BF 13384 Hwy 2 Over Strawberry Ck
Hydrotechnical Summary

Channel Capacity :

S = 0.0008
B = 8 m, h = 4.0 m, T_h = 18 m
Use n = 0.04

At Bank Height : Y = 4.0 m, V = 1.3 m/s, Q = 65 cms
At Channel Capacity : Y = 5.0 m, V = 1.6 m/s, Q = 115 cms

Historical Highwater Data :

HW was noted in July 1961 (Y = 4.0m), April 1965 (Y = 4.0m), June 1983 (Y = 4.5m), and June 1996 (Y = 4.5 – 4.8m, washout of west headslope). A 1990 BIM report notes a HWM with Y = 4m. A 1958 report notes a HWM to the deck with Y = 4m.

There are no WSC gauges on this stream. Nearby gauges suggest HW events in 1917, 1983, 1988, and 1996. The largest storm in the storm database for this area is July 1988 (140mm) with other large storms in 1961, 1979, 1983, 1993 and 1996.

Basin Runoff Potential :

d = 75 mm, T_p = 20 hrs, use q = 1.1 cms/km^2.
Gross DA = 148 km^2.
Q_p = 163 cms.

Conclusion :

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

Recommended parameters : Y = 5.0 m, V = 1.6 m/s, Q = 115 cms.