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East Sussex Structure Plan
Land at Hailsham
Reconnaissance Survey
Agricultural Land Classification
October 1995

Resource Planning Team
Guildford Statutory Group
ADAS Reading

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AGRICULTURAL LAND CLASSIFICATION REPORT
RECONNAISSANCE SURVEY

EAST SUSSEX STRUCTURE PLAN
LAND AT HAILSHAM

Introduction

1. This report presents the findings of a reconnaissance Agricultural Land Classification (ALC) survey of 396.2 ha of land around Hailsham, East Sussex. The survey was carried out during October 1995.

2. The survey was commissioned by the Ministry of Agriculture, Fisheries and Food (MAFF), Land Use Planning Unit, Reading in connection with the East Sussex Structure Plan. The results of this survey supersede any previous ALC information for this land.

3. The work was conducted by members of the Resource Planning Team in the Guildford Statutory Group of ADAS. The land has been graded in accordance with the published MAFF ALC guidelines and criteria (MAFF, 1988). A description of the ALC grades and subgrades is given in Appendix I. The survey was completed at a reconnaissance level of detail, on a 'free' survey basis, as it was undertaken primarily to update the 1:63,360 scale provisional ALC maps for this area. Consequently the results are designed for strategic planning purposes only. For site specific proposals, further, more detailed surveys may be required.

4. At the time of survey most of the land was in permanent grass. Smaller areas of land were in arable use (oilseed rape and cereals). Urban land in the 'area of search' includes residential dwellings, roads, a hospital and a cemetery. Areas mapped as Non-Agricultural include the hospital grounds and recreation areas. Areas of Woodland have also been denoted.

Summary

5. The findings of the survey are shown on the enclosed ALC map. The map has been drawn at a scale of 1:50,000. It is accurate at this scale, but any enlargement would be misleading.

6. The area and proportions of the ALC grades and subgrades on the surveyed land are summarised in Table 1 overleaf.

7. The fieldwork was conducted at an average density of approximately 1 boring per 6 hectares of agricultural land. A total of 47 borings and five soil pits were described.

8. Over one-quarter of the agricultural land around Hailsham has been classified as Subgrade 3a (good quality). The remainder of the land has been classified as Subgrade 3b (moderate quality).

Table 1: Area of grades and other land

Grade/Other land	Area (hectares)	% Site area	% Surveyed area
3a	86.8	21.9	28.8
3b	215.0	54.3	71.2
Urban	67.5	17.0	
Non-Agricultural	23.7	6.0	
Woodland	3.2	0.8	
Total surveyed area	301.8		100.0
Total site area	396.2	100.0	

9. Land classified as Subgrade 3a is limited either by moderate soil droughtiness or soil wetness. Where the former occurs, comparatively shallow depth over dense sandstone or siltstone layers results in a moderate limitation. These soils in the local climatic regime produce a slight limitation to the amount of moisture available to crops. Consequently this land will suffer from potentially lower and less consistent crop yields. Where soil wetness is limiting, some of the profiles comprise medium textured topsoils which overlie slowly permeable subsoils at depth. Given the local climate, these soil characteristics result in slightly reduced flexibility of cropping, stocking and cultivations. Other profiles limited by wetness comprise fine sandy silt loam topsoils which directly overlie slowly permeable subsoils. Although poorly drained the effect of soil wetness is partially offset by the lighter topsoils, such that Subgrade 3a is appropriate.

10. Land classified as Subgrade 3b is typically restricted by more significant soil wetness limitations. However, to the south of the Hellingly Hospital and to the east of Park Farm the land is subject to slope restrictions. Gradients within the range of 7-11° act to restrict the range of agricultural machinery that may be safely and efficiently used. It is also likely that land adjacent to the River Cuckmere will be prone to a significant risk of flooding. The risk of flooding is likely to restrict the range of crops which can be grown, reduce yield potential and may give rise to soil management problems and, hence, its inclusion in Subgrade 3b.

11. Where soil wetness causes land to be Subgrade 3b, medium textured topsoils overlie slowly permeable subsoils. To the east of Boship Farm Hotel, to the east and south-east of Park Farm, and to the south of Hailsham the subsoils are loamy textured, comprising medium and heavy clay loams. Elsewhere, the subsoils are heavier textured, comprising clays and silty clays. The subsoils are slowly permeable either directly below the topsoil or at shallow depths within the soil profile. Such soil wetness will act to significantly restrict the flexibility of cropping and stocking.

FACTORS INFLUENCING ALC GRADE

Climate

12. Climate affects the grading of land through the assessment of an overall climatic limitation and also through interactions with soil characteristics.

13. The key climatic variables used for grading this site are given in Table 2 and were obtained from the published 5km grid datasets using the standard interpolation procedures (Met. Office, 1989).

Table 2: Climatic and altitude data

Factor	Units	Values	Values	Values	
Grid reference	N/A	TQ592078	TQ598113	TQ575111	TQ590122
Altitude	m, AOD	5	10	15	30
Accumulated Temperature	day°C	1526	1519	1514	1496
Average Annual Rainfall	mm	813	798	801	801
Field Capacity Days	days	171	168	168	168
Moisture Deficit, Wheat	mm	117	118	117	115
Moisture Deficit, Potatoes	mm	113	114	112	110

14. The climatic criteria are considered first when classifying land as climate can be overriding in the sense that severe limitations will restrict land to low grades irrespective of favourable site or soil conditions

15. The main parameters used in the assessment of an overall climatic limitation are average annual rainfall (AAR), as a measure of overall wetness, and accumulated temperature (AT0, January to June), as a measure of the relative warmth of a locality.

16. Despite the size of this area of search the climatic range is comparatively small. As a result one mean value was used for the entire area rather than a number of individual zones. The combination of rainfall and temperature at this location mean that there is no overall climatic limitation (Climate Grade 1). However, climatic factors can interact with soil properties to influence soil wetness and droughtiness limitations. At this location the crop adjusted soil moisture deficits are comparatively high thus increasing the likelihood of soil droughtiness.

17. The majority of the area of search is not shown to be adversely affected by local climatic factors such as exposure or frost risk. However, in the extreme south east the land is shown as being rather exposed (Met. Office, 1980).

