AGRICULTURAL LAND CLASSIFICATION

STAINSBY HALL, MIDDLESBROUGH PROPOSED GOLF COURSE

ADAS Leeds Regional Office

December 1990 2FCS 5100

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CONTENTS

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

MAP

1. AGRICULTURAL LAND CLASSIFICATION

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AGRICULTURAL LAND CLASSIFICATION REPORT STAINSBY HALL FARM

#### 1. INTRODUCTION AND SITE CHARACTERISTICS

The site is located around National Grid Reference NZ 472156, adjacent to the A19 about 4 km south east of Middlesbrough. It covers approximately 81 hectares.

Survey work was carried out in November 1990 when soils were examined by hand auger borings at 100 metre intervals at points predetermined 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

All agricultural land is in arable use the main crops being cereals.

1.2 Climate

Average annual rainfall (AAR) in the area is approximately 620 mm. Accumulated temperature (ATO) above 0°C between January and June is 1350 day°C and the land is at field capacity for 150 days a year. The temperature and rainfall figures indicate that there is no climatic restriction on ALC grade.

### 1.3 Relief

Altitude varies between 20 and 35 m above ordnance datum. Slopes of 9° were recorded at some locations adjacent to the stream which forms the eastern boundary of the site. Land in these areas was limited to subgrade 3b by gradient restrictions.

1

### 1.4 Geology, Soils and Drainage

Soils on the site are formed on till or lacustrine clay and generally consist of medium to heavy clay loam topsoils over heavy clay loam or clay subsoils. These soils are slowly permeable between 35 and 50 cm depth and fall into Wetness Classes III and IV. Lighter textured soils consisting of sandy loam to medium clay loam topsoils over sandy clay loam subsoils passing to heavy clay loam or clay at depth occur in patches across the site, especially in the central area. These soils are somewhat better drained and fall mainly within Wetness Class III.

#### 2. AGRICULTURAL LAND CLASSIFICATION

Grade	Area (ha)	Percentage of total
		site area
3a	29.6	36.5
3b	48.5	59.7
Urban	1.9	2.3
Farm Buildings	1.2	<u>    1.5</u>
	<u>81.2</u>	<u>100</u>

### 2.1 Subgrade 3a

Land in this grade consists of sandy loam to medium clay loam topsoils over sandy clay loam subsoils passing to clay at depth.

These soils are slowly permeable between 40 and 65 cm depth and fall into Wetness Class III. Slight soil wetness and workability problems are the limiting factors on land within this subgrade.

## 2.2 Subgrade 3b

Land in this subgrade consists of medium to heavy clay loam topsoils over heavy clay loam to clay subsoils. These soils are slowly permeable at less than 40 cm depth. Wetness and workability problems are more severe than on the adjoining subgrade 3a land and are the main factors limiting this land to subgrade 3b.

#### 2.3 Farm Buildings

These consist of the Stainsby Hall Farm buildings.

# 2.4 Urban

Land in this category consists of the access tracks crossing the site.

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MAP