BF 70249 Local Road Over Paddle River Tributary
Hydrotechnical Summary

Channel Capacity :

S = 0.0065
B = 2 m, h = 1.4 m, T_h = 5 m
Use n = 0.055

At Bank Height : Y = 1.4 m, V = 1.3 m/s, Q = 6 cms
At Channel Capacity : Y = 2.1 m, V = 1.9 m/s, Q = 16 cms

Historical Highwater Data :

HW was noted in July 1997 with Y = 1.5m d/s. A 1976 report estimates Q = 6 – 9cms. The 1989 design was based on Y = 1.2m and Q = 10cms. A 2002 BIM report notes a HWM with Y = 1.2m.

There are no gauges on this stream. Gauges in the area suggest large runoff events in June 1965, April 1974, July 1986, August 1989, and July 2001. The largest storms in the storm database are 155mm of rainfall in June 1944, 130mm in June 1965 and August 1989, and 100mm in July 1990.

Basin Runoff Potential :

d = 55mm, T_p = 20hrs, q = 0.75 cms/km^2.
Gross DA = 36 km^2.
Q_p = 27 cms.

Conclusion :

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

Recommended parameters : Y = 2.1 m, V = 1.9 m/s, Q = 16 cms.