Site

18. Towards the southern edge of the survey area the land is flat and low lying, situated at approximately 5m AOD, however, this rises to 10m AOD around New Barn Farm. To the north west of Hailsham land in the River Cuckmere valley lies at 15m AOD rising to 20m AOD to the north of Horsebridge. The survey area to the north east of Hailsham is more dissected and mainly

situated at between 15-20m AOD but rises steeply to 25m to the north of Park Farm and 30m AOD to the south east of Hellingly hospital. Gradient restrictions occur in this area where slopes measure between 7-11°.

19. Flooding does not appear to be limiting on the majority of the site, however, on land adjacent to the River Cuckmere the topography suggests that there may be an element of flood risk. A narrow strip of land to the east of Park farm may also experience some flooding locally.

Geology and soils

20. The relevant geological sheet (BGS, 1979) maps the higher land, both to the extreme north east and to the south of Hailsham, as Tunbridge Wells Sands. The lower lying land to the north east is shown as the Grinstead Clay while that in the south is mapped as Weald Clay. To the north west of Hailsham Weald Clay again occupies the lower, flatter land while the Grinstead Clay is mapped on the slightly higher ground. Drift deposits mainly comprise 2nd terrace deposits and alluvium along the course of the River Cuckmere. A second alluvial deposit also occurs near Park Farm where it follow the path of a smaller stream.

21. The most recently published soil information for the site (SSEW, 1983) shows that the Curtisden soil association corresponds to the Tunbridge Wells Sands and the Wickham 1 soil assocations relate to the Weald and Grinstead Clays. The Waterstock soil association is mapped where there are drift deposits along the River Cuckmere. The Curtisden soils are described as 'Silty soils over siltstone with slowly permeable subsoils and slight seasonal waterlogging. Some similar well drained soils. Some well drained coarse loamy soils over sandstone. Slumping locally.' (SSEW, 1983), while the Wickham 1 soils association are said to be 'Slowly permeable seasonally waterlogged fine silty over clayey, fine loamy over clayey and clayey soils' (SSEW, 1983). The Waterstock soils, on the other hand, are described as being 'Deep permeable mainly fine loamy soils variably affected by groundwater. Some deep well drained Fine and coarse loamy soils.' (SSEW, 1983). Detailed field survey broadly confirms this.

AGRICULTURAL LAND CLASSIFICATION

22. The details of the classification of the site are shown on the attached ALC map and the area statistics of each grade are given in Table 1, page 2.

23. The location of the auger borings and pits is shown on the attached sample location map and the details of the soils data are presented in Appendix III.

Subgrade 3a

24. Approximately one third of the agricultural land in this area of search has been classified as Subgrade 3a, good quality. On the higher land, overlying the Tunbridge Wells sands the key limitation is soil droughtiness. Land on the gravel terrace deposits, west of the River Cuckmere and around Welbury Farm is, however, limited by soil wetness.

25. Soil inspection pit 2 (near Hellingly Hospital) is typical of those profiles associated with the Tunbridge Wells Sands. Here very slightly stony (1-2% fine grained soft sandstone by volume) fine sandy silt loam topsoils overlie very similar upper subsoils with moderately developed subsoil

structural conditions. Occasional profiles become slightly more stony in the upper subsoil where the stone content measures between 5-10% (fine grained soft sandstone) by volume. At approximately 60-65cm depth the profile generally becomes impenetrable to the soil auger. In the pit a very compacted, stoneless, silt loam horizon was shown to begin at 60cm and continue to 120cm depth. The silt loam is massive in structure and slowly permeable thus causing a moderate drainage moderate climatic regime reduce the affects of soils wetness such that Wetness Class III, Grade 2 is appropriate. Though there is very little stone throughout this profile the over-riding limitation is infact soil droughtiness. The compacted silt loam horizon is impenetrable to most plant roots therefore reducing the affective soil depth and thus the amount of profile available water for crops. At this locality the comparitively high moisture deficits increase soil droughtiness. This land can, therefore, be graded no higher than Subgrade 3a as drought stress can restrict the level and consistency of crop growth and yields.

26. To the north west of Hailsham, south and west of the River Cuckmere, Subgrade 3a land has also been mapped. The soil profiles here generally comprise medium silty clay loam or fine sandy silty loam topsoils with little or no stone (0-3% flints by volume). The upper subsoils vary from moderately structured medium silty clay loams and clay loams to poorly structured, slowly permeable, heavy silty clay loams. From approximately 60cm depth all profiles become slowly permeable. Drainage through the profile is therefore restricted causing a significant amount waterlogging. In this climatic regime a combination of light textured topsoils over shallow slowly permeable horizons or medium textured topsoils over slightly deeper slowly permeable layers result in a moderate soil wetness limitation. Wetness Class III or IV, Subgrade 3a is therefore assigned to most of this area as wet soils can adversely affect crop development. The timing of cultivations may also be slightly restricted as soil structure can be damaged through trafficking by agricultural machinery and grazing cattle. Occasional borings in this area were slightly better drained due to light topsoil textures over deeper slowly permeable horizons. However, at approximately 70cm depth these profiles became impenetrable over siltstone thus resulting in a moderate soil droughtiness limitation which is consistent with Subgrade 3a. Such land is represented by Pit 4.

Subgrade 3b

27. The remainder of the site has been classified as Subgrade 3b mainly on the basis of a significant soil wetness limitation. There are soil types distinct to this soil unit, the first being typified by Pit 1 on the Grinstead Clay. Here a medium silty clay loam topsoil and occasion upper subsoil overlie a slowly permeable clay or silty clay at approximately 35cm depth. The second profile is represented by both Pits 3 and 5 which occur on the 2nd terrace deposits over Grinstead Clay and Tunbridge Wells Sands respectively. The topsoil here ranges from silt loam to medium clay loam over a moderately structured medium clay loam upper subsoil. These profiles again become slowly permeable at approximately 35cm depth but the soil textures are generally lighter ranging from medium to heavy clay loams. In this climatic regime the land has been assessed as Wetness Class IV, Subgrade 3b, as the shallow slowly permeable horizons significantly impede drainage causing prolonged waterlogging in the soil profile. As a result, crop germination and growth may be adversely affected. The timing of cultivations may also be restricted as trafficking by agricultural machinery or grazing by livestock may lead to structural damage.

28. A small area of steeply sloping land to the north of Park Farm has also been classified as Subgrade 3b due to a severe gradient restriction. The angle of slope in this area measures from 7-11° thus restricting the range of agricultural machinery that can safely and efficiently be used.

