



TERRA ANALYTICAL UK

Agricultural Land Classification Report

M Scott Properties Ltd

Land at School Lane, Higham, Gravesham, Kent

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Updated for use: 18/02/26

This report is based on data obtained during field surveys conducted on the 30th January 2026. The conclusions and recommendations are made in good faith and are representative of the outcomes found on that specific day. Any use of this report for purposes other than those stated should be done with caution and may require additional verification.

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1. Summary

An Agricultural Land Classification Survey has been undertaken by Terra Analytical UK on behalf of M Scott Properties Ltd at a site at School Lane, Higham, Gravesham, Kent.

The area of land assessed totalled 2.8 hectares in area.

The survey was carried out in January 2026 under a format that follows the 1988 MAFF guidelines for assessing Agricultural Land Classification and assessing limitations.

The agricultural land on the site has been classified as mainly deep medium textured sandy loam topsoils with moderately draining sandy loam subsoils.

Due to these properties coupled with climactic data, soil droughtiness and stoniness, the quality of the 2.8 hectares of agricultural land over the area is deemed Agricultural **ALC Grade 3a** (100%).

2. Background

Terra Analytical were instructed by M Scott Properties Ltd to determine the Agricultural Land Classification (ALC) of a site situated at School Lane, Higham, Gravesham, Kent.

The site is centred on grid reference TQ 71179 71820.

The site is made up of one parcel comprising a total area of 2.8 ha- detailed in the site survey map in Appendix D. This field is currently being managed as part of an arable rotation and at present is uncropped and sat as cereal stubble.

The land surveyed was bare agricultural land surrounded by various tree belts and hedgerows with no water bodies or wet ditches to be noted within the site.

Published information states the site's soils are predominantly belonging to the '571g FYFIELD 4' soil series comprising 'deep well drained often stoneless course loamy and sandy soils'.

3. Methodology

Agricultural Land is classified into the following grades according to the 1988 guidelines (MAFF, 1988).

Table 1: Agricultural Land Grading categories

Grade	Description
1	Excellent quality Agricultural Land with no or very minor limitations to Agricultural use
2	Very good quality Agricultural Land with minor limitations which effect crop yield, cultivation or harvesting
3a	Good quality Agricultural Land capable of producing moderate to high yields of a narrow range of arable crops or moderate yields of a wider range of crops
3b	Moderate quality Agricultural Land capable of producing moderate yields of a narrow range of crops and/or level of yields
4	Poor quality Agricultural Land with severe limitations which significantly restrict the range of crops and/or level or yields.
5	Very poor-quality Agricultural Land with very severe limitations which restrict use to permanent pasture or rough grazing, except for occasional pioneer forage crops.

The classification includes an initial desktop investigation to examine previously mapped soil types and to note the drift and parent soil geology. At this point climate data is obtained from the Met Office publication; Climatological Data for Agricultural Land Classification (1989) and was used to determine overriding site limitation and interaction with soil parameters.

This is then followed up by a field site survey to gain the physical data in relation to the survey.

The site visit took place on 30th January 2026 where a total of 4 soil auger borings were extracted to a depth of 120cm (where possible) and 2 soil examination pits to make a detailed assessment of the soil profile and sub-soil structure. Soil auger boring and soil pit locations were carried out on a 100m x 100m grid at a density of one per hectare to ensure an unbiased and logical gathering of data. A copy of the location of augers borings are shown in Appendix D.

Soil texture was assessed by the consultant carrying out the survey, however, samples were sent for independent laboratory analysis to support the assessment. The results of this analysis are fully detailed in Appendix B.

3.1 Provisional ALC Gradings

The 1:250000 Provisional Natural England 2010 ALC maps details the entire site as ALC Grade 2 as per Appendix C.

4. Land Classification

The ALC assessment is undertaken in accordance with the Agricultural Land Classification for England and Wales; Revised Guidelines for Grading the Quality of Agricultural Land 1988 and the final grade is ultimately determined by the **most limiting factor** present.

