



Guidance for Land Disturbance Activities

Tools and Procedures for
Implementation of the City's Erosion & Sediment
Control and Stormwater Management Programs



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Disclaimer: This document is for guidance purposes only and does not supersede City Code or regulations cited herein.

City of Salem
Virginia



EEE Consulting, Inc.

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1.0 INTRODUCTION

The City of Salem (City) implements an Erosion and Sediment Control (ESC) Program in accordance with Part II Chapter 30 of the City Code and a Stormwater Management (SWM) Program in accordance with the City's SWM Ordinance. The City incorporates, by reference, the following laws and attendant regulations:

- Virginia SWM Act (§62.1-44. 15:24 et. seq.) and Virginia SWM Program (VSMP) Regulations (9VAC25-870);
- VPDES General Permit for Discharges of Stormwater from Construction Activities (9VAC25-880);
- Virginia ESC Law (§62.1-44.15:51 et. seq.) and Virginia ESC Regulations (9VAC25-840); and
- ESC and SWM Certification Regulations (9VAC25-850);

Administration and enforcement of the City's Programs will be performed by City as described herein. The City shall ensure responsible staff and its representatives obtain the necessary certifications through DEQ in accordance with the Erosion and Sediment Control and Stormwater Management Certification Regulations (9VAC25-850). Certifications will be dependent on the individual's role in implementing the City's Program and may include Program Administrator, Plan Reviewer and/or Inspector.

This Guide has been framed to assist a land disturbance project through planning, plan approval and construction to ensure consistency with the regulatory requirements referenced in above. A Process Diagram is provided in Appendix A that illustrates the process from the application for a permit for a land disturbance activity through the completion of the activity.

The Guide includes four distinct sections:

- **Applicability** – Procedures to determine if a land disturbance project is subject to the City's ESC and SWM Program, as described in Section 2;
- **Application Process** – Procedures for applicable land disturbance activities prior to commencement of land disturbance as discussed in Section 3;
- **Implementation through Construction** – Procedures necessary during construction through the completion of a project as discussed in Section 4; and
- **Post-Construction and Reporting** – Responsibilities and procedures to ensure long-term care and maintenance of stormwater management facilities.

2.0 APPLICABILITY

The ESC and SWM laws and regulations referenced above, along with the applicable City Code, apply to all land disturbance activities in the City that disturb 5,000 square feet or greater.

2.1 Regulated Land Disturbance Activities

Although the definitions overlap, the definition for a “land disturbance activity” differs slightly between the ESC law and SWM law and regulations. Land disturbance activities are subject to the regulations, requiring an approved plan and permit prior to the commencement of the activity. A land disturbance activity is defined as either:

- For the purposes of the ESC Program:

Land Disturbance Activity – means any man-made change to the land surface that may result in soil erosion from water or wind and the movement of sediments into state waters or onto lands in the Commonwealth, including, but not limited to, clearing, grading, excavating, transporting and filling of land.

Exceptions to the applicability of the *City's ESC Program* include:

- Minor land-disturbing activities and individual home landscaping, repairs and maintenance work;
- Individual service connections;
- Installation, maintenance, or repair of underground public utility lines when such activity occurs on, and is confined within, an existing hard surfaced road, street or sidewalk;
- Septic tank lines or drainage fields unless included in an overall plan for land-disturbing activity relating to construction of the building to be served by the septic tank system;
- Surface or deep mining;
- Exploration or drilling for oil and gas including the well site, roads, feeder lines and off-site disposal areas;
- Repair or rebuilding of the tracks, right-of-way, bridges, communication facilities and other related structures, and facilities of a railroad company;
- Installation of fence, sign posts, telephone and electric poles, and other posts or poles; and
- Shore erosion control projects on tidal waters when the projects are approved by local wetlands boards, the Virginia Marine Resources Commission or the Army Corps of Engineers;
- Emergency work to protect life, limb or property, and emergency repairs; however, the land area disturbed shall be shaped and stabilized in accordance with the requirements of the City's ESC Program.

For potential exceptions, the responsible individual for a land disturbance should contact the City Engineer at the City's Public Works Department. Also, see the Code of Virginia for exceptions related to agricultural activities.

➤ For the purposes of the SWM Program:

Land Disturbance Activity – means a man-made change to the land surface that potentially changes its runoff characteristics including clearing, grading, or excavation.

Exemptions to the applicability of the City's SWM Program include:

- Permitted surface or deep mining operations and projects, or oil and gas operations and projects conducted under the provisions of Title 45.1;
- Activities that discharge to a sanitary sewer or a combined sewer system;
- Activities under a state or federal reclamation program to return an abandoned property to an agricultural or open land use
- Single-family residences separately built and disturbing less than one acre and not part of a larger common plan of development or sale, including additions or modifications to existing single-family detached residential structures.
- Land-disturbing activities that disturb less than 5,000 square feet or activities that are part of a larger common plan of development or sale that is one acre or greater of disturbance (in which case the SWM Program would be applied to the common plan of development or sale);
- Routine maintenance that is performed to maintain the original line and grade, hydraulic capacity, or original construction of the project. The paving of an existing road with a compacted or impervious surface and reestablishment of existing associated ditches and shoulders shall be deemed routine maintenance; and
- Land-disturbing activities in response to a public emergency where the related work requires immediate authorization to avoid imminent endangerment to human health or the environment. In such situations, the City Engineer and the DEQ shall be advised of the disturbance within seven days of commencing the land-disturbing activity, and compliance with the administrative requirements described in Section 3.3.1 are required to be submitted to the City within 30 days of commencing the land-disturbing activity.

2.2 Agreement in Lieu of a Plan for a Single-Family Residence

An agreement in lieu of a plan is a contract between the City and the owner or permittee that specifies methods to comply with the ESC and SWM Programs that shall be implemented for the construction of a single-family residence. The contract may be executed by the City in lieu of either an ESC Plan, a SWM Plan, or both.

For a single-family detached home, an agreement in lieu of a plan is required when the land disturbance activity:

- Is equal to or greater than 5,000 square feet; or
- Will be conducted within a residential subdivision developed by another party and the total land disturbance occurring within the overall development is equal to or greater than 5,000 square feet.

For a single-family detached home meeting the conditions above, an agreement in lieu of a plan shall be submitted to the City Engineer for review. A template agreement is provided in Appendix B and must be approved by the City Engineer prior to the commencement of the disturbance. Please note that although an approved agreement in lieu of a plan results in the exemption for a ESC and/or SWM Plan, when land disturbance is equal to or greater than 1-acre:

- A site-specific Stormwater Pollution Prevention Plan (SWPPP) is required if the disturbance exceeds 1-acre. When a SWPPP is applicable, refer to the Section 3.4.1 discussion regarding SWPPPs and the SWPPP template in Appendix I.
- The Construction General Permit (VAR10) must be obtained prior to commencement of land disturbance (reference Section 3.4).

3.0 APPLICATION AND APPROVAL PROCESS

The Section discusses the responsibilities of the City and the applicant of the land disturbance prior to commencement of land disturbance.

3.1 General Submission Information

All submissions described in the following sub-sections are to be provided by the applicant to the City and require City approval on the plans (in the form of a signed approval stamp signed by the Stormwater Program Manager). For land disturbance activity equal to or greater than an acre, a General Permit for Discharges of Stormwater from Construction Activities, issued by DEQ, is also required prior to the commencement of land disturbance (see Section 3.4).

The review of submissions will result in an approval, or a letter providing the reasons that the submittal could not be approved, within 45 days of the acceptance of the submittal. The date of acceptance of a submittal is the date that the City acknowledges in writing that all of the submission materials described in Section 3.1.2 have been provided for review. Acknowledgement from the City of a complete submittal will be provided with form LD-01, provided in Appendix C.

Re-submissions to address comments provided by the City as the result of a review shall include a cover letter from the licensed professional that explicitly responds to each comment from the review. Each response shall describe how the comment was addressed with reference to the locations of the changes in the Plan and/or Narrative. Any other changes not specifically addressed in the response to comments from the previous review shall also be described in the cover letter.

Refer to the Fee Table in Section 30-146 of the City's SWM Ordinance for fees required prior to issuance of permit coverage.

3.2 Erosion & Sediment Control Plan Review & Approval

The required submittals, as listed in Section 3.1.2, will be reviewed for consistency with the technical criteria described in Section 3.1.1 by an individual certified in accordance with the ESC and SWM Certification Regulations (9VAC25-850).

3.2.1 ESC Technical Criteria

The ESC Plan shall be consistent with the requirements of the Virginia ESC Regulations (9VAC25-840), the latest edition of the Virginia Erosion and Sediment Control Handbook (VESCH) and specifically address each applicable minimum standard described in 9VAC25-840-40.

3.2.2 ESC Submittal

The following shall be submitted by the Applicant for review to the City when land disturbance activity is subject to the City's ESC Program. Each item shall be provided to the City as hardcopy (# of copies as shown) and also electronically in pdf format.

- **Land Disturbance Application Form** (2 copies) – This form shall be completed and provided with all submittals. A copy of the form is provided in Appendix C.
- **Completed ESC Plan Checklist** (2 copies) – The ESC Plan Checklist in Appendix D1 is provided to assist the ESC Plan preparer and reviewer with ensuring compliance to the technical criteria. Each applicable item on the checklist shall be addressed in the ESC Plan or ESC Narrative. Written reference on the checklist to the location (plans or narrative) as to where an item has been addressed is recommended to assist with plan development and review.
- **ESC Plan** (6 copies) – The ESC plan shall be signed and sealed by a licensed professional and demonstrate compliance to the technical criteria described in Section 3.1.1.
- **ESC Plan Narrative** (6 copies) – The ESC Plan Narrative shall be signed and sealed by a licensed professional and is considered part of the ESC Plan. The narrative shall incorporate supporting information necessary to demonstrate compliance to the technical criteria described in Section 3.1.1.

3.2.3 ESC Plan Variances

An Applicant may request a variance from the ESC technical criteria through the City. A variance request shall be provided in writing and may be considered prior to plan approval or during construction under the following conditions:

- The applicant requests, in writing, a variance with explanation of the reasons for requesting the variance. Reasons must be specific to restrictive site conditions and the variance shall be the minimum necessary to mitigate for the site restriction.
- The request shall include alternative measures to address potential downstream transport of sediment that could result from the granting of the variance.
- The request shall describe how the alternative measure(s) meets the intent of the minimum standard (9VAC25-840-40) for which the variance is sought.
- A variance will not be granted in any case where the granting of the variance could cause damage to downstream property. It is the responsibility of the applicant to demonstrate in the request that downstream properties will be protected from erosion, sedimentation and flooding.
- Request for a variance to the VESCH standards and specifications of an ESC measure (e.g. proprietary inlet protection device) will consider consistency with the intent of the standard and specification for the specific type of measure described in Chapter 3 of the VESCH.
- Specific variances which are granted shall be documented on the ESC Plan.

Requests for variances will be considered by the City, and if deemed appropriate, will be submitted by the City to DEQ for consideration of approval. All variances must be approved by DEQ Central Office.

The City reserves the right to disallow the use of proprietary ESC measures based on findings that demonstrate poor performance related to sedimentation control or maintenance. Sufficient detail shall be provided on the ESC Plan for allowed proprietary measures, including any

necessary computations, installation instruction, and inspection and maintenance instruction. Installation and maintenance shall be per the manufacturer's recommendations.

3.3 Stormwater Management Plan Review & Approval

Land disturbance activity subject to the City's SWM Program requires an approved SWM Plan. The required submittals, as listed in Section 3.2.4, will be reviewed for consistency with the technical criteria described in Section 3.2.1 by an individual certified in accordance with the ESC and SWM Certification Regulations (9VAC25-850).

3.3.1 SWM Technical Criteria

The SWM Plan shall be consistent with Part II A and Part II B of the VSMP Regulations, unless grandfathered per conditions described in 9VAC25-870-48 and therefore subject to Part II C of the VSMP Regulations. A project is not considered grandfathered unless explicitly approved in writing from DEQ in response to a request for "grandfathered status" consistent with 9VAC25-870-48.

