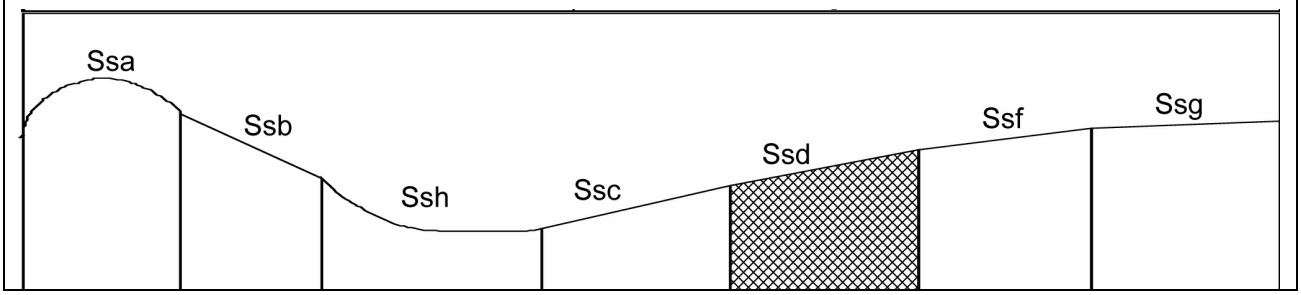
MAP UNIT SYMBOL: **Ssd** Area: 23 823 ha	MAP UNIT: **Silurian sediments, moderate slope**



A. GENERAL DESCRIPTION

The moderate slopes of the Silurian and Ordovician sedimentary hills are commonly yellow duplex with a bleached A2 horizon. A minor soil type is a gradational profile with the A2 horizon absent. The soil is strongly acidic, potentially toxic in aluminium and has a very low nutrient status. Salting can occur on mid-slope where the sedimentary material meets the basalt. As the soils are quite developed and deep the potential groundwater recharge is low.

SITE CHARACTERISTICS

Parent Material Age:	Silurian/Ordovician	**Depth to Seas. Watertable:**	>1.5 m
Parent Material Lithology:	Sedimentary	**Flooding Risk:**	Nil
Landform Pattern:	Rolling low hills	**Drainage:**	Moderately well drained
Landform Element:	Hillslope	**Rock Outcrop:**	0-2%
Slope a) common:	19%	**Depth to Hard Rock:**	>1.1 m
Slope b) range:	11-20%	**Present Land Use:**	Grazing

Potential Recharge to Groundwater: Low
Major Native Vegetation Species: Broad-leaved Peppermint, Narrow-leaved Peppermint, Long-leaved Box, Messmate, Blackwood, Manna Gum, Red Stringybark, Silver Wattle, Grey Box, Kangaroo Grass

LAND DEGRADATION

Land Degradation	Water Erosion		Wind Erosion	Mass Movement	Salting	Acidification
	sheet/rill	gully				
Susceptibility	Moderate	High	Moderate	Moderate	Low	Low
Incidence	Moderate	Moderate	Low	Low	Low	Not available

B. SOIL PROFILE

PROFILE DESCRIPTION

A1 0-90 mm — Very dark grey (10YR3/1) loam, weak subangular blocky structure, peds less than 2 mm, rough fabric, moderately firm consistence, abundant fine angular sedimentary gravel fragments, pH 6.0. Gradual transition to:

A2 90-185 mm — Brown (10YR5/3) loam, bleached (10YR7/3) when dry, moderate subangular blocky structure, peds 5-10 mm, rough fabric, moderately strong consistence, many fine angular sedimentary gravel fragment, pH 5.5. Clear transition to:

B21 185-455 mm — Reddish yellow (7.5YR6/6) light clay with coarse sand, strong subangular blocky structure, peds 2-5 mm, smooth fabric, very firm consistence, a few fine subrounded sedimentary gravel fragments, pH 5.5. Gradual transition to:

B22 455-635 mm — Yellow (10YR7/6) light clay with coarse sand, a few fine faint orange mottles, moderate subangular blocky structure, peds 5-10 mm, smooth fabric, very firm consistence, medium subrounded sedimentary gravel fragments are common, pH 6.0. Diffuse transition to:

B23	635-925 mm	Very pale brown (10YR7/4) light clay with coarse sand, coarse distinct orange mottles are common, strong subangular blocky structure, peds 5-10 mm, smooth fabric, very firm consistence, fine subrounded sedimentary gravel fragments are common, pH 5.5. Clear transition to:
BC	925-1100 mm+	Partially weathered sedimentary rock.

CLASSIFICATION

Factual Key:	Dy3.41 (major), Gn3.91 (minor).
Australian Soil Classification:	Bleached, Dystrophic, Yellow Kurosol; medium, moderately gravely, loamy/clayey, moderate
Unified Soil Group:	CL

INTERPRETATION OF LABORATORY ANALYSIS*

Horizon	pH ($CaCl_2$)	% Gravel	E.C. (salts)	Nutrient Status	P	K	Al	Organic matter	Dispersibility
A1	3.7**	56.8	VL	L	S	S	T	H	L
A2	3.9**	36.1	VL	VL	D	D	T	M	L
B21	3.9**	4.7	VL	VL	D	D	T	L	L
B22	4.0**	13.9	VL	VL	D	D	T	L	L
B23	4.0**	12.6	VL	VL	D	D	T	VL	L

VL: Very Low L: Low M: Moderate H: High VH: Very High D: Deficient S: Satisfactory
T: Potentially Toxic NA: Not Available * see appendix D for analytical results ** Strongly Acidic

SOIL PROFILE CHARACTERISTICS:

Permeability: Moderate (estimate)
Available Water Capacity: Moderate (104 mm H_2O)
Linear Shrinkage (B horizon): Low (10%)

C. LAND CAPABILITY ASSESSMENT

Land Use	Class	Major Limiting Feature(s)/Land Use
Agriculture	C_2 T_3 S_4	Susceptibility to gully erosion
Effluent Disposal (septic tanks)	3	Slope, drainage
Farm Dams	4	Slope, depth to hard rock
Building Foundations		
slab	4	Slope, stone content
stumps/footings	4	Stone content