



STORMWATER PLAN REVIEW CHECKLIST

PROJECT NAME:

JOB NO.:

Engineer:

Date Received:

Reviewed by:

Date Reviewed:

Plan Stamped by a Professional Civil Engineer registered in the State of Georgia

PLAN	INCLUDED	
Page #	Y/N	I. ENVIRONMENTAL
<input type="checkbox"/>	<input type="checkbox"/>	1. Narrative report describing existing conditions
<input type="checkbox"/>	<input type="checkbox"/>	2. Heavy outline of the 100-year flood plain with Base Flood Elevation and Finished Floor Elevation of structure
<input type="checkbox"/>	<input type="checkbox"/>	3. Location of all wetlands. Provide copy of Jurisdictional Determination or Permit from the USACE
<input type="checkbox"/>	<input type="checkbox"/>	4. Location of all State Waters and applicable Undisturbed Buffer
		II. STORMWATER
<input type="checkbox"/>	<input type="checkbox"/>	5. Plan of all impervious area(s), to include, but not limited to, roads, buildings, and parking lots
<input type="checkbox"/>	<input type="checkbox"/>	6. Total impervious area provided, to include any changes in impervious area
<input type="checkbox"/>	<input type="checkbox"/>	7. Existing and proposed topography [minimum of 2-foot contours recommended]
<input type="checkbox"/>	<input type="checkbox"/>	8. Pad elevation(s) provided
<input type="checkbox"/>	<input type="checkbox"/>	9. Stormwater Quality:
<input type="checkbox"/>	<input type="checkbox"/>	a. Stormwater Quality Calculations/Review Tool Provided
<input type="checkbox"/>	<input type="checkbox"/>	b. Runoff Reduction Provided
<input type="checkbox"/>	<input type="checkbox"/>	c. Maintenance Agreement Provided
<input type="checkbox"/>	<input type="checkbox"/>	10. Hydrology report for stormwater management facility(ies) including:
<input type="checkbox"/>	<input type="checkbox"/>	a. Plan showing acreage and flows of all on-site and off-site drainage areas contributing flow through the project. Study point(s) are shown on map.
<input type="checkbox"/>	<input type="checkbox"/>	b. Basis for determining Runoff Coefficients/Curve Numbers & Times of Concentrations include calculations
<input type="checkbox"/>	<input type="checkbox"/>	c. Inflow and outflow hydrograph of pre- and post-developed runoff for the 1-, 25-, 50-, and 100- year storms
<input type="checkbox"/>	<input type="checkbox"/>	d. Storage capacity and discharge rates with minimum of 30 minute detention time or routed design
<input type="checkbox"/>	<input type="checkbox"/>	e. Storage facility designed to detain volume difference of runoff for the pre- and post-developed conditions
<input type="checkbox"/>	<input type="checkbox"/>	f. Summary sheet showing pre-developed runoff, post-developed runoff and release rate of detained runoff for the 1-, 25-, 50-, 100-year storms
<input type="checkbox"/>	<input type="checkbox"/>	g. Post-developed runoff is less than Pre-developed runoff through the 100-year storm
<input type="checkbox"/>	<input type="checkbox"/>	h. Release rate for detained runoff from dry detention structures is 90% or less of the pre-developed runoff rate
<input type="checkbox"/>	<input type="checkbox"/>	i. Release rate for detained runoff from wet or regional detention structures is 100% of the pre-developed runoff rate
<input type="checkbox"/>	<input type="checkbox"/>	j. Size and location of detention facility; detention facility cannot be located within 100-year floodplain

16. Pipe material

Within right-of-way:

O-ring gasketed RCP

High Performance Polypropylene (PP)

Outside right-of-way:

O-ring gasketed RCP

Tongue and groove RCP

High Performance Polypropylene (PP)

High Density Polyethylene (HDPE)

Smooth-lined, Corrugated Polyethylene (CPP)

17. 18" minimum pipe cover on RCP; 24" minimum pipe cover on CPP and HDPE; and GDOT requirements shown for PP. Bedding details provided for all storm pipe materials in accordance with Columbia County Specifications

18. Details for all stormwater structures are shown. GDOT details: 1019A (Precast & Brick), 1030P, 1030D, 1033, 1034, 1120, 1125, and 9031U; Columbia County Weep Hole Detail

19. Pipes extended to limits of the State Waters Buffer allowing for installation of outfall BMP's

20. Flared end sections shown on pipes up to 42" and outlet velocities less than 5 fps

21. Cast-in-place headwalls shown on pipes greater than 42"

22. Headwalls with energy dissipation devices and/or channel protection provided for outlet velocities exceeding 5 fps

23. Collars shown in pipes with slopes greater than:

a. 20% for RCP

b. 15% for CPP & HDPE

24. Swales meet Section 5.5 of current Supplement to GSMM. Cross sections provided

25. French drain plan showing location of french drain in areas of roadway with greater than 4 feet of cut and other areas as needed

III. NOTES TO BE SHOWN

26. All construction to conform to Columbia County Standards and Specifications

27. The contractor will coordinate the work with the utility companies and will verify all existing pipe inverts and existing road elevations prior to construction

28. Notify the County Engineer's office 48 hrs prior to starting construction, pouring trap tops, dumping base, or paving

29. Notify Columbia County Stormwater Utility office 24 hrs prior to construction of stormwater infrastructure

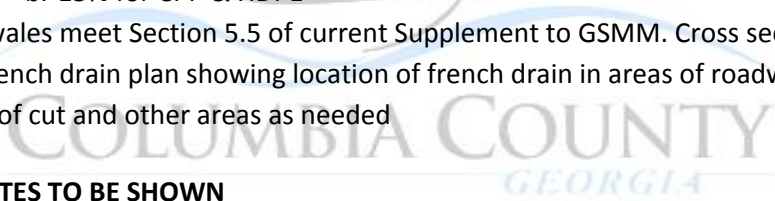
30. All boxes and traps having a depth greater than 4' must have steps vertically and ring and covers aligned for ready access to rungs

31. Full width of the right-of-way and additional utility easement must be cleared & graded with a slope of 1/4" to 1/2" per foot

32. No marquee, island or sprinkler system may be located within County R/W

33. Initial BMPs must be in place prior to clearing, regardless of plan requirement or lot size. No clearing or grading may be done until Initial BMP installation is complete. Contractor must contact Environmental Services for inspection BMPs prior to beginning clearing or grading activities

34. All easements to be grassed and/or rip-rapped as required to control erosion



35. Developers and/or Contractors are responsible to remove or clean out silt, dirt, mud or any other type of debris that comes off their site and finds its way into a private pond, onto private property, into a County owned pond or County owned property to include rights-of-way

36. Columbia County may require additional rip-rap at discharge points and stilling structures

37. Columbia County may require additional swales along rear and/or side lot lines after development begins

38. Columbia County may require additional french drains

39. The contractor will adhere to the weight limits prescribed on County maintained roads for hauling equipment and/or materials to and from this site. The contractor will be held responsible for any damages to the streets and/or utilities due to non-compliance of weight limit regulations



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