BF 80713 Local Road Over Big Mountain Ck Tributary
Hydrotechnical Summary

Channel Capacity :

S = 0.0017
B = 2 m, h = 1.0 m, T_h = 5 m
Use n = 0.055

At Bank Height : Y = 1.0 m, V = 0.5 m/s, Q = 2 cms
At Channel Capacity : Y = 1.5 m, V = 0.8 m/s, Q = 5 cms

Historical Highwater Data :

A 1984 report notes a HWM over the grade and estimates Q = 5 - 6cms. A 1998 BIM report notes a HWM with Y = 1.5m (drift at the u/s crown).

There are no WSC gauges on this stream. Gauges in the area suggest HW events in June 1972, July 1982, June 1990, and April 1997. The largest events in the storm database are about 140mm in July 1982, and 100mm in June 1965 and July 1987.

Basin Runoff Potential :

d = 60 mm, T_p = 20 hrs, q = 0.83 cms/km^2.
Gross DA = 22 km^2.
Q_p = 18 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 = 0.8 m/s, Q = 5 cms.