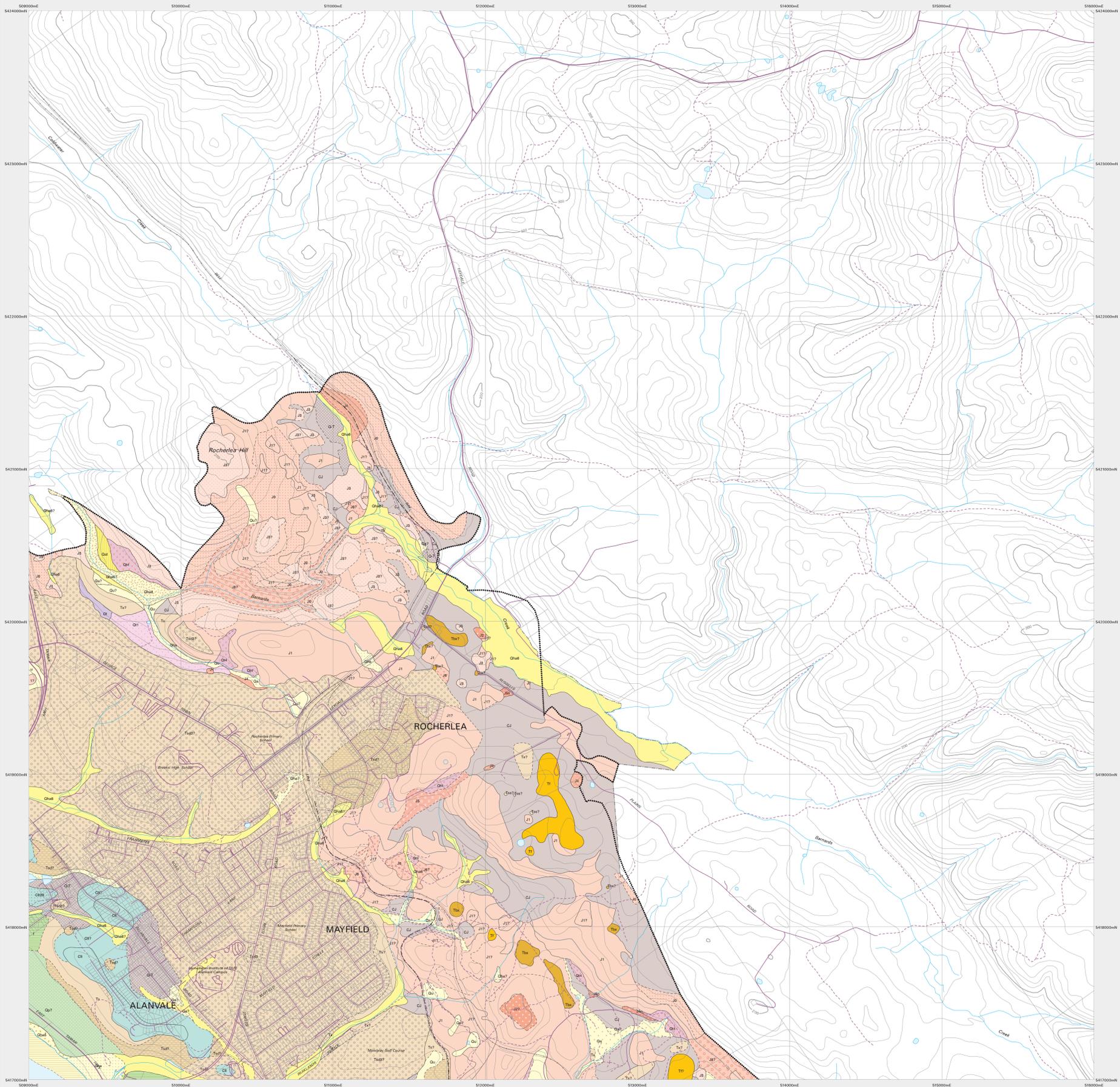


# MINERAL RESOURCES TASMANIA LAUNCESTON - GEOLOGY MAYFIELD



LAUNCESTON URBAN MAPPING PROJECT  
TASMANIAN GEOLOGICAL SURVEY  
MINERAL RESOURCES TASMANIA



**HOLOCENE**

- Qa1 Undifferentiated alluvial, estuarine and associated deposits of silt, sand, gravel and mud.
- Qa2 Alluvial estuarine, deltaic and estuary deposits of silt, sand, mud or gravel situated on the flood plain of modern and recent streams.
- Qa3 Submerged to emergent estuarine deposits of silt, mud, sand or gravel.
- Qa4 Freshwater estuarine deposits of silt, mud, sand or gravel.
- Qa5 Estuarine and other deposits, of silt, mud, sand or gravel with land surface generally above high water mark.
- Qa6 Estuarine deposits of silt, mud, sand or gravel emergent as land between 1835 and 1912.
- Qa7 Alluvial fan deposits predominantly of silt, mud, sand with pebbles or cobbles.
- Qa8 Alluvial deposits predominantly of cobbles, boulders, pebbles and sand.
- Qa9 Alluvial fan deposits predominantly of silt, mud, sand with pebbles or cobbles.

**HOLOCENE-PLEISTOCENE**

- Qa10 Alluvial deposits including common boulders or cobbles of dolerite and located on terraces slightly higher (1-5m) than the modern flood plain of major streams.
- Qa11 Alluvial deposits commonly of dolerite and some siliceous clasts, located on terraces distinctly higher (5-20m) than the modern flood plain of minor streams.
- Qa12 Alluvial deposits with a greater development of dolerite cobbles, pebbles, and ferruginous pebbles, on terraces distinctly higher than the modern flood plain.
