LAND AT JENNY WALKERS LANE,
PERTON
Agricultural Land Classification
ALC Map and Report
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AGRICULTURAL LAND CLASSIFICATION REPORT LAND AT JENNY WALKERS LANE, PERTON

INTRODUCTION

- 1. This report presents the findings of a detailed Agricultural Land Classification (ALC) survey on 6.3 hectares of land. The results of this survey supersede any previous ALC information for this land. The land is located west of Jenny Walkers Lane to the south of South Perton Farm, Perton, South Staffordshire. The survey was in connection with the proposed use of the land for a cemetery.
- 2. The survey was undertaken on behalf of the Ministry of Agriculture, Fisheries and Food (MAFF) in November, 1997 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 pasture, used for grazing horses, donkeys and goats.

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	-	-	-
2	2.0	32	32
3a	-	-	-
3b	4.2	68	67
4	-	-	-
5	-	-	-
Agricultural land not surveyed	-	N/A	-
Other land	0.1	N/A	1
Total surveyed area	6.3	100	100
Total site area			100

- 7. The agricultural land on this site has been classified as Grade 2 (very good quality) and Subgrade 3b (moderate quality). The key limitations to the agricultural use of this land are soil wetness, soil droughtiness and gradient.
- 8. The area of very good quality land is located on the higher land close to the northern site boundary. The soils commonly comprise a sandy clay loam topsoil overlying a sandy clay loam upper subsoil passing to medium sandy loam and loamy sand.
- 9. The area of moderate quality land is mapped on lower lying land in the south of the site. The soils in this area comprise a sandy clay loam topsoil overlying a gleyed sandy clay loam upper subsoil, passing to slowly permeable heavy clay loam and clay.

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).

Factor Units Values Grid reference N/A SO 855 984 m, AOD 105 Altitude day°C (Jan-June) Accumulated Temperature 1368 Average Annual Rainfall mm 693 Field Capacity Days days 156 Moisture Deficit. Wheat 97 mm Moisture Deficit, Potatoes 85 mm Overall climatic grade N/A Grade 1

Table 2: Climatic and altitude data

- 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 104 to 115 metres AOD. The land rises from a basin in the south and south west of the site towards the north and east.
- 16. The three site factors of gradient, microrelief and flooding are considered when classifying the land.
- 17. In the north of the site, gradients of between 7° and 9° restrict some land to Subgrade 3b.
- 18. Microrelief and flooding do not impose any restriction at this site.

Geology and Soils

- 19. The solid geology of the area is comprised of Keuper Sandstone and Upper Mottled Sandstone. This is not overlain with drift deposits British Geological Survey (1948).
- 20. The soils that have developed on this geology are generally of a sandy clay loam or sandy loam texture over weathering sandstone at depth.

Agricultural Land Classification

21. 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 2

- 22. Land of very good quality occupies 2.0 hectares (32 %) of the site area and is found in the north and east of the site.
- 23. The soil has a sandy clay loam texture over sandy loam and loamy sand to depth with common stones within the profile. The moisture balance places these soils in Grade 2.
- 24. The main limitation to the agricultural use of this land is soil droughtiness.

Subgrade 3b

- 25. Land of moderate quality occupies 4.2 hectares (67 %) of the site area and is found in the south and west of the site.
- 26. In the south and west of the site the soil has a sandy clay loam texture overlying heavy clay loam and clay. The depths to gleying and the slowly permeable layer place these soils in Wetness Class IV.
- 27. The main limitation to the agricultural use of this land is soil wetness.
- 28. In the north of the site gradients were measured at between 7° and 10°.

29. The main limitation to the agricultural use of this land is gradient.

Other Land

30. Other land occupies 0.1 hectares (1 %) of the site area and is found as a trackway and a pond.

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SOURCES OF REFERENCE

British Geological Survey (1948) Sheet 153, Wolverhampton 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.