BF 77480 Local Road Over Raven River
Hydrotechnical Summary

Channel Capacity :

S = 0.0015
B = 9 m, h = 2.7 m, T_h = 16 m
Use n = 0.04

At Bank Height : Y = 2.7 m, V = 1.5 m/s, Q = 50 cms
At Channel Capacity : Y = 3.7 m, V = 2.0 m/s, Q = 100 cms

Historical Highwater Data :

HW was noted at this site in June 1972 (Y = 2.4m). HW was noted at BF07145 u/s in June 1972 (Y = 2.1m), July 1982 (Y = 1.5m) and July 1999 (Y = 1.7m). HW was noted at BF73780 d/s in June 1972 with Y = 1.5m. HW has been observed at other sites on this stream in 1915, 1954, 1972, 1982, and 1999.

Gauge 05CB004 (DA = 647km^2, 1972 – Now) is located d/s, and reports the highest flows in June 1972 and July 1999. The largest storms in the database for this area are June 1970 with about 115mm of rainfall, and June 1928 with about 105mm.

Basin Runoff Potential :

d = 50mm, T_p = 20hrs, q = 0.7 cms/km^2.
Gross DA = 310 km^2.
Q_p = 220 cms.

Conclusion :

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

Recommended parameters : Y = 3.7 m, V = 2.0 m/s, Q = 100 cms.