



Agricultural Land Classification (ALC) Report

Land at New Mill Lane, Mansfield

February 2026

Mansfield District Council

Reference: 250905.AC.02

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Client: Mansfield District Council

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1. Scope & Objectives

The Services	Agricultural Land Classification (ALC) Report	
The Client	Mansfield District Council	
Appointment Details	The Services have been carried out in accordance with the Proposal dated 21 August 2025 and REL's Terms and Conditions of Engagement, (together " the Agreement ") as accepted by the Client on 5 September 2025.	
Site Name	Land at New Mill Lane, Mansfield.	
Site Address	Warren Farmhouse, New Mill Lane, Forest Town, Mansfield Woodhouse, Mansfield, NG19 0NS (" the Site ").	
Information Sources (Where appropriate documents are contained in appendices with data extracts provided and summarised within pertinent sections of this report. List not exhaustive)	Online Source	Natural England Provisional Agricultural Land Classification Grade (pre-1988), accessed via Magic Web Mapping Service, DEFRA, 2025.
		Natural England Agricultural Land Classification Grades Post-1988 Surveys (Polygons) Database and Mapping, accessed via Magic Web Mapping Service, DEFRA, 2025.
		British Geological Survey (BGS) Database and Mapping.
		BGS GeoIndex Web Mapping Service.
		BGS 1: 50,000 scale Provisional Series, Geological Map, England and Wales, Sheet 113 (Ollerton), available on the BGS map portal.
		Google Historic Satellite Imagery.
	Documentation Source	National Library of Scotland Historical Ordnance Survey England and Wales, 1830s-1880s Maps.
		Soil Classification for Soil Survey, Monographs on Soil Survey, Butler, B E (1980), Clarendon Press, Oxford.
		Hodgson, J.M (ed.) (2022). <i>Soil Survey Field Handbook</i> . Soil Survey Technical Monograph No. 5, Cranfield.
		Meteorological Office (Met Office), 1989, Climatological Data for Agricultural Land Classification – Gridpoint Datasets of Climatic Variables, at 5km intervals, for England and Wales.
		MAFF, 1988, Agricultural Land Classification of England and Wales – Revised Guidelines and Criteria for Grading the Quality of Agricultural Land.
		Natural England, Technical Information Note TIN049 Second Edition, 2012.
	Previous Reports	Soils and their use in Midland and Western England, 1984, Soil Survey of England and Wales Memoir and accompanying 1:250,000 scale map.
		A Post-1988 ALC survey is available for the site. Further details are provided in Section 4 of this report.
	Site Works	The site works were completed by REL in November 2025.

2. Site Details

National Grid Ref.	Approximate centre of the site: 456343, 363204
Ground Level Topography	Range 79–114m AOD, average for site: c.89m AOD.
Site Area	113.04 hectares (ha).
HELAA Reference	For the purpose of this report, the 'site' corresponds to the red line boundary outlined in Figure 1 below, and incorporates all relevant land parcels identified within the Council's Housing and Economic Land Availability Assessment (HELAA), namely HELAA sites 30, 55, 335/53 to the southwest of New Mill Lane and 31, 403 and 188 to the northeast of New Mill Lane.
Location	The Site is located off New Mill Lane, adjacent to the north of Forest Town, approximately 2.23km east of Mansfield Woodhouse town centre. Clipstone Road is situated adjacent southeast of the Site, providing a link to the town of Mansfield, approximately 2.93km to the southwest.



Figure 1: Site Boundaries (highlighted in red)

Current Site Description and Usage	The subject site comprises agricultural fields which are currently used for arable crop and livestock grazing (based on observations made during the site visit).
Surrounding Land Uses	Surrounding land uses comprise agricultural fields to the north and northeast of the site, with Warren Farmhouse located adjacent north of the site. The land adjacent north, northeast and east are occupied by Spa Ponds Local Wildlife Site with the River Maun running along the northern boundary of the site. The Maun Woodland Local Wildlife Reserve is noted adjacent west of the site, with Maun Scrub and Grassland running along the River Maun corridor to the north.
Site History	From the earliest mapping dated 1830s-1880s, the site is shown as agricultural land.
Current Grading	The site is currently mapped as Grade 3 and an area classified as Urban in the northeast portion on the provisional 1: 250,000 scale ALC map (MAFF, 1983) see Appendix V for key to the gradings.

3. Methodology

Desk Study

Using published data sources, an initial desk-based study has been undertaken to provide a reconnaissance of the general site characteristics, including soil type(s) and agricultural classification.

Where available, Post-1988 ALC Surveys (undertaken at varying scales and levels of detail, ranging from 1:5,000 to 1:50,000 scale) have been consulted. Surveys included on this map provide the most detailed and up to date ALC grading following surveys between 1989 and 1999 by MAFF (now part of DEFRA).

Climatological data provided by the Met Office has been used to determine the overriding agroclimatic site limitations, using interpolated values based on the central point of the site.

Intrusive Soil Survey

The intrusive soil survey comprised at least one hand auger boring per hectare to a depth of 1.20m below ground level (where achievable) in accordance with current guidance. These were undertaken to examine the soil profiles, using standard soil survey methods.

In addition, in order to determine subsoil structure, at least one inspection pit has been excavated for each soil type encountered.

ALC Grade Assessment

All potential limiting ALC grade factors (listed in **Appendix V**) have been considered as part of the assessment, including those which pose no limitation on the ALC grading for the site.

Using the information collected during the site survey and the MAFF ALC guidance documents, an ALC grade was then determined for the site, or for each soil type based on the most limiting ALC grade (**Appendix I**). A brief overview of relevant terminology is included in **Appendix V**.

4. Desk Based Reconnaissance

Prior to the intrusive site investigation, a review of available desk-based information was undertaken. Pertinent information has been summarised below.

Climate Data

Using the climatological data set (Met Office, 1989) the following information (**Table 1**) has been calculated for the site. Calculations comprised altitude adjustment and interpolation, using the formula presented within the data set.

Table 1: Summary of Agroclimatic Data for the Site

(Site Centre Grid Reference: 456343, 363204)		
Average Annual Rainfall (mm)	AAR	677.35
Accumulated Temperature (°C)	ATO	1341.38
Field Capacity Duration (Days)	FCD	148.54
Moisture Deficit Wheat (mm)	MDWHT	100.43
Moisture Deficit Potatoes (mm)	MDPOT	89.45

The site is identified to have below average AAR, an average FCD and ATO when compared to the mapped values for the area North of Mansfield (Soils and their Use in Midland and Western England, 1984).

Using the AAR and ATO values within **Table 1**, the site is not considered to be limited by climate (Figure 1, MAFF 1988).

Topography

The site was identified to have a gradient between 0° and 1°, therefore topography is identified to not be a limiting factor of the ALC grade of the site (Table 1, MAFF 1988).

BGS Published Data

A review of BGS information has identified that no Made Ground areas are indicated across the site.

The site is situated within an area free of superficial deposits. However, there is a strip of Alluvium deposits (clay, silt, sand and gravel) directly adjacent north that may encroach onto the site boundary. The bedrock geology is indicated as the Chester Formation, comprising pebbly sandstones across the majority of the site. However, there is the potential for the Lenton Sandstone Formation to encroach of the east.

Published Soils Data

Soils mapping for the area as shown on *Soils and their use in in Midland and Western*, 1984, Soil Survey of England and Wales Memoir and accompanying 1:250,000 scale map has been reviewed as part of this assessment. The location of the site is shown in the soils mapping extract below in **Figure 2**.

The soils mapping suggests the soils on site comprise the Cuckney 1 Association. The soil is described as follows:

- **Cuckney 1 Association (551b)** - Well drained sandy and coarse loamy soils, often over soft sandstone. Risk of wind erosion



Figure 2: Soils Mapping for the Site and Surrounding Area (site location indicated in red)

Historic Mapping

Following a review of the National Library of Scotland historical mapping, the site was noted to be used for agricultural rotation since 1830s (OS Six Inch, 1830s - 1880s). An old sand pit can be noted on the western boundary from c.1888, noted until 1945-65 mapping records.

Previous Reports

Post 1988 ALC mapping is available on the DEFRA Magic map which has provided data for the land on the site. This report would indicate that majority of the site is **ALC Grade 3a** and **3b**. The remainder of the site is graded as **ALC Grade 2**, **ALC Grade 4** and **'Other'**. There are pockets in the southeast and southwest which have not been previously surveyed.

5. Intrusive Survey Findings

The survey identified One Soil Types with 3 variants across the entire site. Generalised profiles of the soil types encountered have been described as below (**Table 3**) however, please note some localised variations were recorded. Complete soil logs are provided in **Appendix II** and photographs of the surveyed soils are presented in **Appendix III**.

