BF 71096 Local Road Over Battle River Tributary
Hydrotechnical Summary

Channel Capacity :

S = 0.0035
B = 3 m, h = 1.0 m, T_h = 6 m
Use n = 0.05

At Bank Height : Y = 1.0 m, V = 0.9 m/s, Q = 4 cms
At Channel Capacity : Y = 1.5 m, V = 1.3 m/s, Q = 10 cms

Historical Highwater Data :

A 1969 report notes a HWM with Y = 1.2m and estimates Q = 5cms.

There are no gauges on this stream. Gauges in the area suggest large runoff events in April 1974, April 1982, April 1985, July 1990, April 1996, and April 1997. The largest storm in the storm database is 125mm of rainfall in June 1970.

Basin Runoff Potential :

d = 40mm, T_p = 20hrs, q = 0.55 cms/km^2.
Gross DA = 34 km^2.
Q_p = 19 cms.

Conclusion :

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

Recommended parameters : Y = 1.5 m, V = 1.3 m/s, Q = 10 cms.