

Lucas Design Ltd
11A West Street
Reigate
RH2 9BL

12 March 2018

Our Ref: D1368

Dear Sir/Madam,

RE: 1-3 CASTLE CRESCENT, READING, RG1 6AQ

Further to your email dated 7 March 2018, please find enclosed our updated Proposed Drainage Layout (2017/D1368/201B) which addresses the concerns raised, when read in conjunction with this letter.

In its existing use, the site has an impermeable area of 1,669m² which is understood to drain to the 225mm dia. public surface water sewer located in the centre of Castle Crescent. Following development of the site, the impermeable area will be reduced to a figure of 1,509m² – a reduction in the region of 10%. This is demonstrated on drawing 2017/D1368/201B.

We have enclosed calculations which serve to demonstrate the existing run-off rate of the site, as summarised within the table, below;

Storm Event	Run-off Rate (l/s)
1 in 2 year	30.4
1 in 30 year	57.3
1 in 100 year	74.1

Post development, it is proposed that the site will continue to discharge surface water run-off to the 225mm dia. public surface water sewer located within Castle Crescent with it having been determined that the underlying soils and ground conditions are not suited to employing infiltration methods and techniques.

The site-specific geotechnical investigation conducted by Jomas Associates Ltd. dated 29 August 2017 (Job No. P9864J1122) confirms that soil composition consists of soft to firm consistency brown sandy gravelly clay. Although it is to be expected that such conditions would not be conducive to allowing infiltration methods and techniques

to be implemented, infiltration testing was not undertaken as part of the investigation to confirm the exact potential of the underlying soils. Other factors – including historical land use as detailed within your email, also mean that infiltration is not a viable option.

The tanked permeable paving proposed for the site will provide a self-draining surface similar to the existing and will cover an area to the order of 680m², providing a volume of storage amounting to 306m³. The piped network which will be constructed within the confines of the site will provide additional storage which is sufficient to support the development, as demonstrated by the enclosed calculations.

A HydroBrake flow control device will restrict the rate of discharge to the 225mm dia. public surface water sewer, located in Castle Crescent. The rate of discharge will be restricted to 25l/s -offering a betterment in comparison to the existing situation between 30.4 and 74.1l/s.

We also enclose a copy of the maintenance schedule which has been prepared for the development in relation to the SuDS to be implemented across the site. This document outlines the roles and responsibilities of the relevant parties to ensure that all drainage components, including SuDS, are able to operate as designed to reduce the risk of flooding onsite, as well as the possible impacts of potential flooding offsite. This also details the regularity as to how often such tasks should be undertaken to maximise the efficiency of the system.

We trust that the additional information provided assists in addressing and resolving the outstanding queries raised, however, should you have any further questions or comments in relation to the proposed development and/or our strategy, please do not hesitate to contact me directly where we will be more than happy to assist where possible.

Yours faithfully

A handwritten signature in black ink, appearing to read 'Stuart Burnett', with a large, stylized initial 'S'.

Stuart Burnett

Encl. Drawing 2017/D1368/201B, Drainage/SuDS Maintenance Regime, MicroDrainage Calculations,