

Soil profile descriptions										Soil profile descriptions continued										LCA for areas represented by individual survey points																																	
Survey point	Type	Horizon	Depth	Texture	LCA criteria					IMPERMEABLE LAYER?	Minimum depth to impermeable layer	Depth to topsoil	Soil texture	Wetness class	Limited to wetness	Table 12 - trafficability assessment					Mottling					Ped faces					Stones and rocks					Structure					Notes	Wetness class	Climate	Gradient	Summer flood risk	Winter flood risk	Topsoil texture	Soil Depth	Topsoil stoniness	Wetness	Droughtiness	Limited by	LCA Class
					Texture	Structure	Ped strength	Biopores	depth to clay							L	M	H	Abundance up to %	Hue	Value	Chroma	Colour different to matrix	Hue	Value	Chroma	FeMn up to %	Biopores	> 2 cm up to %	> 6 cm up to %	Type	Type	Development	Ped size	Consistence	Calcareous	Gleying																
40	Core	2 3 4 5	70	SCL	1		1	1				L	I	2	a				15	7.5YR	6	6	6	NO	n/a	n/a	n/a	0	NO	0	0	n/a	AB	W	VC	VFIR	NO	NO	Stopped at impermeable layer	I	3.1	1	1	1	0	1.0	1	2	3	Climate & Droughtiness	3.1		
41	Core	1 2 3 4 5	20 60 80	SCL SCL HCL	1		1	1				L	I	2	a				0	0	0	0	0	NO	n/a	n/a	n/a	2	YES	5	0	SS	SAB	M	M	FR	NO	NO	Stopped on stones	I	3.1	1	1	1	0	1.0	1	2	2	Climate	3.1		
57	Core	1 2 3 4 5	35 70	SL SCL	1	1	1	1		36 71	Y		II	3	b				10	7.5YR	6	6	6	NO	n/a	n/a	n/a	0	YES	5	0	H	SAB	S	M	FR	NO	NO	Stopped at impermeable layer.	II	3.1	1	1	1	0	1.0	1	3	3	Wetness & Droughtiness	3.2		
58	Pit	1 2 3 4 5	35 80	SL SCL	1	1	1	1		36 81	Y		III	3	b				0	0	0	0	0	NO	n/a	n/a	n/a	2	YES	10	0	SS	SAB	M	M	FR	NO	NO	Stopped on stones	III	3.1	1	1	1	0	1.0	2	3	3	Wetness & Droughtiness	3.2		
76	Core	1 2 3 4 5	40 45	SL SL			1	1		41 46			I	2	a				0	0	0	0	0	NO	n/a	n/a	n/a	0	YES	5	0	H	SAB	W	F	FR	NO	NO		I	3.1	1	1	1	0	2.0	1	2	3	Climate & Droughtiness	3.1		
90	Core	1 2 3 4 5	35 65 85	SL SL ZL	1			1		36 66 86			I	2	a				0	0	0	0	0	NO	n/a	n/a	n/a	2	YES	5	0	SS	SAB	M	M	FR	NO	NO	Stopped on stones	I	3.1	1	1	1	0	1.0	1	2	2	Climate	3.1		
91	Core	1 2 3 4 5	35 70	SL SC	1	1	1	1		36 71	Y		III	3	c				0	0	0	0	0	NO	n/a	n/a	n/a	0	YES	10	0	H	SAB	S	M	FR	NO	NO	Stopped at spl	III	3.1	1	1	1	0	1.0	2	3	3	Wetness & Droughtiness	3.2		
92	Core	1 2 3 4 5	30 70 100	SL SCL HCL	1	1	1	1		31 71 101	Y		II	3	b				0	0	0	0	0	NO	n/a	n/a	n/a	0	NO	5	0	SS	SAB	M	F	FR	NO	NO	Terminated at 100cm as could not progress further with auger	II	3.1	1	1	1	0	1.0	1	3	3	Wetness & Droughtiness	3.2		
