BF 71346 Hwy 13 Over Battle River Tributary
Hydrotechnical Summary

Channel Capacity :

S = 0.002
B = 2 m, h = 1.0 m, T_h = 4 m
Use n = 0.05

At Bank Height : Y = 1.0 m, V = 0.7 m/s, Q = 2 cms
At Channel Capacity : Y = 1.5 m, V = 1.0 m/s, Q = 5 cms

Historical Highwater Data :

HW was recorded at this site in April 1974, with water to the u/s crown and 16" below the d/s crown (Q ~ 3cms). A 1964 report for BF76146 d/s states that water had been over the road with a 30" pipe (Q ~ 1cms).

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 = 17 km^2.
Q_p = 4 cms.

Conclusion :

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

Recommended parameters : Y = 1.5 m, V = 1.0 m/s, Q = 5 cms.