AGRICULTURAL LAND CLASSIFICATION
BUBWITH INGS, HUMBERSIDE
PROPOSED EXTENSION OF
UNDERGROUND COAL MINING
MARCH 1993

ADAS
Leeds Statutory Group

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SUMMARY

An Agricultural Land Classification survey of approximately 19 ha of land at Bubwith Ings was carried out in February 1993. All of the land on the site is in agricultural use and all falls within Grade 4. Soils are poorly drained and consist of heavy silty clay loam topsoils over silty clay or clay subsoils. The area is subject to long periods of flooding during most winters and is limited to Grade 4 for this reason.

CONTENTS

AGRICULTURAL LAND CLASSIFICATION REPORT ON LAND AT

1. INTRODUCTION AND SITE CHARACTERISTICS

1.1 Location and Survey Methods

The site lies 1 km west north west of Bubwith around National Grid Reference SE 700 370. It covers a total of 19.3 ha. Survey work was carried out in February 1993 when soils were examined by hand auger borings at a density of one per hectare at points predetermined by the National Grid. Land Quality was assessed using the methods described in "Agricultural Land Classification of England and Wales: Revised criteria for grading the quality of agricultural land." (MAFF 1988)

1.2 Land Use and Relief

At the time of survey all of the site was under permanent pasture. The site lies at an altitude of 6m A.O.D. and is level except along the river bank where there is a low levee.

1.3 Climate

Grid Reference	:	SE 700 370
Altitude (m)	:	6
Accumulated Temperature above 0°C (January - June)	:	1401
Average Annual Rainfall (mm)	:	591
Climatic Grade	:	1
Field Capacity Days	:	126
Moisture Deficit (mm) Wheat	:	110
Moisture Deficit (mm) Potatoes	:	102

1.4 Geology, Soils and Drainage

The area is underlain by the Triassic Mercia Mudstone (Keuper Marl) over which there is a thick cover of glacial and Recent drift deposits including riverine alluvium on which the soils on the site are formed. Soil profiles consist of heavy silty clay loam topsoils over gleyed slowly permeable silty clay or clay subsoils. Nearly all are poorly drained but because field capacity days are less than 130, fall within Wetness Class III. Most soils are similar to those within the Fladbury Association as mapped by the Soil Survey and Land Research Centre.

This area adjoining the River Derwent is subject to long periods of flooding in most winters. For this reason there is a severe flood risk limitation on ALC grade.

2. AGRICULTURAL LAND CLASSIFICATION

The ALC grades occurring on this site are as follows:

Grades/Subgrade	Hectares	Percentage of Total Area
1		
2		
3		
4	19.3	100
5		
(Sub total)	(19.30)	(100)
Urban		
Non Agricultural		
Woodland - Farm		
- Commercial		
Agricultural Buildings		
Open Water		
Land not surveyed		
(Sub total)		
TOTAL	19.30	100

2.1 Grade 4

All of the land on the site falls within Grad e 4. Profiles consist of a heavy silty clay loam topsoils over silty clay or clay subsoils. Soils are poorly drained, but because field capcity days are less than 130, fall within Wetness Class III. Severe winter flood risk is the main factor limiting this land to Grade 4.

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