

## SITE DEVELOPMENT CHECKLIST II

The following Checklist must be completed and included the Site Development Plan submission which provides a standard for County plan review. Items which are checked “No” should include a written response explaining the reason for the deviation from requirements. Items which are checked “Yes” should include a reference sheet or page number where the information may be found.

Submission Date:			
Project Name:			
Project Location:			
Consultant:		Phone #:	Email:
Owner/Developer:		Phone #:	Email:
(County use) Sediment and Stormwater Management (SSM) Plan #:			

Yes	No	N/A	Standardized review features	Sheet/Page Reference
			<b>Site Development Plan Submittal Requirements</b>	
			Cover letter with a point-by-point responses to the Concept Plan review comments.	
			This standardized Site Development Checklist II. (Completed and included with this submittal).	
			Digital submission of the Site Development Plans in a 24" x 36" sheet layout.	
			All information from the Concept Plan Submittal is contained within this Site Development Plan, as applicable.	
			Stormwater Management Report	
			Geotechnical Report	
			MDE Waterway Construction Permit Authorization/Coordination	
			NPDES Permit Authorization/Coordination	
			Maryland State Highway Administration Permit Release/Coordination	
			Subdivision Plat submittal requirement	
			•If yes, indicate the subdivision plat approved status (Plat No. _____)	
			Supporting Documentation (Any other relevant information).	
			<b>Site Development Plan Cover Sheet:</b>	
			All information from the Concept Plan Submittal has been retained, as applicable. (i.e. General Information and Certification Blocks)	
			Revision Block: Index of revisions have been updated per plan reviews	
			Vicinity Map with project area labeled	
			<b>Site Development Plan General Notes Sheet:</b>	
			All information from the Concept Plan Submittal has been retain and updated, as applicable.	
			Site Information has been updated per plan design	

			Plan Set Information:	
			<b><u>Existing Site Plan Sheet</u></b>	
			<ul style="list-style-type: none"> <li>All information from the Concept Plan Submittal has been retain and updated, as applicable.</li> </ul>	
			<b><u>Proposed Site Plan Sheet(s)</u></b>	
			<ul style="list-style-type: none"> <li><u>Proposed Road Criteria</u> (see §360 part I, subdivision ordinance) <ul style="list-style-type: none"> <li>Road or street classification</li> <li>Design vehicle</li> <li>Design speed</li> <li>Traffic Study: ADT, directional distribution, traffic composition, existing geometrics, projected traffic, capacity, LOS, intersection analysis, access control, traffic flow relationship, traffic devices inventory</li> <li>Pedestrian accessibility and use</li> <li>Bicycle accessibility and use</li> <li>Walkway capacities</li> <li>Handicapped pedestrian (walking, vision and mental impairment)</li> <li>Environmental assessment</li> <li>Design elements <ul style="list-style-type: none"> <li>Road section specifications</li> <li>Sight distance (horizontal and vertical alignment)</li> <li>Stopping sight distance (horizontal and vertical alignment)</li> <li>Passing sight distance (horizontal and vertical alignment)</li> <li>Effect of grades on horizontal and vertical alignment</li> <li>Max. allowed gradient 10% except 500-ft. segments w/ &lt;15° curve 12%</li> <li>Horizontal alignment, i.e. geometry</li> <li>Maximum and minimum superelevation</li> <li>Maximum degree of curve</li> <li>Minimum radius</li> <li>Curvature of intersections</li> <li>Curvature of road/street (must comply with AASHTO standards for local roads 30 mph design speed and 0.08 max. superelevation rate).</li> <li>Road/street width</li> <li>Shoulder width</li> <li>Vertical alignment, i.e. geometry, terrain, grade length, min. overhead clearance 18 ft.</li> <li>Drainage</li> <li>Culverts running parallel to roadways or located on private property minimum 12" diameter</li> <li>Culverts crossing under roadways minimum 15" diameter</li> <li>Erosion control and landscaping</li> <li>Safety features</li> <li>Lighting (Perimeter and property lighting should be shielded and have a downlighting effect to prevent nuisance light pollution to the neighboring properties and to prevent roadway distraction.)</li> <li>Utilities outside of pavement and within the 20' of Right-of-Way line.</li> <li>Traffic control devices, e.g., information, regulatory, warning signs, pavement markings, signals</li> </ul> </li> </ul> </li> <li><u>Road Profile(s)</u> <ul style="list-style-type: none"> <li>Overlay of Existing Grade vs. Proposed Grade</li> </ul> </li> </ul>	

