# BF 75047 Local Road Over Fourth Ck Tributary
# Hydrotechnical Summary

**Channel Capacity** :

S = 0.004
B = 3 m, h = 1.6 m, $T_h$ = 7 m
Use n = 0.05

At Bank Height : Y = 1.6 m, V = 1.3 m/s, Q = 10 cms
At Channel Capacity : Y = 2.4 m, V = 1.9 m/s, Q = 25 cms

**Historical Highwater Data :**

HW was noted in June 1963 (Q ~ 5cms), and April 1997 (drift just above u/s crown, Q ~ 12cms). A 1958 report estimates Q = 9cms and notes a HWM with Y = 2.4m. A large drop at the outlet and steep d/s banks have been noticed since 1992.

There are no WSC gauges on this stream. Gauges in the area suggest HW events in May 1984, July 1988, June 1990, and April 1997. The largest storms in the storm database are 100mm of rainfall in June 1990 and June 1993.

**Basin Runoff Potential :**

d = 60mm, $T_p$ = 20hrs, q = 0.83 cms/km$^2$.
Gross DA = 70 km$^2$.
$Q_p$ = 58 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 = 1.9 m/s, Q = 25 cms.