Table 3: Summary of Soils Identified on Site

	Depth (cm)	Texture	Colour	Stones (%)	Mottles	Structure
Soil Type 1a	0-40	Coarse Sandy Silty Loam (CSZL)	Dark Yellowish Brown (10YR 4/6)	10	No	Medium Subangular Blocky
	40-85	Coarse Sand (CS)	Dark Yellowish Brown (10YR 4/4)	0	No	Fine Subangular Blocky
	85-120	Fine Sand (FS)	Brown (7.5YR 5/4)	0	Few Fine Ochreous (10YR 5/6) and Grey (10YR 5/1) Mottles	Single Grain
Soil Type 1b	0-55	Fine Sandy Silty Loam (FSZL)	Very Dark Brown (7.5YR 2.5/3)	15	No	Medium Subangular Blocky
	55-85	Fine Sandy Silty Loam (FSZL)	Dark Brown (5YR 3/4)	5	No	Medium Subangular Blocky
Soil Type 1c	0-40	Medium Sandy Silty Loam (MSZL)	Dark Yellowish Brown (10YR 4/6)	0	No	Medium Subangular Blocky
	40-70	Medium Sandy Loam (MSL)	Dark Yellowish Brown (10YR 4/4)	0	No	Medium Subangular Blocky
	70-110	Medium Sand (MS)	Brown (7.5YR 5/4)	0	Few Fine Ochreous (10YR 5/6) and Grey (10YR 5/1) Mottles	Single Grain

Soil Descriptions

Soil Type 1a consist of a slightly stony dark yellowish brown sandy silt loam (10YR 4/6) Ap horizon of the coarse textured classification. The structure was moderately developed medium subangular blocky to coarse subangular blocky in places with a friable consistency. Discrete areas of this soil type have been identified with the absence of one or more subsoils, and variation in depth of topsoil between c.40-80cm bgl. Some areas were also noted to have a different texture of the medium classification.

This was underlain by dark yellowish brown sand (10YR 4/4) B horizon of the coarse textured classification from c.40-85cm bgl, stoneless with no reported mottling. Discrete areas of this horizon were observed with dark yellowish brown (10YR 4/6) Munsell colours dominant in the matrix. The structure was identified as moderately developed fine subangular blocky with a friable consistency.

From c.85-120cm bgl, a second subsoil was identified as brown sand (7.5YR 5/4) of the fine textured classification, stoneless to slightly stony with few distinct mottles of Grey and Ochreous colours. The structure was identified as moderately developed single grain.

Soil Type 1b comprised slightly stony very dark brown sandy silt loam (7.5YR 2.5/3) Ap horizon, with no mottling visible to an average depth of 55cm bgl. The structure was identified as moderately developed medium subangular blocky. Discrete areas of this soil type have been found with the absence of the subsoil, and the presence of shallow bedrock at depth between c.50-70cm bgl.

The subsoil was observed c.55-85cm bgl. This horizon was identified as a dark brown sandy silt loam (5YR 3/4) B horizon of the fine textured classification, stoneless with no mottling visible. The structure was identified as moderately developed medium subangular blocky with a friable consistency. Discrete areas of this soil type were observed with the absence of the fine silty sand topsoil, with the dark brown fine sandy silt loam B horizon extending to depths of 60cm bgl.

Soil Type 1c comprised a dark yellowish brown medium sandy silty loam (10YR 4/6) Ap horizon from ground level to c.40cm bgl. The soil was stoneless with no mottling observed. The structure was identified as moderately developed medium subangular blocky. Discrete areas of this soil type were observed to have an alternative Munsell colouring of 10YR 3/2, c.30-60cm depth.

This was underlain from c.40–70cm bgl by a dark yellowish brown medium sandy loam (10YR 4/4) B horizon, also stoneless with no mottling visible. The structure was identified as moderately developed medium subangular blocky.

From c.70–110cm bgl, the lower subsoil comprised brown medium sand (7.5YR 5/4) of the medium textured classification. This horizon was stoneless and exhibited few fine distinct mottles of ochreous (10YR 5/6) and grey (10YR 5/1) colours. The structure was identified as single grain.

Soil Calcium Carbonate determinations

The soils on site were observed with a negative test for Calcium Carbonate.

The general profiles for the soil types identified on the Site has been used to assess the Wetness Class (WC) for the Soil Type (see **Appendix V** for the MAFF decision flow chart). The general profile is reflective of the findings in the soil pit associated with the Soil Type identified on site. The assessment process and results of the in-field wetness assessment is provided within **Table 4** below with a plan of the distribution of the soil types across the site shown in **Appendix I**.

Table 4: Wetness Class Assessment for Soil Types Encountered on Site

Soil Type	Parameters (Figure 6, MAFF)						Wetness Class
	Disturbed	FCD	SPL (depth cm) Justification	Colour	Gleying (depth cm) Justification	Ref	
Soil Type 1a	No	148.54	No SPL layer was identified to be present within the top 120cm.	Other	Gleying was not identified to be present within the top 120cm.	N/A	I
Soil Type 1b	No	148.54	No SPL layer was identified to be present within the top 120cm.	Other	Gleying was not identified to be present within the top 120cm.	N/A	I
Soil Type 1c	No	148.54	No SPL layer was identified to be present within the top 120cm.	Other	Gleying was not identified to be present within the top 120cm.	N/A	I

Notes: This Table follows the flow chart of Figure 6 of the MAFF ALC guidance to identify the wetness classification per Soil Type.

Soil Interactive Limitations

Soil Type 1 – Wetness Limitation

The combination of the topsoil texture (Coarse Sandy Silty Loam and Fine Sandy Silty Loam), Wetness Class (I) and the number of Field Capacity Days (148.54) results in **ALC Grade 1** for Type 1a, 1b and 1c soils.

Soil Type 1b – Soil Depth Limitation

No Overriding Limitation.

Soil Calcium Carbonate determinations

The topsoils demonstrated a negative test for calcium carbonate content.

Soil Type 1a - Droughtiness Limitation

The combination of the soil textures, together with the climate calculations result in **ALC Grade 2** for Type 1a soils.

Soil Type 1b and 1c - Droughtiness Limitation

No Overriding Limitation.

6. Conclusions

The ALC grading for the site area is summarised below within **Table 5**, overall findings of this assessment can be found in **Appendix IV**. The table below identifies the grades of the areas of agricultural land present across the site (**Appendix I**).

Table 5: ALC Classification

ALC Grade	Area (Ha)	Percentage
Grade 1	82.54	73.0%
Grade 2	26.82	23.7%
Subgrade 3a	0.00	0.00%
Subgrade 3b	0.00	0.00%
Grade 4	0.00	0.00%
Grade 5	0.00	0.00%
Non-Agricultural	3.68	3.30%
Total BMV	109.36	96.75%
Total Non-BMV	3.68	3.30%
Total Site Area	113.04	100%

Overall Site ALC Grade and Conclusions

The majority of the land surveyed as part of this assessment has been identified as **ALC Grade 1**, with approximately 82.54ha in the eastern portion of this site identified and 26.82ha identified as **ALC Grade 2** due to droughtiness limitation. There is also 3.68ha in the west that is identified as **Non-Agricultural**. As such, BMV land has been identified on 96.75% of the overall site area.

APPENDIX I

SITE PLANS



Legend

- Site Boundary
- Non-Agricultural
- ALC Grade 1
- ALC Grade 2

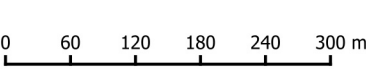
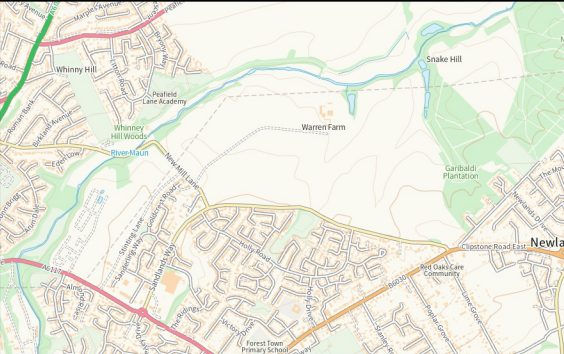


