

AGRICULTURAL LAND CLASSIFICATION

High Stobhill, Morpeth,
Northumberland

Proposed Housing Development

MAFF
Leeds Regional Office

1 October 1991
File Ref: 2FCS 5519
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AL4.stobh.111

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MAP

1. AGRICULTURAL LAND CLASSIFICATION

AGRICULTURAL LAND CLASSIFICATION REPORT

1.0 Introduction and Site Characteristics

1.1 Location

National Grid Reference:-

NZ 208844

Location Details:-

South side of Morpeth

Site Size:-

14 hectares

1.2 Survey Methods

Date Surveyed:-

1st October 1991

Boring Density and Spacing Basis:-

At 100m intervals on a grid pattern predetermined by the national grid

Sampling Method:-

By hand auger borings to a depth of 1 metre

Number of Borings:-

14

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:-

The land is split fairly evenly between grassland and arable use

1.4 Climate and Relief

Average Annual Rainfall (AAR):-

699 mm

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

1297 day °C

Field Capacity Days:-

182 days

Altitude average:-

50 m a.o.d.

maximum:-

57 m a.o.d.

minimum:-

48 m a.o.d.

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

Grade 2

Relief:-

The site slopes gently from north to south towards Catch Burn with steeper slopes next to the stream

Slopes (°):-

Generally 0-3° but a 15° slope near Catch Burn

Gradient Limitations:-

Yes

Limiting gradient(s):-

15°

Grade:-

4

Occurrence on site:-

A small area in the south east corner adjoining Catch Burn

1.5 Geology and Soil

Solid Strata:-

Coal measures

Depth of solid rock from surface:-

More than 1m. Boulder clay covers the whole site

Drift types:-

Boulder clay

Thickness of drift and distribution:-

More than 1m

Soil Types and Distribution:-

Heavy poorly drained boulder clay soils dominate the site

Soil Textures (topsoils and subsoils):-

Topsoils consist generally of medium clay loam with the exception of the small area at the northern end of the site where topsoils are formed of clay

Soil Series/Associations:-

Nercwys

On 1/250000 map:-

Identified on site:-

Soil Limitations and type:-

Heavy topsoil texture in the north of the site and slow permeability of subsoils

1.6 Drainage

Soil type and Wetness Class:-

Medium and heavy soils - poorly drained Wetness Class IV

Drainage Limitations:-

Slowly permeable subsoils

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>
3b	9.92	79.8	78.5
4	2.51	20.2	19.8
Non Agricultural	0.21	-	1.7
	_____	_____	_____
Total	12.64	100	100
	_____	_____	_____

Grade 3b

Distribution on site:-

This is the dominant grade and covers most of the site

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

Boulder clay soils consisting of medium clay loam topsoils over clay subsoils

Depth to Slowly Permeable Layers:-

25 - 40 cm

Wetness and Drainage Class:-

Poorly drained Wetness Class IV

Stone Percentage and Type:-

-

Grade Limiting Factors:-

Soil wetness and workability problems

Subgrade 4

Distribution on site:-

Northern and southern corners of the site

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

Heavy boulder clay soils consisting of clay or heavy clay loam topsoils over clay subsoil in the north. Medium clay loam over heavy silty clay loam in the south

Depth to Slowly Permeable Layers:-

25 cm in the north
40 cm in the south

Wetness and Drainage Class:-

Poorly drained. Wetness Class IV

Stone Percentage and Type:-

-

Grade Limiting Factors:-

Soil wetness and workability problems in the northern area and gradient in the south

Non Agricultural

Type and location of land included:-

Roadside verge and scrub on the northern edge of the site