BF 75539 Hwy 58 Over Ponton River
Hydrotechnical Summary

Channel Capacity :

S = 0.0012
B = 25 m, h = 4 m, T_h = 55 m
Use AT Equation

At Bank Height : Y = 4 m, V = 2.0 m/s, Q = 300 cms
At Channel Capacity : Y = 5 m, V = 2.4 m/s, Q = 500 cms

Historical Highwater Data :

HW was noted in April 1968 (ice run, Y ~ 1.5m), May 1985, and May 1987. The 1963 design was based on Y ~ 5.5m.

Gauge 07BJ003 (DA = 2440 km^2, 1962 – Now) reports Q ~ 200cms (August 1984, May 1987 – gauged close to peak, stage increase ~ 4m).

Basin Runoff Potential :

Gross DA = 2410 km^2 (beyond range of technique)

Conclusion :

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

Y = 5 m, V = 2.4 m/s, Q = 500 cms.
EL 297.0 m (3548-P)