

# Review Checklist

Frederick County, Virginia  
 Department of Public Works



Subdivision/Site Plan Name: \_\_\_\_\_  
 Engineer/Surveyor Name: \_\_\_\_\_  
 Engineer/Surveyor Phone: \_\_\_\_\_  
 Tax Map (PIN): \_\_\_\_\_

*Note: Provide sheet number(s) for each item or indicate if not applicable.*

Requirements	Sheet	N/A	FC Check
Provide a note pertaining to temporary and permanent stabilization of denuded areas.			
Provide a note pertaining to stabilization requirements for soil stockpiles.			
Provide a note stating that vegetative stabilization shall be uniform, mature enough to survive and adequate to inhibit erosion.			
Provide sediment trapping facilities as the first phase of land disturbing activity.			
Provide a note requiring that dams, dikes and diversions be stabilized immediately after construction.			
Sediment traps and basins shall be installed if necessary and in the correct location. Basins shall maintain structural integrity during 100-year 24 hour storm event. (§79-3.A.1 Frederick County Code).			
Cut and fill slopes shall be adequately stabilized. Fill slopes steeper than 3:1 will require a slope stability analysis and maintenance plan.			
Provide adequate temporary or permanent channel, flume or slope drain for all concentrated runoff down cut or fill slopes.			
Provide adequate drainage or other protection whenever water seeps from a slope face.			
Provide adequate inlet protection for all operational storm sewer inlets.			
Provide adequate channel protection for open conveyance and receiving channel, provide adequate outlet protection for pipes and channels.			
Provide measures to minimize channel damage when conducting in-stream construction.			
Install temporary stream crossings of non-erodible material			
All applicable federal, state and local regulations pertaining to working in or crossing live watercourses shall be met - all applicable permits shall be submitted with Land Disturbance application (§79-3.A.2 Frederick County Code).			
Provide a note stating that the bed and banks of a watercourse shall be stabilized immediately after work in the watercourse is completed.			
Provide appropriate notes regarding trenching practices in accordance with 4VAC50-30-40 subsection 16.			

Requirements	Sheet	N/A	FC Check
Provide a note requiring cleaning/removal of any sediment on public or private roadways.			
Provide a note requiring that all temporary controls be removed within 30-days once no longer needed; trapped sediment must be removed and stabilized.			
Provide adequate protection from erosion and sediment deposition for downstream properties and waterways.			
Demonstrate that concentrated stormwater runoff leaving the site discharges directly into an adequate natural or manmade channel.			
Demonstrate that two (2)-year runoff from the site does not overtop banks of natural channels and does not cause erosion.			
Demonstrate that discharge into the previously constructed man-made channels are not overtopped by a ten (10)-year storm and the two (2)-year storm does not cause erosion			
Demonstrate that closed storm sewer systems contain the ten (10)-year storm. Provide calculations and show ten (10)-year HGL in the storm sewer profiles.			
If offsite improvements are proposed, provide evidence of obtained easements, etc.			
Provide an analysis of the existing and ultimate characteristics of the watershed.			
Provide responsible party and maintenance plan for the proposed detention facilities to include access, what is to be maintained?, how often?, who pays?			
Provide energy dissipaters at the outfall of all detention facilities.			
Provide calculations demonstrating that onsite ditches are adequate.			
All sheet flow leaving the site shall be at or below pre-developed rates or it must be diverted to an adequate channel, pipe system or detention facility.			
All calculations and assumptions shall pertain to the entire development and its ultimate build-out.			
All measures utilized shall minimize the impact on waters of the State.			
Project description - Describe the nature and purpose of the land disturbing activity and area (acres) to be disturbed.			
Existing Site Conditions - Provide a description of the existing topography, vegetation and drainage.			
Adjacent Areas - Provide a description of neighboring areas such as streams, lakes, residential areas, roads, etc., which might be affected by the land disturbance.			
Off-site areas - Describe any off-site land-disturbing activities that will occur.			
Soils - Provide a brief description of the soils on the site giving such information as soil name, mapping unit, erodibility, permeability, depth, texture and soil structure.			
Geology - Provide a brief description of the geology on the site related to construction; i.e. methods of removal, use as engineered fills, Karst potential, etc.			

<b>Requirements</b>	<b>Sheet</b>	<b>N/A</b>	<b>FC Check</b>
Critical areas - Provide a description of areas on the site which have potentially serious erosion problems.			
E&S control measures - Provide a description of the methods which will be used to control erosion and sedimentation on the site.			
Permanent stabilization - Provide a brief description, including specifications, of how the site will be stabilized after construction is completed.			
Stormwater runoff narrative - Will the development of the site cause an increase in peak runoff rates? Will it cause flooding? Describe the strategy to control stormwater runoff.			
Calculations - detailed calculations for the design of temporary sediment basins, permanent stormwater detention basins, diversions, channels, etc. Include calculations for pre- and post-development runoff			
Provide a vicinity map.			
Provide a North arrow and scale on all plan sheets.			
Delineate the proposed limits of clearing and grading.			
Show and label existing contours.			
Show and label final contours.			
Show existing vegetation.			
Show boundaries of different soil types.			
Show existing drainage patterns including the acreage of each drainage area.			
Label areas with potentially serious erosion problems.			
Show and label all proposed site improvements.			
Label all storm pipe systems on grading plan sheets (pipe size, material, structure numbers).			
Show elevations for the proposed basement floor, first floor and garage slab for all buildings and finished grade elevations at building corners.			
Show location of all retaining walls with elevations for proposed top and bottom of walls.			
Conveyance system protection and flood protection analysis provided at every discharge point of concentrated flow originating from site improvements.			
Show location of all erosion and sediment control measures using VESCH standard symbols.			
Show all off-site land disturbing activities and erosion and sediment control measures. Provide letter of permission or show temporary construction easements as necessary.			
Provide stage-storage, stage-discharge and routing data for all SWM/BMP ponds.			
Provide VRRM spreadsheet data.			

<b>Requirements</b>	<b>Sheet</b>	<b>N/A</b>	<b>FC Check</b>
Drainage area map showing individual and cumulative drainage area contributing to each point of concentration.			
Provide a maintenance schedule including regular inspection and repair of erosion and sediment control measures.			
Provide the Responsible Land Disturber signature block on the plans.			
Provide a seeding schedule in accordance with VESCH standard 3.31 and 3.32.			
Provide a 20-foot drainage easement for all concentrated flows within on- or off-site residential lots.			
Provide a minimum of 2% slope on grass channels. If less than 2%, provide an alternative design.			
Any area in which drainage collects from more than three (3) lots shall be placed within a platted drainage easement.			
All silt fence shall be wire reinforced.			
Drop Inlets in areas accessible to the public will require an appropriately sized grate opening. Please specify the grate type in the plans.			
Ensure that the backwater condition for the post-developed 100-year storm does not impact adjacent properties.			
Show the location and extent of the overland relief flow paths provided for SWM conditions and to clear buildings for the 100-year storm.			
Provide the dewatering structure details for the proposed sediment basins. The details shall include elevations, type of structures, pipe sizes, etc.			

\_\_\_\_\_  
 Engineer's Signature

\_\_\_\_\_  
 Date