BF 76067 Local Road Over Asplund Ck
Hydrotechnical Summary

Channel Capacity :

S = 0.0015
B = 6 m, h = 3.3 m, T_h = 12 m
Use n = 0.045

At Bank Height : Y = 3.3 m, V = 1.4 m/s, Q = 40 cms
At Channel Capacity : Y = 4.3 m, V = 1.8 m/s, Q = 75 cms

Historical Highwater Data :

A 1964 report notes a HWM with Y = 4.3m. A 2007 BIM report notes a HWM with Y = 3.0m. A recent design report refers to an observation from a local landowner that the bridge has been overtopped 3 times between 1965 and 2007 (suggests Y = 4 – 4.5m).

There are no WSC Gauges on this stream. Gauges in the area suggest HW events in July 1971, August 1987, June 1990, June 1996, and July 1997. The largest storms in the storm database are 160mm of rainfall in August 1987, and about 110mm in June 1961 and June 1983.

Basin Runoff Potential :

d = 70 mm, T_p = 20 hrs, q = 1.0 cms/km^2.
Gross DA = 245 km^2.
Q_p = 245 cms.

Conclusion :

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

Recommended parameters : Y = 4.3 m, V = 1.8 m/s, Q = 75 cms.