

Our ref: 133598/SM/L003  
Your ref: CCC/2022/088468

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John Burns  
Flood and Water Management  
Kent County Council  
Invicta House  
Military Road  
Maidstone  
Kent  
ME14 1XX

Dear Mr Burns

**RE: Details pursuant to conditions 03 (surface water drainage) 56 (surface water drainage strategy), 57 (foul water strategy) and partial discharge of 58 (detailed foul water scheme) of planning permission CA/17/01866/FOS (appeal decision APP/J2210/W/20/3260611).**

We write in response to your letter dated 11 February 2022 and would like to address the points you raised as follows:

1. *At the detailed design stage, we would expect to see the drainage system modelled using 2013 FeH rainfall data in any appropriate modelling or simulation software. Where FeH data is not available, 26.25mm should be manually input for the M5-60 value, as per the requirements of our latest drainage and planning policy statement (November 2019); the unadjusted FSR dataset should not be used:*

We have run the calculations for the proposed development with the 26.25mm rainfall data as requested and enclose the calculations for your information and records. There is no flooding up to and including the 1:30 year event, with any flooding occurring in the most severe events (1:100 plus climate change) to be contained within the upstand of the kerbs in the carriageway and directed / controlled away from the dwellings.

2. *Where there is any exceedance of the drainage network above the 30 year event, an exceedance plan should be provided illustrating where exceedance occurs and the extent and depth of flooding. Exceedance must be controlled within the site boundary.*

An exceedance plan is enclosed showing the location and extent of any flooding that may occur on site for storm events above the 1:30 year occurrence. All exceedance is controlled within the site boundary.

3. *The Kent Design Guide states "The System must be capable of accepting, without surcharge, a storm frequency of once every 2 years except for sites where consequences of flooding affect existing properties adjacent to new development, where a frequency of 5 years will need to be applied".*

We have only 3 instances of surcharging in the 1:2 year storm. Pipes 2.007 11.009, and 11.011. 2.007 is 1.66m deep and surcharges to a depth of only 186mm. 11.009 is 2.26m deep and only surcharges to a depth of 87mm. 11.011 is 1.49m deep and surcharges to a depth of 40mm. We would consider this extremely minimal for a network of this size and complexity. In addition, we have provided opportunities for silt to settle in trapped gullies, catchpits upstream of all SuDS features, the SuDS features themselves, together with the sub base of the permeable paving. All of these measures and the minimal surcharging would result in the risk of siltation in the network being significantly reduced. We would ask you to reconsider this point on this basis.

4. *The condition and precise location of the receiving piped network including the culvert beneath Sweechbridge road shall be ascertained. This is required due to the sensitivity of the existing network and if this is found to be blocked or damaged this would exacerbate any existing flooding issues. Therefore, a mitigation plan should be in place if this found to be faulty.*

The proposal is to discharge the surface water via the existing, improved ditch to the site boundary and then out via the existing culvert beneath the network rail apparatus, before being directed eastwards through the improved, reprofiled ditch (south of the railway), eventually being discharged through the existing culvert underneath Sweechbridge Road. This culvert will be cleared out as it has been identified as containing blockages. The other existing features have been identified through survey works as being suitable for re-use with no works necessary. A copy of the culvert survey is enclosed for your review.

5. *We note permeable paving is proposed and would recommend that other underground services, such as foul sewers, are routed outside of areas of permeable paving or cross it in dedicated service corridors, particularly where sewers will be offered for adoption.*

The permeable paving will be located in the private realm. We have as far as is practicable looked to locate plant outside of the permeable paved extents. We will review the drainage and services routing to see if this can be improved upon.

6. *Although a Typical Details drawing has been supplied for the SuDS features we would expect all typical drainage details to be included such as but not exclusive to headwalls, inlets , outlets and all individual open SuDS features including new or altered ditches / swales with cross sections.*

We enclose details of all SuDS features, together with section of the pond features.

7. *KCC does not generally permit the infilling or culverting of ditches or watercourses as this may disrupt the surface water and groundwater flow regime of the site. The LLFA would only usually allow the culverting of a watercourse for access and crossing.*

At the early stages of this development, we met with Bronwyn Buntine on 28th January 2020, we discussed the existing ditch network and how we would integrate them into the proposed development. We intend not only to maintain the ditch network and preserve its current function, but also to improve the functionality and appearance.

The current ditch network is rather informal and in nature. We will ensure that both the current function is maintained, the alignment is improved through any regrading works, and the appearance will become formalised and aesthetic to the eye, using sustainable techniques while addressing all environmental considerations in conjunction with the landscaping proposals, to provide a robust, sustainable, compliant design. This network developed in agreement with the LLFA provides a betterment to the existing situation.

We trust that the information provided addresses your comments and will enable you to reassess the application to provide an approval. However, if you wish to discuss any aspect of this response and the enclosed, please feel free to contact the writer.

Yours sincerely



Simon Marks  
**Associate Director**