BF 74802 Local Road Over Peno Ck
Hydrotechnical Summary

Channel Capacity :

S = 0.004
B = 2 m, h = 1.0 m, T_h = 5 m
Use n = 0.05

At Bank Height : Y = 1.0 m, V = 0.9 m/s, Q = 3 cms
At Channel Capacity : Y = 1.5 m, V = 1.4 m/s, Q = 8 cms

Historical Highwater Data :

A 1958 report notes water over the road and estimates Q = 10cms. The 2004 design was based on Y = 1.4m and Q = 8cms.

There are no WSC gauges on Peno Ck. Gauges in the area suggest HW events in April 1971, April 1974, April 1979, July 1986, and April 1997. There are no storms in the storm database that exceed 100mm for this area.

Basin Runoff Potential :

d = 40 mm, Tp = 20 hrs, q = 0.55 cms/km^2.
Gross DA = 120 km^2.
Q_p = 66 cms.

Conclusion :

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

Recommended parameters : Y = 1.5 m, V = 1.4 m/s, Q = 8 cms.