AGRICULTURAL LAND CLASSIFICATION

Manor House Farm,
Alwoodley, Leeds
Proposed Golf Course

ADAS
Leeds Regional Office

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MAPS

Agricultural Land Classification Report on land at Manor House Farm, Alwoodley, Leeds

1. Introduction and General Site Characteristics

1.1 Location and Survey Methods

The site is located around National Grid Reference SE 318413 just to the north of Leeds on the west side of the A51. It covers about 37 hectares.

Survey work was carried out in February 1991 when soils were examined by hand auger borings to a depth of 1 metre at 100 metre intervals pre-determined by the National Grid. All assessments of land quality 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)

1.2 Land Use

The majority of the site was under permanent pasture at the time of survey.

1.3 Climate and Relief

Mean Annual Rainfall (AAR) is approximately 754 mm. Accumulated temperature above 0°C between January and June (ATO) is 1260 day °C and the land is at field capacity for about 190 days a year. The rainfall and temperature figures impose an overall climatic limitation of Grade 2 on all agricultural land in the area.

1.4 Relief

The site is moderately to strongly undulating with an overall slope from south west to north east. Gradient is not limiting in the southern part of the site. North of Manor House, however gradients of

12°-13° restrict the upper slopes of the north facing hillside to Grade 4. The lower slopes to the north are limited to subgrade 3b by gradients of 8°-9°. Altitude varies from about 105 m aod on the northern edge of the site to 145 m aod on the hill around Manor House.

1.5 Geology and Soils

Soils over the higher central and southern part of the site are formed over Carboniferous sandstones and consist mainly of freely drained (Wetness Class I) sandy loam or sandy clay loam topsoils over simlar or lighter subsoils. Fragmented weathering sandstone bedrock occurs at depth in some profiles. Patches of heavier soil also occur, but are not extensive. On the lower ground in the north, towards Sturdy beck, soils are formed on clay and on mixed loamy drift from the adjoining higher land. Profiles vary from poorly drained (Wetness Class IV) heavy clay loam topsoils over clay subsoils to imperfectly drained (Wetness Class III) sandy loams which pass to clay at depth.

2. Agricultural Land Classification

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

Grade	Hectares	Per cent of Total Area
2	11.1	30.0%
3a	7.5	20.3%
3b	11.0	29.8%
4	6.0	16.2%
Urban	0.9	2.4%
Farm Buildings	0.5	1.3%
Total	37.0	

2.1 Grade 2

Land of this grade occurs on the sandy loam soils around and to the south of Manor House. They are restricted to grade 2 by the overriding climatic limitation applying to the site.

2.2 Subgrade 3a

Subgrade 3a land is situated on the higher ground to the south west of the farm where sandy soils are often quite shallow over sandstone bedrock. Although well drained and easily worked land of this type is droughty and is limited to subgrade 3a for this reason.

2.3 Subgrade 3b

This subgrade occurs on the lower slopes to the north and east of Manor House. Near Sturdy Beck and towards Wigton Heath Farm soils tend to be heavy and consist generally of poorly drained (Wetness Class IV) medium or heavy clay loam topsoils over slowly permeable heavy clay loam or clay subsoils. This land is limited to subgrade 3b by wetness and workability problems. On the more strongly sloping land nearer to Manor House gradients of about 9°-10° also impose a subgrade 3b slope limitation.

2.4 Grade 4

Land in this grade occurs on the steep hillside to the north of Manor House Farm. Here gradients of between 11° and 18° are the overriding restriction on ALC grade.

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