AGRICULTURAL LAND CLASSIFICATION

KELFIELD LODGE FARM, NABURN

NORTH YORKSHIRE

PROPOSED GOLF COURSE DEVELOPMENT

MAFF
Leeds Regional Office

September 1991
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AGRICULTURAL LAND CLASSIFICATION REPORT

1.0 Introduction and Site Characteristics

1.1 Location

National Grid Reference:-	SE 601445
Location Details:-	1½ km south of the village of Naburn and 7½ km south of York City Centre.
Site Size:-	76 ha

1.2 Survey Methods

Date Surveyed:-	September 1991
Boring Density and Spacing Basis:-	One boring per hectare at 100 m intervals at points predetermined by the National Grid.
Sampling Method:-	By hand auger, to a depth of 1.00 m.
Number of Borings:-	68

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 (potatoes, sugar beet and cereals) along with some small areas of mixed woodland.

1.4 Climate and Relief

Average Annual Rainfall (AAR):-	594 mm
Accumulated Temperature above 0°C (January-June):-	1395 day °C
Field Capacity Days:-	129 days
Altitude average:-	10 m a.o.d.
maximum:-	11 m a.o.d.
minimum:-	8 m a.o.d.
Climatic limitation (based on interaction of rainfall and temperature values:-	None
Relief:-	Flat
Slopes (°):-	0-1°
Gradient Limitations:-	None

1.5 Geology and Soil

Solid Strata:-	Bunter sandstone.
Depth of solid rock from surface:-	Several metres.
Drift types:-	Sand (including blown sand).
Thickness of drift and distribution:-	Several metres over the whole site.
Soil Types and Distribution:-	Mainly light textured soils to depth but with some medium and heavy textured soils in the south western part of the site.

Soil Textures (topsoils and subsoils):-	The light textured soils consist of loamy fine sand topsoils (or occasionally medium sandy loam) over similarly textured subsoils. The medium and heavy textured soils consist of medium clay loam or heavy clay loam topsoils over heavy clay loam or clay subsoils.
Soil Series/Associations:-	
On 1/250000 map:-	Bishampton and Blackwood.
Identified on site:-	
Soil Limitations and type:-	Soil wetness on the heavier textured soils; wind erosion risk and droughtiness on the light textured land.

1.6 Drainage

Soil type and Wetness Class:-	The light textured soils fall in Wetness Class I and the medium to heavy textured soils in Wetness Class III.
Drainage Limitations:-	Soil wetness caused by slowly permeable subsoils, limits some soils (mainly in the south west of the site) to subgrades 3a and 3b.

2.0 Agricultural Land Classification Grades

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

Grade/Subgrade	Hectares	Percentage of Agricultural Area	Percentage of Total Area
2	5.2	7.28	6.9
3a	62.5	87.54	81.8
3b	3.7	5.18	4.8
Non Agricultural	4.3	-	5.6
Urban	0.7	-	0.9
Other			
Total	76.4	100	100

Grade 2

Distribution on site:-	A small area in the south west of the site.
Soil Type(s) and Texture(s):-	Fine sandy loam or medium sandy loam topsoils over loamy fine sand or fine sand subsoils.
Depth to Slowly Permeable Layers:-	None present.
Wetness and Drainage Class:-	These soils are well drained, falling in Wetness Class I.
Stone Percentage and Type:-	Profiles are generally stoneless.
Grade Limiting Factors:-	Soil droughtiness.

Subgrade 3a

Distribution on site:-

Subgrade 3a soils cover the entire site with the exception of the south western corner.

Soil Type(s) and Texture(s):-

Generally loamy fine sand topsoils over similarly textured subsoils. Some medium to heavy textured soils (medium clay loam topsoil over heavy clay loam or clay subsoil) occur scattered throughout the site, especially in the east.

Depth to Slowly Permeable Layers:-

In the medium and heavy textured soils, slowly permeable layers occur at depths of around 30 cm. There are no slowly permeable layers in the light textured soils.

Wetness and Drainage Class:-

The light textured soils are well drained and fall within Wetness Class I, the heavier textured soils fall within Wetness Class III.

Stone Percentage and Type:-

Most profiles are stoneless.

Grade Limiting Factors:-

Wind erosion risk and droughtiness on the widespread light textured land and soil wetness on the small areas of heavier textured soil.

Subgrade 3b

Distribution on site:-	A small area in the south western corner of the site.
Soil Type(s) and Texture(s):-	Heavy clay loam topsoils overlying heavy clay loam or clay subsoils.
Depth to Slowly Permeable Layers:-	Slowly permeable layers occur below about 30 cm depth.
Wetness and Drainage Class:-	Soils in this subgrade fall within Wetness Class III.
Stone Percentage and Type:-	Profiles are stoneless.
Grade Limiting Factors:-	Soil wetness and workability.

Non Agricultural

Type and location of land included:-	Several small areas of woodland in the east, west and south, and a small area of wasteland in the north.

Urban

Type of land use included:-	Grange Garth House on the northern edge of the site and a farm track in the north west.

Resource Planning Group
Leeds Regional Office
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