THRIGBY ROAD, FILBY, NORFOLK.

Agricultural Land Classification
ALC Map and Report

May 1999

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AGRICULTURAL LAND CLASSIFICATION REPORT

THRIGBY ROAD, FILBY, NORFOLK

INTRODUCTION

1. This report presents the findings of a detailed, Agricultural Land Classification (ALC) survey of 0.7 ha of land at Thrigby Road, Filby in Norfolk. The survey was carried out during May 1999.

2. The survey was carried out by the Farming and Rural Conservation Agency (FRCA) for the Ministry of Agriculture, Fisheries and Food (MAFF), in connection with a proposal for housing development on this land.

3. The work was conducted by members of the Resource Planning Team in the Eastern Region of FRCA. The land has been graded in accordance with the published MAFF ALC guidelines and criteria (MAFF, 1988). A description of the ALC grades and subgrades is given in Appendix I.

4. At the time of survey the land use on the site was a grass ley. The site forms part of a larger field which was also sown with grass.

SUMMARY

5. The findings of the survey are shown on the enclosed ALC map. Because the site is so small the map has been drawn at a scale of 1:2 500; it is accurate at this scale but any enlargement would be misleading.

6. The area and proportions of the ALC grades and subgrades on the surveyed land are summarised in Table 1.

Table 1: Area of grades and other land

Grade/Other land	Area (hectares)	% site area
Grade 2	0.7	100
Total site area	0.7	100

7. The fieldwork was conducted at an average density of 6 borings per hectare. A total of 4 borings and 1 soil pit was described.

8. The entire site has been graded 2 (very good quality agricultural land) due to a minor droughtiness limitation.

FACTORS INFLUENCING ALC GRADE

Climate

9. Climate affects the grading of land through the assessment of an overall climatic limitation and also through interactions with soil characteristics.

10. The key climatic variables used for grading this site are given in Table 2 and were obtained from the published 5 km grid datasets using the standard interpolation procedures (Met. Office, 1989).

Table 2: Climatic and altitude data

Factor	Unit	Values
Grid reference	N/A	TG 463 129
Altitude	m, AOD	10
Accumulated Temperature	day°C (Jan-June)	1410
Average Annual Rainfall	mm	621
Field Capacity Days	days	119
Moisture Deficit, Wheat	mm	119
Moisture Deficit, Potatoes	mm	115
Overall climatic grade	N/A	Grade 1

11. The climatic criteria are considered first when classifying land as climate can be overriding in the sense that severe limitations will restrict land to low grades irrespective of favourable site or soil conditions.

12. The main parameters used in the assessment of an overall climatic limitation are average annual rainfall (AAR), as a measure of overall wetness, and accumulated temperature (ATO, January to June), as a measure of the relative warmth of a locality.

13. The combination of rainfall and temperature at this site mean the site is relatively dry and warm and has no climatic limitation. The site is therefore climatic grade 1.

Site

14. The site is situated at the edge of Filby village. To the north it is bounded by Thrigby Road, to the east is a new house, to the south are open fields and to the west allotments and paddocks. The site slopes 2° to the north at an altitude of approximately 10m AOD. This site is not limited by gradient or altitude.

Geology and soils

15. At a scale of 1:50 000, the British Geological Survey mapped the area in 1990 as the Corton Formation of Sandy clay (Till).

16. The Soil Survey of England and Wales have mapped the area on two occasions. This information is summarised below.

17. At a scale of 1:100 000 in 1973, the site is mapped as the Hall, Sherringham, Wickmere and Burlingham series which are summarised as stagnogleyic argillic brown earths comprising coarse loamy over sandy or loamy soils.

18. At a reconnaissance scale of 1:250 000 (Sheet 4, Soils of Eastern England, 1983) the site is mapped as the Wick 2 Association. This association is briefly described as deep well drained coarse loamy, often stoneless soils. Some similar soils have slowly permeable subsoils and slight seasonal waterlogging. There is a slight risk of water erosion.

