BF 72914 Local Road Over Threehills Ck Tributary
Hydrotechnical Summary

Channel Capacity :

S = 0.004
B = 1.5 m, h = 1.2 m, T_h = 4 m
Use n = 0.05

At Bank Height : Y = 1.2 m, V = 1.0 m/s, Q = 3 cms
At Channel Capacity : Y = 1.8 m, V = 1.5 m/s, Q = 8 cms

Historical Highwater Data :

A 1958 report notes a HWM over the grade with Y = 1.8m and estimates Q = 11cms. A 1963 report notes a HWM to the deck (Y ~ 2m) and estimates Q = 15cms.

There are no gauges on this stream. Gauges in the area suggest HW events in April 1969, 1971, 1974, 1996, and 1997. The largest storm in the storm database is June 1928 with about 95mm of rainfall.

Basin Runoff Potential :

d = 35 mm, T_p = 40 hrs, q = 0.25 cms/km^2.
Gross DA = 29 km^2.
Q_p = 7 cms.

Conclusion :

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

Recommended parameters : Y = 1.8 m, V = 1.5 m/s, Q = 8 cms.