

AS-BUILT HYDROLOGY / DETENTION POND

Project: _____

Date: _____

Land Development Permit # _____

Engineer: _____

E-Mail: _____

Phone: _____

The following is the minimum information required in a standard hydrology study submitted to the City of Richmond. Additional information may be required for site specific conditions. It shall be at all times the responsibility of the engineer of record to accurately model and report the conditions on the site. The City of Richmond accepts no responsibility for errors or omissions from this report.

Please submit an As-Built Hydrology report, one set of As-Built Survey drawings, and an annotated copy of these comments to the City of Richmond Planning & Zoning for review. Direct questions regarding the checklist and submittal requirements to City of Richmond Planning & Zoning at 859-623-1000.

ASBUILT SURVEY FOR WET OR DRY DETENTION PONDS

1. Survey is signed, sealed and dated by a Registered Land Surveyor licensed in the state of Kentucky.
2. Contours are shown at 1-foot intervals.
3. Bottom of pond elevations are shown to enable verification of positive drainage.
4. Top of wall shots or dam elevation statement is included on the survey to verify freeboard. Top width of embankment is shown.
5. The required water quality volume for each pond 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 pond is shown with respect to property lines, R/W lines, buildings, other easements, etc.
8. A detail the outlet control structure showing pertinent dimensions and elevations of weirs, orifices, outfall pipes, etc is included on the survey.
9. Water quality and channel protection orifices include filtration/trash rack to reduce the likelihood of clogging.
10. 15-foot access and maintenance easement are shown around the pond. The access easement is sloped at 20% or flatter

AS-BUILT HYDROLOGY STUDY FOR WET AND DRY DETENTION PONDS

1. Hydrology is signed, sealed and dated by a Professional Engineer licensed in the state of Kentucky.
2. Water quality volume provided in the as-built pond 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.
3. Channel protection volume provided in the as-built pond 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.
4. The post development storm flows do not exceed the predevelopment storm flows for the 10yr-24hr, 25yr-24hr, 100yr-6hr, 100yr-24hr design storms.
5. Stage/storage relationship, 100-year hydrographs for all basins and routed pond(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.

Pond #1					
Design Storm	As-Designed Release Rates (cfs)	As-Built Release Rates (cfs)	As-Designed Water Surface Elevation (ft)	As-Built Water Surface Elevation (ft)	As-Built Freeboard Provided (ft)
10yr-24hr					
25yr-24hr					
100yr-6hr					
100yr-24hr					

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