

FAUQUIER COUNTY, VIRGINIA

MINIMUM SUBMISSION REQUIREMENTS CODE OF DEVELOPMENT SITE PLANS *FOR SITE PLANS PREPARED UNDER A CODE OF DEVELOPMENT

PLAN NAME	PRE-APP. DATE:
SUBMITTING FIRM _	
ENGINEER:	PHONE NUMBER:

Code Reference	Description	Sheet #	YES	NO	NA	#
Zoning Ordinance (Z.O.) 12-802.5	Proof of notification to adjacent property owners to include return receipts (white copy) with property addresses and copy of letter that includes description of properties, use, and review.	π				1
Z.O. 12-802.7	Written and signed statements from the appropriate officials concerning the availability of gas (if applicable), electricity, water and sewer to the project.					2
Z.O. 12-805.1	The site plan shall be prepared to the scale of one (1) inch equals fifty (50) feet or larger; no sheet shall exceed 24" by 36" in size.					3
Z.O. 12-805.2	The site plan may be prepared on one or more sheets. If prepared on more than one sheet, match lines shall clearly indicate where the separate sheets join.					4
Z.O. 12-806.1	Name and address of the owner/developer.					5
	Name and address of the engineering firm preparing the plans.					
	Stamp and signature of the engineer/surveyor who prepared the plans.					
	Name and section of subdivision, if applicable.					
	Sheet index of plans/pages.					
	Present zoning, parcel identification number(s).					
	Tabulation of all proposed uses, including square footage and, for residential uses, the number, size and types of dwelling units.					
	Tabulation of required and proposed parking.					
	Magisterial district, county, state, north point, date, scale of drawings.					
	A blank space four (4) inches by four (4) inches in size located in the upper right hand corner on the title page shall be reserved for the use					

Comments:			

Code Reference	Description	Sheet #	YES	NO	NA	#
	of the approving authority.					
	Vicinity map, with north arrow, at a scale of one to two thousand (1"=2000") showing the relationship of the proposed subdivision to the adjoining property. The map should show all adjoining roads, their names and numbers, town/county boundaries, and subdivisions, and other landmarks within a one mile radius of the proposed development.					
	Date of plan.					
Z.O. 12-806.2	A boundary survey of the tract of site plan limit, with an error of closure within the limit of one in ten thousand (10,000), related to the true meridian using the Virginia State Plane coordinate system, showing the location and type of boundary evidence and the area of the site.					6
Z.O. 12-806.3	A certificate signed by the engineer or surveyor setting forth the source and title of the owner of the tract, the owner's name and the place of record of the last instrument in the chain of title (including deed book and page number).					7
Z.O. 12-806.4	Owner, zoning and present use of adjoining tracts.					8
Z.O. 12-806.5	Proposed lot lines and lot sizes.					9
Z.O. 12-806.6	Existing and proposed buildings, and their uses and setbacks.					10
Z.O. 12-806.7	Number of floors, footprint and height of each building.					11
Z.O. 12-806.8	Water courses and their names.					12
Z.O. 12-806.9	100-Year Floodplain limits as most recently approved by FEMA and/or proposed Floodplain limits.					13
Z.O. 12-806.10	Existing topography accurately shown with a maximum of two (2) foot contour intervals.					14
Z.O. 12-806.11	Proposed finished grading by contour with a maximum of two (2) foot contour intervals, supplemented where necessary by spot elevations.					15
Z.O. 12-806.12	Existing and proposed streets, alleys, travelways and sidewalks, including plan view, profiles, culverts, bridges and roadway sections.					16
Z.O. 12-806.13	Right-of-way lines, centerlines, departing lot lines, lot numbers, subdivision limits, limits of construction, and building location.					17
Z.O. 12-806.14	Centerline curve data, including delta radius arc and cord and tangent.					18
Z.O. 12-806.15	Radius of all curb returns to face of curb. On streets where curb and gutter and not required, indicate radius to edge of bituminous treatment.					19

Comments:		

