AGRICULTURAL LAND CLASSIFICATION NORTH YORKS MINERALS LOCAL PLAN MARFIELD MARCH 1995

ADAS Leeds Statutory Group

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SUMMARY

A detailed Agricultural Land Classification survey of 50.7 ha of land at Marfield ("North Yorks Minerals Local Plan") was carried out in March 1995.

At the time of survey 47.5 ha of the site was in agricultural use and 3.2 ha consisted of Woodland and Non Agricultural land. 29.3 ha of the agricultural land falls in Subgrade 3a. The soils are well drained and light to medium-textured, being slightly stony in the case of the topsoil and slightly to moderately stony in the case of the subsoil. The ALC grade of this land is limited by topsoil stoniness, with between 10% and 15% stones greater than 2 cm in most cases, and by a pattern limitation.

18.2 ha of the site falls in Subgrade 3b. Moderately stony light to medium-textured topsoils overlie similar subsoils. The soils are well drained but topsoil stone contents of between 15% and 25% stones greater than 2 cm limit most of this land to Subgrade 3b. In many areas slopes of between 8° and 11° also limit the land to Subgrade 3b and in a few areas this is the only factor restricting the land to this subgrade.

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1. AGRICULTURAL LAND CLASSIFICATION

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AGRICULTURAL LAND CLASSIFICATION REPORT ON LAND AT MARFIELD (NORTH YORKS MINERALS LOCAL PLAN)

1. INTRODUCTION AND SITE CHARACTERISTICS

1.1 Location and Survey Methods

This site lies approximately 3 km north-west of the village of Masham and covers a total area of 50.7 ha. Survey work was carried out in March 1995 when the soils were examined by hand auger borings at 100 m intervals predetermined by the National Grid. Two soil pits were dug to allow full profile descriptions to be made and a number of topsoil samples were sieved to allow a more accurate estimate of topsoil stoniness. 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 94% of the site was in agricultural use, principally growing winter cereals or grass. The remainder consists of Non Agricultural land and Woodland.

Site altitude varies from 85m AOD alongside the River Ure in the north to 118 m AOD in the centre. The land is gently to strongly sloping (2-10° in most places) with variable aspect.

1.3 <u>Climate</u>

Grid Reference	:	SE 211 833	
Altitude (m)	:	105	
Accumulated Temperature above 0°C			
(January - June)	:	1279 day °C	
Average Annual Rainfall (mm)	:	786	
Climatic Grade	:	2	
Field Capacity Days	:	198	
Moisture Deficit (mm) Wheat	:	90	
Moisture Deficit (mm) Potatoes	:	75	

1.4 Geology, Soils and Drainage

The area is underlain by Millstone Grit over which lie deposits of till and fluvioglacial sand and gravel.

The soils are typically well drained, falling in Wetness Class I, and consist of slightly to moderately stony light to medium-textured topsoils and subsoils.

2. AGRICULTURAL LAND CLASSIFICATION

Grade/Subgrade	Hectares	Percentage of Total Area
1		
2		
3a	29.3	57.8
3b	18.2	35.9
4		
5		
(Sub total)	(47.5)	(93.7)
Urban		
Non Agricultural	0.7	1.4
Woodland	2.5	4.9
Agricultural Buildings		
Open Water		
Land not surveyed		
(Sub total)	(3.2)	(6.3)
TOTAL	50.7	100

The ALC grades occurring on this site are as follows:

2.1 <u>Subgrade 3a</u>

Approximately 58% of this site falls in Subgrade 3a. The soils are generally well drained, falling in Wetness Class I, and consist of slightly stony medium clay loam, medium silty clay loam, sandy clay loam or medium sandy loam topsoils overlying similarly textured slightly to moderately stony subsoils. Topsoil stone contents of between 10% and 15% stones greater than 2 cm limit this land to Subgrade 3a. Although some areas contain only 5 - 10% stones in the topsoil, these cannot be mapped as a separate unit or units.

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2.2 Subgrade 3b

The remainder of the agricultural land on this site falls in Subgrade 3b. The soils are generally well drained, falling in Wetness Class I, and consist of medium clay loam, medium silty clay loam, sandy clay loam, or medium sandy loam topsoils and subsoils. Both topsoils and subsoils are moderately stony in most areas with between 18% and 30% total stones. Topsoil stone contents of between 15% and 25% stones greater than 2 cm limit this land to Subgrade 3b.

A number of these areas are also limited to Subgrade 3b by slopes of between 8° and 11°, and in a few areas slope is the only factor restricting the land to Subgrade 3b.

2.3 Non Agricultural Land

This category includes two areas of boggy land in the west.

2.4 <u>Woodland</u>

Areas of woodland occur at High Mains Whin, in the west of the site, and alongside the River Ure in the north-east.

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