SHEET 6

CSIRO AUSTRALIA

NATURAL RESOURCES Queensland — QUEENSLAND GOVERNMENT

NATIONAL LANDCARE PROGRAM

Soil Associations of the Dalrymple Shire

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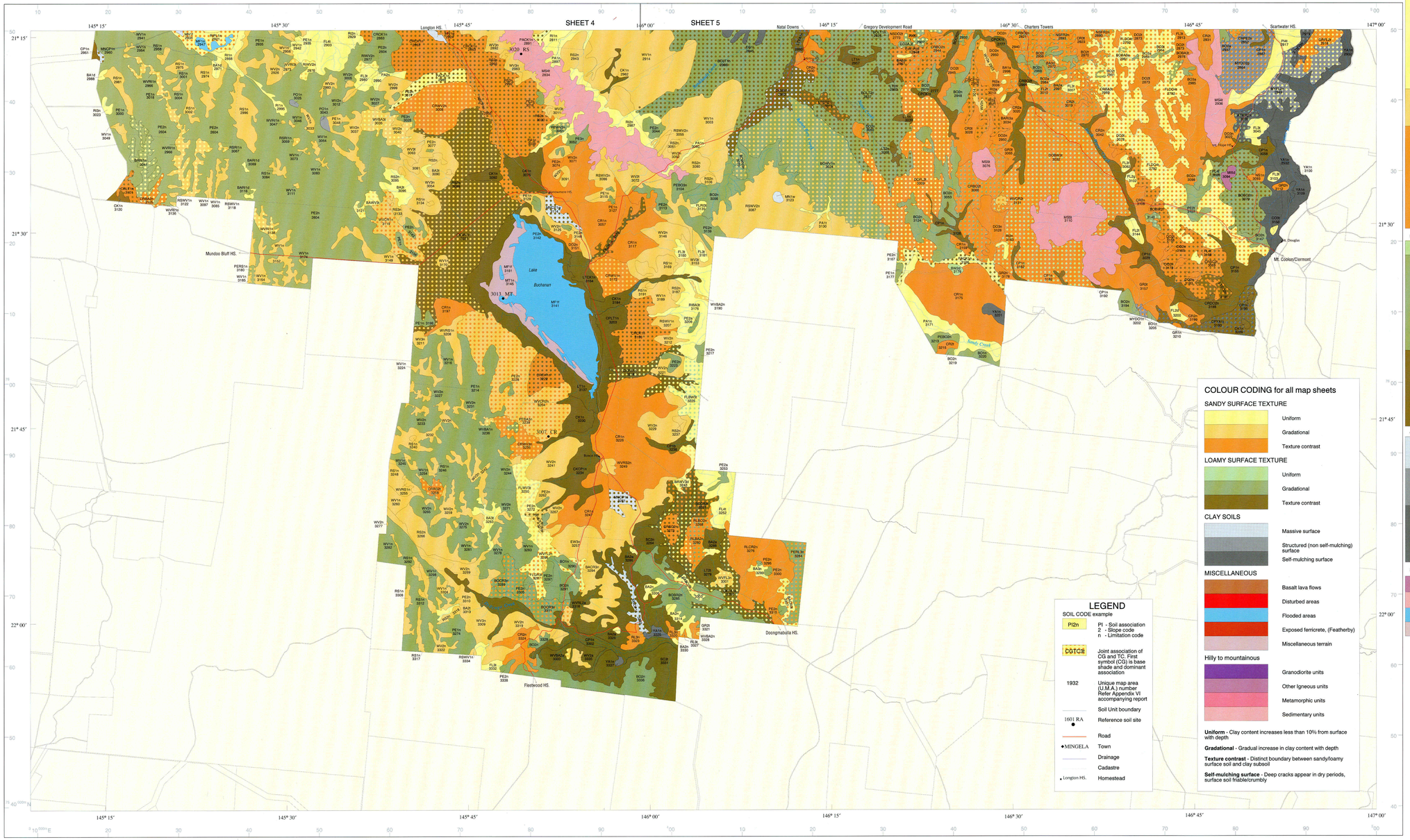
* 1) Australian Soil Classification, Isbell (1996) - dominant Order in bold
2) Great Soil Group, Stace et al. (1968)
NSG - No suitable group



