

**BRICKFIELD FARM, NR. SOLIHULL  
MAJOR INVESTMENT SITE PROPOSAL**

**Agricultural Land Classification Survey  
ALC Map and Report  
December 1996**

**Resource Planning Team  
Wolverhampton Statutory Group  
ADAS Wolverhampton**

**ADAS Reference: 48/96, 25/RPT/0781  
MAFF Reference: EL 46/11280  
LUPU Commission: W02116**

# AGRICULTURAL LAND CLASSIFICATION REPORT

## BRICKFIELD FARM, Nr. SOLIHULL MAJOR INVESTMENT SITE PROPOSAL

### INTRODUCTION

1. This report presents the findings of a detailed Agricultural Land Classification (ALC) survey on 41.8 hectares of land located to the west of the M42 and the east of the A452 trunk road near Chelmsley Wood. The survey was undertaken by the Resource Planning Team at Wolverhampton (Northern ADAS Statutory Centre) during November 1996.
2. The survey was commissioned by the Ministry of Agriculture, Fisheries and Food (MAFF) from its Land Use Planning Unit, in Crewe, in connection with the West Midlands Major Investment Sites Study. The results of this survey supersede any previous ALC information for this land.
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 winter cereals, kale, turnips and permanent grassland.

### SUMMARY

5. The findings of the survey are shown on the attached ALC map. At the request of the Land Use Planning Unit this was a detailed grid survey at a scale of 1:10,000 with a minimum auger boring density of 1 per hectare. The ALC map is only accurate at the 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 below.

Table 1: Area of grades and other land

Grade/Other land	Area (hectares)	% site area	% surveyed area
2	20.1	48	56
3a	10.5	25	29
3b	5.4	13	15
Other Land	5.8	14	-
Total surveyed area	36	-	100
Total site area	41.8	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 being soil wetness, soil droughtiness and topsoil stone content.

8. The land of very good quality is located to the south and west of the site. The soils commonly comprise medium and fine sandy loam topsoils overlying medium and fine sandy loam upper subsoils passing to sandy clay loams or sandy silt loams and clays at depth.

9. The land of good quality is mapped towards the north of the site. The soils in this area comprise medium or fine sandy loam topsoil overlying medium and fine sandy loam upper subsoils passing to sandy clay loams or sandy silt loams and sandy clay loams at depth.

10. The land of moderate quality is mapped towards the north east of the site. The soils in this area comprise a medium clay loam topsoil overlying a medium clay loam subsoil. This part of the site was exploited for brick clays in the 18<sup>th</sup> century and is characterised by shallow soils with soil depths varying over short distances.

## 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 below and were obtained from the published 5km grid datasets using standard interpolation procedures (Met. Office, 1989).

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.

Table 2: Climatic and altitude data

Factor	Units	Values
<i>Grid reference</i>	N/A	SP 195 862
Altitude	m, AOD	104
Accumulated Temperature	day°C	1367
Average Annual Rainfall	mm	685
Field Capacity Days	days	160
Moisture Deficit, Wheat	mm	98
Moisture Deficit, Potatoes	mm	86

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 mean that there is no overall climatic limitation. ~~Local climatic factors, such as exposure and frost risk, are not believed to significantly affect the site.~~ The site is climatically Grade 1.

### Site

16. The site lies at altitudes in the range of 102 to 108m AOD. The land rises from the site boundaries towards the centre. The area of Subgrade 3b in the east of the site is bounded in part by short steep slopes which are a result of brickworks excavation in the 18<sup>th</sup> century.

### Geology and soils

17. The published geological information for the site (BGS, 1950 and 1955), shows the site to be underlain by Keuper Marl. This is overlain by drift deposits of sands and gravels in the north west corner and the southern parts of the site, extending almost as far as the track across the site. Over the remainder of the site there are drift deposits of boulder clay.

18. The soils information that have developed on this geology include sandy loam and clay loam.

### Agricultural Land Classification

19. The details of the classification of the site are shown on the attached ALC map and the area statistics of each grade are given in Table 1.

#### *Grade 2*

20. Land of very good quality occupies 20.1 ha (48%) and extends across the centre of the site.

21. Soils in this area comprise stoneless to very slightly stony medium or fine sandy loam topsoils overlying similar upper subsoil horizons. The lower subsoil textures include heavy clay loam and sandy clay loam which are stoneless to slightly stony. There is no slowly permeable layer present, although gleying was observed and the soils are placed in Wetness Class I.

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

#### *Subgrade 3a*

23. Land of good quality occupies 10.5 ha (25%) of the site and is found in the north.

24. The soils commonly comprise a stony fine or medium sandy loam topsoil which lies directly over subsoils of either a fine or medium sandy loam and sandy clay loam at depth.

25. The main limitation to the agricultural use of the land is topsoil stone content.

*Subgrade 3b*

26. Land of moderate quality occupying 5.4 ha (14%) and is found in the north east of the site.
27. Soils in this area commonly comprise a slightly stony medium clay loam topsoil which lies over a similarly stony medium clay loam subsoil. Soil depths in this area are relatively shallow (approximately 38cm) and overlie old brickwork infill and rubble.
28. The main limitation to the agricultural use of the land is soil droughtiness.

Resource Planning Team  
Wolverhampton Statutory Group  
ADAS Wolverhampton

## SOURCES OF REFERENCE

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