29. Adjacent to the River Cuckmere a small area of land has been mapped as Subgrade 3b on the basis of flood risk. Drainage in these profiles is slightly better than in most of the surrounding area due to a deeper slowly permeable horizon. However, this land is immediately adjacent to the river and lies a relatively low level so may, therefore, be susceptible to flooding or fluctuating groundwater levels as revealed by signs of mottling in the soil profile. A classification of Subgrade 3b is therefore considered appropriate.

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SOURCES OF REFERENCE

British Geological Survey (1979) *Sheet No. 319*, Lewes. 1:50,000 scale (Solid & Drift Edition). BGS: London.

Ministry of Agriculture, Fisheries and Food (1988) *Agricultural Land Classification of England and Wales: Revised guidelines and criteria for grading the quality of agricultural land.* MAFF: London.

Met. Office (1989) *Climatological Data for Agricultural Land Classification.* Met. Office: Bracknell.

Met. Office (1980) *Unpublished Climatological Data, Sheet 183.* Met. Office: Bracknell.

Soil Survey of England and Wales (1983) *Sheet 6, Soils of South East England.* SSEW: Harpenden.

Soil Survey of England and Wales (1983) *Soils and their Use in South East England* SSEW: Harpenden

DESCRIPTIONS OF THE 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 includes 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 or horticultural crops can usually be grown but on some land of this 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 land.

Grade 3: Good to Moderate Quality Land

Land with moderate limitations which affect the choice of crops, the timing and type of cultivation, harvesting or the level of yield. When 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 the 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 moist 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 severe limitations which restrict use to permanent pasture or rough grazing, except for occasional pioneer forage crops.

APPENDIX II

SOIL WETNESS CLASSIFICATION

Definitions of Soil Wetness Classes

Soil wetness is classified according to the depth and duration of waterlogging in the soil profile. Six soil wetness classes are identified and are defined in the table below.

Wetness Class	Duration of waterlogging[1]
I	The soil profile is not wet within 70 cm depth for more than 30 days in most years.[2]
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 only wet within 40 cm depth for 30 days in most years.
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 present within 80 cm depth, it is wet within 70 cm for more than 180 days, but only wet within 40 cm depth for between 31-90 days in most years.
IV	The soil profile is wet within 70 cm depth for more than 180 days but not wet within 40 cm depth for more than 210 days in most years **or**, if there is no slowly permeable layer present within 80 cm depth, it is wet within 40 cm depth for 91-210 days in most years.
V	The soil profile is wet within 40 cm depth for 211-335 days in most years.
VI	The soil profile is wet within 40 cm depth for more than 335 days in most years.

Assessment of Wetness Class

Soils have been allocated to wetness classes by the interpretation of soil profile characteristics and climatic factors using the methodology described in *Agricultural Land Classification of England and Wales: Revised guidelines and criteria for grading the quality of agricultural land* (MAFF, 1988).

[1] The number of days is not necessarily a continuous period.
[2] 'In most years' is defined as more than 10 out of 20 years.

APPENDIX III

SOIL DATA

Contents:

SOIL PROFILE DESCRIPTIONS: EXPLANATORY NOTE

Soil pit and auger boring information collected during ALC fieldwork is held on a computer database. This uses notations and abbreviations as set out below.

Boring Header Information

1. **GRID REF**: national 100 km grid square and 8 figure grid reference.

2. **USE**: Land use at the time of survey. The following abbreviations are used.

ARA:	Arable	**WHT:**	Wheat	**BAR**:	Barley
CER:	Cereals	**OAT**:	Oats	**MZE**:	Maize
OSR:	Oilseed rape	**BEN**:	Field Beans	**BRA**:	Brassicae
POT:	Potatoes	**SBT**:	Sugar Beet	**FCD**:	Fodder Crops
LIN:	Linseed	**FRT:**	Soft and Top Fruit	**FLW**:	Fallow
PGR:	Permanent Pasture	**LEY**:	Ley Grass	**RGR**:	Rough Grazing
SCR:	Scrub	**CFW**:	Coniferous Woodland	**DCW**:	Deciduous Wood
HTH:	Heathland	**BOG**:	Bog or Marsh	**FLW**:	Fallow
PLO:	Ploughed	**SAS**:	Set aside	**OTH**:	Other
HRT:	Horticultural Crops				

3. **GRDNT**: Gradient as estimated or measured by a hand-held optical clinometer.

4. **GLEY/SPL**: Depth in centimetres (cm) to gleying and/or slowly permeable layers.

5. **AP (WHEAT/POTS)**: Crop-adjusted available water capacity.

6. **MB (WHEAT/POTS)**: Moisture Balance. (Crop adjusted AP - crop adjusted MD)

7. **DRT**: Best grade according to soil droughtiness.

8. If any of the following factors are considered significant, 'Y' will be entered in the relevant column.

MREL:	Microrelief limitation	**FLOOD:**	Flood risk	**EROSN**:	Soil erosion risk
EXP:	Exposure limitation	**FROST**:	Frost prone	**DIST**:	Disturbed land
CHEM:	Chemical limitation				

9. **LIMIT**: The main limitation to land quality. The following abbreviations are used.

OC:	Overall Climate	**AE**:	Aspect	**EX**:	Exposure
FR:	Frost Risk	**GR**:	Gradient	**MR**:	Microrelief
FL:	Flood Risk	**TX**:	Topsoil Texture	**DP**:	Soil Depth
CH:	Chemical	**WE**:	Wetness	**WK**:	Workability
DR:	Drought	**ER**:	Erosion Risk	**WD**:	Soil Wetness/Droughtiness
ST:	Topsoil Stoniness				

Soil Pits and Auger Borings

1. **TEXTURE**: soil texture classes are denoted by the following abbreviations.

S:	Sand	**LS**:	Loamy Sand	**SL**:	Sandy Loam
SZL:	Sandy Silt Loam	**CL**:	Clay Loam	**ZCL**:	Silty Clay Loam
ZL:	Silt Loam	**SCL**:	Sandy Clay Loam	**C**:	Clay
SC:	Sandy Clay	**ZC**:	Silty Clay	**OL**:	Organic Loam
P:	Peat	**SP**:	Sandy Peat	**LP**:	Loamy Peat
PL:	Peaty Loam	**PS**:	Peaty Sand	**MZ**:	Marine Light Silts

For the sand, loamy sand, sandy loam and sandy silt loam classes, the predominant size of sand fraction will be indicated by the use of the following prefixes:

F: Fine (more than 66% of the sand less than 0.2mm)
M: Medium (less than 66% fine sand and less than 33% coarse sand)
C: Coarse (more than 33% of the sand larger than 0.6mm)

The clay loam and silty clay loam classes will be sub-divided according to the clay content: **M:** Medium (<27% clay) **H**: Heavy (27-35% clay)

2. **MOTTLE COL**: Mottle colour using Munsell notation.

