

**SECTION 02370 – EROSION AND SEDIMENTATION CONTROL (INCLUDING SWPPP)****PART 1 – GENERAL****1.1 SUMMARY**

- A. Section Includes
  - 1. Installation of temporary and permanent erosion and sedimentation control systems.
  - 2. Installation of temporary and permanent slope protection systems.
  - 3. Stormwater Pollution Prevention Plan (SWPPP).
- B. Related Sections
  - 1. Section 01742 – Waste Disposal
  - 2. Section 02230 – Site Clearing
  - 3. Section 02300 – Earthwork
  - 4. Section 02305 – Soil Management Plan
  - 5. Section 02375 – Rip-Rap (Stone Protection)
  - 6. Section 02630 – Storm Drainage
  - 7. Section 02900 – Planting
  - 8. Stormwater Pollution Prevention Plan
  - 9. Construction Drawings (“Site Maps”)
  - 10. Construction Stormwater Details
  - 12. Section 8, Environmental Compliance, of the Special Conditions

**1.2 ENVIRONMENTAL REQUIREMENTS**

- A. Protect adjacent properties, any identified endangered or threatened species and/or critical habitat, any identified cultural or historic resources, and receiving water resources from erosion and sediment damage until final stabilization is achieved. All stormwater controls and systems must be installed & functioning as designed and free of accumulated sediment and debris before final project approval.

**PART 2 – PRODUCTS****2.1 MATERIALS**

- A. Seed, sod, and ground covers for the establishment of vegetation in accordance with Section 02900.
- B. All erosion control products sediment control devices or materials for non-stormwater BMPs as specified herein and on the Construction Drawings.
- C. Rolled erosion control products according to Erosion Control Technology Council (ECTC) standard specifications.
- D. Temporary mulches such as loose straw, wood cellulose, or agricultural silage.
- E. Rip-Rap (stone protection) as specified in Section 02375.
- F. Temporary and permanent outfall structures as specified on the drawings.

**PART 3 – EXECUTION**

### 3.1 PREPARATION

- A. Review the drawings and Stormwater Pollution Prevention Plan.
- B. Conduct stormwater pre-construction meeting with Site Contractor, all ground-disturbing Sub-contractors, site engineer of record or someone from their office familiar with the site and SWPPP, and state or local agency personnel in accordance with requirements of the special conditions.
- C. Revise SWPPP as necessary to address potential pollution from site identified after issuance of the SWPPP at no additional cost to owner.

### 3.2 EROSION AND SEDIMENTATION CONTROL AND SLOPE PROTECTION IMPLEMENTATION

- A. Place erosion and sediment control systems in accordance with the drawings and Stormwater Pollution Prevention Plan or as may be dictated by site conditions in order to maintain the intent of the specifications and permits.
- B. The Stormwater Pollution Prevention Plan and Site Maps shall be corrected or modified as site conditions change. Contractor must obtain approval from Owner's Engineer prior to modifying or substituting Best Management Practices. Changes during construction shall be noted in the Stormwater Pollution Prevention Plan and posted on the drawings (Site Maps).
- C. Owner has authority to limit surface area of erodible earth material exposed by clearing and grubbing, excavation, borrow and embankment operations and to direct Contractor to provide immediate permanent or temporary pollution control measures.
- D. Maintain erosion and sedimentation control systems as dictated by site conditions, indicated in the construction documents, or as directed by governing authorities or Owner to control sediment until final stabilization. Contractor shall respond to maintenance or additional work ordered by Owner or governing authorities immediately, but in no case, within not more than 48 hours at no additional cost to the Owner.
- E. Contractor shall incorporate permanent erosion control features, paving, permanent slope stabilization, and vegetation into project at earliest practical time to minimize need for temporary controls.
- F. Permanently seed and mulch cut and fill slopes as construction proceeds to extent considered desirable and practical.
- G. Unless required within a shorter timeframe by the applicable General Permit for Stormwater Discharges Associated with Construction Activity, disturbed areas that will not be graded or actively worked for a period of 14 days or more, shall be temporarily stabilized as work progresses with vegetation or other acceptable means in accordance with Section 02900 unless otherwise specified in the Contract Documents. In the event it is not practical to seed areas, slopes must be stabilized with mulch and tackifier, bonded fiber matrix, netting, blankets or other means to reduce the erosive potential of the area.

END OF SECTION

**STORMWATER POLLUTION PREVENTION PLAN**

**FOR**

**CONSTRUCTION ACTIVITIES**

**AT**

**2037-06 Aberdeen, WA Supercenter Expansion**

Prepared for:

Wal-Mart Real Estate Business Trust  
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30001042

1/11/2013

This 02370 specification has been sealed & signed by a licensed Professional Engineer.

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## I. SUMMARY OF PERMIT AND PROGRAM REQUIREMENTS

The Stormwater Pollution Prevention Plan (SWPPP) includes, but is not limited to, Specification Section 02370 (which includes the SWPPP) with appendices, the Erosion and Sedimentation Control Plan (Phase I and Phase II Site Maps) included in the Construction Drawings with the Detail Sheet, the Notice of Intent, Co-Permittee or Transfer forms, Permit Authorization, General Permit, Notice of Termination, all records of inspections and activities which are created during the course of the project, and other documents as may be included by reference to this SWPPP. Changes, modifications, revisions, additions, or deletions shall become part of this SWPPP as they occur.

**Note: The General Contractor must complete the Contact List included in Appendix A and maintain the list in the SWPPP Binder until the stormwater permit is terminated.**

**Note: The General Contractor (GC) must certify this SWPPP by signing the GC SWPPP certification letter included in Appendix B. All signed certifications must be kept in the jobsite SWPPP Binder and be available for inspection on the construction site. Signed documents including permits, certifications and qualification forms can not be modified or revised in the field.**

The General Contractor and all subcontractors involved with a construction activity that disturbs site soil or who implement a pollutant control measure identified in the SWPPP must comply with the following requirements of the Washington State Department of Ecology (WSDOE) Construction General Permit ("General Permit") and any local governing agency having jurisdiction concerning NPDES, stormwater, erosion and sedimentation control:

### A. General Permit Information

- WSDOE requires that the Operator (the party with operational control over construction plans and specifications or day-to-day operational control of activities that ensure compliance with the SWPPP and permit conditions) be listed as the Permittee on the NOI. Wal-Mart will be the only permittee.
- The NOI shall be signed by at least a Vice President level or above.
- No co-permittee or permit transfer is applicable to this project. Upon contract award General Contractor will be designated as the On-Site Contact Person.
- Upon award of project, the CEC must submit a revised NOI identifying the General Contractor On-Site Contact Person to the Wal-Mart SWCT within 7 days of project award. The revised NOI should include information for the On-Site Contact Person in Section III of Page 1 and check the box for "Change or Update Permit Information" on the top of Page 1. Once the revised NOI is received by the SWCT, it shall be signed by a Vice President level or above and re-submitted to WSDOE. A copy of the revised NOI with updated on-site contact information shall be provided to the contractor, the CEC and the City of Aberdeen contact.
- WSDOE requires that a SWPPP be developed prior to starting construction.
- WSDOE has an online submittal process, but the paper process is the Wal-Mart preferred option. The Notice of Intent (NOI) must be mailed to the address below.
- The submittal NOI package is a copy of the signed NOI application form only. The Wal-Mart signed NOI shall then be sent to the WSDOE P.O. Box address below:

**Washington State Department of Ecology – Stormwater  
P.O. Box 47696  
Olympia, WA 98504-7696  
Contact: Joyce Smith**

- There is no application fee associated with the NOI submittal, but there is an annual permit fee based on the area of disturbance. For projects that disturb 10 -< 20 acres the annual fee is \$1,556. The fees are set by the state (Chapter 173-224 WAC) and are subject to change. WSDOE will invoice Wal-Mart soon after issuing the NPDES permit.
- Public notice is required by the Construction General Permit after NOI submittal but before earth-disturbing activities can occur. These public notices will be posted in the local newspaper by CEC.

**Note to General Contractor:** The General Contractor must provide General Contractor's On-Site Contact Person (Certified Erosion and Sediment Control Lead, CESCL) to the CEC within 7 days of project award.

CEC will submit updated NOI to Wal-Mart Stormwater Compliance Team (SWCT) for signature and re-submittal.

- (1) NOIs or similar stormwater permit applications, where the General Contractor is required to obtain a separate permit, must be completed, signed and submitted by the General Contractor to the appropriate governing agency and a copy forwarded to the SWCT.
- (2) Co-permittee and transfer forms must be completed, signed and submitted by the General Contractor directly to the SWCT. Certain agencies require original signatures. If this is the case, both Wal-Mart and General Contractor signatures must be original.
- (3) Copies of any subsequently received stormwater permit authorizations must be forwarded to the SWCT immediately upon receipt.

1. Permit Information:

Wal-Mart has submitted an NOI to obtain stormwater permit coverage for this project.

The General Contractor will act as the On-Site contact for Wal-Mart. The General Contractor shall select a CESCL to be the On-Site contact person. The General Contractor shall provide the CESCL's information as On-Site contact to the CEC within 7 days of project award.

The General Contractor is not required to obtain separate stormwater permit coverage.

A local stormwater or E&S control permit is not required for this project.

A project location/vicinity map is located in Appendix C.

The Notice of Intent is located in Appendix D.

2. Co-permittee information:

Not applicable - There is no co-permittee process.

3. Permit transfer information:

Not applicable.

Waiting Period:

Ground-disturbing activities cannot begin until 60 days after submittal of a complete NOI Package to the appropriate governing agency.

WSDOE cannot grant permit coverage sooner than the end of the 30-day public comment period, which will begin on the date of the second public notice required for permit application. Ecology may specify a different time period in writing.

4. Permit Expiration:

The applicable General Permit expires: December 31, 2015

A copy of the General Permit is located in Appendix Q.

5. Permit modification:

A permit modification is required prior to land disturbing activity in non-permitted areas. The General Contractor must contact the Civil Engineering Consultant (CEC) as soon as a need to work in non-permitted areas is identified. Work in non-permitted areas may not proceed until written approval is provided by the governing agency, CEC or the SWCT.

The General Contractor may only submit a permit modification to the governing authority upon SWCT approval.

If a permit modification is necessary, a permit modification letter summarizing needed permit changes is prepared by the CEC and submitted with a revised site map to the SWCT. The SWCT reviews, signs (a Vice President level or above) and submits the permit modification to the WSDOE. A copy of the signed revised NOI shall be provided to the contractor and CEC.

Additional items that warrant permit modification:

- Changes to Permittee's (Wal-Mart) address
- Changes to the On-Site Contact Person Information
- Changes to the area/acreage affected by construction activity

6. Permitted Project Area:

Note: For purposes of this SWPPP and associated stormwater permit, 'permitted project area' is defined as any and all areas within the project limits of disturbance, as shown on the SWPPP site maps and identified in the Notice of Intent to the agency. ALL ground-disturbing and construction-related activities (material storage, dumpsters, parking areas, project office trailer, etc.) must be included within the permitted project area (limits of disturbance).

The project includes on-site construction of a building expansion of 34,976 SF to the existing Wal-Mart with parking/driving areas, utilities, and associated site features on the 14 acre site. Areas outside of the property boundary will be included in the permitted project areas and include 0.73 acres of pavement, sidewalk and landscape modifications.

**Note to General Contractor:** All areas outside the permitted project area (limits of disturbance) acquired for use by the General Contractor or a subcontractor of the General Contractor (borrow sources, disposal areas, etc.) must be managed in accordance with Section V. D. of this specification.

7. Governing Agency:

The following agency or agencies have governing authority for stormwater-related regulations and permits and must receive a complete NOI Package from the General Contractor where applicable.

**Washington Department of Ecology (WSDOE) – Stormwater**  
**Joyce Smith**  
**P.O. Box 47696**  
**Olympia, WA 98504-7696**  
**360-407-6858**

**B. Agency Information for Stormwater Pre-Construction Meeting**

The General Contractor shall invite the agency (ies) listed below to the Stormwater Pre-Construction meeting as set forth in the Special Conditions. The General Contractor must invite noted agency(ies) to the Pre-Construction meeting at least 7 days prior to conducting the meeting.

**WSDOE - Stormwater**  
**Joyce Smith**  
**P.O. Box 47696**  
**Olympia, WA 98504**  
**360-407-6858**

**City of Aberdeen**  
**Rick Sangler**  
**200 E. Market**  
**Aberdeen, WA 98520**  
**360-537-3241**

**C. Public Posting (Including SWPPP Information Sign)**

Install the SWPPP Information Sign per specification and post Site Maps and Details Sheets on the jobsite trailer wall before beginning BMP installation. The following information must be posted in a prominent place for public viewing until termination of permit coverage has been obtained by filing the Notice of Termination (NOT): 1) Notice of Intent; 2) Permit Authorization; 3) Construction Site Notice (found in



Appendix E); and 4) The location of the SWPPP on site. Reference the Entrance Sign (SWPPP Information Sign) detail for proper posting of documents.

The General Contractor may post other stormwater and/or erosion & sediment control-related permits on the SWPPP Information Sign as required by the governing agency. These postings must not interfere with items 1 – 4 noted above.

**D. Retention of Records**

A complete copy of the SWPPP, including copies of all inspection reports, plan revisions, etc., must be retained at the project site at all times during the duration of the project (until NOT is filed) and kept in the permanent project records of the General Contractor for at least five years following submission of the Notice of Termination (NOT).

**E. Contractor/Sub-Contractor List**

The General Contractor must provide names and addresses of all subcontractors working on this project who will be involved with the major construction activities that disturb site soil or otherwise affect BMP implementation. This information must be kept in the SWPPP Binder. See the General Contractor SWPPP Binder “Jobsite Stormwater Document Guidelines”.

**F. Contractor/Sub-Contractor Certification Form**

The General Contractor and all contractors and/or subcontractors that will implement, maintain and/or impact the pollution control measures in the SWPPP and/or are involved in ground-disturbing activities on the site must sign a copy of the Contractor certification included in Appendix F. An authorized representative from each company on the construction project must sign this form certifying that company representatives understand the General Permit authorizing stormwater discharges during construction. This information must be kept in the SWPPP Binder. See the General Contractor SWPPP Binder “Jobsite Stormwater Document Guidelines”.

**G. Inspections**

Daily inspections by the General Contractor Superintendent, 14-day inspections by the General Contractor Compliance Officer, and 30-day inspections by the Owner’s Construction Manager must be made to determine the effectiveness of the SWPPP. The required Wal-Mart forms are included in Appendix G.

A project-specific inspection form is required by WSDOE and must be completed as required and submitted to the SWCT via the SWPPP Management Tool. A copy of the form is provided in Appendix G.

The SWPPP, including the best management practices implemented on the jobsite, shall be modified as needed to reduce or prevent pollutants from discharging from the site. Modifications to BMPs that change a hydrologic design component (diversions, basins, etc.) must first be approved by the CEC.

The inspector must be a person familiar with the site, the nature of the major construction activities, and qualified to evaluate both overall system performance and individual component performance. The inspector must either be someone empowered to implement BMPs in order to increase effectiveness to an acceptable level or someone with the authority to cause such things to happen. The inspector must be certified as a “Stormwater Professional” through the Wal-Mart stormwater training program. Additionally, the inspector shall be properly authorized in accordance with the applicable General Permit to conduct the certified site stormwater inspections.

Site inspections shall be conducted by a Certified Erosion and Sediment Control Lead (CESCL). The CESCL shall be identified in the SWPPP (name, telephone number, fax number and address) and shall be present on-site or on-call 24-hours at all times throughout the construction period. Certification can be obtained through an approved erosion and sediment control training program that meets the minimum training standards established by Ecology. For more information see the following website maintained by WSDOE: <http://www.ecy.wa.gov/programs/wq/stormwater/cescl.html>

To check the status of an individual’s certification, the following website can be used:  
<http://apps.ecy.wa.gov/wqcescl/>

The CESCL may provide inspection and compliance services for multiple construction projects in the same geographic region.

Per the Construction General Permit, site inspections shall be conducted (at a minimum) at least once every calendar week and within 24 hours of any discharge from the site.

#### Sampling

Per the Construction General Permit, sites that disturb more 5 acres or more shall conduct weekly turbidity sampling with a turbidity meter and pH sampling. Directions and thresholds for this sampling is in Construction General Permit section S4, which can be found in Appendix L under State and Local Government Requirements as well as Appendix Q.

Contractor shall submit Discharge Monitoring Reports (DMRs) using WSDOE WebDMR program (See section S5 of the CGP for more information):

<http://www.ecy.wa.gov/programs/wq/permits/paris/webdmr.html>

#### Inspection Frequency Reduction

Inspection frequency may be reduced under the following conditions:

- 1) No active on-site construction activities.
- 2) Temporary cover has been provided across the entire site and no BMPs remain. Situation: waiting for grass to grow, but grass is dormant.
- 3) Ground is frozen and/or snow covered. Situation: northern projects experiencing winter weather conditions.

If all of the following are requirements are met:

- 1) The requested reduction in frequency is allowed by the applicable General Permit (to be determined by the CEC),
- 2) The site is adequately temporarily stabilized,
- 3) The GC requests a temporary inspection frequency reduction form from the SWCT,
- 4) The GC works with the CEC to complete and return the form to the SWCT per form instructions, and
- 5) The SWCT grants the reduction request and modifies the SWPPP Management Tool reporting frequency.

Notes:

- 1) As of the date of this Specification the SWCT can only consider inspection frequency reduction requests from standard Daily reporting to 30-day inspection frequency if the applicable General Permit allows.
- 2) 30-day inspections are only allowed when site conditions are such that no efforts by the GC will likely make a difference in final stabilization of the site.
- 3) The SWCT may reject inspection frequency reduction requests or require GCs to revert to Daily inspection frequency at any time based on, but not limited to, site conditions, weather and General Permit requirements.
- 4) All winter weather inspection frequency reduction approvals are suspended during periods of thaw and automatically terminate March 15<sup>th</sup> of each year regardless of location.

#### **H. Weekly Stormwater Meeting**

A weekly stormwater meeting will be held by the General Contractor with all contractors and subcontractors involved in ground-disturbing activities to review the requirements of the Permits, the SWPPP, and address any problems that have arisen in implementing the SWPPP or maintaining the BMPs. Contractor shall maintain a log of all weekly meetings and document the issues addressed in the meetings. The weekly meeting form must be completed & submitted each week using the SWPPP Management Tool (hard copy located in Appendix G).

#### **I. SWPPP Updates and Amendments**

The General Contractor must update the SWPPP and Site Maps daily to reflect the progress of construction activities and general changes to the project site. SWPPP contact and contractor information and the record of site stabilization activities log must be maintained by the General Contractor throughout the project.

The General Contractor must submit a request for information (RFI) to the CEC and obtain written CEC approval before modifying or adding erosion or sediment control BMPs. BMPs that may impact hydraulic

design are of particular concern and typically include stormwater basins, diversions, check dams, inlet protection or any product, process or system that changes the stormwater flow path or stormwater storage capacity of the site or is located in an area of concentrated flow.

Substitution of any erosion or sediment control BMPs beyond those specified in the SWPPP must first be approved in writing by the CEC. Substitutions are typically only approved if specified materials are not available or there is a valid reason the specified BMP will not work.

Amending the SWPPP does not mean that it has to be reprinted. It is acceptable to add addenda, sketches, new sections, details, and/or revised drawings that are initialed and dated.

**J. Discharge of Petroleum Products or Hazardous Substances**

Discharge of petroleum products or other hazardous substances into stormwater or the stormwater (storm sewer) system is subject to reporting and clean up requirements. See Section V.B.9. of this SWPPP for state and local information on reporting spills. Refer to the General Permit for additional information. A copy of the spill form is located in Appendix H and the General Permit is located in Appendix Q.

**K. Notice of Termination**

Once the site reaches final stabilization with all permanent erosion and sedimentation controls installed, all temporary erosion and sedimentation controls removed, and construction complete the Owner's Construction Manager will contact the CEC to complete the CEC Pre-NOT site inspection and report. The CEC Pre-NOT report is submitted to the SWCT for review and approval of site stabilization. Upon approval by the SWCT, the General Contractor and Owner's Construction Manager must complete a final inspection and submit the Final Construction Manager report marked 'Ready to Terminate Permit' via the SWPPP Management Tool.

After submittal of the Final Construction Manager report the Owner and General Contractor, as applicable, must complete and submit an NOT. A Notice of Termination (NOT) form is included in Appendix I.

**Note to General Contractor:** Stabilization requirements include all areas covered by applicable permits, including out lots and utility easements, unless the new Owner and/or Operator have submitted an NOI(s) to the applicable agency and a copy of the NOI(s) has been put in the SWPPP Binder.

**L. General Contractors Responsibility**

This SWPPP intends to control water-borne, air-borne and liquid pollutant discharges by some combination of interception, sedimentation, filtration, and containment. The General Contractor and subcontractors implementing this SWPPP must remain alert to the need to periodically refine the update the SWPPP in order to accomplish the intended goals. The General Contractor is ultimately responsible for all site conditions and permit compliance.

**M. Log of Construction Activity**

A record of dates must be maintained when:

- major ground-disturbing activities including earthwork or grubbing occur;
- construction activities temporarily or permanently cease on a portion of the site;
- stabilization measures are initiated or completed; and
- BMPs are installed or permanently removed.

This log must be maintained until the NOT is filed.

A Record of Stabilization and Construction Activity Dates (Stabilization) log for documenting such activities is included in Appendix J. The General Contractor shall complete, at a minimum, 1-page of Stabilization log entries for each month of active construction.

Controls must be in place down gradient of any ground-disturbing activities prior to the commencement of up gradient construction activities and noted on the Site Maps and the Stabilization log. Site Map and Stabilization log comments and entries must compliment one another with greater detail provided in the Stabilization log as needed.

**N. Agency Stormwater Inspections**

A project Superintendent must walk the site with the regulatory inspector and document any deficiencies noted during the inspection. Deficiencies of any type, field or documentation-related, identified during the regulatory inspection must be noted on the Daily report as a deficiency and resolved within 24 or 48-hours as appropriate. A second Daily report must be submitted if the agency inspection occurs after the first Daily report was submitted and the inspector identifies any deficiencies.

A "Supplemental Daily Inspection" form, summarizing agency inspection results, must be filled out and submitted via the SWPPP Management Tool.

The Superintendent must call the SWCT Hotline to report the agency inspection immediately, but no later than 1-hour after the inspector has left the jobsite. All stormwater or erosion and sediment (E&S) agency visits to the jobsite, whether an official inspection occurred or not, must be reported to the SWCT via a Hotline call and Supplemental report. Any agency inspector, including OSHA and utility inspectors, that comment on stormwater BMPs (inlet protection, track out, etc.) must be reported to the SWCT via a Hotline call and Supplemental report.

A log of all inspections by Federal, State, or local stormwater or other environmental agencies shall be kept in the General Contractor SWPPP Binder. The log form can be found in Appendix K and must include the date and time of the visit and whether a report was issued or will be issued as a result of the inspection. All inspection reports issued by an agency must be faxed or e-mailed to the Wal-Mart SWCT immediately, but no later 24-hours of receipt.

WSDOE Inspectors will make periodic inspections to ensure that all sediment and erosion control measures are in place per the approved sediment and erosion control plans and functioning in compliance with the Construction General Permit. Inspection visits are also triggered in order to respond to complaints.

**O. BMP Field Manual**

The General Contractor shall copy the site-specific BMP Field Manual details found in Appendix M of this specification and distribute details in the form of an organized and bound manual to all earth-disturbing subcontractors and subcontractors that affect BMPs during the SWPPP Pre-construction meeting and as needed throughout the duration of the project. Copies of the BMP Field Manual must be available on-site at all times. Contractors and subcontractors shall initial the Contractor / Subcontractor Certification forms to verify receipt of the BMP Field Manual.

## **II. INTRODUCTION**

This SWPPP has been prepared for major activities associated with the construction of:

2037-06 Aberdeen, WA Wal-Mart Supercenter Expansion

This SWPPP, including the applicable General Permit, includes the elements necessary to comply with the General Permit for construction activities administered by the U.S. Environmental Protection Agency (EPA) under the National Pollutant Discharge Elimination System (NPDES) program and all local governing agency requirements. This SWPPP must be implemented at the start of construction.

Construction phase pollutant sources anticipated at the site are disturbed (bare) soil, vehicle fuels and lubricants, chemicals and coatings associated with site or building construction and pavement installation, construction-generated litter and debris, and building materials. Without adequate control there is a potential for each type of pollutant to be transported by stormwater.

Store type: Supercenter

Project type: Expansion

Building size: 121,053 SF with 34,976 SF expansion for a total of 156,029 SF

Total site acreage of the project being built: 14 Acres

Total acreage within the permitted project area: 15 Acres

Project construction will consist primarily of demolition, site grading, paving, storm drainage, water supply, sewage collection, utilities, site lighting, etc. located within the permitted project area. No work shall occur beyond the permitted project area.

**A. Purpose**

A major goal of pollution prevention efforts during project construction is to control soil and pollutants that originate on the site and prevent them from flowing to surface waters. The purpose of this SWPPP is to provide guidelines for achieving that goal. A successful pollution prevention program also relies upon careful inspection and adjustments during the construction process in order to enhance its effectiveness.

**B. Scope**

This SWPPP must be implemented before construction begins on the site. It primarily addresses the impact of storm rainfall and runoff on areas of the ground surface disturbed during the construction process. In addition, there are recommendations for controlling other sources of pollution that could accompany the major construction activities. Applicability of this SWPPP will terminate when disturbed areas are stabilized, permanent erosion and sedimentation controls are installed, temporary erosion and sedimentation controls are removed, construction activities covered herein have ceased, and a completed Notice of Termination (NOT) is transmitted to the governing agency.

Forms which are necessary for implementing the SWPPP are included herein.

The General Permit for Stormwater Discharges Associated with Construction Activities prohibits most non-stormwater discharges during the construction phase. Allowable non-stormwater discharges that occur during construction on this project, which are covered by the General Permit, include:

1. Discharges from fire-fighting activities;
2. Fire hydrant flushings<sup>1</sup>;
3. Potable water, including uncontaminated water line flushing;
4. Pipeline hydrostatic test water;
5. Uncontaminated air conditioning or compressor condensate;
6. Uncontaminated ground water or spring water;
7. Uncontaminated excavation dewatering (in accordance with Construction General Permit Section S9.D.10);
8. Uncontaminated discharges from foundation or footing drains;
9. Water used to control dust. Permittees must minimize the amount of dust control water used;
10. Routine external building wash down that does not use detergents;
11. Landscape irrigation.

<sup>1</sup> Project Specification 02510-3.06-B requires the Utility Contractor to neutralize super-chlorinated water from water distribution pipes before releasing it into the environment. Alternative neutralization techniques are described in that specification.

Construction General Permit Condition S3 states that at a minimum, discharges from potable water (including water line flushing), fire hydrant system flushing, and pipeline hydrostatic test water must undergo the following; dechlorination to a concentration of 0.1 parts per million (ppm) or less, and pH adjustment to within 6.5-8.5 standard units (su), if necessary.

Best Management Practices (BMPs) must be implemented for the above allowable discharges for the duration of the permit. Each non-stormwater discharge should be noted in the SWPPP and have proper erosion and sedimentation controls in place with the possible exception of discharges from fire fighting activities.

The techniques described in this SWPPP focus on providing control of pollutant discharges with practical approaches that utilize readily available expertise, material, and equipment.

The Owner referred to in this SWPPP is Wal-Mart Real Estate Business Trust. The General Contractor shall construct the site development improvements while working under contract with the Owner.

### III. PROJECT DESCRIPTION

Described below are the major construction activities that are the subject of this SWPPP. Also included in the sequence are BMP installation activities that must take place prior to construction activities. **NOTE: Down slope protective measures must always be in place before soil is disturbed.** Activities are presented in the order (sequence) they are expected to be completed.

All activities and timeframes (beginning and ending dates) shall be noted on the Site Map and the "Record of Stabilization and Construction Activity Dates" form found in Appendix J of this SWPPP. The sequence of construction is as follows:

NOTE: UPON IMPLEMENTATION AND INSTALLATION OF THE FOLLOWING AREAS: TRAILER, PARKING, LAY DOWN, PORTA-POTTY, WHEEL WASH, CONCRETE WASHOUT, MASON'S AREA, FUEL AND MATERIAL STORAGE CONTAINERS, SOLID WASTE CONTAINERS, ETC., IMMEDIATELY DENOTE THEM ON THE SITE MAPS AND NOTE ANY CHANGES IN LOCATION AS THEY OCCUR THROUGHOUT THE CONSTRUCTION PROCESS. IN ADDITION, NOTE ALL AREAS WHERE FILL IS IMPORTED FROM OR SOIL IS EXPORTED TO ON THE SITE MAPS.

#### PHASE 1

1. *INSTALL SWPPP INFORMATION SIGN.*
2. *INSTALL TEMPORARY WHEEL WASH.*
3. *INSTALL SILT DIKE(S) ON THE SITE.*
4. *INSTALL SILT FENCE(S) ON THE SITE (CLEAR ONLY THOSE AREAS NECESSARY TO INSTALL SILT FENCE).*
5. *INSTALL INLET PROTECTION AT ALL EXISTING STORM SEWER STRUCTURES.*
6. *PREPARE TEMPORARY PARKING AND STORAGE AREA.*

**HALT ALL ACTIVITIES AND CONTACT THE CEC TO PERFORM INSPECTION AND CERTIFICATION OF BMPS. GENERAL CONTRACTOR SHALL SCHEDULE AND CONDUCT THE STORMWATER PRE-CONSTRUCTION MEETING WITH THE CEC, WAL-MART CONSTRUCTION MANAGER, AGENCY(IES) AND GROUND-DISTURBING CONTRACTORS BEFORE PROCEEDING WITH CONSTRUCTION.**

**ALL EXCEPTIONS NOTED ON THE BMP CERTIFICATION FORM MUST BE ADDED TO THE FIRST DAILY REPORT AS A DEFICIENCY OR DEFICIENCIES AND RESOLVED WITHIN 24-HOURS. BMPS CAN NOT BE CERTIFIED IF ANY EXCEPTION REQUIRES GREATER THAN 24-HOURS TO RESOLVE.**

**DAILY INSPECTIONS AND REPORTING USING THE SWPPP MANAGEMENT TOOL MUST START THE DAY OF OR IMMEDIATELY AFTER BMP CERTIFICATION.**

7. *CONSTRUCT AND STABILIZE SEDIMENT TRAP(S) WITH APPROPRIATE OUTFALL STRUCTURES (CLEAR ONLY THOSE AREAS NECESSARY TO INSTALL TRAPS).*
8. *INSTALL AND STABILIZE HYDRAULIC CONTROL STRUCTURES (DIKES, SWALES, CHECK DAMS, ETC.).*
9. *START CONSTRUCTION.*

#### PHASE 2

1. *TEMPORARILY SEED, THROUGHOUT CONSTRUCTION, DENUDED AREAS THAT WILL BE INACTIVE FOR MORE THAN 7 DAYS DURING DRY SEASON (MAY 1 – SEPT. 30) AND MORE THAN 2 DAYS DURING WET SEASON (OCT. 1 – APRIL 30).*
2. *INSTALL UTILITIES, UNDERDRAINS, STORM SEWERS, CURBS AND GUTTERS.*
3. *INSTALL INLET PROTECTION AT ALL STORM SEWER STRUCTURES AS EACH INLET STRUCTURE IS INSTALLED.*
4. *PERMANENTLY STABILIZE AREAS TO BE VEGETATED AS THEY ARE BROUGHT TO FINAL GRADE.*
5. *PREPARE SITE FOR PAVING.*
6. *PAVE SITE.*
7. *INSTALL APPROPRIATE INLET PROTECTION DEVICES FOR PAVED AREAS AS WORK PROGRESSES.*
8. *COMPLETE GRADING AND INSTALLATION OF PERMANENT STABILIZATION OVER ALL AREAS.*

9. OBTAIN CONCURRENCE WITH THE WAL-MART CONSTRUCTION MANAGER THAT THE SITE HAS BEEN FULLY STABILIZED THEN:
  - a. REMOVE ALL REMAINING TEMPORARY EROSION AND SEDIMENT CONTROL DEVICES,
  - b. STABILIZE ANY AREAS DISTURBED BY THE REMOVAL OF BMPS, AND
  - c. ASK THE CM TO CONTACT THE CEC TO COMPLETE THE CEC NOT SITE INSPECTION AND REPORT.
10. CONTINUE DAILY INSPECTION REPORTS UNTIL THE FINAL DAILY INSPECTION REPORT, MARKED 'READY TO TERMINATE PERMIT', IS SIGNED BY THE CONSTRUCTION MANAGER AND SUBMITTED VIA THE SWPPP MANAGEMENT TOOL.

NOTE: THE GENERAL CONTRACTOR MAY COMPLETE CONSTRUCTION-RELATED ACTIVITIES CONCURRENTLY ONLY IF ALL PRECEDING BMPS HAVE BEEN COMPLETELY INSTALLED. BMP-RELATED STEPS IN THE ABOVE SEQUENCE ARE ITALICIZED FOR CLARITY.

The actual schedule for implementing pollutant control measures will be determined by project construction progress and recorded by the General Contractor on the Soil Erosion/Sedimentation Control Operation Time Schedule on the Erosion and Sedimentation Control plans (Site Maps). Down slope protective measures must always be in place before soil is disturbed.

#### IV. SITE DESCRIPTION

Included as parts of this SWPPP are the project Construction Drawings – Wal-Mart Store #2037-06 Expansion. Refer to the Construction Drawings for detailed site information.

##### A. Site Location

- Address: 909 East Wishkah Street, Aberdeen, WA 98520
- Latitude: 46.975839° N
- Longitude: 123.806903° W
- Adjacent surrounding properties: Commercial uses border the project site to the north and east. The Chehalis River borders the site to the south. The Wishkah River borders the site to the west.
- A vicinity map is included in Appendix C.

##### B. Site Topography

- Lowest elevation on project site: 4'
- Highest elevation on project site: 12'
- Percent slope variation: The existing site is developed and features low to moderate slopes (0.5% to 25%)
- Topography changes: The existing building will be expanded into existing parking lot areas. New parking lot areas will be constructed by modifying the existing parking lot and property west of the existing parking lot. There will not be significant topography changes.
- Vegetation: The existing vegetation consists of landscape trees and shrubs that were planted for the original store. Where conflicting, existing trees will be replaced with new landscaping.

##### C. Rainfall Information

	Jan	Feb	March	April	May	June	July	Aug	Sept	Oct	Nov	Dec	Total
Average rainfall in inches	12.8	9.7	9.0	5.8	3.7	2.7	1.2	1.6	3.5	7.3	12.5	13.5	83.2

- The total average annual rainfall for the project area is: 83.2 inches
- The design rain event for this project is: 10 year continuous model based on the Western Washington Hydrology Manual

##### D. Site Soils

- Soil type and texture: Per the Geotechnical Engineering Report prepared by Terracon, dated November 6, 2012, the site soils can be classified as granular fill over soft organic silt.

- Average depth of topsoil: Per the Geotechnical Engineering Report prepared by Terracon, dated November 6, 2012 the topsoil is limited to the undeveloped areas and is about 6 inches with prevalent root matter.
- Average depth to groundwater: Per the Geotechnical Engineering Report prepared by Terracon, dated November 6, 2012 the average depth to groundwater is 12 to 15 feet.

This information is an estimate and shall not be used for construction costs or estimating.

**E. Total Site Area, Area to be Disturbed, and Runoff Coefficient**

- The Wal-Mart project site contains: 14 Acres
- The area to be disturbed on the Wal-Mart project site is: 15 Acres
- Area(s) to be disturbed as part of this project that are located beyond the permitted project area: None; all areas to be disturbed are located in the permitted project area.

<b>ACREAGE SUMMARY</b> (IN ACRES)	
WAL-MART'S SITE AREA	14
ON-SITE DISTURBED AREA	14
OFF-SITE DISTURBED AREA	1
TOTAL DISTURBED AREA (MUST MATCH NOI)	15
IMPERVIOUS AREA AT COMPLETION	13
PERVIOUS AREA AT COMPLETION	2

- Pre-Construction Runoff Coefficient: "c" = 0.95
- Post-Construction Runoff Coefficient: "c" = 0.95

**F. Receiving Surface Waters**

- Receiving waters: The Chehalis River and The Wishkah River
- Distance to named receiving waters: 35 feet
- Receiving water quality: The State 303(d) list classifies nearby waters of the Chehalis River as having various tissue impairments due to chemicals and nearby waters of the Wishkah River as having impairments due to bacteria; however, the WSDOE GIS system indicates that waters directly downstream of the project site have no assessed impairments.
- Discharge criteria include: Per the CGP, the benchmark value for turbidity is 25 NTU. If turbidity is 26 to 249 NTU, permittee must modify the SWPPP within 10 days of the date the discharge exceeded the benchmark. If discharge is over 250 NTU or higher, permittee must complete the reporting and adaptive management process described in S4 of the CGP. Weekly pH testing shall commence when concrete is first exposed to precipitation. If sampling indicates that pH is 8.5 or greater, the inspection frequency must be increased to daily testing until pH is below 8.5. during this period, the contractor shall prevent the high pH water from entering the storm sewer systems or surface waters, and if necessary, adjust or neutralize the high pH using an appropriate BMP treatment. The Contractor shall obtain written approval from WSDOE prior to using any form of chemical treatment other than carbon dioxide sparging or dry ice. This applies to stormwater that drains to surfaces waters of the State or to a storm sewer system that drains to the surface waters of the State.
- Off-site run-on: Off-site run-on is not a concern at this site. One portion of off-site run-on is from adjacent landscaping, which will not generate any pollutants. The other portion of off-site run-on is a small asphalt driveway that is out of the limits of disturbance and will not generate any construction pollutants.
- 100-year floodplain: According to FEMA FIRM Map Number 530058002B, the property is designated as flood zone A2, which are areas determined to have a 1% chance of flooding inside the 100-year flood plain.

**G. Erosion and Sedimentation Control Plan**

See the Erosion and Sedimentation Control Plans in the construction documents for the Wal-Mart Store #2037-06 expansion improvement plans. The SWPPP Erosion and Sedimentation Control Plans for Phase I and Phase II and associated details are sheets: E-1.0, E-1.1, E-2.0, E-2.1 and E-2.2.



**H. Environmental Permits – Other than NPDES, Stormwater and/or Erosion & Sediment Control**

As a part of the City of Aberdeen Shoreline Permit process a Joint Aquatic Resource Permit Application (JARPA) was submitted to the Corps of Engineers. This permit can be found in Appendix O.

- **Wetlands:** There are flagged wetlands abutting the project site. As outlined in a letter from the Corps of Engineers expansion of the Wal-Mart will not require a DA permit. This letter can be found in Appendix O. The Shoreline Permit and JARPA will permit and govern the improvements along the site and shoreline.

**I. Threatened and Endangered Species**

Based on a Phase I Environmental Site Assessment performed by Terracon, dated July 9, 2012, there is low potential for impacts to protected species. A copy of the relevant section of the Phase I report can be found in Appendix O.

**J. Historic Properties**

Based on a Phase I Environmental Site Assessment performed by Terracon, dated July 9, 2012, there is low potential to impacts on off-site cultural, historic, or archaeological resources. A copy of the relevant section of the Phase I report can be found in Appendix O.

**V. STORMWATER POLLUTION PREVENTION MEASURES AND CONTROLS**

A variety of stormwater pollutant controls are recommended for this project. Some controls are intended to function temporarily and will be used as needed for pollutant control during the construction period. These include temporary sediment barriers and permanent storm retention ponds (which can also function as temporary sediment basins). Permanent stabilization will be accomplished in all disturbed areas by covering the soil with pavement, building foundation, vegetation, or other forms of soil stabilization.

**A. Erosion and Sediment Controls**

**1. Minimization of Disturbed Areas**

**Note to General Contractor:** Owner has authority to limit surface area of erodible earth material exposed by clearing and grubbing, excavation, borrow and embankment operations and to direct General Contractor to provide immediate permanent or temporary pollution control measures

**2. Soil Stabilization**

The purpose of soil stabilization is to prevent soil from eroding and leaving the site. In the natural condition, soil is stabilized by native vegetation. The primary technique to be used at this project for stabilizing site soils will be to provide a protective cover of grass, pavement, or building structure.

- a.) Temporary Seeding or Stabilization** – All denuded areas that will be inactive for more than 7 days during the dry season (May 1 – Sept. 30) and more than 2 days during wet season (Oct. 1 – April 30), must be stabilized temporarily with the use of fast-germinating annual grass/grain varieties appropriate for site soil and climate conditions, straw/hay mulch, wood cellulose fibers, tackifiers, netting and/or blankets. Stockpiles and diversion ditches/berms must be stabilized to prevent erosion and dust issues.

**Note to General Contractor:** Temporary stabilization is not achieved simply through seeding. In order for an area or stockpile to be sufficiently stabilized via temporary vegetation, seed must germinate, grow and provide adequate vegetative density.

Exposed and unworked soils shall be stabilized by application of effective BMPs that prevent erosion. Applicable BMPs include, but are not limited to: temporary and permanent seeding, sodding, mulching, plastic covering, erosion control fabrics and matting, soil application of polyacrylamide (PAM) (not to be applied directly to water or allowed to enter a water body), the early application of gravel base on areas to be paved, and dust control.

No soils shall remain exposed and unworked for more than the time periods set forth below to prevent erosion:

West of the Cascade Mountains Crest

During the dry season (May 1 – Sept. 30): 7 days

During the wet season (October 1 – April 30): 2 days

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

Soil stockpiles shall be stabilized from erosion, protected with sediment trapping measures, and where possible, be located away from storm drain inlets, waterways, and drainage channels.

- b.) **Permanent Seeding, Sod or Mulching** – All areas at final grade must be seeded or covered with sod within 7 days during the dry season (May 1 – September 30) and within 2 days during the wet season (October 1 – April 30) after completion of work in that area. Seed immediately after final grade is achieved and soils are prepared to take advantage of soil moisture and seed germination. At the completion of ground-disturbing activities the entire site must have permanent vegetative cover, meeting vegetative density requirements, or mulch per landscape plan, in all areas not covered by hardscape (pavement, buildings, etc.).

Seeded areas shall be protected with straw mulch, hydraulic mulch or a rolled erosion control product. Straw mulch must be tackified or crimped by disc or other machinery and rolled erosion control products must be installed per manufacturer recommendations.

All areas to be seeded must meet topsoil depth, pH and organic content requirements as specified in the Section 02900 Specification – Planting or Xeriscape Specification.

Consideration is given to climate conditions, soil type and native vegetation when designing the final landscaping plan. Note: Crushed/decomposed granite or other non-vegetative cover may be an acceptable final cover in arid climates.

To minimize the potential for erosion and maximize seed germination & growth, the General Contractor must evaluate the short and long-term local forecast prior to applying permanent seed or sod.

Final site stabilization is achieved when perennial vegetative cover provides permanent stabilization with a density greater than **70 percent** over the entire area to be stabilized by vegetative cover. This area is exclusive of areas that are covered with rock (crushed granite, gravel, etc.) or landscape mulch, paved or have a building or other permanent structure on them.

Per the WSDOE Construction General Permit, Final Stabilization means the establishment of a permanent vegetative cover, or equivalent permanent stabilization measures (such as riprap, gabions or geotextiles) which prevent erosion.

### 3. **Structural Controls**

The intent of the designed BMP system is to filter sediment-laden runoff prior to discharge into on site grass swales/catch basins that convey treated stormwater to the Chehalis River, Wishkah River or City of Aberdeen Storm Sewer. Structural BMPs will consist of temporary sediment traps, silt fence, silt dike, interceptor swales, filter sack inlet protection, check dams, riprap and truck well drain protection.

As a mechanism for limited secondary treatment, contractor shall pump all stormwater accumulated onsite to the method of secondary treatment. Stormwater accumulated from the northeast portion of the site discharged to the City of Aberdeen Storm System, as defined by the Erosion and Sedimentation Control Site Maps, must flow through a treatment system, FLEXSTORM Filter bag or through silt fences containing an oil absorbent boom/sock after the fence to remove any oil/hydrocarbons remaining in the stormwater. Contractor shall not discharge stormwater to the Chehalis or Wishkah River without initial sediment treatment consisting of

sedimentation trap(s), silt fence, silt dike and/or filter sack inlet protection and secondary treatment in the grass swale. Sedimentation ponds shall not be allowed to overflow directly to the Chehalis or Wishkah River; provisions to mitigate overflow are the Contractor's responsibility prior to the occurrence of such condition. It is the Contractor's responsibility to provide for the monitoring of stormwater accumulation and discharge of stormwater at all times, including monitoring for, and sample collection and subsequent analytical laboratory analysis as appropriate, contaminants of concern in accordance with the Washington State Department of Ecology Stormwater Management Manual for Western Washington, Publication Number 12-10-030, August 2012. In the event the contractor becomes aware of, or monitoring equipment identifies, any indications of degraded stormwater quality from a contaminant perspective (unusual odors, sheen, discoloration), contractor shall immediately notify SWCT, and immediately cease discharge by providing for temporary on site storage.

- a) **Sediment Basins** – Temporary sediment basins are depressions constructed downslope of construction activity and located such that stormwater runoff from upland areas of less than 100 acres are diverted through the basin. Sediment basins shall be constructed as directed by the SWPPP and shall be constructed as part of the initial Phase I BMPs whenever practical. An overflow pipe is incorporated at the outlet to discharge flow from the basin.

Basin Name	Drainage Area (acres)	Design Volume (ft <sup>3</sup> )	Designed Retention Time (hours)	Permanent (Y or N)	Outlet Type

**This control is not specified at this time.**

- b) **Sediment Traps** – Temporary sediment traps are depressions constructed down slope of construction activity and located such that stormwater runoff from upland areas of less than 5 acres are diverted through the trap. Sediment traps shall be constructed as indicated by the SWPPP and shall be constructed as part of the initial BMPs whenever practical. An overflow weir is incorporated at the outlet to discharge flow from the trap. Sediment traps shall be phased with the earthwork activity where practical.

Sediment traps are designed per the 2005 Department of Ecology Stormwater Management Manual for Western Washington (SWMM). In accordance with the SWMM, the facility water surface area at the emergency overflow is required to be 2,080 square feet per each cubic foot per second of tributary runoff to the facility during the 2-year, 24-hour storm event. In accordance with the SWMM, the Western Washington Hydrology Model Version 3.0 (WWHM) was utilized to determine the 2-year, 24-hour runoff rate. Design volumes listed below are based on facilities with a 3 foot design depth at the emergency overflow. Sediment laden water shall not be allowed to overflow out of the sediment trap. Contractor shall pump water collected in sediment traps to on-site grass swales for further treatment.

The on-site sediment traps are temporary sediment control measures and will not become part of the permanent stormwater management system on-site.

Trap Name	Drainage Area (acres)	Design Surface Area (ft <sup>2</sup> )	Designed Retention Time Hours	Permanent (Y or N)	Outlet Type
A	2.03	2000 *	N/A	N	Pumped to treatment system

\*Quantities shown are approximate and shall not be used for bidding purposes.

- c) **Silt Fence** – Silt fence is a synthetic permeable woven or non-woven geotextile fabric incorporating metal support stakes at intervals sufficient to support the fence (5-foot maximum distance between posts), water, and sediment retained by the fence. The fence is designed to retain sediment-laden stormwater and allow settlement of suspended soils

before the stormwater flows through the fabric and discharges from the site. Silt fence shall be located on the contour to capture overland, low-velocity sheet flows and is typically installed with a wire fence backing for additional support. Wire fence backing is required unless the silt fence is installed using the slicing method as the slicing method ensures the silt fence fabric is anchored securely in the ground.

Install silt fence at a fairly level grade along the contour with the ends curved uphill to provide sufficient upstream storage volume for the anticipated runoff. Drainage areas shall not exceed ½ acre per 100 feet of wire-reinforced silt fence for slopes less than 2 percent.

Silt Fence Section	Type (wire back or sliced)	Section Length (feet)	Drainage Area (acres)	Average Slope of Area
A	Wire Back	179*	0.08	15%
*B	Wire Back	600*	0.21	2%
C	Wire Back	254*	0.07	2%
D	Wire Back	227*	0.07	2%
E	Wire Back	220*	0.03	5%

Quantities shown are approximate and shall not be used for bidding purposes.

- d) **Construction Exit** – All access points from the public street into the construction site shall include a construction exit composed of course stone to the dimensions shown on the Construction Drawings detail sheet. The rough texture of the stone helps to remove clumps of soil adhering to the construction vehicle tires through the action of vibration and jarring over the rough surface and the friction of the stone matrix against soils attached to vehicle tires.

**A course stone construction exit will not be used on this project.**

A mobile wheel wash shall be installed and maintained on site to prevent sediment track out from the construction site. The Contractor shall move wheel wash as necessary to accommodate construction. No vehicles that have been exposed to sediment shall exit the site without wheel wash treatment. Wheel wash(es) shall be constructed to meet the requirements of the erosion control drawings and the 02305 Soil Management Plan Specification and shall conform to all applicable sections of the Washington State DOE Stormwater Management Manual for Western Washington 2012, BMP C106 Wheel Wash.

All site access must be confined to the construction exit(s). Barricade to prevent use, any locations other than the construction exit(s) where vehicles or equipment may access the site. Use jersey barriers, construction fencing/drums, etc. near construction exit(s) to prevent traffic by-pass or short circuiting.

- e) **Storm Sewer Inlet Protection** – Curb and grated inlets are protected from the intrusion of sediment through a variety of measures as shown on the details included in the Construction drawings. The primary mechanism is to place controls in the path of flow sufficient to slow the sediment-laden water to allow settlement of suspended soils before discharging into the storm sewer. It is possible that as construction progresses from storm sewer installation through to paving that the inlet protection devices will change.

**Note to General Contractor:** All inlet protection devices create ponding of stormwater that can result in flooding or by-pass conditions.

- f) **Check Dams** – Defined channels subject to concentrated flows in larger quantities and higher velocities may be protected with rock or other manufactured device (Geo-ridge for example) that can be used as a check dam. The dams impound sediment-laden water and allow for settlement of suspended soil before the stormwater flows over and through the device. Dams shall be placed along the water course at linear intervals in which the elevation of the bottom of the upper most check dam is at the same elevation as the top of

the check dam immediately below it. This will allow the most ponding capacity and will not increase the velocity of the water flowing along the channel.

Location and spacing of check dams are shown on the Site Maps. Check dams are composed of crushed stone or rip rap or of other manufactured devices. See the detail sheet within the Construction Drawings for the types of dams to be used on this site.

Check Dam Name (reference Diversion Name)	Check Dam Height	Check Dam Spacing	Average Slope	Maximum Slope
A	1.5'	100*	1%	1%
B	1.5'	100*	1%	1%

\*Quantities shown are approximate and shall not be used for bidding purposes.

- g) **Diversion Ditch/Berm** – Diversion ditches (swales) and berms (dikes) are constructed as shown on the Site Maps at locations within the construction site to intercept overland flow and direct or divert flow to a sediment basin or other point where discharge can be controlled. Ditches are excavated in the surface soils with the spoils from the excavation typically placed along the downstream edge of the ditch to provide additional capacity. Berms are built up on the surface soils and compacted to create a stable diversion.

Diversion Name	Diversion Length	Maximum Diversion Slope	Design Flow Depth	Erosion Protection Type (seed, blanket, etc.)
A	438'*	1%	1'	Blanket
B	361'*	1%	1'	Blanket

\*Quantities shown are approximate and shall not be used for bidding purposes.

- h) **Silt Dike** – Silt dikes are constructed as shown on the Site Maps at locations within the construction site to divert sediment laden water from entering existing paved areas. The intent of silt dike placement is not to create ponding and/or encourage silt settlement, but to divert flow and encourage flow along the silt dike.

**Note to General Contractor:** Silt dikes should be placed to ensure that diverted runoff does not pond above the building finished floor elevation and does not enter the building footprint.

Silt Dike Section	Dike Length (feet)	Maximum Diversion Slope	Design Flow Depth
A	98*	2%	<1"
B	125*	2%	<1"
C	104*	2%	<1"
D	91*	2%	<1"
E	114*	2%	<1"
F	114*	2%	<1"
G	114*	2%	<1"
H	104*	2%	<1"
I	163*	2%	<1"
J	155*	2%	<1"
K	66*	2%	<1"
L	29*	2%	<1"
M	16*	2%	<1"
N	92*	2%	<1"
O	65*	2%	<1"
P	59*	2.5%	<1"
Q	96*	2%	<1"
R	32*	2%	<1"
S	49*	2%	<1"

T	9*	2%	<1"
U	126*	2%	<1"
V	327*	2%	<1"
W	161*	2%	<1"
X	127	2%	<1"
Y	49*	2%	<1"
Z	63*	2%	<1"
AA	80*	2%	<1"
BB	154*	2%	<1"

\*Quantities shown are approximate and shall not be used for bidding purposes.

- i) **Truck Well Drain Protection** – Truck well drain protection is placed as shown on the Site Map around the truck well drain to prevent sediment laden water from entering the proposed storm system. Bio-filter bags will filter sediment and encourage silt settlement before entering the truck well drain.

**Note to General Contractor:** The truck well drain protection should be placed to ensure that runoff does not pond above the building finished floor elevation and does not enter the building footprint.

- j) **Riprap Outfall Protection** – Riprap outfall protection is placed as shown on the Site Map around sedimentation basin and infiltration basin outfalls and inlets to prevent erosion and rilling.
- k) **Oil Sorbent Sock** – Oil sorbent sock is placed on the Site Map behind silt fence in specific locations to prevent oil contaminants from entering the municipal storm system.
- l) **FLEXSTORM PC+ Filter Bags** – FLEXSTORM PC+ filter bags are placed on the Site Map in municipal catch basins to prevent oil contaminants from entering the municipal system.

## B. Other Pollutant Controls

This section includes the controls of pollutants other than sediment and additional requirements of the General Permit.

### 1. Dust Control

Construction traffic must enter and exit the site at the specified mobile wheel wash. The purpose is to trap dust and mud that would otherwise be carried beyond the permitted project area by construction traffic. Large areas of soil that are denuded of vegetation and have no protection from particles being picked up and carried by wind should be protected with a temporary cover or kept under control with water or other soil adhering products to limit wind transported particles exiting the site perimeter.

