

### Subdivision / Site Plan Construction Drawings Application and Checklist

#### **Plan Submittal Requirements:**

The following process shall be the template for approval of a subdivision, site plan, or waiver through this department. The owner/developer/engineer (applicant) is encouraged to meet with the Department of Planning and Zoning to further discuss projects as they review a different part of the Wicomico County Code.

- Concept
- 2. Preliminary Site Development
- 3. Final Site Development

- 1. Sketch Plat
- 2. Preliminary Subdivision Plat

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3. Final Subdivision Plat

#### **Concept Plan:**

The applicant shall submit a concept plan checklist, concept plan, and review fee to the department of public works for review and comment. Once received the department of public works will schedule a meeting within two weeks to meet with applicant to discuss the project. After the meeting, the applicant shall submit a memo of the meeting as to the details discussed, and what changes (if any) were made to the concept. Should a memo not be submitted, applicant shall repeat the concept plan stage. The Wicomico County Department of Public Works reserves the right to request an applicant repeat the concept plan stage if project is not consistent with the checklist.

#### **Preliminary Site Development:**

Once the Concept Plan has been submitted and comments have been addressed; the applicant may submit a detailed set of preliminary construction plans and preliminary subdivision/ site plan review fee.

The following items must be submitted to commence the review of a subdivision, site plan, or waiver.

- 1. Completed application signed by the developer, engineer, and surveyor.
- 2. Two (2) sets of site development plans (one set for waiver)
- 3. Three (3) sets of the Traffic Control Plan (TCP)
- 4. Five (5) sets of the preliminary subdivision plat
- 5. One set of Stormwater Management Calculations
- 6. Data information on compact disc (cd) consisting of the following:
  - SWM computations (Hydrocad, Pond Pack, Etc.)
  - > Area computations for each drainage area (AutoCAD release 2006)
  - Storm drain computations (Storm Sewers, Stormcad, Etc.)
- 7. Completed preliminary site development checklist of applicable sections
- 8. Preliminary Site Development review fee

9. Should the project be located with a municipalities corporate limits; a letter must be submitted from said municipality acknowledging preliminary approval of project.

Should any of the above mentioned items have not been submitted or an incomplete stormwater management plan has been submitted the Department of Public Works reserves the right to return the plan without initiating the review process.

Construction plans shall adhere to the latest Wicomico County Construction Standards and 2000 Maryland Stormwater Management Design Manual, and all subsequent revisions. Other applicable standards / guidelines include (but not limited to) the State Highway Access Manual, Highway Drainage Manual, State Highway Administration Standard Specifications for Construction and Materials, Maryland Standards and Specifications for Soil Erosion and Sediment Control, Manual on Uniform Traffic Control Devices for Streets and Highways, AASHTO, and ASTM.

Constructions plans submitted to this office should be in accordance with the "<u>Guidelines for Preparation of Improvements Construction Plans</u>" as prepared by the Wicomico County Department of Public Works.

#### **Final Site Development:**

Once the Preliminary Site Development Plans have been approved; all related documents shall be submitted for signature and recordation as determined by the Department of Public Works (See section 4.0 Supplemental Information of the "Guidelines for Preparation of Improvements Construction Plans". Should any of these documents not be submitted, final signature will be with held from the construction plans.

- 1. Two sets of final construction plans with owner/ developer signature, engineer signature and seal, and other applicable signature (wetlands delineator, town engineer, and etc.).
- 2. Final review fee

#### **Wicomico County Department of Public Works Standard Construction Notes:**

The following notes must be provided on the cover sheet of the plan in sequence as shown and without modifications to the language.

- 1. Wicomico County Department of Public Works must be notified in writing five (5) business days prior to commencing with construction to schedule a pre-construction meeting. Failure to do so constitutes a violation of the approved plans.
- 2. Wicomico County Department of Public Works reserves the right to alter these plans, during the construction phase, as field conditions may warrant.
- 3. No Occupancy Permit shall be issued until all improvements (roads, drainage, stormwater management, etc.) have been completed and the as-built plans have been accepted by Wicomico County Department of Public Works.
- 4. Approval of these plans by Wicomico County Department of Public Works is not a representation, guarantee or warranty of any kind and shall create no liability upon the County, its Officials or Employees.
- 5. An entrance permit shall be obtained from the Wicomico County Roads Division prior to construction of an entrance onto a County maintained road.
- 6. All underground utilities shall be installed prior to stabilization of the roadway.
- 7. Storm drain pipes shall have water tight connections and a rubber gasket shall be provided on the pipe or inlet at pipe to inlet connections. A camera test after installation shall be provided to verify correct installation.

- 8. Should pre-cast structures be used, then shop drawings shall be approved by the Wicomico County Department of Public Works prior to their installation. Failure to do so constitutes a violation of the approved plans.
- 9. Approved plans remain valid for 3 years from the date of approval.
- 10. An "As-built/record" plan shall be provided to the Wicomico County Department of Public Works within thirty (30) days after completion of construction.
- 11. Wicomico County SWM#\_\_\_\_\_.

#### Wicomico County Department of Public Works Guidelines for Traffic Control Plan Preparation:

These guidelines are for preparing Traffic Control Plans (TCP's) in Wicomico County. Closely following these guidelines will result in a more expeditious approval of a TCP. Our experience indicates that these guidelines help develop an acceptable TCP that minimizes inconvenience to the public while assuring safe conditions for workers and all road users including pedestrians and bicyclists.

