

AGRICULTURAL LAND CLASSIFICATION
BOOTHFERRY LOCAL PLAN
LAND WEST OF A161 EALAND
HUMBERSIDE
JUNE 1995

ADAS
Leeds Statutory Group

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SUMMARY

A detailed Agricultural Land Classification (ALC) Survey of 18.1ha of land west of the A161 at Ealand was carried out in April 1994.

At the time of the survey, all the agricultural land was in arable or set aside use.

Soils on the site are developed from alluvium.

Topsoils are mostly medium to light textured and organic or peaty. Subsoils vary from very light to heavy textured. Profiles are well drained (Soil Wetness Class I) and stoneless.

14.6ha of Grade 2 land were identified. The ALC grade of this land is limited by slight droughtiness, and in places a pattern limitation.

A small area of Subgrade 3a land (1.5ha) was mapped in the west of the site. A more severe drought limitation occurs on this land.

2.0ha of urban land occur in the east of the site.

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1. AGRICULTURAL LAND CLASSIFICATION

AGRICULTURAL LAND CLASSIFICATION REPORT ON LAND AT WEST OF A161
EALAND, HUMBERSIDE

1. INTRODUCTION AND SITE CHARACTERISTICS

1.1 Location and Survey Methods

Land covering 18.1ha west of the A161 at Ealand was surveyed in detail in April 1994. Soils were examined by hand auger borings at points predetermined by the National Grid. The density of borings was one per hectare. Two soil profile pits were dug to examine representative soil types in greater detail. All land quality assessments were made using the methods described in "Agricultural Land Classification of England & 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 most of the site was in arable or set aside use. An industrial compound occupied land in the east. Slopes are level or very gentle, and average altitude is 5m AOD.

1.3 Climate

Grid Reference	: SE 778 109
Altitude (m)	: 5
Accumulated Temperature above 0°C (January - June)	: 1411 day °C
Average Annual Rainfall (mm)	: 593
Climatic Grade	: 1
Field Capacity Days	: 125
Moisture Deficit (mm) Wheat	: 115
Moisture Deficit (mm) Potatoes	: 109

1.4 Geology, Soils and Drainage

The soils on this site correspond to the Isleham 2 Association as mapped by the Soil Survey and Land Research Centre. Most profiles consist of light or medium-textured topsoils, most of which are organic or peaty, overlying alluvial subsoil horizons which vary in texture from sand to clay and silty clay. These soils are typically stoneless and well or moderately well drained, falling in Wetness Classes I or II.

An area of lighter-textured soils occurs in the west of the site, where loamy sand or sandy loam topsoils overlie loamy sand subsoils, with heavy clay loam or clay sometimes occurring at depth. These profiles are well drained, falling in Wetness Class I, and stoneless.

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	14.6	80.7
3a	1.5	8.3
3b		
4		
5		
(Sub total)	(16.1)	(89.0)
Urban	2.0	11.0
Non Agricultural		
Woodland - Farm		
- Commercial		
Agricultural Buildings		
Open Water		
Land not surveyed		
(Sub total)	(2.0)	(11.0)
	_____	_____
TOTAL	18.1	100
	_____	_____

2.1 Grade 2

Most of this site falls in Grade 2. Soil profiles are well or moderately well drained, falling in Wetness Class I or Wetness Class II, and both topsoils and subsoils are generally stoneless. In most cases organic medium sandy loam organic medium clay loam or peaty

loam topsoils overlie a variety of subsoil horizons which vary in texture from medium sand or loamy medium sand to silt loam, medium silty clay loam, heavy silty clay loam, clay or silty clay. Although most subsoils are gleyed from around 35cm depth, they are nonetheless permeable, and contain common root channels of up to 5mm in diameter. The ALC grade of this land is limited by slight droughtiness in places, and by a pattern limitation which prevents the Grade 1 profiles from being mapped out as a separate unit.

2.2 Subgrade 3a

An area of land in the west of the site falls in Subgrade 3a. Profiles here are well drained, falling in Wetness Class I, and stoneless, with medium sandy loam or loamy medium sand topsoils overlying medium sand subsoils. Heavy clay loam or clay occurs at depth in places, but droughtiness is the factor which limits this land to Subgrade 3a.

2.3 Urban

This category includes a storage compound in the east of the site.

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MAP