

**AGRICULTURAL LAND CLASSIFICATION
CHESHIRE MINERALS SUBJECT PLAN
SITE 8: (SILICA SAND)**

**V P Redfern
Resource Planning Team
ADAS Statutory Group
WOLVERHAMPTON**

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**AGRICULTURAL LAND CLASSIFICATION REPORT FOR
CHESHIRE MINERALS SUBJECT PLAN
SITE 8: (SILICA SAND)**

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 site
2	35.4	89
3a	3.0	7.5
Other land	1.4	3.5

- 1.2 The main limitation to the agricultural use of land is soil droughtiness.

2 INTRODUCTION

- 2.1 The site was surveyed by the Resource Planning Team in December 1995 and January 1996. 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 39.8 ha site is situated near Siddington to the south of Chelford, Cheshire. The land immediately to the north, south and east of the site is predominantly in agricultural use. The land immediately to the west is occupied by a large sand and gravel quarry.
- 2.3 The survey was requested by MAFF in connection with the Cheshire Minerals Subject Plan.
- 2.4 At MAFF Land Use Planning Unit's request this was a detailed grid survey at 1:10000 with a minimum auger boring density of 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 the survey the site was under permanent grass.
- 2.6 It was observed at the time of the survey that the sides of the adjacent quarry had been left at an angle too steep to allow any possible further return to agricultural use, and that in places slumping of material had occurred. This has left scars of exposed material vulnerable to erosion.

3 CLIMATE

3.1 The following interpolated data are relevant for the site (SJ 832 715) :

Alt. 82m

Average Annual Rainfall (mm)	800	<i>800</i>
Accumulated Temperature above 0°C January to June (day °C)	1364	<i>1363</i>

3.2 There is no overall climatic limitation on the site.

3.3 Other relevant data for classifying land include:

Field Capacity Days (days)	197	<i>197</i>
Moisture Deficit Wheat (mm)	85	<i>86</i>
Moisture Deficit Potatoes (mm)	71	<i>71</i>

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 Triassic Lower Keuper Saliferous Beds - British Geological Survey Sheet 110 Macclesfield 1 Inch. This is overlain by deposits of fluvio-glacial sand and gravel.

5.2 The underlying geology influences the soils which have a predominantly sandy texture.

6 AGRICULTURAL LAND CLASSIFICATION

6.1 Grade 2 - occupies 35.4 ha (89%) of the survey area.

6.1.1 These soils typically have a sandy loam or sandy clay loam texture overlying loamy sand and sand to depth, with few or no stones within the profile. The moisture balance places these soils in Grade 2.

6.1.2 The main limitation to the agricultural use of this land is soil droughtiness.

6.2 Subgrade 3a - occupies 3.0 ha (7.5%) of the survey area.

6.2.1 The soil has a loamy sand texture over sand to depth, with few to common stones within the profile. The moisture balance places these soils into Subgrade 3a.

6.2.2 The main limitation to the agricultural use of this land is soil droughtiness.

6.3 Other land on the site comprises part of an existing sand and gravel quarry which occupies 1.4 ha (3.5%) of the site.

6.4 SUMMARY OF AGRICULTURAL LAND CLASSIFICATION GRADES

Grade/Sub-grade	Area in Hectares	% of Survey Area	% of Agricultural Land
2	35.4	89.0	92.2
3a	3.0	7.5	7.8
Other land	1.4	3.5	
Totals	39.8	100.0	100.0

CESHIRE MINERALS, CHELFORD (SITE 8)

The soils on the site consist predominantly of sandy loam and sandy clay loam textures over loamy sand and sand. This profile typically has a moisture balance which puts the soils into ALC Grade 2. However within this Grade there is variability within the soils, leading to variability of the Grade; this is particularly so in the northern most field, near Piggotts Hill and in the south between Whisterfield House and Pear Tree Cottage. In the northern part of the site the four borings were of Grade 1 quality, however supplementary borings showed the soils to be of varied textures and depths, hence the area was mapped as Grade 2. In the south of the site a soil pit was described as Subgrade 3a, however borings in the area were variable and a continuous area of Subgrade 3a could not be mapped.