Code Reference	Description	Sheet #	YES	NO	NA	#
Z.O. 12-806.16	Street names and state route numbers on all existing streets in vicinity.	π				20
Z.O. 12-806.17	The edge of proposed street surface or the face of curb, as the case may be, for full length of all streets.					21
Z.O. 12-806.18	The width of rights-of-way and all easements, and the width of surface or distance between curb faces and relation to centerline. Easements and rights-of-way of all utilities shall be clearly defined for the purpose intended, and whether they are to be publicly or privately maintained.					22
Z.O. 12-806.19	When proposed streets intersect with or adjoin existing streets or travelways, both edges of existing pavement surface or curb and gutter must be indicated for a minimum of 100 feet or the length of connection, whichever is the greater distance.					23
Z.O. 12-806.20	Existing and proposed drainage easements and the direction of drainage flow in streets, storm sewer, valley gutters, streams and subdrainage, etc.					24
Z.O. 12-806.21	All water mains, sizes, valves, fire hydrant locations.					25
Z.O. 12-806.22	All sanitary and storm sewers and appurtenances, identifying appurtenances by type and number; the station on the plan must conform to the station shown on the profile. Indicate the top and invert elevation of such structure.					26
Z.O. 12-806.23	The contributing drainage area in acres (statistically). Show all culvert, pipe curb inlets and other entrances exclusive of driveway pipes.					27
Z.O. 12-806.24	Type or class of concrete or treated metal drainage pipe to be installed and paved roadside ditches as required.					28
Z.O. 12-806.25	Location of no-through street signs where required on cul-de-sac streets or temporary cul-de-sac streets.					29
Z.O. 12-806.26	The proper driveway entrance type, computed culvert size, and/or VDOT design designation.					30
Z.O. 12-806.27	Provision at ends of curb and gutter for erosion control.					31
Z.O. 12-806.28	Street sections.					32
Z.O. 12-806.29	Symmetrical transition of pavement at intersection with existing street. Indicate road edge delineators.					33
Z.O. 12-806.30	Connection to proposed VDOT construction when necessary.					34
Z.O. 12-806.31	The location of all or any springs either within or draining to street right-of-way and indicate proposed method of treatment.					35
Z.O. 12-806.32	The location of the streams or drainage ways related to the street construction as proposed by the developer and proposed drainage					36

Comments:		

Code Reference	Description	Sheet #	YES	NO	NA	#
	ditches or stream relocation. Easements shall not be considered part of the street right-of-way. Furnish detailed typical drainage section and type of stabilization to be provided. Type of stabilization to be approved by the Zoning Administrator and the resident engineer for VDOT.					
Z.O. 12-806.33	Location, type and size of ingress and egress to and from the site. All off-street parking and parking bays, loading spaces and walkways indicating type of surfacing, size, angle of stalls, width of aisles and a specific schedule showing the number of parking spaces provided and the number required in accordance with the approved Code of Development.					37
Z.O. 12-806.34	Existing and proposed water and sanitary facilities, including all pipe sizes, types and grades, and where connection is to be made to an existing or a proposed public or central water and/or sewer system.					38
Z.O. 12-806.35	Existing and proposed utilities of all other types.					39
Z.O. 12-806.38	A Type I Soil Report prepared by the Fauquier County Soil Scientist's Office or a Preliminary Soil Report prepared by a certified professional soil scientist, such reports to be consistent with the standards found in Fauquier County Subdivision Ordinance Section 9.5(C).					40
Z.O. 12-806.39	Where hydric soils have been identified by the soil report, evidence of a jurisdictional determination of wetlands and all wetland permits required by law shall be provided.					41
Z.O. 12-806.40	Site plans for the expansion of an existing use on the same lot or onto an adjacent lot will show all existing facilities as well as those proposed.					42
Z.O. 12-806.41	A minimum of two (2) datum references for elevations used on plans and profiles and correlation, where practical, to U.S. Geological Survey datum.					43
Z.O. 12-806.42	Any necessary notes that may be required to explain the intent and purposes of specific items on the plan or profile.					44
Z.O. 12-806.43	A landscape design plan, based upon accepted professional design layouts and principles.					45
Z.O. 12-806.44	All existing individual trees (by common name) with greater than six inch caliper, tree masses covering an area of over 1,000 sq. ft. and rock outcrops with an area of over 100 sq. ft.					46
Z.O. 12-806.45	Wells on adjoining property and within five hundred (500) feet of the subject parcel's property lines shall be indicated when water on the subject parcel is to be provided by an on-site well.					47
Z.O. 12-806.46	Location, type, size and height of all fencing, screening and retaining walls where required under the provisions of applicable ordinance.					48
Z.O. 12-502.8	Profiles for sanitary and storm sewers, streets adjacent thereto,					49

Comments:		

