BF 79254 Local Road Over Clouston Creek
Hydrotechnical Summary

Channel Capacity :

S = 0.0055
B = 3 m, h = 2 m, T_h = 6 m.
Use n = 0.055

At Bank Height : Y = 2.0 m, V = 1.5 m/s, Q = 13 cms
At Channel Capacity : Y = 3.0 m, V = 2.2 m/s, Q = 35 cms

Historical Highwater Data :

HW was noted in July 1983 with Y = 3m d/s and 6 – 7m ponding u/s (estimated Q = 74cms but assumes no blockage). The 1980 design was based on Q = 17cms. A 1998 BIM report notes drift to the u/s crown.

There are no WSC gauges on this stream. Gauges in the area suggest HW events in June 1990 and July 1983. There are no storms in the database that exceed 100mm of rainfall.

Basin Runoff Potential :

d = 60 mm, T_p = 20 hrs, q = 0.83 cms/km^2.
Gross DA = 42 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 = 3.0 m, V = 2.2 m/s, Q = 35 cms.