The main limiting factors used in the ALC system, which determines the split into one of the 6 classification grades are:

- Climatic Limitations
- Site Limitations
- Soil Limitations
- Interactive Limitation

4.1) Climatic Conditions

The climatological data for the site has been interpolated from Meteorological Office (1989) data and is shown below in Table 2. It shows the interpolated adjustment for altitude, average annual rainfall, accumulated temperature, field capacity days and the moisture deficit for Wheat and Potatoes for the site.

Table 2 – Climatological Data

Table 2 – Climatological Data for Land at School Lane, Higham, Kent TQ 71179 71820		
Climatological Factor	Units	Value
Altitude	m	59
Average Annual Rainfall (AAR)	mm	627
Accumulated Temperature (AT0)	Day ° C (Jan – Jun)	1433
Field Capacity Days	Day	121
Moisture Deficit – Wheat	mm	118
Moisture Deficit - Potatoes	mm	114

Based on the Average Annual Rainfall and Accumulated Temperature, the grade according to climate at this site should be no less than **ALC Grade 1**.

4.2) Site Limitations

The assessment of the site factors is primarily concerned with the way in which the topography influences the use of Agricultural machinery and hence the potential cropping of the land.

4.2.1 Gradient

This can influence the ALC of a site due to it affecting the type of machinery which can be safely and efficiently operated. Grades 1 to 3a have a gradient limit of seven degrees. Grade 3b has a limit of 11 degrees.

The gradient of the site is undulating but at no point exceeds seven degrees. Therefore, based on gradient, this site should be classified no less than **ALC Grade 1-3a**. This will be considered further if no other limiting factors are presented.

Image 1- Topography and Micro-relief of Land at School Lane, Higham, Kent



4.2.2 Micro-relief

Complex changes to slope angle and direction over short distances, or the presence of boulders or rock considerably limits the use of agricultural machinery. The micro-relief across the site is not considered a limiting factor in assessing the ALC of this site (Image 1).

4.2.3 Flooding

A low risk from flooding for surface water and very low risk to rivers and sea has been identified.

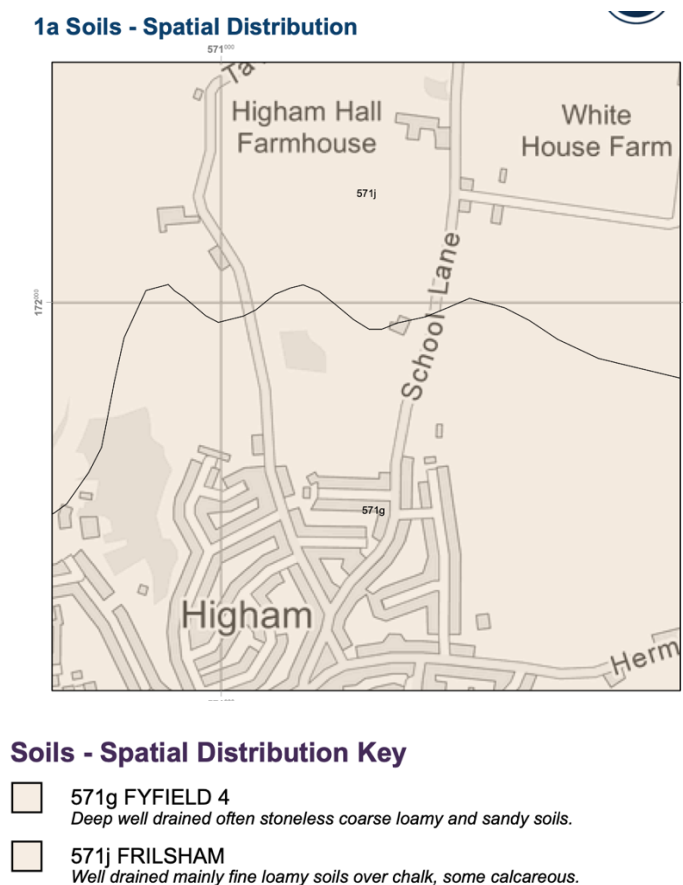
<https://check-long-term-flood-risk.service.gov.uk/postcode>

The risk of flooding will therefore not result in a significant limiting factor for this site.

