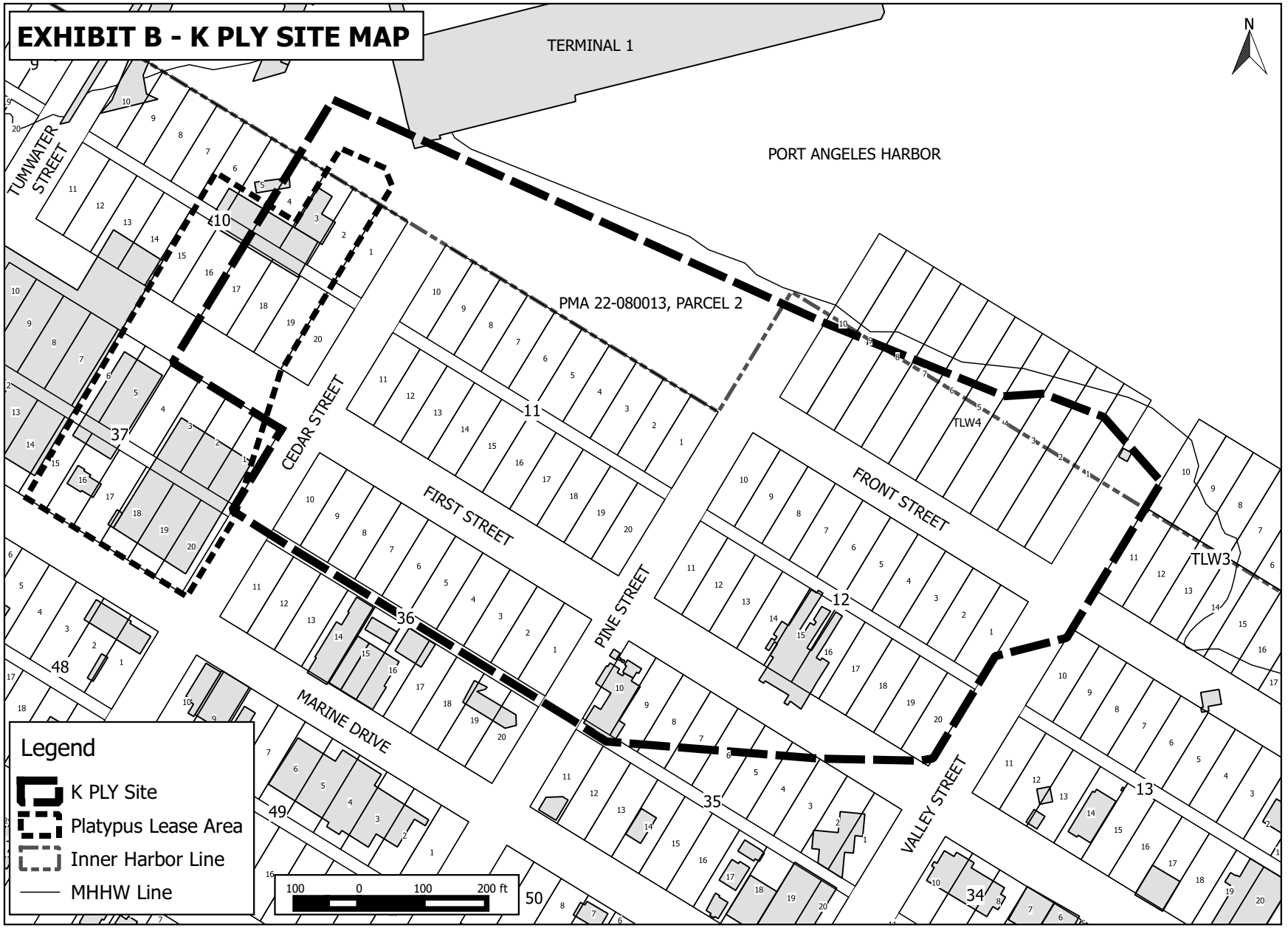
EXHIBIT B - K PLY SITE MAP
TERMINAL 1
PORT ANGELES HARBOR
N
TUMWATER STREET
CEDAR STREET
FIRST STREET
PINE STREET
MARINE DRIVE
FRONT STREET
VALLEY STREET
PMA 22-080013, PARCEL 2
TLW4
TLW3
10
11
12
13
34
35
36
37
48
49
50
Legend
K PLY Site
Platypus Lease Area
Inner Harbor Line
MHHW Line
100 0 100 200 ft

