



AGRICULTURAL LAND CLASSIFICATION
LEEDS UDP
LAND TO THE WEST OF POOL IN WHARFEDALE
WEST YORKSHIRE
APRIL 1995

ADAS
Leeds Statutory Group

Job No:- 77-78/95
MAFF Ref:- EL 49/13
Commission No:- 1786

SUMMARY

A detailed Agricultural Land Classification survey of 11.8 ha of land at Pool ("Leeds UDP, Land to the west of Pool in Wharfedale") was carried out in March 1995.

At the time of survey 11.4 ha was in agricultural use and 0.4 ha of this falls in Grade 2. The soils are well drained, with stoneless medium-textured topsoils over medium to heavy-textured subsoils. A slight topsoil workability limitation restricts this land to Grade 2.

4.3 ha falls in Subgrade 3a. In the north, alongside the River Wharfe, the soils are the same as those on the Grade 2 land. However, this land lies closer to the river and is subject to periodic flooding and it is this which limits it to Subgrade 3a. In the centre of the site the Subgrade 3a land is moderately well to imperfectly drained with medium-textured topsoils over gleyed but permeable medium-textured subsoils. Slowly permeable layers occur at depth in places and soil wetness is the factor limiting the ALC grade in this case.

6.7 ha of Subgrade 3b land is found in the centre and south of the site. The soils are poorly drained, with medium-textured topsoils overlying gleyed and slowly permeable heavy-textured subsoils at around 25cm depth. Soil wetness is again the factor limiting the ALC grade.

The remainder of the site consists of 0.4 ha of Urban land in the south-east.

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1. AGRICULTURAL LAND CLASSIFICATION

AGRICULTURAL LAND CLASSIFICATION REPORT ON LAND TO THE WEST OF POOL
IN WHARFEDALE, LEEDS UDP

1. INTRODUCTION AND SITE CHARACTERISTICS

1.1 Location and Survey Methods

This site lies on the western and northern sides of the village of Pool in Wharfedale and covers a total area of 11.8 ha of which 10.1 ha lies in West Yorkshire and 1.7 ha in North Yorkshire. Survey work was carried out in March 1995 when the soils were examined by hand auger borings at 100m intervals predetermined by the National Grid. In addition, two soil pits were dug to allow more detailed profile descriptions to be made. 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 land was under ley grass with the exception of a small area of Urban land in the south-east.

Site altitude varies from 45m AOD alongside the River Wharfe to 65m AOD in the south-east, and the land is level to moderately sloping (0-7°) with a northerly aspect.

1.3 Climate

Grid Reference	: SE 243 451
Altitude (m)	: 55
Accumulated Temperature above 0°C (January - June)	: 1351 day °C
Average Annual Rainfall (mm)	: 775
Climatic Grade	: 1
Field Capacity Days	: 201
Moisture Deficit (mm) Wheat	: 90
Moisture Deficit (mm) Potatoes	: 77

1.4 Geology, Soils and Drainage

The area is underlain by Millstone Grit over which lie deep deposits of alluvium (alongside the River Wharfe) and boulder clay (on the higher ground).

The alluvial soils are well drained, falling in Wetness Class I, and consist of medium clay loam topsoils overlying medium or heavy clay loam subsoils. The boulder clay soils are *imperfectly or, more often, poorly drained, falling in Wetness Classes III and IV.*

Generally medium clay loam topsoils overlie gleyed and slowly permeable heavy clay loam or clay subsoils although in the centre of the site gleyed but permeable sandy clay loam or medium clay loam upper subsoils occur.

The soils on the site correspond to the Dunkeswick and Wharfe Associations as mapped by the Soil Survey and Land Research 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	0.4	(3.4)
3a	4.3	36.4
3b	6.7	56.8
4		
5		
(Sub total)	(11.4)	(96.6)
Urban	0.4	3.4
Non Agricultural		
Woodland - Farm		
- Commercial		
Agricultural Buildings		
Open Water		
Land not surveyed		
(Sub total)	(0.4)	(3.4)
TOTAL	<u>11.8</u>	<u>100</u>

The grade areas for that part of the site in North Yorkshire (ie on the north side of the River Wharfe) and for that part of the site in West Yorkshire are given separately overleaf.

Land in North Yorkshire

Grade/Subgrade	Area	Percentage of Total Area
2	0.4	23.5
3a	<u>1.3</u>	<u>76.5</u>
	1.7	100

Land in West Yorkshire

Grade/Subgrade	Area	Percentage of Total Area
3a	3.0	29.7
3b	6.7	66.3
Urban	<u>0.4</u>	<u>4.0</u>
	10.1	100

2.1 Grade 2

Grade 2 land occurs in the far north of the site. Soils are well drained, falling in Wetness Class I, and consist of stoneless medium clay loam topsoils overlying medium or heavy clay loam subsoils. This land is limited to Grade 2 by a slight topsoil workability restriction.

2.2 Subgrade 3a

4.3 ha of this site falls in Subgrade 3a. In the north, alongside the River Wharfe, the soils are well drained, falling in Wetness Class I, with medium clay loam topsoils overlying medium or heavy clay loam subsoil. This land is subject to periodic flooding and it is this which limits it to Subgrade 3a.

In the centre of the site the Subgrade 3a land is typically moderately well to imperfectly drained, falling in Wetness Classes II to III, with medium clay loam or sandy clay loam topsoils overlying similarly textured but gleyed and in places slowly permeable subsoils. Soil wetness is the factor restricting this land to Subgrade 3a.

2.3 Subgrade 3b

Subgrade 3b land covers 6.7 ha in the centre and south of the site. The soils are poorly drained (Wetness Class IV) and consist of medium clay loam topsoils overlying gleyed and slowly permeable heavy clay loam or clay subsoils at around 25cm depth. Soil wetness is the factor restricting this land to Subgrade 3b.

2.4 Urban

A small area of Urban land occurs in the south-east, consisting of a track, house and gardens.

RPT File: 2 FCS 10718/10719
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MAP