Design standards and specifications shall be consistent with the Virginia Stormwater BMP Clearinghouse Website, the latest edition of the Virginia Stormwater Management Handbook, and the supplemental criteria in Sections 3.2.2.

3.3.2 Supplemental BMP Selection Criteria

The successful performance of SWM practices is dependent on a successful long-term maintenance program. Designers are encouraged to consider maintenance concerns such as accessibility, frequency of maintenance, and costs of maintenance when selecting BMPs to achieve technical criteria. The maintenance requirements for SWM practices shall be clearly specified on the SWM Plan.

3.3.3 SWM Submittals

The following shall be submitted by the Applicant for review by the City when land disturbance activity is subject to the City's SWM Program. Each item shall be provided to the City as hardcopy (# of copies as shown) and electronically in pdf format.

- **Land Disturbance Application Form** (2 copies) – This form shall be provided with all submittals and include the Applicant's contact information and general information about the land disturbance activity. A copy of the form is provided in Appendix C.
- **Completed SWM Plan Checklist** (2 copies) – The SWM Plan Checklist in Appendix D2 is provided to assist the SWM Plan preparer and reviewer with ensuring compliance to the technical criteria. Each applicable item on the checklist shall be addressed in the SWM Plan or SWM Narrative and the checklist certified by the licensed professional.
- **SWM Plan** (6 copies) – The SWM plan shall be signed and sealed by a licensed professional and provide all of the information described in 9VAC25-870-55 (Stormwater Management Plans) of VSMP regulations.
- **SWM Plan Narrative** (6 copies) – The SWM Plan Narrative shall be signed and sealed by a licensed professional and is considered part of the SWM Plan, incorporating supporting

information necessary to demonstrate compliance to the technical criteria described in Section 3.2.1 and 3.2.2.

- **Completed SWM Management Handbook BMP Checklist** (6 copies) – As applicable, provide the applicable BMP Design Checklist from Appendix 8-A of the Virginia Stormwater Management Handbook, latest edition. A BMP-type specific checklist shall be provided for each BMP proposed in the SWM Plan.
- **Exception Request** (2 copies) – Where applicable, the applicant shall provide written request that address the conditions described in Section 3.2.5.

3.3.4 SWM Plan Exceptions

An Applicant may request in writing for an exception to the SWM technical criteria and design standards and specifications through the City. An exception may be granted provided that:

- The exception is the minimum necessary to afford relief;
- Reasonable and appropriate conditions are imposed as necessary upon any exception granted so that the intent of the Virginia Stormwater Management Act and the technical criteria are preserved;
- Granting the exception will not confer any special privileges that are denied in other similar circumstances; and the
- The request is not based upon conditions or circumstances that are self-imposed or self-created.

Economic hardship alone is not a sufficient reason to request an exception from the requirements of the technical criteria or design standards and specifications. The following exceptions will not be granted:

- The requirement that a land-disturbing activity obtain a state permit, when applicable.
- The use of a BMP not found on the BMP Clearinghouse.
- Requirements for phosphorus reductions.

Requests for exceptions will be considered by the City, and if deemed appropriate, the City will submit the request to DEQ for consideration of approval. All exceptions must be approved by DEQ Central Office.

3.4 Construction General Permit (VAR10)

Land disturbance activity that disturbs an acre or greater requires a General Permit for Discharges of Stormwater from Construction Activity (9VAC25-880), also known as General Permit No. VAR 10 (VAR 10). The VAR 10 General Permit is issued by the Virginia DEQ and coverage is required throughout the duration of the land disturbance activity. Application for coverage requires City-approved ESC and SWM plans, as applicable, and a SWPPP as described in Section 3.3.1. When applicable, the City will verify coverage under the VAR10 General Permit at the preconstruction meeting described in Section 3.4. An “Application of Submission Worksheet” to assist with applying for coverage under the VAR10 General Permit is available from DEQ at the following web link:

<http://www.deq.virginia.gov/Portals/0/DEQ/Water/StormwaterManagement/CGPWorksheetStateFederalSns.pdf>.

The coverage letter is required prior to the commencement of the land disturbance activity and shall be maintained in the project Stormwater Pollution Prevention Plan described in Section 3.3.1. The operator of the permit is responsible for compliance to the permit conditions. The City will conduct oversight of permit compliance through site inspections as described in Section 4.2.

3.4.1 Stormwater Pollution Prevention Plans (SWPPP)

A SWPPP shall be prepared and certified, in accordance with the permit by the permittee or duly authorized representative and prepared using the City's SWPPP template. The template is available in Appendix I of this guidance document. The permittee is responsible for implementation of the SWPPP and may delegate authority for certifications (e.g. SWPPP and inspection form certifications) using the *Delegation of Authority Form* in provided in the SWPPP template.

3.4.2 Special Conditions for Total Maximum Daily Loads

Dependent on the location of a project, special conditions may be applicable if a waste load allocation has been assigned to construction activity in a DEQ approved Total Maximum Daily Load (TMDL). DEQ will indicate in the VAR10 General Permit coverage letter if the TMDL Special Conditions apply to the project. In the case that special conditions do apply, the permittee is responsible for incorporating the increased inspection frequency described in Section 5.1 of the SWPPP template and adhering to the additional criteria in Section 5.4 of the SWPPP.

3.4.3 Off-site Land-Disturbance Activity

Offsite support facilities are defined as those facilities such as staging areas, equipment and material storage areas, unsuitable and surplus material disposal areas, borrow areas, etc., which are located outside of the project limits shown on an approved ESC and/or SWM Plan. It is the responsibility of the contractor to ensure applicable plans are approved and permits are obtained for support facilities prior to the commencement of land disturbance activity.

3.5 Pre-construction Meeting

A preconstruction meeting is required for all applicable land disturbance activity subject to the City's ESC and SWM Program's prior to the commencement of the activity. The permittee is responsible for coordination of the meeting with the City Engineer. The certified Responsible Land Disturber (RLD), as defined in 9VAC25-850-10, shall be identified on the plans at, or prior to, the preconstruction meeting. The permittee shall ensure the individuals identified in Section 1 of the City's *Preconstruction Meeting Form* (see Appendix E) attend the meeting and the checklist items in Section 2 of the form will be available at the meeting.

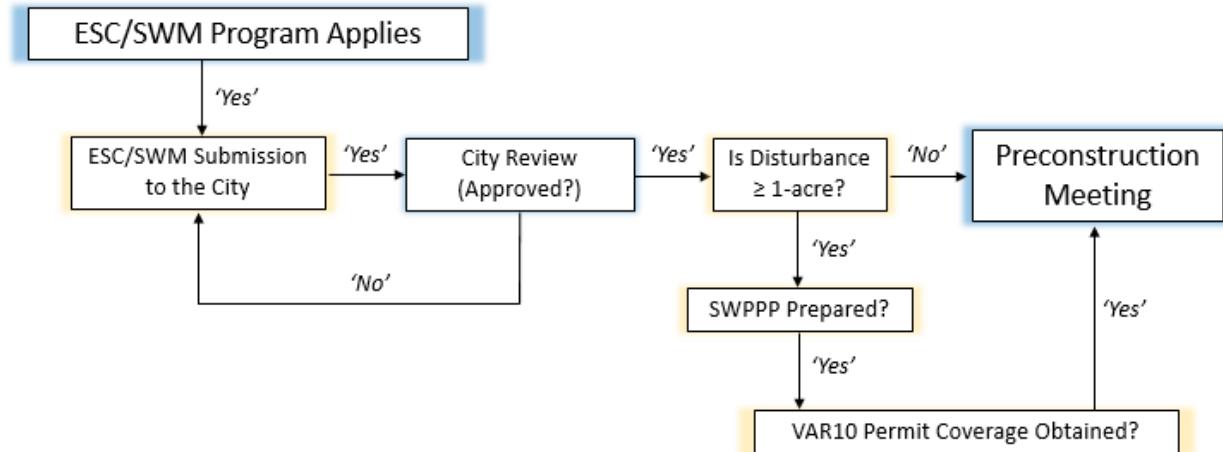


Figure 3.1 Summary of the development process prior to commencement of land disturbance. (Blue highlighted actions to be performed by the City, yellow actions to be performed by the applicant.)

4.0 IMPLEMENTATION THROUGH CONSTRUCTION

Section 4 describes the required actions of the permittee and the City during the implementation of a land disturbance activity subject to the City's ESC and SWM Programs.

4.1 Contractor/Operator Responsibilities

For land disturbance activity subject to the City's ESC and SWM Programs, the permittee's responsibilities prior to and during construction include, but may not be limited to:

- When applicable, obtaining the VAR10 General Permit for Discharges of Stormwater from Construction Activity (9VAC25-880) from DEQ;
 - Complying with the conditions of the VAR10 General Permit, when applicable;
 - Updating and maintaining the SWPPP per the VAR10 General Permit; and
 - Performing self-inspections per the VAR10 (It is strongly recommended that the contractor use the inspection form in Appendix F). It is also recommended that the permittee have inspections performed by a DEQ certified ESC/SWM Inspector per 9VAC25-850.
- Adhering to the approved plans unless otherwise approved in writing by the City;
- Maintaining the approved plans, and an up-to-date SWPPP (e.g. plan modifications and inspection forms) on the project site at all times;
- Obtaining necessary permit coverage and plan approvals for applicable off-site activities;
- Providing SWM BMP certified record drawing per Section 4.1.1; and
- Responding to any corrective action(s) and specified timeframes identified as the result of a City or DEQ inspection.

4.1.1 SWM Facility Record Drawings

Certification of the construction of all stormwater management facilities shall be submitted to the City for review and approval. The certification shall be signed and sealed by a licensed professional and include:

- A completed and certified copy of the *Stormwater Management Facility Record Drawing and Certification Form* in Appendix G;
- A signed and sealed copy of the certifying professional's inspection log, including incremental surveys (drawings), photographs, construction logs, inspection reports, geotechnical testing reports, soil reports, certification of materials, and all other applicable information necessary to support and ensure the SWM facility has been built in accordance with the approved Plan; and
- A record drawing (as-built) signed and sealed by the licensed professional that includes:
 - The long-term inspection and maintenance schedule for the SWM facility (extracted from the SWM Plan or SWM Narrative); and the
 - Total drainage area being served by the stormwater practice with the total impervious and pervious area within the drainage area.

In the case that a SWM facility has not been constructed and installed in accordance with the approved SWM Plan, the licensed professional(s) responsible for certifying the as-built shall

immediately notify the City Engineer. Generally, there are two potential options when a facility is not constructed in accordance with the approved Plan:

- Option 1: Re-construct the facility in accordance with the approved Plan. It will be necessary to repeat the inspections, surveys, and documentation process such that the licensed professional shall certify the facility is constructed in accordance with the approved Plan.
- Option 2: Perform calculations and analysis, based on the licensed professional's surveys, data, inspections, and other applicable documentation necessary to verify the as-built conditions meet the technical criteria described in Section 3.3.1. The licensed professional shall certify the as-built condition of the facility meets the quantitative and qualitative controls and submit the final report as required in this section. The plans shall be revised and the revised plans reviewed and approved by the City.

4.2 City Responsibilities

The City is responsible for ensuring implementation of the City's ESC and SWM Programs throughout the development process. In addition to plan review and approvals, the City meets these responsibilities with oversight throughout the land disturbance activity that include inspections, enforcement actions, and acceptance of record drawings.

4.2.1 Inspections

The City will perform inspections on all projects subject to the ESC and SWM Programs. The individual performing inspections on behalf of the City shall be certified as an ESC and SWM Inspector in accordance with the ESC and SWM Certification Regulations (9VAC25-850). Where a VAR10 is required, City inspections are in addition to the VAR10 permittee's inspection requirements described in the SWPPP. The applicable inspection report provided in Appendix F shall be completed by the inspector on each inspection and a copy provided to the appropriate individual identified on the Preconstruction Form, provided in Appendix E, within 2 business days.

The City will conduct the following inspections, at a minimum, with the exception of the alternative inspection schedule described in Section 4.2.2:

- After the installation of initial ESC measures per the ESC phasing in the approved ESC Plan,
- At least once in every two-week period,
- Within 48 hours following any runoff producing storm event,
- At the completion of the project, and
- Periodically as deemed necessary by the City.

