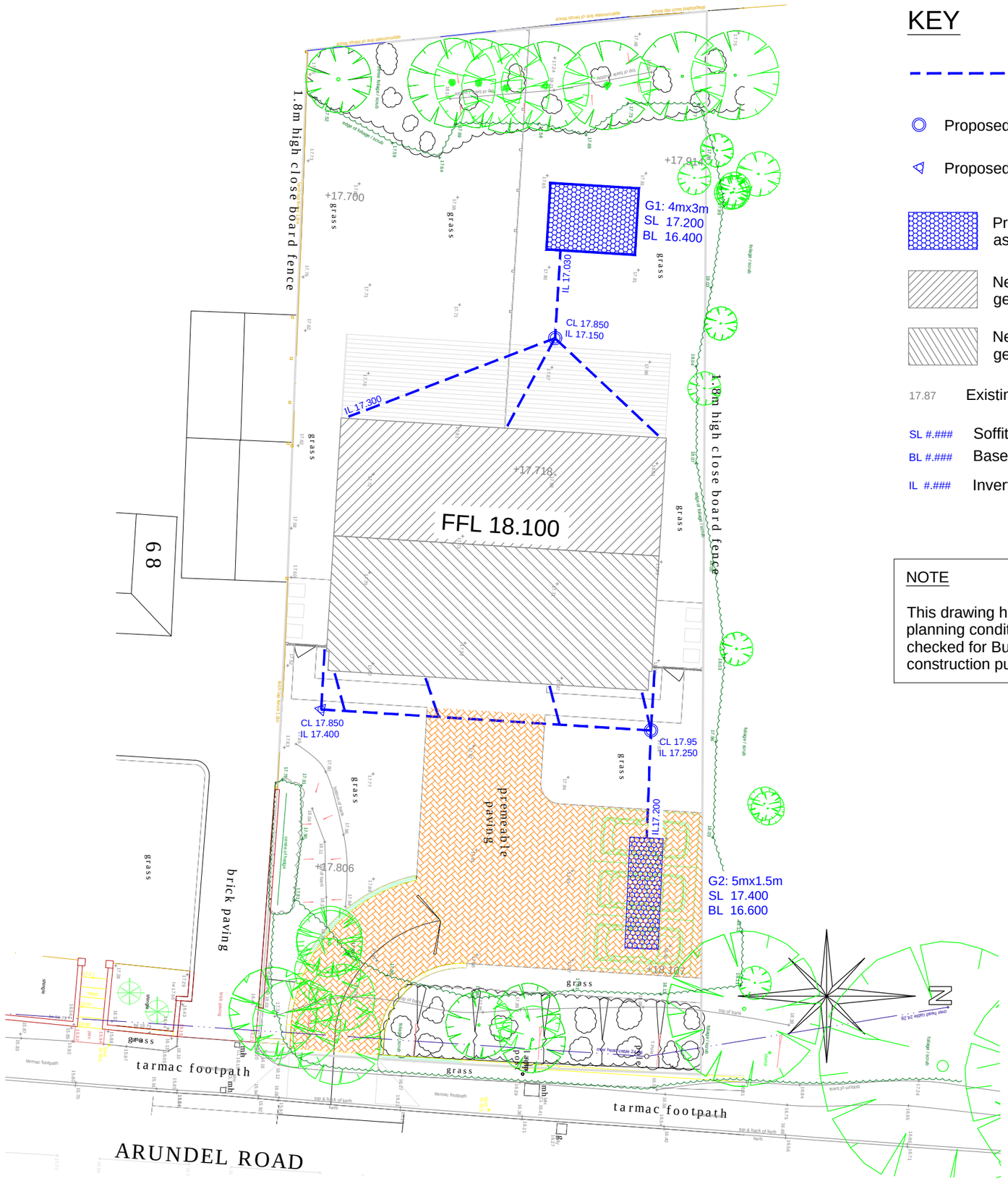


KEY

Proposed storm drainage 100mm dia at min 1:100

Proposed silt trap inspection chamber

Proposed 300 Dia. inspection chamber

Proposed geocellular soakaways as detailed in 0.8m deep geocells

New roof areas to be drained to geocell G1

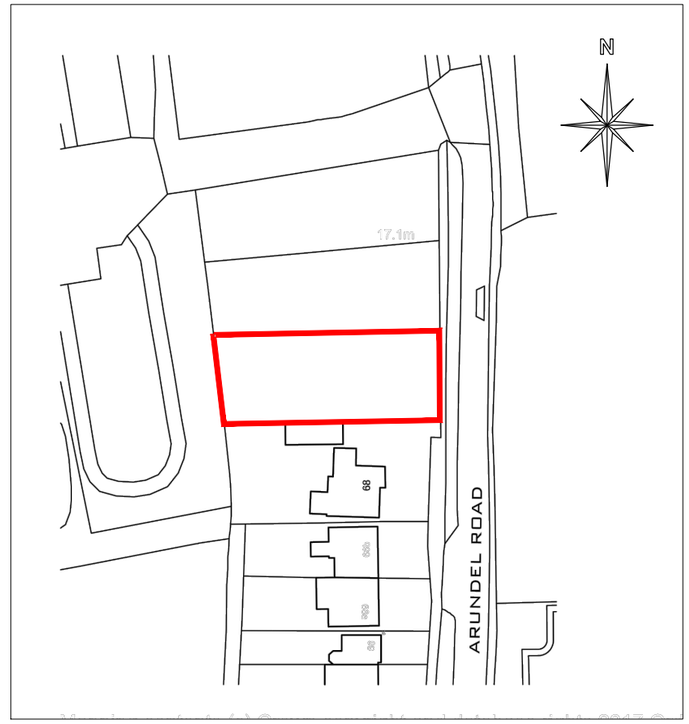
New roof areas to be drained to geocell G2

17.87 Existing ground levels in meters AOD

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

BL #.### Base level of geocells

IL #.### Invert level of surface water drains



Location plan - scale 1:1250

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

Surface Water Drainage Design Notes

Ground conditions here comprise Topsoil over Head Deposits of clay, silt, sand and gravel over London Clay. Our investigations found around 100mm of topsoil over soft to firm silty clay with some small and larger gravel below around 600mm and becoming more gravelly with depth.

The drainage design is based on shallow percolation tests carried out to BRE 365 principles in late March 2018 after a wet period. The lowest soil infiltration rate obtained was 1.269×10^{-5} m/s and this has been used in the calculations for safety.

Groundwater was initially encountered at 1.5m below surface level but has been observed at 1.2m (16.60m AOD) since that time in the open pits and we have designed two geocellular soakaways each using 800mm deep geocells to be sure of penetrating the gravelly layer suficiently.

Soakaway G2 at the front of the development will need to be in suitable geocellular units that will accept the anticipated vehicle loading, having regard to the anticipated loading and the cover than can be provided - refer to manufacturer for guidance.

Soakaway G1 at the rear of the dwelling will be in a soft landscaped area and lower grade geocells can be used.

Ecoblock 50 or similar HDPE cellular permeable paving will be used for the front driveway and parking areas in front of the dwellings on a minimum of 150mm of coarse graded aggregate, subject to structural design by others.

The two soakaways, together with the permeable paved driveway, will be suitable to drain the new dwellings without flooding on a 1 in 100 year rainfall event + 40% climate change addition.

Rev.	Description	Drn.	Date
-	Original	RTFC	15.9.18

Project

Land at Arundel Road
Angmering
West Sussex

Client

Chesterman Homes

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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Scale: As shown | At original: A3

Drawing Number: 1788/SK3 | Revision: -