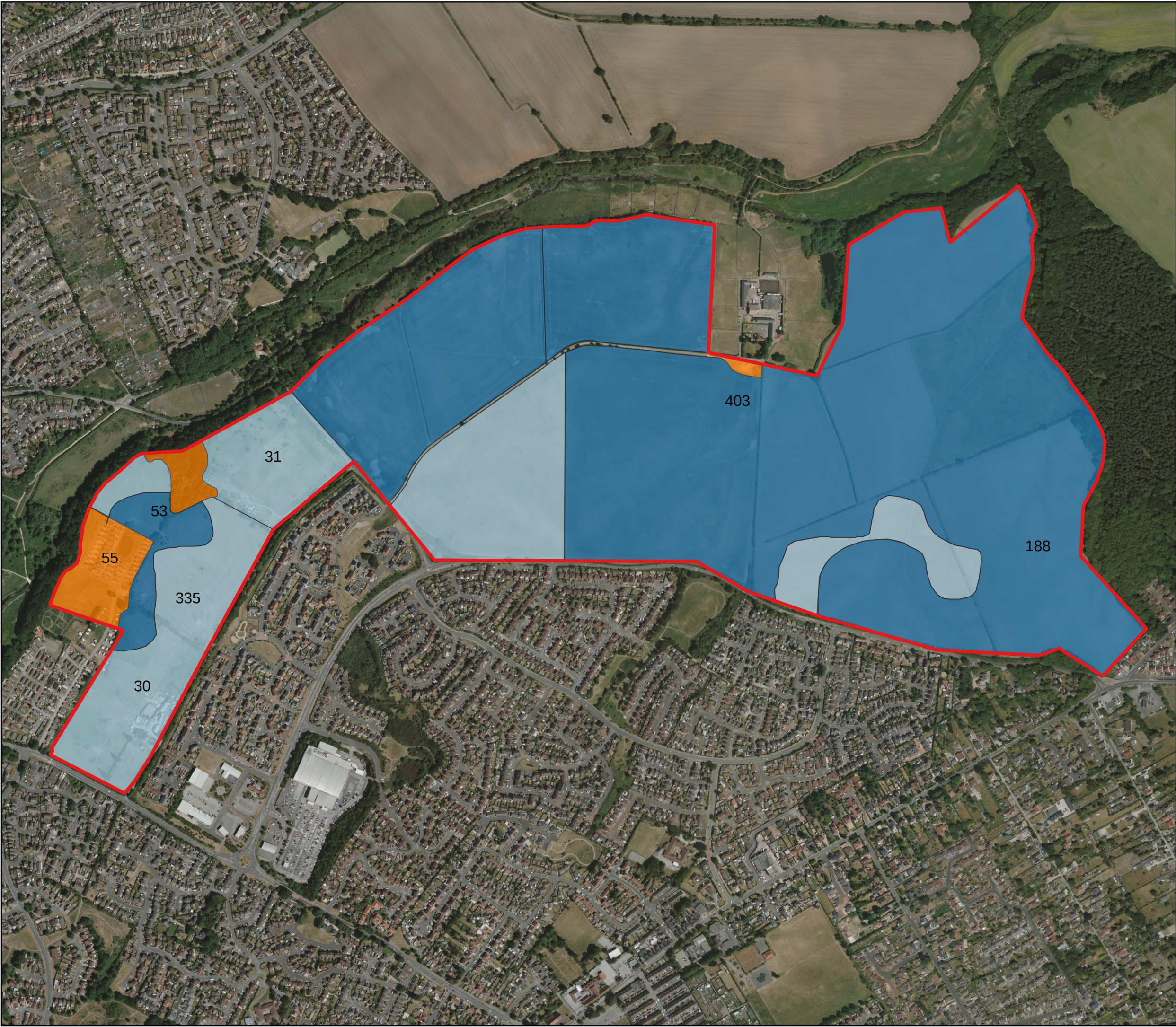
Figure ALC Grade Map		
Job Land at New Mill Lane		
Client Mansfield Council		
Figure No. 1	Revision 1	Date 23 March 2026
Drawn by CL	Checked by EH	Scale 1:6,977.305633
Job No. 250905.02		



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Legend

- Site Boundary
- Non-Agricultural
- ALC Grade 1
- ALC Grade 2

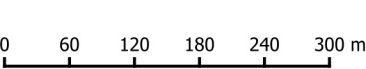
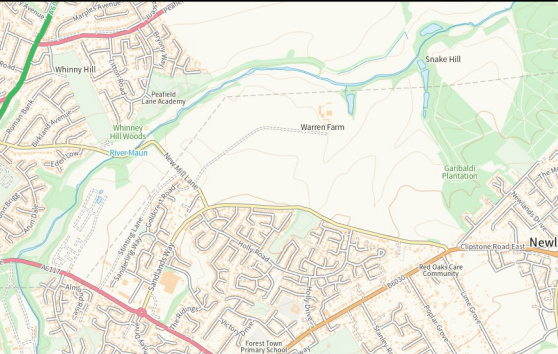
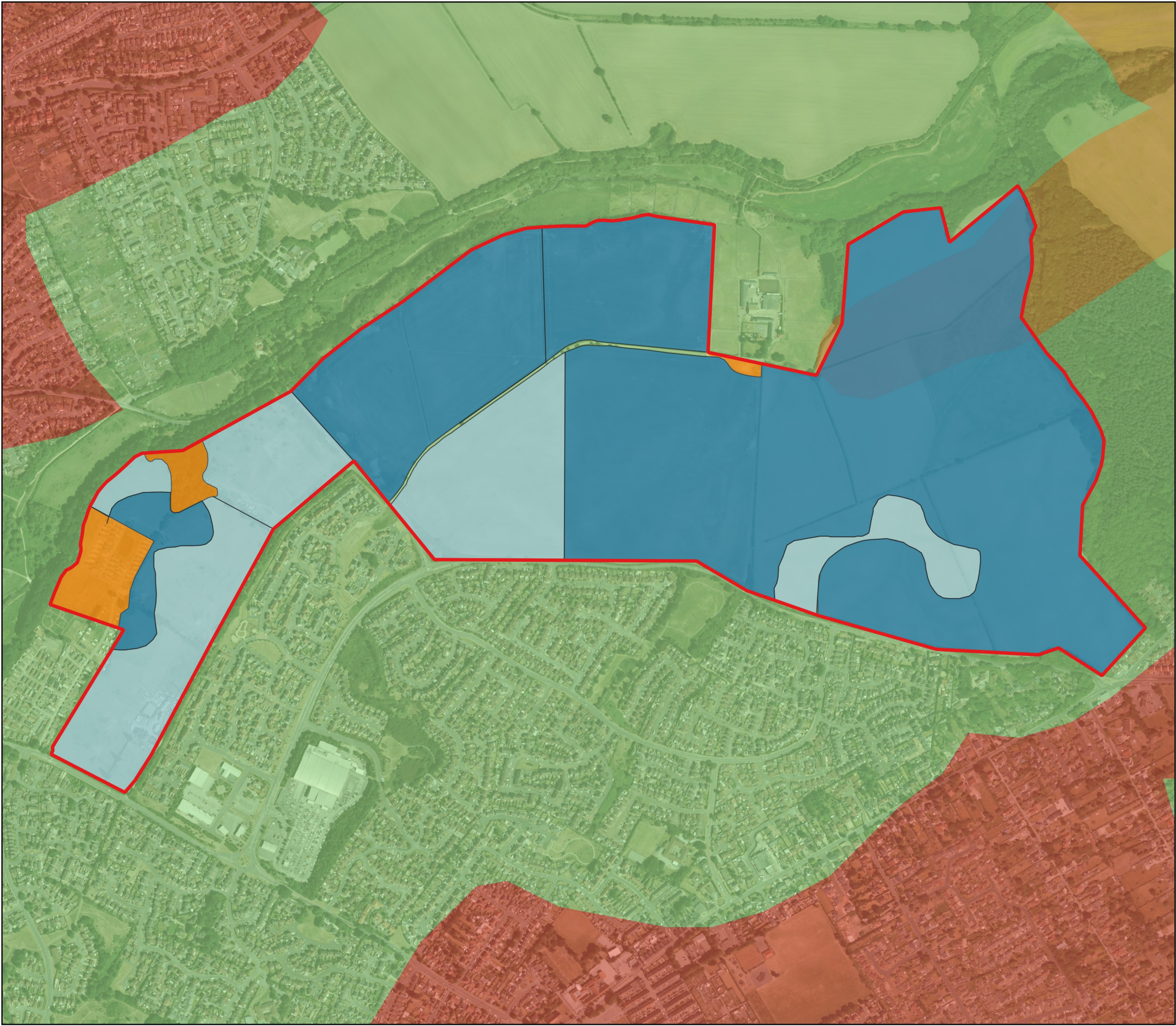


Figure ALC Grade Map		
Job Land at New Mill Lane		
Client Mansfield Council		
Figure No. 1	Revision 1	Date 23 March 2026
Drawn by CL	Checked by EH	Scale 1:6,977.305633
Job No. 250905.02		



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Legend

- Site Boundary
 - Non-Agricultural
 - ALC Grade 1
 - ALC Grade 2
- Agricultural_Land_Classification_Provisional_England*
- Grade 1
 - Grade 2
 - Grade 3
 - Grade 4
 - Grade 5
 - Non Agricultural
 - Urban

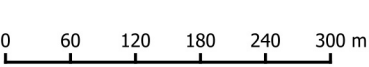


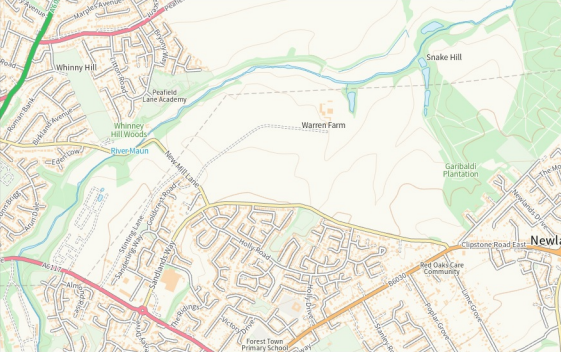
Figure ALC Grade and Provisional ALC Grade Map

Job Land at New Mill Lane

Client Mansfield Council

Figure No.	Revision	Date
1	1	23 March 2026
Drawn by	Checked by	Scale
CL	EH	1:6,977.305633

