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TUNBRIDGE WELLS LOCAL PLAN

SITE 2 Land West of Farnham Lane
Langton Green Speldhurst
Kent

TUNBRIDGE WELLS LOCAL PLAN

SITE 7 - LAND WEST OF FARNHAM LANE, SPELDHURST

1 INTRODUCTION

- 1 1 In June 1992 an Agricultural Land Classification (ALC) Was carried out on 3 47 hectares of land at Langton Green Speldhurst Kent ADAS was commissioned by MAFF to determine the land quality affected by the proposal to include this site as part of the Tunbridge Wells Local Plan
- 1 2 The survey work was carried out by members of the Resource Planning Team within the Guildford Statutory Group The site was free surveyed a total 5 borings were described using MAFF s revised guidelines and criteria for grading the quality of agricultural land (MAFF 1988) The guidelines provide a framework for classifying land according to the extent to which its physical and chemical characteristics impose long term limitations on its agricultural use
- 1 3 The distribution of grades is shown on the attached ALC map The area and extent is given in the table below The map has been drawn at a scale of 1 5 000 and enlargement of this would be misleading

Distribution of Grades and Subgrades

<u>Grade</u>	<u>Area (ha)</u>	<u>% of total agricultural area</u>
1	1 60	53
2	0 32	11
3b	1 07	36
Total Agricultural Area	<u>2 99</u>	<u>100</u>
Urban	0 28	
Non Agricultural	0 20	
Total Area of Site	<u>3 47</u>	

- 1 4 Grades 1 2 and subgrade 3b have been mapped at this locality The higher quality land occurs towards the southern half of the site Grade 2 land is limited by minor droughtiness limitation due to soils becoming impenetrable over sandstone at shallow depths Grade 3b land is limited by slopes of between 7 - 11 or experience significant wetness problems as a result of shallow slowly permeable horizons

2 PHYSICAL FACTORS AFFECTING LAND QUALITY

Relief

- 2 1 The site is at an altitude of approximately 95 m A O D falling towards the north and north west Localised areas directly north of the derelict buildings were found to be limited in terms of land quality by gradients of between 7 and 11

Climate

- 2 2 Estimates of climatic variables were obtained for a representative location in the survey area by interpolation from a 5 km grid database (Met Office 1989)

Climatic Interpolation

Grid Reference	TQ 548 395
Altitude (m A O D)	95
Accumulated Temperature (days Jan-June)	1410
Average Annual Rainfall (mm)	802
Field Capacity Days	167
Moisture Deficit Wheat (mm)	101
Moisture Deficit Potatoes (mm)	92

- 2 3 Climatic factors alone place no limitation on agricultural land quality but do affect the interactive limitations between soil and climate namely soil wetness and droughtiness

Geology and Soils

- 2 4 British Geological Survey Sheet 303 Tunbridge Wells (1971) shows the site to be underlain by Cretaceous Tunbridge Wells Sand
- 2 5 Soil Survey of England and Wales Soils of Kent (1980) shows the site to comprise one mapping unit Soils of the Curtisden series are described as stagnogleyic brown earths (SSEW 1980) stoneless to slightly stony silt loam or silty clay loam over in-situ Tunbridge Wells Sand
- 2 6 Detailed soil examination indicates soils similar to those described by the Soil Survey of England and Wales

3 AGRICULTURAL LAND CLASSIFICATION

3 1 The ALC grading of the site is primarily determined by the interactions between climate and soil factors namely soil wetness and droughtiness

3 2 Grade 1

Land of this quality occurs towards the southern edge of the site Profiles typically comprise non calcareous silt loam topsoils over similar textures or medium silty clay loam Occasional profiles become impenetrable (to soil auger) due to soft sandstone below 76 cm Profiles are typically well drained wetness class I and have no droughtiness restriction

3 3 Grade 2

Land of this quality occurs towards the south western edge of the site Profiles are similar to those described in Section 3 2 but becoming impenetrable (to soil auger) due to soft sandstone at 55 cm Profiles are typically well drained wetness class I but are limited by minor droughtiness limitations as a result of relatively shallow depths of soil over soft sandstone

