BF 13987 Local Road Over Peace River Tributary
Hydrotechnical Summary

Channel Capacity :

S = 0.01
B = 2 m, h = 1.0 m, T_h = 4 m
Use n = 0.055

At Bank Height : Y = 1.0 m, V = 1.3 m/s, Q = 4 cms
At Channel Capacity : Y = 1.5 m, V = 2.0 m/s, Q = 10 cms

Historical Highwater Data :

Icing was noted in January 1965 to Y = 2.1m. Icing was also noted in the 1960 report. A 1964 report notes that water has been over the grade at the culvert crossing and estimates Q = 6cms. A 1996 BIM report notes a HWM with Y = 1m.

There are no WSC gauges on this stream. Gauges in the area suggest HW events in April 1979, 1990, and 1997. There are no storms in the storm database that exceed 100mm of rainfall for this area.

Basin Runoff Potential :

d = 60mm, T_p = 20 hrs, q = 0.83 cms/km^2.
Gross DA = 26 km^2.
Q_p = 21 cms.

Conclusion :

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

Recommended parameters : Y = 1.5 m, V = 2.0 m/s, Q = 10 cms.