Construction Stormwater General Permit

Stormwater Pollution Prevention Plan (SWPPP)

for

Paine Field Passenger Terminal Expansion Building

Prepared for:

Propeller Airports Paine Field, LLC

<table>
<thead>
<tr>
<th>Permittee / Owner</th>
<th>Developer</th>
<th>Operator / Contractor</th>
</tr>
</thead>
<tbody>
<tr>
<td>Propeller Airports Paine Field LLC</td>
<td>TBD</td>
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</table>

3220 100th Street SW, Everett, Washington

Certified Erosion and Sediment Control Lead (CESCL)

<table>
<thead>
<tr>
<th>Name</th>
<th>Organization</th>
<th>Contact Phone Number</th>
</tr>
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SWPPP Prepared By

<table>
<thead>
<tr>
<th>Name</th>
<th>Organization</th>
<th>Contact Phone Number</th>
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<tbody>
<tr>
<td>Phil Newton, PE</td>
<td>AECOM</td>
<td>206-438-2011</td>
</tr>
</tbody>
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SWPPP Preparation Date

June 1, 2016

Project Construction Dates

<table>
<thead>
<tr>
<th>Activity / Phase</th>
<th>Start Date</th>
<th>End Date</th>
</tr>
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<tr>
<td>Construction</td>
<td>Summer 2016</td>
<td>Fall 2016</td>
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<table>
<thead>
<tr>
<th>Acronym / Abbreviation</th>
<th>Explanation</th>
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<tbody>
<tr>
<td>303(d)</td>
<td>Section of the Clean Water Act pertaining to Impaired Waterbodies</td>
</tr>
<tr>
<td>BMP(s)</td>
<td>Best Management Practice(s)</td>
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<tr>
<td>CESCL</td>
<td>Certified Erosion and Sediment Control Lead</td>
</tr>
<tr>
<td>CO₂</td>
<td>Carbon Dioxide</td>
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<td>CSWGP</td>
<td>Construction Stormwater General Permit</td>
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<tr>
<td>CWA</td>
<td>Clean Water Act</td>
</tr>
<tr>
<td>DMR</td>
<td>Discharge Monitoring Report</td>
</tr>
<tr>
<td>DO</td>
<td>Dissolved Oxygen</td>
</tr>
<tr>
<td>Ecology</td>
<td>Washington State Department of Ecology</td>
</tr>
<tr>
<td>EPA</td>
<td>United States Environmental Protection Agency</td>
</tr>
<tr>
<td>ERTS</td>
<td>Environmental Report Tracking System</td>
</tr>
<tr>
<td>ESC</td>
<td>Erosion and Sediment Control</td>
</tr>
<tr>
<td>MTCA</td>
<td>Model Toxics Control Act</td>
</tr>
<tr>
<td>NA</td>
<td>Not Available</td>
</tr>
<tr>
<td>NPDES</td>
<td>National Pollutant Discharge Elimination System</td>
</tr>
<tr>
<td>NTU</td>
<td>Nephelometric Turbidity Units</td>
</tr>
<tr>
<td>OWS</td>
<td>Oil/Water Separator</td>
</tr>
<tr>
<td>pH</td>
<td>Power of Hydrogen</td>
</tr>
<tr>
<td>RCW</td>
<td>Revised Code of Washington</td>
</tr>
<tr>
<td>SPCC</td>
<td>Spill Prevention, Control, and Countermeasure</td>
</tr>
<tr>
<td>su</td>
<td>Standard Units</td>
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<tr>
<td>SCDM</td>
<td>2016 Snohomish County Drainage Manual</td>
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<tr>
<td>SWPPP</td>
<td>Stormwater Pollution Prevention Plan</td>
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<tr>
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<tr>
<td>TESC</td>
<td>Temporary Erosion and Sediment Control</td>
</tr>
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<td>TMDL</td>
<td>Total Maximum Daily Load</td>
</tr>
<tr>
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<td>Washington Administrative Code</td>
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<td>WSDOT</td>
<td>Washington Department of Transportation</td>
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1 Project Information

Project/Site Name: Paine Field Passenger Terminal Expansion Building
Street: 3220 100th Street SW
City: Everett State: WA Zip code: 98204
Parcel Number: 28041500400100
Location: Section 22, T28N, R04E
Receiving waterbody: Puget Sound

The site location is shown on Figure 1, Site Vicinity Map.

1.1 Existing Conditions

Total acreage (including support activities such as off-site equipment staging yards, material storage areas, borrow areas).

Total acreage: 11.15 acres
Disturbed acreage: 4.5 acres
Proposed hard surface in the disturbed acreage: 3.9 acres (including roof and covered walkways)
Proposed Fill: 15,000 cubic yards (CY)
Proposed Cut: 12,000 CY

Existing structures: The site is located within the Paine Field terminal aircraft parking ramp and existing terminal area parking lots. The 11.15 acre (AC) project site is currently developed and has undergone multiple surface disturbing activities over the last 50 years. The majority of the project site is paved, with only approximately 1.15 acres of existing grass/shrub/tree landscaping. The site includes four existing parking lots: Areas P1, P2, P3 and P4. The project site is located in Area P1 and the existing paved terminal aircraft parking ramp west of the existing terminal building. Areas P2, P3 and P4 are currently paved areas within the existing terminal area. Total land disturbance for the project is estimated to be approximately 4.5 AC. The passenger terminal expansion building and covered walkway will have a new roof footprint of 1.0 AC. Building foundations and utility trenching will disturb and replace approximately 1.7 AC of pollution generating impervious surface (PGIS). Existing landscaping converted to parking will disturb and create approximately 1.2 AC of new PGIS. Parking converted to landscaping will create 0.6 AC of new pervious surface within Area P1. Areas P2, P3 and P4 will be used for passenger vehicle parking. No land disturbance will occur in Areas P2, P3 and P4. Terminal area and associated parking lots are shown on Figure 2, Site Plan.
The existing conditions of the site are shown on Drawing C1.0.

**Topography:**

The existing site is generally relatively flat with an average elevation ranging from approximately 590 to 600 North American Vertical Datum (NAVD) 88, and slopes from east to west at an average slope of one percent.

**Drainage patterns:**

The stormwater runoff route downstream of the project site has been documented for previous projects performed in the site vicinity (HNTB, 2006; Javiation, 2016), and was verified by a field inspection conducted by AECOM in April 2016. Site stormwater is collected by a series of trench drains and catchbasins, routed through onsite manholes, and then to a 21-inch, 24-inch, 48-inch and finally a 54-inch diameter pipe that routes discharge into Alpha Pond, a regional detention facility. Stormwater is discharged from Alpha Pond into a 36-inch diameter culvert conveying water under the northeast end of Paine Field, where it discharges to a roadside ditch on the south side of State Route (SR) 526. Flow from the ditch enters a short drain system that conveys flow under SR 526 and then discharges to Japanese Gulch (HNTB, 2006). Stormwater from Japanese Gulch is discharged into Puget Sound.

No other stormwater runoff from upstream areas is expected to flow onto the site. There do not appear to be problems in managing the flows under the existing condition. No evidence of erosion or flooding was observed during the site visit by AECOM in April 2016. No upstream backwater affects are anticipated to be caused by the proposed construction.

**Existing Vegetation:**

The existing site is mostly paved with small, narrow areas of landscaping consisting of seeded grasses, trees, and shrubs within the existing parking areas. The passenger terminal expansion building would be located on an existing paved apron area.

