BF 78142 Local Road Over Ram River
Hydrotechnical Summary

Channel Capacity :

S = 0.0045
B = 40 m, h = 2.4 m, T_h = 70 m
Use AT equation

At Bank Height : Y = 2.5 m, V = 2.5 m/s, Q = 350 cms
At Channel Capacity : Y = 3.5 m, V = 3.3 m/s, Q = 700 cms

Historical Highwater Data :

HW was observed at this site in 1963 (Y ~ 3.0m), 1965 (bridge washed out), June 1970 (flood damage, span added), June 1972 (flood damage, span added), and July 1981 (0.6m below bottom of acrow section, Y ~ 3.3m, appears high compared to WSC stage data). Two bridge reports from 1975 refer to HWM with Y = 2.5 – 2.7m. One report refers to 1915 event with Q ~ 950cms, but no documentation is provided).

WSC Gauge 05DC006 (DA = 1860km^2, 1967 – Now) reports Q ~ 470cms (June 1972), Q ~ 420cms (July 1999, gauged at Q ~ 300cms, stage rise ~ 1.8m), and Q ~ 340cms (July 1981).

Basin Runoff Potential :

Gross DA = 1850 km^2 (beyond range of technique)

Conclusion :

The channel capacity estimate is consistent with historic observations. Recommended parameters :

Y = 3.5 m, V = 3.3 m/s, Q = 700 cms.
EL 1056.0 m (M-78142-98)