BF 76483 Hwy 837 Over Red Deer River Tributary
Hydrotechnical Summary

Channel Capacity :

S = 0.09
B = 1 m, h = 0.5 m, T_h = 2 m
Use n = 0.06

At Bank Height : Y = 0.5 m, V = 2.3 m/s, Q = 2 cms
At Channel Capacity : Y = 1.0 m, V = 4.3 m/s, Q = 7 cms

Historical Highwater Data :

A 1995 note estimates Q = 1cms. A 1967 note states that the bridge was built to handle mud flows from the hill.

There are no gauges on this stream. Gauges in the area suggest large runoff events in April 1969, April 1996, and April 1997. There are no storms in the storm database exceeding 100mm for this area.

Basin Runoff Potential :

d = 35mm, T_p = 40hrs, q = 0.25 cms/km^2.
Gross DA = 2 km^2.
Q_p = 1 cms.

Conclusion :

Basin runoff potential governs for this site.

Recommended parameters : Y = 0.4 m, V = 2.1 m/s, Q = 1 cms.