

SOUTH SOMERSET LOCAL PLAN

YEOVIL

AGRICULTURAL LAND CLASSIFICATION SURVEY

SUMMARY

The survey was carried out by ADAS on behalf of MAFF as part of its statutory role in the preparation of the South Somerset Local Plan. The fieldwork at Yeovil was completed in September 1995 at a scale of 1:10,000. Data on climate, soils, geology and from previous Agricultural Land Classification (ALC) Surveys was used and is presented in the report. The distribution of grades is shown on the accompanying ALC map at 1:20,000 and summarised below. Information is correct at this scale but could be misleading if enlarged.

Distribution of ALC grades: Yeovil

Grade	Area (ha)	% of Survey Area	% of Agricultural Land (113.7 ha)
1	13.4	7.1	11.8
2	35.1	18.6	30.9
3a	28.4	15.1	25.0
3b	33.3	17.7	29.3
4	3.5	1.9	3.1
Urban	22.4	11.9	0.0
Non Agricultural	5.1	2.7	0.0
Agricultural Buildings	0.3	0.2	0.0
Not Surveyed	46.9	24.9	0.0
TOTAL	188.4	100.0	100.0

77% of the agricultural land surveyed has been mapped as "best and most versatile". Most of the Grade 1 and 2 land consists of deep, well drained profiles with no or only minor limitation to their agricultural use. The areas of Subgrade 3a and 3b have moderate wetness limitations, except for the Subgrade 3b land on the steeper slopes along the northern edge of Yeovil which has moderate gradient limitations. The Grade 4 land has a severe gradient limitation. The block of land in the western part of the site was not surveyed because access was not granted. It is likely that at least part of the land is still in agricultural use and that some of it is "best and most versatile".

1. INTRODUCTION

An Agricultural Land Classification (ALC) Survey was carried out in September 1995 at Yeovil, Somerset on behalf of MAFF as part of its statutory role in the preparation of the South Somerset Local Plan. The fieldwork covering 188.4 ha of land was conducted by ADAS at a scale of 1:10,000 with approximately one boring per hectare of agricultural land. A total of 119 auger borings were examined and six soil profile pits used to assess subsoil conditions.

The published provisional one inch to the mile ALC map of this area (MAFF, 1974) shows the grade of the site at a reconnaissance scale. This shows the western block as mainly Grade 3, with an area of Grade 2 land running along Thorne Lane. The Grade 2 land continues east to Brinsmore where Grade 3 is mapped as far as Longcroft. The steep valley here is mapped as Grade 4. The rest of the site is mainly mapped as Grade 3 except for an area of Grade 4 land on the steep slopes to the south of Stone Farm, and areas of Grade 4 land near the school on Mudford Lane and on the lower ground in the eastern block. The land adjacent to the industrial estate and the River Yeo was mapped as predominantly urban.

The area was also surveyed in 1981 at a scale of 1:25,000. This mapped all of the eastern block as Subgrade 3b and all of the western block as being predominantly urban. The rest of the site was mapped as mainly Grade 2 and Subgrade 3a, with areas of Subgrade 3b on the steeper slopes.

This recent survey supersedes these maps having been carried out at a more detailed level and using the Revised Guidelines and Criteria for grading the quality of agricultural land (MAFF 1988). These guidelines provide a framework for classifying land according to the extent to which its physical or chemical characteristics impose long-term limitations on agricultural use. The grading takes account of the top 120 cm of the soil profile. A description of the grades used in the ALC system can be found in Appendix 2.

2. CLIMATE

The grade of the land is determined by the most limiting factor present. The overall climate is considered first because it can have an overriding influence on restricting land to a lower grade despite other favourable conditions.

Estimates of climatic variables were interpolated from the published agricultural climate dataset (Meteorological Office 1989). The parameters used for assessing overall climate are accumulated temperature, a measure of the relative warmth of a locality, and average annual rainfall, a measure of overall wetness. The results shown in Table 1 indicate there is no overall climatic limitation.