Inspection reports shall specify a required corrective action for each violation noted and a date by which the corrective action must be completed.

4.2.2 Enforcement

The City reserves the right to enforce the City's ESC and SWM Programs upon discovery of noncompliance through inspection or through public reporting. Compliance status will be conveyed in writing using the *Construction Site Inspection Form Compliance Summary* included

with the *Construction Site Inspection Form* (LD-05, LD-06 and LD-07) in Appendix F. The compliance summary will be completed with each inspection and may also be used if an issue of noncompliance is identified outside of an inspection. The compliance summary will:

- Summarize the item(s) of noncompliance identified on the inspection form,
- Provide an indication of severity of compliance status, and
- Provide a description of the necessary corrective action and a timeframe for completing the action.

Enforcement will be consistent with a tiered severity system on the LD-05 and LD-06 form which generally includes the following guidelines:

- Tier 1 - In Compliance – Site was in compliance with the City's ESC and SWM Program at the time of inspection.
- Tier 2 - Notice of Violation – Items of noncompliance that have not resulted in observation of sediment or other pollutants being discharged from the project area. A notification with this tier serves as a warning. If specified corrective action is not performed in the specified timeframe, the issue could be elevated to a tier 3 violation by the City Inspector.
- Tier 3 - Notice To Comply - Items of noncompliance that have not been resolved from previous Tier 2 violations, or items of severity that are deemed to need immediate corrections. If the item(s) are not addressed in the specified timeframe given by the City Inspector, it can be elevated to a Tier 4 violation.
- Tier 4 - Stop Work Order - Items of noncompliance that are either elevated from a Tier 3 or are in significant conflict with the City's ESC and SWM Program. A timeframe for compliance will be issued in a certified letter. If these violations are not corrected in the timeframe provided, fines can be issued, per Section 30-93 of the City Code.

4.2.3 Modifications to Approved Plans

An approved Plan may be changed by direction or approval by the City Engineer in the following cases:

- Where inspection has revealed the plan is inadequate to satisfy applicable regulations; or
- Where the person responsible for carrying out the approved Plan finds that because of changing circumstances, or for other reasons, the approved Plan cannot be effectively carried out. Proposed amendments to the Plan, consistent with the requirements of the ESC and SWM Programs, are agreed upon by the City and the person responsible for carrying out the Plan.
- Amendments to an approved ESC and SWM Plan are submitted in writing to the City and shall not be considered approved until written notice from the City is provided verifying compliance with the ESC and SWM Programs. Modifications to approved plans and on-site changes shall be documented on the approved plans by the permittee.

4.2.4 Approval of SWM Facility Record Drawings

The City will review and approve record drawing submissions described in Section 4.1.1. The City will return an approved copy of the *SWM Facility Certification Form* (LD-SS06) to the permittee or provide written comments in the case that a record drawing submission is not approved.

4.2.5 Termination of Land Disturbance

The City will provide to the permittee a completed and approved *Termination of Salem Land Disturbance Form* (Appendix H) upon:

- The approval of the record drawing submittal described in Section 4.1.1 and 4.2.5 and
- Verification that the area of disturbance has reached final stabilization to the satisfaction of the City's Inspector based on the definition provided below (from the Construction General Permit).

➤ ***Final Stabilization*** means that one of the following situations has occurred:

1. All soil disturbing activities at the site have been completed and a permanent vegetative cover has been established on denuded areas not otherwise permanently stabilized. Permanent vegetation shall not be considered established until a ground cover is achieved that is uniform (e.g., evenly distributed), mature enough to survive, and will inhibit erosion.
2. For individual lots in residential construction, final stabilization can occur by either:
 - a. The homebuilder completing final stabilization as specified in subdivision 1 of this definition; or
 - b. The homebuilder establishing temporary soil stabilization, including perimeter controls for an individual lot prior to occupation of the home by the homeowner, and informing the homeowner of the need for, and benefits of, final stabilization.
3. For construction projects on land used for agricultural purposes, final stabilization may be accomplished by returning the disturbed land to its preconstruction agricultural use. Areas disturbed that were not previously used for agricultural activities, such as buffer strips immediately adjacent to surface waters, and areas that are not being returned to their preconstruction agricultural use must meet the final stabilization criteria specified in subdivision 1 or 2 of this definition.

Acceptance of the record drawing submission or issuance of the *Termination of Salem Land Disturbance Form* does not release the contractor from the VAR10 General Permit. The contractor is required to seek termination of the VAR10 and shall not seek termination until receipt of the City's approved *Termination of Salem Land Disturbance Form*.

The requirement for, application of, and release of performance bonds will be per Section 30-140 of the City's SWM Ordinance.

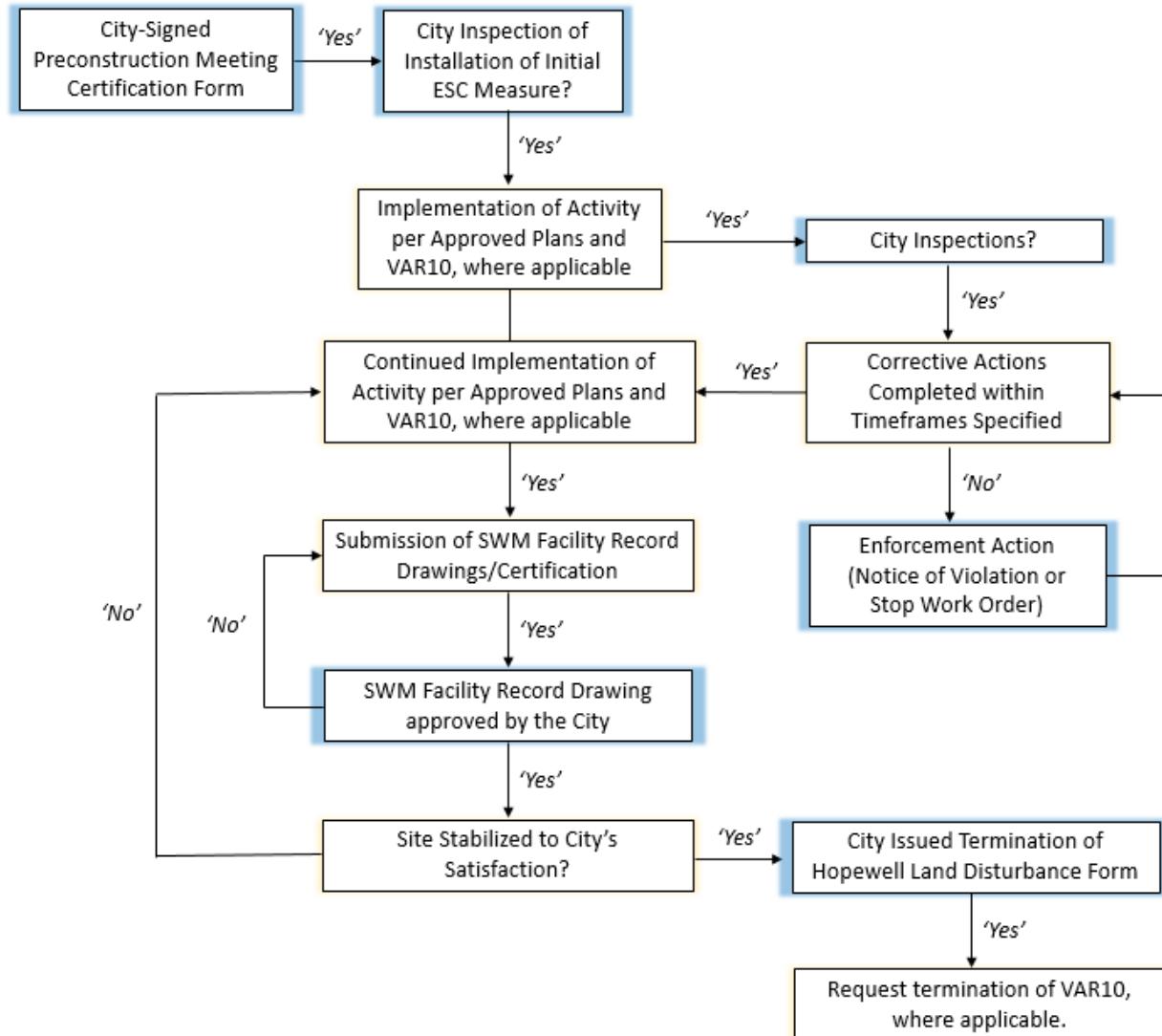


Figure 4.1 Summary of the development process from commencement of land disturbance to termination of land disturbance permits. (Blue highlighted actions to be performed by the City, yellow actions to be performed by the applicant.)

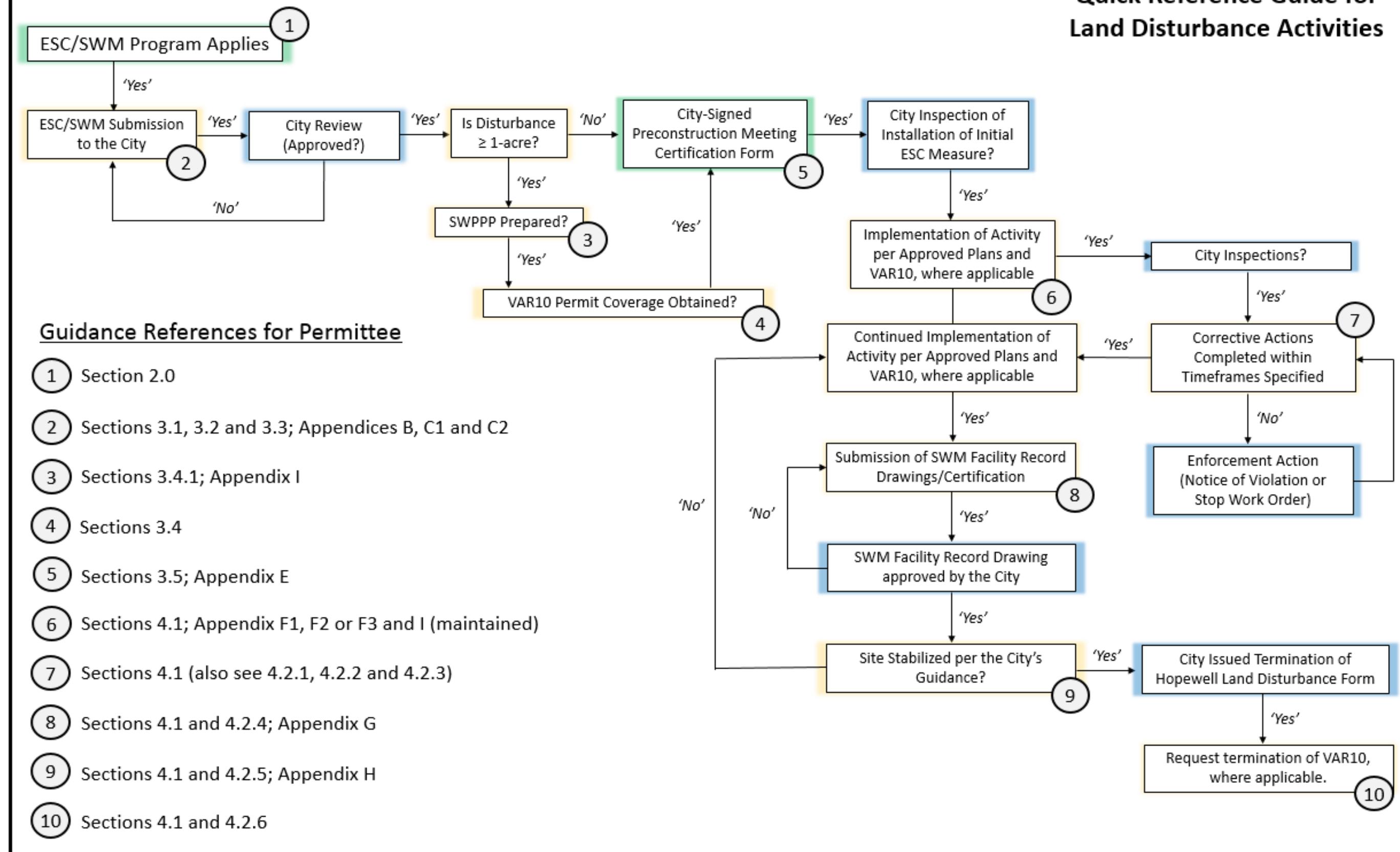
5.0 POST CONSTRUCTION MONITORING

The City ensures long-term functionality and maintenance of all privately-owned stormwater facilities utilizing the maintenance agreements required to be recorded in the local land records prior to plan approval per Section 30-139 of the City's SWM Ordinance. The agreements shall reference, or include, the long-term inspection and maintenance plan required to be identified on the SWM Plans. The owner of the facility is responsible for perpetually performing inspections and maintenance per the plans and agreement.