Exhibit C- Soil Management Plan

K Ply Site

Soil Management Plan for the Construction Completion Report

Prepared for

Port of Port Angeles
338 West First Street
Port Angeles, Washington 98632

December 2016

20 YEARS FLOYD | SNIDER
strategy • science • engineering
Two Union Square • 601 Union Street • Suite 600
Seattle, Washington 98101 • tel: 206.292.2078

LIMITATIONS

This report has been prepared for the exclusive use of ***Port of Port Angeles,*** their authorized agents, and regulatory agencies. It has been prepared following the described methods and information available at the time of the work. No other party should use this report for any purpose other than that originally intended, unless Floyd|Snider agrees in advance to such reliance in writing. The information contained herein should not be utilized for any purpose or project except the one originally intended. Under no circumstances shall this document be altered, updated, or revised without written authorization of Floyd|Snider.

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List of Acronyms and Abbreviations

Acronym/ Abbreviation	Definition
BTEX	Benzene, toluene, ethylbenzene, and total xylenes
bgs	Below ground surface
CAP	Cleanup Action Plan
CUL	Cleanup level
Ecology	Washington State Department of Ecology

Acronym/ Abbreviation	Definition
EDR	Engineering Design Report
GRO	Gasoline-range organics
mg/kg	Milligrams per kilogram
MTCA	Model Toxics Control Act
ORO	Oil-range organics
Port	Port of Port Angeles
PPE	Personal protective equipment
Site	K Ply Site
SMP	Soil Management Plan

1.0 Introduction

This Soil Management Plan (SMP) addresses the necessary considerations for future ground-disturbing activities at the K Ply Site (Site). This SMP is presented as Appendix L of the Construction Completion Report for the cleanup action but is intended to be a stand-alone document.

In 2015, the Site underwent cleanup to remove the majority of petroleum-contaminated soils. Some contaminated soil was purposely left unexcavated as it was not seen as an immediate risk to human health and the environmment. The cleanup was conducted across six separate Excavation Areas. For the contaminated soils that were not fully removed, institutional controls will be required to address any areas where residual soil and groundwater contamination remain at concentrations greater than cleanup levels (CULs) after completion of the cleanup action. Among other requirements, the site-wide institutional controls include implementation of a SMP specifying soil management procedures for future excavation and appropriate health and safety requirements for subsurface work in areas where contamination concentrations greater than CULs remain.

The subsequent sections of this SMP identify these areas of residual contamination, and provide worker safety, soil screening, and soil handling guidelines, and Washington State Department of Ecology (Ecology) notification protocols for future ground-disturbing activities in these areas.

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2.0 Areas of Residual Contamination

There are four areas where residual contamination remains in place, as described in the following sections. These areas are all shown on Figure L.1, which is based on all existing site analytical data and field observations from previous sampling events. Representative analytical data for remaining contaminated soils in these areas are presented in Table L.1.

2.1 EXCAVATION AREA 5

In Excavation Area 5, which included removal of a former gasoline pipeline and associated gasoline-contaminated soil from the southern end of the Site, most of the shallow, vadose zone soil containing gasoline-range organics (GRO) and/or benzene, toluene, ethylbenzene, and total xylenes (BTEX) exceeding the Site CULs was excavated where accessible. However, two shallow sidewall samples from grids C15 and B14 collected from the southwest corner of Excavation Area 5 at depths beginning at between 3.5 and 5 feet below ground surface (bgs) had GRO concentrations greater than the CUL of 30 milligrams per kilogram (mg/kg) but was unable to be excavated because it ran under a street or alley. This is consistent with the information presented in the Engineering Design Report (EDR), which detailed soil contamination in the southeast corner of the former mill building extending into the alley to the south or S. Cedar Street to the west that was anticipated to require long-term soil monitoring (refer to Appendix G of the EDR).

Deeper, smear zone soils (i.e., soils found near the water table) in Excavation Area 5 were excavated only to achieve a concentration of 3,000 mg/kg for GRO and 10 mg/kg for benzene. Therefore, in these areas, deeper soils exceeding the much lower CULs for both GRO and benzene remain in place.