Code Reference	Description	Sheet #	YES	NO	NA	#
	1"=50' horz., 1"=5' vert. Match lines when more than one sheet. Scale 1"=50' or larger; Max. Sheet size 42".					
Z.O. 12-503.2	A copy of the zoning proffers shall be shown on the plan. The applicant is required to explain, in written form, how the proposed plan meets each applicable proffer statement.					50
Z.O. 12-503.17	All horizontal dimensions shown on the site development plan shall be in feet and decimals of a foot to be closest to hundredth of a foot, and all bearings in degrees, minutes and seconds to the nearest 10 seconds.					51
Z.O. 12-620	Required lighting plans shall be prepared by qualified electrical engineers and shall incorporate the latest design criteria.					52
Fauquier County Design Standards Manual (DSM) 201.1.1	For storm drainage systems that are located within public rights-of- way and/or will be included for maintenance under the state highway system, the rainfall frequencies required by the VDOT Drainage Manual shall be used, with the exception that no system shall be designed for less than the ten (10) year storm.					53
DSM 201.1.1	The VDOT Drainage Manual shall be used for the design of inlets or catch basins unless the conditions require the design for a large storm event as determined by the County.					54
DSM 201.1.1	The ten (10) year storm event and the actual time of concentration shall be used for the design of all grate inlets.					55
DSM 201.1.1	Grate inlets shall be designed using a fifty percent (50%) clogging factor.					56
DSM 201.1.1	The specified design storms for stormwater management facilities shall be defined as the 24-hour storm using site specific rainfall precipitation frequency data recommended by the National Oceanic and Atmospheric Administration (NOAA) Atlas 14 unless using the Modified Rational Method, in which case the storm of critical duration should be used.					57
DSM 201.1.2	All storm drainage designs for open channels, culverts, and storm drains shall be designed to provide overland relief to convey the 100-year storm event where there is a possibility of flooding residences, commercial or industrial buildings, overtopping primary roads, experiencing significant economic loss, or catastrophic failure.					58
DSM 201.2	A topographic map identifying all drainage areas. The 5-foot contour topographic maps available from the Fauquier County GIS Department are appropriate to delineate drainage areas that extend beyond the site development area.					59
DSM 201.2	Time of concentration flow paths and calculations. The travel time path shall be reflective of the actual conditions both before and after the land disturbing activities.					60
DSM 201.3.2	The length of overland flow shall be reflective of actual conditions					61

Code Reference	Description	Sheet #	YES	NO	NA	#
Kittinte	and shall be no greater than 150 feet unless approval from the Program Administrator is obtained.	П				
DSM 201.3.2	Overland flow shall be calculated using TR-55 methodology or using the Seelye chart and the roughness coefficients (Manning's n-values) for sheet flow provided in DSM Table 201.1.					62
DSM 201.3.3	The maximum allowable length for shallow concentrated flow shall be 1000 feet. The travel time for shallow concentrated flow shall be calculated using TR-55 methodology or the Kirpich nomograph.					63
DSM 201.3.4	The travel time for channelized flow and pipe flow shall be calculated using TR-55 methodology or the Kirpich nomograph.					64
DSM 201.4.1	 The Natural Resources Conservation Service (NRCS) synthetic rainfall distribution and models, including but not limited to Technical Release 20 (TR-20), TR-55, and the USACE's HEC-1 and HEC-HMS software, as well as other NRCS applications are preferred and acceptable for all stormwater management and floodplain analyses. The NRCS method must be used where drainage areas are equal to or greater than 200 acres, or where times of concentration are 20 minutes or longer. The Rational Method may be used for drainage areas that are less than 200 acres. 					65
	 The Modified Rational Method may be used to determine peak discharge rates for drainage areas less than 200 acres and when the time of concentration is less than 20 minutes. 					
DSM 201.4.2.A	Weighted Runoff Coefficient (C factor) calculations. The Runoff Coefficient (C factor) shall be selected from the range of values for a given land use provided in DSM Exhibit 201.3. Deviations from these values must be approved by the Program Administrator.					65
DSM 201.4.2.B	Rainfall Intensity (I) shall be determined using the formula $I=B/(t_c + D)^E$. Values for B, D and E can be obtained in the table in DSM 201.4.2.B.					66
DSM 204.4.3.C	When calculating existing rates of runoff (pre-construction), assume that all cover types are in good hydrologic condition.					67
DSM 201.6	Design of storm drainage infrastructure shall be based on the ultimate development conditions of the contributing drainage area.					68
DSM 202.1.1	Channel calculations. Design flows for open channels must be contained within the channel.					69
DSM 202.1.2	The lining of channels shall be designed to withstand the erosive effects from a 2-year storm event.					70

Comments:	

Code Reference	Description	Sheet #	YES	NO	NA	#
DSM 202.1.3	The minimum allowable slope for vegetated-lined open channels is 2-percent, and the minimum allowable slope for concrete-lined channels is 1-percent, other than roadside ditches within VDOT's right of way.					71
DSM 202.2.A & 205.2.A	Projects obtaining VSMP coverage under Part IIA and Part IIC of the Virginia Stormwater Management Program (VSMP) Permit Regulations; and projects not requiring coverage under VSMP Permit Regulations but do require coverage under the Virginia Erosion and Sediment Control Regulations shall meet the requirements of VSMP Part IIC and the Virginia Erosion and Sediment Control Regulations for stream channel erosion prevention criteria and flood protection criteria.					72
DSM 202.2.B & 205.2.B	Projects obtaining VSMP coverage under Part IIA and Part IIB of the VSMP Permit Regulations shall meet the requirements of VSMP Part IIB Regulations for channel protection and flood protection criteria.					73
DSM 203.1.A	Culvert calculations. Culverts shall be designed with a headwater to culvert diameter ratio of less than 2.0 for the 10-year storm, unless otherwise restricted by VDOT.					74
DSM 203.1.B	The overland relief area of the 100-year frequency storm with the culvert 100% clogged shall be shown not to flood adjacent buildings/structures.					75
DSM 203.1.C	The minimum culvert performance shall be determined by analyzing both inlet and outlet control for the design flow and using the higher resulting headwater.					76
DSM 203.1.D	Culverts under public roads shall be provided with end sections or endwalls in accordance with the outlet protection requirements of the VDOT Drainage Manual.					77
DSM 203.1.E	The minimum velocity in a culvert shall be 3 feet per second for a 2-year storm event.					78
DSM 203.1.E	All closed conduit and culvert design within the VDOT right of way should be in accordance with the latest version of the VDOT Drainage Manual.					79
DSM 203.2.B	Private culverts not in the VDOT right-of-way may be Reinforced Concrete Pipe (RCP) or Corrugated Metal Pipe (CMP). Corrugated High-Density Polyethylene (HDPE) with an integrally formed smooth interior is allowed for culverts of 48" diameter or smaller.					80
DSM 203.2. C	Manning's n-values for culverts shall be representative of the culvert material specified per DSM exhibit 203.1.					81
DSM 203.3	The minimum culvert size shall be 15-inch diameter.					82

