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**MID SUSSEX DISTRICT LOCAL PLAN
Finches Field and Hemsleys Nursery
Pease Pottage**

**Agricultural Land Classification
ALC Map and Report**

November 1997

**Resource Planning Team
Eastern Region
FRCA Reading**

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AGRICULTURAL LAND CLASSIFICATION REPORT

MID SUSSEX DISTRICT LOCAL PLAN FINCHES FIELD AND HEMSLEYS NURSERY PEASE POTTAGE

INTRODUCTION

1 This report presents the findings of a detailed Agricultural Land Classification (ALC) survey of approximately 27 hectares of land south of the Horsham Road Pease Pottage. The survey was carried out during November 1997.

2 The survey was undertaken by the Farming and Rural Conservation Agency (FRCA)¹ on behalf of the Ministry of Agriculture Fisheries and Food (MAFF) in connection with its statutory input to the Mid Sussex District Local Plan. This survey supersedes any previous ALC information for this land including a 1987 survey covering the north east corner of the current site (ADAS Ref 4106/012/87).

3 The work was conducted by members of the Resource Planning Team in the Eastern Region of FRCA. 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.

4 At the time of survey the land use on the site was mainly arable. There is also an area of permanent grassland in the north of the site. In the northeast corner of the site the land had previously been used as a nursery which is now partly derelict. The areas mapped as Other land include a sports field with pavilion and car park and also woodland. There are also areas of residential dwellings and gardens.

SUMMARY

5 The findings of the survey are shown on the enclosed ALC map. The map has been drawn at a scale of 1:10,000. 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.

7 The fieldwork was conducted at an average density of 1 boring per hectare of agricultural land. A total of 21 borings and 2 soil pits were described.

¹ FRCA is an executive agency of MAFF and the Welsh Office.

Table 1 Area of grades and other land

Grade/Other land	Area (hectares)	% surveyed area	% site area
3a	4.3	20.4	15.1
3b	16.8	79.6	59.2
Other land	7.3	N/A	25.7
Total surveyed area	21.1	100	
Total site area	28.4		100

8 The land is classified as Subgrade 3a (good quality) agricultural land and Subgrade 3b (moderate quality) agricultural land on the basis of a slight to moderate soil wetness limitation. Topsoils typically comprise fine silty or fine loamy textures overlying similar and/or clayey subsoils. Over the majority of this site soil drainage is restricted by shallow poorly drained horizons and the land is classified as Subgrade 3b. This soil wetness can restrict the flexibility of cropping, stocking and cultivations and reduce crop yields.

9 On the better quality land in the south of the site, topsoil texture acts in combination with soil wetness to limit the land to Subgrade 3a. Here the slowly permeable layers are deeper and the land is better drained and soils may be more sandy. The soils show evidence of wetness from a shallow depth and where they are found, poorly structured subsoils occur deeper within the profile. Subgrade 3a is appropriate. Soil workability is reduced due to the combination of topsoil texture and impeded drainage at this locality. This causes the land to be prone to some structural damage during wetter periods were it to be stocked or cultivated.

FACTORS INFLUENCING ALC GRADE

Climate

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

11 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).

12 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.

13 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.

Table 2 Climatic and altitude data

Factor	Units	Values	
Grid reference	N/A	TQ 258 329	TQ 254 325
Altitude	m AOD	140	130
Accumulated Temperature	day C (Jan June)	1368	1380
Average Annual Rainfall	mm	855	847
Field Capacity Days	days	179	178
Moisture Deficit Wheat	mm	93	94
Moisture Deficit Potatoes	mm	82	83
Overall climatic grade	N/A	Grade 1	Grade 1

14 The combination of rainfall and temperature at this site mean that there is no overall climatic limitation. Local climatic factors such as frost risk and exposure do not adversely affect land quality at this location. The site is climatically Grade 1. However climatic factors do interact with soil properties to influence soil wetness and soil droughtiness. At this locality the climate is relatively cool and moist in regional terms. The likelihood of soil wetness problems may therefore be enhanced.

