# AGRICULTURAL LAND CLASSIFICATION

LANGBAURGH LOCAL PLAN CLEVELAND

SITES A-E

### GUISBOROUGH

ADAS Leeds

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 APRIL
 1992

 File Ref:
 2FCS/5780

 Project Nos:
 11-15/92

Lds.AL6SiteA.LLP

# AGRICULTURAL LAND CLASSIFICATION

Langbaurgh Local Plan SITE A Scugdale Farm Guisborough, Cleveland

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Lds.AL6SiteA.LLP

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1. AGRICULTURAL LAND CLASSIFICATION

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# AGRICULTURAL LAND CLASSIFICATION REPORT

### 1.0 Introduction and Site Characteristics

1.1 Location

National Grid Reference:-NZ 592 157Location Details:-1.5km west of Guisborough adjoining the<br/>A173.

Site Size:- 15 hectares

1.2 Survey Methods

Date Surveyed:- 5th March 1992

Boring Density and Spacing Basis:- One boring per hectare on a 100 metre grid pattern predetermined by the National Grid.

Sampling Method:- Hand auger borings to a depth of 1 • metre.

Number of Borings:-

15

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:-At the time of survey most land wasunder cereal production.There is alsoa small area of scrubland in the east.

1.4 Climate and Relief

Average Annual Rainfall (AAR):- 768 mm Accumulated Temperature above 0°C (January-June):-1261 day °C Field Capacity Days:-190 days . 100 m a.o.d. Altitude average: ~ maximum:-105 m a.o.d. minimum:-95 m a.o.d.

 Relief: Undulating with a general north westerly aspect.

 Slopes (° ): 0 - 5°

 Gradient Limitations: None

1.5 Geology and Soil

Soil Strata:-Jurassic lower lias shales and limestoneDepth of solid rock from surface:-Greater than 1 metreDrift types:-Boulder clayThickness of driftGreater than 1 metreand distribution:-Greater than 1 metre

Soil Types and Distribution:- Medium and heavy textured soils cover the whole site.

1.5 Geology and Soil contd.

Soil Textures (topsoils and subsoils).

Topsoils consist of medium clay loam or occasionally heavy clay loam over clay or heavy clay loam subsoils.

Soil Series/Associations:-

Soil Limitations and type:-

Workability problems caused by heavy topsoil texture, especially in the southwest.

Dunkeswick

1.6 Drainage

Soil type and Wetness Class:-

Drainage Limitations:-

Medium/heavy soils fall within Wetness Class III or IV. Heavy soils fall within Wetness Class IV.

Slowly permeable subsoils.

# 2.0 Agricultural Land Classification Grades

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

Grade/Subgrade	<u>Hectares</u>	Percentage of Agricultural Area	<u>Percentage of</u> <u>Total Area</u>
1			
2			
3a	3.0	21.0	20
3b	8.1	56.6	54
4	3.2	22.4	21.3
5			
Non Agricultural	0.7		4.7
Agricultural Buildings			
Urban			
Other	<del></del>		
Total	<u>15.0</u>	_100	_100

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Subgrade 3a
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Distribution on site:-

Soil Types and Textures:-

Along the lower northern edge.

Medium/heavy soils with medium clay loam topsoils over heavy clay loam or clay subsoils.

Depth to Slowly Permeable Layers: -

Wetness and Drainage Class:-

Stone Percentage and Type:-

Grade Limiting Factors:-

60 - 70 cm.

Wetness Class III - imperfectly drained.

Stoneless

Soil wetness and workability problems.

Subgrade 3b

Distribution on site:-

Soil Types and Textures:-

This subgrade covers the majority of the site.

Medium/heavy soils with medium clay loam topsoils over heavy clay loam or clay subsoils.

Depth to Slowly Permeable Layers:- Wetness Class IV - poorly drained.

Grade Limiting Factors:-

Soil wetness and workability problems.

