BF 72786 Local Road Over Stowe Ck Tributary
Hydrotechnical Summary

Channel Capacity :

S = 0.004
B = 2 m, h = 1.2 m, T = 5 m
Use n = 0.05

At Bank Height : Y = 1.2 m, V = 1.0 m/s, Q = 4 cms
At Channel Capacity : Y = 1.8 m, V = 1.5 m/s, Q = 10 cms

Historical Highwater Data :

A 1956 report notes a HWM with Y = 1.5m and estimates Q = 2cms. A 1981 note suggests that the pipe is hydraulically inadequate with water over the grade but no complaints.

There are no WSC gauges on this stream. Nearby gauges suggest large runoff events in April 1979, June 1990, and April 1997. The largest storm for this area in the database is August 1982 with about 100mm of rainfall.

Basin Runoff Potential :

d = 40mm, T_p = 20hrs, q = 0.55 cms/km^2.
Gross DA = 46 km^2.
Q_p = 25 cms.

Conclusion :

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

Recommended parameters : Y = 1.8 m, V = 1.5 m/s, Q = 10 cms.