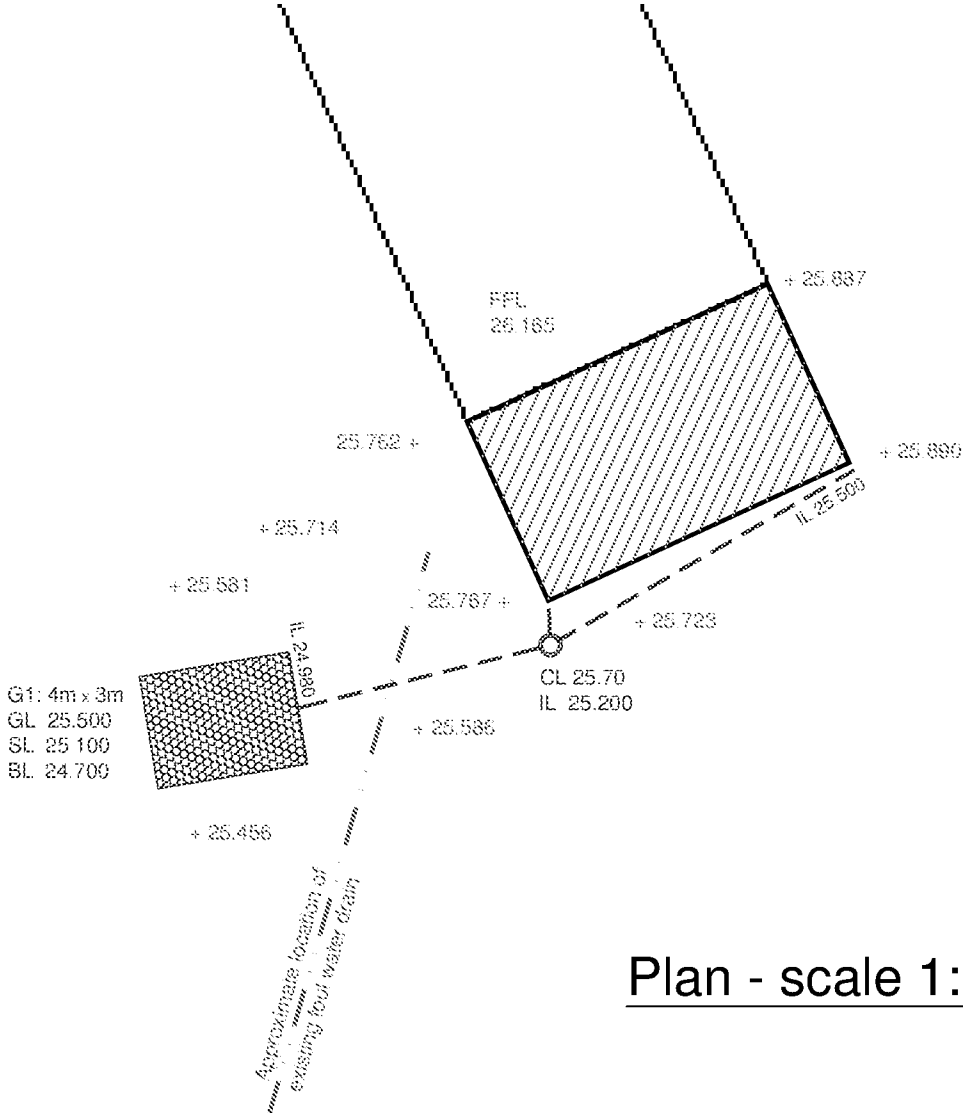
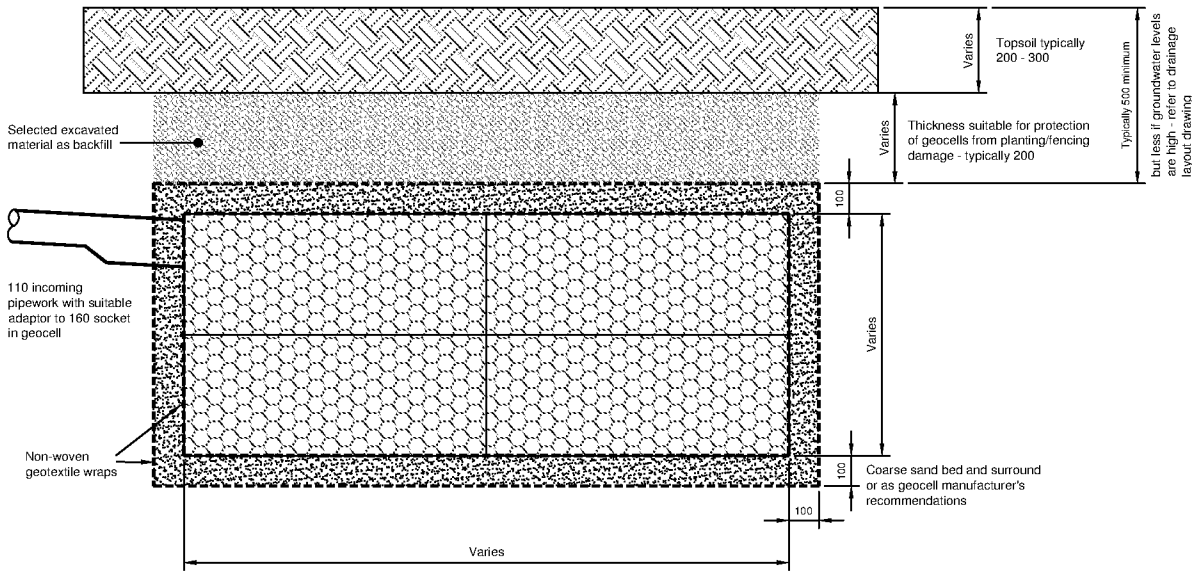


