



AGRICULTURAL LAND CLASSIFICATION

ROKER LANE, PUDSEY

WEST YORKSHIRE

PROPOSED GOLF COURSE

NOVEMBER 1992

ADAS
Leeds Statutory Group

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2 fcs 6248

pudsey.alc.mp

SUMMARY

An Agricultural Land Classification survey of approximately 19ha of land at Roker Lane, Pudsey was carried out in November, 1992

18.6ha of this was in agricultural use of which 5.8ha falls within subgrade 3a. Soils on this land are imperfectly drained (wetness class III) and consist of deep medium clay loam topsoils over either, heavy clay loam to clay subsoils or, occasionally, weathering sandstone bedrock. The deep heavy soils are limited to Subgrade 3a by slight wetness. Those over sandstone are limited by droughtiness.

Subgrade 3b land covers 11.5ha. Soils are poorly drained (wetness class IV) and consist of medium clay loam topsoils over heavy clay loam or clay subsoils. Profiles of this type are limited to Subgrade 3b by wetness and workability problems. Gradient is also limiting in parts of this area.

Poor and very poor quality Grades 4 and 5 land cover 1.2ha and occur in the northern and eastern parts of the site. Both areas are limited to these Grades by steep slopes which severely restrict the use of farm machinery.

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1. AGRICULTURAL LAND CLASSIFICATION

AGRICULTURAL LAND CLASSIFICATION REPORT ON LAND AT ROKER LANE, PUDSEY
PROPOSED GOLF COURSE

1. INTRODUCTION AND SITE CHARACTERISTICS

1.1 Location and Survey Methods.

The site lies 7km west south west of Leeds City centre and is centred on Grid Reference SE 234324. Survey work was carried out in November 1992 when soils were examined by hand auger borings at a density of 2 borings per hectare at points predetermined by the National Grid. 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 98% of the site was in permanent pasture or rough grazing. The remainder consisted of farm buildings.

Site altitude varies from 70m OAD to 125m OAD and the land although mainly gently or moderately sloping (2° - 4°), also contains some small areas, in the east and north, of steep to precipitous slopes (16° - 36°).

1.3 Climate

Grid Reference	: SE 234324
Altitude (m)	: 100
Accumulated Temperature above 0°C (January-June)	: 1306
Average Annual Rainfall (mm)	: 717
Climatic Grade	: 2
Field Capacity Days	: 184
Moisture Deficit (mm) Wheat	: 92
Moisture Deficit (mm) Potatoes	: 78

1.4 Geology, Soils and Drainage

The area is underlain by Carboniferous Coal Measures consisting of interbedded sandstones and shales. There is no drift cover and soils are formed directly on weathering solid strata. On the shales which are most widespread, soils consist of medium clay loam topsoils over poorly drained (Wetness Class IV) gleyed slowly permeable heavy clay loam or clay subsoils. The occasional areas of sandstone contain well drained (Wetness Class I) medium textured topsoils and upper subsoils overlying weathering sandstone bedrock. The heavy soils are similar to those mapped as the Dale series by the Soil Survey and Land Resource Centre. The lighter soils are similar to the Rivington series.

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	5.84	30.8
3b	11.57	61.1
4	0.92	4.9
5	0.30	1.6
(Sub total)	(18.63)	(98.4)
Urban		
Non Agricultural		
Woodland - Farm		
- Commercial		
Agricultural Buildings	0.30	1.6
Open Water		
Land not surveyed		
(Sub total)		
	_____	_____
TOTAL	18.93	100
	_____	_____

2.1 Grade 3a

Land in this subgrade occurs mainly in the centre of the site. There is also a small area in the north east corner. Topsoils are deep and consist of stoneless unmottled medium clay loam overlying subsoils of very slightly stony, gleyed heavy clay loam or clay. Subsoils are slowly permeable at or below 45cm and thus fall within Wetness Class III (imperfectly drained). Soils of this type are limited to Subgrade 3a by slight wetness. Localised areas containing sandstone at 40cm depth are limited to the subgrade by droughtiness.

2.2 Grade 3b

Land in this subgrade covers the majority of the remaining land. Topsoils are stoneless to very slightly stony and consist of medium clay loam topsoils overlying gleyed slowly permeable heavy clay or clay subsoils. Profiles are poorly drained (Wetness Class IV) and limited to Subgrade 3b by wetness and workability problems. Also included within this subgrade are small areas in the north and east where gradients of 8-11° also impose a subgrade 3b slope limitation.

2.3 Grade 4

Land in this grade occurs in two separate areas; in the north west and near the eastern edge of the site. Soils are well drained (wetness Class I) consisting of stoneless or very slightly stony unmottled medium clay loam topsoils over medium or heavy clay loam subsoils. Gradients of between 12 and 18°, however, will severely restrict the use of agricultural machinery and these areas are limited to Grade 4 for this reason.

2.4 Grade 5

Land in this grade occurs in a small area in the north west of the site adjoining the grade 4 land. Soils are well drained, stoneless or very slightly stony and of medium texture. Gradients of 40° however prevent the use of farm machinery and impose an overall Grade 5 slope limitation.

2.5 Agricultural Buildings

This consists of the 3 buildings in the central and southern parts of the site.

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MAP