

CSID No. 15433

**Big Pasco Industrial Park Lagoons
Operation and Maintenance Plan**

**Big Pasco Industrial Park Lagoons
SE Road 36
Pasco, Washington**

for

**Port of Pasco
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P.O. Box 769
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March 15, 2022

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1.0 INTRODUCTION

This Operations and Maintenance Plan (O&M Plan) addresses general operating procedures for monitoring and maintaining the integrity of the soil cap (cap) at the former lagoons at the Big Pasco Industrial Park (lagoons) located at SE Road 36 and E. Ainsworth Ave., in Pasco, Washington (see Figure 1). This O&M Plan was prepared to supplement the remedial action performed at the site and submitted to Washington Department of Ecology (Ecology) under CSID Number 15433.

This O&M Plan is intended to fulfill the requirements found in the Model Toxics Control Act (MTCA) WAC 173-340-400. The elements of this O&M Plan will be implemented to monitor cap conditions and provide the procedures to respond to potential damage to the protective remedial cap or emergency situations. This plan includes (1) a description of the remedial cap system and post-remediation site conditions; (2) the parties responsible for monitoring and maintaining the implemented corrective action; (3) maintenance procedures; and (4) reporting requirements. The location of the site relative to surrounding properties is depicted on Vicinity Map (Figure 1) and the locations of existing site features are depicted on Site Plan (Figure 2).

2.0 SITE BACKGROUND AND REMEDIAL ACTION DESCRIPTION

2.1. Big Pasco Industrial Park Lagoons

The Lagoons were developed for use for wastewater treatment in approximately 1942, and no longer used for treatment by January of 2002. On January 12, 2021, Blue Mountain Environmental and Consulting Co., Inc. (BMEC) conducted sampling of biosolids in the two lagoons. Sample analysis for these contaminants of concern (COCs) in the north lagoon indicate dioxins and furans are below Level A cleanup screening levels. PBDE levels in the north lagoon were either non-detect or extremely low (0.00000026 to 0.000152 mg/kg) It is the opinion of BMEC that the north lagoon biosolids do not contain any COCs above cleanup screening levels, and the plan to backfill this lagoon with clean backfill material does not pose a threat to human health or the environment.

Sample analysis of the south lagoon for dioxins and furans indicate these biosolids exceed CLARC cleanup screening levels for both dioxins and furans (PBDE cleanup screening levels were not readily available). The lagoon is in an industrial area and the planned use of the backfilled site is vehicle parking. No other development is planned for this site.

The Port of Pasco decided to remediate the site by putting a minimum 6-foot soil cap over the south lagoon. As of March 1, 2022, the lagoon has been completely backfilled with a minimum 6-foot soil cap over the contaminated soils in the south lagoon. The north lagoon was also backfilled to level the entire site.

3.0 RESPONSIBLE PARTIES

The Port of Pasco will be financially responsible for maintenance and site security.

3.1. Contact Information

Table 1 lists the contact information for the site.

TABLE 1. IMPORTANT CONTACT INFORMATION

Name	Role	Contact	Phone Number	Additional Information
Port of Pasco	Responsible Party and Property Owner	Randy Hayden	509.547.3378	Executive Director rhayden@portofpasco.org
BMEC, Inc.	Environmental Consultant	Yancy Meyer	509.520.4416	Environmental Professional ymeyer@bmecww.com
Washington State Department of Ecology (Ecology)	Regulatory Oversight	Ted Uecker, Site Manager	509.342.5564	TUEC461@ECY.WA.GOV

4.0 PROTECTION MONITORING

Protection monitoring is required to verify that human health and the environment are protected during implementation of the remedial action. The remedial action include risks to the following receptors:

- Contractors, regulators and engineers (identified collectively as “workers”) on site during construction and maintenance activities

Workers and the public are protected through the use of health and safety monitoring and measures.

