

**AGRICULTURAL LAND CLASSIFICATION
APPLETON NORTH
WARRINGTON
CHESHIRE**

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ADAS Statutory Group
LEEDS

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AGRICULTURAL LAND CLASSIFICATION REPORT FOR APPLETON NORTH, WARRINGTON

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
2	20.7	18.7
3a	38.3	34.6
3b	39.1	35.4
Other land		
Urban	6.2	5.6
Woodland	3.0	2.7
Agricultural Buildings	2.9	2.6
Open Water	0.4	0.4

1.2 The main limitations to the agricultural use of land in Grade 2 are soil droughtiness, and/or topsoil workability.

1.3 The main limitation to the agricultural use of land in Subgrade 3a is soil wetness or, in parts of the north of the site, soil droughtiness.

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

2. INTRODUCTION

2.1 The site was surveyed by the Resource Planning Team in September 1994. An Agricultural Land Classification survey was undertaken according to the guidelines laid down in "Agricultural Land Classification of England and Wales. Revised guidelines and criteria for grading the quality of agricultural land". (MAFF, 1988).

2.2 The 110.6 ha site is situated on the southern outskirts of Warrington and lies to the north-west of the village of Appleton Thorn.

- 2.3 The survey was requested by MAFF in connection with Warrington Local Plan.
- 2.4 At MAFF Land Use Planning Unit's request this was a detailed grid survey at 1:10,000 with minimum auger boring density of one 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 survey most of the site was sown to potatoes or was under cereal stubble.

3. CLIMATE

- 3.1 The following interpolated data are relevant for the site (SJ 630 849):

Average Annual Rainfall	806 mm
Accumulated Temperature above 0°C (January to June)	1398 day° C

- 3.2 There is no overall climatic limitation on the site.
- 3.3 Other relevant data for land classification purposes include

Field Capacity Days	191
Moisture Deficit (Wheat)	89 mm
Moisture Deficit (Potatoes)	77 mm

4. SITE

- 4.1 Three site factors of gradient, micro-relief and flooding are considered when classifying land.
- 4.2 On this site, slopes of 8° in the north-western corner restrict a small area of land to Subgrade 3b. Neither micro-relief nor flooding impose any limitations on the agricultural use of the land.

5. GEOLOGY AND SOILS

- 5.1 The solid geology of the site consists of Keuper Sandstone in the north-west, Keuper Waterstones in the centre and Lower Keuper Marl in the south-east (Runcorn, Sheet No. 79). This is overlain by drift deposits of boulder clay and sand and gravel.
- 5.2 The underlying drift influences the soils, which typically consist of either sandy loam or sandy clay loam topsoils over loamy sand or sand subsoils, or sandy clay loam or medium clay loam topsoils over sandy clay loam, heavy clay loam or clay subsoils.

6. AGRICULTURAL LAND CLASSIFICATION

- 6.1 Grade 2 land occupies 20.7 ha (18.7%) of the survey area, with two areas in the north and one in the south of the site.
 - 6.1.1 The soils typically have a medium sandy loam or sandy clay loam topsoil texture, with medium sandy loam or loamy medium sand upper subsoils and loamy medium sand or medium sand lower subsoils. The soils are slightly droughty for wheat and in most cases it is this factor which limits the land to Grade 2. Where sandy clay loam topsoils occur, topsoil workability is slightly limiting, and also restricts the land to Grade 2.
 - 6.1.2 The main limitations to the agricultural use of this land are thus, soil droughtiness and/or topsoil texture.
- 6.2 Subgrade 3a land occupies 38.3 ha (34.6%) of the survey area, principally in the centre and north but also in parts of the south of the site.
 - 6.2.1 Two soil types occur within Subgrade 3a.

In most areas, sandy loam, sandy clay loam or medium clay loam topsoils and upper subsoils overlie heavy clay loam or clay lower subsoils. These soils are very slightly stony and fall in Wetness Classes II and III. The main limitation to the agricultural use of this land is soil wetness.
 - 6.2.2 The second soil type occurring within Subgrade 3a consists of sandy loam or sandy clay loam topsoils overlying medium sand subsoils. The main limitation to the agricultural use of the land in this case is soil droughtiness.

6.3 Subgrade 3b land occupies 39.1 ha (35.4%) of the survey area and occurs principally in the southern half of the site.

6.3.1 These soils typically consist of sandy loam, sandy clay loam or medium clay loam topsoils overlying sandy clay loam heavy clay loam or clay subsoils to depth. These soils fall in Wetness Class IV.

6.3.2 The main limitation to the agricultural use of this land is soil wetness.

6.4 Other land on the site includes Urban land (consisting of roads and housing and covering a total of 6.2 ha), Woodland (3.0 ha), Agricultural Buildings (2.9 ha) and Open Water (0.4ha).

6.5 SUMMARY OF AGRICULTURAL LAND CLASSIFICATION GRADES

Grade/Subgrade	Area (ha)	% of Survey Area	% of Agricultural Land
2	20.7	18.7	21.1
3a	38.3	34.6	39.0
3b	39.1	35.4	39.9
Other land			
Urban	6.2	5.6	
Woodland	3.0	2.7	
Agricultural Buildings	2.9	2.6	
Open Water	0.4	0.4	
Total	110.6	100	100

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