BF 78272 Local Road Over Swan Ck
Hydrotechnical Summary

Channel Capacity :

S = 0.008
B = 4 m, h = 1.4 m, T_h = 7 m
Use n = 0.05

At Bank Height : Y = 1.4 m, V = 1.7 m/s, Q = 15 cms
At Channel Capacity : Y = 2.1 m, V = 2.5 m/s, Q = 30 cms

Historical Highwater Data :

A 1971 report notes a HWM with Y = 1.2m. A 1975 report notes a HWM with Y = 0.9m and estimates Q = 4cms. A 2000 BIM report notes a HWM with Y = 1.5m (drift below bottom flange, noted as Y = 2.2m in 2002 report), and refers to washout of a backwall in 1999.

There are no WSC gauges on this stream. Gauges in the area suggest HW events in June 1965, June 1970, June 1972, July 1986, June 1990, and July 1999. The storm database shows the largest storms to be June 1970 and June 1972 with 135mm of rainfall, and July 1999 with 115mm.

Basin Runoff Potential :

d = 80 mm, T_p = 20 hrs, q = 1.1 cms/km^2.
Gross DA = 41 km^2.
Q_p = 45 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 = 2.5 m/s, Q = 30 cms.