BF 07086 Local Road Over Carrot Ck
Hydrotechnical Summary

Channel Capacity :

S = 0.0018
B = 9 m, h = 4 m, T_h = 18 m
Use n = 0.04

At Bank Height : Y = 4.0 m, V = 2.0 m/s, Q = 110 cms
At Channel Capacity : Y = 5.0 m, V = 2.5 m/s, Q = 180 cms

Historical Highwater Data :

HW was noted in 1972 (over the deck, Y ~ 5m), and July 1986 (Y = 5.2m, some headslope scour).

There are no WSC gauges on Carrot Ck. Nearby gauges suggest HW in July 1986. The storm database shows rainfall of about 140mm in June 1944.

Basin Runoff Potential :

d = 60 mm, T_p = 20 hrs, q = 0.83 cms/km^2.
Gross DA = 207 km^2.
Q_p = 170 cms.

Conclusion :

The channel capacity estimate is consistent with historic HW observations and is close to the basin runoff potential.

Recommended parameters : Y = 5.0 m, V = 2.5 m/s, Q = 180 cms.