4/91

LAND CLASSIFICATION NOTES FOR NUNEATON AND BEDWORTH LOCAL PLAN - LAND NORTH OF NUNEATON

INTRODUCTION

The survey area of 568 hectares lies north of Nuneaton extending outwards from the existing urban area to the district and county boundaries. The eastern boundary follows the Harrow Brook whilst the western district boundary is composed of field boundaries. The Warwickshire/Leicestershire county boundary runs parallel to and just north of the A5 and forms the northern boundary. Railway lines form the south-west and south-east boundaries.

The area is level or gently undulating, the lowest area at about 80 metres, being in the River Anker valley which flows through the south-west corner of the area. The land rises gradually to the north and east reaching a high point of 97 metres near Whitehouse Farm, though most of the land adjacent to the A5 is at about 95 metres altitude. Frequent winter flooding of short duration in the Anker valley downstream from Sandon Park is the only site limitation to the agricultural use of the land within the survey area.

The area receives an average annual rainfall (AAR) of about 678 millimetres and the accumulated temperature above $0^{\circ}C$ (January to June) is 1380 making the area Grade 1 for climate.

The soils are derived from glacial till and drift, which in the north-east corner becomes slightly calcareous at depth. Over most of the area the glacial drift is thin and the underlying reddish Keuper Marl occurs within auger depth. Most of the soils have a medium clay loam or more rarely heavy clay loam or clay topsoil overlying clay within 45 cms of the surface. Most soils suffer from soil wetness which limits workability and trafficability and imposes restrictions on the flexibility of cropping and the timing of agricultural operations. There are localised patches of sandy material, most particularly associated with the terraces of the River Anker in the south-west corner. These sandy soils are

slightly stoney and gravelly at depth but are better drained and are more easily worked and generally have a higher ALC grade than other soils in the survey area.

At the time of survey (spring/summer 1991) the area was mainly under grass and cereals with some oilseed rape and potatoes.

AGRICULTURAL LAND CLASSIFICATION

Grade 2 land occupies 27.5 hectares and accounts for 4.9% of the survey area corresponding to soils of the Arrow soil series. The soils typically have a sandy loam topsoil with sandy loam or sandy clay loam upper subsoil occasionally with flinty gravels overlying clay or sandy clay within 100 cms of the surface. In places the drift is relatively unsorted and loamy sand and sandy clay loam lenses are common. The soils are slightly stoney, not exceeding 10% in the topsoil and rarely exceeding about 15% in the subsoil. Many of these sandy soils exhibit signs of gleying in the profile but most are wetness Class II or III at worst. Drought is the main limitation to these soils, though where the clay is within about 45 cms of the surface, soil wetness may be equally limiting. At the time of survey, much of this land was under grass and oilseed rape.

Sub grade 3a land occupies 60.0 hectares and accounts for 10.6% of the survey area. 3a land occurs as isolated islands across the area with the largest concentration in the south-west corner adjacent to the grade 2 land. The soils have medium sandy loam or sandy clay loam or much more rarely medium clay loam topsoils with a clay subsoil below about 40 cms. The soils are not as light textures as the grade 2 land but lighter than the sub grade 3b land. The soils generally fall into 2 distinct groups:

(1) Soils derived from river terrace deposits in the west having slightly stoney topsoils and sandy clay loam upper subsoils; or

(2) Soils on higher areas where very slightly stoney glacial till of sandy loam or medium clay loam texture overlays clay at about 40 cms depth.

In common with most of the survey area, this land was growing oilseed rape, winter cereals with limited amounts of grass at the time of survey.

Sub grade 3b land occupies 370 hectares and accounts for 65.2% of the area. The vast majority of the survey area consists of relatively uniform soils derived from reddish glacial till. The soils typically have a medium clay loam topsoil overlying clay within 25-40 cms of the surface. In places heavy clay loam and clay topsoils also occur. The soils are generally very slightly stoney in this topsoil becoming virtually stoneless within the clay subsoil. In the east of the area, south of Higham Grange Hospital some of the soils are slightly calcareous below about 60 cms depth.

Non agricultural land occupies 58.0 hectares and accounts for 10.2% of the area. Most of the non agricultural land is playing fields or recreation areas adjacent to the residential development.

Urban land occupies 45.5 hectares and accounts for 8% of the survey area. This is land mainly occupied by residential development within the survey area.

Not surveyed land occupies 4 hectares and accounts for 0.7% of the area. This is a small parcel of land to the east of the survey area just west of the A47 road. The land has poultry houses but is also used for storage of caravans.

SUMMARY TABLE

ALC GRADE	AREA (HECTARES)	% OF SURVEY AREA	% OF AGRICULTURAL LAND
2	27.5	4.9	6.0
3a	60.0	10.6	13.1
3b	370.0	65.2	80.9
Agricultural Buildings	2.5	0.4	
Non Agricultural	58.0	10.2	
Urban	45.5	8.0	
Not surveyed	4.0	0.7	