The involvement of the County's Roads Division in the development of a TCP is limited to *review and approval*. The *preparation* of a TCP is the full responsibility of the preparer. A TCP will be returned unapproved with only general comments if the TCP cannot be implemented and is not professionally prepared.

- 1. The preparation and concepts of the TCP shall follow those stipulated in the most recent edition of the Manual of Uniform Traffic Control Devices (MUTCD) as well as Maryland's Standards and Specifications for Construction and Materials.
- 2. Field checks of the construction site are mandatory prior and during the preparation of a TCP. It is our experience that inadequate TCP's are prepared in the office without a field investigation by the TCP preparer. In addition, it must be recognized that many of the necessary traffic control devices are located outside the construction limits of the project.
- 3. Specific drawing scales are helpful to adequately show the locations of intersections within the work zone and advance construction signs, the dimensions for the placement of channelizing devices and pavement markings, or other phases of construction as required.
- 4. Work to be performed within the roadway, as well as in and along the shoulder must also be shown on the plan so that the reviewer may have a full understanding of the work and its impact to traffic. The duration of work should also be included. In certain instances the County may require or suggest that work be scheduled during off-peak hours to minimize disruption, especially in high traffic areas.
- 5. Any considerations for the closure of a road must be carefully reviewed and justified with respect to both the necessity as well as the impact of the closure to the public. Justification for closure, including a detailed analysis of alternatives considered, must be submitted in writing to the Roads Division for review. If acceptable, the recommendation will be forwarded to the Director of Public Works as well as the County Executive, for approval. The County Executive must concur with the proposed road closure prior to the approval of a TCP that contains the details of how such a closure would be implemented.
- 6. References to typical drawings taper tables and illustrations in the MUTCD or SHA typical applications are usually insufficient for use on a specific project. Specific sign messages, sign sizes, taper lengths, barricade or traffic drum spacing, types of barricades, typicals for barrier connections, etc., must be site specific and shown on the TCP drawings. Special coding of signs (other than MUTCD numbers, R1-1, etc.) will not be accepted. Typical urban situations are difficult to find in the "real world." Closely spaced intersections, short road lengths, short block lengths, traffic signals, the presence of commercial driveways, and variable road widths are never illustrated on typical drawings. All sign spacing, taper lengths, and device spacing should follow those found in Maryland Standards for Construction and Materials typical applications.
- 7. All special traffic signs (non-standard MUTCD signs) must be designed. Design details required are typical of those shown in the MUTCD supplement Standard Highway Signs and Maryland Sign Standard Book. If you are not strongly familiar with these books, it is assumed that you will obtain services of those who are qualified to do this type of work.
- 8. It is the responsibility of the contractor to replace any pavement markings damaged during construction. Any work that is expected from Wicomico County crews must be requested and approved in writing in advance of being shown on the TCP. With the exception of long lines, all other pavement markings

- shall be preformed thermoplastic. Any pavement marking changes or additions must be specific with respect to line widths, placement of arrows and stop bars, and any other dimensions necessary to assure the proper installation of the pavement markings.
- 9. It is expected that the required engineering will be completed for a successful TCP prior to the submittal for review by Wicomico County. In order for a TCP to be reviewed, Wicomico County must receive two copies of the TCP. They must include all special provisions and appropriate TCP drawings with the stamp and signature of a Professional Engineer or land surveyor registered in the State of Maryland.
  - "I hereby certify that this plan has been prepared under my supervision and in accordance with the Manual on Uniform Traffic Control Devices for Streets and Highways for Maryland requirements, latest edition. I further certify that to the best of my ability the plan features the minimum amount of traffic disruption necessary to complete the work in and along the public roadway".
- 10. Wicomico County reserves the right to modify or add to these guidelines at any time, and as situations arise in the field, may require a modification to the TCP.

#### **Traffic Control General Notes:**

Should the construction plans include a traffic control plan the Traffic Control General Notes must be added without modifications to the language.

- 1. All traffic control devices shall conform to the latest edition of the MUTCD and Maryland's supplements.
- 2. All traffic control devices will be removed from view when not in use.
- 3. Trenches will be back filled or plated during non-working hours.
- 4. When applicable, pedestrian controls should be addressed.
- 5. Access to driveways will be maintained at all times unless other arrangements are made.
- 6. The contractor will replace all striping removed or damaged.
- 7. All flaggers must be ATSSA certified and adhere to all of Maryland's standards for flagging.
- 8. The contractor will maintain all traffic control devices 24 hours per day and 7 days per week. Prior to start of construction, the contractor shall designate and submit to Lee Outen, with Wicomico County Roads Division (410-548-4875 x30), the name of the person designated as the traffic manager.
- 9. A minimum of 11-foot travel lanes will be maintained.

The following are evaluated on a case-by-case basis dependent upon factors including traffic impact, residential impact, commercial impact etc. that the county may require.

- Notice in local newspaper. Description of ad, as well as duration, location and verbiage will be provided.
- > Handbills delivered to residents and or businesses affected by roadwork.
- PVMS (portable variable message board) Location, number required, and message will be provided.

Notice to School Board, Central Alarm, and TRAFFAX.