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Grade 4
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Distribution on site:-The western part of the site. Soil Types and Textures:-Heavy with heavy clay loam topsoils over clay subsoils. Depth to Slowly Permeable Layers:-30cm. Wetness and Drainage Class:-Wetness Class IV - poorly drained. Grade Limiting Factors:-Heavy topsoil texture along with soil wetness and workability problems.

Non Agricultural

Type and location of land included:- A small area of scrub in the east.

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# MAP

AGRICULTURAL LAND CLASSIFICATION

Langbaurgh Local Plan SITE B Lowcross Farm Guisborough, Cleveland

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#### AGRICULTURAL LAND CLASSIFICATION REPORT

# 1.0 Introduction and Site Characteristics

1.1 Location

National Grid Reference:-NZ 590 153Location Details:-1.5km west of Guisborough, Cleveland,<br/>immediately south of the A173

Site Size:-

25 hectares

5th March 1992

1.2 Survey Methods

Date Surveyed:-

Boring Density and Spacing Basis:- One boring per hectare at 100m intervals on a grid pattern, predetermined by the national grid.

Sampling Method:- Hand auger borings to a depth of 1m

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Number of Borings:-

All land quality assessments are 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.

is permanent grassland. There are also several areas of non agricultural land including farm buildings, farm woodland, a covered reservoir and an access road. 1.4 Climate and Relief Average Annual Rainfall (AAR):-768 mm Accumulated Temperature above 0°C (January-June):-1261 day °C Field Capacity Days: -190 days Moisture Deficit: wheat:-84 mm potatoes 69 mm Altitude average:-100 m a.o.d. maximum:-125 m a.o.d. minimum:-90 m a.o.d. Climatic limitation (based on interaction of rainfall and temperature values:-ALC Grade 2 Relief:-Slopes vary from gentle to moderate and steep, generally with a westerly aspect. 0 - 15° Slopes (° ):-Gradient Limitations:-Yes 7 - 15° Limiting gradients:-3b (7-11°) 4 (11-18°) Grades/subgrades:-Occurrence on site:-3b - in the southern corner of the site. 4 - in the centre of the site on

The majority of the agricultural land

1.3. Land Use:-

slopes rising from Lowcross farm to the covered reservoir. 1.5 Geology and Soil Solid Strata:-Jurassic lias shales and limestones. Depth of solid rock from surface:-Greater than one metre over the whole site. A mixture of medium and heavy textured Drift types:boulder clay. Thickness of drift and distribution: - Greater than 1 metre over the whole site. Medium and heavy textured soils cover Soil Types and Distribution:the whole site. Soil Textures (topsoils and subsoils):-Topsoils consist of medium and heavy clay loams, over similar or heavier subsoils. Soil Series/Associations:-On 1/250000 map:-Dunkeswick Identified on site:-Yes Heavy topsoil textures - ALC grade 4. Soil Limitations and type:-

1.6 Drainage

Soil type and Wetness Class:-	All soils fall within Wetness Class IV
	(poorly drained).
Drainage Limitations:-	Slowly permeable subsoils.

2.0 Agricultural Land Classification Grades

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

<u>Grade/Subgrade</u>	<u>Hectares</u>	Percentage of Agricultural Area	Percentage of Total Area
1			
2			
3a			
3b	12.7	58	50
4	9.3	42	37
5			
Non Agricultural	0.8		3
Agricultural Buildings	0.4		1.5
Urban	0.1		0.5
Farm Woodland	2.0		8.0
	- <u></u>		
Total	25.3	<u>100</u>	100

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Subgrade 3b
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Distribution on site:- Land in this subgrade covers much of the west, centre and south of the site, with a further area around Lowcross Farm in the West.

Soil Types and Textures:- Medium to heavy textured soils, typically medium clay loam topsoils over heavy clay loam and clay subsoils.

Depth to Slowly Permeable Layers:- Less than 52 cm

Wetness and Drainage Class:-

Stone Percentage and Type:-

Grade Limiting Factors:-

0 - 5% small and medium sandstones.

Wetness Class IV - Poorly drained.

Soil wetness and workability problems also gradient on slopes of between 8 - 11°.

