



AGRICULTURAL LAND CLASSIFICATION LEEDS UDP TOPIC 318 (BREARY LANE, BRAMHOPE) WEST YORKSHIRE JULY 1995

ADAS Leeds Statutory Group Job No:- 157/1995 MAFF Ref:- E L 49/13 Commission No:- 1963 2FCS (0844

SUMMARY

A detailed Agricultural Land Classification survey of 15.4 ha of land at Bramhope (Leeds UDP Topic 318) was carried out in July 1995. At the time of survey 15.3 ha was under permanent grass and 0.1 ha was open water. 4.5 ha of the agricultural land falls in Subgrade 3a. The soils are imperfectly drained, with medium-textured topsoils overlying medium to heavy-textured subsoils. They become gleyed at between 30 cm and 45 cm depth and slowly permeable layers begin at between 40 cm and 55 cm depth. Soil wetness is the factor restricting the ALC grade of this land.

The remaining agricultural land (10.8 ha) falls in Subgrade 3b. The soils are poorly drained, with medium-textured topsoils overlying medium to heavy-textured subsoils. The profiles become gleyed at between 20 cm and 40 cm depth and slowly permeable layers begin at between 30 cm and 40 cm depth. A more severe soil wetness restriction limits this land to Subgrade 3b.

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1. AGRICULTURAL LAND CLASSIFICATION

AGRICULTURAL LAND CLASSIFICATION REPORT ON LAND AT BREARY LANE, BRAMHOPE (LEEDS UDP TOPIC 318)

1. INTRODUCTION AND SITE CHARACTERISTICS

1.1 Location and Survey Methods

This site lies approximately 10½ Km north-north-west of Leeds city centre, on the east side of the village of Bramhope. It covers a total area of 15.4 ha. Survey work was carried out in July 1995 when the soils were examined by hand auger borings at 100 m intervals predetermined by the National Grid. Two soil profile pits were dug to allow more detailed examination of the soils. The 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 site was in permanent grass with the exception of a 0.1 ha pond in the north.

Site altitude varies from 159 m AOD in the north-east to approximately 142 m AOD in the south and the land is level to gently sloping $(0 - 2^{\circ})$ with a south-westerly aspect.

1.3 <u>Climate</u>

| Grid Reference | • : | SE 261 430 | |
|-----------------------------------|-----|-------------|--|
| Altitude (m) | : | 150 | |
| Accumulated Temperature above 0°C | | | |
| (January - June) | : | 1243 day °C | |
| Average Annual Rainfall (mm) | : | 786 | |
| Climatic Grade | : | 2 | |
| Field Capacity Days | : | 201 | |
| Moisture Deficit (mm) Wheat | : | 79 | |
| Moisture Deficit (mm) Potatoes | : | 63 | |

1.4 Geology, Soils and Drainage

The area is underlain by Millstone Grit over which lies a thick covering of till.

The soils are generally imperfectly or poorly drained, falling in Wetness Classes III and IV. In most cases medium clay loam topsoils overlie medium clay loam, heavy clay loam or sandy clay loam upper subsoils and sandy clay loam or heavy clay loam lower subsoils.

The soils on this site correspond to the Dunkeswick Association as mapped by the Soil Survey and Land Research Centre.

2. AGRICULTURAL LAND CLASSIFICATION

The ALC grades occurring on this site are as follows:

| Grade/Subgrade | Hectares | Percentage of Total Area |
|------------------------|-------------|--------------------------|
| 1 | | |
| 2 | | |
| 3a | 4.5 | 29.2 |
| 3b | 10.8 | 70.1 |
| 4 | | |
| 5 | | |
| (Sub total) | (15.3) | (99.3) |
| Urban | | |
| Non Agricultural | | |
| Woodland - Farm | | |
| - Commercial | | |
| Agricultural Buildings | | |
| Open Water | 0.1 | 0.7 |
| Land not surveyed | | |
| (Sub total) | (0.1) | (0.7) |
| | | |
| TOTAL | <u>15.4</u> | <u>100</u> |

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2.1 Subgrade 3a

An area of Subgrade 3a land occurs in the west of the site. The soils are generally imperfectly drained (Wetness Class III) with medium clay loam topsoils overlying medium clay loam, sandy clay loam or heavy clay loam subsoils. The soils typically become gleyed at between 30 and 45 cm depth and slowly permeable at between 40 and 55 cm depth. Soil wetness is the factor which restricts this land to Subgrade 3a.

2.2 Subgrade 3b

Most of the site falls in Subgrade 3b. The soils are poorly drained (Wetness Class IV) with medium clay loam topsoils overlying medium clay loam, sandy clay loam or heavy clay loam upper subsoils and sandy clay loam or heavy clay loam lower subsoils. Profiles become gleyed at between 20 cm and 40 cm depth and slowly permeable at between 30 cm and 40 cm depth. A more severe soil wetness limitation than on the adjoining Subgrade 3a land restricts this land to Subgrade 3b.

2.3 Open Water

A small pond covering 0.1 ha occurs in the north of the site.

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MAP