

AGRICULTURAL LAND CLASSIFICATION

North Parlington Estate
Garforth, Leeds, W Yorkshire

MAFF
Leeds Regional Office

April 1992
File Ref: 2FCS 5797
Project No: 22/92

lds.AL6.Parli.Est

CONTENTS

1. INTRODUCTION AND SITE CHARACTERISTICS
2. AGRICULTURAL LAND CLASSIFICATION GRADES

MAP

1. AGRICULTURAL LAND CLASSIFICATION

AGRICULTURAL LAND CLASSIFICATION REPORT, North Parlington Estate, Garforth

1.0 Introduction and Site Characteristics

1.1 Location

National Grid Reference:-

SE 415 345

Location Details:-

3km north of Garforth

Site Size:-

115 hectares

1.2 Survey Methods

Date Surveyed:-

March 1992

Boring Density and Spacing Basis:-

One boring per hectare
on a 100m grid pattern
predetermined by the
National Grid

Sampling Method:-

Hand auger borings up
to a depth of 1m

Number of Borings:-

115

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 majority of land is under ceral production with some areas of peas and grassland

1.4 Climate and Relief

Average Annual Rainfall (AAR):-

680 mm

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

1347 day °C

Field Capacity Days:-

156 days

Altitude average:-

70 m a.o.d.

maximum:-

80 m a.o.d.

minimum:-

60 m a.o.d.

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

Relief:-

Moderate slopes with a northerly aspect in the southern part of the site give way to flatter areas to the north

Slopes (°):-

0-6°

Gradient Limitations:-

None

1.5 Geology and Soil

Solid Strata:-

Permian Magnesian
Limestone except for an
area of Coal Measures
near Keeper's House

Depth of solid rock from surface:-

30cm to more than 1m

Drift types:-

Thickness of drift
and distribution:-

Thin loamy or clayey
material derived from
the weathering of
underlying solid strata
covers much of the
site. In places this
may be more than 1m in
thickness

Soil Types and Distribution:-

Medium textured soils
passing into limestone
within 1m of the surface
cover most of the site.
Deeper profiles with
clayey subsoils occur
locally especially near
Keeper's House

Soil Textures (topsoils and subsoils):-

Medium clay loam
topsoils and upper
subsoils over
limestone. Locally
medium or heavy clay
loam topsoils over
heavy clay loam or clay
subsoils

Soil/Associations:-

On 1/250000 map:-

East Keswick 2 and
Aberford

Identified on site:-

Yes

Soil Limitations and type:-

Heavy topsoil texture
and wetness in the
lower lying area near
Keeper's House.
Elsewhere soil
droughtiness

1.6 Drainage

Soil type and Wetness Class:-

Shallow medium textured
soils fall within
Wetness Class I (well
drained). Medium over
heavy soils fall within
Wetness Classes III-IV
(imperfectly and poorly
drained)

Drainage Limitations:-

Slowly permeable
subsoils in the
Keeper's House area

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</u> | <u>Percentage of</u> |
|------------------------|-----------------|--------------------------|----------------------|
| | | <u>Agricultural Area</u> | <u>Total Area</u> |
| 1 | | | |
| 2 | 5.15 | 4.9 | 4.4 |
| 3a | 69.29 | 65.6 | 59.9 |
| 3b | 31.23 | 29.5 | 27.0 |
| 4 | | | |
| 5 | | | |
| Non Agricultural | 3.77 | | 3.3 |
| Agricultural Buildings | 2.05 | | 1.8 |
| Urban | 0.85 | | 0.7 |
| Other | 3.35 | | 2.9 |
| | _____ | _____ | _____ |
| Total | 115.69 | 100 | 100 |
| | _____ | _____ | _____ |

Grade 2

Distribution on site:-

Near the southern edge

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

Medium textured soils
consisting of medium
clay loam topsoils over
similar subsoils to a
depth

Depth to Slowly Permeable Layers:-

None present

Wetness and Drainage Class:-

Wetness Class I - well
drained

Stone Percentage and Type:-

0-5% limestones on the
topsoil

Grade Limiting Factors:-

Slight soil
droughtiness and
occasional topsoils
stoniness

Subgrade 3a

Distribution on site:-

This subgrade covers most of the estate

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

Medium textured soils with medium clay loam topsoils over similar upper subsoils usually passing into weathering limestone within 1m of the surface. Heavy clay loam and fine sandy subsoils occur locally

Depth to Slowly Permeable Layers:-

50-65cm when present

Wetness and Drainage Class:-

Generally Wetness Class I - well drained but occasional Wetness Class III - imperfectly drained profiles

Stone Percentage and Type:-

2-10% limestones in the topsoil

Grade Limiting Factors:-

Soil droughtiness and topsoil stoniness

Subgrade 3b

Distribution on site:-

This subgrade occurs in six areas around the site, the most extensive being south of Keeper's House

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

Medium over heavy with medium clay loam topsoils over medium or heavy clay loam and clay subsoils or stony shallow medium clay loam topsoils over limestone

Depth to Slowly Permeable Layers:-

20-40cm where present

Wetness and Drainage Class:-

Medium shallow soils fall within Wetness Class I - well drained. The deeper slowly permeable soils fall within Wetness Class IV - poorly drained

Stone Percentage and Type:-

0-15% soft limestones

Grade Limiting Factors:-

Soil wetness and workability problems on the deep heavy soils. Droughtiness on the shallow soils which overlie limestone bedrock

Non Agricultural

Type and location of land included:-

Areas of scrubland and farm woodland in a line running north from Wakefield Lodge, and in two small areas on Parlinton Park and south of Home Farm. Also included is an area of gardens and allotments adjoining Home Farm

Agricultural Buildings

Type and location of building included:-

Home Farm House and outbuildings

Urban

Type of land use included:-

Access roads to Home Farm

Other

Land not surveyed in "The Paddocks" north of Home Farm

MAP(S)