BF 73780 Local Road Over Raven River
Hydrotechnical Summary

Channel Capacity :

S = 0.002
B = 9 m, h = 2.9 m, T_h = 16 m
Use n = 0.04

At Bank Height : Y = 2.9 m, V = 1.8 m/s, Q = 65 cms
At Channel Capacity : Y = 3.9 m, V = 2.3 m/s, Q = 120 cms

Historical Highwater Data :

HW was noted at this site in June 1972 (Y = 1.5m). A 1950 cross section notes a HWM with Y = 2.4m, and the 1987 BIM report notes Y = 2.0m. Erosion at the north abutment was noted in 2000. 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 = 370 km^2.
Q_p = 260 cms.

Conclusion :

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

Recommended parameters : Y = 3.9 m, V = 2.3 m/s, Q = 120 cms.