



NEWTON COUNTY

REQUIREMENTS FOR STORMWATER AS-BUILT DRAWINGS

PROCEDURES

1. Submit one (1) copy of each required as-built plan, prepared by a registered engineer or surveyor, with the attached application, to the Department of Planning and Development, 1113 Usher Street, Suite 201, Covington, Georgia 30014. A review fee in the amount approved by the Board of Commissioners is due at time of submittal.

2. **Stormwater As-Builts** -- the Plans shall contain the following (on one or more sheets):

- Name, address, and ph. # of designer of as-built drawings
- Name, address, and phone # of developer
- Name of S/D, with phase numbers, if applicable
- Date of preparation, space for revision dates
- North Arrow, identified as magnetic or true grid
- Index map if more than one sheet for S/D
- Date of survey, source of data
- Scale 1" = 100'
- Appropriate legend of symbols
- Former name(s), if any
- Total A. _____ Zoning _____ # of lots _____
- County / City Water / Well
- Sewer / Septic System
- Exact boundary lines
- Location, material, description of monuments
- Vicinity map
- Digital copy of plans, spatially referenced

STORM DRAINAGE PIPE and INLET INFORMATION

- Street centerline station and offset dimension from street centerline to main at manholes, structures and all changes in alignment.
 - Street centerline station or easement bearing, dimension and offset dimension to the centerline to all manholes, structures and changes in alignment or grade of the pipe or channel.
 - Rim and invert elevations for each manhole, catch basin, stand pipe, turnout structure and miscellaneous drainage structure
 - Hydraulic grade line (HGL) for the pipe mainline, channels, laterals and structures including manholes, catch basins, stand pipes and turnout structures.
 - Calculated slope of the mainline pipe and channel bottom between manholes or drainage structures.
 - The pipe material and diameter that was **actually installed** shall be shown on all plan and/or plan and profile sheets.
 - Verify special requirements (such as Class IV pipe or o-ring joints)
 - Stationing, location, limits and dimension of encasements, caps, pipe supports, etc.
 - Stationing, location, limits and dimensions of repairs, including the type of materials used in the repair.
 - Stationing, location, limits and dimensions of facilities which are abandoned in place, including the size, depth and type of materials remaining.
 - Elevations at the following locations: across the dam embankment, top of riser, at the invert of all orifice openings in the riser, across the emergency spillway, across the bottom of the pond (dry ponds only), at the outlet of the structure and the outlet of the pipe.
 - Measurements describing all openings, weirs, or other flow control devices.
 - A written description of material, construction type, etc.
 - Topographic information to determine the stage/storage relationship up to the top of dam. For wet ponds, this information should be provided from the normal pool to the top of dam.
 - State plane coordinates for the stormwater management facility.
- A statement signed and sealed by a professional engineer evaluating the survey
- Elevations of all outlet structures

- Size of all discharge features
- Verify existence of drawn-down valves, when required
- Spillway and weir cross-sections
- Storm drain markers per NPDES requirements.
- Storm drain inlet protection.

Storm Drainage Ditch Information

- Typical cross-section for all designed ditches. Indicate location of changes if cross-section varies from the typical.

A statement signed and sealed by a professional engineer evaluating the survey information to determine if the pond has been constructed and is functioning according to the approved design. Both Quantity (runoff) and quality (volume) must be evaluated.

In cases where the survey reveals a significant modification from the approved design, a performance as-built will need to be provided in addition to the survey data to demonstrate that the pond meets the Stormwater Ordinance criteria.

As-built information should be submitted to the Water Resources Department for review and approval.

Common Reasons for Disapproval

- No Land Surveyor seal
- Pipe is less than .5% slope
- The velocity at a discharge point is 10 fps or greater (greater than 5 fps on more recent projects)
- Pipe slope differs greatly from design
 - There is less than 2 feet + the pipe diameter from the invert to the rim of a drainage structure in the street (If this happens, be sure Class IV RCP pipe was used).
 - The volume of the BMP is undersized

- The BMP aquatic shelf is not within 1 to 1.5 feet below the permanent pool elevation
 - There is no access point or safety bench for equipment to get to the BMP when it needs maintenance
 - Outlet devices are not sized according to plans
3. Plans, with any comments or redlines, shall be returned to the engineer within 10 days. If corrections need to be made, resubmit the corrected sets with the original redlines.
4. When the plans are approved, the applicant shall submit a performance/maintenance agreement, and a bond or letter of credit from a local bank in the amount approved by the Board of Commissioners.
5. A permit fee, in the amount approved by the Board of Commissioners, shall be paid at the time the permit is issued.
6. The permit card shall be posted. Contact the inspector at least 24 hours before commencement of work.