Table 1: Climatic Interpolations: Yeovil

Grid Reference	ST 531 171	ST 546 179	ST 558 178
Altitude (m)	95	82	100
Accumulated Temperature (day °)	1467	1481	1460
Average Annual Rainfall (mm)	811	796	816
Overall Climatic Grade	1	1	1
Field Capacity Days	173	171	174
Moisture deficit (mm):			
Wheat	100	102	99
Potatoes	91	94	90

Grid Reference	ST 567 182	ST 575 177	ST 580 175
Altitude (m)	72	62	23
Accumulated Temperature (day °)	1491	1503	1547
Average Annual Rainfall (mm)	792	791	763
Overall Climatic Grade	1	1	1
Field Capacity Days	170	170	166
Moisture deficit (mm):			
Wheat	103	104	110
Potatoes	98	97	105

Climatic data on Field Capacity Days (FCD) and Moisture Deficits for wheat and potatoes are shown. These data are used in assessing the soil wetness and droughtiness limitations referred to in later sections.

3. RELIEF AND LANDCOVER

The site covers land along the northern edge of Yeovil. The eastern block consists of land sloping gently down to the River Yeo from an altitude of 65 m Above Ordnance Datum (AOD) to 23 m AOD. There is a narrow, but steep break of slope with gradients greater than 7° on the edge of the flood plain. The western block of land in the survey is relatively flat apart from a shallow valley running between the factory on Larkhill Road and the school. The rest of the site runs along the top of the ridge facing north over the flood plain of the River Yeo. Here the altitude drops from 110 m to 70 m with local gradients of up to 18°. At the time of the survey the land was being used for cereal and maize cultivation, permanent pasture and silage. A small area of land was fallow and there was a small area under fruit cultivation.

4. GEOLOGY AND SOILS

The geology of the site is shown on the published 1:50,000 scale solid and drift geology map, sheet 312 (Institute of Geological Sciences, 1973). This shows that most of the site is underlain by Yeovil and Pennard Sands. There is a deposit of alluvium along the River Yeo on the eastern edge of the site and there are patches and bands of Junction Bed (limestone) occurring throughout the whole site.

The soils were mapped by the Soil Survey of England and Wales in 1983 at a reconnaissance scale of 1:250,000 and in 1987 at a scale of 1:25,000. These show the blocks of land to the east and west of Yeovil as unsurveyed. The rest of the site is mapped as mainly consisting of soils from the Yeld Series, (stoneless and eroded phases). They are described as being slightly mottled, stoneless medium silts over soft siltstone or very fine sandstone. The stoneless phase has slowly permeable subsoils and prominently mottled clay subsoils in places. In contrast the eroded phase soils tend to be well drained and is shallow, with the bedrock occurring at 30 cm to 60 cm depth. There are also areas of heavier soils with poor drainage that are shallow over limestone rubble from the Elmton, Bridport and Stanway (stoneless phase) series.

The soils found during the current survey were similar to those described by the Soil Survey. They were mainly deep, well drained sandy silt loams and silty clay loams over heavier textures at depth. Some shallow well drained profiles were found to coincide with the areas of limestone geology and there were patches of profiles with restricted drainage.

5. AGRICULTURAL LAND CLASSIFICATION

The distribution of ALC grades is shown in Table 2 and on the accompanying ALC map. This information could be misleading if shown at a larger scale.

Table 2: Distribution of ALC grades: Yeovil

Grade	Area (ha)	% of Survey Area	% of Agricultural Land (113.7 ha)
1	13.4	7.1	11.8
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Grade 1

The areas of Grade 1 land that have been mapped have no limitation to their agricultural use and consist of deep, well drained profiles which were assessed as Wetness Class I (see Appendix 3). They have medium sandy silt loam and medium clay loam topsoils over sandy silt loam and silty clay loam subsoils. All of the profiles have negligible stone contents while there is mottling at depth in some of the profiles.

