BF 82030 Service road Over Watercourse near Rocky Rapids
Hydrotechnical Summary

Channel Capacity :

S = 0.006
B = 2 m, h = 1.0 m, T_h = 5 m
Use n = 0.055

At Bank Height : Y = 1.0 m, V = 1 m/s, Q = 4 cms
At Channel Capacity : Y = 1.5 m, V = 1.5 m/s, Q = 10 cms

Historical Highwater Data :

Very limited HW data. Culvert dowstream flowed ½ full in July 2001 (1.5 above s/b) and water was 1.2 m deep in 1995 (both are probably influenced by headwater of BF 74150). Past designs have been based on BF 74150 located 20.0 m downstream of the structure.

There are no WSC Gauges on this stream. Gauges in the area suggest HW events in June 1965, June 1970, and June 1972. The largest storms in the storm database are 123mm of rainfall in Aug 1982, and about 110mm in July 1963.

Basin Runoff Potential :

d = 60 mm, T_p = 20 hrs, q = 0.83 cms/km^2.
Gross DA = 25 km^2.
Q_p = 20 cms.

Conclusion :

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

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