### Subdivision/Site Plan Development Application

Project Name:	_ Date:
Project Location:	
Project Type: Residential ☐ Commercial ☐ Indu	strial □ Other □
Property's current zoning: Property's propose Tax Map, Parcel(s):	sed zoning:
Development Company:  Developer Contact/Name:  Address:  Developers email:	_ Fax:
•	
Land Owner:	
Address: Land Owners email:	_ Fax: _
Engineering Company:	
Engineer Contact/Name: Address:	
Engineers email:	_
Surveyors Company:	Phone:
Surveyor Contact/Name: Address:	_ Fax:
Surveyors email:	
As representative for the above project I do agree to the following requi	rement(s).
All information set forth in this plan (and future submittals) shall accumeets the current Stormwater Management ordinance to the be Management, calculations, design, construction, and exemption/waiver Maryland Stormwater Design Manual volumes I & II and all amendment entitled Stormwater Management, and the Wicomico County Conmeasures approved on this plan will be implemented within the final site.	st of my knowledge. All Stormwater request will adhere to the current 2000 ts, Wicomico County Code Chapter 196 struction standards latest edition. All
Developers Signature:	Date:
Engineers Signature:	Date:

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Surveyors Signature: \_\_\_\_\_ Date: \_\_\_\_\_

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### Concept Development Plan Checklist

Proje	ct Name: Date:
	red By:
	$\underline{\hspace{0.1cm}\sqrt{\hspace{0.1cm}}}$ if included or $\underline{\hspace{0.1cm}N/A}$ if not applicable
A.	Information Required:
1.	Plans prepared on 24' x 36' or 18' x 24" sheets – two (2) sets
2.	Name of the subdivision or site plan
3.	Name, address, phone, fax, email of the land owner
4.	Name, address, phone, fax, email of the developer
5.	Name, address, phone, fax, email of the consultant (engineer/surveyor)
6.	Outline of the entire lot or parcel to be subdivided/ built upon
7.	Outline of adjacent property owners and approximate lot line locations
8.	Vicinity map, North arrow, Scale, and Date
9.	Streets and roads adjacent to the lot or parcel
10.	Significant topographical, environmental features
11.	Proposed general Street or road layout
12.	Proposed general layout of lots or buildings (impervious areas)
13.	Location of existing and proposed utilities
14.	Site and resource mapping (See 2000 Maryland SWM Design Manual, Table 5.1 on page 5.7)
15.	Preliminary estimates of stormwater management requirements
16.	Preliminary location of environmental site design (ESD) practices/targets
17.	Stable conveyance of stormwater at potential outfall and down stream locations
18.	Determination of a project to be reviewed as new development or redevelopment
19.	A brief stormwater management narrative to include the following:
	Natural resource protection and enhancement
	Maintenance of natural flow patterns
	Reduction of impervious areas through better site design, alternate surfaces, and
	non structural practices
	Integration of erosion and sediment controls into the stormwater strategy
	Implementation of ESD planning techniques and practices to the maximum
	extent practicable (MEP)
20.	Concept review fee
21.	After the meeting, the applicant or engineer will prepare a memo summary of the meeting and

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submit it to the Dept. of Public Works within 1 week.



### Preliminary Site Development Plan Checklist

Proje	ct Name: Date:
Prepa	ared By:
	$\sqrt{}$ if included or $\sqrt{}$ if not applicable
В.	<b>General Information and Title Sheet Information:</b>
1.	Plans prepared on 24' x 36' or 18' x 24" sheets – two (2) sets, one (1) if waiver
2.	Index sheet showing entire site and sheets numbered, if more than one sheet used
3.	Title which is descriptive
4.	Tax map, parcel and grid
5.	North arrow on each sheet
6.	Plan view scale, min. 1" = 100'
7.	Deed and plat references
8.	Plan preparation and revision dates
9.	Engineering company, contact name, address, telephone, fax, and email
10.	Surveying company, contact name, address, telephone, fax, and email
11.	Land owner's name, address, telephone and fax
12.	Developers company, contact name, address, telephone, fax, and email
13.	Vicinity map, min. scale 1" = 2000'
14.	Site area and disturbed area
15.	On-site benchmark, NAD83 minimum two (2) benchmarks (datum)
16.	Soil types and classification
17.	Legend for all symbols, both existing and proposed
18.	Cemetery Inventory
19.	Existing and proposed zoning
20.	Proposed parking stalls (minimum required by zoning code and proposed)
21.	SWM number (as assigned by Wicomico County)
22.	Forest Conservation number
23.	Standard Wicomico County construction notes
24.	Construction Specifications
25.	Summary memo from concept meeting
26.	Wetland Delineation certification and signature box
27.	Owner's certification and signature box
28.	State of Maryland's certification for professional engineer's
29.	Wicomico County Department of Public Works approval signature box

