# AGRICULTURAL LAND CLASSIFICATION

HIGH FAVERDALE FARM
DARLINGTON

MAFF Leeds Regional Office

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CONTENTS

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

MAP

1. AGRICULTURAL LAND CLASSIFICATION

AGRICULTURAL LAND CLASSIFICATION REPORT ON LAND AT HIGH FAVERDALE FARM, DARLINGTON

#### 1.0 Introduction and General Site Characteristics

#### 1.1 Location and Survey Methods:-

The site is located around National Grid reference NZ27001800 adjoining the A68 and A1M to the north west of Darlington. It covers 116 hectares, almost all of which is in agricultural use.

Survey work was carried out in December 1991 when soils were examined by hand auger borings to a depth of 1 metre at 100 metre intervals predetermined by the national grid. All assessment of land quality 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)".

#### 1.2 Land Use

The land is divided roughly into two parts. To the north, west and south west of High Faverdale Farm is arable (winter cereals) cropping. To the south and south east of the farm, land use consists mainly of permanent pasture. There are also small areas of woodland in the centre of the site and near Burtree House.

### 1.3 Climate and Relief

Mean Annual Rainfall (A.A.R) is approximately 648 mm, accumulated temperature above 0°C between January and June (ATO) is 1313 days °C and the field capacity period is around 160 days per year. The temperature and rainfall values impose an overall climatic limitation of Grade 2 on all agricultural land in the area. Summer moisture deficits of 97 mm for wheat and 85 mm for potatoes indicate that soil droughtiness will be slightly limiting on very light and/or shallow soils.

1

Altitude is around 60 to 70 metres above Ordinance datum in a gently undulating relief. Slopes do not exceed 7° and so do not restrict the use of agricultural machinery or affect ALC grade.

# 1.4 Geology and Soils

Soils on the site are formed on boulder clay, which forms a thick drift deposit over the underlying Permian Limestones. Over much all of the site soils consist predominantly of medium clay loam topsoils, over gleyed, slowly permeable subsoils. These are slowly permeable below 25-30 cm depth and fall mainly within Wetness Class IV. Surrounding High Faverdale Farm in the south eastern corner of the site textures are generally similar, (though slightly lighter subsoils are occasionally found), but drainage is more variable. Slowly permeable subsoil horizons often occur at greater depth in the areas resulting in better drainage with soils falling into Wetness Classes I and II.

### 2.0 Agricultural Land Classification Grades

GRADE	HECTARES	PERCENTAGE OF TOTAL AREA
2	2.5	2.1
3a	26.3	22.3
3b	87.2	74.1
Non Agricultural	0.4	0.4
Agricultural Buildings	0.7	0.6
Urban	0.6	0.5
	117.7	100

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

#### 2.1 Grade 2

Land in this grade occurs in the extreme south east of the site. Soils Consist mainly of medium clay loam topsoils over sandy clay loam Subsoils to depth. These subsoils are rarely slowly permeable and all fall into Wetness Class II making slight wetness along with the overall climatic limitation the main restrictions on ALC grade in this area.

# 2.2 Grade 3a

This subgrade is most extensive around High Faverdale Farm, in the east of the site. Other isolated areas occur in the north opposite Whessoe Cottage, and just west of the centre of the site. Soils consist of medium clay loam topsoils over sandy clay loam, medium clay loam or heavy clay loam subsoils. Most are slowly permeable and gleyed between 50 cm and 60 cm depth and fall within Wetness Class III. They are limited to subgrade 3a by wetness and workability problems.

# 2.3 Subgrade 3b

The majority of land on the site falls within this subgrade. Most soils consist of medium clay loam or heavy clay loam topsoils 25 cm to 35 cm in thickness overlying gleyed and slowly permeable clay and heavy clay loam subsoils to depth. Soils of this type fall within Wetness Class IV and are limited to subgrade 3b by wetness and workability problems which are more severe than on the subgrade 3a land.

#### 2.4 Farm Buildings

These are the buildings in use at High Faverdale Farm, Bottom House and Holly House.

### 2.5 Woodland

Then consists of a small area of scrubby woodland in the centre of the site and a small coniferous plantation on the northern edge opposite Burtree House.

2.5 Urban

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The access roads to Bottom House and High Faverdale Farm fall into this category.

Resource Planning Group Leeds Regional Office December 1991

4

MAP