BF 86038 Local Road Over Eureka River Tributary
Hydrotechnical Summary

Channel Capacity :

S = 0.02
B = 1.5 m, h = 0.7 m, T_h = 3 m
Use n = 0.06

At Bank Height : Y = 0.7 m, V = 1.4 m/s, Q = 2 cms
At Channel Capacity : Y = 1.2 m, V = 2.3 m/s, Q = 8 cms

Historical Highwater Data :

A 1999 BIM inspection noted a HWM to Y = 3.0m u/s based on drift above the inlet.

There are no WSC gauges on this stream. Gauge 07FD013 (DA = 754km^2, 1976 – Now) on Eureka River d/s reports the highest flow on record in April 1997. There are no storms in the database that exceed 100mm in rainfall for this area.

Basin Runoff Potential :

d = 60 mm, T_p = 20 hrs, q = 0.83 cms/km^2.
Gross DA = 18 km^2.
Q_p = 15 cms.

Conclusion :

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

Recommended parameters : Y = 1.2 m, V = 2.3 m/s, Q = 8 cms.