3. **MOTTLE ABUN**: Mottle abundance, expressed as a percentage of the matrix or surface described.

F: few <2% **C:** common 2-20% **M**: many 20-40% **VM**: very many 40% +

4. **MOTTLE CONT:** Mottle contrast

F: faint - indistinct mottles, evident only on close inspection
D: distinct - mottles are readily seen
P: prominent - mottling is conspicuous and one of the outstanding features of the horizon

5. **PED. COL**: Ped face colour using Munsell notation.

6. **GLEY:** If the soil horizon is gleyed a 'Y' will appear in this column. If slightly gleyed, an 'S' will appear.

7. **STONE LITH**: Stone Lithology - One of the following is used.

HR:	all hard rocks and stones	**SLST**:	soft oolitic or dolimitic limestone
CH:	chalk	**FSST**:	soft, fine grained sandstone
ZR:	soft, argillaceous, or silty rocks	**GH**:	gravel with non-porous (hard) stones
MSST:	soft, medium grained sandstone	**GS**:	gravel with porous (soft) stones
SI:	soft weathered igneous/metamorphic rock		

Stone contents (>2cm, >6cm and total) are given in percentages (by volume).

8. **STRUCT**: the degree of development, size and shape of soil peds are described using the following notation:

degree of development	**WK**: weakly developed **ST**: strongly developed	**MD**: moderately developed
ped size	**F**: fine **C**: coarse	**M**: medium **VC**: very coarse
ped shape	**S** : single grain **GR**: granular **SAB**: sub-angular blocky **PL**: platy	**M**: massive **AB**: angular blocky **PR**: prismatic

9. **CONSIST**: Soil consistence is described using the following notation:

L: loose **VF**: very friable **FR**: friable **FM**: firm **VM**: very firm
EM: extremely firm **EH**: extremely hard

10. **SUBS STR**: Subsoil structural condition recorded for the purpose of calculating profile droughtiness: **G**: good **M**: moderate **P**: poor

11. **POR**: Soil porosity. If a soil horizon has less than 0.5% biopores >0.5 mm, a 'Y' will appear in this column.

12. **IMP**: If the profile is impenetrable to rooting a 'Y' will appear in this column at the appropiate horizon.

13. **SPL**: Slowly permeable layer. If the soil horizon is slowly permeable a 'Y' will appear in this column.

14. **CALC**: If the soil horizon is calcareous, a 'Y' will appear in this column.

15. Other notations
    APW: available water capacity (in mm) adjusted for wheat
    APP: available water capacity (in mm) adjusted for potatoes
    MBW: moisture balance, wheat
    MBP: moisture balance, potatoes

SOIL PIT DESCRIPTION

Site Name : E SUSSEX SP, HAILSHAM Pit Number : 1P

Grid Reference: TQ59401140 Average Annual Rainfall : 798 mm
Accumulated Temperature : 1519 degree days
Field Capacity Level : 164 days
Land Use : Arable
Slope and Aspect : 02 degrees S

HORIZON	TEXTURE	COLOUR	STONES >2	TOT.STONE	LITH	MOTTLES	STRUCTURE	CONSIST	SUBSTRUCTURE	CALC
0- 35	MZCL	10YR53 63	0	0		C				
35- 65	C	25Y 72 00	0	0		C	MDVCPR	FM	P	

Wetness Grade : 3B Wetness Class : IV
Gleying : 0 cm
SPL :035 cm

Drought Grade : APW : mm MBW : 0 mm
APP : mm MBP : 0 mm

FINAL ALC GRADE : 3B
MAIN LIMITATION : Wetness

SOIL PIT DESCRIPTION

Site Name : E SUSSEX SP, HAILSHAM Pit Number : 2P

Grid Reference: TQ59801215
Average Annual Rainfall : 798 mm
Accumulated Temperature : 1519 degree days
Field Capacity Level : 164 days
Land Use : Oilseed Rape
Slope and Aspect : 05 degrees S

HORIZON	TEXTURE	COLOUR	STONES >2	TOT.STONE	LITH	MOTTLES	STRUCTURE	CONSIST	SUBSTRUCTURE	CALC
0- 30	FSZL	10YR43 00	0	1	HR					
30- 45	FSZL	25 Y63 72	0	1	HR	C	WKCSAB	FR	M	
45- 60	FSZL	25Y 72 00	0	0		M	WKVCPL	FR	M	
60-120	ZL	05Y 71 00	0	0		C	MASSVE	FM	P	

Wetness Grade : 2
Wetness Class : III
Gleying :030 cm
SPL :060 cm

Drought Grade : 3A
APW : 122mm MBW : 4 mm
APP : 128mm MBP : 14 mm

FINAL ALC GRADE : 3A
MAIN LIMITATION : Droughtiness

SOIL PIT DESCRIPTION

Site Name : E SUSSEX SP, HAILSHAM Pit Number : 3P

Grid Reference: TQ58951165 Average Annual Rainfall : 798 mm
Accumulated Temperature : 1519 degree days
Field Capacity Level : 164 days
Land Use : Oilseed Rape
Slope and Aspect : degrees

HORIZON	TEXTURE	COLOUR	STONES >2	TOT.STONE	LITH	MOTTLES	STRUCTURE	CONSIST	SUBSTRUCTURE	CALC
0- 25	ZL	10YR42 00	0	1	HR					
25- 35	MCL	10YR52 00	0	0		C	MDCSAB	FR	M	
35- 64	MCL	10YR53 00	0	0		M	MDVCAB	FM	P	
64- 80	MCL	10YR72 63	0	0		M	MDVCAB	FM	P	

Wetness Grade : 3B Wetness Class : IV
Gleying :025 cm
SPL :035 cm

Drought Grade : APW : mm MBW : 0 mm
APP : mm MBP : 0 mm

FINAL ALC GRADE : 3B
MAIN LIMITATION : Wetness

SOIL PIT DESCRIPTION

Site Name : E SUSSEX SP, HAILSHAM Pit Number : 4P

Grid Reference: TQ58001152
Average Annual Rainfall : 798 mm
Accumulated Temperature : 1519 degree days
Field Capacity Level : 164 days
Land Use : Ley
Slope and Aspect : degrees