19. The current detailed survey identified one soil type which covers the entire site.

20. The topsoil comprises very slightly stony medium sandy silt loam typically extending to 30 cm. The upper subsoil is comprised of very slightly stony typically medium sandy silt loam and very occasionally silt loam, it extends on average to 50 cm but occasionally to 70cm. The lower subsoil comprises very slightly stony medium sandy loam, (occasionally medium sandy silt loam and medium silty clay loam). The lower subsoils become sandier at depth and typically merge into loamy medium sand. The profiles are well drained and non-calcareous throughout.

AGRICULTURAL LAND CLASSIFICATION

21. The details of the classification of the site are shown on the attached ALC map and the area statistics of each grade are given in Table 1, page 1.

22. The location of the auger borings and pit is shown on the attached sample location map.

Grade 2

23. The whole site has been mapped as grade 2. The combination of very slightly stony coarse loamy over sandy profiles and the prevailing climate result in the land being limited by slight droughtiness. This excludes the land from grade 1.

Pamela Abbott
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SOURCES OF REFERENCE

British Geological Survey (1990) *Sheet No.162, Great Yarmouth (Quarternary and Pre-Quarternary Geology).*
BGS: London.

Met. Office (1989) *Climatological Data for Agricultural Land Classification.*
Met. Office: Bracknell.

Ministry of Agriculture, Fisheries and Food (1988) *Agricultural Land Classification of England and Wales: Revised guidelines and criteria for grading the quality of agricultural land.* MAFF: London.

Soil Survey of England and Wales (1983) *Sheet 4, Soils of Eastern England.*
SSEW: Harpenden.

Soil Survey of England and Wales (1984) *Soils and their Use in South East England*
SSEW: Harpenden

Soil Survey of England and Wales (1973) *Soils of Norfolk*
SSEW: Harpenden

APPENDIX I

DESCRIPTIONS OF THE GRADES AND SUBGRADES

Grade 1: Excellent Quality Agricultural Land

Land with no or very minor limitations to agricultural use. A very wide range of agricultural and horticultural crops can be grown and commonly includes top fruit, soft fruit, salad crops and winter harvested vegetables. Yields are high and less variable than on land of lower quality.

Grade 2: Very Good Quality Agricultural Land

Land with minor limitations which affect crop yield, cultivations or harvesting. A wide range of agricultural or horticultural crops can usually be grown but on some land of this grade there may be reduced flexibility due to difficulties with the production of the more demanding crops such as winter harvested vegetables and arable root crops. The level of yield is generally high but may be lower or more variable than Grade 1 land.

Grade 3: Good to Moderate Quality Land

Land with moderate limitations which affect the choice of crops, the timing and type of cultivation, harvesting or the level of yield. When more demanding crops are grown, yields are generally lower or more variable than on land in Grades 1 and 2.

Subgrade 3a: Good Quality Agricultural Land

Land capable of consistently producing moderate to high yields of a narrow range of arable crops, especially cereals, or moderate yields of a wide range of crops including cereals, grass, oilseed rape, potatoes, sugar beet and the less demanding horticultural crops.

Subgrade 3b: Moderate Quality Agricultural Land

Land capable of producing moderate yields of a narrow range of crops, principally cereals and grass, or lower yields of a wider range of crops or high yields of grass which can be grazed or harvested over most of the year.

Grade 4: Poor Quality Agricultural Land

Land with severe limitations which significantly restrict the range of crops and/or the level of yields. It is mainly suited to grass with occasional arable crops (e.g. cereals and forage crops) the yields of which are variable. In moist climates, yields of grass may be moderate to high but there may be difficulties in utilisation. The grade also includes very droughty arable land.

Grade 5: Very Poor Quality Agricultural Land

Land with severe limitations which restrict use to permanent pasture or rough grazing, except for occasional pioneer forage crops.