93	Core	1 2 3 4 5	30 40 60	SL SC HCL	1		1	1		31 41 61	Y		II	3	b				0	0	0	0	0	NO	n/a	n/a	n/a	2	YES	5	0	SS	SAB	M	M	FR	NO	NO	Stopped on stones	II	3.1	1	1	1	0	1.0	1	3	3	Wetness & Droughtiness	3.2		
104	Core	1 2 3 4 5	30 50 80	SL SL SL			1	1		31 51 81			I	2	a				0	0	0	0	0	NO	n/a	n/a	n/a	0	NO	5	0	SS	SAB	S	F	VFR	NO	NO	H2 and h3 very hard to auger, but friable when ex situ.	I	3.1	1	1	1	0	1.0	2	2	2	Climate	3.1		
105	Core	1 2 3 4 5	30 70	SL SL				1		31 71			I	2	a				0	0	0	0	0	NO	n/a	n/a	n/a	2	YES	5	0	SS	SAB	M	M	FR	NO	NO	Stopped on stones	I	3.1	1	1	1	0	1.0	1	2	2	Climate	3.1		
106	Core	1 2 3 4 5	30 45	SL SL				1		31 46			I	2	a				2	7.5YR	6	6	6	NO	n/a	n/a	n/a	0	YES	0	0	n/a	SAB	M	M	FR	NO	NO	H2 v hard to dig. Small stones come out. Two cores, stopped when feeling rock and was grinding trough	I	3.1	1	1	1	0	2.0	1	2	3	Climate & Droughtiness	3.1		
107	Core	1 2 3 4 5	35 80	SL SL				1		36 81			I	2	a				0	0	0	0	0	NO	n/a	n/a	n/a	0	YES	5	0	SS	SAB	M	F	FR	NO	NO	Terminated at 80cm as could not penetrate auger further. Grey colour of second horizon caused by	I	3.1	1	1	1	0	1.0	1	2	2	Climate	3.1		
108	Core	1 2 3 4 5	35 50 65	SL SL LS	1	1	1	1		36 51 66	Y		I	2	a				0	0	0	0	0	NO	n/a	n/a	n/a	0	NO	5	0	H	AB	W	C	FR	NO	NO	Last layer hard to auger, likely bedrock.	I	3.1	1	1	1	0	1.0	1	2	3	Climate & Droughtiness	3.1		
109	Core	1 2 3 4 5	30 65 90	SL SL ZL	1			1		31 66 91			I	2	a				0	0	0	0	0	NO	n/a	n/a	n/a	2	YES	5	0	SS	SAB	M	M	FR	NO	NO	Stopped on stones	I	3.1	1	1	1	0	1.0	1	2	2	Climate	3.1		
119	Pit	1 2 3 4 5	25 65	SL SCL	1					26 66			I	2	a				0	0	0	0	0	NO	n/a	n/a	n/a	0	YES	15	10	SS	SAB	M	M	FR	NO	NO	Stopped on stones	I	3.1	1	1	1	0	1.0	1	2	2	Climate	3.1		
120	Core	1 2 3 4 5	50	SL						51			I	2	a				0	0	0	0	0	NO	n/a	n/a	n/a	0	YES	5	0	SS	SAB	M	F	FR	NO	NO	Terminated at 50cm as could not progress deeper with auger. Broken up sandstone gives grey colour to soil	I	3.1	1	1	1	0	2.0	1	2	3	Climate & Droughtiness	3.1		
121	Core	1 2 3 4 5	45 60	SL SL				1		46 61			I	2	a				0	0	0	0	0	NO	n/a	n/a	n/a	2	YES	5	0	SS	SAB	M	F	FR	NO	NO	Terminated at 60cm as could not progress auger	I	3.1	1	1	1	0	1.0	1	2	3	Climate & Droughtiness	3.1		
122	Pit	1 2 3 4 5	35 70	SL SL				1		36 71			I	2	a				0	0	0	0	0	NO	n/a	n/a	n/a	0	NO	5	0	SS	SAB	M	C	FR	NO	NO	Pit terminated at 70cm as could not penetrate through boulders	I	3.1	1	1	1	0	1.0	1	2	3	Climate & Droughtiness	3.1		
