BF 08547 Local Road Over Nose Ck Tributary
Hydrotechnical Summary

Channel Capacity :

S = 0.006
B = 3 m, h = 1.0 m, T_h = 5 m
Use n = 0.05

At Bank Height : Y = 1.0 m, V = 1.2 m/s, Q = 5 cms
At Channel Capacity : Y = 1.5 m, V = 1.7 m/s, Q = 11 cms

Historical Highwater Data :

The culvert installed in 1984 was designed based on Q = 15cms with some head built up.

There are no gauges on this stream. Gauges in the area suggest HW events in 1916, 1917, may 1967, June 1969, June 1970, and June 1995. The largest storms in the database for this area are June 1928 with about 105mm of rainfall and June 1970 with about 120mm.

Basin Runoff Potential :

d = 40mm (near border between d = 60mm and d = 15mm), T_p = 20hrs, use q = 0.5 cms/km^2.
Gross DA = 21 km^2.
Q_p = 10 cms.

Conclusion :

Basin runoff potential governs and is consistent with historic observations.

Recommended parameters : Y = 1.4 m, V = 1.6 m/s, Q = 10 cms.