

**Agricultural Land Classification  
Shawbirch East Major Investment Site**

**September 1996**

**Resource Planning Team  
ADAS Statutory Group  
WOLVERHAMPTON**

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## AGRICULTURAL LAND CLASSIFICATION REPORT FOR SHAWBIRCH EAST MAJOR INVESTMENT SITE

### 1. SUMMARY

- 1.1 The Agricultural Land Classification (ALC) Survey for this site shows that the following proportions of ALC grades are present:

Grade/Other Land	Area (hectares)	% of surveyed area
2	50.3	64
3a	22.9	29
Other land	5.1	7
Total Survey Area	78.3	100

- 1.2 The main limitation to the agricultural use of land in Grade 2 and Subgrade 3a is soil droughtiness.

### 2. INTRODUCTION

- 2.1 The site was surveyed by the Resource Planning Team in August and September 1996. An Agricultural Land Classification survey was undertaken according to the guidelines laid down in the "Agricultural Land Classification of England and Wales - Revised Guidelines and Criteria for Grading the Quality of Agricultural Land" (MAFF 1988).
- 2.2 The 78.3 ha site is situated to the east of Shawbirch and south of Eyton upon the Weald Moors. The land surrounding the site is predominantly in agricultural use.
- 2.3 The survey was requested by MAFF in connection with the proposed development of a major investment site.
- 2.4 At MAFF Land Use Planning Unit's request this was a detailed grid survey at 1:10000 with a minimum auger boring density of 1 per hectare. The attached map is only accurate at the base map scale and any enlargement would be misleading.
- 2.5 At the time of the survey the site was under wheat, leeks and potatoes.

- 2.6 Part of the site has been previously surveyed in August 1994 in connection with the Wrekin District Local Plan. The survey was carried out on a semi-detailed grid and map produced at scale 1:25 000 and the land was shown to be mainly Subgrade 3a with Grade 2. The survey in 1996 at scale 1:10 000 and on a 100 metre grid showed the land to be mainly Grade 2 with Subgrade 3a. Differences between the two maps are a result of mapping scale and the greater auger boring density in the 1996 survey.

### 3. CLIMATE

- 3.1 The following interpolated data are relevant for the site :

Factor	Units	Values
Grid Reference	N/A	SJ 650140
Altitude	m, AOD	70
Accumulated Temperature	day °C	1406
Average Annual Rainfall	mm	668
Field Capacity Days	days	143
Moisture Deficit, Wheat	mm	99
Moisture Deficit, Potatoes	mm	88
Climatic Grade	N/A	1

- 3.2 There is no overall climatic limitation on the site.

### 4. SITE

- 4.1 Three site factors of gradient, micro relief and flooding are considered when classifying land.
- 4.2 These factors do not impose any limitations on the agricultural use of the land.

### 5. GEOLOGY AND SOILS

- 5.1 The solid geology of the area is comprised of Keele Beds and Lower Mottled Sandstone - British Geological Survey Sheet 152 Shrewsbury 1 Inch. This is overlain with deposits of sand and gravel.
- 5.2 The underlying geology influences the soils which have either a sandy loam or sandy clay loam texture

## 6. AGRICULTURAL LAND CLASSIFICATION

### 6.1 Grade 2 - occupies 50.3 ha (64%) of the survey area.

- In the east of the site these soils typically have a sandy loam texture overlying either sandy loam to depth or loamy sand and sand to depth, with few or no stones within the profile. The moisture balance places these soils in Grade 2.
- The main limitation to the agricultural use of this land is soil droughtiness.
- In the west of the site the soils typically have a sandy loam texture overlying sandy clay loam and heavy clay loam. Observations of gleying and the depth to the slowly permeable layer place these soils in Wetness Class III.
- The main limitation to the agricultural use of this land is soil wetness.

### 6.2 Subgrade 3a occupies 22.9 ha (29%) of the survey area.

- The soil has a loamy sand texture over sand to depth. In the west of the site the soils are slightly stony, elsewhere there are few stones within the profile. The moisture balance places these soils in Subgrade 3a.
- The main limitation to the agricultural use of this land is soil droughtiness.

### 6.3 Other land occupies 5.1 ha (7%) of the site and includes agricultural buildings, woodland and urban land.

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**SHAWBIRCH EAST TELFORD -  
ALC INFORMATION  
February 1997**

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# SHAWBIRCH EAST MAJOR INVESTMENT SITE PROPOSAL

## 1. INTRODUCTION

In 1994 an Agricultural Land Classification survey (scale 1:25000) covering some 370 hectares around Eyton upon the Weald Moors was carried out as part of the Wrekin District Local Plan. The land around Eyton Farm was mapped mainly as Grade 3a with some Grade 2. Of the 1:25000 survey 13 borings lie within the boundary of the Shawbirch East Major Investment Site.

In 1996 an Agricultural Land Classification survey (scale 1:10000) was carried out following 100 metre grid and covered approximately 78 hectares of the proposed Major Investment Site. This detailed survey shows a greater area of Grade 2 in the vicinity of Eyton Farm than on the 1:25000 map. At MAFF Land Use Planning Unit's request additional site work was carried out in January 1997 at borings 6, 7, 13, 14, 25, 36, 46, 47, 56, 65 and 73 (scale 1:10000). Auger borings details are attached in Appendix 1.

## 2. RESULTS

The soils typically have a medium sandy loam texture overlying loamy medium sand, and sand at depth. Occasionally textures of sandy clay loam and heavy clay loam are present within the profile. There are a few stones within the soil.

Of the 11 borings (January 1997) 10 are classified as Grade 2 or better. Boring 73 is marginal Grade 3a/2 on the grounds of the moisture balance being calculated using data for a moderate subsoil structure and being slightly (1mm) under the Grade 2 moisture balance cut off. An additional boring close to boring 73 indicated the presence of Grade 2 land.

The main limitation to the agricultural use of the land covered by the January 1997 borings is soil droughtiness. One exception is at boring 13 where the main limitation is soil wetness.

### **3. CONCLUSIONS**

With the exception of one boring all the land covered by the borings (January 1997) is classified as Grade 2. Boring 14 was placed at the boundary of the Grade 2 and 3a land on the 1:10000 survey, and is confirmed as Grade 2 following this additional site visit.

### **4.**

Best and most versatile agricultural land is mapped close to Eyton Farm. In 1994 land was classified as Grade 3a (scale 1:25000) the main limitation being soil droughtiness. This survey covered some 370 hectares and 13 borings of this survey fall within the boundary of the proposed Major Investment Site.

In 1996 a detailed survey at scale 1:10000 was carried out on the proposed Major Investment Site area. More site specific climatic data was used in the interactive limitations of soil droughtiness and soil wetness. Areas of Grade 3a mapped in 1994 were mapped as Grade 2 in 1996. Soil profile details in 1994 were marginal Grade 2/3a and overall were mapped as Grade 3a. With more site specific climatic data as used in 1996 the majority of these borings fall into Grade 2. The 1996 survey included 6 soil pits to back up auger boring information. No pits were dug within the proposed Major Investment Site boundary in the 1994 survey. The change of grading from Grade 3a in 1994 (scale 1:25000) to Grade 2 in 1996 (scale 1:10000) is the result of mapping scale, and more detailed site specific information being used.

## 5.

It is recommended that no modification to the September 1996 ALC survey map scale 1:10000 is necessary.