123	Core	1 2 3 4 5	30 50 70	SL SL MZCL	1			1		31 51 71			I	2	a				0	0	0	0	0	NO	n/a	n/a	n/a	2	YES	5	0	SS	SAB	M	M	FR	NO	NO	Stopped on stones	I	3.1	5	1	1	0	1.0	1	2	2	Climate	3.1		
131	Core	1 2 3 4 5	30 50 90	SCL SCL SC	1	1	1	1		31 51 91	Y		III	3	c				0	0	0	0	0	NO	n/a	n/a	n/a	0	YES	5	5	H	SAB	S	F	VFR	NO	NO	Faint grey and mottling shades where sand clusters are	III	3.1	1	1	1	0	1.0	2	3	2	Climate and Wetness	3.1		
132	Core	1 2 3 4 5	35 65	SL SL				1		36 66			I	2	a				0	0	0	0	0	NO	n/a	n/a	n/a	0	YES	5	0	SS	SAB	M	F	FR	NO	NO	Terminated at 65cm as could not penetrate auger further	I	3.1	1	1	1	0	1.0	1	2	2	Climate	3.1		
133	Core	1 2 3 4 5	30 75	SL SL				1		31 76			I	2	a				0	0	0	0	0	NO	n/a	n/a	n/a	0	YES	5	0	H	SAB	S	M	FR	NO	NO	Stony at depth. H2 hard to auger but friable when extracted	I	3.1	1	1	1	0	1.0	1	2	2	Climate	3.1		
134	Core	1 2 3 4 5	30 60	SL SL						31 61			I	2	a				0	0	0	0	0	NO	n/a	n/a	n/a	2	YES	5	0	SS	SAB	M	F	FR	NO	NO	Stopped on stones	I	3.1	1	1	1	0	1.0	1	2	3	Climate & Droughtiness	3.1		
135	Core	1 2 3 4	35 60	SL SL				1		36 61			I	2	a				0	0	0	0	0	NO	n/a	n/a	n/a	0	YES	5	0	H	SAB	M	F	FR	NO	NO	Stopped at sandstone	I	3.1	1	1	1	0	1.0	1	2	3	Climate & Droughtiness	3.1		

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Survey point	Type	Horizon	Depth	Texture	LCA criteria					IMPERMEABLE LAYER?	Minimum depth to impermeable layer	Depth to topsoil	Soil retained capacity volume	Wetness class	Limited to wetness	Table 12 - trafficability assessment			Mottling			Ped faces			Stones and rocks		Structure		Consistence	Calcareous	Gleying	Notes	Wetness class	Climate	Gradient	Summer flood risk	Winter flood risk	Topsoil texture	Soil Depth	Topsoil stoniness	Wetness	Droughtiness	Limited by	LCA Class								
					L	M	H	Abundance up to %	Hue							Value	Chroma	Colour different to matrix	Hue	Value	Chroma	FeMn up to %	Biopores	> 2 cm up to %	> 6 cm up to %	Type	Type	Development																	Ped size							
95	Core	3 4 5	80	HCL	1	1	1	1	1	81			II	3	b					2	10YR	6	6	NO	n/a	n/a	n/a	2	NO	5	0	SS	AB	W	C	FIR	NO	NO	Stopped on stone	II	3.1	1	1	1	0	1.0	1	3	2	Climate and Wetness	3.1	
96	Core	1 2 3 4 5	35 70	SL SL		1	1	1	1	36 71	Y	<40	L	II	3	b				0	0	0	0	NO	n/a	n/a	n/a	0	YES	0	0	n/a	SAB	S	M	FR	FIR	NO	NO	Stopped at impermeable layer. Miss around the bare soil	II	3.1	1	1	1	0	1.0	1	3	2	Climate and Wetness	3.1
