



AGRICULTURAL LAND CLASSIFICATION  
DARLINGTON LOCAL PLAN  
MUSCAR HOUSE, BARMPTON  
JANUARY 1993

ADAS  
Leeds Statutory Group

Job No:- /9  
MAFF Ref:-

2 fcs 6311

muscar.alc.mp

## SUMMARY

An Agricultural Land Classification of 32ha of land at Muscar House was carried out in January 1993.

At the time of survey, 30ha of the site was in agricultural use of which 2.79ha falls in Grade 2. Profiles are generally moderately well-drained (Wetness Class II) with medium clay loam topsoils and upper subsoils overlying slowly permeable heavy clay loam lower subsoils. The ALC grade of this land is limited by slight soil wetness and workability restrictions.

The remainder of the agricultural land on the site (27.27ha) falls within Subgrade 3b. Profiles are generally poorly drained (Wetness Class IV) with medium clay loam topsoils overlying slowly permeable heavy clay loam subsoils at around 35cm depth. This land is limited to Subgrade 3b by soil wetness and workability problems and, in parts of the east and south, by slope.

CONTENTS

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

MAP

1. AGRICULTURAL LAND CLASSIFICATION

AGRICULTURAL LAND CLASSIFICATION REPORT: DARLINGTON LOCAL PLAN, MUSCAR HOUSE,  
BARMPTON

1. INTRODUCTION AND SITE CHARACTERISTICS

1.1 Location and Survey Methods.

The site lies 4 Km north east of Darlington town centre and covers a total area of 31.95ha. It is centred on Grid Reference NZ 317174. Survey work was carried out in January 1993 when soils were examined by hand auger borings at 100m intervals predetermined by the National Grid. Extra borings were made where necessary to refine grade boundaries, and two soil inspection pits were dug to allow the assessment of subsoil structure.

Land quality was assessed 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 and Relief

At the time of survey 94.1% of the site was in arable use. The remainder consists of urban and non-agricultural land. The site varies between 50m AOD in the south to 70m AOD in the north. It is flat to moderately sloping (0-9°), generally with a southerly or easterly aspect.

1.3 Climate

Grid Reference	:	NZ 317174
Altitude (m)	:	60
Accumulated Temperature above 0°C (January-June)	:	1313 day°C
Average Annual Rainfall (mm)	:	640
Climatic Grade	:	1
Field Capacity Days	:	154
Moisture Deficit (mm) Wheat	:	97
Moisture Deficit (mm) Potatoes	:	85

#### 1.4 Geology, Soils and Drainage

The site is underlain by deposits of Permian Marl over which there is a thick cover of boulder clay.

Soils are medium to heavy-textured, typically consisting of medium clay loam topsoils overlying slowly permeable heavy clay loam subsoils at around 35cm depth. Profiles are generally poorly drained (Wetness Class IV) although some moderately well drained (Wetness Class II) and imperfectly drained (Wetness Class III) profiles occur, principally in the south and east of the site.

Most soils on the site correspond to the Dunkeswick Series as mapped by the Soil Survey and Land Resource Centre.

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	2.79	8.7
3a		
3b	27.27	85.4
4		
5		
(Sub total)	(30.06)	(94.1)
Urban	1.30	4.1
Non Agricultural	0.59	1.8
Woodland - Farm		
- Commercial		
Agricultural Buildings		
Open Water		
Land not surveyed		
(Sub total)	(1.89)	(5.9)
	<hr/>	<hr/>
TOTAL	31.95	100
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## 2.1 Grade 2

Grade 2 land occurs in a band in the north of the site. Profiles are generally moderately well drained (falling in Wetness II) and consist of medium clay loam topsoils and upper subsoils overlying heavy clay loam lower subsoils. Where they occur, slowly permeable layers begin at around 60cm depth. The ALC grade of this land is restricted by slight soil wetness and workability limitations.

## 2.2 Subgrade 3b

Subgrade 3b land occurs over most of the site. Profiles are generally poorly drained (falling in Wetness Class IV) with medium clay loam topsoils overlying slowly permeable heavy clay loam subsoils at around 35cm depth. This land is limited to Subgrade 3b by soil wetness and workability restrictions.

In parts of the east and south of the site, slopes of 8-10° also limit the land to this subgrade.

## 2.3 Urban

This category includes a minor road and part of a housing estate in the north west of the site.

## 2.4 Non-Agricultural

This category consists of two areas of scrubland.

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