

**WEST LANCASHIRE LOCAL PLAN**  
**Objection 0583/4**  
**Agricultural Land Classification**  
**ALC Map and Report**  
**July 1997**

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**RPT Reference: 014/97 & 25/RPT/0626**  
**FRCA Reference: EL 21/10095A**  
**LURET Job Number: ME1AFIW**

**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 14.6 hectares of land. The results of this survey supersede any previous ALC information for this land. The land is located at Burscough Airfield, Ormskirk. 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 July 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 a variety of crops including grass, potatoes, turnips and wheat.

**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	-	-	-
3a	10.9	87	75
3b	1.7	13	12
4	-	-	-
5	-	-	-
Agricultural land not surveyed	-	N/A	-
Other land	2.0	N/A	13
<b>Total surveyed area</b>	<b>12.6</b>	<b>100</b>	<b>-</b>
<b>Total site area</b>	<b>14.6</b>	<b>-</b>	<b>100</b>

7. The agricultural land on this site has been classified as Subgrade 3a (good quality) and Subgrade 3b (moderate quality). The key limitation to the agricultural use of this land is soil wetness.

8. The area of good quality land is located over the majority of the site. The soil has a sandy loam topsoil overlying loamy sand, sand and clay.

9. The area of moderate quality land is mapped towards the north west of the site. The soils in this area have a sandy loam topsoil overlying a gleyed and slowly permeable clay subsoil.

## 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).

Table 2: Climatic and altitude data

Factor	Units	Values
Grid reference	N/A	SD 432 107
Altitude	m, AOD	30
Accumulated Temperature	day°C (Jan-June)	1414
Average Annual Rainfall	mm	936
Field Capacity Days	days	212
Moisture Deficit, Wheat	mm	78
Moisture Deficit, Potatoes	mm	63
Overall climatic grade	N/A	Grade 1

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.

## Site

15. The relatively level site lies at an altitude of 27 to 35 metres AOD.
16. The three site factors of gradient, microrelief and flooding are considered when classifying the land.
17. These factors do not impose any limitations on the agricultural use of this land.

## Geology and Soils

18. The solid geology of the area is comprised of Bunter Sandstone. This is overlain with deposits of Shirdley Hill Sand - British Geological Survey (1977).
19. The soils that have developed on this geology are generally of a sandy loam texture over sand and clay at depth.

## Agricultural Land Classification

20. 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*

21. Land of very good quality occupies 10.9 hectares (75%) of the site area and extends across the majority of the site.
22. The soil has a sandy loam texture over loamy sand and sand to depths of between 57 and 100 cm. Below the sand a thin band of stones marks the sharp boundary with the underlying slowly permeable clay. These soils are placed in Wetness Class III. The topsoils exhibit signs of compaction.
23. The main limitation to the agricultural use of this land is soil wetness.

### *Subgrade 3b*

24. Land of moderate quality occupies 1.7 hectares (12%) of the site area and is found towards the north west of the site.
25. The soil has a sandy loam texture overlying sandy clay loam and clay. The depth to gleying and the slowly permeable layer place these soils in Wetness Class IV.
26. The main limitation to the agricultural use of this land is soil wetness.

*Other Land*

27. Other land occupies 2.0 hectares (13%) of the site area and includes extended gardens and woodland.

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## **SOURCES OF REFERENCE**

British Geological Survey (1977) Sheet 84, Wigan Solid and Drift Edition.  
1:50 000 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.