BF 00329 Hwy 814 Over Irvine Ck
Hydrotechnical Summary

Channel Capacity :

S = 0.0015
B = 3 m, h = 1.2 m, T = 5 m
Use n = 0.05

At Bank Height : Y = 1.2 m, V = 0.7 m/s, Q = 3 cms
At Channel Capacity : Y = 1.8 m, V = 1.0 m/s, Q = 8 cms

Historical Highwater Data :

HW was observed in 1955 with water over the grade (Y = 1.8 – 2.0m), and in April 1963 with Y = 0.5m. A 1977 report notes that water has been close to the deck due to backwater from a d/s structure.

There are no WSC gauges on this stream. Gauges in the area indicate the largest runoff event to be April 1974, with others in July 1990 and April 1982. The largest storms for this area in the database are June 1965 with about 130mm of rainfall, and July 1937 with about 110mm.

Basin Runoff Potential :

d = 40 mm, T_p = 20 hrs, q = 0.55 cms/km^2.
DA = 109 km^2.
Q_p = 60 cms.

Conclusion :

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

Recommended parameters : Y = 1.8 m, V = 1.0 m/s, Q = 8 cms.