

**AGRICULTURAL LAND CLASSIFICATION
AND SOIL PHYSICAL CHARACTERISTICS**

Report for Prettywood , Heywood

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AGRICULTURAL LAND CLASSIFICATION AND SOIL PHYSICAL CHARACTERISTICS REPORT FOR PRETTYWOOD, HEYWOOD

1. SUMMARY

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

Grade/Subgrade	Ha	% of the site
Grade 4	6.6	96%
Other land:		
Urban	0.3	4%

- 1.2 The main limitation to the agricultural use of land in Grade 4 is soil wetness.

2. INTRODUCTION

- 2.1 The site was surveyed by the Resource Planning Team in February 1994. An Agricultural Land Classification Survey was undertaken according to the guidelines laid down in the 'Agricultural Land Classification of England and Wales - Revised Guidelines and Criteria for Grading the Quality of Agricultural Land' (MAFF 1988).
- 2.2 The 6.9ha site is situated to the west of Heywood. The land immediately to the north and west of the site is predominantly in urban use (as landfill), land to the south and east is in agricultural use.
- 2.3 The survey was requested by MAFF in connection with a minerals development proposal for a landfill site.
- 2.4 At MAFF Land Use Planning Unit's request this was a detailed survey at 1:5,000 with a minimum auger boring density of at least 1 per hectare. 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 site was under grass.

3. CLIMATE

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

Average Annual Rainfall	1108 mm
Accumulated Temperature above 0°C January to June	1325 day °C

X 3.2 There is no overall climatic limitation on the site. X

Typing error, it has been recognised throughout this survey that the site is climatically limited to Subgrade 3a

3.3 Other relevant data for classifying land include:

Field Capacity Days	252 days
Moisture Deficit, wheat	61 mm
Moisture Deficit, potatoes	41 mm

4. SITE

4.1 Three site factors of gradient, micro-relief and flooding are considered when classifying land.

4.2 These factors do not impose any limitations on the agricultural use of the land.

5. GEOLOGY AND SOILS

5.1 The solid geology of the area is comprised of Lower Coal Measures - British Geological Survey, sheet 85 Manchester. This is overlain by deposits of Quaternary boulder clay and peat.

5.2 The underlying geology influences the soils which either have an organic clay loam texture in the north west of the site or an organic/peaty and sandy clay loam texture to the south.

6. AGRICULTURAL LAND CLASSIFICATION

6.1 Grade 4 - occupies 6.6ha (96%) of the survey area and is found over the majority of the site. The soils within this grade are of three distinct types.

6.1.1 Firstly there are the soils which typically have an organic sandy loam topsoil texture over sandy peat and/or peat to depth with few or no stones within the profile.

6.1.2 Secondly there are the soils which have an organic sandy loam topsoil texture over sandy clay loam to depth with few or no stones within the profile.

6.1.3 Thirdly there are the soils which have an organic clay loam topsoil over clay to depth with few or no stones within the profile.

6.1.4 When the organic content and gleying characteristics for these soils are examined in conjunction with the climatic data for this site, it can be concluded that these soils are of Wetness Class IV.

6.1.5 The main limitation to the agricultural use of this land is soil wetness.

6.6 Summary of Agricultural Land Classification Grades

Grade/Subgrade	Area in Hectares	% of Survey area	% of Agricultural land
4	6.6	96	100
Other land: Urban	0.3	4	-
Totals	6.9	100.0	100.0

7. SOIL UNITS

Soils have been classed into two soil units, (with unit 1 being further subdivided into 1A and 1B) reflecting differences in their soil textural characteristics. Each individual unit identifies soils with similar handling and storage needs.

7.1 Unit 1A and 1B

7.1.1 This is mapped mainly in the centre and south of the site and accounts for 6.1ha and 88 % of the area. The topsoils of Unit 1A and 1B are typically 25-30cm deep and have a black (75YR 2/0) or very dark grey (10 YR 3/1) organic medium sandy loam texture.

7.1.2 Below this topsoil the subsoil texture for Unit 1A is of a light brownish grey (10 YR 6/2) to greyish brown (75YR 5/2) sandy clay loam. Many strong brown (75 YR 5/6 to 5/8) mottles occur in most profiles. Stone content throughout the profile is less than 5%.

7.1.3 Below the topsoil the subsoil texture for Unit 1B is of a sandy peat texture, black (75YR 2/0) with occasional lenses of light grey sand (75YR 7.2) or grey sandy clay loam (10YR 5/1), with few or no stones.

7.1.4 A typical profile for soil unit 1A is given below:

0-25cm 10YR3/1 Organic medium sandy loam, moderately well developed medium granular friable consistence, few rounded hard stones and common roots.

25-70 cm 7.5YR6/2 Sandy clay loam, moderately well developed coarse prismatic firm consistence, porous, no stones and few roots. Many mottles (75YR 5/6).

70-120cm 75YR 6/2 Sandy clay loam, moderately well developed coarse subangular blocky, firm consistence, low porosity, no stones and no roots. Many mottles (75YR 5/6)

7.1.5 A typical profile for soil unit 1B is given below:

0-29cm 75YR 2/0 Organic medium sandy loam, moderately well developed fine granular, friable consistence, few rounded hard stones and common roots.

29-120cm 75YR2/0 Sandy peat moderately well developed medium subangular blocky, friable consistence, porous, no stone.

7.2 Unit 2

7.2.1 This unit is mapped in the north west of the site accounting for 0.8ha and 12% of the area. Topsoils are typically 25cm deep and have a very dark grey (10YR 3/1) organic medium clay loam overlying 95cm of greyish brown (10 YR 5/2) or grey (10YR 5/1) clay with common strong brown (75 YR 5/6) mottles.

7.2.2 A typical profile for this soil unit type is given below:

0-25cm 10YR 3/1 Organic medium clay loams, moderately well developed subangular blocky, friable, consistence, with few rounded hard stones.

25-120cm 10YR 5/1 Clay, moderately well developed very coarse, prismatic, very firm consistence, low porosity, no stones, few roots, common mottles (7.5YR 5/8)

8. SUMMARY

Of the site 96% is classified Grade 4.

Two soil units are identified with unit 1 covering 88% and unit 2 12% of the site.

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