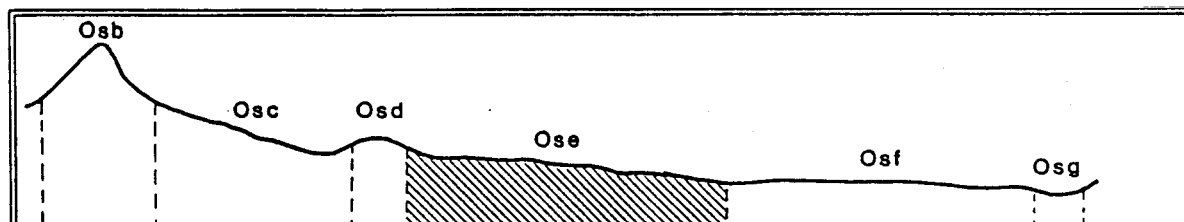


Map Unit:	ORDOVICIAN SEDIMENTS GENTLE SLOPE	Map Unit Symbol: Ose
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General Description:

These gentle slopes are a common occurrence on the Ordovician sediments to the south-west of Woodend and the north-east of Newham. The soils vary from that described in detail below, through to yellow mottled duplex profiles with A2 horizons, however the limitations to land use and the susceptibility to land degradation are very similar. The Red Stringybark-Yellow Box-Grey Box association in the north-east of the Shire reflects a lower annual average rainfall.

Site characteristics: Site No. 725

Parent material Age: Lithology:	Ordovician Sediments	Depth seasonal watertable:	> 2 m
Landform Pattern: Element:	Undulating low hills Gentle slope	Potential recharge to groundwater:	Low
Slope common: range:	5% 3 – 8%	Flooding risk:	Nil
Rock outcrop:	0%	Drainage:	Moderately well drained
		Depth to hardrock:	1.2 m
		Proportion of Shire:	20.7%

Native vegetation: Narrow-leaf Peppermint, Candlebark Gum, Messmate (south-west), Yellow Box, Red Stringybark, Grey Box (north-east)

Present land use: State Forest, hardwood/softwood production (south) grazing (north)

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

Soil profile characteristics:

Permeability (measured - average, range): (estimated):	- Moderate
Available water capacity:	120 mm H ₂ O
Linear Shrinkage (B horizon):	NA

Soil profile description:

A	0-8 cm	Dark brown (10YR 3/3) loam, moderate subangular blocky structure 8 mm, earthy fabric, very firm consistence, pH 5.0. Abrupt transition to
B₁	8-30 cm	Brown (10YR 4/3) light clay, apedal massive, earthy fabric, moderately firm consistence, many coarse sandstone fragments, pH 5.2. Clear transition to
B₂₁	30-50 cm	Light olive brown (2.5YR 5/6) light clay, moderate angular blocky structure 7 mm, smooth ped, moderately weak consistence, many coarse sandstone fragments pH5.4. Clear transition to
B₂₂	50-90 cm	Yellowish brown (10YR 5/6) clay, few medium, faint red mottles, strong angular blocky structure 8 mm, smooth fabric, moderately weak consistence, common coarse fragments, pH 5.8. Clear transition to
BC	90-120 cm	Light olive brown (2.5YR 5/4) clay common coarse distinct yellow mottles, moderate angular blocky structure 4 mm, smooth fabric, firm consistence, pH 6.0

Soil classification:

Factual Key (Northcote): Dy 2.11
 Australian Soil Classification: Mottled, Dystrophic, Brown, Kurosol, deep thin, loamy, gravelly
 Unified Soil Group: NA

Interpretation of soil analyses*

Horizon	pH	Gravel	E.C.	Nutrient status	P	K	Al	Org. matter	Dispersibility
A	5.0**	10	VL	VL	S	S	T	H	L
B ₁	5.2**	32	VL	VL	S	D	T	L	L
B ₂₁	5.4*	24	VL	M	S	S	T	L	L
B ₂₂	5.8	20	VL	M	S	S	S	L	L

VL : Very Low L : Low M : Moderate H: High VH : Very High
 D: Deficient S: Satisfactory T: Toxic ** Acid NA : Not available

Land capability assessment

Land use	Class	Major limiting feature (s)
Agriculture (CTS values)	C ₃ T ₃ S ₄	Shallow topsoils, high susceptibility to sheet/rill, gully and wind erosion
Effluent disposal (septic tanks)	3	Moderate site drainage
Farm dams (earthen)	4	Moderate permeability, shallow depth to bed-rock
Building foundations * slab * stumps/footings	3 3	Moderate slopes, moderate site drainage Moderate site drainage