BF 76146 Hwy 56 Over Battle River Tributary
Hydrotechnical Summary

Channel Capacity :

S = 0.002
B = 3 m, h = 1.3 m, T_h = 6 m
Use n = 0.05

At Bank Height : Y = 1.3 m, V = 0.8 m/s, Q = 5 cms
At Channel Capacity : Y = 2.0 m, V = 1.2 m/s, Q = 12 cms

Historical Highwater Data :

HW was noted over the road in 1964 (30" pipe, Q ~ 1cms). The 1965 design was based on Q = 10cms.

There are no gauges on this stream. Gauges in the area suggest large runoff events in April 1974, and March 1985. No storms in the storm database exceed 100mm for this area.

Basin Runoff Potential :

d = 35mm, T_p = 40hrs, q = 0.25 cms/km^2.
Gross DA = 90 km^2.
Q_p = 22 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 = 1.2 m/s, Q = 12 cms.