**Critical Areas (wetlands, streams, high erosion risk, steep or difficult to stabilize slopes):**

A State Environmental Policy Act (SEPA) checklist was prepared by AECOM in April 2016, and it was determined that no critical areas or jurisdictional waters are impacted by the project.

Nearby surface water bodies, approximately 3,000 feet and 1,300 feet from the site, are the Alpha Pond and Boeing Lake, respectively. Alpha Pond is located northwest of the site and serves as a regional stormwater detention pond. Boeing Lake is located northeast of the site; no site stormwater enters Boeing Lake.

No potential erosion problems exist onsite.

**Soils:**

Soils and groundwater at the project are described in the Geotechnical report (AECOMa, 2016).
List of known impairments for 303(d) listed or Total Maximum Daily Load (TMDL) for the receiving waterbody: None

1.2 Proposed Construction Activities

Description of site development (example: subdivision):

The Paine Field Passenger Terminal project site development includes constructing a passenger terminal expansion building, reconfiguring a passenger parking lot and installing associated utilities such as, stormwater, water, gas, sewer, near the existing terminal building within the Paine Field property by Propeller Aviation.

Proposed construction does not disturb streams, wetlands, lakes, residential areas or roads.

Description of construction activities (example: site preparation, demolition, excavation):

Construction would commence upon issuance of necessary permits, scheduled for summer 2016. The terminal building will be shelled (enclosed) in approximately 5 months. The associated construction would involve the delivery of materials, minimal site grading and preparation, and connection to the existing utilities and infrastructure.

Following the construction and enclosure of the terminal, interior fit-out and furnishings will occur. Automobile parking lot improvements will take place concurrently with terminal construction and subsequent interior fit-out.

The construction activities onsite will be performed in the following steps:

- Site Preparation: Establishment of Temporary Erosion and Sediment Control (TESC), Stormwater Pollution Prevention Plan (SWPPP), and construction support facilities.
- Excavate and construct wetvault and site utilities on the landside.
- Construct surface features in parking lots.
- Construct roadways.
- Construct airside features, building and utilities.
- Construct site appurtenances.

Sequencing plan for the project is shown on G5.0, Sequencing Plan.
TESC Best Management Practices (BMPs) as described in this SWPPP are shown on Drawing C1.0 and C1.1 will be installed as part of site preparation.

Proposed construction schedule: Summer 2016 to Fall 2016.

Wet season construction activities: Terminal building construction, paving, striping and landscaping.

Description of site drainage including flow from and onto adjacent properties. Must be consistent with Site Map in Appendix A:

For the developed site, a combined detention and wetpool facility (wetvault) is planned to be installed for water quality treatment. A stormwater pump station is required upstream of the wetvault, due to site surface elevations and discharge invert elevations. A large wetwell and one large propeller pump and two small submersible pumps provide capacity for the range of runoff flows from 2-year, 24-hour to 100-year, 24-hour recurrence interval storms.

The developed site is not a high-use site due to traffic counts; however, the terminal aircraft parking ramp is subject to Oil Control Requirements because of the potential for spills during aircraft fueling. Therefore, the oil/water separator (OWS) is planned to be installed to accommodate the most significant potential spill volume (5,000 gallons) and is planned to be placed immediately downstream of the terminal aircraft parking ramp trench drains.

The conveyance system was sized for the total site area (disturbed and undisturbed) of 8.43 AC using the 24-hour, 25-year return period storm. Per the Snohomish County’s Engineering Design and Development Standards (EDDS) manual dated January 2016, the wetvault outlet pipe was sized using the 24-hour, 100-year return period storm.

Design calculations for the wetvault, OWS and conveyance are provided in the Stormwater Site Plan for the project (AECOMb, 2016).

Description of final stabilization (example: extent of revegetation, paving, landscaping):

Pervious areas will be stabilized and landscaped or seeded. Pervious areas include approximately 0.6 acres of the 4.5 acres (total disturbed). Impervious areas will include buildings and pavements. Impervious areas include approximately 1.0 acre of buildings and covered walkways and approximately 2.9 acres of pavement. Following completion of construction, no surfaces will be exposed and susceptible to erosion.

Existing pavement will remain in place at the remaining portions of the 11.15-acre site.
Contaminated Site Information:
Proposed activities regarding contaminated soils or groundwater (example: onsite treatment system, authorized sanitary sewer discharge):

There are no known contaminated soils or groundwater onsite.
2 Construction Stormwater Best Management Practices (BMPs)

The SWPPP is a living document reflecting current conditions and changes throughout the life of the project. These changes may be informal (i.e., hand-written notes and deletions). Update the SWPPP when the CESCL has noted a deficiency in BMPs or deviation from original design.

2.1 The 13 Elements

2.1.1 Element 1: Preserve Vegetation / Mark Clearing Limits

The current site has scarce vegetation. Existing vegetation will be preserved to the extent possible. Approximately, 1 acre of existing landscaping is replaced with pavement. Clearing limits are marked on Drawing C1.0. Existing landscaping is shown on Drawing C1.0.

List and describe BMPs:

**BMP C101: Preserving Natural Vegetation.** Existing vegetation not planned to be replaced with impervious surfaces will be preserved and upgraded as appropriate. Heavy equipment will not access these areas in order to prevent soil compaction or damage to vegetation. High visibility fence or flags may be installed around existing vegetation areas, as needed.

Installation Schedules: BMPs associated with vegetation preservation will be installed prior to soil disturbance activities onsite.

Inspection and Maintenance plan: During construction, the existing vegetation will be monitored to minimize disturbance. Onsite workers will be informed of the importance of maintaining areas demarcated for preservation.

Responsible Staff: CESCL

**BMP C103: High Visibility Plastic or Metal Fence.** There is existing fence around most of the property as shown on Drawing C9.0. New AOA fence and gate are planned to be installed at areas shown on Drawing C9.0. Additional high visibility plastic fence may be installed during construction, as required.
2.1.2 Element 2: Establish Construction Access

List and describe BMPs:

**BMP C105 - Stabilized Construction Entrance:** a stabilized construction entrance will be installed as shown on Drawing C1.0. Existing paved surfaces will remain in place in locations to be used for vehicle transport during construction. Stabilized construction entrance shall be installed and maintained in accordance with BMP C105 of the SCDM.

Installation Schedules: The stabilized construction entrance will be installed during mobilization and prior to other site work (including grading and filling).

Inspection and Maintenance plan: Potential tracking of accumulated sediment will be monitored throughout the duration of the work. Accumulated sediment and tracking will be cleaned on a routine basis using a sweeper truck. Water treatment will occur in the Baker tank or the wetvault which will be cleaned before and after construction.

Responsible Staff: CESCL
2.1.3 Element 3: Control Flow Rates

Will you construct stormwater retention and/or detention facilities?
☑ Yes ☐ No

A combined detention and water quality vault (wetvault) will be constructed at the location shown on Drawing C1.0.

Will you use permanent infiltration ponds or other low impact development (example: rain gardens, bio-retention, porous pavement) to control flow during construction?
☐ Yes ☑ No
The site soil soils are not favorable for low impact development. Refer to Geotechnical Report (AECOMa, 2016).

