

Land Development Division Greenville County Square 301 University Ridge Suite 3900 Greenville, SC 29601 (864) 467-4610

## Stormwater As-Built Survey Requirements

From Section 8-103 of the Greenville County Stormwater Ordinance, "Once construction is complete, a final inspection will be conducted, and as-built documentation will be submitted to show that the constructed project meets the requirements of the approved C-SWPPP or OS-SWPPP." An electronic copy of this survey and attached "Engineer's Certificate" will be uploaded to the Land Development Division for the given site; all features will be combined into a single pdf and then uploaded as part of the close out paperwork.

It shall be at all times the responsibility of the engineer of record to accurately model and report the conditions on the site, AFTER CONSTRUCTION. All labeling shall be consistent with the approved hydrology study and maintenance agreement.

All as build drawings must be georeferenced to the US State Plan coordinate system, as specified in the South Carolina Code of Laws. All drawings must contain two reference pins (i.e., property corners)

The following items must be shown on the survey:

- 1. Seal and signature of the engineer of record (in addition to surveyor's seal and signature, if applicable);
- 2. Place the following statement on the survey, "Greenville County accepts no responsibility for errors or omissions from this survey."
- 3. Location, diameter, pipe material, and invert elevations (up- and downstream) of all stormwater conveyance pipes;
- 4. Label accordingly the location of all catch basins, inlets, headwalls, swales, drainage easements, junction boxes, and manholes;
- 5. For each Green Infrastructure (or Water Quality) practice, provide the locations, detailed description, volume (ponding, engineered soils, aggregate, etc.), cross-sectional diagram, and a detail of the outlet control and/or bypass/diversion structures.
- 6. If on a single family residential lot water quality easement and location on each feature.
- 7. Underground Detention If underground detention, provide a cross section of the outlet control structure with the orifices and weirs. Provide pictures if possible.
- 8. The location and name of each stormwater feature (dry extended detention pond, wet pond, underground vault, underground oversized pipes, etc.) For each stormwater detention facility on the developed property, provide:
  - a. Location of the facility in respect to property lines, public roads R/W, and other easements;
  - b. Maintenance access easements;
  - c. Dimensions of facility (pond, vault, oversized pipes, etc.);
  - d. Two foot elevation contours and pertinent spot elevations;
  - e. Both the elevation at the bottom of the facility in front of the outlet control structure and the opposite end of the facility to verify positive drainage;
  - f. Width of dam at the top of dam (if applicable);
  - g. Location, cross-sectional diagram, and dimensions of auxiliary/emergency spillway (if applicable);
  - h. Freeboard above the 25, 50 and 100-year water surface elevation;
  - i. Delineate maximum ponding elevation and limits of ponding; and
  - j. Show a detail of the outlet control structure, including:
    - i. The following elevations (if applicable) top of outlet control structure or wall, permanent pool, 100 year overflow weir/spillway, channel protection orifice/weir, channel protection volume, water quality orifice (for wet pond), water quality volume, 25-year water surface, outlet control pipe invert elevation at structure, outlet control pip invert elevation at downstream headwall, and ALL headwall elevation(s) in the pond;
    - ii. The following dimensions shape and size of outlet control structure, wall, dam, detention weir/orifice size, channel protection orifice size, water quality orifice size, and outlet pipe;
    - iii. The maximum height of water above inverts for each of these conditions water quality, channel protection and the 2, 10, 25, & 100-year storm event detention (if applicable);
    - iv. The volumes for water quality, channel protection, 2, 10, 25, 50, & 100-year storm event detention, and wet pond storage (if applicable);
    - v. Outlet pipe discharge velocity, V25, and dimensions, depth, and average rock size of outlet protection (St); and
    - vi. A detail of the trash rack.