# BF 78744 Local Road Over Whitemud River Tributary
# Hydrotechnical Summary

**Channel Capacity** :

S = 0.013
B = 1.5 m, h = 1.0 m, $T_h$ = 3 m.
Use n = 0.055

At Bank Height : Y = 1.0 m, V = 1.4 m/s, Q = 3 cms
At Channel Capacity : Y = 1.5 m, V = 2.2 m/s, Q = 8 cms

**Historical Highwater Data :**

A washout was noted in 1976. A 1976 report estimates Q = 4cms. A 1999 BIM report notes a HWM with Y = 2m.

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

**Basin Runoff Potential :**

d = 40mm, $T_p$ = 20hrs, q = 0.55 cms/$km^2$.
Gross DA = 28 $km^2$.
$Q_p$ = 15 cms.

**Conclusion :**

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

Recommended parameters : Y = 1.5 m, V = 2.2 m/s, Q = 8 cms.