List and describe BMPs:

**BMP C241 – Temporary Sediment Pond:** A Baker tank will be installed at the location shown on C1.0. Runoff will be collected and treated in accordance with SCDM prior to discharge. After the wetvault is installed, use of the baker tank may be discontinued. Runoff will then be treated in the wetvault prior to discharge.

Installation Schedules: Baker tank will be installed prior to other site work (including grading and filling).

Inspection and Maintenance plan: The Baker tank or the wetvault will be observed weekly or daily during storm events to determine whether the facilities are functioning properly.

Responsible Staff: CESCL
2.1.4 Element 4: Install Sediment Controls

List and describe BMPs:

**BMP C233 - Silt Fence:** A silt fence will be installed along the clearing/grading limits as shown on Drawing C1.0. In impervious areas along the clearing/grading limits, fabric wrapped sand bags will be installed as shown on Drawing C1.0.

**BMP C241 – Temporary Sediment Pond:** A Baker tank will be installed at the location shown on C1.0. Runoff will be collected and treated in accordance with SCDM prior to discharge. After the wetvault is installed, use of the Baker tank may be discontinued. Runoff will then be treated in the wetvault prior to discharge.

Installation Schedules: Silt fence and baker tank will be installed prior to other site work (including grading and filling).

Inspection and Maintenance plan: The silt fence, Baker tank or the wetvault will be observed weekly or daily during large storm events to ensure the facilities are functioning properly. Sediment deposits will either be removed when the deposit reaches approximately one-third the height of the silt fence, or a second silt fence will be installed.

Responsible Staff: CESCL
2.1.5 Element 5: Stabilize Soils

Existing impervious areas onsite will be maintained as impervious until development or use of those areas is required therefore reducing exposed and disturbed soil. Existing paved areas will be used for vehicle transportation and stabilized construction entrances and paths will be installed in locations without existing paved areas. Vehicle traffic will be limited to these defined routes as possible to reduce soil compaction.

West of the Cascade Mountains Crest

<table>
<thead>
<tr>
<th>Season</th>
<th>Dates</th>
<th>Number of Days Soils Can be Left Exposed</th>
</tr>
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<tbody>
<tr>
<td>During the Dry Season</td>
<td>May 1 – September 30</td>
<td>7 days</td>
</tr>
<tr>
<td>During the Wet Season</td>
<td>October 1 – April 30</td>
<td>2 days</td>
</tr>
</tbody>
</table>

Soils must be stabilized at the end of the shift before a holiday or weekend if needed based on the weather forecast.

Anticipated project dates: Start date: Summer 2016  End date: Fall 2016

Will you construct during the wet season?
☑ Yes ☐ No

List and describe BMPs:

**BMP C120: Temporary and Permanent Seeding**: Temporary and permanent seeding will be placed in the proposed landscaped areas and in the existing landscaped areas where existing condition has to be restored at the completion of construction. Temporary seeding will be placed to stabilize the soils over winter, if needed.

BMP C125: Topsoiling: Topsoil will be placed in the proposed landscaped areas and in the existing landscaped areas where existing condition has to be restored at the completion of construction.

Installation Schedules: Topsoil and temporary and permanent seeding will be placed towards the end of construction in the proposed landscaped areas.

Inspection and Maintenance plan: The topsoil and seeding will be placed and maintained in accordance with the landscaping plans (to be developed) for the project.

Responsible Staff: Contractor.

**BMP C123 – Plastic Covering**: Stockpiles will be covered on landside when stockpiles are not in use. Plastic covering shall be installed and maintained in accordance with BMP C123 of the SCDM.
Installation Schedules: Plastic covering will be installed following stockpile formation.

Inspection and Maintenance plan: Plastic covering will be inspected prior to use, weekly at a minimum, and daily during storm events to evaluate functionality. If plastic covering is found to be damaged, replacements will be installed.

Responsible Staff: CESCL
2.1.6 Element 6: Protect Slopes

Will steep slopes be present at the site during construction?
☐ Yes ☒ No

List and describe BMPs: Not applicable
Installation Schedules: Not applicable
Inspection and Maintenance plan: Not applicable
Responsible Staff: Not applicable
2.1.7 Element 7: Protect Drain Inlets

List and describe BMPs:

**BMP C220 – Storm Drain Inlet Protection:** Catch basin inserts will be installed in catch basins remaining onsite as shown on Drawing C1.0. Inserts shall be installed and maintained in accordance with BMP C220 of the SCDM.

Installation Schedules: Catch basin inserts will be installed during mobilization and prior to site work (including grading and filling).

Inspection and Maintenance plan: Inlets will be inspected weekly at a minimum and daily during storm events. Catch basin inserts will be cleaned (or removed and replaced), when sediment has filled the device by one third or as specified by the manufacturer.

Responsible Staff: CESCL
2.1.8 Element 8: Stabilize Channels and Outlets

Provide stabilization, including armoring material, adequate to prevent erosion of outlets, adjacent stream banks, slopes, and downstream reaches, will be installed at the outlets of all conveyance systems.

Surface water flow from the project site is collected in storm drain pipes and is discharged from the site in an existing pipe network. Stabilization of channels and outlets is not applicable.

List and describe BMPs: Not applicable

Installation Schedules: Not applicable

Inspection and Maintenance plan: Not applicable

Responsible Staff: Not applicable
2.1.9 Element 9: Control Pollutants
The following pollutants are anticipated to be present onsite:

<table>
<thead>
<tr>
<th>Pollutant (List pollutants and source, if applicable)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Concrete dust from demolition and construction</td>
</tr>
<tr>
<td>Sedimentation</td>
</tr>
</tbody>
</table>

List and describe BMPs:

Sediment control BMPs will be implemented as detailed in previous sections.

**BMP C151: Concrete Handling** – Concrete handling will occur within designated contained areas. Concrete handling will be completed in accordance with BMP C151 of the SCDM.

**BMP C154: Concrete Washout Area** – Concrete washout will occur offsite or in a designated area to minimize potential for discharge of pollutants. Concrete washout will be completed in accordance with BMP C154 of the SCDM.

Installation Schedules: Berms or secondary containment required will be installed prior to concrete handling or washing.

Inspection and Maintenance plan: Prior to use, berms, secondary containment, and containers (i.e., concrete wash pan) used will be inspected for holes or damages that would compromise their integrity.

Responsible Staff: CESCL

Will maintenance, fueling, and/or repair of heavy equipment and vehicles occur onsite?
- Yes □ No

Fueling will be by remote fuel truck with no onsite fuel storage. Required repairs will occur either offsite or within a contained (lined) area.

List and describe BMPs:

Secondary containment will be utilized during fueling and repair. A spill kit will be present on the fuel truck and present during onsite repairs.

Installation Schedules: Secondary containment will be installed prior to fueling or repair.

Inspection and Maintenance plan: Plastic lining and absorbent socks will be inspected prior to use to ensure they are in proper working order.

