BF 00510 Local Road Over Little Egg Ck
Hydrotechnical Summary

Channel Capacity :

S = 0.0005
B = 6 m, h = 2.0 m, T_h = 14 m
Use n = 0.04 (enhanced channel)

At Bank Height : Y = 2.0 m, V = 0.7 m/s, Q = 15 cms
At Channel Capacity : Y = 3.0 m, V = 1.0 m/s, Q = 35 cms

Historical Highwater Data :

HW was noted in 1956 (partial washout) and 1958 (culvert ran full). The 1953 design was based on Y = 1.8m and Q = 6cms. A 1963 report noted a HWM with Y = 1.8m. The 1977 design was based on AENV Q = 19cms.

There are no WSC Gauges on this stream. Gauges in the area suggest HW events in April 1974, 1982, and 1997. The largest storms in the storm database are 160mm of rainfall in July 1953, and about 100mm in 1937, 1952, 1965, and 1986.

Basin Runoff Potential :

d = 40 mm, T_p = 20 hrs, q = 0.55 cms/km^2.
Gross DA = 247 km^2 (133km^2 u/s of Manawan Lake)
Q_p = 135 cms.

Conclusion :

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

Recommended parameters : Y = 3.0 m, V = 1.0 m/s, Q = 35 cms.