



CULVERT ANALYSIS

PID : 122339 **Date :** 11/25/2024 **Project :** ATB/TRU-CULVERTS-FY26 **Location :** ATB-45-17.196

Description : Prop. 42" Corrugated Analysis

Designer : MEP

HEADWATER CONTROL CODES: INLET - Inlet Control.
OUTLET - Outlet Control.
OUTLET* - Outlet Control with backwater curve used to compute headwater. See Figure III - 7E in HDS 5 for type flow.
OUTLET** - Outlet Control - See Figure III - 7D in HDS 5 for type flow.
N/A - Flow is supercritical with low headwater and low tailwater. Control Section is at the inlet.

Pipe Number : 1	Use HW : 0	Inlet Invert Elevation (ft.) : 783.89	Outlet Invert Elevation (ft.) : 780.00
Pipe Quantity : 1			
Culvert Type : Circular Corrugated		Pipe Length (ft.) : 143.00	Culvert Slope (ft./ft.) : 0.0272
Corrugation Type : Corrugated Metal Pipe (2 2/3 x 1/2 in. corrugations)			
Pipe Size : 42 in.			
Design Manning 'n' : 0.0237			
Entrance Type : Half Headwall		Loss Coef. Ke : 0.9000	

FLOW (cfs.)	HEAD LOSS (ft.)	HWI (ft.)	HWO (ft.)	FLOW TYPE	VELOCITY (fps.)	DN (ft.)	DC (ft.)	MANNING N	HEADWATER CONTROL	BURIED DEPTH (ft.)	TAILWATER ELEVATION (ft.)
42.00	4.20	786.96	N/A	1 - C	9.27	1.67	2.02	0.0237	INLET	0.00	781.10
44.00	4.27	787.06	N/A	1 - C	9.39	1.71	2.07	0.0237	INLET	0.00	781.10
46.00	4.35	787.16	N/A	1 - C	9.49	1.76	2.12	0.0237	INLET	0.00	781.10
48.00	4.43	787.26	N/A	1 - C	9.59	1.81	2.16	0.0237	INLET	0.00	781.10
50.00	4.52	787.37	N/A	1 - C	9.68	1.85	2.21	0.0237	INLET	0.00	781.10
52.00	4.61	787.49	N/A	1 - C	9.77	1.90	2.26	0.0237	INLET	0.00	781.10
54.00	4.70	787.60	N/A	1 - C	9.86	1.94	2.30	0.0237	INLET	0.00	781.10
56.00	4.80	787.72	N/A	1 - C	9.95	1.98	2.34	0.0237	INLET	0.00	781.10



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58.00	4.90	787.85	N/A	1 - C	10.03	2.03	2.38	0.0237	INLET	0.00	781.10
60.00	5.01	787.98	N/A	1 - C	10.11	2.07	2.43	0.0237	INLET	0.00	781.10