84/86 Leicester Road, Hinckley

After an exercise to determine the routing of the current drainage, a revised calculation has been performed.

The impermeable area draining from property number 86 in to the combined sewer is 157m².

The impermeable area draining from property number 84 in to the combined sewer is 90m² with the remaining area of 104m² draining to wells situated at the rear of the property.

Peak Surface Water Runoff (assume 50mm/hr)

Q = 2.78 x 1.0 x 50 x 0.0250 = 3.5l/s

Peak foul flow to combined sewer = 0.1 l/s

Total existing peak flow rate is 3.5 + 0.1 = 3.6 l/s.

Proposed impermeable area is 2096m².
Return period 30 years + 30% climate change.
These figures were used in Micro Drainage software package called WinDes.
The results are attached.

The results indicate that the required storage would be a 2m diameter pipe 20m in length.
This assumes constant pumping rate of 3.6 l/s.

SB 30th September 2008.