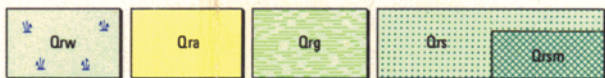


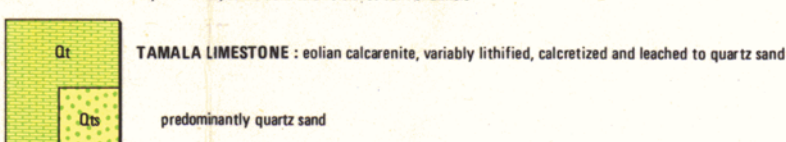
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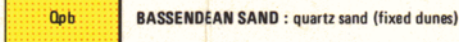
Qrw Swamp and lacustrine deposits – peat, peaty sand and clay
 Qra Alluvium – clay, sand and loam
 Qrg Estuarine, lagoonal and lacustrine deposits – clay, silt, marl with shell beds
 Qrs SAFETY BAY SAND : eolian and beach lime sand, slightly lithified
 Qrsm calcareous quartz sand (mobile dunes)



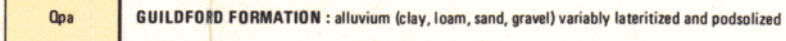
Qrc Colluvium, including valley-fill deposits, variably lateritized and podsolized
 Qrcs Colluvium-sand, often associated with older drainage courses
 Qa Alluvium and minor colluvium developed on laterite of the Darling Range
 Qas Sand-variously reworked, associated with older stream channels



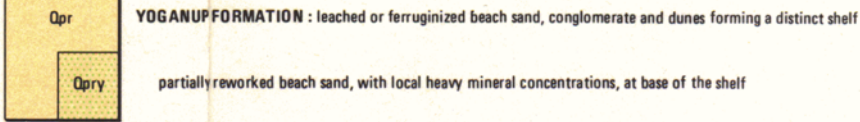
Qt TAMALA LIMESTONE : eolian calcarenite, variably lithified, calccretized and leached to quartz sand
 Qts predominantly quartz sand



Qpb BASSENDEAN SAND : quartz sand (fixed dunes)



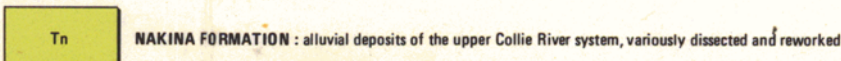
Qpa GUILDFORD FORMATION : alluvium (clay, loam, sand, gravel) variably lateritized and podsolized



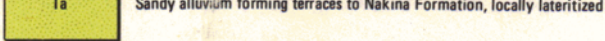
Qpr YOGANUP FORMATION : leached or ferruginized beach sand, conglomerate and dunes forming a distinct shelf
 Qpry partially reworked beach sand, with local heavy mineral concentrations, at base of the shelf



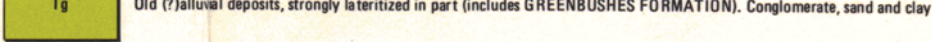
CzI Laterite – chiefly massive, but includes overlying pisolithic gravel and minor lateritized sand
 CzII lower laterite surface formed below breakaway, best developed on Blackwood Plateau
 Czs Sand overlying laterite – yellow, white or grey
 Czh Beach sand and dune deposits of the Happy Valley shoreline
 Czc Conglomerate – cobbles and boulders in sand or clay matrix, variably lateritized
 Cza Broad tracts of sandy alluvium often traversed by dunes, variously reworked by present drainage
 CzAt terraces above alluvium, locally lateritized



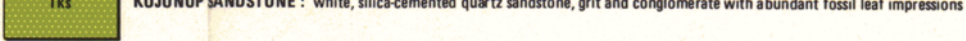
Tn NAKINA FORMATION : alluvial deposits of the upper Collie River system, variously dissected and reworked



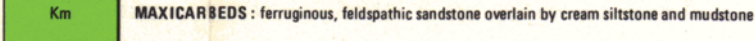
Ta Sandy alluvium forming terraces to Nakina Formation, locally lateritized



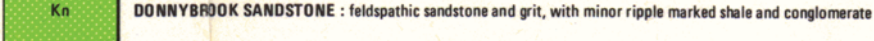
Tg Old (?) alluvial deposits, strongly lateritized in part (includes GREENBUSHES FORMATION). Conglomerate, sand and clay



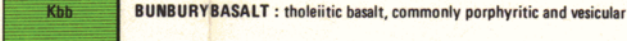
TKs KOJONUP SANDSTONE : white, silica-cemented quartz sandstone, grit and conglomerate with abundant fossil leaf impressions



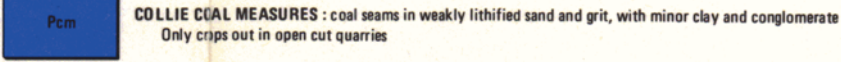
Km MAXICARBEDS : ferruginous, feldspathic sandstone overlain by cream siltstone and mudstone



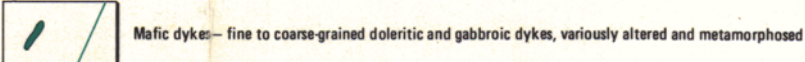
Kn DONNYBROOK SANDSTONE : feldspathic sandstone and grit, with minor ripple marked shale and conglomerate



