Ellen Moore
WLMA South Holland IDB

By Email Only

11th March 2022

Our Ref: SW21-235-L01

Dear Ellen,

RE: SW 22-235 – 8 Plots, Mill Lane, Gedney Hill (Ref H07-0109-22)

Further to your correspondence dated 21st February 2022, your ref 22_06081_P, please see our responses to your queries below.

As we are sure you are aware, infiltration testing in flat low-lying fenland areas very often takes a considerable amount of time to complete. Therefore, it is rarely possible to expect test fills to empty during the course of a single day and unrealistic to expect 3 test fills to be competed. This being the case test fills would need to be undertaken on 3 consecutive days.
Infiltration testing was undertaken generally in accordance with the guidance set out with BRE 365.

For a small minor application development site such as this, it is unfeasible/uneconomical for field testing to be carried out over a 3 day period of time. We would note that historically the practice of completing one test fill measured over the whole day has always been accepted in this area as appropriate.

It should also be noted that the soakaway design offered has incorporated a significant factor of safety offering above the min. 30% free volume recommended by BRE 365.

The treatment plant soakaway has been sized using the infiltration rate to infiltrate the 24 hours flow ouput within a 12 hour period, as such of factor of safety of over 2 has been provided.
It is also significant that the proposal is for a modern treatment plant and not a septic tank and this outputs generally clean water at a slow and steady rate.

We would also note that there is no public surface water sewer system in this area and as such the existing local properties are all very likely served by “old fashioned” rubble filled soakaways which have had no reported issues of performing inadequately.

We trust that the above commentary provides sufficient background to the test results and designs presented and will hopefully enable the application to progress without further delay.

Should you have any queries or wish to discuss anything please do not hesitate to get in touch.

Yours sincerely

A.P. WILSON CEng MIStructE

Director, Chartered Structural Engineer

For and on behalf of **SHIELDS WILSON LTD**

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