AGRICULTURAL LAND CLASSIFICATION

Proposed Golf Course at Colliery Farm Little Houghton, Barnsley

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Leeds Regional Office

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AGRICULTURAL LAND CLASSIFICATION REPORT ON THE PROPOSED GOLF COURSE AT COLLIERY FARM, LITTLE HOUGHTON, BARNSLEY

1. Introduction

The proposed golf course is located about 8 km east of Barnsley just north of the village of Little Houghton around NGR SE 428058. It covers 45.3 hectares. Survey work was carried out in April 1991 when soils were examined by hand auger borings at 44 points predetermined by the National Grid. In addition 2 soil profile pits were dug to examine soil morphology in greater detail.

Climate and Relief

Salient climatic parameters at the site are as follows:-

Average Annual Rainfall	(mm)	641
Moisture Deficit wheat	(mm)	104
potatoes	(mm)	94
Field Capacity Days		137
Accumulated Temperature above 0°C (Jan-June)		1370

The above temperature and rainfall figures impose no overall climatic limitation or ALC grade. The crop moisture deficits, however, suggest that light textured soils are likely to be droughty.

Slopes are moderate or gentle and altitude ranges from 49 m a.o.d. along the Rotherham Road to 61 m a.o.d. on the hill towards the centre of the site. Average altitude is approximately 55 m a.o.d.

Geology, Soils and Drainage

Soils are all developed or weathering Carboniferous Coal Measures. Drift cover is very thin or absent. Where the bedrock is sandstone light textured soils, occasionally shallow and stony, have developed. Topsoils on this material usually consist of medium sandy loam over similar or

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slightly lighter textured subsoils. These profiles are free from any wetness limitation. They are, however, droughty to varying extents. Elsewhere soils are formed on weathering shales and mudstones. These have produced medium or heavy clay loam topsoils over clayey slowly permeable subsoils. Soil wetness and workability are both problems on land of this type. Restored soils occur in the western part of the site on the field around the Golf Driving Range. Here the land has been restored after previous mining activities. Soil profiles are stony, shallow, compacted and very poorly drained.

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Agricultural Land Classification

Grade 2 (10.6 hectares, 23.4% of total area)

The grade 2 land contains very slightly stony sandy loam topsoils and upper subsoils. The lower subsoil often consists of loamy medium sand extending to about 100 cm depth. Slight droughtiness is the principal limiting factor on this land.

Subgrade 3a (16.6 hectares, 36.6% of total area)

Most of the 3a land is similar in character to that within Grade 2. Topsoils and subsoils tend, however, to be slightly stonier and rock often occurs at less than 100 cm depth. For these reasons these soils are more droughty and are limited to subgrade 3a for this reason. The remaining subgrade 3a land consists of medium clay loam topsoils over clayey slowly permeable subsoils (soil Wetness Class III). Soil wetness and workability are the limiting factors in this case.

Subgrade 3b (14.7 hectares, 32.4% of total area)

The 3b land in the southern part of the site is all limited by soil wetness and workability problems. Topsoils consist of heavy clay loam or heavy silty clay loam over a clayey slowly permeable subsoil. The 3b area towards the centre of the site contains light textured, shallow and stony soils which are limited to this subgrade by droughtiness. Grade 4 (3.4 hectares, 7.5% of total area)

The small area of grade 4 land contains the restored soils which have a severe soil wetness problem.

Resource Planning Group Leeds Regional Office May 1991

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