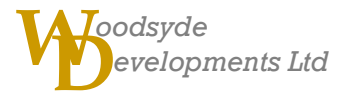


Woodsyde Developments Limited

Development Consultants



*Directors: Mr A W Gough
Mrs L M Gough*

Ms Amy Brittain
Development Management Planning Officer
Wrexham County Borough Council
Lambpit Street
Wrexham
LL11 1AR

7th April 2023

Dear Amy,

P/2022/0808 - Proposed Residential Development at Glebe Farm, Horseman's Green, Whitchurch, SY13 3DY.

We have been passed a copy of your most recent comments in respect of the above planning application, with particular reference to offsets to drainage features, phosphates and discharge rates.

Based on 3 properties having 3-bedrooms each, this would typically result in a maximum occupancy of 15 persons. In accordance with Code of Practice Flows and Loads – 4, which is the current national document for sizing criteria for sewage treatment plants, any system serving 3 properties where the collective number exceeds 12, an allowance can be made for the balancing effects on the daily flow. In this case the multiplier is 0.9. Ultimately this would result in 13.5 persons. With no allowance for a half person, the discharge based on 150 litres per head would be 1950 litres or 1.95m³, which in turn is below the maximum daily discharge rate of 2 cubic meters to a drainage field.

Turning now to the location for a drainage field, we are well aware that the applicants owns significant land around the application area and indeed can locate the treatment plant and drainage field to the north west of the application site and be located a minimum distance of 40m from a water feature, more than 50m from a SAC boundary and more than 200m from any known discharge to ground and similarly to the larger watercourse to the south and west. Attached hereto is a plan showing the location of open ditches and piped drainage in the vicinity of the application site and an indication where the drainage field could be located.

As previously mentioned the Premier Tech Water & Environment: Rewatec Solido Smart +P is a new range of treatment plants which lowers both Phosphorus and Nitrogen levels by typically 90% for Phosphorus removal and 75% Nitrogen removal from the waste water. If this system is coupled with secondary treatment such as a reed bed and stone pits, where the cleaned water from the treatment plant is discharged to then it is considered an approximate further 50% improvement in water quality will be achieved.

Overall, in respect of the above, we would advocate that a well maintained private treatment plant can be very effective over and above a direct connection to a public sewer, particularly when treatment plants are sized correctly and provided with appropriately designed outfalls. We do appreciate the necessity to examine and regularise treatment plants, but it would appear that these currently are better placed than connecting to a public system, which may already be overloaded. The development can be self sufficient, particularly with the land area available to the applicant and where appropriate distances can be achieved from watercourses, SACS and/or water supplies. We are well aware in recent national news bulletins that the Water Authorities across the country are overstretched and it was suggested that there was approximately 1.75 million hours of direct discharge from their treatment plants to watercourses. Clearly, a separate system would be beneficial in managing discharge from a small sewage treatment plant to serve only 3 properties.

Given the significant reductions now available through not only the initial treatment plant but its phosphate and nitrate reductions and the secondary treatment that could be implemented, we see no reason why the Planning Authority could not support the application, with a suitably worded Grampian type condition being imposed.

We trust the above provides some clarity on the type and nature of treatment plants now available, such that rural development that discharges to watercourses can be supported and implemented.

Kind regards,

Yours sincerely,

A W Gough
Director