

General Description:

A well-developed dendritic drainage pattern occurs in the Ordovician sedimentary areas to the southwest of Woodend and the north-east of Newham. The drainage depressions vary greatly in slope, width and soils, however they all convey considerable quantities of water during the winter-spring months. Due to limitations of scale the full extent of this map unit cannot be shown, particularly where it extends into map units Ose and Osf.

Site characteristics: Site No. 1

Parent material		Depth seasonal	1.0 m
Age:	Ordovician	watertable:	
Lithology:	Sediments		
Landform		Potential recharge to	Low
Pattern:	Undulating low hills	groundwater:	
Element:	Drainage depression		
Slope		Flooding risk:	High
common:	3%	_	_
range:	1 – 3%		
Rock outcrop:	0%	Drainage:	Imperfectly drained
		Depth to hardrock:	0.8 m
		Proportion of Shire:	4.0%

Native vegetation:River Red Gum, Black Wattle, SedgePresent land use:Grazing (native and introduced pastures)

Land	Water erosion		Wind	Salting	Acidification
degradation:	Sheet/rill	Gully			
Susceptibility	Low	High	High	High	Moderate
Incidence	Low	Moderate	Nil	Moderate	Low

Soil profile characteristics:

Permeability (measured - average, range): (estimated):	- Slow
Available water capacity:	90 mm H ₂ O
Linear Shrinkage (B horizon):	7.5%

Soil profile description:

Α	0-21 cm	Dark brown (10YR 3/3) loam, weak subangular blocky structure 3 mm, rough fabric, loose consistence, pH 5.5. Clear transition to
B ₁	21-35 cm	Very dark brown (10YR 2/2) clay loam, weak subangular blocky structure 7 mm, smooth fabric, weak consistence, few ferruginous concretions, pH 5.5. Gradual transition to
B ₂₁	35-59 cm	Very dark greyish brown (10YR 3/2) sandy clay, weak subangular blocky structure 5 mm, smooth fabric, very weak consistence, few ferruginous concretions and sandstone fragments pH 5.7. Gradual transition to
B ₂₂	59-81 cm	Yellowish brown (10YR 5/6) clay moderate angular blocky structure 4 mm, smooth fabric, moderately weak consistence, pH 5.5
С	81 cm	Parent material, rock

Soil classification:

Factual Key (Northcote):	Gn 3.41
Australian Soil Classification:	Haplic, Dystrophic, Black, Dermosol, moderate medium, loamy,
	non-gravelly
Unified Soil Group:	NA

Interpretation of soil analyses*

Horizon	рН	Gravel	E.C.	Nutrient status	Р	К	AI	Org. matter	Dispersibility
А	5.5	1	VL	L	D	S	Т	Н	L
B ₁	5.5	1	VL	L	D	D	Т	Н	L
B ₂₁	5.7	2	VL	L	D	D	S	Μ	L
B ₂₂	5.5	14	VL	VL	D	D	Т	Μ	М
VL : Very Lo D: Deficien		L : Low S: Satis		/ : Moderate : Toxic		High Acid		ery High ot available	

Land capability assessment

Land use	Class	Major limiting feature (s)
Agriculture (CTS values)	$C_3T_2S_4$	Shallow soils and depth to seasonal water table, low available water capacity, high susceptibility to gully erosion
Effluent disposal (septic tanks)	4	High flood risk, imperfect site drainage, slow permeability
Farm dams (earthen)	3	Moderate depth to hardrock
Building foundations * slab * stumps/footings	4 4	Imperfect site drainage shallow depth to seasonal water table, high flooding risk Imperfect site drainage shallow depth to seasonal water table, high flooding risk