HORIZON	TEXTURE	COLOUR	STONES >2	TOT.STONE	LITH	MOTTLES	STRUCTURE	CONSIST	SUBSTRUCTURE	CALC
0- 30	FSZL	10YR42 53	0	0						
30- 58	MCL	25Y 53 63	0	5	HR	C	MDCSAB	FR	M	
58- 68	MCL	05Y 72 00	0	20	HR	M	MDCAB	FR	M	

Wetness Grade : 2
Wetness Class : III
Gleying :030 cm
SPL :058 cm

Drought Grade : 3A
APW : 112mm MBW : -6 mm
APP : 122mm MBP : 8 mm

FINAL ALC GRADE : 3A
MAIN LIMITATION : Droughtiness

SOIL PIT DESCRIPTION

Site Name : E SUSSEX SP, HAILSHAM Pit Number : 5P

Grid Reference: TQ59120795 Average Annual Rainfall : 798 mm
Accumulated Temperature : 1519 degree days
Field Capacity Level : 164 days
Land Use : Permanent Grass
Slope and Aspect : degrees N

HORIZON	TEXTURE	COLOUR	STONES >2	TOT.STONE	LITH	MOTTLES	STRUCTURE	CONSIST	SUBSTRUCTURE	CALC
0- 25	MCL	10YR52 00	0	0		C				
25- 35	MCL	10YR53 00	0	0		C	MDCSAB	FR	M	
35- 55	MCL	10YR72 00	0	0		M	WKMPR	FM	P	

Wetness Grade : 3B Wetness Class : IV
Gleying : 0 cm
SPL :035 cm

Drought Grade : APW : mm MBW : 0 mm
APP : mm MBP : 0 mm

FINAL ALC GRADE : 3B
MAIN LIMITATION : Wetness

SAMPLE NO.	GRID REF	USE	ASPECT	GRDNT	GLEY	SPL	--WETNESS-- CLASS	GRADE	-WHEAT- AP	MB	-POTS- AP	MB	M.REL DRT	EROSN FLOOD	FROST EXP	CHEM DIST	ALC LIMIT	ALC	COMMENTS
1	TQ57851217	SAS			050	050	3	3A	134	16	114	0	2				WE	3A	
1P	TQ59401140	ARA	S	02	0	035	4	3B		0		0					WE	3B	At Boring 31
2	TQ59171217	ARA	S	02	030	060	3	2	107	-11	113	-1	3A				DR	3A	QMasv at 60
2P	TQ59801215	OSR	S	05	030	060	3	2	122	4	128	14	3A				DR	3A	At Boring 3
3	TQ59801215	OSR	S	05	025	062	3	2	113	-5	116	2	3A				DR	3A	
3P	TQ58951165	OSR			025	035	4	3B		0		0					WE	3B	At Boring 16
4	TQ60051210	OSR	S	03	025	025	4	3B		0		0					WE	3B	
4P	TQ58001152	LEY			030	058	3	2	112	-6	122	8	3A				DR	3A	At Boring 23
5	TQ57271200	CER			030	030	4	3B		0		0					WE	3B	
5P	TQ59120795	PGR	N		0	035	4	3B		0		0					WE	3B	At Boring 46
6	TQ58901205	PGR			035	035	4	3B		0		0					WE	3B	See Pit 3
7	TQ57051180	PGR			0	028	4	3B		0		0					WE	3B	
8	TQ57321182	CER			035	035	4	3B		0		0					WE	3B	
9	TQ57701185	PLO	S	01	030	030	4	3A		0		0					WE	3A	
10	TQ59801215	PGR			025	045	4	3B		0		0					WE	3B	
11	TQ58921195	ARA	S	01	030	030	4	3B		0		0					WE	3B	See 3P
12	TQ59301185	ARA	S	02	030	030	4	3B		0		0					WE	3B	See 5P
13	TQ59621180	PGR			0	020	4	3B		0		0					WE	3B	
14	TQ59951195	OSR	S	02	028	035	4	3B		0		0					WE	3B	
15	TQ57871170	PLO			030	075	2	1	158	40	140	26	1					1	
16	TQ58951165	OSR			025	045	4	3B		0		0					WE	3B	See 3P
17	TQ59521167	PGR	E	04			1	1	116	-2	117	3	3A				DR	3A	I78 Stone
18	TQ59801172	LEY	S	04	035	035	4	3A	94	-24	96	-18	3B				DR	3B	See 4P
19	TQ60101177	OSR	N	05			1	1	104	-14	107	-7	3A				DR	3A	QMasv at 55
20	TQ60321172	STB	W	04	028	075	2	1	171	53	145	31	1					1	
21	TQ57251152	PGR	NE	03	0	040	4	3B		0		0					WE	3B	
22	TQ57521152	PLO			030	030	4	3B		0		0					WE	3B	
23	TQ58001152	PLO	SE	01	030	030	4	3B	98	-20	109	-5	3A				WE	3B	
24	TQ59101152	OSR			035	035	4	3B		0		0					WE	3B	
25	TQ59701162	LEY	S	04	028	028	4	3B		0		0					WE	3B	
26	TQ59951157	PLO	S	02	065	075	2	1	126	8	135	21	3A				DR	3A	Masv at 65
27	TQ56801147	PGR			0	028	4	3B		0		0					WE	3B	
28	TQ57801130	ARA	S	03	0	028	4	3A		0		0					WE	3A	
29	TQ58921142	OSR			025	025	4	3B	119	1	122	8	3A				WE	3B	I80 Stone
30	TQ59121140	ARA			0	025	4	3B		0		0					WE	3B	
31	TQ59401140	PLO	S	02	0	038	4	3B		0		0					WE	3B	See 1P
32	TQ59801142	LEY			0	025	4	3B		8		9					WE	3B	
33	TQ57351112	PGR	S	01	0	035	4	3B		0		0					WE	3B	
34	TQ57551117	PGR	S	01	0	028	4	3B		0		0					WE	3B	
35	TQ59221127	ARA			0	025	4	3B		0		0					WE	3B	
36	TQ57501097	PGR	NW		060	060	2	2	120	2	114	0	3A				FL	3B	Q flood risk
37	TQ57551080	PGR	NW	01	055	055	3	2	142	24	124	10	2				WD	2	