97	Pit	1 2 3 4 5	25 60	SL					1	26 61			L	I	2	a				0	0	0	0	NO	n/a	n/a	n/a	0	YES	10	10	SS	SAB	M	M	FR	FR	NO	NO	Stopped on stones	I	3.1	1	1	1	0	1.0	2	2	3	Climate & Droughtiness	3.1
98	Core	1 2 3 4 5	35 50 70	SL SL SL					1 1	36 51 71			L	II	2	a				10	10YR	6	2	NO	n/a	n/a	n/a	0	YES	0	0	n/a	SAB	S	M	FR	FR	NO	NO	Stopped at bedrock, two cores attempted. Slight, very slight podzol pattern. bottom of valley	II	3.1	1	1	1	0	1.0	1	2	2	Climate	3.1
110	Core	1 2 3 4 5	45 60	SL					1	46 61			L	I	2	a				0	0	0	0	NO	n/a	n/a	n/a	0	YES	5	5	H	SAB	W	F	FR	FR	NO	NO	Terminated at 60cm as cannot progress auger	I	3.1	1	1	1	0	1.0	1	2	3	Climate & Droughtiness	3.1
111	Core	1 2 3 4 5	30 60	SL					1	31 61			L	I	2	a				0	0	0	0	NO	n/a	n/a	n/a	0	YES	0	0	n/a	SAB	S	M	FR	FR	NO	NO	Stopped because I was churning sand.	I	3.1	1	1	1	0	1.0	1	2	3	Climate & Droughtiness	3.1
112	Core	1 2 3 4 5	45 60	SL					1	46 61			L	I	2	a				0	0	0	0	NO	n/a	n/a	n/a	0	YES	5	5	H	SAB	W	F	FR	FR	NO	NO	Terminated as cannot penetrate deeper due to boulders	I	3.1	1	1	1	0	1.0	1	2	3	Climate & Droughtiness	3.1
113	Core	1 2 3 4 5	30 65	SL						31 66			L	I	2	a				0	0	0	0	NO	n/a	n/a	n/a	0	YES	5	0	SS	SAB	M	F	FR	FR	NO	NO	Stopped on stones	I	3.1	1	1	1	0	1.0	1	2	2	Climate	3.1
114	Core	1 2 3 4 5	30 60 90	SCL ZC	1	1	1	1	1	31 61 91	Y	40-80	L	I	2	a				0	0	0	0	NO	n/a	n/a	n/a	0	YES	5	5	SS	SAB	M	M	FIR	FIR	NO	NO	Stopped on stones	I	3.1	1	1	1	0	1.0	1	2	2	Climate and Wetness	3.1
124	Core	1 2 3 4 5	34 70	SL	1				1	35 71			L	II	2	a				0	0	0	0	NO	n/a	n/a	n/a	0	YES	0	0	n/a	SAB	M	M	VFR	VFR	NO	NO	H2 v hard to auger but friable when dug out, stopped at impermeable layer	II	3.1	1	1	1	0	1.0	1	2	2	Climate	3.1
125	Core	1 2 3 4 5	45 70 120	SL SC	1				1	46 71 121	Y	40-80	L	II	2	a				0	0	0	0	NO	n/a	n/a	n/a	0	YES	5	0	H	SAB	W	F	FR	FR	NO	NO	-	II	3.1	1	1	1	0	1.0	1	2	2	Climate	3.1
126	Core	1 2 3 4 5	30 60	SL					1	31 61			L	I	2	a				0	0	0	0	NO	n/a	n/a	n/a	0	YES	0	0	n/a	SAB	S	M	FR	FR	NO	NO	Stop at indurement	I	3.1	1	1	1	0	1.0	1	2	3	Climate & Droughtiness	3.1
127	Core	1 2 3 4 5	30 80	SL					1	31 81			L	I	2	a				0	0	0	0	NO	n/a	n/a	n/a	0	YES	5	0	H	SAB	M	M	FR	FR	NO	NO	Terminated at 80cm as cannot penetrate deeper with auger due to boulders	I	3.1	1	1	1	0	1.0	1	2	2	Climate	3.1
