Section IV.Storm Water Conveyance

4.01 General Requirements:

- 1. The Developer shall prepare a storm water pollution prevention plan (SWPPP) that complies with the Texas Commission on Environmental Quality's (TCEQ) regulations for preventing downstream erosion.
- 2. Unless otherwise noted below, comply with the requirements of the latest editions of the "Montgomery County Drainage Criteria Manual" or the Texas Department of Transportation (TxDOT) "Hydraulic Design Manual."
- 3. Variance Procedure
 - (a) The City Council may, upon request, approve an alternative design, unusual circumstance, or construction methodology that differs from the requirements in this manual on a case by case basis if the City Council determines that the alternative design or construction methodology is sufficient to ensure public health and safety.

4.02 Methods

- 1. For drainage areas of less than 50 acres, use the Rational Method
- 2. For drainage areas of 50 acres to 640 acres, use either the Montgomery County Runoff Rate Curves, or a computer modeling method approved by the City Engineer.
- 3. For drainage areas greater than 640 acres use a computer modeling method approved by the City Engineer.

4.03 Design Flood and Check Flood Standards

- 1. Size inlets and storm sewers for a minimum 5-Year Storm Event, check that the 100-Year Storm Event is conveyed within the Right-of-Way or an Easement.
- 2. Size cross culverts for a minimum 10-Year Storm Event, check that the 100-Year Storm Event will not overtop the roadway.

4.04 Requirements for Inlets with Curb and Gutter Sections:

- 1. Use standard curb inlets on all curb and gutter sections, sized to carry the calculated runoff.
- 2. Place inlets to intercept run-off prior to intersections.
- 3. Place inlets at a maximum spacing of 300 feet for major, secondary or commercial streets, and 400 feet for residential and minor residential streets.
- 4. Place inlets to intercept concentrated runoff from outside of the right-of-way.
- 5. Place inlets at the end of curbed pavement to eliminate direct drainage from gutter to open ditch.

(End of Section)