Responsible Staff: CESCL

Will wheel wash or tire bath system BMPs be used during construction?
- □ Yes □ No
List and describe BMPs: Not applicable

Installation Schedules: Not applicable

Inspection and Maintenance plan: Not applicable

Responsible Staff: Not applicable

Will pH-modifying sources be present onsite?  
☑ Yes ☐ No

<table>
<thead>
<tr>
<th>Table 2 – pH-Modifying Sources</th>
</tr>
</thead>
<tbody>
<tr>
<td>☐ None</td>
</tr>
<tr>
<td>☑ Bulk cement</td>
</tr>
<tr>
<td>☐ Cement kiln dust</td>
</tr>
<tr>
<td>☐ Fly ash</td>
</tr>
<tr>
<td>☑ Other cementitious materials</td>
</tr>
<tr>
<td>☑ New concrete washing or curing waters</td>
</tr>
<tr>
<td>☑ Waste streams generated from concrete grinding and sawing</td>
</tr>
<tr>
<td>☑ Exposed aggregate processes</td>
</tr>
<tr>
<td>☐ Dewatering concrete vaults</td>
</tr>
<tr>
<td>☑ Concrete pumping and mixer washout waters</td>
</tr>
<tr>
<td>☐ Recycled concrete</td>
</tr>
<tr>
<td>☐ Recycled concrete stockpiles</td>
</tr>
<tr>
<td>☐ Other (i.e., calcium lignosulfate) [please describe:  ]</td>
</tr>
</tbody>
</table>

List and describe BMPs:

Containment BMPs described for concrete work will be utilized to prevent pH-modifying sources from polluting waterways.

**BMP C152: Sawcutting and Surfacing Pollution Prevention** – Slurry generated during sawcutting of existing pavement will be vacuumed and properly disposed of to ensure pollutants do not reach surface water or groundwater. Sawcutting will be completed in accordance with BMP C152 of the SCDM.

Installation Schedules: Berms or secondary containment required will be installed prior to concrete handling, washing or sawcutting.

Inspection and Maintenance plan: Inspection and Maintenance will follow procedures outlined for concrete handling and concrete washout areas above. The CESCL will monitor for pH at site monitoring locations shown on Drawing C1.0. If pH values are observed outside for the range 6.5 to 8.5 su, additional measures will be implemented to treat stormwater prior to discharge (written approval will be requested from Ecology before the use of chemical treatment with the except of CO₂ or dry ice).
Concrete trucks must not be washed out onto the ground, or into storm drains, open ditches, streets, or streams. Excess concrete must not be dumped onsite, except in designated concrete washout areas with appropriate BMPs installed.

<table>
<thead>
<tr>
<th>Yes</th>
<th>No</th>
</tr>
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</tbody>
</table>

List and describe BMPs: Not Applicable

Installation Schedules: Not Applicable

Inspection and Maintenance plan: Not Applicable

Responsible Staff: Not Applicable
2.1.10 Element 10: Control Dewatering

The groundwater table is greater than 50 feet below ground surface, so it is unlikely that dewatering will be needed. If necessary, discharge from groundwater control wells or sumps will be sent to the existing stormwater treatment systems prior to discharge. Perched groundwater conditions may exist and the amount of perched groundwater is not expected to be high.

Table 3 – Dewatering BMPs

<p>| | |</p>
<table>
<thead>
<tr>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Infiltration</td>
</tr>
<tr>
<td></td>
<td>Transport off-site in a vehicle (vacuum truck for legal disposal)</td>
</tr>
<tr>
<td></td>
<td>Ecology-approved onsite chemical treatment or other suitable treatment technologies</td>
</tr>
<tr>
<td></td>
<td>Sanitary or combined sewer discharge with local sewer district approval (last resort)</td>
</tr>
<tr>
<td>✔</td>
<td>Use of sedimentation bag with discharge to ditch or swale (small volumes of localized dewatering)</td>
</tr>
</tbody>
</table>

List and describe BMPs: Baker tanks or other storage methods will be utilized as needed during Construction. Approved onsite chemical treatment will be utilized as needed.

Installation Schedules: Not applicable

Inspection and Maintenance plan: Existing facilities will be inspected weekly at a minimum and daily during storm events.

Responsible Staff: CESCL
2.1.11 Element 11: Maintain BMPs

TESC BMPs shall be maintained and repaired as needed to ensure continued performance of their intended function.

Maintenance and repair shall be conducted in accordance with each particular BMP specification (see Volume II of the SCDM).

Visual monitoring of BMPs installed at the site will be conducted at least once every calendar week and within 24 hours of stormwater or non-stormwater discharge from the site. If the site becomes inactive and is temporarily stabilized, the inspection frequency may be reduced to once every calendar month.

TESC BMPs shall be removed within 30 days after final site stabilization is achieved or after the temporary BMPs are no longer needed.

Trapped sediment shall be stabilized onsite or removed. Disturbed soil resulting from removal of either BMPs or vegetation shall be permanently stabilized.

Additionally, protection must be provided for BMPs installed for the permanent control of stormwater from sediment and compaction. BMPs that are to remain in place following completion of construction shall be examined and restored to full operating condition. If sediment enters these BMPs during construction, the sediment shall be removed and the facility shall be returned to conditions specified in the construction documents.

List and describe BMPs:

BMP C150: Materials on Hand – Quantities of erosion prevention and sediment control materials will be kept on the project site at all times to be used for emergency situations such as unexpected heavy summer rains in accordance with BMP C150 of SCDM.

BMP C160: Certified Erosion and Sediment Control Lead – The Contractor will designate at least one person as the responsible representative in charge of erosion and sediment control (ESC), and water quality protection. The designated person will be the Certified Erosion and Sediment Control Lead (CESCL) who is responsible for ensuring compliance with all local, state, and federal erosion and sediment control and water quality requirements in accordance with SCDM requirements.
2.1.12 Element 12: Manage the Project

The project will be managed based on the following principles:

- The project will be phased and seasonal work limitations will be taken into account.
- Inspection and monitoring:
  - Inspection, maintenance and repair of BMPs will occur as needed to ensure performance of their intended function.
  - Site inspections and monitoring will be conducted in accordance with Special Condition S4 of the CSWGP. Sampling locations are indicated on Drawing C1.0. Sampling station(s) are located in accordance with applicable requirements of the CSWGP.
- Maintain an updated SWPPP.
  - The SWPPP will be updated, maintained, and implemented in accordance with Special Conditions S3, S4, and S9 of the CSWGP.

As site work progresses the SWPPP will be modified routinely to reflect changing site conditions. The SWPPP will be reviewed monthly to ensure the content is current.

### Table 4 – Management

<table>
<thead>
<tr>
<th>Item</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>✓ Design the project to fit the existing topography, soils, and drainage patterns</td>
<td></td>
</tr>
<tr>
<td>✓ Emphasize erosion control rather than sediment control</td>
<td></td>
</tr>
<tr>
<td>✓ Minimize the extent and duration of the area exposed</td>
<td></td>
</tr>
<tr>
<td>✓ Keep runoff velocities low</td>
<td></td>
</tr>
<tr>
<td>✓ Retain sediment onsite</td>
<td></td>
</tr>
<tr>
<td>✓ Thoroughly monitor site and maintain ESC measures</td>
<td></td>
</tr>
<tr>
<td>✓ Schedule major earthwork during the dry season</td>
<td></td>
</tr>
<tr>
<td>✗ Other (please describe)</td>
<td></td>
</tr>
</tbody>
</table>

List and describe BMPs:

**BMP C150: Materials on Hand** – Quantities of erosion prevention and sediment control materials will be kept on the project site at all times to be used for emergency situations such as unexpected heavy summer rains in accordance with BMP C150 of SCDM.

