BF 70347 Hwy 751 Over Paddle River Tributary
Hydrotechnical Summary

Channel Capacity :

S = 0.01
B = 2 m, h = 1.0 m, T_h = 4 m
Use n = 0.055

At Bank Height : Y = 1.0 m, V = 1.3 m/s, Q = 4 cms
At Channel Capacity : Y = 1.5 m, V = 2.0 m/s, Q = 10 cms

Historical Highwater Data :

HW was noted in July 1970 with water over the grade and a washout of the culvert. A 1968 report estimates Q = 3 – 4cms.

There are no gauges on this stream. Gauges in the area suggest large runoff events in June 1965, July 1986, August 1989, and June 1996. The largest storms in the database for this area are 155mm of rainfall in June 1944, 135mm in June 1965, and 120mm in July 1986 and August 1989.

Basin Runoff Potential :

d = 60mm, T_p = 20hrs, q = 0.83 cms/km^2.
Gross DA = 12 km^2.
Q_p = 10 cms.

Conclusion :

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

Recommended parameters : Y = 1.5 m, V = 2.0 m/s, Q = 10 cms.