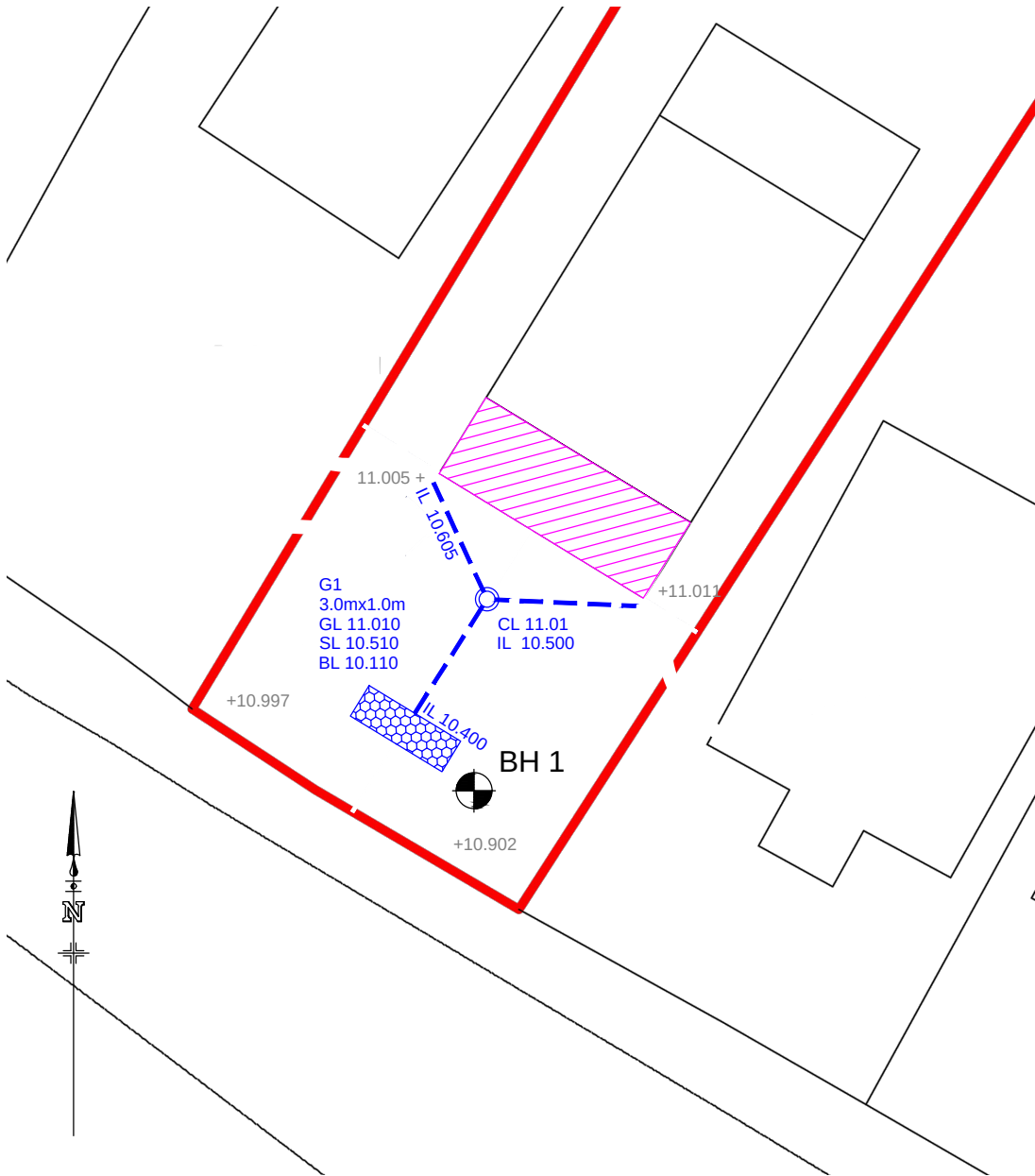
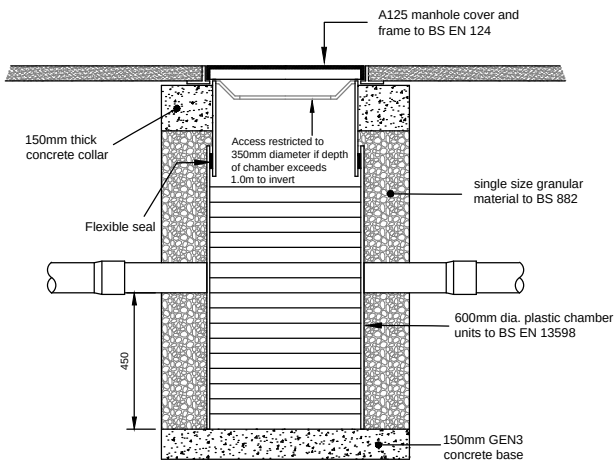