**BMP C160: Certified Erosion and Sediment Control Lead** – The Contractor will designate at least one person as the responsible representative in charge of erosion and sediment control (ESC), and water quality protection. The designated person will be the Certified Erosion and Sediment Control Lead (CESCL) who is responsible for ensuring compliance with all local, state, and federal erosion and sediment control and water quality requirements in accordance with SCDM requirements.

**BMP C162: Scheduling** – Projects will be phased and seasonal work limitations will be taken into account. Construction will be minimized during rainy periods to the maximum extent. Grading will be completed as soon as possible.
2.1.13 Element 13: Protect on-site stormwater management BMPs

List and describe BMPs:

**BMP C103: High Visibility Fence** – A high visibility fence will be installed around the wetvault, pump station, and oil/water separator to prevent damage during construction.

Installation Schedules: Immediately after completion of wetvault, pump station, and oil/water separator installation.

Inspection and Maintenance plan: The fence will be inspected weekly at a minimum.

Responsible Staff: CESCL
### 3 Pollution Prevention Team

#### Table 6 – Team Information

<table>
<thead>
<tr>
<th>Title</th>
<th>Name(s)</th>
<th>Phone Number</th>
</tr>
</thead>
<tbody>
<tr>
<td>Certified Erosion and Sediment Control Lead (CESCL)</td>
<td>TBD</td>
<td>NA</td>
</tr>
<tr>
<td>Resident Engineer</td>
<td>TBD</td>
<td>NA</td>
</tr>
<tr>
<td>Emergency Ecology Contact</td>
<td>Northwest Regional Office</td>
<td>1-425-649-7000</td>
</tr>
<tr>
<td>Emergency Permittee/Owner Contact</td>
<td>Mark Reichin</td>
<td>1-425-216-3010</td>
</tr>
<tr>
<td>Non-Emergency Owner Contact</td>
<td>TBD</td>
<td>NA</td>
</tr>
<tr>
<td>Monitoring Personnel</td>
<td>TBD</td>
<td>NA</td>
</tr>
<tr>
<td>Ecology Regional Office</td>
<td>Northwest Regional Office</td>
<td>1-425-649-7000</td>
</tr>
</tbody>
</table>
4 Monitoring and Sampling Requirements

Monitoring includes visual inspection, sampling for water quality parameters of concern, and documentation of the inspection and sampling findings in a site log book. A site log book will be maintained for onsite construction activities and will include:

- A record of the implementation of the SWPPP and other permit requirements
- Site inspections
- Stormwater sampling data

File a blank form under Appendix B.

The site log book must be maintained onsite within reasonable access to the site and be made available upon request to Ecology or the local jurisdiction.

Numeric effluent limits may be required for certain discharges to 303(d) listed waterbodies. See CSWGP Special Condition S8 and Section 5 of this template.

4.1 Site Inspection

Site inspections will be conducted at least once every calendar week and within 24 hours following any discharge from the site. For sites that are temporarily stabilized and inactive, the required frequency is reduced to once per calendar month.

The monitoring point(s) are indicated on Drawing C1.0 and in accordance with the applicable requirements of the CSWGP.

4.2 Stormwater Quality Sampling

4.2.1 Turbidity Sampling

Requirements include calibrated turbidity meter or transparency tube to sample site discharges for compliance with the CSWGP. Sampling will be conducted at monitoring points at least once per calendar week.

Method for sampling turbidity:

Table 7 – Turbidity Sampling Method

| Turbidity Meter/Turbidimeter (required for disturbances 5 acres or greater in size) |
| Transparency Tube (option for disturbances less than 1 acre and up to 5 acres in size) |

The benchmark for turbidity value is 25 nephelometric turbidity units (NTU) and a transparency less than 33 centimeters.

If the discharge’s turbidity is 26 to 249 NTU or the transparency is less than 33 cm but equal to or greater than 6 cm, the following steps will be conducted:

1. Review the SWPPP for compliance with Special Condition S9. Make appropriate revisions within 7 days of the date the discharge exceeded the benchmark.
2. Immediately begin the process to fully implement and maintain appropriate source control and/or treatment BMPs as soon as possible. Address the problems within 10 days of the date the discharge exceeded the benchmark. If installation of necessary treatment BMPs is not feasible within 10 days, Ecology may approve additional time when the Permittee requests an extension within the initial 10-day response period.


If the turbidity exceeds 250 NTU or the transparency is 6 cm or less at any time, the following steps will be conducted:

1. Telephone or submit an electronic report to the applicable Ecology Region’s Environmental Report Tracking System (ERTS) within 24 hours.
   - **Northwest Region** (Island, King, Kitsap, San Juan, Skagit, Snohomish, and Whatcom counties): 1-425-649-7000 or http://www.ecy.wa.gov/programs/spills/forms/nerts_online/NWRO_nerts_online.html

2. Immediately begin the process to fully implement and maintain appropriate source control and/or treatment BMPs as soon as possible. Address the problems within 10 days of the date the discharge exceeded the benchmark. If installation of necessary treatment BMPs is not feasible within 10 days, Ecology may approve additional time when the Permittee requests an extension within the initial 10-day response period.


4. Continue to sample discharges daily until one of the following is true:
   - Turbidity is 25 NTU (or lower).
   - Transparency is 33 cm (or greater).
   - Compliance with the water quality limit for turbidity is achieved.
     - 1 - 5 NTU over background turbidity, if background is less than 50 NTU
     - 1% - 10% over background turbidity, if background is 50 NTU or greater
   - The discharge stops or is eliminated.
4.2.2 pH Sampling

pH monitoring is required for “Significant concrete work” (i.e., greater than 1000 cubic yards poured concrete over the life of the project). The use of recycled concrete or engineered soils (soil amendments including but not limited to Portland cement-treated base [CTB], cement kiln dust [CKD] or fly ash) also requires pH monitoring.

For significant concrete work, pH sampling will start the first day concrete is poured and continue until it is cured, typically three (3) weeks after the last pour.

For engineered soils and recycled concrete, pH sampling begins when engineered soils or recycled concrete are first exposed to precipitation and continues until the area is fully stabilized.

If the measured pH is 8.5 or greater, the following measures will be taken:

1. Prevent high pH water from entering storm sewer systems or surface water.
2. Adjust or neutralize the high pH water to the range of 6.5 to 8.5 su using appropriate technology such as carbon dioxide (CO₂) sparging (liquid or dry ice).
3. Written approval will be obtained from Ecology prior to the use of chemical treatment other than CO₂ sparging or dry ice.

Method for sampling pH:

Table 8 – pH Sampling Method

| □ | pH meter |
| | pH test kit |
| □ | Wide range pH indicator paper |
5 Discharges to 303(d) or Total Maximum Daily Load (TMDL) Waterbodies

5.1 303(d) Listed Waterbodies
Is the receiving water 303(d) (Category 5) listed for turbidity, fine sediment, phosphorus, or pH?

☐ Yes ☑ No

List the impairment(s):

Not applicable

5.2 TMDL Waterbodies
Waste Load Allocation for CWSGP discharges:

Not applicable

List and describe BMPs:

Not applicable

Discharges to TMDL receiving waterbodies will meet in-stream water quality criteria at the point of discharge.

The Construction Stormwater General Permit Proposed New Discharge to an Impaired Water Body form is included in Appendix C.
6 Reporting and Record Keeping

6.1 Record Keeping

6.1.1 Site Log Book
A site log book will be maintained for onsite construction activities and will include:

- A record of the implementation of the SWPPP and other permit requirements
- Site inspections
- Sample logs

6.1.2 Records Retention
Records will be retained during the life of the project and for a minimum of three (3) years following the termination of permit coverage in accordance with Special Condition S5.C of the CSWGP.

