

AGRICULTURAL LAND CLASSIFICATION

SOUTH TYNESIDE UDP
SITE A, LAND AT PIKES HOLE FARM
HEBBURN, TYNE & WEAR

MAFF
Leeds Regional Office

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1. AGRICULTURAL LAND CLASSIFICATION

AGRICULTURAL LAND CLASSIFICATION REPORT, LAND AT PIKES HOLE FARM, HEBBURN, TYNE AND WEAR

1.0 Introduction and Site Characteristics

1.1 Location

National Grid Reference:- NZ 323615
Location Details:- 3 km south of Hebburn town centre, South Tyneside.

Site Size:- 142 ha

1.2 Survey Methods

Date Surveyed:- February 1992

Boring Density and Spacing Basis:- One Boring per hectare at 100m intervals at points predetermined by the National Grid.

Sampling Method:- By hand auger to a depth of 1.00m

Number of Borings:- 136

All land quality assessments were made 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)".

This detailed survey supersedes the previous "1" to one mile" survey of the area.

1.3 Land Use:- Mainly arable and ley grassland but with smaller areas of farm buildings, urban and non-agricultural land.

1.4 Climate and Relief

Average Annual Rainfall (AAR):- 635 mm

Accumulated Temperature above 0°C (January-June):- 1322 day °C

Field Capacity Days:- 156 days

Moisture Deficit:

wheat:- 97 mm

potatoes:- 84 mm

Altitude average:- 40 m a.o.d.

maximum:- 52 m a.o.d.

minimum:- 30 m a.o.d.

Climatic limitation (based on interaction of rainfall and temperature values):- None

Relief:- Flat to gently sloping

Slopes (°):- 0 - 3°

Gradient Limitations:- None

1.5 Geology and Soil

Solid Strata:-	Carboniferous coal measures.
Depth of solid rock from surface:-	Greater than 1.00m over the whole site.
Drift types:-	Lacustrine clay.
Thickness of drift and distribution:-	Greater than 1.00m over the whole site.
Soil Types and Distribution:-	Medium to heavy-textured soils cover the entire site.
Soil Textures (topsoils and subsoils):-	Generally medium clay loam or heavy clay loam topsoils overlying heavy clay loam or clay subsoils.
Soil Series/Associations:- On 1/250000 map:- Identified on site:-	Foggathorpe I Foggathorpe I
Soil Limitations and type:-	Soil wetness and workability.

1.6 Drainage

Soil type and Wetness Class:-	All of the soils on the site are imperfectly or poorly drained (Wetness Classes III and IV).
Drainage Limitations:-	Slowly permeable layers generally begin at between 35cm and 50cm depth thus limiting the land to subgrades 3a and 3b.

2.0 Agricultural Land Classification Grades

The ALC grades occurring on the site are as follows:-

<u>Grade/Subgrade</u>	<u>Hectares</u>	<u>Percentage of Agricultural Area</u>	<u>Percentage of Total Area</u>
1			
2			
3a	7.1	5.2	5.0
3b	129.4	94.8	90.9
4			
5			
Non Agricultural	3.34		2.3
Agricultural Buildings	1.08		0.8
Urban	1.48		1.0
Other	_____	_____	_____
Total	<u>142.3</u>	<u>100</u>	<u>100</u>

Subgrade 3a

Distribution on site:- Two separate areas, one around West Fellgate Farm in the north and one to the north of Boldon Fellgate Farm in the south.

Soil Types and Textures:- Medium to heavy-textured soils which generally consist of medium clay loam topsoils over heavy clay loam upper subsoils and clay lower subsoils.

Depth to Slowly Permeable Layers:- Slowly permeable layers generally begin at around 50cm depth.

Wetness and Drainage

Class:- Soils are imperfectly drained, falling in Wetness Class III.

Stone Percentage and

Type:- Profiles are stoneless to very slightly stony with up to 3% small rounded hardstones.

Grading Limiting Factors:- Soil wetness and workability.

Subgrade 3b

Distribution on site:- Land in this subgrade covers most of the site.

Soil Types and Textures:- Medium to heavy-textured soils, generally consisting of medium clay loam or heavy clay loam topsoils overlying heavy clay loam or clay subsoils.

Depth to Slowly Permeable Layers:- Slowly permeable layers generally begin at around 35cm depth.

Wetness and Drainage Class:- Soils are poorly drained, falling in Wetness class IV.

Stone Percentage and Type:- Profiles are stoneless to very slightly stony with up to 3% small rounded hard stones.

Grade Limiting Factors:- Soil wetness and workability.

Non Agricultural

Type and location of land included:- Five small areas of scrubland and parkland, principally in the north and east of the site.

Agricultural Buildings

Type and location of building included:- The farm buildings at Pikes Hole Farm and Boldon Fellgate Farm in the southeast of the site, and at West Fellgate in the northwest.

Urban

Type of land use included:- Houses and buildings at Laverick Hall Farm.

MAP