30.	Identify the ACD MAP Coordinates for the project			
31.	Identify Type, Drainage Area, Curve Number, and Latitude/ Longitude of each Stormwater			
	Management Facility. Provide breakdown via alternate surface, non-structural, micro-scale and			
	structural for each Environmental Site Design.			
32.	Water and Sewerage Plan Service Area per the Wicomico County Water and Sewer Plan			
33.	Preliminary Site Development review fee			
<b>C</b> .	Predevelopment/ Existing Conditions			
34	Entire site plan shown			
35	Ex. Building(s) with name			
36	Ex. Road(s) with name, number, centerline, travel lane width, pavement width, and right of way			
37.	Ex. Pave			
38.	Ex. Drainage Swales			
39.	Ex. Concrete (sidewalk/ curb/ slab)			
40.	Ex. Woods, tree's, or shrubs			
41.	Ex. Fence			
42.	Ex. Signs			
43.	Ex. Soil(s) type and location			
44.	Ex. Public Drainage Ditch (PDA)			
45.	Ex. Adjacent Property Owners Name and Parcel			
46.	Ex. Contours at one (1) foot intervals			
47.	Ex. Spot Shot Elevations			
48.	Ex. Benchmarks (minimum two (2)) NAD83			
49.	Ex. Property marker locations and descriptions			
50.	Ex. Property line(s) with Bearing and Distance			
	Line Table			
	Curve Table			
	Easement Table			
51.	Ex. Utilities (Sanitary, Storm Drain, Water, Gas, Electric, and etc.)			
	Sanitary			
	Manhole location			
	Rim elevation			
	Inverts with direction of flow			
	Pipe size, Material if known			
	Forcemain location, Size, and Inverts			
	Approximate location of septic area			
	Storm Drain			
	Manhole locations			
	Inlet locations			
	Rim and Grate elevation			
	Inverts with direction of flow			
	Pipe size, Material if known			
	Culvert(s) (Pipe size, material, and length)			
	Trench Drain(s) (Pipe size, material, and length)			

	water
	Pipe size, Material if known
	Valve location
	Well location
	Water meter location
	fire/yard hydrant location
	Gas
	Line location
	Pipe size, Material if known
	Electric
	Line location
	Utility pole location
	Transformer location
	Generator location
52.	Ex. Corporate Limits
53.	Ex. bodies of water (name, location, tidal and non-tidal)
54.	Critical areas limits, designation and buffers
55.	Wetlands limits and buffers, tidal and non-tidal
56.	Ex. Flood Plain limits, zone and elevation
57.	Airport surface zone
58.	Historic District Limits
59.	Public Drainage Association Limits
	Allen Laws
	Aydelotte Mill Branch
	Beaverdam Nanticoke
	Deer Harbor Nebo Road
	Givans Passerdyke
	Green Branch Pine Branch
	Horsebridge
60.	Agriculture Preservation District Limits
61.	Paleo Channel Overlay District Limits
D.	Roadway and Parking Design:
62.	Road plan view showing stationing, bearings, distances and horizontal curve data
63.	Proposed elevations along roadway (centerline of road, edge of pave, flow line, and top of curb)
	grade shots will be provided at every 50' stationing either on plan view or table
64.	Stations and elevations of all PC, PT, PRC, PVC, PVT and PVI points
65.	Identify type of roadway used and provide standard cross section detail
66.	Identify type of curbing used and provide standard detail
67.	Identify type of cul-de-sac being used and provide elevations and cross slope
68.	Identify type of cul-de-sac being used and provide elevations and cross slope Details related to road design tailored to each site
	Details related to road design failured to each site Identify proposed road name, centerline, travel lane width, pavement width, and right of way
69. 70	
70.	Curb return radii – Minimum twenty (20') feet (measured from flow line)

