BF 73407 Hwy 35 Over Hay River
Hydrotechnical Summary

Channel Capacity :

S = 0.00011
B = 100 m, h = 8.0 m, T_h = 150 m
Use AT equation

At Bank Height : Y = 8.0 m, V = 1.3 m/s, Q = 1300 cms
At Channel Capacity : Y = 9.0 m, V = 1.4 m/s, Q = 1600 cms

Historical Highwater Data :

An ice jam and bridge washout occurred in 1946 with Y ~ 10m.

WSC Gauge 07OB003 (DA = 36900km^2, 1974 – Now) reports Q ~ 880cms (1977), and Q > 600cms (1979, 1988, 1989). The WSC rating curve suggests a 7m rise in stage at Q ~ 1000cms.

Basin Runoff Potential :

Gross DA = 36700 km^2, runoff potential is not applicable

Conclusion :

Historic observations govern. Recommended parameters :

Y = 9.0 m, V = 1.4 m/s, Q = 1600 cms
EL 302.0 m (2752-P)