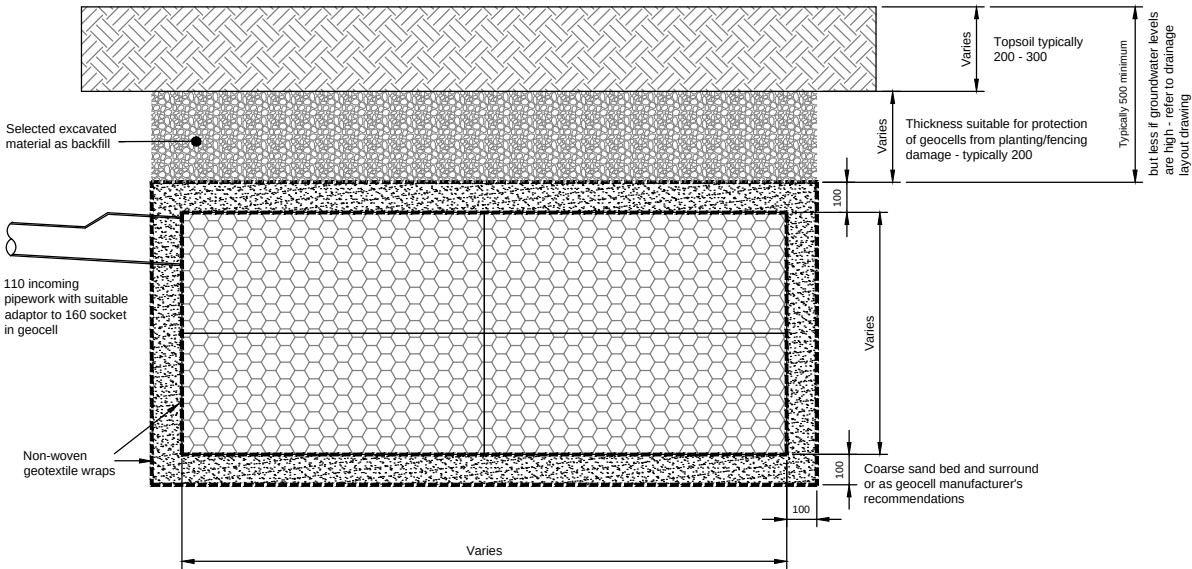


Plan - scale 1:200



Typical Silt Trap Inspection Chamber Detail
(for use in soft landscaped areas and footways)

Construction Details



Typical Geocellular soakaway Unit
(for use in soft landscaped areas)

Surface Water Drainage Design Notes

Ground conditions here generally comprise Topsoil over River Terrace Deposits of soft to firm silty sandy clays over London Clay.

In practice we found 300mm of topsoil over around 400mm of made-up ground of gravel, brick and concrete with natural soils commencing at around 700mm depth and comprising soft silty clays with some grit, gravel and occasional large flints, becoming more gravelly with depth. The London Clay was not encountered in test holes that extended to 1.25m below ground level.