			<ul style="list-style-type: none"> <li>Scale: Horizontal - 1" = 100' or larger; Vertical – 1" = 10' or larger</li> </ul>	
			<ul style="list-style-type: none"> <li>Label existing and proposed slopes</li> </ul>	
			<ul style="list-style-type: none"> <li>Label Vertical Curves</li> </ul>	
			<ul style="list-style-type: none"> <li>Label Horizontal Curves</li> </ul>	
			<ul style="list-style-type: none"> <li>o <u>Road Cross Sections</u> <ul style="list-style-type: none"> <li>Overlay of Existing Grade vs. Proposed Grade</li> <li>Scale: 1" = 5' or larger</li> <li>Label: <ul style="list-style-type: none"> <li>➤ Existing Grades vs. Proposed Grades</li> <li>➤ Lane width.</li> <li>➤ Shoulder width, cross slope.</li> <li>➤ Horizontal clearance, i.e. roadside fixed objects.</li> <li>➤ Closed road section, i.e. curbs, curb placement.</li> <li>➤ Walkway width, cross slope.</li> <li>➤ Drainage structures, e.g. inlets, junction boxes, endwalls, etc.</li> <li>➤ Drainage channels and side slopes.</li> <li>➤ Traffic barriers.</li> <li>➤ Roadside control, i.e. utility placement, driveways, mailboxes, nearby driveways/entrances</li> <li>➤ On-street parking.</li> <li>➤ Bicycle facilities (designated vs. shared lanes)</li> </ul> </li> </ul> </li> </ul>	
			<ul style="list-style-type: none"> <li>• Operation and maintenance considerations, i.e. drainage, snow/ice control, etc.</li> </ul>	
			<ul style="list-style-type: none"> <li>• Traffic control devices (including signs and line striping)</li> </ul>	
			<ul style="list-style-type: none"> <li>• Crossings and access</li> </ul>	
			<ul style="list-style-type: none"> <li>• Street or drainageway overcrossings (contact ACDPW)</li> </ul>	
			<ul style="list-style-type: none"> <li>• Curb cut crossings/wheelchair accessibility</li> </ul>	
			<ul style="list-style-type: none"> <li>• Driveways (90° angle; ≤ 5% for 30 ft. beyond shoulder; ≥200 ft. from arterials or major collectors)</li> </ul>	
			<ul style="list-style-type: none"> <li>• Intersections (contact – ACDPW)</li> </ul>	
			<ul style="list-style-type: none"> <li>• Cul-de-sacs and turning areas</li> </ul>	
			<ul style="list-style-type: none"> <li>• Railroad grade crossings (contact – ACDPW)</li> </ul>	
			<ul style="list-style-type: none"> <li>• <u>Parking Plan</u> <ul style="list-style-type: none"> <li>o Call out geometric configuration for stalls (45-, 60-, 75- or 90-degree parking angles).</li> <li>o Operation and maintenance considerations (cleaning and snow removal area).</li> <li>o Pedestrian walkways and safety</li> <li>o Pedestrian handicapped access onto sidewalks.</li> <li>o Layout and circulation</li> <li>o Ingress/egress locations with dimensions and associated ac-cel/de-cel lanes as applicable.</li> <li>o Landscaping and security</li> <li>o Lighting</li> <li>o Handicapped spaces</li> <li>o Pavement markings and traffic control devices</li> <li>o Drainage</li> <li>o Surface type</li> <li>o Cross sections</li> </ul> </li> </ul>	
			<ul style="list-style-type: none"> <li>• <u>Stormwater Management Plan</u> <ul style="list-style-type: none"> <li>o Existing and proposed 2ft contours</li> <li>o All proposed improvements: buildings or other structures, impervious</li> </ul> </li> </ul>	

