BF 02016 Local Road Over Stretton Ck
Hydrotechnical Summary

Channel Capacity :

S = 0.002
B = 3 m, h = 1.6 m, T_h = 8 m
Use n = 0.05

At Bank Height : Y = 1.6 m, V = 0.9 m/s, Q = 8 cms
At Channel Capacity : Y = 2.4 m, V = 1.3 m/s, Q = 20 cms

Historical Highwater Data :

HW was noted in April 1974 to 0.3m over the crown u/s and 0.5m below the crown d/s (Y = 2.5m) with an estimated Q = 18 cms.

WSC gauge 05EE005 (DA = 82km^2, 1979 – Now) reports Q = 5cms in April 1997 (gauged close to peak, stage rise = 0.8 – 1.0m). The largest storm in the database for this area is June 1962 with about 105 mm of rainfall.

Basin Runoff Potential :

d = 35 mm, T_p = 40 hrs, q = 0.25 cms/km^2.
Gross DA = 86 km^2.
Q_p = 22 cms.

Conclusion :

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

Recommended parameters : Y = 2.4 m, V = 1.3 m/s, Q = 20 cms.