

Project Description

Input Data

Station (ft)

Elevation (ft)

Roughness Segment Definitions

Start Station

Ending Station

Roughness Coefficient

Results

Bentley Systems, Inc. Haestad Methods Solution Center

Bentley FlowMaster [08.01.066.00]

Worksheet for 3-Mustang Road 100-yr

Results

Critical Depth	1.36	ft
Critical Slope	0.00562	ft/ft
Velocity	3.39	ft/s
Velocity Head	0.18	ft
Specific Energy	1.55	ft
Froude Number	0.98	
Flow Type	Subcritical	

GVF Input Data

Downstream Depth	0.00	ft
Length	0.00	ft
Number Of Steps	0	

GVF Output Data

Upstream Depth	0.00	ft
Profile Description		
Profile Headloss	0.00	ft
Downstream Velocity	Infinity	ft/s
Upstream Velocity	Infinity	ft/s
Normal Depth	1.37	ft
Critical Depth	1.36	ft
Channel Slope	0.00540	ft/ft
Critical Slope	0.00562	ft/ft

Project Description

Manning Formula

Normal Depth

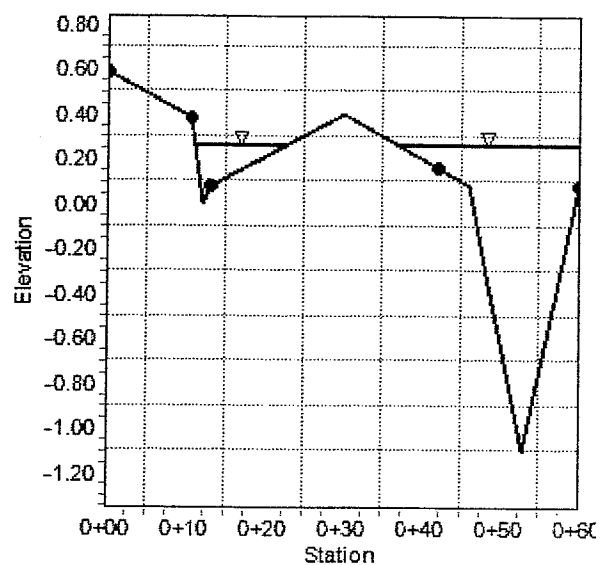
Input Data

0.00540 ft/ft

1.37 ft

44.00 ft³/s

Cross Section Image



Worksheet for 5-El Campo Grande 100-yr

Project Description

Friction Method Manning Formula
Solve For Normal Depth

Input Data

Channel Slope 0.00400 ft/ft
Discharge 166.00 ft³/s
Section Definitions

Station (ft)	Elevation (ft)
0+00.00	0.59
0+10.50	0.38
0+12.00	0.00
0+13.00	0.08
0+30.00	0.40
0+47.00	0.07
0+53.50	-1.04
0+60.00	0.07

Roughness Segment Definitions

Start Station	Ending Station	Roughness Coefficient
(0+00.00, 0.59)	(0+10.50, 0.38)	0.022
(0+10.50, 0.38)	(0+13.00, 0.08)	0.013
(0+13.00, 0.08)	(0+47.00, 0.07)	0.016
(0+47.00, 0.07)	(0+60.00, 0.07)	0.022

Results

Normal Depth 1.82 ft
Elevation Range -1.04 to 0.59 ft
Flow Area 39.75 ft²
Wetted Perimeter 61.15 ft
Top Width 60.00 ft
Normal Depth 1.82 ft
Critical Depth 1.78 ft

Worksheet for 5-El Campo Grande 100-yr

Results

Critical Slope	0.00499	ft/ft
Velocity	4.18	ft/s
Velocity Head	0.27	ft
Specific Energy	2.09	ft
Froude Number	0.90	
Flow Type	Subcritical	

GVF Input Data

Downstream Depth	0.00	ft
Length	0.00	ft
Number Of Steps	0	

GVF Output Data

Upstream Depth	0.00	ft
Profile Description		
Profile Headloss	0.00	ft
Downstream Velocity	Infinity	ft/s
Upstream Velocity	Infinity	ft/s
Normal Depth	1.82	ft
Critical Depth	1.78	ft
Channel Slope	0.00400	ft/ft
Critical Slope	0.00499	ft/ft

Cross Section for 5-El Campo Grande 100-yr

Project Description

Friction Method Manning Formula
Solve For Normal Depth

Input Data

Channel Slope 0.00400 ft/ft
Normal Depth 1.82 ft
Discharge 166.00 ft³/s

Cross Section Image