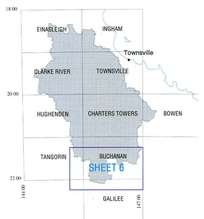
REFERENCE

NAME	CLASSIFICATION *	DESCRIPTION	LANDFORM	COMMON VEGETATION FORM AND SPECIES	GEOLOGICAL SUBSTRATE
SANDY SURFACE TEXTURE					
BA Barkla	1) Orthic **TENOSOLS** 2) Siliceous sand	Greyish brown sands grading to yellowish brown loamy sands on ferricrete.	Level to gently undulating plains	Mid-high woodland of narrow-leaved ironbark, Red River box, quinine bush, buck spinifex, golden beard grass and love grasses.	Cainozoic sediments
CO Conolly	1) Leptic **RUDOSOLS** 2) Lithosol	Shallow grey, brown and yellowish brown sands on granite.	Undulating rises	Mid-high woodland of narrow-leaved ironbark, silver-leaved ironbark (*E. shirleyi*), quinine bush, *Acacia* spp. black spear grass, Indian couch and *Aristida* spp.	Granite
EW Ewan	1) Leptic **RUDOSOLS** TENOSOLS 2) Lithosol	Shallow massive brown sandy loam over metamorphic rock.	Undulating rises	Mid-high woodland of narrow-leaved ironbark, silver-leaved ironbark (*E. shirleyi*), quinine bush, *Aristida* spp., pitted blue grass and black spear grass.	Metamorphic rocks
FL Flagstone	1) Leptic **RUDOSOLS** TENOSOLS 2) Lithosol	Very dark greyish brown to yellowish brown sands to sandy loam over sandstone rock.	Undulating rises	Mid-high open forest of narrow-leaved ironbark, lancewood and silver-leaved ironbark (*E. shirleyi*), quinine bush, false sandlewood, *Aristida* spp., buck spinifex, golden beard grass and love grasses.	Sedimentary rocks
PA Pandanus	1) Orthic **TENOSOLS** 2) Siliceous sand & Earthy sand	Uniform sands. Dark brown soft surface grading to yellowish red to brownish yellow subsoils.	Drainage lines and level to gently undulating alluvial plains	Tall woodland of narrow-leaved ironbark, long-fruited grey blackwood, coolibah, *Acacia* spp., *Melaleuca* spp., *Aristida* spp., black spear grass and golden beard grass.	Alluvium
PI Pinnacle	1) Leptic **RUDOSOLS** 2) Lithosol	Dark brown to grey uniform rocky sand and sandy loam.	Undulating rises to mountains	Grassland to mid-high open woodland of narrow-leaved ironbark, silver-leaved ironbark (*E. shirleyi*), *Acacia* spp., black spear grass, red natal grass and golden beard grass.	Acid volcanic rocks
RI Rishon	1) Orthic and Bleached - Leptic **TENOSOLS** 2) Siliceous sand	Uniform sands often with bleached A2 horizon. Dark brown loose to soft surface with yellowish brown subsoil.	Level to gently undulating plain	Mid-high to tall woodland of long-fruited grey bloodwood, narrow-leaved ironbark, brigalow, false sandlewood (*P. metaxoxylon*), *Acacia* spp., quinine bush and tea tree (*M. nervosa*), *Aristida* spp., black spear grass, spinifex and golden beard grass.	unconsolidated sands
RS Rangeside	2) Red **KANDOSOLS** 2) Red earth	Dark reddish brown to dark brown sand to sandy loam grading to earthy red to yellowish red sandy loam to clay loam.	Level to gently undulating plains	Tall woodland of narrow-leaved ironbark, yellowjack, silver-leaved ironbark (*E. melanophloia*), *Acacia* spp., quinine bush, *Aristida* spp., spinifex, black spear grass and golden beard grass.	Cainozoic sediments
WV Wattle Vale	1) Yellow Brown **KANDOSOLS** 2) Yellow earth	Dark greyish brown loose to firm loamy sand to sandy loam grading to yellowish brown to yellow sandy clay loams.	Level to gently undulating plains	Mid-high woodland of narrow-leaved ironbark, silver-leaved ironbark (*E. melanophloia*), long-fruited grey bloodwood, *Acacia* spp., tea-tree , golden beard grass, *Aristida* spp. and black spear grass.	Cainozoic sediments
CR Corea	1) Brown **CHROMOSOLS** 2) Yellow or Lateritic podzolic soil	Very dark grey to dark brown sand to sandy loam over massive to structured yellowish brown clay.	Gently undulating plains	Mid-high woodland of narrow-leaved ironbark, Red River box and silver-leaved ironbark (*E. melanophloia*), quinine bush, *Acacia* spp., *Aristida* spp., golden beard grass and black spear grass.	Cainozoic sediments
DO Dotswood	1) Brown **SODOSOLS** 2) Solodic soil	Dark brown to yellowish brown sandy loams over alkaline structured brown to yellowish brown clay.	Gently undulating plains to undulating rises	Mid-high woodland of Reid River box, narrow-leaved ironbark, blackwood, false sandlewood, *Aristida* spp., black spear grass and buck spinifex.	Sedimentary rocks
GR Greenvale	1) Brown/ Yellow **CHROMOSOLS** 2) Solodic soil	Dark greyish brown to brown sand to sandy loam over structured dark yellowish brown to brownish yellow clay.	Undulating rises	Tall woodland of narrow-leaved ironbark, Reid River box, silver-leaved ironbarks, *Acacia* spp., *Aristida* spp., golden beard grass and black spear grass.	Sedimentary rocks