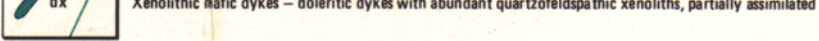
Kbb BUNBURY BASALT : tholeiitic basalt, commonly porphyritic and vesicular



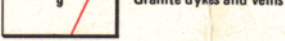
Pcm COLLIE COAL MEASURES : coal seams in weakly lithified sand and grit, with minor clay and conglomerate
 Only crops out in open cut quarries



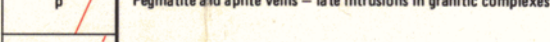
Mafic dykes – fine to coarse-grained doleritic and gabbroic dykes, variously altered and metamorphosed



dx Xenolithic mafic dykes – doleritic dykes with abundant quartzofeldspathic xenoliths, partially assimilated



g Granite dykes and veins



p Pegmatite and aplite veins – late intrusions in granitic complexes



pf Pegmatite dykes and veins – foliated and deformed intrusions in the gneisses of the Bridgetown - Donnybrook area



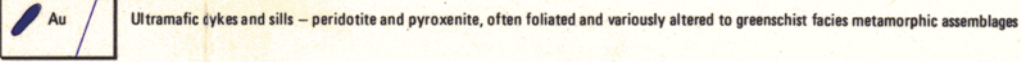
q Quartz dykes and veins



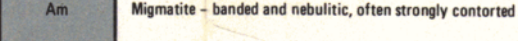
Age Even-grained granite rocks – fine to coarse-grained granodiorite, adamellite and granite
 Agp Porphyritic granite – medium to coarse-grained granite with microcline megacrysts
 Agv Fine to medium-grained adamellite and granite with scattered microcline megacrysts
 Agg Leucocratic adamellite, fine to coarse-grained with abundant pegmatite
 Agm Mixed granitic rocks, chiefly interdeveloped even-grained and porphyritic granite
 Agmb banded granitic rocks, chiefly even-grained and porphyritic types interlayered on centimetre to metre scale



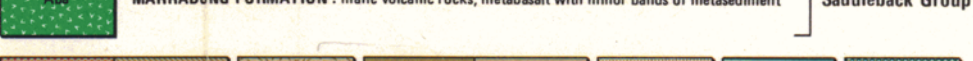
Agd Dioritic rocks, range from monzonite to diorite. Small intrusions only
 Aggp Porphyritic hornblende-bearing quartz monzonite. Scattered amphibolite xenoliths
 Agze Even-grained hornblende-bearing quartz monzonite. Local range to quartz diorite and syenite. Often recrystallized and lineated



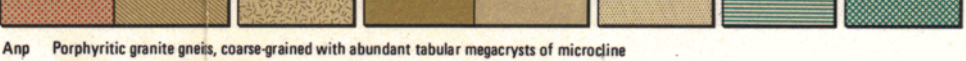
Au Ultramafic dykes and sills – peridotite and pyroxenite, often foliated and variously altered to greenschist facies metamorphic assemblages



Am Migmatite – banded and nebulitic, often strongly contorted



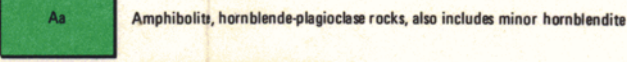
Aje MARRADONG FORMATION : mafic volcanic rocks, metabasalt with minor bands of metasediment } Saddleback Group



Anp Porphyritic granite gneiss, coarse-grained with abundant tabular megacrysts of microcline
 Ana Augen gneiss, coarse-grained with microcline augen, strong cataclastic foliation
 Ang Granitic gneiss, coarse-grained orthogneiss, commonly with braided biotite foliation, includes local augen gneiss and migmatite
 Anb Quartz-feldspar-biotite (-garnet) gneiss, generally well-banded. Includes blastomylonite along Darling Scarp
 Anl Quartz-feldspar (-garnet) gneiss, leucocratic, often with elongate felsic minerals
 Anf Quartz-feldspar-biotite (hornblende-garnet) granofels, generally bluish with only weak foliation
 Anh Quartz-feldspar-hornblende (-biotite) gneiss
 Anc Calc-silicate gneiss, diopside-epidote-microcline (-quartz) assemblages



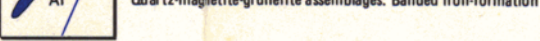
Alb Quartz-biotite schist, often ferruginous
 Alm Quartz-muscovite-chlorite phyllitic schist
 Alg Quartz-mica-garnet schist
 Aln Staurolite-bearing schistose metasediment



Aa Amphibolite, hornblende-plagioclase rocks, also includes minor hornblendite



Aqo Quartzite – metamorphosed orthoquartzite, often with green chrome muscovite
 Aqh Hornblende-bearing quartzite – metamorphosed, some clinopyroxene
 Aqe Epidote-bearing quartzite – metamorphosed calcareous sandstone



Ai Quartz-magnetite-grunerite assemblages. Banded iron-formation



Ahm Granulite facies assemblages – interlayered mafic and felsic units containing ortho- and clinopyroxene



Overprint, indicating bedrock largely obscured by residual and colluvial deposits

PHANEROZOIC

PRECAMBRIAN UNDETERMINED

ARCHAEOAN

CAINOZOIC

MESOZOIC

PALAEZOIC

QUATERNARY

?TERTIARY

TERTIARY

CRETACEOUS

PERMIAN

RECENT

PLEISTOCENE-RECENT

PLEISTOCENE

?EOCENE