4.3 Soil Limitations

The soils previously mapped on site are the '571g FYFIELD 4' association mapped over the entire site. See figure 1 below.

Figure 1- Spatial distribution of soils at the site.



A detailed soil quality assessment was made over the site. A 100m x 100m grid was made over the site (as detailed in Appendix E). 4 auger borings to a depth of 120cm (where possible) were taken and 2 soil pits were dug to a depth of 120cm to observe details around soil quality and composition.

The soils were relatively consistent at the site.

4.3.1 Medium Sandy Loam Topsoil over Sandy Loam Subsoil

A typical observation profile can be seen below:

Boring B2 & Pit 1- Appendix B & E

0-35cm Dark Greyish/Brown (10YR 4/2) medium sandy loam; stoney; moderately developed coarse sub-angular blocky structure; soft; non-calcareous; smooth clear boundary to:

35-66cm Very Dark Greyish/Brown (10YR 3/2) medium sandy loam; stoney; weakly developed coarse angular block structure; soft; smooth gradual boundary to:

66-120cm+ Very Dark Greyish/Brown (10YR 3/2) medium sandy loam with common duller brown; stoney; weakly developed coarse angular blocky prismatic structure; firm. Poorly structured.

These are typically well drained soils and of Soil Wetness Class II with a good capacity to absorb excess winter rainfall.

4.3.2 Soil Depth

The depth of soil can be a limiting factor within ALC. The land at School Lane, Higham had soil depths in excess of 60cm across the whole site and therefore can be graded no less than **ALC Grade 1**.

4.3.3 Stoniness

Another limiting factor is stoniness, which assesses the percentage (volume) of hard stones in the top 25cm of soil. High percentages of stones in these areas of the profile can impact crop growth, cultivations and harvesting. The stone content of the Land at School Lane, Higham could be attributed to being a limiting factor. With stone content at 15% but below 35% the site should be downgraded to **ALC Grade 3a**. **This is jointly deemed the most limiting factor for the site.**

4.3.4 Chemical Limitations

Sites can be limited according to chemical contamination and whether their ability to be farmed can be maintained by routine applications of fertiliser and lime. From the laboratory results it is noted that chemical contamination or a nutrient imbalance is not present at the site and therefore is not a limiting factor.

4.4 Interactive Limitations

Interactive limitations are the physical limitations which result from interactions between climate, site and soil (MAFF, 1988). Within this, soil wetness, droughtiness, irrigation and soil erosion are assessed.

4.4.1 Soil Wetness

The soil wetness of the site is deemed to be Wetness Class II. Therefore, the ALC grade based on wetness class, considering the site has topsoil textures of medium sandy loam and Field Capacity Days of 121 (Table 1 & Appendix A), should be no less than **ALC Grade 1** (2.8 ha).

4.4.2 Soil Droughtiness

Soil droughtiness needs to be assessed as available and adequate moisture is vital to a crop achieving full yield potential. Two crops, a shallow and deep rooting crop are used to provide an average drought risk assessment of the soil. Stoniness of the soil, soil type and soil structure are all used to determine the moisture balance (crop adjusted available water capacity *less* moisture deficit). Droughtiness calculations have found the moisture balance is considered a limitation in down grading the site detailed in Appendix A to ALC Grade 3a. **This is jointly deemed the most limiting factor for the site.**

4.4.3 Soil Erosion

Soil erosion is a factor to consider when grading Agricultural Land. Given the presence of sandy loam top soils and moderate stone content, it is deemed this site is not susceptible to wind blow. The sheltering effect of many of the hedgerows and woodland will also add to this factor, therefore, soil erosion is not considered significant enough to downgrade the site.

5. Final Classification

Prior to carrying out this report, the land at School Lane, Higham was classified by Natural England in their 2010 Provisional Agricultural Land Classification Maps (Data from pre-1988) as Grade 2 Agricultural Land (as shown in Appendix C).

