Executive Summary of - Combined Report Authored by Chartered Engineers and Chartered Environmentalists at - Environmental Protection Group and Card Geotechnical Engineering and Mcloy Consulting

Review of drainage and flooding implications of basement extensions in RBKC

Executive Summary

- Runoff from the roof of a basement with 1m of soil over it is not likely to occur for most frequent rainfall events. This is one of the fundamental requirements of a sustainable drainage system in accordance with the SuDS Manual (known as interception).
- It is easy to provide the roof with an effective sustainable drainage system that can manage more extreme events in accordance with SuDS Manual and the current draft of the National Standards for Sustainable Drainage Systems.
- Provision of a pumped outfall from the basement will provide adequate mitigation against flooding from sewers into basements.
- The design of basements should take account of other forms of flooding such as from over topping of river walls. This can be achieved for example by maintaining threshold levels at a level that minimizes the risk of flood water entry.
- The proposed RBKC policy to limit basements to 50% of a garden area is far too generic
 and does not take into consideration the particulars of the specific development such as
 existing groundwater levels, the permeability of the ground, SuDS measures incorporated
 into the design, etc.
- The existing requirement to limit basements to 85% of the garden area is more than sufficient to allow reasonable SuDS provision and aquifer recharge
- There is no valid reason why basement construction should be limited to a blanket 50% of a garden area on the basis of drainage or flood risk. Any assessment should be on a site specific basis and include consideration of the proposed SuDS.