BF 08821 Local Road Over Anderson Ck
Hydrotechnical Summary

Channel Capacity :

S = 0.001
B = 6 m, h = 3.0 m, T_h = 13 m
Use n = 0.04

At Bank Height : Y = 3.0 m, V = 1.2 m/s, Q = 35 cms
At Channel Capacity : Y = 4.0 m, V = 1.6 m/s, Q = 65 cms

Historical Highwater Data :

HW was noted in July 1986 (over the grade, Y ~ 3.6m), and July 1990 (over the grade, Y = 3.6m). A 1959 report notes a HWM over the deck (Y = 3.3m).

There are no WSC gauges on Anderson Ck. Gauges on the Blindman River d/s suggest HW events in 1974, 1981, 1986, 1990, and 2000. The largest storms in the storm database for this area are July 1990 (140mm), July 1982 and July 1986 (120mm).

Basin Runoff Potential :

d = 70 mm, T_p = 20 hrs, q = 1.0 cms/km^2.
Gross DA = 74 km^2.
Q_p = 74 cms.

Conclusion :

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

Recommended parameters : Y = 4.0 m, V = 1.6 m/s, Q = 65 cms.