APPENDIX 2. WORKING TABLES FOR LAND CAPABILITY RATINGS

Agriculture - Summary table showing assessment of individual parameters

Land Units	Dga	Dgb1	Dgb2	Dgc2	Dgd	Dge	Dgf	Dgg	Dsa	Dsb1	Dsb2	Dsc1
CLIMATE - length of growing season *	3	3	3	3	3	3	3	3	3	3	3	3
TOPOGRAPHY - slope (%)	3	5	5	4	2	3	2	3	3	5	5	4
SOIL												
Topsoil condition *	3	3	2	3	3#	3	2	2#	2	2	1	2
Depth of topsoil (cm)	4	2	1	1	3#	1	1	1#	4	4	2	1
Depth to rock/hardpan	5	4	4	1	3	2	1	1#	5	5	4	3
Depth to seasonal watertable (m)	1	1	1	1	1	5+	5+	5	1	1	1	1
Total amount of water available to plants *	5#	3	1	1	1#	2	1	1#	5#	5#	3	2
Index of permeability/rainfall *	1	1	1	4	3	3	3	4	1	1	1	1
Dispersibility of topsoil (Emerson) *	-	2	3	3	-	2	4	-	-	-	3	2
Linear shrinkage (%) *	1#	2	1	3	3#	3	3#	3#	1#	1#	2	2
Gravel/stone/boulder content (% v/v) *	2	2	3	3	3#	3	2	2#	5	5	4	2
Electrical conductivity (micro s cm-1) *	-	1	1	1	-	1	1	-	-	-	1	1
Susceptibility to sheet/rill erosion *	2	4	5	3	2	3	2	3	3	5	5	4
Susceptibility to gully erosion *	2	3	3	4	3	3	3	4	2	2	3	3
Susceptibility to wind erosion *	4	4	4	1	4	4	4	3	4	1	4	3
FINAL RATING	C3 T3 S5	C3 T5 S4	C3 T5 S5	C3 T4 S4	C3 T2 S4	C3 T3 S5	C3 T2 S5	C3 T3 S5	C3 T3 S5	C3 T5 S5	C3 T5 S5	C3 T4 S4

Land Units	Dsc2	Dsd	Dse	Dsg	Tfc1	Tfc2	Tfe	Tff	Tfg	Qam	Qa1	Qa2
CLIMATE - length of growing season *	3	3	3	3	3	3	3	3	3	3	3	3
TOPOGRAPHY - slope (%)	4	2	3	3	4	4	3	2	2	2	2	1
SOIL												
Topsoil condition *	3	3#	2	2	2	3	2	2	2	2	2	2
Depth of topsoil (cm)	2	2#	2	3	1	1	1	1	1	3	1	2
Depth to rock/hardpan	3	4#	3	1	3	1	2	1	1	3	1	1
Depth to seasonal watertable (m)	2	1#	2	5	1	2	2	5+	5	4	3	5
Total amount of water available to plants *	1	3#	2	2	1	1	1	1	1	1	1	1
Index of permeability/rainfall *	3	2	4	4	1	3	3	3	4	5	3	1
Dispersibility of topsoil (Emerson) *	3	-	3	2	3	3	3	4	4	3	4	2
Linear shrinkage (%) *	2	2#	3	2	2	3	3	3	3	3	2	1
Gravel/stone/boulder content (% v/v) *	3	3#	2	2	2	2	1	1	1	3	2	1
Electrical conductivity (micro s cm-1) *	1	-	1	1	1	1	1	1	1	1	1	1
Susceptibility to sheet/rill erosion *	3	2	3	4	4	3	3	3	3	3	4	1
Susceptibility to gully erosion *	3	2	3	4	3	3	3	3	3	2	2	2
Susceptibility to wind erosion *	2	4	3	4	4	3	3	4	4	2	4	4
FINAL RATING	C3 T4 S3	C3 T2 S4	C3 T3 S4	C3 T3 S5	C3 T4 S4	C3 T4 S3	C3 T3 S3	C3 T2 S5	C3 T2 S5	C3 T2 S5	C3 T2 S4	C3 T1 S5

