BF 13411 Local Road Over Ross Ck Tributary
Hydrotechnical Summary

Channel Capacity :

S = 0.009
B = 2 m, h = 1.0 m, T_h = 4 m
Use n = 0.055

At Bank Height : Y = 1.0 m, V = 1.3 m/s, Q = 4 cms
At Channel Capacity : Y = 1.5 m, V = 1.9 m/s, Q = 9 cms

Historical Highwater Data :

HW was noted in March 1994 with Y = 1.1m and Q = 8cms. A 1950 report notes a HWM with Y = 0.6 – 0.9m. The 1989 design was based on Y = 1.7m and Q = 10cms.

There are no gauges on this stream. Gauges in the area suggest HW events in 1950's, March 1994, and June 2002. The storm database notes storms in June 2002 (170mm), June 1998 (135mm), and September 1986 (80mm).

Basin Runoff Potential :

d = 35mm, T_p = 40hrs, q = 0.3 – 0.4 cms/km^2 (Cypress Hills)
Gross DA = 22 km^2.
Q_p = 8 cms.

Conclusion :

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

Recommended parameters : Y = 1.5 m, V = 1.9 m/s, Q = 9 cms.