



AGRICULTURAL LAND CLASSIFICATION
DARLINGTON DISTRICT LOCAL PLAN
(FAVERDALE EAST)
COUNTY DURHAM
JANUARY 1994

ADAS
Leeds Statutory Group

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SUMMARY

An Agricultural Land Classification survey of 163.2 ha of land at Faverdale East, Darlington was carried out in January 1994. At the time of survey, 110.8 ha of this was in agricultural production of which 1.9 ha falls in Grade 2. Profiles are well or moderately well drained with medium clay loam or sandy clay loam topsoils and upper subsoils overlying slowly permeable heavy clay loam lower subsoils. The land is limited to Grade 2 by the overall climate of the area and, in most cases, by slight soil wetness.

34.1 ha of land falls in Subgrade 3a. Profiles are typically imperfectly drained but are well or moderately well drained in places. Medium clay loam topsoils overlie medium or heavy clay loam upper subsoils and slowly permeable heavy clay loam or clay lower subsoils. Soil wetness and a pattern limitation are the factors restricting this land to Subgrade 3a.

The remainder of the agricultural land on the site (74.8 ha) falls in Subgrade 3b. Profiles are poorly drained, with medium or heavy clay loam topsoils overlying slowly permeable heavy clay loam or clay subsoils at around 35cm depth. In this case soil wetness and workability restrictions limit the land to Subgrade 3b.

Urban land (44.4 ha), Non Agricultural land (3.0 ha), Farm Woodland (3.9 ha), Agricultural Buildings (1.0 ha) and Open Water (0.1 ha) make up the remainder of the area surveyed.

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AGRICULTURAL LAND CLASSIFICATION REPORT: DARLINGTON DISTRICT
LOCAL PLAN (FAVERDALE EAST)

1. INTRODUCTION AND SITE CHARACTERISTICS

1.1 Location and Survey Methods

The site lies approximately 3½ Km north-west of Darlington town centre, and lies around Grid Reference NZ 279178. It covers a total of 163.2 ha. Survey work was carried out in January 1994 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 three soil profile pits were dug to confirm the depth to slowly permeable layers. 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 68% of the site was in agricultural use (winter cereals, ley and permanent grass). The remainder of the site consists mainly of urban land (a rolling mill in the south-east, and an industrial estate under construction in the south) but there are small areas of Non Agricultural land, Agricultural Buildings, Farm Woodland and Open Water.

Site altitude varies from 80m in the north-west to 61m in the south and the land is generally gently to moderately sloping (typically 2-6°) with a variable aspect.

1.3 Climate

Grid Reference	: NZ 279178
Altitude (m)	: 70
Accumulated Temperature above 0°C (January-June)	: 1302 day°C
Average Annual Rainfall (mm)	: 656
Climatic Grade	: 2
Field Capacity Days	: 162
Moisture Deficit (mm) Wheat	: 96
Moisture Deficit (mm) Potatoes	: 83

1.4 Geology, Soils and Drainage

The site is underlain by Middle Magnesian Limestone and overlain by thick deposits of glacial till and, in a small area in the centre of the site, lake sediments.

Soil profiles are generally imperfectly or poorly drained (falling in Wetness Classes III or IV), although a few well or moderately well drained profiles (Wetness Classes I and II) occur in places. Where soils are imperfectly drained, medium clay loam topsoils and medium or heavy clay loam upper subsoils typically overlie slowly permeable heavy clay loam or clay lower subsoils. In the case of the poorly drained soils, medium or heavy clay loam topsoils overlie slowly permeable heavy clay loam or clay subsoils.

The soils on the site correspond to the Dunkeswick Association as mapped by the Soil Survey and Land Research 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	1.9	1.2
3a	34.1	20.9
3b	74.8	45.8
4		
5		
(Sub total)	(110.8)	(67.9)
Urban	44.4	27.2
Non Agricultural	3.0	1.8
Woodland - Farm	3.9	2.4
- Commercial		
Agricultural Buildings	1.0	0.6
Open Water	0.1	0.1
Land not surveyed		
(Sub total)	(52.4)	(32.1)
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TOTAL	163.2	100
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2.1 Grade 2

Two small areas of Grade 2 land occur in the south of the site. Profiles are well or moderately well drained (falling in Wetness Classes I or II) with medium clay loam or sandy clay loam topsoils and upper subsoils overlying slowly permeable heavy clay loam lower subsoils at between 60cm and 80cm depth. The ALC grade of this land is limited by the overall climate of the area and, in most cases, by slight soil wetness.

2.2 Subgrade 3a

Land in this subgrade occurs in three separate areas in the west and south of the site. In most cases profiles are imperfectly drained (falling in Wetness Class III) with medium clay loam topsoils overlying permeable medium or heavy clay loam upper subsoils and slowly permeable heavy clay loam or clay lower subsoils. The slowly permeable lower subsoils typically begin at between 45cm and 60cm depth and the land is restricted to Subgrade 3a by soil wetness and workability restrictions. In a few places well or moderately well drained profiles occur (falling in Wetness Classes I or II) which meet the requirements for Grade 2, but a pattern limitation prevents these being mapped as a separate unit.

2.3 Subgrade 3b

Subgrade 3b land covers most of the north and much of the south of the site. Profiles are poorly drained, falling in Wetness Class IV, with medium or heavy clay loam topsoils overlying slowly permeable heavy clay loam or clay subsoils at between 25cm and 40cm depth. *Soil wetness and workability limitations are more severe than on the adjoining Subgrade 3a land and it is these factors which restrict this land to Subgrade 3b.*

2.4 Urban

The rolling mill in the south-east and the industrial estate (currently being built) in the south fall within this category.

2.5 Non Agricultural

This refers to an area of scrub adjoining the rolling mill in the south-east of the site.

2.6 Farm Woodland

Three areas of Farm Woodland occur on the site - one at Whessoe Grange, one in the centre of the site, and Faverdale Whin in the south.

2.7 Agricultural Buildings

This category includes the farmhouse and outbuildings at Whessoe Grange (in the north-west of the site) and the outbuildings at Huntershaw (in the east).

2.8 Open Water

This category includes a small pond in the north-east.

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MAP