

**AGRICULTURAL LAND CLASSIFICATION  
NEWCASTLE-UNDER-LYME  
PROPOSED INDUSTRIAL DEVELOPMENT  
(B1, B2 and B3)**

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**ADAS Ref: 25/RPT/0762  
Job No: 167/95  
MAFF Ref: EL37/11147**

**AGRICULTURAL LAND CLASSIFICATION REPORT FOR  
NEWCASTLE-UNDER-LYME PROPOSED INDUSTRIAL DEVELOPMENT  
(B1, B2 and B3)**

**1 SUMMARY**

1.1 The Agricultural Land Classification (ALC) Survey for this site shows that the following proportions of ALC grades are present:

Grade/Subgrade	ha	% of site
3a	17.0	31.5
3b	30.8	57.0
4	5.0	9.3
Other land	1.2	2.2

1.2 The main limitation to the agricultural use of land in Subgrade 3a is soil wetness.

1.3 The main limitations to the agricultural use of land in Subgrade 3b are soil wetness, gradient and micro-relief.

1.4 The main limitation to the agricultural use of land in Grade 4 is micro-relief.

**2 INTRODUCTION**

2.1 The site was surveyed by the Resource Planning Team in February 1996. An Agricultural Land Classification survey was undertaken according to the guidelines laid down in the "Agricultural Land Classification of England and Wales - Revised Guidelines and Criteria for Grading the Quality of Agricultural Land" (MAFF 1988).

2.2 The 54 ha site is situated to the east of the M6 and is bisected by the A500. The land immediately to the north, south, east and west of the site is predominantly in agricultural use.

2.3 The survey was requested by MAFF in connection with a proposed industrial development.

2.4 At MAFF Land Use Planning Unit's request this was a detailed grid survey at 1:10000 with a minimum auger boring density of 1 per hectare. The attached map is only accurate at the base map scale and any enlargement would be misleading.

2.5 At the time of the survey the site was under permanent grass and cereals.

### **3 CLIMATE**

3.1 The following interpolated data are relevant for the site (SJ 783526) :

Average Annual Rainfall (mm)	776
Accumulated Temperature above 0°C January to June (day °C)	1346

3.2 There is no overall climatic limitation on the site.

3.3 Other relevant data for classifying land include:

Field Capacity Days (days)	184
Moisture Deficit Wheat (mm)	86
Moisture Deficit Potatoes (mm)	72

### **4 SITE**

4.1 Three site factors of gradient, micro relief and flooding are considered when classifying land.

4.2 Gradients of up to 11° occur in the west and east of the site, limiting these areas to Subgrade 3b.

4.3 Micro relief limits areas in the centre and west of the site to Grade 4.

4.4 Flooding does not impose any limitation on the agricultural use of the land.

### **5 GEOLOGY AND SOILS**

5.1 The solid geology of the area is comprised of Red Marl and Soft Flags and Building Stones - British Geological Survey Sheet 123 Stoke-upon-Trent (Macclesfield).

5.2 The underlying geology influences the soils which either have a sandy clay loam or clay loam texture.

## **6 AGRICULTURAL LAND CLASSIFICATION**

- 6.1 Subgrade 3a - occupies 17 ha (31.5%) of the survey area and is found in the north, east and centre of the site.**
  - 6.1.1 These soils typically have a sandy clay loam texture overlying clay loam and clay to depth, with few or no stones within the profile. Observations of gleying and the depth to the slowly permeable layer place these soils in Wetness Class III.**
  - 6.1.2 The main limitation to the agricultural use of this land is soil wetness.**
- 6.2 Subgrade 3b - occupies 30.8 ha (57%) of the survey area and is found mainly in the west and south of the site.**
  - 6.2.1 The soil has either a clay loam or sandy clay loam texture over sandy clay loam and clay to depth. Observations of gleying and the depth to the slowly permeable layer place these soils in Wetness Class IV.**
  - 6.2.2 Gradients of up to 11° occur in the west and east of the site limiting these areas to Subgrade 3b.**
  - 6.2.3 An area adjacent to the trackway leading to Brockwood Hill Farm is limited by micro relief to Subgrade 3b.**
  - 6.2.4 The main limitations to the agricultural use of this land are soil wetness, gradient and micro relief.**
- 6.3 Grade 4 - occupies 5 ha (9.3%) of the survey area.**
  - 6.3.1 The uneven nature of the terrain with steep sided hollows and mounds limits areas of the site to Grade 4.**
  - 6.3.2 The main limitation to the agricultural use of this land is micro relief.**
- 6.4 Other land occupies 1.2 ha (2.2%) of the survey area and includes a farmhouse, agricultural buildings and a trackway.**

## 6.5 SUMMARY OF AGRICULTURAL LAND CLASSIFICATION GRADES

<b>Grade/Sub-grade</b>	<b>Area in Hectares</b>	<b>% of Survey Area</b>	<b>% of Agricultural Land</b>
3a	17.0	31.5	32.2
3b	30.8	57.0	58.3
4	5.0	9.3	9.5
Other land	1.2	2.2	
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<b>Totals</b>	<b>54.0</b>	<b>100.0</b>	<b>100.0</b>
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