

Drainage Report Guidelines

Transportation Projects & Storm Water Projects <200 acres

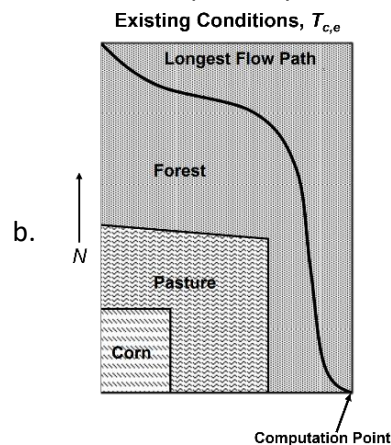
Please note this document serves as general guidance for meeting the criteria for a drainage report, and best practice is to refer to the most recent versions of the IDM and the UDC for more details. Supplemental information may be necessary to including in a drainage report depending on the scope and specifications of the development project.

Description

- a. Use of land (*IDM 3.03 Level of Protection*)
 - i. Identify appropriate Level of Protection
 - ii. Use Level of Protection criteria in post-development determination
- b. What is being developed
 - i. Acreage, location, nearby drainage
- c. Methodology
 - i. Method and rationale of drainage analysis, inventory of pertinent variables, coefficients, or formulas
 - ii. Clear explanation if any deviation from the Rational Method

Existing hydrologic analysis

- d. Land survey, topography, contours of land clearly shown to exhibit current drainage direction
- e. Pre-developed runoff determination (*IDM 3.03 Hydrology*)
 - i. Rainfall intensity
 - ii. Runoff coefficient (*IDM 3.03 Table 3.1: Runoff Coefficient (C)*)
 - iii. Drainage area calculation
 - iv. Drainage area map
 - v. Time of concentration
 1. Graphical
 - a. Visual exit pathway of most remote (largest T_c) location in drainage area



2. Analytical (ex. NRCS)

Proposed hydrologic analysis

- f. Proposed layout of development with functioning hydraulics (*IDM 3.04: Hydraulics*)
- g. Post-developed runoff determination
 - i. Rainfall intensity
 - ii. Runoff coefficient (*IDM 3.03 Table 3.1: Runoff Coefficient (C)*)
 - iii. Drainage area calculation
 - iv. Drainage area map
 - v. Time of concentration
 1. Graphical

Determination of Impact

- k. Proposed and existing comparison of flow and runoff rates (*IDM 3.05b: Pre-Developed Peak Runoff*)
- l. Mitigation efforts described if necessary (*IDM 3.05a: No Adverse Impacts Downstream; a*)