BF 01074 Hwy 3 Over Oldman River
Hydrotechnical Summary

Channel Capacity :

S = 0.0009
B = 130 m, h = 7 m, T_h = 190 m
Use AT equation

At Bank Height : Y = 7 m, V = 2.9 m/s, Q = 3100 cms
At Channel Capacity : Y = 8 m, V = 3.2 m/s, Q = 4000 cms

Historical Highwater Data :

HW has been noted at this site in 1902 (timber bridge washed away), 1908 (adjacent flooding, approach washout, estimated Y ~ 9.5m), 1923, 1942, 1953, 1964, 1972 (Ice), 1975, 1995, and 2005.

WSC Gauge 05AD007 (DA ~ 17000km^2, 1911 – Now) reports Q ~ 4600cms (1995, Y ~ 9m, gauged at Q ~ 4100cms), and Q ~ 3000 – 3500cms (1923, 1942, 1948, 1953, and 1975, Y ~ 7.5 – 8m).

Basin Runoff Potential :

Gross DA = 17000 km^2, runoff potential is not applicable

Conclusion :

Historic observations govern. Recommended parameters :

Y = 9 m, V = 3.4 m/s, Q = 5000 cms.
HW EL 827.5 (Dwg. 4170).