BF 71976 Hwy 677 Over Saddle River Tributary
Hydrotechnical Summary

Channel Capacity :

S = 0.014
B = 1 m, h = 0.5 m, T_h = 3 m
Use n = 0.06

At Bank Height : Y = 0.5 m, V = 0.9 m/s, Q = 1 cms
At Channel Capacity : Y = 1.0 m, V = 1.7 m/s, Q = 4 cms

Historical Highwater Data :

A 1960 report notes a HWM with Y = 0.9m and estimates Q = 3cms. The pipe was extended in 1986, partly due to a hanging outlet.

There are no gauges on this stream. WSC gauges in the area suggest HW in June 1968, April 1974, June 1990, and April 1997. The largest storms in the storm database are about 120mm of rainfall in June 1964 and June 1990, and about 110mm in June 1965 and June 1993.

Basin Runoff Potential :

d = 75 mm, T_p = 20 hrs, q = 1.1 cms/km^2.
Gross DA = 4 km^2.
Q_p = 4 cms.

Conclusion :

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

Recommended parameters : Y = 1.0 m, V = 1.7 m/s, Q = 4 cms.