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Grade 4
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Distribution on site:-

One large area extending around the northern and western slopes of Grove Hill, plus a smaller area adjoining the disused railway in the south.

Soil Types and Textures:- Medium to heavy textured soils, typically medium or heavy clay loam topsoils over similar or heavier subsoils.

Depth to Slowly Permeable Layers:- Less than 52cm.

Wetness and Drainage Class:-

Stone Percentage and Type:-

Grade Limiting Factors:-

Wetness Class IV - Poorly drained.

0 - 5% small and medium sandstones.

Heavy topsoil textures leading to soil wetness and workability problems and also

gradient, particularly around Grove Hill, where gradients range from 12° to 15°.

Non Agricultural Type and location of land included:- Two main areas in the centre of the site and in the west around the dismantled railway. Land in the central area consists of farm woodland, a covered reservoir and rough scrubland; the area near the railway is disturbed.

Agricultural Buildings Type and location of building included:-

Farmhouse and buildings around Lowcross Farm near the western corner of the site.

Type of land use included:- The

The access road to the covered reservoir.

Urban:-

MAP

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# AGRICULTURAL LAND CLASSIFICATION

Langbaurgh Local Plan SITE C Hunter Hill Farm Guisborough, Cleveland

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# 1. AGRICULTURAL LAND CLASSIFICATION

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Lds.AL6.SiteC.LLP

#### AGRICULTURAL LAND CLASSIFICATION REPORT

## 1.0 Introduction and Site Characteristics

1.1 Location

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National Grid Reference:- NZ 615 146
Location Details:- On the southern edge of Guisborough
immediately north of the disused
railway.
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9.5 hectares

Site Size:-

1.2 Survey Methods

Date Surveyed:- 6th March 1992

Boring Density and Spacing Basis:- 1 boring per hectare on a 100m grid predetermined by the National Grid.

Sampling Method:- Hand auger borings to a depth of 1 metre.

Number of Borings:-

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.

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All the agricultural land is under 1.3 Land Use:permanent grassland. Other land uses include allotments, roads and a farm house and associated buildings. 1.4 Climate and Relief Average Annual Rainfall (AAR):-794 mm . / Accumulated Temperature above day °C 0°C (January-June):-1244 Field Capacity Days:-198 days Altitude average:-125 m a.o.d. maximum:-133 m a.o.d. minimum:-118 m a.o.d. Climatic limitation (based on interaction of rainfall and temperature values: -Grade 2 Relief:-Gently sloping from southeast to northwest. 1 - 3° Slopes (° ):-Gradient Limitations:-None

1.5 Geology and Soil

Solid Strata:-Jurassic lower lias clays and limestoneDepth of solid rock from surface:-Greater than 1 metreDrift types:-Medium and heavy textured boulder clay.Thickness of driftGreater than 1 metre over the whole

site.

Soil Types and Distribution:-

Soil Textures (topsoils and subsoils):-

Medium or heavy clay loam topsoils over heavy clay loam or clay subsoils. Heavy clay loam topsoils are most common in the western part of the site.

Medium over heavy soils in the east;

heavy soils in the west.

Soil Series/Associations:-On 1/25000 map:- Crewe

Soil Limitations and type:-

Heavy topsoils in the western part of the site.

All soils fall within Wetness Class IV

1.6 Drainage

Soil type and Wetness Class:-

Drainage Limitations: -

Slowly permeable subsoils.

(poorly drained).

Lds.AL6.SiteC.LLP

# 2.0 Agricultural Land Classification Grades

<u>Grade/Subgrade</u>	<u>Hectares</u>	<u>Percentage of</u> <u>Agricultural Area</u>	Percentage of Total Area
1			
2			
3a			
3b	4.6	61.3	47.4
4	2.9	38.7	29.9
5			
Non Agricultural	1.5		15.5
Agricultural Buildings	0.4		4
Urban	0.3		3.2
Other		· .	
Total	9.7	100	100

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

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Subgrade 3b
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Distribution on site:-Distribution on site:-Soil Types and Textures:-Depth to Slowly Permeable Layers:-Wetness and Drainage Class:-Grade Limiting Factors:-Distribution on site:-This subgrade covers most of the eastern half of the site. Medium and heavy textured soils with medium clay loam topsoils over heavy clay loam or clay subsoils. Depth to Slowly Permeable Layers:-15 - 35 cm Wetness and Drainage Class:-Grade Limiting Factors:-Soil wetness and workability problems.

