File 09836 – Hwy 18 Bridge over Wabash Creek Tributary

Hydrotechnical File History

1931 20’ bridge built.

1951 Report: Q = 200 cfs.
20’ bridge built, dh = 6’.

1974 Bridge constructed. Single VH precast concrete span on a treated timber substructure 1 – 6.1 m span. deck to streambed = 1.83 m
Report: Y = 5’, Q = 270 cfs, existing bridge has run full.

2003 Bridge Assessment Report completed by cmTBridge Engineering Ltd. The report recommended 1 – 2.46 x 4 m HE SPCSP grouted liner or 2 – 2.2m CSP grouted liner in 4 years. DA = 15 km^2, Design Q = 8 cms, S = 0.005, B = 4 – 5m, h = 1.2 – 1.5m.

2005 Preliminary Engineering Report completed by AMEC in September. Recommended hydrotechnical parameters: Y = 1.5 m, V = 1.2 m/s, Q = 8 cms. Recommended 2 – 2200 mm CSP liners by 15 m each.

2005 Detailed Engineering Report completed by AMEC in November. Recommended 1 – 3000 mm span by 2400 mm rise by 26 m length precast concrete box culvert.

2016 Level 2 Timber Coring and Girder Inspection report completed by MPA engineering Ltd.

2019 Bim: Scheduled for replacement in 2021.

2020 Updated hydrotechnical summaries. DA = 12 km^2, S = 0.003, B = 4 m, h = 1 m, T = 5 m.
Recommended hydrotechnical parameters: Y = 1.5 m, V = 1.2 m/s, Q = 8 cms.