* See Appendix 1

\# Estimated value based on non-sampled sites in the same land unit

\+ A perched water table at < 50 cm

Building foundations - Summary table showing assessment of individual parameters

Land Units	Dga	Dgb1	Dgb2	Dgc2	Dgd	Dge	Dgf	Dgg	Dsa	Dsb1	Dsb2	Dsc1
1. Slope												
a) 100 mm reinforced concrete slab	3	5	5	4	2	3	2	2	2	5	5	4
b) stumps or strip footings	2	5	4	3	1	2	1	1	1	5	4	3
2. Drainage	1	1	1	3	1	4	4	4	1	1	1	1
3. Depth to seasonal watertable	1	1	1	1	1	5*	5*	5	1	1	1	1
4. Proportion of stones and boulders	5	4	4	2	3	1	1	1	5	5	2	1
5. Depth to hard rock	4	2	2	1	1#	1	1	2	4	4	3	2
6. Susceptibility to slope failure	1	4	5	4	2	2	2	2	1	3	4	4
7. Linear shrinkage												
a) 100 mm reinforced concrete slab	1	1	1	2	2	2	3	2	1	1	1	1
b) stumps or strip footings	2	2	1	3	3	3	2	3	1	1	2	2
8. Flooding risk	1	1	1	1	1	1	1	5	1	1	1	1
FINAL RATING concrete slab	5	5	5	4	3	5	5	5	5	5	5	4
stumps or footings	5	5	5	4	3	5	5	5	5	5	4	4

Land Units	Dsc2	Dsd	Dse	Dsg	Tfc1	Tfc2	Tfe	Tff	Tfg	Qam	Qa1	Qa2
1. Slope												
a) 100 mm reinforced concrete slab	4	2	2	2	4	4	2	2	2	2	1	1
b) stumps or strip footings	3	1	1	1	3	3	1	1	1	1	1	1
2. Drainage	4	3	4	5	1	3	3	5	5	5	4	2
3. Depth to seasonal watertable	1	1	1	4	1	1	1	5*	5	3	3	5
4. Proportion of stones and boulders	1	1	1	1	1	1	1	1	1	1	1	1
5. Depth to hard rock	2	2	2	1	2	1	1	1	1	2	1	1
6. Susceptibility to slope failure	4	1	1	1	4	4	2	1	2	2	2	2
7. Linear shrinkage												
a) 100 mm reinforced concrete slab	1	1	2	1	1	2	2	2	2	2	1	1
b) stumps or strip footings	2	2	3	2	2	3	3	3	3	3	1	1
8. Flooding risk	1	1	1	5	1	1	1	2	5	5	2	5
FINAL RATING concrete slab	4	3	4	5	4	4	3	5	5	5	4	5
stumps or footings	4	3	4	5	4	4	3	5	5	5	4	5

* A perched water table during wet periods occurs above B horizon
# depth to hard rock is variable; site would require careful selection

Effluent disposal - Summary table showing assessment of individual parameters

Land Units	Dga	Dgb1	Dgb2	Dgc2	Dgd	Dge	Dgf	Dgg	Dsa	Dsb1	Dsb2	Dsc1
1. Slope	2	5	5	3	2	2	1	2	2	5	5	4
2. Flooding risk	1	1	1	1	1	1	1	5	1	1	1	1
3. Drainage	1	1	1	3	3	4	4	4	1	1	1	1
4. Depth to seasonal water table	1	1	1	1	1	5#	5#	4	1	1	1	1
5. Depth to hard rock/impermeable layer	5	3	3	1	3*	1	1	2	5	5	3	2
6. Number of months per year when average daily rainfall > Ksat	1	1	1	1	1	1	1	2	1	1	1	1
7. Permeability (Ksat.)	1	1	1	3	3	2	2	4	1	1	1	1
FINAL RATING	5	5	5	3	3	5	5	5	5	5	5	4

Land Units	Dsc2	Dsd	Dse	Dsg	Tfc1	Tfc2	Tfe	Tff	Tfg	Qam	Qa1	Qa2
1. Slope	3	1	2	2	4	3	2	1	2	1	1	1
2. Flooding risk	1	1	1	5	1	1	1	2	5	5	2	5
3. Drainage	4	3	4	5	2	3	3	5	5	5	4	2
4. Depth to seasonal water table	1	1	1	4	1	1	1	5#	5	3	3	5
5. Depth to hard rock/impermeable layer	2	3	2	1	2	1	1	1	1	2	1	1
6. Number of months per year when average daily rainfall > Ksat	1	1	1	1	1	1	1	1	2	5	1	1
7. Permeability (Ksat.)	2	1	4	3	1	2	2	2	4	5	2	1
FINAL RATING	4	3	4	5	4	3	3	5	5	5	4	5

A perched water table occurs on top of the B horizon rendering any effluent absorption field located in this soil profile, ineffective

