

# London Area Storm Water Plan - Proposed

**Design Requirements**

1. Minimum Level of Protection
  - Major Systems (>500 acres contributing area):
    - Major Underground Storm Sewers (>500 acres contributing area):
      - 25-Year (HGL at or below top of curb and manhole rims)
      - 100-Year (Measures shall be taken to ensure that street ponding remains below habitable living space)
    - Major Channels (>500 acres contributing area):
      - 25-Year (Design objective is 3 feet of freeboard with a 1-foot minimum, when necessary)
      - 100-Year (Water surface elevation below top of banks)
    - Major Channel Crossings (Culverts):
      - 50-Year Design Storm
      - 100-Year (Measures shall be taken to ensure that street ponding remains below habitable living space)
    - Major Channel Crossings (Bridges):
      - 50-Year At least 1 foot of freeboard below bottom of low chord
      - 100-Year Water surface elevation below bottom of low chord and measures shall be taken to ensure that street ponding remains below habitable living space)
  - 2. Hydrology

Hydrologic analyses shall be based upon ultimate land development according to the latest Future Land Use Plan adopted by Development Services.

In this master plan the following Design Rainfall Depth (inches), shall be used for the US Army Corps of Engineers Hydrologic Modeling System (HEC-HMS) hydrologic analysis in the design of channels, culverts and bridges.

Duration	Rainfall Depth (inches) Corpus Christi, Texas				
	5-Year	10-Year	25-Year	50-Year	100-Year
15 minutes	1.37	1.57	1.82	2.03	2.24
60 minutes	2.48	2.9	3.49	3.97	4.51
2 hours	2.97	3.52	4.29	4.94	5.66
3 hours	3.31	3.94	4.85	5.61	6.47
6 hours	3.97	4.79	5.97	6.98	8.13
12 hours	4.81	5.84	7.3	8.55	9.95
24 hours	5.84	7.12	8.94	10.48	12.18
  - 3. Hydraulics

In this master plan the hydraulic design of channels, culverts and bridges shall be performed using the US Army Corps of Engineers HEC-RAS software program.

**Legend**

- Proposed Service Area
- Proposed Drainage Basins
- Proposed Channels
- Ditch**
  - Major Ditch
  - Underground Major Ditch
  - Collector Ditch
  - Concrete Lined Ditch
  - Minor Ditch
  - Pilot Ditch
  - Natural Ditch
- Land Use**
  - Commercial
  - Estate Residential
  - Low Density Residential
  - Medium Density Residential
  - Parks
  - Public/Semi-Public
  - City Limit

**City of Corpus Christi, Texas**  
INCORPORATED 1852

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**Scale:** 0, 800, 1,600, 3,200 Feet

**City of Corpus Christi, Texas**

