

The Former BAE Systems Technology Park, Elettra Avenue, Waterloo

Planning Applications Refs: APP/15/0072 and APP/15/00773

This note has been prepared in response to Havant Borough Council's drainage officer's consultation response, dated 27 August 2015, to the above applications at the former BAE Systems Technology Park ('the Site'). It raises concerns with the redevelopment schemes at the site being proposed individually, and seeks an overall SuDS 'masterplan' for the overall development scheme for the site. As such, the suitability and appropriateness of the overall SuDS masterplan for the Site has been considered as follows:

Assessment

Prior to demolition the site comprised impermeable surfaces over most of its area with surface water drains discharging to the public sewer in Silverthorne Way via five separate connections, as indicated on the attached plan (ref:1605/SK2). The current proposals will not increase the area of impermeable surface beyond what previously existed. This is confirmed by our analysis of the topographical survey undertaken prior to the demolition of the buildings which indicates that the current proposals will provide similar permeable areas to those which existed originally on the Site.

It should also be noted that the site geology comprises made ground over head deposits of sandy silty clay, over London Clay with Upper Chalk at depth. The underlying ground condition, particularly with a high degree of clay which does not provide effective soakage, means that the Site as a whole is unsuitable for a SuDS system based on Soakage. Indeed, the Site's ground investigations (October 2012) have revealed perched water and standing water in monitoring wells at just over a metre below ground level thus indicating difficulties with percolation.

A Flood Risk Assessment ('FRA') prepared by Peter Brett Associates (ref: 29169/004) dated September 2013, states that the Site lies within an area of low bedrock permeability and of high or very high source of potential overflow, with a small area of the Site being Flood Zone 2. The FRA concluded that infiltration techniques would not be suitable for the Site, thereby confirming that no reduction in the volume of surface water discharge from the Site can be made. On this point, whilst a reduction in the rate of discharge could be made through the introduction of storage structures, this could have an adverse impact on the overall drainage system for the local area because with this Site being at the downstream end of an urban drainage system, it can be beneficial in storm conditions for this site to discharge early before high flows arrive from upstream. As such, holding back the outflows from this site in storage structures may have an adverse impact on the drainage system in the area, as it could lead to higher flows in the public sewers at peak times.

Conclusion

Based on the above assessment, an overall SuDS masterplan / solution, based on infiltration techniques, are not considered suitable or appropriate, due to the underlying ground conditions. In addition amending the existing drainage arrangements at the site, through the introduction of

storage, could have an adverse effect on the existing drainage system in the area. As such, the proposed surface water drainage features for each of the proposed developments will mimic the existing situation as being the most appropriate engineering solution for surface water drainage.

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