

**AGRICULTURAL LAND CLASSIFICATION
CRANAGE HALL HOSPITAL, HOLMES CHAPEL**

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AGRICULTURAL LAND CLASSIFICATION REPORT FOR CRANAGE HALL HOSPITAL, HOLMES CHAPEL

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	1.9	3
3a	10.9	18
3b	23.8	40
Other land		
Non-Agricultural buildings	2.5	4
Woodland	0.7	1
Urban	20.6	34

- 1.2 The main limitation to the agricultural use of land in Grade 2 is soil droughtiness.
- 1.3 The main limitations to the agricultural use of land in Subgrade 3a are soil wetness and 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 May 1995. 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 60.4 ha site is situated to the north west of Holmes Chapel. The land immediately to the north, south, east and west of the site is predominantly in agricultural use. The land to the north east around Cranage is in urban use.
- 2.3 The survey was requested by MAFF in connection with the a development proposal for the Cranage Hall Hospital complex.
- 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 cereals and grass.

3 CLIMATE

3.1 The following interpolated data are relevant for the site (SJ 750684) :

Average Annual Rainfall (mm)	766
Accumulated Temperature above 0°C January to June (day °C)	1396

3.2 There is no overall climatic limitation on the site

3.3 Other relevant data for classifying land include:

Field Capacity Days (days)	180
Moisture Deficit Wheat (mm)	92
Moisture Deficit Potatoes (mm)	80

4 SITE

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

4.2 In the south of the site (SJ 748 678) slopes are between 7 and 11°. Therefore gradient limits this small area to Subgrade 3b.

4.3 The remaining factors do not impose any limitations on the agricultural use of the land.

5 GEOLOGY AND SOILS

5.1 The solid geology of the area is comprised of Triassic Keuper Marl - British Geological Survey Sheet 110 Macclesfield 1:63,360. This is overlain with deposits of Quaternary boulder clay, fluvio-glacial deposits and alluvium.

5.2 The underlying geology influences the soils which are varied, but either have a sandy loam texture in the north or a clay loam texture in the south.

6 AGRICULTURAL LAND CLASSIFICATION

- 6.1 Grade 2 - occupies 1.9 ha (3%) of the survey area and is found in the north of the site.**
- 6.1.1** These soils typically have a sandy loam texture overlying loamy sand and sand to depth, with few or no stones within the profile. The moisture balance places these soils into Grade 2.
- 6.1.2** The main limitation to the agricultural use of this land is soil droughtiness.
- 6.2 Subgrade 3a - occupies 10.9 ha (18%) of the survey area and is found mainly in the southern half of the site. The soils are variable in texture and can be summarised by the following profile descriptions.**
- 6.2.1** Firstly, there are the soils that typically have a sandy clay loam or clay loam texture over permeable sandy clay loam and/or clay loam to depth, with few stones within the profile. Observations of gleying place these soils in the Wetness Class II. The main limitation to the agricultural use of this land is soil wetness.
- 6.2.2** Secondly, there are the soils that typically have a sandy loam or sandy clay loam texture over sandy loam, loamy sand and sand. The main limitation to the agricultural use of this land is soil droughtiness.
- 6.2.3** Finally, there are the soils that typically have a sandy loam, sandy clay loam or clay loam texture over clay loam or sandy loam over clay. Observations of gleying and the depth to the slowly permeable layer place these soils in Wetness Class III. The main limitation to the agricultural use of this land is soil wetness.
- 6.2.2** The main limitations to the agricultural use of this land are soil wetness and soil droughtiness.
- 6.3 Subgrade 3b - occupies 23.8 ha (40%) of the survey area.**
- 6.3.1** The soil typically has a clay loam texture overlying heavy clay loam and clay to depth. Observations of gleying and the depth to the slowly permeable layer place these soils in Wetness Class IV.
- 6.3.2** The main limitation to the agricultural use of this land is soil wetness.
- 6.4 Other land includes non-agricultural land which occupies 2.5 ha (4%) of the survey area on the periphery of Cranage Hall Hospital and low lying meander; woodland - occupying 0.7 ha (1%) of the survey area in the south of the site and urban - covering 20.6 ha (34%) of the survey area at the Cranage Hospital itself.**

The area of urban consists of a close juxtaposition of hospital buildings and landscaped gardens that cannot be separately shown at this scale of mapping.

6.5 SUMMARY OF AGRICULTURAL LAND CLASSIFICATION GRADES

Grade/Sub-grade	Area in Hectares	% of Survey Area	% of Agricultural Land
2	1.9	3	5
3a	10.9	18	30
3b	23.8	40	65
Other land			
Non-Agricultural	2.5	4	-
Woodland	0.7	1	-
Urban	20.6	34	-
Totals	60.4	100	100