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Network Asset Management
Highways Laboratory and
Information Centre
Merrow Lane
Guildford
Surrey
GU4 7BQ

Our ref: LLFA-WA-20-0437
Your ref: WA/2020/0260
Date: 01/06/2020

Dear Sir/Madam,

Land at Coordinates 504360 134890, Horsham Road, Alfold

Thank you for consulting Surrey County Council (SCC) as the Lead Local Flood Authority (LLFA) on the above Outline Planning Application. We have reviewed the surface water drainage strategy for the proposed development and assessed it against the requirements of the NPPF, its accompanying PPG and the Non-Statutory Technical Standards for sustainable drainage systems.

The following documents submitted as part of the above application have been reviewed and should be referred to as part of any future submissions:

- Flood Risk Assessment, BR, Feb 2020, document reference: MT/5391/FRA.3;
- Surface Water Drainage Summary Pro-forma;

We are not satisfied that the proposed drainage scheme meets the requirements set out in the aforementioned documents because insufficient information has been provided and significant issues have been identified. To overcome this, the following information is required:

The existing Greenfield run-off rates have been established for the site as a whole (3.43ha). The drainage calculations appear to cover approx. 1.3ha of positively drained area. It is unclear why significant open spaces have been included when calculating existing Greenfield run-off.

Unless the open spaces are being positively drained the Greenfield run-off rates should be proportioned down to the positively drained area only.

The drainage strategy appears to show attenuation ponds located in the place of proposed footpaths, additionally it does not appear that root protection zones have been considered when locating the attenuation ponds.

The existing watercourse running along the north-eastern border, identified on the topo survey does not appear to connect to anything. Additional information of the watercourses connectivity downstream should be submitted.



Area 1 which discharges to the watercourse along the north-eastern boundary appears to have a disproportionately high discharge rate compared to the catchment area existing Greenfield run-off.

The watercourse that runs along the western and southern boundaries, identified on the topo survey appears to show the direction of flow incorrectly. Interrogating the wider catchment, it appears to show that the watercourse flows south to north towards the main river adjacent to the Wey and Arun canal. Additional details of the watercourse should be submitted as the information on the topo survey may be incorrect.

No details of additional SuDS elements have been submitted. Porous surfacing, tree pits, conveyance swales, rainwater harvesting elements and rain gardens could all be introduced to help improve water quality, aid interception and increase biodiversity and amenity.

There appears to be a Thames Water foul pipe that runs across the north eastern portion of the proposed site. No consideration has been given to a diversion, or build-over agreement. This would impact the surface water drainage.

Should the Applicant wish to discuss our concerns in more detail we provide a pre-application advice service, details of which are available on our website:

<https://www.surreycc.gov.uk/people-and-community/emergency-planning-and-community-safety/flooding-advice/more-about-flooding/suds-planning-advice>

A full list of the information we expect to receive as part of Outline Planning Application can also be found using the above link.

In the event that planning permission be granted, suitably worded conditions should be applied to ensure that the SuDS Scheme is properly implemented and maintained throughout the lifetime of the development. Suggested conditions are below:

- 1) The development hereby permitted shall not commence until details of the design of a surface water drainage scheme have been submitted to and approved in writing by the planning authority. The design must satisfy the SuDS Hierarchy and be compliant with the national Non-Statutory Technical Standards for SuDS, NPPF and Ministerial Statement on SuDS. The required drainage details shall include:
 - a) The results of infiltration testing completed in accordance with BRE Digest: 365 and confirmation of groundwater levels.
 - b) Evidence that the proposed final solution will effectively manage the 1 in 30 & 1 in 100 (+40% allowance for climate change) storm events and 10% allowance for urban creep, during all stages of the development. If infiltration is deemed unfeasible, associated discharge rates and storage volumes shall be provided using a maximum discharge rate equivalent to the existing Greenfield run-off rate.
 - c) Detailed drainage design drawings and calculations to include: a finalised drainage layout detailing the location of drainage elements, pipe diameters, levels, and long and cross sections of each element including details of any flow restrictions and maintenance/risk reducing features (silt traps, inspection chambers etc.).
 - d) A plan showing exceedance flows (i.e. during rainfall greater than design events or during blockage) and how property on and off site will be protected.
 - e) Details of drainage management responsibilities and maintenance regimes for the drainage system.
 - f) Details of how the drainage system will be protected during construction and how runoff (including any pollutants) from the development site will be managed before the drainage system is operational.

Reason: To ensure the design meets the national Non-Statutory Technical Standards for SuDS and the final drainage design does not increase flood risk on or off site.

- 2) Prior to the first occupation of the development, a verification report carried out by a qualified drainage engineer must be submitted to and approved by the Local Planning Authority. This must demonstrate that the drainage system has been constructed as per the agreed scheme (or detail any minor variations), provide the details of any management company and state the national grid reference of any key drainage elements (surface water attenuation devices/areas, flow restriction devices and outfalls).

Reason: To ensure the Drainage System is designed to the National Non-Statutory Technical Standards for SuDS.

Informative

If proposed site works affect an Ordinary Watercourse, Surrey County Council as the Lead Local Flood Authority should be contacted to obtain prior written Consent. More details are available on our website.

If proposed works result in infiltration of surface water to ground within a Source Protection Zone the Environment Agency will require proof of surface water treatment to achieve water quality standards.

If there are any further queries please contact the Flood Risk Asset, Planning, and Programming team via SUDES@surreycc.gov.uk. Please use our reference number in any future correspondence.

Yours faithfully

Michael Burch
For the Flood Risk Asset, Planning, and Programming Team
On behalf of Lucy Monie
Head of Highways & Transport