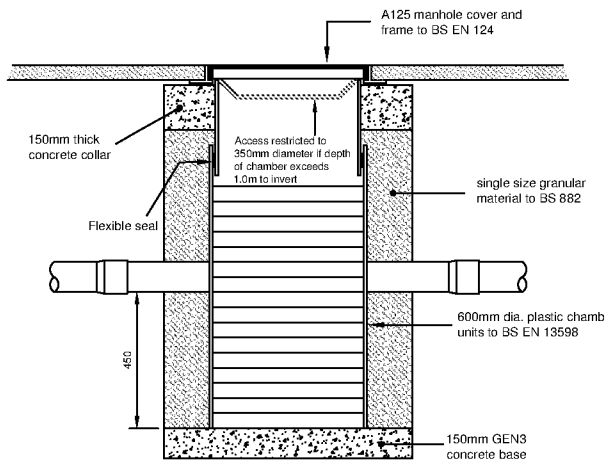
Ashgrove



Plan - scale 1:200

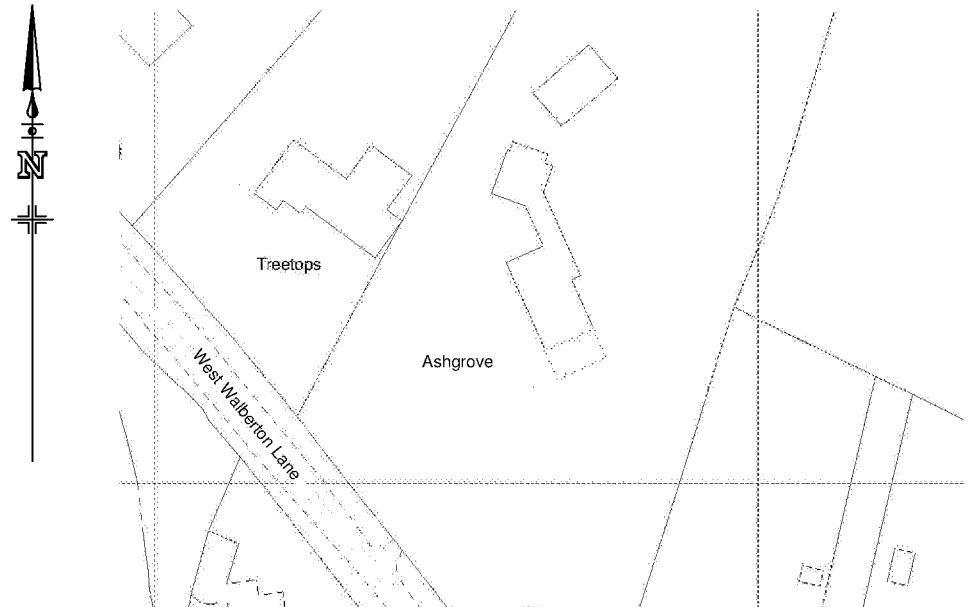


Typical Geocellular soakaway Unit
(for use in soft landscaped areas)



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

Construction Details - scale 1:25



Location Plan - scale 1:1250

Surface Water Drainage Design Notes

Ground conditions here comprise Topsoil over Head Deposits of gravel, sand, silt and clay over The Lambeth Group of clay, silt and sand. The Head Deposits were encountered at 350 to 400mm below ground level and comprised dense gravelley silty brown clays that became softer grey clay at depth with some grit.

Groundwater was not encountered in test pits excavated in early September 2018. Subsequent groundwater monitoring throughout December and January 2019 has shown groundwater rising to a maximum of 995mm below ground level, confirming that shallow soakage structures will be required here.

Percolation tests carried out to BRE365 provided a minimum soil infiltration rate of 3.071×10^{-6} m/s in early September 2018. Further testing in December 2018 provided a lower rate of 1.81×10^{-6} m/s.

We have designed a single geocellular soakaway, using 400mm units with 400mm of cover in a soft landscaped area as shown, which will be suitable to drain the development on a rainfall event with a return period of 1 in 100 years with an addition of 40% for climate change. The half-drain time of the soakaway is longer than we would normally accept but the development is a small conservatory and there is plenty of garden area available to cater for excedence.

KEY

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

○ Proposed silt trap inspection chamber

■ Proposed geocellular soakaway as
detailed in 0.8m deep geocells

■ New roof areas to be drained to
geocell G1

+27.57 Existing ground levels in meters AOD

SL.### Soffit (top) level of geocells

BL.### Base level of geocells

CL.### Cover level of surface water drains

IL.### Invert level of surface water drains

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

Rev.	Description	Drn.	Date
-	Original	RTFC	5.2.19

Project	Ashgrove West Walberton Lane West Sussex
---------	--

Client	Nick Dobson
Drawing Title	Surface Water Drainage

Robert Clark Associates Ltd Chartered Civil Engineers Willow Cottage, Herne Lane, Rustington West Sussex BN16 3EE T: 01903 778945 E: rca-ltd@talktalk.net

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Drawing Number	1900/SK3	Revision	-	