BF 07600 Local Road Over Battle River Tributary
Hydrotechnical Summary

Channel Capacity :

S = 0.0025
B = 3 m, h = 1.3 m, T_h = 6 m
Use n = 0.05

At Bank Height : Y = 1.3 m, V = 0.9 m/s, Q = 5 cms
At Channel Capacity : Y = 2.0 m, V = 1.3 m/s, Q = 12 cms

Historical Highwater Data :

There are no direct HW observations at this site. A reports from 1957 notes a HWM with Y = 1.8m. A report from 1961 estimates Q = 9 – 10cms. A report from 1972 notes Y = 1.8 – 2.4m and Q = 10cms.

There are no gauges on this stream. Gauges in the area suggest large runoff events in April 1974, and March 1985. No storms in the storm database exceed 100mm for this area.

Basin Runoff Potential :

d = 35mm, T_p = 40hrs, q = 0.25 cms/km^2.
Gross DA = 95 km^2.
Q_p = 24 cms.

Conclusion :

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

Recommended parameters : Y = 2.0 m, V = 1.3 m/s, Q = 12 cms.