AGRICULTURAL LAND CLASSIFICATION

.

MANOR FARM, DRIGHLINGTON WEST YORKSHIRE PROPOSED GOLF COURSE

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AGRICULTURAL LAND CLASSIFICATION OF PROPOSED GOLF COURSE AT MANOR FARM, DRIGHLINGTON, WEST YORKSHIRE

1.1 Introduction

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64.6 hectares of land north of Drighlington (National Grid Reference SE 225295) were surveyed in early October 1989. Soils were examined by hand auger borings at a density of one boring per hectare at points predetermined by the National Grid. In addition soils were examined in more detail in profile pits at representative points across the site. Land quality assessments were made using the revised guidelines published by MAFF in 1989.

1.2 CLIMATE AND RELIEF

Salient climatic parameters at Manor Farm are as follows:-

Average Annual Rainfall (mm)	803	
Accumulated Temperature above 0°C (Jan-June)	1234	
Field Capacity Days	194	•
Moisture Deposit (mm) Wheat	79	
Potatoes	62	

Climatically the area is limited to no better than grade 2. On shallow or light textured soils there is also a slight droughtiness limitation.

The southern half of the site contains gently sloping land at an average altitude of about 165 m a.o.d. Further north the land slopes down towards the Ringshaw Beck and its tributaries. These slopes are often steep enough to limit the effective use of agricultural machinery and ALC grades have been adjusted accordingly. Altitude here is somewhat lower - between 160 and 130 m a.o.d.

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1.3 GEOLOGY AND SOILS

Soils are all developed on Carboniferous Middle Coal Measures consisting of sandstone and shale. Drift cover is thin or absent in the area. The rock has weathered to produce two distinctive soil types. In the south sandstones give rise to relatively shallow, slightly stony, freely drained (Wetness Class I) fine loamy soils. These profiles have a slight droughtiness limitation. Elsewhere shales and mudstones have weathered down to produce fine loamy topsoils over clayey, gleyed slowly permeable subsoils (Wetness Class IV). Soil wetness is the principal limiting factor here. In addition shallow drift mining at the turn of the century has disturbed many of the soils in the southern half of the site.

1.4 LAND USE

16.2% of the site is occupied by Doles and Whitley woods which are deciduous. Three old shale tips above the woods are now grassed over but not farmed. Elsewhere all the farmland is in arable use currently growing cereals and potatoes.

1.5 AGRICULTURAL LAND CLASSIFICATION

Grade	Area (hectares)	% of site
3a	35.4	54.8
3b	11.1	17.2
4	7.6	11.8
Non Agricultural	<u>10.5</u>	16.2
Total	<u>64.6</u>	<u>100</u>

1.5.1 Subgrade 3a

In these areas topsoils consist of medium clay loam or sandy clay loam over similar textured subsoils which in turn pass into sandstone at about 60 cm

depth. There is no slowly permeable layer and the soils are all freely drained (Wetness Class I). Slight stoniness throughout the profile and depth limitations, however, make these soils slightly droughty and this limits the land to subgrade 3a.

1.5.2 Subgrade 3b

Most of the soils within this subgrade are similar to those within subgrade 3a except for topsoil stone content. Where this is high soils are excluded from 3a as the high stone content will make farming difficult. The other sizeable area of subgrade 3b east of Doles Wood contains medium silty clay loam topsoils over clayey slowly permeable subsoils (Wetness Class IV). Soil wetness and workability are the main limitations on ALC grade in this area.

1.5.3 Grade 4

Disturbance has considerably increased the clay content of topsoils in this area making soil wetness and workability problems more severe than in other parts of the site. Slopes of 12° are also a limitation in places within this area.

1.5.4 Non Agricultural

The two areas of woodland and three grassed over spoil heaps were all included in this category.

Resource Planning Group Leeds RO

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