* Soil depth varies - careful location of absorption trenches would be required

Farm dams - Summary table showing assessment of individual parameters

Land Units	Dga	Dgb1	Dgb2	Dgc2	Dgd	Dge	Dgf	Dgg	Dsa	Dsb1	Dsb2	Dsc1
1. Slope	1	5	5	4	2	1	2	1	1	5	5	5
2. Linear shrinkage	1	2	1	3	3	3	3	3	1	1	2	2
3. Suitability of subsoil	5	3	4	4	-	4	5	-	5	5	4	4
4. Depth to seasonal watertable	1	1	1	1	1	1	2	5	1	1	1	1
5. Depth to hard rock	5	4	4	3	4	4	2	4	5	5	5	4
6. Permeability (K sat.)	5	5	5	3	3	4	4	2	5	5	5	5
7. Dispersibility of subsoil	1	3	4	2	-	4	4	-	-	-	2	4
8. Susceptibility to slope failure	1	4	5	4	2	2	2	2	1	3	4	4
FINAL RATING	5	5	5	4	4	4	5	5	5	5	5	5

Land Units	Dsc2	Dsd	Dse	Dsg	Tfc1	Tfc2	Tfe	Tff	Tfg	Qam	Qa1	Qa2
1. Slope	4	2	1	1	4	4	1	2	1	2	2	2
2. Linear shrinkage	2	2	3	2	2	3	3	3*	3	3	2	1
3. Suitability of subsoil	4	-	4	5	5	5	3	4	4	5	4	5
4. Depth to seasonal watertable	1	1	2	4	1	1	1	2	5	5	5	5
5. Depth to hard rock	4	4	4	3	4	3	3	2	2	4	1	1
6. Permeability (K sat.)	4	4	3	3	5	4	4	3*	3	2	4	5
7. Dispersibility of subsoil	3	-	4	2	2	3	4	3	3	3	3	3
8. Susceptibility to slope failure	4	1	1	1	4	4	2	1	2	2	2	2
FINAL RATING	4	4	4	5	5	5	4	4	5	5	5	5

* A perched water table during wet periods occurs above the B horizon

Rural residental - Summary table showing assessment of individual parameters

Land Units	Dga	Dgb1	Dgb2	Dgc2	Dgd	Dge	Dgf	Dgg	Dsa	Dsb1	Dsb2	Dsc1
1. Building foundations												
a) 100 mm reinforced concrete slab	5	5	5	4	2	3	2	2	2	5	5	4
b) stumps or strip footings	5	5	4	3	1	2	1	1	1	5	4	3
2. Effluent disposal	5	5	5	3	3	5	5	5	5	5	5	4
3. Secondary roads	5	5	5	4	3	5	5	5	5	5	5	4
4. Farm dams (earthen)	5	5	5	4	4	4	4	5	5	5	5	5
FINAL RATING	5	5	5	4	4	5	5	5	5	5	5	5

Land Units	Dsc2	Dsd	Dse	Dsg	Tfc1	Tfc2	Tfe	Tff	Tfg	Qam	Qa1	Qa2
1. Building foundations												
a) 100 mm reinforced concrete slab	4	2	2	2	4	4	2	2	2	2	1	1
b) stumps or strip footings	3	1	1	1	3	3	1	1	1	1	1	1
2. Effluent disposal	4	3	4	5	4	3	3	5	5	5	4	5
3. Secondary roads	4	3	4	5	4	4	3	5	5	5	4	5
4. Farm dams (earthen)	4	4	4	5	5	5	4	4	5	5	5	5
FINAL RATING	4	4	4	5	5	5	4	5	5	5	5	5

Urban residential - Summary table showing assessment of individual parameters

Land Units	Dga	Dgb1	Dgb2	Dgc2	Dgd	Dge	Dgf	Dgg	Dsa	Dsb1	Dsb2	Dsc1
1. Building foundations												
a) 100 mm reinforced concrete slab	3	5	5	4	2	3	2	2	2	5	5	4
b) stumps or strip footings	2	5	4	3	1	2	1	1	1	5	4	3
2. Secondary roads	5	5	5	4	3	5	5	5	5	5	5	4
FINAL RATING	5	5	5	4	3	5	5	5	5	5	5	4

Land Units	Dsc2	Dsd	Dse	Dsg	Tfc1	Tfc2	Tfe	Tff	Tfg	Qam	Qa1	Qa2
1. Building foundations												
a) 100 mm reinforced concrete slab	4	2	2	2	4	4	2	2	2	2	1	1
b) stumps or strip footings	3	1	1	1	3	3	1	1	1	1	1	1
2. Secondary roads	4	3	4	5	4	4	3	5	5	5	4	5
FINAL RATING	4	3	4	5	4	4	3	5	5	5	4	5

