BF 75946 Hwy 2 Over Peace River
Hydrotechnical Summary

Channel Capacity :

S = 0.0003
B = 400 m, h = 13 m, T_h = 550 m
Use AT equation

At Bank Height : Y = 13 m, V = 2.8 m/s, Q = 17000 cms
At Channel Capacity : Y = 14 m, V = 2.9 m/s, Q = 20000 cms

Historical Highwater Data :

HW was observed in 1990 (Y ~ 14m) and high ice in 1992 (Y ~ 15m) and 1979 (Y ~ 14m). The 1965 design was based on Y ~ 12m.

WSC Gauge 07HA001 (DA = 186,000km^2, 1915-31, 1957 - Now) reports Q ~ 18500cms (~ 11m stage rise) in June 1990, Q ~ 15600cms in 1972, and Q ~ 14000 in 1965. The highest gauging was at Q ~ 12000cms in 1964.

Basin Runoff Potential :

DA = 186,000km^2, beyond range of basin runoff potential technique.

Conclusion :

Historic observations govern. Recommended parameters :

Y = 14.0m, V = 2.9 m/s, Q = 20000 cms
EL 318.0m (4202-P)