PROPOSED GOLF COURSE
NETHERTON FARM, HIGHLEY, BRIDGNORTH

Agricultural Land Classification
ALC Map and Report
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AGRICULTURAL LAND CLASSIFICATION REPORT
NETHERTON FARM, HIGHLEY, BRIDGNORTH

INTRODUCTION

1. This report presents the findings of a detailed Agricultural Land Classification (ALC) survey on 30.8 hectares of land. The results of this survey supersede any previous ALC information for this land. The land is located to the east of the B4555, south of Highley village. The survey was in connection with the proposed conversion of the land to a golf course.

2. The survey was undertaken in May 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 under ley pasture, grazed in part by sheep.

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
3a	25.0	81	82
3b	4.0	13	13
4	1.4	5	5
Other land	0.4	1	-
Total surveyed area	30.4	-	100
Total site area	30.8	100	-

7. The agricultural land on this site has been classified as Subgrade 3a (good quality), Subgrade 3b (moderate quality) and Grade 4 (poor quality). The key limitation to land classified as Subgrade 3a is soil droughtiness, whilst on land classified as Subgrade 3b and Grade 4 it is gradient.

8. The area of good quality land is located on the lower lying land across most of the site. The soils commonly comprise a sandy silt loam topsoil overlying medium sandy loams and weathered sandstone. The key limitation is soil droughtiness.

9. The area of moderate quality land is mapped towards the north of the site where the slopes are between 7° and 11° and gradient is the key limitation.

10. The area of poor quality land is located in the north west corner of the site where slopes exceed 11° and gradient is the key limitation.

FACTORS INFLUENCING ALC GRADE

Climate

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

12. 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	SO 744 826
Altitude	m, AOD	90
Accumulated Temperature	day°C (Jan-June)	1395
Average Annual Rainfall	mm	740
Field Capacity Days	days	169
Moisture Deficit, Wheat	mm	94
Moisture Deficit, Potatoes	mm	82
Overall climatic grade	N/A	Grade 1

13. 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.

14. 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.

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

Site

16. The site lies at an altitude of between 75-105 metres AOD. The land rises gradually from the south of the site towards the north with a steep rise in the extreme north. On the east side of the site the relief falls gradually towards the Severn Valley.

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

18. In the north of the site gradients of up to 15° limit the land to Subgrade 3b and Grade 4.

19. Evidence of earth movement was observed in several parts of the site where preparatory workings for the golf course had been undertaken. The workings could potentially impose localised microrelief limitations, but this has not been mapped at the scale the survey was undertaken.

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

Geology and Soils

21. The solid geology of the area is comprised of Upper Coal Measures (Highley Beds). This is overlain with drift - British Geological Survey (1975).

22. The soils that have developed on this geology are generally of either a sandy clay loam or sandy loam texture over weathered sandstone.

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.

Subgrade 3a

24. Land of very good quality occupies 25.0 hectares (81 %) of the site area and extends across the majority of the site in a single unit.

25. The soil has either a sandy silt loam or medium sandy loam texture over medium sandy loam and sandstone. The proportion of weathered sandstone increases with subsoil depth. The moisture balance places these soils in Grade 3a.

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

Subgrade 3b

27. Land of moderate quality occupies 4.0 hectares (13 %) of the site area and is found in the north of the site in a single unit.

28. The soil has a medium clay loam texture which lies over a gleyed and slowly permeable heavy clay loam subsoil. The depth to gleying and the slowly permeable layer place these soils in Wetness Class IV.

29. The slopes in this area were measured as between 7° and 11°.

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

Grade 4

31. Land of poor quality occupies 1.4 hectares (5 %) of the site area and is found in the north of the site in a single unit.

32. Slopes in this area were measured as greater than 11°.

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

Other Land

34. Other land occupies 0.4 hectares (1 %) of the site area and is found as a road and a small copse towards the north of the site.

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SOURCES OF REFERENCE

British Geological Survey (1975) Sheet 167, Dudley 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.