The City will provide oversight with an inspection of the facility at least once each five years. The maintenance agreement shall allow access to the City onto the property to conduct inspections. If a City inspection results in the identification of maintenance needs for the intended functionality of the facility, the Owner will be provided a written inspection summary with a list of corrective actions, including a timeframe to perform the corrective actions. If the Owner does not perform the corrective actions, the City will perform the corrective actions at the Owner's expense in accordance with the maintenance agreement.

Appendix A – Guidance for Land Disturbance Activities Process Diagrams

Quick Reference Guide for Land Disturbance Activities



Appendix B Agreement in Lieu of an ESC and SWM Plan (Template)



**CITY OF SALEM AGREEMENT IN LIEU OF
AN EROSION & SEDIMENT CONTROL AND STORMWATER MANAGEMENT PLAN FOR
SINGLE-FAMILY DETACHED RESIDENTIAL STRUCTURE**

Construction Activity Operator:

Name: _____

Contact #: _____

Mailing Address: _____

Email address: _____

Location of Single-Family Detached Residential Structure:

Address (if no address description of location, provide Tax Map ID#)

In place of a City-approved Erosion and Sediment Control (ESC) and Stormwater Management (SWM) Plan for the construction of this single-family detached residential structure, I agree to comply with the requirements of this "Agreement in Lieu of an ESC and SWM Plan" (or other requirements as established by the City when necessary) to ensure compliance with the City's ESC and SWM Programs.

Requirements

The following minimum practices will be considered to meet the requirements of the City's ESC and SWM Programs. However, the City reserves the right to require additional measures as the result of an inspection that determines the intent of the Programs if not achieved by the permittee (i.e. offsite sediment transport). Minimum practices shall include:

- A copy of this signed and dated "Agreement in Lieu of a Stormwater Management Plan" shall be maintained at the location of the land disturbance activity at all times.
- Silt fence, as specified in the Virginia Erosion and Sediment Control Handbook (VESCH), is required behind the curb line at the front of the property and on all sides of the property that slope away from the site. Silt fence is required between the work site and any wetlands or other environmentally sensitive area. The bottom of all silt fences shall be trenched at least 4 inches into the ground per the Virginia Erosion and Sediment Control Handbook.
- All stormwater conveyance channels (i.e. ditches) shall be installed per VESCH.
- Streets and gutters are to remain free of all sediment. Any sediment deposited onto the street must be cleaned up (shoveled and broom swept by the end of each day or with the threat of rain).
- If a curb or drop inlet is located adjacent to the lot, the inlet must be protected and the protection must be kept clean of sediment and trash.
- A construction entrance as specified in the VESCH is required unless otherwise allowed by the City's ESC/SWM Inspector.
- All denuded areas on the lot shall be stabilized within seven (7) days of final grading with permanent vegetation or a protective ground cover suitable for the time of year.
- Post-construction runoff from the property shall be minimized to the maximum extent practicable and shall be controlled to prevent flooding or erosion damage from occurring on adjacent or downstream properties. In meeting this requirement, the permittee agrees to direct runoff from:



- rooftops as non-erosive sheet flow to well-vegetated areas on the property to the maximum extent practicable,
- on-lot impervious surfaces (e.g., driveways, parking areas, sidewalks) as non-erosive sheet flow to well-vegetated areas on the property to the maximum extent practicable, and
- lawns as non-erosive sheet flow to undisturbed naturally-vegetated areas on the property to the maximum extent practicable.

I fully understand that not complying with this agreement may result in the revocation of this "Agreement in Lieu of an ESC and SWM Plan" and that the submission of a project-specific ESC and SWM in accordance with the City's Code and Ordinances may be required.

The City will perform periodic inspections of the site and I understand that failure to comply with the corrective action from inspection within five working days following notice by the representatives of the City may result in a stop work order and civil penalties.

Measures specified by the plan approving authority (in addition to those specified above):

Indicate what erosion & sediment controls will be used;

- Prevent sediment from accumulating on all roads;
- Prevent sediment from entering adjacent properties, waterbodies and watercourses (intermittent and personal);
- Keep debris and sediment out of ditches, swales and streams;
- Keep runoff velocities from eroding soil and retain runoff on site;
- Limit land disturbing activities to the approved limits;
- Actual field conditions may warrant additional measures.

APPROVED:

Signature of Owner or RLD Plan

Stormwater Program Manager

Date

COMMONWEALTH OF VIRGINIA

CITY/COUNTY OF _____, to wit:

I hereby certify on this _____ day of _____, 20____, that the foregoing Agreement in Lieu of an Erosion and Sediment Control Plan for a Single Family Residence was executed before me by _____ (Owner or RLD). He/She is known to me personally or produced _____ as identification.

Notary Public

My Commission Expires: _____

Registration No.: _____

Appendix C - Land Disturbance Application (LD-01)



CITY OF SALEM LAND DISTURBANCE APPLICATION FORM

Instruction: This form shall be completed, typically by the design engineer preparing the plans, and included with all plan submissions for projects involving land disturbance activities in the City of Salem.

Project Name: _____

Applicant

Date of submittal: _____ Date on plans: _____

Name: _____

Project Abbreviation (if applicable): _____

Phone: _____

Project Location: _____

Email: _____

Estimated Area of Disturbance (sq. ft.): _____

Estimated Impervious Area (sq. ft.): Pre-Development: _____, Post-Development: _____

Estimated Dates of Disturbance: _____ to _____, or Duration (months): _____

Does the City Stormwater Ordinance require an approved ESC plan? Yes No Unknown

Does the City Stormwater Ordinance require an approved SWM plan? Yes No Unknown

Describe the land-disturbance(s) involved with the project, including any offsite activities: _____

Submission Item	Applicable? (yes/no)	Included in Submission? (yes/no)
Completed Land Disturbance Application Form		
Completed ESC Plan Checklist		
ESC Plan		
ESC Narrative		
Completed SWM Plan Checklist (when applicable)		
SWM Plan (when applicable)		
SWM Narrative (when applicable)		

Applicant (Print): _____

Applicant Signature: _____

Information below to be completed by City

City has verified receipt of all of the applicable submittal items identified above on _____, initiating the 60 day City review period. Comments or an approval letter resulting from the review will be provided to the applicant listed above.

Received by: _____

Appendix D1 - ESC Plan Preparer/Reviewer Checklist (LD-02)



Instruction: The checklist shall be completed if an ESC Plan and Narrative is required per the City of Salem Stormwater and/or Erosion and Sediment Control Ordinance. The completed checklist shall be provided with the ESC Plan submittal. The plan and narrative submitted for review shall be signed and sealed by a licensed professional. This checklist is intended to only be used as a guide. The licensed professional is responsible for ensuring plans address the ESC laws and regulations.

Project Information:

Project Name: _____ Project Location: _____
 Submittal Date: _____ Date on Plans: _____
 Design Engineer (Printed): _____ Email: _____

Yes	No	N/A	ESC Narrative Requirement
			Completed ESC Checklist provided in ESC Narrative.
			Project description including the nature and purpose of the land-disturbing activity.
			Description of the existing site conditions , including topography, ground cover, and drainage (including information for on-site and receiving channels).
			Description of adjacent areas such as residential developments, agricultural areas, streams, lakes, roads, etc., that might be affected by the land disturbance.
			Description of off-site land disturbing activities that may occur (borrow sites, disposal areas, easements, etc.). Identify the Owner of the off-site area and the locality responsible for plan review. Include a statement that any off-site land-disturbing activity associated with the project must have an approved ESC Plan. Submit documentation of the approved ESC Plan for each of these sites.
			Description of the site soils conditions , including hydrologic soils group, mapping unit, erodibility, permeability, surface runoff, and a brief description of depth, texture and soil structure. Mapping of soil variations should be provided in the narrative or on the plans.
			Description of critical areas that have potentially serious erosion problems or that are sensitive to sediment impacts (e.g., steep slopes, channels, etc.).
			Description of the structural and vegetative ESC measures that will be used to control erosion and sedimentation on the site. Controls should be consistent with the standards and specifications in Chapter 3 of the Virginia Erosion and Sediment Control Handbook (VESCH), latest edition. Variations and proprietary measures require a variance. Approval from DEQ of variances shall be maintained in the narrative.
			Detailed sequence of construction , that includes the phasing of installation of ESC measures.
			Description of permanent stabilization for the entirety of the site, including specifications, of how the site will be stabilized after construction is completed (permanent stabilization).
			Schedule of maintenance requirements for ESC measures including inspections frequency, maintenance concerns, and methods for repair or prevention of need for repair (i.e. removal of sediment build-up).
			Description of stormwater runoff considerations that includes describing any increase in peak runoff rates and the effects on downstream erosion and flooding. The description shall include the strategy to control stormwater runoff.
			Calculations for temporary sediment basins, diversions, channels, stormwater facilities to address MS-19, etc. Where applicable. including pre- and post-development runoff calculations, drainage area maps, time of concentration paths and computations, rainfall source and documentation, weighted runoff coefficients and computations, runoff and routed hydrographs or peak computations (as applicable), adequate onsite channel (MS-19) & culvert computations, etc.



Yes	No	N/A	ESC Plan Requirement
			Vicinity map locating the site in relation to the surrounding area. Include any landmarks and road information that might assist in locating the site.
			Location on the ESC Plan cover sheet for identification of the Responsible Land Disturber (RLD) .
			Existing conditions including existing contours, surface waters and other surface features, existing tree lines, grassed areas, or unique vegetation.
			Where applicable, a demolition plan with identification of features to be demolished and measures to address ESC for the demolition.
			Proposed conditions , including proposed contours and features.
			Delineation of the limits of disturbance .
			A description of any variance approved by DEQ described on the cover sheet of the ESC Plans.
			North arrow provided on all plan sheets.
			Legend with a complete listing of all ESC measures used, including the VESCH uniform code symbol and the standard and specification number. Include any other items necessary to identify pertinent features in the plan.
			Identification of any off-site land disturbing activities (e.g., borrow sites, disposal areas, etc.) and appropriate ESC controls.
			Identification of critical areas and appropriate protections.
			Inclusion of erosion and sediment control notes (ES-1 through ES-9) found in Table 6-1 on page VI-15 of the 1992 Virginia Erosion and Sediment Control Handbook.
			Identification of property and easement lines . For each adjacent property, list the deed book and page number and the property owner's name and address.
			Finished floor elevation of all buildings on site, including basements.
			The locations of erosion and sediment control and stormwater management practices used on the site. Use the standard symbols and abbreviations in Chapter 3 of the VESCH.
			Existing drainage patterns including dividing lines and directions of flows with the total area for each drainage area.
			A schedule of regular inspections, maintenance, and repair of temporary erosion and sediment control structures and permanent stormwater management facilities.
			Storm sewer profiles of all storm drains except roof drains.
			Site-specific details for all ESC measures . Where applicable, details shall include site-specific dimensions. Proprietary measures with an approved variance shall include site-specific details with dimensions and other information for construction per manufacturer's specifications.
			Specifications for stormwater and stormwater management structures (i.e. pipe materials, pipe bedding, stormwater structures etc.).
			Minimum Standard (MS) 1 through 19 provided on the plan with a description for each that describes how the minimum standard is addressed with the plan.
			Permanent or temporary soil stabilization shown where required on plans using standard symbols and abbreviations in Chapter 3 of the VESCH. (MS-1, MS-3, and MS-5)
			Stabilization and/or protection measures for soil stock piles and borrow areas. (MS-2)
			Detailed sequence of construction , that includes the phasing of installation of ESC measures with sediment trapping measures as a first step prior to upslope land disturbance. (MS-4)
			Drainage areas to sediment traps and sediment basins shown on plans. (MS-6)
			Stabilization measures provided for slopes steeper than 3:1. (MS-7)