SAMPLE NO.	GRID REF	USE	ASPECT	GRDNT	GLEY	SPL	--WETNESS-- CLASS	GRADE	-WHEAT- AP	MB	-POTS- AP	MB	M.REL DRT	FLOOD	EROSN EXP	FROST DIST	CHEM LIMIT	ALC	COMMENTS
38	TQ57821070	PGR	NE	02	045	045	3	3A		0		0					WE	3A	
39	TQ58501180	PGR			028	050	3	3A		0		0					WE	3A	
40	TQ57851042	PGR			028	028	4	3B		0		0					WE	3B	
41	TQ59300850	PGR	N	02	030	030	4	3B		0		0					WE	3B	
42	TQ59100830	PGR	S	02	0	080	2	1	140	22	137	23	2				WD	2	QMasv at 80
43	TQ59570835	PGR	E	02	0	060	3	2	110	-8	116	2	3A				DR	3A	QMasv at 60
44	TQ58850820	PGR			0	025	4	3B		0		0					WE	3B	
45	TQ58870790	PGR			0	025	4	3B		0		0					WE	3B	
46	TQ59120795	PGR			0	035	4	3B		0		0					WE	3B	
47	TQ59550800	ARA	E	02	0	065	3	2	121	3	129	15	3A				DR	3A	QMasv at 65

SAMPLE	DEPTH	TEXTURE	COLOUR	MOTTLES COL	MOTTLES ABUN	MOTTLES CONT	PED COL.	PED GLEY	STONES >2	STONES >6	STONES LITH	STONES TOT	STRUCT/ CONSIST	SUBS STR	SUBS POR	SUBS IMP	SUBS SPL	SUBS CALC	
1	0-30	mzcl	10YR43 00						0	0		0							
	30-50	mzcl	10YR54 00	10YR56 00	F		00MN00 00		0	0		0		M					
	50-65	mcl	25Y 64 00	10YR68 00	C		00MN00 00	Y	0	0		0		P			Y		
	65-90	mcl	25Y 63 00	10YR68 00	M		00MN00 00	Y	0	0	HR	20		P			Y		
	90-120	hzcl	05Y 72 00	10YR68 00	M			Y	0	0		0		P			Y		
1P	0-35	mzcl	10YR53 63	10YR58 00	C			Y	0	0		0							
	35-65	c	25Y 72 00	75YR68 00	C			Y	0	0		0	MDVCPR	FM P	Y		Y		
2	0-30	fszl	10YR53 00	10YR58 00	F				0	0	HR	1							
	30-45	mcl	25Y 63 00	10YR58 00	C		00MN00 00	Y	0	0	HR	1		M					
	45-60	mcl	25Y 72 00	75YR58 00	M		00MN00 00	Y	0	0		0		M					V compact 60
2P	0-30	fszl	10YR43 00						0	0	HR	1							
	30-45	fszl	25 Y63 72	75YR58 00	C			Y	0	0	HR	1	WKCSAB	FR M					
	45-60	fszl	25Y 72 00	75YR58 00	M			Y	0	0		0	WKVCPL	FR M					
	60-120	zl	05Y 71 00	10YR56 00	C			Y	0	0		0	MASSVE	FM P		Y	Y		V compacted
3	0-25	fszl	10YR43 00						0	0	HR	1							
	25-35	fszl	10YR73 00	75YR58 00	C			Y	0	0	HR	1		M					Hand textd fsl
	35-45	fszl	25Y 72 00	75YR56 00	C			Y	0	0	HR	1		M					Hand textd fsl
	45-62	zl	05Y 72 00	75YR58 00	M			Y	0	0		0		M					Hand textd lfs
	62-80	zl	05Y 72 00	75YR58 00	M			Y	0	0		0		P			Y		Hand textd lfs
3P	0-25	zl	10YR42 00						0	0	HR	1							Borderline mzcl
	25-35	mcl	10YR52 00	75YR58 00	C			Y	0	0		0	MDCSAB	FR M					
	35-64	mcl	10YR53 00	75YR58 72	M		00MN00 00	Y	0	0		0	MDVCAB	FM P	Y		Y		
	64-80	mcl	10YR72 63	75YR58 00	M		00MN00 00	Y	0	0		0	MDVCAB	FM P	Y		Y		
4	0-25	mcl	10YR42 00						0	0	HR	1							
	25-50	c	05Y 71 00	75YR58 00	M			Y	0	0		0		P	Y		Y		
4P	0-30	fszl	10YR42 53						0	0		0							
	30-58	mcl	25Y 53 63	10YR68 00	C		00MN00 00	Y	0	0	HR	5	MDCSAB	FR M					
	58-68	mcl	05Y 72 00	75YR68 00	M		00MN00 00	Y	0	0	HR	20	MDCAB	FR M	Y		Y		I68 QSandst/Siltst
5	0-30	mzcl	10YR43 00						0	0		0							
	30-50	zc	25Y 53 00	10YR68 00	M			Y	0	0		0		P			Y		
	50-70	zc	05Y 62 00	10YR68 00	M			Y	0	0		0		P			Y		
5P	0-25	mcl	10YR52 00	10YR56 00	C			Y	0	0		0							
	25-35	mcl	10YR53 00	10YR56 00	C			Y	0	0		0	MDCSAB	FR M					
	35-55	mcl	10YR72 00	75YR68 00	M			Y	0	0		0	WKMPR	FM P			Y		
6	0-25	zl	10YR43 00						0	0	HR	1							Re PSD results
	25-35	mcl	10YR54 00						0	0	HR	1		M					
	35-70	mcl	10YR53 00	10YR56 00	C			Y	0	0		0		P			Y		
	70-120	hcl	10YR53 00	10YR58 72	M		00MN00 00	Y	0	0		0		P			Y		

