BF 72747 Local Road Over Muriel Ck
Hydrotechnical Summary

Channel Capacity :

S = 0.001
B = 5 m, h = 1.5 m, T = 8 m
Use n = 0.045

At Bank Height : Y = 1.5 m, V = 0.7 m/s, Q = 7 cms
At Channel Capacity : Y = 2.3 m, V = 1.0 m/s, Q = 16 cms

Historical Highwater Data :

A report from 1953 notes a HWM to the grade with Y = 1.5m and estimates Q = 7cms. A report from 1955 notes a HWM to the grade with Y = 2m u/s of the culvert and estimates Q = 17cms. The 1999 design was based on Y = 2.2m and Q = 30cms.

There are no WSC gauges on this stream. Gauges in the area have noted HW in April 1974 and 1997. The largest storms in the storm database are June 1962 with about 135mm of rainfall, followed by June 1986 with about 115m.

Basin Runoff Potential :

d = 40mm, T_p = 20hrs, q = 0.55 cms/km^2.
Gross DA = 880 km^2.
Q_p = 485 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 = 1.0 m/s, Q = 16 cms.