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Grade 4
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Distribution on site:- Most of the western part of the site along with two smaller areas to the east of Hunters Hill Farm. Soil Types and Textures:- Heavy consisting of heavy clay loam topsoils over clay subsoils. Depth to Slowly Permeable Layers:- 10 - 15 cm Wetness and Drainage Class:- Wetness Class IV - poorly drained. Stone Percentage and Type:- 0°

workability problems.

Heavy topsoil texture along with soil wetness and

Lds.AL6.SiteC.LLP

Grade Limiting Factors:-

Non Agricultural

Type and location of land included:- Allotments on the northern edge of the site along with a garden at Hunter Hill Farm.

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Agricultural Buildings

Type and location of building included:

Farm house and out buildings at Hunter Hill Farm.

Urban

Type of land use included:-

Access roads

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MAP

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# AGRICULTURAL LAND CLASSIFICATION

Langbaurgh Local Plan SITE D Belmont Farm Guisborough, Cleveland

Lds.AL6.SiteD.LLP

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1. AGRICULTURAL LAND CLASSIFICATION

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### AGRICULTURAL LAND CLASSIFICATION REPORT

# 1.0 Introduction and Site Characteristics

#### 1.1 Location

National Grid Reference:- NZ 620 153 Location Details:- On the southeastern edge of Guisborough Site Size:- 8 hectares

1.2 Survey Methods

Date Surveyed: - 6th March 1992

Boring Density and Spacing Basis:- 1 boring per hectare at 100m intervals on a grid basis,predetermined by the National Grid.

Sampling Method:- Hand auger borings to a depth of 1m.

Number of Borings:- 8

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.

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1.3 Land Use:-

All the agricultural land is under permanent grassland.

1.4 Climate and Relief

Average Annual Rainfall (AAR):-775 mm Accumulated Temperature above day °C 0°C (January-June):-1249 Field Capacity Days:days 193 Moisture Deficit: wheat:-84 mm potatoes:-68 mт Altitude average:-110 m a.o.d. maximum:-125 m a.o.d. m a.o.d. minimum:-105 Climatic limitation (based on interaction of rainfall and temperature values:-ALC Grade 2 ٠ Relief:-Gentle to moderate slopes with a northerly aspect: 0 - 8° Slopes (° ):-Gradient Limitations: -ALC grade 3b Limiting gradients:- $(8 - 11^{\circ})$ Grades/Subgrades:-3b Occurrence on site:-One small area at the centre of the site.

1.5 Geology and Soil

Solid Strata:-Depth of solid rock from surface:-Drift types:-Thickness of drift and distribution:-

Soil Types and Distribution: -

Soil Textures (topsoils and subsoils):-

Jurassic lower lias shales and limestone Greater than 1 metre over the whole site Medium and heavy textured boulder clay.

Greater than 1 metre over the whole site.

Medium to heavy textured soils cover the whole site.

Topsoils consist of medium clay loam over heavy clay loam, clay or silty clay subsoils.

Soil Series/Associations:-On 1/25000 map:- Crewe

Soil Limitations and type:-

1.6 Drainage

Soil type and Wetness Class:-

Drainage Limitations:-

All soils fall within Wetness Class IV (poorly drained).

Slowly permeable subsoils.

Heavy topsoil texture.

Lds.AL6.SiteD.LLP

# 2.0 Agricultural Land Classification Grades

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Grade/Subgrade	<u>Hectares</u>	Percentage of Agricultural Area	<u>Percentage_of</u> <u>Total_Area</u>
1			
2			
3a	•		
3ъ ,	8.13	100	100
4			
5			
Non Agricultural			
Agricultural Buildings			
Urban			
Other			
Total	8.13	100	100

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

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Subgrade 3b

Distribution on site:- All of the site falls within this subgrade.

