BF 77271 Hwy 743 Over Whitemud River Tributary
Hydrotechnical Summary

Channel Capacity :

S = 0.055
B = 1 m, h = 0.5 m, T_h = 2 m
Use n = 0.06

At Bank Height : Y = 0.5 m, V = 1.8 m/s, Q = 1 cms
At Channel Capacity : Y = 1.0 m, V = 3.4 m/s, Q = 6 cms

Historical Highwater Data :

Icing was notes in 1971 and 1990. A 1997 BIM report notes a HWM with Y = 3m (no description).

There are no gauges on this stream. Gauges in the area suggest large runoff events in April 1979, June 1990, and April 1997. The largest storm in the database for this area is 120mm in August 1982.

Basin Runoff Potential :

d = 40 mm, T_p = 20 hrs, q = 0.55 cms/km^2.
Gross DA = 23 km^2.
Q_p = 13 cms.

Conclusion :

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

Recommended parameters : Y = 1.0 m, V = 3.4 m/s, Q = 6 cms.