2.2 EXCAVATION AREA 6

In Excavation Area 6, which included removal of a pool of hydraulic oil-contaminated soil near the former mill presses, all soil with GRO and hydraulic oil-range organics (ORO), and/or BTEX exceeding the CULs was excavated during the cleanup action. However, the northern extents of the excavation were limited by a sheetpile wall that was installed to prevent destabilization of the bulkhead. A small area of residual smear zone soil contamination consisting entirely of GRO remains in place under the road that parallels the bulkhead, as shown on Figure L.1.

2.3 DIOXINS/FURANS IN FILL SOIL

During demolition of the former K Ply mill prior to the cleanup action, rubble from the mill's smokestack was deposited on the ground surface to the east of the main excavation. Samples of this rubble had dioxin/furan concentrations greater than the Model Toxics Control Act (MTCA) Method A CUL for unrestricted land use, but less than the CUL for industrial land use.

Per the EDR, approximately 300 cubic yards of soil containing dioxins/furans was scraped from the ground surface and later used as backfill above the water table within Excavation Area 6 at the location and depth shown on Figure L.1.

2.4 LOG POND AREA

In the former log pond area east of the main excavation, heavy oil type contamination exceeding the CUL was detected in silty soil that appeared to represent the former log pond bottom at approximately 12 feet bgs. Due to the depth of the contamination, and a previous restrictive covenant that was placed at the time that the log pond was filled, the Cleanup Action Plan did not require excavation in this area (Ecology 2015). Additional soil borings were advanced in the former log pond to delineate the area of ORO contamination with results provided to Ecology in the March 2016 Quarterly Report (Floyd|Snider 2016). These borings confirmed that the ORO contamination was limited to the silty soil representing the former log pond bottom encountered below approximately 12 feet bgs, and found that the horizontal extents of the contamination are limited to the area north of the former log debarker. The limits of the extent of ORO concentrations greater than CULs is shown in Figure L.1.

3.0 Considerations for Future Site Work

The following sections present protocols for future ground-disturbing work at the Site.

3.1 GROUND-DISTURBING ACTIVITIES

Ground-disturbing activities at the Site include all activities that alter the ground surface including foundation drilling, grading, utility trenching, and excavation. The following sub-sections present the protocols that must be followed during these activities.

3.1.1 Ecology Notification Prior to Ground-Disturbing Activities

Prior to the start of any ground-disturbing activities with the potential to disturb areas of residual contamination, Ecology must be notified of the intended scope of work and anticipated work area. Figure L.1 displays the locations and depths on-site where it is likely that residually contaminated soil will be encountered. In general, with the exception of soil under S. Cedar Street and the alley, the residually contaminated soil lies deeper than 4 feet bgs. Therefore, if ground-disturbing activities are to occur within these areas at depths greater than 4 feet bgs, Ecology should be notified prior to the commencement of work. Ecology will require a description of the work that is planned as well as a schedule. Ground-disturbing activities that occur outside of these areas and/or at depths shallower than 4 feet do not require Ecology notification (with the exception of work within the contaminated areas of the alley or S. Cedar Street, as shown on Figure L.1).

3.1.2 Identification of Potentially Contaminated Soils

The extensive testing that was done at the Site makes it highly unlikely that new areas of soil contamination will be encountered. Regardless, workers should be made aware that potentially contaminated soils may be encountered at any location and depth site-wide and that they should notify the Port of Port Angeles (Port) if indications of contamination are observed.

Indications of potentially contaminated soils may include the presence of stained or oily soil, petroleum-like or solvent-like odors, and/or hydrocarbon sheens. In the event that potentially contaminated soil is encountered outside the known areas of residual contamination, the Port will notify Ecology and investigate the situation. If it is determined by the Port that work should be allowed to proceed, then the health and safety protocols described in Section 3.1.3 and contaminated soil handling and disposal protocols described in Section 3.1.4 must be implemented. Further reporting to be made to Ecology following the completion of soil disturbing activities in contaminated or potentially-contaminated areas is described in Section 3.1.5.

3.1.3 Health and Safety Protocols

When undertaking ground-disturbing activities with the limited potential to encounter contaminated soil, workers must wear the appropriate personal protective equipment (PPE). The minimum PPE required for handling Site soils, in addition to protective clothing appropriate to

the work being done, includes safety glasses and protective disposable (i.e., latex or nitrile) gloves. Eating and smoking are prohibited within work areas during ground-disturbing activities at the Site.