Comments:		

Code Reference	Description	Sheet #	YES	NO	NA	#
DSM 203.3	The maximum length of culvert shall be 300 feet.	π				83
DSM 203.5	When a culvert is set in a perineal stream the invert of the culvert shall be set below the normal flow line as required in the VDOT Drainage Manual. The slope of the culvert shall not exceed the slope of the natural stream.					84
DSM 204.1	Storm drain calculations establishing the design flow shall be submitted with the Storm Drainage Plan. Design flows shall be based on ultimate build-out of the contributing watershed based on the current Comprehensive Plan.					85
DSM 204.2.A	Inlet calculations. Inlets shall be designed for the 10-year storm.					86
DSM 204.2.B	Storm drains shall be designed for the 10-year frequency design storm.					87
DSM 204.2.B	Grate inlet calculations. Grate inlets in a sump condition shall be designed using a 50% clogging factor.					88
DSM 204.2.C	The minimum slope of a closed conduit storm drain pipe shall be 0.5%.					89
DSM 204.2.D	Stormwater conveyance pipes shall have a minimum of 15-inch diameter.					90
DSM 204.2.D	Storm drain pipe size shall not be reduced in the direction of flow, except as required for the proper operation of stormwater management facilities. In general there may not be a reduction in pipe size greater than one standard increment in the direction of flow.					91
DSM 204.2.E	A cleanout access point, either an inlet, manhole or junction box, shall be provided at a maximum of every 300 feet of pipe.					92
DSM 204.3	Hydraulic grade line calculations. The hydraulic grade line shall not exceed any critical elevation during the design storm, including rising above the ground elevation at inlets or other structures, or reaching a point where storm flow would back-up to cause flooding damage.					93
DSM 204.4	In all Service Districts, drainage systems shall be designed to provide overland relief from the 100-year rainfall event without increasing flood potential for nearby buildings.					94
DSM 204.5.A	Storm drains not in the VDOT right-of-way shall be constructed with RCP or HDPE pipe.					95
DSM 205.3	Stormwater detention calculations. To properly design stormwater detention facilities, a flow routing computer program shall be used with appropriate elevation-discharge-storage relationship for the design storm events.					96

Comments:	

Code Reference	Description	Sheet #	YES	NO	NA	#
DSM 205.4	Stormwater detention facilities should not be constructed within a Federal Emergency Management Agency (FEMA) designated Special Flood Hazard Area (SFHA). If this is unavoidable, the facility shall comply with all applicable regulations under the National Flood Insurance Program, 44 CFR Part 59.					97
DSM 205.4	A minimum separation of 50' from the computed 100-year water- surface elevation of an extended detention pond and drainfields is required.					98
DSM 205.4	All Stormwater Management Ponds shall have their toe of embankment established a minimum of 10 feet from all property lines.					99
DSM 205.4	A "No Plant Zone" area shall be established extending a minimum of 10 feet beyond the embankment toe and shall be included in a stormwater maintenance easement.					100
DSM 205.4	Hydrophilic trees or shrubs, such as maple, sycamore or willow species, shall not be permitted within 25 feet of the embankment toe.					101
DSM 205.4	Stormwater management and BMP facilities shall not be located in required buffer areas unless authorized by the Zoning Administrator.					102
DSM 205.5	Impounding structures that are not covered under the Virginia Dam Safety regulations shall be designed to maintain structural integrity during the 100-year frequency storm event. An emergency spillway shall be provided. The emergency spillway may be separate or incorporated into the design of the principal spillway. Weirs or orifices used to control lesser frequency storms are to be considered 100% clogged for the design of the emergency spillway.					103
DSM 205.5	Embankment side slopes shall be no steeper than 3:1 unless prior approval is obtained from the VSMP administrator.					104
DSM 205.5	Embankments must provide at least one foot of freeboard from the maximum 100-year storm water-surface elevation to the lowest elevation on the top of the dam.					105
DSM 205.5	A geotechnical study must be provided for all stormwater embankments greater than 6 feet in height as measured from the toe of the embankment.					106
DSM 205.5	Dry stormwater management detention facilities shall be designed to be empty within 72 hours of the storm event.					107
DSM 205.5	The minimum orifice size shall be 1" diameter.					108
DSM 205.5	All riser structures shall be cast-in-place concrete unless a substitute material has been approved by the Program Administrator.					109

