BF 77160 Local Road Over Peace River Tributary
Hydrotechnical Summary

Channel Capacity :

S = 0.0022
B = 3 m, h = 1.4 m, T_h = 6 m
Use n = 0.05

At Bank Height : Y = 1.4 m, V = 0.9 m/s, Q = 6 cms
At Channel Capacity : Y = 2.1 m, V = 1.3 m/s, Q = 13 cms

Historical Highwater Data :

A 1969 report notes a HWM with Y = 1.8m and estimates Q = 11cms. The 1978 design was based on Q = 14cms.

There are no WSC gauges on this stream. Gauges in the area suggest HW events in May 1984, July 1988, June 1990, and April 1997. The largest storm in the storm database is 100mm of rainfall in July 1987.

Basin Runoff Potential :

d = 60mm, T_p = 20hrs, q = 0.83 cms/km^2.
Gross DA = 30 km^2.
Q_p = 25 cms.

Conclusion :

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

Recommended parameters : Y = 2.1 m, V = 1.3 m/s, Q = 13 cms.