If work with high potential for worker exposure, such as excavation of a wide or deep trench for a sewer line in known areas of residual gasoline contamination, then a health and safety plan including site monitoring protocols must be prepared by the Contractor prior to the start of work in accordance with Hazardous Waste Operations and Emergency Response (HAZWOPER) worker requirements.

3.1.4 Soil Handling and Disposal

All known and potentially contaminated soils brought to the surface must be managed in accordance with applicable regulations. Contaminated soils cannot be re-used on-site as backfill.

Stockpiles of contaminated soils must be stored on impervious surfaces such as pavement or plastic sheeting, and covered with plastic sheeting when not being actively worked to control airborne dust.

Testing of the stockpiles will determine contaminant levels and the appropriate disposition options for the soil. If the stockpile test samples are greater than CULs, it must be disposed of at a permitted Subtitle D landfill. Soil that tests to have contaminant levels less then CULs may be reused as backfill within the Site, but cannot be exported from the Site.

During hauling, the following best management practices will be implemented to control off-site migration of contaminated soil:

- Loads must be covered to prevent fugitive dust.
- Truck loading will take place on the property or in a designated loading area that is either covered with sheeting or swept immediately after loading to prevent track-out.
- If wet soils are encountered, these soils must pass a paint filter test or be hauled in a truck or container fitted with a liner.

3.1.5 Record-Keeping

A record of the ground-disturbing activities including the area of disturbance and, if contaminated soil is excavated, the quantities of soil disposed and disposal facility will be maintained and provided to Ecology following completion of the work.

4.0 References

Floyd|Snider. 2016. *March 2016 Quarterly Progress Report for K Ply*. Letter from Tom Colligan and Tucker Stevens, Floyd|Snider, to Connie Groven, Washington State Department of Ecology. 13 May.

Van den Berg, Martin, Linda S. Birnbaum, Michael Denison, Mike De Vito, William Farland, Mark Feeley, Heidelore Fiedler, Helen Hakansson, Annika Hanberg, Laurie Haws, Martin Rose, Stephen Safe, Dieter Schrenk, Chiharu Tohyama, Angelika Tritscher, Jouko Tuomisto, Mats Tysklind, Nigel Walker, and Richard E. Perterson. 2006. "Review: The 2005 World Health Organization Reevalutation of Human and Mammalian Toxic Equivalency Factors for Dioxins and Dioxin-Like Compounds." *Toxicological Sciences* 93(2): 223-241. 7 July.

Washington State Department of Ecology (Ecology). 2015. Agreed Order No. DE 11302. 19 May.

