# AGRICULTURAL LAND CLASSIFICATION

## NABURN BUSINESS PARK

ADAS
Leeds Regional Office

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AGRICULTURAL LAND CLASSIFICATION REPORT
NABURN BUSINESS PARK

## SECTION 1: INTRODUCTION AND SITE CHARACTERISTICS

This site is located around grid reference SE 610480 approximately 4 km south of York city centre. It covers 31.9 hectares, all of which is in agricultural use. Survey work was carried out in January 1990 when soils were examined by hand auger borings at 100 metre intervals at points pre-determined by the National Grid. A soil profile pit was also dug to assess soil structural characteristics and gley morphology.

All land quality assessments were made using the methods described in the "Revised guidelines and criteria for grading the quality of Agricultural Land" (MAFF 1988).

### 1.1 LAND USE

The site is entirely in arable use. Winter cereals are the main arable crop although sugar beet had recently been grown in the northern part of the site.

### 1.2 CLIMATE

Average Annual Rainfall (AAR) is approximately 599 mm. Accumulated temperature (ATO) above 0°C between January and June is 1390 day°C and the land is at field capacity for 132 days a year. There is thus no overall climatic limitation on ALC grade.

Although summer moisture deficits of 110 mm for winter wheat and 102 mm for potatoes indicate a moderate drought limitation on most soils on the site, irrigation equipment has been installed and this significantly enhances the agricultural potential. For this reason the land has been upgraded by one grade or subgrade over that which the droughtiness limitation in this area would normally impose on a site without irrigation (MAFF 1988 p21).

## 1.3 RELIEF

The site is at a mean altitude of 13 metres above Ordnance Datum and the relief is level to gently undulating. Slopes rarely exceed 2-3° and do not restrict the use of agricultural machinery.

## 1.4 SOILS AND GEOLOGY

Site geology consists of glacio-lacustrine clay overlain by sandy drift of variable thickness.

Soils formed on the lightest deposits, consist mainly of sandy topsoils and subsoils which occasionally pass into clay below about 70 cm depth. Stoniness is not a problem, most profiles being no more than very slightly stony.

Slightly heavier textured soils occur through the centre of the site and in the north. These consist typically of stoneless coarse loamy topsoils over similar or slightly lighter subsoil material. Clay is sometimes encountered as a lower subsoil below about 70-100 cm depth.

## SECTION 2: AGRICULTURAL LAND CLASSIFICATION GRADES

The ALC grades occurring on the site are as follows:

| Grade | Hectares | Percentage of total survey area |
|---|---|---|
| 2 | 10.5 | 33% |
| 3a | 21.4 | 67% |
| Total | 31.9 | 100% |

### GRADE 2

Grade 2 land is mainly confined to the northern half of the site. Soils fall within Wetness Classes I or II and consist of stoneless sandy loam topsoils over sandy loam and loamy sand subsoils.

Although irrigation significantly ameliorates soil droughtiness, it is likely to benefit only some of the range of crops which could be grown. For this reason land of this type is restricted to Grade 2.

### SUBGRADE 3A

Land in this subgrade occurs in two distinct areas in the southern half of the site.

Soils fall within Wetness Classes I or II and usually consist of loamy medium sand topsoils over similar, or slightly lighter, subsoils.

Soil droughtiness even with irrigation, is more restricting than on the Grade 2 land and is the main limitation on ALC grade.

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