BF 00257 Hwy 587 over Bowden Creek
Hydrotechnical Summary

Channel Capacity :

S = 0.0018
B = 5 m, h = 1.8 m, T_h = 10 m
Use n = 0.04

At Bank Height : Y = 1.8 m, V = 1.1 m/s, Q = 15 cms
At Channel Capacity : Y = 2.7 m, V = 1.6 m/s, Q = 35 cms

Historical Highwater Data :

A 1959 report notes a HWM with Y = 2.4m, a 1966 survey notes a HWM with Y = 1.8m, a 1966 report notes a HWM with Y = 1.5m and estimates Q = 11cms, and a 1986 BIM report notes a HWM with Y = 1.8m.

There are no WSC gauges on this stream. Gauges in the area suggest HW events in July 1982, July 1990, July 1999, and June 2005. The largest storms in the database for this area are about 120mm of rainfall in August 1916 and June 1970, and about 110mm in June 1928.

Basin Runoff Potential :

d = 40 mm, T_p = 20 hrs, q = 0.55 cms/km^2
Gross DA = 90 km^2
Q_p = 50 cms

Conclusion :

The channel capacity estimate is consistent with historic observations and is within the basin runoff potential.

Recommended parameters : Y = 2.7 m, V = 1.6 m/s, Q = 35 cms.