Code Reference	Description	Sheet #	YES	NO	NA	#
DSM 205.5	Outflows from stormwater detention/retention facilities shall be discharged into an adequate channel as specified in Section 202.2.					110
DSM 205.5	Stormwater basin embankments shall be vegetated in accordance with the standards in the Virginia Stormwater Management Handbook or the BMP Clearinghouse.					111
DSM 205.5	If underground facilities are proposed, the following note shall appear on the plans: "Construction inspections are required throughout construction by the design engineer or other qualified professional to ensure that stormwater management facilities are constructed in conformance with the approved design plan."					112
DSM 205.5	Trash racks are required at the low flow orifice controlling extended detention drawdown. Trash racks are required at the tops of all risers/drop inlet spillways. The trash rack shall be a removable unit.					113
DSM 205.5	Emergency spillways and their outfall channels must safely convey the 100-year storm to a receiving channel (the receiving channel does not have to be adequate for the 100-year storm).					114
DSM 205.6	Access to remote stormwater management/BMP facilities must be provided by an all-weather vehicular traversable route a minimum of 8 feet wide and contained in appropriate easements.					115
DSM 205.6	Stormwater management access roads with grades of 0%-3.49% may be stabilized with grass; access roads with grades of 3.5%-6.99% shall be stabilized, at a minimum, with compacted gravel mix (21-a), and access roads with grades of 7%-12% shall be paved with asphalt.					116
DSM 206.1	Permanent outlet protection shall be provided at culvert and stormdrain discharge points and shall be designed in accordance with VDOT methods.					117
DSM 207.3	A geotechnical report with site specific infiltration rates is required for all stormwater infiltrations practices. The report must demonstrate that the infiltration BMP will work as designed.					118
DSM 207.3	All wet ponds shall have an aquatic safety bench at least 10 feet wide with slopes not to exceed 1:10 (V:H) or 1' water depth.					119
DSM 207.3	No more than one penetration shall be allowed through a dam structure without prior approval of the program administrator.					120
DSM 208.2	Stormwater management/BMP practices having an infiltration component are prohibited in stormwater management hot spot areas.					121
DSM 208.2	Stormwater detention facilities shall be separated a minimum of four feet from the seasonal high groundwater table, or use an					122

Comments:		

Code Reference	Description	Sheet #	YES	NO	NA	#
	impermeable liner if the facility will be receiving runoff from a stormwater management hotspot.					
DSM 209.1	Easements shall not split property lines. Open channels or storm drains that run parallel to a property line shall be offset a sufficient amount so that the easement is totally contained on the property that contains the open channel or storm drain.					123
DSM 209.1	A storm drainage easement shall be provided for the exit channel of all emergency spillways sufficient to convey the maximum emergency spillway flow to an existing downstream receiving channel.					124
DSM 209.1	For all Site Plans, the maximum computed 100-year water-surface elevation must be contained within the Stormwater Management Easement.					125
DSM 209.1	Underground utility lines and structures shall be kept at least 5-feet horizontal from drainage pipes, structures, and channels. Utility crossings at drainage easements shall be as near to 90 degrees as possible.					126
DSM 209.1	Where a storm drainage system terminates or starts short of a property line, adequate drainage easements shall be dedicated to allow for maintenance and future extension of the system through the property.					127
DSM 209.1	Drainage easements at the inlet and outlet of all culverts and storm drain inlets shall include areas inundated by the headwater during the 10-year storm.					128
DSM 209.1	Storm drainage easements shall extend a minimum of 10 feet from culvert inlets and outlets and storm drain inlets to allow for maintenance access.					129
DSM 209.1	Storm drain easements shall cross private driveways at perpendicular angles to the extent practicable.					130
DSM 209.3	All stormwater structures and BMPs shall be accessible. All access easements shall connect to a public road or right-of-way.					131
DSM 210.2	A legally binding maintenance agreement specifying the parties responsible for the proper maintenance of all stormwater management facilities shall be secured prior to the issuance of any permits for land disturbance activities.					132
DSM 210.2	The maintenance agreement shall include a project specific appendix that lists all stormwater management facilities present on the property; the minimum frequency of inspections and maintenance; and the routine maintenance that is to be performed for each stormwater management facility. The project specific appendix to the maintenance agreement is to be prepared by the applicant and submitted to the County with the Stormwater Management Plan for review.					133