Job No. 250905.02



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APPENDIX II

SITE SURVEY LOGS

FCD:	148.54	MDWHT:	100.43	MDPOT:	89.45
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Auger Sample	Top Depth (cm)	Bottom Depth (cm)	Texture	Hue	value	chroma	colour	Hue	value	chroma	colour	Hue	value	chroma	colour	Stones	Structure	SPL	GLEIVING	Figure	Wetness class	Wetness Grade	condition	Wheat	Potatoes		Overriding Limitation
1	Non-Agricultural																										
	0	50	CSZL	10YR	4	6	Brownish	n/a	n/a	n/a	n/a	n/a	n/a	n/a	-	10	MSAB	No	No				moderate				
	50	100	CS	10YR	4	4	Brownish	n/a	n/a	n/a	n/a	n/a	n/a	n/a	-	0	FSAB	No	No				good				
2	100	120	FS	7.5YR	5	4	Brownish	10YR	5	6	Ochreous	10YR	5	1	Greyish	0	SG	No	No	WC1	I	1	good	2	2	2	Dr Pot
	0	35	CSZL	10YR	4	6	Brownish	n/a	n/a	n/a	n/a	n/a	n/a	n/a	-	10	MSAB	No	No				moderate				
	35	70	CS	10YR	4	6	Brownish	n/a	n/a	n/a	n/a	n/a	n/a	n/a	-	0	FSAB	No	No				good				
3	70	120	FS	7.5YR	5	4	Brownish	10YR	5	6	Ochreous	10YR	5	1	Greyish	0	SG	No	No	WC1	I	1	good	2	2	2	Dr Pot
	0	70	FSZL	10YR	4	6	Brownish	n/a	n/a	n/a	n/a	n/a	n/a	n/a	-	0	FSAB	No	No				moderate				
	70	90	FSZL	10YR	4	6	Brownish	n/a	n/a	n/a	n/a	n/a	n/a	n/a	-	0	FSAB	No	No				good				
4																		No	No	WC1	I	1	good	1	1	1	Wetness Class
5	Non-Agricultural																										
	0	40	MSZL	10YR	3	2	other	n/a	n/a	n/a	-	n/a	n/a	n/a	-	0	MSAB	No	No				moderate				
	40	70	MSL	10YR	4	4	Brownish	n/a	n/a	n/a	n/a	n/a	n/a	n/a	-	15	MSAB	No	No				moderate				
6	70	110	MS	7.5YR	5	4	Brownish	10YR	5	6	Ochreous	10YR	5	1	Greyish	0	SG	No	No	WC1	I	1	moderate	1	1	1	Wetness Class
	0	45	CSZL	10YR	3	2	other	n/a	n/a	n/a	-	n/a	n/a	n/a	-	10	MSAB	No	No				moderate				
	45	90	CS	10YR	4	4	Brownish	n/a	n/a	n/a	n/a	n/a	n/a	n/a	-	0	FSAB	No	No				moderate				
7	90	120	FS	7.5YR	5	4	Brownish	10YR	5	6	Ochreous	10YR	5	1	Greyish	0	SG	No	No	WC1	I	1	moderate	2	2	2	Dr Pot
	0	55	CSZL	10YR	3	2	other	n/a	n/a	n/a	-	n/a	n/a	n/a	-	10	MSAB	No	No				moderate				
	55	100	CS	10YR	4	4	Brownish	7.5YR	5	6	Ochreous	n/a	n/a	n/a	-	0	FSAB	No	No				good				
8	100	120	FS	7.5YR	5	4	Brownish	10YR	5	6	Ochreous	10YR	5	1	Greyish	0	SG	No	No	WC1	I	1	good	2	2	2	Dr Pot
	0	55	CSZL	10YR	2	2	other	n/a	n/a	n/a	n/a	n/a	n/a	n/a	-	10	MSAB	No	No				moderate				
	55	90	MS	10YR	4	4	Brownish	n/a	n/a	n/a	n/a	n/a	n/a	n/a	-	0	FSAB	No	No				good				
9																		No	No	WC1	I	1	good	2	2	2	Dr Pot
10	Non-Agricultural																										
	0	35	MSZL	10YR	3	2	other	n/a	n/a	n/a	-	n/a	n/a	n/a	-	0	MSAB	No	No				moderate				
	35	80	MSL	10YR	4	4	Brownish	n/a	n/a	n/a	n/a	n/a	n/a	n/a	-	0	MSAB	No	No				moderate				
11	80	120	FSZL	10YR	4	6	Brownish	n/a	n/a	n/a	n/a	n/a	n/a	n/a	-	0	CSAB	No	No	WC1	I	1	moderate	1	1	1	Wetness Class
	0	40	CSZL	10YR	4	6	Brownish	n/a	n/a	n/a	-	n/a	n/a	n/a	-	0	FSAB	No	No				moderate				
	40	90	CS	10YR	4	6	Brownish	n/a	n/a	n/a	n/a	n/a	n/a	n/a	-	10	FSAB	No	No				good				
12	90	120	MS	10YR	4	4	Brownish	10YR	5	6	Ochreous	10YR	5	1	Greyish	0	SG	No	No	WC1	I	1	good	2	2	2	Dr Pot
	0	40	CSZL	10YR	4	6	Brownish	n/a	n/a	n/a	-	n/a	n/a	n/a	-	0	FSAB	No	No				moderate				
	40	90	CS	10YR	4	6	Brownish	n/a	n/a	n/a	n/a	n/a	n/a	n/a	-	10	FSAB	No	No				good				
13	90	120	MS	10YR	4	4	Brownish	10YR	5	6	Ochreous	10YR	5	1	Greyish	0	SG	No	No	WC1	I	1	good	2	2	2	Dr Pot
	0	40	CSZL	10YR	4	6	Brownish	n/a	n/a	n/a	-	n/a	n/a	n/a	-	10	MSAB	No	No				moderate				
	40	90	CS	10YR	4	6	Brownish	n/a	n/a	n/a	n/a	n/a	n/a	n/a	-	0	MSAB	No	No				good				
14	90	120	MS	10YR	4	4	Brownish	10YR	5	6	Ochreous	10YR	5	1	Greyish	0	CSAB	No	No	WC1	I	1	good	2	2	2	Dr Pot
	0	30	CSZL	10YR	3	2	other	n/a	n/a	n/a	-	n/a	n/a	n/a	-	10	MSAB	No	No				moderate				
	30	90	CS	10YR	4	4	Brownish	n/a	n/a	n/a	n/a	n/a	n/a	n/a	-	0	FSAB	No	No				good				
15	90	120	FS	7.5YR	5	4	Brownish	10YR	5	6	Ochreous	10YR	5	1	Greyish	0	SG	No	No	WC1	I	1	good	2	2	2	Dr Pot
	0	40	CSZL	10YR	4	6	Brownish	n/a	n/a	n/a	-	n/a	n/a	n/a	-	10	MSAB	No	No				moderate				
	40	70	CS	10YR	4	6	Brownish	n/a	n/a	n/a	n/a	n/a	n/a	n/a	-	0	MSAB	No	No				good				
16	70	120	MS	10YR	4	4	Brownish	10YR	5	6	Ochreous	10YR	5	1	Greyish	0	CSAB	No	No	WC1	I	1	good	2	2	2	Dr Pot
	0	40	CSZL	10YR	4	6	Brownish	n/a	n/a	n/a	-	n/a	n/a	n/a	-	10	MSAB	No	No				moderate				
	40	70	CS	10YR	4	6	Brownish	n/a	n/a	n/a	n/a	n/a	n/a	n/a	-	0	MSAB	No	No				good				
17	70	120	MS	10YR	4	4	Brownish	10YR	5	6	Ochreous	10YR	5	1	Greyish	0	CSAB	No	No	WC1	I	1	good	2	2	2	Dr Pot
	0	40	CSZL	10YR	3	2	other	n/a	n/a	n/a	-	n/a	n/a	n/a	-	5	MSAB	No	No				moderate				
	40	90	CS	10YR	4	4	Brownish	n/a	n/a	n/a	n/a	n/a	n/a	n/a	-	20	FSAB	No	No				good				
18	90	120	FS	7.5YR	5	4	Brownish	10YR	5	6	Ochreous	10YR	5	1	Greyish	0	SG	No	No	WC1	I	1	good	2	2	2	Dr Pot
	0	35	CSZL	10YR	3	2	other	n/a	n/a	n/a	-	n/a	n/a	n/a	-	5	MSAB	No	No				moderate				
	35	90	CS	10YR	4	4	Brownish	n/a	n/a	n/a	n/a	n/a	n/a	n/a	-	20	FSAB	No	No				good				
19	90	120	FS	7.5YR	5	4	Brownish	10YR	5	6	Ochreous	10YR	5	1	Greyish	0	SG	No	No	WC1	I	1	good	2	2	2	Dr Pot
	0	35	CSZL	10YR	3	2	other	n/a	n/a	n/a	-	n/a	n/a	n/a	-	5	MSAB	No	No				moderate				
	35	90	CS	10YR	4	4	Brownish	n/a	n/a	n/a	n/a	n/a	n/a	n/a	-	20	FSAB	No	No				good				
20	90	120	FS	7.5YR	5	4	Brownish	10YR	5	6	Ochreous	10YR	5	1	Greyish	0	SG	No	No	WC1	I	1	good	2	2	2	Dr Pot
	0	30	MSZL	7.5YR	2.5	3	other	n/a	n/a	n/a	-	n/a	n/a	n/a	-	20	MSAB	No	No				moderate				
																100		No	No				moderate				
21																		No	No	WC1	I	1	moderate	1	1	1	Wetness Class
	0	50	MSZL	7.5YR	2.5	3	other	n/a	n/a	n/a	-	n/a	n/a	n/a	-	10	MSAB	No	No				moderate				
																100		No	No				moderate				
22																		No	No	WC1	I	1	moderate	1	1	1	Wetness Class
	0	16	CSZL	10YR	3	2	other	n/a	n/a	n/a	-	n/a	n/a	n/a	-	5	MSAB	No	No				moderate				
	16	50	CS	10YR	4	4	Brownish	n/a	n/a	n/a	n/a	n/a	n/a	n/a	-	20	FSAB	No	No				good				
23	50	120	FS	7.5YR	5	4	Brownish	10YR	5	6	Ochreous	10YR	5	1	Greyish	0	SG	No	No	WC1	I	1	good	2	2	2	Dr Pot
	0	45	MSZL	10YR	4	6	Brownish	n/a	n/a	n/a	-	n/a	n/a	n/a	-	0	MSAB	No	No				moderate				
	45	70	FSZL	5YR	3	4	Reddish	n/a	n/a	n/a	-	n/a	n/a	n/a	-	0	CSAB	No	No				moderate				
24																		No	No	WC1	I	1	moderate	1	1	1	Wetness Class