71.	Handicap access ramp, detectable warning surface, and sidewalk locations
72.	Parking stalls, driveway aisle's, and driveways sized per zoning code
73.	Open section roadway – culvert pipe location, size (minimum 15"), length, material, and inverts
74.	Open section roadway minimum pave radii twenty-five (25') feet
75.	Acceleration and Deceleration lanes per Wicomico County std WI-103.00
76.	Road widening dedication by deed and plat
77.	Sight Triangle
78.	Minimum cross slope in parking lots 1.0%, recommended 1.5%.
79.	Proposed contours
80.	Road profile showing existing and proposed roadway. Profile must depict one of the following – centerline of roadway, flow line of curb, or top of curb. Identify proposed line and its relation to the plan view
81.	Provide elevations of profile at every 50' stationing. Existing and proposed
82.	Identify vertical curve data
83.	Identify inlet location and invert
84.	Provide utility crossings with inverts for each pipe and identify minimum cover and vertical spacing between utilities
<ul><li>85.</li><li>86.</li></ul>	<ul> <li>Road construction specifications with CBR values. Soil sampling frequency and CBR tests for new subdivision streets shall be 1 every 500' of roadway as measured by the centerline.</li> <li>Samples should be within 100' of entrance road and cul-de-sac. Locations must have Wicomico County approval – see guidelines for preparation of improvements construction plans.</li> <li>Traffic Control Plan and notes.</li> </ul>
<b>.</b> 87.	Storm Drainage Design:  Drainage area map for drainage system showing similar information as stormwater
	management
88.	
89.	Hydraulic calculations using rational method provided in tabular form, min. 10yr. storm
	Structure and pipe schedule or information shown on the plan view beside structure (name of structure, stationing, rim, grate, invert in (identify size of pipe), invert in drop (identify size of pipe), drop depth, and invert out (identify size of pipe)
	Structure and pipe schedule or information shown on the plan view beside structure (name of structure, stationing, rim, grate, invert in (identify size of pipe), invert in drop (identify size of pipe), drop depth, and invert out (identify size of pipe)  Flared end sections
91.	<ul> <li>Structure and pipe schedule or information shown on the plan view beside structure (name of structure, stationing, rim, grate, invert in (identify size of pipe), invert in drop (identify size of pipe), drop depth, and invert out (identify size of pipe)</li> <li>Flared end sections</li> <li>Minimum pipe cover as recommended by manufacturer</li> </ul>
91. 92.	Structure and pipe schedule or information shown on the plan view beside structure (name of structure, stationing, rim, grate, invert in (identify size of pipe), invert in drop (identify size of pipe), drop depth, and invert out (identify size of pipe)  Flared end sections  Minimum pipe cover as recommended by manufacturer  Standard details
91. 92. 93.	Structure and pipe schedule or information shown on the plan view beside structure (name of structure, stationing, rim, grate, invert in (identify size of pipe), invert in drop (identify size of pipe), drop depth, and invert out (identify size of pipe)  Flared end sections  Minimum pipe cover as recommended by manufacturer  Standard details  Rip-rap sizing calculations and details (identify size of stone and type of filter cloth)
91. 92. 93. 94.	Structure and pipe schedule or information shown on the plan view beside structure (name of structure, stationing, rim, grate, invert in (identify size of pipe), invert in drop (identify size of pipe), drop depth, and invert out (identify size of pipe)  Flared end sections  Minimum pipe cover as recommended by manufacturer  Standard details  Rip-rap sizing calculations and details (identify size of stone and type of filter cloth)  Plan and profile of pipes and ditches. Provide utility crossings with inverts for each pipe and identify minimum cover and vertical spacing between utilities
91. 92. 93. 94.	Structure and pipe schedule or information shown on the plan view beside structure (name of structure, stationing, rim, grate, invert in (identify size of pipe), invert in drop (identify size of pipe), drop depth, and invert out (identify size of pipe)  Flared end sections  Minimum pipe cover as recommended by manufacturer  Standard details  Rip-rap sizing calculations and details (identify size of stone and type of filter cloth)  Plan and profile of pipes and ditches. Provide utility crossings with inverts for each pipe and identify minimum cover and vertical spacing between utilities  Provide hydraulic gradient from the 25 year peak storm event in the pond
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91. 92. 93. 94. 95. 96.	Structure and pipe schedule or information shown on the plan view beside structure (name of structure, stationing, rim, grate, invert in (identify size of pipe), invert in drop (identify size of pipe), drop depth, and invert out (identify size of pipe)  Flared end sections  Minimum pipe cover as recommended by manufacturer  Standard details  Rip-rap sizing calculations and details (identify size of stone and type of filter cloth)  Plan and profile of pipes and ditches. Provide utility crossings with inverts for each pipe and identify minimum cover and vertical spacing between utilities  Provide hydraulic gradient from the 25 year peak storm event in the pond  Provide gutter spread calculations for the 2 year storm event  Structural design of non-standard structures by Registered Professional Engineer  Swale capacity for 10 year storm with 6" of freeboard
91. 92. 93. 94. 95. 96. 97.	Structure and pipe schedule or information shown on the plan view beside structure (name of structure, stationing, rim, grate, invert in (identify size of pipe), invert in drop (identify size of pipe), drop depth, and invert out (identify size of pipe)  Flared end sections  Minimum pipe cover as recommended by manufacturer  Standard details  Rip-rap sizing calculations and details (identify size of stone and type of filter cloth)  Plan and profile of pipes and ditches. Provide utility crossings with inverts for each pipe and identify minimum cover and vertical spacing between utilities  Provide hydraulic gradient from the 25 year peak storm event in the pond  Provide gutter spread calculations for the 2 year storm event  Structural design of non-standard structures by Registered Professional Engineer
90. 91. 92. 93. 94. 95. 96. 97. 98. 99.	Structure and pipe schedule or information shown on the plan view beside structure (name of structure, stationing, rim, grate, invert in (identify size of pipe), invert in drop (identify size of pipe), drop depth, and invert out (identify size of pipe)  Flared end sections  Minimum pipe cover as recommended by manufacturer  Standard details  Rip-rap sizing calculations and details (identify size of stone and type of filter cloth)  Plan and profile of pipes and ditches. Provide utility crossings with inverts for each pipe and identify minimum cover and vertical spacing between utilities  Provide hydraulic gradient from the 25 year peak storm event in the pond  Provide gutter spread calculations for the 2 year storm event  Structural design of non-standard structures by Registered Professional Engineer  Swale capacity for 10 year storm with 6" of freeboard
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	site development design and demonstrate that ESD is achieved to the MEP – clearly identify in
	the narrative each structural, non-structural, alternative surface, and micro scale practice used.
102.	Tabular summary of pre- and post- development areas, curve numbers, times of concentration
	and flow rates
103.	Drainage area map, min. scale 1" = 200', showing:
	a Sufficient topographic information to delineate watershed sub-
	areas, off-site if necessary (color is encouraged to help delineate between
	drainage areas)
	b Hydrologic soil groups
	<ul> <li>c Property boundaries</li> <li>d. Time of concentration flow paths shown and labeled accordingly</li> </ul>
	<ul> <li>d Time of concentration flow paths shown and labeled accordingly (type, length, and % slope) Must be most hydraulically distant point</li> </ul>
	e. Legend on drainage area map
	f North arrow and barscale
	g land uses
	<ul> <li>▶ h identify each ESD(s) per each drainage area</li> </ul>
104.	Hydrologic calculations using SCS methodologies based on the area being developed including
	any offsite runoff coming onto the site (TR55, TR20, HydroCAD, and PondPack)
105.	Peak runoff calculations identified within a table in SWM report for pre and post conditions (2,
	10, and 100 year storm events)
106.	If discharging to existing swale or ditch, tailwater condition modeled as half full
107.	Water quality and quantity calculations, both required and provided
108.	The proposed stormwater volume requirements for ESD targets and quantity control
109.	The location and size of ESD practices used to the MEP and all nonstructural, alternative
4.40	surfaces, and micro scale practices used
110.	Table provided showing ESD and Unified Sizing Criteria (drywells to include void ratio
111	calculations)
	Planting plan and table Control structure and emergency spillway design
113.	Outfall structure buoyancy calculations
114.	Anti-Seep collar design and calculations
115.	Level Spreader
116.	Ponds with side slopes steeper than 4:1, fenced by 6' high solid fencing with 12' wide gate
117.	Pond cross-sections showing bottom dimensions, side slopes, minimum 15' wide accessible
	maintenance area, storm events (2, 10, and 100 year), outfall location, and seasonal high
	groundwater
118.	Trashrack (low flow and high flow)
119.	Rip-rap sizing calculations and details (identify location, shape, size of stone, and type of filter
	cloth)
120.	Maintenance schedule
121.	Public access to pond for maintenance
122.	Geotechnical analysis for infiltration facilities by Registered Professional Engineer, Geologist or
4.00	Soil Scientist
123.	Geotechnical analysis for seasonal high ground water elevations for pond design by a
404	Registered Professional Engineer, Geologist, or Soil Scientist
124.	Infiltration basin – modeled at half the average infiltration rate
125.	Infiltration basin – identify types of pre-treatment and provide calculations

