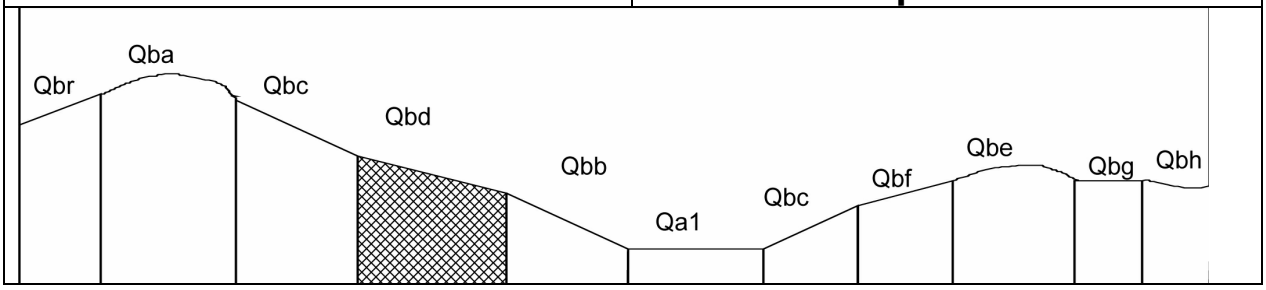
MAP UNIT SYMBOL: **Qbd** Area: 15 938 ha	MAP UNIT: **Quaternary basalt, moderate slope**



A. GENERAL DESCRIPTION

This map unit mainly occurs either as the side slopes off the basalt cones and crests, or as slopes going down to the major water courses. When the basalt meets the sedimentary material, there can be some salting although the incidence is very low for this component. The soils are commonly dark gradational with silty clay loam top soils with a gradual transition to a silty clay subsoil. Minor variants are structured, uniform silty clay loams or silty clays. Less commonly dark or yellow duplex soils can occur.

SITE CHARACTERISTICS

Parent Material Age:	Quaternary	**Depth to Seas. Watertable:**	>2.0 m
Parent Material Lithology:	Basalt	**Flooding Risk:**	Nil
Landform Pattern:	Rolling hills/lava plain	**Drainage:**	Well drained
Landform Element:	Hillslope/drainage depression	**Rock Outcrop:**	0-2%
Slope a) common:	18%	**Depth to Hard Rock:**	>1.1 m
Slope b) range:	11-20%	**Present Land Use:**	Grazing
Potential Recharge to Groundwater:	Moderate		
Major Native Vegetation Species:	River Red Gum, Hedge Wattle, Silver Wattle, Yellow Gum, Swamp Gum, Grey Box, Kangaroo Grass		

LAND DEGRADATION

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

B. SOIL PROFILE

PROFILE DESCRIPTION

A11 0-45 mm — Dark brown (7.5YR3/2) silty clay loam, strong subangular blocky structure, peds 2-5 mm, rough fabric, moderately weak consistence, pH 6.0. Clear transition to:

A12 45-270 mm — Dark brown (7.5YR3/2) silty clay loam, strong subangular blocky structure, peds 2-5 mm, rough fabric, moderately weak consistence, a few fine basalt gravel fragments, pH 6.0. Gradual transition to:

B21 270-680 mm — Dark brown (7.5YR3/2) silty clay, a few fine faint orange mottles, strong subangular blocky structure, peds 5-10 mm, rough fabric, moderately strong consistence, pH 6.0. Gradual transition to:

B22 680-1100 mm — Dark brown (7.5YR3/2) silty clay, a few fine faint orange mottles, strong subangular blocky structure, peds 5-10 mm, rough fabric, moderately strong consistence, pH 6.5. Gradual transition to:

BC 1100 mm+ — Partially weathered basalt rock.

CLASSIFICATION

Factual Key:	Gn4.42 (major) Uf6.11, Um6.11 (minor)
Australian Soil Classification:	Haplic, Eutrophic, Black Dermosols; medium, non-gravely, clay loamy/clayey, deep
Unified Soil Group:	ML

INTERPRETATION OF LABORATORY ANALYSIS*

Horizon	pH ($CaCl_2$)	% Gravel	E.C. (salts)	Nutrient Status	P	K	Al	Organic matter	Dispersibility
A11	4.8	0	VL	VL	S	S	S	H	L
A12	4.5	2.1	VL	M	D	S	S	H	L
B21	5.3	1.0	VL	M	S	D	S	L	L
B22	5.5	<1	VL	M	S	D	S	L	M

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:	Rapid (average 930 mm/day, range 120-1600 mm/day)
Available Water Capacity:	High (160 mm H_2O)
Linear Shrinkage (B horizon):	Moderate (14%)

C. LAND CAPABILITY ASSESSMENT

Land Use	Class	Major Limiting Feature(s)/Land Use
Agriculture	$C_2T_3S_3$	Slope, susceptibility to sheet and rill erosion
Effluent Disposal (septic tanks)	3	Slope
Farm Dams	4	Slope, suitability of subsoil, depth to hardrock
Building Foundations		
slab	4	Slope
stumps/footings	3	Slope, susceptibility to slope failure, linear shrinkage