BF 70506 Local Road Over Bench Ck
Hydrotechnical Summary

Channel Capacity :

S = 0.0025
B = 4 m, h = 1.8 m, T_h = 8 m
Use n = 0.05

At Bank Height : Y = 1.8 m, V = 1.1 m/s, Q = 12 cms
At Channel Capacity : Y = 2.7 m, V = 1.6 m/s, Q = 30 cms

Historical Highwater Data :

HW was noted in 1954 (washout), and 1965 (over road, estimated Q = 20cms). A 1965 report estimates Q = 26cms. The 1988 design was based on Y = 2.3m and Q = 18cms.

There are no WSC gauges on this stream. Gauges in the area suggest large runoff events in July 1982 and July 1986. The storm database notes July 1965 (120mm) and June 1944 and June 1958 (105mm).

Basin Runoff Potential :

d = 60 mm, T_p = 20 hrs, q = 0.83 cms/km^2.
Gross DA = 88 km^2.
Q_p = 73 cms.

Conclusion :

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

Recommended parameters : Y = 2.7 m, V = 1.6 m/s, Q = 30 cms.