Site

15 The site lies at altitudes in the range of 130-140m AOD. The highest land occurs in the north of the site adjacent to the Horsham Road. The site is relatively flat with the land generally falling gently (1-2 degrees) to the west and east in the south of the site with some steeper slopes to the south west. The site is not adversely affected by site restrictions such as gradient, microrelief or flooding.

Geology and soils

16 The most detailed published geological information for the site (BGS 1972) shows the whole of the site to be underlain by Upper Tunbridge Wells Sand. Bands of clay within this deposit are found in the southwest and southeast of the site.

17 The most detailed published soils information covering the area (SSEW 1983) shows it to comprise entirely soils of the South Petherton association. These soils are described as deep well drained silty soils some over soft rock. Risk of water erosion (SSEW 1983). Detailed inspection of the site indicated a wider range of soils including those developed on clays and siltstones.

AGRICULTURAL LAND CLASSIFICATION

18 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 1.

19 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 II.

Subgrade 3a

20 Land of good quality is found on the slightly elevated area in the south of the site. The main limitations are of soil workability in combination with soil wetness.

21 Soils typically comprise non calcareous medium silty clay loam or medium clay loam topsoils. These are very slightly stony (2-3% total soft sandstone up to 1% >2cm). Topsoils overlie similar upper subsoils which occur either to depth or pass into heavy clay loam or heavy silty clay loam lower subsoils. These subsoils are very slightly stony to slightly stony (2-10% total soft sandstone). Occasionally stoneless sandier subsoils may be found for example of loamy fine sand, fine sandy loam or medium sandy loam. At depth very slightly stony (5% total soft sandstone) medium clay loam, stoneless sandy clay loam or silty clay subsoils are characteristically found. These soils are generally gleyed at a shallow depth which is evidence of seasonal waterlogging high in the soil profile. Wetness Class II or III describes the drainage status of these soils. In some instances no slowly permeable layer was evident within 80cm but in others, particularly where silty clay loam or silty clay horizons were described, soils are less permeable at depth (see Pit 2 Appendix II).

22 The combination of imperfect soil drainage, topsoil texture and climatic factors gives rise to a land classification of Subgrade 3a. Soil wetness may adversely affect crop growth and development as well as limiting the flexibility of the land due to the reduction in the number of days when the soil is in a suitable condition for cultivation, trafficking by machinery or grazing by livestock. Also in this locally wet climate the workability of the medium clay loam and medium silty clay loam topsoils is restricted. This causes the land to be prone to some structural damage during wetter periods were it to be stocked or cultivated.

Subgrade 3b

23 Moderate quality land is mapped across the majority of the site where soil wetness is the main limitation.

24 Soils typically comprise non calcareous medium clay loam or medium silty clay loam topsoils which may contain up to 3% total soft sandstone (up to 1% >2cm). These characteristically overlie similar or heavier textured heavy clay loam or heavy silty clay loam upper subsoils which may be stoneless to slightly stony (up to 2-10% total soft sandstone) and dense in nature. Occasionally stoneless to very slightly stony (up to 5% total soft sandstone) silty clay or clay subsoils occur directly under the topsoil (between 27 and 30cm). However these clayey horizons more typically form lower subsoils at a depth of 40-67cm. The soils are gleyed within 40cm indicating they are seasonally waterlogged. Pit 1 (see Appendix II) shows both the medium silty clay loam and silty clay subsoils to be poorly structured. These slowly permeable horizons significantly impede drainage and occur at a depth (25-35cm) to restrict the soils to Wetness Class IV. Combined with topsoil textures and the prevailing climatic conditions a land classification of Subgrade 3b is appropriate for these soils. This significant soil wetness may adversely affect crop growth and development as well as limiting the flexibility of the land due to the reduction in the number of days when the soil is in a suitable condition for cultivation, trafficking by machinery or grazing by

livestock There are occasional isolated borings of better quality within this unit however they occur too infrequently to be mapped

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SOURCES OF REFERENCE

British Geological Survey (1972) *Sheet No 302 Horsham* (Solid and 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

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

Soil Survey of England and Wales (1984) *Soils and their Use in South East England*
SSEW Harpenden