K Ply Site

Soil Management Plan

Table

Table L.1
Residually-Contaminated Soil Analytical Data

Sample ID	Sample Date	Depth (feet bgs)[1]	Range Organics (mg/kg)	Diesel-Range Organics (mg/kg)	Oil-Range Organics (mg/kg)	Benzene (mg/kg)	Toluene (mg/kg)	Ethylbenzene (mg/kg)	Xylenes, Total (mg/kg)	Dioxins/ Furans TEQ[2]
Concrete Pad and Bulkhead Areas										
C15-S-3	11/10/2015	3	**580**	--	--	0.020 U	0.48	0.42	1.5	--
B14-S-5.5	10/26/2015	**5.5**	**62**	--	--	0.054	0.27	0.93	4.1	--
E15-S-8	11/10/2015	5.00	**1,900**	--	--	0.97	3.7	**12**	**45**	--
F14-S-9	10/23/2015	6.00	**510**	--	--	0.96	2.3	2.6	8.6	--
G8-S-9.5	10/01/2015	6.50	**550**	--	--	0.51	2.7	**8.1**	**19**	--
G11-S-9 (2)	09/03/2015	6.00	**2,000**	--	--	0.020 U	**11**	**14**	**31**	--
G13-S-8.5	10/23/2015	5.50	**89**	--	--	0.077	0.23	0.85	0.57	--
G10-S2-9.5 (2)	09/03/2015	6.50	**140**	--	--	0.020 U	0.10 U	0.37	1.6	--
C15-S-8	11/10/2015	8	**100**	--	--	0.020 U	0.069	0.098	0.26	--
K-14	9/11/2013	6.5–7.5	**1,600**	--	--	**0.34**	**8.6**	**14**	8.0	--
K-15	9/11/2013	6.5–7.5	**1,900**	--	--	**0.58**	**12**	**15**	**10**	--
K-16	9/23/2013	7.5–8.5	**560**	710 JM	120 U	**0.58**	3.7	2.4	5.8	--
K-17	9/23/2013	8.8–9.8	**510**	180 JM	120 U	**1.6**	4.5	**7.2**	4.4	--
K-35	9/11/2013	6–7	**500**	--	--	**0.56**	3.5	5.0	**26**	--
K-36	9/11/2013	7–8	**880**	--	--	0.20 U	4.9	**7.1**	4.8	--
K-83	10/15/2013	3.5–6	**150**	170 JM	100 U	**0.075**	0.39	1.2	5.9	--
K-84	10/15/2013	8.5–9	**1,500**	130 JM	100 U	0.4 U	**7.7**	0.4 U	6.4	--
K-89	10/16/2013	14–15	**880**	**8,100** JM	1,200 JM	**0.24**	0.95	2.3	3.8	--
K-301	4/1/2015	9–10	2.8	--	--	**0.35**	0.20 U	0.20 U	0.20 U	--
K-302	4/1/2015	10–11	**2,300**	--	--	**5.9**	**20**	**27**	**140**	--
K-302	4/1/2015	11–12	**39**	--	--	0.025	0.23	0.28	1.4	--
DP-03	1/12/2009	11–12	**330** U	--	--	0.03 U	0.9	3.2	3.5	--
DP-04	1/12/2009	11–12	**1,500**	--	--	0.03 U	5 U	5 U	7.1	--
DP-08	1/12/2009	10–11	**830**	--	--	**2.6 J**	3.6 J	5.1 J	3.9 J	--
DP-08	1/12/2009	11–12	5 U	--	--	**1.2**	0.05 U	0.07	0.2 U	--
DP-09	1/12/2009	10–11.5	**660**	--	--	0.03 U	0.8	1.8	1.7	--
DP-15	1/12/2009	12–13	8	--	--	**0.06**	0.05 U	0.4	0.2 U	--
DP-23	1/12/2009	11.5–12.5	15	--	--	**0.4**	0.2	0.8	0.8	--
SB-210	5/31/2006	6–8	**791**	**530**	--	0.05 U	0.08 U	0.08 U	2 U	--
B14[3]	8/13/2015	16.8–17.8	**110**	--	--	**1.7**	0.74	1.3	7.6	--
B15[3]	8/13/2015	16.9–17.9	9.7	--	--	**0.6**	0.02 U	0.29	0.06 U	--
C13[3]	8/13/2015	17.0–18.0	**76**	--	--	**1.4**	0.5	0.84	1.3	--
C14[3]	8/13/2015	16.9–17.9	2 U	--	--	**0.33**	0.02 U	0.05	0.06 U	--
C15[3]	8/13/2015	16.9–17.9	**45** J	--	--	0.041 J	0.02 U	0.26 J	0.14 J	--
D11	8/13/2015	10.9–11.9	**410**	--	--	**0.4**	2.3	3.9	**21**	--
D11	8/13/2015	11.9–12.9	2 U	--	--	**0.34**	0.02 U	0.02 U	0.06 U	--
D12	8/13/2015	11.3–12.3	**30**	--	--	**1.4**	0.19	0.47	1.4	--

