

This is an Extract from the Original Report which was provided in full to RBKC as part of Cranbrook Basements evidence - see Document 64 - Environmental Protection Group - Review of Drainage and Flooding

Review of drainage and flooding implications of basement extensions in RBKC

**Revision 2.0
March 2014**



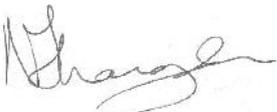
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in RBKC**

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Author	Steve Wilson, Technical Director EPG <i>BEng MSc CEng MICE CEnv CSci MCIWEM FGS ROGEP</i>				
Author	Anthony McCloy, Director MCL <i>BEng CEng MIEI</i>				
Author	Andy O Dea, Business Director <i>MSc BAI BA DIC CEnv MEnvSc FGS</i>				
Reviewer	Nick Langdon, Director CGL <i>MSc BEng DIC CEnv CEng FICE FGS</i>				
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6. CONCLUSIONS

The RBKC policy indicates that there are concerns that basement development of greater than 50% of the garden area may lead to reduced surface water infiltration, increased surface water run-off and hence increased flooding risk.

This assessment has demonstrated that:

1. Runoff from the roof of a basement with 1m of soil is not likely to occur for most frequent rainfall events. This meets one of the requirements of the SuDS Manual.
2. It is easy to provide the roof with a sustainable drainage system that can manage more extreme events in accordance with SuDS Manual and the current draft version of the National Standards for Sustainable Drainage Systems¹⁵.
3. Provision of a pumped outfall from the basement will provide adequate mitigation against flooding from sewers into basements.
4. Protection of basements from other flooding such as due to breaching of river walls can be achieved by providing the threshold to the basement at a suitable level to minimize the risk.

Therefore the proposed RBKC policy is far too generic in relation to flood risk and drainage. It 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. **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. The existing requirement to limit basements to 85% of the garden area is more than sufficient to allow reasonable SuDS provision and aquifer recharge on most sites.**

¹⁵ DEFRA, National Standards for sustainable drainage systems. Designing, constructing, operating and maintaining drainage for surface runoff. December 2011.