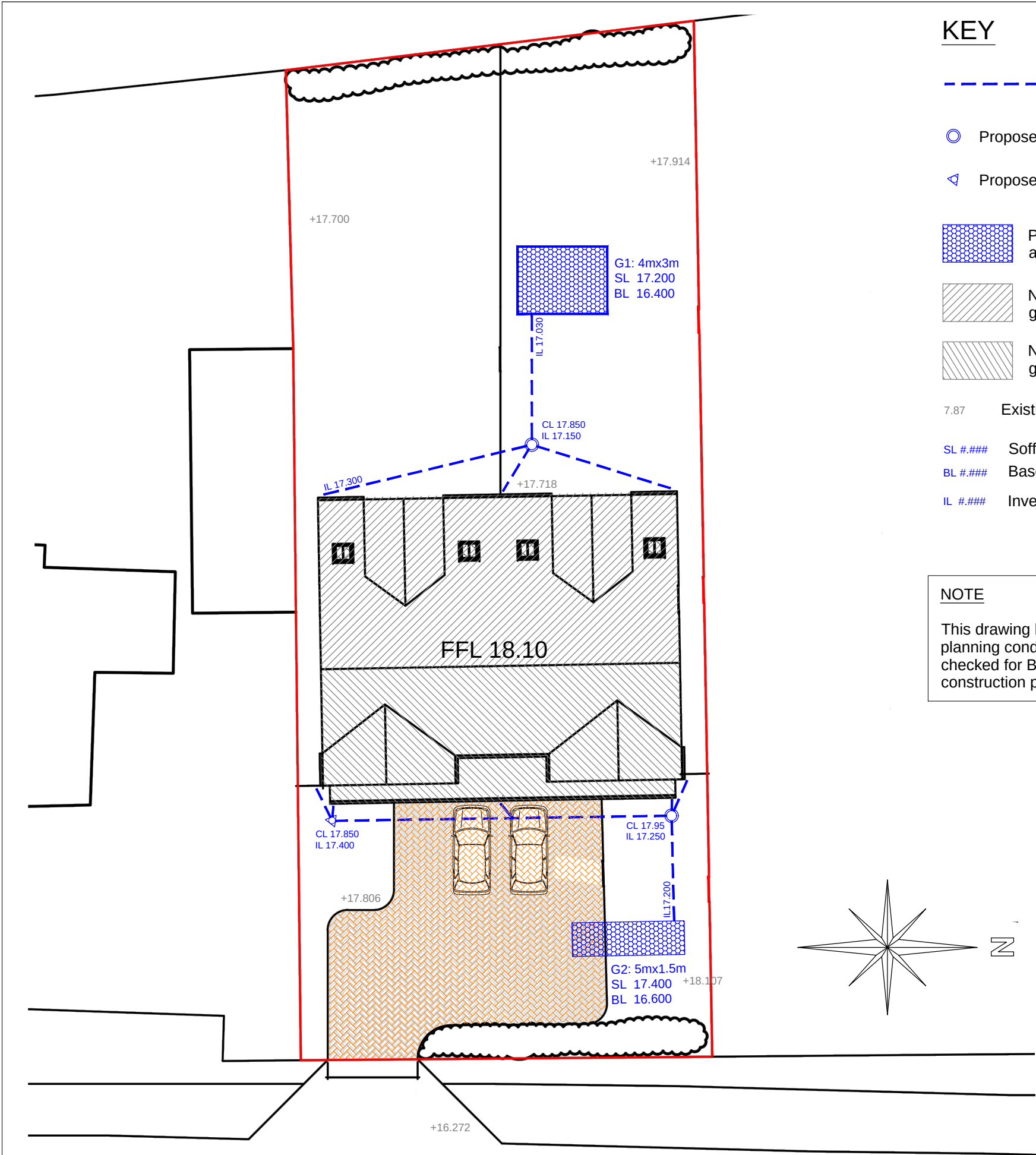




KEY

- 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
- 7.87 Existing ground levels in meters AOD
- SL ##### Soffit (top) level of geocells
- BL ##### Base level of geocells
- IL ##### Invert level of surface water drains

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.

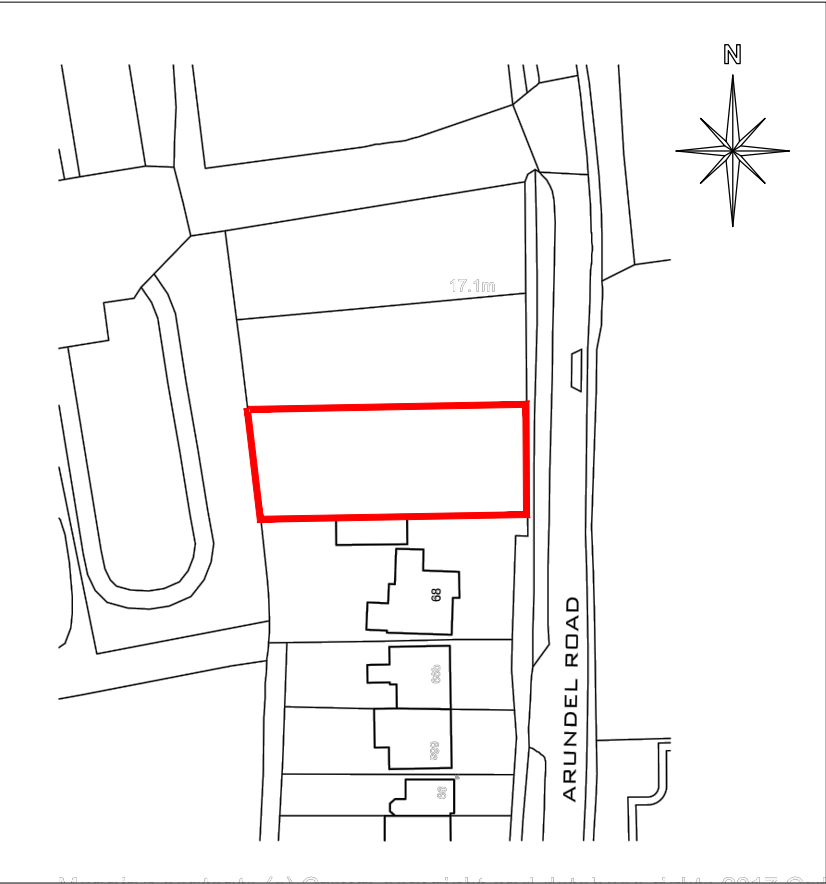
Groundwater was initially encountered at 1.5m below surface level but has been observed at 1.2m (16.60m AOD) since that time in the open pits and we have designed two geocellular soakaways each using 800mm deep geocells to be sure of penetrating the gravelly layer sufficiently.

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.



Location plan - scale 1:1250

-	Original	RTFC	3.5.18
Rev.	Description	Drm.	Date

Project
Land at Arundel Road Angmering West Sussex

Client
Chesterman Homes
Drawing Title
Surface Water Drainage

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Scale	As shown	At original	A3
Drawing Number	1788/SK2		Revision -