

AGRICULTURAL LAND CLASSIFICATION
LEEDS UNITARY DEVELOPMENT PLAN
SITE E4:24/E8:10
JULY 1993

ADAS
Leeds Statutory Group

Job No:- 126/93
MAFF Ref:-

2Fes 6597

SUMMARY

An Agricultural Land Classification survey of 17ha of land adjoining Junction 30 of the M62 motorway was carried out in July 1993. At the time of survey 95% of the site was in agricultural use of which 5.7ha falls in Subgrade 3a. Profiles are imperfectly drained (Wetness Class III) and typically consist of medium clay loam topsoils overlying medium silty clay loam or heavy silty clay loam upper subsoils and heavy silty clay loam or silty clay lower subsoils. The ALC grade of this land is limited by soil wetness and workability problems.

The remainder of the agricultural land on the site falls in Subgrade 3b. Profiles are poorly drained (Wetness Class IV) and consist of medium clay loam topsoils overlying slowly permeable heavy silty clay loam or silty clay subsoils at around 30cm depth. The ALC grade of this land is limited by soil wetness and workability restrictions, which are more severe than on the smaller area of Subgrade 3a land.

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1. AGRICULTURAL LAND CLASSIFICATION

AGRICULTURAL LAND CLASSIFICATION REPORT ON LEEDS UDP SITE E4:24/E8:10

1. INTRODUCTION AND SITE CHARACTERISTICS

1.1 Location and Survey Methods

The site lies approximately 10km south east of Leeds city centre, adjoining Junction 30 of the M62 motorway. Survey work was carried out in July 1993 when soils were examined by hand auger borings at 100m intervals predetermined by the National Grid. One soil profile pit was dug in order to assess subsoil structure. Land quality was determined using the methods described in "Agricultural Land Classification of England and Wales: Revised guidelines and criteria for grading the quality of agricultural land" (MAFF, 1988).

1.2 Land Use and Relief

At the time of survey most of the site was in arable use with cabbages in the south of the site and winter wheat in the north. The site lies at an altitude of approximately 55m AOD and is gently sloping (typically 1-3°) with a southerly aspect.

1.3 Climate

Grid Reference	: SE 360263
Altitude (m)	: 55
Accumulated Temperature above 0°C (January-June)	: 1352 day°C
Average Annual Rainfall (mm)	: 646
Climatic Grade	: 1
Field Capacity Days	: 145
Moisture Deficit (mm) Wheat	: 102
Moisture Deficit (mm) Potatoes	: 92

1.4 Geology, Soils and Drainage

The site is underlain by Carboniferous Coal Measures consisting of interbedded sandstones and shales. There is no drift cover on the site and the soils are formed in weathering shale, with medium clay loam topsoils typically overlying gleyed slowly permeable heavy silty clay loam or silty clay subsoils. Profiles are imperfectly or poorly drained, falling in Wetness Classes III or IV. Most soils are similar to the Dale Series as mapped by the Soil Survey and Land Resource Centre.

2. AGRICULTURAL LAND CLASSIFICATION

The ALC grades occurring on this site are as follows:

<u>Grade/Subgrade</u>	<u>Hectares</u>	<u>Percentage of Total Area</u>
1		
2		
3a	5.7	32.8
3b	10.9	62.6
4		
5		
(Sub total)	(16.6)	(95.4)
Urban		
Non Agricultural	0.8	4.6
Woodland - Farm		
- Commercial		
Agricultural Buildings		
Open Water		
Land not surveyed		
(Sub total)	(0.8)	(4.6)
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TOTAL	17.4	100
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2.1 Subgrade 3a

Land in this subgrade occurs in the south east and south west of the site. Profiles are generally imperfectly drained (falling in Wetness Class III) and typically consist of medium clay loam topsoils overlying medium silty clay loam or heavy silty clay loam upper subsoils and heavy silty clay loam or silty clay lower subsoils. Slowly permeable layers start at around 50cm depth and the land is limited to Subgrade 3a by soil wetness restrictions.

2.2 Subgrade 3b

Subgrade 3b land occurs in the north and centre of the site. Profiles are poorly drained (falling in Wetness Class IV) and typically consist of medium clay loam topsoils overlying gleyed slowly permeable heavy silty clay loam or silty clay subsoils at around 30cm depth. The soil wetness and workability restrictions are more limiting than on the adjoining Subgrade 3a land and this land is, thus, restricted to Subgrade 3b.

2.3 Non Agricultural

This category includes a small area of scrubland in the north east of the site.

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MAP