Water trucks or other dust control agents will be used as needed during construction to minimize dust generated on the site. Tackifiers may be used to hold soil in place and prevent dust. Manufacturer recommendations for application locations and rates must be used for dust control applications. Dust control must be provided by the General Contractor to a degree that is in compliance with applicable local and state dust control regulations.

### 2. Dewatering

Verify discharges from dewatering activities are allowed non-stormwater discharges under the General Permit. Obtain a dewatering permit according to state and local regulations, if discharges from dewatering activities are not allowed under the General Permit. Discharges from dewatering operations must be directed through an appropriate pollution prevention/treatment measure, such as a pump discharge filter bag, sediment trap or sediment basin prior to being discharged from the site or into a water body of the State. Under no circumstances are discharges from dewatering operations to be discharged directly into streams, rivers, lakes or other areas beyond the permitted project area. Likewise, discharges into storm sewer systems that do not drain to a suitable on-site

treatment facility, such as a basin, are also prohibited. Discharges from dewatering operations must also be conducted in a manner sufficient to prevent erosion from the discharge runoff.

Use best management practices when dewatering. Place intake hose on a flotation or similar device and do not pump directly from the bottom of the basin, trench, etc. Always pump through a sediment control BMP and dewater within the permitted limits of disturbance to ensure discharge criteria are achieved. Do not discharge on a slope greater than three percent or within 20' of a surface water body. Dewatering should not occur during or immediately after precipitation events, but exceptions will be evaluated on case by case basis.

**3. Solid Waste Disposal**

No solid materials, including building materials, are allowed to be discharged from the site with stormwater. All solid waste, including disposable materials incidental to the major construction activities, must be collected and placed in containers. The containers will be emptied when 95% full, or as necessary, by a certified trash disposal service and hauled away from the site. Covers for the containers will be provided as necessary to meet state and local requirements. Construct covers as practicable, or required, to prevent stormwater contact and pollutant discharges from solid waste receptacles. The location of solid waste receptacles shall be shown on the Site Maps.

Substances that have the potential for polluting surface and/or groundwater must be controlled by whatever means necessary in order to ensure that they do not discharge from the site. As an example, special care must be exercised during equipment fueling and servicing operations. If a spill occurs, it must be contained and disposed of so that it will not flow from the site or enter groundwater, even if this requires removal, treatment, and disposal of soil. In this regard, potentially polluting substances should be handled in a manner consistent with the impact they represent.

**4. Sanitary Facilities**

All personnel involved with construction activities must comply with state and local sanitary or septic system regulations. Temporary sanitary facilities will be provided at the site throughout the construction phase. They must be utilized by all construction personnel and will be serviced by a commercial operator. The location of sanitary facilities shall be shown on the Site Maps. Portable toilets must be securely anchored and are not allowed within 30' of inlets or permitted limit of disturbance or within 50' of a water of the State.

Secondary containment is not required for portable toilets.

**5. Non-Stormwater Discharges**

Non-stormwater components of site discharges must be clean water. Water used for construction which discharges from the site must originate from a public water supply or private well approved by the State Health Department. Water used for construction that does not originate from an approved public supply must not discharge from the site. It can be retained in the ponds until it infiltrates and evaporates. Other non-stormwater discharges would include ground water. Only uncontaminated ground water can be discharged from the site, as allowed by and in accordance with applicable local ground water dewatering permits/regulations. When non-stormwater is discharged from the site, it must be done in a manner such that it does not cause erosion of the soil during discharge.

Process water such as power washing and concrete cutting must be collected for treatment and disposal. It is not to be flushed into the site storm drain system.

A groundwater dewatering permit is not required for this project.

**6. Concrete Waste from Concrete Ready-Mix Trucks**

Discharge of excess or waste concrete and/or wash water from concrete trucks will be allowed on the construction site, but only in approved aboveground portable concrete washout containers (preferred) or in specifically designated lined and diked areas prepared to prevent contact between the concrete and/or wash water and stormwater that will be discharged from the site. The General Contractor shall eliminate or minimize the number of seams in the liner.

Alternatively, waste concrete can be placed into forms to make rip rap or other useful concrete products. The cured residue from the concrete washout diked areas shall be disposed in accordance with applicable state and federal regulations. This jobsite superintendent is responsible for assuring that these procedures are followed. The location of concrete washout areas shall be shown on the Site Maps. Follow all applicable environmental regulations for concrete wash out pits.

Concrete wash out pits are not prohibited but must be in accordance with the CGP.

**7. Masons' Area**

Contractor shall identify masons' area on the site and indicate location on the Site Map. To the extent practical, all masonry tools, material, including sand and sacked cement or mortar materials, and equipment shall be located within the area identified. Runoff control, such as berms or diversion ditches, silt fence, straw wattles, or other means of containment shall be provided to prevent the migration of stormwater pollutants in runoff from the masons' area. Receptacles for debris and trash disposal shall also be provided.

**8. Fuel Tanks**

Temporary on-site fuel tanks for construction vehicles shall meet all state and federal regulations. Tanks shall have approved spill containment with the capacity required by the applicable regulations. From NFPA 30: All tanks shall be provided with secondary containment (i.e. containment external to and separate from primary containment). Secondary containment shall be constructed of materials of sufficient thickness, density, and composition so as not to be structurally weakened as a result of contact with the fuel stored and capable of containing discharged fuel for a period of time equal to or longer than the maximum anticipated time sufficient to allow recovery of discharged fuel. It shall be capable of containing 110% of the volume of the primary tank if a single tank is used, or in the case of multiple tanks, 150% of the largest tank or 10% of the aggregate, whichever is larger.

The tanks shall be in sound condition free of rust or other damage which might compromise containment. Fuel storage areas will meet all EPA, OSHA and other regulatory requirements for signage, fire extinguisher, etc. Hoses, valves, fittings, caps, filler nozzles, and associated hardware shall be maintained in proper working condition at all times. The location of fuel tanks shall be shown on the Site Maps and shall be located to minimize exposure to weather and surface water drainage features.

A Spill Prevention, Control and Countermeasure (SPCC) Plan must be developed if aboveground oil storage of a single container is in excess of 660 gallons, or an aggregate *capacity* at the construction site exceeds 1,320-gallons. Containers with a storage capacity of 55-gallons or less are not included when calculating site storage capacity. The General Contractor shall work with the CEC to develop and implement a SPCC Plan in accordance with the Oil Pollution Prevention regulation at Title 40 of the Code of Federal Regulations, Part 112, (40 CFR 112).

Per the Construction General Permit section S9.D.9.b. all chemicals, liquid products, petroleum products, and other materials that have the potential to pose a threat to human health or the environment shall be covered, contained, and protected from vandalism. On-site fueling tanks must include secondary containment.

**9. Hazardous Material Management and Spill Reporting Plan**

Any hazardous or potentially hazardous material that is brought onto the construction site will be handled properly in order to reduce the potential for stormwater pollution. All materials used on this construction site will be properly stored, handled, dispensed and disposed of following all applicable label directions. Flammable and combustible liquids will be stored and handled according to 29 CFR 1926.152. Only approved containers and portable tanks shall be used for storage and handling of flammable and combustible liquids.

Material Safety Data Sheets (MSDS) information will be kept on site for any and all applicable materials.

In the event of an accidental spill, immediate action will be undertaken by the General Contractor to contain and remove the spilled material. All hazardous materials, including contaminated soil



and liquid concrete waste, will be disposed of by the Contractor in the manner specified by federal, state and local regulations and by the manufacturer of such products. As soon as possible, the spill will be reported to the appropriate agencies. As required under the provisions of the Clean Water Act, any spill or discharge entering waters of the United States will be properly reported. The General Contractor will prepare a written record of any spill and associated clean-up activities of petroleum products or hazardous materials in excess of 1 gallon or reportable quantities, whichever is less. The General Contractor will provide notice to Owner, via the SWCT Hotline, immediately upon identification of a reportable spill. A spill report form is located in Appendix H.

Any spills of petroleum products or hazardous materials in excess of Reportable Quantities as defined by EPA or the state or local agency regulations, shall be immediately reported to the EPA National Response Center (1-800-424-8802) and Washington Emergency Management Division: 1-800-258-5990 OR 1-800-OILS-911 and the WSDOE Southwest Region office 1-360-407-6300.

**The State reportable quantity for petroleum products is:** Any amount that could be transported to waters of the state. WSDOE recommends that all spills be reported so a determination can be made. Information to assist with reporting is below:

Small Spill Clean Up Guide: <http://www.ecy.wa.gov/pubs/0308005.pdf>

How to report a spill: <http://www.ecy.wa.gov/programs/spills/other/reportaspill.htm>

The reportable quantity for hazardous materials can be found in 40 CFR 302 and <http://www.ecy.wa.gov/epcra/reportingreq.html>

In order to minimize the potential for a spill of petroleum product or hazardous materials to come in contact with stormwater, the following steps will be implemented:

- a) All materials with hazardous properties (such as pesticides, petroleum products, fertilizers, detergents, construction chemicals, acids, paints, paint solvents, additives for soil stabilization, concrete, curing compounds and additives, etc.) will be stored in a secure location, under cover and in appropriate, tightly sealed containers when not in use.
- b) The minimum practical quantity of all such materials will be kept on the job site and scheduled for delivery as close to time of use as practical.
- c) A spill control and containment kit (containing for example, absorbent material such as kitty litter or sawdust, acid neutralizing agent, brooms, dust pans, mops, rags, gloves, goggles, plastic and metal trash containers, etc.) will be provided on the construction site and location(s) shown on Site Maps.
- d) All of the product in a container will be used before the container is disposed of. All such containers will be triple rinsed, with water prior to disposal. The rinse water used in these containers will be disposed of in a manner in compliance with state and federal regulations and will not be allowed to mix with stormwater discharges.
- e) All products will be stored in and used from the original container with the original product label.
- f) All products will be used in strict compliance with instructions on the product label.
- g) The disposal of excess or used products will be in strict compliance with instructions on the products label.

#### **10. Long-Term Pollutant Controls**

Stormwater pollutant control measures installed during construction, that will also provide stormwater management benefits after construction, include catch basin sumps, grass lined swales, and Stormfilter quality control units.

A site-specific post construction stormwater Operation and Maintenance (O&M) Manual has been created previously for the original store. The O&M manual for the new and modified site features was completed as a part of the Washington state required drainage report. This O&M manual is included in Appendix P. This Manual has been developed by the CEC and will be used by the Owner to operate and maintain long-term stormwater controls and systems constructed and/or installed by the General Contractor. All controls and systems must be installed & functioning as designed and free of accumulated sediment and debris during final project inspection and approval.

The following is a description of state, local and/or site specific post-construction stormwater management requirements and how they will be managed and maintained. The governing agencies do not require that an operation and maintenance manual be included in the project SWPPP.

**C. “Best Management Practices” (BMPs)**

Owner has authority to limit surface area of erodible earth material exposed by clearing and grubbing, excavation, borrow and embankment operations and to direct the General Contractor to provide immediate permanent or temporary pollution control measures.

During the construction phase, the General Contractor shall implement the following measures:

- 1) Materials resulting from clearing and grubbing or excavation operations shall be stockpiled up slope from adequate sedimentation controls. Materials removed to sites beyond the permitted project area shall be protected with appropriate controls and properly permitted and otherwise comply with applicable laws, all in accordance with this SWPPP, including Section V.D. below.
- 2) The General Contractor shall designate areas on the Site Maps for equipment cleaning, maintenance, and repair. The General Contractor and subcontractors shall utilize such designated areas. Cleaning, maintenance, and repair areas shall be protected by a temporary perimeter berm, shall not occur within 150 feet of any waterway, water body or wetland, and in areas located as far as practical from storm sewer inlets.
- 3) Use of detergents for large scale washing is prohibited (i.e. vehicles, buildings, pavement surfaces, etc.).
- 4) Chemicals. Paints, solvents, fertilizers, and other toxic materials must be stored in waterproof containers. Except during application, the containers, the contents must be kept in trucks or within storage facilities. Runoff containing such material must be collected, removed from the site, treated, and disposed of at an approved solid waste and chemical disposal facility.

**D. Material Storage, Import, or Export Activities Outside of Permitted Limits of Disturbance**

This section describes roles and responsibilities of Wal-Mart General Contractors in verifying and documenting that activities associated with site construction at material storage, import, or export activities outside of the Permitted Limits of Disturbance have obtained proper coverage under the NPDES program.

- 1) Definitions Applicable to this Section
  - a) NPDES Industrial Permitted Facility – Any facility that accepts or provides material that has a current, active National Pollutant Discharge Elimination System (NPDES) industrial storm water permit. Examples include landfills, sand and gravel operations, mines, etc.
  - b) Material – Rock, soil, or other construction materials obtained as part of an earth disturbing activity.
  - c) Operational Control - Control over construction plans and specifications, including the ability to make modifications to those plans and specifications, or day-to-day operational control of those activities at the Site which are necessary to ensure compliance with the SWPPP.

- d) Off-site – Any area outside the Limits of Disturbance as shown on the Site Maps in the SWPPP. This is not necessarily the same as the property ownership boundary.
  - e) Permitted Limits of Disturbance (Permitted Project Area) - Any area of the Site for which the operator(s) are authorized to disturb the ground surface or conduct construction-related activities (i.e. areas shown inside the Limits of Disturbance on the Site Maps in the SWPPP).
  - f) Site - The location(s) described in this SWPPP and on the associated Site Maps at which Wal-Mart or a Wal-Mart contractor has operational control.
- 2) Responsibilities of the General Contractor

There will not be extensive cut/fill required. The site will be approximately balanced. Processing materials off-site is not anticipated. This site will not be considered a mining operation.

Prior to construction, during the pre-construction meeting, the Contractor is required to complete the Soil Removal Statement, Clean Soil Import (Acceptance) Statement, and Limits of Disturbance Statement documents found in Appendix N certifying the expected import/export activities for the site.

When any material storage, import, or export will take place during construction outside of Permitted Limits of Disturbance the General Contractor must:

- a) Prior to any Storage, Import, or Export activities, submit the signed Soil Removal Statement or Clean Soil Import (Acceptance) Statement to the Storm Water Compliance Team (SWCT) 48 hours before the start of the activity. In addition, properly execute and complete the Material Storage, Import, or Export Manifest (the “Manifest”), the Material Storage, Import or Export Agreement (the “Agreement”) and any related Contract for each area. Blank copies of the appropriate forms are provided in Appendix N. Note that Agreements are not required for storage, import, or export of material to or from NPDES industrial permitted facilities; however, Manifests are required for all storage, import, or export activities, including those to or from NPDES industrial permitted facilities.
- b) Copies of the Manifest, the Agreement and/or any related Contract for removal and/or acceptance of soil or material shall be provided to the SWCT at Wal-Mart upon execution. The Manifest and Agreement shall not be amended or changed without prior approval from the SWCT or Wal-Mart legal team.
- c) The General Contractor shall complete and keep current the Material Information box on the project site map and update the map and site stabilization log to indicate locations where, and dates when, storage, import, or export occur on the Wal-Mart Site.
- d) All documentation obtained as described in this section shall be retained in the SWPPP binder at the site and in accordance with the Retention of Records as described in Part I.D of Section 02370.

## VI. LOCAL PLANS

In addition to this SWPPP, construction activities associated with this project must comply with any guidelines set forth by local regulatory agencies. The General Contractor shall maintain documents evidencing such compliance in Appendix L of this SWPPP.

The WSDOE CGP requires weekly turbidity and pH sampling. The required documentation for reporting the test results is the Discharge Monitoring Report (DMR) (See Appendix G & L). The DMR forms must be submitted monthly to WSDOE via the WAwebDMR system. DMR forms may be submitted by mail but requires a waiver from WSDOE. For information on the WAwebDMR, refer to the website <http://www.ecy.wa.gov/programs/wq/permits/paris/index.html>. Site inspections shall be conducted per Wal-Mart requirements listed within section I.G. of this specification and at least once every calendar week

and within 24 hours of any discharge from the site per the General Permit. Both Wal-Mart and WSDOE inspection requirements must be met. (See Appendix G for all necessary inspection forms)

The CGP requires 12 elements be included in the project SWPPP. The summary of the requirements is attached in Appendix L. The requirements have been reviewed and incorporated in preparation of this SWPPP.

## **VII. INSPECTIONS AND SYSTEM MAINTENANCE**

Between the time this SWPPP is implemented and final Notice of Termination has been submitted, all disturbed areas and pollutant controls must be inspected daily. The purpose of site inspections is to assess performance of pollutant controls. The inspections will be conducted by the General Contractor's Site Superintendent. Based on these inspections, the General Contractor will decide whether it is necessary to modify this SWPPP, add or relocate controls, or revise or implement additional Best management Practices in order to prevent pollutants from leaving the site via stormwater runoff. The General Contractor has the duty to cause pollutant control measures to be repaired, modified, supplemented, or take additional steps as necessary in order to achieve effective pollutant control. Note: If a BMP is covered by snow, mark the BMP as not applicable and document the reason the BMP can not be inspected on the daily report.

Examples of specific items to evaluate during site inspections are listed below. This list is not intended to be comprehensive. During each inspection, the inspector must evaluate overall pollutant control system performance as well as particular details of individual system components. Additional factors should be considered as appropriate to the circumstances. Note: A grid system has been incorporated into Site Maps and shall be used as a location guide for daily reporting on structural controls and BMPs. The General Contractor is responsible for measuring and recording site-specific rainfall amounts.

### **A. Construction Exit and Track Out**

Locations where vehicles enter and exit the site must be inspected for evidence of sediment tracking beyond the permitted project area. A mobile wheel wash shall be installed where vehicles enter and exit. Exits shall be maintained or supplemented with additional BMPs as necessary to prevent the release of sediment from vehicles leaving the site. Any sediment deposited on the roadway shall be swept as necessary throughout the day or at the end of every day and disposed of in an appropriate manner. Sediment shall **NOT** be washed into storm sewer systems.

**Note to General Contractor:** Track out is a sediment release (sediment from the construction site was allowed beyond the permitted limits of disturbance). All sediment releases must be reported to the SWCT Hotline at (800-530-9928). See Item H below for additional information.

### **B. Erosion Control Devices**

Rolled erosion control products (nets, blankets, turf reinforcement mats) and marginally vegetated areas (areas not meeting required vegetative densities for final stabilization) must be inspected daily. Rilling, rutting and other signs of erosion indicate the erosion control device is not functioning properly and additional erosion control devices are warranted.

### **C. Sediment Control Devices**

Sediment barriers, traps and basins must be inspected and they must be cleaned out at such time as their original capacity has been reduced by 50 percent. All material excavated from behind sediment barriers or in traps and basins shall be incorporated into on-site soils or spread out on an upland portion of the site and stabilized. To minimize the potential for sediment releases from the project site perimeter control devices shall be inspected with consideration given to changing up-gradient conditions.

### **D. Material Storage Areas**

Material storage areas should be located to minimize exposure to weather. Inspections shall evaluate disturbed areas and areas used for storing materials that are exposed to rainfall for evidence of, or the potential for, pollutants entering the drainage system or discharging from the site. If necessary, the materials must be covered or original covers must be repaired or supplemented. Also, protective berms must be constructed, if needed, in order to contain runoff from material storage areas. All state and local regulations pertaining to material storage areas will be adhered to.

### **E. Vegetation**

Consideration must be given to anticipated climate and seasonal conditions when specifying and planting seed. Seed shall be free of weedy species and appropriate for site soils and regional climate. Seed and mulch per the construction drawings and the 02900 Planting specification immediately after topsoil is applied and final grade is reached. Grassed areas shall be inspected to confirm that a healthy stand of grass

is maintained. The site has achieved final stabilization once all areas are covered with building foundation or pavement, or have a stand of grass with a minimum of 70 percent density or greater of natural background cover over the entire vegetated area in accordance with the General Permit requirements. Vegetated areas must be watered, fertilized, and reseeded as needed to achieve this requirement. The vegetative density must be maintained through project completion to be considered stabilized. Areas protected by erosion control blankets are not permanently stabilized until the applicable General Permit requirement for final vegetative density is achieved.

Rip-rap, mulch, gravel, decomposed granite or other equivalent permanent stabilization measures may be employed in lieu of vegetation based on site-specific conditions and governing authority approval.

**F. Discharge Points**

All discharge points must be inspected to determine whether erosion and sediment control measures are effective in preventing discharge of sediment from the site or impacts to receiving waters.

**G. Special Project Areas**

There are no special projects, located beyond the Wal-Mart permitted project area, requiring inspection and maintenance associated with this construction project.

**H. Sediment Releases**

The SWCT must be notified each and every time sediment is allowed beyond permitted limits of disturbance. This includes sediment that escapes or is allowed to leave via designed discharge points. Stormwater that leaves the permitted limits of disturbance and is discolored contains soil particles (sediment) and must be treated as a sediment release.

All sediment releases must be reported to the SWCT Hotline at (800-530-9928).

When calling the SWCT Hotline to report a sediment release the General Contract should leave the following information:

1. Store Number & Sequence
2. Store City & State
3. Caller (full name & firm)
4. Caller Telephone Number
5. Sediment Release Date
6. Was a rain event associated with release (Yes or No)?
  - 6b. If yes, what was duration of rain event & total amount of rain received?
  - 6c. If no, what caused the sediment release?
7. Where on the jobsite did the release occur?
8. Did the sediment release occur beyond the permitted limits of disturbance (Yes or No)?

If yes,

  - 8b. What BMPs failed to allow the sediment release to occur?
  - 8c. Did sediment enter a water body or wetland?
  - 8d. Did sediment enter a stormwater inlet?
  - 8e. Did sediment enter an adjacent street or property?
  - 8f. Estimate, in cubic yards, how much sediment left the site:
  - 8g. Has all sediment located beyond the permitted project area been cleaned up (Yes or No)?

If no, when will sediment clean up be completed?

  - 8h. Is there a requirement to notify the governing agency of this release (Yes or No)?
9. Was the sediment release noted as a deficiency on the Daily report and resolved (or will be resolved) within 48 hours (Yes or No)?
  - 9b. If no, add to Daily report as a deficiency & resolve.
10. How have BMPs been modified / improved to prevent future sediment releases?

The Daily Inspection Report Form must identify all deficiencies, any corrections, whether they are identified during the current inspection or have occurred since the previous inspection, and any additional comments. Based on inspection results, any modification necessary to increase effectiveness of this SWPPP to an acceptable level must be made immediately but no longer than within 48 hours of the inspection. The inspection reports must be complete and additional information should be included if needed to fully describe a situation. An important aspect of the inspection report is the description of additional measures that need to be taken to enhance plan effectiveness. The

inspection report must identify whether the site was in compliance with the SWPPP at the time of inspection and specifically identify all incidents of non-compliance.

A responsible corporate officer must sign a letter delegating the site superintendent as the authorized position for conducting the required inspections. A draft form of this authorization is included in Appendix G. The inspector must be a certified "Stormwater Professional" through the Wal-Mart training program. Inspection reports must include an original, authorized signature and date of the inspection. Inspection reports must be retained by the General Contractor as an integral part of this SWPPP for at least five years from the date of submission of the Notice of Termination of permit coverage.

Ultimately, it is the responsibility of the General Contractor to assure the adequacy of site pollutant discharge controls. Actual physical site conditions or contractor practices could make it necessary to install more structural controls than are shown on the plans. For example, localized concentrations of runoff could make it necessary to install additional sediment barriers. Assessing the need for additional controls and implementing them or adjusting existing controls will be a continuing aspect of this SWPPP until the site achieves final stabilization. Any modifications, additions or deletions of sediment control devices that may alter the hydraulic design of the site or are located in areas of potential high flow (basins, traps, check dams, diversions, etc.) must be approved by the CEC through the request for information process (RFI).

<b>APPENDIX A</b>	<b>CONTACT LIST</b>
<b>APPENDIX B</b>	<b>SWPPP CERTIFICATIONS</b>
<b>APPENDIX C</b>	<b>VICINITY MAP AND USGS MAP</b>
<b>APPENDIX D</b>	<b>NOTICE OF INTENT (NOI)</b>
<b>APPENDIX E</b>	<b>CONSTRUCTION SITE NOTICE</b>
<b>APPENDIX F</b>	<ul style="list-style-type: none"> <li>• <b>CONTRACTOR/SUBCONTRACTOR CERTIFICATION;</b></li> <li>• <b>CERTIFICATION OF QUALIFICATIONS FOR COMPLIANCE OFFICER AND TWO SUPERINTENDENTS;</b></li> <li>• <b>PHASE I BMP CERTIFICATION; AND</b></li> <li>• <b>STORMWATER PRE-CONSTRUCTION MEETING</b></li> </ul>
<b>APPENDIX G</b>	<ul style="list-style-type: none"> <li>• <b>WAL-MART LETTER OF DELEGATION FOR CONTRACTOR TO PERFORM INSPECTIONS</b></li> <li>• <b>DAILY INSPECTION REPORT;</b></li> <li>• <b>SUPPLEMENTAL REPORT;</b></li> <li>• <b>GENERAL CONTRACTOR'S DELEGATION LETTER FOR INSPECTOR; AND</b></li> <li>• <b>WEEKLY STORMWATER MEETING FORM</b></li> <li>• <b>WSDOE DAILY MONITORING REPORT FORM</b></li> <li>• <b>WSDOE SITE INSPECTION FORM</b></li> </ul>
<b>APPENDIX H</b>	<b>SPILL REPORT FORM</b>
<b>APPENDIX I</b>	<b>NOTICE OF TERMINATION (NOT)</b>
<b>APPENDIX J</b>	<b>RECORD OF STABILIZATION AND CONSTRUCTION ACTIVITY DATES</b>
<b>APPENDIX K</b>	<b>LOG OF FEDERAL, STATE, OR LOCAL STORMWATER OR OTHER ENVIRONMENTAL INSPECTIONS</b>
<b>APPENDIX L</b>	<b>STATE AND LOCAL GOVERNMENT REQUIREMENTS</b>
<b>APPENDIX M</b>	<b>BMP FIELD MANUAL</b>
<b>APPENDIX N</b>	<b>MATERIAL CERTIFICATION STATEMENT</b>
<b>APPENDIX O</b>	<b>SITE-SPECIFIC PERMITS, DESIGN CALCULATIONS AND RELATED INFORMATION including NON-NPDES STORMWATER PERMITS, 404 PERMITS, ENVIRONMENTAL SITE ASSESSMENTS, etc.</b>
<b>APPENDIX P</b>	<b>SITE-SPECIFIC, POST-CONSTRUCTION STORMWATER OPERATION AND MAINTENANCE MANUAL</b>





**APPENDIX A**  
**CONTACT LIST**

To be located behind SWPPP Binder Tab 1

# CONTACT LIST

Contacts for: #2037-06 Aberdeen, WA Supercenter Expansion

Date: \_\_\_\_\_

**Wal-Mart's Senior Director of Stormwater Compliance:** Mark S. Goldsmith, CPESC Phone: (479) 204-1195

Responsible for coordinating oversight of stormwater compliance by Wal-Mart and it's Responsible Contractors at each site.

**Wal-Mart's Construction Manager:** Name: \_\_\_\_\_

Phone: \_\_\_\_\_

Responsible for conducting monthly inspections, conducting the final site inspection after verifying final stabilization and overseeing compliance with all applicable permits, the Clean Water Act, and the site SWPPP.

**Responsible Contractor's Compliance Officer:** Name: \_\_\_\_\_

Company: \_\_\_\_\_

Phone: \_\_\_\_\_

Responsible for the supervision or completion of construction at a site and able to adequately identify and implement stormwater sediment and erosion control practices and effectively instruct employees and contractors in the implementation of such practices.

**Project Superintendent:** Name: \_\_\_\_\_

Company: \_\_\_\_\_

Phone (office): \_\_\_\_\_

Phone (mobile): \_\_\_\_\_

**Project Superintendent:** Name: \_\_\_\_\_

Company: \_\_\_\_\_

Phone (office): \_\_\_\_\_

Phone (mobile): \_\_\_\_\_

Responsible for overseeing activities and work at a site; has the authority to direct employees and contractors to undertake actions to comply with all applicable permits, the Clean Water Act, and the site's SWPPP.

**Note to General Contractors:** Date this form each time contact information is added or updated. Do not erase information from this form. If information is incorrect or outdated, line through incorrect / outdated information and write in correct / new information. If contact information changes more than once create a new updated Contact List, date, and place on top of old Contact List in the SWPPP Binder.

## Confidential Business Information

## **APPENDIX B**

### **WAL-MART and GENERAL CONTRACTOR SWPPP CERTIFICATIONS**

To be located behind SWPPP Binder Tab 7

#### **NOTES to General Contractor:**

The General Contractor must certify this SWPPP by signing the GC SWPPP certification letter located in this Appendix.

Signed Wal-Mart and General Contractor SWPPP certifications must be kept in the jobsite SWPPP Binder behind Tabs 7A and 7B, respectively.

Signed SWPPP certifications can not be modified or revised in the field.



**Realty Compliance Department**  
**Stormwater Compliance Team**

Mark S. Goldsmith, CPESC; Senior Director Stormwater Compliance

2001 SE 10<sup>th</sup> Street  
Bentonville, AR 72716-5570  
Phone 479-204-1195  
Fax 479-204-0934  
www.walmart.com

Date: 1-24-13

RE: #2037-06 Aberdeen, WA Supercenter Expansion

Address:  
909 East Wishkah Street  
Aberdeen, WA 98520

**CERTIFICATION OF THE**  
**STORMWATER POLLUTION PREVENTION PLAN**  
  
**GENERAL PERMIT FOR STORMWATER DISCHARGES**  
**FROM CONSTRUCTION ACTIVITIES**

I certify under penalty of law, that this document and all attachments were prepared under my direction or supervision in accordance with a system designed to assure qualified personnel properly gathered and evaluated the information submitted. Based on my inquiry of the person or persons who manage this system, or those persons directly responsible for gathering information, the information submitted is, to the best of my knowledge and belief, true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment for knowing violations.

Sincerely,  
**Wal-Mart Real Estate Business Trust**

Mark S. Goldsmith, CPESC  
Senior Director of Stormwater Compliance

#2037-06 Aberdeen, WA

02370-34

1/11/2013

## DELEGATION OF SIGNATURE AUTHORITY

I, **Mary Rottler**, being a Vice President of Wal-Mart Stores, Inc.; Wal-Mart Real Estate Business Trust; Wal-Mart TRS, LLC; Wal-Mart Realty Company; Wal-Mart Property Company; Wal-Mart Stores Arkansas, LLC; Wal-Mart Stores, Texas, LLC; Wal-Mart Stores East, LP; Wal-Mart Louisiana, LLC; WSE Management, LLC; Sam's Real Estate Business Trust; Sam's TRS, LLC; Sam's East, Inc.; Sam's West, Inc.; Sam's PW, Inc. and Sam's Property Company (hereinafter collectively referred to as "the Company"), do hereby delegate to the positions below the authority to sign documents as set forth below on behalf of the Company, in their respective capacity for the Company.

### Senior Director of Safety and Environmental Compliance

Any and all agreements related to safety and environmental matters on behalf of the Company.

### Senior Director of Supplier Management and Compliance

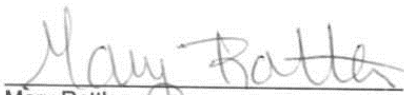
Non-Disclosure agreements as vendors are pre- and re-qualified, and service and other related agreements to be performed in furtherance of construction, facilities maintenance, remodels and goods not-for-resale.

### Senior Director of Storm Water Compliance

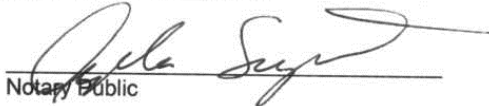
Any and all documents relative to or required by any storm water construction general or individual permit issued or promulgated by the United States Environmental Protection Agency, or by a state or local agency with authority to regulate storm water discharges from construction sites. This includes, without limitation, the authority to sign Notices of Intent, Storm Water Pollution Prevention Plans, reports, certifications, Notices of Termination, or any other information or document required to be signed by the Company as a permittee under the terms of any of the above described permits.

When an associate in a position listed in this document is unavailable, another associate in a position listed in this document may sign for such absent associate. Such signature will serve on its face as confirmation that the regular signatory was unavailable and be valid and binding as long as it is within the scope of signature authority for the absent associate.

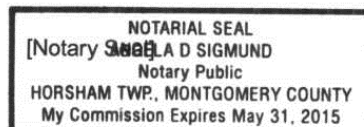
This delegation shall supersede and revoke any signature authority previously given to the individuals in the above positions as of the date set forth below and revokes the Delegation of Signature Authority by Jennifer May-Brust dated March 16, 2009. All acts and transactions of individuals in the positions above, which were taken or made in good faith and prior to the formal delegation of authority to such position that are consistent with this delegation are hereby ratified and approved.

  
Mary Rottler  
Vice President

Subscribed and sworn before me this 11<sup>th</sup> day of December, 2012

  
Notary Public

My commission expires: May 31, 2015



Date: \_\_\_\_\_

RE: #2037-06 Aberdeen, WA Supercenter Expansion

Address:

909 East Wishkah Street

Aberdeen, WA 98520

**CERTIFICATION OF THE  
STORMWATER POLLUTION PREVENTION PLAN**

**GENERAL PERMIT FOR STORMWATER DISCHARGES  
FROM CONSTRUCTION ACTIVITIES**

I certify under penalty of law, that this document and all attachments were prepared under my direction or supervision in accordance with a system designed to assure qualified personnel properly gathered and evaluated the information submitted. Based on my inquiry of the person or persons who manage this system, or those persons directly responsible for gathering information, the information submitted is, to the best of my knowledge and belief, true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment for knowing violations.

Sincerely,

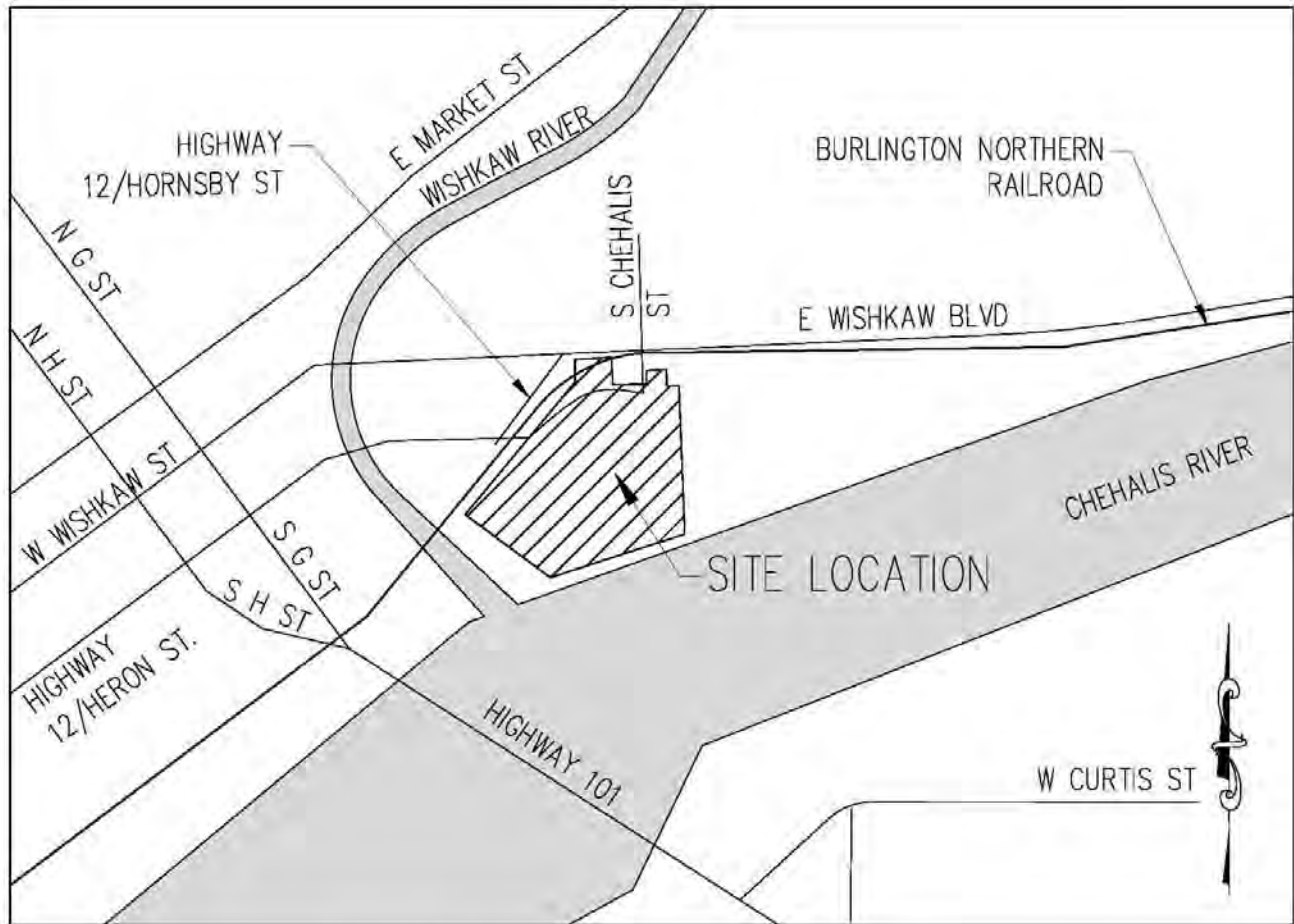
\_\_\_\_\_  
Signature

\_\_\_\_\_  
Printed Name

\_\_\_\_\_  
Title

\_\_\_\_\_  
Company

**APPENDIX C**  
**VICINITY MAP**



## SITE LOCATION MAP

N.T.S.





SITE LOCATION  
LAT: 46.975839° N  
LONG: 123.806903° W

APPROX. ±35 FEET  
TO CHEHALIS RIVER  
LAT: 46.975100° N  
LONG: 123.083600° W

APPROX. ±0 FEET  
TO WISHKAH RIVER  
LAT: 46.974300° N  
LONG: 123.808900° W

## USGS QUADRANGLE MAP

N.T.S.

## **APPENDIX D**

### **NOTICE OF INTENT**

To be located behind SWPPP Binder Tab 2 and/or 3

The General Contractor does not have to submit a stormwater Notice of Intent.

WSDOE requires that the Operator (the party with operational control over construction plans and specifications or day-to-day operational control of activities that ensure compliance with the SWPPP and permit conditions) be listed as the Permittee on the NOI. Wal-Mart will be the only permittee.

The NOI shall be signed by at least a Vice President level or above.

No co-permittee or permit transfer is applicable to this project. Upon contract award General Contractor will be designated as the On-Site Contact Person.

Upon award of project, the CEC must submit a revised NOI identifying the General Contractor On-Site Contact Person to the Wal-Mart SWCT within 7 days of project award. The revised NOI should include information for the On-Site Contact Person in Section III of Page 1 and check the box for "Change or Update Permit Information" on the top of Page 1. Once the revised NOI is received by the SWCT, it shall be signed by a Vice President level or above and re-submitted to WSDOE. A copy of the revised NOI with updated on-site contact information shall be provided to the contractor, the CEC and the City of Aberdeen contact.

WSDOE requires that a SWPPP be developed prior to starting construction.

WSDOE has an online submittal process, but the paper process is the Wal-Mart preferred option. The Notice of Intent (NOI) must be mailed to the address below.

The submittal NOI package is a copy of the signed NOI application form only. The Wal-Mart signed NOI shall then be sent to the WSDOE P.O. Box address below:

**Washington State Department of Ecology – Stormwater**  
**P.O. Box 47696**  
**Olympia, WA 98504-7696**  
**Contact: Joyce Smith**

There is no application fee associated with the NOI submittal, but there is an annual permit fee based on the area of disturbance. For projects that disturb 10 -< 20 acres the annual fee is \$1,556. The fees are set by the state (Chapter 173-224 WAC) and are subject to change. WSDOE will invoice Wal-Mart soon after issuing the NPDES permit.

Public notice is required by the Construction General Permit after NOI submittal but before earth-disturbing activities can occur. These public notices will be posted in the local newspaper by CEC.

**NOTES to General Contractor:**

If instructed above, the General Contractor must complete, sign and submit a Notice of Intent or similar stormwater permit application, to the applicable governing agency within 7 days of Project Award.

The General Contractor must submit a copy of the GC NOI or similar stormwater permit application to the Wal-Mart Stormwater Compliance Team within 48-hours after submitting to an agency.

If Wal-Mart obtained a State or EPA stormwater permit the Wal-Mart NOI shall be placed behind Tab 2a in the SWPPP Binder. Place a note indicating 'not required' if Wal-Mart did not obtain a State or EPA stormwater permit.

If the GC obtained a State or EPA stormwater permit the GC NOI shall be placed behind Tab 3 in the SWPPP Binder. Place a note indicating 'not required' if the GC did not obtain a State or EPA stormwater permit.

Signed Wal-Mart and General Contractors NOIs must be posted on the SWPPP Sign near the job-site entrance within view of the public.

Signed NOIs can not be modified or revised in the field.



NOTICE OF INTENT (NOI)  
APPLICATION FORM

Construction Stormwater General  
Permit

Check if applicable:  
☐ Change or Update Permit Information  
☐ Modification of Permit Coverage  
Permit #WAR\_\_\_\_\_

*Please print or type all sections of this application. All fields are required unless otherwise marked.*

<b>I. Operator/Permittee</b> (Party with operational control over plans and specifications or day-to-day operational control of activities which ensure compliance with Stormwater Pollution Prevention Plan (SWPPP) and permit conditions. Ecology will send correspondence and permit fee invoices to the permittee on record.)				
Name: Mark S. Goldsmith		Company: Wal-Mart Real Estate Business Trust		
Business Phone: 479-204-1195	Ext.	Unified Business Identifier (UBI): 601336273 <i>(UBI is a nine-digit number used to identify a business entity. Write "none" if you do not have a UBI number.)</i>		
Cell Phone (Optional): N/A	Fax (Optional): 479-204-0934			
E-mail: mark.goldsmith@wal-mart.com				
Mailing Address: 2001 SE 10 <sup>th</sup> Street		City: Bentonville	State: AR	Zip + 4: 72716-5570
<b>II. Property Owner</b> (The party listed on the County Assessor's records as owner and taxpayer of the parcel[s] for which permit coverage is requested. Ecology will <u>not</u> send correspondence and permit fee invoices to the Property Owner. The Property Owner information will be used for emergency contact purposes.)				
Name: Mark S. Goldsmith		Company (if applicable): Wal-Mart Real Estate Business Trust		
Business Phone: 479-204-1195	Ext.	Unified Business Identifier (UBI): 601336273 <i>(UBI is a nine-digit number used to identify a business entity. Write "none" if you do not have a UBI number.)</i>		
Cell Phone (Optional): N/A	Fax (Optional): 479-204-0934			
E-mail: mark.goldsmith@wal-mart.com				
Mailing Address: 2001 SE 10 <sup>th</sup> Street		City: Bentonville	State: AR	Zip + 4: 72716-5570
<b>III. On-site Contact Person</b> (Typically the Certified Erosion & Sediment Control Lead or Operator/Permittee)				
Name: Jason Munich		Company: PACLAND		
Business Phone: 360-786-9500	Ext.	Mailing Address: 606 Columbia St NW, Suite 106		
Cell Phone (Optional): N/A	Fax (Optional): 360-786-5267	City: Olympia	State: WA	Zip + 4: 98501
E-mail: jmunich@pacland.com				
<b>IV. WebDMR (Electronic Discharge Monitoring Reporting)</b>				
<p>You must submit monthly discharge monitoring reports using Ecology's WebDMR system. To sign up for WebDMR, or to register a new site, go to <a href="http://www.ecy.wa.gov/stormwater">www.ecy.wa.gov/stormwater</a>, and click on the "Construction Stormwater" link. You will find information on WebDMR under the "WebDMR and PARIS" link on the right-hand side. If you are unable to submit your DMRs electronically, you may contact Ecology to request a waiver. Ecology will generally only grant waiver requests to those permittees without internet access. Only a permittee or representative, designated in writing, may request access to or a waiver from WebDMR. To have the ability to use the system immediately, you must submit the Electronic Signature Agreement with your application. If you have questions on this process, contact Ecology's WebDMR staff at <a href="mailto:WAWebDMR-Stormwater@ecy.wa.gov">WAWebDMR-Stormwater@ecy.wa.gov</a> or 360-407-7097.</p>				

<b>V. Site Information</b>		
<b>Site or Project Name</b> Aberdeen Walmart		<b>Site Acreage</b> Total size of your site/project (that you own/control): <u>14</u> acres.
<b>Street Address or Location Description</b> (If the site lacks a street address, list its specific location. For example, Intersection of Highway 61 and 34.)  <u>909 E. Wishkah Street, Aberdeen, WA</u>		Total area of soil disturbance (grading and/or excavating) for your site/project over the life of the project: <u>15</u> acres. (Note: 1 acre = 43,560 ft <sup>2</sup> .)
Parcel ID#: _____ (Optional)		<b>Concrete / Engineered Soils</b> How many yards of concrete will be poured over the life of the project? <u>2000</u> yd <sup>3</sup> (estimate)
Type of Construction Activity (check all that apply): <input type="checkbox"/> Residential <input checked="" type="checkbox"/> Commercial <input type="checkbox"/> Industrial <input type="checkbox"/> Highway or Road (city, county, state) <input type="checkbox"/> Utilities (specify): _____ <input type="checkbox"/> Other (specify): _____		How many yards of recycled concrete will be used over the life of the project? <u>0</u> yd <sup>3</sup> (estimate)
City (or nearest city): Aberdeen		Estimated project start-up date (mm/dd/yy): 04/17/2013
County: Grays Harbor		Estimated project completion date (mm/dd/yy): 4/17/2015
Record the latitude and longitude of the <i>main entrance</i> to the site or the approximate center of site.		
Latitude: <u>46° 58' 33.02"</u> °N                      Longitude: <u>123° 48' 24.85"</u> °W		
For assistance with latitude and longitude, refer to the following website: <a href="http://www.getlatlon.com">http://www.getlatlon.com</a> . Convert all latitude and longitude coordinates into degrees, minutes, seconds format. For help with this process go to: <a href="http://transition.fcc.gov/mb/audio/bickel/DDDMSS-decimal.html">http://transition.fcc.gov/mb/audio/bickel/DDDMSS-decimal.html</a>		
<b>VI. Existing Site Conditions</b>		
1. Are you aware of contaminated soils present on the site? <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No		
2. Are you aware of groundwater contamination located within the site boundary? <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No		
3. If you answered yes to questions 1 or 2, will any contaminated soils be disturbed or will any contaminated groundwater be discharged due to the proposed construction activity? <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No		
["Contaminated" and "contamination" here mean containing any hazardous substance (as defined in WAC 173-340-200) that does not occur naturally or occurs at greater than natural background levels.]		
If you answered yes to Question 3, <u>please explain below or on a separate paper</u> in detail the locations, contaminants, and concentrations, and pollution prevention and/or treatment BMPs proposed to control the discharge of soil/groundwater contaminants. Ecology may request a copy of your SWPPP.		
A Reporting Letter, dated July 13, 2011, by Terracon Consultants, sent to Scott Rose of the Department of Ecology, indicating the contaminants and locations is attached. Since the contaminants are present in the soil, sediment BMP controls such as, silt fence, silt dike, inlet protection and sediment traps are being utilized. To further treat any contamination from the soil, all stormwater will be run through secondary treatment BMPs such as, grass swales, oil booms, and/or proprietary hydrocarbon sorbent filter sacks. The soil contaminants and appropriate BMPs are outlined in the SWPPP and an associated Soil Management Plan.		
<b>VII. Stormwater Pollution Prevention Plan (SWPPP)</b>		
You must develop a SWPPP prior to starting construction. Do <b>not</b> submit your SWPPP with your application. The exception is that Ecology may request a copy of your SWPPP if you answered yes to the questions in Part VI.		

### VIII. Best Management Practices (BMPs)

You must use the BMPs listed in the Stormwater Management Manual for Western Washington or the Stormwater Management Manual for Eastern Washington or other manuals approved by Ecology. Alternatively, you may use demonstrably equivalent BMPs on the basis of permit condition S9.C.4. If you intend to use a BMP at your site that is not included in these manuals, but that you believe meets the definition of a *demonstrably equivalent* BMP, you must notify the appropriate regional office. (See Definitions in the Construction Stormwater General Permit).\*

<http://www.ecy.wa.gov/programs/wq/stormwater/construction/contacts.html>

*\*Note that if you receive permit coverage without indicating the preference for a demonstrably equivalent BMP and later decide to use one, you must provide Ecology with notice of the selection of an equivalent BMP no less than 60 days before the intended use of the equivalent BMP.*

### IX. Discharge/Receiving Water Information

Indicate whether your site's stormwater and/or dewatering water could enter surface waters, **directly** and/or **indirectly**:

☒ Water will discharge directly or indirectly (through a storm drain system or roadside ditch) into one or more surface waterbodies (wetlands, creeks, lakes, and all other surface waters and water courses).

If your discharge is to a storm sewer system, provide the name of the operator of the storm sewer system:

(e.g., City of Tacoma): City of Aberdeen

(NOTE: If your stormwater discharges to a storm sewer system operated by the City of Seattle, King County, Snohomish County, City of Tacoma, Pierce County, or Clark County, you must **also** submit a copy of this NOI to the appropriate jurisdiction.)

☐ Water will discharge to ground with 100% infiltration, with no potential to reach surface waters under any conditions.

If your project includes dewatering, you **must** include dewatering plans and discharge locations in your site Stormwater Pollution Prevention Plan.

#### Location of Discharge into Surface Waterbody

Enter the waterbody name and latitude/longitude of the point(s) where the site has the potential to discharge into a waterbody (enter all locations).

- Include the names and locations of both direct and indirect discharges to surface waterbodies, even if the risk of discharge is low or limited to periods of extreme weather.
- Some large construction projects (for example, subdivisions, roads, or pipelines) may discharge into several waterbodies.
- If the creek or tributary is unnamed, use a format such as "unnamed tributary to Deschutes River."
- **Attach a separate list if necessary.**

Surface Waterbody Name	Latitude Decimal Degrees	Longitude Decimal Degrees
Chehalis River	46.9751° N	123.0836° W
Wishkah River	46.9743° N	123.8089° W
	° N	° W
	° N	° W

*If your site discharges to a waterbody that is on the impaired waterbodies list (i.e., 303(d) list) for turbidity, fine sediment, high pH, or phosphorus, Ecology will require additional documentation before issuing permit coverage and these sites will be subject to additional sampling and numeric effluent limits (per Permit Condition S8). Ecology will notify you if any additional sampling requirements apply. Information on impaired waterbodies is available online at <http://www.ecy.wa.gov/programs/wq/303d/2008/index.html>.*



#### X. State Environmental Policy Act (SEPA)

This Notice of Intent (NOI) is incomplete and cannot be approved until the applicable SEPA requirements under Chapter 197-11 WAC are met.

Who is the SEPA lead agency on your site? City of Aberdeen

Has the SEPA lead agency issued a final decision on your checklist? ☐ No ☒ Yes ☐ Exempt\*

If No: The NOI is incomplete. Ecology will hold the application until a final SEPA decision is made or the Construction Stormwater NOI public comment period ends, whichever is later. You must notify Ecology once the lead agency has issued a determination.

If Yes: Type of SEPA decision issued: ☐ Determination of Non-Significance (DNS) ☒ Mitigated DNS (MDNS) ☐ Determination of Significance (DS) ☐ Final Environmental Impact Statement (EIS) ☐ Other: \_\_\_\_\_

- Date of final SEPA decision: 12/01/2010
- If a supplemental EIS, SEPA addendum, or some other type of additional SEPA review was required, please attach and submit with this form.
- Date when all SEPA-related comment & appeal periods are exhausted: 12/01/2010

\*If Exempt: Attach written documentation, check type of exemption below, and proceed to Section VII.

- ☐ Watershed Restoration & Fish Habitat Enhancement Exemption (RCW 43.21C.0382).
- ☐ Infill Development Exemption (RCW 43.21C.229).
- ☐ Planned Action Exemption (RCW 43.21C.031).
- ☐ Categorical Exemption. Under what section of the SEPA Rule (WAC 197-11-800) is it exempt? \_\_\_\_\_ (for example, WAC 197-11-800(1) Minor New Construction)

More SEPA information is available at: <http://www.ecy.wa.gov/programs/sea/sepa/e-review.html>.

#### XI. Public Notice

You must publish a public notice at least **once** a week for **two** consecutive weeks with **seven days** between publications, in at least a **single** newspaper of general circulation in the county in which the construction is to take place. Ecology cannot grant permit coverage sooner than the end of the 30-day public comment period, which begins on the date of the **second** public notice.

Mail or fax (360-407-6426) the NOI to Ecology on or **before** the **first** public notice date. If you fax the public notice to Ecology, you must also mail a hard copy. Failure to do so may delay the issuance of your permit.

Provide the **exact** dates (mm/dd/yy) that the first and second public notices will appear in the newspaper(s):

First notice: 02/01/13

Second notice: 02/08/13 (Begins 30-day public comment period.)

For example: First notice: 01/01/10

Second notice: 01/08/10

Name of the newspaper(s) publishing the notices: The Daily World

### PUBLIC NOTICE TEMPLATE

Complete this template using project-specific information and submit to a local newspaper with general circulation within the county where the project is located. The **bold** language is required by WAC 173-226-130 and must be included in its entirety. (Either use the fill-in template below or **attach on a separate sheet of paper, if necessary.**)

(Note: This section is unprotected so you can delete text in parentheses)

Wal-Mart Real Estate Business Trust, 2001 SE 10<sup>th</sup> Street, Bentonville, AR 72716-5570, is seeking coverage under the Washington State Department of Ecology's Construction Stormwater NPDES and State Waste Discharge General Permit. The proposed project, Wal-Mart Supercenter Expansion is located at 909 E. Wishkah Street Aberdeen, in Grays Harbor County. This project involves **15 acres of soil disturbance for commercial construction activities.**

Stormwater will be discharged to the Chehalis River and the Wishkah River.

Any persons desiring to present their views to the Washington State Department of Ecology regarding this application, or interested in Ecology's action on this application, may notify Ecology in writing no later than 30 days of the last date of publication of this notice. Ecology reviews public comments and considers whether discharges from this project would cause a measurable change in receiving water quality, and, if so, whether the project is necessary and in the overriding public interest according to Tier II antidegradation requirements under WAC 173-201A-320.