5.1 Final Grading and most Limiting Factor

Grade 3a- Droughtiness/Stoniness Limitation- 2.8 ha

The combination of the topsoil texture (Medium Sandy Loam), Wetness Class II and the number of Field Capacity Days of 121, Average Annual Rainfall and Droughtiness results in **ALC Grade 3a** for agricultural area within the site (2.8ha). Also, with stone content at 15% of hard stones in the top 25cm of soil, this adds another contributing factor to the down downgrading.

Current Grading

Drawing on the climatological data, site limitations, soil limitations and interactive limitations investigated in the report thus far, the 2.8 ha site at School Lane, Higham should receive the following Agricultural Land Classification:

Table 3 – Final Agricultural Grading split of 'Land at School Lane, Higham: TQ 71179 71820.

ALC Gradings and Limitations			
Grade	Hectares	Percentage (%)	Limitation
1	-	-	-
2	-	-	-
3a	2.8	100%	Droughtiness/Stoniness
3b	-	-	-
4	-	-	-
5	-	-	-
Non-Agricultural Land	-	-	-
Total	2.8	100%	-

5.2.1 Results Discussion

Grade 3a

There are 2.8 hectares of Grade 3a soils on the site. This is predominantly made up of medium sandy loam topsoils and sandy loam subsoils. These subsoils are moderate to poorly structured, but on the whole are well draining and hold a Wetness Class of II (ALC Grade 3a). These soils are of the majority on the site.

Workability of these soils is likely to be limited to the autumn with a mainly cereal crop rotation. The relatively dry climate does lend itself to extended agricultural use in the Autumn potentially depending on Autumn rainfall. These types of soils could be suited to row crops or high value vegetable crops such as potatoes, however the relatively high stone content will likely limit this appeal. These soils do have the potential to produce moderate cereal yields.

The final ALC grade map can be found in Appendix E.

5.2 Further Remarks

Should the site be developed, these types of soils are very prone to compaction- resulting in the soil being less permeable. Therefore, care would be advised in the use of heavy machinery. If heavy machinery is used, thought should be taken to loosen subsoil compaction before the spreading for topsoil.

Care should also be taken in soil selection for landscape use. The topsoil, however, would be of reasonable quality and should be stored in separate bunds (recommended to be no higher than 3 metres). In order to protect them as a topsoil resource, they should be kept free of vegetation and compaction.

Ideal times for workability for these types of soils should be between April and September and care should be taken in working these soils, during and after heavy rainfall.

Agricultural Land Classification

Statement of Competence

Terra Analytical UK Ltd and the agents acting on behalf of the company, conduct numerous Agricultural Land Classification Surveys (ALC), Land Appraisal Studies and Agricultural Impact Assessments.

These surveys are carried out for a variety of clients in the rural sector. More commonly, instructions are received from developers in the residential, commercial, mineral and renewable spheres.

Our agents have attended and fulfilled the criteria from the Agricultural Land Classification Course: Working with Soils- run by the British Association of Soil Scientists resulting in an advanced level of competence when carrying out these surveys.

Piers Bulgin BSc (Hons) holds a second class, upper division honours degree from Harper Adams University, Shropshire. He graduated in 2008, and has been involved in the management of two 1000 ha Agricultural businesses from 2009-2021.

He specialises in land use management and advises private clients on the profitable and sustainable operational practice of their land.

He farms in his own right on an 800-acre grassland farm in mid-Norfolk and South Essex, over a range of different soil types.

He is qualified through the British Association of Soil Scientists to carry out Agricultural Land Classification Surveys and has acted for several high-profile clients in these matters. His academic credentials and experience in the industry within this particular field, makes him more than suitably qualified to prepare this report.

This report is based on data obtained during field surveys conducted on the 30th January 2026. The conclusions and recommendations are made in good faith and are representative of the outcomes found on that specific day. Any use of this report for purposes other than those stated should be done with caution and may require additional verification.

