MAFF Ministry of Agriculture Fisheries and Food

AGRICULTURAL LAND CLASSIFICATION
LAND NORTH OF WALDRIDGE ROAD
CHESTER-LE-STREET
COUNTY DURHAM
APRIL 1996

ADAS
Leeds Statutory Group

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SUMMARY

A detailed Agricultural Land Classification (ALC) survey of 7.7ha of land at Waldridge near Chester-le-Street was carried out in April 1996. At the time of the survey 7.6ha of the site were in agricultural use and 1.4ha of this falls into Grade 2.

These soils are well drained with medium textured topsoils over light textured sandy subsoils. Climatic restrictions limits this land to Grade 2.

The remaining 6.2ha of agricultural land is mapped as Subgrade 3b. Soils are restored and poorly drained, consisting of a medium textured topsoil over a heavy textured subsoil, containing varying degrees of colliery spoil overburden. Some profiles consist of mainly colliery spoil overburden below the topsoil.

Other land consists of a small area of scrub and trees in the south-west corner.

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1. INTRODUCTION AND SITE CHARACTERISTICS

1.1 Location and Survey Methods

This 7.7ha site lies approximately 1km south-west of Chester-le-Street, Co. Durham. Survey work was carried out in April 1996 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 full 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 the survey most of the land was in winter cereals. The remainder was a small area of scrub and wood to the west of the site.

The land lies between an altitude of 70m AOD in the north and 90m AOD in the south-west. Slopes are level to moderately sloping (0°-6°) over most of the site, with a small area of strongly sloping (8°) land in the north-east.

1.3 Climate

Grid Reference	: NZ254 505
Altitude (m)	: 75
Accumulated Temperature above 0°C (January - June)	: 1282 day °C
Average Annual Rainfall (mm)	: 699
Climatic Grade	: 2
Field Capacity Days	: 174
Moisture Deficit (mm) Wheat	: 92
Moisture Deficit (mm) Potatoes	: 78

1.4 Geology, Soils and Drainage

The site is shown to be underlain by Middle Coal Measures with a drift of boulder clay over this. However, the majority of soils from the centre to the west have been worked for coal and subsequently restored.

Restored soils consist of poorly drained (Wetness Class IV) medium clay loam topsoils over heavy silty clay loam or silty clay subsoils. In some areas subsoil material consists of mainly colliery spoil overburden to depth.

Unrestored soils to the east consist of medium clay loam and sandy clay loam topsoils over sandy loam and loamy sand subsoils. These soils are well drained, falling into Wetness Class I.

2. AGRICULTURAL LAND CLASSIFICATION

The ALC grades occurring on this site are as follows:

Grade/Subgrade	Hectares	% of Total Area
1		
2	1.4	18.2
3a		
3b	6.2	80.5
4		
5		
(Sub total)	(7.6)	(98.7)
Other Land	0.1	1.3
TOTAL	**7.7**	**100**

2.1 Grade 2

A small area of Grade 2 land occurs to the east of the site. The soils are well drained (Wetness Class I) and consist of very slightly stony medium clay loam and sandy clay loam topsoils, over stoneless medium sandy loam and loamy medium sand subsoils. This land is limited to Grade 2 by a climatic restriction.

2.2 Subgrade 3b

The remainder of the agricultural land is of this subgrade. Soils are restored, and consist of poorly drained (Wetness Class IV) very slightly stony medium clay loam topsoils, over gleyed slowly permeable heavy silty clay loam and silty clay subsoils. The majority of subsoils contain between 10% and 20% colliery spoil, with some profiles consisting of mainly colliery spoil overburden to depth. This land is limited by severe soil wetness and workability restrictions and lack of subsoil resources in some areas. A small area of land in the north-east corner is limited to Subgrade 3b by a gradient of 8°.

2.3 Other Land

Other land consists of a small area of scrub and trees in the south west corner of the site.

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