# AGRICULTURAL LAND CLASSIFICATION

## FLAXBY MOOR, NORTH YORKSHIRE

## PROPOSED RELOCATION OF ENGINEERING WORKS

ADAS
LEEDS REGIONAL OFFICE

FEBRUARY 1989
REF 2FS ~~3548.12.88~~
4281 14/89

Lds.alc4.Armstrong

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**AGRICULTURAL LAND CLASSIFICATION REPORT ON THE PROPOSED DEVELOPMENT AT FLAXBY MOOR, FLAXBY**

**Introduction**

The site is located at Grid Reference SE 403565 about ½ mile south of the A59 York-Harrogate road. The northern and eastern boundaries consist of woodland and the south western edge adjoins the York to Harrogate railway. Flaxby Moor Farm lies close to the northern edge of the site. The proposed development covers a total area of 14.3 ha (35.3 acres) of which 2.4 ha (6.0 acres) are in woodland or other non agricultural use. The area at present under cultivation amounts to approximately 11.9 ha (29.4 acres) that is about 83% of the site.

ALC Survey work was carried out in March 1988. Soils were examined by hand auger borings to a depth of 1 m, at points predetermined by the National Grid, at a density of two borings per hectare. Additional borings were made where necessary to check on soil variability and to refine grade boundaries.

Land quality assessment was made using the revised guidelines published by MAFF in 1988.

**Climate**

Mean annual rainfall in the area is approximately 670 mm (26.3 in). Accumulated temperature (above $0^0$C) between January and June is $1371^o$ C and the field capacity period for the district is about 161 days each year. There are thus no overall climatic limitations on ALC Grade. Summer soil moisture deficits in the area, however, are large (wheat 102 mm, potatoes 92 mm) and this will result in slight droughtiness limitations on light textured soils which have a low available water capacity.

**Relief**

The site is level to very slightly undulating at an altitude of about 30 m (98 ft) aod.

**Geology, Soils and Drainage**

Soils over much of the site are formed in post glacial sand which forms a thin and patchy cover over the underlying glacial clays. In the sandy areas topsoils are of sandy loam or loamy sand over loamy sand subsoils. In places where the sand cover is thin topsoils and upper subsoils are of sandy loam or loamy sand over a lower subsoil in the underlying clay. Heavier soils are restricted to a few small slightly lower areas in the north western part of the site and near the farm where the glacial clay occurs close to the surface. In these areas clay loam topsoils of about 25 cm thickness occur over heavy clay subsoils. The sandy soils are generally in soil wetness class I, but can be poorly drained in hollows. The heavy soils are usually within soil wetness class IV. Much of the water standing on the surface in early March 1988 results from subsurface compaction brought about by the unavoidable harvesting of potatoes in wet conditions the previous autumn. On the lighter soils, summer droughtiness could be a problem in some years. If this land were to remain in agricultural use, irrigation would be advisable for consistent yields of crops such as potatoes.

**Land Use**

The open land adjoining the railway is all in arable use except for one small field at the north western corner which is not cultivated.

**Agricultural Land Classification**

Subgrade 3a (11.0 hectares, 27.2 acres)

Soils consist mainly of sandy loam or loamy sand topsoils about 30 cm in thickness over similar but mottled subsoils. These soils are in Wetness Class I. In a few places there is also a lower subsoil of heavy clay, usually below about 50-60 cm depth making these profiles Wetness Class III. Near the farm some areas of medium clay loam topsoil over clayey subsoils are also included within the subgrade. The main limitation on this land is summer droughtiness and on the heavier soils winter wetness. It is placed within subgrade 3a for these reasons.

Subgrade 3b (0.9 ha, 2.2 acres)

This subgrade is restricted to three separate small areas. Two of these, near the north western end of the site, consist of heavy clay loam topsoils over heavy clay subsoils. Heavy soil combined with soil wetness are the factors limiting these areas to subgrade 3b. A third small area towards the southern end of the site contains lighter soil but occurs within a depression subject to waterlogging.

Non Agricultural (2.0 ha/4.9 acres)

This comprises woodland and land not currently used for farming.

Urban Farm Buildings (0.4 ha/1.0 acres).

Resource Planning Group
February 1989