BF 73898 Local Road Over Lalby Ck
Hydrotechnical Summary

Channel Capacity :

S = 0.002
B = 4 m, h = 1.4 m, T_h = 7 m (improved channel)
Use n = 0.045

At Bank Height : Y = 1.4 m, V = 1.0 m/s, Q = 7 cms
At Channel Capacity : Y = 2.1 m, V = 1.4 m/s, Q = 17 cms

Historical Highwater Data :

HW was noted in May 1965 (above u/s crown, over grade, Q = 11 – 14cms), and April 1997 (Y = 2m, reported in BIM report). A 1963 report notes a HWM with Y = 1.5m and estimates Q = 9cms.

WSC Gauge 07GJ005 (DA = 160km^2, 1978 – 1995) reports Q = 37cms (stage rise = 3.0m) in May 1979 (gauging info not available). There are no storms in the storm database with more than 100mm for this area.

Basin Runoff Potential :

d = 60 mm, T_p = 20 hrs, q = 0.83 cms/km^2.
Gross DA = 76 km^2.
Located just d/s of lake, routing suggests Q_p ~ 12 cms.

Conclusion :

Basin runoff potential governs for this site and is consistent with historic observations.

Recommended parameters : Y = 1.8 m, V = 1.2 m/s, Q = 12 cms.