



RESIDENTIAL AS-BUILT SUBMISSION CHECKLIST:

The submitted as-built plan shall include all approved coversheets (Including revisions) with the name, address, and phone number of the preparing firm, approved site grading sheets, and approved stormwater management (SWM) and drainage computations.

Note: Construction Inspection: Inspections are needed during construction to ensure that the facilities are built in accordance with the approved plans and design specifications. The developer/owner shall provide for periodic inspections of the facility during construction. Detailed inspection checklists shall be used that include sign-offs by a licensed land surveyor or professional engineer registered in Virginia at critical stages of construction, to ensure that the contractor's interpretation of the plan is consistent with the designer's intent. The actual inspections may be performed by an individual under the direct supervision of the licensed professional [(DCSM Section 721.02 (B) (11)].

Legend: **APM = Administrative Procedures Manual**
 DCSM = Design and Construction Standards Manual

<u>REF. Section</u>	<u>Regulations</u>	<u>Yes</u>	<u>No</u>	<u>N/A</u>
APM 4.12.2	Impervious Area Certification shall be submitted for commercial, industrial and multi-family properties.			
APM 4.12.1.A.2	Horizontal location of storm sewers with one (1) tie for all storm structures. All ties shall be affixed to permanent objects (i.e., building corners, fire hydrant).			
APM 4.12.1B	Invert elevations (in and out) for all storm sewers, and invert of structures.			
APM 4.12.1.C	Length, size, percent slope, and type of material used for all storm sewer and stormwater management (703.02.B.1)			
APM 4.12.1.D	Top of structure elevation on all storm sewer structures			
APM 4.12.1.E	As-Built topography for Stormwater Management/Best Management Practices, Low Impact Designs and verification of as-built storage volume with the approved design.			
APM 4.12.1.F	Detailed as-built information for special design drainage and stormwater management structures.			
APM 4.12.1.G	As-built elevations including centerline, cross sections and slopes of channels, swales, channel outfalls, and outfall protections and downstream of outfall pipes located within drainage easements. A typical as-built ditch section shall be shown on the plan.			
APM 4.12.A.1.H	All dedicated easements shall be shown. The cover sheet of the plan and plat shall show the deed book and page numbers in which the easements are recorded.			
APM 4.12.1.I	A graphic scale and north arrow shall be shown on each as-built plan sheet.			
APM 4.12.1.J	Any changes/revisions from the approved construction plan shall be indicated by circling the changes in red with written explanation for the changes by the engineer.			

REF. Section	Regulations	Yes	No	N/A
APM 4.12.1.K	Except for stormwater management, best management practices, and the low impact designs, the as-built certification of physical survey (statement is listed in APM) shall be dated within one year of submission (the physical survey itself shall be within one year of submission) to the County for review.			
DCSM 702.02 (A)	Provide as-built topographic survey of the overland relief for the one hundred (100) year storm event.			
DCSM 702.02 (D)	Hydraulic grade line computations for as-built conditions for drainage system not built according to the approved plan.			
DCSM 702.10 (B) and (C)	As-built certifications for storm sewer anchors/cut off walls added to the plan.			
DCSM 110.11	The as-built information (i.e., physical survey) pertaining to the stormwater management facilities, best management practices and low impact designs shall be current within 6 months of submission to the County for review.			
DCSM 770.50 (B)	As-built location and elevations of retaining walls by the professional engineer or land surveyor, and certification from the geotechnical engineer of record.			
DCSM 721.10 (A) and (B)	SWM access road width and grade, embankment width, gate and fencing (721.11(A) and (B) for details).			
DCSM 722.04 (B)	An electronic spreadsheet shall be submitted with the following information along with the as-built plan: 1. SWM/BMP Facility a. SWM/BMP Facility Type b. Location c. Subdivision/Site Name d. Hydrologic Unit Code (HUC) of the receiving stream *(in most cases, the HUC of the development) ("HUC" means a watershed unit established in the most recent version of Virginia's 6th Order National Watershed Boundary Datasheet) e. Total acres treated (BMP Acres) f. Year Built g. Land Use (commercial, single family, industrial, etc.) h. Latitude and longitude of the facility. i. Maintenance (County/Private) j. Copy of maintenance agreement (if applicable) 2. Each Outfall a. Size of outfall (diameter or equivalent) b. Subdivision/Site Name c. Hydrologic Unit Code of the Receiving Stream (development) d. Drainage Area to the outfall e. Year Built f. Land Use g. Latitude and Longitude			

Ref Section:	Regulations:	Yes	No	N/A
DCSM 722.01 (C)	A completed "construction inspection and as-built survey checklist", certified by a professional engineer or surveyor verifying the storm water management facilities and associated conveyance systems have been built in accordance with the approved plan and design specifications. The completed checklist shall be incorporated in the plan.			
DCSM 722.02 (J)	Copy of the recorded Stormwater Management Agreement/Best Management Practices Maintenance Agreement.			
DCSM 722.02 (K)	Approved and as-built Storm Water Management fact sheets. Rerouting of the pond is required if as-built conditions deviate significantly from the approved plan.			
DCSM 732.01 (A)	Letter of Map Amendment or Revision from Federal Emergency Management Agency.			
DCSM 770.50 (A) and (B)	The written certification shall include all geotechnical elements, but is not limited to, the type of material, compaction, depth and spacing of piles/piers, location, length, spacing, strength and type of geogrid, and ground cover to protect the slope as specified, and any other stabilization measures as recommended in the approved geotechnical report. The GER shall verify and certify that the final slope is in accordance with the slope approved in the geotechnical report at the time of as-built plan submission.			
DCSM 770.50 (C)	The Site Civil Engineer of Record (SER) or a Land Surveyor duly licensed in the Commonwealth of Virginia shall provide a written certification on the gradient of the constructed slope as directed by County staff.			
DCSM 721.08	Setback from the 100 year WSE to the structure and the property line.			
DCSM 721.02 (B) 12	As-Built Certification: After the facility has been constructed, the developer shall have an as-built certification conducted by a licensed land surveyor or professional engineer registered in Virginia and submitted to the County along with the as-built checklist and as-built plan. The as-built certification verifies that the facility was installed as designed and approved.			
Policy	Interior curb with spot elevations where inlets are provided			
Virginia Dam Safety Regulations 725.00 (D)	Submit two DCR approved copies of all the documentation (i.e. Operation and Maintenance Plan, Inundation Zone Maps, Emergency Action Plan, etc.) as well as one soft copy related to Virginia regulated impoundment structures to the County for its records as well as for facilitating emergency operations. Site finalization and final bond release is subject to meeting this requirement.			