NS Neurolor	1) Brown/ Yellow **SODOSOLS** CHROMOSOLS 2) Solodic soil	Very dark greyish brown to yellowish brown sand to sandy loam over structured mottled alkaline structured yellowish brown or yellow clay.	Level to gently undulating plains	Mid-high woodland of Reid River box, narrow-leaved ironbark, silver-leaved ironbark (*E. melanophloia*), false sandlewood, *Acacia* spp., *Aristida* spp., golden beard grass and buck spinifex.	Cainozoic sediments
FL Fairlamania	1) Grey **CHROMOSOLS** SODOSOLS 2) Yellow & Lateritic podzolic soils	Very dark greyish brown to yellowish brown sand to sandy loam over structured mottled dark grey to brownish yellow clay.	Level to gently undulating plains	Mid-high woodland of Reid River box, narrow-leaved ironbark, silver-leaved ironbark (*E. melanophloia*), false sandlewood, golden beard grass, *Aristida* spp. and black spear grass.	Cainozoic sediments
RL Roston	1) Red **CHROMOSOLS** 2) Red Podzolic soil / Red Podzolic soil	Dark reddish brown sandy loam over structured red to yellowish red clay.	Gently undulating plains	Mid-high woodland of narrow-leaved ironbark, Reid River box, silver-leaved ironbark (*E. melanophloia*), *Acacia* spp. and quinine bush, *Aristida* spp., golden beard grass and black spear grass.	Cainozoic sediments
LOAMY SURFACE TEXTURE					
BW Bullwallah	1) Leptic **TENOSOLS** / RUDOSOLS 2) Lithosol	Dark brown to yellowish brown loam over sandstone.	Undulating rises	Tall woodland of narrow-leaved ironbark, ghost gum, Reid River box, false sandlewood, *Acacia* spp., *Aristida* spp., pitted blue grass, black spear grass and buck spinifex.	Sedimentary rocks
BO Boston	1) Yellow / Brown **KANDOSOLS** 2) Yellow earth	Dark greyish brown loam grading to yellowish brown clay.	Level to gently undulating plains	Mid-high woodland of silver and narrow leaved ironbark and Reid River box. *Acacia* spp. quinine bush, *Aristida* spp. golden beard grass, black spear grass and buck spinifex.	Cainozoic sediments
BR Burra	1) Grey **KANDOSOLS** 2) Grey earth	Dark greyish brown sandy loam grading to mottled grey clay.	Level plains to gently undulating plains	Mid-high woodland of silver and narrow-leaved ironbark, *Acacia* spp., golden beard grass, *Aristida* spp., black spear grass and buck spinifex.	Cainozoic sediments
FR Fanning River	1) Brown **DERMOSOLS** 2) Brown earth	Dark greyish brown to brown sandy loam to clay loam grading to structured dark brown to dark yellowish brown clay.	Level to gently undulating alluvial plains	Tall woodland of Reid River box, narrow-leaved ironbark, Moreton Bay ash, false sandlewood , *Bothrochloa* spp., *Aristida* spp., golden beard grass and *Dichanthium sepe*	Alluvium
GA Gainsford	1) Red/ Yellow **KANDOSOLS** 2) Red & Yellow earth	Dark reddish brown to grey brown loam grading to reddish brown to red clay.	Level to gently undulating alluvial plains	Tall woodland of narrow-leaved ironbark, Reid River box, *Acacia* spp., tea-tree (*A. nervosa*) *Bothrochloa* spp., *Aristida* spp. and golden beard grass.	Alluvium
PE Pentland	1) Red **KANDOSOLS** 2) Red earth	Dark reddish brown to dark brown sandy clay loam grading to earthy red light clay.	Gently undulating plains	Mid-high woodland of narrow-leaved ironbark, long-fruited grey blackwood, yellowjack, *Acacia* spp., quinine bush, *Aristida* spp., kangaroo grass and buck spinifex.	Cainozoic sediments
WR Watsuna	1) Red **DERMOSOLS** 2) NSG	Dark reddish brown to dark brown clay loam over structured dark red to yellowish red clay.	Undulating rises	Mid-high woodland of narrow-leaved ironbark, Reid River box, red-barked bloodwood, *Acacia* spp., quinine bush, kangaroo grass, black spear grass and blue grasses.	Metamorphic and sedimentary rocks
CK Creek	1) Brown/ Grey **CHROMOSOLS** 2) Grey-Brown/ Yellow podzolic soil	Dark greyish brown loams over structured yellowish brown to grey clay.	Level to gently undulating alluvial plains	Tall woodland of narrow-leaved ironbark, Reid River box, poplar gum, false sandlewood, black spear grass, golden beard grass, and *Aristida* spp.	Unconsolidated material (alluvium)
DP Dapple	1) Brown **SODOSOLS** 2) Solodic soil / Solonetzic soil	Very dark greyish brown silty loam to clay loam grading to structured dark brown/yellowish brown clay, often mottled.	Level to gently undulating alluvial plains	Tall woodland of Reid River box, narrow-leaved ironbark, false sandlewood, black spear grass, golden beard grass, and *Aristida* spp.	Alluvium