Comments can be submitted to:

Department of Ecology

Attn: Water Quality Program, Construction Stormwater

P.O. Box 47696, Olympia, WA 98504-7696

### XII. Certification of Permittees

"I certify under penalty of law that this document and all attachments were prepared under my direction or supervision in accordance with a system designed to assure that qualified personnel properly gather and evaluate the information submitted. Based on my inquiry of the person or persons who manage the system or those directly responsible for gathering the information, the information submitted is, to the best of my knowledge and belief, true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment for knowing violations."

Mary Rottler, Wal-Mart Real Estate Bus. Trust V.P. Supplier Mgmt & Compliance

Printed Name / Company (operator/permittee only)

Title

AF Mary Rottler

1/28/13

Signature of Operator/Permittee\*

Date

\* Federal regulations require this application is signed by one of the following:

- A. For a corporation: By a principal executive officer of at least the level of vice president.
- B. For a partnership or sole proprietorship: By a general partner or the proprietor, respectively.
- C. For a municipality, state, federal, or other public facility: By either a principal executive officer or ranking elected official.

Please sign and return this document to the following address:

Washington Department of Ecology - Stormwater  
P.O. Box 47696  
Olympia, WA 98504-7696



DO NOT SUBMIT THIS PAGE WITH YOUR APPLICATION

**If you have questions about this form, contact the following Ecology staff:**

Location	Contact Name	Phone	E-mail
City of Seattle, and Kitsap, Pierce, and Thurston counties	Josh Klimek	360-407-7451	<a href="mailto:josh.klimek@ecy.wa.gov">josh.klimek@ecy.wa.gov</a>
Island, King, and San Juan counties	Clay Keown	360-407-6048	<a href="mailto:clay.keown@ecy.wa.gov">clay.keown@ecy.wa.gov</a>
Adams, Asotin, Columbia, Ferry, Franklin, Garfield, Grant, Lincoln, Pend Oreille, Skagit, Snohomish, Spokane, Stevens, Walla, Whatcom, and Whitman counties.	Shawn Hopkins	360-407-6442	<a href="mailto:shawn.hopkins@ecy.wa.gov">shawn.hopkins@ecy.wa.gov</a>
Benton, Chelan, Clallam, Clark, Cowitz, Douglas, Grays Harbor, Jefferson, Kittitas, Klickitat, Lewis, Mason, Okanogan, Pacific, Skamania, Wahkiakum, and Yakima counties.	Joyce Smith	360-407-6858	<a href="mailto:joyce.smith@ecy.wa.gov">joyce.smith@ecy.wa.gov</a>

**If you have questions about WebDMR, contact the following Ecology staff:**

Permittees must submit discharge monitoring reports (DMRs) each month using Ecology's secure online system, WebDMR. To have the ability to use the system immediately, you must submit the Electronic Signature Agreement with your application. If you have questions on this process, contact Ecology's WebDMR staff at [WAWebDMR-Stormwater@ecy.wa.gov](mailto:WAWebDMR-Stormwater@ecy.wa.gov) or 360-407-7097.

More information is available at: <http://www.ecy.wa.gov/programs/wq/stormwater/construction/>.

*If you need this document in a version for the visually impaired, call the Water Quality Program at 360-407-6401. Persons with hearing loss, call 711 for Washington Relay Service. Persons with a speech disability, call 877-833-6341.*

July 13, 2011



Department of Ecology  
Southwest Regional Office  
PO Box 47775  
Olympia, WA 98504-7775

Attn: Scott Rose

Re: Reporting Letter  
Wal-Mart Store #2037-06  
909 East Wishkah Street  
Aberdeen, Grays Harbor County, Washington  
Terracon Project No. 81117009

Dear Mr. Rose:

Terracon Consultants, Inc. (Terracon) is pleased to submit this letter regarding the discovery of select analytes present in concentrations exceeding Washington State cleanup levels per Chapter 70.105D RCW, and its implementing regulation, the Model Toxics Control Act (MTCA) Chapter 173-340 WAC, in soil and groundwater at a commercial property in Aberdeen, Washington (Property).

This letter constitutes formal reporting of the site in accordance with Chapter 173-340-300(2)(a) WAC. Based on our evaluation of the data, Terracon believes the exceedances are minor and do not pose a threat to human health and the environment.

#### PROJECT INFORMATION

The Property is located at 909 East Wishkah Street in Aberdeen, Washington. Portions of the Property are currently owned and operated by Wal-Mart Stores, Inc. (Walmart) and the Port of Grays Harbor. Wal-Mart is preparing for expansion activities at the Property, including expanding the existing store and constructing or improving underground utilities and paved surfaces. As part of its preparations, Wal-Mart authorized Terracon to assess environmental conditions in order to determine whether unique handling and disposition of soil and water at the Property would be necessary during construction activities.

Terracon conducted investigation activities at the Property in March, May, and June 2011. The details of the investigation are set forth in the enclosed Limited Site Investigation Report dated July 5, 2011 (Report). A total of 26 soil and 17 groundwater samples were collected and analyzed by a Washington State accredited analytical laboratory. Several rounds of investigations were performed because sampling results



Terracon Consultants, Inc. 21905 64<sup>th</sup> Avenue W., Suite 100 Mountlake Terrace, Washington 98043  
P [425] 771 3304 F [425] 771 3549 [www.terracon.com](http://www.terracon.com)

Geotechnical



Environmental



Construction Materials



Facilities

in earlier rounds seemed to be anomalous and not representative of current environmental conditions.

For example, in March 2011, diesel-range total petroleum hydrocarbons (TPH) was identified in the groundwater sample collected from MW-13 at a concentration of 1,200 µg/l, above the MTCA Method A cleanup level of 500 µg/l. In May 2011, however, diesel-range TPH was not detected in a sample from the same well following silica gel cleanup. Further, the EPH/VPH results for that sample did not fail the site specific risk-based analysis using the MTCATPH11.1 workbook tool. Based on the data, Terracon believes the initial exceedance in this monitoring well was an anomaly and that diesel-range TPH in groundwater does not exceed the cleanup level. In addition, based on re-sampling of certain wells, total and dissolved vanadium in groundwater in MW-8R and cPAH in MW-2 were determined to be below the respective cleanup levels.

The enclosed Figure 1, which is amended from Figures 3 and 4 of Appendix A to the Report, shows the exceedances of cleanup levels at the Property. The only consistent exceedance in groundwater was for arsenic in MW-2, MW-9, and MW-12. The highest concentrations of total and dissolved arsenic in groundwater detected were 14.9 µg/l and 15.1 µg/l, respectively.

Although these results exceed the cleanup level for arsenic of 5 µg/l, the concentrations do not pose a risk to human health and the environment because, in accordance with criteria under WAC § 173-340-720(2), the groundwater is not classified as a potable water source. In particular, groundwater at the site is not used as a drinking water supply. The Property is served by a municipal water supply. No drinking water supply wells are located in the immediate vicinity of the site. Groundwater at the Property discharges into a section of the Chehalis River which is classified as marine water and is not classified as a suitable domestic water supply source. The highest concentrations of arsenic in groundwater at the Property are well below the surface water cleanup standard of 36 µg/l.

With respect to soil, as shown on Figure 1, minor exceedances of cleanup levels for cPAHs and lead were detected in soil in certain areas of the Property (and diesel-range TPH was detected at 2,000 mg/kg, which is at the cleanup level). Total cPAHs were identified in soil sample MW-8R, S-1 at 0.4065 mg/kg, which is above the MTCA Method A cleanup level of 0.1 mg/kg for benzo(a)pyrene.

Lead was identified in soil samples MW-8R, S-1 and MW-11, S-1 at concentrations of 380 mg/kg and 420 mg/kg, respectively, which exceed the MTCA Method A cleanup level of 250 mg/kg. However, per WAC § 173-340-740(7)(d)(iv) since neither sample concentration was identified at twice the MTCA Method A cleanup level and less than ten percent of the sample concentrations exceed the MTCA Method A cleanup level for

Reporting Letter  
Terracon Project No. 81117009  
July 13, 2011



lead in soil, the two instances of elevated lead concentrations are not significant.

Terracon's professional opinion is that contamination in soil does not pose a threat or potential threat to human health or the environment because the impacted soil is beneath asphalt paved areas and/or is well below ground surface. Terracon will recommend implementation of protective measures when expansion activities are performed in order to prevent or minimize the potential exposure of workers to impacted soil or groundwater and to ensure that conditions at the Property after expansion are protective of future occupants and visitors.

If necessary, please address any correspondence regarding the Property to Lucas Swart or Sean Donnan at Terracon at the following address:

Terracon Consultants Inc.  
21905 64<sup>th</sup> Avenue W., Ste.100  
Mountlake Terrace, Washington 98043

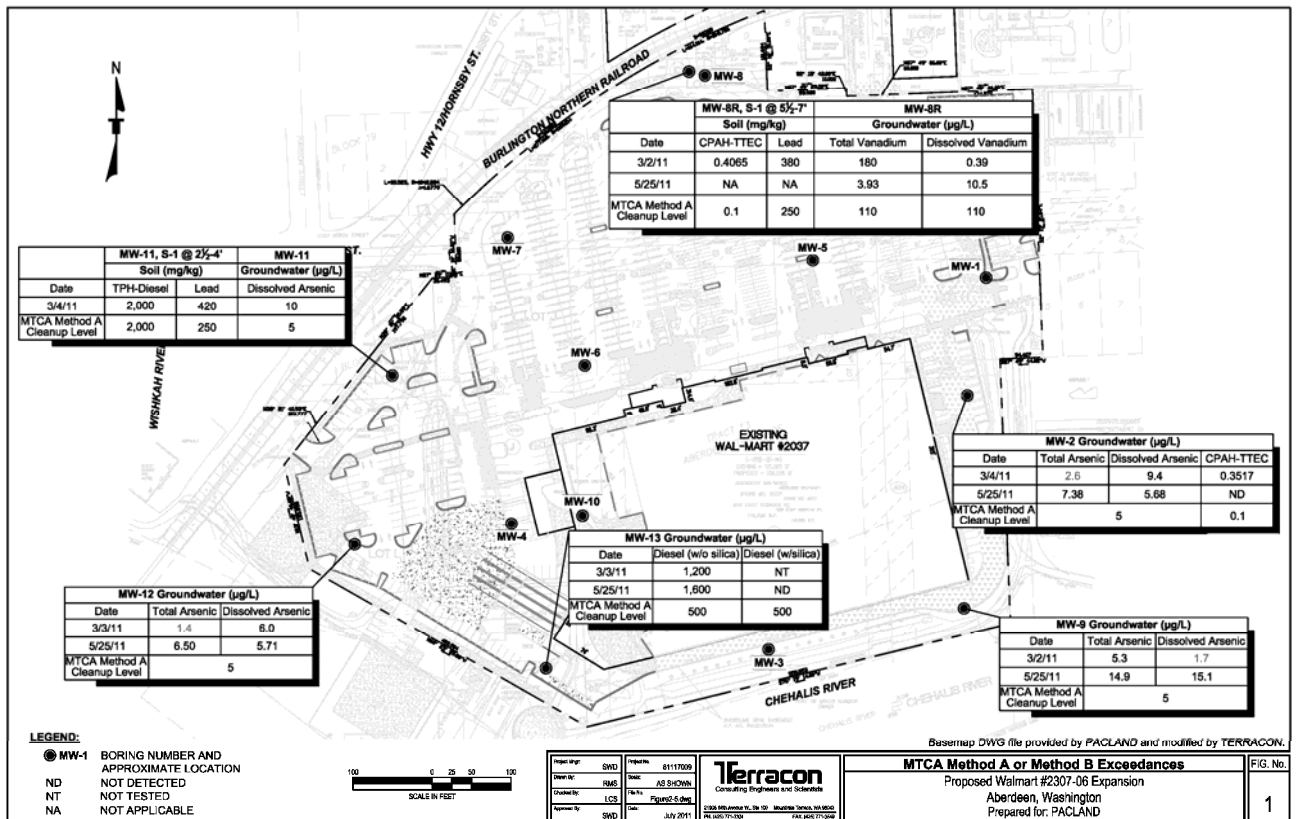
In addition, please feel free to call either one of us at 425.771.3304 if you have any questions about this letter.

Sincerely,  
**Terracon Consultants, Inc.**

A handwritten signature in blue ink, appearing to read "L. Swart".

Lucas C. Swart  
Senior Staff Geologist

A handwritten signature in blue ink, appearing to read "Sean W. Donnan".  
Sean W. Donnan, P.G.  
Principal



**APPENDIX E**

**CONSTRUCTION SITE NOTICE**

To be located on the SWPPP Information Sign

**NOTES to General Contractor:**

The Construction Site Notice must be posted on the SWPPP Information Sign located in a prominent place for public viewing along with the W-M &/or GC NOI(s), W-M &/or GC permit authorization(s) and a reference to where the SWPPP is located on the jobsite.

If a state-specific construction site notice is also provided in this appendix, both the Wal-Mart and state-specific construction site notices must be posted on the SWPPP Information Sign.

# CONSTRUCTION SITE NOTICE

## FOR THE NPDES GENERAL PERMIT

<b>Contractor Firm:</b>	
<b>Contractor Address:</b>	
<b>Contact Name &amp; Number:</b> (both Site Superintendents)	
	Name Phone Number
	Name Phone Number
<b>Project Description:</b>	<b>Supercenter Expansion, 2037-06, 909 East Wishkah Street, Aberdeen, WA 98520, 156,029 SF, 15 Acres disturbed</b>

## **APPENDIX F**

### **CONTRACTOR/SUBCONTRACTOR CERTIFICATION**

To be located behind SWPPP Binder Tab 10b

**&**

### **CERTIFICATION OF QUALIFICATIONS FOR COMPLIANCE OFFICER AND TWO SUPERINTENDENTS**

To be located behind SWPPP Binder Tab 9c

**&**

### **PHASE I BMP CERTIFICATION**

To be located behind SWPPP Binder Tab 9a

**&**

### **STORMWATER PRE-CONSTRUCTION MEETING CERTIFICATION**

To be located behind SWPPP Binder Tab 9b



## CONTRACTOR/SUBCONTRACTOR CERTIFICATION

### #2037-06 Aberdeen, WA Supercenter Expansion

The General Contractor and all contractors and/or subcontractors that will implement and maintain the pollution control measures in the SWPPP and/or are involved in ground-disturbing activities on the site must be identified below. An authorized representative from each company on the construction project must sign this form certifying that company representatives understand the General Permit authorizing stormwater discharges during construction. These certifications must be maintained in the SWPPP file.

Contractor/Subcontractor Employee Name	Trade
Company Name	Business Phone Number
Business Address	City, State Zip

#### CERTIFICATION:

***"I certify that I understand the term and conditions of the National Pollutant Discharge Elimination System (NPDES) General Permit that authorizes the stormwater discharges associated with industrial activity from the construction site identified as part of this certification. The SWPPP and General Permit have been made available to me to review and I agree to stay in compliance with the permit."***

Signature	Date
Printed Name	Initial here if you received a copy of stormwater compliance Guidance material appropriate for the conditions at the site and watched the Wal-Mart stormwater video.

Title (Must be an Officer of company if form is a permit requirement. See Note below.)

**\* All employees of contractors and subcontractors have the responsibility of notifying the General Contractor's Superintendent of any Stormwater BMP deficiencies or damage.**

The above listed contractor is responsible for the following BMPs: (check all that apply)

✓	Best Management Practice	✓	Best Management Practice	✓	Best Management Practice
	Mobile Wheel Wash		Diversions		Solid Waste
	Silt Fence		Sediment Traps		Sanitary Waste
	Check Dams		Sediment Basins		Hazardous Waste Management
	Inlet Protection		Dust Control		Record Keeping
	Erosion Control		Concrete Wash-out		SWPPP modifications
	Vegetation		Fuel Storage/Containment		

**Note:** This form may or may not be a requirement of the state this construction project is occurring in; however, it is a requirement of Wal-Mart for all our construction projects. If the certification statement above begins with "I certify under penalty of law..." then it is a state permit requirement and must be signed by an officer of the company or their delegated authority. If the certification statement above begins with "I certify that I understand..." then any company representative may sign the form.

# Certification of Qualifications

#2037-06 Aberdeen, WA Supercenter Expansion

## Certification of Compliance Officer Stormwater Qualifications

I certify under penalty of law that the Compliance Officer:

\_\_\_\_\_  
Print Name

\_\_\_\_\_  
Certificate #

\_\_\_\_\_  
Compliance Officer E-mail Address

- 1) is a Stormwater Professional\*;
- 2) has at least **5 years** of construction-related experience; and
- 3) is able to adequately identify and implement stormwater sediment and erosion control practices and effectively instruct employees and contractors in the implementation of such practices.

\_\_\_\_\_  
Contractor Company Name

\_\_\_\_\_  
Date

\_\_\_\_\_  
Name of Officer of the Company

\_\_\_\_\_  
Signature of Officer

\_\_\_\_\_  
Title

## Certification of Project Superintendents Stormwater Qualifications

I certify under penalty of law that each of these two superintendents:

\_\_\_\_\_  
Print Name

\_\_\_\_\_  
Certificate #

\_\_\_\_\_  
Print Name

\_\_\_\_\_  
Certificate #

\_\_\_\_\_  
State or local Certificate #, as applicable

\_\_\_\_\_  
Superintendent E-mail Address

\_\_\_\_\_  
Superintendent E-mail Address

- 1) is a Stormwater Professional\*;
- 2) has at least **5 years** of construction-related experience; and
- 3) is able to adequately identify and implement stormwater sediment and erosion control practices and effectively instruct employees and contractors in the implementation of such practices.

\_\_\_\_\_  
Contractor Company Name

\_\_\_\_\_  
Date

\_\_\_\_\_  
Name of Officer of the Company

\_\_\_\_\_  
Signature of Officer

\_\_\_\_\_  
Title

\*A Stormwater Professional is an individual who is currently certified through the stormwater training program provided/required by Wal-Mart pursuant to a training program approved by US EPA.

NOTE: Only one (1) Compliance Officer and two (2) Superintendents can be certified on this form. Additional Compliance Officers and Superintendents associated with this project must complete and execute (obtain officer signature) a separate form and save behind Tab 9c in the SWPPP Binder on top of old/obsolete forms.

**GENERAL CONTRACTOR IS TO FAX OR E-MAIL THIS FORM WITHIN 7 DAYS OF PROJECT AWARD TO:**

**Fax: 479-204-0934 or E-mail: stormwatercomp@Wal-Mart.com**

**This form can not be altered.**

# Civil Engineer and Project Superintendent Certification of Site Best Management Practices

Date: \_\_\_\_\_

#2037-06 Aberdeen, WA Supercenter Expansion

**“We certify that on this date we conducted an inspection of the construction site and Best Management Practices (BMPs) required by the SWPPP have been installed correctly and in the correct locations as shown on the Phase I Erosion and Sediment Control Site Map drawing subject to any exceptions as listed below. Other than disturbance to install these BMPs, no other ground disturbing activities have occurred on the site nor will ground disturbing activities occur on this Site until all exceptions have been resolved.”**

**“We certify all appropriate documents are located in the SWPPP Binder and on the SWPPP Information Sign at the time of this inspection. This includes required permit authorizations, signed NOIs (or equivalent) that have been timely submitted to allow for the commencement of ground disturbing activities, SWPPP Certification letters, General Permit, final revised SWPPP with all Wal-Mart and agency comments incorporated.”**

Initial one of the following:

No exceptions:

\_\_\_\_\_  
(Superintendent)

\_\_\_\_\_  
(Engineer)

Exceptions (as noted below):

\_\_\_\_\_  
(Superintendent)

\_\_\_\_\_  
(Engineer)

Exceptions: (Do not list more than 1 exception per line.)

- 1) \_\_\_\_\_
- 2) \_\_\_\_\_
- 3) \_\_\_\_\_
- 4) \_\_\_\_\_
- 5) \_\_\_\_\_

**All exceptions described above must be noted as deficiencies on the first Daily Inspection Report submitted via the SWPPP Management Tool and resolved within 24-hours BEFORE any ground-disturbing activity may begin on the site.**

**BMPs CAN NOT be certified (this form can not be signed) if exceptions will require more than 24-hrs to resolve.**

\_\_\_\_\_  
Name of Consulting Engineer of Record\*

\_\_\_\_\_  
Signature of Consulting Engineer

\_\_\_\_\_  
Company

\_\_\_\_\_  
Name of Project Superintendent

\_\_\_\_\_  
Signature of Project Superintendent

\_\_\_\_\_  
Company

\*Consulting Engineer of Record is the Professional Engineer who stamped and signed the SWPPP or any other Professional within the CEC organization who reviews and becomes familiar with the SWPPP or an engineer retained by Wal-Mart who reviews and becomes familiar with the SWPPP, the Site and the BMPs to be inspected.

**GENERAL CONTRACTOR IS TO FAX OR E-MAIL THIS FORM IMMEDIATELY UPON COMPLETION TO:  
Fax: 479-204-0934 or E-mail: stormwatercomp@Wal-Mart.com**

**This form can not be altered.**

## Stormwater Compliance Environmental Pre-Construction Meeting Certification Form

Date: \_\_\_\_\_

**#2037-06 Aberdeen, WA Supercenter Expansion**

General Contractor (Company): \_\_\_\_\_

Project Superintendent: \_\_\_\_\_

Superintendent must initial each item when complete. This action constitutes agreement and acceptance of each provision.

- |       |   |
|-------|---|
| _____ | 1. A stormwater pre-construction meeting between the Project Superintendent (s) of the General Contractor, the Professional Engineer who prepared the SWPPP or a Professional within the CEC organization who reviews and becomes familiar with the SWPPP and site (or an engineer retained by the Owner), and contractors and subcontractors and their employees who will be involved in ground-disturbing activities has been completed successfully. |
| _____ | 2. At this meeting: (a) the applicable Construction Stormwater General Permit requirements, the SWPPP and drawings (Site Maps) and other environmental requirements for the site were discussed; and (b) the videotape (VHS or DVD) "Stormwater Pollution Prevention on Construction Sites" was shown to all persons; (c) material storage areas and run-on conditions were discussed.  |
| _____ | 3. The Project Superintendent and all contractors or subcontractors present at this meeting have signed a Contractor Certification form and all contractors receive a copy of stormwater compliance guidance materials appropriate for the conditions at the site.  |
| _____ | 4. Local and/or state certifications have been obtained as applicable.  |
| _____ | 5. A Copy of the construction stormwater permit regulations applicable to the site has been obtained, is available for review, and will be located in the on-site construction office and the SWPPP Binder has been reviewed and deemed complete.   |
| _____ | 6. A signed Wal-Mart and/or General Contractor Notice of Intent as required by the State Permit have been properly filed and will be posted at the construction entrance board prior to ground disturbing activity.   |
| _____ | 7. The Certification of Site Best Management Practices has been completed, certifying that appropriate stormwater controls are in place prior to commencement of ground disturbing activity, and has been signed by the Civil Engineer and Project Superintendent.  |

\_\_\_\_\_  
Name of Construction Manager

\_\_\_\_\_  
Signature of Construction Manager

\_\_\_\_\_  
Company

\_\_\_\_\_  
Name of Consulting Engineer of Record

\_\_\_\_\_  
Signature of Consulting Engineer

\_\_\_\_\_  
Company

\_\_\_\_\_  
Name of Project Superintendent

\_\_\_\_\_  
Signature of Project Superintendent

\_\_\_\_\_  
Company

**NOTE:** It is highly recommended the project Construction Manager certifies this form; however, an alternant CM or the project CEC may sign this form on behalf of the project CM with prior notification to the Stormwater Compliance Team.

**GENERAL CONTRACTOR IS TO FAX OR E-MAIL THIS FORM IMMEDIATELY UPON COMPLETION TO:**

**Fax: 479-204-0934 or E-mail: stormwatercomp@Wal-Mart.com**

**This form can not be altered.**

02370-60

## **APPENDIX G**

### **WAL-MART LETTER OF DELEGATION TO CONTRACTOR TO PERFORM INSPECTIONS**

To be located behind SWPPP Binder Tab 11a

**&**

### **DAILY INSPECTION REPORT / SUPPLEMENTAL REPORT**

(Available through the Evoco Stormwater Management Tool)

**&**

### **GENERAL CONTRACTOR'S DELEGATION LETTER FOR INSPECTOR**

To be located behind SWPPP Binder Tab 11b

**&**

### **WEEKLY STORMWATER MEETING FORM**

(Available through the Evoco Stormwater Management Tool)

To be located behind SWPPP Binder Tab 13

**&**

### **WSDOE Site Inspection From**

**&**

### **WSDOE Daily Monitoring Report (Web version preferred. Waiver required for paper use)**

Contractor shall perform sampling and monitoring at all stormwater outflow locations, including but not limited to the outflow locations located on the Temporary Erosion and Sedimentation Control Plans/Site Maps.

# Realty Compliance Department

## Stormwater Compliance Team

Mark S. Goldsmith, CPESC; Senior Director Stormwater Compliance

2001 SE 10<sup>th</sup> Street  
Bentonville, AR 72716-0550  
Phone 479-204-1195  
Fax 479-204-0934  
www.walmart.com

### DELEGATION OF AUTHORITY TO SIGN STORMWATER INSPECTION AND OTHER REPORTS

[#2037-06 Aberdeen, WA Supercenter Expansion]

I, Mark S. Goldsmith, CPESC, Senior Director of Stormwater Compliance of Wal-Mart Stores, Inc. and its entities, with the authority over stormwater compliance of all Wal-Mart construction, do hereby delegate project *Superintendents and Compliance Officers*, certified as Stormwater Professionals by Wal-Mart, of the below listed General Contractor the authority to sign/certify any and all stormwater inspection reports and/or related documents.

This authorization includes the authority to sign/certify any and all inspection forms and or associated reports in accordance with the National Pollutant Discharge Elimination System (NPDES) general permit for stormwater discharges from construction activities.

Sincerely,  
**Wal-Mart Real Estate Business Trust**

Mark S. Goldsmith, CPESC  
Senior Director of Stormwater Compliance

#### General Contractor

\_\_\_\_\_  
Company Name

\_\_\_\_\_  
Business Address

\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_

\_\_\_\_\_  
Business Phone Number

\_\_\_\_\_  
Company Contact

**NOTE:** This form must be completed by the project General Contractor and faxed (479-204-0934) or e-mailed ([stormwatercomp@wal-mart.com](mailto:stormwatercomp@wal-mart.com)) to the Wal-mart Stormwater Compliance Team within 7-days of Project Award. The SWCT will certify the form and return it to the General Contractor for incorporation into the SWPPP Binder.

## DELEGATION OF SIGNATURE AUTHORITY

I, **Mary Rottler**, being a Vice President of Wal-Mart Stores, Inc.; Wal-Mart Real Estate Business Trust; Wal-Mart TRS, LLC; Wal-Mart Realty Company; Wal-Mart Property Company; Wal-Mart Stores Arkansas, LLC; Wal-Mart Stores, Texas, LLC; Wal-Mart Stores East, LP; Wal-Mart Louisiana, LLC; WSE Management, LLC; Sam's Real Estate Business Trust; Sam's TRS, LLC; Sam's East, Inc.; Sam's West, Inc.; Sam's PW, Inc. and Sam's Property Company (hereinafter collectively referred to as "the Company"), do hereby delegate to the positions below the authority to sign documents as set forth below on behalf of the Company, in their respective capacity for the Company.

### Senior Director of Safety and Environmental Compliance

Any and all agreements related to safety and environmental matters on behalf of the Company.

### Senior Director of Supplier Management and Compliance

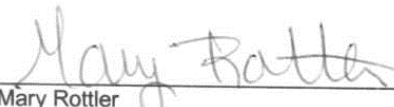
Non-Disclosure agreements as vendors are pre- and re-qualified, and service and other related agreements to be performed in furtherance of construction, facilities maintenance, remodels and goods not-for-resale.

### Senior Director of Storm Water Compliance


Any and all documents relative to or required by any storm water construction general or individual permit issued or promulgated by the United States Environmental Protection Agency, or by a state or local agency with authority to regulate storm water discharges from construction sites. This includes, without limitation, the authority to sign Notices of Intent, Storm Water Pollution Prevention Plans, reports, certifications, Notices of Termination, or any other information or document required to be signed by the Company as a permittee under the terms of any of the above described permits.

When an associate in a position listed in this document is unavailable, another associate in a position listed in this document may sign for such absent associate. Such signature will serve on its face as confirmation that the regular signatory was unavailable and be valid and binding as long as it is within the scope of signature authority for the absent associate.

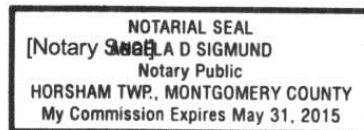
This delegation shall supersede and revoke any signature authority previously given to the individuals in the above positions as of the date set forth below and revokes the Delegation of Signature Authority by Jennifer May-Brust dated March 16, 2009. All acts and transactions of individuals in the positions above, which were taken or made in good faith and prior to the formal delegation of authority to such position that are consistent with this delegation are hereby ratified and approved.

  
Mary Rottler  
Vice President

Subscribed and sworn before me this 11<sup>th</sup> day of December, 2012

  
Notary Public

My commission expires: May 31, 2015



**Daily Inspection Report available through the  
Evoco Stormwater Management Tool**

**Supplemental Report available through the  
Evoco Stormwater Management Tool**

**Note: Supplemental Report is Only used to Document  
Stormwater-related Agency Inspections  
or  
any agency representative that comments on stormwater  
or erosion & sediment controls while on site**



**[General Contractor to complete this form on company letterhead]**

**[Note to GC: Send to the agency only if requested to do so.]**

Date:

Director of Governing Authority, Stormwater:

Name:

Title:

Address:

**CERTIFIED MAIL RECEIPT**

No. \_\_\_\_\_

Project: #2037-06 Supercenter Expansion

Address: Aberdeen, WA

**Permit Authorization for Stormwater:** **[Note to GC: Provide permit authorization number or date of NOI]**

**GENERAL CONTRACTOR  
SIGNATURE DELEGATION FOR REPORTS**

**GENERAL PERMIT FOR  
STORMWATER DISCHARGES FROM CONSTRUCTION ACTIVITIES**

I, the undersigned, hereby delegate [Company Name]'s Project Superintendent or Compliance Officer as the authorized signatory for all reports required by this permit and other information requested by the Director or authorized representative of the Director in accordance with the provisions of the General Permit.

I certify under penalty of law that this document and all attachments were prepared under my direction or supervision in accordance with a system designed to assure qualified personnel properly gathered and evaluated the information submitted. Based on my inquiry of the person or persons who manage this system, or those persons directly responsible for gathering the information, the information submitted is, to the best of my knowledge and belief, true accurate and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment for knowing violations.

Sincerely,

**[Principle Officer of the General Contractor]**

\_\_\_\_\_  
Signature

\_\_\_\_\_  
Printed Name

\_\_\_\_\_  
Title

\_\_\_\_\_  
Company

## Weekly Stormwater Meeting form available through the Evoco Stormwater Management Tool

## Weekly Stormwater Meeting Review and Comment Form

### #2037-06 Aberdeen, WA Supercenter Expansion:

Project Site Superintendent: \_\_\_\_\_ Date and Time: \_\_\_\_\_

Others Present:	NAME	TITLE	COMPANY
-----------------	------	-------	---------


Installation/Removal of BMPs (include subcontractors performing the activities): \_\_\_\_\_

---

BMP Maintenance and Repair (include subcontractors performing the activities): \_\_\_\_\_

---

Non-effective BMPs: \_\_\_\_\_

---

Efforts to mitigate or correct non-effective BMPs: \_\_\_\_\_

---

Status of staging areas, storage, borrow, fill, concrete wash-out, and exits: \_\_\_\_\_

---

Upcoming activities: \_\_\_\_\_

---

Modifications or additions to SWPPP or project phasing: \_\_\_\_\_

---

Findings, Conclusions &amp; Additional Information: \_\_\_\_\_

**Construction Stormwater  
SITE INSPECTION CHECKLIST**

Project \_\_\_\_\_ Permit No. \_\_\_\_\_ Inspector \_\_\_\_\_ Date \_\_\_\_\_ Time \_\_\_\_\_

Site BMPs	Overall Condition			Need Repair?		Comments/Observations
<b>Clearing Limits</b>						
• Buffer Zones around sensitive areas	G	F	P	Y	N	
•	G	F	P	Y	N	
•	G	F	P	Y	N	
<b>Construction Access/Roads</b>						
• Stabilized site entrance	G	F	P	Y	N	
• Stabilized roads/parking area	G	F	P	Y	N	
•	G	F	P	Y	N	
<b>Control Flow Rates</b>						
• Swale	G	F	P	Y	N	
• Dike	G	F	P	Y	N	
• Sediment pond	G	F	P	Y	N	
• Sediment trap	G	F	P	Y	N	
•	G	F	P	Y	N	
•	G	F	P	Y	N	
<b>Install Sediment Controls</b>						
• Sediment pond/trap	G	F	P	Y	N	
• Silt fence	G	F	P	Y	N	
• Straw bale barriers	G	F	P	Y	N	
•	G	F	P	Y	N	
•	G	F	P	Y	N	
•	G	F	P	Y	N	
<b>Preserve Vegetation/Stabilize Soils</b>						
• Nets and blankets	G	F	P	Y	N	
• Mulch	G	F	P	Y	N	
• Seeding	G	F	P	Y	N	
•	G	F	P	Y	N	
•	G	F	P	Y	N	
<b>Protect Slopes</b>						
• Terrace	G	F	P	Y	N	
• Pipe slope drains	G	F	P	Y	N	
•	G	F	P	Y	N	
•	G	F	P	Y	N	
<b>Protect Drain Inlets</b>						
• Inserts	G	F	P	Y	N	
•	G	F	P	Y	N	
•	G	F	P	Y	N	
<b>Stabilize Channels and Outlets</b>						
• Conveyance channels	G	F	P	Y	N	
• Energy dissipators	G	F	P	Y	N	
•	G	F	P	Y	N	
<b>Control Pollutants</b>						
• Chemical Storage Area covered	G	F	P	Y	N	
• Concrete handling	G	F	P	Y	N	
•	G	F	P	Y	N	
<b>Control De-watering</b>						
•	G	F	P	Y	N	

G=Good F=Fair P=Poor Y=Yes N=No

Excerpt from *How to do Stormwater Monitoring*, Publication # 06-10-020

**Construction Stormwater  
SITE INSPECTION CHECKLIST**

Project \_\_\_\_\_ Permit No. \_\_\_\_\_ Inspector \_\_\_\_\_ Date \_\_\_\_\_ Time \_\_\_\_\_

Will existing BMPs need to be modified or removed, or other BMPs installed? YES NO  
IF YES, list the action items to be completed on the following table:

<b>Actions to be Completed</b>	<b>Date Completed/ Initials</b>
1.	
2.	
3.	
4.	
5.	
6.	

Describe current weather conditions

Approximate amount of precipitation since last inspection: \_\_\_\_\_ inches  
and precipitation in the past 24 hours\*: \_\_\_\_\_ inches  
*\*based on an on-site rain gauge or local weather data.*

Describe discharging stormwater, if present. Note the presence of suspended sediment, "cloudiness", discoloration, or oil sheen.

Was water quality sampling part of this inspection? YES NO  
If yes, record results below (attach separate sheet, if necessary):

<b>Parameter:</b>	<b>Method (circle one)</b>	<b>Result</b>	<b>Units</b>
<b>Turbidity</b>	tube, meter, laboratory		NTU (cm, if tube used)
<b>pH</b>	paper, kit, meter		pH standard units

Is the site in compliance with the SWPPP and the permit requirements? YES NO  
If no, indicate tasks necessary to bring site into compliance on the "Actions to be Completed" table above, and include dates each job WILL BE COMPLETED.  
If no, has the non-compliance been reported to Dept. of Ecology? YES NO  
If no, should the SWPPP be modified: YES NO

Sign the following certification:

"I certify that this report is true, accurate, and complete, to the best of my knowledge and belief."

Inspection completed on: \_\_\_\_\_ by: (print+signature) \_\_\_\_\_

Title/Qualification of Inspector: \_\_\_\_\_

Excerpt from *How to do Stormwater Monitoring*, Publication # 06-10-020

PERMIT NUMBER WAR-\_\_\_\_\_

**CONSTRUCTION STORMWATER GENERAL PERMIT  
DISCHARGE MONITORING REPORT (DMR)**

**PROJECT INFORMATION**

Site Name:  
Disturbed Acreage:  
Location:  
County:

Owner Name:  
Permittee/Operator:  
Mailing Address:

**MONITORING DOCUMENTATION**

Unique Discharge/Monitoring Point: \_\_\_\_\_ Monitoring Period: \_\_\_\_\_  
(Use same description each month, (Month/Year)  
use one DMR for each monitoring point)

Please send your Discharge Monitoring Report (DMR) to Ecology every month, **even if there is no discharge**. Also, read the attached instructions before completing the DMR. If a section does not apply, please annotate "N/A", leaving no blanks.

Weekly Monitoring	Sampling Date (Month/Day/Year)	Turbidity (NTU's- Nephelometric Turbidity Units)	Transparency (Centimeters)	pH (If applicable)	Treatment BMPs Used Prior to Discharge from Site (List <u>all</u> that apply) P = Sediment Pond/Trap/Tank/Vault C = Chemical Treatment/Sand Filter S = Silt Fence W = Straw Wattles/Coir Wattles D = Check Dam/Triangular Silt Dike O = Other	No Discharge This Week (Check if applicable)
Example	10/06/06	32	N/A	N/A	P, S, W	
Week 1						
Week 2						
Week 3						
Week 4						
Week 5						

☐ No soil disturbing construction activities have taken place on the site yet. Construction is expected to begin on \_\_\_\_\_

☐ There was no discharge during normal working hours this month (provide comments or explanation below)

COMMENTS / EXPLANATIONS

I CERTIFY UNDER PENALTY OF LAW THAT I HAVE PERSONALLY EXAMINED AND AM FAMILIAR WITH THE INFORMATION SUBMITTED HEREIN AND BASED ON MY JUDGEMENT OR MY INQUIRY OF THOSE INDIVIDUALS IMMEDIATELY RESPONSIBLE FOR OBTAINING THE INFORMATION, I BELIEVE THE SUBMITTED INFORMATION IS TRUE, ACCURATE, AND COMPLETE. I AM AWARE THAT THERE ARE SIGNIFICANT PENALTIES FOR SUBMITTING FALSE INFORMATION INCLUDING THE POSSIBILITY OF FINE AND IMPRISONMENT. SEE 18 USC § 1001 AND 33 USC § 1319. (PENALTIES UNDER THESE STATUTES MAY INCLUDE FINES UP TO \$10,000.00 AND/ OR MAXIMUM IMPRISONMENT OF BETWEEN SIX MONTHS AND FIVE YEARS.)

NAME/TITLE OF PERSON WITH SIGNATORY AUTHORITY (SEE REVERSE)	DATE: MONTH DAY YEAR
SIGNATURE OF PERSON WITH SIGNATORY AUTHORITY	TELEPHONE NUMBER OF PERSON WITH SIGNATORY AUTHORITY

MAIL YOUR DMR (WITHOUT INSTRUCTIONS PAGE) TO:  
DEPARTMENT OF ECOLOGY, WATER QUALITY PROGRAM - CONSTRUCTION STORMWATER, P.O. BOX 47696, OLYMPIA, WA 98504-7696

PERMIT NUMBER WAR-\_\_\_\_\_

## DAILY TURBIDITY/TRANSPARENCY SAMPLING LOG

Note: Daily sampling is triggered by turbidity sampling results over 250 NTU's, or transparency results less than 6 cm.

[illegible]

## INSTRUCTIONS AND FREQUENTLY ASKED QUESTIONS FOR COMPLETING THE DMR FORM

### PROJECT INFORMATION

1. How can I update contact information and/or mailing addresses? You can update any project information by submitting a Notice of Intent (NOI) Application Form and checking the box in the upper right hand corner next to "Change/Update Permit Information". Complete only the boxes that are being updated and submit the signed form to the same address as the DMR.

### MONITORING DOCUMENTATION

1. How often do I sample? Once initial soil-disturbing activity occurs, sampling must be conducted at least once every calendar week when there is a discharge of stormwater (or authorized non-stormwater) from the site.

2. Where do I sample? Sampling is required at all discharge points where stormwater (or authorized non-stormwater such as de-watering water) is discharged off-site.

3. When stormwater leaves my site from more than one location, what do I need to do?

- Use a separate DMR sheet for each location where stormwater is discharged from the site.
- Enter a unique name or description of the monitoring location (for example: Pond 1; or West Ditch). Use the same monitoring location name each month.
- All sampling point(s) must be identified on the Storm Water Pollution Prevention Plan (SWPPP) site map and be clearly marked in the field with a flag, tape, stake or other visible marker.

4. What if I don't have a discharge off site for an entire week? If there was no discharge during a **calendar week**, sampling is not required; mark an X in the "No Discharge" column for that week. If there was no discharge **during a calendar month**, mark the "No Discharge" box at the bottom of the table.

5. If it rains at 3 AM on my site do I have to get up and sample at that hour? Sampling is not required outside of normal working hours or during unsafe conditions. If you are unable to sample during a monitoring period, you must include a brief explanation in the "Comment/Explanation" box of the DMR.

6. What kind of stormwater turbidity/transparency sampling do I have to do? If construction activity disturbs 5 acres or more, the permit requires you to conduct turbidity sampling, using a turbidity meter. If construction activity disturbs greater than or equal to 1 acre, but less than 5 acres, you may conduct either transparency sampling (with a transparency tube) **or** turbidity sampling (with a turbidity meter). Enter turbidity or transparency values collected each week on the DMR.

7. What if my turbidity result is greater than 250 NTU or less than 6 centimeters (cm) transparency? If any discharge is greater than 250 NTU or less than 6 centimeters (cm) transparency, daily sampling must be conducted, and recorded in the attached sampling log (on page 2). Write the date, sampling data (number), and unit (NTU or cm). Continue to sample daily until:

- Turbidity is 25 NTU (or lower); or
- Transparency is 31 cm (or greater); or
- The CESCL has determined compliance with the water quality standard for turbidity:
  - No more than 5 NTU over background turbidity, if background is less than 50 NTU, or
  - No more than 10% over background turbidity, if background is 50 NTU or greater; or
- The discharge stops or is eliminated.

8. When do I have to sample for pH? If construction activity will result in the disturbance of 1 acre or more, **and** involves *significant concrete work* or the use of *engineered soils*, **and** stormwater from the affected area drains to surface waters of the state or to a storm sewer system that drains to surface waters, the Permittee shall conduct *pH* monitoring:

- Definitions:
  - Significant Concrete Work* means greater than 1000 cubic yards poured or recycled concrete.
    - For poured concrete, the 1000 cubic yard threshold is met if a single or multiple concrete pours on the site results in greater than 1000 cubic yards of concrete curing at the same time. Typical curing time is less than 30 days. If individual concrete pours smaller than 1000 cubic yards occur more than 30 days apart, pH sampling is not required unless required by Ecology order.
    - For recycled concrete, the 1000 cubic yard threshold is met if greater than 1000 cubic yards of concrete is recycled or crushed on-site.
  - Engineered Soils* means the use of soil amendments including, but not limited to, Portland cement treated base (CTB), cement kiln dust (CKD), or fly ash to achieve certain desirable soil characteristics.



- b. For *significant concrete work*, pH monitoring begins when the concrete is first exposed to precipitation and continues weekly until stormwater pH is 8.5 or less.
  - c. For sites with engineered soils, the pH monitoring period shall commence when the soil amendments are first exposed to precipitation and shall continue until the area of engineered soils is fully stabilized.
  - d. During the pH monitoring period, the Permittee shall obtain a representative sample of stormwater and conduct pH analysis at least once per week.
  - e. The Permittee shall monitor pH in the sediment trap/pond(s) or other locations that receive stormwater runoff from the area of significant concrete work or engineered soils prior to discharge to surface waters.
  - f. The benchmark value for pH is 8.5 standard units. Any time sampling indicates that pH is 8.5 or greater, the Permittee shall:
    - 1. Prevent the high pH water (8.5 or above) from entering the storm sewer systems or surface waters; and
    - 2. If necessary, adjust or neutralize the high pH water using an appropriate treatment BMP such as carbon dioxide (CO<sub>2</sub>) sparging or dry ice. The permittee shall obtain written approval from Ecology prior to using any form of chemical treatment other than CO<sub>2</sub> sparging or dry ice. Information on CO<sub>2</sub> sparging / dry ice BMP is can be found on Ecology's web site at: [www.ecy.wa.gov/programs/wq/stormwater](http://www.ecy.wa.gov/programs/wq/stormwater).
  - g. The Permittee shall perform pH analysis on-site with a calibrated pH meter, pH test kit, or wide range pH indicator paper. The Permittee shall record pH monitoring results in the site log book.
9. What do the treatment BMP letter codes on the form mean? For any discharge, report the type of treatment Best Management Practice(s) (BMPs) applied to the stormwater (or non-stormwater) prior to discharge from the site. Use the letter code (e.g., P for Pond) which corresponds which each type of BMP listed. If multiple treatment BMPs are used, list the letter code for each type of BMP.
9. What if I haven't started clearing or grading my site? If initial soil disturbing activity has not occurred yet, mark an X in the applicable box, indicate estimated construction start up date and submit the DMR each month.
10. Who should sign the report?
- A. This report shall be signed as follows:
    - 1. Corporations, by a responsible corporate officer of at least the level of vice president of a corporation or a duly authorized representative;
    - 2. Partnerships, by a general partner of a partnership or a duly authorized representative;
    - 3. Sole proprietorships, by the proprietor or a duly authorized representative; or
    - 4. Municipal, state, or other public facility, by either a principal executive officer, ranking elected official or a duly authorized representative.
  - B. A person is a duly authorized representative only if:
    - 1. The authorization is made in writing by a person described above and submitted to the Ecology.
    - 2. The authorization specifies either an individual or a position having responsibility for the overall operation of the regulated facility or having overall responsibility for environmental matters.
  - C. Changes to authorization:
    - If an authorization is no longer accurate, submit a new authorization to Ecology prior to (or together with) any reports, information, or applications to be signed by an authorized representative.

#### **ADDITIONAL SAMPLING**

- 1. What if I take additional samples or have more information to submit than will fit on the provided forms? You can submit any additional information on separate sheets of paper. You may also attach lab sheets, if you use a lab for analysis. Please sign, date and document the site information on those sheets so that they can be included in your file.

#### **ADDITIONAL INFORMATION**

- 1. Mail the DMR to: Department of Ecology, Water Quality Program- Construction Stormwater, P.O. Box 47696, Olympia, WA 98504-7696
- 2. Who can I call for assistance? If you have questions or concerns, please contact Ecology's Water Quality Reception Desk at (360) 407-6600. Please have your site name, location, and permit number available when calling.

For more information, additional forms and/or additional copies of the permit, please visit our web site:  
<http://www.ecy.wa.gov/programs/wq/stormwater/construction>.



## APPENDIX H

### SPILL REPORT FORM

To be located behind SWPPP Binder Tab 14

**NOTES to General Contractor:**

- 1) Contact the appropriate regulatory agency if the spill exceeds the applicable reportable quantity.
- 2) Complete this form in full for each spill that exceeds 1-gallon or exceeds the reportable quantity for the Governing Agency and submit to the SWCT.
- 3) Call the SWCT Hotline (800-530-9928) **\*see below**
- 4) Transfer spill information to the Daily report and resolve as appropriate.

The SWCT recommends taking photos to document spill clean-up measures and saving the photos on-site.

**\*When calling the SWCT Hotline to report a spill the General Contractor should leave the following information:**

1. Store Number & Sequence
2. Store City & State
3. Caller (full name & firm)
4. Caller Telephone Number
5. Spill Date
6. Type of material spilled
7. Amount spilled (in gallons)
  - 7b. Was the amount above the applicable reportable quantity (Yes or No)?
  - 7c. If yes, has the governing agency been notified of the spill (Yes or No)?
  - 7d. If yes, what agency was notified (agency name and how notified):
8. Location of the spill on the jobsite
9. Did the spill impact surface water, leave the site, or enter an inlet (Yes or No)?
  - 9b. If yes, elaborate on impacts to surface water, inlets and areas beyond the permitted project area:
10. Has spilled material and contaminated media (soil, pavement, etc.) been removed and/or cleaned (Yes or No)?
  - 10b. If no, what additional measures need to be completed to remediate the spill?
11. Was the spill noted as a deficiency on the Daily report & resolved (or will be resolved) within 48 hours (Yes or No)?
  - 11b. If no, add to Daily report as a deficiency & resolve.
12. Has the Spill Report Form been completed and submitted to the SWCT (Yes or No)?
  - 12b. If no, complete and submit the Spill Report Form.

## Spill Report Form

**#2037-06 Aberdeen, WA Supercenter Expansion:**

Spill Reported by: \_\_\_\_\_

Date/Time Spill: \_\_\_\_\_

Date/Time Spill reported to Wal-Mart Hotline: \_\_\_\_\_

Date/Time Spill Report Form faxed to Wal-Mart: \_\_\_\_\_

Describe spill location and events leading to spill: \_\_\_\_\_

\_\_\_\_\_

Material spilled: \_\_\_\_\_

Source of spill: \_\_\_\_\_

Amount spilled (gallons): \_\_\_\_\_ Amount spilled to waterway: \_\_\_\_\_

Containment or clean up action: \_\_\_\_\_

\_\_\_\_\_

Approximate depth of soil excavation: \_\_\_\_\_

List Injuries or Personal Contamination: \_\_\_\_\_

Action to be taken to prevent future spills: \_\_\_\_\_

\_\_\_\_\_

Modifications to the SWPPP, including required sampling, necessary due to this spill: \_\_\_\_\_

\_\_\_\_\_

Agencies notified of the spill: \_\_\_\_\_

\_\_\_\_\_

I certify under penalty of law that this document and all attachments were prepared under my direction or supervision in accordance with a system designed to assure that qualified personnel properly gather and evaluate the information submitted. Based on my inquiry of the person or persons who manage the system, or those persons directly responsible for gathering the information, the information submitted is, to the best of my knowledge and belief, true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment for knowing violations.

\_\_\_\_\_  
Contractor Superintendent

\_\_\_\_\_  
Date

**IMMEDIATELY COMPLETE AND FAX THIS FORM TO THE SWCT AT 479-204-0934.  
IMMEDIATELY CALL THE WAL-MART HOTLINE (800-530-9928) IF THE SPILL EXCEEDS 1-GALLON or EXCEEDS  
THE REPORTABLE QUANTITY FOR THE GOVERNING AGENCY.  
SEE SECTION V, PART B.9. OF THE SWPPP TO DETERMINE THE REPORTABLE QUANTITY FOR GOVERNING  
AGENCY.**

**APPENDIX I**  
**NOTICE OF TERMINATION**

To be located behind SWPPP Binder Tab 18

**NOTE to General Contractor:**

Place a note in Tab 18 that states 'The project Notice of Termination will be completed, certified and submitted when the construction site has been stabilized upon project completion.'

## **NOTICE of TERMINATION**

Two copies of the Notice of Termination (NOT) must be complete and ready for signature. Wal-Mart will keep one in their files while the other may be used by the General Contractor as necessary. Upon a final inspection by the General Contractor and the Wal-Mart Construction Manager, it will be determined that the NOT may be submitted to the appropriate agency. If the State in which the Project is located requires the General Contractor to file a separate Notice of Intent (NOI), then the General Contractor will need to sign one of these NOTs, provide the specific permit number from the General Contractors permit authorization, then remit to the address below. **Please do not file a NOT using the General Permit Number (i.e. XYZ100000) OR file a NOT using Wal-Mart's Permit Authorization Number if a separate permit was obtained.** Please provide a copy of the General Contractors NOT to Wal-Mart when it is submitted to the proper agency (fax to 479-204-0934). Wal-Mart will file a NOT to terminate their permit.

**Department of Ecology  
Stormwater Unit - Construction  
P.O. Box 47696  
Olympia, WA 98504-7696**



**Notice of Termination Form**  
**Construction Stormwater General**  
**Permit**

Permit # WAR \_\_\_\_\_

Use this form to request termination of permit  
coverage

<b>I. Operator/Permittee</b> (Party with operational control over plans and specifications, or day-to-day operational control of activities which ensure compliance with SWPPP and permit conditions. Ecology will send correspondence and permit fee invoices to the permit holder on record.)		
Name: Mark S. Goldsmith		Company: Wal-Mart Real Estate Business Trust
Business Phone: 479-204-1195      Ext.      Cell Phone (Optional): N/A      Fax (Optional): 479-204-0934		
E-mail: mark.goldsmith@wal-mart.com		
Mailing Address: 2001 SE 10th Street		
City: Bentonville	State: AR	Zip + 4: 72716-5570
<b>II. Site Location/Address</b>		
Site name: Walmart Supercenter		Total area of soil disturbance for your site/project: <u>15</u> acres
Street address (or location description): 909 E. Wishkah Street		
City (or nearest city): Aberdeen	Zip: 98520	County: Grays Harbor
<b>III. Construction Activity-</b> The site is eligible for termination by one of the following methods:		
<input type="checkbox"/> The site has undergone final stabilization. The operator has permanently stabilized all exposed soils, removed all temporary BMPs, and eliminated all stormwater discharges associated with construction activity.		
<input type="checkbox"/> Permit coverage on all portions of the site that have not undergone final stabilization (Permit Condition S10.A.1) are being, or have been, transferred (Permit Condition G9), and the Permittee no longer has operational control of the construction activity. We provided the new owner Transfer of Coverage paperwork on:		
<input type="checkbox"/> All portions of the site that have not undergone final stabilization (Permit Condition S10.A.1) have been sold and the Permittee no longer has operational control of the construction activity. We will not be submitting Transfer of Permit coverage paperwork. (Optional). Please provide new owner contact info:		
<b>IV. Certification of Permittees.</b> Please read the certification statement carefully before signing.		
<p>"I certify under penalty of law that all stormwater discharges associated with construction activity from the identified site that are authorized by the National Pollution Discharge Elimination System (NPDES) and State Waste Discharge general permit have been eliminated, or that I no longer own or operate on this site. I understand that by submitting this Notice of Termination that I am no longer authorized to discharge stormwater associated with construction activity by the general permit, and that discharging pollutants in stormwater to waters of the State of Washington is unlawful under the Clean Water Act where the discharge is not authorized by a NPDES permit. I also understand that the submittal of this Notice of Termination does not release the permittee from liability for any violations of this permit or the Clean Water Act."</p>		

Operator printed name \_\_\_\_\_

Title \_\_\_\_\_

ECY 020-87 (Rev. 04/10)

Operator signature

Date

### Instructions for Notice of Termination Form

Submit a Notice of Termination Form to the Department of Ecology when

- 1.) All stormwater discharges from a construction site are eliminated, and the site has undergone final stabilization.
- 2.) The site has been sold or transferred to a different operator(s). The permit fees will continue until the permit is terminated.

