BF 71515 Local Road Over Blindman River
Hydrotechnical Summary

Channel Capacity :

S = 0.0011
B = 9 m, h = 3.7 m, T_h = 19 m
Use n = 0.04

At Bank Height : Y = 3.7 m, V = 1.5 m/s, Q = 75 cms
At Channel Capacity : Y = 4.7 m, V = 1.9 m/s, Q = 135 cms

Historical Highwater Data :

There is a reference to flooding in 1931 and a note of damage and repair following a flood in July 1986. The current bridge was replaced with a higher gradeline just prior to the July 1990 flood, but there is no record of its impact at this site.

WSC gauge 05CC008 (DA = 352km^2, 1965 – Now) is located d/s with a highest reported Q = 330cms in July 1990, with other large events in July of 1981, 1982, and 1986 (190 – 230cms). The rating curve shows a stage rise of just under 5m for the July 1990 event, with Q based on extrapolation (highest gauged event Q = 114cms, Y = 2.5m) and may be in the 260 – 300cms range. The largest storm in the database for this area is July 1990 with 145mm of rainfall, followed by July 1986 with 125mm and July 1982 with 115mm.

Basin Runoff Potential :

d = 70mm, T_p = 20hrs, q = 1.0 cms/km^2.
Gross DA = 165 km^2.
Q_p = 165 cms.

Conclusion :

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

Recommended parameters : Y = 4.7 m, V = 1.9 m/s, Q = 135 cms.