BF 07553 Hwy 748 Over Edson River
Hydrotechnical Summary

Channel Capacity :

S = 0.0012
B = 15 m, h = 3.5 m, T_h = 24 m
Use AT equation

At Bank Height : Y = 3.5 m, V = 1.9 m/s, Q = 130 cms
At Channel Capacity : Y = 4.5 m, V = 2.3 m/s, Q = 210 cms

Historical Highwater Data :

HW was noted at this site in July 1965 with Y = 3.6m and in August 1989 with Y = 2.9m and V = 1.6m/s. The 1960 and 1982 designs were based on Y = 5.0m (DD881 notes Q = 225cms).

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 = 0.83 cms/km^2
Gross DA = 590 km^2.
Q_p = 490 cms.

Conclusion :

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

Recommended parameters : Y = 4.5 m, V = 2.3 m/s, Q = 210 cms.