Surface Water Drainage Design Notes

Ground conditions here comprise Topsoil over River Terrace Deposits (soft to firm silty sandy clays) over London Clay. The River Terrace Deposits were found at 0.25m below ground level and were found to comprise soft to firm silt and silty clays with some gravel and occasional large flints, becoming more gravelly with some chalk at depth. The London Clay was not encountered in test holes that extended to 1.55m below ground level. Groundwater was not encountered during the investigations in late November 2017.

The drainage design is based on percolation tests carried out to BRE365 principles in two separate test holes in early December 2017. Soil infiltration rates varying from of 1.759×10^{-5} m/s up to 3.493×10^{-5} m/s were obtained. The lowest value has been used in the calculations and a factor of safety of 2.5 has been applied.

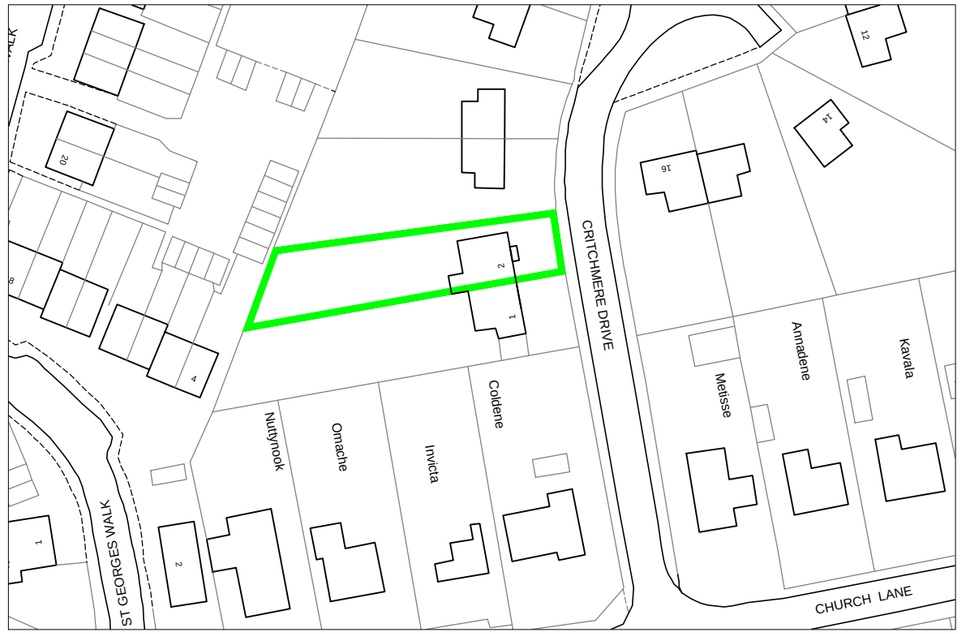
A geocellular soakaway has been designed, 7sq.m in area x 0.8m deep, which will be suitable to drain the new extension and half of the existing rear roof without flooding on a 1 in 100 year rainfall event + 30% climate change addition.

KEY

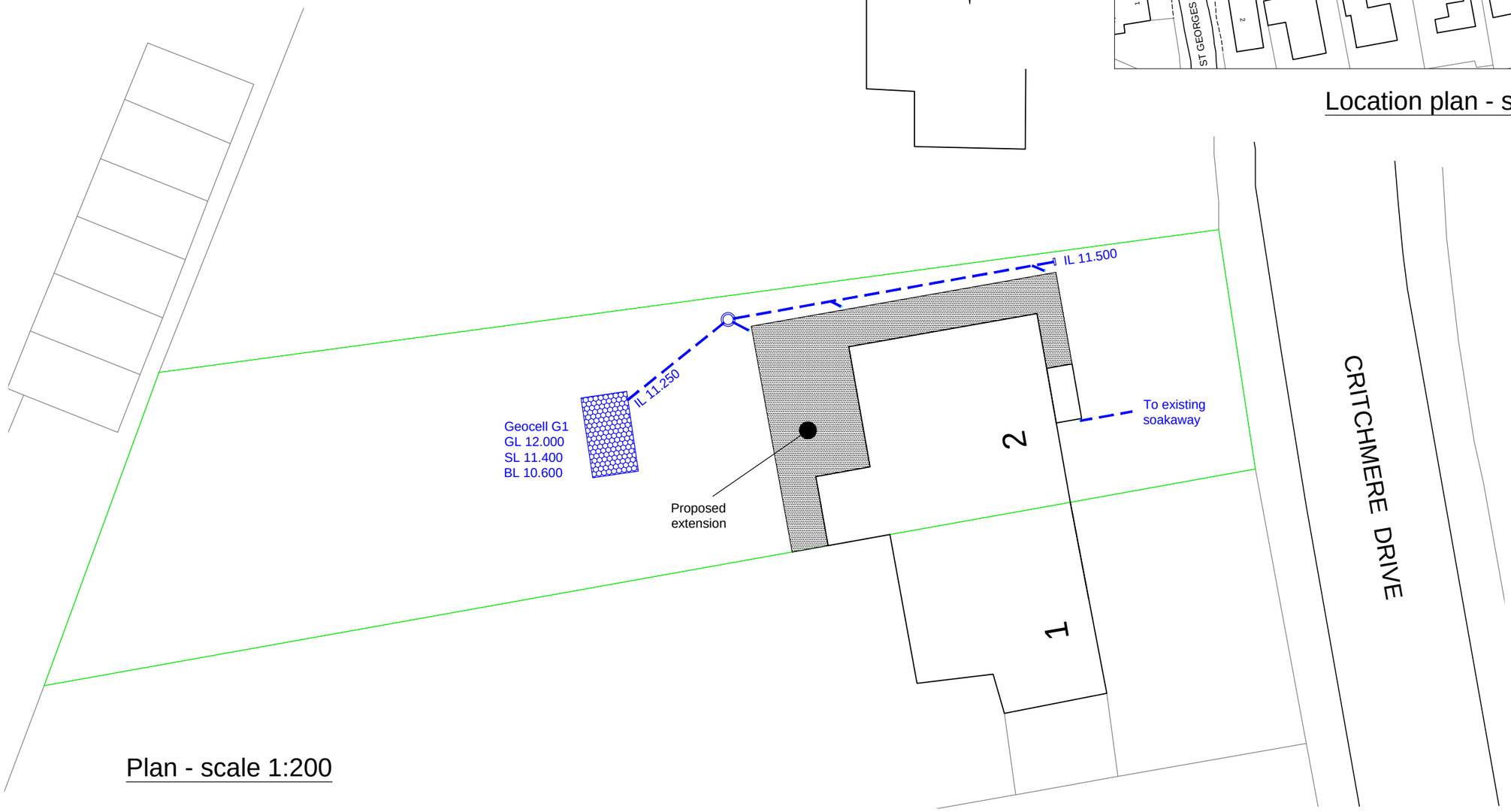
- Proposed storm drainage 100mm dia at min 1:100
- Surface water rodding eye
- Proposed silt trap inspection chamber
- Proposed geocellular soakaway $7m^2$ of 0.8m deep geocells = $5.6m^3$

NOTE

This drawing had been produced for discharge of planning conditions only. All levels and details to be checked for Building Regulations approval and construction purposes



Location plan - scale 1:1000



Plan - scale 1:200

Rev.	Description	Drn.	Date
-	Original	RTFC	20.12.17

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2 Critchmere Drive
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Drawing Title
Surface Water Drainage

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Scale: As shown
At original: A3
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