	0	35	MSZL	10YR	4	6	Brownish	n/a	n/a	n/a	-	n/a	n/a	n/a	-	0	MSAB	No	No	WC1	I	1	moderate	1	1	1	Wetness Class	
	35	100	FSZL	5YR	3	4	Reddish	n/a	n/a	n/a	-	n/a	n/a	n/a	-	0	CSAB	No	No									moderate
25	0	60	MSZL	10YR	4	6	Brownish	n/a	n/a	n/a	-	n/a	n/a	n/a	-	5	MSAB	No	No	WC1	I	1	moderate	1	1	1	Wetness Class	
	60	100	FSZL	7.5YR	3	4	other	n/a	n/a	5	6	Ochreous	n/a	n/a	n/a	-	0	CSAB	No									No
26	0	60	CSZL	10YR	4	6	Brownish	n/a	n/a	n/a	-	n/a	n/a	n/a	-	15	FSAB	No	No	WC1	I	1	moderate	1	1	1	Wetness Class	
	60	80	CS	10YR	4	6	Brownish	n/a	n/a	n/a	n/a	n/a	n/a	n/a	-		FSAB	No	No									good
27	0	80	120	MS	10YR	4	4	Brownish	10YR	5	6	Ochreous	10YR	5	1	Greyish	15	FSAB	No	No	WC1	I	1	moderate	1	1	1	Wetness Class
	0	40	FSZL	7.5YR	2.5	3	other	n/a	n/a	n/a	-	n/a	n/a	n/a	-	5	FSAB	No	No	good								
28	0	40	70	FSZL	5YR	3	4	Reddish	n/a	n/a	n/a	n/a	n/a	n/a	-	3	5	FSAB	No	No	WC1	I	1	moderate	1	1	1	Wetness Class
																		No	No	good								
29	0	50	80	FSZL	5YR	3	4	Reddish	n/a	n/a	n/a	n/a	n/a	n/a	-	10	FSAB	No	No	WC1	I	1	moderate	1	1	1	Wetness Class	
																		No	No									good
30	0	35	CSZL	10YR	4	6	Brownish	n/a	n/a	n/a	n/a	n/a	n/a	n/a	-	10	MSAB	No	No	WC1	I	1	moderate	2	2	2	Dr Pot	
	35	90	CS	10YR	4	6	Brownish	n/a	n/a	n/a	n/a	n/a	n/a	n/a	-	0	FSAB	No	No									good
31	0	90	120	MS	7.5YR	5	4	Brownish	10YR	5	6	Ochreous	10YR	5	1	Greyish	0	SG	No	No	WC1	I	1	moderate	2	2	2	Dr Pot
	0	30	CSZL	10YR	4	6	Brownish	n/a	n/a	n/a	n/a	n/a	n/a	n/a	-	10	MSAB	No	No	good								
32	0	85	CS	10YR	4	6	Brownish	n/a	n/a	n/a	n/a	n/a	n/a	n/a	-	0	FSAB	No	No	WC1	I	1	moderate	2	2	2	Dr Pot	
	85	120	MS	7.5YR	5	4	Brownish	10YR	5	6	Ochreous	10YR	5	1	Greyish	0	SG	No	No									good
33	0	40	FSZL	5YR	3	4	Reddish	n/a	n/a	n/a	-	n/a	n/a	n/a	-	35	FSAB	No	No	WC1	I	1	moderate	1	1	1	Wetness Class	
																		No	No									good
34	0	60	MSZL	5YR	3	4	Reddish	n/a	n/a	n/a	-	n/a	n/a	n/a	-	35	MSAB	No	No	WC1	I	1	moderate	1	1	1	Wetness Class	
																		No	No									good
35	0	70	FSZL	5YR	3	4	Reddish	n/a	n/a	n/a	-	n/a	n/a	n/a	-	15	FSAB	No	No	WC1	I	1	moderate	1	1	1	Wetness Class	
																		No	No									good
36	0	35	CSZL	10YR	4	6	Brownish	n/a	n/a	n/a	n/a	n/a	n/a	n/a	-	10	MSAB	No	No	WC1	I	1	moderate	2	2	2	Dr Pot	
	35	90	CS	10YR	4	6	Brownish	n/a	n/a	n/a	n/a	n/a	n/a	n/a	-	0	FSAB	No	No									good
37	0	90	120	MS	7.5YR	5	4	Brownish	10YR	5	6	Ochreous	10YR	5	1	Greyish	0	SG	No	No	WC1	I	1	moderate	2	2	2	Dr Pot
	0	35	CSZL	10YR	4	6	Brownish	n/a	n/a	n/a	n/a	n/a	n/a	n/a	-	10	MSAB	No	No	good								
38	0	35	CSZL	10YR	4	6	Brownish	n/a	n/a	n/a	n/a	n/a	n/a	n/a	-	10	MSAB	No	No	WC1	I	1	moderate	2	2	2	Dr Pot	
	35	90	CS	10YR	4	6	Brownish	n/a	n/a	n/a	n/a	n/a	n/a	n/a	-	0	FSAB	No	No									good
39	0	90	120	MS	7.5YR	5	4	Brownish	10YR	5	6	Ochreous	10YR	5	1	Greyish	0	SG	No	No	WC1	I	1	moderate	2	2	2	Dr Pot
	0	50	FSZL	5YR	3	4	Reddish	n/a	n/a	n/a	-	n/a	n/a	n/a	-	25	FSAB	No	No	good								
40	0	50	70	FSZL	5YR	3	4	Reddish	n/a	n/a	n/a	n/a	n/a	n/a	-	10	FSAB	No	No	WC1	I	1	moderate	1	1	1	Wetness Class	
																		No	No									good
41	0	30	MSZL	5YR	3	4	Reddish	n/a	n/a	n/a	-	n/a	n/a	n/a	-	5	MSAB	No	No	WC1	I	1	moderate	1	1	1	Wetness Class	
																		No	No									good
42	0	100	FSZL	5YR	3	4	Reddish	n/a	n/a	n/a	-	n/a	n/a	n/a	-	25	FSAB	No	No	WC1	I	1	moderate	1	1	1	Wetness Class	
	40	100	FSZL	5YR	3	4	Reddish	n/a	n/a	n/a	n/a	n/a	n/a	n/a	-	25	FSAB	No	No									good
43	0	40	FSZL	5YR	3	4	Reddish	n/a	n/a	n/a	-	n/a	n/a	n/a	-	15	FSAB	No	No	WC1	I	1	moderate	1	1	1	Wetness Class	
																		No	No									good
44	0	35	CSZL	10YR	4	6	Brownish	n/a	n/a	n/a	n/a	n/a	n/a	n/a	-	10	MSAB	No	No	WC1	I	1	moderate	2	2	2	Dr Pot	
	35	90	CS	10YR	4	6	Brownish	n/a	n/a	n/a	n/a	n/a	n/a	n/a	-	0	FSAB	No	No									good
45	0	90	120	MS	7.5YR	5	4	Brownish	10YR	5	6	Ochreous	10YR	5	1	Greyish	0	SG	No	No	WC1	I	1	moderate	2	2	2	Dr Pot
	0	35	CSZL	10YR	4	6	Brownish	n/a	n/a	n/a	n/a	n/a	n/a	n/a	-	10	MSAB	No	No	good								
46	0	35	CSZL	10YR	4	6	Brownish	n/a	n/a	n/a	n/a	n/a	n/a	n/a	-	10	MSAB	No	No	WC1	I	1	moderate	2	2	2	Dr Pot	
	35	90	CS	10YR	4	6	Brownish	n/a	n/a	n/a	n/a	n/a	n/a	n/a	-	0	FSAB	No	No									good
47	0	90	120	MS	7.5YR	5	4	Brownish	10YR	5	6	Ochreous	10YR	5	1	Greyish	0	CSAB	No	No	WC1	I	1	moderate	2	2	2	Dr Pot
	0	35	CSZL	10YR	4	6	Brownish	n/a	n/a	n/a	n/a	n/a	n/a	n/a	-	10	MSAB	No	No	good								
48	0	35	CSZL	10YR	4	6	Brownish	n/a	n/a	n/a	n/a	n/a	n/a	n/a	-	10	MSAB	No	No	WC1	I	1	moderate	2	2	2	Dr Pot	
	35	90	CS	10YR	4	6	Brownish	n/a	n/a	n/a	n/a	n/a	n/a	n/a	-	0	MSAB	No	No									good
49	0	90	120	MS	7.5YR	5	4	Brownish	10YR	5	6	Ochreous	10YR	5	1	Greyish	0	CSAB	No	No	WC1	I	1	moderate	2	2	2	Dr Pot
	0	40	MSZL	10YR	3	2	other	n/a	n/a	n/a	-	n/a	n/a	n/a	-	10	MSAB	No	No	good								
50	0	100	FSZL	5YR	3	4	Reddish	n/a	n/a	n/a	-	n/a	n/a	n/a	-	25	MSAB	No	No	WC1	I	1	moderate	1	1	1	Wetness Class	
																		No	No									good