136	Core	1 2 3 4 5	45 80	SL					1	46 81			L	I	2	a				0	0	0	0	NO	n/a	n/a	n/a	0	YES	5	5	H	SAB	W	F	FR	FR	NO	NO	Terminated at 80cm as could not penetrate auger though boulder. Bottom 10cm is broken up boulder	I	3.1	1	1	1	0	1.0	1	2	2	Climate	3.1
137	Core	1 2 3 4 5	30 75	SL					1	31 76			L	I	2	a				0	0	0	0	NO	n/a	n/a	n/a	0	YES	0	0	n/a	SAB	S	M	FR	FR	NO	NO	Stopped because o boulder beneath	I	3.1	1	1	1	0	1.0	1	2	2	Climate	3.1
138	Pit	1 2 3 4 5	45 80	SL					1	46 81			L	I	2	a				0	0	0	0	NO	n/a	n/a	n/a	0	YES	10	5	H	SAB	M	C	FR	FR	NO	NO	-	I	3.1	1	1	1	0	1.0	2	2	2	Climate	3.1
139	Core	1 2 3 4 5	35 55 80	SL SL SC	1	1	1	1	1	36 56 81	Y	40-80	L	I	2	a				2	7.5YR	6	6	NO	n/a	n/a	n/a	2	YES	0	0	n/a	SAB	S	M	FR	FR	NO	NO	Insured layer at bottom.	I	3.1	1	1	1	0	1.0	1	2	2	Climate	3.1
147	Core	1 2 3 4 5	50 120	SL					1	51 121			L	I	2	a				0	0	0	0	NO	n/a	n/a	n/a	2	YES	5	0	H	SAB	W	F	FR	FR	NO	NO	-	I	3.1	1	1	1	0	1.0	1	2	2	Climate	3.1
10	Core	1 2 3 4 5	35 65	SL	1	1			1	36 66	Y	<40	L	I	2	a				0	0	0	0	NO	n/a	n/a	n/a	0	YES	10	10	H	SAB	S	M	FR	FR	NO	NO	Too many rocks at depth, two cores	I	3.1	1	1	1	0	1.0	2	2	3	Climate & Droughtiness	3.1
11	Core	1 2 3 4 5	50 80	SL	1	1	1	1	1	51 81	Y	40-80	L	II	3	b				0	0	0	0	NO	n/a	n/a	n/a	0	YES	0	5	n/a	SAB	W	C	FR	FIR	NO	NO	Terminated at 80cm as could not penetrate below boulder	II	3.1	1	1	1	0	1.0	1	3	2	Climate and Wetness	3.1
12	Core	1 2 3 4 5	45 120	SL	1	1	1	1	1	46 121	Y	40-80	L	II	3	b				0	0	0	0	NO	n/a	n/a	n/a	2	YES	5	5	H	SAB	M	F	FR	VFIR	NO	NO	-	II	3.1	1	1	1	0	1.0	1	3	2	Climate and Wetness	3.1
13	Core	1 2 3 4 5	35 60	SL	1	1	1	1	1	36 61	Y	<40	L	III	3	c				0	0	0	0	NO	n/a	n/a	n/a	0	YES	0	0	n/a	SAB	S	M	FR	VFIR	NO	NO	Stopped at impermeable layer. H2 indured	III	3.1	1	1	1	0	1.0	1	3	3	Wetness & Droughtiness	3.2
25	Core	1 2 3 4 5	50 80	SL	1				1	51 81			L	I	2	a				0	0	0	0	NO	n/a	n/a	n/a	0	YES	5	0	H	SAB	W	F	FR	FR	NO	NO	Terminated at 80cm as could not penetrate through boulder	I	3.1	1	1	1	0	1.0	1	2	2	Climate	3.1
26	Core	1 2 3 4 5	45 80 110	HCL	1				1	46 81 111	Y	>80	L	II	2	a				0	0	0	0	NO	n/a	n/a	n/a	0	YES	5	0	H	SAB	W	F	FR	FR	NO	NO	Terminated at 110cm as could not penetrate further	II	3.1	1	1	1	0	1.0	1	2	2	Climate	3.1
27	Pit	1 2 3 4 5	35 80	SL	1	1	1	1	1	36 81	Y	<40	L	III	3	c				0	0	0	0	NO	n/a	n/a	n/a	0	YES	5	0	H	SAB	M	VC	FR	FIR	NO	NO	-	III	3.1	1	1	1	0	1.0	1	3	3	Wetness & Droughtiness	3.2