Secondary roads - Summary table showing assessment of individual parameters

Land Units	Dga	Dgb1	Dgb2	Dgc2	Dgd	Dge	Dgf	Dgg	Dsa	Dsb1	Dsb2	Dsc1
1. Slope	3	5	5	4	2	3	2	2	2	5	5	4
2. Drainage	1	1	1	3	1	4	4	4	1	1	1	1
3. Depth of seasonal watertable	1	1	1	1	1	5*	5*	5	1	1	1	1
4. Proportion of stones and boulders	5	4	4	2	3	1	1	1	5	5	2	1
5. Depth to hard rock	4	2	2	1	1#	1	1	2	4	4	3	2
6. Susceptibility to slope failure	1	4	5	4	2	2	2	2	1	3	4	4
7. Linear shrinkage	2	2	1	3	3	3	3	3	1	1	2	2
8. Flooding risk	1	1	1	1	1	1	1	5	1	1	1	1
9. Subsoil dispersibility on slopes > 4%	1	2	4	3	1	2	1	2	2	3	3	2
10. Universal Soil Group for subsoils	3	2	1	3	-	3	4	-	4	4	4	4
FINAL RATING	5	5	5	4	3	5	5	5	5	5	5	4

Land Units	Dsc2	Dsd	Dse	Dsg	Tfc1	Tfc2	Tfe	Tff	Tfg	Qam	Qa1	Qa2
1. Slope	4	2	2	2	4	4	2	2	2	2	1	1
2. Drainage	4	3	4	5	1	3	3	5	5	5	4	2
3. Depth of seasonal watertable	1	1	1	4	1	1	1	5*	5	3	3	5
4. Proportion of stones and boulders	1	1	1	1	1	1	1	1	1	1	1	1
5. Depth to hard rock	2	2	2	1	2	1	1	1	1	2	1	1
6. Susceptibility to slope failure	4	1	1	1	4	4	2	1	2	2	2	2
7. Linear shrinkage	2	2	3	2	2	3	3	3	3	3	1	1
8. Flooding risk	1	1	1	5	1	1	1	2	5	5	2	5
9. Subsoil dispersibility on slopes > 4%	4	1	2	3	3	2	2	1	1	1	1	1
10. Universal Soil Group for subsoils	4	-	3	4	3	3	3	3	3	3	3	2
FINAL RATING	4	3	4	5	4	4	3	5	5	5	4	5

* Perched water table at < 40 cm

\# Depth to hard rock extremly variable

Scenic value - Summary table showing assessment of individual parameters

Land Units		Dga	Dgb1	Dgb2	Dgc2	Dgd	Dge	Dgf	Dgg	Dsa	Dsb1	Dsb2	Dsc1
1. Scenic quality		M	M	M	M	L	L	L	L	H	H	H	M
2. Public	> 50% of land units	H	H	H	M	M	M	H	H	H	H	H	M
Sensitivity	25 - 50% of land units	-	-	M	-	-	H	-	-	L	-	-	-
Level	< 25% of land units	-	-	-	-	-	-	-	-	-	-	M	H
3. Distance													
(H - < 0.5 km)	> 50% of land units	M	M	M	H	H	H	H	H	M	M	M	M
(M - 0.5 - 6.5 km)	25 - 50% of land units	-	H	-	M	-	-	-	-	L	-	L	-
(L - > 6.5 km)	< 25% of land units	H	-	-	-	-	-	-	-	H	-	H	H
FINAL RATING	**> 50% of land units**	2	2	2	3	4	4	3	3	1	1	1	3
	25 - 50% of land units	-	-	3	-	-	3	-	-	2	-	2	2
	< 25% of land units	-	-	-	-	-	-	-	-	-	-	-	-

Land Units		Dsc2	Dsd	Dse	Dsg	Tfc1	Tfc2	Tfe	Tff	Tfg	Qam	Qa1	Qa2
1. Scenic quality		L	L	L	L	L	L	L	L	L	M	L	H
2. Public	> 50% of land units	M	M	M	M	M	M	H	H	H	M	M	M
Sensitivity	25 - 50% of land units	-	-	-	-	-	-	-	-	M	-	-	-
Level	< 25% of land units	H	H	H	H	-	H	-	-	L	H	H	H
3. Distance													
(H - < 0.5 km)	> 50% of land units	M	M	M	M	M	H	H	H	M	M	H	H
(M - 0.5 - 6.5 km)	25 - 50% of land units	-	-	L	L	L	M	-	-	H	H	M	M
(L - > 6.5 km)	< 25% of land units	H	H	-	H	-	-	-	-	-	-	-	-
FINAL RATING	**> 50% of land units**	4	4	4	4	4	4	3	3	3	3	4	2
	25 - 50% of land units	-	-	3	3	3	3	-	-	4	2	3	1
	< 25% of land units	3	3	5	5	-	-	-	-	5	-	-	-