

AGRICULTURAL LAND CLASSIFICATION  
KIRKLEES UNITARY DEVELOPMENT PLAN SITE B4:3  
GRANGE MOOR  
WEST YORKSHIRE  
DECEMBER 1992

ADAS  
Leeds Statutory Group

Job No:- 138/92  
MAFF Ref:-

2F15 6272

## SUMMARY

An Agricultural Land Classification of 17 ha of land at Grange Moor was carried out in December 1992, of which 13.5 ha is in agricultural use.

Subgrade 3a land covers a total of 0.7 ha and generally consists of medium sandy loam topsoils and subsoils overlying sandstone bedrock at around 45 cm depth. The overall climate of the area is the factor which limits this land to this subgrade.

Subgrade 3b land covers a total of 4.0 ha. Soils are poorly drained and consist of medium clay loam or medium silty clay loam topsoils overlying silty clay subsoils. Soil wetness and workability are the factors which limit the A.L.C. grade of this land.

Grade 4 land covers a total of 8.3 ha. Soils are restored and typically consist of compacted medium clay loam topsoils (and a compacted silty clay subsoil in places) overlying colliery overburden at between 20 cm and 60 cm depth. These soils are subject to severe waterlogging and are limited to Grade 4 for this reason.

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AGRICULTURAL LAND CLASSIFICATION REPORT ON LAND AT KIRKLEES U.D.P. SITE B4:3  
GRANGE MOOR, WEST YORKSHIRE

1. INTRODUCTION AND SITE CHARACTERISTICS

1.1 Location and Survey Methods.

The site lies 8 km east of Huddersfield town centre, between the village of Grange Moor and the A642 Huddersfield to Wakefield road. It is centred on Grid Reference SE223157. Survey work was carried out in December 1992 when soils were examined by hand auger borings at 100 m intervals predetermined by the National Grid. Extra borings were made, where necessary, to refine grade boundaries and one inspection pit was dug to allow the assessment of subsoil structure.

Land quality was assessed 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 under ley or permanent grass. The remainder consisted of a small area of urban land (in the south-west of the site), farm woodland (in the centre and south) and playing fields (in the north).

The site lies at an altitude of 220m A.O.D. and is flat to moderately sloping (typically 0 - 4°).

1.3 Climate

Grid Reference	:	SE223157
Altitude (m)	:	220
Accumulated Temperature above 0°C (January-June)	:	1177 day °C
Average Annual Rainfall (mm)	:	822
Climatic Grade	:	3a
Field Capacity Days	:	201
Moisture Deficit (mm) Wheat	:	73
Moisture Deficit (mm) Potatoes	:	53

#### 1.4 Geology, Soils and Drainage

The site is underlain by Carboniferous coal measures consisting of interbedded sandstones (which occur within one metre of the soil surface in the north-west of the site) and shales. There is no drift cover but soils in the centre and south of the site are restored, and in places consist of a shallow topsoil directly overlying colliery overburden.

The soils overlying sandstone (which occur in the north-west of the site) are typically light-textured and well-drained, falling in Wetness Class I. Weathering sandstone bedrock typically occurs at around 45 cm depth on this area.

Soils formed in weathering shale occur in the west and in the north-east. Typically medium clay loam or medium silty clay loam topsoils overlie slowly permeable silty clay subsoils at around 25 cm depth. These soils are poorly drained, falling in Wetness Class IV.

The restored soils in the centre and south of the site consist mainly of compacted, medium clay loam topsoils directly overlying colliery overburden at around 20 cm depth. However, in places a compacted silty clay subsoil also occurs and the overburden begins at around 60 cm depth.

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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	0.73	4.2
3b	4.02	23.4
4	8.30	48.3
5		
(Sub total)	(13.05)	(75.9)
Urban	0.45	2.6
Non Agricultural	0.86	5.0
Woodland - Farm	2.84	16.5
- Commercial		
Agricultural Buildings		
Open Water		
Land not surveyed		
(Sub total)	(4.15)	(24.1)
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TOTAL	17.20	100
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### 2.1 Subgrade 3a

Subgrade 3a land occurs in the north-west of the site. Profiles are well-drained (falling in Wetness Class I) and typically consist of medium sandy loam topsoils and subsoils overlying sandstone bedrock at around 45 cm depth. These soils are slightly droughty but it is the overall climate of the area which limits the A.L.C. grade of the land.

### 2.2 Subgrade 3b

Land in this subgrade occurs in two separate areas - one in the west and one in the north-east of the site. Soils are poorly drained (falling in Wetness Class IV) and consist of medium clay loam or medium silty clay loam topsoils overlying slowly permeable silty clay subsoils. Soil wetness and workability are, therefore, the factors limiting this land to Subgrade 3b.

### 2.3 Grade 4

Grade 4 land covers much of the centre and south of the site. The soils have been restored and typically consist of compacted medium clay loam topsoils (containing lenses of heavy silty clay loam or silty clay subsoil in places) overlying colliery overburden at around 20 cm depth. In the centre of the site a compacted silty clay subsoil occurs in places and this overlies overburden at around 60 cm depth.

The permeability of these soils is much reduced by the compaction and as a result they are easily waterlogged and difficult to work for much of the year. For this reason, this land is restricted to Grade 4.

### 2.4 Urban

This refers to an area of waste ground in the south-west of the site which is currently being used to store building rubble.



2.5 Non-Agricultural

This category includes a football pitch in north-west of the site.

2.6 Farm Woodland

This occurs in the north, south and east of the site.

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