BF 73461 Highway 35 Over Jackpot Creek
Hydrotechnical Summary

Channel Capacity :

S = 0.003
B = 7 m, h = 2.5 m, T_h = 15 m
Use n = 0.04

At Bank Height : Y = 2.5 m, V = 1.9 m/s, Q = 55 cms
At Channel Capacity : Y = 3.5 m, V = 2.6 m/s, Q = 110 cms

Historical Highwater Data :

The 2004 design was based on Q ~ 90cms (V ~ 3.6m/s). This creek is ungauged but WSC Gauges in the area suggest high water events in 1993, 1975, 1979, and 2006.

The storm on basin tool reports large events in August 1993 (75mm), July 1998 (75mm), and June 1988 (70mm), although there is limited rain gauging stations in the area.

Basin Runoff Potential :

d=40mm, Tp = 20 hrs, q = 0.56 cms/km^2
Gross DA= 575km^2
Qp= 320 cms

Conclusion :

The channel capacity values are within the basin potential :

Y = 3.5 m, V = 2.6 m/s, Q = 110 cms.