

AGRICULTURAL LAND CLASSIFICATION FOR A PROPOSED BUSINESS PARK, REDHOUSE FARM, STONE

SUMMARY

22.2 ha of land south of Stone were graded under the Revised Agricultural Land Classification system. 66.2% of the site was found to be grade 2, a further 29.3% to be sub-grade 3a, 1.8% was found to be sub-grade 3b with the remainder of the site classified as farm buildings and non-agricultural land.

INTRODUCTION

The 22.2 ha site was visited by members of the Resource Planning Team in July 1993. An Agricultural Land Classification (ALC) survey was undertaken using the ALC Revised Guidelines (MAFF 1988).

LOCATION, ALTITUDE AND RELIEF

The site lies south of Stone and is bounded by a business park in the east and agricultural land in the west, north and south. The altitude of the site varies from c.90m in the east to c.110m in the west. The relief of the site is generally not a limitation to the agricultural use of the land with the exception of an area in the south east of the site where the gradient is 8° and limits the land to sub-grade 3b.

CLIMATE AND RAINFALL

The main parameters used to assess climatic limitations are Average Annual Rainfall (AAR) as a measure of overall wetness and Accumulated Temperature (ATO) as a measure of relative warmth of the locality. For this site the average figures are 742mm and 1358°C respectively indicating no climatic limitation on this site.

GEOLOGY AND SOILS

The solid geology is composed of Keuper Marl overlain by a drift of boulder clay. The associated soils are typically medium clay loam or medium sandy loam topsoils onto sandy clay loam onto clay to depth.

LIMITATIONS

Soil wetness and gradient are the main limitations on this site. Soil wetness is measured by reference to Field Capacity Days (FCD), topsoil texture and depth to gleying. The site is at field capacity for approximately 184 days per year. Some of the soils have a gleyed morphology above 40cm and have a slowly permeable layer below about 50cm, placing them into Wetness Class III. Other profiles fall into Wetness Class I having no slowly permeable layer above 80cm and exhibiting no gleying characteristics. In the south east of the site the main limitation is gradient, which is 8°, limiting the area to sub-grade 3b.

LAND USE

At the time of survey the site was under grass being grazed by sheep and cattle.

AGRICULTURAL LAND QUALITY

Grade 2

This grade covers 14.7 ha and 66.2% of the site. It is found mainly along the eastern half of the site. The soils typically have medium sandy loam or medium clay loam textures over sandy clay loam to depth.

Sub-grade 3a

This sub-grade covers 6.5 ha and 29.3% of the site. It is found along the western half of the site. The soils typically have a medium clay loam texture over sandy clay loam onto clay to depth.

Sub-grade 3b

An area of 0.4 ha and 1.8% of the site was mapped as sub-grade 3b where the gradient was the limiting factor. The angle of slope in this area exceeded 7° but was no greater than 11°.

**LAND PRIMARILY IN NON-AGRICULTURAL USE
AND AGRICULTURAL BUILDINGS**

Land in these classifications covered 0.6 ha and 2.7% of the site. It included the track leading to the farm and the farm buildings. A breakdown of these two categories can be found in the table entitled "Breakdown of Agricultural Land Classification Grades".

BREAKDOWN OF AGRICULTURAL LAND CLASSIFICATION GRADES

Grade	Area (ha)	% of total	% of agricultural land
2	14.7	66.2	68
3a	6.5	29.3	30
3b	0.4	1.8	2
Non-agricultural land	0.1	0.4	
Farm buildings	0.5	2.3	
Total area	22.2	100	100
Total agricultural area	21.6		100

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