4.1. Worker Health and Safety

Remediation-related construction activities were performed in accordance with the requirements of the Washington Industrial Safety and Health Act (RCW 49.17) and the Federal Occupational Safety and Health Act (29 CFR 1910, 1926). These regulations require protection of workers from exposure to contaminants and ensuring excavations are properly shored or sloped. During the remedial action, the contractor (Contractor) and engineer (Engineer) prepared and implemented a Health and Safety Plan (HASP) covering work activities and employees. All parties are responsible for their health and safety, although visitors can adopt either the Contractor’s or Engineer’s HASP for their own use.

5.0 MONITORING PROCEDURES AND SCHEDULE

The South Lagoon long-term monitoring will include:

- Cap inspections to assess the integrity of the soil cap

The table below summarizes the site inspection schedule.

Table 2: Site Inspection Schedule

Task	Frequency	Description
Cap Inspection	Annually	Inspect the capped area for damage and functionality

5.1. Cap Inspection

Cap inspections will be conducted annually to assess the integrity of the cap. Since the cap material is soil, the soil will be inspected to maintain the integrity of the cap. During the inspections, the Port of Pasco's representative will document and photograph the capped area, which is the soil cap over the South Lagoon. The inspection form is included in Appendix A. The representative performing the inspection will document the following conditions:

- The integrity of the soil cap;
- Puddles or other depressions indicating poor drainage;
- Indications of excessive runoff or erosion;
- Trees or brush of sufficient size such that their roots may damage the soil cap if allowed to grow.

If damage to the cap or one of the above conditions is observed, the inspector will make the notifications required in Section 7.0. Damage observed will be assessed, documented and photographed. Per the requirements in the pending environmental covenant, the Port of Pasco will be responsible to repair the damage and document the repair to Ecology within 30 days.

5.2. Site Security

The Port of Pasco provides security at the site. Given the minimum 6-foot soil cap over the contaminated soil the risk of exposure to contaminants is minimal. The anticipated use of the site is parking space.

6.0 MAINTENANCE

Cap maintenance will be conducted by the Port of Pasco maintenance and will be performed as needed based on the inspection observations.

Maintenance activities might include:

- Removing large plants and shrubs from the capped area in a manner that will not cause damage to the soil cap;
- Filling in animal burrows with sand and/or gravel;

Required repairs will be completed and reported to Ecology within 30 days of discovery. The soil cover is graded to match the surrounding site elevations. Large trees and shrubs will be removed from the capped area using hand tools to avoid damaging the soil cap.

7.0 REPORTING

Long term monitoring and maintenance reporting will occur as specified in the pending environmental covenant. Ecology will be notified of planned development activities, earthwork, utility installation or any other activity that might disturb the capped area or increase the risk of contaminant exposure to human health and the environment as required in the pending environmental covenant. The Port of Pasco will be responsible to provide the required reports and notifications listed below to Ecology:

Table 3: Reporting Requirements

Report	Frequency	Description
Cap Inspection Report	Annually	Report describing the observations from the cap inspection
Cap Damage	As needed	Damage to the cap must be reported to Ecology within 48 hours of discovery

8.0 REFERENCES


BMEC, Inc., Biosolids Sample Analysis Report, Big Pasco Industrial Center, Pasco, Washington, February 2021

Washington State Department of Ecology, 2007. Model Toxics Control Act (MTCA) Cleanup Regulations, Washington Administrative Code, Chapter 173-340. November 2007.

FIGURE 1:

VICINITY MAP

Legend

 Pasco

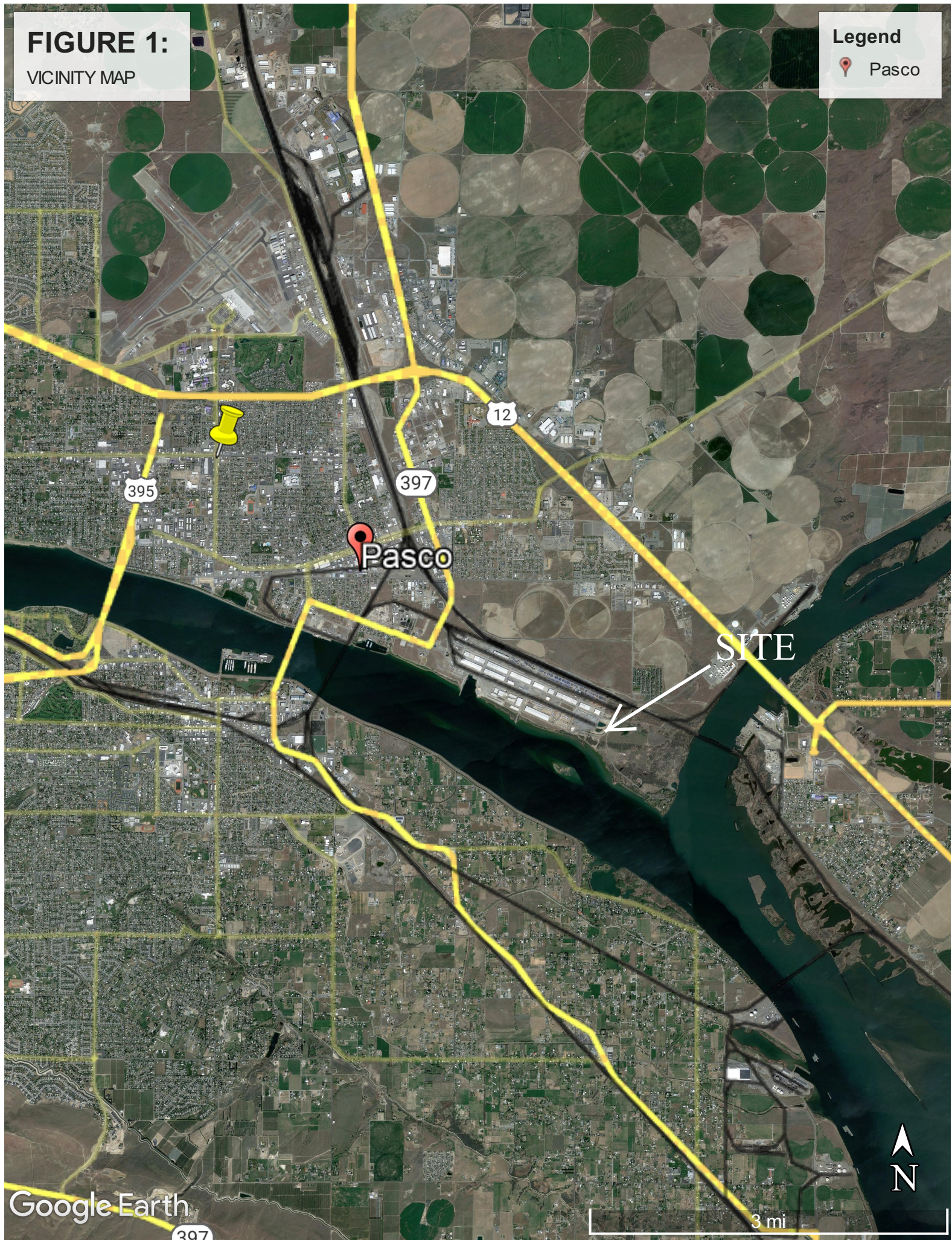
