BF 78525 Local Road Over Whitecourt Ck Tributary
Hydrotechnical Summary

Channel Capacity :

S = 0.013
B = 2 m, h = 1.2 m, T_h = 4 m
Use n = 0.06

At Bank Height : Y = 1.2 m, V = 1.6 m/s, Q = 6 cms
At Channel Capacity : Y = 1.8 m, V = 2.4 m/s, Q = 15 cms

Historical Highwater Data :

Drift has been noted above the u/s crown in 1997, 1998, and 2003 (up to 1.8m above the u/s crown). A 2004 photo notes backwater from a beaver dam to 0.7m below the d/s crown and ponding u/s with overflow from a small pipe to the NW (likely blockage of this pipe).

There are no WSC gauges on this stream. Gauges in the area suggest HW events in June 1985, August 1989, and June 2001. The largest storms in the database for this area are 150mm in June 1944, 135mm in June 1965, and 125mm in July 1990.

Basin Runoff Potential :

d = 60mm, T_p = 20hrs, q = 0.83 cms/km^2.
Gross DA = 10 km^2.
Q_p = 8 cms.

Conclusion :

Basin runoff potential governs for this site.

Recommended parameters : Y = 1.4 m, V = 1.9 m/s, Q = 8 cms.