			surfaces, storm drainage facilities, and all grading	
			o Location(s) of existing and proposed structures and utilities	
			o Any easements and/or right-of-ways	
			o Delineation of the 100-year floodplain, as applicable	
			o All necessary structural and construction details	
			o Profiles and cross sections for all components of the proposed drainage system(s) and stormwater management facilities	
			o All necessary construction specifications	
			o Table showing the ESD & unified sizing criteria volumes	
			o Table of materials to be used for stormwater management facility plantings	
			o An inspection and maintenance criteria and schedule for each type of stormwater management facility (Request inspection schedule information from Allegany County SWM Reviewer)	
			o An asbuilt certification signature block to be executed after project completion. (Request signature block from Allegany County SWM Reviewer)	
			• <u>Sediment and Erosion Control Plan</u>	
			o SEC sheets labeled, numbered and identified as sheet no. ____ of ____	
			o Sequence of Construction with Time Table	
			▪ Include “contact MDE Compliance Officer @ 301-689-1487 for a pre-construction meeting”).	
			▪ Include “contact Allegany County Dept. of Public Works @ 301-777-5933 for a swm pre-construction meeting”).	
			o Drainage area map for sediment trapping devices	
			o LOD – Limit of Disturbance boundary	
			o Stock pile and/or borrow area location (if n/a, note in site information)	
			o Locations and method of stabilization (riprap, seed, matting, pavement, etc.)	
			o Details, specifications and standard symbols for each SEC measure	
			o Details and sizes of existing and proposed drainage control structures (traps, ditches, culverts, etc.)	
			o Designs of structures and/or practices, provide calculations	
			o Location of sediment control measures	
			o Required standard erosion and sediment control notes	
			o Revegetation Specifications	
			▪ Seedbed preparations	
			▪ Permanent seeding (mix & rate) – include method of application	
			▪ Temporary seeding (mix & rate) – include method of application	
			▪ Mulching (include anchoring method)	
			▪ Matting (type & specifications)	
			▪ Fertilizer and lime (amount & type)	
			o Road Profiles	
			▪ Location and spacing of interceptor dikes and culverts	
			▪ Location of diversion dikes	
			▪ Inlets for dikes and culverts (type of structure and size)	
			▪ Outlets for dikes and culverts (type of structure and size)	
			▪ Stream crossings (type of structure and size)	
			▪ Typical cross section: toe of fill to top of cut including ditches	
			o Dikes (perimeter, diversion, interceptor)	
			▪ Practice meets purpose and design criteria	
			▪ Positive drainage is maintained	
			▪ Flow area of dikes over 5% properly stabilized	

			▪ Outlet to sediment trapping device or onto stable outlet	
			▪ Points of vehicular crossing shown and stabilized	
			○ Sediment Traps (pipe, grass, storm inlet, swale, stone and riprap)	
			▪ Plan view of trap and storage area (top and bottom area drawn to scale)	
			▪ Bottom dimensions and control elevations (bottom clean-out and discharge)	
			▪ Contributing drainage area and volume computations	
			▪ Type and size of outlet structure	
			▪ Stabilized inlet and outlet	
			▪ Practice meets purpose and design criteria	
			○ Temporary Swales (interceptor, perimeter)	
			▪ Contributing drainage area shown	
			▪ Required cross section can be installed	
			▪ Provisions for traffic crossing shown on plan	
			▪ Channel grade over 5% property stabilized	
			▪ Adequate outlet or discharge condition	
			▪ Practice meets purpose and design criteria	
			○ Silt Fence	
			▪ Drainage area doesn't exceed ½ acre per 100 ft. of fence	
			▪ Placed on contours	
			▪ Meets maximum allowable slope length	
			▪ Used for sheet erosion	
			○ Sediment Basins	
			▪ Plan view of dam and storage area	
			▪ Profile along center line of dam	
			▪ Profile of emergency spillway	
			▪ Cross section through dam or impoundment at principal spillway	
			▪ Detail of riser base, anti-vortex device, anti-seep collars and trash rack	
			▪ Design data sheet properly completed	
			▪ Outlet protection detail and downstream outfall conditions	
			▪ Volume and emergency spillway design computations	
			▪ Provisions for stabilization	
<b>Site Development Plan Narrative/Report</b>				
			All information from the Concept Plan Submittal has been retain and updated, as applicable.	
			References for design criteria and/or design standards	
			Address feasibility criteria/conditions/limitations of all proposed ESD practices	
			Geotechnical Report	
			• Soils Map	
			• Borings	
			• Site specific geotechnical constraints/issues identified	
			• Site Specific Recommendations	
			• Infiltration Rates for SWM locations	
			• Seasonal high groundwater table	
			Drainage Area Maps showing the following items for pre- and post-development	
			• Pre- and post-development drainage boundaries	
			• On-site and off-site drainage area boundaries	
			• Flow paths for time of concentration calculations	
			• Land use with corresponding acreage	