DA Dalrymple	1) Red **CHROMOSOLS** 2) Non-calcic brown soil	Reddish brown to dark brown loamy sand to sandy loam over structured red to reddish brown clay.	Gently undulating to undulating rises	Mid-high woodland of narrow-leaved ironbark, red barked bloodwood, *Acacia* spp., Indian couch, blackspear and golden beard grass.	Granodiorite
LT Lontoken	1) Brown **SODOSOLS** 2) Solodic soil	Dark brown to greyish brown loam with bleached A2 over alkaline structured dark brown to yellowish brown and grey clay.	Level to gently undulating plains	Mid-high woodland of Reid River box, blackwood, false sandlewood, golden beard grass, blue grasses and *Sporobolus* spp.	Cainozoic sediments
SC Scartwater	1) Grey **SODOSOLS** 2) Solodic soil	Dark grey to dark brown sandy loam to clay loam, bleached A2 horizon over alkaline, structured dark greyish brown clay.	Gently undulating plains and hillslopes	Mid-high open forest of Reid River box, blackwood, narrow-leaved ironbark, false sandlewood, bauhinia, *Aristida* spp., blue grasses and love grasses.	Sedimentary rocks
CLAY SOILS (Surface)					
MV Manos	1) Brown/ Grey **DERMOSOLS** 2) NSG	Dark grey to dark yellowish brown clay. Structured neutral to alkaline subsoil.	Level alluvial plains	Mid-high woodland of blackwood, coolibah, Reid River box, false sandlewood, kangaroo grass, *Bothrochloa* spp., blue grasses and love grasses.	Alluvium
VD Victoria Downs	1) Grey/ Brown **VERTOSOLS** 2) Grey clay	Uniform clay profile of massive to blocky structured dark grey to greyish brown surface grading to alkaline structured dark grey to yellowish brown subsoil.	Level to gently undulating plains	Grassland to mid-high isolated to woodland of Reid River box, blackwood, narrow-leaved ironbark, false sandlewood, whitewood, blue grasses, love grasses, *Aristida* spp. and silky brown-top grass.	Cainozoic sediments
MY Myrtlevale	1) Brown/ Grey **DERMOSOLS** VERTOSOLS 2) NSG	Very dark greyish brown to dark brown light clay grading to alkaline structured dark brown to yellowish brown medium heavy clay.	Gently undulating plains	Grassland to mid-high woodland of narrow-leaved ironbark, red-barked bloodwood, Reid River box, false sandlewood, bauhinia, yellowwood, Indian couch, desert blue grass, and black spear grass. Buffel grass noteable.	Sedimentary rocks
PO Pueblathangs	1) Grey **VERTOSOLS** 2) Grey clay	Very dark grey to dark brown clay. Massive to blocky surface over alkaline over an acid structured subsoil.	Level plains	Grassland to mid-high woodland of Reid River box, blackwood, gidgee, false sandlewood, yellowwood, blue grasses, *Aristida* spp. and love grasses.	Cainozoic sediments
AT Amaty	1) Black **VERTOSOLS** 2) Black earth	Self mulching black clay. Alkaline structured subsoil with carbonate nodules.	Gently undulating plains	Grassland to mid-high open woodland of red-barked bloodwood, narrow-leaved ironbark, Indian couch, black spear grass and desert blue grass. Buffel grass noteable.	Basic igneous rocks
EG Egera	1) Grey **VERTOSOLS** 2) Grey clay/Black earth	Grey self-mulching clay. Often with carbonate nodules in profile.	Level to gently undulating plains	Grassland to mid-high open forest of blackwood, gidgee, brigalow yellow wood, bauhinia, false sandlewood blue grasses and silky brown-top grass. Buffel grass noteable.	Cainozoic sediments
YA Yarraman	1) Black brown/grey **VERTOSOLS** 2) Black earth & Grey clay	Black brown/grey clay. Self-mulching to blocky surface with alkaline structured subsoil.	Level alluvial plains	Grassland to mid-high open forest of Reid River box, blackwood, brigalow, false sandlewood, blue grasses, desert blue grass and love grasses. Buffel grass noteable.	Alluvium
MISCELLANEOUS					
MI Other Igneous Unit	1) **RUDOSOLS** CHROMOSOLS 2) Earthy sands/Podzolics	Shallow soils on slopes, often rocky, deeper soils along major creek lines.	Rolling to very steep hills and mountains	Mid high to tall woodlands of narrow-leaved ironbark, black spear grass, kangaroo grass and blady grass.	Igneous rocks
MS Sedimentary Unit	1) **RUDOSOLS** CHROMOSOLS 2) Earthy sands/Podzolics	Shallow soils on slopes, often rocky with deeper soils along major creek lines.	Rolling to very steep hills and mountains	Low to mid high woodland of narrow-leaved ironbark, silver-leaved ironbarks, Reid River box, black spear grass, *Aristida* spp., kangaroo grass and blady grass.	Sedimentary rocks
MF Misc. Flooded areas		Flooded lands, natural or man made. Some units seasonly flooded.			
MT Misc. terrain		Lacustrine shoreline deposits.	Dunefields	Acacia and Gravillea species	Aeolian, lacustrine and alluvial deposits

