



A. GENERAL DESCRIPTION :

A broad floodplain associated with King Parrot Creek from Hazledene to Kerrisdale. The soils are gradational in nature with dark greyish brown, loam fine sandy top soils grading into light yellowish-brown, fine sandy clay loam subsoils. Distinct mottles are abundant in the subsoil. In the south, near Hazledene, coarse sand is present in the profile because of the contributions from the Mt Disappointment granite in the catchment. This floodplain is frequently active, particularly in the north, and contains a number of swampy, cut off meanders.

SITE CHARACTERISTICS :

Parent Material Age:	Quaternary	Depth to Seas. Watertable:	> 2.0m
Parent Material Lithology:	Alluvium	Flooding Risk:	Very high
Landform Pattern:	Floodplain	Drainage:	Imperfectly drained
Landform Element:	Backplain	Rock Outcrop:	0%
Slope a) common:	< 1%	Depth to Hard Rock:	> 1.5 m
Slope b) range:	0-1%	Present Land Use:	Grazing
Potential Recharge to Groundwater:	Low		
Major Vegetation Species:	River Red Gum, Silver Wattle, Kangaroo Grass, Wallaby Grass		

LAND DEGRADATION :

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

B. SOIL PROFILE

PROFILE DESCRIPTION

- A1** 0-110mm Dark greyish-brown (10YR4/2) fine sandy loam, moderate subangular blocky structure, peds 2-5mm, rough fabric, moderately weak consistence, a few oxidised root channels, pH 4.3. Gradual transition to:
- A2** 110-210mm Light brownish-grey (10YR6/2) fine sandy loam, bleached (10YR7/2) when dry, weak subangular blocky structure, peds 5-10mm, rough fabric, moderately weak consistence, a few oxidised root channels, pH 4.3. Clear transition to:
- A3** 210-320mm Light brownish-grey (10YR6/2) loam fine sandy, common medium distinct orange mottles, weak subangular blocky structure, peds 10-20mm, rough fabric, moderately firm consistence, pH 4.6. Clear transition to:
- B2** 320-740mm Light yellowish-brown (10YR6/4) fine sandy clay loam, abundant medium distinct orange and pale mottles, weak prismatic structure, peds 20-50mm, rough fabric, moderately firm consistence, pH 6.1. Gradual transition to:

B3 740-1320⁺mm

Light yellowish-brown (10YR6/4) fine sandy clay loam, common coarse distinct grey, orange and pale mottles, apedal structure, earthy fabric, moderately weak consistence, pH 7.2.

CLASSIFICATION

Factual Key (Northcote):	Gn4.66
Australian Soil Classification:	Bleached-Mottled, Magnesian, Yellow Kandosol; medium, non-gravelly, loamy/clay loamy, very deep.
Unified Soil Group:	CL

INTERPRETATION OF LABORATORY ANALYSIS

Horizon	pH (CaCl ₂)	%Gravel	E.C. (salts)	Nutrient Status	P	K	Al	Organic matter	Dispersibility
A1	4.3**	<1	VL	VL	D	S	T	H	L
A2	4.3**	7.3	VL	VL	D	S	T	L	L
A3	4.6	9.1	VL	L	D	D	S	L	H
B2	6.1	11.3	VL	L	D	D	S	VL	H
B3	7.2	<1	VL	L	D	D	S	VL	H

VL : Very low L : Low M : Moderate H : High VH : Very High D : Deficient S : Satisfactory
 T : Toxic * see appendix D for analytical results ** : Strongly acidic N.A. : Not Available

SOIL PROFILE CHARACTERISTICS:

Permeability :	Slow (average 85mm/day, range 6-129 mm/day)
Available Water Capacity:	Very high (276 mmH ₂ O)
Linear Shrinkage (B horizon):	Low (7%)

C. LAND CAPABILITY ASSESSMENT

Land Use	Class	Major Limiting Feature(s)/Land Use
Agriculture	C ₃ T ₁ S ₃	Climate, moderately dispersible top soil, moderate susceptibility to gully and wind erosion
Effluent Disposal (septic tanks)	5	High flooding risk
Farm Dams	3	Moderate suitability of subsoil, moderate depth to seasonal watertable, moderately dispersible and permeable subsoil
Secondary Roads	5	High flooding risk
Rural Residential	5	Effluent disposal, secondary roads
Small Farms	5	Effluent disposal, secondary roads