AGRICULTURAL LAND CLASSIFICATION REPORT

CARNABY INDUSTRIAL ESTATE

BRIDLINGTON

Proposed Extension

ADAS

Leeds Regional Office

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1. AGRICULTURAL LAND CLASSIFICATION

AGRICULTURAL LAND CLASSIFICATION REPORT ON LAND ADJACENT TO THE CARNABY INDUSTRIAL ESTATE BRIDLINGTON, HUMBERSIDE

1. INTRODUCTION AND GENERAL SITE CHARACTERISTICS

This site is located around Grid Reference TA 140664 approximately 4 km south west of Bridlington Town Centre. It covers 60.6 hectares, nearly all of which is in agricultural use.

Survey work was carried out in September 1989 when soils were examined by hand auger borings at 100 metre intervals pre-determined by the National Grid. Soil profile pits were also dug at representative locations to assess topsoil and subsoil stone contents and soil structural characteristics.

All land quality assessments were made 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. LAND USE

All agricultural land was under cereals or grass leys during the 1988-9 season.

1.2 CLIMATE

Average Annual Rainfall (AAR) is approximately 699 mm. Accumulated temperature (ATO) above 0°C between January and June is 1371 day°C and the land is at field capacity for 171 days a year. There is thus no overall climatic limitation on ALC grade.

Depending on stoniness, summer moisture deficits of 109 mm for winter wheat and 102 mm for potatoes indicate a slight to moderate drought limitation on the coarse to fine loamy soils commonly found on the site.

1.3 RELIEF

The site is virtually level at a mean altitude of 10 m above Ordnance Datum.

1.4 GEOLOGY AND SOILS

Soils are developed on a mixture of boulder clay and patchy deposits of flint and chalk gravel which form a thick cover over the underlying solid chalk. Parts of the site are also disturbed and contain rubble remaining from the wartime airfield.

Soil types reflect this variable pattern with gleyed medium and occasionally heavy textured soils occurring on the boulder clay and light easily worked soils corresponding to the coarse loamy and gravelly deposits. Topsoil stoniness is variable, but limiting only in the east where the stoniest drift occurs. Hardcore and concrete rubble is also limiting in a few places near the eastern end of the site.

Soil Wetness Classes range from I on the light textured land to III and IV on the heavier boulder clay soils.

2. AGRICULTURAL LAND CLASSIFICATION GRADES

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

Grade	Hectares	Per cent of total site area
2	18.6	31%
3a	28.8	48%
3b	11.8	19%
Non Agricultural	1.4	2%
Total	60.6	100%

2.1 Grade 2

Two strips of grade 2 land run through the centre of the site. Soils fall within Wetness Class I and consist mainly of stoneless to very slightly stony sandy loam, sandy clay loam or medium clay loam topsoils over similar subsoil material to depth. Slight soil droughtiness is the main restriction on ALC grade, although some areas with very variable topsoil textures are also limited by slight workability and soil pattern problems.

2.2 Subgrade 3a

In the east, soils consist of slightly stony sandy loam topsoils over similar subsoils to depth. Soil droughtiness is particularly limiting for potatoes on these soils and is the main restriction on ALC grade.

Elsewhere subgrade 3a land consists of medium clay loam or sandy clay loam topsoils over similar upper subsoils which occasionally pass into heavy clay loam or clay at depth. All profiles on land of this type fall within Wetness Class III and are limited by a combination of soil wetness and workability problems.

2.3 Subgrade 3b

Soils in this subgrade consist mainly of medium to heavy clay loam topsoils over slowly permeable heavy clay loam or clay subsoils. All profiles fall within Wetness Class IV and are limited by soil wetness and workability problems more severe than on the adjoining subgrade 3a land. Also included in this subgrade is a small strip of disturbed rubbly land near the railway at the eastern end of the site. Here subsoil compaction and topsoil stoniness (rubble) are the main limitations on ALC grade.

2.4 Non Agricultural

This consists mainly of vacant land alongside the railway including the old Carnaby Station goods yard.

RPG, Leeds RO

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