LOCALITY MAP

INDEX TO MAP SHEETS

1 : 250 000 SHEET SERIES



SCALE 1:250 000

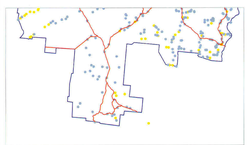
kilometres 5 0 5 10 15 20

miles 0 5 10 15

Areal Scale

25 sq miles — 640 acres — 10 sq km — 100 ha

FIELD SITE LOCATIONS



Not analysed

Sampled for various chemical and physical analyses

Roads

SHEET 6

Bibliographic reference:

Cannon, M.G., Rogers, L.G., Barry, E.V., DeCorte, M.W.M., and Bright, M.J. (1997). "Soil Associations of the Dalrymple Shire" (Scale 1:250000 6 map sheets). To accompany Rogers, L.G., Cannon, M.G., Barry, E.V.(1997), "Land Resources of the Dalrymple Shire".

Acknowledgements:

Produced by the Department of Natural Resources (DNR). GIS and Cartography Unit, Marreba and CSIRO Division of Soils, Townsville. Cartography by S.R. Philip (DNR) & T.D. Sullivan (CSIRO) 1997.

Projection: Universal Transverse Mercator
Horizontal Datum: Australian Geodetic Datum 1966
Grid: AMG Zone 55
Central Meridian 147 00 East

Source data: Field survey and interpretation of aerial photography and satellite imagery. Base map compiled from Digital Cadastral Data Base supplied by the Department of Natural Resources. Drainage data supplied by AUSLIG.

Use of map: This map is designed for use at the published scale.

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SLOPE CODES

1:	Level	(0-1%)
2:	Very gently inclined	(1-3%)
3:	Gently inclined	(3-10%)
4:	Moderately inclined	(10-32%)
5:	Steep	(32-56%)
6:	Very steep	(56-100%)
7:	Precipitous	(100-300%)
8:	Clifted	(>300%)

LANDUSE LIMITATION CODES

a: access (unit bounded by scarps)
b: badlands (eroded areas)
d: shallow (< 55cm to rock)
f: flooding (man made or natural)
g: stony
h: human influence (mining/ urban)
l: gilgai microrerlief (> 20cm deep)
n: none apparent
r: rock outcrop
t: short slopes / dissected
w: wetness (soils saturated > 3 months)

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