

AGRICULTURAL LAND CLASSIFICATION

Busby House Farm, Stokesley  
North Yorkshire

Proposed Golf Course

MAFF  
Leeds Regional Office

June 1991  
File Ref: 2FCS 5440  
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lds.AL4.Busby.Hse

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MAP

1. AGRICULTURAL LAND CLASSIFICATION

AGRICULTURAL LAND CLASSIFICATION REPORT ON THE  
PROPOSED GOLF COURSE AT BUSBY HOUSE FARM, STOKESLEY, NORTH YORKSHIRE

1.0 Introduction and Site Characteristics

1.1 Location

National Grid Reference:- NZ 509070  
Location Details:- 2 km south west of Stokesley

Site Size:- 113 hectares

1.2 Survey Methods

Date Surveyed:- June 1991

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

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

Number of Borings:- 111

Number of Soil Pits (used for):- Several pits were dug to  
confirm depth to slowly  
permeable layers.

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)".

1.3 Land Use:- Mainly arable

1.4 Climate and Relief

Average Annual Rainfall (AAR):- 694 mm

Accumulated Temperature above  
0°C (January-June):- 1307 day °C

Field Capacity Days:- 180 days

Altitude average:- 65 m a.o.d.  
maximum:- 70 m a.o.d.  
minimum:- 60 m a.o.d.

Climatic limitation (based on  
interaction of rainfall and  
temperature values):- Grade 2

Relief:- Gently undulating

Slopes (°):-

Gradient Limitations:- None

Limiting gradient(s):- None  
Grade(s)/subgrade(s):-  
Occurrence on site:-

#### 1.5 Geology and Soil

Solid Strata:- Keuper Marl  
Depth of solid rock from surface:- > 1 metre  
Drift types:- Lacustrine clay/alluvium  
Thickness of drift  
and distribution:- > 1 metre

Soil Types and Distribution:- Heavy soils occur over the majority of the site, becoming lighter along the line of the stream in the lowest part of the site.

Soil Textures (topsoils and subsoils):- Medium or heavy clay loam topsoils over silty clay loam or clay subsoils dominate. Sandy loams over similar or lighter subsoils occur along the stream.

Soil Series/Associations:- Foggathorpe/Fladbury  
On 1/250000 map:-

Soil Limitations and type:- ALC grades are limited by soil wetness and associated workability problems.

#### 1.6 Drainage

##### Soil type and Wetness Class:-

The heavy soils on site fall into Wetness Class IV. The light soils are freely drained (Wetness Class I). The small areas of subgrade 3a are within Wetness Class III.

##### Drainage Limitations:-

Wetness Class IV soils are limited by slowly permeable layers at about 50 cm from the surface.

## 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>
2	14.1	14.3	12.5
3a	2.2	2.2	1.9
3b	62.9	63.7	55.8
4	19.6	19.8	17.9
Non Agricultural	2.2		1.9
Agricultural Buildings	1.1		1.0
Urban	-		
Farm Woodlands	10.7		9.5
Total	<u>112.8</u>	<u>100</u>	<u>100</u>

Grade 2

Distribution on site:- Land of this grade occurs in the lowest part of the site along the line of the stream running across the centre of the site.

Soil Type(s) and Texture(s):- Soils tend to be light with medium sandy loams or sandy clay loams common.

Depth to Slowly Permeable Layers:- Freely draining, no slowly permeable layers.

Wetness and Drainage Class:- Wetness Class I, well drained.

Stone Percentage and Type:- -

Grade Limiting Factors:- Climate

Other Limiting Factor(s):- -



Subgrade 3a

Distribution on site:- Two small areas occur at the northern end of the site.

Soil Type(s) and Texture(s):- Medium clay loam or sandy clay loam topsoils over clay or clay loam at depth.

Depth to Slowly Permeable Layers:- 60 cm

Wetness and Drainage Class:- Wetness Class III.

Stone Percentage and Type:- Stoneless

Grade Limiting Factors:- Soil wetness and workability.

Other Limiting Factor(s):-

Grade 3b

Distribution on site:- This is the dominant subgrade and occurs in two large swathes across the northern and southern halves of the site.

Soil Type(s) and Texture(s):- Medium clay loam or medium silty clay loam topsoils over heavier subsoils predominate.

Depth to Slowly Permeable Layers:- Usually slowly permeable at less than 45 cm.

Wetness and Drainage Class:- Wetness Class IV

Stone Percentage and Type:- Stoneless

Grade Limiting Factors:- Soil wetness and workability.

Other Limiting Factor(s):-

Grade 4

Distribution on site:- Two large areas; one in the north western corner and one to the north west of Thorn Tree.

Soil Type(s) and Texture(s):- Heavy clay loam topsoils over similar or heavier, often silty subsoils.

Depth to Slowly Permeable Layers:- Always slowly permeable at less than 45 cm depth.

Wetness and Drainage Class:- Wetness class IV.

Stone Percentage and Type:- Stoneless.

Grade Limiting Factors:- Severe soil wetness and workability.

Other Limiting Factor(s):- -

Non Agricultural

Type and location of land included:- Cricket pitch on the southern tip of site and various patches of woodland scattered around the site.

Agricultural Buildings

Type and location of building included:- Buildings at Thorn Tree Farm and Busby House.

Urban

Type of land use included:-

Resource Planning Group  
Leeds Regional Office  
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MAP