BF 81315 Local Road Over Little Smoky River
Hydrotechnical Summary

Channel Capacity :

S = 0.002
B = 8 m, h = 2 m, T_h = 15 m
Use n = 0.04

At Bank Height : Y = 2.0 m, V = 1.4 m/s, Q = 30 cms
At Channel Capacity : Y = 3.0 m, V = 2.0 m/s, Q = 75 cms

Historical Highwater Data :

The 1988 design was based on Y ~ 3m (Q ~ 55cms). There are no HW observations at the site.

WSC Gauge 07GG002 (DA = 3,010km^2, 1967 – Now) reports Q ~ 450cms (1982, 4m stage rise) and Q ~ 330 – 360cms in 1971, 1987, 1990, 1996, and 1997.

Basin Runoff Potential :

d = 70 mm, T_p = 20 hrs, q = 1.0 cms/km^2.
Gross DA = 116 km^2.
Q_p ~ 115 cms.

Conclusion :

Channel capacity governs. Recommended parameters :

Y = 3.0 m, V = 2.0 m/s, Q = 75 cms.
EL 1238.0 m (13228-P)