BF 78116 Local Road Over Lonepine Ck Tributary
Hydrotechnical Summary

Channel Capacity :

S = 0.002
B = 1 m, h = 0.5 m, T_h = 3 m
Use n = 0.05

At Bank Height : Y = 0.5 m, V = 0.4 m/s, Q = 0.5 cms
At Channel Capacity : Y = 1.0 m, V = 0.8 m/s, Q = 2 cms

Historical Highwater Data :

A 1975 report notes that the existing 36" pipe is inadequate (capacity < 2cms) with water over the grade and estimates Q = 4cms.

There are no gauges on this stream. Gauges in the area suggest HW events in April 1969, 1971, and 1997. The largest storms in the database for this area are June 1928 and 1970 with about 100mm of rainfall.

Basin Runoff Potential :

d = 35mm, T_p = 40hrs, use q = 0.25 cms/km^2.
Gross DA = 9 km^2.
Q_p = 2 cms.

Conclusion :

Basin runoff potential governs and is consistent with historic observations.

Recommended parameters : Y = 1.0 m, V = 0.8 m/s, Q = 2 cms.