# AGRICULTURAL LAND CLASSIFICATION HAPSFORD MSA, JUNCTION 14 M56 MOTORWAY

M J W Wood Resource Planning Team ADAS Statutory Group WOLVERHAMPTON

.

 ADAS Ref:
 25/RPT/0702

 Job No:
 151/94

 MAFF Ref:
 EL 06/10806

2

# AGRICULTURAL LAND CLASSIFICATION REPORT FOR HAPSFORD MSA, JUNCTION 14 M56 MOTORWAY

# 1 SUMMARY

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

Grade/Subgrade	ha	% of site
3a	5.3	14
3b	33.2	86

- 1.2 The main limitation to the agricultural use of land in Subgrade 3a is soil wetness.
- 1.3 The main limitation to the agricultural use of land in Subgrade 3b is soil wetness.

# 2 INTRODUCTION

- 2.1 The site was surveyed by the Resource Planning Team in February 1995. 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 38.5 ha site is situated to the north of the M56 Motorway at Junction 14. The land immediately to the north, east and south of the site is predominantly in agricultural use. The land to the north west is in urban use.
- 2.3 The survey was requested by MAFF in connection with an ad hoc development proposal for a motorway service area (MSA).
- 2.4 At the request of the Land Use Planning Unit of MAFF this was a detailed grid survey at 1:10 000 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 grass.

# 3 CLIMATE

3.1 The following interpolated data are relevant for the site (SJ 466 753) :

Average Annual Rainfall (mm) Accumulated Temperature above 0°C January to June (day °C)	699 1454
There is no overall climatic limitation on the site	
Other relevant data for classifying land include:	
Field Capacity Days (days)	159
Moisture Deficit Wheat (mm)	103
Moisture Deficit Potatoes (mm)	93

#### 4 SITE

3.2

3.3

- 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 Bunter Pebble Beds and Permian Sandstone - British Geological Survey Sheet 97 Runcorn 1:63 360. This is overlain with deposits of Quaternary marine alluvium and boulder clay.
- 5.2 The underlying geology influences the soils which have a clay loam over clay texture.

# 6 AGRICULTURAL LAND CLASSIFICATION

- 6.1 Subgrade 3a occupies 5.3 ha (14%) of the survey area and is found to the north of the A5117 trunk road.
  - 6.1.1 The soil has a medium clay loam or a sandy clay loam texture over sandy clay loam, heavy clay loam and clay to depth, with few or no stones within the profile. Observations of gleying and the depth to the slowly permeable layer place these soils in Wetness Class III.
  - 6.1.2 The main limitation to the agricultural use of this land is soil wetness.
- 6.2 Subgrade 3b occupies 33.2 ha (86%) of the survey area and is found to the north and south of the A5117 trunk road.
  - 6.2.1 The soil typically has a clay loam or a sandy clay loam texture overlying sandy clay loam and/or heavy clay loam and clay to depth. Observations of gleying and the depth to the slowly permeable layer place these soils in Wetness Class IV. Occasionally the lower subsoil has lenses of peaty or sandy material.
  - 6.2.2 The main limitation to the agricultural use of this land is soil wetness.

#### 6.3 SUMMARY OF AGRICULTURAL LAND CLASSIFICATION GRADES

	Grade/Sub-grade	Area in Hectares	% of Survey Area
3a		5.3	14
3b		33.2	86
		······	
Total	S	38.7	100