SAMPLE	DEPTH	TEXTURE	COLOUR	MOTTLES COL	MOTTLES ABUN	MOTTLES CONT	PED COL.	GLEY	STONES >2	STONES >6	LITH	TOT	STRUCT/ CONSIST	SUBS STR	SUBS POR	SUBS IMP	SUBS SPL	CALC
7	0-28	mzcl	10YR53 00	10YR56 00	C			Y	0	0	HR	3						
	28-55	zc	10YR72 00	75YR68 81	M			Y	0	0		0		P	Y		Y	
8	0-35	mzcl	10YR43 00						0	0	HR	4						
	35-70	zc	05Y 63 00	10YR58 00	M			Y	0	0		0		P			Y	
9	0-30	fszl	10YR43 00						0	0	HR	3						
	30-65	hzcl	25Y 63 00	10YR68 00	M		00MN00 00	Y	0	0		0		P			Y	
	65-80	mzcl	25Y 62 00	10YR58 00	M			Y	0	0		0		P			Y	
	80-120	scl	05Y 62 00	10YR58 00	M		00MN00 00	Y	0	0		0		P			Y	
10	0-25	mzcl	10YR43 00						0	0		0						
	25-45	mzcl	10YR53 00	10YR56 00	C			Y	0	0		0		M				
	45-60	hcl	10YR53 00	10YR66 00	M			Y	0	0		0		P			Y	
	60-90	hcl	10YR53 00	10YR66 72	M		00MN00 00	Y	0	0		0		P			Y	
11	0-30	zl	10YR42 00						0	0	HR	1						Hand textd fszl
	30-55	mcl	10YR53 00	75YR58 00	C		00MN00 00	Y	0	0	HR	1		P			Y	
	55-120	mcl	10YR63 00	75YR58 00	M		00MN00 00	Y	0	0	HR	5		P			Y	
12	0-30	zl	10RY42 00	10YR58 00	C		00MN00 00	Y	0	0	HR	1						Re PSD
	30-70	mcl	10YR63 00	75YR58 00	M		00MN00 00	Y	0	0	HR	1		P			Y	
	70-120	mcl	25Y 63 00	75YR58 00	M		00MN00 00	Y	0	0	HR	1		P			Y	
13	0-20	mcl	10YR52 00	10YR88 00	C			Y	0	0		0						
	20-45	c	10YR62 00	75YR58 00	C			Y	0	0		0		P			Y	
	45-65	c	10YR72 00	75YR58 00	M			Y	0	0		0		P			Y	
14	0-28	mcl	10YR42 00						0	0	HR	1						
	28-35	hcl	10YR53 00	75YR58 00	C			Y	0	0		0		M				
	35-50	hcl	25Y 63 00	75YR58 00	M			Y	0	0		0		P			Y	
	50-70	c	25Y 72 00	75YR58 00	M			Y	0	0		0		P			Y	
15	0-30	fszl	10YR43 00						0	0		0						
	30-45	fszl	10YR53 54	10YR56 00	C			S	0	0		0		M				
	45-75	mzcl	25Y 63 00	10YR68 00	M			Y	0	0		0		M				
	75-120	mzcl	25Y 63 00	10YR68 00	M		00MN00 00	Y	0	0		0		P			Y	
16	0-25	zl	75YR43 00						0	0		0						Hand textd fszl
	25-45	mcl	10YR53 00	10YR68 72	M			Y	0	0		0		M				
	45-60	mcl	10YR53 00	10YR56 64	M			Y	0	0		0		P			Y	
	60-120	hcl	10YR53 00	10YR58 63	M			Y	0	0		0		P			Y	
17	0-25	mcl	10YR43 00	10YR58 00	F				0	0	FSST	2						
	25-60	mcl	10YR44 00	10YR58 00	C		00MN00 00	S	0	0	FSST	5		M				
	60-78	fszl	10YR54 00	10YR58 00	C		00MN00 00	S	0	0	FSST	15		M				I78 Q Bedrock
18	0-35	fszl	10YR53 00	10YR58 00	F				0	0	FSST	2						
	35-48	mcl	25Y 63 00	10YR58 00	C			Y	0	0	FSST	20		P			Y	
	48-55	mcl	25Y 73 00	75YR58 00	M			Y	0	0	FSST	40		P			Y	I55 Q Bedrock

SAMPLE	DEPTH	TEXTURE	COLOUR	MOTTLES COL	MOTTLES ABUN	MOTTLES CONT	PED COL.	PED GLEY	STONES >2	STONES >6	STONES LITH	STONES TOT	STRUCT/ CONSIST	SUBS STR	SUBS POR	SUBS IMP	SUBS SPL	SUBS CALC	
19	0-30	fszl	10YR53 00						0	0	FSST	2							Q zl
	30-55	fsl	10YR54 00						0	0	FSST	10		M					Q fszl
20	0-28	fszl	10YR53 00						0	0	FSST	2							
	28-75	fszl	10YR63 00	10YR58 00	C			Y	0	0	FSST	5		M					
	75-120	mcl	10YR72 00	75YR58 00	C			Y	0	0	FSST	10		P		Y			
21	0-25	mcl	10YR53 00	10YR56 00	C			Y	0	0		0							
	25-40	mcl	10YR64 00	10YR56 00	C			Y	0	0		0		M					
	40-60	c	10YR53 00	75YR68 72	M			Y	0	0		0		P		Y			
22	0-30	mzcl	10YR43 00						0	0	HR	5							
	30-70	zc	05Y 62 00	10YR68 00	M			Y	0	0		0		P		Y			
23	0-30	fszl	10YR43 53	00MN00 00	F				0	0		0							
	30-60	fszl	25Y 53 63	10YR68 00	C		00MN00 00	Y	0	0		0		M					
	60-70	fszl	25Y 63 00	10YR68 00	C		00MN00 00	Y	0	0	HR	10		M		Y			I70 Stone
24	0-25	zl	75YR43 00						0	0		0							Re PSD results
	25-35	mcl	10YR43 00						0	0		0		M					
	35-65	mcl	10YR53 00	10YR56 00	C		00MN00 00	Y	0	0		0		P		Y			
	65-120	c	10YR53 00	10YR58 72	M		00MN00 00	Y	0	0		0		P		Y			
25	0-28	fszl	10YR53 00	10YR58 00	F				0	0	FSST	2							
	28-45	mcl	25Y 63 00	10YR58 00	M		00MN00 00	Y	0	0	FSST	15		P		Y			
	45-60	mcl	25Y 73 00	75YR58 00	M		00MN00 00	Y	0	0	FSST	25		P		Y			
	60-65	fsl	25Y 73 00	75YR58 00	M		00MN00 00	Y	0	0	FSST	40		P		Y			
26	0-25	fszl	10YR53 00	10YR53 00					0	0	FSST	2							Q zl
	25-65	fsl	10YR54 00	10YR58 00	F				0	0	FSST	5		M					Q fszl
	65-75	lfs	10YR73 00	10YR56 00	C				0	0		0		M					Q zl/Q Rootable
27	0-28	mzcl	10YR52 00	75YR46 00	M			Y	0	0		0							
	28-55	zc	05Y 71 00	75YR68 58	M		00MN00 00	Y	0	0		0		P		Y			
28	0-28	fszl	10RY42 00	10YR58 00	C			Y	0	0		0							
	28-48	mcl	10YR63 72	10YR58 00	C		00MN00 00	Y	0	0	HR	1		P		Y			
	48-80	mcl	25Y 63 72	75YR58 00	M		00MN00 00	Y	0	0	HR	1		P		Y			
29	0-25	zl	75YR43 00						0	0		0							Hand textd fszl
	25-50	mcl	10YR53 00	10YR68 71	M			Y	0	0		0		P		Y			
	50-80	mcl	10YR53 00	10YR68 71	M		00MN00 00	Y	0	0		0		P		Y			
30	0-25	mcl	10YR53 00	75YR46 00	C			Y	0	0		0							
	25-60	c	10YR53 00	75YR68 71	M			Y	0	0		0		P		Y			
31	0-25	mzcl	10YR53 00	75YR46 00	C			Y	0	0		0							
	25-38	mzcl	10YR64 00	10YR56 00	C			Y	0	0		0		M					
	38-60	c	25Y 53 00	10YR71 68	M			Y	0	0		0		P		Y			

