

TR55 Tc Worksheet

Hydraflow Hydrographs Extension for Autodesk® Civil 3D® by Autodesk, Inc. v2025

Hyd. No. 1

EX-DA 1

<u>Description</u>	<u>A</u>	<u>B</u>	<u>C</u>	<u>Totals</u>
Sheet Flow				
Manning's n-value	= 0.150	0.011	0.011	
Flow length (ft)	= 150.0	0.0	0.0	
Two-year 24-hr precip. (in)	= 3.00	0.00	0.00	
Land slope (%)	= 2.99	0.00	0.00	
Travel Time (min)	= 11.92	+ 0.00	+ 0.00	= 11.92
Shallow Concentrated Flow				
Flow length (ft)	= 150.00	363.00	0.00	
Watercourse slope (%)	= 2.99	2.50	0.00	
Surface description	= Unpaved	Unpaved	Paved	
Average velocity (ft/s)	=2.79	2.55	0.00	
Travel Time (min)	= 0.90	+ 2.37	+ 0.00	= 3.27
Channel Flow				
Sectional flow area (sqft)	= 0.00	0.00	0.00	
Wetted perimeter (ft)	= 0.00	0.00	0.00	
Channel slope (%)	= 0.00	0.00	0.00	
Manning's n-value	= 0.015	0.015	0.015	
Velocity (ft/s)	=0.00	0.00	0.00	
Flow length (ft)	0.0	0.0	0.0	
Travel Time (min)	= 0.00	+ 0.00	+ 0.00	= 0.00
Total Travel Time, Tc				15.20 min

Hydrograph Report

Hyd. No. 2

EX-DA2

Hydrograph type	= SCS Runoff	Peak discharge	= 3.627 cfs
Storm frequency	= 1 yrs	Time to peak	= 12.07 hrs
Time interval	= 2 min	Hyd. volume	= 13,895 cuft
Drainage area	= 11.760 ac	Curve number	= 67*
Basin Slope	= 0.0 %	Hydraulic length	= 0 ft
Tc method	= TR55	Time of conc. (Tc)	= 13.10 min
Total precip.	= 2.40 in	Distribution	= Type II
Storm duration	= 24 hrs	Shape factor	= 484

* Composite (Area/CN) = [(2.060 x 39) + (5.190 x 77) + (1.370 x 30) + (1.600 x 74) + (1.540 x 98)] / 11.760