Grade 2

Most of the Grade 2 mapping units have profiles which are similar to those in the Grade 1 area. They are deep medium silty clay loams and medium clay loams over silty loam subsoils and in places silty clays. The soils have a minor wetness limitation with gleying above 40 cm. The subsoils are too to be slowly permeable layers and the profiles were therefore assessed as Wetness Class II. The area of Grade 2 land to the north of the industrial estate in the eastern part of the site is very variable with the occasional profile having moderate wetness limitations.

Subgrade 3a

The land mapped as Subgrade 3a has a moderate wetness limitation. In these profiles the medium clay loam and medium silty clay loam topsoils overlie heavy silty clay loam and clay subsoils. They are gleyed above 40 cm and have slowly permeable layers starting above 74 cm. These profiles were therefore assessed as Wetness Class IV. Some of the mapping units are again variable in their land quality and there are small areas of better drained land within them.

Subgrade 3b

Most of the land mapped as Subgrade 3b in the northern block of land has a moderate limitation imposed by gradients of 8-11° which will limit the safe use of some agricultural machinery. The areas of Subgrade 3b on the flatter land and the narrow band of land in the eastern block, below the break of slope, have heavy and medium silty clay loam and clay loam topsoils over silty clay and clay subsoils. The profiles have a moderate wetness limitation and are gleyed above 40 cm and have slowly permeable layers starting above 45 cm. They were assessed as Wetness Class IV. Part of the Subgrade 3b mapping unit to the south of Brinsmore has been downgraded due to the restrictions imposed by its micro-relief on agricultural cultivations where the limestone bedrock has been quarried.

Grade 4

The small areas of land mapped as Grade 4 have a severe limitation to their agricultural use due to their steep gradients of 12-18°. This limits the range of agricultural machinery which can be safely used.

Other land

Land mapped as urban includes gardens, roads and hard-core tracks. The areas of non-agricultural land include scrub and woodland while agricultural buildings have been mapped as such.

Not Surveyed

The block of land at the western edge of the site was not surveyed owing to access not being granted. At the time of the survey part of the block had been developed and some of it was undergoing residential development. About 20 ha was in agricultural use. It is expected that at least part of this land would be "best and most versatile".

Resource Planning Team
Taunton Statutory Unit
October 1995

APPENDIX 1

REFERENCES

INSTITUTE OF GEOLOGICAL SCIENCES (1973) Solid and Drift Edition, Sheet 312, Yeovil, 1:50,000.

MAFF (1974) Agricultural Land Classification Map, Sheet 177, Provisional 1:63,360 scale.

MAFF (1988) Agricultural Land Classification of England and Wales (Revised Guidelines and Criteria for grading the quality of agricultural land), Alnwick.

METEOROLOGICAL OFFICE (1989) Climatological Data for Agricultural Land Classification.

SOIL SURVEY OF ENGLAND AND WALES (1983) Sheet 5, Soils of South West England, 1:250,000 scale.

SOIL SURVEY OF ENGLAND AND WALES (1987) Sheet ST51, Soils of the Yeovil Area, 1:25,000

APPENDIX 2

DESCRIPTION OF GRADES AND SUBGRADES

Grade 1 - excellent quality agricultural land

Land with no or very minor limitations to agricultural use. A very wide range of agricultural and horticultural crops can be grown and commonly include top fruit, soft fruit, salad crops and winter harvested vegetables. Yields are high and less variable than on land of lower quality.

Grade 2 - very good quality agricultural land

Land with minor limitations which affect crop yield, cultivations or harvesting. A wide range of agricultural and horticultural crops can usually be grown but on some land in the grade there may be reduced flexibility due to difficulties with the production of the more demanding crops such as winter harvested vegetables and arable root crops. The level of yield is generally high but may be lower or more variable than Grade 1.

Grade 3 - good to moderate quality agricultural land

Land with moderate limitations which affect the choice of crops, timing and type of cultivation, harvesting or the level of yield. Where more demanding crops are grown yields are generally lower or more variable than on land in Grades 1 and 2.