Yes	No	N/A	ESC Plan Requirement (cont.)
			Stabilization measures provided for slopes steeper than 3:1. (MS-7)
			Measures to prevent concentrated flow from flowing down cut or fill slopes (i.e. slope drains). (MS-8)
			Measures to address water seeping from a slope face been addressed. (MS-9)
			Inlet protection provided for all operational storm drain and culvert inlets. (MS-10)
			Outlet protection and/or channel linings provided for all stormwater conveyance channels and receiving channels prior to being made operational (see sequence of construction). (MS-11)
			Measures to minimize encroachment and minimize sediment transport for work in a live watercourse. (MS-12)
			Temporary stream crossings of non-erodible material where a live watercourse must be crossed by construction vehicles more than twice in any six-month period. (MS-13)
			Applicable federal, state and local regulations pertaining to working in or crossing live watercourses are addressed and summarized on the plan. (MS-14)
			Stabilization measures for bed and banks of live watercourse subject to disturbance. (MS-15)
			Measures shown on plan (i.e. Construction entrance) to minimize sediment transport onto public and otherwise paved roads. (MS-17)
			MS-19 satisfied for each receiving channel per 9VAC25-840-40(19)
			Increased volumes of sheet flows that may cause erosion or sedimentation on adjacent property are diverted to a stable outlet, adequate channel, pipe or pipe system, or to a detention facility.
			If the project impacts any wetlands or surface waters, is all correspondence and permits concerning any proposed impacts to jurisdictional wetlands, stream and channels included (i.e. COE 404 permit). Note that the plan cannot be approved without proper documentation or necessary permits for jurisdictional impacts.

Appendix D2 - SWM Plan Preparer/Reviewer Checklist (LD-03)



Instruction: This checklist shall be completed if a SWM Plan and Narrative is required per the City of Salem Stormwater and/or Erosion and Sediment Control ordinance. The completed checklist shall be provided with the SWM Plan submittal. The Plan and Narrative submitted for review shall be signed and sealed by a licensed professional. This checklist is intended to only be used as a guide. The licensed professional is responsible for ensuring plans address the SWM laws and regulations.

Project Information:

Project Name: _____ Project Location: _____
 Submittal Date: _____ Date on Plans: _____
 Design Engineer (Printed): _____ Email: _____

Yes	No	N/A	SWM Plan/Narrative Requirement
<i>General Plan Information (Plan)</i>			
			North arrow.
			Legend.
			Location and vicinity map.
			Delineation of the site area and property lines in the vicinity of the project.
			Existing and proposed contours (2' interval minimum).
			Locations of test borings.
			Earthwork specifications.
			Compaction requirements specified.
			Sequence of construction.
			Limits of clearing and grading.
			Existing and proposed features including buildings, roads, parking areas, utilities, stormwater management facilities and any other physical attributes.
			SWM Facility Certification - Plans shall list all SWM facilities and critical construction inspection timeframes (i.e., liner, underdrain and outlet pipe installation) for which SWM BMP certification is required per the City of Salem Stormwater and Erosion and Sediment Control ordinance.
			The following note is on the plan: "A certified construction record drawing for permanent SWM facilities shall be submitted to the City of Salem for approval per the City of Salem Stormwater and Erosion and Sediment Control ordinance. Construction inspections and surveys, performed by a licensed professional, shall be required at each stage of installation (construction) as necessary to certify that the SWM facility has been built in accordance with the approved plan and design specifications. The Contractor shall provide a minimum of 2 business days' notice to the certifying professional to allow for critical inspections."
			BMP Inspection and maintenance plan for each permanent SWM facilities. For manufactured permanent BMPs, the construction drawings shall include manufacturer's recommendation on maintenance and inspection.
			Specifications for construction/installation of proprietary BMPs per the manufacturer's specifications
			Cross sections for stormwater conveyance channels with maximum water surface elevations for design storms (1-, 10-, and 100-year)
			Where applicable, outlet protection with dimensions at points of concentrated discharge



Yes	No	N/A	SWM Plan/Narrative Requirement
<i>Site Information (Narrative)</i>			
			Description of existing and proposed site conditions.
			Summary table with pre- and post-development land cover conditions (i.e. forest, managed turf, and impervious areas).
			Discussion of the stormwater management strategy to address water quantity and quality criteria.
			Information on the type and location of stormwater discharges, including information on the features to which stormwater is being discharged including surface waters or karst features if present.
			If the project impacts any wetlands or surface waters, is all correspondence and permits concerning any proposed impacts to jurisdictional wetlands, stream and channels included (i.e. COE 404 permit). Note that the plan cannot be approved without proper documentation or necessary permits for jurisdictional impacts.
			A general description of the proposed stormwater management facilities and the mechanism through which the facilities will be operated and maintained after construction is complete
			Information on the proposed stormwater management facilities, including (i) the type of facilities; (ii) location, (iii) impervious and pervious acres treated; and (iv) the surface waters or karst features into which the facility will discharge
			Discussion of possible stormwater impacts on downstream properties including mapping with sufficient information on adjoining parcels to assess the impacts.
			Geotechnical report when applicable (include infiltration rates when required for a BMP).
			Boring locations: borrow area, basin pool area and embankment area (centerline principal spillway, emergency spillway, abutments).
			Boring logs with Unified Soils Classifications, soil descriptions, depth to seasonal high groundwater table, etc.
			Additional geophysical investigation and recommendations in Karst environment.
			Description of inclusion of the locality's additional technical requirements into the plan, if any, and how they were addressed to the maximum extent practicable.
<i>Hydrologic Computations (Narrative)</i>			
			Mapping that supports computations and includes, at a minimum the following: <ul style="list-style-type: none"> Pre- and post-development development contours; Existing streams, ponds, culverts, ditches, wetlands, other water bodies, and floodplains; Current land use including existing structures, roads, and locations of known utilities and easements; Limits of clearing and grading; Proposed drainage patterns on the site; Proposed buildings, roads, parking areas, utilities, and stormwater management facilities.
			Pre-development drainage area mapping that includes all contributing drainage areas, CN labels, depiction of time of concentration flow paths, slopes and lengths used for runoff hydrographs.
			Post-development drainage area mapping that includes all contributing drainage areas, CN labels, depiction of time of concentration flow paths, slopes and lengths used for runoff hydrographs.



Yes	No	N/A	SWM Plan/Narrative Requirement
<i>Hydrologic Computations cont. (Narrative)</i>			
			Rainfall precipitation frequency data recommended by the U.S. National Oceanic and Atmospheric Administration (NOAA) Atlas 14. Partial duration time series shall be used for the precipitation data.
			Summary table for determination of runoff curve numbers.
			Time of concentration calculations.
			Predevelopment runoff hydrographs.
			Post-development runoff hydrographs.
<i>Hydraulic Computations (Narrative & Plans, as indicated)</i>			
			Routing computations for each proposed stormwater management facility for each applicable design storm provided in narrative.
			Stage-storage data used in routing computations in the narrative.
			Control structure information used in routing computations in the narrative.
			Summary table of pre- and post-development peak runoff rates for each point of discharge from the site provided in narrative.
			Maximum water surface elevations for design storms shown in sections or profiles on the plans for each stormwater management facility.
			Impoundments designed to convey the 100-year storm as demonstrated in computations in the narrative.
			Adequate freeboard is provided for impoundments as shown on the plans based on computations in the narrative.
			Hydraulic grade line computations in the narrative with indication of locations of surcharge or inadequacy.
			Storm sewer design computations in the narrative.
			Culvert calculations in the narrative.
			Gutter spread calculations in the narrative.
			Provide profiles of all storm conveyances (except roof drains) on plans. Profiles should include existing and proposed grade, structure types, pipe materials and sizes, slopes, inverts, etc.
<i>Water Quality Computations (Narrative & Plans, as indicated)</i>			
			Provide Runoff Reduction Method spreadsheet output including: <ul style="list-style-type: none"> • Site loadings • Required reductions • Input for each BMP employed and reductions achieved by each BMP • Compliance worksheet • Adjusted CN worksheet, when applicable.
			Treatment volume calculations for sizing BMPs.
			Stage-storage information indicating the treatment volume required and volume provided.
			All proposed SWM design follows the Virginia BMP Clearinghouse design specifications.
			A BMP-type specific checklist from Appendix 8-A of the Virginia Stormwater Management Handbook, latest edition, is completed and provided in the narrative for each proposed BMP.

Appendix E - Preconstruction Meeting Verification Form (LD-04)



CITY LAND DISTURBANCE PRECONSTRUCTION MEETING FORM

Instruction: This form shall be completed prior to the commencement of a land disturbance. The purpose of this form is to acknowledge responsibilities in accordance with the City of Salem Stormwater and Erosion and Sediment Control Ordinance. A copy of this completed form shall be maintained by the City VSMP Representative and the contractor and be readily available upon request. The following individuals are required to participate in the preconstruction meeting:

- City VSMP Representative;
- VAR10 General Permit Operator (or Duly Authorized Representative) or primary contractor for projects where the land disturbance activity is less than 1-acre;
- For land disturbance of an acre or greater, the Certified Inspector performing self-inspections for the Operator as required by the VAR10 General Permit ;
- The Responsible Land Disturber (RLD) identified on the ESC Plan;
- Representative of SWM facility design firm providing SWM facility certification, when applicable; and
- A list of additional attendees may be attached to this form, if desired.

Section 1 – Project Information

Project Name: _____ Date: _____

Project Location/Description: _____

City Representative: _____

Primary Contractor/ VAR10 General Permit Operator: _____

Responsible Land Disturber: _____

Representative for firm certifying stormwater facility (when applicable): _____

City Inspector: _____

Section 2 – Checklist

Check those available:

- Coverage Letter for the General Permit for Discharges of Stormwater from Construction Activity Available, when applicable for land disturbance \geq 1-acre
- Prepared site-specific and completed SWPPP for land disturbance of an acre or greater, when applicable for land disturbance \geq 1-acre
- Approved ESC Plan
- Approved SWM Plan, when applicable
- Identification of Responsible Land Disturber (Recorded in SWPPP, when applicable)
- Any off-site areas associated with this project have been identified.



- Conditions of termination of land disturbance form discussed.

Discussion of responsibilities for SWM facility certifications (e.g. coordination with the design professional certifying the facility and the critical components of the installation of the facility)

Section 3 – Contractor Acknowledgement of Responsibilities

(To be completed by the Contractor/Operator)

I acknowledge my responsibilities to conduct the land disturbance activity in accordance with the City of Salem Stormwater and Erosion and Sediment Control Ordinance, the approved Plans, to seek approval from City for any significant changes to the plan, to adhere to the conditions of the VAR10 General Permit (when applicable), oversight of the maintenance of the Stormwater Pollution Prevention Plan (when applicable), coordination with the individual providing the as-built for any stormwater management facilities, and notifying the City Project Inspector upon:

- Installation of the initial ESC measures where applicable and as identified on the ESC Plan; and
- The occurrence of significant discharge of sediment or other pollutants from the site.

Name: _____

Signature: _____

Date: _____

Section 4 – City Approval of Completeness of the Land Disturbance Preconstruction Meeting

(To be completed by the City VSMP Representative)

I acknowledge the Land Disturbance Preconstruction Meeting has occurred and been conducted consistent with the City of Salem Stormwater and Erosion and Sediment Control Ordinance. The required documentation, as listed on this form, is complete and land disturbance can commence.

