BF 76843 Local Road Over Fourth Ck Tributary
Hydrotechnical Summary

Channel Capacity :

S = 0.003
B = 4 m, h = 1.5 m, T_h = 7 m
Use n = 0.05

At Bank Height : Y = 1.5 m, V = 1.1 m/s, Q = 9 cms
At Channel Capacity : Y = 2.3 m, V = 1.6 m/s, Q = 20 cms

Historical Highwater Data :

Degradation was noted at this site in 1971 and control structures and channel regrading were done in 1977 to address the resulting high unstable banks. A 1968 report refers to the design of drainage improvements to B = 4m, Y = 0.9m, and Q = 6 – 7cms.

There are no WSC gauges on this stream. Gauges in the area suggest HW events in May 1984, July 1988, June 1990, and April 1997. The largest storms in the storm database are 100mm of rainfall in June 1990 and June 1993.

Basin Runoff Potential :

d = 60mm, T_p = 20hrs, q = 0.83 cms/km^2.
Gross DA = 58 km^2.
Q_p = 48 cms.

Conclusion :

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

Recommended parameters : Y = 2.3 m, V = 1.6 m/s, Q = 20 cms.