# BF 01312 Local Road Over Fish Ck
# Hydrotechnical Summary

**Channel Capacity** :

S = 0.0035
B = 15 m, h = 2.5 m, $T_h$ = 25 m
Use AT equation

At Bank Height : Y = 2.5 m, V = 2.3 m/s, Q = 120 cms
At Channel Capacity : Y = 3.5 m, V = 3.0 m/s, Q = 230 cms

**Historical Highwater Data :**

HW was observed in 1900 (approach washout). The 1993 design was based on Y ~ 3.5m (Q ~ 210cms).

WSC gauge 05BK001 (DA ~ 260km$^2$, 1908 – 1916, 1956 – Now) reports Q ~ 480cms (June 2005, unrealistic hydrograph, gauged at Q ~ 175cms, stage rise ~ 2.7m, no HWM along stream match extra 1m to reported flow), and Q ~ 200cms (June 1915, unrealistic hydrograph, gauged near peak).

**Basin Runoff Potential :**

d = 80 mm, $T_p$ = 20 hrs, q = 1.1 cms/km$^2$.
Gross DA = 265 km$^2$.
$Q_p$ = 300 cms.

**Conclusion :**

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

Y = 3.5 m, V = 3.0 m/s, Q = 230 cms.
EL 100.5 m (16895-C)