APPENDIX A

Cross Sections – with 2 year through 100 year flood levels

- Lower Reach + Tributaries
- Middle Reach

Manning’s “n”
• Lower Reach
• Middle Reach
Manning’s “n”

Generally an ‘n’ value of 0.030 to 0.035 was used to characterise the smooth rocky nature of the channel; except in steeper parts of the Lower Reach where the large boulders and cobbles present suggest a value of, say, 0.045 to 0.065. The overbanks were characterised as either dense trees and shrub or urban areas; or open fields with crops; and ‘n’ values ranging between 0.075-0.080; and 0.045-.050, respectively, were used.

A sensitivity analysis was undertaken, whereby the “n” value was raised and lowered by 25% in both channel and overbank components of a cross section – for all cross sections in both the lower and middles reaches. The results are illustrated in Figures A1 and A2 respectively.