Groundwater encountered at the base of the excavation during the investigations in early early January 2019 and monitoring carried out through to mid-March showed levels rising to a maximum of 929mm below ground level in early March 2019.

The drainage design is based on 3No. percolation tests carried out to BRE365 principles in early January 2019. An average soil infiltration rate of 2.713×10^{-5} m/s was obtained. A rate of 1.157×10^{-5} m/s was obtained at the proposed soakaway base depth with much higher results in a shallow pit and slightly lower results at depth. A factor of safety of 3.0 has been applied.

A shallow geocellular soakaway has been designed, 3.0 sq.m in area x 0.4m deep, which will be suitable to drain the new extension to the dwelling without flooding on a 1 in 100 year rainfall event + 40% climate change addition.

KEY

----- Proposed storm drainage
100mm Dia at min 1:100

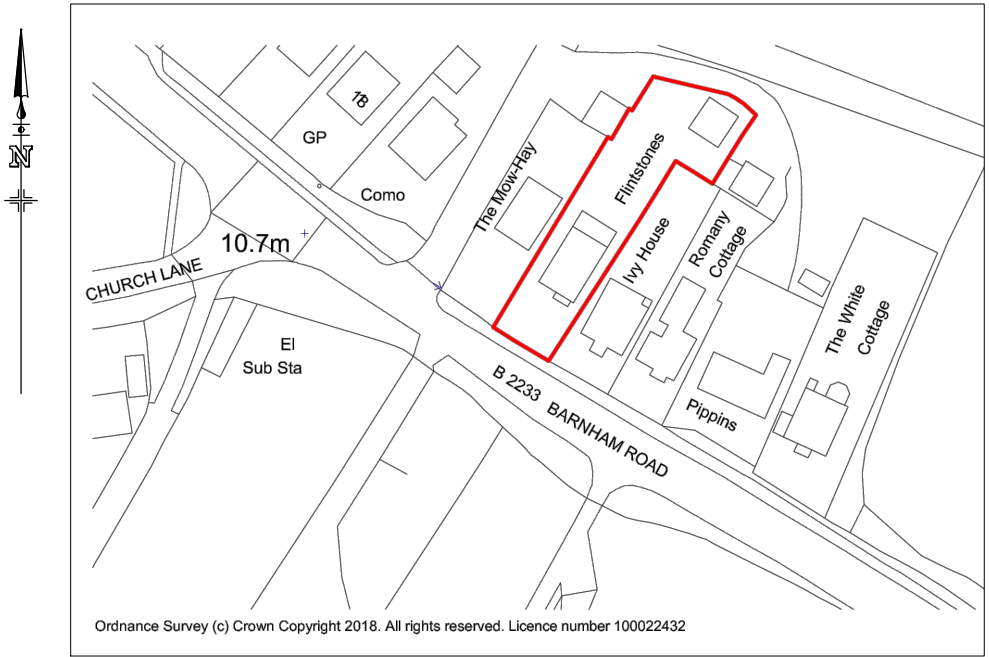
○ Proposed silt trap inspection chamber

Proposed geocellular soakaway
3.0 sq.m of 400mm deep geocells

Proposed new roof areas to be
drained to new soakaway

3.681 + Existing ground levels in metres AOD

BH 1 Borehole/test pit locations



Location plan - scale 1:1250

Percolation Test Results

TP1 - Test at 746mm depth 6.614×10^{-5} m/s
TP1 - Test at 920mm depth 1.157×10^{-5} m/s
TP1 - Test at 1074mm depth 3.679×10^{-6} m/s
Average of all tests was 2.713×10^{-5} m/s

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

-	Original	RTFC	25.5.19
Rev.	Description	Drn.	Date

Project
Flintstones Barnham Road Eastergate

Client
Mr and Mrs Stroud
Drawing Title
Surface Water Drainage

©	This drawing is copyright It may not be copied or reproduced without written authority		
Scale	As shown	At original	A3
Drawing Number	2008/SK4		Revision -