

SITE DRAINAGE PLAN REVIEW
CATEGORY 1 PROJECTS

(Allow 20 business days for review)

(Definition of Category 1: Land disturbing activities of greater than 1 acre)

Date: _____

All permits applied for through the City of Richmond Permits & Inspection department that are located inside the corporate limits of the City of Richmond or within the two mile fringe jurisdiction of the City of Richmond are required to submit for a site drainage plan review.

Any and all changes to the site plan located at the address below will be submitted to the RSD Engineer's office at least 7 days in advance with a complete copy of the required drainage plans and submittals. Any changes may require a Stormwater Permit to be issued shall be kept on file in the Department of Planning, Permits and Inspections after review.

OWNER NAME: _____
JOB ADDRESS: _____
Project Name: _____
Permitted Project Name _____
Permitted Project N.O.I. _____
Section/Township/Range: _____

Name Date

The Richmond Sanitary District considers your project a priority and strives to complete reviews as quickly as possible. We ask that you plan for a minimum review time of 20 businesses days to allow our office to conduct a full review of your project, although not every submittal will require the full minimum allowable review time. The more accurate and complete the application is, the more likely a quicker turnaround time can be realized. This review is independent of any other permit or state building release and can submitted (directly to RSD) prior to or in conjunction with these applications.

SITE DRAINAGE PLAN REVIEW
CATEGORY 1 PROJECTS

Definition of Category 1: Land disturbing activities of greater than 1acre

Name of Project: _____

Parcel Number: _____

Subdivision Name: _____

Lot Name / Lot Number: _____

Location and Description: _____

Owners Information

Address: _____

Telephone Number: _____

Email Address: _____

Design Professional Information (Architect/Engineer/Surveyor)

Company Name: _____

Contact Person: _____

Address: _____

Telephone Number: _____

Email Address: _____

General Contractor Information (If Applicable)

Company Name: _____

Contact Person: _____

Address: _____

Telephone Number: _____

Email Address: _____

SITE DRAINAGE PLAN REVIEW CATEGORY 1 PROJECTS

(Definition of Category 1: Land disturbing activities greater than one acre.)

Submitted by Applicant	For City Use Only			Project Narrative
	Adequate	Deficient	Not Applicable	
<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	Scope and Purpose of Project
<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	Legal Description
<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	Existing Soil Conditions including:
<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	Properties
<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	Characteristics
<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	Limitations
<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	Hazards
<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	Measures utilized to overcome/ minimize adverse soil conditions
<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	Construction Sequence including Phases
<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	14-Digit Hydrologic Unit Code
<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	Project Site Map or Plat including:
<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	Lot numbers
<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	Lot boundaries
<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	Road layout
<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	Road names
<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	Right-of-way
<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	Identification of Other State/ Federal Water Quality Permits Required

Submitted by Applicant	Adequate	Deficient	Not Applicable	Vicinity Map

General Plan Requirements				
Submitted by Applicant	Adequate	Deficient	Not Applicable	
<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	North arrow
<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	Graphic and written scale
<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	Legend for all symbols
<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	Location and elevation of property benchmark
<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	Professional seal and signature
<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	Date
<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	Table of revisions with dates (when applicable)

Existing Project Site Layout				
Submitted by Applicant	Adequate	Deficient	Not Applicable	
<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	Location and name of wetlands, lakes, water courses on or adjacent to site
<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	Location of existing structures on site
<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	Existing stormwater drainage systems including:
<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	Location
<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	Size
<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	Dimension
<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	Slope
<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	Flow direction
<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	100-year floodplains, floodway fringes, floodways (note if none exists)
<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	Soil map of predominant soil types
<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	Identification and delineation of vegetative cover
<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	Land use of adjacent properties
<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	Existing topography at a contour interval (2' min.) to indicate drainage pattern
<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	Adjacent site topography (when applicable)

Final Project Site Layout				
Submitted by Applicant	Adequate	Deficient	Not Applicable	
<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	Location of all proposed site improvements including:
<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	Roads
<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	Utilities
<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	Lot delineation and identification
<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	Proposed structures
<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	Common areas
<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	100-year floodplains, floodway fringes, floodways (note if none exists)

<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	Proposed topography at a contour interval (2' min.) to indicate drainage pattern
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Submitted by Applicant	Adequate	Deficient	Not Applicable	Grading Plan
<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	Delineate proposed land disturbing activities, including those off-site
<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	Locate soil stockpiles and borrow areas
<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	Information regarding off-site borrow, stockpile, disposal areas that are under the control of the project site owner
<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	Existing and proposed topographic information

Submitted by Applicant	Adequate	Deficient	Not Applicable	Drainage Plan
<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	Peak discharge of 10-year storm event including:
<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	Preconstruction conditions
<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	Post construction conditions
<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	Location, size, dimension, slope, direction of flow of stormwater drainage systems shown on plan and profile views
<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	Locations where stormwater may be directly discharged into ground water, note if none exist
<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	Locations of points where stormwater discharge will leave the site
<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	Name of receiving waters
<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	Location, size, and dimensions of features used for stormwater management

