BF 07836 Hwy 748 Over Edson River
Hydrotechnical Summary

Channel Capacity :

S = 0.003
B = 20 m, h = 2.5 m, T_h = 35 m
Use AT equation

At Bank Height : Y = 2.5 m, V = 2.2 m/s, Q = 150 cms
At Channel Capacity : Y = 3.5 m, V = 2.8 m/s, Q = 300 cms

Historical Highwater Data :

HW was noted in June 1954 (Y ~ 2.5m, scour at south abutment), June 1960 (damage to slope protection), July 1965 (Y ~ 3m, washout of west abutment and 20m of approach), and June 1980 (Y ~ 1.5m). The 1959 design was based on Y ~ 3.8m.

There are no WSC gauges on this stream. Gauges in the area suggest HW events in June 1972, June 1980, July 1986, and July 1999. The largest storms in the database for this area are July 1939, June 1944, June 1958, July 1965, and June 1972 with about 105mm of rainfall.

Basin Runoff Potential :

d = 60 mm, T_p = 20 hrs, q = 0.85 cms/km^2
Gross DA = 765 km^2.
Q_p = 650 cms.

Conclusion :

The channel capacity estimate is consistent with historic information and is within the basin runoff potential. Recommended parameters :

Y = 3.5 m, V = 2.8 m/s, Q = 300 cms.
EL 714.0m (2540-P)