RUGELEY
Springs Farm (9)
Agricultural Land Classification
ALC Map and Report
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AGRICULTURAL LAND CLASSIFICATION REPORT
RUGELEY
Springs Farm (9)

INTRODUCTION

1. This report presents the findings of a detailed Agricultural Land Classification (ALC) survey on 30.1 hectares of land. The results of this survey supersede any previous ALC information for this land. The land is located to the south east of Rugeley and Brereton. The survey was in connection with the Staffordshire Structure Plan Development Study.

2. The survey was undertaken on behalf of the Ministry of Agriculture, Fisheries and Food (MAFF) in June 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 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 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	6.1	24	20
3a	3.7	15	13
3b	13.5	54	45
4	1.9	7	6
5	-	-	-
Agricultural land not surveyed	0.9	N/A	3
Other land	4.0	N/A	13
Total surveyed area	25.2	100	-
Total site area	30.1	-	100

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

8. The area of very good quality land is located on the lower lying land in the centre and north east of the site. The soil has a sandy loam topsoil texture overlying sandy loam, loamy sand and sand.

9. The area of good quality land is mapped towards the south of the site. The soils have a sandy loam topsoil texture overlying loamy sand and sand.

10. The area of moderate quality land is found mainly on the strongly sloping land (7° - 11°) in the west, south and east of the site. The soils have a sandy loam topsoil texture over loamy sand and sand. Occasionally sandstone is encountered in the lower subsoil. In the centre of the site the soils are disturbed.

11. The area of poor quality land is mapped on similar soil profiles to Subgrade 3b. However, these soils are found on slopes of between 11° and 18° or where microrelief is a limitation.

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	SK 057 159
Altitude	m, AOD	95
Accumulated Temperature	day°C (Jan-June)	1368
Average Annual Rainfall	mm	747
Field Capacity Days	days	178
Moisture Deficit, Wheat	mm	91
Moisture Deficit, Potatoes	mm	79
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 85 to 120 metres AOD. The undulating land rises from the low lying area adjacent to Batesway towards The Springs and India Hills in the south and west of the site.

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

19. Gradient is a limitation on slopes of between 7^{o} and 18^{o}. The strongly sloping land is limited to Subgrade 3b and the moderately steeply sloping land is limited to Grade 4.

20. In the east of the site there are complex changes in slope angle and direction over short distances, here microrelief limits the agricultural use of this land to Subgrade 3b.

21. Flooding does not impose any limitations on the agricultural use of this land.

Geology and Soils

22. The solid geology of the area is comprised of Soft Sandstones and Pebble Beds. In places these deposits are overlain with boulder clay - British Geological Survey (1954).

23. The soils that have developed on this geology are generally of a sandy loam texture over loamy sand and sand to depth.

Agricultural Land Classification

24. 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

25. Land of very good quality occupies 6.1 hectares (20%) of the site area and is found on the lower lying land in the centre and north east of the site.

26. The soil has a sandy loam topsoil texture over sandy loam, loamy sand and sand to depth with few to common stones within the profile. Occasionally sandy clay loam may be present in the subsoil. The moisture balance places these soils in Grade 2.

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

Subgrade 3a

28. Land of good quality occupies 3.7 hectares (13%) of the site area and is found towards the south of the site.

29. 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. Occasionally sandy clay loam is present in the subsoil.

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

Subgrade 3b

31. Land of moderate quality occupies 13.5 hectares (45%) of the site area and is found on the strongly sloping land in the west, south and east of the site.

32. The soil has a sandy loam topsoil texture over loamy sand and sand. Occasionally sandstone is encountered in the lower subsoil below 60cm. In the centre of the site the soils are disturbed, consisting of a variety of textures from sand to clay over an impenetrable layer at 30cm.

33. The majority of these soils are found on slopes of between 7° and 11°.

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

Grade 4

35. Land of poor quality occupies 1.9 hectares (6%) of the site area and is found on slopes of between 11° and 18°. In the east of the site there are also complex changes in slope angle and direction over short distances, where microrelief places this land in Grade 4.

36. The soil has a sandy loam topsoil texture over loamy sand and sand. In the west of the site sandy clay loam is occasionally present in the soil profile.

37. The main limitations to the agricultural use of this land are gradient and microrelief.

Agricultural Land Not Surveyed

38. The RPT could not survey 0.9 hectares (3%) of agricultural land between the footpath to the west of Springs Farm and the dismantled railway, as high fences prohibited access.

Other Land

39. Other land occupies 4.0 hectares (13%) of the site area and includes a carpark, farm buildings, a pond, houses, stables, a public house and a dismantled railway cutting/embankment.

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SOURCES OF REFERENCE

British Geological Survey (1954) Sheet 154, Lichfield 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.
Meteorological Office: Bracknell.