Soil Types and Textures:- Medium and heavy textured soils. Typically medium clay loam topsoils over heavy clay loam, silty clay or clay subsoils.

Depth to Slowly Permeable Layers:- 15 - 45 cm

Wetness and Drainage Class: - Wetness Class IV - poorly drained

Stone Percentage and Type:- Stoneless

Grade Limiting Factors:- Soil wetness and workability problems; gradient and local topography.

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# AGRICULTURAL LAND CLASSIFICATION

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Langbaurgh Local Plan SITE E Foxdale Farm Guisborough, Cleveland

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1. AGRICULTURAL LAND CLASSIFICATION

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#### AGRICULTURAL LAND CLASSIFICATION REPORT

# 1.0 Introduction and Site Characteristics

#### 1.1 Location

National Grid Reference:- NZ 622 157 Location Details:- The site is located to the East of Guisborough adjoining the A171

Site Size:-

16 hectares

1.2 Survey Methods

Date Surveyed: - 6th March 1992

Boring Density and Spacing Basis:- 1 boring per hectare at 100m intervals on a grid basis, predetermined by the National Grid.

Sampling Method:- Hand auger borings to a depth of 1m.

Number of Borings:- 15

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:-

Almost all of the land is under permanent grassland, except for one small field of cereals and a small area of farm buildings.

# 1.4 Climate and Relief

Average Annual Rainfall (AAR):-	770	mm
Accumulated Temperature above		
0°C (January-June):-	1255	day °C
Field Capacity Days:-	193	days
Moisture Deficit:		
wheat:-	85	mm
potatoes:-	70	mm
Altitude average:-	100	m a.o.d.
maximum:-	110	m a.o.d.
minimum:-	94	m a.o.d.

Climatic limitation (based on interaction of rainfall and temperature values:-

Relief:-

Gentle slopes, which are slightly steeper towards the southern edge of the site.

Slopes (°):- 0 - 3° Gradient Limitations:- None

ALC Grade 2

1.5 Geology and Soil

Solid Strata:- Jurassic lias shales and limestone Depth of solid rock from surface:- Greater than 1 metre over the whole site Drift types:- Heavy textured boulder clay. Thickness of drift and distribution:- Greater than 1 metre over the whole site.

the whole site.

Soil Types and Distribution:-

Soil Textures (topsoils and subsoils):-

Topsoils consist of medium clay loam over similar or more clayey subsoils.

Medium over heavy textured soils cover

Soil Series/Associations:-<br/>On 1/25000 map:-CreweIdentified on site:-Yes

Soil Limitations and type:-

1.6 Drainage

Soil type and Wetness Class:- All soils fall within Wetness Class IV (poorly drained).
Drainage Limitations:- Slowly permeable subsoils.

Lds.AL6.SiteD.LLP

# 2.0 Agricultural Land Classification Grades

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

Grade/Subgrade	<u>Hectares</u>	<u>Percentage of</u> Agricultural Area <u>Surveyed</u>	Percentage of Total Area
1			
2			
3a			
3b	13.3	100	83
4			
5			
Non Agricultural			
Agricultural Buildings	0.05	(negligible)	
Urban		١	
Not surveyed (owner not			
known)	2.8		17
Other		<u> </u>	
Total	16.1	100	100

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Subgrade 3b

Grade Limiting Factors:-

Distribution on site:-This subgrade covers all of the surveyed area of agricultural land. Soil Types and Textures:-Medium over heavy soils consisting of medium clay loam topsoils over medium clay loam, heavy clay loam and clay subsoils. Depth to Slowly Permeable Layers:-30 - 50 cm Wetness and Drainage Class:-Wetness Class IV - poorly drained Stone Percentage and Type:-Stoneless

Soil wetness and workability problems.

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