126.	Structural design of non-standard structures by Registered Professional Engineer
127.	Details related to SWM tailored to each site (trashracks, rip-rap, level spreaders, and etc.)
128.	Pictures of each outfall location (minimum 3 per outfall – include in the swm report)
129.	Stormwater Management Facilities discharging to Public Drainage Association (PDA) and or
	Farm Ditches
	a 10 year post development peak rates held to 2-year pre-
	development rate with tailwater condition modeled as half full
	b Building areas a minimum 1' above 100-year storm elevation
130.	Stable conveyance of down stream discharge points
131.	Data information on compact disk
G.	Submittal Forms:
132.	Site Development Plan Application
133.	Stormwater Management Data Summary Sheet
134.	Non-Tidal Wetlands Disclaimer
135.	<del></del>
136.	
	of Circuit Court"
137.	
Must	do one of the following:
138.	Letter of Credit
139.	Performance Bond (with public works agreement)
140.	Performance Bond (without public works agreement)
141.	Review Checklist Check in Lieu of Bond
Н.	Other possible outstanding approvals:
142.	Maryland State Highway
143.	Forest Conservation
144.	Critical Area
145.	Specific town approvals
146.	Wicomico County Health Department
147.	Wicomico County Soil Conservation District
148.	Planning Commission
149.	Demolition Permit
150.	Sign Permit
151.	Building Permit
152.	Fire Safety
153.	Entrance Permit - Wicomico County Roads Division
154.	Wetlands Permit - Maryland Department of the Environment
155.	Road Closure Request
156.	Water and Sewerage Service Area Amendment



### As-built/ Record Plan Checklist

Project N	Name: Date:
	d By:
	$\sqrt{}$ if included or $\sqrt{N/A}$ if not applicable
. <u>l</u> i	nformation Required:
1	Plans prepared on 24' x 36' or 18' x 24" sheets – one (1) set
2	Title which is descriptive (identify project as an as-built/ record drawing)
3	North arrow on each sheet
4	Plan view scale, min. 1" = 100'
5	Date of the survey
6	Name, address, phone, fax, email of the developer
7	Name, address, phone, fax, email of the consultant (engineer/surveyor) who prepared the plan
8	***Calculations of outflow to and from the stormwater management facility for all design storms.
	Routing calculations must be based on as-built elevations and volumes for each facility***
9	As-built contours of each stormwater management facility including basins, swales, forebays,
	micropools, maintenance area, and elevations below the permanent pool at 1' intervals based
	on the project benchmarks (contours shall be generated based upon as-built grade spot shots)
10	Permanent pool elevation
	Top of bank around the perimeter of each stormwater management facility
	Pond bottom
	Elevations for pond berm and emergency spillway inverts and dimensions
14	Cross sections through pond (elevations, inside slopes, benching, and etc.)
15	Dimensions of the outfall structure (pipes, weirs, orifices, risers, material, inverts, % slope,
	length, and etc.)
16	Spot shot elevations to verify drainage patterns and stormwater management facilities
17	Dimensions of rip-rap (length, width, depth, stone size, and type of filter fabric)
18	Dimensions and specifications of underground infiltration facilities (stone, type of filter fabric,
	pipe, and trench)
19	Statement concerning condition of site's vegetative stabilization relative to its ability to resist
	erosion
20	Rim/ grate elevations, inverts, pipe sizes, and pipe material of each manhole and inlet.
21	County road curb grades at high points and 50 feet stations on slopes greater than or equal to
	0.5%, and at 10 feet stations on slopes less than 0.5%. (Top of curb and flow line)

