

**WEST LANCASHIRE LOCAL PLAN
Objection 0630/002
Agricultural Land Classification
ALC Map and Report
September 1997**

**M J W WOOD
Resource Planning Team
Northern Region
FRCA Wolverhampton**

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AGRICULTURAL LAND CLASSIFICATION REPORT
WEST LANCASHIRE LOCAL PLAN
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INTRODUCTION

1. This report presents the findings of a detailed Agricultural Land Classification (ALC) survey on 56.5 hectares of land. The results of this survey supersede any previous ALC information for this land. The land is located to the south of Skelmersdale and the M58 motorway. The survey was in connection with the West Lancashire Local Plan.
2. The survey was undertaken on behalf of the Ministry of Agriculture, Fisheries and Food (MAFF) in August 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 grass, potatoes and stubble from the previous harvest. An area of grass east of the landfill site is used by a model aeroplane club and has been graded as if it is in agricultural use.

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 | 35.5 | 86 | 63 |
| 3a | 4.9 | 12 | 9 |
| 3b | 0.9 | 2 | 2 |
| 4 | - | - | - |
| 5 | - | - | - |
| Agricultural land not surveyed | 5.9 | N/A | 10 |
| Other land | 9.3 | N/A | 16 |
| Total surveyed area | 41.3 | 100 | - |
| Total site area | 56.5 | - | 100 |

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

8. The area of very good quality land is located over the majority of the site. The soil commonly has a peaty texture over peat to depth.

9. The area of good quality land is mapped in the east of the site. The soils in this area have an organic loamy sand over sand and clay to depth.

10. The area of moderate quality land is mapped in the west of the site. The soils in this area have a sandy loam texture over shale.

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 | SD 471 050 |
| Altitude | m, AOD | 70 |
| Accumulated Temperature | day°C (Jan-June) | 1370 |
| Average Annual Rainfall | mm | 950 |
| Field Capacity Days | days | 220 |
| Moisture Deficit, Wheat | mm | 72 |
| Moisture Deficit, Potatoes | mm | 55 |
| Overall climatic grade | N/A | Grade 2 |

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 (AT0, 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 a climatic limitation at this location. The site is climatically limited to Grade 2.

Site

16. The site lies at an altitude of approximately 65 to 70 metres AOD.
17. The three site factors of gradient, microrelief and flooding are considered when classifying the land.
18. These factors do not impose any limitations on the agricultural use of this land.

Geology and Soils

19. The solid geology of the area is comprised of Westphalian Sandstone. This is overlain with deposits of peat and Shirdley Hill Sand - British Geological Survey (1977).
20. The soils that have developed on this geology are generally of a peaty or an organic loamy sand texture.

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 35.5 hectares (63%) of the site area and extends across the majority of the site.
23. The soil has either a loamy peat or a peaty loam texture over peat to depth with few or no stones within the profile. These soils have been assessed as Wetness Class III.
24. The main limitations to the agricultural use of this land include climate and soil wetness.

Subgrade 3a

25. Land of good quality occupies 4.9 hectares (9%) of the site area.
26. In the east of the site the soil has an organic loamy sand texture which overlies sand and clay to depth. The depths to gleying and the slowly permeable layer place these soils in Wetness Class III.
27. The main limitation to the agricultural use of this land is soil wetness.

Subgrade 3b

28. Land of moderate quality occupies 0.9 hectares (2%) of the site area and is found around the disused tip south west of Peel Farm.

29. The soil has a sandy loam texture over shale. The depths to gleying and the slowly permeable layer place these soils in Wetness Class IV.

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

Land Not Surveyed

31. An area of 5.9 hectares (10%) in the west of the site was not surveyed as access had not been agreed.

Other Land

32. Other land occupies 9.3 hectares (16%) of the site area and includes farmsteads, trackways and a landfill site.

Resource Planning Team
Northern Region
FRCA Wolverhampton

SOURCES OF REFERENCE

British Geological Survey (1977) Sheet 84, Wigan Solid and Drift Edition.
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BGS: London.

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