APPENDIX I

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 DATA

Contents

Sample location map

Soil abbreviations explanatory note

Soil pit descriptions

Soil boring descriptions (boring and horizon levels)

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	OTH	Other
DCW	Deciduous woodland	BOG	Bog or marsh	SAS	Set Aside
HTH	Heathland	HRT	Horticultural crops	PLO	Ploughed

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

4 **GLEYS/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	ST	Topsoil Stoniness
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
EX	Exposure				

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	FSST	soft fine grained sandstone
ZR	soft argillaceous or silty rocks	CH	chalk
MSST	soft medium grained sandstone	GS	gravel with porous (soft) stones
SI	soft weathered igneous/metamorphic rock	GH	gravel with non porous (hard) stones

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	MD	moderately developed
	ST	strongly developed		
Ped size	F	fine	M	medium
	C	coarse		
Ped shape	S	single grain	M	massive
	GR	granular	AB	angular blocky
	SAB	sub angular blocky	PR	prismatic
	PL	platy		

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

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

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 appropriate 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

SAMPLE NO	GRID REF	ASPECT USE	WETNESS			WHEAT		POTS		M REL		EROSN EXP	FROST DIST	CHEM LIMIT	ALC	COMMENTS	
			GRDNT	GLEY	SPL	CLASS	GRADE	AP	MB	AP	MB						DRT
1	TQ25703290	PGR		27	27	4	3B	96	3	99	17	3A					
1P	TQ25603280	PGR		26	42	4	3B	125	32	100	18	1			WE	3B	See 1P
2	TQ25803290	RGR		27	27	4	3B	115	22	114	32	2			WE	3B	Dug70A g120
2P	TQ25603240	ARA	E	1	50	70	2	3A	134	41	115	33	1		WE	3A	Dug90A g120
3	TQ25903290	STB			25	95	2	3A	146	53	116	34	1		WE	3A	
4	TQ25503280	PGR			35	35	4	3B	82	11	82	0	3A		WE	3B	See 1P
5	TQ25603280	PGR			32	32	4	3B	116	23	115	33	2		WE	3B	See 1P
6	TQ25703280	PGR			30	30	4	3B	72	21	72	10	3B		WD	3B	
10	TQ25603270	ARA			27	27	4	3B	82	11	84	2	3A		WE	3B	See 1P
11	TQ25703270	ARA			35	35	4	3B	106	13	117	35	2		WE	3B	See 1P
14	TQ25503260	ARA	W	2	30	30	4	3B		0		0			WE	3B	See 1P
15	TQ25603260	ARA			30	30	4	3B	86	7	92	10	3A		WE	3B	See 1P
16	TQ25703260	ARA			30	30	4	3B	151	58	114	32	1		WE	3B	See 1P
17	TQ25803260	ARA			35	35	4	3B	93	0	96	14	3A		WE	3B	See 1P
19	TQ25503250	ARA	W	2	30	30	4	3B		0		0			WE	3B	See 1P
20	TQ25603250	ARA	W	1	35	35	4	3B		0		0			WE	3B	See 1P
21	TQ25703250	ARA			30		2	3A	154	61	117	35	1		WE	3A	See 2P
22	TQ25803250	ARA	E	1	30	100	2	3A	167	74	118	36	1		WE	3A	See 2P
23	TQ25903250	ARA	E	2	25	35	4	3B	101	8	111	29	2		WE	3B	
24	TQ25603240	ARA	E	1	30	60	3	3A	124	31	115	33	1		WE	3A	See 2P
25	TQ25703240	ARA			30		2	3A	121	28	118	36	2		WE	3A	See 2P
26	TQ25803240	ARA	E	1	25	25	4	3B	99	6	111	29	2		WE	3B	See 1P
27	TQ25903240	ARA	E	2	25	73	3	3A	121	28	93	11	2		WE	3A	See 2P

