

AGRICULTURAL LAND CLASSIFICATION

AKEBAR, WENSLEYDALE
NORTH YORKSHIRE

MAFF
Leeds Regional Office

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1. AGRICULTURAL LAND CLASSIFICATION

AGRICULTURAL LAND CLASSIFICATION REPORT ON THE PROPOSED
GOLF COURSE AT AKEBAR, LOWER WENSLEYDALE, NORTH YORKSHIRE

1.0 Introduction and Site Characteristics

1.1 Location

National Grid Reference:-

SE 194900

Location Details:-

8 kms east of Leyburn
town centre, lying to
the south of the A684
at Akebar.

Site Size:-

19 ha.

1.2 Survey Methods

Date Surveyed:-

20 June 1991.

Boring Density and Spacing Basis:-

1 boring per hectare
carried out at 100 m
intervals predetermined
by the National Grid.

Sampling Method:-

By hand auger, to a
depth of 1.00 m.

Number of Borings:-

20.

Number of Soil Pits (used for):- 3, to assess soil structure.

All land quality assessments were made 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)".

1.3 Land Use:- Arable in the north and south eastern parts of the site, permanent grassland elsewhere.

1.4 Climate and Relief

Average Annual Rainfall (AAR):- 744 mm

Accumulated Temperature above 0°C (January-June):- 1305 day °C

Field Capacity Days:- 191 days

Altitude average:- 80 m a.o.d.

maximum:- 100 m a.o.d.

minimum:- 65 m a.o.d.

Climatic limitation (based on interaction of rainfall and temperature values):- Grade 2

Relief:-	Flat or gently sloping in the north and south, moderate to severe slopes elsewhere.
Slopes (°):-	2°-25°
Gradient Limitations:-	Yes.
Limiting gradient(s):-	8-11° 12-18° > 18°
Grade(s)/subgrade(s):-	3b 4 5
Occurrence on site:-	In central and south western parts of the site.

1.5 Geology and Soil

Solid Strata:-	Carboniferous sandstones (Millstone Grit).
Depth of solid rock from surface:-	More than 1 m.
Drift types:-	Boulder clay and alluvial sand and gravel.
Thickness of drift and distribution:-	Greater than 1.00 m throughout the site.
Soil Types and Distribution:-	Light to medium textured soils on the level land in the north of the site, with medium to heavy textured boulder clay soils elsewhere.

Soil Textures (topsoils and subsoils):-

Generally medium clay loam topsoil over medium clay loam, heavy clay loam or clay subsoil, although some sandy soils occur in the north of the site.

Soil Series/Associations:-

On 1/250000 map:-

East Keswick I and Enborne Associations.

Soil Limitations and type:-

Soil wetness.

1.6 Drainage

Soil type and Wetness Class:-

The lighter textured soils in the north fall mainly within Wetness Class I. The heavy textured soils in the rest of the site are poorly drained and fall within Wetness Class IV.

Drainage Limitations:-

Slowly permeable layers are often found at depths of 30-50 cm in the heavier textured soils.

2.0 Agricultural Land Classification Grades

The ALC grades occurring on the site are as follows:-

<u>Grade/Subgrade</u>	<u>Hectares</u>	<u>Percentage of Agricultural Area</u>	<u>Percentage of Total Area</u>
2	3.10	16.9	16.3
3a	1.06	5.6	5.6
3b	9.29	50.4	48.8
4	4.85	26.3	25.5
5	0.13	0.8	0.7
Non Agricultural	0.58	-	3.1
Total	<u>19.01</u>	<u>100</u>	<u>100</u>

Grade 2

Distribution on site:-

In the north western corner of the site, lying alongside Newton Beck.

Soil Type(s) and Texture(s):-

Medium textured soils with medium clay loam topsoil over medium clay loam, medium sandy loam or sandy clay loam subsoils.

Depth to Slowly Permeable Layers:-

No slowly permeable layers.

Wetness and Drainage Class:-

Wetness Class I, well drained.

Stone Percentage and Type:-

Stoneless or very slightly stony (5% hard rock).

Grade Limiting Factors:-

Climate and slight flooding risk.

Subgrade 3a

Distribution on site:-

In the north east of the site and in a small area in the south west.

Soil Type(s) and Texture(s):-

Medium textured topsoil (usually medium clay loam) over medium to heavy textured subsoils (heavy clay loam or sandy clay loam).

Depth to Slowly Permeable Layers:-

Slowly permeable layers are present in some places at depths of 40-80 cm.

Wetness and Drainage Class:-

Wetness Classes II to III moderately well drained to imperfectly drained.

Stone Percentage and Type:-

Stoneless to slightly stony (0-15% hard rock or soft sandstone).

Grade Limiting Factors:-

Soil wetness.

Subgrade 3b

Distribution on site:-

In central and southern areas of the site.

Soil Type(s) and Texture(s):-

Medium textured topsoils over heavy textured subsoils (usually medium clay loam over heavy clay loam or clay).

Depth to Slowly Permeable Layers:-

Slowly permeable layers occur at depths of 30-50 cm resulting in soil wetness.

Wetness and Drainage Class:-

Wetness Class IV, poorly drained.

Stone Percentage and Type:-

Stoneless to slightly stony (0-15% hard rock or soft sandstone).

Grade Limiting Factors:-

Soil wetness and gradients greater than 7°.

Grade 4

Distribution on site:-

In the south west of the site.

Soil Type(s) and Texture(s):-

Heavy textured topsoils (heavy clay loam) over heavy textured subsoils (heavy clay loam, silty clay or clay).

Depth to Slowly Permeable Layers:-

Slowly permeable layers occur at depths of 20-30 cm.

Wetness and Drainage Class:-

Wetness Class IV, poorly drained.

Stone Percentage and Type:-

Stoneless to very slightly stony (0-10% hard rock).

Grade Limiting Factors:-

Gradient and soil wetness.

Grade 5

Distribution on site:- A small area in the west of the site.

Soil Type(s) and Texture(s):- Heavy textured soils with heavy clay loam topsoil and heavy clay loam or clay subsoil.

Depth to Slowly Permeable Layers:- Approximately 25 cm.

Wetness and Drainage Class:- Wetness Class IV, poorly drained.

Stone Percentage and Type:- Stoneless.

Grade Limiting Factors:- Gradients of 25° limit this land to Grade 5.

Other Limiting Factor(s):- Soil wetness.

Non Agricultural

Type and location of land included:- A small area of scrub/woodland in the west of the site.

Resource Planning Group
Leeds Regional Office
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