3 4 Grade 3b

Grade 3b land is mapped towards the north of the site and occurs in two situations

Directly north of the derelict building towards the middle of the site gradients of between 7 and 11 were measured using an optical reading clinometer As a result land can not be graded higher than 3b due to the steepness of the slopes and the associated trafficability problems with machinery

The remaining area of 3b land occurs towards the north west of the site Profiles typically comprise non-calcareous medium silty clay loam topsoils over gleyed and slowly permeable heavy silty clay loam and silty clay subsoils Profiles are poorly drained wetness class IV and are limited due to severe wetness restrictions

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Resource Planning Team
Guildford Statutory Group
ADAS

SOURCES OF REFERENCE

BRITISH GEOLOGICAL SURVEY (1971) Sheet 303 Tunbridge Wells

MAFF (1988) Agricultural Land Classification of England and Wales
Revised guidelines and criteria for grading the quality of agricultural
land

METEOROLOGICAL OFFICE (1989) Climatological datasets for Agricultural Land
Classification

SOIL SURVEY OF ENGLAND AND WALES (1980) Soils of Kent Bulletin 9

SOIL SURVEY OF ENGLAND AND WALES (1983) Sheet 6 Soils of South East
England

SAMPLE NO	GRID REF	ASPECT		WETNESS		WHEAT		POTS		M REL		EROSN	FROST	CHEM	ALC	COMMENTS
		USE	GRDNT	GLEYS	SPL CLASS	GRADE	AP	MB	AP	MB	DRT	FLOOD	EXP	DIST	LIMIT	
1	TQ55023957	GRS	N	048		1	1	127	26	130	38	2			DR	2
3	TQ54893956	GRS	SE	058		1	1	125	24	130	38	2			DR	2
4	TQ54773957	GRS		033	033	4	3B	000	0	000	0				WE	3B
4A	TQ54823957	GRS	N	035	035	4	3B	118	17	109	17	2			WE	3B
5	TQ54943954	GRS	E			1	1	157	56	142	50	1				1

SAMPLE	DEPTH	TEXTURE	COLOUR	-MOTTLES			PED		STONES			STRUCT/ CONSIST	SUBS			SPL	CALC
				COL	ABUN	CONT	COL	GLE	2	6	LITH		TOT	STR	POR		
1	0 26	z1	10YR42 00						0	0	0						
	26 48	z1	10YR54 00						0	0	0		M				
	48 65	z1	10YR64 00	10YR66 68 F			10YR82 83 Y		0	0	0		P				
	65 80	fsz1	10YR64 00	10YR68 00 F			10YR84 00 Y		0	0	0		P				Imp 80 soft sst
3	0 30	z1	10YR42 00						0	0	0						
	30 45	mzc1	10YR54 00						0	0	MSST 2		M				z1/mzc1 te t re
	45 58	mzc1	75YR54 56						0	0	0		P				
	58 76	fs1	75YR66 00		C		25Y 73 00 Y		0	0	0		P				Imp 76 soft sst
4	0 33	z1	10YR42 00						0	0	0						
	33 45	mzc1	10YR63 00	10YR68 00 C			10YR73 00 Y		0	0	0		M		Y		
	45 50	mzc1	10YR63 00	10YR68 00 C			10YR73 00 Y		0	0	0		M		Y		Imp 50 msst
4A	0 35	mzc1	10YR42 00	10YR46 00 F					0	0	0						
	35 70	h c1	10YR42 00	10YR46 58 C				Y	0	0	0		P		Y		
	70 100	zc	05Y 71 00	75YR68 00 M				Y	0	0	0		P		Y		
5	0 36	z1	10YR42 00						0	0	0						
	36 48	z1	10YR54 00						0	0	MSST 2		M				
	48 100	z1	75YR54 56						0	0	0		P				z1 to depth