# BF 70271 Local Road Over Kilini Ck
# Hydrotechnical Summary

**Channel Capacity** :

S = 0.001
B = 5 m, h = 1.5 m, $T_h$ = 8 m
Use n = 0.05

At Bank Height : Y = 1.5 m, V = 0.7 m/s, Q = 6 cms
At Channel Capacity : Y = 2.3 m, V = 0.9 m/s, Q = 15 cms

**Historical Highwater Data :**

The 1957 report notes that the bridge was designed based on Y = 1.5m. There are no other HW observations at this site. HW was noted at BF13905 u/s in 1954, 1965 and 1986. HW was noted at BF71083 d/s in 1950.

There are no WSC gauges on this stream. Gauges in the area report HW events in April 1971, April 1974, July 1986, and July 1990. The largest storms in the database for this area are June 1944 with about 150mm of rainfall, and July 1982 with about 120mm of rainfall.

**Basin Runoff Potential :**

d = 50mm, $T_p$ = 20hrs, q = 0.7 cms/km$^2$.
Gross DA = 118 km$^2$.
$Q_p$ = 85 cms.

**Conclusion :**

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

Recommended parameters : Y = 2.3 m, V = 0.9 m/s, Q = 15 cms.