- I. Operator**  
Give the name, address, and telephone number of the person who is responsible for the permit. This person will also be sent the final fee invoice.
- II. Site Location**  
Enter the street address or location description, including the city or nearest city and county for the construction site. Construction sites that do not have a street address must also provide a legal description in the space provided, or as an attachment.
- III. Construction Activity**  
Indicate:
  1. That all stormwater discharges associated with construction activity are eliminated and final stabilization of all exposed soils is completed. Final stabilization means the establishment of a permanent vegetative cover, or equivalent permanent stabilization measures, that prevents erosion.
  2. That the permit has been transferred to another responsible party(ies) for management. (*Provide the information required on the Transfer of Coverage form.*)
  3. That all portions of the site that have not undergone final stabilization have been sold.
- IV. Certification of Permittee(s)**  
Read this statement carefully. The operator, or authorized representative of the operator, must print his or her name for clarity, then sign and date the document on the lines provided. (Refer to General Condition G2 in the permit for signatory requirements.)

**Please sign and return this original document to the following address and retain a copy for your records:**

Department of Ecology  
Stormwater Unit – Construction  
PO Box 47696  
Olympia, WA 98504-7696

**Note:** Your site remains under permit and subject to all permit conditions until your termination is effective. Continue to comply with permit conditions until the earlier of the following two dates:

- 1) The date you receive written notification from Ecology that termination is effective.
- 2) The 31<sup>st</sup> day following Ecology's receipt of this form.

### Questions?

#### Call:

- **360-407-7451 Josh Klimek** for city of Seattle or counties: Kitsap, Pierce, and Thurston.
- **360-407-6048 Clay Keown** for counties: King, Island, San Juan.
- **360-407-6442 Shawn Hopkins** for counties: Whatcom, Skagit, Snohomish, Ferry, Stevens, Pend Oreille, Lincoln, Spokane, Grant, Adams, Whitman, Franklin, Walla Walla, Columbia, Garfield, and Asotin.
- **360-407-6858 Joyce Smith** for counties: Okanogan, Chelan, Douglas, Kittitas, Yakima, Benton, Klickitat, Skamania, Clark, Cowlitz, Wahkiakum, Lewis, Pacific, Grays Harbor, Mason, Jefferson, and Clallam.

*To ask about the availability of this document in a version for the visually impaired, call the Water Quality Program at 360-407-6401. Persons with hearing loss may call 711 for Washington Relay Service. Persons with a speech disability may call 877-833-6341.*

ECY 020-87 (Rev. 04/10)

## **APPENDIX J**

### **RECORD OF STABILIZATION AND CONSTRUCTION ACTIVITY DATES**

To be located behind SWPPP Binder Tab 15

**NOTE to General Contractor:**

The General Contractor shall complete at least 1-pg of stabilization and grading activities for each month of active construction.

## SITE STABILIZATION and CONSTRUCTION ACTIVITY DATES

A record of dates when BMPs are installed or removed, stabilization measures are initiated, major grading activities occur, and construction activities temporarily or permanently cease on a portion of the site shall be maintained until final site stabilization is achieved and the Notice of Termination (NOT) is filed. This form must be updated continuously throughout the project until the NOT is filed. **NOTE:** The General Contractor shall complete at least 1-pg of stabilization and grading activities for each month of active construction. Activities noted in this log must reflect information provided on Site Maps.

### MAJOR STABILIZATION AND GRADING ACTIVITIES

Description of Activity: \_\_\_\_\_  
Contractor performing Activity: \_\_\_\_\_ Begin (date): \_\_\_\_\_ End(date): \_\_\_\_\_  
Location: \_\_\_\_\_

Description of Activity: \_\_\_\_\_  
Contractor performing Activity: \_\_\_\_\_ Begin (date): \_\_\_\_\_ End(date): \_\_\_\_\_  
Location: \_\_\_\_\_

Description of Activity: \_\_\_\_\_  
Contractor performing Activity: \_\_\_\_\_ Begin (date): \_\_\_\_\_ End(date): \_\_\_\_\_  
Location: \_\_\_\_\_

Description of Activity: \_\_\_\_\_  
Contractor performing Activity: \_\_\_\_\_ Begin (date): \_\_\_\_\_ End(date): \_\_\_\_\_  
Location: \_\_\_\_\_

Description of Activity: \_\_\_\_\_  
Contractor performing Activity: \_\_\_\_\_ Begin (date): \_\_\_\_\_ End(date): \_\_\_\_\_  
Location: \_\_\_\_\_

Description of Activity: \_\_\_\_\_  
Contractor performing Activity: \_\_\_\_\_ Begin (date): \_\_\_\_\_ End(date): \_\_\_\_\_  
Location: \_\_\_\_\_

Description of Activity: \_\_\_\_\_  
Contractor performing Activity: \_\_\_\_\_ Begin (date): \_\_\_\_\_ End(date): \_\_\_\_\_  
Location: \_\_\_\_\_

Description of Activity: \_\_\_\_\_  
Contractor performing Activity: \_\_\_\_\_ Begin (date): \_\_\_\_\_ End(date): \_\_\_\_\_  
Location: \_\_\_\_\_

Description of Activity: \_\_\_\_\_  
Contractor performing Activity: \_\_\_\_\_ Begin (date): \_\_\_\_\_ End(date): \_\_\_\_\_  
Location: \_\_\_\_\_

Description of Activity: \_\_\_\_\_  
Contractor performing Activity: \_\_\_\_\_ Begin (date): \_\_\_\_\_ End(date): \_\_\_\_\_  
Location: \_\_\_\_\_

Description of Activity: \_\_\_\_\_  
Contractor performing Activity: \_\_\_\_\_ Begin (date): \_\_\_\_\_ End(date): \_\_\_\_\_  
Location: \_\_\_\_\_

Description of Activity: \_\_\_\_\_  
Contractor performing Activity: \_\_\_\_\_ Begin (date): \_\_\_\_\_ End(date): \_\_\_\_\_  
Location: \_\_\_\_\_



## APPENDIX K

### FEDERAL, STATE, OR LOCAL STORMWATER OR OTHER ENVIRONMENTAL INSPECTOR SITE VISIT LOG

To be located behind SWPPP Binder Tab 16

#### NOTES to General Contractor:

Upon completion of a stormwater or erosion & sediment control agency inspection or site visit the General Contractor shall:

- 1) Call the SWCT Hotline (800-530-9928) **\*see below**
- 2) Complete and submit a Supplement report via the SWPPP Management Tool
- 3) Transfer all noted deficiencies to the Daily report and resolve as appropriate
- 4) Complete the inspector site visit log
- 5) Submit agency inspection reports if/when received to the SWCT at 479-204-0934
- 6) The SWCT encourages the General Contractor to take photos of any area or item that is photographed by the inspector.

The General Contractor is not required to complete the above noted steps if the agency inspection is not stormwater related (i.e., OSHA, Fire Marshal, etc.); however, if any agency representative comments on stormwater-related BMPs while on-site the above noted steps must be followed.

#### **\*When calling the SWCT Hotline to report an agency inspection the General Contractor should leave the following information:**

1. Store Number & Sequence
2. Store City & State
3. Caller (full name & firm)
4. Caller Telephone Number
5. Inspection Date
6. Name of Agency & Agency Representative (Inspector)
7. Was the inspection stormwater / erosion-related (Yes or No)?
  - 7b. If no, what was inspected?Note: If the inspection was not stormwater-related remaining questions can be skipped.
8. Deficiencies or items requested for improvement (add additional lines as needed):
  - 1)
  - 2)
9. Were all issues noted by the Inspector, from question 8, added to the Daily report as deficiencies (Yes or No)?
  - 9b. If no, add deficiencies to Daily report and resolve.
10. Did the inspector provide a report while on site (Yes or No)?
  - 10b. If yes, submit the report via the SWCT Fax number.
  - 10c. If no, submit a report, if received, to the SWCT.
11. Was a Notice of Violation or similar warning issued or verbally referenced by the Inspector (Yes or No)?
  - 11b. If yes, what specifically did the Inspector find in violation?
12. Is an inspection response due (Yes or No)?
  - 12b. If yes, when is the response due date?
13. Did the Inspector reference a follow-up inspection (Yes or No)?
  - 13b. If yes, when is the follow-up inspection?
14. Was the Agency Inspection Log in the SWPPP Binder updated (Yes or No)?
  - 14b. If no, update the Inspection Log.

**Federal, State, or Local Stormwater or other  
Environmental Inspector Site Visit Log**

Inspectors Name: \_\_\_\_\_ Agency: \_\_\_\_\_

Contractors Representative Present: \_\_\_\_\_

Others Present: \_\_\_\_\_

Comments: \_\_\_\_\_

Time and Date: \_\_\_\_\_ Report Prepared: Yes No

Date/Time Inspection Reported to Wal-Mart Hotline: \_\_\_\_\_

Date/Time Inspection Report faxed to Wal-Mart (n/a if not applicable): \_\_\_\_\_

Inspectors Name: \_\_\_\_\_ Agency: \_\_\_\_\_

Contractors Representative Present: \_\_\_\_\_

Others Present: \_\_\_\_\_

Comments: \_\_\_\_\_

Time and Date: \_\_\_\_\_ Report Prepared: Yes No

Date/Time Inspection Reported to W-M Hotline: \_\_\_\_\_

Date/Time Inspection Report faxed to Wal-Mart (n/a if not applicable): \_\_\_\_\_

Inspectors Name: \_\_\_\_\_ Agency: \_\_\_\_\_

Contractors Representative Present: \_\_\_\_\_

Others Present: \_\_\_\_\_

Comments: \_\_\_\_\_

Time and Date: \_\_\_\_\_ Report Prepared: Yes No

Date/Time Inspection Reported to W-M Hotline: \_\_\_\_\_

Date/Time Inspection Report faxed to Wal-Mart (n/a if not applicable): \_\_\_\_\_

**The SWCT must be contacted at the conclusion of any stormwater-related agency inspection @ 1-800-530-9928 (Wal-Mart Hotline). Caller must provide as a minimum the date, inspection beginning and completion times, inspecting agency, agency inspector name, all contractor representative names, and a brief summary of any comments, observations or deficiencies noted during the inspection. See Special Conditions 8.M. for additional information.**

**IMMEDIATELY COMPLETE AND SUBMIT A SUPPLEMENTAL REPORT AT THE CONCLUSION OF ANY AGENCY INSPECTION.**

## **APPENDIX L**

### **STATE AND LOCAL GOVERNMENT REQUIREMENTS**

**Per Construction General Permit Section S4, sites that disturb 5 acres or more require weekly sampling of turbidity and pH. Section S4 is provided in this appendix, which includes sampling and reporting thresholds. All locations of stormwater outfall shall be sampled and monitored, which includes, but isn't limited to, to the stormwater outflow locations labeled on the Temporary Erosion and Sedimentation Control Plans/Site Maps**

**WSDOE Construction General Permit 12 elements of a SWPPP**

#### S4. MONITORING REQUIREMENTS, BENCHMARKS AND REPORTING TRIGGERS

Table 3. Summary of Primary Monitoring Requirements

Size of Soil Disturbance <sup>1</sup>	Weekly Site Inspections	Weekly Sampling w/ Turbidity Meter	Weekly Sampling w/ Transparency Tube	Weekly pH Sampling <sup>2</sup>	Requires CESCL Certification?
Sites that disturb less than 1 acre, but are part of a larger Common Plan of Development	Required	Not Required	Not Required	Not Required	No
Sites that disturb 1 acre or more, but fewer than 5 acres	Required	Sampling Required – either method <sup>3</sup>		Required	Yes
Sites that disturb 5 acres or more	Required	Required	Not Required <sup>4</sup>	Required	Yes

##### A. Site Log Book

The Permittee must maintain a site log book that contains a record of the implementation of the SWPPP and other permit requirements, including the installation and maintenance of BMPs, site inspections, and stormwater monitoring.

##### B. Site Inspections

The Permittee's (operator's) site inspections must include all areas disturbed by construction activities, all BMPs, and all stormwater discharge points. (See Special Conditions S4.B.3 and B.4 below for detailed requirements of the Permittee's Certified Erosion and Sediment Control Lead [CESCL]).

<sup>1</sup> Soil disturbance is calculated by adding together all areas affected by construction activity. Construction activity means clearing, grading, excavation, and any other activity that disturbs the surface of the land, including ingress/egress from the site.

<sup>2</sup> If construction activity results in the disturbance of 1 acre or more, and involves significant concrete work (1,000 cubic yards of poured or recycled concrete over the life of a project) or the use of engineered soils (soil amendments including but not limited to Portland cement-treated base [CTB], cement kiln dust [CKD], or fly ash), and stormwater from the affected area drains to surface waters of the State or to a storm sewer stormwater collection system that drains to other surface waters of the State, the Permittee must conduct pH monitoring sampling in accordance with Special Condition S4.D.

<sup>3</sup> Sites with one or more acres, but fewer than 5 acres of soil disturbance, must conduct turbidity or transparency sampling in accordance with Special Condition S4.C.

<sup>4</sup> Sites equal to or greater than 5 acres of soil disturbance must conduct turbidity sampling using a turbidity meter in accordance with Special Condition S4.C.

Construction sites one acre or larger that discharge stormwater to surface waters of the State must have site inspections conducted by a certified CESCL. Sites less than one acre may have a person without CESCL certification conduct inspections; sampling is not required on sites that disturb less than an acre.

1. The Permittee must examine stormwater visually for the presence of suspended sediment, turbidity, discoloration, and oil sheen. The Permittee must evaluate the effectiveness of BMPs and determine if it is necessary to install, maintain, or repair BMPs to improve the quality of stormwater discharges.

Based on the results of the inspection, the Permittee must correct the problems identified by:

- a. Reviewing the SWPPP for compliance with Special Condition S9 and making appropriate revisions within 7 days of the inspection.
  - b. Immediately beginning the process of fully implementing and maintaining appropriate source control and/or treatment BMPs as soon as possible, addressing the problems no later than within 10 days of the inspection. If installation of necessary treatment BMPs is not feasible within 10 days, Ecology may approve additional time when an extension is requested by a Permittee within the initial 10-day response period.
  - c. Documenting BMP implementation and maintenance in the site log book.
2. The Permittee must inspect all areas disturbed by construction activities, all BMPs, and all stormwater discharge points at least once every calendar week and within 24 hours of any discharge from the site. (For purposes of this condition, individual discharge events that last more than one day do not require daily inspections. For example, if a stormwater pond discharges continuously over the course of a week, only one inspection is required that week.) The Permittee may reduce the inspection frequency for temporarily stabilized, inactive sites to once every calendar month.
  3. The Permittee must have staff knowledgeable in the principles and practices of erosion and sediment control. The CESCL (sites one acre or more) or inspector (sites less than one acre) must have the skills to assess the:
    - a. Site conditions and construction activities that could impact the quality of stormwater, and
    - b. Effectiveness of erosion and sediment control measures used to control the quality of stormwater discharges.
  4. The SWPPP must identify the CESCL or inspector, who must be present on site or on-call at all times. The CESCL must obtain this certification through an approved erosion and sediment control training program that meets the minimum training standards established by Ecology (see BMP C160 in the manual referred to in Special Condition S9.C.1 and 2).

5. The Permittee must summarize the results of each inspection in an inspection report or checklist and enter the report/checklist into, or attach it to, the site log book. At a minimum, each inspection report or checklist must include:
  - a. Inspection date and time.
  - b. Weather information, the general conditions during inspection and the approximate amount of precipitation since the last inspection, and precipitation within the last 24 hours.
  - c. A summary or list of all implemented BMPs, including observations of all erosion/sediment control structures or practices.
  - d. A description of the locations:
    - i. Of BMPs inspected.
    - ii. Of BMPs that need maintenance and why.
    - iii. Of BMPs that failed to operate as designed or intended, and
    - iv. Where additional or different BMPs are needed, and why.
  - e. A description of stormwater discharged from the site. The Permittee must note the presence of suspended sediment, turbidity, discoloration, and oil sheen, as applicable.
  - f. Any water quality monitoring performed during inspection.
  - g. General comments and notes, including a brief description of any BMP repairs, maintenance or installations made following the inspection.
  - h. A summary report and a schedule of implementation of the remedial actions that the Permittee plans to take if the site inspection indicates that the site is out of compliance. The remedial actions taken must meet the requirements of the SWPPP and the permit.
  - i. The name, title, and signature of the person conducting the site inspection, a phone number or other reliable method to reach this person, and the following statement: "I certify that this report is true, accurate, and complete to the best of my knowledge and belief."

C. Turbidity/Transparency Sampling Requirements

1. Sampling Methods
  - a. If construction activity involves the disturbance of 5 acres or more, the Permittee must conduct turbidity sampling per Special Condition S4.C.
  - b. If construction activity involves 1 acre or more but fewer than 5 acres of soil disturbance, the Permittee must conduct either transparency sampling **or** turbidity sampling per Special Condition S4.C.

## 2. Sampling Frequency

- a. The Permittee must sample all discharge locations at least once every calendar week when stormwater (or authorized non-stormwater) discharges from the site or enters any on-site surface waters of the state (for example, a creek running through a site).
- b. Samples must be representative of the flow and characteristics of the discharge.
- c. Sampling is not required when there is no discharge during a calendar week.
- d. Sampling is not required outside of normal working hours or during unsafe conditions.
- e. If the Permittee is unable to sample during a monitoring period, the Permittee must include a brief explanation in the monthly Discharge Monitoring Report (DMR).
- f. Sampling is not required before construction activity begins.

## 3. Sampling Locations

- a. Sampling is required at all points where stormwater associated with construction activity (or authorized non-stormwater) is discharged off site, including where it enters any on-site surface waters of the state (for example, a creek running through a site).
- b. The Permittee may discontinue sampling at discharge points that drain areas of the project that are fully stabilized to prevent erosion.
- c. The Permittee must identify all sampling point(s) on the SWPPP site map and clearly mark these points in the field with a flag, tape, stake or other visible marker.
- d. Sampling is not required for discharge that is sent directly to sanitary or combined sewer systems.

## 4. Sampling and Analysis Methods

- a. The Permittee performs turbidity analysis with a calibrated turbidity meter (turbidimeter) either on site or at an accredited lab. The Permittee must record the results in the site log book in nephelometric turbidity units (NTU).
- b. The Permittee performs transparency analysis on site with a 1¾-inch-diameter, 60-centimeter (cm)-long transparency tube. The Permittee will record the results in the site log book in centimeters (cm). Transparency tubes are available from: <http://watermonitoringequip.com/pages/stream.html>.

Table 4. Monitoring and Reporting Requirements

Parameter	Unit	Analytical Method	Sampling Frequency	Benchmark Value	Phone Reporting Trigger Value
Turbidity	NTU	SM2130 or EPA 180.1	Weekly, if discharging	25 NTU	250 NTU
Transparency	cm	Manufacturer instructions, or Ecology guidance	Weekly, if discharging	33 cm	6 cm

5. Turbidity/Transparency Benchmark Values and Reporting Triggers

The benchmark value for turbidity is 25 NTU or less. The benchmark value for transparency is 33 centimeters (cm). Note: Benchmark values do not apply to discharges to segments of water bodies on Washington State's 303(d) list (Category 5) for turbidity, fine sediment, or phosphorus; these discharges are subject to a numeric effluent limit for turbidity. Refer to Special Condition S8 for more information.

a. Turbidity 26 – 249 NTU, or Transparency 32 – 7 cm:

If the discharge turbidity is 26 to 249 NTU; or if discharge transparency is less than 33 cm, but equal to or greater than 6 cm, the Permittee must:

- i. Review the SWPPP for compliance with Special Condition S9 and make appropriate revisions within 7 days of the date the discharge exceeded the benchmark.
- ii. Immediately begin the process to fully implement and maintain appropriate source control and/or treatment BMPs as soon as possible, addressing 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.
- iii. Document BMP implementation and maintenance in the site log book.

b. Turbidity 250 NTU or greater, or Transparency 6 cm or less:

If a discharge point's turbidity is 250 NTU or greater, or if discharge transparency is less than or equal to 6 cm, the Permittee must complete the reporting and adaptive management process described below.

- i. Telephone the applicable Ecology Region's Environmental Report Tracking System (ERTS) number within 24 hours, in accordance with Special Condition S5.F.
  - Central Region (Okanogan, Chelan, Douglas, Kittitas, Yakima, Klickitat, Benton): (509) 575-2490



- Eastern Region (Adams, Asotin, Columbia, Ferry, Franklin, Garfield, Grant, Lincoln, Pend Oreille, Spokane, Stevens, Walla Walla, Whitman): (509) 329-3400
- Northwest Region (Kitsap, Snohomish, Island, King, San Juan, Skagit, Whatcom): (425) 649-7000
- Southwest Region (Grays Harbor, Lewis, Mason, Thurston, Pierce, Clark, Cowlitz, Skamania, Wahkiakum, Clallam, Jefferson, Pacific): (360) 407-6300

These numbers are also listed at the following web site:

<http://www.ecy.wa.gov/programs/wq/stormwater/construction/permit.html>

- ii. Review the SWPPP for compliance with Special Condition S9 and make appropriate revisions within 7 days of the date the discharge exceeded the benchmark.
- iii. Immediately begin the process to fully implement and maintain appropriate source control and/or treatment BMPs as soon as possible, addressing 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.
- iv. Document BMP implementation and maintenance in the site log book.
- v. Continue to sample discharges daily until:
  - a) Turbidity is 25 NTU (or lower); or
  - b) Transparency is 33 cm (or greater); or
  - c) The Permittee has demonstrated compliance with the water quality limit for turbidity:
    - 1) No more than 5 NTU over background turbidity, if background is less than 50 NTU, or
    - 2) No more than 10% over background turbidity, if background is 50 NTU or greater; or
  - d) The discharge stops or is eliminated.

D. pH Sampling Requirements -- Significant Concrete Work or Engineered Soils

If construction activity results in the disturbance of 1 acre or more, **and** involves significant concrete work (significant concrete work means greater than 1000 cubic yards poured concrete or recycled concrete used over the life of a project ) or the use of engineered soils (soil amendments including but not limited to Portland cement-treated base [CTB], cement kiln dust [CKD], or fly ash), and stormwater from the affected area

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drains to surface waters of the State or to a storm sewer system that drains to surface waters of the state, the Permittee must conduct pH monitoring as set forth below. Note: In addition, discharges to segments of water bodies on Washington State's 303(d) list (Category 5) for high pH are subject to a numeric effluent limit for pH; refer to Special Condition S8.

1. For sites with significant concrete work, the Permittee must begin the pH monitoring period when the concrete is first poured and exposed to precipitation, and continue weekly throughout and after the concrete pour and curing period, until stormwater pH is in the range of 6.5 to 8.5 (su).
2. For sites with engineered soils, the Permittee must begin the pH monitoring period when the soil amendments are first exposed to precipitation and must continue until the area of engineered soils is fully stabilized.
3. During the applicable pH monitoring period defined above, the Permittee must obtain a representative sample of stormwater and conduct pH analysis at least once per week.
4. The Permittee must monitor pH in the sediment trap/pond(s) or other locations that receive stormwater runoff from the area of significant concrete work or engineered soils before the stormwater discharges to surface waters.
5. The benchmark value for pH is 8.5 standard units. Anytime sampling indicates that pH is 8.5 or greater, the Permittee must either:
  - a. Prevent the high pH water (8.5 or above) from entering storm sewer systems or surface waters; or
  - b. If necessary, adjust or neutralize the high pH water until it is in the range of pH 6.5 to 8.5 (su) using an appropriate treatment BMP such as carbon dioxide (CO<sub>2</sub>) sparging or dry ice. The Permittee must obtain written approval from Ecology before using any form of chemical treatment other than CO<sub>2</sub> sparging or dry ice.
6. The Permittee must perform pH analysis on site with a calibrated pH meter, pH test kit, or wide range pH indicator paper. The Permittee must record pH monitoring results in the site log book.

installation of necessary treatment BMPs is not feasible within 10 days, Ecology may approve additional time when an extension is requested by a Permittee within the initial 10-day response period,

- c. Document BMP implementation and maintenance in the site log book.

The Permittee must modify the SWPPP whenever 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.

C. Stormwater Best Management Practices (BMPs)

BMPs must be consistent with:

1. Stormwater Management Manual for Western Washington (most recent edition), for sites west of the crest of the Cascade Mountains; or
2. Stormwater Management Manual for Eastern Washington (most recent edition), for sites east of the crest of the Cascade Mountains; or
3. Revisions to the manuals listed in Special Condition S9.C.1. & 2., or other stormwater management guidance documents or manuals which provide an equivalent level of pollution prevention, that are approved by Ecology and incorporated into this permit in accordance with the permit modification requirements of WAC 173-226-230; or
4. Documentation in the SWPPP that the BMPs selected provide an equivalent level of pollution prevention, compared to the applicable Stormwater Management Manuals, including:
  - a. The technical basis for the selection of all stormwater BMPs (scientific, technical studies, and/or modeling) that support the performance claims for the BMPs being selected.
  - b. An assessment of how the selected BMP will satisfy AKART requirements and the applicable federal technology-based treatment requirements under 40 CFR part 125.3.

D. SWPPP – Narrative Contents and Requirements

The Permittee must include each of the 12 elements below in Special Condition S9.D.1-12 in the narrative of the SWPPP and implement them unless site conditions render the element unnecessary and the exemption from that element is clearly justified in the SWPPP.

1. Preserve Vegetation/Mark Clearing Limits
  - a. Before beginning land-disturbing activities, including clearing and grading, clearly mark all clearing limits, sensitive areas and their buffers, and trees that are to be preserved within the construction area.

- b. Retain the duff layer, native top soil, and natural vegetation in an undisturbed state to the maximum degree practicable.
2. Establish Construction Access
- a. Limit construction vehicle access and exit to one route, if possible.
  - b. Stabilize access points with a pad of quarry spalls, crushed rock, or other equivalent BMPs, to minimize tracking sediment onto roads.
  - c. Locate wheel wash or tire baths on site, if the stabilized construction entrance is not effective in preventing tracking sediment onto roads.
  - d. If sediment is tracked off site, clean the affected roadway thoroughly at the end of each day, or more frequently as necessary (for example, during wet weather). Remove sediment from roads by shoveling, sweeping, or pickup and transport of the sediment to a controlled sediment disposal area.
  - e. Conduct street washing only after sediment removal in accordance with Special Condition S9.D.2.d. Control street wash wastewater by pumping back on site or otherwise preventing it from discharging into systems tributary to waters of the State.
3. Control Flow Rates
- a. Protect properties and waterways downstream of development sites from erosion and the associated discharge of turbid waters due to increases in the velocity and peak volumetric flow rate of stormwater runoff from the project site, as required by local plan approval authority.
  - b. Where necessary to comply with Special Condition S9.D.3.a, construct stormwater retention or detention facilities as one of the first steps in grading. Assure that detention facilities function properly before constructing site improvements (for example, impervious surfaces).
  - c. If permanent infiltration ponds are used for flow control during construction, protect these facilities from siltation during the construction phase.
4. Install Sediment Controls

The Permittee must design, install and maintain effective erosion controls and sediment controls to minimize the discharge of pollutants. At a minimum, the Permittee must design, install and maintain such controls to:

- a. Construct sediment control BMPs (sediment ponds, traps, filters, etc.) as one of the first steps in grading. These BMPs must be functional before other land disturbing activities take place.
- b. Minimize sediment discharges from the site. The design, installation and maintenance of erosion and sediment controls must address factors such as the amount, frequency, intensity and duration of precipitation, the nature of

resulting stormwater runoff, and soil characteristics, including the range of soil particle sizes expected to be present on the site.

- c. Direct stormwater runoff from disturbed areas through a sediment pond or other appropriate sediment removal BMP, before the runoff leaves a construction site or before discharge to an infiltration facility. Runoff from fully stabilized areas may be discharged without a sediment removal BMP, but must meet the flow control performance standard of Special Condition S9.D.3.a.
- d. Locate BMPs intended to trap sediment on site in a manner to avoid interference with the movement of juvenile salmonids attempting to enter off-channel areas or drainages.
- e. Provide and maintain natural buffers around surface waters, direct stormwater to vegetated areas to increase sediment removal and maximize stormwater infiltration, unless infeasible.
- f. Where feasible, design outlet structures that withdraw impounded stormwater from the surface to avoid discharging sediment that is still suspended lower in the water column.

5. Stabilize Soils

- a. The Permittee must stabilize exposed and unworked soils by application of effective BMPs that prevent erosion. Applicable BMPs include, but are not limited to: temporary and permanent seeding, sodding, mulching, plastic covering, erosion control fabrics and matting, soil application of polyacrylamide (PAM), the early application of gravel base on areas to be paved, and dust control.
- b. The Permittee must control stormwater volume and velocity within the site to minimize soil erosion.
- c. The Permittee must control stormwater discharges, including both peak flow rates and total stormwater volume, to minimize erosion at outlets and to minimize downstream channel and stream bank erosion.
- d. Depending on the geographic location of the project, the Permittee must not allow soils to remain exposed and unworked for more than the time periods set forth below to prevent erosion:

West of the Cascade Mountains Crest

During the dry season (May 1 - Sept. 30): 7 days

During the wet season (October 1 - April 30): 2 days

East of the Cascade Mountains Crest, except for Central Basin\*

During the dry season (July 1 - September 30): 10 days

During the wet season (October 1 - June 30): 5 days

The Central Basin\*, East of the Cascade Mountains Crest

During the dry Season (July 1 - September 30): 30 days

During the wet season (October 1 - June 30): 15 days

\*Note: The Central Basin is defined as the portions of Eastern Washington with mean annual precipitation of less than 12 inches.

- e. The Permittee must stabilize soils at the end of the shift before a holiday or weekend if needed based on the weather forecast.
  - f. The Permittee must stabilize soil stockpiles from erosion, protected with sediment trapping measures, and where possible, be located away from storm drain inlets, waterways, and drainage channels.
  - g. The Permittee must minimize the amount of soil exposed during construction activity.
  - h. The Permittee must minimize the disturbance of steep slopes.
  - i. The Permittee must minimize soil compaction and, unless infeasible, preserve topsoil.
6. Protect Slopes
- a. The Permittee must design and construct cut-and-fill slopes in a manner to minimize erosion. Applicable practices include, but are not limited to, reducing continuous length of slope with terracing and diversions, reducing slope steepness, and roughening slope surfaces (for example, track walking).
  - b. The Permittee must divert off-site stormwater (run-on) or ground water away from slopes and disturbed areas with interceptor dikes, pipes, and/or swales. Off-site stormwater should be managed separately from stormwater generated on the site.
  - c. At the top of slopes, collect drainage in pipe slope drains or protected channels to prevent erosion.
    - i. West of the Cascade Mountains Crest: Temporary pipe slope drains must handle the peak 10-minute velocity of flow from a Type 1A, 10-year, 24-hour frequency storm for the developed condition. Alternatively, the 10-year, 1-hour flow rate predicted by an approved continuous runoff model, increased by a factor of 1.6, may be used. The hydrologic analysis must use the existing land cover condition for predicting flow rates from tributary areas outside the project limits. For tributary areas on the project site, the analysis must use the temporary or permanent project land cover condition, whichever will produce the highest flow rates. If using the Western Washington Hydrology Model (WWHM) to predict flows, bare soil areas should be modeled as "landscaped area."

- ii. East of the Cascade Mountains Crest: Temporary pipe slope drains must handle the expected peak flow velocity from a 6-month, 3-hour storm for the developed condition, referred to as the short duration storm.
- d. Place excavated material on the uphill side of trenches, consistent with safety and space considerations.
- e. Place check dams at regular intervals within constructed channels that are cut down a slope.
- 7. Protect Drain Inlets
  - a. Protect all storm drain inlets made operable during construction so that stormwater runoff does not enter the conveyance system without first being filtered or treated to remove sediment.
  - b. Clean or remove and replace inlet protection devices when sediment has filled one-third of the available storage (unless a different standard is specified by the product manufacturer).
- 8. Stabilize Channels and Outlets
  - a. Design, construct and stabilize all on-site conveyance channels to prevent erosion from the following expected peak flows:
    - i. West of the Cascade Mountains Crest: Channels must handle the peak 10-minute velocity of flow from a Type 1A, 10-year, 24-hour frequency storm for the developed condition. Alternatively, the 10-year, 1-hour flow rate indicated by an approved continuous runoff model, increased by a factor of 1.6, may be used. The hydrologic analysis must use the existing land cover condition for predicting flow rates from tributary areas outside the project limits. For tributary areas on the project site, the analysis must use the temporary or permanent project land cover condition, whichever will produce the highest flow rates. If using the WWHM to predict flows, bare soil areas should be modeled as "landscaped area."
    - ii. East of the Cascade Mountains Crest: Channels must handle the expected peak flow velocity from a 6-month, 3-hour storm for the developed condition, referred to as the short duration storm.
  - b. Provide stabilization, including armoring material, adequate to prevent erosion of outlets, adjacent stream banks, slopes, and downstream reaches at the outlets of all conveyance systems.
- 9. Control Pollutants

Design, install, implement and maintain effective pollution prevention measures to minimize the discharge of pollutants. The Permittee must:

- a. Handle and dispose of all pollutants, including waste materials and demolition debris that occur on site in a manner that does not cause contamination of stormwater.
  - b. Provide cover, containment, and protection from vandalism for all chemicals, liquid products, petroleum products, and other materials that have the potential to pose a threat to human health or the environment. On-site fueling tanks must include secondary containment. Secondary containment means placing tanks or containers within an impervious structure capable of containing 110% of the volume contained in the largest tank within the containment structure. Double-walled tanks do not require additional secondary containment.
  - c. Conduct maintenance, fueling, and repair of heavy equipment and vehicles using spill prevention and control measures. Clean contaminated surfaces immediately following any spill incident.
  - d. Discharge wheel wash or tire bath wastewater to a separate on-site treatment system that prevents discharge to surface water, such as closed-loop recirculation or upland land application, or to the sanitary sewer with local sewer district approval.
  - e. Apply fertilizers and pesticides in a manner and at application rates that will not result in loss of chemical to stormwater runoff. Follow manufacturers' label requirements for application rates and procedures.
  - f. Use BMPs to prevent contamination of stormwater runoff by pH-modifying sources. The sources for this contamination include, but are not limited to: bulk cement, cement kiln dust, fly ash, new concrete washing and curing waters, waste streams generated from concrete grinding and sawing, exposed aggregate processes, dewatering concrete vaults, concrete pumping and mixer washout waters. (Also refer to the definition for "concrete wastewater" in Appendix A--Definitions.)
  - g. Adjust the pH of stormwater if necessary to prevent violations of water quality standards.
  - h. Assure that washout of concrete trucks is performed offsite or in designated concrete washout areas only. Do not wash out concrete trucks onto the ground, or into storm drains, open ditches, streets, or streams. Do not dump excess concrete on site, except in designated concrete washout areas. Concrete spillage or concrete discharge to surface waters of the State is prohibited.
  - i. Obtain written approval from Ecology before using chemical treatment other than CO<sub>2</sub> or dry ice to adjust pH.
10. Control Dewatering
- a. Permittees must discharge foundation, vault, and trench dewatering water, which have characteristics similar to stormwater runoff at the site, into a



controlled conveyance system before discharge to a sediment trap or sediment pond.

- b. Permittees may discharge clean, non-turbid dewatering water, such as well-point ground water, to systems tributary to, or directly into surface waters of the State, as specified in Special Condition S9.D.8, provided the dewatering flow does not cause erosion or flooding of receiving waters. Do not route clean dewatering water through stormwater sediment ponds. Note that "surface waters of the State" may exist on a construction site as well as off site; for example, a creek running through a site.
- c. Other treatment or disposal options may include:
  - i. Infiltration.
  - ii. Transport off site in a vehicle, such as a vacuum flush truck, for legal disposal in a manner that does not pollute state waters.
  - iii. Ecology-approved on-site chemical treatment or other suitable treatment technologies.
  - iv. Sanitary or combined sewer discharge with local sewer district approval, if there is no other option.
  - v. Use of a sedimentation bag with discharge to a ditch or swale for small volumes of localized dewatering.
- d. Permittees must handle highly turbid or contaminated dewatering water separately from stormwater.

11. Maintain BMPs

- a. Permittees must maintain and repair all temporary and permanent erosion and sediment control BMPs as needed to assure continued performance of their intended function in accordance with BMP specifications.
- b. Permittees must remove all temporary erosion and sediment control BMPs within 30 days after achieving final site stabilization or after the temporary BMPs are no longer needed.

12. Manage the Project

- a. Phase development projects to the maximum degree practicable and take into account seasonal work limitations.
- b. Inspection and monitoring -- Inspect, maintain and repair all BMPs as needed to assure continued performance of their intended function. Conduct site inspections and monitoring in accordance with Special Condition S4.
- c. Maintaining an updated construction SWPPP -- Maintain, update, and implement the SWPPP in accordance with Special Conditions S3, S4 and S9.

## **APPENDIX M**

### **BMP FIELD MANUAL**

**NOTE to General Contractor:**

The General Contractor shall copy the site-specific BMP Field Manual details found in this Appendix and distribute details in the form of an organized and bound manual to all subcontractors during the SWPPP Pre-con meeting and as needed throughout the duration of the project. The General Contractor and subcontractors shall initial Contractor / Subcontractor Certification forms, where appropriate, indicating receipt of the BMP Field Manual.

## **Wal-Mart Storm Water BMP Field Manual**

Best Management Practice (BMP) Field Manual sheets for Wal-Mart and several regulatory agency erosion and sediment control (E&SC) details are available on the Building Portal Design Collective for incorporation into the project Storm Water Pollution Prevention Plan (SWPPP). Each BMP Field Manual sheet contains information on the corresponding E&SC detail including application/use, control type, installation, inspection, maintenance and removal/disposal/reuse/recycle.

The project Civil Engineering Consultant (CEC) is responsible for selecting E&SC details based on site conditions, project requirements and manufacturer specifications. The CEC will compile a complete BMP Field Manual from applicable BMP sheets based on E&SC details specified for the project. The BMP Field Manual will be provided to the General Contractor in the specified SWPPP appendix.

The General Contractor will be responsible for making bound copies of the BMP Field Manual to be distributed to project contractors and subcontractors during the Storm Water Pre-Construction meeting and throughout the construction period. The BMP Field Manual cover and back must be weather resistant. The BMP Field Manual binder should allow insertion of additional BMPs as needed. (Note: To ensure field copies are legible, the BMP Field Manual must be reproduced in black and white.)

If a new or modified BMP, other than those specified in the SWPPP, is preferred or recommended by the General Contractor, the BMP must be reviewed and approved by the CEC. The corresponding E&SC detail must be posted on the jobsite trailer wall and its equivalent BMP Field Manual sheet must be included in the BMP Field Manual.

Note: All BMPs must be installed or constructed within the permitted limits of disturbance. Removal and disposal of BMPs must conform to all applicable health, safety, security and environmental laws and regulations. All areas disturbed during BMP removal shall be permanently stabilized. BMP removal and/or disposal shall not incur additional cost to a project.

## **BMP: SWPPP Information Sign**

### Application/Use

- To display applicable NOI(s), Construction Site Notice, Stormwater Discharge Permit(s) and other documents as required for regulatory compliance; and show location of SWPPP

### Type

- Temporary sign

### Installation

- To be installed near the construction site entrance
- To be installed before construction activities begin

### Inspection

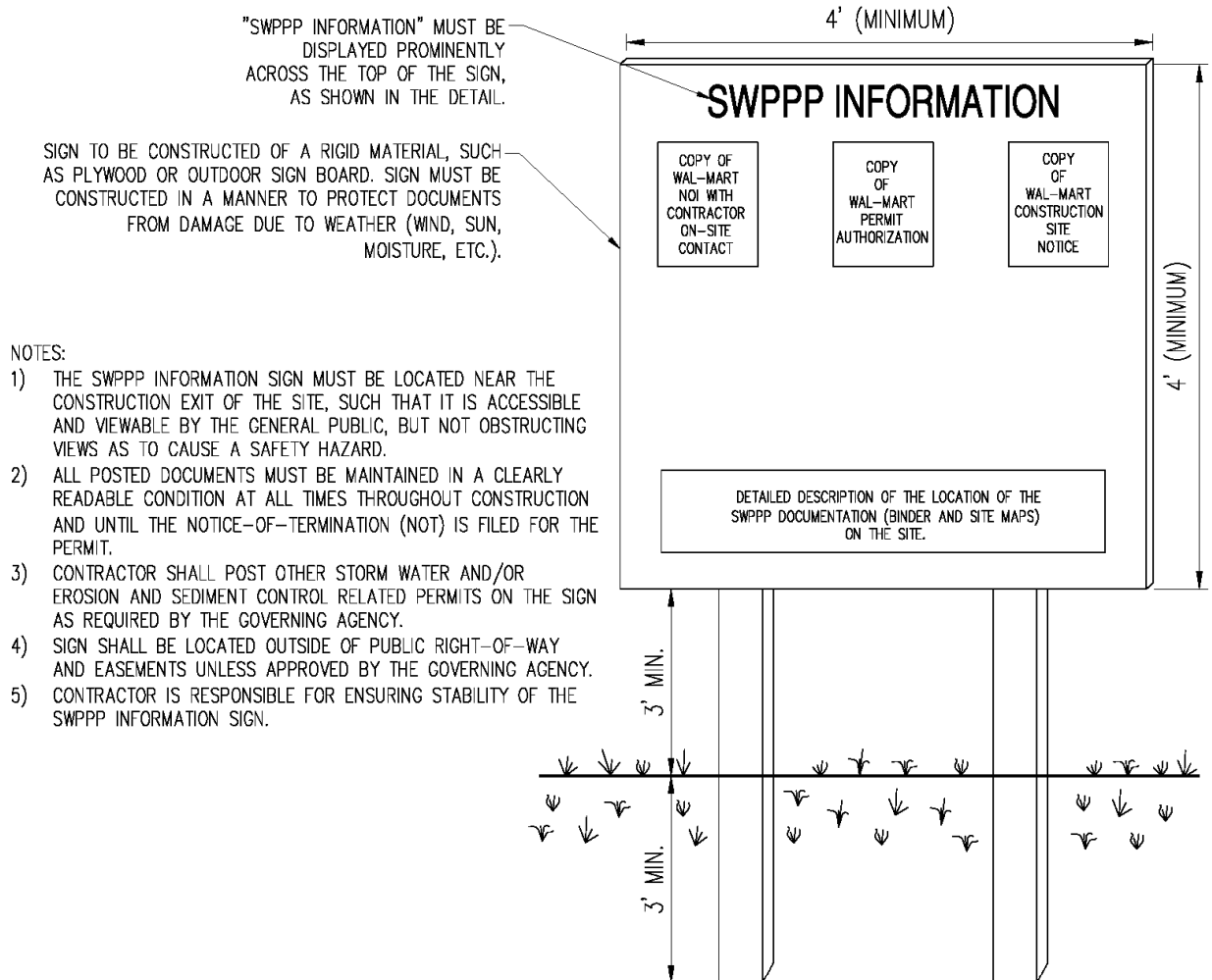
- Is the sign easily accessible/viewable by the general public?
- Will the sign cause safety hazard?
- Are all documents posted clearly readable?
- Is the sign structurally stable?
- Is the sign encroaching the right-of-way or easement of other(s)?

### Maintenance

- Repair and replacement of sign
- Replacement of document(s)

### Removal/Disposal/Reuse/Recycle

- Must be removed after construction activities are completed



NOTES:

- 1) THE SWPPP INFORMATION SIGN MUST BE LOCATED NEAR THE CONSTRUCTION EXIT OF THE SITE, SUCH THAT IT IS ACCESSIBLE AND VIEWABLE BY THE GENERAL PUBLIC, BUT NOT OBSTRUCTING VIEWS AS TO CAUSE A SAFETY HAZARD.
- 2) ALL POSTED DOCUMENTS MUST BE MAINTAINED IN A CLEARLY READABLE CONDITION AT ALL TIMES THROUGHOUT CONSTRUCTION AND UNTIL THE NOTICE-OF-TERMINATION (NOT) IS FILED FOR THE PERMIT.
- 3) CONTRACTOR SHALL POST OTHER STORM WATER AND/OR EROSION AND SEDIMENT CONTROL RELATED PERMITS ON THE SIGN AS REQUIRED BY THE GOVERNING AGENCY.
- 4) SIGN SHALL BE LOCATED OUTSIDE OF PUBLIC RIGHT-OF-WAY AND EASEMENTS UNLESS APPROVED BY THE GOVERNING AGENCY.
- 5) CONTRACTOR IS RESPONSIBLE FOR ENSURING STABILITY OF THE SWPPP INFORMATION SIGN.

SWPPP INFORMATION SIGN

11/01/2007

NTS

PACLAND MODIFIED WAL-MART STD DETAIL

4

## **BMP: Silt Fence**

### Application/Use

- To capture sediment from sheet flow

### Type

- Temporary structural control

### Installation

- To be installed as perimeter control for sheet flow
- To be installed adjacent to toe of slopes
- To protect water bodies
- To be installed before construction activities begin and while construction activities are occurring

### Inspection

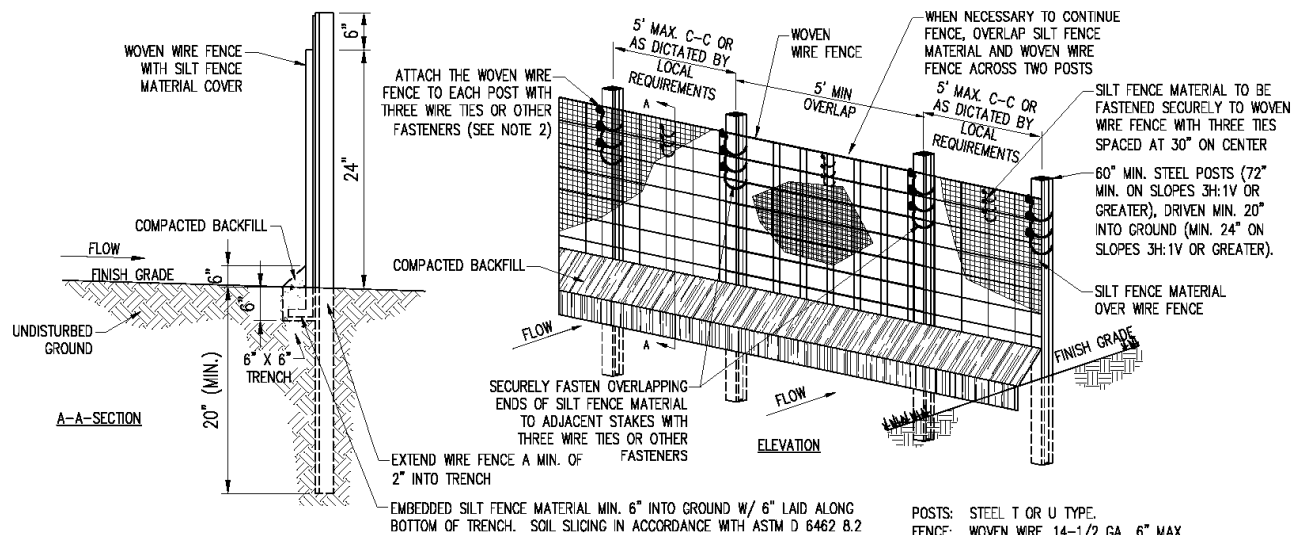
- Is silt fence installed at concentrated flow area?
- Are metal posts on the downstream side of the silt fence?
- Is the fabric supported by wire on downstream side of silt fence?
- Does water flow under the fabric?
- Has water or soil “flattened” the structure?
- Is the fabric torn?
- Is the fabric secured in the ground?
- Is the fabric attached to the posts?
- Will water flow around the fence?
- Has wind destroyed the fence?
- Is silt fence constructed with J-hooks?

### Maintenance

- Repair and replacement of material
- Removal of sediment

### Removal/Disposal/Reuse/Recycle

- Must be removed after construction activities are completed
- Fabric may be removed by cutting at finished grade and surrounding area must be permanently stabilized
- Wire may be reused/recycle



1. INSTALLATION SHALL COMPLY WITH ASTM D 6462 LATEST EDITION.
2. ATTACH THE WOVEN WIRE FENCE TO EACH POST AND THE GEOTEXTILE TO THE WOVEN WIRE FENCE (SPACED EVERY 30") WITH THREE WIRE TIES OR OTHER FASTENERS, ALL SPACED WITHIN THE TOP 8" OF THE FABRIC. ATTACH EACH TIE DIAGONALLY 45 DEGREES THROUGH THE FABRIC, WITH EACH PUNCTURE AT LEAST 1" VERTICALLY APART. ALSO, EACH TIE PLACED ON A POST SHOULD BE POSITIONED TO HANG ON A POST NIPPLE WHEN TIGHTENED TO PREVENT SAGGING.
3. WHEN TWO SECTIONS OF SILT FENCE MATERIAL ADJOIN EACH OTHER, THEY SHALL BE OVERLAPPED A MINIMUM OF 60" ACROSS TWO POSTS, AS SHOWN.
4. MAINTENANCE SHALL BE PERFORMED AS NOTED IN THE SWPPP. DEPTH OF ACCUMULATED SEDIMENTS MAY NOT EXCEED ONE-HALF THE HEIGHT OF THE FENCE. MAINTENANCE CLEANOUT MUST BE CONDUCTED REGULARLY TO PREVENT ACCUMULATED SEDIMENTS FROM REACHING ONE-HALF THE HEIGHT OF THE SILT FENCE MATERIAL ABOVE GRADE.
5. ALL SILT FENCE SHALL INCLUDE WIRE SUPPORT UNLESS THE STATIC SLICING EQUIPMENT IS UTILIZED TO INSTALL THE FENCE.
6. WRAP APPROXIMATELY 6" OF FABRIC AROUND THE END POSTS AND SECURE WITH 3 TIES.
7. COMPACT THE SOIL IMMEDIATELY NEXT TO THE SILT FENCE FABRIC WITH THE FRONT WHEEL OF THE TRACTOR, SKID STEER, OR ROLLER EXERTING AT LEAST 60 POUNDS PER SQ. INCH. COMPACT THE UPSTREAM SIDE FIRST. COMPACT EACH SIDE TWICE FOR A TOTAL OF FOUR TRIPS.
8. ADD POST CAPS AS NEEDED BASED ON SITE CONDITIONS AND APPLICABLE AGENCY REQUIREMENTS.

POSTS: STEEL T OR U TYPE.  
 FENCE: WOVEN WIRE, 14-1/2 GA., 6" MAX.  
 MESH OPENING  
 FABRIC: IN ACCORDANCE WITH ASTM D 6461  
 LATEST EDITION.

## SILT FENCE

11/01/2007

NTS

WAL-MART STD DETAIL

1

## **BMP: Filter Sacks for Grated Inlets**

### Application/Use

- To filter out sediment in grated inlet

### Type

- Temporary structural control

### Installation

- To be installed inside grated inlets
- To be installed before construction activities begin or while construction activities are occurring

### Inspection

- Is the filter sack secured to prevent from dropping into the inlet?
- Is the correct geotextile sack used?
- Is the geotextile sack torn?