Subgrade 3a - good quality agricultural land

Land capable of consistently producing moderate to high yields of a narrow range of arable crops, especially cereals, or moderate yields of a wide range of crops including cereals, grass, oilseed rape, potatoes, sugar beet and the less demanding horticultural crops.

Subgrade 3b - moderate quality agricultural land

Land capable of producing moderate yields of a narrow range of crops, principally cereals and grass, or lower yields of a wider range of crops or high yields of grass which can be grazed or harvested over most of the year.

Grade 4 - poor quality agricultural land

Land with severe limitations which significantly restrict the range of crops and/or level of yields. It is mainly suited to grass with occasional arable crops (e.g. cereals and forage crops) the yields of which are variable. In most climates, yields of grass may be moderate to high but there may be difficulties in utilisation. The grade also includes very droughty arable land.

Grade 5 - very poor quality agricultural land

Land with very severe limitations which restrict use to permanent pasture or rough grazing, except for occasional pioneer forage crops.

Descriptions of other land categories used on ALC maps

Urban

Built-up or 'hard' uses with relatively little potential for a return to agriculture including: housing, industry, commerce, education, transport, religious buildings, cemeteries. Also, hard-surfaced sports facilities, permanent caravan sites and vacant land; all types of derelict land, including mineral workings which are only likely to be reclaimed using derelict land grants.

Non-agricultural

'Soft' uses where most of the land could be returned relatively easily to agriculture, including: private park land, public open spaces, sports fields, allotments and soft-surfaced areas on airports/airfields. Also active mineral workings and refuse tips where restoration conditions to 'soft' after-uses may apply.

Agricultural buildings

Includes the normal range of agricultural buildings as well as other relatively permanent structures such as glasshouses. Temporary structures (e.g. polythene tunnels erected for lambing) may be ignored.

Open water

Includes lakes, ponds and rivers as map scale permits.

Land not surveyed

Agricultural land which has not been surveyed.

Where the land use includes more than one of the above landcover types, e.g. buildings in large grounds, and where may be shown separately. Otherwise, the most extensive cover type will usually be shown.

Source: MAFF (1988) Agricultural Land Classification of England and Wales (Revised Guidelines and Criteria for Grading the Quality of Agricultural Land), Alnwick.

APPENDIX 3

DEFINITION OF SOIL WETNESS CLASSES

Wetness Class I

The soil profile is not wet within 70 cm depth for more than 30 days in most years.

Wetness Class II

The soil profile is wet within 70 cm depth for 31-90 days in most years or, if there is no slowly permeable layer within 80 cm depth, it is wet within 70 cm for more than 90 days, but not wet within 40 cm depth for more than 30 days in most years.

Wetness Class III

The soil profile is wet within 70 cm depth for 91-180 days in most years or, if there is no slowly permeable layer within 80 cm depth, it is wet within 70 cm for more than 180 days, but only wet within 40 cm depth for between 31 and 90 days in most years.

Wetness Class IV

The soil profile is wet within 70 cm depth for more than 180 days but not within 40 cm depth for more than 210 days in most years or, if there is no slowly permeable layer within 80 cm depth, it is wet within 40 cm depth for 91-210 days in most years.

Wetness Class V

The soil profile is wet within 40 cm depth for 211-335 days in most years.

Wetness Class VI

The soil profile is wet within 40 cm depth for more than 335 days in most years.

Notes: The number of days specified is not necessarily a continuous period. 'In most years' is defined as more than 10 out of 20 years.

Source: Hodgson, J M (in preparation), Soil Survey Field Handbook (revised edition).

