

AGRICULTURAL LAND CLASSIFICATION
BARNESLEY UNITARY DEVELOPMENT PLAN
SOUTH YORKSHIRE
SITE NE 1/10
AUGUST 1993

ADAS
Leeds Statutory Group

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2 FCS 6630

SUMMARY

An Agricultural Land Classification survey of Site NE 1/10, Barnsley UDP was carried out in August 1993.

A total of 10.2ha of land was surveyed, of which 3.7ha falls within Subgrade 3a. Profiles are imperfectly drained (falling in Wetness Class III) and consist of medium-textured topsoils and upper subsoils overlying slowly permeable heavy-textured lower subsoils at around 60cm depth. The land is limited to Subgrade 3a by soil wetness problems.

Subgrade 3b land covers 6.5ha. Profiles are poorly drained (falling in Wetness Class IV) and consist of medium-textured topsoils overlying slowly permeable heavy-textured subsoils at around 30cm depth. This land is limited to Subgrade 3b by soil wetness and workability problems, which are more severe than on the adjoining Subgrade 3a land.

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1. AGRICULTURAL LAND CLASSIFICATION

AGRICULTURAL LAND CLASSIFICATION REPORT ON LAND AT SHAFTON, SOUTH YORKSHIRE (BARNSELY UDP SITE NE 1/10)

1. INTRODUCTION AND SITE CHARACTERISTICS

1.1 Location and Survey Methods

The site lies on the south-western edge of the village of Shafton, around Grid Reference SE 392108. Survey work was carried out in August 1993 when soils were examined by hand auger borings at 100m intervals predetermined by the National Grid. Extra borings were made where necessary to refine grade boundaries, and one soil 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 all of the land was under stubble from the previous barley crop. Site altitude varies between 70 and 80m AOD and the land is gently to moderately sloping, with a south-westerly aspect.

1.3 Climate

Grid Reference	: SE 392108
Altitude (m)	: 75
Accumulated Temperature above 0°C (January-June)	: 1340 day°C
Average Annual Rainfall (mm)	: 666
Climatic Grade	: 1
Field Capacity Days	: 145
Moisture Deficit (mm) Wheat	: 100
Moisture Deficit (mm) Potatoes	: 89

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 have formed directly over weathering bedrock.

Profiles are typically imperfectly to poorly drained, falling in Wetness Classes III or IV. The soils are generally medium to heavy textured, typically consisting of medium clay loam topsoils overlying medium to heavy silty clay loam upper and lower subsoils.

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	3.7	36.3
3b	6.5	63.7
4		
5		
(Sub total)	(10.2)	(100)
Urban		
Non Agricultural		
Woodland - Farm		
- Commercial		
Agricultural Buildings		
Open Water		
Land not surveyed		
(Sub total)		
TOTAL	10.2	100

2.1 Subgrade 3a

Land in this subgrade covers the north and west of the site. Profiles are imperfectly drained (falling in Wetness Class III) and typically consist of medium clay loam topsoils overlying medium silty clay loam upper subsoils and slowly permeable heavy silty clay loam lower subsoils at a depth of between 50 and 60cm. The land is, thus, limited to Subgrade 3a by soil wetness.

2.2 Subgrade 3b

Land in this subgrade covers the southern part of the site. Profiles are poorly drained (falling in Wetness Class IV) and typically consist of medium clay loam topsoils overlying slowly permeable heavy silty clay loam subsoils at a depth of about 30cm. The land is limited to Subgrade 3b by soil wetness and workability restrictions, which are more severe than on the adjoining Subgrade 3a land.

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MAP