

AGRICULTURAL LAND CLASSIFICATION

BLACK BOY ROAD, HOUGHTON-LE-SPRING
SUNDERLAND

Proposed Residential Development

ADAS
Leeds Regional Office

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1. AGRICULTURAL LAND CLASSIFICATION

AGRICULTURAL LAND CLASSIFICATION REPORT;
LAND AT BLACK BOY ROAD, HOUGHTON-LE-SPRING
SUNDERLAND

1. INTRODUCTION AND SITE CHARACTERISTICS

The site is located around National Grid Reference NZ325494, approximately 2 km south west of Houghton-le-Spring town centre. The area surveyed covers 35.9 hectares, 87 per cent of which is in agricultural use.

Survey work was carried out in August 1989 when soils were examined by hand auger borings at 100 m intervals at points pre-determined by the National Grid.

All land quality assessments were made using the methods described in "The Revised Guidelines and Criteria for Grading the Quality of Agricultural Land", (MAFF October 1988).

LAND USE

Most agricultural land east of the B1284 is in permanent pasture, with cereal production common in the west. Under utilised agricultural land occurs near Red Burn Row and Moors Burn.

Other land uses include a football pitch near Chilton Moor Houses, recent residential development near Chilton Moor Farm and public open space in the north east near Moors Burn.

CLIMATE

Average Annual Rainfall (AAR) is approximately 654 mm. Accumulated temperature above 0°C between January and June (ATO) is 1310 day °C and the land is at field capacity for 166 days a year. These factors restrict land quality to a maximum of grade 2.

RELIEF

Altitude varies between 46 and 54 metres above ordnance datum and the relief is gently undulating.

Slopes rarely exceed 2 or 3° and do not restrict the use of agricultural machinery.

GEOLOGY AND SOILS

Site geology consists of Carboniferous Coal Measures overlain by glacial and post glacial deposits. These consist mainly of Boulder Clay on which fine loamy over clayey soils have formed. Occasionally these pass into weathering shales and mudstones, particularly in the east where the drift is often thinner. Recent alluvial deposits occur around Moors Burn and consist of fine loamy topsoils over permeable coarse loamy subsoils.

2. AGRICULTURAL LAND CLASSIFICATION GRADES

The ALC grades occurring on the site are as follows:

GRADE	HECTARES	PERCENT OF SURVEYED AREA
3a	3.5	10%
3b	22.5	63%
4	4.9	14%
Non Agricultural	2.3	7%
Urban	2.7	6%
Total	<hr/> 35.9	<hr/> 100%

Subgrade 3A

Two distinct areas of subgrade 3a land occur in the west.

Soils fall within Wetness Class III and consist mainly of medium clay loam topsoils over a similar upper subsoil which passes into gleyed and slowly permeable clay at depth. A combination of soil wetness and workability problems are the main restriction on the ALC grade.

Included in the subgrade are a few better quality (grade 2) profiles on deeper alluvium near Moors Burn. Their occurrence, however, is too sporadic to separate on the accompanying ALC map.

Subgrade 3b

This is the predominant grade. Soils consist of medium clay loam topsoils over gleyed and slowly permeable heavy clay loam and clay subsoils. All profiles fall within Wetness Class IV and are limited by a combination of soil wetness and workability problems.

Grade 4

The Grade 4 land near Chilton Moor House occupies a poorly drained depression. Soils are usually similar to those in subgrade 3b except for marginally heavier organic topsoils. Workability problems are thus more severe and form the main limitation on ALC grade.

Severely disturbed profiles are common near Redburn Row and Moors Burn. These soils are extremely variable but often consist of thin medium clay loam topsoils over clinker and cinders. The severe disturbance and thin variable nature of the top soil is the main grade limitation in these areas.

Non Agricultural

Non Agricultural land on the site consists of a football pitch in the west and municipal public open space near Moors Burn on the eastern part of the site.

Urban

This consists of residential development near Chilton Moor Farm.