Permit documentation to be retained onsite:

- CSWGP
- Permit Coverage Letter
- SWPPP
- Site Log Book

Permit documentation will be provided within 14 days of receipt of a written request from Ecology. A copy of the SWPPP or access to the SWPPP will be provided to the public when requested in writing in accordance with Special Condition S5.G.2.b of the CSWGP.

6.1.3 Updating the SWPPP
The SWPPP will be modified if:

- Found ineffective in eliminating or significantly minimizing pollutants in stormwater discharges from the site.
- There is a change in design, construction, operation, or maintenance at the construction site that has, or could have, a significant effect on the discharge of pollutants to waters of the State.

The SWPPP will be modified within seven (7) days if inspection(s) or investigation(s) determine additional or modified BMPs are necessary for compliance. An updated timeline for BMP implementation will be prepared.
6.2 Reporting

6.2.1 Discharge Monitoring Reports
Cumulative soil disturbance is one (1) acre or larger; therefore, Discharge Monitoring Reports (DMRs) will be submitted to Ecology monthly. If there was no discharge during a given monitoring period the DMR will be submitted as required, reporting “No Discharge”. The DMR due date is fifteen (15) days following the end of each calendar month.

DMRs will be reported online through Ecology’s WQWebDMR System.

6.2.2 Notification of Noncompliance
If any of the terms and conditions of the permit is not met, and the resulting noncompliance may cause a threat to human health or the environment, the following actions will be taken:

1. Ecology will be notified within 24-hours of the failure to comply by calling the applicable Regional office ERTS phone number (Regional office numbers listed below).
2. Immediate action will be taken in order to avoid the discharge/pollution or otherwise stop or correct the noncompliance. If applicable, sampling and analysis of any noncompliance will be repeated immediately and the results submitted to Ecology within five (5) days of becoming aware of the violation.
3. A detailed written report describing the noncompliance will be submitted to Ecology within five (5) days, unless requested earlier by Ecology.

Anytime turbidity sampling indicates turbidity is 250 NTUs or greater, or water transparency is 6 cm or less, the Ecology Regional office will be notified by phone within 24 hours of analysis as required by Special Condition S5.A of the CSWGP.

- **Northwest Region** at 1-425-649-7000 for Island, King, Kitsap, San Juan, Skagit, Snohomish, and Whatcom counties

Include the following information:

1. Your name and / Phone number
2. Permit number
3. City / County of project
4. Sample results
5. Date / Time of call
6. Date / Time of sample
7. Project name

In accordance with Special Condition S4.D.5.b of the CSWGP, the Ecology Regional office will be notified if chemical treatment other than CO₂ sparging is planned for adjustment of high pH water.
7 References

AECOMa, Report of Geotechnical Consultation, Paine Field Passenger Terminal, Snohomish County Airport, June 1, 2016

AECOMb, “Stormwater Site Plan, Paine Field Passenger Terminal, Snohomish County Airport, June 1, 2016.


Snohomish County, Engineering Design and Development Standards (EDDS) manual, dated January 2016,
FIGURES
Figure Source: Fentress Architects, SEPA Checklist Figure 3A, March 11, 2016

Legend
- Test pit (GeoEngineers, 2005)
- Boring (GeoEngineers, 2005)
- Pilot infiltration test (AECOM, 2016)

Note
1. Test pit and boring locations shown are approximate.

Figure 2
Site Plan

Job No. 60490227

Paine Field Passenger Terminal
Snohomish County Airport, Washington
DRAWINGS
SNOHOMISH COUNTY AIRPORT
PAINE FIELD    EVERETT, WASHINGTON

PAINE FIELD PASSENGER TERMINAL

LAND DISTURBANCE PERMIT APPLICATION
03 JUNE 2016

PROJECT CONTACTS
OWNER/APPLICANT, AND
POINT OF CONTACT:
PROPELLER AIRPORTS
885 THIRD AVENUE
20TH FLOOR
NEW YORK, NY 10022
(212) 209-3037

CONTACT:
MARK REICHIN
mark@propellerairports.com

PROPERTY TAX ACCOUNT NUMBER
28041500400100

LEGAL DESCRIPTION
PAINE FIELD AIRPORT - SECTOR 2
PART OF SECTION 22, T28N, R04E
WILLAMETTE MERIDIAN

SITE ADDRESS
3220 100TH STREET S.W.
EVERETT, WA 98204-1390

ENGINEER:
AECOM
1111 3RD AVENUE, SUITE 1600
SEATTLE, WA 98101
TEL: (206) 438-2700
FAX: (206) 438-2699

CONTACT:
JOHN YARNISH
john.yarnish@aecom.com

AIRPORT ROAD
100TH STREET SW

AIR TRAFFIC CONTROL TOWER

NOT TO SCALE

SNOHOMISH COUNTY AIRPORT

VICINITY MAP

G1.0
1. APPROVAL OF THIS EROSION AND SEDIMENT CONTROL (ESC) PLAN DOES NOT CONSTITUTE AN APPROVAL OF PERMANENT PAVEMENT OR DRAINAGE DESIGN (E.G., SIZE AND LOCATION OF PAVEMENT, PIPES, RESTRICTORS, CHANNELS, RETENTION FACILITIES, UTILITIES, ETC.).

2. THE IMPLEMENTATION OF THESE ESC PLANS AND THE CONSTRUCTION, MAINTENANCE, REPLACEMENT, AND UPGRADING OF THESE ESC FACILITIES IS THE RESPONSIBILITY OF THE CONTRACTOR UNTIL ALL CONSTRUCTION IS APPROVED.

3. THE ESC FACILITIES SHOWN ON THIS PLAN MUST BE CONSTRUCTED PRIOR TO OR IN CONJUNCTION WITH ALL CLEARING AND GRADING SO AS TO ENSURE THAT THE TRANSPORT OF SEDIMENT TO SURFACE WATERS, DRAINAGE SYSTEMS, AND ADJACENT PROPERTIES IS MINIMIZED.

4. THE ESC FACILITIES SHOWN ON THIS PLAN ARE THE MINIMUM REQUIREMENTS FOR ANTICIPATED SITE CONDITIONS. DURING THE CONSTRUCTION PERIOD, THESE ESC FACILITIES SHALL BE UPGRADED AS NEEDED FOR UNEXPECTED STORM EVENTS AND MODIFIED TO ACCOUNT FOR CHANGING SITE CONDITIONS (E.G., ADDITIONAL SUMP PUMPS, RELOCATION OF DITCHES AND SILT FENCES, ETC.).

5. THE ESC FACILITIES SHALL BE INSPECTED DAILY BY THE SITE SUPERVISOR AND MAINTAINED TO ENSURE CONTINUED PROPER FUNCTIONING. WRITTEN RECORDS SHALL BE KEPT OF WEEKLY REVIEWS OF THE ESC FACILITIES DURING THE WET SEASON (OCT. 1 TO APRIL 30) AND OF MONTHLY REVIEWS DURING THE DRY SEASON (MAY 1 TO SEPTEMBER 30).