### Maintenance

- Removal of sediment
- Repair or replacement of filter sacks

### Removal/Disposal/Reuse/Recycle

- Must be removed after construction activities are completed



- 
- INLET GRATE
- LOOPS SIZED FOR 1" REBAR, LIFT FILTER BAG FROM INLET USING REBAR FOR HANDLES.
- OVERFLOW HOLES
- GEOTEXTILE BAG
- 1/4" BRIGHTLY COLORED NYLON ROPE EXPANSION RESTRAINT
- LOOPS SIZED FOR 1" REBAR, USE REBAR FOR A HANDLE TO EMPTY FILTER SACK AT A SEDIMENT COLLECTION LOCATION.
- DEPTH = D
- WIDTH = W
- LENGTH = L
- ISOMETRIC VIEW

**SECTION VIEW**  
**PROFILE VIEW OF INSTALLED FILTER SACK**  
**DO NOT USE IN PAVED AREAS WHERE PONDING**  
**MAY CAUSE TRAFFIC HAZARDS.**

### FILTER SACKS (GRATED INLETS)

11/01/07

NTS

WAL-MART STD DETAIL

## **BMP: Gravel Check Dam**

### Application/Use

- To act as temporary containment structure to capture sediment and reduce runoff velocities in drainage channels

### Type

- Temporary structural control

### Installation

- To be installed in drainage ditch
- To be installed while construction activities are occurring

### Inspection

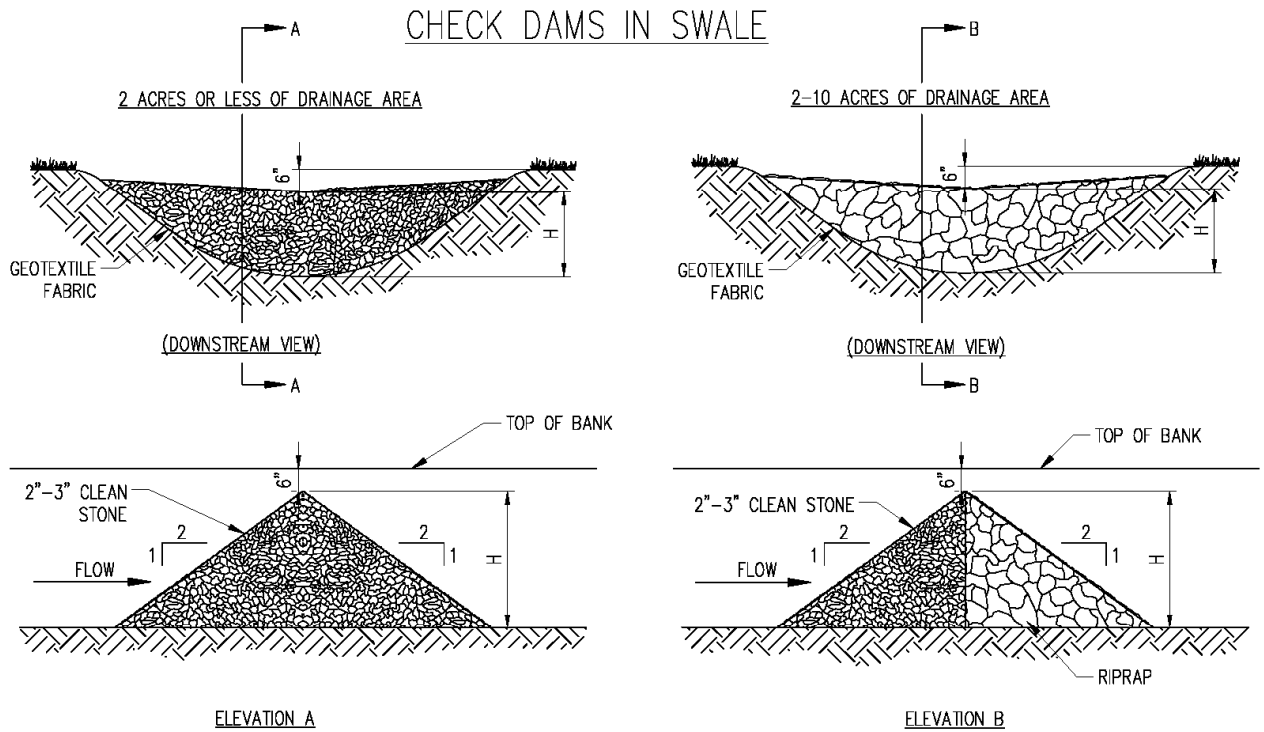
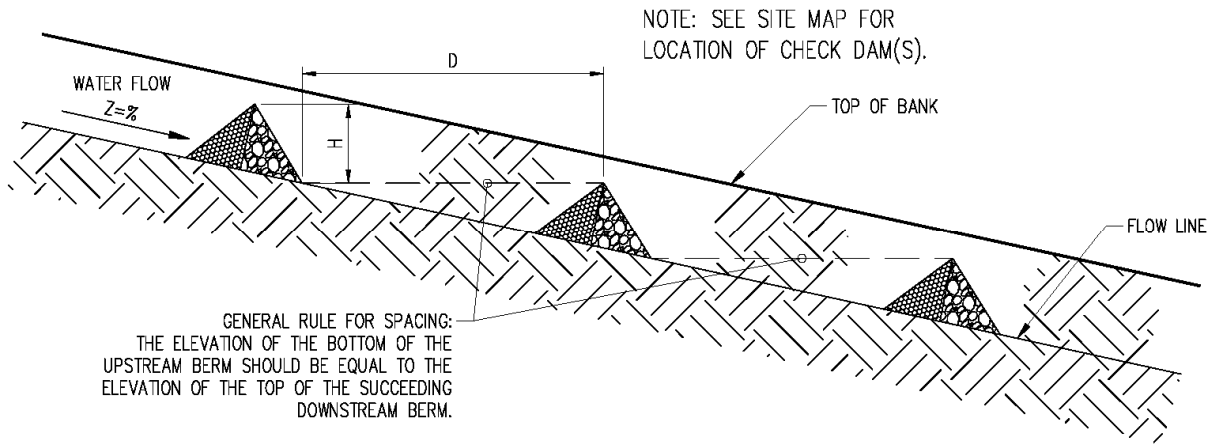
- Is the correct rock type used?
- Is channel erosion occurring between check dams?
- Is the spacing correct?
- Will water flow around the rock?
- Is there a depression in the check dam for overflow?
- Will water flow over the rock?

### Maintenance

- Repair of eroded ground
- Removal of sediment
- Repair or replacement of structure

### Removal/Disposal/Reuse/Recycle

- Must be removed after construction activities are completed
- Rock may be reused for other applications



## GRAVEL CHECK DAM

11/01/07

NTS

WAL-MART STD DETAIL

6

## **BMP: Silt Dike Check Dam**

### Application/Use

- To act as temporary containment structure to capture sediment and reduce runoff velocities in drainage channels

### Type

- Temporary structural control

### Installation

- To be installed in drainage ditch
- To be installed on Turf Reinforcement Mat (TRM)
- To be installed on smooth surfaces
- To be installed while construction activities are occurring

### Inspection

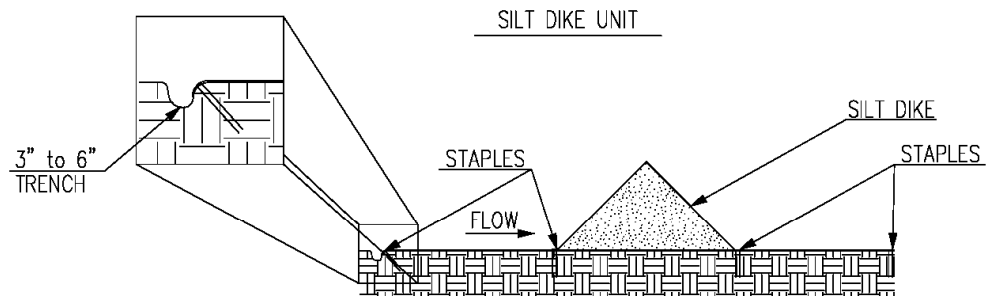
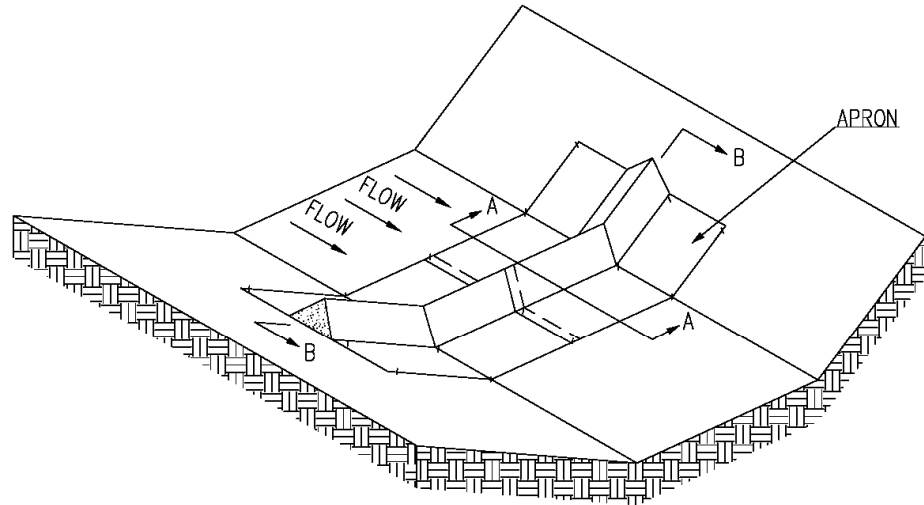
- Is the structure installed per specifications?
- Is channel erosion occurring between check dams?
- Is the spacing correct?
- Is there a depression in the check dam for overflow?
- Does water flows between the structures?
- Will water flow around the structure?
- Does water flow under the structure?
- Is it properly anchored and/or stapled?

### Maintenance

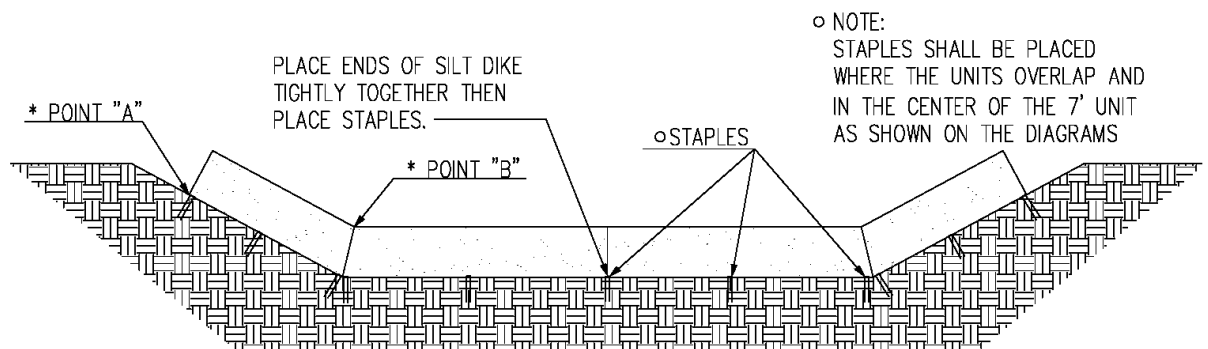
- Repair and replacement structures
- Removal of sediment
- Repair of eroded ground

### Removal/Disposal/Reuse/Recycle

- Removed after construction activities are completed
- Structures may be reused/recycled



SECTION A-A



NOTE:  
\*POINT "A" MUST BE HIGHER THAN POINT "B" TO  
ENSURE THAT WATER FLOWS OVER THE DIKE AND  
NOT AROUND THE ENDS.

SECTION B-B

## SILT DIKE CHECK DAM

01/11/2013

NTS

PACLAND DETAIL

5

## **BMP: Diversion Ditch/Berm**

### Application/Use

- To divert sheet flow from one location to another location via a channel and an earth dike

### Type

- Temporary or permanent erosion control

### Installation

- To be constructed along and/or diagonal to contour
- To be constructed while construction activities are occurring

### Inspection

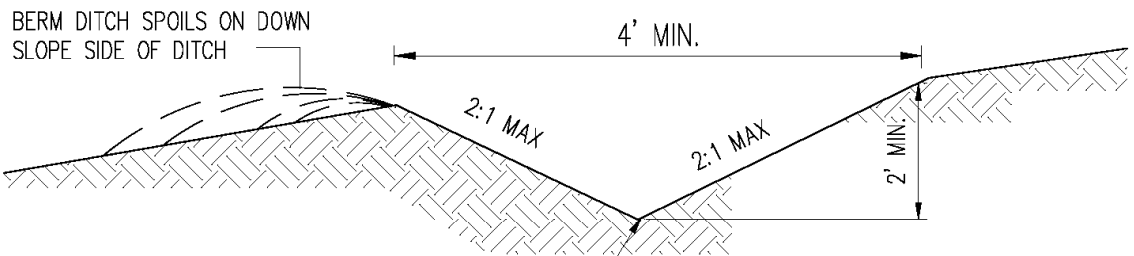
- Is the channel and earth dike stabilized?
- Is channel/dike erosion occurring?
- Is channel constructed to drain?
- Will runoff overtop the earth dike?

### Maintenance

- Repair and reconstruct channel and/or earth dike
- Removal of sediment
- Repair of eroded channel/dike

### Removal/Disposal/Reuse/Recycle

- Bulldozed/flatten after construction activities are completed
- Channel and dike may remain as permanent runoff control measure as specified per construction plans



SLOPE DITCH TO STORMWATER MANAGEMENT AREA (TYP). PLACE CHECK DAM FILTER BARRIER AT REQUIRED SPACING (SEE DETAIL 5 AND 6, SHEET E-2.0) 1% MIN. SLOPE TO DRAIN.

## DIVERSION DITCH/BERM

04/11/2012

NTS

PACLAND STD DETAIL

3

## **BMP: Silt Dike (on Existing Pavement)**

### Application/Use

- To act as a temporary barrier and containment structure while construction activities occur

### Type

- Temporary structural control

### Installation

- To be installed directly on pavement surface
- To be installed before construction activities begin and/or while construction activities are occurring

### Inspection

- Is the structure installed per specifications?
- Does water flows between the structures?
- Will water flow around the structure?
- Does water flow under the structure?
- Is it properly glued down?

### Maintenance

- Repair and replacement of structures
- Removal of sediment

### Removal/Disposal/Reuse/Recycle

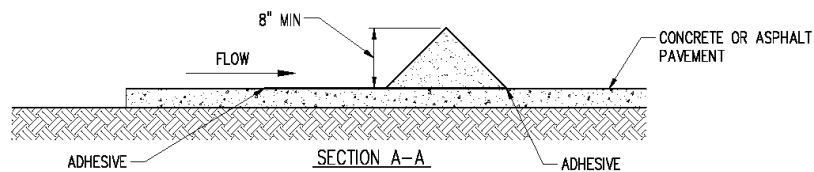
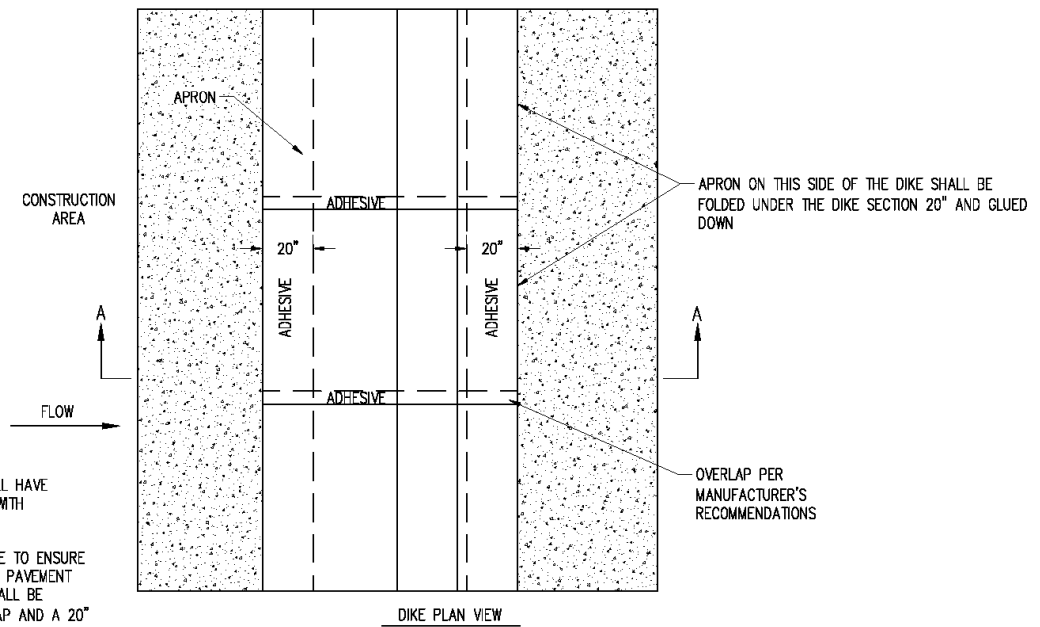
- Removed after construction activities are completed
- Structures may be reused/recycled



NOTES:

1. INSTALLED SILT DIKE UNIT SHALL HAVE CONTINUOUS AND FIRM CONTACT WITH PAVEMENT.

2. ADHESIVES SHALL BE ADEQUATE TO ENSURE SILT DIKE WILL NOT DETACH FROM PAVEMENT WHEN DRIVEN OVER. ADHESIVE SHALL BE PLACED WHERE THE UNITS OVERLAP AND A 20" STRIP ALONG BOTH EDGES.



## SILT DIKE (ON PAVEMENT)

04/11/2012

NTS

PACLAND MODIFIED WAL-MART STD DETAIL

5

## **BMP: Truck Well Drain Protection**

### Application/Use

- Filter out sediment before runoff enters the truck well side drain

### Installation

- To be installed as shown on site map
- Bags must have a minimum 6 inches of overlap

### Inspection

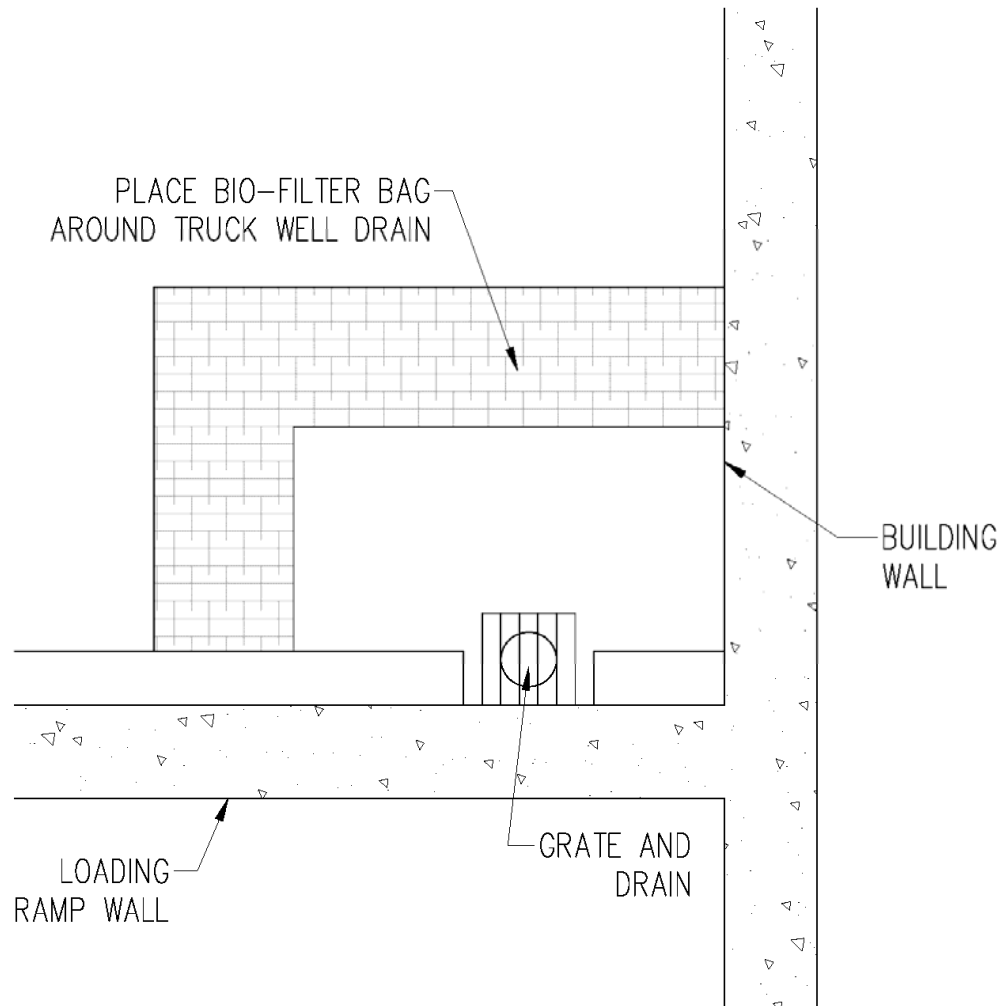
- Are the bags secured to prevent being washed away?
- Do the bags have a minimum 6 inches of overlap?

### Maintenance

- Replacement of biobags whenever they become plugged with sediments or damaged.
- Removal of sediment when 1/3 height of bag has accumulated.

### Removal/Disposal/Reuse/Recycle

- Remove or dispose of bags after construction activities are completed.



NOTES:

1. BIO-FILTER BAG DIMENSIONS ARE 30" X 12" X 9"
2. BIO-FILTER BAGS MUST OVERLAP 6" MIN.

## TRUCK WELL DRAIN PROTECTION

04/11/2012

NTS

PACLAND STD DETAIL

4

## **BMP: Sediment Trap with Rip Rap Lined Overflow Bypass**

### Application/Use

- Basin contains runoff waters and allows deposition of sediment from contributory areas of less than 5-ac

### Type

- Temporary structural control

### Installation

- To be installed on construction site
- To be installed at low point of drainage basin(s)
- To be installed before site grading and/or while construction activities are occurring

### Inspection

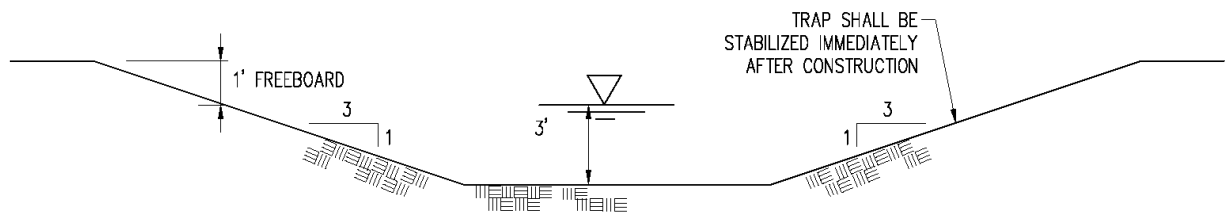
- Are the dimensions of the basin correct per plans and specifications?
- Does a low area in overflow bypass exist?
- Is the rip rap installed correctly on the overflow bypass?
- How much sediment is accumulated in the basin?
- Are slopes of basin and/or embankment stabilized?
- Is area immediately downstream of the rip rap overflow bypass stabilized?

### Maintenance

- Removal of sediment

### Removal/Disposal/Reuse/Recycle

- Sediment basin may remain as permanent structure for runoff control as specified per construction plans
- Rip Rap may be reused



## TEMPORARY SEDIMENT TRAP SECTION

04/11/2012

NTS

PACLAND DETAIL

6

## **BMP: Traffic Barrier**

### Application/Use

- Barrier shall block all non-stabilized entrances so sediment may not be tracked in or out

### Type

- Temporary structural control

### Installation

- To be installed on construction site
- To be installed at non-stabilized site entrances
- To be as entrances are completed

### Inspection

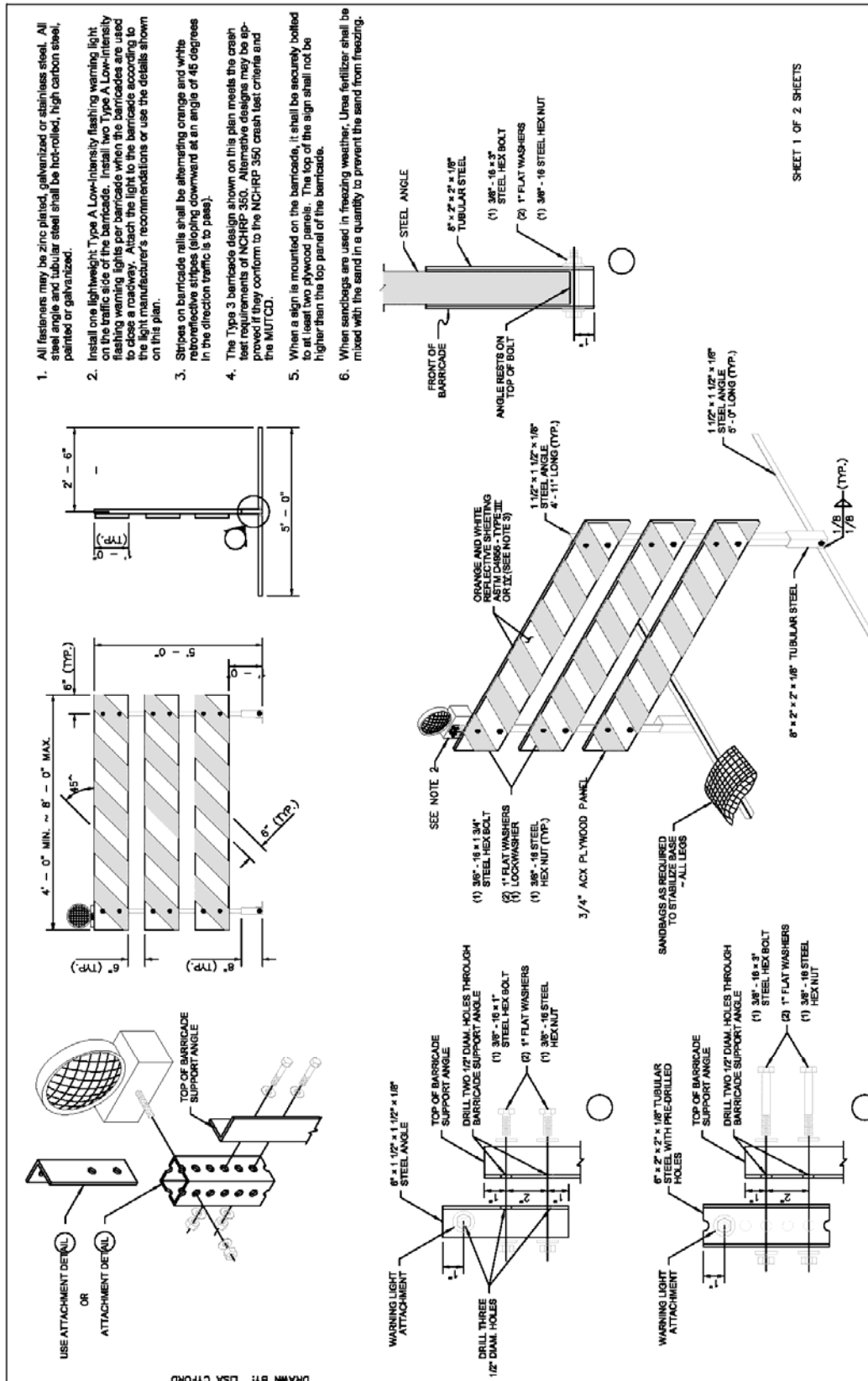
- Is the barrier sufficiently blocking the entrance?

### Maintenance

- None

### Removal/Disposal/Reuse/Recycle

- Barriers may be re-used



# WSDOT TYPE 3 BARRICADE

NIS

WSDOT STD DETAIL

## **BMP: Riprap Outfall Protection**

### Application/Use

- To protect drainage path against erosion due to flowing water, through energy dissipation

### Type

- Temporary structural control

### Installation

- To be constructed at concentrated discharge areas which require flow energy dissipation to prevent and/or alleviate erosion

### Inspection

- Is the correct stone used?
- Are pad dimensions correct?

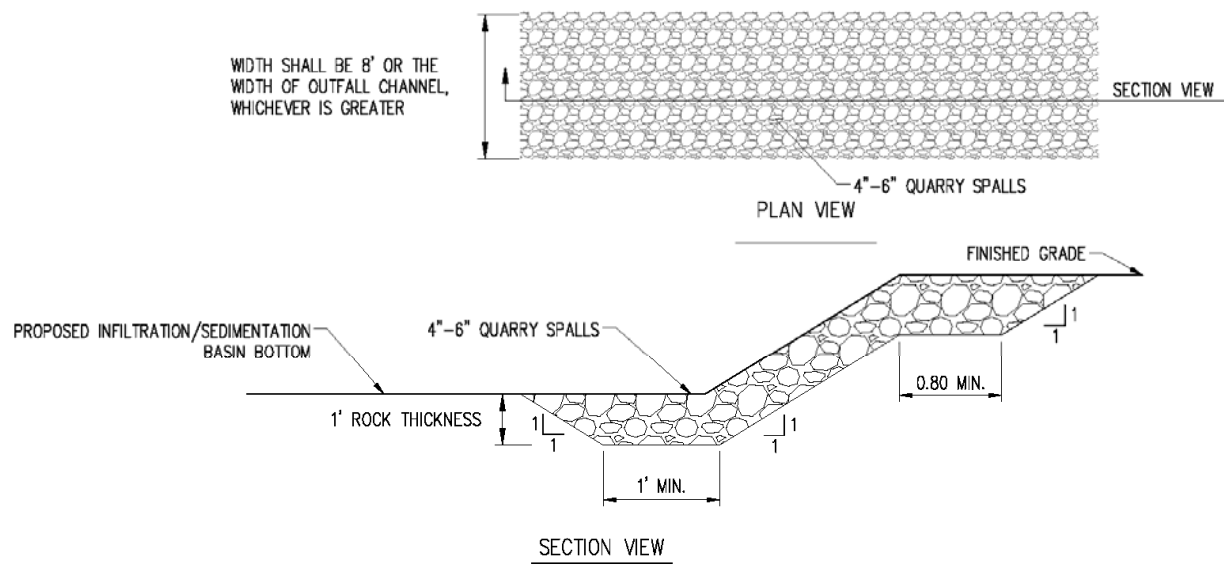
### Maintenance

- Removal of sediment collected on the rip-rap pad

### Removal/Disposal/Reuse/Recycle

- Remove or dispose of temporary rip-rap pad after construction activities are completed
- Stones may be reused onsite for other applications





## RIPRAP OUTFALL

04/11/2012

NTS

PACLAND DETAIL

2

## **BMP: FLEXSTORM PC+ Filter Bag**

### Application/Use

- To filter out sediment and oil contaminants in grated inlet

### Type

- Temporary structural control

### Installation

- To be installed inside grated inlets
- To be installed before construction activities begin or while construction activities are occurring
- To be installed per manufacture specification

### Inspection

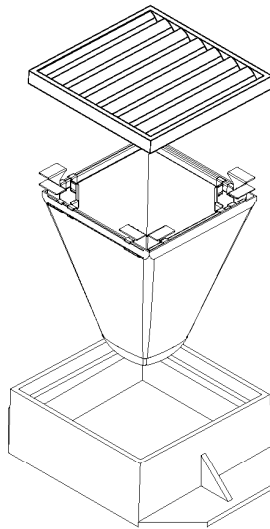
- Is the filter sack secured to prevent from dropping into the inlet?
- Is the correct geotextile sack used?
- Is the geotextile sack torn?
- Is the oil adsorbent insert at capacity?

### Maintenance

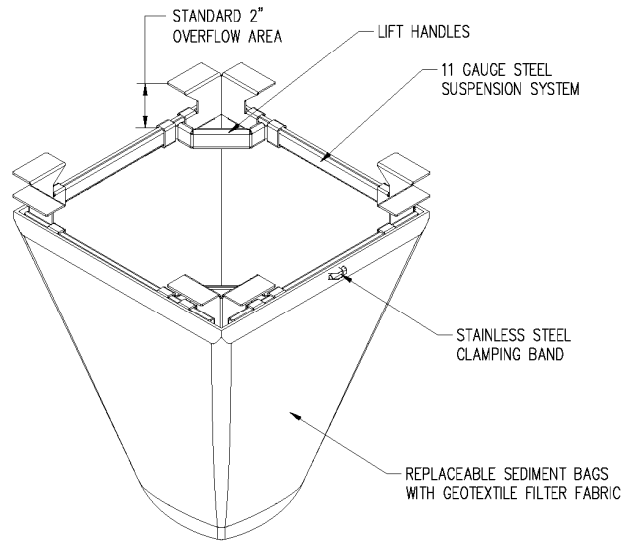
- Removal of sediment
- Removal and replacement of oil adsorbent insert
- Repair or replacement of filter sacks

### Removal/Disposal/Reuse/Recycle

- Must be removed after construction activities are completed



- INSTALLATION:
1. REMOVE GRATE
  2. DROP FLEXSTORM INLET FILTER ONTO LOAD BEARING LIP OF CASTING OR CONCRETE STRUCTURE
  3. REPLACE GRATE
  4. SIZING AND INSTALLATION SHALL BE DONE BY CONTRACTOR PER MANUFACTURER SPECIFICATIONS



## FLEXSTORM PC+ FILTER BAG

01/09/2013

NTS

PACLAND DETAIL

7

## **BMP: Oil Sorbent Sock**

### Application/Use

- To capture oil contaminants from sheet flow

### Type

- Temporary structural control

### Installation

- To be installed as perimeter control for sheet flow in coordination with silt fence
- To be installed adjacent to toe of slopes
- To protect water bodies
- To be installed before construction activities begin and while construction activities are occurring
- To be installed per manufacturer specification

### Inspection

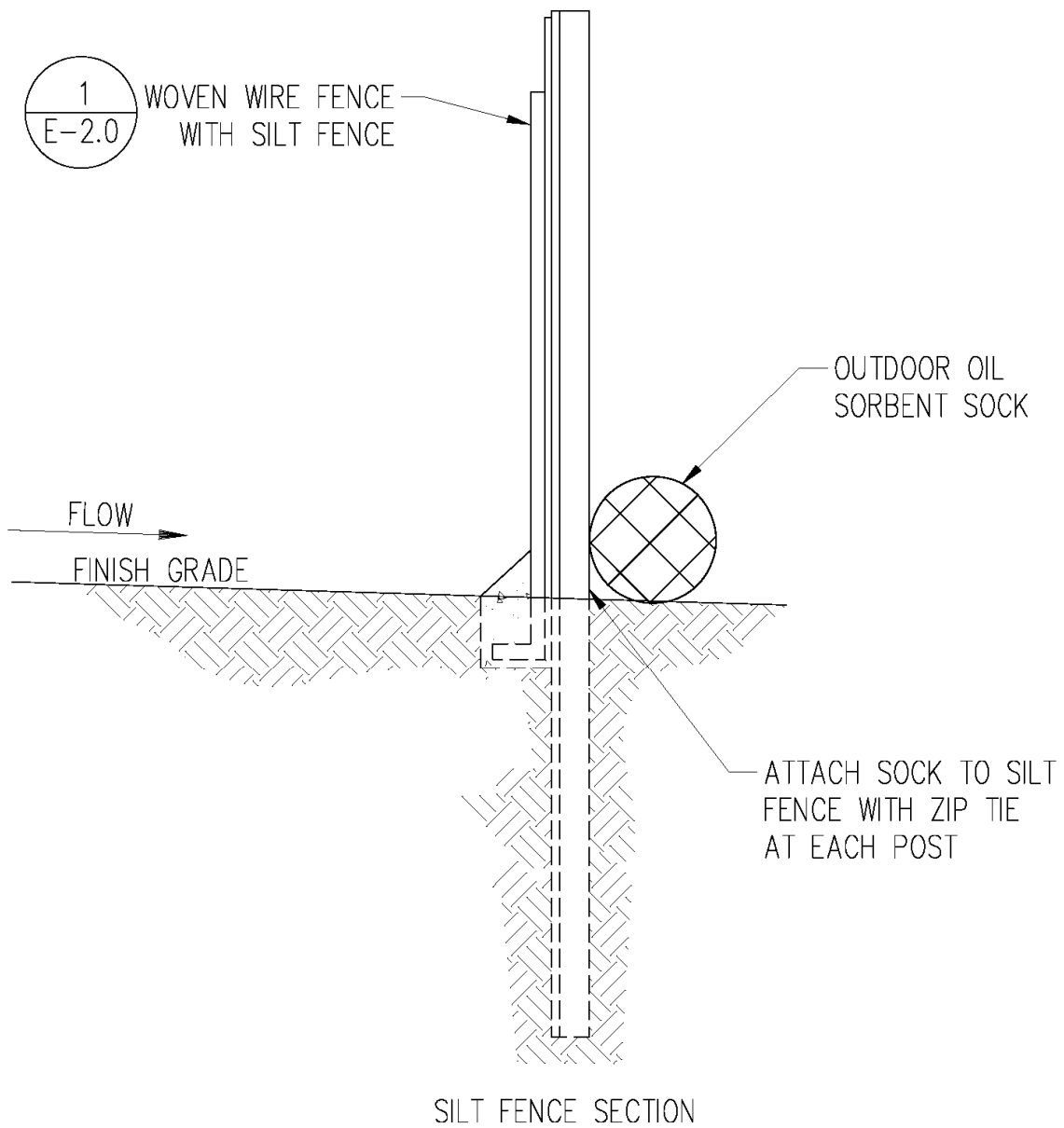
- Is oil sorbent sock correctly tied to silt fence?
- Has water or soil “flattened” the structure?
- Is the sock torn?
- Has the sock reached capacity per manufacturer specification?

### Maintenance

- Repair and replacement of material

### Removal/Disposal/Reuse/Recycle

- Must be removed after construction activities are completed



## OIL SORBENT SOCK

01/09/2013

NTS

PACLAND DETAIL

3

## **BMP: Mobile Wheel Wash**

### Application/Use

- To prevent sediment track out from construction vehicles by washing sediment and capturing it in a closed loop system.

### Type

- Temporary structural control

### Installation

- To be installed directly on pavement surface
- To be installed before construction activities begin and/or while construction activities are occurring

### Inspection

- Is the structure installed per specifications?
- Is structure capturing all sediment?
- Does water flow from the structure?

### Maintenance

- Repair and replacement of structures
- Removal of sediment and wheel wash water

### Removal/Disposal/Reuse/Recycle

- Removed after construction activities are completed



## APPENDIX N

### MATERIAL CERTIFICATION STATEMENT

The General Contractor shall coordinate completion of the following forms, as applicable, found in this Appendix:

- 1) Limits of Disturbance Statement,
- 2) Soil / Material Export Statement,
- 3) Clean Soil / Material Import (Acceptance) Statement,
- 4) Material Storage, Import or Export Manifest, and
- 5) Material Storage, Import or Export Agreement

Submit Material Storage, Import or Export Statement(s), Manifest(s), and Agreement (s)\* to the SWCT, prior to initiating import and/or export activities, for all occurrences where soil, dirt, rock, fill, or other materials are:

- 1) Imported from another site to the Wal-Mart construction site, or
- 2) Exported from the Wal-Mart construction site for placement in areas off of the Wal-Mart construction site.

Completed soil material Statement(s), Manifest(s), and Agreement (s) must be placed behind Tab 21 in the SWPPP Binder.

The General Contractor shall also complete and keep current the Import/Export Material information box on the project Site Maps.

**\*Agreements are only required for import from or export to non-industrial NPDES permitted facilities. If fill or export comes from or goes to an industrial permitted facility (mines, sand and gravel pits, landfills, etc...) this should be indicated as such on the Manifest.**



## Limits of Disturbance Statement

**Wal-Mart Project #: 2037-06**

**Location (City & State): Aberdeen, WA**

**General Contractor (firm):**

**GC Storm Water Contact (name & phone #):**

I have reviewed the SWPPP and associated plan maps, and I am aware of the locations of the limits of disturbance of the Wal-Mart project. I certify that:

1. No work will be performed outside of the limits of disturbance (this includes but is not limited to creation of new routes of access outside the limits of disturbance) and
2. No materials, soil, equipment, trailers, or any item associated with or to be used at the Wal-Mart Project will be stored on a temporary or permanent basis anywhere outside the limits of disturbance of the Wal-Mart project without prior approval of the Wal-Mart Storm Water Compliance Team and verification of proper permitting and approval for use.

\_\_\_\_\_  
Contractor Superintendent

\_\_\_\_\_  
Date

**CONTACT THE WAL-MART STORMWATER DIVISION HOTLINE IF YOU BECOME  
AWARE OF ANY WAL-MART PROJECT RELATED STORAGE OR WORK OUTSIDE THE  
PERMITTED LIMITS OF DISTURBANCE**

**Soil / Material Export Statement\***

**Wal-Mart Project #: 2037-06**

**Location (City & State): Aberdeen, WA**

**General Contractor (firm):**

**GC Storm Water Contact (name & phone #):**

**FORM INSTRUCTIONS:**

**1. COMPLETE FORM BY SIGNING ONE OF THE CERTIFICATIONS: A, B, OR C.**

**2. IF SIGNING CERTIFICATION “C”, THEN ALSO PROVIDE A MATERIAL STORAGE, IMPORT, OR EXPORT MANIFEST AND A MATERIAL STORAGE, IMPORT OR EXPORT AGREEMENT PRIOR TO INITIATION OF THE EXPORT ACTIVITY.**

**A.** I certify that soil (topsoil, subsurface soils, etc.) or material will not be exported from the Wal-Mart limits of disturbance.

\_\_\_\_\_  
Contractor Superintendent

\_\_\_\_\_  
Date

**OR**

**B.** At this time, I am unsure whether soil (topsoil, subsurface soils, etc.) or material may be exported from the Wal-Mart limits of disturbance. I certify that if soil or material will be exported, I will (i) submit a revised Soil or Material Export Statement to Wal-Mart; and (ii) will provide the documents listed in certification “C” below.

\_\_\_\_\_  
Contractor Superintendent

\_\_\_\_\_  
Date

**OR**

**C.** I certify that soil (topsoil, subsurface soils, etc.) or material will be exported from the Wal-Mart limits of disturbance. For each location and company that will accept soil or material, I am providing a **MATERIAL STORAGE, IMPORT, OR EXPORT MANIFEST AND A MATERIAL STORAGE, IMPORT, OR EXPORT AGREEMENT**, if applicable, signed by an authorized representative of the company or owner of the property that accepts the soil or material.

\_\_\_\_\_  
Contractor Superintendent

\_\_\_\_\_  
Date

**IMMEDIATELY UPDATE and FAX THIS FORM TO THE WMSWCT AT 479-204-0934 AT LEAST 48-HOURS PRIOR TO TRANSPORTING SOIL FROM THE PROJECT SITE.**

**\*It should be noted that some jurisdictions classify processing (segregating, crushing for use, or classifying) of material prior to export as a mining operation. The General Contractor should verify the requirements of their jurisdiction if processing potential export materials to determine if additional regulations may apply.**

**Clean Soil / Material Import (Acceptance) Statement**

**Wal-Mart Project #: 2037-06**

**Location (City & State): Aberdeen, WA**

**General Contractor (firm):**

**GC Storm Water Contact (name & phone #):**

**FORM INSTRUCTIONS:**

**1. COMPLETE FORM BY SIGNING ONE OF THE CERTIFICATIONS: A, B, OR C.**

**2. IF SIGNING CERTIFICATION “C”, THEN ALSO PROVIDE A MATERIAL STORAGE, IMPORT, OR EXPORT MANIFEST AND A MATERIAL STORAGE, IMPORT, OR EXPORT AGREEMENT PRIOR TO INITIATION OF THE IMPORT ACTIVITY.**

**A.** I certify that no soil, fill (topsoil, subsurface soils, etc.) or material from outside the Wal-Mart limits of disturbance will be accepted at or the Wal-Mart project.

\_\_\_\_\_  
Contractor Superintendent

\_\_\_\_\_  
Date

**OR**

**B.** At this time, I am unsure whether any soil, fill (topsoil, subsurface soils, etc.) or material from outside the Wal-Mart limits of disturbance will be accepted at or on the Wal-Mart project. I certify that if soil, fill or material from outside the Wal-Mart limits of disturbance will be accepted, I will (i) submit a revised Clean Soil Import (Acceptance) Statement to Wal-Mart; and (ii) provide a Material Storage, Import, or Export Manifest and a Material Storage, Import, or Export Agreement (if applicable) form for each company and or location that provides soil, fill or material from outside the Wal-Mart limits of disturbance.

\_\_\_\_\_  
Contractor Superintendent

\_\_\_\_\_  
Date

**OR**

**C.** I certify that clean soil, fill (topsoil, subsurface soils, etc.) or material from outside the Wal-Mart limits of disturbance will be accepted at or on the Wal-Mart project. For each company and or location that provides soil, fill or material from outside the Wal-Mart limits of disturbance, I am providing a **MATERIAL STORAGE, IMPORT, OR EXPORT MANIFEST AND A MATERIAL STORAGE, IMPORT, OR EXPORT AGREEMENT** (if applicable) signed by an authorized representative of the company or owner of the property that provides the soil, fill or material.

\_\_\_\_\_  
Contractor Superintendent

\_\_\_\_\_  
Date

**IMMEDIATELY UPDATE and FAX THIS FORM TO THE WMSWCT AT 479-204-0934 AT LEAST 48-HOURS PRIOR TO HAULING SOIL, FILL OR MATERIAL TO THE PROJECT SITE.**

02370-131

**Material Storage, Import, or Export MANIFEST**  
**To or From Sites Outside of Wal-Mart's Permitted Limits of Disturbance**  
**Attachment 1 to Appendix N**

Wal-Mart Project #: 2037-06

DATE: \_\_\_\_\_

Location (City and State): Aberdeen, WA

General Contractor (firm):

Form Completed By (name, title and phone #):

	MATERIAL STORAGE, IMPORT, OR EXPORT AREA INFORMATION
NAME OF FACILITY MATERIAL IS BEING TRANSFERRED TO OR FROM	
ADDRESS	
FACILITY CONTACT NAME AND TITLE MAILING ADDRESS PHONE	
GENERAL DESCRIPTION OF STORAGE, IMPORT, OR EXPORT (E.G., TOP SOIL / CLAY/ SAND / ROCK)	

1) WHO WILL RESPONSIBLE FOR TRANSPORTING THE MATERIAL? PROVIDE CONTACT INFORMATION

\_\_\_\_\_

2) DATES OF STORAGE, IMPORT, OR EXPORT

START DATE \_\_\_\_\_

END DATE \_\_\_\_\_

3) MATERIAL *PROVIDED TO SITE* - TOTAL QUANTITY ESTIMATE (CU-YD) : \_\_\_\_\_

OR

MATERIAL *ACCEPTED FROM SITE* - TOTAL QUANTITY ESTIMATE (CU-YD): \_\_\_\_\_

4) THE STORAGE, IMPORT, OR EXPORT SITE IS:

ACTIVE CONSTRUCTION SITE? ☐

INDUSTRIAL FACILITY (E.G., MINING)? ☐

UNDER ACTIVE AGRICULTURAL PRODUCTION? ☐

OTHER (DESCRIBE): \_\_\_\_\_

5) AREA OF THE STORAGE, IMPORT, OR EXPORT SITE? (AC)

TOTAL \_\_\_\_\_

DISTURBED \_\_\_\_\_

**Material Storage, Import, or Export AGREEMENT**  
**To or From Sites Outside of Wal-Mart's Permitted Limits of Disturbance**  
**Attachment 2 to Appendix N**

The General Contractor shall coordinate completion of the Material Storage, Import or Export Agreement found in this Appendix and submit the Agreement to the SWCT for all occurrences where soil, dirt, rock, fill, or other materials are:

- 1) **Imported** for placement on the Wal-Mart construction site (with the exception of material obtained from an industrial NPDES permitted facility); or
- 2) **Exported** from the Wal-Mart construction site for placement on areas off of the Wal-Mart construction site (with the exception of material taken to an industrial NPDES permitted facility)

The General Contractor shall also complete and keep current the Import / Export Material information box on the project Site Maps.

**MATERIAL STORAGE, IMPORT, OR EXPORT AGREEMENT**  
**("AGREEMENT")**

\_\_\_\_\_, which is the party, entity, or individual that possesses ownership over the real property (as these terms are set forth, defined, or used under applicable laws) (the "Owner") located at \_\_\_\_\_ (the "Off-Site Area"), and \_\_\_\_\_ ("Contractor"), enter into this Material Storage, Import, or Export Agreement ("Agreement"). In consideration of the mutual covenants set forth in this Agreement, the parties hereto agree as follows:

1. Definitions

- a. Storm Water Requirements - All federal, state, or local laws, regulations, ordinances, permits, or other authorizations, approvals or other requirements relating to storm water discharges or the control of erosion or sediment discharges from construction projects, including but not limited to, the Clean Water Act, 33 U.S.C. 1251 *et seq.* and the July, 2003 NPDES General Permit for Storm Water Discharges Associated with Construction Activities (the "EPA General Permit") and all other applicable federal, state, and local laws (collectively the "Storm Water Requirements").
- b. Material - Rock, soil, or other construction materials obtained from certain real property owned by [Wal-Mart] as part of an earth disturbing activity.
- c. Owner - For a corporation a responsible corporate officer. A responsible corporate officer means: (1) a president, secretary, treasurer, or vice-president of the corporation in charge of a principle business function, or any other person who performs similar policy or decision making functions for the corporation; or (2) the manager of one or more operating facilities provided the manager is authorized to make management decisions which govern the operation of the facility including having the explicit or implicit duty of making major capital investments recommendations, and initiating and directing other comprehensive measures to assure long term environmental compliance with environmental laws and regulations. For a partnership or sole proprietorship: by a general partner or the proprietor respectively. For a municipality, State, Federal or other public facility by either a principle executive officer or ranking elected official.

- 2. Contractor covenants and agrees to [deliver / export] the Material to Owner, and the Owner agrees to accept the Material outlined in Attachment 1, all subject to the terms and conditions of this Agreement. Said delivery of Material shall be without representation or warranty of any kind whatsoever, including without limitation representation as to composition and/or acceptability for any particular use or purpose.
- 3. The Owner covenants and agrees through this Agreement and by accepting the Material to comply with all applicable Storm Water Requirements and the Owner further acknowledges and agrees that, from and after delivery of the Material, neither Contractor, Wal-Mart nor any other person other than the Owner shall be responsible for such compliance with respect to the Material.
- 4. To the greatest extent permitted by applicable law, the Owner hereby releases, now and forever, Contractor, Wal-Mart and the representatives, agents, consultants, contractors and subcontractors of either of them, including their respective employees, agents, officers, directors, members, and

shareholders (collectively, "Released Parties"), from any and all known and unknown claims, suits, judgments, orders, costs, expenses, and damages of any kind or nature (including any attorneys, paralegal, and consultant fees and costs), whether fixed or contingent, now existing or hereafter arising, and based on any and every theory of recovery, that the Owner may have, suffer, incur, or accrue, now or in the future, arising from, relating to, or in connection with, directly or indirectly, (i) the Owner's acceptance, receipt, use, handling, and/or management of the Material or (ii) any third party's subsequent acceptance, receipt, use, handling, and/or management of the Material. Owner hereby further irrevocably waives, and covenants and agrees to refrain from, directly or indirectly, asserting, any claim or demand, or commencing, instituting or causing to be commenced, any proceeding of any kind against any Released Party, based upon any matter purported to be released hereby. Owner acknowledges that it or its attorneys or advisors may hereafter discover facts in addition to or different from those which they now know or believe to be true with respect to the subject matter of this Agreement that, if known, would materially affect their decision to enter into this Agreement. Nevertheless, it is the intention of Owner to settle and release the Released Parties as to all claims released hereby notwithstanding the discovery of the existence of any additional or different facts.

5. To the greatest extent permitted by applicable law, the Owner shall indemnify and hold harmless the Released Parties, including their respective employees, agents, officers, directors, members, and shareholders, from and against any and all claims, suits, judgments, orders, costs, expenses, damages of any kind or nature, remediation and corrective action costs, and penalties (including any attorneys, paralegal, and consultant fees and costs) that any Released Party may have, suffer, or incur, now or in the future, arising from, relating to, or in connection with, directly or indirectly, (i) the Owner's acceptance, receipt, use, handling, and/or management of the Material or (ii) any third party's subsequent acceptance, receipt, use, handling, and/or management of the Material. Owner shall promptly and fully comply with its indemnity obligations hereunder upon receipt of notice thereof from any Released Party. Wal-Mart shall be entitled to control and direct the defense of, and to accept or reject any offer to compromise or settle, any and all such matters subject to indemnity hereunder, with counsel satisfactory to Wal-Mart in its discretion. Owner shall cooperate, at Owner's expense, with Wal-Mart and its counsel in all respects in connection with such defense. Owner's indemnity obligations hereunder shall survive the acceptance, receipt, use, handling and management of the Material by Owner or any third party until all such matters covered by this indemnity are fully and finally barred by applicable law.
6. In accepting and receiving the Material, the Owner acknowledges exclusive control over the Material, and accepts all responsibilities, obligations, and duties in connection with such Material and with such ownership and control, including obligations arising from all Storm Water Requirements. The Released Parties shall have no ownership or control and shall have no responsibility or obligation whatsoever relating to or in connection with any such Material covered by this Agreement following the Owner's acceptance and receipt of any such Material.
7. To the extent that any third party (other than the Owner) may accept, receive, use, handle, and/or manage any of the Material, now or in the future, the Owner shall obtain from such third party a written Agreement in favor of the Released Parties, substantially in the same form as this Agreement, in which such third party agrees to comply with the terms and conditions hereof and makes the agreements, covenants, waivers, and releases set forth herein in favor of the Released Parties. The Released Parties shall be named third party beneficiaries of such written Agreement.
8. This Agreement shall be governed by the laws of the state in which the Material is located, without reference to the conflicts of law provisions thereof. This Agreement shall supersede any

other writing, contract, or agreement which specifies the timing, amount, or other specifications of delivery of Material unless any changes are specifically outlined in this Agreement. This Agreement may be modified only by a writing signed by each of the parties. Owner specifically acknowledges and agrees that the Released Parties are intended third-party beneficiaries of the provisions of this Agreement and that in the event of any breach by Owner of the provisions of this Agreement, Wal-Mart and the other Released Parties shall each have all rights and remedies available hereunder, at law and in equity. In the event of any dispute concerning the terms or enforcement of this Agreement, the prevailing party shall be entitled to recover costs and attorney's fees.

9. The signatories below have the authority to execute this Agreement and to bind their respective parties to this Agreement. This Agreement may be executed in any number of counterparts, each of which when executed and delivered shall be an original, but all of which together shall constitute one and the same instrument. Executed copies hereof may be delivered by telecopier, fax or electronically and shall be deemed originals binding upon the parties hereto.

