BF 01519 Local Road Over Amisk Ck
Hydrotechnical Summary

Channel Capacity :

S = 0.0008
B = 5 m, h = 2.0 m, T_h = 10 m
Use n = 0.05

At Bank Height : Y = 2.0 m, V = 0.8 m/s, Q = 11 cms
At Channel Capacity : Y = 3.0 m, V = 1.1 m/s, Q = 27 cms

Historical Highwater Data :

There is a report from 1966 of the bridge at that time flowing full, with Y = 2.4m. A 1988n BIM report notes a HWM with Y = 1.8m.

WSC Gauge 05EB016 (DA = 377km^2, 1976 – 1996) reports Q = 14cms in March 1985. The rating curve suggests a 2.1m rise in stage for this flow. Other gauges in the area suggest that the April 1974 event is the largest event on record for this area. The largest storm in this area in the storm database is June 1965 with about 120mm of rainfall.

Basin Runoff Potential :

d = 35 mm, T_p = 40 hrs, q = 0.25 cms/km^2.
Gross DA = 285 km^2.
Q_p = 71 cms.

Conclusion :

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

Recommended parameters : Y = 3.0 m, V = 1.1 m/s, Q = 27 cms.