BF 02150 Hwy 37 Over Riviere Qui Barre
Hydrotechnical Summary

Channel Capacity :

S = 0.0004
B = 10 m, h = 2.2 m, T_h = 18 m
Use AT equation.

At Bank Height : Y = 2.2 m, V = 0.9 m/s, Q = 30 cms
At Channel Capacity : Y = 3.2 m, V = 1.2 m/s, Q = 60 cms

Historical Highwater Data :

Bridges washed out at this site in 1900 and 1946. HW was noted over the grade and close to the deck in April of 1965 and 1974 with Y = 2.7 – 3.0m.

There are no WSC gauges on this stream. Gauges in the area report HW events in April 1971, 1974, 1982, and 1997. The largest storms in the database for this area are July 1953 with about 160mm of rainfall, and July 1937 and June 1965 with about 110mm of rainfall.

Basin Runoff Potential :

d = 40mm, T_p = 20hrs, q = 0.55 cms/km^2.
Gross DA = 283 km^2.
Q_p = 155 cms.

Conclusion :

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

Recommended parameters : Y = 3.2 m, V = 1.2 m/s, Q = 60 cms.