**OWNER**

**BY:** \_\_\_\_\_

Name: \_\_\_\_\_

Title: \_\_\_\_\_

Date: \_\_\_\_\_

**CONTRACTOR**

**BY:** \_\_\_\_\_

Name: \_\_\_\_\_

Title: \_\_\_\_\_

(Must be an Officer of the Company)

Date: \_\_\_\_\_



## **APPENDIX O**

### **SITE-SPECIFIC PERMITS, DESIGN CALCULATIONS AND RELATED INFORMATION including NON-NPDES STORMWATER PERMITS, 404 PERMITS, ENDANGERED SPECIES INFORMATION, ENVIRONMENTAL SITE ASSESSMENTS, etc.**

GC shall save State &/or local SWPPP-related permits & correspondence behind SWPPP Binder Tab 20

Appendix O contents:

- City of Aberdeen Shoreline Permit/JARPA
- Army Corps of Engineers Letter of determination of the absence of wetlands
- Terracon Phase I ESA excerpts – Historic Resources/Endangered Animals
- Western Washington Hydrology Manual Continuous Model Output
- Sediment Trap Calculation Data
- Diversion Ditch Calculation Data

City of  
Aberdeen



Community Development Department  
200 East Market Street • Aberdeen, WA 98520-5242  
PHONE (360) 537-3238 • EMAIL [lscott@aberdeeeninfo.com](mailto:lscott@aberdeeeninfo.com)  
FAX (360) 537-3350 • TDD (360) 533-6668

## Shoreline Management Act Remand Permit Date Sheet and Transmittal Letter

**From:** Community Development Department  
City of Aberdeen  
200 East Market Street  
Aberdeen, WA 98520

**To:** DOE Shorelands Assistance Program  
State of Washington  
P.O. Box 47775  
Olympia, WA 98504-7775

**Date of Transmittal:** January 13, 2012

**Date of Receipt:**

**Type of Permit:** Substantial Development ; Conditional Use ☐ ; Variance ☐ ; Revision ☐ ; Other ☐

**Local Government Decision:** Approval ; Conditional Approval ☐ ; Denial ☐.

**Applicant Information:**

**Applicant's Representative:**

**Name:** WalMart Real Estate  
Business Trust  
**Address:** 2001 SE 10<sup>th</sup> Street  
Bentonville, AR 72712-6489

**Name:** Jared VerHey, PACLAND  
**Address:** 606 Columbia Street NW, Suite 106  
Olympia, WA 98501

**Phone(s):**

**Phone(s):** (360) 786-9500

**Is the applicant the property owner?** No.

**Location of the Property:** This project is located at 909 East Wishkah Street. It is in the NE ¼ of Section 9, Township 17N, Range 9W, in Aberdeen, Grays Harbor County, Washington and bears the parcel numbers: 022901300002, 0101010500900, 010101900401, 010102000100, 010102000901, 010102101200, 010102100100 & 010101400200;

**Waterbody Name:** Chehalis River

**Shoreline of Statewide Significance:** Yes.

**Environmental Designation:** Urban Mixed

**Description of the Project:** The expansion of an existing retail store by approximately 36,000 sq. ft.

**Notice of Revised Application Date:** October 10, 2011 **Final Decision Date:** January 13, 2012

**By:** Lisa Scott, Community Development Director

**Phone:** (360) 537-3238



Printed on Recycled Paper

[www.aberdeeeninfo.com](http://www.aberdeeeninfo.com)



**REVISED  
SHORELINE  
PERMIT  
NO. 206R**

City of  
Aberdeen



Community Development Department  
200 East Market Street • Aberdeen, WA 98520-5242  
PHONE (360) 537-3238 • EMAIL lscott@aberddeeninfo.com  
FAX (360) 537-3350 • TDD (360) 533-6668

## SHORELINE MANAGEMENT ACT OF 1971

### REVISED PERMIT FOR SHORELINE SUBSTANTIAL DEVELOPMENT (per remand in SHB Case No. 11-005)

Application Number:	206R
Administering Agency:	City of Aberdeen
Date Received:	October 10, 2011
Date Approved:	January 13, 2012
Type of Action:	Shoreline Substantial Development

Pursuant to Aberdeen Municipal Code Chapter 16.20.180(3), Chapter 90.58 RCW, and the decision of the state Shorelines Hearings Board issued August 19, 2011, in SHB Case No. 11-005 ("the remand order"), Shoreline Substantial Development Permit No. 206 issued on January 17, 2011 (DOE SSDP No. 463) is revised and reissued as follows:

A Shoreline Substantial Development Permit is hereby granted to:

**Wal-Mart Real Estate Business Trust**  
**2001 SE 10<sup>th</sup> Street**  
**Bentonville, AR 72712-6489**

to undertake the following development:

**An addition of approximately 36,000 square feet of building area to an existing 121,053 square foot retail store;**

upon the following property:

**This project is located at 909 East Wishkah Street. It is in the Northeast ¼ of Section 9, Township 17N, Range 9W, in Aberdeen, Grays Harbor County, Washington and bears the parcel numbers: 022901300002, 0101010500900, 010101900401, 010102000100, 010102000901, 010102101200, 010102100100 and 010101400200;**

within the shorelines and associated wetlands of:

**The Chehalis River, a Shoreline of Statewide Significance.**

The following Shoreline Master Program provisions are applicable to this proposal: GHEMP Management Unit 17, Planning Area II, Chapter 16.20.070 Design Regulations, Chapter 16.20.080 Earth Changing regulations, Chapter 16.20.090 for Public Access, Chapter 16.20.100 Restoration, Chapter 16.20.110 Scenic Views and Vistas and Chapter 16.20.140 Urban Regulations. Additionally, Washington Administrative Code (WAC) Chapter 173-27-150 provides direction concerning the review criteria for substantial development permits.

### Findings and Conclusions

1. The Findings and Conclusions in SSDP No. 206, issued on January 17, 2011, are adopted by reference herein as though fully set forth, except as modified herein.
2. Finding and Conclusion No. 4 (compliance with design regulations in AMC 16.20.070) is modified to include the revisions submitted by applicant on October 11, 2011, relating to the screening and relocation of both the bale/pallet area and trash compactor along the northern side of the truck well to be further from the shoreline as shown in Preliminary Site Plan Exhibit (E-1) dated October 4, 2011. The new location for the proposed bale/pallet area and trash compactor is against the new portion of the building and in between the truck bay and the garbage facility which provides a screen for this structure away from the shoreline. The proposed location is more than 100 feet from the Compass Rose. The applicant has moved the pallet/bale storage area away from the shoreline and has eliminated the 90 foot wall that would separate this area from the walkway and Compass Rose. The applicant has complied with the remand order directing a redesign of these features.
3. Findings and Conclusions Nos. 6 and 15 (compliance with public access regulations in AMC 16.20.090) are modified to include the revisions submitted by applicant on October 11, 2011, relating to signage, dedications for public access to the Compass Rose and East Aberdeen Waterfront Walkway, and a dedication for the extension of the East Aberdeen Waterfront Walkway.

The applicant has proposed a dedicated easement to extend the existing East Aberdeen Waterfront Walkway. The City does not anticipate the same 46 foot wide easement as provided for the existing walkway in SSD #141. The existing segment of the walkway to the West of the project, which will remain in the ownership of the Port of Grays Harbor, together with its dock and the Compass Rose, make a 46 foot easement unnecessary and impracticable. Due to these existing property constraints in some areas the new easement for the extension of the walkway will be 40 feet in width and in others it will be approximately 10 feet. The proposed easement complies with the remand order.

The applicant has also proposed to dedicate an easement for public access and parking for members of the public wishing to utilize the Compass Rose and East Aberdeen Waterfront Walkway as referenced in the Access Exhibit (E-3) dated December 20, 2011. The traffic study submitted by the applicant demonstrates that the proposed dedicated nine spaces, properly signed, are more than enough for those members of the public wishing to park and utilize that portion of the walkway and Compass Rose. Along the entire East Aberdeen Waterfront Walkway there are over 1,000 parking spaces in public and private ownership (from the City of Aberdeen's Rotary Log Pavilion to the Guest House Inn & Suites). The City of Aberdeen has 72 public parking spaces along the Chehalis River at the Rotary Log Pavilion. These parking spaces are located along the East Aberdeen Waterfront Walkway and are the parking spaces intended for use by the

City of Aberdeen SSD #206R



users of the walkway. The proposed dedicated route and parking spaces comply with the remand order.


The City is not requiring the applicant to provide parking for Port of Grays Harbor tenants leasing the POGH dock area. The current POGH tenant, the Grays Harbor Historical Seaport Authority (the "Seaport"), only infrequently uses the leased property and has a sailing schedule posted which indicates that they are not planning to even be in the State until the middle of June at the earliest. The Seaport has no long term plan to use the area and is holding over on a month to month lease on a temporary basis pending acquisition and development of property on the South side of the Chehalis River. The area that is currently being used for event parking when the *Lady Washington* is in town is not a legally permitted site for public parking. It is dangerous for pedestrians that use the walkway during these events because vehicles illegally drive across and park on the walkway. The Seaport does not have a contractual right to use Port of Grays Harbor property as a parking area and the Port does not have a paved parking area that complies with city codes available to lease to the Seaport. The Seaport's historic use of Port property as an impromptu gathering area and parking lot is not an existing public access that the applicant should be required to maintain as a condition for undertaking the public access improvements it has proposed.

The applicant has also proposed signage at the three entrances from Highway 12 directing the public wishing to use the walkway and Compass Rose along the designated route to the dedicated parking areas. The proposed signage complies with the remand order.

4. Finding and Conclusion No. 8 (compliance with scenic views and vistas regulations in AMC 16.20.110) is modified to include the revisions relating to retention or enhancement of existing public amenities and the re-design of the proposed landscaping to combine visual access to the shoreline with appropriate screening of commercial areas.

The applicant has submitted Preliminary Landscape Plans (L-1 and L-2), dated October 5, 2011, detailing the proposed landscaping, along with a description of what types of plantings will be used. The applicant has taken into consideration the environment and is looking to use a mixture of plantings, including native grass and wetland seed mixes and other native plantings, which will enhance the area near the wetlands. The proposed planting strips are wider than required by the city code and provide for a good mix of trees and shrubs that will enhance the riverfront experience. The applicant is proposing grading cuts into the existing grassy knoll area partially intact and is proposing to create four additional knolls and other berms along the waterfront which will provide the public even more room to picnic and view the river. The proposed revisions to the landscape plans more than satisfy the provisions of the city code and the requirements of the remand order.

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 City of Aberdeen SSD #206R

Attempting to eliminate the impact of existing development and vehicles from the waterfront in this part of Aberdeen would be an exercise in futility. The City's waterfront walkway in the project area – a former industrial site – is surrounded by existing intensive development. It is also in full view of an interstate highway bridge and railroad trestle. The sound of truck, vehicle and train traffic as it approaches the site makes conversation difficult in the existing picnic areas in the project area. Designing inviting public areas along the shorelines in such fully developed and active commercial areas is a challenge and must take into account the already heavily developed nature of the area surrounding the property.

The City of Aberdeen designed Morrison Riverfront Park so that the public can enjoy the beauty of the Chehalis River not only from the park and walkway but from inside of their vehicles. Because the weather conditions along the river bank are normally windy, and frequently noisy, wet or cold, many visitors to the park enjoy it from the relative comfort, solitude, and security of their vehicles. They eat their lunch, watch the fishermen on the river and enjoy the view of the industrial activities on the other side. In the future the views may well include an old Weyerhaeuser mill redeveloped by the Seaport.

The applicant has applied these same design principals to its proposal. By allowing parking adjacent to shoreline it provides a place for the public to enjoy the scenic beauty of the shoreline, even in the wind and rain. This design also allows the public to park in a parking area that complies with all city codes for paving and lighting so visitors may feel safe going to and from the walkway, Compass Rose and the picnic areas.

The new design for the expansion area of the project eliminates many existing obstruction to public access to the shoreline and adds elements to increase visibility and access. Currently, as it sits today, the site is anything but inviting and open to the public. A fence and gate on the site give the appearance of a forbidden access area even when the gate or sections of the fence are open. The physical condition of the property makes it unsafe for vehicle or pedestrian access. There are numerous pot holes, uneven gravel surfaces, and broken concrete foundation in the area. A portion of the property, behind and under the abandoned warehouse foundation, is frequently used as a homeless encampment. The area is visually cut off from the general public. Visitors to the area that do not already know about the site would not look for it and would have difficulty finding it if they tried.

The applicant's access easement, signage and proposed landscaping plan guides people to the waterfront and vastly improves the visual quality of the waterfront in this location. The design takes into account the unique waterfront area and allows visitors to the area a wide open view of the walkway and river. The applicant has done a good job in creating a place along the shoreline that allows the public to enjoy the scenic views of the Chehalis and Wishkah Rivers.

5. The proposal as resubmitted is consistent with the City's decision criteria set forth in both Chapter 16.20 AMC and WAC 173-27-150, with the public interest being served should the permit be issued as conditioned below.


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#### **Permit Conditions**

Development pursuant to this proposal shall be undertaken subject to the following terms and conditions:

1. WalMart shall obtain all required permits from the Department of Ecology.
2. WalMart shall ensure that all necessary construction permits from the City of Aberdeen are received.
3. Prior to issuance of a certificate of occupancy for the expansion, WalMart shall ensure that a plan is in place to address any inadvertent releases of oils, hydraulic fluids, fuels, other petroleum products, paints, solvents and other deleterious materials, spills are contained and removed in a manner that will prevent their discharge to waters and soils of the state. The cleanup of spills shall take precedence over other work.
4. WalMart will ensure that erosion control through the use of Best Management Practices as required to prevent side casting of disturbed materials on adjacent properties or into the water. All erosion and sediment control measures shall be in place prior to, during and after site improvements are completed or when control measures are no longer needed.
5. The applicant shall submit an engineered stormwater collection and treatment system that will meet the City of Aberdeen and the Department of Ecology's requirements for stormwater collection prior to issuance of any building permit.
6. The applicant shall dedicate an easement to the City of Aberdeen for the East Aberdeen Waterfront Walkway, as required by the Shoreline Hearings Board decision in FOGH v. City of Aberdeen, dated August 19, 2011, prior to issuance of any certificate of occupancy. The easement shall be an extension of the existing walkway, in substantially the same location and width as shown in Access Exhibit (E-3), dated December 20, 2011, and consistent with the Findings and Conclusions herein.
7. Prior to issuance of a certificate of occupancy for the expansion, the applicant shall dedicate an easement to the City of Aberdeen for public access to and parking for the East Aberdeen Waterfront Walkway and Compass Rose as required by the Shorelines Hearings Board decision in FOGH v. City of Aberdeen, dated August 19, 2011, consistent with Preliminary Site Plan Exhibit

 5 City of Aberdeen SSD #206R



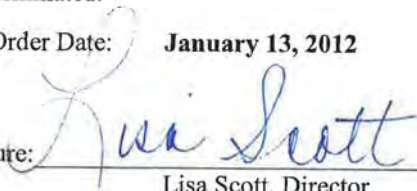
(E-1), dated October 4, 2011 and Access Exhibit (E-3), dated December 20, 2011. The dedication shall include at a minimum nine (9) parking spaces for users of the East Aberdeen Waterfront Walkway and Compass Rose. The applicant shall install signage at the three entrances from Hwy 12/Wishkah Street to direct the public to the dedicated route and parking areas for the walkway and Compass Rose.

8. The applicant may remove a portion of the existing "grassy knoll" but shall provide additional grassy knolls and bermed areas consistent with Preliminary Site Plan (E-1), dated October 4, 2011 and Preliminary Landscape Plans (L-1 and L-2), dated October 5, 2011. One of the existing picnic tables may be relocated but all existing picnic tables shall remain after the project is constructed. The applicant shall, at a minimum, install the additional landscaping detailed in Preliminary Landscape Plans (L-1 and L-2), dated October 5, 2011.
9. The applicant shall screen and relocate both the bale/pallet area and trash compactor along the northern side of the truck well to be further from the shoreline consistent with Site Plan Revision Exhibit (E-2), dated December 20, 2011.
10. The applicant has indicated that additional storage within the building will reduce the use of outdoor storage containers. After construction of the project, outdoor storage shall be allowed only on a temporary basis and, when used, shall be located to minimize adverse effects on shoreline views.
11. Substantial progress toward completion of this project shall be undertaken within 2 years of permit approval by the City of Aberdeen, with substantial progress including but not limited to the making of contracts, the signing of notice to proceed or the receipt of a City of Aberdeen Building Permit. The City of Aberdeen may authorize a single extension before the end of the time limit, with prior notice to parties of record and the Washington State Department of Ecology or its successor agency, for up to one year based on reasonable factors.
12. The authorization to conduct construction activities under this Shoreline Substantial Development Permit shall terminate 5 years after the effective date of the permit, provided that the City may authorize a single extension before the end of the time limit, with prior notice to parties of record and the Department of Ecology or its successor agency, for up to one year based on reasonable factors.
13. The permit time periods in Paragraphs 11 and 12 do not include the time during which a use or activity was not actually pursued due to the pendency of administrative appeals or legal actions or due to the need to obtain any other government permits and approvals for the development that authorize the development to proceed, including all reasonably related administrative or legal actions on any such permits or approvals.

This permit shall be rescinded pursuant to RCW 90.58.140(7) in the event the permittee fails to comply with the terms or conditions thereof.

Construction pursuant to this permit shall not begin or is not authorized until 21 days from the date of filing this local government final order with the regional office of the Department of Ecology and the Attorney General, and until all review proceedings initiated before the Shoreline Hearings Board within 21 days from the date of such filing have terminated.

Final Order Date: **January 13, 2012**

Signature: 

Lisa Scott, Director  
Community Development Department  
City of Aberdeen  
State of Washington

**TRANSMITTED** to the parties listed hereafter:

Jared VerHey, Applicant's Representative  
Courtney Kaylor, Applicant's Representative  
Rick Mraz, Department of Ecology  
Amy Iverson, Department of Fish and Wildlife  
Leonard Barnes, Port of Grays Harbor  
Eric Nelson, City of Aberdeen Corporation Counsel  
Robert F. Cousins, Attorney at Law, PLLC.  
Arthur (R.D.) Grunbaum, President, Friends of Grays Harbor  
Knoll Lowney, Smith & Lowney  
Greg & Becky Durr  
Washington State Office of Attorney General  
File SSD No. 206



REPLY TO  
ATTENTION OF

**DEPARTMENT OF THE ARMY**  
SEATTLE DISTRICT, CORPS OF ENGINEERS  
P.O. BOX 3755  
SEATTLE, WASHINGTON 98124-3755

Regulatory Branch

**JUL 26 2012**

Mr. Jared VerHey  
PACLAND  
606 Columbia Street Northwest  
Suite 106  
Olympia, Washington 98501

Reference: NWS-2012-657  
PACLAND  
(Wal-Mart)

Dear Mr. VerHey:

We have received your application for a Department of the Army (DA) permit to expand a parking lot at an existing Wal-Mart Store adjacent to the Chehalis River at Aberdeen, Grays Harbor County, Washington. We have reviewed the information you provided to us pursuant to Section 404 of the Clean Water Act and Section 10 of the Rivers and Harbors Act of 1899. We have determined that a DA permit is not required for your proposed work as described in your application and drawings.

Under Section 10 of the Rivers and Harbors Act of 1899, a Section 10 DA permit is normally required for work or structures in or affecting navigable waters of the U.S. Because the proposed work would not impact navigable waters of the U.S., a Section 10 DA permit is not required.


Under Section 404 of the Clean Water Act, a DA permit is normally required for the discharge of dredged or fill material (e.g., fill, excavation, or mechanized land clearing) into waters of the U.S., including wetlands and navigable waters of the U.S. For more information, see the enclosed *Clean Water Act Extracts and Definitions*. The Chehalis River and adjacent wetlands are waters of the U.S. However, because parking lot expansion project does not involve a discharge of dredged or fill material into waters of the U.S., a Section 404 DA permit is not required.

While a DA permit is not required, local, state, and other federal requirements may still apply. For assistance in determining other permit requirements for the proposed project, we recommend you contact the Washington State Office of Regulatory Assistance via the internet at [www.ora.wa.gov](http://www.ora.wa.gov).

-2-

If you have any questions, please contact Mr. Ron Wilcox by phone at (206) 766-6439 or by email at [ronald.j.wilcox@usace.army.mil](mailto:ronald.j.wilcox@usace.army.mil).

Sincerely,

  
for Mr. David Martin, Section Chief  
Regulatory Branch

Enclosure

# CLEAN WATER ACT

## Extracts and Definitions

Revised Date: September 19, 2003



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### EXTRACTS from the Clean Water Act

#### 1. SECTION 404

(a) The Secretary of the Army, acting through the Chief of Engineers, may issue permits, after notice and opportunity for public hearings for the discharge of dredged or fill material into the navigable waters at specified disposal sites.

(b) Subject to subsection (c) of this section, each such disposal site shall be specified for each such permit by the Secretary of the Army (1) through the application of guidelines developed by the Administrator, in conjunction with the Secretary of the Army, which guidelines shall be based upon criteria comparable to the criteria applicable to the territorial seas, the contiguous zone, and the ocean under section 403(c), and (2) in any case where such guidelines under clause (1) alone would prohibit the specification of a site, through the application additionally of the economic impacts of the site on navigation and anchorage.

(c) The Administrator of the Environmental Protection Agency is authorized to prohibit the specification (including the withdrawal of specification) of any defined area as a disposal site, and he is authorized to deny or restrict the use of any defined area for specification (including the withdrawal of specification) as a disposal site, whenever he determines, after notice and opportunity for public hearings, that the discharge of such materials into such area will have an unacceptable adverse effect on municipal water supplies, shellfish beds and fishery areas (including spawning and breeding areas), wildlife, or recreational areas. Before making such determination, the Administrator shall set forth in writing and make public his findings and his reasons for making any determination under this subsection.

#### 2. SECTION 301

This section prohibits the discharge of any pollutant including fill or dredged material except as in compliance with various sections of the Clean Water Act, including Section 404.

#### 3. SECTION 309

This section provides that any person who willfully or negligently violates the provisions of this Act may be punished by a fine of not less than \$2,500 or more than \$25,000 per day of violation or by imprisonment for not more than one year or by both. In addition, any person violating this Act may be subject to a civil penalty of not more than \$25,000 per day of violation.

DEFINITIONS regarding the Clean Water Act

1. The term “**wetlands**” means those areas that are inundated or saturated by surface or ground water at a frequency and duration sufficient to support, and that under normal circumstances do support, a prevalence of vegetation typically adapted for life in saturated soil conditions. The Corps of Engineers has the responsibility for determining whether a specific wetland area is within Section 404 jurisdiction.
2. The term “**adjacent**” means bordering, contiguous, or neighboring. Wetlands separated from other waters of the United States by manmade dikes or barriers, natural river berms, beach dunes, and the like are “adjacent wetlands.”
3. The term “**discharge of dredged material**” means the addition, including redeposition, of dredged material, runoff from a contained land or water disposal area, and any addition, including redeposition, of excavated material. These activities include mechanized landclearing, grading, filling in low areas, sidecasting of excavated material from new ditching work, and other placement of excavated material into waters of the United States, including wetlands.
4. The term “**discharge of fill material**” means the addition of fill material used for the primary effect of replacing any portion of a water of the U.S. with dry land or of changing the bottom elevation of a water of the U.S., including wetlands. The placement of pilings constitutes a discharge of fill material when such placement has or would have the effect of a discharge of fill material.
5. The term “**ordinary high water mark**” means that line on the shore established by the fluctuations of water and indicated by physical characteristics such as a clear, natural line impressed on the bank, shelving, changes in the character of soil, destruction of terrestrial vegetation, the presence of litter and debris, or other appropriate means that consider the characteristics of the surrounding area.



usually contains very little lead. Contamination generally occurs in the water distribution system or in the supply pipes of the building. Because of this, the EPA has established an "Action Level" for lead concentrations in drinking water of 0.015 milligrams per liter (mg/l). The "Action Level" is defined as the concentration of lead in water which, if exceeded, triggers treatment or other requirements which a water system must follow.

The site relies upon municipal water and wastewater services provided by the City of Aberdeen. Based on the current site use/operations (retail facility), it does not appear that lead in drinking water issues will impact Walmart's future intended use of the subject property.

#### **7.4 Environmental Regulatory Compliance**

Environmental permits associated with the site were not provided by the client or site contact to Terracon for review. However, based on the current site use/operations (retail facility), it does not appear that Environmental Regulatory Compliance issues will impact Walmart's future intended use of the subject property.

#### **7.5 High Voltage Powerlines**

Based on observations made during site reconnaissance, it appears that there is a low potential for Walmart's future intended use of the site to be adversely impacted by high voltage power lines at this time.

#### **7.6 Cultural, Historic and Archaeological Resources**

Terracon reviewed the National Park Service's National Register Information System (NRIS) website for listed National Register of Historic Places (NRHP) resources located in the vicinity of the site. The NRIS website indicates there are currently numerous NRHP-listed resources in Grays Harbor County. Several of the NRHP-listed resources appear to be located in the immediate vicinity of the site, however, no historical resources were identified on-site. It is our understanding that the proposed project consists of additions to areas on the west side of the existing building that would expand the store an additional approximately 35,942 square feet.

Terracon contacted Ms. Gretchen Kaehler, Local Government Archaeologist with the Washington State Department of Archaeology and Historic Preservation (DAHP), by telephone on August 19, 2010 for comments with regard to the proposed site expansion. However, at the issuance of this report, a response had not been received from Ms. Kaehler.

Terracon conducted an on-line review of the Washington Information System for Architectural and Archaeological Records Data (WISAARD) maintained by the DAHP to determine if there are known archaeological sites in the vicinity of the proposed project site. According to the WISAARD database, no known archaeological resources are located on the proposed project site or adjacent to it.

Because no historical resources were identified on-site, it appears there is a low potential that impacts to off-site cultural, historic, or archaeological resources could adversely affect Walmart's future intended use of the site.

## **7.7 Wetlands and Surface Waters**

Under the Clean Water Act (40 CFR § 230.3), wetlands are defined as "those areas that are inundated or saturated by surface or ground water at a frequency and duration sufficient to support, and that under normal circumstances do support, a prevalence of vegetation typically adapted for life in saturated soil conditions. Wetlands generally include swamps, marshes, bogs and similar areas." Potential wetlands under the jurisdiction of the United States Army Corps of Engineers (ACOE) include waterways, lakes, streams, and natural springs.

Terracon reviewed the US Fish and Wildlife Service (USFWS) National Wetlands Inventory map available online at the National Wetlands Inventory website. The review of the USFWS National Wetlands Inventory map indicated that wetlands are not located on the site. A copy of the wetlands inventory map is included in Appendix F.

Evidence of wetland vegetation or standing water was not observed during our site reconnaissance activities. Based on the above findings, it appears there is a low potential that impacts to wetlands will adversely affect the planned redevelopment activities at the site.

## **7.8 Ecological Resources; Threatened, Endangered and Other Protected Species**

According to the U.S. Fish and Wildlife Service and the Washington Department of Fish and Wildlife, the State of Washington has 48 listed threatened and/or endangered species. However, the site is located in an urban area, and is currently developed with an existing Walmart store and associated paved parking areas. The proposed project consists of additions to areas on the west side of the existing building that would expand the store an additional approximate 35,942 square feet. The site also currently includes paved parking, landscaped areas, a loading dock, and a greenhouse. The areas of the planned additions are currently undeveloped, graded land or paved parking areas. The site is adjoined by the Chehalis River to the south. The confluence of the Chehalis River and the Wishkah River adjoins to the southwest.

Based on the above findings, it appears there is low potential that impacts to protected species will adversely affect Walmart's future intended use of the site.

## **7.9 Wildlife Sanctuaries and Other Natural Resource Preservation**

Terracon reviewed the USGS Aberdeen, Washington 7.5 minute topographic map, the Washington page of the National Wilderness Preservation System website, and the USFWS National Wildlife Refuge (NWR) Systems website. According to information on these sources,



the site is not located within or adjacent to a designated wilderness area, wildlife refuge, wildlife management area, or wildlife preserve. During site reconnaissance, Terracon did not encounter signage that would indicate that the site is located in a designated wilderness area or a wildlife refuge, management area, or preserve. Based on the above findings, it appears there is a low potential that impacts to wildlife refuges or wilderness areas will adversely affect Walmart's future intended use of the site.

#### **7.10 Biological Agents**

Biological agents include bacteria, viruses, fungi, other microorganisms and their associated toxins. Biological agents have the ability to adversely affect human health in a variety of ways, ranging from relatively mild, allergic reactions to serious medical conditions, even death. These organisms are widespread in the natural environment, they are found in water, soil, plants, and animals. Because many microbes reproduce rapidly and require minimal resources for survival, biological agents are a potential danger in a wide variety of occupational settings.

Based on the findings of this ESA, biological agents were not identified at the site. Therefore, it appears that there is a low potential for Walmart's future intended use of the site to be impacted by issues stemming from existing on-site conditions.

#### **7.11 Mold**

During site reconnaissance Terracon did not observe paint mold growth, water infiltration, or water damage at the existing building. These observations should not be construed as a comprehensive mold assessment and no surface or air sampling was conducted to verify the absence/presence or concentrations of mold.

Based on observations made during site reconnaissance, it appears that there is a low potential for Walmart's future intended use of the site to be adversely impacted by mold at this time.

#### **7.12 Polychlorinated Biphenyls (PCBs); Mercury, Chlorofluorocarbons (CFCs)**

The presence, location, and condition of suspect Polychlorinated Biphenyls (PCBs) containing equipment such as fluorescent light ballasts, hydraulic elevators and lifts, and electrical transformers and equipment was assessed during the site visit.

During the site visit Terracon observed fluorescent light ballasts throughout the building. Terracon observed some of the light ballasts to determine whether the ballasts were labeled as Non-PCB. The light ballasts observed were identified with labels indicating "Non-PCB containing". Indications of releases from the above-listed equipment were not observed during the site visit.

# Western Washington Hydrology Manual

## Continuous Model Output

Western Washington Hydrology Model  
PROJECT REPORT

---

Project Name: Aberdeen TESC Design  
Site Address:  
City :  
Report Date : 1/21/2013  
Gage : Montesano  
Data Start : 1955/10/01  
Data End : 1999/09/30  
Precip Scale: 1.10  
WWHM3 Version:

---

**PREDEVELOPED LAND USE**

Name : Basin 1  
Bypass: No

GroundWater: No

<u>Pervious Land Use</u>	<u>Acres</u>
C, Forest, Flat	2.03

<u>Impervious Land Use</u>	<u>Acres</u>
----------------------------	--------------

---

Element Flows To:		
Surface	Interflow	Groundwater

---

Name : Basin 1  
Bypass: No

GroundWater: No

<u>Pervious Land Use</u>	<u>Acres</u>
C, Lawn, Mod	1.74

<u>Impervious Land Use</u>	<u>Acres</u>
PARKING FLAT	0.29

---

Element Flows To:		
Surface	Interflow	Groundwater

---

**MITIGATED LAND USE**

---

**ANALYSIS RESULTS**

Flow Frequency Return Period	Periods for Predeveloped.	POC #1
<u>Return Period</u>	<u>Flow(cfs)</u>	
2 year	0.206225	
5 year	0.279449	
10 year	0.315697	
25 year	0.350741	
50 year	0.370829	
100 year	0.386984	

Flow Frequency Return Periods for Mitigated. POC #1		
<u>Return Period</u>	<u>Flow(cfs)</u>	
2 year	0.630758	
5 year	0.834008	
10 year	0.939831	
25 year	1.047592	
50 year	1.113819	
100 year	1.169597	

Yearly Peaks for Predeveloped and Mitigated. POC #1		
<u>Year</u>	<u>Predeveloped</u>	<u>Mitigated</u>
1957	0.328	0.931
1958	0.222	0.808
1959	0.118	0.613
1960	0.224	0.813
1961	0.328	0.839
1962	0.208	0.435
1963	0.329	0.915
1964	0.294	0.736
1965	0.229	0.920
1966	0.297	0.862
1967	0.277	0.844
1968	0.126	0.429
1969	0.217	0.718
1970	0.274	0.829
1971	0.120	0.333
1972	0.403	1.141
1973	0.228	0.682
1974	0.182	0.637
1975	0.330	0.969
1976	0.181	0.580
1977	0.274	0.776
1978	0.148	0.392
1979	0.236	0.765
1980	0.217	0.498
1981	0.222	0.667
1982	0.187	0.624
1983	0.196	0.843
1984	0.211	0.670
1985	0.207	0.460
1986	0.103	0.348
1987	0.231	0.758
1988	0.173	0.494
1989	0.162	0.675
1990	0.122	0.519
1991	0.247	0.806
1992	0.172	0.462
1993	0.161	0.492
1994	0.100	0.360
1995	0.247	0.636
1996	0.132	0.334
1997	0.077	0.385
1998	0.259	0.654
1999	0.122	0.325
2000	0.040	0.174

Ranked Yearly Peaks for Predeveloped and Mitigated. POC #1		
<u>Rank</u>	<u>Predeveloped</u>	<u>Mitigated</u>
1	0.4027	1.1410
2	0.3297	0.9693
3	0.3286	0.9313
4	0.3279	0.9203
5	0.3275	0.9152
6	0.2973	0.8617
7	0.2941	0.8440
8	0.2766	0.8429
9	0.2744	0.8389
10	0.2736	0.8286
11	0.2586	0.8127
12	0.2474	0.8081

13	0.2471	0.8063
14	0.2359	0.7755
15	0.2310	0.7652
16	0.2285	0.7581
17	0.2282	0.7363
18	0.2238	0.7181
19	0.2222	0.6823
20	0.2220	0.6754
21	0.2174	0.6699
22	0.2173	0.6671
23	0.2111	0.6545
24	0.2080	0.6368
25	0.2071	0.6360
26	0.1963	0.6236
27	0.1875	0.6129
28	0.1821	0.5797
29	0.1809	0.5187
30	0.1733	0.4978
31	0.1717	0.4936
32	0.1621	0.4920
33	0.1610	0.4625
34	0.1480	0.4598
35	0.1318	0.4351
36	0.1262	0.4292
37	0.1220	0.3917
38	0.1218	0.3849
39	0.1204	0.3602
40	0.1180	0.3484
41	0.1030	0.3338
42	0.0998	0.3333
43	0.0770	0.3245
44	0.0399	0.1735

#### POC #1

The Facility PASSED

The Facility PASSED.

Flow(CFS)	Predev	Dev	Percentage	Pass/Fail
0.1031	0	0	0	Pass
0.1058	0	0	0	Pass
0.1085	0	0	0	Pass
0.1112	0	0	0	Pass
0.1139	0	0	0	Pass
0.1166	0	0	0	Pass
0.1193	0	0	0	Pass
0.1220	0	0	0	Pass
0.1247	0	0	0	Pass
0.1275	0	0	0	Pass
0.1302	0	0	0	Pass
0.1329	0	0	0	Pass
0.1356	0	0	0	Pass
0.1383	0	0	0	Pass
0.1410	0	0	0	Pass
0.1437	0	0	0	Pass
0.1464	0	0	0	Pass
0.1491	0	0	0	Pass
0.1518	0	0	0	Pass
0.1545	0	0	0	Pass
0.1572	0	0	0	Pass
0.1599	0	0	0	Pass
0.1626	0	0	0	Pass
0.1653	0	0	0	Pass
0.1680	0	0	0	Pass
0.1707	0	0	0	Pass
0.1734	0	0	0	Pass
0.1761	0	0	0	Pass
0.1788	0	0	0	Pass
0.1815	0	0	0	Pass
0.1842	0	0	0	Pass
0.1869	0	0	0	Pass
0.1896	0	0	0	Pass

0.1924	0	0	0	Pass
0.1951	0	0	0	Pass
0.1978	0	0	0	Pass
0.2005	0	0	0	Pass
0.2032	0	0	0	Pass
0.2059	0	0	0	Pass
0.2086	0	0	0	Pass
0.2113	0	0	0	Pass
0.2140	0	0	0	Pass
0.2167	0	0	0	Pass
0.2194	0	0	0	Pass
0.2221	0	0	0	Pass
0.2248	0	0	0	Pass
0.2275	0	0	0	Pass
0.2302	0	0	0	Pass
0.2329	0	0	0	Pass
0.2356	0	0	0	Pass
0.2383	0	0	0	Pass
0.2410	0	0	0	Pass
0.2437	0	0	0	Pass
0.2464	0	0	0	Pass
0.2491	0	0	0	Pass
0.2518	0	0	0	Pass
0.2545	0	0	0	Pass
0.2573	0	0	0	Pass
0.2600	0	0	0	Pass
0.2627	0	0	0	Pass
0.2654	0	0	0	Pass
0.2681	0	0	0	Pass
0.2708	0	0	0	Pass
0.2735	0	0	0	Pass
0.2762	0	0	0	Pass
0.2789	0	0	0	Pass
0.2816	0	0	0	Pass
0.2843	0	0	0	Pass
0.2870	0	0	0	Pass
0.2897	0	0	0	Pass
0.2924	0	0	0	Pass
0.2951	0	0	0	Pass
0.2978	0	0	0	Pass
0.3005	0	0	0	Pass
0.3032	0	0	0	Pass
0.3059	0	0	0	Pass
0.3086	0	0	0	Pass
0.3113	0	0	0	Pass
0.3140	0	0	0	Pass
0.3167	0	0	0	Pass
0.3194	0	0	0	Pass
0.3222	0	0	0	Pass
0.3249	0	0	0	Pass
0.3276	0	0	0	Pass
0.3303	0	0	0	Pass
0.3330	0	0	0	Pass
0.3357	0	0	0	Pass
0.3384	0	0	0	Pass
0.3411	0	0	0	Pass
0.3438	0	0	0	Pass
0.3465	0	0	0	Pass
0.3492	0	0	0	Pass
0.3519	0	0	0	Pass
0.3546	0	0	0	Pass
0.3573	0	0	0	Pass
0.3600	0	0	0	Pass
0.3627	0	0	0	Pass
0.3654	0	0	0	Pass
0.3681	0	0	0	Pass
0.3708	0	0	0	Pass

---

Water Quality BMP Flow and Volume for POC 1.  
 On-line facility volume: 0 acre-feet  
 On-line facility target flow: 0 cfs.



[illegible]

Water Quality BMP Flow and Volume for POC 2.

On-line facility volume: 0 acre-feet

On-line facility target flow: 0 cfs.

Adjusted for 15 min: 0 cfs.

Off-line facility target flow: 0 cfs.

Adjusted for 15 min: 0 cfs.

### Perlnd and Implnd Changes

No changes have been made.



## Diversion Ditch Sizing

10 year flow from continuous model = 0.94 cfs

Grade=1.0%

Manning's Coefficient (n) = 0.035

Flow Depth = 12 inches

Side slopes=2:1 max

Width=4 feet minimum

$\theta = 27$

$$A = 0.5(\text{Width})(\text{flow depth}) = 0.5 \times 4 \times 1 = 2$$

$$R = d \cos \theta / 2 = (1 \times \cos(27)) / 2 = 0.447$$

$Q = 1.49/n \times A R^{2/3} \times S^{1/2}$  (Manning's Open Channel Flow Equation)

$$Q = (1.49/0.035) \times 2 \times (0.447)^{2/3} \times (0.01)^{1/2}$$

$$Q = 4.98 \text{ cfs}$$

Flow from Western Washington Hydrology Manual 10-year Continuous Model(see above) = 0.94 cfs

4.98 cfs > 0.94 cfs therefore ditches have sufficient capacity.

## Sediment Trap Sizing

10 year flow from continuous model = 0.94 cfs

$$SA = 2*Q/0.00096$$

$$SA = 2*0.94/0.00096 = 1,958 \text{ SF}$$

## **BMP C240: Sediment Trap**

**Purpose** A sediment trap is a small temporary ponding area with a gravel outlet used to collect and store sediment from sites cleared and/or graded during construction. Sediment traps, along with other perimeter controls, shall be installed before any land disturbance takes place in the drainage area.

**Conditions of Use** Prior to leaving a construction site, stormwater runoff must pass through a sediment pond or trap or other appropriate sediment removal best management practice. Non-engineered sediment traps may be used on-site prior to an engineered sediment trap or sediment pond to provide additional sediment removal capacity.

It is intended for use on sites where the tributary drainage area is less than 3 acres, with no unusual drainage features, and a projected build-out time of six months or less. The sediment trap is a temporary measure (with a design life of approximately 6 months) and shall be maintained until the site area is permanently protected against erosion by vegetation and/or structures.

Sediment traps and ponds are only effective in removing sediment down to about the medium silt size fraction. Runoff with sediment of finer grades (fine silt and clay) will pass through untreated, emphasizing the need to control erosion to the maximum extent first.

Whenever possible, sediment-laden water shall be discharged into on-site, relatively level, vegetated areas (see [BMP C234 – Vegetated Strip](#)). This is the only way to effectively remove fine particles from runoff unless chemical treatment or filtration is used. This can be particularly useful after initial treatment in a sediment trap or pond. The areas of release must be evaluated on a site-by-site basis in order to determine appropriate locations for and methods of releasing runoff. Vegetated wetlands shall not be used for this purpose. Frequently, it may be possible to pump water from the collection point at the downhill end of the site to an upslope vegetated area. Pumping shall only augment the treatment system, not replace it, because of the possibility of pump failure or runoff volume in excess of pump capacity.

All projects that are constructing permanent facilities for runoff quantity control should use the rough-graded or final-graded permanent facilities for traps and ponds. This includes combined facilities and infiltration facilities. When permanent facilities are used as temporary sedimentation facilities, the surface area requirement of a sediment trap or pond must be met. If the surface area requirements are larger than the surface area of the permanent facility, then the trap or pond shall be enlarged to comply with the surface area requirement. The permanent pond shall also be divided into two cells as required for sediment ponds.

**Design and  
Installation  
Specifications**

Either a permanent control structure or the temporary control structure (described in [BMP C241](#), Temporary Sediment Pond) can be used. If a permanent control structure is used, it may be advisable to partially restrict the lower orifice with gravel to increase residence time while still allowing dewatering of the pond. A shut-off valve may be added to the control structure to allow complete retention of stormwater in emergency situations. In this case, an emergency overflow weir must be added.

A skimmer may be used for the sediment trap outlet if approved by the Local Permitting Authority.

- See [Figures 4.2.16](#) and [4.2.17](#) for details.
- If permanent runoff control facilities are part of the project, they should be used for sediment retention.
- To determine the sediment trap geometry, first calculate the design surface area (SA) of the trap, measured at the invert of the weir. Use the following equation:

$$SA = FS(Q_2/V_s)$$

where

$Q_2$  = Design inflow based on the peak discharge from the developed 2-year runoff event from the contributing drainage area as computed in the hydrologic analysis. The 10-year peak flow shall be used if the project size, expected timing and duration of construction, or downstream conditions warrant a higher level of protection. If no hydrologic analysis is required, the Rational Method may be used.

$V_s$  = The settling velocity of the soil particle of interest. The 0.02 mm (medium silt) particle with an assumed density of 2.65 g/cm<sup>3</sup> has been selected as the particle of interest and has a settling velocity ( $V_s$ ) of 0.00096 ft/sec.

$FS$  = A safety factor of 2 to account for non-ideal settling.

Therefore, the equation for computing surface area becomes:

$$SA = 2 \times Q_2 / 0.00096 \text{ or}$$

2080 square feet per cfs of inflow

Note: Even if permanent facilities are used, they must still have a surface area that is at least as large as that derived from the above formula. If they do not, the pond must be enlarged.

- To aid in determining sediment depth, all sediment traps shall have a staff gauge with a prominent mark 1-foot above the bottom of the trap.

## **APPENDIX P**

### **SITE-SPECIFIC, POST-CONSTRUCTION STORMWATER OPERATION AND MAINTENANCE MANUAL**

The site-specific post-construction stormwater Operation and Maintenance (O&M) Manual provided in this appendix will be used by the Owner to operate and maintain long-term stormwater controls and systems constructed and/or installed by the General Contractor. All controls and systems must be installed & functioning as designed and free of accumulated sediment and debris before final project approval.

A site-specific post construction stormwater Operation and Maintenance (O&M) Manual has been created previously for the original store. The O&M manual for the new and modified site features was completed as a part of the Washington state required drainage report. This Manual has been developed by the CEC and will be used by the Owner to operate and maintain long-term stormwater controls and systems constructed and/or installed by the General Contractor in concurrence with the existing store Operation and Maintenance Manual. All controls and systems must be installed & functioning as designed and free of accumulated sediment and debris during final project inspection and approval.

#### **NOTE to General Contractor:**

The Owner will use this O&M Manual to operate and maintain long-term stormwater controls and systems. The GC must update this O&M Manual, as needed, to reflect as-built site conditions and system components. The updated Manual must be e-mailed from the GC to the Construction Manager, within 14 days after filing the Final CM Report, for subsequent delivery to Wal-Mart Environmental Services.

***Walmart #2037***  
*Aberdeen, Washington*

***Operations and Maintenance Plan***

*November 2, 2012*



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## ***Maintenance***

### **Required Maintenance**

The on-site storm drainage facilities will require occasional maintenance. The following is based on minimum requirements as set forth in the Stormwater Management Manual for Western Washington. The required maintenance and frequency of maintenance are as follows:

The following pages contain maintenance needs for most of the components that are part of your drainage system, as well as for some components that you may not have. Let us know if there are any components that are missing from these pages. Ignore the requirements that do not apply to your system. You should plan to complete a checklist for all system components on the following schedule:

Monthly from November through April.

Once in late summer (preferably September).

After any major storm (use 1" in 24 hours as a guideline), items marked "S" only.

Using photocopies of these pages check off the problems you looked for each time you perform an inspection. Add comments on problems found and actions taken. Keep these "Checked" sheets in your files, as they will be used to write your annual report (due in May). Some items do not need to be looked at every time an inspection is done. Use the suggested frequency at the left of each item as a guideline for your inspection.

You may call the jurisdiction for technical assistance. Please do not hesitate to call, especially if you are unsure whether a situation you have discovered may be a problem.

### **What is Stormwater Runoff?**

When urban and suburban development covers the land with buildings, houses, streets and parking lots, much of the native topsoil, duff, trees, shrubs, and grass are replaced by asphalt and concrete. Rainfall that would have directly soaked into the ground instead stays on the surface as stormwater runoff making its way into storm drains (including man-made pipes, ditches, or swale networks), stormwater ponds, surface and groundwater, and eventually to the Chehalis River.

### **What is a Storm Drain System and how does it work?**

The storm drain system for most developments includes components that carry, store, cleanse, and release the stormwater. These components work together to reduce the impacts of development on the environment. These impacts can include flooding which results in property damage and blocked emergency routes, erosion which can cause damage to salmon spawning habitat, and pollution which harms fish and/or drinking water supplies.

The storm drain system provides a safe method to carry stormwater to the treatment and storage areas. Swales and ponds filter pollutants from the stormwater by physically settling out particles, chemically binding pollutants to pond sediments, and biologically converting pollutants to less-harmful compounds. The ponds also store the treated water, releasing it gradually to a nearby stream or to groundwater. The various components of storm drain systems are described in the glossary.



**What does Stormwater Runoff have to do with Water Quality?**

Stormwater runoff needs to be treated because it carries litter, oil, gasoline, fertilizers, pesticides, pet wastes, sediments, and anything else that can float, dissolve, or be swept along by the moving water. Left untreated, polluted stormwater can reach nearby waterways where it can harm and even kill aquatic life. It can also pollute groundwater to the extent that it must be treated before it can be used for drinking, which has actually happened in Pierce County. Nationally, stormwater is recognized as a major threat to water quality. Remember to keep everything out of stormwater systems except the rainwater they are designed to collect.

**Your Stormwater Facility**

Stormwater facilities can be attractive as well as functional. They can provide both active and passive-use recreation areas and open space for wildlife. Perhaps you've noticed a wet or dry pond in your neighborhood. These different types of ponds are designed for different purposes. For example, wet ponds primarily provide treatment of stormwater. They also provide good cover and habitat for birds and small mammals, making them fine "wildlife preserves". Dry ponds or infiltration ponds are designed to provide storage for stormwater and gradually release it downstream or allow it to filter into the ground. These types of ponds can be maintained as grassy play areas, and may even be modified to house more formal play equipment.

**Who is Responsible for Maintaining Stormwater Facilities?**

All stormwater facilities need to be maintained. Regular maintenance ensures proper functioning and keeps the facility visually appealing. This Stormwater Facility Maintenance Guide was designed to help explain how stormwater facilities work and provide user-friendly, straightforward guidance on how to maintain them. As a commercial business, you are responsible for regularly maintaining privately owned ponds, catch basins, pipes and other drainage facilities within your property. Local governments maintain stormwater facilities located in public right-of-ways.

**Maintenance Checklists**

The maintenance checklists in this packet are for you to use when checking the stormwater facilities in your neighborhood. If you feel that you are missing a checklist, or you have additional facilities not identified or addressed in this packet, please contact your developer or local jurisdiction.

The checklists are in table format for ease of use and brevity. Each checklist tells you what part of the feature to check, how often to check, what to check for, and what to do about it. Log sheets are included to help you keep track of when you last surveyed the storm drainage system.

Those systems using approved "emerging technologies", such as a StormFilter™, may not find a checklist covering the specific stormwater facility. Please refer to the manufacturer's guidelines for the appropriate maintenance activity schedule. If a checklist is provided, it is for guidance purposes only and not meant to supersede the manufacturer's recommendations.

Although it is not intended for the maintenance survey to involve anything too difficult or strenuous, there are a few tools that will make the job easier and safer. These tools include:

- A flashlight.
- A long pole or broom handle.
- Some kind of pry bar or lifting tool for pulling manhole and grate covers.
- Gloves.

**SAFETY WARNING:** *Due to OSHA regulations, you should never stick your head or any part of your body into a manhole or other type of confined space. When looking into a manhole or catch basin, stand above it and use the flashlight to help you see. Use a pole or broom handle that is long enough when you are checking sediment depths in confined spaces. **NO PART OF YOUR BODY SHOULD BREAK THE PLANE OF THE OPEN HOLE.***

### Checklist Instructions

The following pages contain maintenance checklists covering most of the needs for the components of your drainage system, as well as for some components that you may not have. Let us know if there are any components missing from these pages. Ignore the requirements that are not part of your system. You should plan to complete a check for all system components on the following schedule:

1. Quarterly – plan to inspect the facility at least once during the following months – January, May, August, and November.
2. Annually – The best time for an annual inspection is in the late summer, preferably September.
3. Items marked “After Major Storm Event”, use 1-inch in 24 hours as a guideline.

Using photocopies of these checklists and log sheet below, check off the problems that you look for each time you do an inspection. Add comments on problems found and actions taken on the log sheet. Keep the completed forms in your files for future reference.

## Log Sheet

Use copies of this log sheet to keep track of when maintenance checks occur and what items, if any, are repaired or altered. The completed sheets will serve as a record of past maintenance activities and will provide valuable information on how your facilities are operating. This information will be useful for future requirements regarding the types of facilities that are installed. It helps to keep all log sheets in a designated area so that others can easily access them.

Date Checked: \_\_\_\_/\_\_\_\_/\_\_\_\_

Checked By:

Name: \_\_\_\_\_

Position: \_\_\_\_\_

Address: \_\_\_\_\_ City: \_\_\_\_\_ State: \_\_\_\_\_

Zip: \_\_\_\_\_

Phone Number: (\_\_\_\_) \_\_\_\_\_

<u><i>Part of Facility Checked</i></u>	<u><i>Observations (List things that should be done)</i></u>	<u><i>Follow-up Actions Taken</i></u>	<u><i>Date Action Taken</i></u>

## Energy Dissipaters

Energy dissipaters are generally rock pads, dispersion trenches, and pipes that are designed to spread out the flow of water over a larger surface area creating more of a sheet flow and less of a point source. These structures are typically found at the outlet areas of ponds or swales.

Part of Pond To Check	How Often	Completed (Date/By)	Problem	Conditions to Check For	What to do
Rock Pad	Annually		Missing or Moved Rock	Only one layer of rock exists above native soil or any soil is exposed.	Replace large rocks so that no soil is visible.
Rock Pad	Annually		Erosion	Soil erosion is evident in or adjacent to the rock pad.	More rock is needed. Add more rock to meet design standards.
Manhole / Chamber	Annually		Structural Damage	The structure's interior has become worn, or damage is visible on the post, baffles, or chamber sides.	Internal structure needs to be repaired or replaced.
Dispersion Trench	Annually		Missing or Moved Rock	Trench should be full of rip rap	Add large rocks (+/- 30lb. Each) so that rocks are visible above the edge of the trench.
Dispersion Trench	Quarterly		Pipe Plugged	Accumulated sediment should not exceed 20% of the depth	Clean and flush pipe. In severe cases, the rocks will have to be removed, cleaned, and then replaced.
Dispersion Trench	Quarterly		Perforation Plugged	Ensure that at least 1/2 of the perforations in the pipe are not plugged with debris or sediment.	Clean or replace perforated pipe.
Dispersion Trench	Semi-Annually & After Major Storms		Not Discharging Water Properly	The intent of the dispersion trench is to prevent erosion. Water should flow out of the trench in a uniform "sheet flow". Visually inspect the trench for evidence of water discharging at concentrated points and creating erosion.	If water is not being discharged correctly, the trench must be redesigned or rebuilt to standard. The elevation of the lip of the trench should be the same (flat) at all points.
Dispersion Trench	Semi-Annually & After Major Storms		Water flows out top of catch basin	Water should not flow out during storms smaller than the design storm. Also, ensure that it is not causing, or appears likely to cause damage	Facility must be rebuilt or redesigned to standards. Pipe is probably plugged or damaged and needs replacement.
Dispersion Trench	Semi-Annually & After Major Storms		Receiving area Over-Saturated	Ensure that the water in the receiving area is not causing, or does not have the potential to cause, a landslide.	Stabilize the slope with grass or other vegetation. You might need to use rock or other cover if the condition is severe.

Comments:

## Catch Basins and Inlets

These structures are typically located in the streets and public right-of-ways. The City is responsible for routine maintenance of the pipes and catch basins in the right-of-ways, while the homeowners association is responsible for keeping the grates clear of debris in all areas as well as pipes and catch basins in private areas.

Part of Structure To Check	How Often	Completed (Date/By)	Problem	Conditions to Check For	What to do
Grate	During and After Major Storms		Trash & Debris	Trash or debris accumulating in front of the catch basin opening and not allowing waters to flow in.	Remove blocking trash or debris with a rake and clean off the grate.
Grate	Quarterly		Vegetation	Vegetation is growing across and blocking more than 10% of the basin opening.	Remove vegetation.
Catch Basin	Quarterly		Sediments	Sediment or debris in the basin should be kept under 50% of the depth from the bottom of the pipe to the bottom of the basin. Use a long stick or broom handle to poke into sediment and determine depth.	Clean out the catch basin of sediment and debris.
Inlet and Outlet Pipes	Quarterly		Trash & Debris	Trash or debris in the pipes should not be more than 1/5 of its height. Also there should not be any roots or vegetation growing in the pipes.	Clean out the inlet and outlet pipes from trash, debris, or vegetation.
Inlet and Outlet Pipes Joints	Annually		Structural Damage	There should be no cracks wider than 0.5" and longer than 1 foot at the joint of any inlet or outlet pipe. Also, check for evidence of sediment entering the catch basin through the cracks.	Repair cracks or replace the joints. Contact the City for technical guidance.
Grate	Quarterly		Structural Damage	The grate should not have any cracks longer than 2". There should not be multiple cracks. There should be no opening wider than 7/8"	Replace the grate.
Frame	Quarterly		Structural Damage	Ensure that the frame is sitting flush on top of the concrete structure (slab). A separation of more than 3/4" between the frame and the slab should be corrected.	Repair or replace the frame so that it is flush with the slab.
Catch Basin	Annually		Structural Damage	Inspect the walls of the catch basin for cracks wider than 0.5" and longer than 3 feet. Also check for evidence of sediment entering the catch basin through the cracks. Determine whether or not the structure is sound.	Repair or replace the basin. Contact a professional engineer for evaluation.
Catch Basin	Quarterly		Pollution and Fire Hazard	There should be no chemicals such as natural gas, oil, and gasoline in the catch basin. Check for obnoxious color, odor, or oily sludge.	Clean out catch basin. Contact Thurston County Environmental Health if you detect a color, odor, or oily sludge.

Oil/Water Separator (down-turned elbow or "T" in catch basin)	Quarterly		Pollution	Water surface in catch basin has significant sludge, oil, grease, or scum layer covering all or most of the water surface.	Remove catch basin cover and skim off oil layer. Pour oil into disposable container, seal container, wrap securely in newspaper, and contact Thurston County Environmental Health for proper disposal methods. Water surface should be clear of oily layer.
Pipe Elbow	Quarterly		Structural Damage	Top or bottoms of pipe appear to have broken off. Check for any apparent damage and check to see if it's plumb.	Remove the catch basin lid and examine the pipe for damage. If broken, hire a contractor to replace pipe in accordance to approved system design.
Ladder (if applicable)	Annually		Ladder Rungs Unsafe	Ladder is unsafe due to missing rungs, not securely attached to basin wall, misalignment, rust, cracks, or sharp edges.	Replace ladder.
Catch Basin Cover	Annually		Structural Damage	Some catch basins have covers. In this case, check to make sure that the cover is properly placed, not difficult to remove using normal lifting pressure, and the locking mechanism (if applicable) is functioning properly.	Sit cover properly or replace if necessary. If difficult to remove, tap a few times with a heavy sledgehammer to open and then clean lip edges. Replace locking mechanism if necessary.