Name: _____

Signature: _____

Date: _____

Appendix F1 - Construction Inspection Checklist less than acre (LD-05)

CITY OF SALEM, VIRGINIA

OFFICE OF COMMUNITY DEVELOPMENT
P. O. BOX 869 / 21 S BRUFFEY ST
SALEM, VIRGINIA 24153
(540) 375-3032

**LAND DISTURBING ACTIVITIES****INSPECTION REPORT****FOR EROSION AND SEDIMENT CONTROL****RSF & Non VSMP Form**

INSPECTOR _____ DATE _____

PROJECT _____ TIME _____

1. Silt Fence

- A. Violation Noted _____
B. Required Action _____

2. Drop Inlet Protection

- A. Violation Noted _____
B. Required Action _____

3. Denuded Areas/Stabilization

- A. Violation Noted _____
B. Required Action _____

4. Construction Entrance

- A. Violation Noted _____
B. Required Action _____

5. Soil Stockpiles

- A. Violation Noted _____
B. Required Action _____

6. Storm Water Channels

- A. Violation Noted _____
B. Required Action _____

7. Other Minimum Standards

- A. Violation Noted _____
B. Required Action _____

In Compliance:

Notice of Violation:

Notice to Comply:

Stop Work:

Inspector Signature _____

Inspection	ENG-LD NON VSMP	Status	Resulted - Failed
Inspector	Driscoll, Sam	Inspection Number	2019-00002262.2
Address	1706 W Main ST Salem, VA 24153	Reinspection Number	2019-00002262.4
Permit	Land Disturbance 2019-00020057	Partial	<input type="checkbox"/>
Scheduled Date	10/22/2019 11:15 AM	Estimated Duration	00:30 <input type="button" value="X"/>
Actual Date	10/22/2019 03:31 PM		
Comments	<p>NO CE SF DOWN AROUND SITE Fix SF where necessary</p> <p>Failure to comply will result in a stop work order being issued</p>		
		Internal Comments	
		External Comments	

Compliance Items (23)

Documents (1)

ENG-MS 01 Photo

History

Results

UDFs

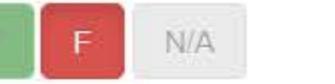
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ENG-MS 03 Photo

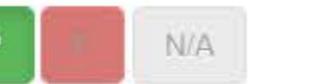
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ENG-MS 05 Photo

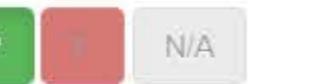
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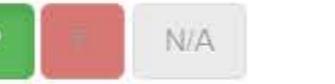
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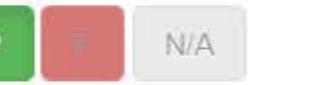
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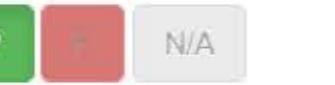
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ENG-MS 08 Photo



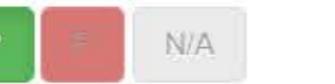
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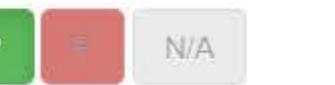
ENG-MS 10 Photo



ENG-MS 11 Photo



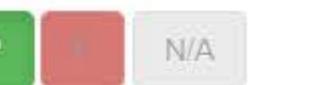
ENG-MS 12 Photo



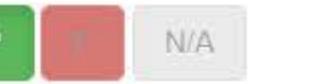
ENG-MS 13 Photo

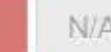
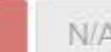
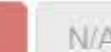


ENG-MS 14 Photo



ENG-MS 15 Photo



ENG-MS 15 Photo	  	View
ENG-MS 16 Photo	  	View
ENG-MS 17 Photo	  	View
ENG-MS 18 Photo	  	View
ENG-MS 19 Photo	  	View
Job Status		
ENG-In Compliance Photo	  	View
ENG-Notice of Violation Photo	  	View
ENG-Notice to Comply Photo	  	View
ENG-Stop Work Photo	  	View

Total Compliance Items 23

Total Failed 3

Total to Pass 23

Total Passed 20

Suggested Result Failed

Appendix F2 - Construction Inspection Checklist with SWPPP (LD-06)



City of Salem Construction General Permit Inspection Form

Department of Community Development

Engineering and Inspections Division

21 South Bruffey Street, Salem, VA 24153

Phone: (540) 375-3032 / Email: engineering@salemva.gov

Project Name: _____ Permit Number: _____

Project Address: _____ Contractor: _____

Project Contact: _____ Contact Telephone: _____

Contact E-Mail: _____ Weather Conditions: _____

Inspector: _____ Inspection Date/Time: _____

Stage of Construction:

- Clearing/Grading Rough Grading Building Construction Final Grading SWM Facility Construction
 Final Stabilization Termination Notice Other: _____

COVERAGE & POSTING REQUIREMENTS		Y/N	Comments/Description
1	Construction site has permit coverage? (Va. Code §62.1-44.15:34.A) (9VAC25-870-310)		
2	A copy of the notice of coverage letter is posted conspicuously near the main entrance of the construction activity? (CGP Part II.C)		
3	Notice of the location of the SWPPP is posted near the site's entrance, if applicable, and information for public access is provided? (9VAC25-870-54.G)(CGP Part II D.2 & 3)		
SWPPP AVAILABILITY AND CONTENTS		Y/N	Comments/Description
4	The SWPPP is on-site or made available during the inspection? (CGP Part II D.1&2) (9VAC25-870-54.G)		
5	The SWPPP contains a signed copy of the registration statement? (CGP Part II A.1.a)		
6	The SWPPP includes, upon receipt, a copy of the notice of coverage letter and the CGP? (CGP Part II A.1.b & c)		
7	The SWPPP contains an approved erosion and sediment control plan? (9VAC25-870-54.B)(CGP Part II.A.2)		
8	The SWPPP contains an approved stormwater management plan or an existing construction site has a stormwater management plan? (9VAC25-870-54.C)(CGP Part II.A.3) Technical Criteria II.B II.C		
9	The SWPPP contains a pollution prevention plan? (9VAC25-870-54.D)(CGP Part II.A.4)		
10	SWPPP is being amended, modified and updated: (CGP Part II(B))		
11	SWPPP contains name, phone number and qualifications of "Qualified Personnel" conducting inspections? (CGP Part II A.6)		
12	SWPPP inspections are being carried out at required frequency by qualified personnel and inspection reports are being retained: Part II(F)		

ESC AND SWM CONTROL MEASURES		Y/N	Comments/Description
13	Sediment trapping measures are installed as a first step in the land disturbing activity? (9VAC25-840-40.4)		
	Above measures properly functioning and maintained per the VA Erosion and Sediment Control Handbook?		
14	Stabilization applied and/or established in accordance with CGP and ESC Minimum Standards? (9VAC25-840-40(1,2,3,5,7, and 15)) (9VAC25-880-60) (CGP Part I F.1(a)) (CGP Part II A.2.c.8) (CGP Part II A.5.b.1) -Denuded area/stockpile (7 days) -Diversion (immediate)		
15	Operable storm sewer inlets are protected from sediment laden water? (9VAC25-840-40.10)		
16	Operational stormwater conveyance channels or pipes have adequate outlet protection and channel lining? (9VAC25-840-40.11)		
17	Construction entrance acceptable & transport of sediment onto paved surfaces is minimized? (9VAC25-840-40.17)		
18	For Notice of Termination, permanent SWM control measures included in the SWPPP are in place? (9VAC25-880-60) (CGP Part I F.1(a))		
POLLUTION PREVENTION PRACTICES		Y/N	Comments/Description
19	Have discharges of spilled and leaked fuels and chemicals from vehicle fueling and maintenance activities been prevented, if applicable? (CGP Part IIA.4 (e)(2))		
20	Have discharges of soaps, solvents, detergents, and washwater from construction materials, including the clean-up of stucco, paint, form release oils, and curing compounds been prevented, if applicable? (CGP Part IIA.4(e)(3))		
21	Is concrete washwater directed into a leak-proof container or leak-proof settling basin? (CGP Part IIA.4(e)(5))		
22	Is trash being picked up and disposed of properly on a daily basis? (CGP Part IIA.4(e)(6))		
SITE EVALUATION/RECOMMENDATION		Y/N	Comments/Description
23	Are measures in place that have prevented or minimized actual or potential impacts occurring at the site or along the perimeter and at outfall locations?		
24	Impacting receiving waters? Part I(B)6, Part I(D), or Part II(A)2c(2) or (5)		

In Compliance

Notice of Violation

Notice to Comply

Summary of violations to be addressed and/or other violations not included above:

Corrective Action(s) Deadline: _____ Targeted Re-inspection Date: _____

Inspector Signature: _____ Date: _____

Reinspection Details - 2019-00003313.7

Inspection	ENG-VSMP	Status	Resulted - Passed
Inspector	Driscoll, Sam	Inspection Number	2019-00003313.6
Address	1606 Lynchburg TPKE Salem, VA 24153	Partial	<input type="checkbox"/>
Permit	Land Disturbance =/> 1 Acre 2019-00020128	Estimated Duration	00:30  
Scheduled Date	01/27/2020 09:30 AM	Internal Comments	<div style="border: 1px solid #ccc; height: 100px; width: 100%;"></div>
Actual Date	01/27/2020 10:29 AM	External Comments	<div style="border: 1px solid #ccc; height: 100px; width: 100%;"></div>
Comments	In compliance		

Compliance Items (26)

[Pass All](#) [Expand All](#) [Collapse All](#)

Documents (1)

Coverage & Posting Requirements

ENG-Permit Coverage Photo

N/A

Comments

Codes in Violation

[+ Add Row](#)

ENG-Coverage Letter Posted Photo

N/A

Comments

Codes in Violation

History

Results

UDFs

+ Add Row

ENG-Coverage Letter Posted Photo



Comments

+ Add Row

ENG-SWPPP Location Photo



Comments

+ Add Row

SWPPP Availability & Contents

ENG-SWPPP Availability Photo



Comments

+ Add Row

ENG-SWPPP Registration Statement Photo



Comments

+ Add Row

ENG-SWPPP Coverage Letter/CGP Photo

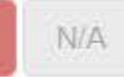


Comments

+ Add Row

Codes in Violation

Codes in Violation

+ Add Row			
ENG-SWPPP includes ESC Plan Photo			   ▼
Comments			Codes in Violation
+ Add Row			
ENG-SWPPP includes SWM Plan Photo			   ▼
Comments			Codes in Violation
+ Add Row			
ENG-SWPPP includes P2 Plan Photo			   ▼
Comments			Codes in Violation
+ Add Row			
ENG-SWPPP Up to Date Photo			   ▼
Comments			Codes in Violation
+ Add Row			
ENG-SWPPP Qualified Personnel Photo			   ▼
Comments			Codes in Violation
+ Add Row			
ENG-SWPPP Inspections Photo			   ▼

P F N/A

Comments**Codes in Violation**

+ Add Row

ESC & SWM Control Measures**ENG-ESC First Step Measures Photo**

P F N/A

Comments**Codes in Violation**

+ Add Row

ENG-ESC Stabilization Photo

P F N/A

Comments**Codes in Violation**

+ Add Row

ENG-ESC Inlet Protection Photo

P F N/A

Comments**Codes in Violation**

+ Add Row

ENG-ESC Outlet Protection Photo

P F N/A

Comments**Codes in Violation**

+ Add Row

ENG-ESC CE/Tracking Photo

P F N/A

P F N/A

Comments	Codes in Violation
+ Add Row	

Pollution Prevention Practices

ENG-P2 Prevention Photo	P	F	N/A	▼
-------------------------	---	---	-----	---

Comments	Codes in Violation
+ Add Row	

ENG-P2 Clean Up Photo	P	F	N/A	▼
-----------------------	---	---	-----	---

Comments	Codes in Violation
+ Add Row	

ENG-P2 Concrete Washout Photo	P	F	N/A	▼
-------------------------------	---	---	-----	---

Comments	Codes in Violation
+ Add Row	

ENG-P2 Trash/Debris Photo	P	F	N/A	▼
---------------------------	---	---	-----	---

Comments	Codes in Violation
+ Add Row	

ENG-Impacting Receiving Waters? Photo	P	F	N/A	▼
---------------------------------------	---	---	-----	---

