BF 08786 Local Road Over St. Lina Ck
Hydrotechnical Summary

Channel Capacity :

S = 0.0015
B = 4 m, h = 1.5 m, T_h = 8 m
Use n = 0.045

At Bank Height : Y = 1.5 m, V = 0.9 m/s, Q = 8 cms
At Channel Capacity : Y = 2.3 m, V = 1.3 m/s, Q = 20 cms

Historical Highwater Data :

HW was noted in April 1997 (Y = 2.9m u/s, drift and grass above u/s crown, Q ~ 12 – 15cms if no blockage). A 1968 report notes a HWM with Y ~ 2m and estimates Q = 23cms.

There are no WSC gauges on this stream. Gauges in the area suggest HW events in July 1970, April 1971, April 1974, April 1997, and June 1997. The largest storms in the storm database are about 125mm in June 1970, and about 95mm in June 1962 and June 1973.

Basin Runoff Potential :

d = 40 mm, T_p = 20 hrs, q = 0.55 cms/km^2.
Gross DA = 173 km^2.
Q_p = 95 cms.

Conclusion :

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

Recommended parameters : Y = 2.3 m, V = 1.3 m/s, Q = 20 cms.