Code Reference	Description	Sheet #	YES	NO	NA	#
DSM 210.2	When landscaping is a component of the stormwater management facility, a project specific maintenance schedule for the landscaping shall be provided that is reflective of the plant species specified.					134
Z.O. 2-401, Z.O. 2308	Density calculations, including deductions for steep slopes, floodplain, etc. using Pre. Soil Map as Base Info.					135
Z.O. 2-309, Z.O. 2406	Open space calculations					136
Subdivision Ordinance (S.O.) S.O. 10-6 (B)(12)	Offsite drainage map from USGS scale topographic maps (minimum scale 1 " = 1000') showing drainage areas, location of property and all drainage divides that parcel is a part of.					137
S.O. 10-6 (B)(7)	If an individual sewage disposal system is proposed, the Onsite Soil Evaluator (OSE)/Virginia Certified Professional Soil Scientist (VPSS) who prepared the plans and specifications for the individual sewage disposal system(s) shall seal, with both seals, and sign the certification block in accord with Section 17-6.3B of the Fauquier County Code, the construction plan sheet that shows the individual sewage disposal system(s), indicating that all information pertaining to the individual sewage disposal system(s) is correct, proposed grading does not impact the drainfields, and all information required by VDH and Fauquier County regulations is provided.					138
S.O. 9-	Show what type of approved drainfield system for primary and					139
13(A)(1)(b)	reserve on final soil map.					1.40
S.O. 9-13 (B)(1)	Show approved well site & what type of well on final soil map					140
EROSION & SED	IMENT CONTROL PLANS					
Chapter 6, VESCH	 Project description – Briefly describes the nature and purpose of the land-disturbing activity Total acreage of site Total disturbed acreage Include how many acres will be in permanent seed Include all utility work (storm sewer and waterline) Include work in live streams as defined by DEQ (may require additional permitting from the Virginia Department of Environmental Quality and/or the US Army Corp of Engineers). 					141
Chapter 6, VESCH	Existing site conditions – A description of the existing topography, vegetation and drainage Image: Wetland type vegetation Image: Shrubs/tree line Image: Include all drainage swales Identify any existing structures					142

Comments:		

Code Reference	Description	Sheet #	YES	NO	NA	#
Chapter 6, VESCH	Adjacent areas – A description of neighboring areas such as streams, lakes, residential areas, roads, etc., which might be affected by the land disturbance □ Include all adjacent sensitive areas such as wetlands or water bodies □ Address any possible traffic issues					143
	 Does it reflect actual conditions Staging areas 					
9VAC25-840-80, Chapter 8, VESCH	 Off-site-areas – Describe any off-site land-disturbing activities that will occur (including borrow sites, waste or surplus areas, etc.) Does the site balance in regards to amount of cut and fill? Will offsite areas be used as a borrow area or stockpile? Include a note that the borrow area & stockpile location has not been identified with this plan that a plan amendment will be required along with a bond estimate for the new disturbance if the borrow area & stockpile location is not permitted. Offsite Soil Tracking Form 					144
Chapter 6, VESCH	Soils – A brief description of the soils on the site giving such information as: Soil name Mapping unit Erodibility Permeability Depth Texture Soil structure Specify micaceous soils Reference soils information in narrative to plan sheet Specify high water table soils					145
Chapter 6, VESCH	Critical areas – A description of areas on the site which could potentially have a serious impact Drainfields Offsite SWM facility Micaceous soils – highly erodible soils Wetlands or water bodies Steep slopes Wet weather/underground springs Channels Traffic issues					146

Code Reference	Description	Sheet #	YES	NO	NA	#
MS-1 thru 19	Minimum Standards – All applicable Minimum Standards must be addressed.					147
Chapter 3, VESCH	 Erosion and sediment control measures – A description of the methods which will be used to control erosion and sedimentation on the site. (Controls should meet the specifications in Chapter 3, VESCH) Controls used should be specific to the project List E&S controls to be used – Reference to VESCH Provide detail for each control – Reference to VESCH Include the statement that "the E&S inspector has the authority to add or delete E&S control as necessary in the field as site conditions change. In addition, no sediment basin or trap ca be removed without written authorization. " Stream Crossing Installation (MS-12 thru 15, Std. 3.24) Type of diversion needs to be provided How will the work be done in the dry? What type of crossing will be used? 					148
Chapter 6, VESCH	Management Strategies Discuss E&S Phase 1 and 2 Perimeter sediment trapping measures to be installed as a first step. Include the phasing of removal for each sediment basin & sediment trap, until all upslope areas are stabilized. Take in consideration of utility installation, roadways, building locations, etc. Discuss conversion of sediment basins to its permanent storm water facility for both wet and dry ponds.					149
MS-3	 Procedure for Converting Dry Ponds: (MS-3) Consult with the erosion and sediment control inspector prior to beginning the conversion from sediment basin to dry pond to ensure that the timing is appropriate for the conversion to take place. Pump down basin – use approved dewatering measures. Effluent must be filtered. Remove accumulated sediment (as needed) to establish the final grade of the pond. Sediment must be disposed of in an approved area. Grade and roughen the bottom of the pond to prepare it for seeding. 					150

