

WALLER COUNTY ROAD AND BRIDGE DEPT.



Ross McCall, P.E.
County Engineer

To: Waller County Commissioners Court

From: Ross McCall, County Engineer

Re: Amendment to Subdivision and Development Regulations: Drainage Criteria Manual –
Drainage Plan Review

Item 3a on the agenda for December 6, 2023 is to amend the Subdivision and Development Regulations to modify road construction criteria. The amendment, if approved, would modify Appendix E, Section 2: Administration – Drainage Plan Review:

The drainage plan shall present the applicant's overall approach to collecting and conveying rainfall runoff to the appropriate drainage artery. It is recommended that prior to preparation of the plan a meeting be arranged between the applicant and the Waller County Engineer to discuss the proposed concept for drainage of the project. The design submittal shall contain the following items:

1. Name, address, and phone number of the engineer that prepared the plan including contact person.
2. Scale of drawing with a minimum scale of 1"=100'.
3. Benchmark and reference benchmark with datum and year of adjustment.
4. A detailed location or vicinity map drawn to a scale. The project site shall be accurately located on the map.
5. Date on all submittals with date of all revisions with month, day, and year.
6. Signature lines for The County Engineer.
7. Contour lines at 1 foot where slopes do not exceed 2.0% and 5 foot intervals for slopes exceeding 2.0% intervals covering the entire development and extended beyond the development boundaries at least 50 feet on all sides. At least two contours are required for each project.
8. Preliminary scheme for the passage of sheet flow from adjacent properties.
9. Drainage area divides for project area, with peak run-off rates for each drainage area.
10. Locations of all planned drainage improvements proposed for moving run-off water from the development to the principle drainage artery, i.e., creek, stream, bayou, ditch etc., and their point(s) of entry into the drainage artery. Proposed detention facilities may not be located within the floodway.
11. Points at which structures or pipelines will cross drainage ditches, streams etc., within the development.
12. Locations of structures or other physical features on the development area to provide orientation as required during field inspection of the site.
13. Location of all existing drainage structures, utility lines, pipelines, and other underground features on the property and adjacent rights-of-way.
14. Location and dimensions of all proposed drainage easements and rights-of-way.

15. Location of major drainage arteries adjacent to or crossing the development.
16. Cross-section of detention facilities showing proposed water surface elevations, freeboard, slopes, and maintenance berms.
17. Detention calculations in accordance with SECTION VI including volumetric calculations of detention provided.
18. Drainage area map of receiving system, if discharging to existing storm sewer system. Drainage area of receiving channel if discharging to open ditch or stream. Include calculations to prove capacity is available.
19. Copy of approved permit from TxDOT if draining to or impacting their system.
20. Copies of documents and letters of request for permission to cross privately held easements or rights-of-way and their approvals to do so.
21. Limits of floodway, 100-year floodplain, and 500-year floodplain.