6. ANY AREAS OF EXPOSED SOILS (SAND, Silt, etc.) THAT WILL NOT BE DISTURBED FOR TWO DAYS DURING THE WET SEASON OR SEVEN DAYS DURING THE DRY SEASON SHALL BE IMMEDIATELY STABILIZED WITH THE APPROVED ESC METHODS (E.G., SEEDING, MULCHING, PLASTIC COVERING, ETC.). PLASTIC COVERING MAY BE USED ON STOCKPILE AREAS TO MAINTAIN OPTIMUM MOISTURE CONTENT AND PREVENT SEDIMENTATION.

7. THE ESC FACILITIES ON INACTIVE SITES SHALL BE INSPECTED AND MAINTAINED A MINIMUM OF ONCE A MONTH OR PRECEDING AND WITHIN FORTY-EIGHT (48) HOURS FOLLOWING A STORM EVENT.

8. AT NO TIME SHALL MORE THAN ONE (1) FOOT OF SEDIMENT BE ALLOWED TO ACCUMULATE WITHIN A CATCH BASIN. ALL CATCH BASINS AND CONVEYANCE LINES SHALL BE VACUUM CLEANED PRIOR TO INSTALLING CATCH BASIN INLET PROTECTION AND PRIOR TO PROJECT COMPLETION. THE CLEANING OPERATION SHALL NOT FLUSH SEDIMENT. SEDIMENT REMOVED FROM CATCH BASINS AND STORMWATER MANHOLE STRUCTURES SHALL BE TAKEN OFF SITE FOR DISPOSAL.

9. WHERE STRAW MULCH FOR TEMPORARY EROSION CONTROL IS REQUIRED, IT SHALL BE APPLIED AT A MINIMUM THICKNESS OF 2 TO 3 INCHES.

10. ALL SEEDING MUST BE COMPLETED BY SEPTEMBER 30.

11. COVER MEASURES WILL BE APPLIED IN CONFORMANCE WITH APPENDIX D OF THE 2005 DEPARTMENT OF ECOLOGY SURFACE WATER DESIGN MANUAL.

12. NEW STORM DRAIN INLETS WITHIN THE PROJECT AREA SHALL BE PROTECTED WITH INLET PROTECTION.

13. A MINIMUM OF 2 FEET COVER SHALL BE PROVIDED FOR ALL TEMPORARY PIPES.

14. PROCESS WATER, SUCH AS WATER USED IN CONCRETE WORK, SHALL BE HAULED TO AN APPROPRIATE DISPOSAL SITE. PROCESS WATER SHALL NOT BE DISCHARGED TO THE STORM DRAIN.

15. THE CONTRACTOR SHALL COVER AND SECURE MATERIAL ON THE TRUCKS DURING OFFSITE TRAVEL IF NECESSARY TO PREVENT SPILLAGE OR LOSS OF MATERIAL.

16. UNLESS OTHERWISE NOTED, THE WASHOUT FROM A CONCRETE TRUCK SHOULD BE DISPOSED OF INTO:
   16.1. A DESIGNATED AREA WHICH SHALL LATER BE BACKFILLED SUCH AS A SLURRY PIT.
   16.2. AN AREA WHERE THE CONCRETE CAN HARDEN, BE BROKEN UP, AND THEN PUT IN THE DUMPSTER.
   16.3. A LOCATION WHICH IS NOT SUBJECT TO SURFACE WATER RUNOFF, AND MORE THAN 50 FEET AWAY FROM A STORM DRAIN, OPEN DITCH, RECEIVING WATER, OR WETLAND.
1. PROVIDE FOOTING DRAIN (NOT SHOWN) AROUND STRUCTURE. CONNECT FOOTING DRAINS TO MANIFOLD STRUCTURE AND PROVIDE TIDEFLEX CHECK VALVE (OR EQUAL).
APPENDIX A

DOWNSTREAM ANALYSIS
4-11-16 – GMF  
SITE VISIT TO TV OUTFALL FROM PROPELLER TERMINAL

8:00 AM – Met with Bravo, discussed goals for the day and then walked out to MH 5395 to determine the first set up.

8:15 AM – Talked with Stephen Henry (with PAE) about getting an escort to investigate the outfall on airside. Set up at MH 5395 heading NE to MH 5728.

- MH 5395 to MH 5728: 21” Concrete, L=478’
- MH 5395 has a 15” pipe coming in from the west (from MH 5394, this line was not videoed, also a 12” pipe from SE (from the road swale)
- MH 5728 has a slotted lid
- MH 5728 also has a 15” pipe coming in from the south

9:00 AM – Met with Stephen went out onto airside (MH 5728) to verify the downstream MH as MH 5728. Walked perceived outfall alignment.

9:50 AM – Set up at SW corner of Bldg E (E-105) on a MH that is not labeled on any base map that we had onsite, for second setup. Head upstream to MH 5728 to verify the 24” concrete pipe connection, seen in MH 5728.

- MH 5728 to MH unknown # (at SW corner of Bldg E) : 24” Concrete, L=282’
- MH with unknown # at corner of Bldg E is located just off of the service road behind the curb

10:15 AM – Same setup at Bldg E, heading downstream to MH 1170.

- MH unknown # (at SW corner of Bldg E) to MH 1170: 24” Smooth Lined Corrugated HDPE, L=152’

10:50 AM – Setup at MH 1169 heading downstream to MH 2481. MH 2481 is in the middle of the service road south of Boeing property line. Verify the downstream pipe is a 54” concrete pipe that flows onto Boeing property.

- MH 1169 to MH 2481 : 48” Smooth Lined Corrugated HDPE, L=190’
- MH 1169 also has a 36” pipe coming from the SE, upstream MH unknown

11:30 AM – Setup at MH 1170 heading downstream to MH 1169

- MH 1170 to MH 1169 : 24” Smooth Lined Corrugated HDPE, L=16’
- MH 1170 also has a 12” pipe coming in that drains the swale west of the MH.

11:45 AM – Bravo checked depth of pipe in each structure along the outfall alignment from MH 5395 to MH 2481.

12:05 PM – Stephen Henry (PAE) and Bravo left the site.

12:05 PM – I walked the site to look for areas of concrete, took pictures of vaults within the asphalt that may need to be moved or relocated.

12:45 PM – I left the site.
APPENDIX B

SITE INSPECTION FORM
Construction Stormwater Site Inspection Form

Project Name __________________________ Permit # __________ Inspection Date __________ Time ______

Name of Certified Erosion Sediment Control Lead (CESCL) or qualified inspector if less than one acre
Print Name: _____________________________________________________________________________

Approximate rainfall amount since the last inspection (in inches): ________________________________

Approximate rainfall amount in the last 24 hours (in inches): ________________________________

Current Weather  Clear  Cloudy  Mist  Rain  Wind  Fog

A. Type of inspection:  Weekly  Post Storm Event  Other

B. Phase of Active Construction (check all that apply):

Pre Construction/installation of erosion/sediment controls  Clearing/Demo/Grading
Concrete pours  Vertical Construction/buildings  Infrastructure/storm/roads
Offsite improvements  Site temporary stabilized  Utilities  Final stabilization

C. Questions:

1.  Were all areas of construction and discharge points inspected?  Yes  No
2.  Did you observe the presence of suspended sediment, turbidity, discoloration, or oil sheen  Yes  No
3.  Was a water quality sample taken during inspection?  (refer to permit conditions S4 & S5)  Yes  No
4.  Was there a turbid discharge 250 NTU or greater, or Transparency 6 cm or less?*  Yes  No
5.  If yes to #4 was it reported to Ecology?  Yes  No
6.  Is pH sampling required? pH range required is 6.5 to 8.5.  Yes  No

If answering yes to a discharge, describe the event. Include when, where, and why it happened; what action was taken, and when.