- Qa13 Low (1-5 m) terraces deposit of Tamar Estuary with gravel deposits also present area.
- Qa14 Slope deposits of major estuary or stream with alluvium gravel boulders present at level noticeably above sand, silt and mud, and of pebbles Pleistocene age.
- Qa15 Alluvial fan deposit predominantly of dolerite clasts.
- Qa16 Andean sand and some slope deposits of sand.
- Qa17 Talus of locally derived material (DOL).
- Qa18 Slope deposits derived from Cainozoic strata and exhibiting bench-like recent morphology.
- Qa19 Talus with dolerite cobbles derived from Tertiary strata.
- Qa20 Talus with siliceous clasts.
- Qa21 Talus and scree with predominantly ferruginous and/or basaltic clasts.

**PLEISTOCENE-LATE TERTIARY**

- CF Poorly cemented ferronites.
- CR10 Terrace deposits - 10m above sea level, of clay, silt, sand, pebbles and cobbles, loess to poorly consolidated.
- CR20 Terrace deposits - 20m above sea level and of gravel filling pits and alluvial channels and cobbles, loess to poorly consolidated or cemented, clasts include dolerite, siliceous rocks and ferruginous pebbles.
- CR30 Terrace deposits - 25-60m and 100m above sea level of local base level and of gravel filling pits and alluvial channels and cobbles, loess to poorly consolidated or cemented, clasts include dolerite, siliceous rocks and ferruginous pebbles.
- CR70 Terrace deposits - 70m above sea level and of gravel filling pits and alluvial channels and cobbles, loess to poorly consolidated or cemented, clasts include dolerite, siliceous rocks and ferruginous pebbles.

