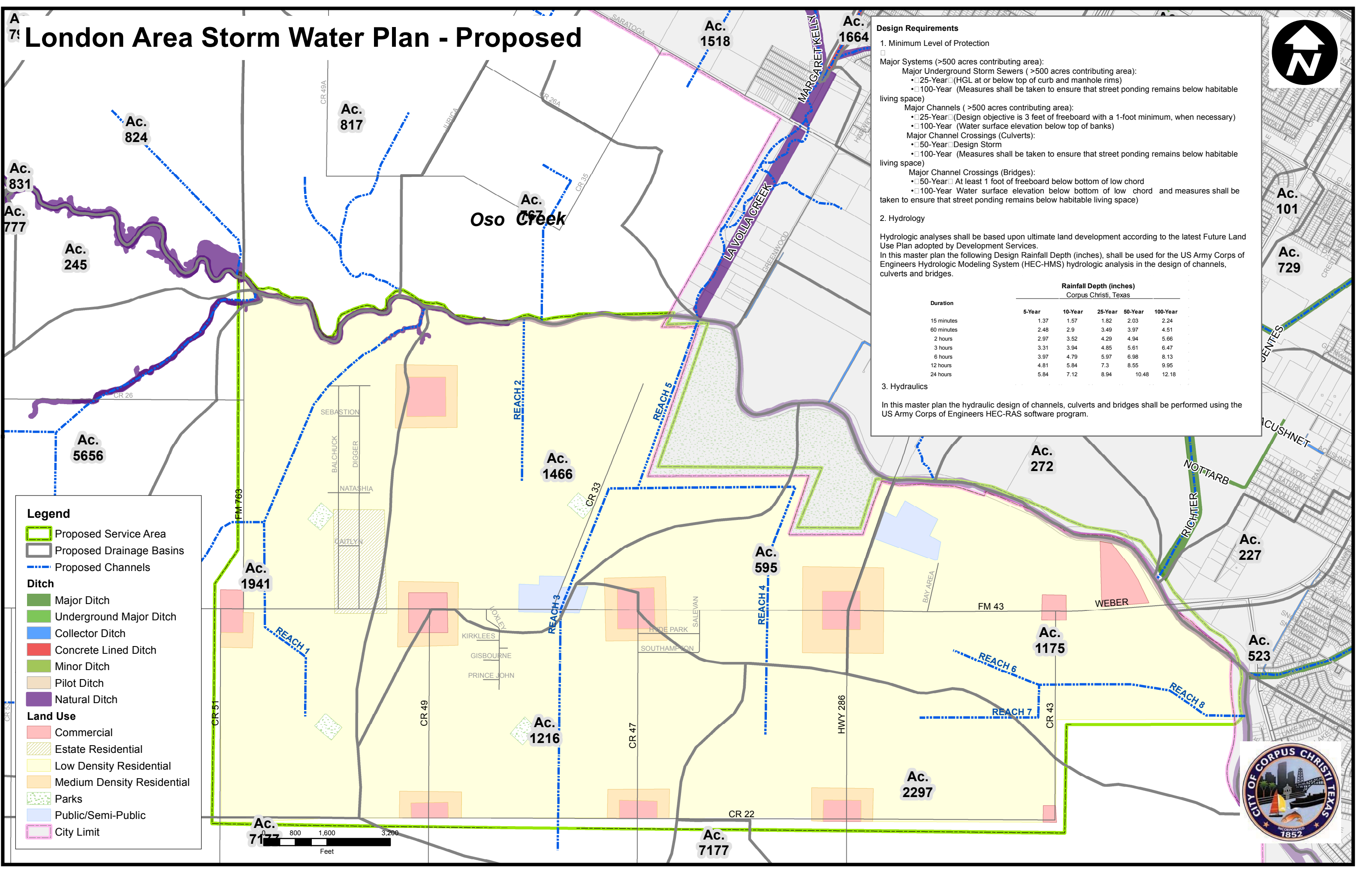




# London Area Storm Water Plan - Proposed

**Design Requirements**

1. Minimum Level of Protection

Major Systems (>500 acres contributing area):

Major Underground Storm Sewers (>500 acres contributing area):

Major Channels (>500 acres contributing area):

Major Channel Crossings (Culverts):

Major Channel Crossings (Bridges):

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)<br>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

