BF 00557 Local Road Over Amisk Ck
Hydrotechnical Summary

Channel Capacity :

S = 0.0008
B = 4 m, h = 1.8 m, T_h = 8 m
Use n = 0.045

At Bank Height : Y = 1.8 m, V = 0.7 m/s, Q = 8 cms
At Channel Capacity : Y = 2.7 m, V = 1.0 m/s, Q = 18 cms

Historical Highwater Data :

HW was noted in June 1902 with Y = 1.8m. A 1970 report notes that the bridge had flowed full (Y = 2.4 – 2.7m). A 1990 BIM report notes a HWM with Y = 1.5m.

WSC Gauge 05EB016 (DA = 377km^2, 1976 – 1996) reports Q = 14cms in March 1985 (rating curve suggests 2.1m rise in stage). Other gauges in the area suggest a large runoff event in April 1974. 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 = 234 km^2.
Q_p = 58 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 = 1.0 m/s, Q = 18 cms.