

AGRICULTURAL LAND CLASSIFICATION

CARLISLE URBAN AREA
LOCAL PLAN REVISION
SPRINGFIELD FARM

April 1991
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MAP

1. Agricultural Land Classification

AGRICULTURAL LAND CLASSIFICATION REPORT
LAND AT SPRINGFIELD FARM, CARLISLE

1.1 Introduction

The site is located around grid reference NY 443516, east of Junction 42 on the M6. It covers 27 hectares, nearly all of which is in agricultural use.

Survey work was carried out in March 1991 when soils were examined by hand auger borings at 100 metre intervals pre-determined by the national grid. Soil profile pits were also dug at representative locations to assess soil structural characteristics and to collect samples for laboratory analysis. All land quality assessments were made using the methods described in the "Revised Guidelines and Criteria for grading the quality of Agricultural Land" (MAFF 1988).

1.2 Land Use

At the time of survey the land was split evenly between arable use and grassland along with some urban and non-agricultural land.

1.3 Climate

Average Annual Rainfall (AAR) is approximately 870 mm. Accumulated temperature above 0°C between January and June (ATO) is 1306 day°C and the land is at field capacity for 217 days a year. These climate figures indicate an overall climatic limitation on ALC of grade 2.

1.4 Relief

Altitude on the site varies from about 60 m above ordnance datum (a.o.d.) in the north to about 80 m a.o.d. in the south and east. Slopes do not exceed 7° and so do not restrict the use of agricultural machinery.

1.5 Geology and Soils

Soils are formed on the reddish boulder clay which is widespread in the Carlisle area. Topsoils consist generally of sandy clay loam or medium clay loam over reddish heavy clay loam or clay which is often slowly permeable at depth. Most profiles are poorly drained falling within Wetness Class IV. Soils in the western part of the site, however, tend to have a larger sand content and as a result are often slightly better drained (Wetness Class III).

AGRICULTURAL LAND CLASSIFICATION

The ALC grades on this site are as follows:

<u>Grade</u>	<u>Hectares</u>	<u>Percentage of Agricultural Land</u>	<u>Percentage of Total Area</u>
3a	3.5	14.2	13.3
3b	21.2	85.8	80.6
Urban	1.2	-	4.6
Non Ag	<u>0.4</u>	<u>-</u>	<u>1.5</u>
TOTAL	26.3	100	100%

Subgrade 3a

Three small parcels of subgrade 3a land occur in the western part of the site. These are areas where the soil is slightly lighter with an increased sand content and deeper slowly permeable layers at around 60 cm or more. This improves drainage and profiles of this type are usually imperfectly drained, falling within Wetness Class III. The main limiting factor is the imperfect drainage which will give wetness problems especially in winter and early spring.

Subgrade 3b

The majority of the site falls into subgrade 3b. Wetness resulting from the high rainfall and slowly permeable reddish clay subsoils will be more restricting than on the subgrade 3a land and is the main limiting factor.

Urban

This consists of buildings, a filling station and access roads.

Non Ag

The small parcel of disused land behind the filling station is placed within this category.

RPG

Leeds RO

April 1991

MAP