

CITY AND COUNTY OF BROOMFIELD PRELIMINARY GEOTECHNICAL REPORT REQUIREMENTS

Geotechnical and soils investigation studies are required for foundation design and pavement design. These two categories may be combined into one report when the purpose of the investigation includes both facets of design. A preliminary geotechnical report shall include the following information at a minimum:

- I. General Information
 - A. Past and present land uses and features
 - B. Proposed use of the land when developed
 - C. Surface drainage characteristics
 - D. A general geologic report on the area and a discussion of the soil profiles and subsurface features
 - E. Potential slope instability
- II. Unusual Land Uses/Conditions
 - A. Report which identifies all unusual land uses such as landfills, open dumps, wetlands, leach fields, areas of natural springs, faults, mines, etc. These shall be presented in a written and graphical format of suitable scale.

CITY AND COUNTY OF BROOMFIELD PRELIMINARY TRAFFIC ANALYSIS REPORT REQUIREMENTS

Required information for the preliminary traffic report shall include, but not be limited to the following.

- 1. Land use, site and study area boundaries.
- 2. Existing and proposed site uses.
- 3. Existing and proposed roadways and intersections.
- 4. Existing and proposed roadways and intersection capacities and volumes.
- 5. Trip generation and design hour volumes.
- 6. Trip distribution.
- 7. Trip assignments.
- 8. Existing and projected traffic volumes.
- 9. Levels of service of all effected intersections for the design hour.

CITY AND COUNTY OF BROOMFIELD PRELIMINARY DRAINAGE REPORT REQUIREMENTS

Drainage report calculations and supporting data required as set forth herein shall be prepared in accordance with the UDFCD Urban Storm Drainage Criteria Manual. A preliminary drainage report shall include as a minimum, the following:

- I. General Information
 - A. A map showing project location, description of the property, acreage, topography, identification of major drainageways involved, proposed type of development, identification of wetlands and a reference to any flood hazard area delineation study and Drainage Outfall System Master Plan applicable to the site.
 - B. A map of the tributary drainage basin determining the location and magnitude of flows from upstream of the site based on current development or zoning, which ever provides the highest runoff volumes.
 - C. A conceptual drainage plan showing how intercepted and on-site flows will be received and transported.
 - D. Designated points of discharge from the site, accompanied by a general analysis of how existing downstream facilities will handle this discharge.
 - E. Required rights-of-way for drainage easements and detention areas.
 - F. A discussion of how site characteristics (soils, vegetation, erodibility) will influence both wind and water erosion.
 - G. A general discussion of the type of erosion control program necessary to prevent sediments from leaving the site.

- II. Hydraulic Calculations
 - A. Historic and proposed initial and major storm run-off quantities from the site under development. Evaluation of the historic drainage for the initial and major storm shall include:
 1. Basin length, slope, time of concentration, intensity (show intensity duration curves used), and flow rates. The evaluation of proposed run-off quantities will be based on the developer's plans for the site. An evaluation will be done for the same items listed for historic drainage to the extent that they are known or can be estimated.
 - B. Storm Water Detention:
 1. Storm water storage volume required.
 2. Location of storage areas. The storage areas will be shown and designated. If the ultimate land use of a parcel is not known, the storage volume required shall be numerically written with a statement designating how the required storage is to be apportioned as parcels of property are sold off for the ultimate development.

**CITY AND COUNTY OF BROOMFIELD
PRELIMINARY UTILITY REPORT REQUIREMENTS**

Preliminary utility reports will include the following information and data as a minimum:

- I. Sanitary Sewer
 - A. Layout/ Connection to City and County Sewer
 - B. Average and Peak Flow Calculations
- II. Water System
 - A. Layout/ Connection with City and County Water
 - B. Potable Water Demand (peak and average)