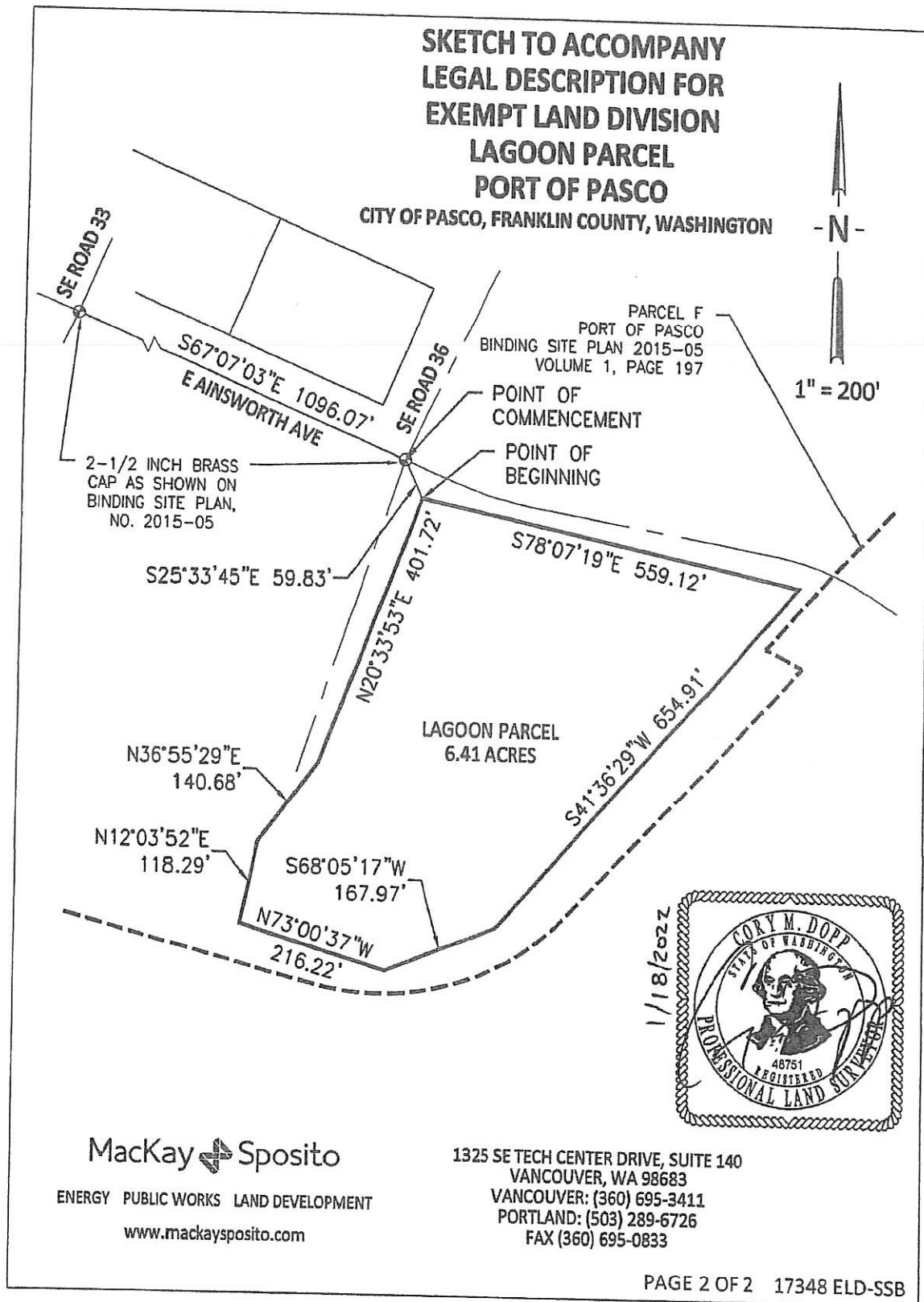