SAMPLE	DEPTH	TEXTURE	COLOUR	MOTTLES			PED		STONES			STRUCT/ CONSIST	SUBS			CALC		
				COL	ABUN	CONT	COL	GLEYS	2	6	LITH		TOT	STR	POR		IMP	SPL
1	0 27	MCL	10YR32						0	0	FSST	2					RootMottles	
	27 50	ZC	25Y71	10YR58	C	D		Y	0	0		0		P		Y	PlasticFirm	
	50 120	ZC	05Y71	75YR56	M	D		Y	0	0		0		P		Y	Plastic	
1P	0 26	MZCL	10YR42						0	0	FSST	1						
	26 42	MZCL	25Y62	10YR58	C	D		Y	0	0	FSST	15	WKCPR	FM	P	Y	Y	QueryHZCL
	42 120	ZC	05Y71	75YR58	M	D	00MN00	Y	0	0		0	WKCAB	FM	P	Y	Y	TendingPR
2	0 27	MCL	10YR32						0	0		0						RootMottles
	27 45	MZCL	25Y7253	75YR58	C	D		Y	0	0		0		P		Y	VeryMoist	
	45 58	HCL	25Y7164	75YR58	M	D		Y	0	0		0		P		Y	VeryMoist	
	58 85	ZC	25Y7271	75YR58	M	D		Y	0	0		0		P		Y	ICompacted	
2P	0 27	MCL	10YR32						0	0	FSST	2						
	27 50	MCL	10YR54	10YR56	F	D			0	0	FSST	5	MDCSAB	FR	M			TendingWkDe
	50 70	HZCL	10YR63	10YR56	C	D		Y	0	0	FSST	10	MDCSAB	FR	M			TendingAB
	70 90	HZCL	10YR63	10YR56	C	D		Y	0	0	FSST	10	WKCAB	FR	M	Y	Y	
	90 120	ZC	10YR63	10YR56	M	D		Y	0	0		0		FM	P	Y	Y	Ass meStructure
3	0 25	MCL	10YR33						0	0	FSST	2						FSand
	25 35	MCL	10YR53	10YR56	C			Y	0	0		0		M				FSand
	35 95	MCL	10YR53	10YR56	M	D		Y	0	0		0		M				Saturated
	95 120	MCL	25Y64	10YR58	M	D	00MN00	Y	0	0	FSST	2		M		Y		VMoistCompact
4	0 35	MZCL	10YR42	10YR58	C	D			0	0	FSST	2						
	35 50	HZCL	25Y63	10YR58	M	D	00MN00	Y	0	0	FSST	10		P		Y		FirmImpStones
5	0 32	MZCL	10YR32	10YR56	F	D			0	0	FSST	2						
	32 55	MCL	05Y72	75YR58	C	D		Y	0	0		0		P		Y		FSandWtat32cm
	55 67	HZCL	05Y71	75YR58	C	D		Y	0	0		0		P		Y		Firm
	67 120	ZC	N7	75YR58	M	D	00MN00	Y	0	0	FSST	5		P		Y		FirmPlastic
6	0 25	MZCL	10YR32						0	0	FSST	2						RootMottles
	25 30	MZCL	10YR32	10YR56	F	D			0	0	FSST	5		M				
	30 45	HZCL	25Y62	10YR58	M	D		Y	0	0	FSST	10		P		Y		Wtat30cmI45Stones
10	0 27	MZCL	10YR42						0	0	FSST	2						RootMottles
	27 55	ZC	25Y71	75YR58	M	D	00MN00	Y	0	0		0		P		Y		Wtat27cmIStones
11	0 35	MZCL	10YR32						0	0	FSST	3						
	35 70	MCL	25Y71	75YR58	M	D	00MN00	Y	0	0	FSST	10		P		Y		FSandIStones
14	0 30	MZCL	10YR32						1	0	FSST	3						
	30 40	HZCL	25Y62	75YR58	C	D		Y	0	0	FSST	2		P		Y		
	40 120	ZC	05Y71	75YR58	M	D		Y	0	0		0		P		Y		PlasticFirm
15	0 30	MCL	10YR32						1	0	FSST	2						FSand
	30 120	C	25Y71	75YR58	M	D	00MN00	Y	0	0		0		P		Y		FirmPlastic