Comments	Codes in Violation
+ Add Row	

Job Status

ENG-In Compliance Photo	P F N/A
-------------------------	--

Comments	Codes in Violation
+ Add Row	

ENG-Notice of Violation Photo	P F N/A
-------------------------------	--

Comments	Codes in Violation
+ Add Row	

ENG-Notice to Comply Photo	P F N/A
----------------------------	--

Comments	Codes in Violation
+ Add Row	

ENG-Stop Work Photo	P F N/A
---------------------	--

Comments	Codes in Violation
+ Add Row	

Comments	Codes in Violation
+ Add Row	
ENG-Notice of Violation Photo	P F N/A ▼
Comments	Codes in Violation
+ Add Row	
ENG-Notice to Comply Photo	P F N/A ▼
Comments	Codes in Violation
+ Add Row	
ENG-Stop Work Photo	P F N/A ▼
Comments	Codes in Violation
+ Add Row	

Total Compliance Items 26

Total Failed 0

Total to Pass 26

Total Passed 26

Suggested Result Passed

**Appendix F3 - Construction Inspection Checklist for Sites with Agreements in Lieu of a Plan
(LD-07)**

CITY OF SALEM, VIRGINIA

OFFICE OF COMMUNITY DEVELOPMENT
P. O. BOX 869 / 21 S BRUFFEY ST
SALEM, VIRGINIA 24153
(540) 375-3032

**LAND DISTURBING ACTIVITIES****INSPECTION REPORT****FOR EROSION AND SEDIMENT CONTROL****RSF & Non VSMP Form**

INSPECTOR _____ DATE _____

PROJECT _____ TIME _____

1. Silt Fence

- A. Violation Noted _____
B. Required Action _____

2. Drop Inlet Protection

- A. Violation Noted _____
B. Required Action _____

3. Denuded Areas/Stabilization

- A. Violation Noted _____
B. Required Action _____

4. Construction Entrance

- A. Violation Noted _____
B. Required Action _____

5. Soil Stockpiles

- A. Violation Noted _____
B. Required Action _____

6. Storm Water Channels

- A. Violation Noted _____
B. Required Action _____

7. Other Minimum Standards

- A. Violation Noted _____
B. Required Action _____

In Compliance:

Notice of Violation:

Notice to Comply:

Stop Work:

Inspector Signature _____

CITY OF SALEM, VIRGINIA

OFFICE OF COMMUNITY DEVELOPMENT
P. O. BOX 869 / 21 S BRUFFEY ST
SALEM, VIRGINIA 24153
(540) 375-3032

LAND DISTURBING ACTIVITIES**INSPECTION REPORT****FOR EROSION AND SEDIMENT CONTROL**

INSPECTOR _____

DATE _____

PROJECT _____

TIME _____

1. Silt Fence

- A. Violation Noted _____
B. Required Action _____

2. Drop Inlet Protection

- A. Violation Noted _____
B. Required Action _____

3. Denuded Areas/Stabilization

- A. Violation Noted _____
B. Required Action _____

4. Construction Entrance

- A. Violation Noted _____
B. Required Action _____

5. Soil Stockpiles

- A. Violation Noted _____
B. Required Action _____

6. Storm Water Channels

- A. Violation Noted _____
B. Required Action _____

7. Other

- A. Violation Noted _____
B. Required Action _____

In Compliance:

Notice of Violation:

Notice to Comply:

Stop Work:

Inspector Signature _____

Inspection	ENG-LD RSF	Status	Resulted - Passed
Inspector	Driscoll, Sam	Reinspection Number	2019-00002261.1
Address	204 Northern TRL Salem, VA 24153	Partial	<input type="checkbox"/>
Permit	Land Disturbance 2019-00020056	Estimated Duration	00:30 X ▼
Scheduled Date	09/10/2019 (Anytime)	Internal Comments	<div style="border: 1px solid #ccc; width: 100%; height: 100px; margin-top: 10px;"></div>
Actual Date	09/10/2019 03:56 PM	External Comments	<div style="border: 1px solid #ccc; width: 100%; height: 100px; margin-top: 10px;"></div>
Comments	<div style="border: 1px solid #ccc; width: 100%; height: 100px; margin-top: 10px;"></div>		

Compliance Items (9)

Pass All Expand All Collapse All

Documents (1)

ENG-Silt Fence PhotoP F N/A >

History

Results

UDFs

ENG-Construction Entrance PhotoP F N/A >**ENG-Denuded Areas/Stabilization Photo**P F N/A >**ENG-Soil Stockpiles Photo**P F N/A >**ENG-Other Photo**P F N/A >

History

Results

UDFs

ENG-Silt Fence Photo



ENG-Construction Entrance Photo



ENG-Denuded Areas/Stabilization Photo



ENG-Soil Stockpiles Photo



ENG-Other Photo



Job Status

ENG-In Compliance Photo



ENG-Notice of Violation Photo



ENG-Stop Work Photo



ENG-Notice to Comply Photo



Total Compliance Items 9

Total Failed 0

Total to Pass 9

Total Passed 9

Suggested Result Passed

Appendix G - SWM Facility Record Drawing and Certification Form (LD-08)



Stormwater Management Facility Record Drawing and SWM Facility Certification Form

Instruction: The purpose of the record drawing and stormwater management (SWM) facility certification process is to verify that all stormwater management facilities and associated conveyance systems have been built in accordance with the approved plan and design specifications. All required information shall be submitted to the City for approval in accordance with the City of Salem Stormwater and Erosion and Sediment Control Ordinances. City approval is required prior to receiving a Termination of Land Disturbance that is necessary prior to the permittee's termination of a VAR10 General Permit. The following shall be submitted for each permanent post-construction stormwater management facility:

(1) A completed copy of this form

- ✓ A copy of this form shall be submitted for each permanent stormwater management facility that is recommended for acceptance. The applicant shall ensure that this form is completed in its entirety and all applicable documentation is included with the submittal.

(2) Certified Professional Inspection Log

- ✓ A copy of the applicant's inspection log shall be submitted with this form. This log should document all critical aspects of SWM facility construction to demonstrate compliance with the approved plans. For example, a bioretention facility may require a liner. Without an inspection log, there would be no assurance that it was installed post-construction since it is underground and not visible from the surface.

(3) Certified Record Drawing (As-built)

- ✓ A record drawing of the plans is required to be submitted with this form. The plans should indicate any changes that differ from the approved plans, along with any applicable computations.
- ✓ A clear means, such as a checkmark, shall be used to demonstrate that the applicant agrees with the constructed values.
- ✓ For any changes to the plans, including numeric changes, a red line shall be used to cross out the original item and the actual revision shall be entered beside the crossed out value.
- ✓ Elevations shall be to the nearest 0.1 foot.
- ✓ The storage volume of the facility, including all dimensioned structures, shall be verified with the certification.
- ✓ All submitted plan sheets shall be labeled as "Record Drawing."

Section 1 – SWM Facility General Information

Project Name:	Project Location:
BMP Location (Latitude/Longitude):	
BMP Type:	Total Drainage To BMP (Acres):
Impervious Acres draining to BMP:	Pervious Acres draining to BMP:
6 th Order HUC:	Date Facility Brought Online:
Name of any impaired waters the BMP discharges to (2012 305(b)/303(d)):	


Section 2 - Contractor Information:

Company:	Contact Person:
Title:	Phone Number:
Plan Name:	Plan Date:

Section 3 - Record Drawing Certifications Statement

A Licensed Professional shall provide certification (below) of the SWM Record Drawing(s) including inspections, monitoring and other efforts used for the certification of Stormwater Management facilities during construction.

Record Drawing Certification

I certify that I am a Licensed Professional in the Commonwealth of Virginia and that to best of my knowledge, having completed site specific inspection(s), the stormwater facility referenced on this form is constructed in accordance with the approved plans and all of the information provided with this certification is complete and accurate.

Design Firm Name: _____

Mailing Address: _____

Business Phone: _____

Name of certifying individual: _____

PLACE SEAL HERE

Signature: _____ Date: _____

Section 4 - Record Drawing Approval

(This section to be completed by City only)

City Stormwater Compliance Manager (print): _____

Signature: _____ Date: _____

Appendix H - Termination of Land Disturbance Form (LD-09)



City Contractor Notification of Completion of Land Disturbance Activity Form

Instruction: This form is to be used as a request of recognition of completion of land disturbance between the Contractor/Operator and City. This form will **NOT** result in termination of VAR10 General Permit coverage from DEQ. The Contractor/Operator **SHALL NOT** terminate VAR10 General Permit coverage with DEQ, when applicable, until recognition of completion from City is provided in Section 3 of this form.

Project Name: _____ VAR10 Permit # (where applicable): _____

Section 1– Conditions for Recognition of Completion of Land Disturbance

The conditions of this section shall be met and this form shall be signed by both the Operator and the City VSMP Representative prior to termination of land disturbance (check those that apply):

- No further land disturbance activities are planned.
- The project area has been stabilized in accordance with the approved plans, which includes seeding, mulching, sodding, paving, or other means.
- All temporary erosion and sediment control measures have been removed.
- All pollution prevention measures have been removed from the site and disposed of in a legal manner.
- All permanent post-construction stormwater management facilities have City-approved record drawings.
- All trash and debris has been removed from the site.
- The City has received as-built drawings for stormwater management facilities.

Section 2 – Operator Certification:

"I certify under penalty of law that I have read and understand this document and that this document and all attachments were prepared 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 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."

Upon approval of this form, I will request termination of the VAR10 General Permit from DEQ, when applicable."

Operator/Contractor: _____ Company: _____

Signature: _____ Date: _____

Section 3 – Recognition of Completion

(This section to be completed by the City VSMP Representative)

City recognizes this request to be accurate based on the certification above and terminates the Operator/Contractor's land disturbance activity as it applies to the City of Salem Stormwater and Erosion and Sediment Control Ordinance.

City Stormwater Compliance Manager (Print): _____

Signature: _____ Date: _____

Appendix I - SWPPP Template (LD-10)



Stormwater Pollution Prevention Plan (SWPPP)

Contractor Firm Name: _____

Individual Responsible for SWPP Implementation _____

Address: _____

Phone Number: _____

Plan Date: July 13, 2016

Plan Approval Date: _____

Approved plans are incorporated by reference and shall be maintained with SWPPP at all times during construction.

Project Name: _____

This SWPPP shall be maintained on-site and made available at a central location for use by applicable personnel, be readily available upon request by the City, DEQ, or the EPA, and for public review. Information for the public to access this SWPPP shall be posted conspicuously near the main entrance of the construction activity along with the VAR10 general permit coverage letter.

VSMP Oversight Representative:

Contact Number:

Email:

The Operator of the VPDES Permit for Discharges of Stormwater from Construction Activities (VAR 10) is responsible for ensuring compliance with the permit that incorporates this SWPPP, be reference.

SWPPP CERTIFICATION

Operator

(In the case of certification by a Duly Authorized Representative, the Delegation of Authority certification on the following page shall be completed)

Name: _____

Title: _____

Company: _____

Phone Number: _____

Date: _____

"I certify under penalty of law that I have read and understand this document and that this document and all attachments were prepared 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 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."

"Furthermore, I have read and understand this Stormwater Pollution Prevention Plan and the information in this document and its attachments is to the best of my knowledge true, accurate and complete. In addition, I certify that I will fully implement this Plan and will maintain its accuracy and maintain on site at all times."

Name: _____

Signature: _____

[See Part III (K) of the General VPDES Permit for Discharges of Stormwater from Construction Activities for appropriate individual for certification of this Stormwater Pollution Prevention Plan]

Delegation of Authority

The Operator may specify a Duly Authorized Representative to implement this Stormwater Pollution Prevention Plan (SWPPP). This individual must be in a position having responsibility for the overall operation of the regulated facility or activity. If the authorization is no longer accurate because a change in the individual or position with responsibility for the overall operation of the regulated facility or activity, a new authorization shall be submitted prior to or together with any reports or information to be signed by an authorized representative, such as this SWPPP and inspection reports, or other information requested by the City, DEQ or EPA.

The Duly Authorized Representative for this project will be:

Name: _____
Title: _____
Company: _____
Phone Number: _____
Email Address: _____
Date: _____

"I certify under penalty of law that I have read and understand this document and that this document and all attachments were prepared 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 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."

