BF 77528 Hwy 16 Over Wolf Ck
Hydrotechnical Summary

Channel Capacity :

S = 0.0013
B = 22 m, h = 4.0 m, T_h = 45 m
Use AT Equation

At Bank Height : Y = 4.0 m, V = 2.0 m/s, Q = 275 cms
At Channel Capacity : Y = 5.0 m, V = 2.5 m/s, Q = 450 cms

Historical Highwater Data :

HW was noted in 1972 (Y ~ 3.5m), 1980 (Y ~ 3m), and July 1986 (Y ~ 5.5m). The 1987 design was based on Y ~ 5.5m (Q ~ 500cms).

WSC Gauge 07AG003 (DA ~ 830km^2, 1954 – present) reports Q ~ 570cms (July 1986, gauged at Q ~ 230cms, stage rise ~ 5m at peak) and Q ~ 260cms (June 1972).

Basin Runoff Potential :

d = 60 mm, T_p = 20 hrs, q = 0.85 cms/km^2.
DA = 780 km^2
Q_p = 650 cms

Conclusion :

Historic HW observations govern. Recommended parameters :

Y = 5.5 m, V = 2.7 m/s, Q = 550 cms.
EL 884.5 m (12519-C)