MAFF Ministry of Agriculture Fisheries and Food

# AGRICULTURAL LAND CLASSIFICATION
SOUTH FERRIBY CEMENT WORKS
KILN DUST CONTAINMENT
HUMBERSIDE
FEBRUARY 1996

ADAS
Leeds Statutory Group

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# SUMMARY

A detailed and semi-detailed survey of 80.8 ha of land at South Ferriby was carried out in February 1996.

All agricultural land is presently used for arable crops and set aside. 30.8 ha are currently in non-agricultural use containing open water and industrial uses.

Soils on the site are derived from thick deposits of estuarine alluvium. Topsoils are fine loamy or clayey over similar textured slowly permeable subsoils. Profiles are typically non-calcareous and Soil Wetness Class III or IV.

50.0 ha (all agricultural land) are classified as Subgrade 3b. Soil wetness and workability limitations restrict the ALC grade.

Remaining 30.8 ha are classed as other non-agricultural land.

CONTENTS



MAP

# AGRICULTURAL LAND CLASSIFICATION REPORT ON LAND AT SOUTH FERRIBY CEMENT WORKS

## 1. INTRODUCTION AND SITE CHARACTERISTICS

### 1.1 Location and Survey Methods

80.8 ha of land at South Ferriby were the subject of a detailed and semi-detailed Agricultural Land Classification (ALC) survey in February 1996. The site occupies land immediately west of the existing cement works and south of the A1077 in an area known as Winteringham Ings. Land proposed for clay extraction and kiln dust disposal was the subject of detailed survey work - one boring per hectare,with remaining land covered by an IDO subject to a semi-detailed survey - one boring per 2 ha.

Soils were examined by hand auger borings at locations predetermined by the OS National Grid. Supplementary borings were used to check upon and refine grade boundaries. One soil profile pit was dug to examine representative soils in greater detail. Land quality was assessed using the methods described in "Agricultural Land Classification of England and Wales : *Revised guidelines and criteria for grading the quality of agricultural land*" MAFF (1988).

### 1.2 Land Use and Relief

The agricultural land surveyed is level at an altitude of 2m AOD. It is all currently used for arable crops or set aside.

Remaining non-agricultural land is mostly used for industrial purposes or open water.

### 1.3 Climate

| | |
|---|---|
| Grid Reference | : SE 965 205 |
| Altitude (m) | : 2 |
| Accumulated Temperature above 0°C (January - June) | 1406 day °C |
| Average Annual Rainfall (mm) | : 596 |
| Climatic Grade | : 1 |
| Field Capacity Days | : 132 |
| Moisture Deficit (mm) Wheat | : 113 |
| Moisture Deficit (mm) Potatoes | : 107 |

1.4 Geology, Soils and Drainage

All soils on the site are derived from thick deposits of clayey estuarine alluvium. Solid Jurassic deposits do not outcrop within a metre of the surface on the site.

Topsoils are typically non-calcareous heavy clay loam, heavy silty clay loam, clay or silty clay over similar textured, gleyed, slowly permeable subsoils. All profiles are stoneless. Soils are typically Wetness Class III or IV.

These soils correspond to the Wallasea I Association as mapped by the Soil Survey and Land Research Centre.

## 2. AGRICULTURAL LAND CLASSIFICATION

The ALC grades occurring on the part of the site proposed for clay extraction (outlined in brown on attached ALC map) are as follows:

| Grade/Subgrade | Hectares | % of Total Area |
|---|---|---|
| 1 | | |
| 2 | | |
| 3a | | |
| 3b | 15.6 | 100 |
| 4 | | |
| 5 | | |
| (Sub total) | (15.6) | (100) |
| Other Land | | |
| **TOTAL** | **15.6** | **100** |

The ALC grades occurring on the part of the site covered by the present planning application (outlined in red on the attached ALC map) are as follows:

| Grade/Subgrade | Hectares | % of Total Area |
|---|---|---|
| 1 | | |
| 2 | | |
| 3a | | |
| 3b | 2.8 | 13 |
| 4 | | |
| 5 | | |
| (Sub total) | (2.8) | (13) |
| Other Land | 18.4 | 87 |
| **TOTAL** | **21.2** | **100** |

The ALC grades occurring on the part of the site covered by the existing IDO (outlined in black on the attached ALC map) are as follows:

| Grade/Subgrade | Hectares | % of Total Area |
|---|---|---|
| 1 | | |
| 2 | | |
| 3a | | |
| 3b | 50.0 | 62 |
| 4 | | |
| 5 | | |
| (Sub total) | (50.0) | (62) |
| Other Land | 30.8 | 38 |
| **TOTAL** | **80.8** | **100** |

## 2.1 Subgrade 3b

All agricultural land surveyed was classified as Subgrade 3b. Topsoils were typically heavy textured - heavy clay loam, heavy silty clay loam, clay or silty clay over similar textured slowly permeable subsoils. Topsoils and subsoils were both non-calcareous and stoneless. Profiles were typically Soil Wetness Class III or IV.

The ALC grade of this land is limited by soil wetness and workability limitations.

## 2.2 Other Land

This includes land presently used for industrial purposes and open water.

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MAP