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SALISBURY LOCAL PLAN: SITE 16 ERSKINE BARRACKS, WILTON
AGRICULTURAL LAND CLASSIFICATION
Report of survey

1. INTRODUCTION

Four hectares of land near Erskine Barracks, Wilton were graded under the Agricultural Land Classification (ALC) System in April 1992. The survey was carried out for MAFF as part of its statutory role in connection with the Salisbury Local Plan.

The fieldwork was carried out by ADAS's Resource Planning Team (Wessex Region) at a scale of 1:10,000 (approximately one sample point every hectare). The information is correct at the scale shown but any enlargement would be misleading. This survey supercedes the previous survey of this area at 1" being at a more detailed level and carried out under the Revised Guidelines and Criteria for grading the quality of agricultural land (MAFF 1989). A total of 4 borings and 1 soil pit were examined.

The ALC provides a framework for classifying land according to the extent to which its physical or chemical characteristics impose long-term limitations on agricultural use. The grading takes account of the top 120cm of the soil profile. A description of the grades used in the ALC System can be found in the appendix.

The distribution of ALC grades identified in the survey area is detailed below and on the accompanying map.

Table 1 Distribution of ALC grades: Erskine Barracks

Grade	Area (ha)	% of Survey Area	% of Agricultural Land
3A	4.0	100	100
TOTAL	4.0	100%	

2. CLIMATE

The grade of the land is determined by the most limiting factor present. The overall climate is considered first because it can have an overriding influence on restricting land to lower grades despite other favourable conditions.

To assess any overall climatic limitation, estimates of important climatic variables were obtained for the site by interpolation from the 5km grid Met Office/Maff Database (Met Office/MAFF/SSLRC 1989). The parameters used for assessing climate are accumulated temperature, (a measure of the relative warmth of a locality) and average annual

rainfall, (a measure of overall wetness). The results shown in Table 2 reveal that there is no overall climatic limitation across the survey area. No local climatic factors were observed.

Climatic data on Field Capacity Days (FCD) and Moisture Deficits for wheat (MDW) and potatoes (MDP) are also shown. This data is used in assessing the soil wetness and droughtiness limitations referred to in Section 5.

Table 2 Climatic Interpolations: Erskine Barracks

Grid Reference	SU 103 319
Height (m)	75
Accumulated Temperature (days)	1470
Average Annual Rainfall (mm)	821
Overall Climatic Grade	1
Field Capacity (Days)	182
Moisture Deficit, Wheat (mm)	104
Potatoes (mm)	95

3. RELIEF

The survey area gently slopes to the south west. The difference in height is only 5m with maximum height of 75m.

4. GEOLOGY AND SOILS

The majority of the survey area is underlain by valley gravels with a small part of the southern edge underlain by upper chalk.

The top soils in the survey area are medium clay loams. The close proximity of the chalk and the underlying river gravels have made the soils stoney and calcarious. The subsoils are heavier becoming clays and heavy clay loams. The soils are free draining. However the stoney nature of the soils and the high moisture deficits for the area mean that water available for crop growth is restricted.

5. AGRICULTURAL LAND CLASSIFICATION

The distribution of ALC grades identified in the survey area is detailed in Section 1 and shown on the accompanying ALC map. The information is correct at the scale shown but any enlargement would be misleading.

Subgrade 3A

The whole of the survey area has been graded as subgrade 3A. Whilst there is no overall climatic limitation for the survey area the balance between rainfall and potential

evapotranspiration known as the moisture deficit is relatively high as shown in Table 2. The soils in the survey area have stone contents rising from 10% flint in the topsoil to 30% in the subsoil horizons. These stone contents reduce the available water for crops within the soil. The combination of these factors creates a droughtiness limitation which limits the versalility of the soil such that it cannot be graded higher than subgrade 3A.

PIT 1 LEY SLOPE 3
MCL 0-26 10YR32 CALC 10% FLINT (8% >2CM)
C 26-60 10YR54 CALC 30% FLINT MODERATE STRUCTURE
C 60-75+ 75YR46 CALC 30% FLINT MODERATE STRUCTURE
WETNESS CLASS I WETNESS GRADE 2
MB WHEAT -20 MB POTATOES -2
DROUGHT GRADE 3A

OVERALL ALC GRADE 3A

DESCRIPTION OF THE GRADES AND SUB-GRADES

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 include 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 and horticultural crops can usually be grown but on some land in the 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.

Grade 3 - good to moderate quality agricultural land

Land with moderate limitations which affect the choice of crops, timing and type of cultivation, harvesting or the level of yield. Where 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 an 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 level of yields. It is mainly suited to grass with occasional arable crops (eg 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 very severe limitations which restrict use to permanent pasture or rough grazing, except for occasional pioneer forage crops.

Descriptions of other land categories used on ALC maps

Urban

Built-up or 'hard' uses with relatively little potential for a return to agriculture including: housing, industry, commerce, education, transport, religious buildings, cemeteries. Also, hard-surfaced sports facilities, permanent caravan sites and vacant land; all types of derelict land, including mineral workings which are only likely to be reclaimed using derelict land grants.

Non-agricultural

'Soft' uses where most of the land could be returned relatively easily to agriculture, including: private parkland, public open spaces, sports fields, allotments and soft-surfaced areas on airports/airfields. Also active mineral workings and refuse tips where restoration conditions to 'soft' after-uses may apply.

Agricultural buildings

Includes the normal range of agricultural buildings as well as other relatively permanent structures such as glasshouses. Temporary structures (eg polythene tunnels erected for lambing) may be ignored.

Open water

Includes lakes, ponds and rivers as map scale permits.

Land not surveyed

Agricultural land which has not been surveyed.

Where the land use includes more than one of the above land cover types, eg buildings in large grounds, and where map scale permits, the cover types may be shown separately. Otherwise, the most extensive cover type will usually be shown.