BF 13905 Hwy 43 Over Kilini Ck
Hydrotechnical Summary

Channel Capacity :

S = 0.0007
B = 3 m, h = 1.4 m, T_h = 6 m
Use n = 0.05

At Bank Height : Y = 1.4 m, V = 0.5 m/s, Q = 3 cms
At Channel Capacity : Y = 2.1 m, V = 0.7 m/s, Q = 7 cms

Historical Highwater Data :

HW is reported in June 1954 with water 0.5m below the d/s crown at a previous pipe, with a note of flooding complaints due to the pipe being placed too high. HW was also noted in 1965 with water 0.7m above the u/s crown and 0.2m below the d/s crown at the 1.7m x 2.5m pipe, with estimated Q = 6cms. HW has also been reported in July 1986 with water 0.3m below the d/s crown.

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 = 51 km^2.
Q_p = 35 cms.

Conclusion :

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

Recommended parameters : Y = 2.1 m, V = 0.7 m/s, Q = 7 cms.