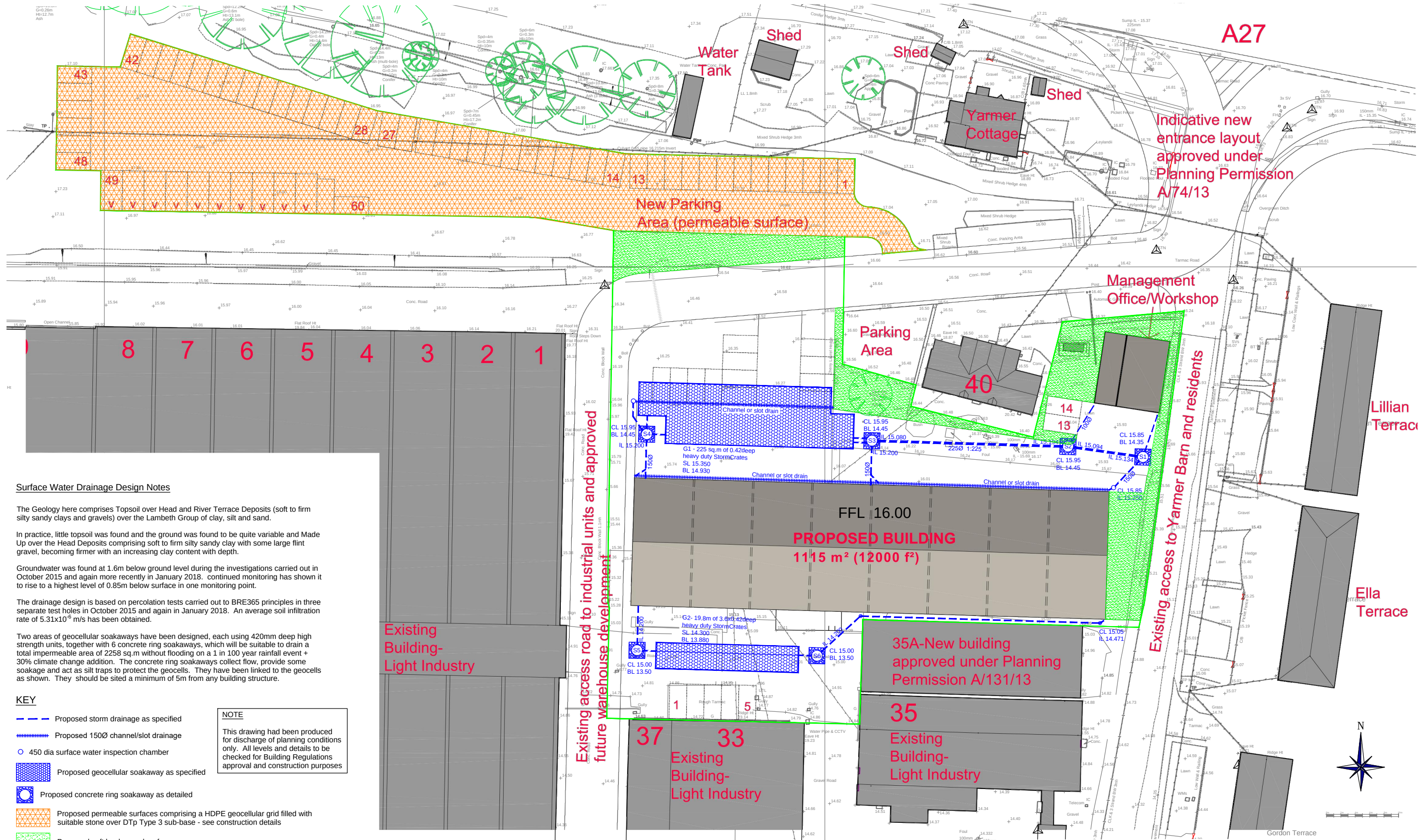




Surface Water Drainage Design Notes

The Geology here comprises Topsoil over Head and River Terrace Deposits (soft to firm silty sandy clays and gravels) over the Lambeth Group of clay, silt and sand.

In practice, little topsoil was found and the ground was found to be quite variable and Made Up over the Head Deposits comprising soft to firm silty sandy clay with some large flint gravel, becoming firmer with an increasing clay content with depth.

Groundwater was found at 1.6m below ground level during the investigations carried out in October 2015 and again more recently in January 2018. continued monitoring has shown it to rise to a highest level of 0.85m below surface in one monitoring point.

The drainage design is based on percolation tests carried out to BRE365 principles in three separate test holes in October 2015 and again in January 2018. An average soil infiltration rate of 5.31x10⁻⁶ m/s has been obtained.

Two areas of geocellular soakaways have been designed, each using 420mm deep high strength units, together with 6 concrete ring soakaways, which will be suitable to drain a total impermeable area of 2258 sq.m without flooding on a 1 in 100 year rainfall event + 30% climate change addition. The concrete ring soakaways collect flow, provide some soakage and act as silt traps to protect the geocells. They have been linked to the geocells as shown. They should be sited a minimum of 5m from any building structure.

KEY

- Proposed storm drainage as specified
- Proposed 150Ø channel/slot drainage
- 450 dia surface water inspection chamber
- Proposed geocellular soakaway as specified
- Proposed concrete ring soakaway as detailed
- Proposed permeable surfaces comprising a HDPE geocellular grid filled with suitable stone over DTP Type 3 sub-base - see construction details
- Proposed soft landscaped surfaces

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	PC	RTFC	14.3.18	
Rev.	Description	App.	Chk.	Dm.	Date

Project	The Vinery Arundel Road Poling
Client	Vinery Management
Drawing Title	Surface Water Drainage

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Scale 1:500	At original A3
Drawing Number 1771/SK3	Revision -