Information Sources-

Ministry of Agriculture, Fisheries and Food, 1988, Agricultural Land Classification of England and Wales

Meteorological Office, 1989, Climatological Data for Agricultural Land Classification

Munsell Colour Chart

Cranfield University, LandIS, 2022, Soil Site Soil Reporter

Flood Warning Information Service- Online, 2022 <https://check-long-term-flood-risk.service.gov.uk/postcode>

AGRICULTURAL LAND CLASSIFICATION

Boring / Pit	Grid (Easting)	Horizon	Base depth (cm)	Horizon Thickness for Drought Measurements	Texture	Calcium	Colour	Stones%	Sonetype	Pores < 3mm	Structure	SPL depth (cm)	SWC Soil wetness (class)	Grades (weathering)	Tay (total available moisture)	Epi (easily available)	STWV (stones available)	SEBV (stones available)	Total for Weak	Total for potatoes	Grade (Drought-wheat)	MSP	Grade (Drought-potatoes)																								
		To 50				50 To 120				To 70																																					
Boring Pit	Grid	Horizon	Base depth (cm)	Horizon Thickness for Drought Measurements	Texture	Calcium	Colour	Stones%	Sonetype	Pores < 3mm	Structure	SPL depth (cm)	SWC Soil wetness (class)	Grades (weathering)	Tay (total available moisture)	Epi (easily available)	STWV (stones available)	SEBV (stones available)	Total for Weak	Total for potatoes	Grade (Drought-wheat)	MSP	Grade (Drought-potatoes)	1	33	1	33	N/A	10R 4/2	15.00	All hard rocks or stones (i.e. ethos -	17	17	1	1	0.5											
																								2	60	27	10	27	N/A	10R 3/2	15.00	All hard rocks or stones (i.e. ethos moderate	15	11	1	1	0.5										
																								3	120	0	0	0	N/A	10R 3/2	15.00	All hard rocks or stones (i.e. ethos moderate	60				1	15	11	1	0.5						
																								4	60	0	0	10	N/A	10R 3/2	15.00	All hard rocks or stones (i.e. ethos poor					1	11	8	1	0.5	120.785	92.51	2.785	-21.49	3a	
																								5	35	35	0	35	N/A	10R 4/2	15.00	All hard rocks or stones (i.e. ethos -	17	17	1	1	0.5										
																								6	66	15	16	31	N/A	10R 3/2	15.00	All hard rocks or stones (i.e. ethos moderate	15	11	1	1	0.5										
																								7	66	0	0	0	N/A	10R 3/2	15.00	All hard rocks or stones (i.e. ethos moderate	60				1	15	11	1	0.5						
																								8	120	0	54	4	N/A	10R 3/2	15.00	All hard rocks or stones (i.e. ethos poor					1	11	8	1	0.5	122.655	94.89	4.655	-19.11	3a	
B2 pit	Grid	Horizon	Base depth (cm)	Horizon Thickness for Drought Measurements	Texture	Calcium	Colour	Stones%	Sonetype	Pores < 3mm	Structure	SPL depth (cm)	SWC Soil wetness (class)	Grades (weathering)	Tay (total available moisture)	Epi (easily available)	STWV (stones available)	SEBV (stones available)	Total for Weak	Total for potatoes	Grade (Drought-wheat)	MSP	Grade (Drought-potatoes)	1	35	1	35	0	35	N/A	10R 4/2	15.00	All hard rocks or stones (i.e. ethos -	17	17	1	1	0.5									
																								2	66	0	0	0	N/A	10R 3/2	15.00	All hard rocks or stones (i.e. ethos moderate	60				1	15	11	1	0.5						
																								3	120	0	54	4	N/A	10R 3/2	15.00	All hard rocks or stones (i.e. ethos poor					1	11	8	1	0.5	122.655	94.89	4.655	-19.11	3a	
																								4	64	15	14	29	N/A	10R 3/2	15.00	All hard rocks or stones (i.e. ethos moderate	60				1	15	11	1	0.5						
B3 pit	Grid	Horizon	Base depth (cm)	Horizon Thickness for Drought Measurements	Texture	Calcium	Colour	Stones%	Sonetype	Pores < 3mm	Structure	SPL depth (cm)	SWC Soil wetness (class)	Grades (weathering)	Tay (total available moisture)	Epi (easily available)	STWV (stones available)	SEBV (stones available)	Total for Weak	Total for potatoes	Grade (Drought-wheat)	MSP	Grade (Drought-potatoes)	1	35	1	35	0	33	N/A	10R 4/2	15.00	All hard rocks or stones (i.e. ethos -	17	17	1	1	0.5									
																								2	65	17	15	32	N/A	10R 3/2	15.00	All hard rocks or stones (i.e. ethos moderate	60				1	15	11	1	0.5						
																								3	65	0	0	0	N/A	10R 3/2	15.00	All hard rocks or stones (i.e. ethos moderate	60				1	15	11	1	0.5						
																								4	120	0	55	5	N/A	10R 3/2	15.00	All hard rocks or stones (i.e. ethos poor					1	11	8	1	0.5	122.06	94.21	4.06	-19.79	3a	
B4	Grid	Horizon	Base depth (cm)	Horizon Thickness for Drought Measurements	Texture	Calcium	Colour	Stones%	Sonetype	Pores < 3mm	Structure	SPL depth (cm)	SWC Soil wetness (class)	Grades (weathering)	Tay (total available moisture)	Epi (easily available)	STWV (stones available)	SEBV (stones available)	Total for Weak	Total for potatoes	Grade (Drought-wheat)	MSP	Grade (Drought-potatoes)	2	3	120	0	55	5	N/A	10R 3/2	15.00	All hard rocks or stones (i.e. ethos poor														