[illegible]

	0	30	MSZL	10YR	3	2	other	n/a	n/a	n/a	-	n/a	n/a	n/a	-		FSAB	No	No				moderate				
	30	90	FS	5YR	4	6	Brownish	10YR	5	6	Ochreous	10YR	5	1	Greyish		SG	No	No				good				
77																		No	No				good				
	0	70	MSZL	5YR	3	4	Reddish	n/a	n/a	n/a	-	n/a	n/a	n/a	-	35	FSAB	No	No				moderate				
																		No	No				good				
78																		No	No				good				
	0	40	MSZL	10YR	3	2	other	n/a	n/a	n/a	-	n/a	n/a	n/a	-	10	MSAB	No	No				moderate				
	40	50	FS	5YR	4	6	Brownish	10YR	5	6	Ochreous	10YR	5	1	Greyish	0	FSAB	No	No				good				
79																		No	No				good				
	0	30	MSZL	10YR	4	6	Brownish	n/a	n/a	n/a	-	n/a	n/a	n/a	-	10	MSAB	No	No				moderate				
	30	50	MS	7.5YR	5	4	Brownish	10YR	5	6	Ochreous	10YR	5	1	Greyish	0	FSAB	No	No				good				
80																		No	No				good				
	0	35	MSZL	10YR	4	6	Brownish	n/a	n/a	n/a	-	n/a	n/a	n/a	-	10	MSAB	No	No				moderate				
	35	50	MS	7.5YR	5	4	Brownish	10YR	5	6	Ochreous	10YR	5	1	Greyish	0	FSAB	No	No				good				
81																		No	No				good				
	0	20	MSZL	10YR	4	6	Brownish	n/a	n/a	n/a	-	n/a	n/a	n/a	-	15	MSAB	No	No				moderate				
	20	30	MS	7.5YR	5	4	Brownish	10YR	5	6	Ochreous	10YR	5	1	Greyish	0	FSAB	No	No				moderate				
	30	70	CSZL	10YR	4	6	Brownish	n/a	n/a	n/a	-	n/a	n/a	n/a	-	0	CSAB	No	No				moderate				
82																		No	No				moderate				
	0	120	MS	7.5YR	5	4	Brownish	10YR	5	6	Ochreous	10YR	5	1	Greyish	0	SG	No	No				moderate				
																		No	No				moderate				
	0	50	MSZL	10YR	4	6	Brownish	n/a	n/a	n/a	-	n/a	n/a	n/a	-	10	MSAB	No	No				moderate				
																100		No	No				moderate				
83																		No	No				moderate				
	0	30	MSZL	10YR	4	6	Brownish	n/a	n/a	n/a	-	n/a	n/a	n/a	-	0	MSAB	No	No				moderate				
	30	50	CSZL	10YR	4	6	Brownish	n/a	n/a	n/a	n/a	n/a	n/a	n/a	-	5	MSAB	No	No				moderate				
84																		No	No				moderate				
																		No	No				moderate				
	0	30	MSZL	10YR	3	2	other	n/a	n/a	n/a	-	n/a	n/a	n/a	-		FSAB	No	No				moderate				
	30	90	FS	5YR	4	6	Brownish	10YR	5	6	Ochreous	10YR	5	1	Greyish		SG	No	No				good				
85																		No	No				good				
	0	70	FSZL	10YR	4	6	Brownish	n/a	n/a	n/a	-	n/a	n/a	n/a	-		MSAB	No	No				moderate				
																		No	No				good				
86																		No	No				good				
	0	45	MSZL	10YR	3	2	other	n/a	n/a	n/a	-	n/a	n/a	n/a	-	10	MSAB	No	No				moderate				
	45	50	MS	7.5YR	5	4	Brownish	10YR	5	6	Ochreous	10YR	5	1	Greyish	0	FSAB	No	No				good				
87																		No	No				good				
	0	40	MSZL	10YR	3	2	other	n/a	n/a	n/a	-	n/a	n/a	n/a	-	10	MSAB	No	No				moderate				
	40	50	MS	7.5YR	5	4	Brownish	10YR	5	6	Ochreous	10YR	5	1	Greyish	0	FSAB	No	No				good				
88																		No	No				good				
	0	40	MSZL	10YR	3	2	other	n/a	n/a	n/a	-	n/a	n/a	n/a	-	10	MSAB	No	No				moderate				
	40	50	MS	7.5YR	5	4	Brownish	10YR	5	6	Ochreous	10YR	5	1	Greyish	0	FSAB	No	No				good				
89																		No	No				good				
	0	40	MSZL	10YR	3	2	other	n/a	n/a	n/a	-	n/a	n/a	n/a	-	10	MSAB	No	No				moderate				
	40	50	MS	7.5YR	5	4	Brownish	10YR	5	6	Ochreous	10YR	5	1	Greyish	0	FSAB	No	No				good				
90																		No	No				good				
	0	50	MSZL	10YR	3	2	other	n/a	n/a	n/a	-	n/a	n/a	n/a	-	10	MSAB	No	No				moderate				
																100		No	No				moderate				
91																		No	No				moderate				
																		No	No				moderate				
	0	50	CSZL	5YR	2.5	1	Reddish	n/a	n/a	n/a	-	n/a	n/a	n/a	-	0	MSAB	No	No				moderate				
	50	65	CSZL	5YR	3	2	Reddish	n/a	n/a	n/a	n/a	n/a	n/a	n/a	-	10	FSAB	No	No				moderate				
92																		No	No				moderate				
	65	75	MS	7.5YR	5	4	Brownish	10YR	5	6	Ochreous	10YR	5	1	Greyish	15	SG	No	No				moderate				
	0	60	FSZL	5YR	3	4	Reddish	n/a	n/a	n/a	-	n/a	n/a	n/a	-	35	FSAB	No	No				moderate				
	60	70	FSZL	5YR	3	4	Reddish	n/a	n/a	n/a	n/a	n/a	n/a	n/a	-	35	FSAB	No	No				good				
93																		No	No				good				
	0	60	FSZL	5R	3	4	Reddish	n/a	n/a	n/a	-	n/a	n/a	n/a	-		FSAB	No	No				moderate				
																		No	No				good				
94																		No	No				good				
	0	40	MSZL	10YR	3	2	other	n/a	n/a	n/a	-	n/a	n/a	n/a	-	10	MSAB	No	No				moderate				
	40	50	MS	7.5YR	5	4	Brownish	10YR	5	6	Ochreous	10YR	5	1	Greyish	0	FSAB	No	No				good				
95																		No	No				good				
	0	43	MSZL	10YR	3	2	other	n/a	n/a	n/a	-	n/a	n/a	n/a	-	10	MSAB	No	No				moderate				
	43	50	MS	7.5YR	5	4	Brownish	10YR	5	6	Ochreous	10YR	5	1	Greyish	0	FSAB	No	No				good				
96																		No	No				good				
	0	50	MSZL	10YR	3	2	other	n/a	n/a	n/a	-	n/a	n/a	n/a	-	10	MSAB	No	No				moderate				
	50	50	MS	7.5YR	5	4	Brownish	10YR	5	6	Ochreous	10YR	5	1	Greyish	0	FSAB	No	No				good				
97																		No	No				good				
	0	40	MSZL	10YR	3	2	other	n/a	n/a	n/a	-	n/a	n/a	n/a	-	10	MSAB	No	No				moderate				
	40	50	MS	7.5YR	5	4	Brownish	10YR	5	6	Ochreous	10YR	5	1	Greyish	0	FSAB	No	No				good				
98																		No	No				good				
	0	40	MSZL	10YR	3	2	other	n/a	n/a	n/a	-	n/a	n/a	n/a	-	10	MSAB	No	No				moderate				
	40	50	MS	7.5YR	5	4	Brownish	10YR	5	6	Ochreous	10YR	5	1	Greyish	0	FSAB	No	No				good				
99																		No	No				good				
	0	40	MSZL	10YR	3	2	other	n/a	n/a	n/a	-	n/a	n/a	n/a	-	0	MSAB	No	No				moderate				
	40	50	MSL	10YR	4	4	Brownish	n/a	n/a	n/a	n/a	n/a	n/a	n/a	-	0	CSAB	No	No				moderate				
100																		No	No				moderate				
	0	40	MSZL	10YR	3	2	other	n/a	n/a	n/a	-	n/a	n/a	n/a	-	0	MSAB	No	No				moderate				
	40	55	MSL	10YR	4	4	Brownish	n/a	n/a	n/a	n/a	n/a	n/a	n/a	-	0	CSAB	No	No				moderate				
101																		No	No				moderate				
	0	45	MSZL	10YR	3	2	other	n/a	n/a	n/a	-	n/a	n/a	n/a	-	10	MSAB	No	No				moderate				
	45	50	MS	7.5YR	5	4	Brownish	10YR	5	6	Ochreous	10YR	5	1	Greyish	0	FSAB	No	No				good				
102																		No	No				good				

