BF 70550 Local Road Over North Sask. River Tributary
Hydrotechnical Summary

Channel Capacity :

S = 0.007
B = 1.5 m, h = 1.0 m, T_h = 3 m
Use n = 0.055

At Bank Height : Y = 1.0 m, V = 1.0 m/s, Q = 2 cms
At Channel Capacity : Y = 1.5 m, V = 1.6 m/s, Q = 6 cms

Historical Highwater Data :

A 1993 BIM report notes a HWM with Y = 1m. The 2003 design was based on Y = 1.5m and Q = 9cms.

There are no WSC gauges on this stream. Gauges in the area suggest HW events in June 1965, April 1974, July 1982, July 1986, and July 1990. The storm database notes storms in July 1982 (165mm), June 1944 (150mm), and June 1965 and August 1969 (100mm).

Basin Runoff Potential :

d = 60 mm, T_p = 20 hrs, q = 0.83 cms/km^2.
Gross DA = 5 km^2.
Q_p = 4 cms.

Conclusion :

Basin runoff potential governs for this site.

Recommended parameters : Y = 1.3 m, V = 1.4 m/s, Q = 4 cms.