_____________________________________________________________________________________

_____________________________________________________________________________________

*If answering yes to #4 record NTU/Transparency with continual sampling daily until turbidity is 25 NTU or less/ transparency is 33 cm or greater.

Sampling Results:  Date: __________________________

<table>
<thead>
<tr>
<th>Parameter</th>
<th>Method (circle one)</th>
<th>Result</th>
<th>Other/Note</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td>NTU</td>
<td>cm</td>
</tr>
<tr>
<td>Turbidity</td>
<td>tube, meter, laboratory</td>
<td></td>
<td></td>
</tr>
<tr>
<td>pH</td>
<td>Paper, kit, meter</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
D. Check the observed status of all items. Provide “Action Required” details and dates.

<table>
<thead>
<tr>
<th>Element #</th>
<th>Inspection</th>
<th>BMPs Inspected</th>
<th>BMP needs maintenance</th>
<th>BMP failed</th>
<th>Action required (describe in section F)</th>
</tr>
</thead>
<tbody>
<tr>
<td>1 Clearing Limits</td>
<td>Before beginning land disturbing activities are all clearing limits, natural resource areas (streams, wetlands, buffers, trees) protected with barriers or similar BMPs? (high visibility recommended)</td>
<td>yes</td>
<td>no</td>
<td>n/a</td>
<td></td>
</tr>
<tr>
<td>2 Construction Access</td>
<td>Construction access is stabilized with quarry spalls or equivalent BMP to prevent sediment from being tracked onto roads? Sediment tracked onto the road way was cleaned thoroughly at the end of the day or more frequent as necessary.</td>
<td>yes</td>
<td>no</td>
<td>n/a</td>
<td></td>
</tr>
<tr>
<td>3 Control Flow Rates</td>
<td>Are flow control measures installed to control stormwater volumes and velocity during construction and do they protect downstream properties and waterways from erosion? If permanent infiltration ponds are used for flow control during construction, are they protected from siltation?</td>
<td>yes</td>
<td>no</td>
<td>n/a</td>
<td></td>
</tr>
<tr>
<td>4 Sediment Controls</td>
<td>All perimeter sediment controls (e.g. silt fence, wattles, compost socks, berms, etc.) installed, and maintained in accordance with the Stormwater Pollution Prevention Plan (SWPPP). Sediment control BMPs (sediment ponds, traps, filters etc.) have been constructed and functional as the first step of grading. Stormwater runoff from disturbed areas is directed to sediment removal BMP.</td>
<td>yes</td>
<td>no</td>
<td>n/a</td>
<td></td>
</tr>
<tr>
<td>5 Stabilize Soils</td>
<td>Have exposed un-worked soils been stabilized with effective BMP to prevent erosion and sediment deposition?</td>
<td>yes</td>
<td>no</td>
<td>n/a</td>
<td></td>
</tr>
<tr>
<td>Element #</td>
<td>Inspection</td>
<td>BMPs Inspected</td>
<td>BMP needs maintenance</td>
<td>BMP failed</td>
<td>Action required (describe in section F)</td>
</tr>
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<tr>
<td>5</td>
<td>Stabilize Soils Cont.</td>
<td>Are stockpiles stabilized from erosion, protected with sediment trapping measures and located away from drain inlet, waterways, and drainage channels?</td>
<td>yes</td>
<td>no</td>
<td>n/a</td>
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<tr>
<td></td>
<td></td>
<td>Have soils been stabilized at the end of the shift, before a holiday or weekend if needed based on the weather forecast?</td>
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<tr>
<td>6</td>
<td>Protect Slopes</td>
<td>Has stormwater and ground water been diverted away from slopes and disturbed areas with interceptor dikes, pipes and or swales?</td>
<td></td>
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<td></td>
<td></td>
<td>Is off-site storm water managed separately from stormwater generated on the site?</td>
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<td></td>
<td></td>
<td>Is excavated material placed on uphill side of trenches consistent with safety and space considerations?</td>
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<td>Have check dams been placed at regular intervals within constructed channels that are cut down a slope?</td>
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<tr>
<td>7</td>
<td>Drain Inlets</td>
<td>Storm drain inlets made operable during construction are protected.</td>
<td>yes</td>
<td>no</td>
<td>n/a</td>
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<td></td>
<td></td>
<td>Are existing storm drains within the influence of the project protected?</td>
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<tr>
<td>8</td>
<td>Stabilize Channel and Outlets</td>
<td>Have all on-site conveyance channels been designed, constructed and stabilized to prevent erosion from expected peak flows?</td>
<td>yes</td>
<td>no</td>
<td>n/a</td>
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<td></td>
<td>Is stabilization, including armoring material, adequate to prevent erosion of outlets, adjacent stream banks, slopes and downstream conveyance systems?</td>
<td></td>
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<tr>
<td>9</td>
<td>Control Pollutants</td>
<td>Are waste materials and demolition debris handled and disposed of to prevent contamination of stormwater?</td>
<td>yes</td>
<td>no</td>
<td>n/a</td>
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<tr>
<td></td>
<td></td>
<td>Has cover been provided for all chemicals, liquid products, petroleum products, and other material?</td>
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<td>Has secondary containment been provided capable of containing 110% of the volume?</td>
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<td></td>
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<td>Were contaminated surfaces cleaned immediately after a spill incident?</td>
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<td></td>
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<td>Were BMPs used to prevent contamination of stormwater by a pH modifying sources?</td>
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<tr>
<td>Element #</td>
<td>Inspection</td>
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<tr>
<td>9</td>
<td>Wheel wash wastewater is handled and disposed of properly.</td>
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<td>10</td>
<td>Concrete washout in designated areas. No washout or excess concrete on the ground. Dewatering has been done to an approved source and in compliance with the SWPPP. Were there any clean non turbid dewatering discharges?</td>
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<td>11</td>
<td>Are all temporary and permanent erosion and sediment control BMPs maintained to perform as intended?</td>
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<td>12</td>
<td>Has the project been phased to the maximum degree practicable? Has regular inspection, monitoring and maintenance been performed as required by the permit? Has the SWPPP been updated, implemented and records maintained?</td>
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</table>

E. Check all areas that have been inspected. ✔

All in place BMPs ☐ All disturbed soils ☐ All concrete wash out area ☐ All material storage areas ☐
All discharge locations ☐ All equipment storage areas ☐ All construction entrances/exits ☐

F. Elements checked “Action Required” (section D) describe corrective action to be taken. List the element number; be specific on location and work needed. Document, initial, and date when the corrective action has been completed and inspected.

<table>
<thead>
<tr>
<th>Element #</th>
<th>Description and Location</th>
<th>Action Required</th>
<th>Completion Date</th>
<th>Initials</th>
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<tbody>
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Attach additional page if needed

Sign the following certification:
“\(I\) certify that this report is true, accurate, and complete, to the best of my knowledge and belief”

Inspected by: (print) __________________________ (Signature) __________________________ Date: __________
Title/Qualification of Inspector: __________________________
Pending Construction Stormwater Permit application