Hydraulic Analysis Report

# Project Data

Project Title:

Designer:

Project Date: Tuesday, March 4, 2025

Project Units: U.S. Customary Units

Notes:

# Channel Analysis: 5201DW - 2 yr\_High Slope

Notes: Test Note

## Input Parameters

Channel Type: Trapezoidal

Side Slope 1 (Z1): 4.0000 ft/ft

Side Slope 2 (Z2): 4.0000 ft/ft

Channel Width 2.00 ft

Longitudinal Slope: 0.0270 ft/ft

Manning's n: 0.0300

Flow 0.1000 cfs

## Result Parameters

Depth 0.0463 ft

Area of Flow 0.1011 ft^2

Wetted Perimeter 2.3815 ft

Hydraulic Radius 0.0424 ft

Average Velocity 0.9893 ft/s

Top Width 2.3701 ft

Froude Number: 0.8442

Critical Depth 0.0415 ft

Critical Velocity 1.1136 ft/s

Critical Slope: 0.0391 ft/ft

Critical Top Width 2.33 ft

Calculated Max Shear Stress 0.0779 lb/ft^2

Calculated Avg Shear Stress 0.0715 lb/ft^2