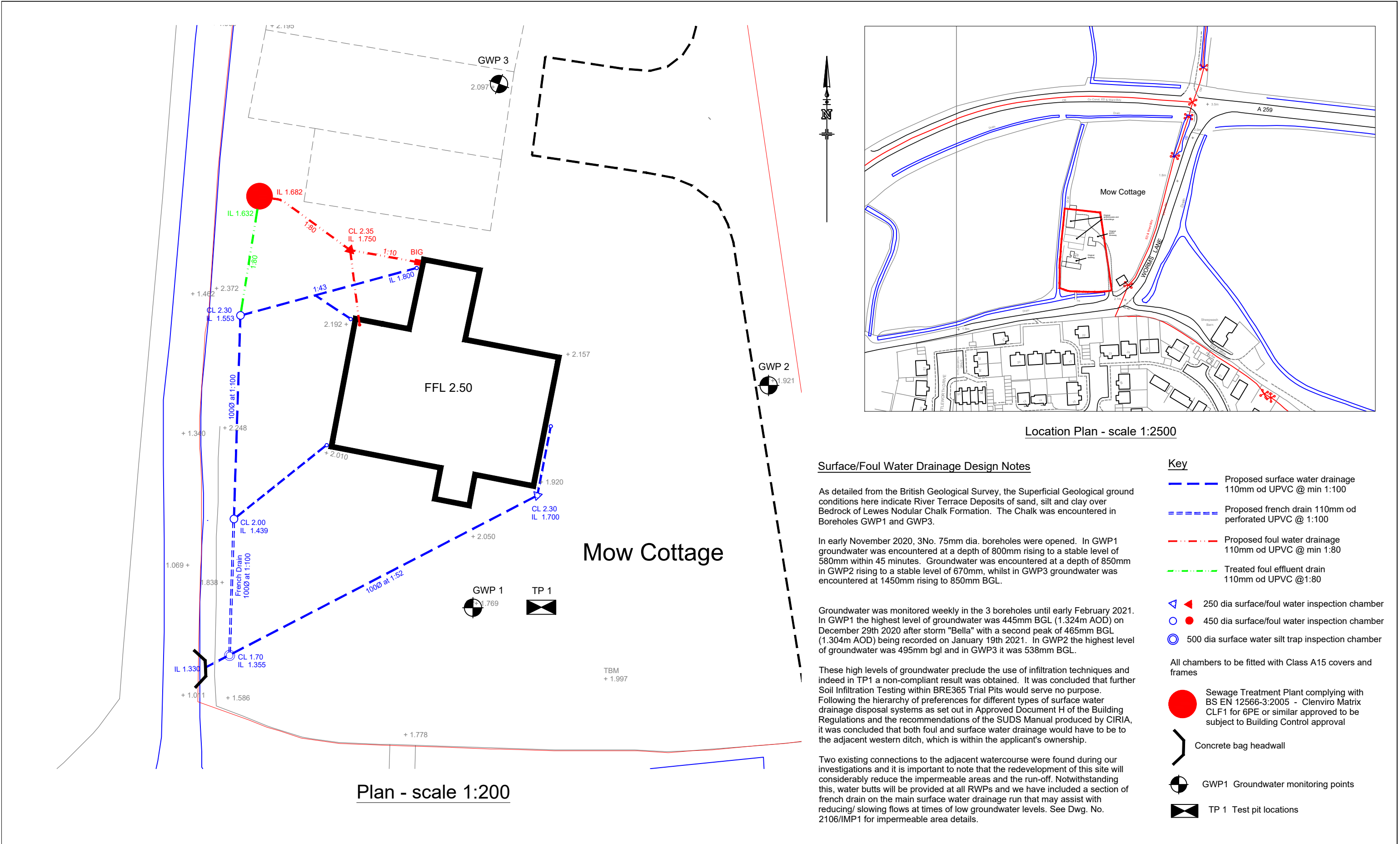
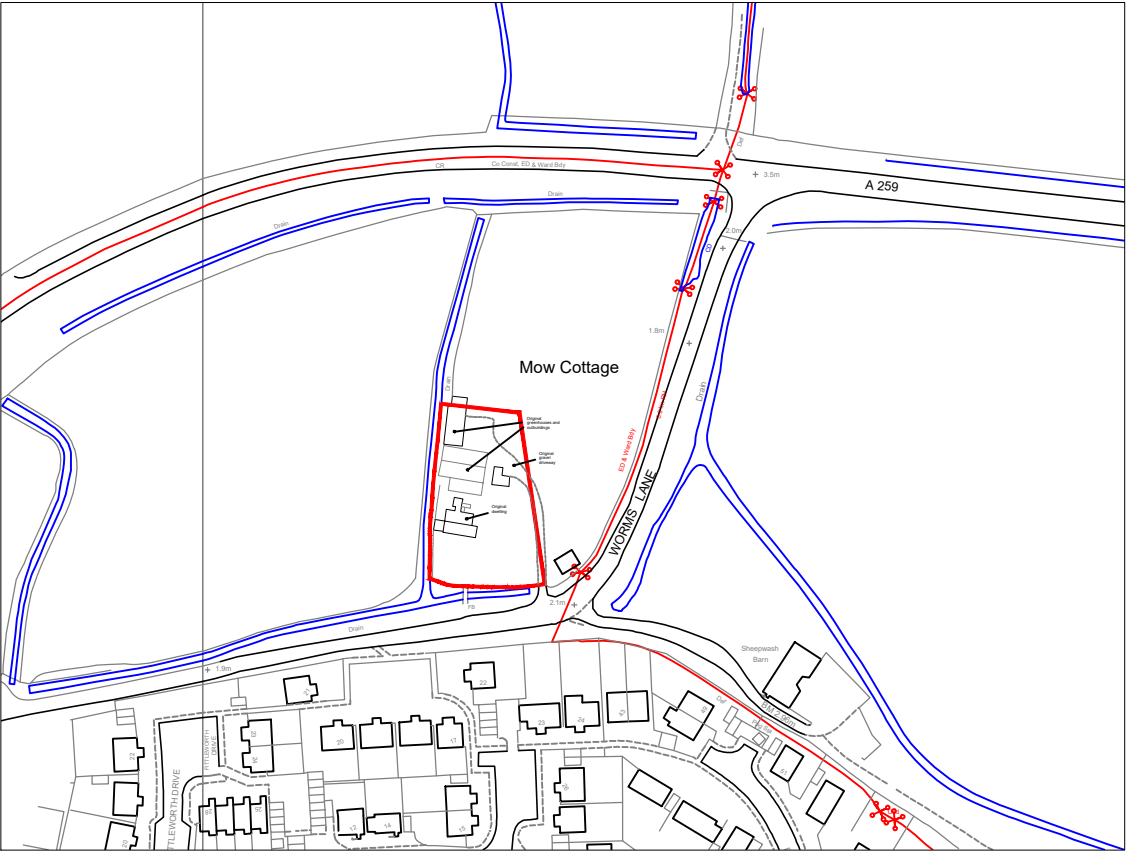




