

# Culvert Analysis Report

## Culvert-1

Culvert Summary			
Computed Headwater Elev.	7,013.18 ft	Discharge	1.86 cfs
Inlet Control HW Elev.	7,013.04 ft	Tailwater Elevation	N/A ft
Outlet Control HW Elev.	7,013.18 ft	Control Type	Outlet Control
Headwater Depth/Height	0.58		
Grades			
Upstream Invert	7,012.31 ft	Downstream Invert	7,012.08 ft
Length	59.30 ft	Constructed Slope	0.003879 ft/ft
Hydraulic Profile			
Profile	M2	Depth, Downstream	0.51 ft
Slope Type	Mild	Normal Depth	0.77 ft
Flow Regime	Subcritical	Critical Depth	0.51 ft
Velocity Downstream	3.48 ft/s	Critical Slope	0.016797 ft/ft
Section			
Section Shape	Circular	Mannings Coefficient	0.024
Section Material	Aluminum	Span	1.50 ft
Section Size	18 inch	Rise	1.50 ft
Number Sections	1		
Outlet Control Properties			
Outlet Control HW Elev.	7,013.18 ft	Upstream Velocity Head	0.07 ft
Ke	0.70	Entrance Loss	0.05 ft
Inlet Control Properties			
Inlet Control HW Elev.	7,013.04 ft	Flow Control	Unsubmerged
Inlet Type	Mitered to slope	Area Full	1.8 ft²
K	0.02100	HDS 5 Chart	2
M	1.33000	HDS 5 Scale	2
C	0.04630	Equation Form	1
Y	0.75000		