

ENVIRONMENTAL / PUBLIC WORKS: REVIEW CHECKLIST

AS-BUILT STORMWATER STRUCTURAL BMPS

PROJECT: _____ **Date:** _____

LAND DEVELOPMENT PERMIT # _____

ENGINEER: _____

FAX: _____

Please submit an As-Built Hydrology report, one set of As-Built Survey drawings, and an annotated copy of these comments to the Stormwater Plans Reviewer in the City of Roswell Environmental / Public Works Department for review.

AS-BUILT SURVEY FOR STRUCTURAL STORMWATER BMPS (PONDS, BIORETENTION, PERMEABLE PAVERS, RAIN GARDENS, ETC.)

1. Survey is signed, sealed and dated by a Registered Land Surveyor licensed in the state of Georgia.
2. Contours are shown at 1-foot or 2-foot intervals.
3. Bottom of BMP elevations are shown to enable verification of positive drainage.
4. Top of BMP, wall shots, or embankment elevation statement is included on the survey to verify freeboard. Top width of embankment is shown.
5. Forebay providing 0.1 inch of rainfall per acre of contributing basin area and 4 to 6 feet in depth is shown at each inlet. The required water quality volume for each BMP is shown on the survey.
6. The maximum limits of ponding are shown. The 100-year water surface elevation is shown.
7. The location of the BMP is shown with respect to property lines, R/W lines, buildings, other easements, etc.
8. Detail of outlet control structure showing pertinent dimensions and elevations of weirs, orifices, outfall pipes, etc is included on the survey (if applicable).
9. Water quality and channel protection orifices include filtration/trash rack to reduce the likelihood of clogging (if applicable).
10. 20-foot drainage easement and 10-foot maintenance easement are shown around the BMP. The access easement is sloped at 20% or flatter.

AS-BUILT HYDROLOGY STUDY FOR STRUCTURAL STORMWATER BMPS

1. Hydrology study is signed, sealed and dated by a Professional Engineer licensed in the state of Georgia and qualified in the field of hydrology and water resources.
2. Water quality volume provided in the as-built BMP is equal or greater than the as-designed volume. The elevation of the water quality volume is indicated on the stage/storage table. Revisions to water quality orifice size/elevation are justified by calculations (if applicable).
3. Channel protection volume provided in the as-built BMP is equal or greater than the as-designed volume. The elevation of the channel protection volume is indicated on the stage/storage table. Revisions to channel protection orifice size/elevation are justified by calculations (if applicable).
4. The post-development storm flows do not exceed the pre-development storm flows for the 1-, 2-, 5-, 10-, 25-, 50-, or 100-year design storms.
5. Stage/storage relationship, 100-year hydrographs for all basins and routed BMP(s) are provided. The beginning routing elevation for the as-built pond is provided.
6. Use the following tables as an example to organize the hydrology information.

Bioretention #1					
Design Storm	Designed Release Rates (cfs)	As-Built Release Rates (cfs)	Designed Water Surface Elevation (ft)	As-Built Water Surface Elevation (ft)	As-Built Freeboard Provided (ft)
1					
2					
5					
10					
25					
50					
100					

Bioretention #1						
	Water Quality Volume (cf)	Channel Protection Volume (cf)	Diameter of Water Quality Orifice (ft) (if applicable)	Elevation of Water Quality Orifice (ft) (if applicable)	Diameter of Channel Protection Orifice (ft) (if applicable)	Elevation of Channel Protection Orifice (ft) (if applicable)
Designed						
As-Built						