
7.5.3 General Drainage Requirements.

F. **Detention Facilities.** All detention facilities, whether maintained by the city, private property owner, home owners association, or private entity, shall comply with any applicable design requirements of the city and any state or federal laws or regulations, as amended, including the regulations of the Texas Commission on Environmental Quality (TCEQ) or its successor agency. The following standards shall apply to all detention facilities, to the extent they do not conflict with any applicable federal or state laws or regulations, as amended:

1. The 100-year flood shall be used to determine the volume of detention storage required. Water quality volume shall be designed per the Stormwater Design Criteria Manual.
2. Detention facilities shall be designed so that any additional runoff generated by the proposed development will not increase the amount of original discharge for storm frequencies from the 1-year, 25-year, and 100-year flood;
3. Publicly dedicated or privately maintained detention facilities may be used to reduce peak discharges where conditions prevent conveying stormwater to an adequate discharge point or studies show that off-site structural facilities will not mitigate hydraulic effects more efficiently;
4. All detention facilities shall comply with the standards of this section and the Stormwater Design Criteria Manual, as amended;
5. A development may provide for drainage by participating in the design and construction of a regional detention facility. Detailed engineering studies of the entire basin shall be required to ensure that the timing of peak flows has not been altered to create higher peak flows elsewhere in the basin; and
6. Detention facilities may be constructed in phases, if phased to provide for the timely needs of the development.