BF 81968 Local Road Over Driedmeat Ck
Hydrotechnical Summary

Channel Capacity :

S = 0.0002
B = 3 m, h = 1.4 m, T_h = 7 m
Use n = 0.05

At Bank Height : Y = 1.4 m, V = 0.3 m/s, Q = 2 cms
At Channel Capacity : Y = 2.1 m, V = 0.4 m/s, Q = 5 cms

Historical Highwater Data :

There is no HW data for this site. A 1994 design was based on Q = 5cms, Y = 1.0m. A 1996 BIM report notes a HWM with Y = 1.0m. HW data for April 1974 at BF71345 d/s suggests Q = 5 – 6cms, Y = 2.4m.

WSC Gauge 05FA018 (DA = 1150km^2, 1976 – 1995) located d/s reports Q = 16cms in July 1983. Other nearby gauges suggest possible HW for this site in April 1974. The storm database indicates that the largest storms were June 1970 and June 1973 with about 100mm of rainfall.

Basin Runoff Potential :

d = 35mm, T_p = 20 hrs, q = 0.25 cms/km^2.
Gross DA = 74 km^2.
Q_p = 19 cms.

Conclusion :

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

Recommended parameters : Y = 2.1 m, V = 0.4 m/s, Q = 5 cms.