BF 13833 Local Road Over Tawatinaw River
Hydrotechnical Summary

Channel Capacity :

S = 0.0015
B = 7 m, h = 3.0 m, T = 14 m
Use n = 0.04

At Bank Height : Y = 3.0 m, V = 1.5 m/s, Q = 50 cms
At Channel Capacity : Y = 4.0 m, V = 2.0 m/s, Q = 90 cms

Historical Highwater Data :

A 2002 BIM inspection notes a HWM with Y = 2.5m, and a 1924 survey notes notes a HWM with Y = 3.0m). A note in 1988 refers to the need to add rock to the headslopes.

There are no WSC gauges on the Tawatinaw River. Nearby gauges suggest large runoff events in April 1971, 1974, 1979 and 1997. The largest storms for this area in the database are July 1953 and June 1970 with about 100mm of rainfall.

Basin Runoff Potential :

d = 40 mm, T_p = 20 hrs, q = 0.55 cms/km^2.
Gross DA = 719 km^2.
Q_p = 395 cms.

Conclusion :

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

Recommended parameters : Y = 4.0m, V = 2.0 m/s, Q = 90 cms.