103	0	45	MSZL	10YR	3	2	other	n/a	n/a	n/a	-	n/a	n/a	n/a	-	10	MSAB	No	No	WC1	I	1	moderate	1	1	1	Witness Class
	45	50	MS	7.5YR	5	4	Brownish	10YR	5	6	Ochreous	10YR	5	1	Greyish	0	FSAB	No	No				good				
104	0	40	MSZL	5YR	3	4	Reddish	n/a	n/a	n/a	-	n/a	n/a	n/a	-	5	FSAB	No	No	WC1	I	1	moderate	1	1	1	Witness Class
	40	80	FS	5YR	3	3	Reddish	10YR	5	6	Ochreous	10YR	5	1	Greyish	0	FSAB	No	No				good				
105	0	35	MSZL	10YR	3	2	other	n/a	n/a	n/a	-	n/a	n/a	n/a	-	5	MSAB	No	No	WC1	I	1	good	1	1	1	Witness Class
	35	60	MSZL	10YR	3	2	other	n/a	n/a	n/a	-	n/a	n/a	n/a	-	15	CSAB	No	No				moderate				
	60	120	MS	7.5YR	5	4	Brownish	10YR	5	6	Ochreous	10YR	5	1	Greyish	15	FSAB	No	No				moderate				
106	0	40	MSZL	10YR	3	2	other	n/a	n/a	n/a	-	n/a	n/a	n/a	-	5	MSAB	No	No	WC1	I	1	moderate	1	1	1	Witness Class
	40	80	MSZL	10YR	3	2	other	n/a	n/a	n/a	-	n/a	n/a	n/a	-	15	CSAB	No	No				moderate				
	80	120	FS	7.5YR	5	4	Brownish	10YR	5	6	Ochreous	10YR	5	1	Greyish	15	FSAB	No	No				moderate				
107	0	45	MSZL	10YR	3	2	other	n/a	n/a	n/a	-	n/a	n/a	n/a	-	10	MSAB	No	No	WC1	I	1	moderate	1	1	1	Witness Class
																			moderate								
																							moderate				
108	0	40	MSZL	5R	3	4	Reddish	n/a	n/a	n/a	-	n/a	n/a	n/a	-	5	FSAB	No	No	WC1	I	1	moderate	1	1	1	Witness Class
	40	80	FS	7.5YR	5	4	Brownish	10YR	5	6	Ochreous	10YR	5	1	Greyish	0	FSAB	No	No				good				
109	0	40	MSZL	10YR	3	2	other	n/a	n/a	n/a	-	n/a	n/a	n/a	-	0	MSAB	No	No	WC1	I	1	moderate	1	1	1	Witness Class
	40	55	MSL	10YR	4	4	Brownish	n/a	n/a	n/a	-	n/a	n/a	n/a	-	0	CSAB	No	No				good				
	55	110	MS	7.5YR	5	4	Brownish	10YR	5	6	Ochreous	10YR	5	1	Greyish	0	FSAB	No	No				good				

Structure	
MSAB	Medium Subangular Blocky
AB	Angular Blocky
CP	Coarse Prismatic
MSAB	Massive
SAB	Subangular Blocky
CP	Coarse
W	Weak

Stones	
5	Very Slightly Stony
15	Slightly Stony
35	Moderately Stony

Texture	
C	Clay
ZC	Silty Clay
SC	Sandy Clay
CL	Clay Loam
ZCL	Silty Clay Loam
SCL	Sandy Clay Loam
SZL	Sandy Silty Loam
SL	Sandy Loam
LS	Loamy Sand
S	Sand
ZS	Silty Sand
MG	Made Ground
F (sand)	Fine
M (sand)	Medium
C (sand)	Coarse
H (clay)	Heavy
M (clay)	Medium

Rock Type	
Ca	Calcareous

Mottling	
*	No Mottling
X	Fine Grey
O	Fine Ochreous
N	Numerous Mottles
F	Few Mottles
D	Fine Brown

Cell Colours	Reason
	Livestock in field - not accessed
	Woodland/Made Ground/Urban
	Inaccessible areas
	N/A

APPENDIX III

SITE SURVEY PHOTOGRAPHS

Photograph Number	Photograph Description	Photograph
1.	Land at New Mill Lane, Mansfield General Site View	
2.	Land at New Mill Lane, Mansfield General Site View	
3.	Land at New Mill Lane, Mansfield General Site View	

Photograph Number	Photograph Description	Photograph
4.	Land at New Mill Lane, Mansfield General Site View	
5.	Land at New Mill Lane, Mansfield General Site View	
6.	Land at New Mill Lane, Mansfield General Site View	

Photograph Number	Photograph Description	Photograph
7.	Land at New Mill Lane, Mansfield Soil Type 1a - Pit.	
8.	Land at New Mill Lane, Mansfield Soil Type 1a - Pit.	
9.	Land at New Mill Lane, Mansfield Soil Type 1c - Auger. Borehole 162	

Photograph Number	Photograph Description	Photograph
10.	Land at New Mill Lane, Mansfield Soil Type 1a - Auger. Borehole 18	
11.	Land at New Mill Lane, Mansfield Soil Type 1b - Auger.	
12.	Land at New Mill Lane, Mansfield Soil Type 1b – Topsoil Structure.	
13.	Land at New Mill Lane, Mansfield Soil Type 1b – Subsoil Structure.	

Photograph Number	Photograph Description	Photograph
14.	Land at New Mill Lane, Mansfield Soil Type 1a – Topsoil Structure.	 A photograph showing a sample of topsoil (Soil Type 1a) in a metal tray. The soil is dark brown and crumbly. A yellow ruler is placed below the tray for scale, showing measurements in centimeters. The tray is resting on green grass.
15.	Land at New Mill Lane, Mansfield Soil Type 1a – Subsoil Structure.	 A photograph showing a sample of subsoil (Soil Type 1a) in a metal tray. The soil is a lighter brown color and has a more clumpy, aggregated structure compared to the topsoil. The tray is resting on green grass.

APPENDIX IV

SUMMARY OF FINDINGS

Job Name:	New Mill Lane
Job Number:	250905
Date:	23/12/2025
Completed By:	CL

Site Altitude:	89	
Centre Grid Ref:	456343	363204

AAR	677.35
ATO	1341.38
FCD	148.54
MDMWHT	100.43
MDMPOT	89.45

	Soil Type 1a	Soil Type 1b	Soil Type 1c
AP WHT	130.60	158.38	133.00
MB WHT	30.17	57.95	32.57
AP POT	84.6	136.9	121
MB POT	-4.85	47.45	31.55



Site Limitations Summary			
	Soil Type 1a	Soil Type 1b	Soil Type 1c
Wetness Class	I	I	I
Wetness Grading	1	1	1
Droughtiness Wheat	1	1	1
Droughtiness Potato	2	1	1
Gradient Limitation	1	1	1
Soil Depth Limitation	1	1	1
Stoniness Limitation	1	1	1
	Overall		
Site Climatic Limitation	1	1	1
Overall Grade	2	1	1

Agricultural Land Classification (ALC)

The Agricultural Land Classification (ALC) provides a framework for classifying land according to the extent to which its physical or chemical characteristics impose long-term limitations on agricultural use. The limitations can operate in one or more of four principal ways: they may affect the range of crops which can be grown; the level of yield; the consistency of yield and the cost of obtaining it. The classification system gives considerable weight to flexibility of cropping, whether actual or potential, but the ability of some land to produce consistently high yields of a somewhat narrower range of crops is also taken into account.