22.		County road i	intersection curb (	grades at P.C.s, P.T.s & P.R.C.s	s. (Top of curb and flow line)
23.		County road	cul-de-sac curb gi	rades at P.C.s, P.T.s & P.R.C.s,	as well as center radius point.
		(Top of curb a	and flow line)		
24.		Roadway cor	nstruction survey	conducted before asphalt placer	ment.
25.			/lanagement As-B		
		individually id	lentified below ha	water management facility (facilis (have) been constructed in achwater Management #	
		Facility Identi	fication (Identify e	each facility individually)	
		Name (Printe	d)	Signature	
		Maryland Lice	ense Number	Date	
		•		lare a professional opinion base I tests conducted during constru	• • • • • • • • • • • • • • • • • • • •
26.		Stormwater M	•	Built tables (as necessary with de	esign vs. as-built information
27.		As-built / Rec	ord Plan review for	ee	
	drainag	e system supp	elemental calculat	any stormwater management fa ions must be provided to determ ne design requirements.	acility volume, outlet structure, or nine if the stormwater
		>	a T	The allowable tolerance from des	sian volume is 10%
		>			ert elevations of outlet structures
		>		he allowable tolerance for top o	of bank elevation shall not be less
		>	-	The allowable tolerance from sto	rm drain pipe invert is 0.1 ft.

The Wicomico County Department of Public Works reserves the right to require additional as-built information beyond what is listed above. All applicable as-built information shall be supplied to this office within thirty (30) days after completion of construction. The as-built drawing shall be sealed by a professional engineer or land surveyor who is registered in the State of Maryland. The construction surety shall be withheld pending the approval of this as-built information.



### <u>Preliminary Subdivision Plat</u> <u>Checklist</u>

⊃rojed	ct Name	: Date:
		<del></del>
		$\sqrt{}$ if included or $\sqrt{}$ if not applicable
J.	<u>Infor</u>	mation Required:
1.		Plans prepared on 24' x 36' or 18' x 24" sheets – five (5) sets
2.		Index sheet showing entire site and sheets numbered, if more than one sheet used
3.		Title which is descriptive
4.		Tax map, parcel and grid
5.		North arrow on each sheet
6.		Plan view scale, min. 1" = 100'
7.		Deed and plat references
8.		Plan preparation and revision dates
9.		Engineering company, contact name, address, telephone, fax, and email
10.		Surveying company, contact name, address, telephone, fax, and email
11.		Land owner's name (or person of legal control), address, telephone and fax
12.		Developers company, contact name, address, telephone, fax, and email
13.		Vicinity map, min. scale 1" = 2000'
14.		Legend for all symbols, both existing and proposed
15.		Location of existing and platted property lines, streets, buildings, watercourses, water – and
		sewer lines, railroads, bridges, culverts, drainpipes, and any easements, based on accurate field survey, and the names of all adjoining owners or subdivisions.
16.		Plans of proposed sewer or water utility layouts showing feasible connection to existing or proposed systems
17.		Water and Sewer Plan service area – When community sewer and water systems are not practical, any proposed individual on-site water supply and/or sewage disposal system must be reviewed by the County Health Officer or a soils evaluation for the site completed and submitted.
18.		Zoning classifications
19.		Identify if in an urban service district
20.		Identify any tax ditches
21.		The names, locations, widths, and other dimensions of proposed streets, alleys, easements,
		parks, and open spaces, reservations, and stormwater management areas

22	Approximate dimensions, lot numbers, block letters, front building lines and any other proposed
	private setback lines for the proposed lots.
23	Contours at vertical intervals of not more than one foot, with proposed flow patterns for new
	streets, drainage, and stormwater areas.
24	A signed certificate showing ownership or legal control of the property and a tabular summary or
	the following must be provided.
	The total acreage of the site being subdivided
	The total number of lots proposed and average lot size
	The area of natural vegetation to remain on the site and all buffer or screening areas as
	proposed or as many as may be required by the Commission
	The estimated total amount of land area on the site to be reserved and used for
	stormwater management areas
	The total amount of land area proposed for access rights-of-way, easement areas, on-
	site recreation, open spaces and other parcels or areas in the subdivision reserved for
	the common use of residents
	The estimated linear footage and area of new public roads to be constructed or widened
25	The following information shall be shown, if applicable.
	Chesapeake Bay Critical Area
	The one-hundred-year flood plain
	A note indicating that the property is located in an Airport Zoning District
26	Preliminary Subdivision Plat review fee