"Furthermore, I have read and understand this Stormwater Pollution Prevention Plan and the information in this document and its attachments is to the best of my knowledge true, accurate and complete. In addition, I certify that I will fully implement this Plan and will maintain its accuracy and maintain on site at all times."

Duly Authorized Representative (Signature): _____

Operator's Certification:

"I certify that the Duly Authorized Representative named above is my duly authorized representative for this project. The Operator is in a position to have overall responsibility in a manner sufficient to implement the SWPPP. I also certify that the Operator named above has the delegated authority to sign inspection reports and/or amend or modify this SWPPP."

Operator (Signature): _____

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3.2	Prohibited Discharges	3
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5.0	Site Inspections	5
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Appendices

- Appendix A: SWPPP Documents
- Appendix B: Pollution Prevention Plan
- Appendix C: Pollution Prevention Awareness Form
- Appendix D: Spills and Leaks Log
- Appendix E: SWPPP Amendment, Modification and Update Log
- Appendix F: Record of Land Disturbing Activities
- Appendix G: Qualified Personnel for Inspections Form
- Appendix H: Inspection Forms

ACRONYMS

DEQ	Virginia Department of Environmental Quality
EPA	Environmental Protection Agency
ESC	Erosion and Sediment Control
MS4	Municipal Separate Storm Sewer System
NPDES	National Pollutant Discharge Elimination System
P2	Pollution Prevention
SWM	Stormwater Management
SWPPP	Stormwater Pollution Prevention Plan
TMDL	Total Maximum Daily Load
VESCLR	Virginia Erosion and Sediment Control Law and Regulations
VSMP	Virginia Stormwater Management Program
VPDES	Virginia Pollution Discharge Elimination System
WLA	Wasteload Allocation

SWPPP Completion Checklist

A Stormwater Pollution Prevention Plan (SWPPP) must be developed prior to submitting a registration statement for coverage under the General VPDES Permit for Stormwater Discharges from Construction Activities. The Construction Activity Operator identified on the cover page of the SWPPP is responsible for obtaining and certifying the information contained herein. Utilize the following steps to ensure completion of the SWPPP.

- Step 1 – Provide general information and documents for the project and General Permit coverage per Section 2. Incorporate, by reference the City-approved Erosion and Sediment Control and Stormwater Management Plans.
- Step 2 – Complete the Pollution Prevention (P2) Plan as described in Section 3 and complete the P2 template in Appendix B. Provide any additional information regarding pollutant-generating activities and methods to control the discharge of pollutants in surface runoff. Conduct a “walk through” training regarding potential pollutant generating activities and pollution prevention practices. Acquire signatures of all applicable subcontractors and personnel in Appendix C.
- Step 3 –Indicate the appropriate inspection frequency in Section 5.
- Step 4 –Include qualified personnel information in Appendix G.
- Step 5 – Establish a record of land-disturbing activities. Maintain the log in Appendix F to document location, descriptions, and applicable dates of disturbance.
- Step 6 – As applicable, maintain the SWPPP Amendment, Modification, and Update Log to document potential changes to the project and the SWM and ESC plans.
- Step 7 – As required, complete self-inspections using the construction site inspection form in Appendix H. Document dates and corrective actions resulting from items identified during inspections.
- Step 8 – Ensure that all of the required SWPPP documents are located onsite and are available for review.
- Step 9 – Upon completion of stormwater management facilities, provide a record drawing to the VSMP Representative.

1.0 Introduction

The purpose of this Stormwater Pollution Prevention Plan (SWPPP) is to address Part II of the General VPDES Permit for Discharges of Stormwater from Construction Activities (General Permit No. VAR10), referred to herein as the VAR10. This SWPPP is provided as a template and is intended to provide a minimum standard of compliance and consistency for land-disturbance activity greater than or equal to 1-acre in the City.

The individual applying for VAR10 permit coverage is responsible for the completion and implementation of this SWPPP. All plans incorporated by reference into the SWPPP become enforceable under this general permit. If a plan incorporated by reference does not contain all of the required elements of the SWPPP, the operator must develop the missing elements and include them in the SWPPP. Step-by-step instruction for completing this SWPPP is provided and upon completion serves as the site-specific SWPPP for the land disturbance activity identified on the cover sheet.

Upon commencement of land disturbance, the operator shall implement the SWPPP and subsequent amendments, modifications, and updates from commencement of land disturbance until termination of VAR10 permit coverage.

2.0 General Information

This section addresses Part II.A.1 of the VAR10 that requires general information be provided in the SWPPP. Incorporated by reference are the City-approved ESC and SWM Plans that incorporate the following general information required by the permit:

- Directions of stormwater flow and approximate slopes anticipated after major grading activities;
- Limits of land disturbance including steep slopes and natural buffers around surface waters that will not be disturbed;
- Locations of major structural and nonstructural control measures that will be installed between disturbed areas and the undisturbed vegetated areas in order to increase sediment removal and maximize stormwater infiltration;
- Locations of surface waters; and
- Locations where concentrated stormwater is discharged.

General Description of the land disturbance activity:

Table 1. General information documents required per Part II.A.1 of the VAR10.

SWPPP Document Type	Incorporated as part of this SWPPP?
Signed copy of VAR10 Registration Statement (Appendix A)	<input type="checkbox"/> Yes
DEQ Notice of Coverage Letter (Appendix A)	<input type="checkbox"/> Yes
Copy of VAR10 Construction General Permit (Appendix A)	<input type="checkbox"/> Yes
Completed Preconstruction Meeting Verification Form (Appendix A)	<input type="checkbox"/> Yes
Approved Erosion & Sediment Control Plan (By Reference)	<input type="checkbox"/> Yes
Approved Stormwater Management Plan (By Reference)	<input type="checkbox"/> Yes

* The implementation of a City approved ESC and SWM Plan meets the requirements of Part II.A.2 and A.3 of the VAR10

3.0 Pollution Prevention

This section addresses Part II.A.4 of the VAR10 that requires a Pollution Prevention Plan (P2) to address potential pollutant-generating activities that may reasonably be expected to affect the quality of stormwater discharges from the construction activity, including any support activity. The P2 Plan is provided in Appendix B.

3.1 Awareness

The Operator or Duly Authorized Representative shall identify all subcontractors and other personnel that could potentially conduct the pollutant generating activities identified in Table B-1 of the P2 Plan (Appendix B). Identified subcontractors and other personnel shall be listed on the P2 Awareness Form in Appendix C with each individual acknowledging with their signature their awareness of the P2 Plan in Appendix B.

3.2 Prohibited Discharges

The Operator or Duly Authorized Representative shall record the date of any prohibited discharges, the discharge volume released, and what actions were taken to minimize the impact of the release in the Spill and Leaks Log in Appendix D. For each spill or leak, measures taken to prevent the reoccurrence of any prohibited discharge shall also be recorded in the log.

4.0 Updates and Plan Modifications

The Operator or Duly Authorized representative will certify modifications to the SWPPP when amended to reflect a change in design, construction, operation, or maintenance of the project site that has a significant effect on the potential for the discharge of pollutants to surface waters and that has not been addressed in the normal implementation of the SWPPP. The SWPPP will also be updated whenever it is found to be ineffective in meeting the requirements of the VAR10. The Operator will update the SWPPP no later than seven days following any modification to its implementation.

Where revisions or modifications to the SWPPP for the project are necessary, such revisions or modifications shall be approved by the Operator and shall be documented in the SWPPP Amendments, Modifications, and Update Log form in Appendix E identified on applicable sheet of the plan set. All documentation shall be accompanied with a date and initials of the person performing the modifications.

In addition to SWPPP modifications, the following shall be noted in the Record of Land Disturbance Activity log in Appendix F and shall include the following items:

- 1) A record of dates when:
 - ✓ Major grading activities occur;
 - ✓ Construction activities temporarily or permanently cease on a portion of the site; and
 - ✓ Stabilization measures are initiated;
- 2) Documentation of replaced or modified controls where periodic inspections or other information have indicated that the controls have been used inappropriately or incorrectly and were modified as soon as practicable;
- 3) Areas that have reached final stabilization and where no further SWPPP or inspection requirements apply;
- 4) All properties that are no longer under the legal control of the Operator and the dates on which the Operator no longer had legal control over each property;

5.0 Site Inspections

The Operator or Duly Authorized representative shall conduct inspections using the Site Inspection Forms in Appendix H. All inspections shall be conducted by qualified personnel in accordance with the ESC and SWM Certification Regulations (9VAC25-850). Qualified personnel shall be identified in Appendix G. Completed inspections forms shall be maintained in Appendix H for all inspections.

5.1 Inspection Frequency

The Operator or Duly Authorized Representative shall conduct inspections at one of the following frequencies using the inspection form in Appendix H. The option selected (identified with a check mark) should be implemented throughout coverage under the VAR10 General Permit.

- At least once every 4 business days; **or**
- At least once every 5 business days and no later than 48 hours following a measurable storm event.
In the event that a measurable storm event occurs when there are more than 48 hours between business days, the inspection shall be conducted on the next business day. A measurable for event (as defined below) for this inspection option will be established and documented by one of the following methods:
 - On-site rain gauge
 - Rainfall data from NOAA (http://www.srh.noaa.gov/ridge2/RFC_Precip/)

5.2 Alternative Inspection Frequency under Certain Conditions

Where areas have been temporarily stabilized or land-disturbing activities will be suspended due to continuous frozen ground conditions and stormwater discharges are unlikely, the inspection frequency may be reduced to once per month. If weather conditions (such as above freezing temperatures or rain or snow events) make discharges likely, the operator shall immediately resume the regular inspection frequency.

5.3 Corrective Action

The Operator shall implement the corrective action(s) identified as a result of an inspection as soon as practicable but no later than seven days after discovery or a longer period as approved by the Salem VSMP Representative. If approval of a corrective action by a regulatory authority is necessary, additional control measures shall be implemented to minimize pollutants in stormwater discharges until such approvals can be obtained.

Documentation of any corrective actions shall be recorded on the respective, or subsequent, construction site inspection form (Appendix H). Corrective actions taken shall be retained by the Operator as part of the SWPPP for at least three years from the date that the Construction Permit coverage expires or is terminated.

5.4 Special Conditions for Inspections

If the SWM Plan identifies that the site either discharges to an impaired waterway; or a waste load allocation has been assigned for construction activity for sediment or nutrients as part of an approved TMDL prior to July 1, 2014, the following special conditions.

APPENDIX A: SWPPP Documents

1. Signed copy of the VAR10 Registration Statement
2. DEQ Notice of Coverage Letter for the Activity
3. Copy of the VAR10 General Permit
4. Completed Salem Preconstruction Verification Form
5. Salem approved ESC Plan (incorporated by reference)
6. Salem approved SWM Plan (incorporated by reference)

APPENDIX B: Pollution Prevention Plan

APPENDIX C: Pollution Prevention Awareness Form

APPENDIX D: Spills and Leaks Log

Use this log to keep a record of spills and leaks from equipment or chemicals that are on-site or off-site during the life of the project.

SPILLS AND LEAKS LOG

APPENDIX E: SWPPP Amendment, Modification and Update Log

SWPPP AMENDMENT, MODIFICATION AND UPDATE LOG
(Copy as needed)

Use this log to identify dates and changes to the SWPPP and/or the associated ESC and SWM plans.

Date	Description of Amendment, Modification or Update
Responsible Party	<i>"I certify under penalty of law that I have read and understand this document and that this document and all attachments were prepared 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 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."</i>
	SWPPP Operator or Duly Authorized Representative

APPENDIX F: Record of Land Disturbing Activities

Use this log to keep a record of land-disturbing activities, as determined by the referenced plans or amendments, during the life of the project. Create extra sheets as necessary.

- Major grading activities occur;
- Construction activities temporarily or permanently cease on a portion of the site; and
- Stabilization measures are initiated;
- Areas that have reached final stabilization

RECORD OF LAND-DISTURBING ACTIVITIES
(ALTERNATIVELY REFERENCE PLAN SET WITH DOCUMENTED REQUIREMENTS)

Location and description (or reference the plans where information is noted)	Date Land Disturbance Began	Date Land Disturbance Ended

APPENDIX G: Qualified Personnel for Inspections Form

APPENDIX H: Inspection Forms