

Proposed residential development at Station Road, Surfleet

Drainage Strategy

Revision A 2nd August 2018

Introduction

This drainage strategy report has been produced to accompany a planning application for a residential development on land off Station Road, Surfleet. This document should be read in conjunction with the Concept Drainage Strategy drawing.

For developments of 10 or more dwellings there is a requirement to apply sustainable drainage principles (SuDS) to the disposal of surface water from the site. Generally the aim should be to discharge surface water as high up the following hierarchy of drainage options as reasonably practicable:

1. Into the ground (infiltration);
2. To a surface water body;
3. To a surface water sewer or highway drain;
4. To a combined sewer.

Foul Water

The foul water from the application site will connect into the existing foul drainage system along Kingfisher Drive and all foul drainage sewers serving more one property will be offered for adoption to Anglian Water under a Section 104 agreement. See Concept Drainage Strategy drawing.

The existing adopted foul sewer within the site will also be diverted and new connections for the existing sewer provided within Station Road.

Surface Water from Adopted Highway

At present the land is used for agricultural production and recent ground investigation work has suggested a poor infiltration rate and therefore it is unlikely that soakaways would work as a solution. Therefore the SuDS strategy for the surface water highway drainage will be achieved using the provision of filter drains with perforated pipes and open detention basins. Both the filter drains and detention basin will discharge into a piped system within the adopted road which in turn discharges into the open watercourse to the northern boundary of the site which is maintained by Welland & Deepings Internal Drainage Board. The filter drains adjacent to the road will be offered to Lincolnshire County Highways for adoption under a Section 38 agreement and the pipes within the road will be offered for adoption to Anglian Water under a Section 104 agreement. See Concept Drainage Strategy drawing.

Surface Water from Roofs and Private Drives

All private drives will be permeable construction with appropriate sub-base and tanked to prevent groundwater entry. Roof water will be collected through a gutter system and discharge into the sub-base to the drive of the relevant house. Each drive will then discharge into the piped system within the road.

Finished Floor Levels

All finished floor levels are to be set at a minimum 3.50m AOD in accordance with the Flood Risk Assessment approved as part of the outline planning application.

Conclusion

The above drainage strategy demonstrates that the site can be drained appropriately including the use of a Sustainable Drainage System.