



LAND DISTURBANCE PERMIT DRAINAGE REVIEW CHECKLIST

Project Name: _____ Tax ID #: _____

Project Number: _____ Date: _____

Applicant: _____ Signature: _____
Print Name Signature

Firm: _____ Phone: _____

Accepted/Denied by: _____

Address All Items Marked With an "X"

- ___ 1. Minimum culvert size shall be 18" and maximum velocity shall be 15 ft. /sec.
- ___ 2. Locate catch basins as with 600 feet maximum spacing, designed for 10-year storm with a maximum gutter spread of 8 feet.
- ___ 3. Show nearest existing catch basin along all roads that development connects with.
- ___ 4. Provide design calculations for all storm drainage pipes. Storm drainage pipes shall be designed for 25-year storm frequency.
- ___ 5. Culverts beneath roads shall be designed to convey the 100-year storm. Show analysis/effects of 100 year storm.
- ___ 6. Provide design calculations for all ditches and channels. Ditches and channels shall be designed for 25-year storm frequency.
- ___ 7. Provide back water effect due to constriction of pipes in ditches or swales. Limit backwater to property line.

Storm Drainage Plan

- ___ 8. Show existing and proposed contours, clearly distinguishable.
- ___ 9. Identify drainage structures as existing or proposed.
- ___ 10. Show drainage easements, drawn with width dimensions specified. Typical D.E. width is 20 ft minimum.
- ___ 11. Delineate and label any flood zone within the site.
- ___ 12. Label roadway highpoints on the center line of the roadway.
- ___ 13. Show the limits of proposed construction to be permitted.
- ___ 14. Profile all existing/proposed storm pipes above which land disturbance will occur.
- ___ 15. Reference all storm drainage structures (i.e., catch basins, drop inlets, headwalls...etc.) to Sandy Springs or any other standard (G.D.O.T., etc.) or provide complete detail(s) if not a public standard.

- ___ 16. Storm drainage structures are not allowed within the radius of a curb.
- ___ 17. Provide outlet velocity at outlet structures. (i.e. storm drainage profile).
- ___ 18. Storm drainage structures shall discharge into natural draws or drainage channels/swales.
- ___ 19. For all permit revisions, submit a letter stating the proposed changes. These changes should be highlighted on all sheets affected.

Storm Drainage Pipe Design

- ___ 20. 30" maximum cross drain pipe draining through Sandy Springs standard catch basins or drop inlets. When larger diameter is required, provide design and detail of all structures.
- ___ 21. Storm drain cross section:
 - A. Minimum pipe cover
 - 1. Storm drains: 18 inches outside roadway, 36 inches within roadway (See standard 600).
 - 2. Berming or trenching is not allowed to achieve minimum or maximum cover
 - B. Minimum pipe slopes:
 - 1. Concrete or smooth walled HDPE 0.5%
 - 2. CMP 1.0%
- ___ 22. All storm crossings under roadways shall be reinforced concrete pipe, class per Standard 573.
- ___ 23. Storm pipe material types, directional changes, slope changes or transitions are permitted only at drainage structure with surface access(i.e., junction box with manhole, catch basin, etc.). Concrete collars are not acceptable at transitions.
- ___ 24. Show size, material type, class or gauge, percent slope and length of all pipes.
- ___ 25. Provide invert elevations and top elevations of drainage structures.
- ___ 26. Anchor collars are required on storm pipes when the slope is greater than 30%.
- ___ 27. Cite Standard 573 for storm sewer pipes (C.M.P. pipe shall be half coated with a paved invert.)

Ditches and Swales

- ___ 28. All proposed swales and ditches shall have cross sections, centerline profiles, flow volumes and velocities shown on plans.
- ___ 29. If velocity in ditch is greater than 3 ft. /sec., ditch shall be paved with a non-erodible material.

Storm Drain Structures

- ___ 30. Show drainage area, Q25 and headwater elevation at the inlet of all storm drain structures (include accumulative areas and Q's and longitudinal system).
- ___ 31. Indicate the type and Fulton County standard number (or other) for inlet and outlet structures of all pipes.
- ___ 32. All pre-cast M.H. shall be provided with a minimum of 9 inches clearance on each side of connecting pipe between all cut-outs or penetration.
- ___ 33. Use online catch basins except for cul-de-sac applications in which one foot offset is required.

- ____ 34. Show concrete spillway at the end of curb and gutter (as per G.D.O.T. Standard 9013, type III) where applicable.
- ____ 35. Use concrete flared end sections at driveway crossings within the right-of-way and other applications adjacent to vehicular traffic (Ref. G.D.O.T. Standard 1120).
- ____ 36. Professional's seal and signature required on plans and reports.