FORMULATION OF NOMOGRAPH FOR INLETS OF ZERO DEPRESSION

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ABSTRACT

The formulation of the nomograph entails the use of the rational formula ($Q = 10CIA$) where Q is the discharge in m^3 /s, C is the runoff coefficient, I is the intensity in mm/hr and A is the catchments area in m^2. The nomograph relates the basic parameters in the formula $Q = C_W L d^{3/2}$. In other to use the formula $Q = C_W L d^{3/2}$ the following values of coefficient $0.36 - 0.4$, $0.47 - 0.64$, $0.64 - 0.74$ and $0.7 - 1.04$ were computed for curb inlets with 0 mm depression respectively. From these values of coefficient, 0.4, 0.58, 0.7 and 0.9 were chosen to formulate the nomograph for the inlets while Q and d values are fixed on logarithmic scale.

Keywords: Nomograph, intensity, duration, inlets, drainage.