Comments:	

Code Reference	Description	Sheet #	YES	NO	NA	#
	 Install debris/trash rack device on the low-flow orifice to prevent clogging. Seed, mulch, and tack jute mesh or other suitable matting to the bottom of the pond. After the conversion is complete, prepare and submit as-built plans of the pond(s) to the Department of Community Development in conjunction with the bond reduction request. 					
MS-3	 Procedure for Converting Wet Ponds: (MS-3) Consult with the erosion and sediment control inspector prior to beginning the conversion from sediment basin to wet pond to ensure that the timing is appropriate for the conversion to take place. Pump down basin – use approved dewatering measures. Effluent must be filtered. Remove accumulated sediment (as needed) to establish the final grade of the pond. Sediment must be disposed of in an approved area. Grade and roughen the bank of the pond to prepare it for seeding. 					151
MS-1 thru 3 & 5 and Chapter 3, VESCH	Permanent stabilization – A brief description, including specifications, of how the site will be stabilized after construction is completed: □ Specify type of seeding, matting, sod or other types of stabilization that may be used □ Include table 3.31-B (temporary seeding guidelines) □ Include table 3.32-D (permanent seeding guidelines) □ Include table 3.35-A (mulching guidelines)					152
MS-19	Stormwater runoff considerations – Will the development site cause an increase in peak runoff rates? Will the increase in runoff cause flooding or channel degradation downstream? Describe the strategy to control stormwater runoff (MS-19). Image: Minimum Standard 19 has been included where applicable Image: List what type of permanent stormwater facility that will be installed on the project					153
9VAC25-840-40, MS-19, and Chapter 6, VESCH	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.					154
9VAC25-840-40	Maintenance – A schedule of regular inspections and repair of erosion and sediment control structures should be set forth. Please include maintenance information for each control proposed to be used.					155

Code	Description	Sheet	YES	NO	NA	#
Reference		#				
Std. & Spec 3.14,	□ The following information must be submitted when a					156
MS-6	Temporary Sediment Basin is proposed for a project:					
	 Temporary Sediment Basin Design Data Sheets 					
	— Time of Concentration flow path (broken up into sheet,					
	shallow concentrated and channel flow). When a Tc of 5					
	minutes is used, the flow path is not required.					
	 Stage/storage elevation information in graph format 					
	 When using TR-55, all worksheets must be included in submittal. 					
	— When using the Modified Rational method (for drainage					
	A schematic for each adjust have must be manided					
	- A schematic for each sediment basin must be provided showing dimensions and elevations.					
	— Show the length of the flow path from the inflow at the					
	wet pool to the outflow to ensure that the length to width					
	ratio is adequate.					
	— Emergency spillway dimensions and calculations					
	— Provide adequate channel calculations and cross sections					
	— Include this note that a stake or spray paint marker on riser					
	for cleanout elevation will need to be in place for sediment					
	basins & sediment traps					
Std. & Spec.	□ The following information must be submitted when a					157
3.13, MS-6	Temporary Sediment Trap is proposed for the project.					
	— Embankments height (H), Outlet Height (Ho), and					
	Minimum Top Width (W), Weir Length					
	 One detail for multiple traps is sufficient 					
	 Provide dimensions for wet & dry storage 					
	 Provide wet & dry storage elevations 					
	 Provide cleanout elevation 					
	— Include this note that a stake or spray paint marker on riser					
	for cleanout elevation will need to be in place for sediment					
	basins & sediment traps					
Std. & Spec. 3.18	Outlet protection calculations					158
and 3.19	— Provide tailwater depth					
	 Provide apron length 					
	— Provide apron width					
	 Provide bottom grade 					
	— Identify type and size of materials used to lined outfall					
	— Provide detail 3.18-1					
	Note: Permanent outlet protection must be designed using VDOT					
	standards and specifications.					

Comments:	

