



AGRICULTURAL LAND CLASSIFICATION  
KIRKLEES UNITARY DEVELOPMENT PLAN  
SITE B5:2  
CLAYTON WEST  
JANUARY 1993

ADAS  
Leeds Statutory Group

Job No:- 151/92  
MAFF Ref:-

2 FCS 62 A2

clayton.alc.mp

## SUMMARY

An Agricultural Land Classification survey of 8.5ha of land at Clayton West was carried out in January 1993. Almost all of the site was in agricultural use at the time of survey of which 0.41ha falls in Subgrade 3a. Profiles on this land are imperfectly drained (Wetness Class III) and typically consist of medium clay loam topsoils and upper subsoils overlying slowly permeable heavy clay loam or 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 (8.03ha) falls within Subgrade 3b. Profiles are poorly drained (Wetness Class IV) and consist of medium clay loam topsoils overlying slowly permeable heavy clay loam or clay subsoils. The ALC grade of this land is limited by soil wetness and workability restrictions which are more severe than on the small area of Subgrade 3a land.

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1. AGRICULTURAL LAND CLASSIFICATION

AGRICULTURAL LAND CLASSIFICATION REPORT:- KIRKLEES UDP SITE B5:2, CLAYTON WEST

1. INTRODUCTION AND SITE CHARACTERISTICS

1.1 Location and Survey Methods.

The site lies 10Km north west of Barnsley town centre, to the north of the village of Clayton West. It is centred on Grid Reference SE 257114. Survey work was carried out in January 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 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 the western part of the site was sown to cereals and the east was in ley grass.

The site lies at an altitude of 96m AOD and is flat to very gently sloping (typically 0-2° )

1.3 Climate

|   |   |            |
|---|---|------------|
| Grid Reference                                      | : | SE 257114  |
| Altitude (m)  | : | 96         |
| Accumulated Temperature above 0°C<br>(January-June) | : | 1318 day°C |
| Average Annual Rainfall (mm)                        | : | 709        |
| Climatic Grade                                      | : | 1          |
| Field Capacity Days                                 | : | 184        |
| Moisture Deficit (mm) Wheat                         | : | 94         |
| Moisture Deficit (mm) Potatoes                      | : | 81         |

#### 1.4 Geology, Soils and Drainage

The site is underlain by Carboniferous card measures consisting of interbedded sandstones and shales. There is no drift cover and the soils on the site have formed in weathering shale.

Soils are medium to heavy-textured, typically consisting of medium clay loam topsoils overlying heavy clay loam or clay subsoils. Profiles are generally poorly drained (falling in Wetness Class IV) except for a small imperfectly drained (Wetness Class III) area in the north western corner of the site. Most soils on the site correspond 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                     | 0.41            | 4.9                             |
| 3b                     | 8.03            | 94.9                            |
| 4                      |                 |                                 |
| 5                      |                 |                                 |
| (Sub total)            | (8.44)          | (99.8)                          |
| Urban                  | 0.02            | 0.2                             |
| Non Agricultural       |                 |                                 |
| Woodland - Farm        |                 |                                 |
| - Commercial           |                 |                                 |
| Agricultural Buildings |                 |                                 |
| Open Water             |                 |                                 |
| Land not surveyed      |                 |                                 |
| (Sub total)            | (0.02)          | (0.2)                           |
|                        | -----           | -----                           |
| TOTAL                  | 8.46            | 100                             |
|                        | -----           | -----                           |

2.1 Subgrade 3a

Subgrade 3a land occurs in the north western corner of the site. Topsoils and upper subsoils consist of very slightly stony medium clay loam overlying slowly permeable heavy clay loam or clay subsoils at around 60cm depth. Profiles are imperfectly drained (falling in Wetness Class III) and the land is limited to this subgrade by soil wetness and workability limitations.

2.2 Subgrade 3b

Subgrade 3b land covers most of the site. Topsoils consist of very slightly stony medium clay loams overlying slowly permeable heavy clay loam or clay subsoils at around 35cm depth. Profiles are poorly drained (falling in Wetness Class IV) and the land is, thus, restricted to Subgrade 3b by soil wetness and workability limitations.

2.3 Urban

This refers to a small storage area in the south of the site.