

AGRICULTURAL LAND CLASSIFICATION

LAND AROUND THE
ALDWARD MANOR HOTEL, ALDWARD
NORTH YORKSHIRE

Proposed Golf Course Extension

MAFF
Leeds RO

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AGRICULTURAL LAND CLASSIFICATION REPORT ON LAND AROUND THE ALDWARK MANOR
HOTEL, ALDWARK, NORTH YORKSHIRE

1. INTRODUCTION AND SITE CHARACTERISTICS

The site is located around grid reference SE 473663, approximately 3 km north west of Linton-on-Ouse. It covers 52.9 hectares, 65% of which is in agricultural use.

Survey work was carried out in August 1990 when soils on agricultural land 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 gley morphology and soil structural characteristics.

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

All agricultural land was in arable production during the 1989-90 season except for the 2 grassland fields between the River Ure and South Lodge. Cereals were the main arable crop with potatoes in the field west of Moor Plantation.

1.2 CLIMATE

Average Annual Rainfall (AAR) is approximately 629 mm. Accumulated temperature above 0°C (ATO) between January and June is 1390 days°C and the land is at field capacity for 143 days a year. This combination of temperature and rainfall indicates that there is no overall climatic limitation on ALC grade.

Although summer moisture deficits of 106 mm for wheat and 98 mm for potatoes show a moderate to severe drought risk on the sandy soils in the eastern half of the site, the risk is ameliorated by irrigation which has been successfully practised in these areas for a number of years.

1.3 RELIEF

The site slopes gently west-east between 16 and 20 metres above Ordnance Datum. Relief is level to very slightly undulating and does not restrict the use of agricultural machinery.

1.4 FLOODING

A moderate flood risk exists on land adjoining the River Ure which prevents this area being graded higher than subgrade 3a.

1.5 GEOLOGY AND SOILS

Site geology consists of Boulder clay overlain by a superficial layer of glacial and post glacial drift.

East of the hotel this drift consists of variable thicknesses of stoneless aeolian and river terrace sands on which sandy to coarse loamy profiles have developed over the underlying boulder clay.

Recent alluvium occurs near the River Ure. Soils here are also stoneless and consist of freely drained coarse loamy topsoils and subsoils to depth.

These post glacial deposits are largely absent round the Aldwark Road, where boulder clay occurs close to the surface. Soils formed over this consist of stoneless to very slightly stony fine loamy topsoils over gleyed and slowly permeable, fine loamy to clayey subsoils to depth.

2. AGRICULTURAL LAND CLASSIFICATION GRADES

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

GRADE	HECTARES	PER CENT OF TOTAL SITE AREA
3a	7.4	13.9
Urban	26.7	50.6
Non Agricultural	2.0	3.8
Woodland	<u>0.6</u>	<u>1.1</u>
TOTAL	52.9	100%

GRADE 2

Strips of grade 2 quality land occur on sandy drift east of the hotel, near Moor Plantation. Soils fall within Wetness Classes I or II and consist mainly of stoneless medium sandy loam, or occasionally loamy medium sand topsoils over similar subsoils which become gradually lighter with depth. The underlying Boulder Clay is seldom encountered within 1 metre of the surface except on the margins of the drift deposit near Aldwark Hotel. The irrigation of these soils is likely to benefit only a few of the crops that could be grown for this reason, the land is restricted to grade 2.

SUBGRADE 3A.

Near the Aldwark road soils in this subgrade consist of medium clay loam topsoils over gleyed heavy clay loam and clay to depth. These fall within Wetness Class III and are limited to the subgrade by a combination of topsoil wetness and workability problems.

Adjacent to the River Ure, soils consist of freely drained (Wetness Class I) fine sandy silt loam topsoils and subsoils to depth. Although the soils are easily worked and have adequate reserves of available water, the land is restricted to subgrade 3A by the winter flood risk present in areas close to the River.

Small areas of land near Moor Plantation also fall within this subgrade. Soils here consist mainly of loamy medium sand topsoils and upper subsoils which become lighter with depth. Soil droughtiness is more restricting, even with irrigation, than adjacent Grade 2 land and thus is the main limitation on ALC grade in this area.

URBAN

This consists of the Hotel, various outbuildings and the Aldwark road which crosses the site area.

NON AGRICULTURAL

This consists of the existing Golf Course around the Hotel.

WOODLAND

Several small areas of deciduous farm woodland occur within the site boundaries. These are marked on the accompanying Agricultural Land Classification map.

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