# BF 75757 Local Road Over Gunns Ck
# Hydrotechnical Summary

**Channel Capacity** :

S = 0.004
B = 2 m, h = 1.3 m, $T_h$ = 4 m
Use n = 0.05

At Bank Height : Y = 1.3 m, V = 1.0 m/s, Q = 4 cms
At Channel Capacity : Y = 2.0 m, V = 1.6 m/s, Q = 10 cms

**Historical Highwater Data :**

HW was noted in 1997 and 2003 (Y = 4m u/s, estimated Q = 10cms, possibly affected by blockage). The 1963 design was based on Q = 8cms.

There are no WSC gauges on this stream. Gauges in the area suggest HW events in May 1979, June 1996, and April 1997. The largest events in the storm database are about 100mm in July 1983 and June 1993.

**Basin Runoff Potential :**

d = 60mm, $T_p$ = 20 hrs, q = 0.83 cms/$km^2$.
Gross DA = 17 $km^2$.
$Q_p$ = 14 cms.

**Conclusion :**

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

Recommended parameters : Y = 2.0 m, V = 1.6 m/s, Q = 10 cms.