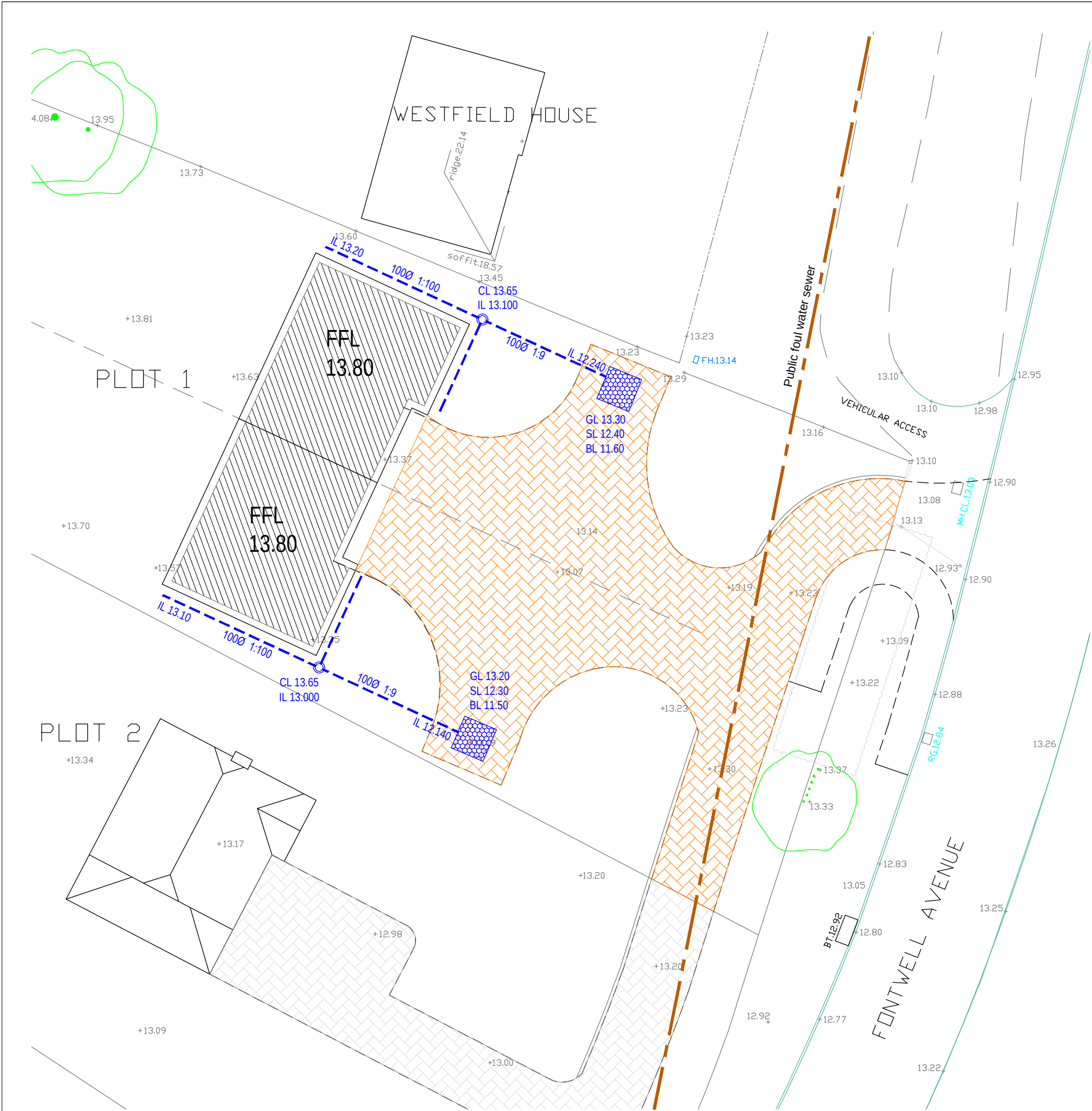




Plan - scale 1:250



Location plan - scale 1:2500

KEY

- Proposed storm drainage
- Proposed silt trap inspection chamber
- Proposed geocellular soakaway
4 sq.m of 0.8m deep geocells
- New roof area to connect to
geocellular soakaway
- Permeable paving laid on coarse
graded aggregate to manufacturer's
recommendations - see Notes

Surface Water Drainage Design Notes

Ground conditions here comprise Topsoil over Head Deposits (soft to firm clays, silts, sands and gravels) over London Clay. The Head Deposits were found at 0.15 to 0.25m below ground level and were found to comprise compact clayey silts with some grit and gravel and occasional large sub-angular flints. The London Clay was not encountered but some chalk was found at depth. A little groundwater was found at the base of a borehole in the lowest part of the site at 1.96m below ground level during the investigations in March 2017.

The drainage design is based on percolation tests carried out to BRE365 principles in four test holes in April 2017. Soil infiltration rates varied considerably from 1.166×10^{-6} m/s through to 1.226×10^{-4} m/s in a shallow test pit.

Permeable paving is being used throughout the access and drives together with rectangular geocellular soakaways into which the roofs will be directly connected. The geocells will each be 2m x 2m x 0.8m high, which will be suitable to drain a roof area of 86 sq.m without flooding on a 1 in 100 year rainfall event + 40% climate change addition. The permeable paving will only need to have 65mm depth of coarse graded aggregate for hydraulic storage but will need more for structural strength (to be determined by others)

Rev.	Description	Drn.	Date
A	Additional drainage details added	RTFC	6.6.17
-	Original	RTFC	20.4.17

Project	Plot 1 Fontwell Avenue Eastergate
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Client	Mr Duggin
Drawing Title	Surface Water Drainage

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Drawing Number	1730/D1.1	Revision	A	