SITE NAME		PROFILE NO.	SLOPE AND ASPECT	LAND USE	Av Rainfall: 796 mm	PARENT MATERIAL
Yeovil		Pit 1 (ASP 84)	2° SE	PLO	ATO: 1481 day °C	
JOB NO.		DATE	GRID REFERENCE	DESCRIBED BY	FC Days: 171	SOIL SAMPLE REFERENCES
48/95		2/10/95	ST 575 178	HLJ/PB	Climatic Grade: 1	
					Exposure Grade: -	

Horizon No.	Lowest Av. Depth (cm)	Texture	Matrix (Ped Face) Colours	Stoniness: Size, Type, and Field Method	Mottling Abundance, Contrast, Size and Colour	Mangan Concs	Structure: Ped Development Size and Shape	Consistence	Structural Condition	Pores (Fissures)	Roots: Abundance and Size	Calcium Carbonate Content	Horizon Boundary: Distinctness and form
1	33	MZCL	10YR54	None	None	None	-	-	-	-	CF	-	Abrupt Smooth
2	65	MZCL	10YR63	None	CDFOGM (10YR56) (10YR72)	None	WCSAB	Friable	Moderate	Good	FVF	-	Clear Smooth
3	90 +	ZL	25Y63	None	CDFGOM (25Y72) (10YR56)	None	WMSAB tending to WMP	Friable	Good	Poor	FVF	-	-

Profile Gleyed From: 33 cm

Depth to Slowly Permeable Horizon: No SPL

Wetness Class: II

Wetness Grade: 2

Available Water Wheat: 200 mm

Potatoes: 129 mm

Moisture Deficit Wheat: 102 mm

Potatoes: 94 mm

Moisture Balance Wheat: 98 mm

Potatoes: 35 mm

Droughtiness Grade: 1 (Calculated to 120 cm)

Final ALC Grade: 2

Main Limiting Factor(s): Wetness

Remarks:

SITE NAME		PROFILE NO.	SLOPE AND ASPECT	LAND USE	Av Rainfall: 796 mm		PARENT MATERIAL		
Yeovil		Pit 2 (ASP 147)	6° East	Ploughed	ATO: 1481 day °C		Pennard Sands		
JOB NO.		DATE	GRID REFERENCE	DESCRIBED BY	FC Days: 171		SOIL SAMPLE REFERENCES		
48/95		3/10/95	ST 578 173	PB/HLJ	Climatic Grade: 1				
					Exposure Grade: -				

Horizon No.	Lowest Av. Depth (cm)	Texture	Matrix (Ped Face) Colours	Stoniness: Size, Type, and Field Method	Mottling Abundance, Contrast, Size and Colour	Mangan Concs	Structure: Ped Development Size and Shape	Consistence	Structural Condition	Pores (Fissures)	Roots: Abundance and Size	Calcium Carbonate Content	Horizon Boundary: Distinctness and form
1	30	MCL	10YR42/52	0%	None	None	-	-	-	Good	MVF	-	Abrupt Smooth
2	70	MZCL	10YR54	0%	CFFG FFFO (10YR63,56)	None	WCSAB	Friable	Mod	Good	FVF	-	Gradual Smooth
3	110 +	FSZL	10YR54	0%	CFFG FFFO (10YR63,56)	None	WCAB	Friable	Good	Good	FVF	-	-

Profile Gleyed From: Not gleyed

Depth to Slowly Permeable Horizon: No SPL

Wetness Class: I

Wetness Grade: 1

Available Water Wheat: 191 mm
 Potatoes: 125 mm
 Moisture Deficit Wheat: 102 mm
 Potatoes: 94 mm
 Moisture Balance Wheat: 89 mm
 Potatoes: 31 mm
 Droughtiness Grade: 1 (Calculated to 120 cm)

Final ALC Grade: 1

Main Limiting Factor(s):

Remarks: Narrow horizon of mixed materials at btm to t/s.

