

AGRICULTURAL LAND CLASSIFICATION
HARROGATE LOCAL PLAN
SITE 16 WHINNEY LANE
PANNAL ASH HARROGATE
MAY 1993

ADAS
Leeds Statutory Group

Job No: 25/93

SUMMARY

An Agricultural Land Classification survey of 47.5 ha of land North-west of Whinney Lane, Pannal Ash, Harrogate was carried out in May 1993. Most of this is in agricultural use. Subgrade 3a land covers 4.9 ha. Soil profiles in this subgrade are well drained (Wetness Class I) consisting of light to medium textured topsoils over slightly stony light to medium textured subsoils. Impenetrable weathering sandstone bedrock occurs between 30 and 60 cm depth. Climate and droughtiness limits this land to Subgrade 3a. Subgrade 3b land covers 40.5 ha and consists of medium clay loam topsoils over poorly drained (Wetness Class IV) clay or heavy clay loam subsoils. These soils are limited to Subgrade 3b by wetness. The remainder of the site consists of urban land and agricultural buildings.

CONTENTS

1. INTRODUCTION AND SITE CHARACTERISTICS
2. AGRICULTURAL LAND CLASSIFICATION GRADES

MAP

1. AGRICULTURAL LAND CLASSIFICATION

AGRICULTURAL LAND CLASSIFICATION: HARROGATE LOCAL PLAN, SITE 16,
WHINNEY LANE, PANNAL ASH.

1. INTRODUCTION AND SITE CHARACTERISTICS

1.1 Location and Survey Methods

This site is located 2km south-west of Harrogate around National Grid Reference SE288530. Survey work was carried out in May 1993 when soils were examined by hand auger borings at a density of one boring per hectare at points predetermined by the National Grid. Land quality was assessed using the methods described in "Agricultural Land Classification of England and Wales: Revised criteria for grading the quality of agricultural land" (MAFF).

1.2 Land Use and Relief

At the time of the survey the majority of the site was under permanent pasture or silage grass. The remainder consisted of urban land (tracks and housing) and agricultural buildings. The site lies between 155m and 175m AOD and is level to moderately sloping (0-5°).

1.3 Climate

Grid Reference	:SE288530
Altitude (m)	:170
Accumulated Temperature above 0°C (January-June)	:1216 day °C
Average Annual Rainfall (mm)	:879
Climatic Grade	:39
Field Capacity Days	:213
Moisture Deficit (mm) Wheat	:72
Moisture Deficit (mm) Potatoes	:53

1.4 Geology, Soils and Drainage

The site lies near the crest of the Harrogate anticline which forms an inlier of Carboniferous Limestone age within the Millstone Grit. The underlying strata consists mainly of the Harlow Hill Sandstone and Harrogate Roadstone (Carboniferous Limestone age) and, in the south-east, the younger Millstone Grit. Boulder Clay forms a thick cover over the solid strata except near the western edge of the site where the Harlow Hill sandstone occurs close to the surface.

Over most of the site soils consist of medium textured topsoils over poorly drained slowly permeable (Wetness Class IV) heavy textured subsoils. A small area in the west where sandstone is close to the surface consists of light to medium textured topsoils over similar textured well drained (Wetness Class I) subsoils. Weathering bedrock occurs within this area at variable depths (typically 30-60cm). The boulder clay soils are similar to those mapped as the Dunkeswick Series by the Soil Survey and Land Research Centre. Those formed on sandstone resemble the Rivington Series.

2. AGRICULTURAL LAND CLASSIFICATION

The ALC grades occurring on this site are as follows:

<u>Grade / Subgrade</u>	<u>Hectares</u>	<u>Percentage of Total Area</u>
1		
2		
3a	4.9	10.3
3b	40.5	85.2
4		
5		
(Sub total)	(45.4)	(95.5)
Urban	0.7	1.5
Non Agricultural		
Woodland - Farm		
- Commercial		
Agricultural Buildings	0.5	1.1
Open Water		
Land not surveyed	0.9	1.9
(Sub total)	(2.1)	(4.5)
TOTAL	<hr/> 47.5 <hr/>	<hr/> 100 <hr/>

2.1 Subgrade 3a

A small area of Subgrade 3a land occurs in the western part of the site. Soil profiles are well drained (Wetness Class I) and consist of very slightly stony medium sandy loam or occasionally medium clay loam topsoils overlying slightly stony medium sandy loam subsoils. Weathering sandstone bedrock occurs at between 30 and 60cm depth. This land is limited to Subgrade 3a by droughtiness and by the overall climatic limitation.

2.2 Subgrade 3b

Most of the site falls within Subgrade 3b. Soil profiles are poorly drained (Wetness Class IV) and consist of very slightly stony medium clay loam topsoils overlying very slightly stony gleyed slowly permeable subsoils of clay or heavy clay loam. Profiles of this type are limited to Subgrade 3b by wetness and workability problems.

2.3 Urban

Urban land consists of private dwellings and gardens.

2.4 Agricultural buildings

Two farms are included within this category.

MAP