BF 78755 Hwy 64 Over Jack Ck
Hydrotechnical Summary

Channel Capacity :

S = 0.0008
B = 5 m, h = 1.6 m, T_h = 9 m
Use n = 0.045

At Bank Height : Y = 1.6 m, V = 0.7 m/s, Q = 8 cms
At Channel Capacity : Y = 2.4 m, V = 1.0 m/s, Q = 18 cms

Historical Highwater Data :

A 1978 report notes a HWM with Y = 2.4m and estimates Q = 21cms. A 1992 BIM report notes a HWM with Y = 1.0m (no description). A 2003 newspaper article refers to flooding on this stream with some roads overtopped.

There are no WSC gauges on this stream. Gauges in the area suggest HW events in April 1974, April 1979, April 1984, June 1990, and April 1997. The largest events in the storm database are July 1987 and June 1988 with 100mm of rainfall.

Basin Runoff Potential :

d = 50mm, T_p = 20 hrs, q = 0.7 cms/km^2.
Gross DA = 84 km^2.
Q_p = 60 cms.

Conclusion :

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

Recommended parameters : Y = 2.4 m, V = 1.0 m/s, Q = 18 cms.