SITE NAME Yeovil		PROFILE NO. Pit 3 (ASP 126)	SLOPE AND ASPECT 3° S	LAND USE PLO	Av Rainfall: 796 mm ATO: 1481 day °C FC Days: 171 Climatic Grade: 1 Exposure Grade: -	PARENT MATERIAL Yeovil Sands
JOB NO. 48/95		DATE 4/10/95	GRID REFERENCE ST 574 175	DESCRIBED BY HLJ/PB		SOIL SAMPLE REFERENCES

Horizon No.	Lowest Av. Depth (cm)	Texture	Matrix (Ped Face) Colours	Stoniness: Size, Type, and Field Method	Mottling Abundance, Contrast, Size and Colour	Mangan Concs	Structure: Ped Development Size and Shape	Consistence	Structural Condition	Pores (Fissures)	Roots: Abundance and Size	Calcium Carbonate Content	Horizon Boundary: Distinctness and form
1	25	MZCL	10YR54	None	None	None	-	-	-	-	CVF	-	Clear Smooth
2	65	MZCL	10YR64	None	None	None	MCSAB	Friable	Moderate	Good	FVF	-	Clear Wavy
3	80 +	HCL	25Y64	None	CDFOM (10YR56)	C	WCSAB	Firm	Moderate	Good	FVF	-	-

Profile Gleyed From: 65 cm
 Depth to Slowly Permeable Horizon: No SPL
 Wetness Class: I
 Wetness Grade: 1

Available Water Wheat: 160 mm
 Potatoes: 124 mm
 Moisture Deficit Wheat: 102 mm
 Potatoes: 94 mm
 Moisture Balance Wheat: 58 mm
 Potatoes: 30 mm
 Droughtiness Grade: 1 (Calculated to 120 cm)

Final ALC Grade: 1
 Main Limiting Factor(s):

Remarks: Augured to 120 cm

SITE NAME		PROFILE NO.	SLOPE AND ASPECT	LAND USE	Av Rainfall: 796 mm	PARENT MATERIAL	
Yeovil		Pit 4 (ASP 57)	4° East	Ploughed	ATO: 1481 day °C	Pennard Sands	
JOB NO.		DATE	GRID REFERENCE	DESCRIBED BY	FC Days: 171	SOIL SAMPLE REFERENCES	
48/95		4/10/95	ST 578 179	PB/HLJ	Climatic Grade: 1		
					Exposure Grade: -		

Horizon No.	Lowest Av. Depth (cm)	Texture	Matrix (Ped Face) Colours	Stoniness: Size, Type, and Field Method	Mottling Abundance, Contrast, Size and Colour	Mangan Concs	Structure: Ped Development Size and Shape	Consistence	Structural Condition	Pores (Fissures)	Roots: Abundance and Size	Calcium Carbonate Content	Horizon Boundary: Distinctness and form
1	30	MZCL	10YR64	0%	CFFO + G (10YR56,73)	Few	-	-	-	Good	CF + VF	-	Gradual Smooth
2	55	HZCL	10YR64	0%	MDFG + O (10YR56,73)	Few	WCSAB	Friable	Moderate	Good	FF + VF	-	Gradual Smooth
3	85 +	C	10YR72	0%	MDMO (10YR68)	None	WCPr	Very Firm	Poor	Poor	FVF (ex-ped)	-	-

Profile Gleyed From: 0 cm

Depth to Slowly Permeable Horizon: 55 cm

Wetness Class: III

Wetness Grade: 3a

Available Water Wheat: 142 mm

Potatoes: 119 mm

Moisture Deficit Wheat: 102 mm

Potatoes: 94 mm

Moisture Balance Wheat: 40 mm

Potatoes: 25 mm

Droughtiness Grade: 1 (Calculated to 120 cm)

Final ALC Grade: 3a

Main Limiting Factor(s): Wetness

Remarks: Ploughed quite deeply (trash at 28cm) explains gleyed at surface cb undisturbed. H2 just good pores, mainly large.

