BF 75115 Local Road Over Pats Ck
Hydrotechnical Summary

Channel Capacity :

S = 0.005
B = 4 m, h = 1.5 m, T_h = 8 m
Use n = 0.05

At Bank Height : Y = 1.5 m, V = 1.4 m/s, Q = 12 cms
At Channel Capacity : Y = 2.3 m, V = 2.1 m/s, Q = 30 cms

Historical Highwater Data :

HW was noted in 1958 (washout, poor installation), and June 1996 (embankment slide, drift). A 2001 BIM report notes a HWM with Y = 2.4m u/s, and a 2007 BIM report notes a HWM 1.2m below the u/s crown. A 1959 report notes a HWM with Y = 2.1m, and estimates Q = 9cms. A 1996 report estimates Q = 19cms.

There are no gauges on this stream. Gauges in the area suggest large runoff events in April 1965, April 1974, and April 1997. The largest storm in the storm database is 90mm of rainfall in July 1935.

Basin Runoff Potential :

d = 60 mm, T_p = 20 hrs, q = 0.85 cms/km^2.
Gross DA = 140 km^2.
Q_p = 120 cms.

Conclusion :

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

Recommended parameters : Y = 2.3 m, V = 2.1 m/s, Q = 30 cms.