Soil Profile Data - Site

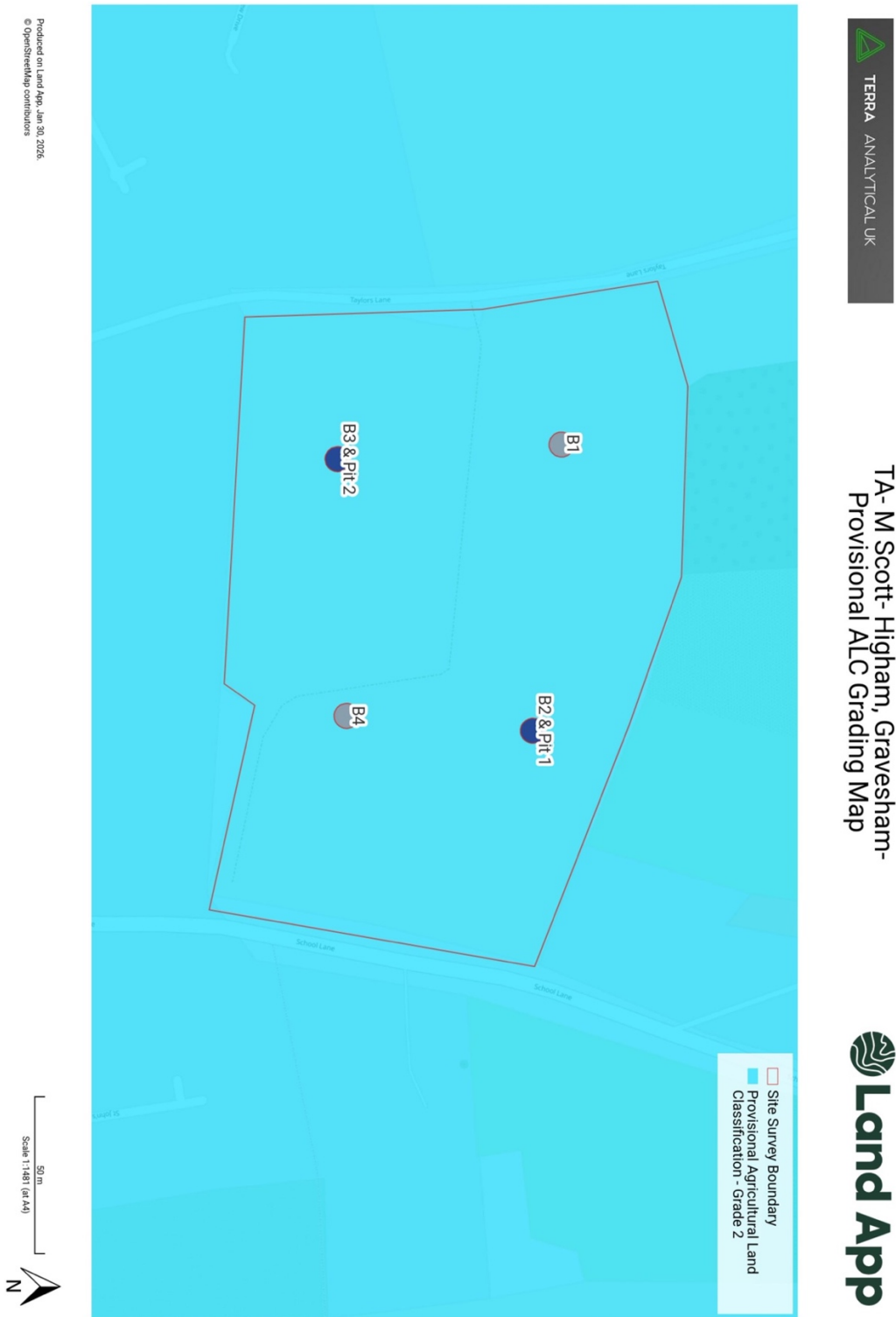
All observations are standardised and derived from the guidance documentation:
Agricultural Land Classification of England & Wales: Revised guidelines and criteria for grading the quality of agricultural land. MAF, 1988
Soil Survey Field Handbook, Technical Monograph No. 5, Soil Survey of England and Wales, 1976
Munsell Colour Chart