Table L.1
Residually-Contaminated Soil Analytical Data

Sample ID	Sample Date	Depth (feet bgs)[1]	Range Organics (mg/kg)	Diesel-Range Organics (mg/kg)	Oil-Range Organics (mg/kg)	Benzene (mg/kg)	Toluene (mg/kg)	Ethylbenzene (mg/kg)	Xylenes, Total (mg/kg)	Dioxins/ Furans TEQ[2]
Concrete Pad and Bulkhead Areas (continued)										
D13[3]	8/13/2015	17.7–18.1	**59**	--	--	**1.8**	0.68	0.6	1.7	--
D13[3]	8/13/2015	18.1–19.1	**45**	--	--	**0.36**	0.33	0.25	1.1	--
D13[3]	8/13/2015	19.1–20.1	**34**	--	--	**0.88**	0.26	0.26	0.67	--
D14[3]	8/13/2015	16.9–17.9	**48**	--	--	0.073	0.063	0.19	0.7	--
D15[3]	8/13/2015	16.9–17.9	**1,700**	--	--	0.02 U	5.7	**18**	**28**	--
D15[3]	8/13/2015	17.9–18.9	**150**	--	--	0.28	0.41	1.7	1.2	--
E12	8/13/2015	10.9–11.9	11	--	--	**2.4**	0.047	0.046	0.06 U	--
F8	8/13/2015	10.5–11.5	**75**	--	--	0.14	0.44	1.4	1.1	--
F12	8/13/2015	11.1–12.1	7.4	--	--	**0.32**	0.043	0.23	0.12	--
F13[3]	8/13/2015	17.2–18.2	**290**	--	--	**0.69**	1	3.1	1.6	--
F14[3]	8/13/2015	17.2–18.2	**69**	--	--	**2.4**	0.33	1.6	0.78	--
Log Pond Area										
K-101	9/12/2013	13.5–15	2.0 U	250 JM	**2,800**	0.020 U	0.020 U	0.020 U	0.060 U	--
K-401-12-14	3/24/2016	12–14	--	910 JM	**7,300**	--	--	--	--	--
K-401-14-16	3/24/2016	14–16	--	1,900 JM	**16,000**	--	--	--	--	--
Bulkhead Area Backfill Soil with Dioxins/Furans										
SS-4	9/20/2013	5	--	--	--	--	--	--	--	**19.4**
SS-5	9/20/2013	5	--	--	--	--	--	--	--	**55.2**
SS-6	9/20/2013	5	--	--	--	--	--	--	--	**222**
MTCA Unrestricted Cleanup Level			30	2,000	2,000	0.030	7.0	6.0	9.0	12.8

Notes:

-- Sample was not analyzed for the given analyte.

bold Indicates a concentration that exceeds the applicable MTCA unrestricted cleanup level.

1 Sample depths are reported below the current Site ground surface, which is approximately 3 feet lower than the pre-excavation ground surface in the Concrete Pad and Bulkhead Areas.

2 World Health Organization 2005 Toxic Equivalency Factors used for calculation of dioxin/furan TEQ (Van den Berg et al. 2006).

3 Sample location was located on the loading dock concrete pad, which is approximately 5 feet above the surrounding ground surface.

Abbreviations:

bgs Below ground surface
mg/kg Milligrams per kilogram
MTCA Model Toxics Control Act
pg/g Picograms per gram
TEQ Toxicity equivalent

