BF 08128 Local Road Over Edson River
Hydrotechnical Summary

Channel Capacity :

S = 0.0015
B = 15 m, h = 3.5 m, T_h = 24 m
Use AT equation

At Bank Height : Y = 3.5 m, V = 2.1 m/s, Q = 140 cms
At Channel Capacity : Y = 4.5 m, V = 2.6 m/s, Q = 240 cms

Historical Highwater Data :

HW was noted in July 1965 with Y = 4.4m and note that this was similar to 1954 event. The 1959 report refers to HWM to the deck and over both approaches (Y = 4.6m). HW was noted in August 1989 with Y = 1 – 1.5m, and the 2001 BIM report notes a HWM with Y = 2.6m based on debris on a willow bush.

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 = 510 km^2.
Q_p = 460 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 = 2.6 m/s, Q = 240 cms.