Plan - scale 1:200



Location Plan - scale 1:2500

Surface/Foul Water Drainage Design Notes

As detailed from the British Geological Survey, the Superficial Geological ground conditions here indicate River Terrace Deposits of sand, silt and clay over Bedrock of Lewes Nodular Chalk Formation. The Chalk was encountered in Boreholes GWP1 and GWP3.

In early November 2020, 3No. 75mm dia. boreholes were opened. In GWP1 groundwater was encountered at a depth of 800mm rising to a stable level of 580mm within 45 minutes. Groundwater was encountered at a depth of 850mm in GWP2 rising to a stable level of 670mm, whilst in GWP3 groundwater was encountered at 1450mm rising to 850mm BGL.

Groundwater was monitored weekly in the 3 boreholes until early February 2021. In GWP1 the highest level of groundwater was 445mm BGL (1.324m AOD) on December 29th 2020 after storm "Bella" with a second peak of 465mm BGL (1.304m AOD) being recorded on January 19th 2021. In GWP2 the highest level of groundwater was 495mm bgl and in GWP3 it was 538mm BGL.

These high levels of groundwater preclude the use of infiltration techniques and indeed in TP1 a non-compliant result was obtained. It was concluded that further Soil Infiltration Testing within BRE365 Trial Pits would serve no purpose. Following the hierarchy of preferences for different types of surface water drainage disposal systems as set out in Approved Document H of the Building Regulations and the recommendations of the SUDS Manual produced by CIRIA, it was concluded that both foul and surface water drainage would have to be to the adjacent western ditch, which is within the applicant's ownership.

Two existing connections to the adjacent watercourse were found during our investigations and it is important to note that the redevelopment of this site will considerably reduce the impermeable areas and the run-off. Notwithstanding this, water butts will be provided at all RWP's and we have included a section of french drain on the main surface water drainage run that may assist with reducing/ slowing flows at times of low groundwater levels. See Dwg. No. 2106/IMP1 for impermeable area details.

Key

- Proposed surface water drainage 110mm od UPVC @ min 1:100
- Proposed french drain 110mm od perforated UPVC @ 1:100
- Proposed foul water drainage 110mm od UPVC @ min 1:80
- Treated foul effluent drain 110mm od UPVC @ 1:80

- 250 dia surface/foul water inspection chamber
- 450 dia surface/foul water inspection chamber
- 500 dia surface water silt trap inspection chamber

All chambers to be fitted with Class A15 covers and frames

Sewage Treatment Plant complying with BS EN 12566-3:2005 - Clenviro Matrix CLF1 for 6PE or similar approved to be subject to Building Control approval

Concrete bag headwall

GWP1 Groundwater monitoring points

TP 1 Test pit locations

-	Original			RTFC	14.5.21
Rev.	Description	App.	Chk.	Drm.	Date

Project	Mow Cottage Worms Lane Flansham
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Client	Mr Keen and Miss Robson
Drawing Title	Drainage Layout

Note:	The Sewage Treatment Plant must comply with the General Binding Rules for Small Sewage Discharges and conform to BS EN 12566-3:2005 - Clenviro Matrix CLF1 for 6PE or similar approved. It is our understanding that a sample chamber is not required unless discharging to a drainage field. Building Regulations approval is to be obtained.
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Scale	As shown	At original	A3
Drawing Number	2106/SK4		Revision -