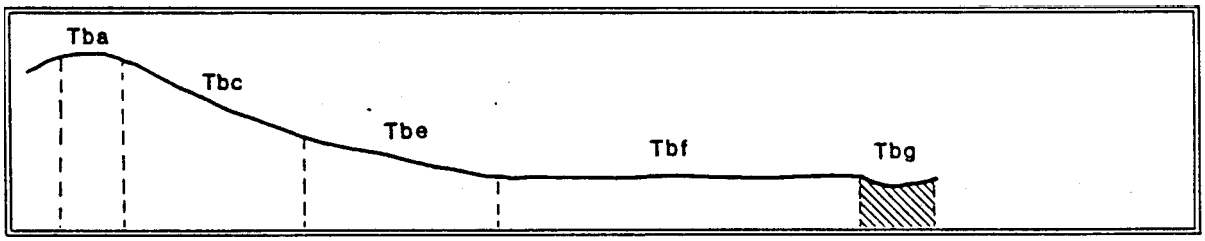
Map Unit:	TERTIARY BASALT, DRAINAGE DEPRESSION	Map Unit Symbol: Tbg



General Description:

Broad drainage depressions are a common occurrence on these gently undulating basalt plains. During the wetter months of the year, runoff water from adjacent slopes and the extended catchment result in prolonged wet periods and flooding. The soils are moderately deep, have a low permeability and are invariable kept under introduced pasture.

Site characteristics: Site No. 38

Parent material **Age:** **Lithology:**	 Tertiary Basalt	**Depth seasonal watertable:**	1.0 – 1.5 m
Landform **Pattern:** **Element:**	 Gently undulating plain Drainage depression	**Potential recharge to groundwater:**	Low
Slope **common:** **range:**	 1% 1 – 2%	**Flooding risk:**	High (seasonal)
Rock outcrop:	0%	**Drainage:**	Imperfectly drained
		Depth to hardrock:	> 2.0 m
		Proportion of Shire:	1%

Native vegetation: Swamp gum (mostly cleared)
Present land use: Grazing (native and introduced pasture)

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

Soil profile characteristics:

Permeability (measured - average, range): (estimated):	- Slow
Available water capacity:	220 mm H_2O
Linear Shrinkage (B horizon):	Low (estimate)

Soil profile description:

A_1	0-23 cm	Brown (10YR 5/3), clay loam, moderate subangular blocky structure 2 mm, rough fabric, very weak consistence, pH 6.0. Clear transition to
A_2	23-35 cm	Brown (10YR 5/3) silty clay loam, bleached (10 YR 7/2, dry) <2% fine faint orange-brown mottles, weak subangular blocky structure 4 mm, rough fabric, very weak consistence, pH 7.0. Clear transition to
B_{21}	35-52 cm	Dark yellowish brown (10YR 4/6) medium clay, weak subangular blocky structure 2 mm, rough fabric, very weak consistence, pH 7.0. Gradual transition to
B_{22}	52-70 cm	Yellowish brown (10YR 5/6) medium clay. A few fine faint grey mottles, weak subangular blocky structure 5 mm, rough fabric, moderately firm consistence, <2% ferruginous gravels pH 7.0. Diffuse transition to
B_{23}	70-150 cm+	Dark greyish brown (10YR 4/2) medium clay, medium sized distinct orange mottles are common, moderate subangular blocky structure 5 mm, rough fabric, very firm consistence, few ferruginous and organic vegetations, pH 6.0.

Soil classification:

Factual Key (Northcote): Db 1.42
Australian Soil Classification: Mottled, Mesotrophic, Brown, Chromosol, very deep, medium, clay loamy, non-gravelly
Unified Soil Group: NA

Interpretation of soil analyses*

Horizon	pH	Gravel	E.C.	Nutrient status	P	K	Al	Org. matter	Dispersibility
A_1	6.0	NA	NA	NA	NA	NA	NA	NA	L
A_2	7.0	NA	NA	NA	NA	NA	NA	NA	M
B_{21}	7.0	NA	NA	NA	NA	NA	NA	NA	M
B_{22}	7.0	NA	NA	NA	NA	NA	NA	NA	L
B_{23}	6.0	NA	NA	MA	NA	NA	NA	NA	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)	$C_3T_2S_3$	Moderate dispersibility of topsoil Moderate susceptibility to gully erosion
Effluent disposal (septic tanks)	4	Imperfect site drainage
Farm dams (earthen)	3	Moderate depth to hardrock, moderate permeability, moderate dispersibility of subsoil
Building foundations * slab * stumps/footings	 4 4	 Imperfect site drainage, high risk of seasonal flooding Imperfect site drainage high risk of seasonal flooding