**TERTIARY**

- T1 Ferruginous laterite and basaltic with cemented and soft loams.
- T2 Lower remnants of ferruginous laterite profile grading down to very weathered rock, lacking alluvium and generally lacking substantial remnants of ferronites, commonly overlain by dolerite.
- T3 Basaltic profile developed on pre-Tertiary rocks.
- T4 Dominantly interbedded poorly consolidated mudstone and clayey siltstone, subordinate lignite, conglomerate with cemented layers, and siliceous sandstone, some ferruginous cemented part and concretions, and some leaf fossils.
- T5 Sequence of poorly consolidated slightly micaceous quartz-rich sandstone and conglomerate interbedded with siltstone and mudstone, underlies Tertiary basalt at Akela Hill.
- T6 Sequence of poorly consolidated slightly micaceous quartz-rich sandstone and conglomerate interbedded with siltstone and mudstone, underlies Tertiary basalt at Akela Hill.
- T7 Moderately consolidated, dominantly cobble grade with lesser pebbles and boulder grade dolerite conglomerate, some sandstone and rare siliceous conglomerates, some sandstone and rare siltstone, pebbles and calcite cementation, some ferruginous, red to red brown, and calcite cementation, some ferruginous, red to red brown, and calcite cementation.
- T8 Dominantly cobble to pebble grade dolerite conglomerate and sandstone, some ferruginous, red to red brown, and calcite cementation, some ferruginous, red to red brown, and calcite cementation.

**IGNEOUS ROCKS**

- Ts Basalt, slightly to extremely weathered.

**JURASSIC**

- J0 Dolerite, fresh to extremely weathered, isolated from previous mapping Longman et al. 1965, Blake 1959 and/or from aerial photo interpretation.
- J1 Dolerite, fresh to extremely weathered.
- J2 Dolerite surface expression - extensive in situ rock.
- J3 Dolerite surface expression - some in situ rock.
- J4 Dolerite surface expression - some in situ boulders.
- J5 Dolerite sub-surface zone of in situ dolerite derived clay showing residual texture and enclosing dolerite boulders.
- J6 Dolerite sub-surface zone of extremely weathered dolerite or in situ derived material, may include dolerite boulders grading down to rock.
- J7 Dolerite, few or no in situ boulders or rock at land surface - probable thick soil or extremely weathered rock.
- J8 Dolerite, surface indication of remnant fossil soil.

**TRASSIC**

- TR1 Moderately bedded, interbedded freshwater quartz sandstone and micaceous shaly siltstone.
- TR2 Dominantly dolerite, cobble conglomerate, sandstone, lignite and carbonaceous beds, contains 1, 2, 3, 4, 5, 6, 7, 8, 9, 10, 11, 12, 13, 14, 15, 16, 17, 18, 19, 20, 21, 22, 23, 24, 25, 26, 27, 28, 29, 30, 31, 32, 33, 34, 35, 36, 37, 38, 39, 40, 41, 42, 43, 44, 45, 46, 47, 48, 49, 50, 51, 52, 53, 54, 55, 56, 57, 58, 59, 60, 61, 62, 63, 64, 65, 66, 67, 68, 69, 70, 71, 72, 73, 74, 75, 76, 77, 78, 79, 80, 81, 82, 83, 84, 85, 86, 87, 88, 89, 90, 91, 92, 93, 94, 95, 96, 97, 98, 99, 100.

**UNDIFFERENTIATED**

- U1 Undifferentiated Permian and Pleistocene deposits.
- U2 Undifferentiated Cainozoic deposits and rocks.
- U3 Undifferentiated Cainozoic deposits and rocks or Jurassic dolerite.
- U4 Undifferentiated deposits located within the Tamar Estuary - 5m above sea level.

Scale: 1:10 000

**LOCATION DIAGRAM**

**THIS MAP IS TO BE USED FOR GENERAL GUIDANCE ONLY AND DOES NOT REMOVE THE NEED FOR SITE SPECIFIC INVESTIGATIONS**

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Field work for the study was carried out by Project Geologist S. M. Forsyth, Mineral Resources Tasmania between 1991 and 1993.

Reference this map as: Forsyth, S.M., 1996, Geology Map, Launceston Area, Urban Engineering Geology Series, Tasmanian Geological Survey.

Digital base information from Information and Land Services, Department of Primary Industries, Water and Environment, Cadastre information (depicted in grey), as at April 2003 and supplied by Information and Land Services, Department of Primary Industries, Water and Environment.

Map produced September 2003 by Data Management Branch, Mineral Resources Tasmania using G.I.S. software.

AGD66 - AMG Zone 58, Contour Interval: 20 metres.

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