BF 73837 Hwy 43 Over Waskahigan River
Hydrotechnical Summary

Channel Capacity :

S = 0.0012
B = 25 m, h = 3 m, T_h = 50 m
Use AT equation

At Bank Height : Y = 3 m, V = 1.6 m/s, Q = 180 cms
At Channel Capacity : Y = 4 m, V = 2.1 m/s, Q = 350 cms

Historical Highwater Data :

HW was observed in July 1982 (Y ~ 1.5 – 2m), August 1983 (Y ~ 1.5m), and July 2001 (drift at pier). The 2001 design was based on Y ~ 4.5m (Q ~ 530cms).

WSC gauge 07GG001 (DA = 1,040km^2, 1968 – Now) reports Q ~ 180cms (June 1979, June 1990, gauged at Q ~ 160cms, stage rise ~ 2.5m at peak), and Q ~ 150 – 160cms (July 1971, June 1978, July 1989, and June 1996).

Basin Runoff Potential :

Gross DA = 1,030 km^2 (beyond range of technique)

Conclusion :

Channel capacity estimate is consistent with historic highwater observations. Recommended parameters :

Y = 4.0 m, V = 2.1 m/s, Q = 350 cms.
EL 653.0 m (22028-P)