BF 74694 Local Road Over Whitefish Ck Tributary
Hydrotechnical Summary

Channel Capacity :

S = 0.0012
B = 4 m, h = 1.2 m, T_h = 7 m
Use n = 0.045

At Bank Height : Y = 1.2 m, V = 0.7 m/s, Q = 5 cms
At Channel Capacity : Y = 1.8 m, V = 1.0 m/s, Q = 10 cms

Historical Highwater Data :

HW was noted in April 1974 with water over the grade (Y = 1.2m) and estimated Q = 9cms. A 1956 report notes that water has been over the grade and estimates Q = 4cms. A 1965 report estimates Q = 3 – 9cms.

There are no gauges on this stream. Gauges in the area suggest HW events in April 1971, April 1974, and June 1997. The largest storm in the storm database is June 1970 with about 110mm of rainfall.

Basin Runoff Potential :

d = 40 mm, T_p = 20 hrs, q = 0.55 cms/km^2.
Gross DA = 144 km^2.
Q_p = 80cms.

Conclusion :

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

Recommended parameters : Y = 1.8 m, V = 1.0 m/s, Q = 10 cms.