Code Reference	Description	Sheet #	YES	NO	NA	#
Std. & Spec. 3.24, MS-12 thru 15	 The following information must be submitted with a Temporary Stream Crossing If a crossing is to remain in place up to 14 days, it must carry a 2 year storm If a crossing is to remain in place for 14 days to 1 year, it must be sized to carry a 10 year storm. A profile of the crossing and all calculations used must be submitted Drainage area shown Does pipe diameter provided coincide with drainage area? Temporary culvert crossing should not exceed 40 ft 					159
MS-19	 Provide Minimum Standard 19 adequate channel calculations for the following as applicable: Diversions Channels Sediment basins outfalls 					160
	<u>Coordinate a Pre-Construction Meeting with the Fauquier</u> County E&S inspector after receiving the Land Disturbing Permit. A copy of the Stormwater Pollution Prevention Plan is required to be provided at pre-construction meeting for review.					161
	Variance request- if there are any E&S structural practices proposed that are not included in the VESCH. Submittal of a variance request requires a statement of justification and calculations if applicable for items not per VESCH. (9VAC25- 840-50, plan approval authority)					162
	Provide installation instructions for each Best Management Practice					163
Chapter 6, VESCH	Vicinity map – A small map locating the site in relation to the surrounding area. Include any landmarks which might assist in locating the site. □ Directions					164
Chapter 6, VESCH	Indicate north – The direction of north in relation to the site ☐ This is to be shown on each plan sheet, including vicinity map					165
Chapter 6, VESCH	The E&S plan should be at a scale of at least $1'' = 50'$					166
Chapter 6, VESCH	 Limits of clearing and grading – Areas which are to be cleared and graded. All areas involved in the construction of the project should be included. Construction entrances must be included at all access points. Include 'staging areas'. 					167

Code Reference	Description	Sheet #	YES	NO	NA	#
Reference	 Include stockpile / borrow areas Areas that may have safety fence but will not be disturbed Phase I E&S controls-give spot elevation to show drainage Offsite stockpile areas Trails Well installation Storm sewer installation Waterline installation Power line installation Stream crossings Drainfields Drip lines for trees to be retained Identify SWPPP items such as dumpsters, porta-johns, 	#				
Chapter 6, VESCH	fuel-containment areas, etc. Existing contours – The existing contours of the site. □ Does this reflect the actual current condition of the site? □ Show sufficient elevations					168
Chapter 6, VESCH	Final contours – Changes to the existing contours, including final drainage patterns.					169
Chapter 6, VESCH	Existing vegetation – The existing tree lines, grassed areas, or unique vegetation.					170
Chapter 6, VESCH	Soils – The boundaries of different soil types. □ Show on the E&S Phase 1.					171
Chapter 6, VESCH	Existing drainage patterns – The dividing lines and the direction of flow for the different drainage areas. Include the size (acreage) of each drainage area. □ Show drainage areas & acreage for pre-development on phase 1 □ Show drainage areas & acreage for post-development on phase 2 					172
Chapter 6, VESCH	Critical erosion areas – Areas with potentially serious erosion problems. (See Chapter 6 for criteria). □ Identify critical areas with * on the Phase 1 & 2 E&S plan.					173
9VAC25-840-40, Chapter 6, VESCH	Site Development – Show all improvements such as buildings, parking lots, access roads, utility construction, etc. □ Sediment basins & sediment traps need to stay in place until upslope areas are stabilized, take					174

Comments:	

I

Code Reference	Description	Sheet #	YES	NO	NA	#
	 in to consideration of utility installation, lots, and buildings Roads & lots need to be shown on phase 1 & 2 Actual lot numbers & road names need to be shown on phase 2 Target areas to be stabilized ASAP Consider phasing of a project All engineered plans require a phase 1 & 2 E&S plan Sanitary sewer, water line and storm sewer must be shown on the Phase 2 E&S plan. Structure numbers must also be shown. While these are not required to be shown on the Phase 1 E&S plan, the perimeter E&S controls for Phase 1 must take the construction of these utilities into account. Keep all of phase 1 E&S controls on phase 2 E&S plans Show stockpiles – with appropriate E&S controls Are stockpiles located above sensitive areas? Identify areas of permanent seeding with (PS) Identify areas of temporary seeding with (TS) 					
Chapter 3, VESCH	Location of practices – The location of erosion and sediment controls and stormwater management practices used on the site. Use the standard symbols and abbreviations in Chapter 3 of the Virginia Erosion and Sediment Control Handbook. Use standard symbols to identify controls Provide a legend When micaceous soils are found on a site, rock check dams and silt fence should be used in conjunction with sediment traps and sediment basins in those areas.					177
9VAC25-840-40, Chapter 8, VESCH	Off-site areas – Identify any off-site land-disturbing activities (e.g., borrow sites, waste areas, etc.) □ Does the site balance in regards to the amount of cut and fill required? □ Is it on the same property as the project? If so, it needs to be included in the LOC. Show access. □ Show offsite stockpile □ Show location of erosion controls. □ Offsite Soil Tracking Form 					178
Chapter 3, VESCH	Detail drawings – Any structural practices used that are referenced to the E&S handbook or local handbooks should be explained and illustrated with detail drawings. □ Include details of structural practices and reference them to the VESCH.					179

Code	Description	Sheet	YES	NO	NA	#
Reference		#				
	□ If any E&S structural practices are proposed that are not included in the VESCH, then a detail and a request for a variance must be submitted to the County (plan approval authority).					
	Provide Comment Response letter. Please provide a comment- response letter identifying how each comment is addressed with the current plan submission. This will greatly assist in the review of all future plan submissions.					180

Comments:		