

FINAL DRAINAGE PLAN GUIDELINES

Final Drainage Plans for all new construction or developments are required to show the following as a minimum:

1. Plan shall be titled "Final Drainage Plan."
2. Provide the name of the MUD and MUD engineer and the name of the surveyor including contact information. The contact information for the Homeowners Association shall be submitted to the DISTRICT upon being formed.
3. Date on all submittals and date of all revisions, including month, day, and year.
4. Scale of drawing with a minimum scale of 1"=100'.
5. Location or vicinity map drawn to a scale.
6. Benchmark and reference benchmark with datum and year of adjustment. All projects must be tied vertically and horizontally to a City of Pearland or Brazoria Drainage District No. 4 benchmark.
7. District notes in accordance with Section 5.H.
8. Copies of authorization documents, e.g., licenses, consents, etc., showing permission to cross privately held easements and fee strips.
9. Signature lines in accordance with Section 5.I.
10. Contour lines at 0.5 foot intervals where slopes do not exceed 1.0%, and 1 foot intervals for slopes exceeding 1.0% intervals covering the entire development and extended beyond the development boundaries at least two hundred (200) feet on all sides for developments over five (5) acres and fifty (50) feet on developments under five (5) acres. Two (2) contours minimum are required.
11. Cross-section of existing and/or proposed detention facility, swales, and ditches.
12. Drainage area divides for the project area, including off-site areas with peak runoff rates for each inlet, structure, or drainage area.
13. Location and dimensions of all existing and proposed drainage easements and fee strips. (See Section 9)

14. True location of all drainage arteries adjacent to or crossing the development, as determined by actual ground survey by the developer's surveyor. Survey shall have been completed within one year of the date of approval of the Preliminary Drainage Plan and shall show stream alignment two hundred (200) feet upstream and downstream of development. This shall include identifying the static water level (if any).
15. Final detention calculation in accordance with the applicable provisions of Appendix A including volumetric calculations of detention provided. Calculations shall include the allowable release rate and restrictor sizing analysis. The detention service area, rate of detention required, and detention provided shall be shown on the plans.
16. 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. Calculations to prove available capacity.
17. Limits of the floodway and the 100-year floodplain scaled from the current FIRM. If none exists within the project limits, add a note stating that the entire project is outside of the floodplain.
18. Location of all existing and proposed buildings, structures, pipelines, paving or other impermeable cover within the site or development and adjacent easements and fee strips.
19. Points at which structures or pipelines will cross any and all drainage ditches, streams, etc., within the development.
20. Provide a complete set of construction plans which include a lot grading plan that provides for the passage of sheet flow from adjacent property.
21. A 100-year sheet flow analysis that provides direct access to the detention facility of main outfall.
22. Details of all ditches, which are to convey rainfall runoff from a subdivision and/or through a subdivision to the appropriate District drainage artery and location of that District drainage artery. All ditches must comply with specifications herein.
23. Bridges, which span any creek, bayou, stream, gully, or ditch, specifying maintenance responsibility and/or ownership of such structures.
24. Culvert type and size shall be shown. No culvert shall be less than 18" in diameter without special permission by the District's engineer.
25. Seal of the Registered Professional Engineer that prepared the plan.

26. An erosion control plan and a permanent storm water quality plan acceptable to the District and the Texas Commission on Environmental Quality (TCEQ). The District shall receive copies of all submittals to the TCEQ.
27. Any project that discharges into one (1) of the seven (7) major drainage arteries must have a permit or letter of no objection from the Corps of Engineers and a copy of that approval must be furnished to the District. A letter sealed by a Registered Professional Engineer certifying that a Nationwide Permit is applicable may be permitted.
28. A copy of the TxDOT permit, if applicable.
29. Provide a detention area service map.
30. CDROM containing the project boundary and plans tied to the State Plane Coordinate System NAD 83.

***** PLEASE REFER TO SECTION 5 PAGES 18-20 OF THE RULES, REGULATIONS, & GUIDELINES DOCUMENT *****