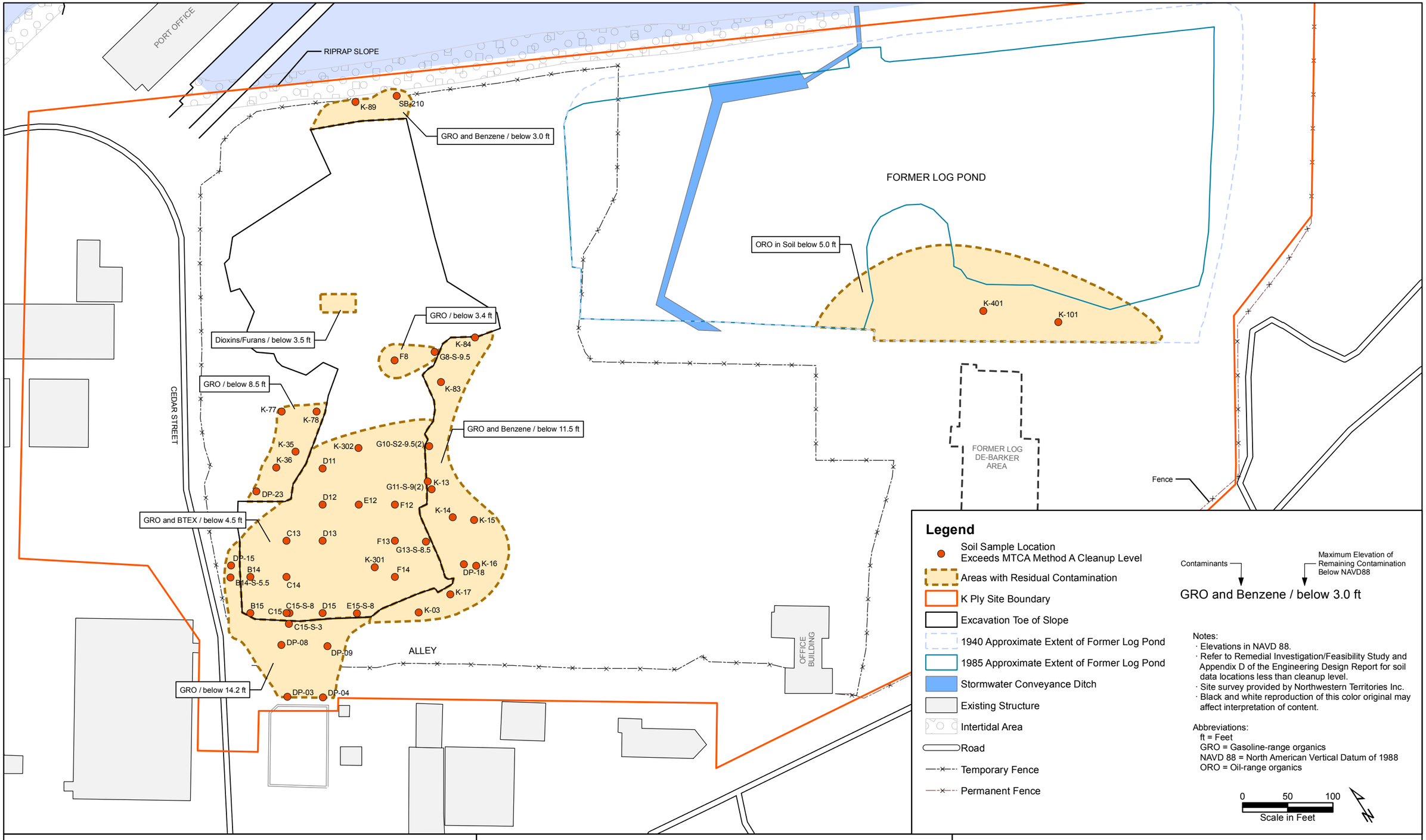
Qualifiers:

J Analyte was detected, concentrations is considered an estimate.
JM Analyte was detected, chromatographic pattern is a poor match to standard used for quantiation, concentraion is considered an estimate.
U Analyte was not detected at the given reporting limit.

K Ply Site

Soil Management Plan

Figure



Legend

- Soil Sample Location Exceeds MTCA Method A Cleanup Level
- Areas with Residual Contamination
- K Ply Site Boundary
- Excavation Toe of Slope
- 1940 Approximate Extent of Former Log Pond
- 1985 Approximate Extent of Former Log Pond
- Stormwater Conveyance Ditch
- Existing Structure
- Intertidal Area
- Road
- Temporary Fence
- Permanent Fence

Contaminants → GRO and Benzene / below 3.0 ft ← Maximum Elevation of Remaining Contamination Below NAVD88

Notes:
- Elevations in NAVD 88.
- Refer to Remedial Investigation/Feasibility Study and Appendix D of the Engineering Design Report for soil data locations less than cleanup level.
- Site survey provided by Northwestern Territories Inc.
- Black and white reproduction of this color original may affect interpretation of content.

Abbreviations:
ft = Feet
GRO = Gasoline-range organics
NAVD 88 = North American Vertical Datum of 1988
ORO = Oil-range organics

0 50 100
Scale in Feet

N

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Construction Completion Report
K Ply Site
Port Angeles, Washington

