BF 76738 Local Road Over Teepee Ck
Hydrotechnical Summary

Channel Capacity :

S = 0.0013
B = 4 m, h = 1.6 m, T = 8 m
Use n = 0.045

At Bank Height : Y = 1.6 m, V = 0.8 m/s, Q = 8 cms
At Channel Capacity : Y = 2.4 m, V = 1.2 m/s, Q = 20 cms

Historical Highwater Data :

A 1967 report estimates Q = 25 – 32cms. A 1968 survey notes a HWM with Y = 2.1m. A 1994 BIM report notes a HWM with Y = 2.5m.

Gauge 07JD004 (1981 – Now, DA = 136km^2) reports Q = 23cms in April 1987 (gauged at Q = 22cms, stage rise = 2.1m, includes overbank transfer flow), and Q = 19cms in April 1997. The storm database notes about 140mm in July 1987 and June 1991, and 115mm in June 1986 and July 1998.

Basin Runoff Potential :

d = 40 mm, T_p = 20 hrs, q = 0.55 cms/km^2.
Gross DA = 115 km^2.
Q_p = 63 cms.

Conclusion :

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

Recommended parameters : Y = 2.4 m, V = 1.2 m/s, Q = 20 cms.