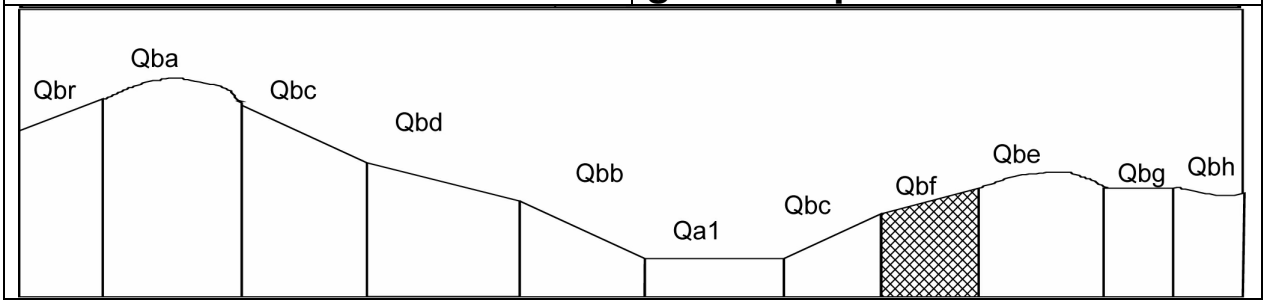
MAP UNIT SYMBOL: **Qbf** Area: 30 418 ha	MAP UNIT: **Quaternary basalt, gentle slope**



A. GENERAL DESCRIPTION

The basalt gentle slopes often have lighter soils higher in the landscape. Well drained uniform silt loams are common on the higher sections of the component, whereas darker gradational and brown and yellow duplex soils, occasionally mottled are common lower down in the landscape, where the soil is moderately well drained. The detailed description below relates to a brown whole coloured duplex soil. The topsoil is clay loam with an abrupt transition to a clayey subsoil.

SITE CHARACTERISTICS

Parent Material Age:	Quaternary	**Depth to Seas. Watertable:**	>2.0 m
Parent Material Lithology:	Basalt	**Flooding Risk:**	Nil
Landform Pattern:	Undulating low hills	**Drainage:**	Well drained
Landform Element:	Hillslope	**Rock Outcrop:**	0-2%
Slope a) common:	5%	**Depth to Hard Rock:**	>1.3 m
Slope b) range:	4-10%	**Present Land Use:**	Grazing, cropping (minor)

Potential Recharge to Groundwater: Moderate
Major Native Vegetation Species: Manna Gum, Messmate, Golden Wattle, Broad-leaved Peppermint, Yellow Box, Blackwood, River Red Gum

LAND DEGRADATION

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

B. SOIL PROFILE

PROFILE DESCRIPTION

A1 0-240 mm — Dark brown (7.5YR3/2) clay loam moderate subangular blocky structure, peds 2-5 mm, smooth fabric, moderately firm consistence, a few fine subangular basalt gravel fragments, pH 6.5. Abrupt transition to:

B21 240-605 mm — Dark brown (7.5YR3/4) light clay, strong subangular blocky structure, peds 2-5 mm, smooth fabric, moderately weak consistence, fine subrounded basal gravel fragments are common, pH 7.0. Gradual transition to:

B22 605-760 mm — Dark brown (7.5YR4/3) light clay, strong subangular blocky structure, peds 10-20 mm, smooth fabric, moderately weak consistence, a few fine subangular basaltic fragments, pH 7.0. Gradual transition to:

B23 760-980 mm — Dark brown (7.5YR3/3) light clay, strong subangular blocky structure, peds 10-20 mm, rough fabric moderately firm consistence, a few fine subangular and subrounded basalt gravel fragments, pH 7.0. Gradual transition to:

B3 980-1300 mm+ Dark brown (7.5YR3/3) light clay, strong subangular blocky structure, peds 5-10 mm, smooth fabric, very weak consistence, many medium angular and subrounded basalt gravel fragments, pH 7.0.

CLASSIFICATION

Factual Key:	Db1.12 (Major) Um6.32, Gn3.42, Dy3.11 (Minor)
Australian Soil Classification:	Haplic, Eutrophic, Brown Chromosol; medium, slightly gravely, clay loamy/clayey, deep
Unified Soil Group:	MH

INTERPRETATION OF LABORATORY ANALYSIS*

Horizon	pH ($CaCl_2$)	% Gravel	E.C. (salts)	Nutrient Status	P	K	Al	Organic matter	Dispersibility
A1	5.7	3.7	VL	M	S	S	S	H	L
B21	6.7	19.1	VL	H	S	D	S	L	L
B22	6.7	3.6	VL	H	S	D	S	VL	L
B23	6.8	9.4	VL	H	S	D	S	VL	L
B3	6.8	31.5	VL	H	S	D	S	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 (average 350 mm/day, range 110-600 mm/day)
Available Water Capacity:	Very high (209 mm H_2O)
Linear Shrinkage (B horizon):	Low (8%)

C. LAND CAPABILITY ASSESSMENT

Land Use	Class	Major Limiting Feature(s)/Land Use
Agriculture	C_2 T_2 S_3	Gravel content, susceptibility to sheet and rill erosion
Effluent Disposal (septic tanks)	2	
Farm Dams	3	Suitability of subsoil, depth to seasonal watertable, depth to hardrock, permeability
Building Foundations		
slab	3	Slope, stone content
stumps/footings	3	Stone content