BF 74227 Hwy 88 Over Peace River
Hydrotechnical Summary

Channel Capacity :

S = 0.00005
B = 550 m, h = 13 m, T_h = 700 m
Use AT equation

At Bank Height : Y = 13 m, V = 1.4 m/s, Q = 11000 cms
At Channel Capacity : Y = 14 m, V = 1.5 m/s, Q = 13000 cms

Historical Highwater Data :

HW was observed in 1990 (Y ~ 15m). The 1971 design was based on Y ~ 15m (Q ~ 11500cms), and high ice to Y ~ 19m.

WSC Gauge 07HF001 (DA = 223,000km^2, 1915 – 1922, 1961 – 1978) reports Q ~ 12000cms in 1964 and 1965, and Q ~ 11000cms in 1918, 1967, and 1972. 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.

Basin Runoff Potential :

DA = 223,000km^2, beyond range of basin runoff potential technique.

Conclusion :

Historic observations govern. Recommended parameters :

Y = 15.0m, V = 1.5 m/s, Q = 150000 cms
EL 254.0m (5801-C)