BF 06716 Hwy 684 Over Peace River Tributary
Hydrotechnical Summary

Channel Capacity :

S = 0.05
B = 2 m, h = 1.0 m, T_h = 4 m
Use n = 0.06

At Bank Height : Y = 1.0 m, V = 2.7 m/s, Q = 8 cms
At Channel Capacity : Y = 1.5 m, V = 4.0 m/s, Q = 20 cms

Historical Highwater Data :

Severe icing was noted at this site many times between 1951 and 1966, with an ice trap dam built in 1957, although the source of much of the ice may be d/s. A washout occurred in the spring of 1955, with the d/s end of both pipes plugged by ice, and in 1956 ice was close to the u/s crown of the larger, higher pipe. Scour and a slide were noted d/s of the pipes in 1957. A 1951 report notes a HWM with Y = 1.5m and estimates Q ~ 8cms. A 1990 report estimates Q = 12cms and Y = 1.7m.

There are no WSC Gauges on this stream. Gauges in the area suggest HW events in April 1974, June 1990, and April 1997. The largest storms in the storm database are about 85mm of rainfall in July 1935 and July 1957.

Basin Runoff Potential :

d = 50 mm, T_p = 20 hrs, q = 0.7 cms/km^2.
Gross DA = 80 km^2.
Q_p = 55 cms.

Conclusion :

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

Recommended parameters : Y = 1.5 m, V = 4.0 m/s, Q = 20 cms.