

## SUDS TOOL FOR SMALL DEVELOPMENT PROJECT OVERVIEW

The Royal borough of Kensington and Chelsea has suffered from flooding for some time and has developed a strategy aimed at increasing the number of sustainable urban drainage systems –SUDS – in response to this historic problem.

Over the past 20 years the Victorian Counters Creek sewer system, which runs along the western boundary of the Royal Borough, has been unable to cope during periods of heavy rainfall, partly because new developments have reduced the amount of surface area available to soak up excess water.

The Royal Borough of Kensington and Chelsea along with Royal HaskoningDHV have developed an online tool – the first of its kind in the country – to increase the implementation of SuDS in small developments (up to a maximum of 10 dwellings or 1,000m<sup>2</sup> of non-residential property). The tool assists developers by helping them to calculate the impact of new developments and extensions on the surface water run-off. The tool enables developers to interactively develop appropriate solutions for the site from a range of different SuDS to mitigate the impact of the development. Through a traffic light approach, the tool confirms the adequacy of the proposed SuDS to mitigate the impact of the development and provides further guidance on the proposed SuDS measures. The developer needs to submit the tool report along with their planning application and show in the accompanying plans where the SuDS will be located.



#### Introduction

The Royal Borough of Kensington and Chelsea Small Scale Sustainable Drainage Systems (SuDS) Tool has been developed by Royal HaskoningDHV for the Royal Borough of Kensington and Chelsea. It is designed to assist the council in assessing the suitability of SuDS provision within small scale development proposals. The main focus of the tool is to enable the council to ensure that the water attenuation requirements for SuDS are met by development proposals. It does not give definitive attenuation volumes that will be achieved by a specific SuDS solution and a final design will be required to determine the actual performance of the system.

#### Key Assumptions

- This tool has been designed for assessing development proposals in the Royal Borough of Kensington and Chelsea. It is not suitable for use in other geographical areas as the hydrological calculations are specific to this area.
- The tool assumes that infiltration measures are not appropriate due to the predominantly clay soils within the Royal Borough of Kensington and Chelsea and as such they are not suggested as appropriate solutions by the tool. Where a developer proposes infiltration as part of the SuDS techniques for a site, they will be required to provide appropriate infiltration test results and calculations to support their applications.
- The tool is designed for small scale development up to a maximum of 10 dwellings or 1,000m<sup>2</sup> of non-residential property. Larger developments would need a more comprehensive SuDS design to be developed.

<http://www.rbkc.gov.uk/planningandconservation/planningpolicy/sudstool-smalldevelopment.aspx>