Figure L.1
Residual Soil Contamination

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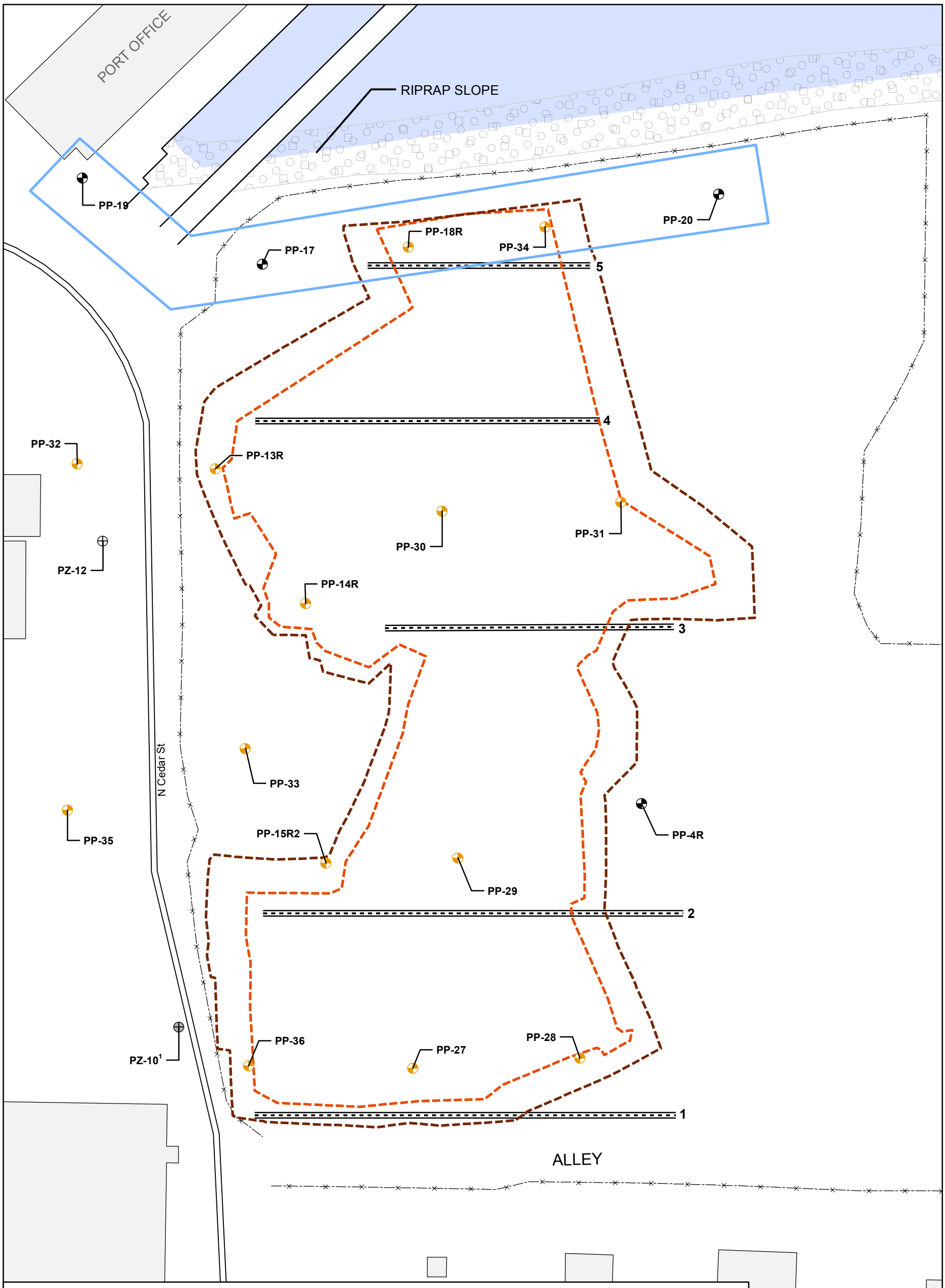
8/10/2016

Exhibit D- Site Monitoring Wells and Infiltration Galleries

Exhibit D



Legend

- Abandoned Piezometer
- Existing Piezometer
- Existing Well
- New Well
- Infiltration Gallery and ID Number
- 2015 Excavation Area Toe of Slope
- 2015 Excavation Area Top of Slope
- Point of Compliance Monitoring Wells
- Temporary Fence
- Existing Structure
- Intertidal Area

Notes:
1. PZ-10 well was abandoned in July 2016.
· Site survey provided by Northwestern Territories Inc.

0 30 60 120
Scale in Feet

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Restrictive Covenant
K Ply Site
Port Angeles, Washington

Exhibit D
Location of Site Groundwater Monitoring Wells and Infiltration Galleries

\\Gimli\enterprise\GIS\Projects\PPA_KPLY\MXD\RestrictiveCovenant\Exhibit D Location of Site Groundwater Monitoring Wells and Infiltration Galleries.mxd
5/12/2017