### Final Subdivision Plat Checklist

⊃roje	Name: Date:			
>repa	ed By:			
	$\underline{\hspace{0.1cm}\sqrt{\hspace{0.1cm}}}$ if included or $\underline{\hspace{0.1cm}N/A\hspace{0.1cm}}$ if not applicable			
K.	X. Information Required:			
1.	Plans prepared on 24' x 36' or 18' x 24" sheets – six (6) sets paper, four (4) mylar			
2.	Index sheet showing entire site and sheets numbered, if more than one sheet used			
3.	Title which is descriptive			
4.	Tax map, parcel and grid			
5.	North arrow on each sheet			
6.	Plan view scale, min. 1" = 100'			
7.	Deed and plat references			
8.	Plan preparation and revision dates			
9.	Engineering company, contact name, address, telephone, fax, and email			
10.	Surveying company, contact name, address, telephone, fax, and email			
11.	Land owner's name (or person of legal control), address, telephone and fax			
12.	Developers company, contact name, address, telephone, fax, and email			
13.	Vicinity map, min. scale 1" = 2000'			
14.	Legend for all symbols, both existing and proposed			
15.	Adjacent Property Owners Names and Parcels			
16.	Street name, number and right-of-way width			
17.	Location and description of property monuments, coordinates			
18.	Metes and bounds description, including complete curve data			
19.	Corporate Limits			
20.	Name and location of bodies of water, tidal and non-tidal			
21.	Front building setback lines			
22.	Limits and description of all easements, i.e. forest conservation, access, drainage and	utility		
23.	Zoning district			
24.	Critical area limits, designation, buffers and note			
25.	Floodplain limits, zone, elevation and note			
26.	Floodway limits			
27.	Airport surface zone and note			
28.	Historic District limits and note			
29.	Public Drainage Association limits and note			

30	Agriculture Preservation District limits				
31	Sewage reserve area and well				
32	Paleo Channel Overlay District limits and note				
33	Election District				
34	Surveyor's Seal and Signature				
35	Distance to nearest road intersection				
36	Minimum lot frontage and width				
37	Existing building location				
38	Percolation Test results				
39	Road widening dedication and/or reservation limits and note				
40	Lot numbers, block letters and section number				
41	Drainage easement obstruction note				
42	Right to Farm note, if zoned A1				
43	Future development note, if existing non-conforming structure				
44	50% Set-aside limits and notes				
45	State Highway Administration approval letter for access				
46	Forest Conservation approval block				
47	Chesapeake Bay Critical Area approval block				
48	Planning & Zoning approval block				
49	Planning Commission approval block				
50	Health Department approval block				
51	Public Works approval block				
52	Non-tidal wetlands disclaimer				
53	Final Subdivision Plat review fee				
54	The following notes shall appear on the final plat if applicable:				
	"I/we certify that the requirements of the Real Property Article, § 3-108, of the Annotated Code of Maryland, latest edition, as far as it concerns the making of this plat and setting of markers, have been complied with."  Owner(s) name				
	Surveyor				
	Final plat approval certifies that the subdivision has been reviewed for stormwater drainage affecting only streets and public areas within its own boundaries, not individual lots.				
	This property is located within "" Public Drainage Association Watershed and is subject to the conditions, easements and restrictions thereof.				
	All future construction shall conform to the Wicomico County Zoning Code in effect at the time of construction.				
	Lots are located within the 100 Year Flood Plain and any development is subject to the requirements and regulations as set forth in Chapter 149 of the Wicomico County Code entitled "Flood Plain Management".				
	This lot not approved at this time for any building construction requiring water supply and sewage disposal. If this lot is ever approved by the Health Department for water supply and sewage disposal, a new plat approved by the Health Department and Wicomico County Department of Public Works must be recorded in the land records of Wicomico County.				
	"" feet wide strip hereby dedicated to Wicomico County, Maryland for road and utility purposes. (Area = S.F.)				

	"" feet wide st	trip hereby reserved for road and utility purposes. (Area =
	S.F.)	
		n on this plat is located within a (Intensely Developed), (Limited
		Resource Conservation) Area of the "Chesapeake Bay Critical Area ance of land may occur without a "Chesapeake Bay Critical Area
	Certificate of Compl	
	Continuate of Compi	Chesapeake Bay Critical Areas Approval
		John F. Lenox
		Director of Planning and Zoning
	problems. Lot owne	may be susceptible to periodic localized storm water drainage ers are encouraged to prepare the site and construct structures so as
	Maintenance of the homeowners associ	act of these potential storm water drainage problems. area designated as "Future Street" shall be the responsibility of the iation until such time as a street constructed to Wicomico County
		ted into the County Maintenance System.  ated within an area which allows agricultural operations. This "Right
	to Farm" is protecte	d under Chapter 186 of the Wicomico County Code.
		ignated as "Drainage and Maintenance Easement", objects (such as tures, fences sidewalks, paved driveways, and/or utilities) which may
		on to the intended use and/or maintenance of this easement, shall not
	be permitted.	
		Wicomico County Department of Public Works does not relieve the ponsibility to comply with all other applicable Federal, State, and
		Drainage & Maintenance Easement located within the Forest
		shall only occur with prior approval from the Wicomico County
	r iaining Cinicol	
Rec	ordation Requirement	<u>ts:</u>
	Danding Fatingsts	
<ul> <li>Bonding Estimate</li> <li>Public Works Agreement</li> <li>Homeowners Association Documents, Forest Conservation Documents, Open Space/</li> </ul>		
		Documents Forest Conservation Documents Open Space/Set-Aside
-	Documents	
	Deed for common areas	
	Six (6) sets of paper and fo	our (4) mylars
	to Clerk of Circuit Court	
	A. Plats-	\$5 per sheet (i.e. subdivision with cover sheet and 2 additional sheets = \$15.00)
	B. Documents-	•

L.

55. 56. 57.

58. 59. 60.

Wicomico County DPW Last Updated 11/01/2009 19

10 or more \$90.00