BF 08290 Local Road Over Irrigation Ck
Hydrotechnical Summary

Channel Capacity :

S = 0.0008
B = 6 m, h = 2.0 m, T_h = 12 m
Use n = 0.045

At Bank Height : Y = 2.0 m, V = 0.8 m/s, Q = 15 cms
At Channel Capacity : Y = 3.0 m, V = 1.1 m/s, Q = 35 cms

Historical Highwater Data :

The 1992 BIM report notes a HWM with Y = 1.2m. An old bridge at BF06777 u/s washed out in 1928.

WSC gauge 05AF008 (DA = 202km^2, 1917 – 1930, 1936) is located u/s and reports the largest flows in March 1928 (Q = 11cms), and April 1922 (Q = 8cms). Gauges in the area suggest HW events in March 1943, April 1955, and March 1994. The largest storms in the database for this area are June 2002 with about 140mm of rainfall, and September 1986 and June 1998 with 100mm.

Basin Runoff Potential :

d = 35mm, T_p = 20hrs, use q = 0.35cms/km^2 (Cypress Hills)
Gross DA = 225 km^2.
Q_p = 80 cms.

Conclusion :

Channel capacity governs for this site and is consistent with historic observations and within the basin runoff potential.

Recommended parameters : Y = 3.0 m, V = 1.1 m/s, Q = 35 cms.