

AGRICULTURAL LAND CLASSIFICATION  
HEDON AERODROME  
HUMBERSIDE  
PROPOSED GOLF COURSE AND HOUSING  
APRIL 1994

ADAS  
Leeds Statutory Group

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## SUMMARY

An Agricultural Land Classification survey of 72 ha of land at Hedon Aerodrome was carried out in April 1994. At the time of survey 97% of the land was in agricultural use of which 11.6 ha falls in Subgrade 3a. Soil profiles are moderately well or imperfectly drained, with medium-textured topsoils overlying medium or heavy-textured subsoils. Slowly permeable layers typically begin at between 40 and 50 cm depth and the land is restricted to Subgrade 3a by a soil wetness limitation.

The remainder of the agricultural land on the site (58.8 ha) falls in Subgrade 3b. Profiles are imperfectly or poorly drained with medium or heavy-textured topsoils overlying gleyed and slowly permeable heavy-textured subsoils at between 30 and 40 cm depth. Soil wetness and topsoil workability restrictions limit this land to Subgrade 3b. The remainder of the area surveyed consists of Non Agricultural land (1.7 ha) and Open Water (0.2 ha).

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1. AGRICULTURAL LAND CLASSIFICATION

AGRICULTURAL LAND CLASSIFICATION REPORT ON LAND AT HEDON  
AERODROME: PROPOSED GOLF COURSE AND HOUSING

1. INTRODUCTION AND SITE CHARACTERISTICS

1.1 Location and Survey Methods

The site lies approximately 8 km east of Hull city centre, around Grid Reference TA 174290. It covers a total area of 72 ha. of which 70 ha were in agricultural use at the time of survey. Survey work was carried out in April 1994 when soils were examined by hand auger borings at 100 m intervals predetermined by the National Grid. Two soil inspection pits were dug to allow the assessment of subsoil structure and porosity and to allow samples to be taken for laboratory analysis. Land quality was assessed 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 and Relief

At the time of survey all of the agricultural land on the site (70 ha) was under permanent grass. The remainder of the site consists of two small areas of Open Water in the east and Non Agricultural land in the north-west.

Site altitude varies from 2 m A.O.D. in the centre and west to 5 m A.O.D. in the east. The land is generally flat but becomes undulating in the east with slopes of up to 4°.

1.3 Climate

Grid Reference	:	TA 174290
Altitude	:	5
Accumulated Temperature above 0°C (January - June)	:	1395 day °C
Average Annual Rainfall (mm)	:	616
Climatic Grade	:	1
Field Capacity Days	:	135
Moisture Deficit (mm) Wheat	:	113
Moisture Deficit (mm) Potatoes	:	106

#### 1.4 Geology, Soils and Drainage

The site is underlain by deposits of Cretaceous Chalk over which lie thick deposits of marine and estuarine alluvium (in the centre and west) and boulder clay (in the east).

Profiles in the centre and west of the site are imperfectly or poorly drained (falling in Wetness Classes III or IV) with non-calcareous medium or heavy silty clay loam topsoils overlying gleyed and slowly permeable heavy silty clay loam or silty clay subsoils. The soils in the east of the site are moderately well or imperfectly drained (falling in Wetness Classes II or III) with non-calcareous medium clay loam topsoils and upper subsoils overlying medium or heavy clay loam lower subsoils, some of which are slowly permeable.

## 2. AGRICULTURAL LAND CLASSIFICATION

The ALC grades occurring on this site are as follows:

<u>Grade/Subgrade</u>	<u>Hectares</u>	<u>Percentage of Total Area</u>
1		
2		
3		
3a	11.6	16.0
3b	58.8	81.3
4		
5		
(Sub total)	(70.4)	(97.3)
Urban		
Non Agricultural	1.7	2.3
Woodland - Farm		
- Commercial		
Agricultural Buildings		
Open Water	0.3	0.4
Land not surveyed		
(Sub total)	(2.0)	(2.7)
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TOTAL	72.4	100
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### 2.1 Subgrade 3a

Subgrade 3a land occurs in the east and south-west of the site. Soil profiles are moderately well or imperfectly drained, falling in Wetness Classes II or III, with non-calcareous medium clay loam or medium silty clay loam topsoils (and, in the east, upper subsoils) overlying medium clay loam, heavy clay loam, heavy silty clay loam or silty clay lower subsoils. These lower subsoils are generally gleyed and slowly permeable, typically beginning at between 40 cm and 50 cm depth. The land is, therefore, limited to Subgrade 3a by soil wetness restrictions.

## 2.2 Subgrade 3b

Most of the agricultural land on the site falls in Subgrade 3b. Soil profiles are imperfectly or poorly drained, falling in Wetness Classes III or IV, with non-calcareous medium or heavy silty clay loam topsoils overlying gleyed and slowly permeable heavy silty clay loam or silty clay subsoils at between 30 cm and 40 cm depth. Soil wetness and topsoil workability restrictions limit this land to Subgrade 3b.

## 2.3 Non Agricultural

This category includes an embankment and an area of disturbed uneven ground in the north-west of the site.

## 2.4 Open Water

This category includes two ponds in the east of the site.

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