

**Shropshire Minerals Local Plan
Objection 413/6174
Agricultural Land Classification
ALC Map and Report
April 1997**

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AGRICULTURAL LAND CLASSIFICATION REPORT
Shropshire Minerals Local Plan
Objective 413/6174

INTRODUCTION

1. This report presents the findings of a detailed Agricultural Land Classification (ALC) survey on 40.2 hectares of land. The results of this survey supersede any previous ALC information for this land. The land is located to the north west of the village of Tong, Shropshire. The survey was in connection with the Shropshire Minerals Local Plan.
2. The survey was undertaken in April 1997 by the Farming and Rural Conservation Agency (FRCA) on behalf of the Ministry of Agriculture, Fisheries and Food (MAFF). The work was conducted by members of the Resource Planning Team (RPT) in the Northern Region of FRCA.
3. The land has been graded in accordance with the publication "Agricultural Land Classification of England and Wales - Revised guidelines and criteria for grading the quality of agricultural land" (MAFF 1988) .
4. At the time of survey the agricultural land on this site was either under cereals or fallow.

SUMMARY

5. The findings of the survey are shown on the enclosed ALC map. The map has been drawn at a scale of 1:10 000 with an average auger boring density of 1 per hectare. The ALC map is only accurate at this base map scale and any enlargement would be misleading.
6. The area and proportions of the ALC grades and subgrades on the surveyed land are summarised in Table 1.

Table 1: Area of grades and other land

Grade/Other land	Area (hectares)	% surveyed area	% site area
1	-	-	-
2	-	-	-
3a	37.1	93	92
3b	3.0	7	7
4	-	-	-
5	-	-	-
Agricultural land not surveyed	-	N/A	-
Other land	0.1	N/A	1
Total surveyed area	40.1	100	-
Total site area	40.2	-	100

7. The agricultural land on this site has been classified as Subgrade 3a (good quality) and Subgrade 3b (moderate quality), the key limitations being soil wetness, soil droughtiness and topsoil stone content.

8. The area of good quality land is located over the majority of the site. The soils have a sandy loam topsoil overlying either sandy loam, loamy sand and sand to depth or sandy clay loam and clay.

9. The area of moderate quality land is mapped on the north west of the site. The soils in this area have a loamy sand topsoil over sand to depth.

FACTORS INFLUENCING ALC GRADE

Climate

10. Climate affects the grading of land through the assessment of an overall climatic limitation and also through interactions with soil characteristics.

11. The key climatic variables used for grading this site are given in Table 2 and were obtained from the published 5km grid datasets using standard interpolation procedures (Meteorological Office, 1989).

Table 2: Climatic and altitude data

Factor	Units	Values
Grid reference	N/A	SJ 787 078
Altitude	m, AOD	85
Accumulated Temperature	day°C (Jan-June)	1388
Average Annual Rainfall	mm	699
Field Capacity Days	days	165
Moisture Deficit, Wheat	mm	95
Moisture Deficit, Potatoes	mm	84
Overall climatic grade	N/A	Grade 1

12. The climatic criteria are considered first when classifying land as climate can be overriding in the sense that severe limitations will restrict land to low grades irrespective of favourable site or soil conditions.

13. The main parameters used in the assessment of an overall climatic limitation are average annual rainfall (AAR), as a measure of overall wetness, and accumulated temperature (AT0, January to June), as a measure of the relative warmth of a locality.

14. The combination of rainfall and temperature at this site means that there is no overall climatic limitation. The site is climatically Grade 1.

Site

15. The site lies at an altitude of 85 metres AOD.
16. The three site factors of gradient, microrelief and flooding are considered when classifying the land.
17. These factors do not impose any limitations on the agricultural use of this land.

Geology and Soils

18. The solid geology of the area is comprised of Lower Keuper and Upper Mottled Sandstone. This is overlain with deposits of glacial sands and gravels - British Geological Survey (1958).
19. The soils that have developed on this geology are generally of a sandy and loamy texture.

Agricultural Land Classification

20. The details of the classification of the site are shown on the enclosed ALC map and the area statistics of each grade are given in Table 1, page 1.

Subgrade 3a

21. Land of very good quality occupies 37.1 hectares (92%) of the site area.
22. In the southern half of the site the soil has a sandy loam topsoil texture over loamy sand and sand to depth, with few to common stones within the profile. The moisture balance places these soils in Subgrade 3a. The main limitation to the agricultural use of this land is soil droughtiness.
23. In the northern half of the site the soil has a sandy loam topsoil texture over either sandy loam and sandy clay loam to depth or the topsoil overlies over clay. The depth to gleying and the slowly permeable layer place these soils in either Wetness Class III and IV. The soils are slightly to moderately stony, with the volume of topsoil stones greater than 2 cm in size limiting some profiles to subgrade 3a. The main limitations to the agricultural use of this land are either topsoil stone content or soil wetness.
24. The main limitations to the agricultural use of land in this grade are topsoil stone content, soil wetness or soil droughtiness.

Subgrade 3b

25. Land of moderate quality occupies 30.0 hectares (7%) of the site area and is found in the west of the site.

26. The soil has a loamy sand topsoil texture which overlies sand to depth, with few to common stones throughout the soil profile. The moisture balance places these soils in Subgrade 3b.

27. The main limitation to the agricultural use of this land is soil droughtiness.

Other Land

28. Other land occupies 0.1 hectares (1%) of the site area and is found as a small group of trees in the south east corner of the site.

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SOURCES OF REFERENCE

British Geological Survey (1958) Sheet 153, Wolverhampton Solid and Drift Edition.
1:63 360 Scale.
BGS: London.

Ministry of Agriculture, Fisheries and Food (1988) Agricultural Land Classification of
England and Wales: Revised guidelines and criteria for grading the quality of agricultural land.
MAFF: London.

Meteorological Office (1989) Climatological Data for Agricultural Land Classification.
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