SAMPLE	DEPTH	TEXTURE	COLOUR	MOTTLES		PED		STONES			STRUCT/ SUBS		SPL	CALC	
				COL	ABUN	CONT	COL	GLE	2	6	LITH	TOT			CONSIST
16	0 30	MCL	10YR32							0	0	FSST	3		FSand
	30 80	MCL	25Y62	10YR58	M	D		Y	0	0	FSST	5	P	Y	WT t30cm
	80 120	MCL	05Y7172	75YR58	M	D		Y	0	0	FSST	5	P	Y	+MSand QMSL
17	0 35	MZCL	10YR41							0	0	FSST	3		
	35 55	MZCL	25Y6272	10YR58	M	D	00MN00	Y	0	0	FSST	10	P	Y	ImpStones
19	0 30	MZCL	10YR32							0	0	FSST	2		Su faceVmet
	30 65	HZCL	25Y63	10YR56	C	D	00MN00	Y	0	0	FSST	10	P	Y	
	65 100	HZCL	25Y62	10YR58	M	D	00MN00	Y	0	0	FSST	10	P	Y	ImpStones
20	0 35	MZCL	10YR32							0	0	FSST	2		
	35 42	HZCL	25Y63	10YR58	C	D	00MN00	Y	0	0	FSST	5	P	Y	
	42 120	ZC	05Y71	75YR58	M	D	00MN00	Y	0	0		0	P	Y	Pl ticFirm
21	0 30	MZCL	10YR42							1	0	FSST	3		
	30 55	MCL	10YR53	75YR54	C	D		Y	0	0	FSST	5	M		FSand
	55 120	MCL	10YR63	10YR56	C	D		Y	0	0	FSST	5	M		FSand
22	0 30	MZCL	10YR42							0	0	FSST	2		
	30 65	MCL	25Y63	10YR58	C	D	00MN00	Y	0	0	FSST	5	M		FS nd
	65 80	LFS	25Y72	10YR58	M	D		Y	0	0		0	M		
	80 100	FSL	25Y72	10YR58	M	D		Y	0	0		0	M		WT t80cm
	100 120	SCL	05Y71	75YR68	M	D		Y	0	0		0	M	Y	Firmer
23	0 25	MZCL	10YR4243							0	0	FSST	2		
	25 35	MCL	10YR53	10YR58	C	D		Y	0	0		0	M		FSand
	35 50	HCL	10YR53	10YR58	C	D	00MN00	Y	0	0		0	M	Y	
	50 120	ZC	25Y71	75YR56	M	D	00MN00	Y	0	0		0	P	Y	FirmPl tic
24	0 30	MCL	10YR42							1	0	FSST	2		FSand
	30 60	MCL	25Y63	10YR58	C	D		Y	0	0	FSST	5	M		
	60 80	HCL	25Y63	75YR56	C	D		Y	0	0	FSST	2	M	Y	+FSand
	80 90	MSL	25Y62	10YR58	C	D		Y	0	0		0	M		ImpStone
25	0 30	MZCL	10YR42							0	0	FSST	2		
	30 55	MCL	25Y71	10YR58	C	D	00MN00	Y	0	0	FSST	5	M		
	55 85	MCL	05Y71	10YR58	M	D	00MN00	Y	0	0	FSST	5	M		ImpStones
26	0 25	MZCL	10YR42							0	0	FSST	2		
	25 30	MZCL	25Y71	75YR56	C	D		Y	0	0		0	P	Y	
	30 42	HCL	25Y71	75YR58	C	D		Y	0	0		0	P	Y	Que ySCL
	42 120	C	05Y71	10YR58	M	D		Y	0	0		0	P	Y	FirmPl tic
27	0 25	MZCL	10YR42							0	0	FSST	1		
	25 32	MCL	25Y63	10YR56	C	D		Y	0	0		0	M		FSandWTat30cm
	32 73	LMS	25Y63	10YR58	C	D		Y	0	0		0	M		
	73 120	C	05Y71	10YR58	M	D		Y	0	0		0	P	Y	Plast cf rm