SAMPLE	DEPTH	TEXTURE	COLOUR	MOTTLES COL	MOTTLES ABUN	MOTTLES CONT	PED COL.	PED GLEY	STONES >2	STONES >6	STONES LITH	STONES TOT	STRUCT/ CONSIST	SUBS STR	SUBS POR	SUBS IMP	SUBS SPL	SUBS CALC
32	0-25	zc	25Y 53 0	75YR68	71	M		Y	0	0		0						
	25-60	zc	25YR71 00	75YR68	00	M		Y	0	0		0		P		Y		
33	0-35	mcl	10YR53 00	10YR58	00	C		Y	0	0		0						
	35-60	mcl	10YR63 00	10YR58	00	M	00MN00	00 Y	0	0	HR	1		P		Y		
	60-120	mcl	10YR63 72	75YR58	00	M	00MN00	00 Y	0	0	HR	1		P		Y		
34	0-28	mcl	10YR53 00	10YR58	00	C		Y	0	0	HR	1						
	28-50	mcl	10YR63 62	75YR56	00	M	00MN00	00 Y	0	0	HR	5		P		Y		
	50-60	mcl	10YR43 00	75YR58	00	M	00MN00	00 Y	0	0	HR	20		P		Y		
35	0-25	mcl	10YR53 00	75YR46	00	C		Y	0	0		0						
	25-60	c	05Y 71 00	75YR68	00	M		Y	0	0		0		P		Y		
36	0-30	mcl	10YR43 00						0	0		0						
	30-60	mcl	10YR44 54						0	0		0		M				
	60-85	mcl	25Y 63 73	10YR56	00	M		Y	0	0		0		P		Y		
	85-95	scl	25Y 73 00	75YR58	00	M		Y	0	0	HR	15		P		Y		
37	0-25	fszl	10YR43 00						0	0		0						Q zl
	25-55	mzcl	10YR54 00	00MN00	00	C			0	0		0		M				
	55-120	mzcl	05Y 82 00	10YR68	78	M		Y	0	0		0		P		Y		
38	0-30	mcl	10YR43 00						0	0		0						
	30-45	mcl	10YR44 54	00MN00	00	F			0	0		0		M				
	45-65	hcl	25Y 64 66	10YR68	00	C		Y	0	0		0		P		Y		
	65-100	scl	05Y 62 00	10YR68	00	M		Y	0	0		0		P		Y		
	100-120	scl	05Y 82 00	75YR58	00	M	00MN00	00 Y	0	0		0		P		Y		
39	0-28	mzcl	10YR43 00						0	0		0						
	28-50	mzcl	25Y 63 53	10YR58	00	M		Y	0	0		0		M				
	50-70	mzcl	05Y 82 00	10YR78	00	M		Y	0	0		0		P		Y		
	70-120	mzcl	05Y 61 71	10YR68	00	M	00MN00	00 Y	0	0		0		P		Y		
40	0-28	hcl	10YR43 00						0	0		0						
	28-70	c	05Y 62 00	10YR58	68	M	00MN00	00 Y	0	0		0		P		Y		
41	0-30	mcl	10YR53 00						0	0	HR	1						
	30-40	mcl	25Y 63 00	10YR58	00	C		Y	0	0		0		P		Y		
	40-60	mcl	25Y 71 00	10YR58	00	M		Y	0	0		0		P		Y		
42	0-30	fszl	10YR53 00	75YR58	00	C		Y	0	0	HR	1						
	30-80	fsl	75YR72 00	10YR58	00	M		Y	0	0		0		M				
43	0-35	fszl	10YR53 00	10YR58	00	C		Y	0	0	HR	1						
	35-60	mcl	25Y 71 00	10YR55	00	M		Y	0	0		0		M				
44	0-25	mcl	25Y 53 52	10YR56	00	C		Y	0	0		0						
	25-55	hcl	10YR64 00	75YR68	71	M		Y	0	0		0		P		Y		
	55-70	mcl	10YR72 00	75YR68	00	M		Y	0	0		0		P		Y		

SAMPLE	DEPTH	TEXTURE	COLOUR	----MOTTLES----- COL	ABUN	CONT	PED COL.	GLEY	----STONES---- >2	>6	LITH	TOT	STRUCT/ CONSIST	SUBS STR	POR	IMP	SPL	CALC
45	0-25	zc	10YR51 00	10YR58 00	M			Y	0	0		0						
	25-55	zc	25Y 72 53	75YR58 00	M			Y	0	0		0		P		Y		
46	0-25	mzcl	10YR52 00	10YR56 00	C			Y	0	0		0						
	25-35	mzcl	10YR63 00	10YR56 00	C			Y	0	0		0		M				
	35-50	mcl	10YR72 00	75YR68 00	M			Y	0	0		0		P		Y		
	50-70	mcl	10YR81 00	75YR68 00	M			Y	0	0		0		P		Y		
47	0-32	fszl	10YR53 00	75YR58 00	C			Y	0	0	HR	1					Q	zl
	32-65	fsl	25Y 63 71	75YR58 00	M		00MN00 00	Y	0	0	HR	1		M			Q	fszl