



## **Galveston County Drainage District # 2**

5000 F.M. 1765 / P.O. Box 624, La Marque, TX 77568

(409) 935-2041 Fax (409)-935-4095

[office@gcdd2.org](mailto:office@gcdd2.org)

Website: <https://gcdd2.org>

# **DESIGN CRITERIA GUIDANCE**

1. This District utilizes the HCFCD 2019 PCPM for Hydrologic and Hydraulic Methodologies and detention analysis. Once Galveston County releases an updated Drainage Criteria Manual the district will review and potentially utilize the new manual in lieu of the HCFCD manual.
2. Impact Fee Watershed:  
Applies to developments within an impact fee watershed, detention may not be required with payment of an impact fee. Conditions to be met for development without detention:
  - a. Payment of Impact Fee. Impact fee payment is assessed at time of plat or at development approval if no platting is required.
  - b. Outfall directly to a district facility. You will need to confirm with the district engineer which channels meet the latest criteria for direct outfall without detention.
  - c. Offsite drainage must be accommodated and passed through the system at a fully developed - undetained rate. This may include the dedication of easements and construction of drainage systems to accommodate this flow. Offsite flows, which would otherwise have direct access to the outfall channel, CANNOT be cut off.
  - d. If the outfall is to a non-district facility, then detention will be required based on the minimum rates listed below.
  - e. Developer needs to submit a preliminary drainage plan showing general development boundaries, drainage easement dedication, and offsite flow accommodations.
  - f. No work is allowed within a district right-of-way until applicable impact fees have been paid. Coordinate with the District office to pay impact fees.
3. Minimum Detention Rate of 0.75 ac-ft per ac without a detailed study (HCFCD Method 2-alternative model or greater). With a detailed study, minimum detention rate of 0.5 ac-ft per ac.

4. Pumped Detention minimum rates:

- a. 50% or greater of Detention Volume drained by Gravity - minimum of 0.75 ac-ft per ac
- b. 25% to 50% of Detention Volume drained by Gravity - minimum of 1.0 ac-ft per ac
- c. Less than 25% of Detention Volume drained by Gravity - 1.2 ac-ft per ac

5. Discharge Rate:

- a. District Facility (flood control channel) - existing condition 100-year peak flow rate
- b. TxDOT - utilize TxDOT drainage criteria for discharge rate.
- c. Roadside Ditch - pro-rata share of ditch capacity based on development area and total ditch drainage. Utilize Manning's equation to determine ditch capacity.
- d. Storm Sewer - flow rate from design event from storm sewer plans. If no design plans can be located, then the undeveloped 2-year flow rate.
- e. Pumped Detention - at no time can the combined gravity plus pump discharge rate exceed the allowable discharge rate from above.
- f. Non-District Facilities: at no time do the above discharge rates preclude any capacity limitations identified by a local jurisdiction. Development engineer will need to coordinate with applicable jurisdiction on allowed discharge rates.

6. Floodplain Mitigation:

The district maintains detailed watershed studies for most streams within the district. These studies may identify local 100-year riverine floodplains that will require a minimum 1:1 floodplain compensatory mitigation be provided for any fill placed within the floodplain. Conveyance improvements or other regional improvements can be considered based on consultation with the District Engineer. The need for a detailed Hydraulic analysis will be determined by the District Engineer based on the extents of the proposed floodplain reclamation.

7. FEMA Floodplain Management:

The district is not the floodplain administrator (FPA). This duty falls to the local cities or county depending on location. The district does not require FEMA permitting as part of the review process and it is solely the developers' responsibility for coordination with FEMA and the local FPA. If any FEMA MT-2 application is made (Letter of Map Revision) which includes a District Facility, the district will require a review and approval to ensure compliance of the MT-2 application with the district watershed studies. The district may submit Letter of Map Revisions at its sole discretion.

8. Easement Dedication:

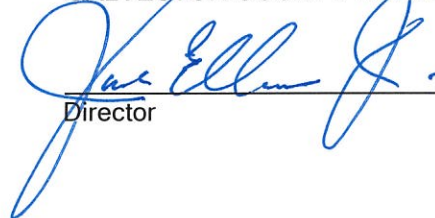
Developments along district creeks are required to dedicate drainage easements over channels identified on the overall district watershed map.

- a. Easement widths are determined from the minimum width of the following:
  - 1) the width determined in the Master Drainage Plan, or
  - 2) width between high banks + 30-ft, or
  - 3) a minimum easement width of 150-ft centered on the stream centerline

9. Easements will be dedicated via separate instruments, then shown on any applicable development plats. Developer can choose to dedicate the easement in fee to District.
- a. Contact District for standard easement dedication language.
  - b. Developer is then required to submit the easement standard language, metes and bounds, exhibit, and DWG file of easement boundary to District Engineer for review and approval. Once approved the developer is required to file the easement with Galveston County and provide recordation information to the District.
  - c. No development or construction plans will be approved until all required drainage easements have been recorded.
10. This criteria does not replace other applicable jurisdiction codes, statues, or criteria. If there is a conflict between district policy and local jurisdictional criteria, the more stringent of the two will apply.
11. Submittal and Review Process:  
You must submit a hard copy of the final approved construction plans to the District for approval on the board agenda. District board meets 2<sup>nd</sup> Thursday of the month and all documents and comments must be submitted to the district at least 2 weeks prior to the meeting to be included on the board agenda.
12. Construction Notes:  
Cover Sheet - **Contractor to contact the district office at 409-935-2041 to schedule an onsite field visit at least 48-hours before starting any construction activity within the District right-of-way or easement. District right-of-way and easements must be returned to the original or better condition.**

ADOPTED this 10<sup>th</sup> day of August 2023.

GALVESTON COUNTY DRAINAGE DISTRICT # 2

  
Director

