AGRICULTURAL LAND CLASSIFICATION REPORT

HOOD HILL, KILBURN

ADAS
LEEDS REGIONAL OFFICE

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ON LAND AT HOOD HILL, KILBURN

INTRODUCTION

The site is located around National Grid Reference SE 505810 approximately 7½ km east - south east of Thirsk, North Yorkshire.

It covers an area of 27.7 hectares, virtually all of which is in agricultural use.

Survey work was carried out in May 1989 when soils were examined by hand auger borings to a depth of 1 m, at points predetermined by the National Grid, at a density of one boring per hectare. Additional borings were made where necessary to check on soil variability and to refine grade boundaries.

Land quality assessments were made using the revised guidelines published by MAFF in 1988.

CLIMATE

Average annual rainfall is approximately 766 mm. Accumulated temperature above $0^{o}C$ (January to June) is about 1165 day^{o}C and the Mean Duration of Field Capacity is about 184 field capacity days.

The interaction of temperature and rainfall place an overall climatic limitation of subgrade 3a on the site.

RELIEF

Relief varies from gently (2-3^{o}) to moderately steeply sloping (12-15^{o}) at altitudes of between 150 m and 220 m a.o.d. Slopes in excess of 7^{o} are common on the margins of the site where they are often the overriding grade limitation.

GEOLOGY, SOILS AND DRAINAGE

The site is underlain by sandstones and shales of Middle Jurassic age on which are developed coarse and fine loamy soils. Some of these overlie rock at less than 1 m depth. Superficial drift is largely absent, except for a few isolated thin patches of boulder clay. Most soils are well drained and fall within Wetness Class I. Wetter soils (Wetness classes II and III) are restricted to a few areas of heavier land where medium and heavy clay loams overlie shale or boulder clay.

LAND USE

At present most of the site is under permanent grass. Much of this is undergrazed and in many places has reverted to poor quality rough grazing land. There is one field in arable in the south eastern corner of the site.

AGRICULTURAL LAND CLASSIFICATION GRADES

The ALC grades occurring on this site are as follows:

Grade	Hectares	Per cent of total agricultural land
3a	11.0	40
3b	9.4	34
4	6.7	24
5	0.6	2
Total	27.7	100%

Subgrade 3a

Land in this subgrade occurs through the centre of the site and in two isolated patches in the south west.

Soils are deep and consist of sandy loam or sandy clay loam topsoils and subsoils. Where thin patches of boulder clay occur these pass into slowly permeable heavy clay loam or clay at depth. Depending on the occurrence of and depth of these horizons, soil wetness class varies between I and III. Slopes are no steeper than moderate (7^{o}). Much of this is good quality land which is restricted to subgrade 3a only by the overall climatic limitation on the site.

Subgrade 3b

Subgrade 3b land occurs in 3 distinct areas, the south west, the south east and the north.

In the south east and extreme north, soils tend to be thin and consist of a variable thickness of sandy loam or sandy clay loam over weathering sandstones fragments and bedrock. Slopes vary between 7^{o} and 11^{o} and, combined with shallow soil depth, limit these areas to subgrade 3b.

In the south west, and north east of the disused lime kiln, soils consist of sandy clay loam or clay loam topsoils over gleyed and slowly permeable heavy clay loam or clay subsoils. These soils fall within Wetness Class IV and are therefore restricted to subgrade 3b by wetness and workability problems.

Grade 4

Grade 4 land is found on steeper slopes around the site margins. Soils consist of a variable depth of sandy loam, sandy clay loam or clay loam over sandstone fragments and bedrock. Slopes of between 11 and 18^{o} are the main grade limitation.

Grade 5

Land in this grade is confined to small areas of severe disturbance along the western boundary and east of High Ground Barn. Irregular micro relief, thin soil and localised slopes in excess of 18^{o} are the main limitations.

Resource Planning Group
May 1989

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