BF 71092 Local Road Over French Ck
Hydrotechnical Summary

Channel Capacity :

S = 0.0055
B = 6 m, h = 1.5 m, T_h = 10 m
Use n = 0.045

At Bank Height : Y = 1.5 m, V = 0.6 m/s, Q = 7 cms
At Channel Capacity : Y = 2.3 m, V = 0.8 m/s, Q = 15 cms

Historical Highwater Data :

HW was noted in 1954 (damage – no details). A 2002 assessment estimates Q = 17cms. HW was noted at BF70060 u/s in 1971 and May 1981.

There are no WSC gauges on this stream. Gauges in the area suggest HW events in April 1974, April 1982, July 1986, and April 1997. The largest storms in the storm database are about 120mm in July 1953 and 100mm in July 1988.

Basin Runoff Potential :

d = 40 mm, T_p = 20 hrs, q = 0.55 cms/km^2.
Gross DA = 370 km^2.
Q_p = 200 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 = 0.8 m/s, Q = 15 cms.