Comments:

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**Conveyance Pipes, Ditches, and Swales**

Part of Structure To Check	How Often	Completed (Date/By)	Problem	Conditions to Check For	What to do
Pipes	Annually		Sediment, Debris, & Vegetation	Accumulated sediment should not exceed 20% of the diameter of the pipe. Vegetation should not reduce free movement of water through pipes. Ensure that the protective coating is not damaged or rusted. Dents should not significantly impede flow. Pipe should not have major cracks or tears allowing water to leak out.	Clean out pipes of all sediment and debris. Remove all vegetation so that water flows freely through pipes. Repair or replace pipe.
Open Ditches	Quarterly		Trash & Debris	There should not be any yard waste or litter in the ditch.	Remove trash and debris and dispose of them properly.
Open Ditches	Annually		Sediment Buildup	Accumulated sediment should not exceed 20% of the depth of the ditch.	Clean out ditch of all sediment and debris.
Open Ditches and Swales	Annually		Overgrowth of Vegetation	Check for vegetation (e.g., weedy shrubs or saplings) that reduces the free movement of water through ditches or swales.	Clear blocking vegetation so that water moves freely through the ditches. Grassy vegetation should be left alone.
Open Ditches and Swales	Quarterly		Erosion / Scouring	Check around inlets, outlets, and swale bottoms for signs of erosion. Check slopes for signs of sloughing or settling. Action is needed where eroded damage is over 2" deep and where there is potential for continued erosion.	Eliminate causes of erosion. Stabilize slopes by using the appropriate erosion control procedure (e.g., reinforce with rock, plant grass, and compact soil).
Open Ditches and Swales	Annually		Missing Rocks	Native soil beneath the rock splash pad, check dam, or lining should not be visible.	Replace rocks to design standard.
Swales	Quarterly		Vegetation	Grass cover is sparse and weedy, or areas are overgrown with woody vegetation. Overhanging limbs are shading out the grass.	Aerate soils and re-seed and mulch bare areas. Keep grass less than 8" high. Remove woody growth, re-contour, and re-seed as necessary. Trim back overhanging limbs to allow for more light.
Swales	Quarterly		Homeowner Conversion	Swale has been filled in or blocked by shed, woodpile, shrubbery, etc.	If possible, speak with the homeowner and request that the swale area be restored. Contact the City to report the problem if not rectified voluntarily.
Swales	Annually		Swale does not drain	Water stands in the swale or flow velocity is very slow. Stagnation occurs.	A survey may be needed to check grades. Grades need to be in 1-5% range if possible. If grade is less than 1%, under-drains may need to be installed.

Comments:

**Debris Barriers (e.g., Trash Racks)**

Part of Structure To Check	How Often	Completed (Date/By)	Problem	Conditions to Check For	What to do
General	Quarterly		Trash and Debris	Trash or debris is plugging more than 20% of the openings in the barrier.	Remove and dispose of debris.
Grate	Quarterly		Structural Damage	Bars are bent out of shape by more than 3", are missing, and/or are loose and rust covers most of the grate.	Replace grate.
Inlet/Outlet Pipe	Annually		Debris Barrier not Attached.	The debris barrier has become loose or is no longer attached.	Firmly attach to inlet or outlet pipe.

Comments:

**Catch Basin Inserts**

Part of Structure To Check	How Often	Completed (Date/By)	Problem	Conditions to Check For	What to do
Insert	Semi-Annually		Sediment Accumulation	Sediment forms a cap over the insert media and/or the unit.	Remove sediment.
Insert	Semi-Annually		Trash and Debris Accumulation	Trash and debris accumulates in the unit creating a blockage and/or restriction.	Remove trash and debris so that runoff may flow freely.
Insert	Semi-Annually		Oil Removal Performance	The media insert is not removing oil, and the discharge water has a visible sheen.	Contact Insert Company for guidance and/or replace insert.
Insert	Semi-Annually		Water Saturation	Catch basin insert is saturated with water and no longer has the capacity to absorb water.	Remove and replace media.
Insert	Semi-Annually		Oil Saturation	Catch basin insert media is saturated with oil possibly due to a petroleum spill.	Remove and replace media insert. Contact your local hazardous waste regulators for guidance on proper disposal.
Insert	Semi-Annually		Normal Product Life Exceeded	Catch basin insert media has been used beyond the typical average life of the media insert product.	Remove and replace media. Develop a schedule to insure timely replacement of media.

Comments:



### Grounds and Landscaping

Part of Structure To Check	How Often	Completed (Date/By)	Problem	Conditions to Check For	What to do
Landscaped Areas	Quarterly		Weeds	Weeds growing out of control in landscaped area.	Pull weeds by hand, if possible, to avoid using chemical weed controls.
Landscaped Areas	Quarterly		Poisonous Plants & Insects	Check for any presence of poison ivy or any other poisonous vegetation or insect nests.	Remove any vegetation or insect nests that are present in landscaped areas.
Landscaped Areas	Quarterly		Litter	There should not be any litter or yard waste in the landscaped areas.	Remove and dispose of properly.
Landscaped Areas	Quarterly		Erosion	Noticeable rills are seen in the landscaped areas.	Identify the cause of erosion and take steps to slow down or disperse the water. Fill in contour and re-seed the area.
Trees & Shrubs	Annually		Damaged Trees	Limbs or parts of trees or shrubs that are split or broken.	Trim trees and shrubs to restore shape. Replace severely damaged trees and shrubs.
Trees & Shrubs	Annually		Damaged Trees	Trees and shrubs that have been blown down or knocked over.	Replant trees or shrubs, inspecting for injury to stem and roots. Replace if necessary.
Trees & Shrubs	Annually		Damaged Trees	Trees and shrubs which are not adequately supported or are leaning over, causing exposure of the roots.	Place stakes and rubber-coated ties around young trees/shrubs for support.

Comments:

**Stormfilter™ (Leaf Compost Filter)**

A proprietary device that may have been installed, the Stormfilter™ needs regular maintenance. The suggested maintenance guidelines provided below are not meant to supercede the Manufacturer's Guidelines, but are provided for guidance only. Please refer to the Maintenance Guidelines provided by the manufacturer for the proper maintenance schedule.

Part of Structure To Check	How Often	Completed (Date/By)	Problem	Conditions to Check For	What to do
Vault	Annually		Sediment Accumulation	Sediment depth exceeds 6" in the first chamber of the vault.	Remove sediments.
Media Cartridge	Quarterly		Sediment Accumulation	Sediment depth exceeds 0.25" on the media and is impeding the water flow.	Remove sediments.
Entire Vault	Quarterly		Trash/Debris Accumulation	Trash and/or debris have accumulated on the vault floor.	Remove trash and debris and dispose of properly.
Drain Pipes	Annually		Sediment Accumulation	Drain pipes and/or clean-outs have become full with sediment and/or debris.	Remove debris and sediment.
Piping	Annually		Structural Damage	Pipes have become crushed, corroded, or damaged.	Repair or replace pipes as necessary.
Access Cover	Annually		Structural Damage	The access cover has become damaged, corroded, or deformed and cannot be opened by one person under normal pressure.	Repair or replace cover as necessary.
Entire Vault	Annually		Structural Damage	Cracks are found that are wider than 1/2" at the joint of any inlet/outlet pipe or there is evidence of soil entering the vault through cracks. The walls, bottom, frame, and/or top slab are damaged.	Replace vault or make repairs so that the vault becomes structurally sound and meets design criteria.
Baffles	Annually		Structural Damage	Baffles corroding, cracking, warping, and/or showing signs of failure.	Repair or replace baffles.
Access Ladder	Annually		Structural Damage	Ladder is corroded or deteriorated, not functioning properly, no longer attached to the wall, or missing rungs.	Repair or replace ladder as necessary.
Compost Media	Semi-Annually		Slow Drain	Drawdown of water through the media takes longer than 1 hour, and/or overflow occurs frequently.	Replace media cartridges.
Filter Cartridges	Semi-Annually		Short Circuiting	Flows do not properly enter the cartridges.	Replace filter cartridges.

Comments:

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## *Glossary*

**Best Management Practice (BMP)** – structures, conservation practices, or regulations that improve quality of runoff or reduce the impact of development on the quantity of runoff.

**Biofilter (Swale)** – A wider and flatter vegetated version of a ditch over which runoff flows at a uniform depth and velocity. Biofilters perform best when vegetation has a thick mat of roots, leaves, and stems at the soil interface (such as grass).

**Biofiltration** – The process through which pollutant concentrations in runoff are reduced by filtering runoff through vegetation.

**Buffer** – The zone that protects aquatic resources by providing: protection of slope stability, attenuation of runoff, and reduction of landslide hazards. An integral part of a stream or wetland ecosystem, it provides shading, input of organic debris, and coarse sediments to streams. It allows room for variation in stream or wetland boundaries, habitat for wildlife, and protection from harmful intrusion.

**Catch Basin** – An inlet for stormwater set into the ground, usually rectangular and made of concrete and capped with a grate that allows stormwater to enter.

**Compost Stormwater Filter** – A treatment facility that removes sediment and pollutants from stormwater by percolating water through a layer of specially prepared Bigleaf maple compost. Clean water exits the bottom of the facility through a pipe, while stormwater flows in excess of the facility design overflow the compost bed and bypass the facility.

**Conveyance** – A mechanism or device for transporting water including pipes, channels (natural and man-made), culverts, gutters, manholes, etc.

**Critical Area** – Areas such as wetlands, streams, steep slopes, etc., as defined by ordinance or resolution by the jurisdiction. Also known as environmentally sensitive areas.

**Culvert** – A conveyance device (e.g., concrete box, pipe) which conveys water from a ditch, swale, or stream under (usually across) a roadway or embankment.

**Drainage System** – The combination of Best Management Practices (BMP's), conveyances, treatment, retention, detention, and outfall features or structures on a project.

**Drop Structure** – A structure for dropping water to a lower elevation and/or dissipating energy. A drop may be vertical or inclined.

**Easement** – A right afforded a person to make a limited use of another's real property. Typical easements are for pipes or access to ponds, and may be 15 to 20 feet wide.

**Energy Dissipater** – A rock pad at an outlet designed to slow the velocity, spread out the water leaving the pipe or channel, and reduce the potential for erosion.

**Freeboard** – The vertical distance between the design high water mark and the elevation of the top of the pond. Most ponds have one to two feet of freeboard to prevent them from overflowing.

**Junction** – Point where two or more drainage pipes or channels converge (e.g., a manhole).

**Jurisdiction** – Aberdeen, Department of Ecology, or Grays Harbor County (as applicable).

**Manhole** – A larger version of the catch basin, often round with a solid lid. Manholes allow access to underground stormwater pipes for maintenance.

**Natural Channel** – Stream, creek, river, lake, wetland, estuary, gully, swale, ravine, or any open conduit where water will concentrate and flow intermittently or continuously.

**Outfall** – The point where water flows from a man-made conduit, channel, or drain into a water body or other natural drainage feature.

**Revetments** – Materials such as rock or keystones used to sustain an embankment, such as in a retaining wall.

**Riprap** – Broken rock, cobbles, or boulders placed on earth surfaces, such as on top of a berm for the emergency overflow, along steep slopes, or at the outlet of a pipe, for protection against the action of the water. Also used for entrances to construction sites.

**Runoff** – Stormwater.

**Stormwater** – The portion of precipitation that falls on property and that does not naturally percolate into the ground or evaporate, but flows via overland flow, channels or pipes into a defined surface water channel, or a constructed infiltration facility. Stormwater includes wash down water and other wastewater that enters the drainage system.

**Swale** – A shallow drainage conveyance with relatively gentle side slopes, generally with flow depths less than 1 foot. This term is used interchangeably with Biofilter.

**Trash Rack or Bar Screen** – A device (usually a screen or bars) that fits over a pipe opening to prevent large debris such as rocks or branches from entering and partially blocking the pipe.

## **APPENDIX Q**

### **GENERAL PERMIT AND GENERAL PERMIT SUMMARY**

A General Permit Summary is provided behind this Appendix cover page. If conflicts arise, the General Permit will govern over the Summary.

## WASHINGTON STATE CONSTRUCTION STORMWATER GENERAL PERMIT SUMMARY

### Permit requirements:

- (1) General Permit issuance date: December 1, 2010  
General Permit expiration date: December 31, 2015
- (2) Permittee: WSDOE requires that the Operator (the party with operational control over construction plans and specifications or day-to-day operational control of activities at a project that are necessary to ensure compliance with a SWPPP and permit conditions) be listed as the Permittee on the NOI. Wal-Mart will be the Permittee on the NOI and the General Contractor will be listed as the On-Site Contact Person after project award. (See CGP Section S1.B)
- (3) Small Site Permit Exemptions: Projects disturbing less than one acre (over the course of the common plan of development) are eligible for exemption if additional requirements are met regarding the waters of the state being discharged to (See CGP Section S1.B)
- (4) Obtaining Permit Coverage:
  - i.) NOI Package: The NOI package is simply the submittal (via mail and fax) of the signed NOI application form to WSDOE. The SWPPP and Site Maps are not submitted, and there is no application fee. However, there is an annual fee of \$1,556 for site disturbing 10 -< 20 acres and two public notices are required. The NOI shall be submitted by the CEC on or before the date of the first public notice and at least 60 days prior to the discharge of stormwater from construction activities. A 7-day time span is required between publications. (See CGP Section S2.B)
  - ii.) Waiting Period: Earth-disturbing activities can begin no sooner than 60 days after NOI submittal and 30 days after the second public notice (whichever is greater). (See CGP Section S2.A)
  - iii.) Governing Agency: The governing agency is Washington State Department of Ecology and the project specific contact information is:

**Washington Department of Ecology-Stormwater**  
**Contact: Joyce Smith**  
**P.O. Box 47696**  
**Olympia, WA 98504-7696**  
**360-407-6858**

- (5) There is an online submittal process for the NOI, but the current Wal-Mart preferred option is paper submittal.

### Unique SWPPP documentation:

- (1) Signature requirements: Per section G2 of the CGP, the permit application must be signed by a responsible corporate officer of at least the level of vice president of a corporation. Additionally, all reports required by the permit shall be signed by the person described above or by a duly authorized representative of that person.
- (2) Allowable non-stormwater discharges of WSDOE are slightly different than the standard 02370 specification. The more stringent WSDOE standards have been incorporated into this SWPPP.

**Unique Field Inspection, Monitoring, Sampling and Reporting:**

- (1) Inspection Frequency: The CGP requires weekly inspections and inspections within 24 hours of any discharge from the site. The Wal-Mart requirement is daily inspections. Both requirements shall be met. (See CGP Section S4.B)
- (2) Inspection Frequency Reduction Options: Per the CGP, the inspection frequency for temporarily stabilized, inactive sites may be reduced to once every calendar month. (See CGP Section S4.B)
- (3) Certification Requirements for Site Inspectors: Site inspections shall be conducted by a Certified Erosion and Sediment Control Lead (CESCL). The CESCL shall be identified in the SWPPP (name, telephone number, fax number and address) and shall be present on-site or on-call at all times throughout the construction period. Certification can be obtained through an approved erosion and sediment control training program that meets the minimum training standards established by Ecology. For more information see the following website maintained by WSDOE and section S4 of the General Permit:  
<http://www.ecy.wa.gov/programs/wq/stormwater/cescl.html>

To check the status of an individual's certification, the following website can be used:  
<http://apps.ecy.wa.gov/wqcescl/> (See CGP Section S4.B)

- (4) Specific Monitoring or Sampling Requirements: The CGP requires weekly inspections and sampling of turbidity and pH (for sites with greater than 1000 cubic yards of poured or recycled concrete). (See CGP Section S4)
- (5) Specific Reporting Requirements: The CGP requires monthly reporting using Discharge Monitoring Reports. Permittees are authorized and encouraged to submit electronic DMRs using the "E-DMR Form" on Ecology's Construction Stormwater web site:

<http://www.ecy.wa.gov/programs/wq/permits/paris/webdmr.html>

Issuance Date: December 1, 2010  
Effective Date: January 1, 2011  
Expiration Date: December 31, 2015

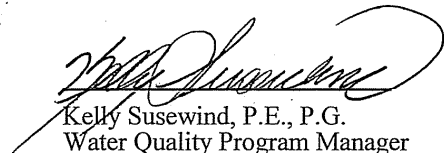
## CONSTRUCTION STORMWATER GENERAL PERMIT

National Pollutant Discharge Elimination System (NPDES) and State Waste Discharge General  
Permit for Stormwater Discharges Associated with Construction Activity

**State of Washington**  
**Department of Ecology**  
Olympia, Washington 98504

In compliance with the provisions of  
Chapter 90.48 Revised Code of Washington  
(State of Washington Water Pollution Control Act)  
and  
Title 33 United States Code, Section 1251 et seq.  
The Federal Water Pollution Control Act (The Clean Water Act)

Until this permit expires, is modified or revoked, Permittees that have properly obtained  
coverage under this general permit are authorized to discharge in accordance with the special and  
general conditions that follow.



Kelly Susewind, P.E., P.G.  
Water Quality Program Manager  
Washington State Department of Ecology



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## SUMMARY OF PERMIT REPORT SUBMITTALS

Refer to the Special and General Conditions within this permit for additional submittal requirements. Appendix A provides a list of definitions. Appendix B provides a list of acronyms.

Table 1. Summary of Permit Report Submittals

Permit Section	Submittal	Frequency	First Submittal Date
S5.A and S8	High Turbidity/Transparency Phone Reporting	As Necessary	Within 24 hours
S5.B	Discharge Monitoring Report	Monthly*	Within 15 days of applicable monitoring period
S5.F and S8	Noncompliance Notification	As necessary	Immediately
S5.F	Noncompliance Notification – Written Report	As necessary	Within 5 Days of non-compliance
G2.	Notice of Change in Authorization	As necessary	
G6.	Permit Application for Substantive Changes to the Discharge	As necessary	
G8.	Application for Permit Renewal	1/permit cycle	No later than 180 days before expiration
G9.	Notice of Permit Transfer	As necessary	
G20.	Notice of Planned Changes	As necessary	
G22.	Reporting Anticipated Non-compliance	As necessary	

SPECIAL NOTE: \*Permittees must submit Discharge Monitoring Reports (DMRs) to the Washington State Department of Ecology monthly, regardless of site discharge, for the full duration of permit coverage. Refer to Section S5.B of this General Permit for more specific information regarding DMRs.

Table 2. Summary of Required On-site Documentation

Document Title	Permit Conditions
Permit Coverage Letter	See Conditions S2, S5
Construction Stormwater General Permit	See Conditions S2, S5
Site Log Book	See Conditions S4, S5
Stormwater Pollution Prevention Plan (SWPPP)	See Conditions S9, S5

## SPECIAL CONDITIONS

### S1. PERMIT COVERAGE

#### A. Permit Area

This Construction Stormwater General Permit (CSWGP) covers all areas of Washington State, except for federal and Tribal lands as specified in Special Condition S1.E.3.

#### B. Operators Required to Seek Coverage Under this General Permit:

1. Operators of the following construction activities are required to seek coverage under this CSWGP:
  - a. Clearing, grading and/or excavation that results in the disturbance of one or more acres and discharges stormwater to surface waters of the State; and clearing, grading and/or excavation on sites smaller than one acre that are part of a larger common plan of development or sale, if the common plan of development or sale will ultimately disturb one acre or more and discharge stormwater to surface waters of the State.
    - i. This includes forest practices (including, but not limited to, class IV conversions) that are part of a construction activity that will result in the disturbance of one or more acres, and discharge to surface waters of the State (that is, forest practices that prepare a site for construction activities); and
  - b. Any size construction activity discharging stormwater to waters of the State that the Department of Ecology ( "Ecology"):
    - i. Determines to be a significant contributor of pollutants to waters of the State of Washington.
    - ii. Reasonably expects to cause a violation of any water quality standard.
2. Operators of the following activities are not required to seek coverage under this CSWGP (unless specifically required under Special Condition S1.B.1.b. above):
  - a. Construction activities that discharge all stormwater and non-stormwater to ground water, sanitary sewer, or combined sewer, and have no point source discharge to either surface water or a storm sewer system that drains to surface waters of the State.
  - b. Construction activities covered under an Erosivity Waiver (Special Condition S2.C).
  - c. Routine maintenance that is performed to maintain the original line and grade, hydraulic capacity, or original purpose of a facility.

C. Authorized Discharges:

1. Stormwater Associated with Construction Activity. Subject to compliance with the terms and conditions of this permit, Permittees are authorized to discharge stormwater associated with construction activity to surface waters of the State or to a storm sewer system that drains to surface waters of the State. (Note that “surface waters of the State” may exist on a construction site as well as off site; for example, a creek running through a site.)
2. Stormwater Associated with Construction Support Activity. This permit also authorizes stormwater discharge from support activities related to the permitted construction site (for example, an on-site portable rock crusher, off-site equipment staging yards, material storage areas, borrow areas, etc.) provided:
  - a. The support activity relates directly to the permitted construction site that is required to have a NPDES permit; and
  - b. The support activity is not a commercial operation serving multiple unrelated construction projects, and does not operate beyond the completion of the construction activity; and
  - c. Appropriate controls and measures are identified in the Stormwater Pollution Prevention Plan (SWPPP) for the discharges from the support activity areas.
3. Non-Stormwater Discharges. The categories and sources of non-stormwater discharges identified below are authorized conditionally, provided the discharge is consistent with the terms and conditions of this permit:
  - a. Discharges from fire-fighting activities.
  - b. Fire hydrant system flushing.
  - c. Potable water, including uncontaminated water line flushing.
  - d. Pipeline hydrostatic test water.
  - e. Uncontaminated air conditioning or compressor condensate.
  - f. Uncontaminated ground water or spring water.
  - g. Uncontaminated excavation dewatering water (in accordance with S9.D.10).
  - h. Uncontaminated discharges from foundation or footing drains.
  - i. Water used to control dust. Permittees must minimize the amount of dust control water used.
  - j. Routine external building wash down that does not use detergents.
  - k. Landscape irrigation water.

The SWPPP must adequately address all authorized non-stormwater discharges, except for discharges from fire-fighting activities, and must comply with Special

Condition S3. At a minimum, discharges from potable water (including water line flushing), fire hydrant system flushing, and pipeline hydrostatic test water must undergo the following: dechlorination to a concentration of 0.1 parts per million (ppm) or less, and pH adjustment to within 6.5 – 8.5 standard units (su), if necessary.

D. Prohibited Discharges:

The following discharges to waters of the State, including ground water, are prohibited.

1. Concrete wastewater.
2. Wastewater from washout and clean-up of stucco, paint, form release oils, curing compounds and other construction materials.
3. Process wastewater as defined by 40 Code of Federal Regulations (CFR) 122.1 (see Appendix A of this permit).
4. Slurry materials and waste from shaft drilling.
5. Fuels, oils, or other pollutants used in vehicle and equipment operation and maintenance.
6. Soaps or solvents used in vehicle and equipment washing.
7. Wheel wash wastewater, unless discharged according to Special Condition S9.D.9.d.
8. Discharges from dewatering activities, including discharges from dewatering of trenches and excavations, unless managed according to Special Condition S9.D.10.

E. Limits on Coverage

Ecology may require any discharger to apply for and obtain coverage under an individual permit or another more specific general permit. Such alternative coverage will be required when Ecology determines that this CSWGP does not provide adequate assurance that water quality will be protected, or there is a reasonable potential for the project to cause or contribute to a violation of water quality standards.

The following stormwater discharges are not covered by this permit:

1. Post-construction stormwater discharges that originate from the site after completion of construction activities and the site has undergone final stabilization.
2. Non-point source silvicultural activities such as nursery operations, site preparation, reforestation and subsequent cultural treatment, thinning, prescribed burning, pest and fire control, harvesting operations, surface drainage, or road construction and maintenance, from which there is natural runoff as excluded in 40 CFR Subpart 122.
3. Stormwater from any federal project or project on federal land or land within an Indian Reservation except for the Puyallup Reservation. Within the Puyallup

Reservation, any project that discharges to surface water on land held in trust by the federal government may be covered by this permit.

4. Stormwater from any site covered under an existing NPDES individual permit in which stormwater management and/or treatment requirements are included for all stormwater discharges associated with construction activity.
5. Stormwater from a site where an applicable Total Maximum Daily Load (TMDL) requirement specifically precludes or prohibits discharges from construction activity.

## **S2. APPLICATION REQUIREMENTS**

### **A. Permit Application Forms**

#### **1. Notice of Intent Form/Timeline**

- a. Operators of new or previously unpermitted construction activities must submit a complete and accurate permit application (Notice of Intent, or NOI) to Ecology.
- b. The operator must submit the NOI at least 60 days before discharging stormwater from construction activities and must submit it on or before the date of the first public notice (see Special Condition S2.B below for details). The 30-day public comment period required by WAC 173-226-130(5) begins on the publication date of the second public notice. Unless Ecology responds to the complete application in writing, based on public comments, or any other relevant factors, coverage under the general permit will automatically commence on the thirty-first day following receipt by Ecology of a completed NOI, or the issuance date of this permit, whichever is later, unless Ecology specifies a later date in writing.
- c. Applicants who propose to discharge to a storm or sewer system operated by Seattle, King County, Snohomish County, Tacoma, Pierce County, or Clark County must also submit a copy of the NOI to the appropriate jurisdiction.
- d. If an applicant intends to use a Best Management Practice (BMP) selected on the basis of Special Condition S9.C.4 (“demonstrably equivalent” BMPs), the applicant must notify Ecology of its selection as part of the NOI. In the event the applicant selects BMPs after submission of the NOI, it must provide notice of the selection of an equivalent BMP to Ecology at least 60 days before intended use of the equivalent BMP.
- e. Permittees must notify Ecology regarding any changes to the information provided on the NOI by submitting an updated NOI. Examples of such changes include, but are not limited to,
  - i. changes to the Permittee’s mailing address,
  - ii. changes to the on-site contact person information, and

iii. changes to the area/acreage affected by construction activity.

2. Transfer of Coverage Form

The Permittee can transfer current coverage under this permit to one or more new operators, including operators of sites within a Common Plan of Development, provided the Permittee submits a Transfer of Coverage Form in accordance with General Condition G9. Transfers do not require public notice.

B. Public Notice

For new or previously unpermitted construction activities, the applicant must publish a public notice at least one time each week for two consecutive weeks, at least 7 days apart, in a newspaper with general circulation in the county where the construction is to take place. The notice must contain:

1. A statement that "The applicant is seeking coverage under the Washington State Department of Ecology's Construction Stormwater NPDES and State Waste Discharge General Permit."
2. The name, address and location of the construction site.
3. The name and address of the applicant.
4. The type of construction activity that will result in a discharge (for example, residential construction, commercial construction, etc.), and the number of acres to be disturbed.
5. The name of the receiving water(s) (that is, the surface water(s) to which the site will discharge), or, if the discharge is through a storm sewer system, the name of the operator of the system.
6. The statement: "Any persons desiring to present their views to the Washington State Department of Ecology regarding this application, or interested in Ecology's action on this application, may notify Ecology in writing no later than 30 days of the last date of publication of this notice. Ecology reviews public comments and considers whether discharges from this project would cause a measurable change in receiving water quality, and, if so, whether the project is necessary and in the overriding public interest according to Tier II antidegradation requirements under WAC 173-201A-320. Comments can be submitted to: Department of Ecology, P.O. Box 47696, Olympia, WA 98504-7696 Attn: Water Quality Program, Construction Stormwater."



C. Erosivity Waiver

Construction site operators may qualify for an erosivity waiver from the CSWGP if the following conditions are met:

1. The site will result in the disturbance of fewer than 5 acres and the site is not a portion of a common plan of development or sale that will disturb 5 acres or greater.
2. Calculation of Erosivity “R” Factor and Regional Timeframe:
  - a. The project’s rainfall erosivity factor (“R” Factor) must be less than 5 during the period of construction activity, as calculated using either the Texas A&M University online rainfall erosivity calculator at: <http://ei.tamu.edu/> or EPA's calculator at <http://cfpub.epa.gov/npdes/stormwater/lew/lewcalculator.cfm>. The period of construction activity starts when the land is first disturbed and ends with final stabilization. In addition:
  - b. The entire period of construction activity must fall within the following timeframes:
    - i. For sites west of the Cascades Crest: June 15 – September 15.
    - ii. For sites east of the Cascades Crest, excluding the Central Basin: June 15 – October 15.
    - iii. For sites east of the Cascades Crest, within the Central Basin: no additional timeframe restrictions apply. The Central Basin is defined as the portions of Eastern Washington with mean annual precipitation of less than 12 inches. For a map of the Central Basin (Region 2), refer to <http://www.ecy.wa.gov/pubs/ecy070202.pdf>.
3. Construction site operators must submit a complete Erosivity Waiver certification form at least one week before disturbing the land. Certification must include statements that the operator will:
  - a. Comply with applicable local stormwater requirements; and
  - b. Implement appropriate erosion and sediment control BMPs to prevent violations of water quality standards.
4. This waiver is not available for facilities declared significant contributors of pollutants as defined in Special Condition S1.B.1.b.
5. This waiver does not apply to construction activities which include non-stormwater discharges listed in Special Condition S1.C.3.
6. If construction activity extends beyond the certified waiver period for any reason, the operator must either:
  - a. Recalculate the rainfall erosivity “R” factor using the original start date and a new projected ending date and, if the “R” factor is still under 5 and the entire

project falls within the applicable regional timeframe in Special Condition S2.C.2.b, complete and submit an amended waiver certification form before the original waiver expires; or

- b. Submit a complete permit application to Ecology in accordance with Special Condition S2.A and B before the end of the certified waiver period.

### **S3. COMPLIANCE WITH STANDARDS**

- A. Discharges must not cause or contribute to a violation of surface water quality standards (Chapter 173-201A WAC), ground water quality standards (Chapter 173-200 WAC), sediment management standards (Chapter 173-204 WAC), and human health-based criteria in the National Toxics Rule (40 CFR Part 131.36). Discharges not in compliance with these standards are not authorized.
- B. Prior to the discharge of stormwater and non-stormwater to waters of the State, the Permittee must apply all known, available, and reasonable methods of prevention, control, and treatment (AKART). This includes the preparation and implementation of an adequate Stormwater Pollution Prevention Plan (SWPPP), with all appropriate BMPs installed and maintained in accordance with the SWPPP and the terms and conditions of this permit.
- C. Ecology presumes that a Permittee complies with water quality standards unless discharge monitoring data or other site-specific information demonstrates that a discharge causes or contributes to a violation of water quality standards, when the Permittee complies with the following conditions. The Permittee must fully:
  - 1. Comply with all permit conditions, including planning, sampling, monitoring, reporting, and recordkeeping conditions.
  - 2. Implement stormwater BMPs contained in stormwater management manuals published or approved by Ecology, or BMPs that are demonstrably equivalent to BMPs contained in stormwater technical manuals published or approved by Ecology, including the proper selection, implementation, and maintenance of all applicable and appropriate BMPs for on-site pollution control. (For purposes of this section, the stormwater manuals listed in Appendix 10 of the Phase I Municipal Stormwater Permit are approved by Ecology.)
- D. Where construction sites also discharge to ground water, the ground water discharges must also meet the terms and conditions of this CSWGP. Permittees who discharge to ground water through an injection well must also comply with any applicable requirements of the Underground Injection Control (UIC) regulations, Chapter 173-218 WAC.

#### S4. MONITORING REQUIREMENTS, BENCHMARKS AND REPORTING TRIGGERS

Table 3. Summary of Primary Monitoring Requirements

Size of Soil Disturbance <sup>1</sup>	Weekly Site Inspections	Weekly Sampling w/ Turbidity Meter	Weekly Sampling w/ Transparency Tube	Weekly pH Sampling <sup>2</sup>	Requires CESCL Certification?
Sites that disturb less than 1 acre, but are part of a larger Common Plan of Development	Required	Not Required	Not Required	Not Required	No
Sites that disturb 1 acre or more, but fewer than 5 acres	Required	Sampling Required – either method <sup>3</sup>		Required	Yes
Sites that disturb 5 acres or more	Required	Required	Not Required <sup>4</sup>	Required	Yes

##### A. Site Log Book

The Permittee must maintain a site log book that contains a record of the implementation of the SWPPP and other permit requirements, including the installation and maintenance of BMPs, site inspections, and stormwater monitoring.

##### B. Site Inspections

The Permittee's (operator's) site inspections must include all areas disturbed by construction activities, all BMPs, and all stormwater discharge points. (See Special Conditions S4.B.3 and B.4 below for detailed requirements of the Permittee's Certified Erosion and Sediment Control Lead [CESCL]).

<sup>1</sup> Soil disturbance is calculated by adding together all areas affected by construction activity. Construction activity means clearing, grading, excavation, and any other activity that disturbs the surface of the land, including ingress/egress from the site.

<sup>2</sup> If construction activity results in the disturbance of 1 acre or more, and involves significant concrete work (1,000 cubic yards of poured or recycled concrete over the life of a project) or the use of engineered soils (soil amendments including but not limited to Portland cement-treated base [CTB], cement kiln dust [CKD], or fly ash), and stormwater from the affected area drains to surface waters of the State or to a storm sewer stormwater collection system that drains to other surface waters of the State, the Permittee must conduct pH monitoring sampling in accordance with Special Condition S4.D.

<sup>3</sup> Sites with one or more acres, but fewer than 5 acres of soil disturbance, must conduct turbidity or transparency sampling in accordance with Special Condition S4.C.

<sup>4</sup> Sites equal to or greater than 5 acres of soil disturbance must conduct turbidity sampling using a turbidity meter in accordance with Special Condition S4.C.

Construction sites one acre or larger that discharge stormwater to surface waters of the State must have site inspections conducted by a certified CESCL. Sites less than one acre may have a person without CESCL certification conduct inspections; sampling is not required on sites that disturb less than an acre.

1. The Permittee must examine stormwater visually for the presence of suspended sediment, turbidity, discoloration, and oil sheen. The Permittee must evaluate the effectiveness of BMPs and determine if it is necessary to install, maintain, or repair BMPs to improve the quality of stormwater discharges.

Based on the results of the inspection, the Permittee must correct the problems identified by:

- a. Reviewing the SWPPP for compliance with Special Condition S9 and making appropriate revisions within 7 days of the inspection.
  - b. Immediately beginning the process of fully implementing and maintaining appropriate source control and/or treatment BMPs as soon as possible, addressing the problems no later than within 10 days of the inspection. If installation of necessary treatment BMPs is not feasible within 10 days, Ecology may approve additional time when an extension is requested by a Permittee within the initial 10-day response period.
  - c. Documenting BMP implementation and maintenance in the site log book.
2. The Permittee must inspect all areas disturbed by construction activities, all BMPs, and all stormwater discharge points at least once every calendar week and within 24 hours of any discharge from the site. (For purposes of this condition, individual discharge events that last more than one day do not require daily inspections. For example, if a stormwater pond discharges continuously over the course of a week, only one inspection is required that week.) The Permittee may reduce the inspection frequency for temporarily stabilized, inactive sites to once every calendar month.
  3. The Permittee must have staff knowledgeable in the principles and practices of erosion and sediment control. The CESCL (sites one acre or more) or inspector (sites less than one acre) must have the skills to assess the:
    - a. Site conditions and construction activities that could impact the quality of stormwater, and
    - b. Effectiveness of erosion and sediment control measures used to control the quality of stormwater discharges.
  4. The SWPPP must identify the CESCL or inspector, who must be present on site or on-call at all times. The CESCL must obtain this certification through an approved erosion and sediment control training program that meets the minimum training standards established by Ecology (see BMP C160 in the manual referred to in Special Condition S9.C.1 and 2).

5. The Permittee must summarize the results of each inspection in an inspection report or checklist and enter the report/checklist into, or attach it to, the site log book. At a minimum, each inspection report or checklist must include:
  - a. Inspection date and time.
  - b. Weather information, the general conditions during inspection and the approximate amount of precipitation since the last inspection, and precipitation within the last 24 hours.
  - c. A summary or list of all implemented BMPs, including observations of all erosion/sediment control structures or practices.
  - d. A description of the locations:
    - i. Of BMPs inspected.
    - ii. Of BMPs that need maintenance and why.
    - iii. Of BMPs that failed to operate as designed or intended, and
    - iv. Where additional or different BMPs are needed, and why.
  - e. A description of stormwater discharged from the site. The Permittee must note the presence of suspended sediment, turbidity, discoloration, and oil sheen, as applicable.
  - f. Any water quality monitoring performed during inspection.
  - g. General comments and notes, including a brief description of any BMP repairs, maintenance or installations made following the inspection.
  - h. A summary report and a schedule of implementation of the remedial actions that the Permittee plans to take if the site inspection indicates that the site is out of compliance. The remedial actions taken must meet the requirements of the SWPPP and the permit.
  - i. The name, title, and signature of the person conducting the site inspection, a phone number or other reliable method to reach this person, and the following statement: "I certify that this report is true, accurate, and complete to the best of my knowledge and belief."

C. Turbidity/Transparency Sampling Requirements

1. Sampling Methods
  - a. If construction activity involves the disturbance of 5 acres or more, the Permittee must conduct turbidity sampling per Special Condition S4.C.
  - b. If construction activity involves 1 acre or more but fewer than 5 acres of soil disturbance, the Permittee must conduct either transparency sampling **or** turbidity sampling per Special Condition S4.C.

## 2. Sampling Frequency

- a. The Permittee must sample all discharge locations at least once every calendar week when stormwater (or authorized non-stormwater) discharges from the site or enters any on-site surface waters of the state (for example, a creek running through a site).
- b. Samples must be representative of the flow and characteristics of the discharge.
- c. Sampling is not required when there is no discharge during a calendar week.
- d. Sampling is not required outside of normal working hours or during unsafe conditions.
- e. If the Permittee is unable to sample during a monitoring period, the Permittee must include a brief explanation in the monthly Discharge Monitoring Report (DMR).
- f. Sampling is not required before construction activity begins.

## 3. Sampling Locations

- a. Sampling is required at all points where stormwater associated with construction activity (or authorized non-stormwater) is discharged off site, including where it enters any on-site surface waters of the state (for example, a creek running through a site).
- b. The Permittee may discontinue sampling at discharge points that drain areas of the project that are fully stabilized to prevent erosion.
- c. The Permittee must identify all sampling point(s) on the SWPPP site map and clearly mark these points in the field with a flag, tape, stake or other visible marker.
- d. Sampling is not required for discharge that is sent directly to sanitary or combined sewer systems.

## 4. Sampling and Analysis Methods

- a. The Permittee performs turbidity analysis with a calibrated turbidity meter (turbidimeter) either on site or at an accredited lab. The Permittee must record the results in the site log book in nephelometric turbidity units (NTU).
- b. The Permittee performs transparency analysis on site with a 1¾-inch-diameter, 60-centimeter (cm)-long transparency tube. The Permittee will record the results in the site log book in centimeters (cm). Transparency tubes are available from: <http://watermonitoringequip.com/pages/stream.html>.

Table 4. Monitoring and Reporting Requirements

Parameter	Unit	Analytical Method	Sampling Frequency	Benchmark Value	Phone Reporting Trigger Value
Turbidity	NTU	SM2130 or EPA 180.1	Weekly, if discharging	25 NTU	250 NTU
Transparency	cm	Manufacturer instructions, or Ecology guidance	Weekly, if discharging	33 cm	6 cm

5. Turbidity/Transparency Benchmark Values and Reporting Triggers

The benchmark value for turbidity is 25 NTU or less. The benchmark value for transparency is 33 centimeters (cm). Note: Benchmark values do not apply to discharges to segments of water bodies on Washington State's 303(d) list (Category 5) for turbidity, fine sediment, or phosphorus; these discharges are subject to a numeric effluent limit for turbidity. Refer to Special Condition S8 for more information.

a. Turbidity 26 – 249 NTU, or Transparency 32 – 7 cm:

If the discharge turbidity is 26 to 249 NTU; or if discharge transparency is less than 33 cm, but equal to or greater than 6 cm, the Permittee must:

- i. Review the SWPPP for compliance with Special Condition S9 and make appropriate revisions within 7 days of the date the discharge exceeded the benchmark.
- ii. Immediately begin the process to fully implement and maintain appropriate source control and/or treatment BMPs as soon as possible, addressing 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.
- iii. Document BMP implementation and maintenance in the site log book.

b. Turbidity 250 NTU or greater, or Transparency 6 cm or less:

If a discharge point's turbidity is 250 NTU or greater, or if discharge transparency is less than or equal to 6 cm, the Permittee must complete the reporting and adaptive management process described below.

- i. Telephone the applicable Ecology Region's Environmental Report Tracking System (ERTS) number within 24 hours, in accordance with Special Condition S5.F.
  - Central Region (Okanogan, Chelan, Douglas, Kittitas, Yakima, Klickitat, Benton): (509) 575-2490

- Eastern Region (Adams, Asotin, Columbia, Ferry, Franklin, Garfield, Grant, Lincoln, Pend Oreille, Spokane, Stevens, Walla Walla, Whitman): (509) 329-3400
- Northwest Region (Kitsap, Snohomish, Island, King, San Juan, Skagit, Whatcom): (425) 649-7000
- Southwest Region (Grays Harbor, Lewis, Mason, Thurston, Pierce, Clark, Cowlitz, Skamania, Wahkiakum, Clallam, Jefferson, Pacific): (360) 407-6300

These numbers are also listed at the following web site:

<http://www.ecy.wa.gov/programs/wq/stormwater/construction/permit.html>

- ii. Review the SWPPP for compliance with Special Condition S9 and make appropriate revisions within 7 days of the date the discharge exceeded the benchmark.
- iii. Immediately begin the process to fully implement and maintain appropriate source control and/or treatment BMPs as soon as possible, addressing 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.
- iv. Document BMP implementation and maintenance in the site log book.
- v. Continue to sample discharges daily until:
  - a) Turbidity is 25 NTU (or lower); or
  - b) Transparency is 33 cm (or greater); or
  - c) The Permittee has demonstrated compliance with the water quality limit for turbidity:
    - 1) No more than 5 NTU over background turbidity, if background is less than 50 NTU, or
    - 2) No more than 10% over background turbidity, if background is 50 NTU or greater; or
  - d) The discharge stops or is eliminated.

**D. pH Sampling Requirements -- Significant Concrete Work or Engineered Soils**

If construction activity results in the disturbance of 1 acre or more, **and** involves significant concrete work (significant concrete work means greater than 1000 cubic yards poured concrete or recycled concrete used over the life of a project ) or the use of engineered soils (soil amendments including but not limited to Portland cement-treated base [CTB], cement kiln dust [CKD], or fly ash), and stormwater from the affected area



drains to surface waters of the State or to a storm sewer system that drains to surface waters of the state, the Permittee must conduct pH monitoring as set forth below. Note: In addition, discharges to segments of water bodies on Washington State's 303(d) list (Category 5) for high pH are subject to a numeric effluent limit for pH; refer to Special Condition S8.

1. For sites with significant concrete work, the Permittee must begin the pH monitoring period when the concrete is first poured and exposed to precipitation, and continue weekly throughout and after the concrete pour and curing period, until stormwater pH is in the range of 6.5 to 8.5 (su).
2. For sites with engineered soils, the Permittee must begin the pH monitoring period when the soil amendments are first exposed to precipitation and must continue until the area of engineered soils is fully stabilized.
3. During the applicable pH monitoring period defined above, the Permittee must obtain a representative sample of stormwater and conduct pH analysis at least once per week.
4. The Permittee must monitor pH in the sediment trap/pond(s) or other locations that receive stormwater runoff from the area of significant concrete work or engineered soils before the stormwater discharges to surface waters.
5. The benchmark value for pH is 8.5 standard units. Anytime sampling indicates that pH is 8.5 or greater, the Permittee must either:
  - a. Prevent the high pH water (8.5 or above) from entering storm sewer systems or surface waters; or
  - b. If necessary, adjust or neutralize the high pH water until it is in the range of pH 6.5 to 8.5 (su) using an appropriate treatment BMP such as carbon dioxide (CO<sub>2</sub>) sparging or dry ice. The Permittee must obtain written approval from Ecology before using any form of chemical treatment other than CO<sub>2</sub> sparging or dry ice.
6. The Permittee must perform pH analysis on site with a calibrated pH meter, pH test kit, or wide range pH indicator paper. The Permittee must record pH monitoring results in the site log book.

## **S5. REPORTING AND RECORDKEEPING REQUIREMENTS**

### **A. High Turbidity Phone Reporting**

Anytime sampling performed in accordance with Special Condition S4.C indicates turbidity has reached the 250 NTU phone reporting level, the Permittee must call Ecology's Regional office by phone within 24 hours of analysis. The web site is <http://www.ecy.wa.gov/programs/wq/stormwater/construction/permit.html>. Also see phone numbers in Special Condition S4.C.5.b.i.

### **B. Discharge Monitoring Reports**

Permittees required to conduct water quality sampling in accordance with Special Conditions S4.C (Turbidity/Transparency), S4.D (pH), S8 (303[d]/TMDL sampling), and/or G13 (Additional Sampling) must submit the results to Ecology.

Permittees must submit monitoring data using Ecology's WebDMR program. To find out more information and to sign up for WebDMR go to:

<http://www.ecy.wa.gov/programs/wq/permits/paris/webdmr.html>.

Permittees unable to submit electronically (for example, those who do not have an internet connection) must contact Ecology to request a waiver and obtain instructions on how to obtain a paper copy DMR at:

Mailing Address:  
Department of Ecology  
Water Quality Program  
Attn: Stormwater Compliance Specialist  
PO Box 47696  
Olympia, WA 98504-7696

Permittees who obtain a waiver not to use WebDMR must use the forms provided to them by Ecology; submittals must be mailed to the address above. Permittees shall submit DMR forms to be received by Ecology within 15 days following the end of each month.

If there was no discharge during a given monitoring period, all Permittees must submit a DMR as required with "no discharge" entered in place of the monitoring results. For more information, contact Ecology staff using information provided at the following web site: <http://www.ecy.wa.gov/programs/spills/response/assistancessoil%20map.pdf>

### **C. Records Retention**

The Permittee must retain records of all monitoring information (site log book, sampling results, inspection reports/checklists, etc.), Stormwater Pollution Prevention Plan, and any other documentation of compliance with permit requirements for the entire life of the construction project and for a minimum of three years following the termination of permit coverage. Such information must include all calibration and maintenance records, and records of all data used to complete the application for this

permit. This period of retention must be extended during the course of any unresolved litigation regarding the discharge of pollutants by the Permittee or when requested by Ecology.

D. Recording Results

For each measurement or sample taken, the Permittee must record the following information:

1. Date, place, method, and time of sampling or measurement.
2. The first and last name of the individual who performed the sampling or measurement.
3. The date(s) the analyses were performed.
4. The first and last name of the individual who performed the analyses.
5. The analytical techniques or methods used.
6. The results of all analyses.

E. Additional Monitoring by the Permittee

If the Permittee monitors any pollutant more frequently than required by this permit using test procedures specified by Special Condition S4 of this permit, the results of this monitoring must be included in the calculation and reporting of the data submitted in the Permittee's DMR.

F. Noncompliance Notification

In the event the Permittee is unable to comply with any part of the terms and conditions of this permit, and the resulting noncompliance may cause a threat to human health or the environment, the Permittee must:

1. Immediately notify Ecology of the failure to comply by calling the applicable Regional office ERTS phone number (find at <http://www.ecy.wa.gov/programs/spills/response/assurancesoi1%20map.pdf>) or refer to Special Condition S4.C.5.b.i.
2. Immediately take action to prevent the discharge/pollution, or otherwise stop or correct the noncompliance, and, if applicable, repeat sampling and analysis of any noncompliance immediately and submit the results to Ecology within five (5) days of becoming aware of the violation.
3. Submit a detailed written report to Ecology within five (5) days, unless requested earlier by Ecology. The report must contain a description of the noncompliance, including exact dates and times, and if the noncompliance has not been corrected, the anticipated time it is expected to continue; and the steps taken or planned to reduce, eliminate, and prevent reoccurrence of the noncompliance.

The Permittee must report any unanticipated bypass and/or upset that exceeds any effluent limit in the permit in accordance with the 24-hour reporting requirement contained in 40 C.F.R. 122.41(l)(6)).

Compliance with these requirements does not relieve the Permittee from responsibility to maintain continuous compliance with the terms and conditions of this permit or the resulting liability for failure to comply. Refer to Section G14 of this permit for specific information regarding non-compliance.

G. Access to Plans and Records

1. The Permittee must retain the following permit documentation (plans and records) on site, or within reasonable access to the site, for use by the operator or for on-site review by Ecology or the local jurisdiction:
  - a. General Permit.
  - b. Permit Coverage Letter.
  - c. Stormwater Pollution Prevention Plan (SWPPP).
  - d. Site Log Book.
2. The Permittee must address written requests for plans and records listed above (Special Condition S5.G.1) as follows:
  - a. The Permittee must provide a copy of plans and records to Ecology within 14 days of receipt of a written request from Ecology.
  - b. The Permittee must provide a copy of plans and records to the public when requested in writing. Upon receiving a written request from the public for the Permittee's plans and records, the Permittee must either:
    - i. Provide a copy of the plans and records to the requester within 14 days of a receipt of the written request; or
    - ii. Notify the requester within 10 days of receipt of the written request of the location and times within normal business hours when the plans and records may be viewed; and provide access to the plans and records within 14 days of receipt of the written request; or

Within 14 days of receipt of the written request, the Permittee may submit a copy of the plans and records to Ecology for viewing and/or copying by the requester at an Ecology office, or a mutually agreed location. If plans and records are viewed and/or copied at a location other than at an Ecology office, the Permittee will provide reasonable access to copying services for which a reasonable fee may be charged. The Permittee must notify the requester within 10 days of receipt of the request where the plans and records may be viewed and/or copied.

## **S6. PERMIT FEES**

The Permittee must pay permit fees assessed by Ecology. Fees for stormwater discharges covered under this permit are established by Chapter 173-224 WAC. Ecology continues to assess permit fees until the permit is terminated in accordance with Special Condition S10 or revoked in accordance with General Condition G5.

## **S7. SOLID AND LIQUID WASTE DISPOSAL**

The Permittee must handle and dispose of solid and liquid wastes generated by construction activity, such as demolition debris, construction materials, contaminated materials, and waste materials from maintenance activities, including liquids and solids from cleaning catch basins and other stormwater facilities, in accordance with:

- A. Special Condition S3, Compliance with Standards.
- B. WAC 173-216-110.
- C. Other applicable regulations.

## **S8. DISCHARGES TO 303(D) OR TMDL WATER BODIES**

### **A. Sampling and Numeric Effluent Limits For Certain Discharges to 303(d)-listed Water Bodies**

- 1. Permittees who discharge to segments of water bodies listed as impaired by the State of Washington under Section 303(d) of the Clean Water Act for turbidity, fine sediment, high pH, or phosphorus, must conduct water quality sampling according to the requirements of this section, and Special Conditions S4.C.2.b-f and S4.C.3.b-d, and must comply with the applicable numeric effluent limitations in S8.C and S8.D.
- 2. All references and requirements associated with Section 303(d) of the Clean Water Act mean the most current listing by Ecology of impaired waters (Category 5) that exists on January 1, 2011, or the date when the operator's complete permit application is received by Ecology, whichever is later.

### **B. Limits on Coverage for New Discharges to TMDL or 303(d)-listed Waters**

Operators of construction sites that discharge to a 303(d)-listed water body are not eligible for coverage under this permit *unless* the operator:

- 1. Prevents exposing stormwater to pollutants for which the water body is impaired, and retains documentation in the SWPPP that details procedures taken to prevent exposure on site; or
- 2. Documents that the pollutants for which the water body is impaired are not present at the site, and retains documentation of this finding within the SWPPP; or

3. Provides Ecology with data indicating the discharge is not expected to cause or contribute to an exceedance of a water quality standard, and retains such data on site with the SWPPP. The operator must provide data and other technical information to Ecology that sufficiently demonstrate:
  - a. For discharges to waters without an EPA-approved or -established TMDL, that the discharge of the pollutant for which the water is impaired will meet in-stream water quality criteria at the point of discharge to the water body; or
  - b. For discharges to waters with an EPA-approved or -established TMDL, that there is sufficient remaining wasteload allocation in the TMDL to allow construction stormwater discharge and that existing dischargers to the water body are subject to compliance schedules designed to bring the water body into attainment with water quality standards.

Operators of construction sites are eligible for coverage under this permit if Ecology issues permit coverage based upon an affirmative determination that the discharge will not cause or contribute to the existing impairment.

C. Sampling and Numeric Effluent Limits for Discharges to Water Bodies on the 303(d) List for Turbidity, Fine Sediment, or Phosphorus

1. Permittees who discharge to segments of water bodies on the 303(d) list (Category 5) for turbidity, fine sediment, or phosphorus must conduct turbidity sampling in accordance with Special Condition S4.C.2 and comply with either of the numeric effluent limits noted in Table 5 below.
2. As an alternative to the 25 NTU effluent limit noted in Table 5 below (applied at the point where stormwater [or authorized non-stormwater] is discharged off-site), permittees may choose to comply with the surface water quality standard for turbidity. The standard is: no more than 5 NTU over background turbidity when the background turbidity is 50 NTU or less, or no more than a 10% increase in turbidity when the background turbidity is more than 50 NTU. In order to use the water quality standard requirement, the sampling must take place at the following locations:
  - a. Background turbidity in the 303(d)-listed receiving water immediately upstream (upgradient) or outside the area of influence of the discharge.
  - b. Turbidity at the point of discharge into the 303(d)-listed receiving water, inside the area of influence of the discharge.
3. Discharges that exceed the numeric effluent limit for turbidity constitute a violation of this permit.
4. Permittees whose discharges exceed the numeric effluent limit shall sample discharges daily until the violation is corrected and comply with the non-compliance notification requirements in Special Condition S5.F.