SITE NAME		PROFILE NO.	SLOPE AND ASPECT	LAND USE	Av Rainfall: 796 mm	PARENT MATERIAL
Yeovil		Pit 5 (ASP 62)	2° S	PGR	ATO: 1481 day °C	
JOB NO.		DATE	GRID REFERENCE	DESCRIBED BY	FC Days: 171	SOIL SAMPLE REFERENCES
48/95		4/10/95	ST 539 178	HLJ/PB	Climatic Grade: 1	

Horizon No.	Lowest Av. Depth (cm)	Texture	Matrix (Ped Face) Colours	Stoniness: Size, Type, and Field Method	Mottling Abundance, Contrast, Size and Colour	Mangan Concs	Structure: Ped Development Size and Shape	Consistence	Structural Condition	Pores (Fissures)	Roots: Abundance and Size	Calcium Carbonate Content	Horizon Boundary: Distinctness and form
1	22	MCL	10YR53	<1%	CFFO (10YR66)	Few	-	-	-	Good	MF + VF	-	Clear Smooth
2	38	HZCL/ ZC	10YR64	0%	CDFO+G (10YR58,63)	Few	WCSAB	Very Firm	Poor	Good (all large)	CF + VF	-	Gradual Smooth
3	66	ZC	2.5Y63	0%	MDMO+G (10YR58,63)	Few	WCSAB	Extremely Firm	Poor	Good (all large)	CF + VF	-	Clear Smooth
4	90 +	C	10YR52	1% MSST	MDFO (7.5YR56)	Many	WCSAB	Firm	Poor	Poor	FVF	-	-

Profile Gleyed From: 0 cm

Depth to Slowly Permeable Horizon: 66 cm

Wetness Class: III

Wetness Grade: 3a

Available Water Wheat: 122 mm

Potatoes: 98 mm

Moisture Deficit Wheat: 102 mm

Potatoes: 94 mm

Moisture Balance Wheat: 20 mm

Potatoes: 4 mm

Droughtiness Grade: 2 (Calculated to 120 cm)

Final ALC Grade: 3a

Main Limiting Factor(s): Wetness

Remarks: H3 very compact but rootable. Discontinuous slab of limestone at 90cm. Augured to 120.

SITE NAME		PROFILE NO.	SLOPE AND ASPECT	LAND USE	Av Rainfall: 776 mm	PARENT MATERIAL
Yeovil		Pit 6 (ASP 1)	4° N	PGR	ATO: 1481 day °C	Yeovil Sands
JOB NO.		DATE	GRID REFERENCE	DESCRIBED BY	FC Days: 171	SOIL SAMPLE REFERENCES
48/65		5/10/95	ST 566 182	HLJ/PB	Climatic Grade: 1 Exposure Grade: -	

Horizon No.	Lowest Av. Depth (cm)	Texture	Matrix (Ped Face) Colours	Stoniness: Size, Type, and Field Method	Mottling Abundance, Contrast, Size and Colour	Mangan Concs	Structure: Ped Development Size and Shape	Consistence	Structural Condition	Pores (Fissures)	Roots: Abundance and Size	Calcium Carbonate Content	Horizon Boundary: Distinctness and form
1	20	MZCL	10YR54	0%	CRRC	Few	-	-	-	Good	MF + VF	-	Abrupt Smooth
2	35	MZCL	10YR64	0%	None	None	WCSAB	Friable	Moderate	Good	CF + VF	-	Clear Wavy
3	80 +	ZC	2.5Y72	0%	MDMO (10YR68)	Common	WCSAB	Very Firm	Poor	Good	CVF	-	-

Profile Gleyed From: 35 cm

Depth to Slowly Permeable Horizon: No SPL

Wetness Class: II

Wetness Grade: 2

Available Water Wheat: 131 mm

Potatoes: 106 mm

Moisture Deficit Wheat: 102 mm

Potatoes: 94 mm

Moisture Balance Wheat: 29 mm

Potatoes: 12 mm

Droughtiness Grade: 2 (Calculated to 120 cm)

Final ALC Grade: 2

Main Limiting Factor(s): Wetness and Drought

Remarks: Porosity in H3 examined closely to 80 cm and found to be generally > 0.5% : borderline spl.