FIGURE 2: SITE PLAN



CONFORMED COPY

FIGURE 3: INSPECTION AREA

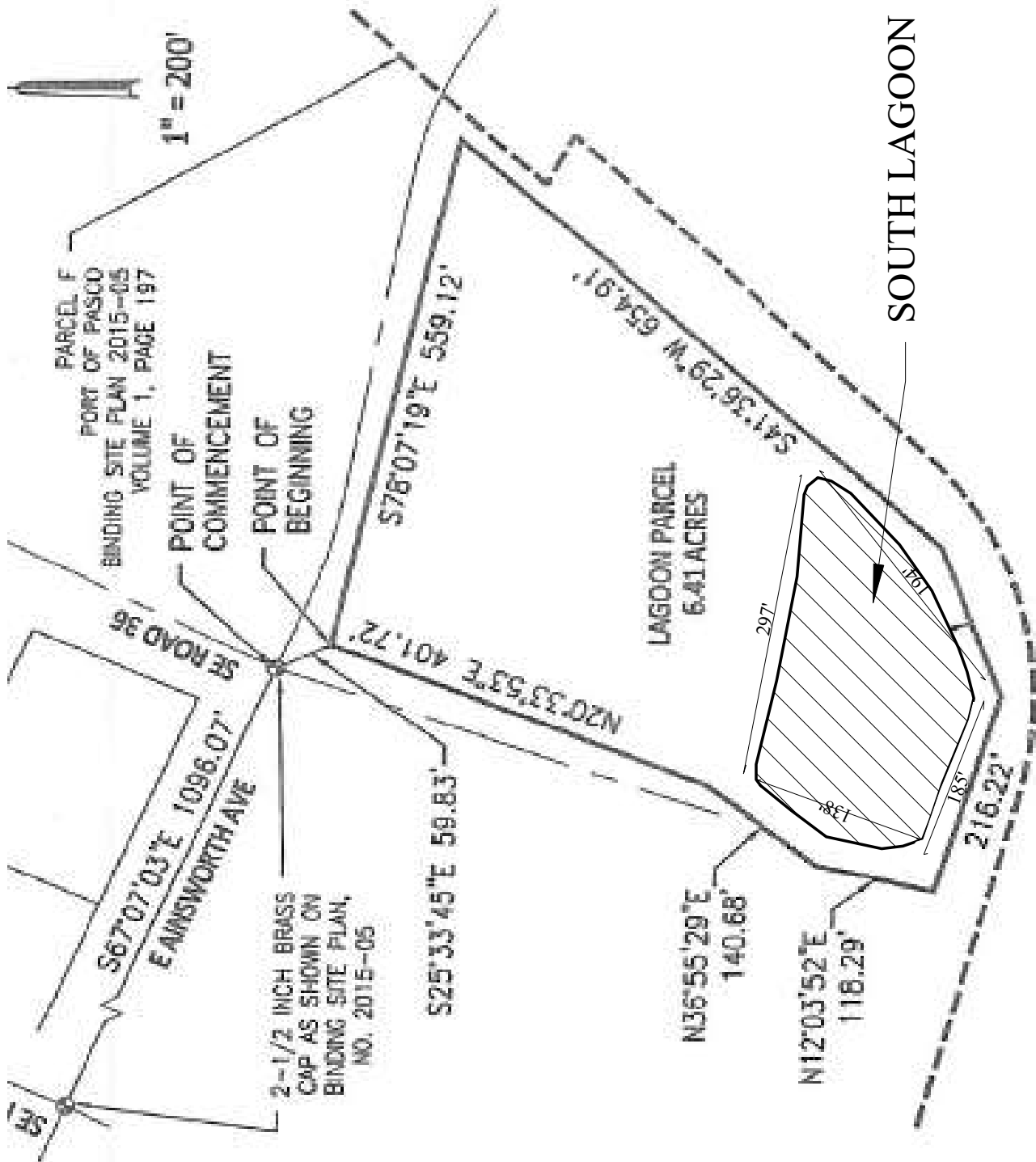


FIGURE 4: PHOTOS OF INSPECTION AREA



FORMER LAGOON AREA LOOKING EAST



NORTH LAGOON AFTER BACKFILLING



SOUTH LAGOON AFTER BACKFILLING LOOKING SOUTHEAST



SOUTH LAGOON AFTYER BACKFILLING LOOKING SOUTH

Table A-1

Cap Monitoring and Maintenance Field Form

CSID No. 15433 Big Pasco Industrial Park Lagoons

SE Road 36, Pasco, Washington

Date: _____

Time: _____

Name: _____

Component	Condition	Action Needed/Notes
Soil Cap		
Vegetation		
Erosion		
Animal Burrows		