AGRICULTURAL LAND CLASSIFICATION

HALL FARM, TICKTON

ADAS
Leeds Regional Office

November 1990
2 FCS 4999
79/90

Lds.AL2.Hall.Fm

CONTENTS

MAP

AGRICULTURAL LAND CLASSIFICATION REPORT.
LAND AT HALL FARM, TICKTON, NORTH HUMBERSIDE

1. INTRODUCTION AND GENERAL SITE CHARACTERISTICS

The site is located at grid reference TA 070434 on Ordnance Survey 1/50,000, sheet No 107, 3.5 km north east of Beverley. It covers 121 hectares of arable land immediately west of the Holderness drain.

Survey work was carried out in October 1990 when soils were examined by hand auger borings at 100 metre intervals at points pre-determined by the National Grid. Soil profile pits were also dug where necessary to assess soil structural characteristics in more detail.

All assessments of land quality were made using the methods described in "Agricultural land Classification: Revised Guidelines and Criteria for grading the quality of agricultural land". (MAFF 1988).

1.1 Land Use

Most of the site is used for cereal production.

1.2 Climate

Average Annual Rainfall (AAR) in the area is approximately 641 mm. Accumulated temperature (ATO) above 0°C between January and June is 1393 day °C and the land is at field capacity for 148 days a year. The temperature and rainfall figures indicate that there are no climatic restrictions on ALC grade.

Soil moisture deficits of 106 mm for winter wheat and 98 mm for potatoes are large and suggest that droughtiness it likely to be a limiting factor on any very light soils within the survey area.

1.3 Relief

Altitude varies between 0 and 10 metres above ordnance datum. Slopes do not exceed 7° and do not therefore impose any limitation on ALC grade.

1.4 Geology and Soils and Drainage

The area is underlain by Cretaceous chalk over which there is a considerable thickness of drift consisting of glaciofluvial sand, boulder clay, alluvium and peat.

To the north of Eske Plantation soils consist of peaty loam over sandy clay loam passing to medium or heavy clay loam at depth. To the south of the plantation peaty soils are rare and heavier textured drift is more widespread. Many soils consist of medium clay loam topsoils over slowly permeable heavy clay loam or clay subsoil at about 30 cm depth. These soils are poorly drained and fall within Wetness Class IV. Where surface horizons are slightly lighter profiles are imperfectly drained (Wetness Class III) and formed of medium clay loam top and upper subsoils to a depth of about 50 cm. The lower subsoil below this depth consists of poorly drained slowly permeable heavy clay loam or clay. Small areas of lighter textured soil occur throughout the site and consist of medium sandy loam topsoils passing to similar or slightly light upper subsoils over slowly permeable heavy clay loam at 70-100 cm depth. These soils are moderately well drained and fall within Wetness Classes II and III.

2. AGRICULTURAL LAND CLASSIFICATION

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

Grade	Hectares	Percentage of Total Area
2	53.9	40.2
3a	44.1	33.0
3b	30.9	23.0
Agricultural Buildings	0.2	0.1
Non-Agricultural (inc Woodland)	3.2	2.4
Urban	1.7	1.3
TOTAL	134.0	100

2.1 Grade 2

Land in this grade is most widespread to the north of Eske Plantation.

Soils consist mainly of medium clay loam or sandy loam topsoils over medium loamy sand to sandy loam subsoils with slowly permeable heavy clay loam to clay at 80-100 cm in most locations. Where subsoils are loamy sand, droughtiness is a limitation on ALC grade. Where soils consist of a peaty topsoil over a slowly permeable subsoil at less than 70 cm soil wetness and workability are limiting on ALC grade.

2.2 Subgrade 3a

Land in this subgrade occurs throughout the site. Soils consist of sandy clay loam to medium clay loam topsoils over similar subsoils passing to slowly permeable heavy clay loam to clay at about 70 cm. These soils are imperfectly drained and fall into Wetness Class III.

To the north of Eske Plantation other soils within this subgrade consist of peat over slowly permeable heavy clay loam at less than 40 cm. These soils are poorly drained and fall into Wetness Class IV.

Soil wetness and workability problems are the main limiting factors on most soils within this subgrade.

2.3 Subgrade 3b

Land in this subgrade occurs mainly to the south of Eske Plantation. Soils consist of medium clay loam topsoil over slowly permeable heavy clay loam to clay subsoils at 40 cm or less. These soils are poorly drained (Wetness Class IV) and appreciable soil wetness and workability problems are the limiting factors on ALC grade.

2.4 Non-Agricultural

Land in this category consists of woodland and vacant land around Carr House.

2.5 Urban

This consists of tracks crossing the site.

Resource Planning Group
Leeds Regional Office
November 1990