Table 5. Turbidity, Fine Sediment & Phosphorus Sampling and Limits for 303(d)-Listed Waters

Parameter identified in 303(d) listing	Parameter Sampled	Unit	Analytical Method	Sampling Frequency	Numeric Effluent Limit <sup>1</sup>
<ul style="list-style-type: none"> <li>Turbidity</li> <li>Fine Sediment</li> <li>Phosphorus</li> </ul>	Turbidity	NTU	SM2130 or EPA180.1	Weekly, if discharging	25 NTU, at the point where stormwater is discharged from the site; OR  In compliance with the surface water quality standard for turbidity (S8.C.1.a)

<sup>1</sup>Permittees subject to a numeric effluent limit for turbidity may, at their discretion, choose either numeric effluent limitation based on site-specific considerations including, but not limited to, safety, access and convenience.

D. Discharges to Water Bodies on the 303(d) List for High pH

1. Permittees who discharge to segments of water bodies on the 303(d) list (Category 5) for high pH must conduct pH sampling in accordance with the table below, and comply with the numeric effluent limit of pH 6.5 to 8.5 su (Table 6).

Table 6. pH Sampling and Limits for 303(d)-Listed Waters

Parameter identified in 303(d) listing	Parameter Sampled/Units	Analytical Method	Sampling Frequency	Numeric Effluent Limit
High pH	pH /Standard Units	pH meter	Weekly, if discharging	In the range of 6.5 – 8.5

2. At the Permittee's discretion, compliance with the limit shall be assessed at one of the following locations:
  - a. Directly in the 303(d)-listed water body segment, inside the immediate area of influence of the discharge; or
  - b. Alternatively, the permittee may measure pH at the point where the discharge leaves the construction site, rather than in the receiving water.
3. Discharges that exceed the numeric effluent limit for pH (outside the range of 6.5 – 8.5 su) constitute a violation of this permit.
4. Permittees whose discharges exceed the numeric effluent limit shall sample discharges daily until the violation is corrected and comply with the non-compliance notification requirements in Special Condition S5.F.

E. Sampling and Limits for Sites Discharging to Waters Covered by a TMDL or Another Pollution Control Plan

1. Discharges to a water body that is subject to a Total Maximum Daily Load (TMDL) for turbidity, fine sediment, high pH, or phosphorus must be consistent with the TMDL. Refer to <http://www.ecy.wa.gov/programs/wq/tmdl/index.html> for more information on TMDLs.
  - a. Where an applicable TMDL sets specific waste load allocations or requirements for discharges covered by this permit, discharges must be consistent with any specific waste load allocations or requirements established by the applicable TMDL.
    - i. The Permittee must sample discharges weekly or as otherwise specified by the TMDL to evaluate compliance with the specific waste load allocations or requirements.
    - ii. Analytical methods used to meet the monitoring requirements must conform to the latest revision of the Guidelines Establishing Test Procedures for the Analysis of Pollutants contained in 40 CFR Part 136. Turbidity and pH methods need not be accredited or registered unless conducted at a laboratory which must otherwise be accredited or registered.
  - b. Where an applicable TMDL has established a general waste load allocation for construction stormwater discharges, but has not identified specific requirements, compliance with Special Conditions S4 (Monitoring) and S9 (SWPPPs) will constitute compliance with the approved TMDL.
  - c. Where an applicable TMDL has not specified a waste load allocation for construction stormwater discharges, but has not excluded these discharges, compliance with Special Conditions S4 (Monitoring) and S9 (SWPPPs) will constitute compliance with the approved TMDL.
  - d. Where an applicable TMDL specifically precludes or prohibits discharges from construction activity, the operator is not eligible for coverage under this permit.
2. Applicable TMDL means a TMDL for turbidity, fine sediment, high pH, or phosphorus that is completed and approved by EPA before January 1, 2011, or before the date the operator's complete permit application is received by Ecology, whichever is later. TMDLs completed after the operator's complete permit application is received by Ecology become applicable to the Permittee only if they are imposed through an administrative order by Ecology, or through a modification of permit coverage.



## **S9. STORMWATER POLLUTION PREVENTION PLAN**

The Permittee must prepare and properly implement an adequate Stormwater Pollution Prevention Plan (SWPPP) for construction activity in accordance with the requirements of this permit beginning with initial soil disturbance and until final stabilization.

### **A. The Permittee's SWPPP must meet the following objectives:**

1. To implement best management practices (BMPs) to prevent erosion and sedimentation, and to identify, reduce, eliminate or prevent stormwater contamination and water pollution from construction activity.
2. To prevent violations of surface water quality, ground water quality, or sediment management standards.
3. To control peak volumetric flow rates and velocities of stormwater discharges.

### **B. General Requirements**

1. The SWPPP must include a narrative and drawings. All BMPs must be clearly referenced in the narrative and marked on the drawings. The SWPPP narrative must include documentation to explain and justify the pollution prevention decisions made for the project. Documentation must include:
  - a. Information about existing site conditions (topography, drainage, soils, vegetation, etc.).
  - b. Potential erosion problem areas.
  - c. The 12 elements of a SWPPP in Special Condition S9.D.1-12, including BMPs used to address each element.
  - d. Construction phasing/sequence and general BMP implementation schedule.
  - e. The actions to be taken if BMP performance goals are not achieved—for example, a contingency plan for additional treatment and/or storage of stormwater that would violate the water quality standards if discharged.
  - f. Engineering calculations for ponds and any other designed structures.
2. The Permittee must modify the SWPPP if, during inspections or investigations conducted by the owner/operator, or the applicable local or state regulatory authority, it is determined that the SWPPP is, or would be, ineffective in eliminating or significantly minimizing pollutants in stormwater discharges from the site. The Permittee must then:
  - a. Review the SWPPP for compliance with Special Condition S9 and make appropriate revisions within 7 days of the inspection or investigation.
  - b. Immediately begin the process to fully implement and maintain appropriate source control and/or treatment BMPs as soon as possible, addressing the problems no later than 10 days from the inspection or investigation. If

installation of necessary treatment BMPs is not feasible within 10 days, Ecology may approve additional time when an extension is requested by a Permittee within the initial 10-day response period,

- c. Document BMP implementation and maintenance in the site log book.

The Permittee must modify the SWPPP whenever 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.

C. Stormwater Best Management Practices (BMPs)

BMPs must be consistent with:

1. Stormwater Management Manual for Western Washington (most recent edition), for sites west of the crest of the Cascade Mountains; or
2. Stormwater Management Manual for Eastern Washington (most recent edition), for sites east of the crest of the Cascade Mountains; or
3. Revisions to the manuals listed in Special Condition S9.C.1. & 2., or other stormwater management guidance documents or manuals which provide an equivalent level of pollution prevention, that are approved by Ecology and incorporated into this permit in accordance with the permit modification requirements of WAC 173-226-230; or
4. Documentation in the SWPPP that the BMPs selected provide an equivalent level of pollution prevention, compared to the applicable Stormwater Management Manuals, including:
  - a. The technical basis for the selection of all stormwater BMPs (scientific, technical studies, and/or modeling) that support the performance claims for the BMPs being selected.
  - b. An assessment of how the selected BMP will satisfy AKART requirements and the applicable federal technology-based treatment requirements under 40 CFR part 125.3.

D. SWPPP – Narrative Contents and Requirements

The Permittee must include each of the 12 elements below in Special Condition S9.D.1-12 in the narrative of the SWPPP and implement them unless site conditions render the element unnecessary and the exemption from that element is clearly justified in the SWPPP.

1. Preserve Vegetation/Mark Clearing Limits
  - a. Before beginning land-disturbing activities, including clearing and grading, clearly mark all clearing limits, sensitive areas and their buffers, and trees that are to be preserved within the construction area.

- b. Retain the duff layer, native top soil, and natural vegetation in an undisturbed state to the maximum degree practicable.
- 2. Establish Construction Access
  - a. Limit construction vehicle access and exit to one route, if possible.
  - b. Stabilize access points with a pad of quarry spalls, crushed rock, or other equivalent BMPs, to minimize tracking sediment onto roads.
  - c. Locate wheel wash or tire baths on site, if the stabilized construction entrance is not effective in preventing tracking sediment onto roads.
  - d. If sediment is tracked off site, clean the affected roadway thoroughly at the end of each day, or more frequently as necessary (for example, during wet weather). Remove sediment from roads by shoveling, sweeping, or pickup and transport of the sediment to a controlled sediment disposal area.
  - e. Conduct street washing only after sediment removal in accordance with Special Condition S9.D.2.d. Control street wash wastewater by pumping back on site or otherwise preventing it from discharging into systems tributary to waters of the State.
- 3. Control Flow Rates
  - a. Protect properties and waterways downstream of development sites from erosion and the associated discharge of turbid waters due to increases in the velocity and peak volumetric flow rate of stormwater runoff from the project site, as required by local plan approval authority.
  - b. Where necessary to comply with Special Condition S9.D.3.a, construct stormwater retention or detention facilities as one of the first steps in grading. Assure that detention facilities function properly before constructing site improvements (for example, impervious surfaces).
  - c. If permanent infiltration ponds are used for flow control during construction, protect these facilities from siltation during the construction phase.
- 4. Install Sediment Controls

The Permittee must design, install and maintain effective erosion controls and sediment controls to minimize the discharge of pollutants. At a minimum, the Permittee must design, install and maintain such controls to:

- a. Construct sediment control BMPs (sediment ponds, traps, filters, etc.) as one of the first steps in grading. These BMPs must be functional before other land disturbing activities take place.
- b. Minimize sediment discharges from the site. The design, installation and maintenance of erosion and sediment controls must address factors such as the amount, frequency, intensity and duration of precipitation, the nature of

resulting stormwater runoff, and soil characteristics, including the range of soil particle sizes expected to be present on the site.

- c. Direct stormwater runoff from disturbed areas through a sediment pond or other appropriate sediment removal BMP, before the runoff leaves a construction site or before discharge to an infiltration facility. Runoff from fully stabilized areas may be discharged without a sediment removal BMP, but must meet the flow control performance standard of Special Condition S9.D.3.a.
- d. Locate BMPs intended to trap sediment on site in a manner to avoid interference with the movement of juvenile salmonids attempting to enter off-channel areas or drainages.
- e. Provide and maintain natural buffers around surface waters, direct stormwater to vegetated areas to increase sediment removal and maximize stormwater infiltration, unless infeasible.
- f. Where feasible, design outlet structures that withdraw impounded stormwater from the surface to avoid discharging sediment that is still suspended lower in the water column.

5. Stabilize Soils

- a. The Permittee must stabilize exposed and unworked soils by application of effective BMPs that prevent erosion. Applicable BMPs include, but are not limited to: temporary and permanent seeding, sodding, mulching, plastic covering, erosion control fabrics and matting, soil application of polyacrylamide (PAM), the early application of gravel base on areas to be paved, and dust control.
- b. The Permittee must control stormwater volume and velocity within the site to minimize soil erosion.
- c. The Permittee must control stormwater discharges, including both peak flow rates and total stormwater volume, to minimize erosion at outlets and to minimize downstream channel and stream bank erosion.
- d. Depending on the geographic location of the project, the Permittee must not allow soils to remain exposed and unworked for more than the time periods set forth below to prevent erosion:

West of the Cascade Mountains Crest

During the dry season (May 1 - Sept. 30): 7 days

During the wet season (October 1 - April 30): 2 days

East of the Cascade Mountains Crest, except for Central Basin\*

During the dry season (July 1 - September 30): 10 days

During the wet season (October 1 - June 30): 5 days

The Central Basin\*, East of the Cascade Mountains Crest

During the dry Season (July 1 - September 30): 30 days

During the wet season (October 1 - June 30): 15 days

\*Note: The Central Basin is defined as the portions of Eastern Washington with mean annual precipitation of less than 12 inches.

- e. The Permittee must stabilize soils at the end of the shift before a holiday or weekend if needed based on the weather forecast.
  - f. The Permittee must stabilize soil stockpiles from erosion, protected with sediment trapping measures, and where possible, be located away from storm drain inlets, waterways, and drainage channels.
  - g. The Permittee must minimize the amount of soil exposed during construction activity.
  - h. The Permittee must minimize the disturbance of steep slopes.
  - i. The Permittee must minimize soil compaction and, unless infeasible, preserve topsoil.
6. Protect Slopes
- a. The Permittee must design and construct cut-and-fill slopes in a manner to minimize erosion. Applicable practices include, but are not limited to, reducing continuous length of slope with terracing and diversions, reducing slope steepness, and roughening slope surfaces (for example, track walking).
  - b. The Permittee must divert off-site stormwater (run-on) or ground water away from slopes and disturbed areas with interceptor dikes, pipes, and/or swales. Off-site stormwater should be managed separately from stormwater generated on the site.
  - c. At the top of slopes, collect drainage in pipe slope drains or protected channels to prevent erosion.
    - i. West of the Cascade Mountains Crest: Temporary pipe slope drains must handle the peak 10-minute velocity of flow from a Type 1A, 10-year, 24-hour frequency storm for the developed condition. Alternatively, the 10-year, 1-hour flow rate predicted by an approved continuous runoff model, increased by a factor of 1.6, may be used. The hydrologic analysis must use the existing land cover condition for predicting flow rates from tributary areas outside the project limits. For tributary areas on the project site, the analysis must use the temporary or permanent project land cover condition, whichever will produce the highest flow rates. If using the Western Washington Hydrology Model (WWHM) to predict flows, bare soil areas should be modeled as "landscaped area."

- ii. East of the Cascade Mountains Crest: Temporary pipe slope drains must handle the expected peak flow velocity from a 6-month, 3-hour storm for the developed condition, referred to as the short duration storm.
  - d. Place excavated material on the uphill side of trenches, consistent with safety and space considerations.
  - e. Place check dams at regular intervals within constructed channels that are cut down a slope.
7. Protect Drain Inlets
- a. Protect all storm drain inlets made operable during construction so that stormwater runoff does not enter the conveyance system without first being filtered or treated to remove sediment.
  - b. Clean or remove and replace inlet protection devices when sediment has filled one-third of the available storage (unless a different standard is specified by the product manufacturer).
8. Stabilize Channels and Outlets
- a. Design, construct and stabilize all on-site conveyance channels to prevent erosion from the following expected peak flows:
    - i. West of the Cascade Mountains Crest: Channels must handle the peak 10-minute velocity of flow from a Type 1A, 10-year, 24-hour frequency storm for the developed condition. Alternatively, the 10-year, 1-hour flow rate indicated by an approved continuous runoff model, increased by a factor of 1.6, may be used. The hydrologic analysis must use the existing land cover condition for predicting flow rates from tributary areas outside the project limits. For tributary areas on the project site, the analysis must use the temporary or permanent project land cover condition, whichever will produce the highest flow rates. If using the WWHM to predict flows, bare soil areas should be modeled as "landscaped area."
    - ii. East of the Cascade Mountains Crest: Channels must handle the expected peak flow velocity from a 6-month, 3-hour storm for the developed condition, referred to as the short duration storm.
  - b. Provide stabilization, including armoring material, adequate to prevent erosion of outlets, adjacent stream banks, slopes, and downstream reaches at the outlets of all conveyance systems.
9. Control Pollutants
- Design, install, implement and maintain effective pollution prevention measures to minimize the discharge of pollutants. The Permittee must:

- a. Handle and dispose of all pollutants, including waste materials and demolition debris that occur on site in a manner that does not cause contamination of stormwater.
  - b. Provide cover, containment, and protection from vandalism for all chemicals, liquid products, petroleum products, and other materials that have the potential to pose a threat to human health or the environment. On-site fueling tanks must include secondary containment. Secondary containment means placing tanks or containers within an impervious structure capable of containing 110% of the volume contained in the largest tank within the containment structure. Double-walled tanks do not require additional secondary containment.
  - c. Conduct maintenance, fueling, and repair of heavy equipment and vehicles using spill prevention and control measures. Clean contaminated surfaces immediately following any spill incident.
  - d. Discharge wheel wash or tire bath wastewater to a separate on-site treatment system that prevents discharge to surface water, such as closed-loop recirculation or upland land application, or to the sanitary sewer with local sewer district approval.
  - e. Apply fertilizers and pesticides in a manner and at application rates that will not result in loss of chemical to stormwater runoff. Follow manufacturers' label requirements for application rates and procedures.
  - f. Use BMPs to prevent contamination of stormwater runoff by pH-modifying sources. The sources for this contamination include, but are not limited to: bulk cement, cement kiln dust, fly ash, new concrete washing and curing waters, waste streams generated from concrete grinding and sawing, exposed aggregate processes, dewatering concrete vaults, concrete pumping and mixer washout waters. (Also refer to the definition for "concrete wastewater" in Appendix A--Definitions.)
  - g. Adjust the pH of stormwater if necessary to prevent violations of water quality standards.
  - h. Assure that washout of concrete trucks is performed offsite or in designated concrete washout areas only. Do not wash out concrete trucks onto the ground, or into storm drains, open ditches, streets, or streams. Do not dump excess concrete on site, except in designated concrete washout areas. Concrete spillage or concrete discharge to surface waters of the State is prohibited.
  - i. Obtain written approval from Ecology before using chemical treatment other than CO<sub>2</sub> or dry ice to adjust pH.
10. Control Dewatering
- a. Permittees must discharge foundation, vault, and trench dewatering water, which have characteristics similar to stormwater runoff at the site, into a

controlled conveyance system before discharge to a sediment trap or sediment pond.

- b. Permittees may discharge clean, non-turbid dewatering water, such as well-point ground water, to systems tributary to, or directly into surface waters of the State, as specified in Special Condition S9.D.8, provided the dewatering flow does not cause erosion or flooding of receiving waters. Do not route clean dewatering water through stormwater sediment ponds. Note that “surface waters of the State” may exist on a construction site as well as off site; for example, a creek running through a site.
- c. Other treatment or disposal options may include:
  - i. Infiltration.
  - ii. Transport off site in a vehicle, such as a vacuum flush truck, for legal disposal in a manner that does not pollute state waters.
  - iii. Ecology-approved on-site chemical treatment or other suitable treatment technologies.
  - iv. Sanitary or combined sewer discharge with local sewer district approval, if there is no other option.
  - v. Use of a sedimentation bag with discharge to a ditch or swale for small volumes of localized dewatering.
- d. Permittees must handle highly turbid or contaminated dewatering water separately from stormwater.

11. Maintain BMPs

- a. Permittees must maintain and repair all temporary and permanent erosion and sediment control BMPs as needed to assure continued performance of their intended function in accordance with BMP specifications.
- b. Permittees must remove all temporary erosion and sediment control BMPs within 30 days after achieving final site stabilization or after the temporary BMPs are no longer needed.

12. Manage the Project

- a. Phase development projects to the maximum degree practicable and take into account seasonal work limitations.
- b. Inspection and monitoring -- Inspect, maintain and repair all BMPs as needed to assure continued performance of their intended function. Conduct site inspections and monitoring in accordance with Special Condition S4.
- c. Maintaining an updated construction SWPPP -- Maintain, update, and implement the SWPPP in accordance with Special Conditions S3, S4 and S9.



E. SWPPP – Map Contents and Requirements

The Permittee's SWPPP must also include a vicinity map or general location map (for example, a USGS quadrangle map, a portion of a county or city map, or other appropriate map) with enough detail to identify the location of the construction site and receiving waters within one mile of the site.

The SWPPP must also include a legible site map (or maps) showing the entire construction site. The following features must be identified, unless not applicable due to site conditions:

1. The direction of north, property lines, and existing structures and roads.
2. Cut and fill slopes indicating the top and bottom of slope catch lines.
3. Approximate slopes, contours, and direction of stormwater flow before and after major grading activities.
4. Areas of soil disturbance and areas that will not be disturbed.
5. Locations of structural and nonstructural controls (BMPs) identified in the SWPPP.
6. Locations of off-site material, stockpiles, waste storage, borrow areas, and vehicle/equipment storage areas.
7. Locations of all surface water bodies, including wetlands.
8. Locations where stormwater or non-stormwater discharges off-site and/or to a surface water body, including wetlands.
9. Location of water quality sampling station(s), if sampling is required by state or local permitting authority.
10. Areas where final stabilization has been accomplished and no further construction-phase permit requirements apply.

**S10. NOTICE OF TERMINATION**

- A. The site is eligible for termination of coverage when it has met any of the following conditions:
1. The site has undergone final stabilization, the Permittee has removed all temporary BMPs (except biodegradable BMPs clearly manufactured with the intention for the material to be left in place and not interfere with maintenance or land use), and all stormwater discharges associated with construction activity have been eliminated; or
  2. All portions of the site that have not undergone final stabilization per Special Condition S10.A.1 have been sold and/or transferred (per General Condition G9), and the Permittee no longer has operational control of the construction activity; or

3. For residential construction only, the Permittee has completed temporary stabilization and the homeowners have taken possession of the residences.
- B. When the site is eligible for termination, the Permittee must submit a complete and accurate Notice of Termination (NOT) form, signed in accordance with General Condition G2, to:

Department of Ecology  
Water Quality Program - Construction Stormwater  
PO Box 47696  
Olympia, Washington 98504-7696

The termination is effective on the date Ecology receives the NOT form, unless Ecology notifies the Permittee within 30 days that termination request is denied because the Permittee has not met the eligibility requirements in Special Condition S10.A.

Permittees transferring the property to a new property owner or operator/permittee are required to complete and submit the Notice of Transfer form to Ecology, but are not required to submit a Notice of Termination form for this type of transaction.

## GENERAL CONDITIONS

### G1. DISCHARGE VIOLATIONS

All discharges and activities authorized by this general permit must be consistent with the terms and conditions of this general permit. Any discharge of any pollutant more frequent than or at a level in excess of that identified and authorized by the general permit must constitute a violation of the terms and conditions of this permit.

### G2. SIGNATORY REQUIREMENTS

- A. All permit applications must bear a certification of correctness to be signed:
  - 1. In the case of corporations, by a responsible corporate officer of at least the level of vice president of a corporation;
  - 2. In the case of a partnership, by a general partner of a partnership;
  - 3. In the case of sole proprietorship, by the proprietor; or
  - 4. In the case of a municipal, state, or other public facility, by either a principal executive officer or ranking elected official.
- B. All reports required by this permit and other information requested by Ecology must be signed by a person described above or by a duly authorized representative of that person. A person is a duly authorized representative only if:
  - 1. The authorization is made in writing by a person described above and submitted to the Ecology.
  - 2. The authorization specifies either an individual or a position having responsibility for the overall operation of the regulated facility, such as the position of plant manager, superintendent, position of equivalent responsibility, or an individual or position having overall responsibility for environmental matters.
- C. Changes to authorization. If an authorization under paragraph G2.B.2 above is no longer accurate because a different individual or position has responsibility for the overall operation of the facility, a new authorization satisfying the requirements of paragraph G2.B.2 above must be submitted to Ecology prior to or together with any reports, information, or applications to be signed by an authorized representative.
- D. Certification. Any person signing a document under this section must make the following certification:

“I certify under penalty of law, that this document and all attachments were prepared under my direction or supervision in accordance with a system designed to assure that qualified personnel properly gathered and evaluated the information submitted. Based on my inquiry of the person or persons who manage the system, or those persons directly responsible for gathering

information, the information submitted is, to the best of my knowledge and belief, true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment for knowing violations.”

### **G3. RIGHT OF INSPECTION AND ENTRY**

The Permittee must allow an authorized representative of Ecology, upon the presentation of credentials and such other documents as may be required by law:

- A. To enter upon the premises where a discharge is located or where any records are kept under the terms and conditions of this permit.
- B. To have access to and copy – at reasonable times and at reasonable cost -- any records required to be kept under the terms and conditions of this permit.
- C. To inspect -- at reasonable times – any facilities, equipment (including monitoring and control equipment), practices, methods, or operations regulated or required under this permit.
- D. To sample or monitor – at reasonable times – any substances or parameters at any location for purposes of assuring permit compliance or as otherwise authorized by the Clean Water Act.

### **G4. GENERAL PERMIT MODIFICATION AND REVOCATION**

This permit may be modified, revoked and reissued, or terminated in accordance with the provisions of Chapter 173-226 WAC. Grounds for modification, revocation and reissuance, or termination include, but are not limited to, the following:

- A. When a change occurs in the technology or practices for control or abatement of pollutants applicable to the category of dischargers covered under this permit.
- B. When effluent limitation guidelines or standards are promulgated pursuant to the CWA or Chapter 90.48 RCW, for the category of dischargers covered under this permit.
- C. When a water quality management plan containing requirements applicable to the category of dischargers covered under this permit is approved, or
- D. When information is obtained that indicates cumulative effects on the environment from dischargers covered under this permit are unacceptable.

### **G5. REVOCATION OF COVERAGE UNDER THE PERMIT**

Pursuant to Chapter 43.21B RCW and Chapter 173-226 WAC, the Director may terminate coverage for any discharger under this permit for cause. Cases where coverage may be terminated include, but are not limited to, the following:

- A. Violation of any term or condition of this permit.
- B. Obtaining coverage under this permit by misrepresentation or failure to disclose fully all relevant facts.
- C. A change in any condition that requires either a temporary or permanent reduction or elimination of the permitted discharge.
- D. Failure or refusal of the Permittee to allow entry as required in RCW 90.48.090.
- E. A determination that the permitted activity endangers human health or the environment, or contributes to water quality standards violations.
- F. Nonpayment of permit fees or penalties assessed pursuant to RCW 90.48.465 and Chapter 173-224 WAC.
- G. Failure of the Permittee to satisfy the public notice requirements of WAC 173-226-130(5), when applicable.

The Director may require any discharger under this permit to apply for and obtain coverage under an individual permit or another more specific general permit. Permittees who have their coverage revoked for cause according to WAC 173-226-240 may request temporary coverage under this permit during the time an individual permit is being developed, provided the request is made within ninety (90) days from the time of revocation and is submitted along with a complete individual permit application form.

#### **G6. REPORTING A CAUSE FOR MODIFICATION**

The Permittee must submit a new application, or a supplement to the previous application, whenever a material change to the construction activity or in the quantity or type of discharge is anticipated which is not specifically authorized by this permit. This application must be submitted at least sixty (60) days prior to any proposed changes. Filing a request for a permit modification, revocation and reissuance, or termination, or a notification of planned changes or anticipated noncompliance does not relieve the Permittee of the duty to comply with the existing permit until it is modified or reissued.

#### **G7. COMPLIANCE WITH OTHER LAWS AND STATUTES**

Nothing in this permit will be construed as excusing the Permittee from compliance with any applicable federal, state, or local statutes, ordinances, or regulations.

#### **G8. DUTY TO REAPPLY**

The Permittee must apply for permit renewal at least 180 days prior to the specified expiration date of this permit.

#### **G9. TRANSFER OF GENERAL PERMIT COVERAGE**

Coverage under this general permit is automatically transferred to a new discharger, including operators of lots/parcels within a common plan of development or sale, **if**:

- A. A written agreement (Transfer of Coverage Form) between the current discharger (Permittee) and new discharger, signed by both parties and containing a specific date for transfer of permit responsibility, coverage, and liability is submitted to the Director; and
- B. The Director does not notify the current discharger and new discharger of the Director's intent to revoke coverage under the general permit. If this notice is not given, the transfer is effective on the date specified in the written agreement.

When a current discharger (Permittee) transfers a portion of a permitted site, the current discharger must also submit an updated application form (NOI) to the Director indicating the remaining permitted acreage after the transfer.

#### **G10. REMOVED SUBSTANCES**

The Permittee must not re-suspend or reintroduce collected screenings, grit, solids, sludges, filter backwash, or other pollutants removed in the course of treatment or control of stormwater to the final effluent stream for discharge to state waters.

#### **G11. DUTY TO PROVIDE INFORMATION**

The Permittee must submit to Ecology, within a reasonable time, all information that Ecology may request to determine whether cause exists for modifying, revoking and reissuing, or terminating this permit or to determine compliance with this permit. The Permittee must also submit to Ecology, upon request, copies of records required to be kept by this permit [40 CFR 122.41(h)].

#### **G12. OTHER REQUIREMENTS OF 40 CFR**

All other requirements of 40 CFR 122.41 and 122.42 are incorporated in this permit by reference.

#### **G13. ADDITIONAL MONITORING**

Ecology may establish specific monitoring requirements in addition to those contained in this permit by administrative order or permit modification.

#### **G14. PENALTIES FOR VIOLATING PERMIT CONDITIONS**

Any person who is found guilty of willfully violating the terms and conditions of this permit shall be deemed guilty of a crime, and upon conviction thereof shall be punished by a fine of up to ten thousand dollars (\$10,000) and costs of prosecution, or by imprisonment in the discretion of the court. Each day upon which a willful violation occurs may be deemed a separate and additional violation.

Any person who violates the terms and conditions of a waste discharge permit shall incur, in addition to any other penalty as provided by law, a civil penalty in the amount of up to ten thousand dollars (\$10,000) for every such violation. Each and every such violation shall be a separate and distinct offense, and in case of a continuing violation, every day's continuance shall be deemed to be a separate and distinct violation.

#### **G15. UPSET**

Definition – "Upset" means an exceptional incident in which there is unintentional and temporary noncompliance with technology-based permit effluent limitations because of factors beyond the reasonable control of the Permittee. An upset does not include noncompliance to the extent caused by operational error, improperly designed treatment facilities, inadequate treatment facilities, lack of preventive maintenance, or careless or improper operation.

An upset constitutes an affirmative defense to an action brought for noncompliance with such technology-based permit effluent limitations if the requirements of the following paragraph are met.

A Permittee who wishes to establish the affirmative defense of upset must demonstrate, through properly signed, contemporaneous operating logs or other relevant evidence that: 1) an upset occurred and that the Permittee can identify the cause(s) of the upset; 2) the permitted facility was being properly operated at the time of the upset; 3) the Permittee submitted notice of the upset as required in Special Condition S5.F, and; 4) the Permittee complied with any remedial measures required under this permit.

In any enforcement proceeding, the Permittee seeking to establish the occurrence of an upset has the burden of proof.

#### **G16. PROPERTY RIGHTS**

This permit does not convey any property rights of any sort, or any exclusive privilege.

#### **G17. DUTY TO COMPLY**

The Permittee must comply with all conditions of this permit. Any permit noncompliance constitutes a violation of the Clean Water Act and is grounds for enforcement action; for permit termination, revocation and reissuance, or modification; or denial of a permit renewal application.

#### **G18. TOXIC POLLUTANTS**

The Permittee must comply with effluent standards or prohibitions established under Section 307(a) of the Clean Water Act for toxic pollutants within the time provided in the regulations that establish those standards or prohibitions, even if this permit has not yet been modified to incorporate the requirement.

#### **G19. PENALTIES FOR TAMPERING**

The Clean Water Act provides that any person who falsifies, tampers with, or knowingly renders inaccurate any monitoring device or method required to be maintained under this permit shall, upon conviction, be punished by a fine of not more than \$10,000 per violation, or by imprisonment for not more than two years per violation, or by both. If a conviction of a person is for a violation committed after a first conviction of such person under this condition, punishment shall be a fine of not more than \$20,000 per day of violation, or imprisonment of not more than four (4) years, or both.

#### **G20. REPORTING PLANNED CHANGES**

The Permittee must, as soon as possible, give notice to Ecology of planned physical alterations, modifications or additions to the permitted construction activity. The Permittee should be aware that, depending on the nature and size of the changes to the original permit, a new public notice and other permit process requirements may be required. Changes in activities that require reporting to Ecology include those that will result in:

- A. The permitted facility being determined to be a new source pursuant to 40 CFR 122.29(b).
- B. A significant change in the nature or an increase in quantity of pollutants discharged, including but not limited to: for sites 5 acres or larger, a 20% or greater increase in acreage disturbed by construction activity.
- C. A change in or addition of surface water(s) receiving stormwater or non-stormwater from the construction activity.
- D. A change in the construction plans and/or activity that affects the Permittee's monitoring requirements in Special Condition S4.

Following such notice, permit coverage may be modified, or revoked and reissued pursuant to 40 CFR 122.62(a) to specify and limit any pollutants not previously limited. Until such modification is effective, any new or increased discharge in excess of permit limits or not specifically authorized by this permit constitutes a violation.



#### **G21. REPORTING OTHER INFORMATION**

Where the Permittee becomes aware that it failed to submit any relevant facts in a permit application, or submitted incorrect information in a permit application or in any report to Ecology, it must promptly submit such facts or information.

#### **G22. REPORTING ANTICIPATED NON-COMPLIANCE**

The Permittee must give advance notice to Ecology by submission of a new application or supplement thereto at least forty-five (45) days prior to commencement of such discharges, of any facility expansions, production increases, or other planned changes, such as process modifications, in the permitted facility or activity which may result in noncompliance with permit limits or conditions. Any maintenance of facilities, which might necessitate unavoidable interruption of operation and degradation of effluent quality, must be scheduled during non-critical water quality periods and carried out in a manner approved by Ecology.

#### **G23. REQUESTS TO BE EXCLUDED FROM COVERAGE UNDER THE PERMIT**

Any discharger authorized by this permit may request to be excluded from coverage under the general permit by applying for an individual permit. The discharger must submit to the Director an application as described in WAC 173-220-040 or WAC 173-216-070, whichever is applicable, with reasons supporting the request. These reasons will fully document how an individual permit will apply to the applicant in a way that the general permit cannot. Ecology may make specific requests for information to support the request. The Director will either issue an individual permit or deny the request with a statement explaining the reason for the denial. When an individual permit is issued to a discharger otherwise subject to the construction stormwater general permit, the applicability of the construction stormwater general permit to that Permittee is automatically terminated on the effective date of the individual permit.

#### **G24. APPEALS**

- A. The terms and conditions of this general permit, as they apply to the appropriate class of dischargers, are subject to appeal by any person within 30 days of issuance of this general permit, in accordance with Chapter 43.21B RCW, and Chapter 173-226 WAC.
- B. The terms and conditions of this general permit, as they apply to an individual discharger, are appealable in accordance with Chapter 43.21B RCW within 30 days of the effective date of coverage of that discharger. Consideration of an appeal of general permit coverage of an individual discharger is limited to the general permit's applicability or nonapplicability to that individual discharger.
- C. The appeal of general permit coverage of an individual discharger does not affect any other dischargers covered under this general permit. If the terms and conditions of this general permit are found to be inapplicable to any individual discharger(s), the matter

shall be remanded to Ecology for consideration of issuance of an individual permit or permits.

**G25. SEVERABILITY**

The provisions of this permit are severable, and if any provision of this permit, or application of any provision of this permit to any circumstance, is held invalid, the application of such provision to other circumstances, and the remainder of this permit shall not be affected thereby.

**G26. BYPASS PROHIBITED**

A. Bypass Procedures

Bypass, which is the intentional diversion of waste streams from any portion of a treatment facility, is prohibited for stormwater events below the design criteria for stormwater management. Ecology may take enforcement action against a Permittee for bypass unless one of the following circumstances (1, 2, 3 or 4) is applicable.

1. Bypass of stormwater is consistent with the design criteria and part of an approved management practice in the applicable stormwater management manual.
2. Bypass for essential maintenance without the potential to cause violation of permit limits or conditions.

Bypass is authorized if it is for essential maintenance and does not have the potential to cause violations of limitations or other conditions of this permit, or adversely impact public health.

3. Bypass of stormwater is unavoidable, unanticipated, and results in noncompliance of this permit.

This bypass is permitted only if:

- a. Bypass is unavoidable to prevent loss of life, personal injury, or severe property damage. "Severe property damage" means substantial physical damage to property, damage to the treatment facilities which would cause them to become inoperable, or substantial and permanent loss of natural resources which can reasonably be expected to occur in the absence of a bypass.
- b. There are no feasible alternatives to the bypass, such as the use of auxiliary treatment facilities, retention of untreated wastes, maintenance during normal periods of equipment downtime (but not if adequate backup equipment should have been installed in the exercise of reasonable engineering judgment to prevent a bypass which occurred during normal periods of equipment downtime or preventative maintenance), or transport of untreated wastes to another treatment facility.

- c. Ecology is properly notified of the bypass as required in Special Condition S5.F of this permit.
4. A planned action that would cause bypass of stormwater and has the potential to result in noncompliance of this permit during a storm event.

The Permittee must notify Ecology at least thirty (30) days before the planned date of bypass. The notice must contain:

- a. a description of the bypass and its cause
  - b. an analysis of all known alternatives which would eliminate, reduce, or mitigate the need for bypassing.
  - c. a cost-effectiveness analysis of alternatives including comparative resource damage assessment.
  - d. the minimum and maximum duration of bypass under each alternative.
  - e. a recommendation as to the preferred alternative for conducting the bypass.
  - f. the projected date of bypass initiation.
  - g. a statement of compliance with SEPA.
  - h. a request for modification of water quality standards as provided for in WAC 173-201A-110, if an exceedance of any water quality standard is anticipated.
  - i. steps taken or planned to reduce, eliminate, and prevent reoccurrence of the bypass.
5. For probable construction bypasses, the need to bypass is to be identified as early in the planning process as possible. The analysis required above must be considered during preparation of the Stormwater Pollution Prevention Plan (SWPPP) and must be included to the extent practical. In cases where the probable need to bypass is determined early, continued analysis is necessary up to and including the construction period in an effort to minimize or eliminate the bypass.

Ecology will consider the following before issuing an administrative order for this type bypass:

- a. If the bypass is necessary to perform construction or maintenance-related activities essential to meet the requirements of this permit.
- b. If there are feasible alternatives to bypass, such as the use of auxiliary treatment facilities, retention of untreated wastes, stopping production, maintenance during normal periods of equipment down time, or transport of untreated wastes to another treatment facility.
- c. If the bypass is planned and scheduled to minimize adverse effects on the public and the environment.

After consideration of the above and the adverse effects of the proposed bypass and any other relevant factors, Ecology will approve, conditionally approve, or deny the request. The public must be notified and given an opportunity to comment on bypass incidents of significant duration, to the extent feasible. Approval of a request to bypass will be by administrative order issued by Ecology under RCW 90.48.120.

B. Duty to Mitigate

The Permittee is required to take all reasonable steps to minimize or prevent any discharge or sludge use or disposal in violation of this permit that has a reasonable likelihood of adversely affecting human health or the environment.

## APPENDIX A – DEFINITIONS

AKART is an acronym for “all known, available, and reasonable methods of prevention, control, and treatment.” AKART represents the most current methodology that can be reasonably required for preventing, controlling, or abating the pollutants and controlling pollution associated with a discharge.

Applicable TMDL means a TMDL for turbidity, fine sediment, high pH, or phosphorus, which was completed and approved by EPA before January 1, 2011, or before the date the operator’s complete permit application is received by Ecology, whichever is later.

Applicant means an operator seeking coverage under this permit.

Best Management Practices (BMPs) means schedules of activities, prohibitions of practices, maintenance procedures, and other physical, structural and/or managerial practices to prevent or reduce the pollution of waters of the State. BMPs include treatment systems, operating procedures, and practices to control: stormwater associated with construction activity, spillage or leaks, sludge or waste disposal, or drainage from raw material storage.

Buffer means an area designated by a local jurisdiction that is contiguous to and intended to protect a sensitive area.

Bypass means the intentional diversion of waste streams from any portion of a treatment facility.

Calendar Day A period of 24 consecutive hours starting at 12:00 midnight and ending the following 12:00 midnight.

Calendar Week (same as Week) means a period of seven consecutive days starting at 12:01 a.m. (0:01 hours) on Sunday.

Certified Erosion and Sediment Control Lead (CESCL) means a person who has current certification through an approved erosion and sediment control training program that meets the minimum training standards established by Ecology (see BMP C160 in the SWMM).

Clean Water Act (CWA) means the Federal Water Pollution Control Act enacted by Public Law 92-500, as amended by Public Laws 95-217, 95-576, 96-483, and 97-117; USC 1251 et seq.

Combined Sewer means a sewer which has been designed to serve as a sanitary sewer and a storm sewer, and into which inflow is allowed by local ordinance.

Common Plan of Development or Sale means a site where multiple separate and distinct construction activities may be taking place at different times on different schedules and/or by different contractors, but still under a single plan. Examples include: 1) phased projects and projects with multiple filings or lots, even if the separate phases or filings/lots will be constructed under separate contract or by separate owners (e.g., a development where lots are sold to separate builders); 2) a development plan that may be phased over multiple years, but is still under a

consistent plan for long-term development; 3) projects in a contiguous area that may be unrelated but still under the same contract, such as construction of a building extension and a new parking lot at the same facility; and 4) linear projects such as roads, pipelines, or utilities. If the project is part of a common plan of development or sale, the disturbed area of the entire plan must be used in determining permit requirements.

Composite Sample means a mixture of grab samples collected at the same sampling point at different times, formed either by continuous sampling or by mixing discrete samples. May be "time-composite" (collected at constant time intervals) or "flow-proportional" (collected either as a constant sample volume at time intervals proportional to stream flow, or collected by increasing the volume of each aliquot as the flow increases while maintaining a constant time interval between the aliquots).

Concrete wastewater means any water used in the production, pouring and/or clean-up of concrete or concrete products, and any water used to cut, grind, wash, or otherwise modify concrete or concrete products. Examples include water used for or resulting from concrete truck/mixer/pumper/tool/chute rinsing or washing, concrete saw cutting and surfacing (sawing, coring, grinding, roughening, hydro-demolition, bridge and road surfacing). When stormwater comes in contact with concrete wastewater, the resulting water is considered concrete wastewater and must be managed to prevent discharge to waters of the state, including ground water.

Construction Activity means land disturbing operations including clearing, grading or excavation which disturbs the surface of the land. Such activities may include road construction, construction of residential houses, office buildings, or industrial buildings, and demolition activity.

Contaminant means any hazardous substance that does not occur naturally or occurs at greater than natural background levels. See definition of "hazardous substance" and WAC 173-340-200.

Demonstrably Equivalent means that the technical basis for the selection of all stormwater BMPs is documented within a SWPPP, including:

1. The method and reasons for choosing the stormwater BMPs selected.
2. The pollutant removal performance expected from the BMPs selected.
3. The technical basis supporting the performance claims for the BMPs selected, including any available data concerning field performance of the BMPs selected.
4. An assessment of how the selected BMPs will comply with state water quality standards.
5. An assessment of how the selected BMPs will satisfy both applicable federal technology-based treatment requirements and state requirements to use all known, available, and reasonable methods of prevention, control, and treatment (AKART).

Department means the Washington State Department of Ecology.

Detention means the temporary storage of stormwater to improve quality and/or to reduce the mass flow rate of discharge.

Dewatering means the act of pumping ground water or stormwater away from an active construction site.

Director means the Director of the Washington Department of Ecology or his/her authorized representative.

Discharger means an owner or operator of any facility or activity subject to regulation under Chapter 90.48 RCW or the Federal Clean Water Act.

Domestic Wastewater means water carrying human wastes, including kitchen, bath, and laundry wastes from residences, buildings, industrial establishments, or other places, together with such ground water infiltration or surface waters as may be present.

Ecology means the Washington State Department of Ecology.

Engineered Soils means the use of soil amendments including, but not limited, to Portland cement treated base (CTB), cement kiln dust (CKD), or fly ash to achieve certain desirable soil characteristics.

Equivalent BMPs means operational, source control, treatment, or innovative BMPs which result in equal or better quality of stormwater discharge to surface water or to ground water than BMPs selected from the SWMM.

Erosion means the wearing away of the land surface by running water, wind, ice, or other geological agents, including such processes as gravitational creep.

Erosion and Sediment Control BMPs means BMPs intended to prevent erosion and sedimentation, such as preserving natural vegetation, seeding, mulching and matting, plastic covering, filter fences, sediment traps, and ponds. Erosion and sediment control BMPs are synonymous with stabilization and structural BMPs.

Final Stabilization (same as fully stabilized or full stabilization) means the establishment of a permanent vegetative cover, or equivalent permanent stabilization measures (such as riprap, gabions or geotextiles) which prevents erosion.

Ground Water means water in a saturated zone or stratum beneath the land surface or a surface water body.

Hazardous Substance means any dangerous or extremely hazardous waste as defined in RCW 70.105.010 (5) and (6), or any dangerous or extremely dangerous waste as designated by rule under chapter 70.105 RCW; any hazardous substance as defined in RCW 70.105.010(14) or any hazardous substance as defined by rule under chapter 70.105 RCW; any substance that, on the effective date of this section, is a hazardous substance under section 101(14) of the federal cleanup law, 42 U.S.C., Sec. 9601(14); petroleum or petroleum products; and any substance or category of substances, including solid waste decomposition products, determined by the director

by rule to present a threat to human health or the environment if released into the environment. The term hazardous substance does not include any of the following when contained in an underground storage tank from which there is not a release: crude oil or any fraction thereof or petroleum, if the tank is in compliance with all applicable federal, state, and local law.

Injection Well means a well that is used for the subsurface emplacement of fluids. (See Well.)

Jurisdiction means a political unit such as a city, town or county; incorporated for local self-government.

National Pollutant Discharge Elimination System (NPDES) means the national program for issuing, modifying, revoking and reissuing, terminating, monitoring, and enforcing permits, and imposing and enforcing pretreatment requirements, under sections 307, 402, 318, and 405 of the Federal Clean Water Act, for the discharge of pollutants to surface waters of the State from point sources. These permits are referred to as NPDES permits and, in Washington State, are administered by the Washington Department of Ecology.

Notice of Intent (NOI) means the application for, or a request for coverage under this general permit pursuant to WAC 173-226-200.

Notice of Termination (NOT) means a request for termination of coverage under this general permit as specified by Special Condition S10 of this permit.

Operator means any party associated with a construction project that meets either of the following two criteria:

- The party has operational control over construction plans and specifications, including the ability to make modifications to those plans and specifications; or
- The party has day-to-day operational control of those activities at a project that are necessary to ensure compliance with a SWPPP for the site or other permit conditions (e.g., they are authorized to direct workers at a site to carry out activities required by the SWPPP or comply with other permit conditions).

Permittee means individual or entity that receives notice of coverage under this general permit.

pH means a liquid's measure of acidity or alkalinity. A pH of 7 is defined as neutral. Large variations above or below this value are considered harmful to most aquatic life.

pH monitoring period means the time period in which the pH of stormwater runoff from a site must be tested a minimum of once every seven days to determine if stormwater pH is between 6.5 and 8.5.

Point source means any discernible, confined, and discrete conveyance, including but not limited to, any pipe, ditch, channel, tunnel, conduit, well, discrete fissure, and container from which pollutants are or may be discharged to surface waters of the State. This term does not include return flows from irrigated agriculture. (See Fact Sheet for further explanation.)



Pollutant means dredged spoil, solid waste, incinerator residue, filter backwash, sewage, garbage, domestic sewage sludge (biosolids), munitions, chemical wastes, biological materials, radioactive materials, heat, wrecked or discarded equipment, rock, sand, cellar dirt, and industrial, municipal, and agricultural waste. This term does not include sewage from vessels within the meaning of section 312 of the CWA, nor does it include dredged or fill material discharged in accordance with a permit issued under section 404 of the CWA.

Pollution means contamination or other alteration of the physical, chemical, or biological properties of waters of the State; including change in temperature, taste, color, turbidity, or odor of the waters; or such discharge of any liquid, gaseous, solid, radioactive or other substance into any waters of the State as will or is likely to create a nuisance or render such waters harmful, detrimental or injurious to the public health, safety or welfare; or to domestic, commercial, industrial, agricultural, recreational, or other legitimate beneficial uses; or to livestock, wild animals, birds, fish or other aquatic life.

Process wastewater means any water which, during manufacturing or processing, comes into direct contact with or results from the production or use of any raw material, intermediate product, finished product, byproduct, or waste product (40 CFR 122.1).

Receiving water means the water body at the point of discharge. If the discharge is to a storm sewer system, either surface or subsurface, the receiving water is the water body to which the storm system discharges. Systems designed primarily for other purposes such as for ground water drainage, redirecting stream natural flows, or for conveyance of irrigation water/return flows that coincidentally convey stormwater are considered the receiving water.

Representative means a stormwater or wastewater sample which represents the flow and characteristics of the discharge. Representative samples may be a grab sample, a time-proportionate composite sample, or a flow proportionate sample. Ecology's Construction Stormwater Monitoring Manual provides guidance on representative sampling.

Sanitary sewer means a sewer which is designed to convey domestic wastewater.

Sediment means the fragmented material that originates from the weathering and erosion of rocks or unconsolidated deposits, and is transported by, suspended in, or deposited by water.

Sedimentation means the depositing or formation of sediment.

Sensitive area means a water body, wetland, stream, aquifer recharge area, or channel migration zone.

SEPA (State Environmental Policy Act) means the Washington State Law, RCW 43.21C.020, intended to prevent or eliminate damage to the environment.

Significant Amount means an amount of a pollutant in a discharge that is amenable to available and reasonable methods of prevention or treatment; or an amount of a pollutant that has a

reasonable potential to cause a violation of surface or ground water quality or sediment management standards.

Significant concrete work means greater than 1000 cubic yards poured concrete or recycled concrete over the life of a project.

Significant Contributor of Pollutants means a facility determined by Ecology to be a contributor of a significant amount(s) of a pollutant(s) to waters of the State of Washington.

Site means the land or water area where any "facility or activity" is physically located or conducted.

Source control BMPs means physical, structural or mechanical devices or facilities that are intended to prevent pollutants from entering stormwater. A few examples of source control BMPs are erosion control practices, maintenance of stormwater facilities, constructing roofs over storage and working areas, and directing wash water and similar discharges to the sanitary sewer or a dead end sump.

Stabilization means the application of appropriate BMPs to prevent the erosion of soils, such as, temporary and permanent seeding, vegetative covers, mulching and matting, plastic covering and sodding. See also the definition of Erosion and Sediment Control BMPs.

Storm drain means any drain which drains directly into a storm sewer system, usually found along roadways or in parking lots.

Storm sewer system means a means a conveyance, or system of conveyances (including roads with drainage systems, municipal streets, catch basins, curbs, gutters, ditches, manmade channels, or storm drains designed or used for collecting or conveying stormwater. This does not include systems which are part of a combined sewer or Publicly Owned Treatment Works (POTW) as defined at 40 CFR 122.2.

Stormwater means that portion of precipitation that does not naturally percolate into the ground or evaporate, but flows via overland flow, interflow, pipes, and other features of a stormwater drainage system into a defined surface water body, or a constructed infiltration facility.

Stormwater Management Manual (SWMM) or Manual means the technical Manual published by Ecology for use by local governments that contain descriptions of and design criteria for BMPs to prevent, control, or treat pollutants in stormwater.

Stormwater Pollution Prevention Plan (SWPPP) means a documented plan to implement measures to identify, prevent, and control the contamination of point source discharges of stormwater.

Surface Waters of the State includes lakes, rivers, ponds, streams, inland waters, salt waters, and all other surface waters and water courses within the jurisdiction of the state of Washington.

Temporary Stabilization means the exposed ground surface has been covered with appropriate materials to provide temporary stabilization of the surface from water or wind erosion. Materials include, but are not limited to, mulch, riprap, erosion control mats or blankets and temporary cover crops. Seeding alone is not considered stabilization. Temporary stabilization is not a substitute for the more permanent “final stabilization.”

Total Maximum Daily Load (TMDL) means a calculation of the maximum amount of a pollutant that a water body can receive and still meet state water quality standards. Percentages of the total maximum daily load are allocated to the various pollutant sources. A TMDL is the sum of the allowable loads of a single pollutant from all contributing point and nonpoint sources. The TMDL calculations must include a "margin of safety" to ensure that the water body can be protected in case there are unforeseen events or unknown sources of the pollutant. The calculation must also account for seasonable variation in water quality.

Treatment BMPs means BMPs that are intended to remove pollutants from stormwater. A few examples of treatment BMPs are detention ponds, oil/water separators, biofiltration, and constructed wetlands.

Transparency means a measurement of water clarity in centimeters (cm), using a 60 cm transparency tube. The transparency tube is used to estimate the relative clarity or transparency of water by noting the depth at which a black and white Secchi disc becomes visible when water is released from a value in the bottom of the tube. A transparency tube is sometimes referred to as a “turbidity tube.”

Turbidity means the clarity of water expressed as nephelometric turbidity units (NTU) and measured with a calibrated turbidimeter.

Uncontaminated means free from any contaminant, as defined in MTCA cleanup regulations. See definition of “contaminant” and WAC 173-340-200.

Waste Load Allocation (WLA) means the portion of a receiving water’s loading capacity that is allocated to one of its existing or future point sources of pollution. WLAs constitute a type of water quality based effluent limitation (40 CFR 130.2[h]).

Water quality means the chemical, physical, and biological characteristics of water, usually with respect to its suitability for a particular purpose.

Waters of the State includes those waters as defined as "waters of the United States" in 40 CFR Subpart 122.2 within the geographic boundaries of Washington State and "waters of the State" as defined in Chapter 90.48 RCW, which include lakes, rivers, ponds, streams, inland waters, underground waters, salt waters, and all other surface waters and water courses within the jurisdiction of the state of Washington.

Well means a bored, drilled or driven shaft, or dug hole whose depth is greater than the largest surface dimension. (See Injection well.)

Wheel wash wastewater means any water used in, or resulting from the operation of, a tire bath or wheel wash (BMP C106: Wheel Wash), or other structure or practice that uses water to physically remove mud and debris from vehicles leaving a construction site and prevent track-out onto roads. When stormwater combines with wheel wash wastewater, the resulting water is considered wheel wash wastewater and must be managed according to Special Condition S9.D.9.

## APPENDIX B – ACRONYMS

AKART	All Known, Available, and Reasonable Methods of Prevention, Control, and Treatment
BMP	Best Management Practice
CESCL	Certified Erosion and Sediment Control Lead
CFR	Code of Federal Regulations
CKD	Cement Kiln Dust
cm	Centimeters
CTB	Cement-Treated Base
CWA	Clean Water Act
DMR	Discharge Monitoring Report
EPA	Environmental Protection Agency
ESC	Erosion and Sediment Control
FR	Federal Register
NOI	Notice of Intent
NOT	Notice of Termination
NPDES	National Pollutant Discharge Elimination System
NTU	Nephelometric Turbidity Unit
RCW	Revised Code of Washington
SEPA	State Environmental Policy Act
SWMM	Stormwater Management Manual
SWPPP	Stormwater Pollution Prevention Plan
TMDL	Total Maximum Daily Load
UIC	Underground Injection Control
USC	United States Code
USEPA	United States Environmental Protection Agency
WAC	Washington Administrative Code
WQ	Water Quality
WWHM	Western Washington Hydrology Model