Submitted by Applicant	Adequate	Deficient	Not Applicable	Erosion and Sediment Control Plan
<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	Location, dimensions, detailed specifications, construction details of all temporary and permanent stormwater quality measure
<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	Temporary and Permanent Stabilization Plans including:
<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	Sequence of implementation
<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	Specifications and application rates for soil amendments and seed mixtures
<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	Type and application rate for anchored mulch
<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	Construction sequence describing relationship between implementation of stormwater quality measures and stages of construction activities
<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	Self-monitoring program including:

<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	Plan
<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	Procedures
<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	Maintenance plan of measures
<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	Description of potential pollutant sources associated with construction activities that may reasonably be expected to add a significant amount of pollutants to stormwater discharges
<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	Material handling and storage associated with construction activity shall meet the spill prevention and spill response requirements in 327 IAC 2-6.1

Submitted by Applicant	Adequate	Deficient	Not Applicable	Post-Construction Stormwater Management Plan
<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	Description of potential pollutant sources from proposed land use that may reasonably be expected to add a significant amount of pollutants to stormwater discharges
<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	Location, dimensions, detailed specifications, and construction details of all post construction stormwater quality measures.
<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	Description of measures that will be installed to control pollutants in stormwater discharges after completion of construction activities.
<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	Sequence of installation of measures
<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	Measures to remove or minimize pollutants from stormwater run-off
<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	Measures to prevent or minimize adverse impacts to stream and riparian habitat
<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	Description of maintenance guidelines for measures including:
<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	Facilitates proper long-term function
<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	Availability to future parties whom will be responsible for operation and maintenance of measures

Submitted by Applicant	Adequate	Deficient	Not Applicable	Calculations
<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	Existing and Proposed Estimation of Stormwater Runoff Calculations including:
<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	Drainage area map (note all subareas) with all acreage and runoff coefficients and entering off-site drainage noted
<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	Weighted runoff coefficient computations
<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	Time of concentration computations
<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	Closed Conduit and Open Channel Design Calculations including:
<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	Size of pipe or channel cross-section
<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	Pipe or channel's slope w/invert and inlet elevations
<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	Roughness coefficient

<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	Pipe length
<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	Velocities
<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	Capacities
<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	Pipe type and class
<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	Design runoff of component sheds
<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	Inlet spacing calculations
<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	Off-Site Drainage and Downstream Capacity Calculations (if applicable)
<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	Detention/Retention Pond Calculations
<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	Pre-developed shed map
<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	Post-developed shed map
<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	Pre- and post-developed time of concentrations calculations
<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	Overland flow route to detention/retention pond
<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	Peak design discharge
<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	Time to peak discharge
<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	Total design storm runoff
<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	Inflow hydrograph
<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	Spillway peak outflow rate
<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	Emergency spillway capacity calculations
<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	Off-site bypass flow route
<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	Bottom pond slope
<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	Flood protection grades on plat

Submitted by Applicant	Adequate	Deficient	Not Applicable	Miscellaneous
<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	Submittal Package Checklist
<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	1 Full-Sized Sets of Plans
<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	1 Half-Sized Sets of Plans
<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	Permit Filing Fee of \$50
<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	Petition for Regulated Drain
<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	Electronic Files of Complete Set of Plans (PDF & AutoCAD if available)

This checklist is not intended to be comprehensive. The Stormwater Design Criteria Ordinance and the Ordinance for Erosion and Sediment Control, along with other sections of the Stormwater Development Manual, shall be referenced to assure all required elements are integrated into the submittal package.

The following person is the responsible party for the Stormwater Prevention Plan (SWPPP). This person will be available onsite throughout the project, and has the owner's authority to make corrections to the plan as needed. The responsible party also agrees to the following:

- 1. Sediment discharge and tracking from lot shall be minimized throughout the land disturbing activities until permanent stabilization is achieved.
- 2. Sediment that is tracked or washed shall be redistributed or disposed of in a manner that is in compliance with all applicable statues and rule. Sediment shall not be flushed from the streets with water.
- 3. Adjacent lots disturbed by the lot operator shall be stabilized with temporary or permanent surface.
- 4. Final stabilization shall be installed prior to certificate of occupancy is issued.

Signature and Date _____
 Printed Name _____
 Company Name _____
 Address _____
 Telephone Number: _____
 Email Address: _____

TO BE COMPLETED BY THE CITY OF RICHMOND

DATE OF REJECTION LETTER SENT _____ ACCEPTANCE _____
 DATE OF REVIEW INITIATION: _____ REVIEWER _____
 DATE THE REVIEW COMMENCED: _____