			<ul style="list-style-type: none"> <li>• HSG boundaries</li> </ul>	
			Includes calculations to support the design and demonstrate ESD to the MEP	
			<ul style="list-style-type: none"> <li>• Hydrology analysis for runoff rates, storage volumes and discharge velocities</li> </ul>	
			<ul style="list-style-type: none"> <li>• Hydraulic analysis and structural computations for ESD practices</li> </ul>	
			<ul style="list-style-type: none"> <li>• Runoff curve numbers (RCN) for pre- and post-development</li> </ul>	
			<ul style="list-style-type: none"> <li>• Time of concentration for pre- and post-development</li> </ul>	
			<ul style="list-style-type: none"> <li>• Runoff and peak discharge for pre- and post-development</li> </ul>	
			<ul style="list-style-type: none"> <li>• ESD Target Calculations</li> </ul>	
			<ul style="list-style-type: none"> <li>• Determination of Target Rainfall (<math>P_E</math>)</li> </ul>	
			<ul style="list-style-type: none"> <li>• Calculate Runoff Depth (<math>Q_E</math>)</li> </ul>	
			<ul style="list-style-type: none"> <li>• Calculation ESD Volume (<math>ESD_V</math>)</li> </ul>	
			<ul style="list-style-type: none"> <li>• Sizing calculations for all proposed ESD practices</li> </ul>	
			<ul style="list-style-type: none"> <li>• If underdrain proposed, compute Recharge Volume (Rev) and set underdrain above Rev</li> </ul>	
			<ul style="list-style-type: none"> <li>• Discharge calculations demonstrating stable conveyance of runoff off site</li> </ul>	
			<u>If Target Rainfall (<math>P_E</math>) cannot be met:</u>	
			<ul style="list-style-type: none"> <li>• Address feasibility of all options in Ch. 5 of Manual cannot be met</li> </ul>	
			<ul style="list-style-type: none"> <li>• Determine Reduced Runoff Curve Number (*RCN)</li> </ul>	
			<ul style="list-style-type: none"> <li>• Compute Extreme Flood Volume (<math>Q_E</math>) for 100-year storm (if applicable)</li> </ul>	
			<ul style="list-style-type: none"> <li>• Include calculations of meeting <math>CP_v</math>, <math>Q_P</math> and <math>Q_F</math> requirements using Chapter 3 BMP's</li> </ul>	
			<ul style="list-style-type: none"> <li>• Discharge calculations demonstrating stable conveyance of runoff off site</li> </ul>	
			If stormwater management plan involves direction of some or all runoff to an off-site facility, it is the responsibility of the developer to obtain from the adjacent property owner(s) any necessary easements or other necessary property interests concerning flowage of water. Approval of a stormwater management plan does not create or affect any right to direct runoff onto adjacent property without that property owner's permission. A signature block for each necessary easement shall be shown on the construction drawings. Show this signature block on the cover page as applicable.	
			<ul style="list-style-type: none"> <li>• Does this plan require adjacent property easement documentation?</li> </ul>	
			<b>Final Documents Initiation (Drafts)</b>	
			Performance Bond Draft Document	
			<ul style="list-style-type: none"> <li>• Provide Developer/Owner Contact Information <ul style="list-style-type: none"> <li>○ Name, Title, Address, Phone Number, Email</li> </ul> </li> </ul>	
			Operation & Maintenance Agreement Draft Document	
			<ul style="list-style-type: none"> <li>• Provide Developer/Owner Contact Information <ul style="list-style-type: none"> <li>○ Name, Title, Address, Phone Number, Email</li> </ul> </li> </ul>	