

AGRICULTURAL LAND CLASSIFICATION REPORT ON LAND AT MANOR FARM, BRIDGHAM,
NORFOLK.

1. BACKGROUND

- 1.1 The land surveyed, which is subject to a proposal for landfill tipping, consists of 2 parcels, a western block (10.8 hectares) centred on grid reference TL959867 and an eastern block (38.7 hectares) centred on grid reference TL976868.
- 1.2 MAFF carried out an Agricultural Land Classification of both blocks in July 1991. A detailed network of soil borings was carried out using a Dutch soil auger and in addition several pits were dug to provide additional information on soil characteristics.
- 1.3 At the time of survey the eastern parcel was partly used for an outdoor pig enterprise and was partly in arable use (wheat). The western parcel was entirely arable (potatoes and sugar beet).

2. SITE PHYSICAL CHARACTERISTICS

Climate

- 2.1 Climatic data for the area was obtained from the published agricultural data set (Met. Office 1989). This indicates an average annual rainfall of approximately 625mm (24.6"). The field capacity day value for the site is 123mm and moisture deficits are 112mm for wheat and 105mm for potatoes (the rainfall and moisture deficits quoted are mean values for the 2 blocks).
- 2.2 These climatic characteristics do not impose any climatic limitation on the ALC grading of the 2 parcels.

Altitude and Relief

- 2.3 The 2 parcels vary in altitude between approximately 30 and 40m above Ordnance Datum. Slopes on both areas are very gentle. Neither gradient or altitude constitute limitations to ALC grade.

Soils.

- 2.4 Soils on the eastern parcel consist primarily of a very slightly stony sandy or sometimes coarse loamy topsoil overlying a calcareous clay loam/sandy clay loam subsoil with inclusions of sandier material. This subsoil was assessed as moderately stony, the stones consisting primarily of chalk with some flints. All profiles were assessed as well drained (Wetness Class 1).
- 2.5 Soils on the western parcel are similar but somewhat loamier than those to the east, probably influenced by the presence of a tongue of boulder clay extending from the west into the western block. Topsoils are predominantly very slightly stony, sandy loam or a sandy clay loam. Subsoils are very variable, being mainly clay loam or clay but with significant inclusions of sandy or coarse, loamy material. Subsoil stone content (chalk and flint) is somewhat lower than on the eastern parcel (predominantly slightly stony). Profiles on the western parcel are also assessed as well drained (Wetness Class ~~1~~).

3. AGRICULTURAL LAND CLASSIFICATION

- 3.1 The predominant limitation on both parcels is droughtiness risk. Although some crops on both blocks are irrigated, the quantity of water available for irrigation is insufficient to affect the ALC grading of the site.
- 3.2 The eastern parcel is graded predominantly 3b, being subject to a moderately high risk of droughtiness due to the light textured topsoil and the relatively high subsoil stone content. A small

area of this block where a loamier topsoil was observed (well bodied sandy loam or sandy clay loam) has been graded 3a.

- 3.3 The western parcel is graded predominantly 3a. The soils in this area can have greater moisture reserves than the lighter profiles characterising the eastern parcel due to the presence of better bodied topsoils and reduced subsoil stone content. A small area at the western end of the block where droughtier sandy subsoils were encountered is graded 3b.

RESOURCE PLANNING GROUP
CAMBRIDGE RO
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GEOLOGICAL SURVEY OF ENGLAND AND WALES. Unpublished 1:63,660 drift geology map.

MAFF 1988. Agricultural Land Classification of England and Wales (Revised Guidelines and Criteria for grading the quality of agricultural land).

METEOROLOGICAL OFFICE 1989. Climate data extracted from the published agricultural climatic data set.

SOIL SURVEY OF ENGLAND AND WALES. 1984 Bulletin 13, Soils and their Use in eastern England.