BF 77531 Local Road Over Cutbank River
Hydrotechnical Summary

Channel Capacity :

S = 0.0045
B = 30 m, h ~ 3.5 m (scale from photo), T_h = 60 m
Use AT equation

At Bank Height : Y = 3.5 m, V = 3.1 m/s, Q = 500 cms
At Channel Capacity : Y = 4.5 m, V = 3.8 m/s, Q = 850 cms

Historical Highwater Data :

There are no HW observations at this site.

WSC Gauge 07GB001 (DA ~ 850km^2, 1970 – Now) reports Q ~ 800cms (July 1982, June 1972 – stage rise ~ 4m) and Q ~ 550cms (June 1990).

Basin Runoff Potential :

d = 70/90mm, q ~ 1.1 cms/km^2.
Gross DA = 840 km^2.
Q_p = 900 cms.

Conclusion :

The channel capacity estimate is consistent with historic observations. Recommended parameters :

Y = 4.5 m, V = 3.8 m/s, Q = 850 cms.
EL 86.0 m (M77531-96-5)