BF 71618 Local Road Over Little Paddle River Tributary
Hydrotechnical Summary

Channel Capacity :

S = 0.01
B = 3 m, h = 1.4 m, T_h = 6 m
Use n = 0.055

At Bank Height : Y = 1.4 m, V = 1.7 m/s, Q = 10 cms
At Channel Capacity : Y = 2.1 m, V = 2.5 m/s, Q = 25 cms

Historical Highwater Data :

HW was noted in 1952 with Y = 1.5m, and in August 1989 (2.5m above u/s crown, Q ~ 25cms if no blockage). A 1953 report estimates Q = 10cms. A 1975 report estimates Q = 14cms. A 2001 BIM report notes a HWM with drift to 2.8m above the u/s crown.

There are no gauges on this stream. Gauges in the area suggest HW events in June 1965, July 1971, April 1974, July 1986, August 1989, and June 1996. The largest storms in the database are June 1944 (145mm), June 1965 (135mm), August 1989 (135mm), and July 1990 (110mm).

Basin Runoff Potential :

d = 60 mm, T_p = 20 hrs, q = 0.83 cms/km^2.
Gross DA = 34 km^2.
Q_p = 28 cms.

Conclusion :

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

Recommended parameters : Y = 2.1 m, V = 2.5 m/s, Q = 25 cms.