BF 71361 Local Road Over Shoal Ck Tributary
Hydrotechnical Summary

Channel Capacity :

S = 0.0019
B = 3 m, h = 1.5 m, T_h = 6 m
Use n = 0.05

At Bank Height : Y = 1.5 m, V = 0.8 m/s, Q = 6 cms
At Channel Capacity : Y = 2.3 m, V = 1.2 m/s, Q = 14 cms

Historical Highwater Data :

A 1953 report notes a HWM with Y = 1.5m and estimates Q = 11cms. A 1971 report notes that water has been over the grade at the small culvert crossing, and estimates Q = 7cms.

There are no gauges on this stream. Gauges in the area suggest large runoff events in April 1974, April 1982, and July 1986. The largest storms in the storm database are 165mm of rainfall in August 1957, 115mm in June 1965, and 105mm in July 1953.

Basin Runoff Potential :

d = 40 mm, T_p = 20 hrs, q = 0.55 cms/km^2.
Gross DA = 65 km^2.
Q_p = 36 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 = 1.2 m/s, Q = 14 cms