These factors form the basis for classifying agricultural land into one of five grades (with Grade 3 land divided into Subgrades 3a and 3b since the guidelines were revised in 1988), ranked from Excellent (Grade 1) to Very Poor (Grade 5). ALC grading is determined using the Ministry of Agriculture Food and Fisheries (MAFF) '*Agricultural Land Classification of England and Wales – Revised guidelines and criteria for grading the quality of agricultural land*'.

Definition of Agricultural Land Classification Grades

ALC Grade	Description
Grade 1	Excellent quality agricultural land No or very minor limitations to agricultural use.
Grade 2	Very good quality agricultural land Minor limitation which affect crop yield, cultivation or harvesting.
Subgrade 3a (pre-1988 Grade 3)	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.
Subgrade 3b (pre-1988 Grade 3)	Moderate quality agricultural land Capable of producing moderate yields of a narrow range of arable crops and/or lower yields of a wider range of crops.
Grade 4	Poor quality agricultural land Severe limitations which significantly restrict the range of crops and/or levels of yield.
Grade 5	Very poor quality agricultural land Very severe limitations which restrict use to permanent pasture or rough grazing.

Best and Most Versatile (BMV) Agricultural Land

The National Planning Policy Framework (NPPF) (Department for Communities and Local Government, 2012) defines Best and Most Versatile (BMV) agricultural land as land of Excellent (ALC Grade 1), Very Good (Grade 2) and Good (Grade 3a) agricultural quality. BMV land is provided a degree of protection against development within planning policy, with most Local Plans including specific policies which refer to the protection of BMV agricultural land.

Non-BMV agricultural land, i.e. Moderate, Poor and Very Poor quality agricultural land is designated subgrade 3b or Grades 4 and 5 respectively, and is restricted to a narrower range of agricultural uses. Limited to no protection is provided against development on this grade land within planning policy.

Limiting Factors

Main Factor	Sub Factor	Explanation
Climatic Limitations	Overall Climatic Limitation	Using a dataset of five parameters, as set on a 5km grid for the whole of the UK, the site climatic values are used to determine if there is an overriding limiting factor for the site with regard to the wider climate.
	Local Climatic Factors	Where the above climatic factors are liable to be modified by local factors such as aspect, gradient and elevation then one or more of these factors may become a limiting factor for the site.
Site Limitations	Gradient	Gradient may have an impact on mechanised farm operations and also on soil erosion. The ALC grade limitations with reference to gradient are given in Table 1 of the MAFF guidance.
	Microrelief	Complex changes in slope angle and direction over short distances may have an impact on agricultural machinery. The effect of microrelief is considered in conjunction with overall gradient.
	Flooding	The extent, duration, frequency and timing of flooding may have an influence over the ALC Grade and could become the limiting site factor. The ALC grade limitations with reference to flooding are given in Tables 2 and 3 of the MAFF guidance.
Soil Limitations	Soil Texture and Structure	Soil texture and structure can influence the water retention, water movement and aeration of the soil and therefore affect the workability, trafficability, poaching risk and suitability for plant growth. Soil texture is determined by the proportions of sand, silt and clay and is used to assess the wetness class of the soil.
	Soil Depth	Soil depth can influence the available water capacity of the soil, restrict nutrient uptake, root growth and root anchorage. The ALC grade limitations with reference to soil depth are given in Table 4 of the MAFF guidance.
	Stoniness	Stone content can influence the cultivation, harvesting and crop growth and may negatively impact machinery. The ALC grade limitations with reference to stoniness are given in Table 5 of the MAFF guidance.
	Chemical Limitations	Certain physical limitations may limit soil chemical properties, such as saline conditions, organic matter and toxic elements.
Interactive Limitations	Soil Wetness	Soil wetness is assessed using a combination of factors including climate, soil water regime and soil texture. The ALC grade limitations with reference to soil wetness are given in Tables 6 and 7 of the MAFF guidance.
	Droughtiness	Soil droughtiness is assessed using a combination of factors including available water capacity, moisture deficit, moisture balance and irrigation. The ALC grade limitations with reference to droughtiness are given in Table 8 of the MAFF guidance.
	Soil Erosion	Soil erosion may be caused by wind or water action and is determined by interactions between weather, soil type, topography and vegetation cover.

Soil Series

Soil series is the lowest categorical level used for classifying soils in England and Wales. According to the Soil Survey of England and Wales 1984:

"Soil series are defined using a combination of three main properties, the broad type of parent material present (substrate type), the texture of the soil material (textural grouping) and the presence or absence of material with a distinctive mineralogy."

Higher categories are: Major Soil Group, Soil Group, and Soil Subgroup, which are not explicitly used in this report.

Soil Association

A soil association is a geographic grouping of soils identified by the name of the most frequently occurring soil series and by the combination of additional soil series.

Gleying

Gleying is the process of iron reduction (opposite to oxidation) in soils from ferric (reddish in colour) to ferrous compounds (grey or colourless), by microorganisms or by-products of decomposing organic matter. Gleying occurs in areas devoid of oxygen when the soil is waterlogged. The resulting mottling (spots or blotches of colour) can therefore be used to identify the existence of a Slowly Permeable Layer (SPL); as defined within the MAFF ALC guidance.

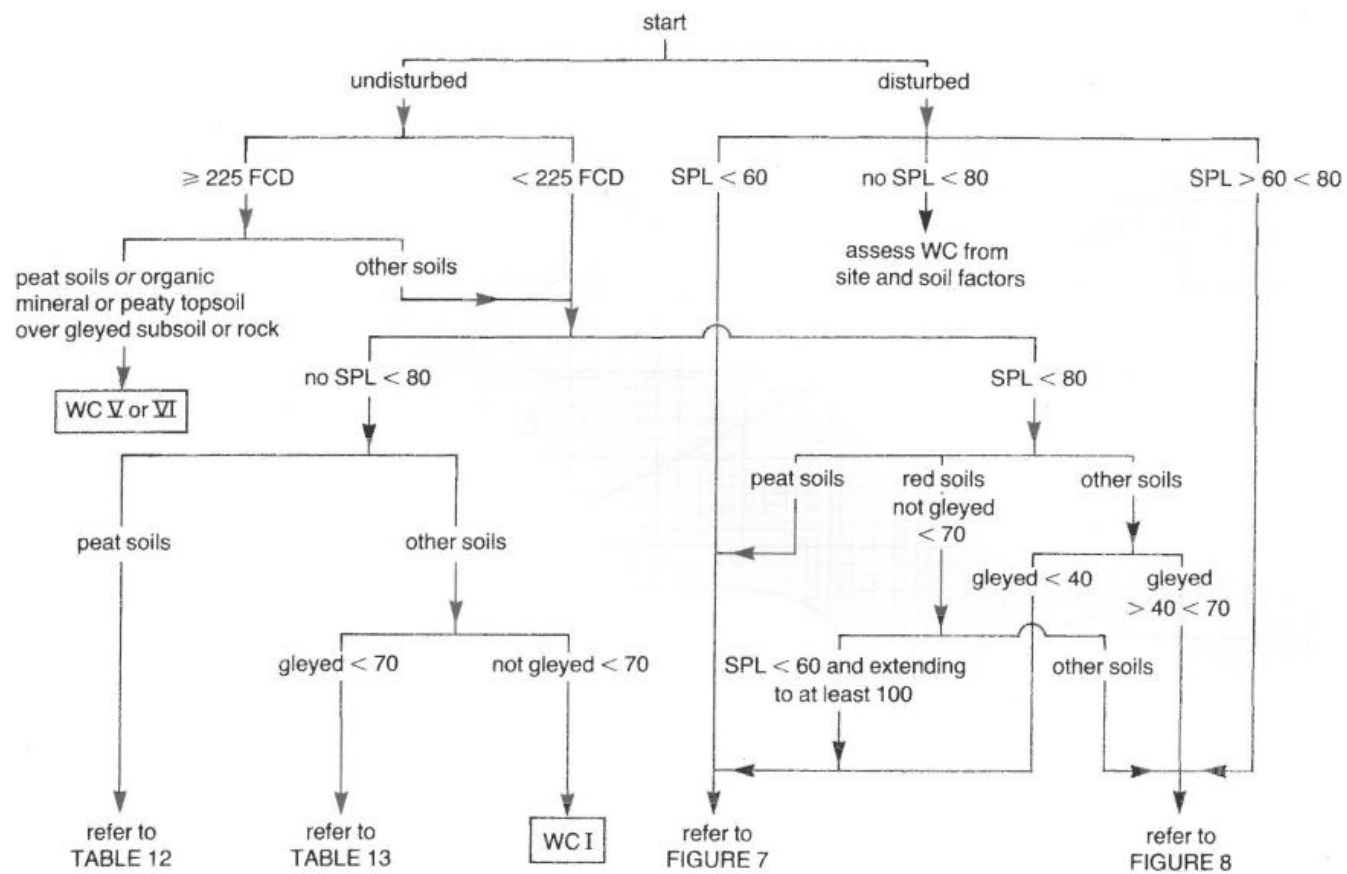


Figure 6. Flow diagram for assessing soil wetness class (WC) from field capacity days (FCD), depth to gleying (in cm) and depth to a slowly permeable layer (SPL, in cm)

Figure 6