BF 00296 Hwy 16 Over Oldman Ck
Hydrotechnical Summary

Channel Capacity :

S = 0.004
B = 3 m, h = 1.3 m, T_h = 6 m
Use n = 0.05

At Bank Height : Y = 1.3 m, V = 1.1 m/s, Q = 6 cms
At Channel Capacity : Y = 2.0 m, V = 1.6 m/s, Q = 16 cms

Historical Highwater Data :

Only HW observation on file is 2003 BIM HW (Y = 1.6m). 1967 design estimate was for Y = 1.2m, Q = 5cms. At BF76675 just d/s, a 2001 consultant report refers to a rain response runoff event in 1969 that resulted in water over a service road, estimated to be Q = 15cms. Also, a 1992 design estimate of flow for this site was Q = 13 cms.

There are some WSC gauges in the Pointe-Aux-Pins basin with the highest recorded flow in June 1983. Other longer record gauges in the area indicate that the spring 1974 event was the largest on record. The largest event in the storm database for this area was in June 1965 with rainfall coverage of about 140mm.

Basin Runoff Potential :

d = 40mm, T_p = 20 hrs, q = 0.55 cms/km^2.
Gross DA = 80 km^2.
Q_p = 44 cms.

Conclusion :

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

Recommended parameters : Y = 2.0 m, V = 1.6 m/s, Q = 16 cms.