WREKIN LOCAL PLAN SITE 2
WEST OF ADMASTON AND WELLINGTON

Agricultural Land Classification
ALC Map and Report
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AGRICULTURAL LAND CLASSIFICATION REPORT
WREKIN LOCAL PLAN, SITE 2
WEST OF ADMASTON AND WELLINGTON

INTRODUCTION

1. This report presents the findings of a detailed Agricultural Land Classification (ALC) survey on 138.1 hectares of land. The results of this survey supersede any previous ALC information for this land. The land is located to the west of Wellington, Shropshire, centred on grid reference SJ 634 120. The site is bounded to the north and east by a railway, to the west by agricultural land and to the south by urban land. The survey was in connection with the Wrekin Local Plan.

2. The survey was undertaken on behalf of the Ministry of Agriculture, Fisheries and Food (MAFF) between August and October 1998 by the Resource Planning Team of the Farming and Rural Conservation Agency (FRCA)- 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 under a beans, cereal crops, sugar beet and grass.

SUMMARY

5. The findings of the survey are shown on the enclosed ALC map. The map has been drawn at a scale of 1:10000 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	21.3	16.8	15.4
2	102.7	81.0	74.4
3b	2.0	1.6	1.5
4	0.7	0.6	0.5
Agricultural land not surveyed	1.7	N/A	7.0
Other land	9.7	N/A	1.2
Total surveyed area	126.7	100.0	-
Total site area	138.1	-	100.0

7. The agricultural land on this site has been classified as Grade 1 (excellent quality), Grade 2 (very good quality), Subgrade 3b (moderate quality) and Grade 4 (poor quality) . The key limitations to the agricultural use of this land are soil wetness, soil droughtiness and gradient.

8. Excellent quality land occurs in three distinct blocks in the north east, north west and the south of the site. Two types of profile can occur within this grade, and can occur anywhere within the areas mapped. The soils commonly comprise either a sandy clay loam or medium sandy loam topsoil, overlying subsoil textures of medium sandy loam, sandy clay loam and loamy medium sand. Alternatively the profiles have a sandy clay loam or medium sandy loam topsoil, passing to either a sandy clay loam or heavy clay loam subsoil.

9. Very good quality land occurs throughout the site. Two types of profile can occur within this grade. The soils commonly comprise either a sandy clay loam or medium sandy loam topsoil, overlying subsoils of sandy clay loam or heavy clay loam. Alternatively they may comprise a sandy clay loam topsoil, onto subsoil textures of sandy clay loam, medium sandy loam and loamy medium sand, with medium sand at depth.

10. Moderate quality land is found through the centre of the site. The agricultural use of the land is limited by gradients of between 7° and 11°.

11. Poor quality land is found in the east of the site as a single unit. The agricultural use of the land is limited by gradients of between 11° and 18°.

FACTORS INFLUENCING ALC GRADE

Climate

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

13. 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 639 113
Altitude	m, AOD	100
Accumulated Temperature	day°C (Jan-June)	1373
Average Annual Rainfall	mm	691
Field Capacity Days	days	154
Moisture Deficit, Wheat	mm	91
Moisture Deficit, Potatoes	mm	77
Overall climatic grade	N/A	Grade 1

14. 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.

15. 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 (ATO, January to June), as a measure of the relative warmth of a locality.

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

Site

17. The site lies at an altitude of 70 - 105 metres AOD. The land form is mainly gently undulating, but some steeper slopes occur in the centre of the site around Wrockwardine Bank.

18. The three site factors of gradient, microrelief and flooding are considered when classifying the land.

19. Gradient is limiting in the centre of the site around Wrockwardine Bank through the centre of the site.

20. Microrelief and flooding do not impose any limitations on the agricultural use of this land.

Geology and Soils

21. The solid geology of the area is comprised Upper Coal Measures in the south of the site, and Pre-Cambrian Rhyolites in the north - British Geological Survey (1952). The drift deposits consist mainly of Boulder Clay, with areas of Glacial Sand and Gravel in the far north of the site, and in the north west close to Wrockwardine village. A strip of Glacial Sand and Gravel also runs across the site on a slight rise east of Orleton Hall. Isolated patches of Glacial Lake Clay underlie small areas of the north east of the site - British Geological Survey (1959).

22. The soils that have developed on this geology are generally of either a sandy clay loam or medium sandy loam topsoil texture, over either a sandy loam, loamy sand and sand subsoil, or alternatively a sandy clay loam topsoil over a sandy clay loam upper subsoil and heavy clay loam subsoil.

Agricultural Land Classification

23. 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.

Grade 1

24. Land of excellent quality occupies 21.3 hectares (15.4 %) of the site area and occurs in three distinct blocks in the north east, north west and the south of the site. Two types of profile are found within this grade and can be found in any of the three areas mapped.

25. In some observations the soils commonly comprised either a sandy clay loam or medium sandy loam topsoil, over either a medium sandy loam, or sandy clay loam upper subsoil, passing to loamy medium sand at depth.

26. Alternatively they comprised either a sandy clay loam or medium sandy loam topsoil, onto either a sandy clay loam or heavy clay loam subsoil.

27. There are no or very minor limitations to the agricultural use of this land.

Grade 2

28. Land of very good quality occupies 102.7 hectares (74.4 %) of the site area and extends throughout the site. Two types of profile can occur within the areas mapped for this grade.

29. In some observations the soils commonly comprised either a sandy clay loam or medium sandy loam topsoil, overlying upper subsoils of sandy clay loam or heavy clay loam. This passed onto a heavy clay loam lower subsoil that was variable in its permeability throughout the site. The depths to gleying and the slowly permeable layer place these soils in Wetness Class II.

30. Alternatively some observations comprised a sandy clay loam topsoil, onto either a sandy clay loam or medium sandy loam upper subsoil, onto loamy medium sand and medium sand lower subsoils. The moisture balance places these soils in Grade 2.

31. Within the Grade 2 area there are a few isolated borings of both excellent and moderate quality land. These profiles cannot be shown separately at this scale of mapping.

32. The main limitations to the agricultural use of this land are soil droughtiness and soil wetness.

Subgrade 3b

33. Land of moderate quality occupies 2.0 hectares (1.5 %) of the site area and is found through the centre of the site.

34. The agricultural use of the land is limited by gradients of between 7° and 11°.

Grade 4

35. Land of poor quality occupies 0.7 hectares (0.5 %) of the site area and is found through the centre of the site.

36. The agricultural use of the land is limited by gradients of between 11° and 18°.

Agricultural Land Not Surveyed

37. Agricultural land not surveyed occupies 1.7 hectares (1.2 %) of the site area, and is found as one field in the far north of the site.

38. Permission for access was not gained to this land.

Other Land

39. Other land occupies 9.7 hectares (7.0 %) of the site area and is found as a urban land, farm tracks, farm buildings, woodland, ponds and broad drainage ditches.

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SOURCES OF REFERENCE

British Geological Survey (1952) Sheet 152, Shrewsbury, Solid Edition.
1:63 360 Scale.
BGS: London.

British Geological Survey (1959) Sheet 153, Shrewsbury, 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.
Meteorological Office: Bracknell.