

**AGRICULTURAL LAND CLASSIFICATION REPORT
CARLISLE DISTRICT LOCAL PLAN
CARLISLE PERIPHERY**

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**AGRICULTURAL LAND CLASSIFICATION REPORT FOR
CARLISLE DISTRICT LOCAL PLAN
CARLISLE PERIPHERY**

1 SUMMARY

- 1.1 The Agricultural Land Classification (ALC) for this site shows that the following proportions of ALC grades are present:

Grade/Subgrade	ha	% of site
2	99	2.5
3a	526	13.1
3b	761	18.9
4	51	1.2
5	1	0.1
Other land		
Urban	2190	54.4
Non-agricultural	315	7.8
Woodland	33	0.8
Agricultural buildings	8	0.2
Not surveyed	42	1.0

- 1.2 The main limitation to the agricultural use of land in Grade 2, Subgrade 3a and Subgrade 3b is soil wetness.
- 1.3 The main limitations to the agricultural use of land in Grade 4 are soil wetness, flooding and slope.
- 1.4 The main limitation to the agricultural use of land in Grade 5 is gradient.

2 INTRODUCTION

- 2.1 The site was surveyed by the Resource Planning Team in February and March 1995. An Agricultural Land Classification Survey was undertaken according to the guidelines laid down in the "Agricultural Land Classification for England and Wales - Revised Guidelines and Criteria for Grading the Quality of Agricultural Land" (MAFF 1988).
- 2.2 The area surveyed comprises 4026 ha and includes all that land within the boundaries of the city of Carlisle.
- 2.3 The survey was requested by MAFF in connection with the Carlisle District Local Plan.
- 2.4 At the request of the Land Use Planning Unit of MAFF this was a free survey at a reconnaissance scale with an auger boring density of approximately 1 per

4 hectares. The attached map is only accurate at the base map scale and any enlargement would be misleading.

- 2.5 At the time of survey the predominant agricultural land use was grass with a few small areas under cereals.

3 CLIMATE

- 3.1 The following range of interpolated data are relevant for the site:

Average Annual Rainfall (mm)	826-863
Accumulated Temperature above 0°C January to June (day °C)	1368-1317

The combination of Average Annual Rainfall and Accumulated Temperature limit part of the site to Climatic Grade 2, mostly in the east. The remainder of the site is Climatic Grade 1.

- 3.2 The number of Field Capacity Days ranges across the site between 210 and 215.

4 SITE

- 4.1 Three site factors of gradient, micro-relief and flooding are considered when classifying land.
- 4.2 Flooding limits an area in the east of the site, around Rickerby to Subgrade 3b. Gradient limits small, isolated areas to Subgrade 3b and Grade 4. Microrelief is not a limitation on the site.

5 GEOLOGY AND SOILS

- 5.1 The geology of the area consists predominantly of Boulder Clay with isolated deposits of Glacial Sands and Gravels. There are deposits of alluvium along the River Eden and its tributaries - British Geological Survey Sheets 17 & 18, Carlisle and Brampton, 1".
- 5.2 The underlying geology influences the soils which have a predominantly clay loam texture.

6 AGRICULTURAL LAND CLASSIFICATION

- 6.1 Grade 2 occupies 99 ha (2.5 %) of the survey area and occurs in the south east around Garlands, in the north east around Rickerby and in the west around Stainton.
- 6.1.1 The soils within this Grade consist predominantly of sandy loam texture over sandy loam or sand. The subsoils are sometimes gleyed but there

is no slowly permeable layer. The combination of topsoil texture and Field Capacity Days places these soils into Wetness Class I.

- 6.1.2 The main limitation to the agricultural use of soils within this grade is soil wetness.
- 6.2 Subgrade 3a occupies 526 ha (13.1 %) of the survey area and occurs predominantly in the south of the site.
 - 6.2.1 The soils within this subgrade consist predominantly of medium clay loam or sandy clay loam over medium clay loam or sandy clay loam. The subsoils are gleyed and occasionally a slowly permeable layer is encountered. Where a slowly permeable layer occurs the soils fall into Wetness Class III, otherwise they are in Wetness Class II.
 - 6.2.2 The main limitation to the agricultural use of the soils within this subgrade is soil wetness.
- 6.3 Subgrade 3b occupies 761 ha (18.9 %) of the site and occurs predominantly in the north and east.
 - 6.3.1 The soils consist mainly of medium clay loam texture over clay loam or clay. The soils are gleyed and the clay forms a slowly permeable layer placing these soils into Wetness Class IV.
 - 6.3.2 The main limitation to the agricultural use of the land in this subgrade is soil wetness.
- 6.4 Grade 4 occupies 51 ha (1.2 %) of the site and occurs as isolated areas across the survey area.
 - 6.4.1 The soils within this grade consist mainly of heavy clay loam texture over clay. The soils are gleyed and the clay forms a slowly permeable layer placing these soils into Wetness Class IV.
 - 6.4.2 The main limitation to the agricultural use of this land is soil wetness.
- 6.5 Grade 5 occupies 1 ha (0.1 %) of the site and occurs as one area near Cummersdale where the land has been used for tipping excavated soil. The soil has become grassed over and was being grazed at the time of survey.
 - 6.5.1 The main limitation to the agricultural use of this land is gradient.
- 6.6 Other land on the site comprises urban, occupying 2190 ha and mostly consisting of the built up area of Carlisle and the outlying suburbs; the M6 is also included in this grade. Non-agricultural land comprises 315 ha and mostly consists of parks and recreational areas. Woodland covers 33 ha and occurs mostly on the western side of Carlisle. An area of 42 ha was not surveyed as permission to access the land was not granted.

6.7 SUMMARY OF AGRICULTURAL LAND CLASSIFICATION GRADES

Grade/Subgrade	ha	% of site	% of agricultural land
2	99	2.5	6.9
3a	526	13.1	36.6
3b	761	18.9	52.9
4	51	1.2	3.5
5	1	0.1	0.1
Other land			
Urban	2190	54.4	
Non-agricultural	315	7.8	
Woodland	33	0.8	
Agricultural buildings	8	0.2	
Not surveyed	42	1.0	
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Totals	4026	100.0	100.0