

4-5-7: **DESIGN AND CONSTRUCTION STANDARDS FOR STORM SEWERS AND DRAINAGE WAYS:**

A. Design Standards: All subdivisions shall include a stormwater drainage system designed in such a way as to accomplish the following:

1. Provide that all lots and outlots in the subdivision will be graded and shaped so as to drain property within the subdivision to natural drainage ways by gravity by means of catch basins, inlets, retention ponds and natural drainage ways with adequate capacity.

2. Connect all stormwater inlets and catch basins to a primary storm sewer, pipe or conduit of sufficient size, grade, and capacity to carry the runoff reasonably expected from a 25-year frequency storm event for property within the corporate limits or the land use element of the City's Comprehensive Plan for property outside the corporate limits.

3. Outlet all storm sewers to other existing storm sewers or improved drainage ways of sufficient size, grade and capacity to carry the runoff reasonably expected from a 25-year frequency storm event for that area within the corporate limits of the City or the land use element of the City's Comprehensive Plan for property outside the corporate limits.

4. Improve all drainage ways through the proposed subdivision to a size and in a way adequate to carry the runoff reasonably expected from a 25-year frequency rainfall event on the area in the natural drainage area for property within the corporate limits or the land use element of the City's Comprehensive Plan for property outside the corporate limits.

B. Retention and/or Detention Facilities:

1. No development shall be authorized in the City unless there is an adequate stormwater outlet and the City has approved retention and/or detention facilities. The applicant shall show by his detailed calculations and plans that the storm sewer outlet and/or drainage way are in compliance with the City design criteria. The calculations must be submitted for review and approval.

2. In connection with any required storage facilities, the developer shall submit two (2) sets of plans, specifications and calculations for review and approval. Plans shall be prepared by a registered professional engineer or professional architect in accordance with standards previously set forth. Plans and calculations shall include existing and proposed elevations of site, including buildings, with streets adjacent to the sites.

C. Manholes: Provide public manholes installed at the end of each storm sewer line in public right of way or permanent drainage easements at all changes in grade or alignment, at all intersections and at distances not greater than three hundred fifty feet (350') between manholes.

- D. Adequate Outfall: Provide a controlled outlet from all drainage facilities. The applicant shall show by his detailed calculations that the storm sewer outlet or retention basin outlet is adequate for a twenty-five (25) year rainfall event in the calculations presented to the City.

- E. Approvals: A certificate of occupancy for the development of a building or structure shall not be issued until all stormwater facilities are completed to the satisfaction of the Inspection Department according to the previously approved plans. Building permits for structures or buildings in any residential subdivision shall not be issued until all stormwater facilities are completed to the satisfaction of the Inspection Department in accordance with previously approved plans.