Appendix B- Soil Laboratory Validation Report



ANALYTICAL REPORT									
Report Number	38506-26	B 86	PIERS BULGIN				Client PIERS BULGIN		
Date Received	04-FEB-2026	TERRA ANALYTICAL UK LTD							
Date Reported	17-FEB-2026	POPPS COTTAGE							
Project	SOIL	LITTLE THEY ROAD							
Reference	PIERS BULGIN	FEERING							
Order Number	Scott- Higham	ESSEX CO5 9RP							
Laboratory Reference	SOIL782792	SOIL782793	SOIL782794	SOIL782795					
Sample Reference	HIGHAM-TOPS 1	HIGHAM-SUBS 1	HIGHAM-TOPS 2	HIGHAM-SUBS 2					
Determinand	Unit	SOIL	SOIL	SOIL	SOIL				
Textural Class		Sandy Clay Loam	Sandy Loam	Sandy Loam	Sandy Loam				
Sand 2.00-0.063mm	% w/w	53	63	61	53				
Silt 0.063-0.002mm	% w/w	23	20	22	30				
Clay <0.002mm	% w/w	24	17	17	17				
Notes The sample submitted was of adequate size to complete all analysis requested. The results as reported relate only to the item(s) submitted for testing. The results are presented on a dry matter basis unless otherwise stipulated. This test report shall not be reproduced, except in full, without the written approval of the laboratory.									
Analysis Notes The sample submitted was of adequate size to complete all analysis requested. The results as reported relate only to the item(s) submitted for testing. The results are presented on a dry matter basis unless otherwise stipulated. This test report shall not be reproduced, except in full, without the written approval of the laboratory.									
Document Control									
Reported by	Daniel Petty Natural Resource Management, a trading division of Cawood Scientific Ltd. Coopers Bridge, Braziers Lane, Bracknell, Berkshire, RG42 6NS Tel: 01344 886338 Fax: 01344 890972 email: enquiries@rirm.uk.com								

Appendix C- 2010 Provisional Natural England ALC Map of Land off School Lane, Higham, Gravesham, Kent



Appendix D- Site Map Plan with Auger Borings and Soil Pit Locations



TA- M Scott Properties- Higham,
Gravesham- ALC Survey Area



Appendix E- Final ALC Survey Grading Map

Produced on Land App, Feb 18, 2026.
© OpenStreetMap contributors



M Scott Properties- Higham, Kent-
Final ALC Grading Map



Soil Site Report

Soil Report



TA-MScott-Higham

Easting: 571231

Northing: 171882

Site Area: 1km x 1km

Prepared for: Piers Bulgin, PERSONAL USE

Date: 18 Feb 2026

