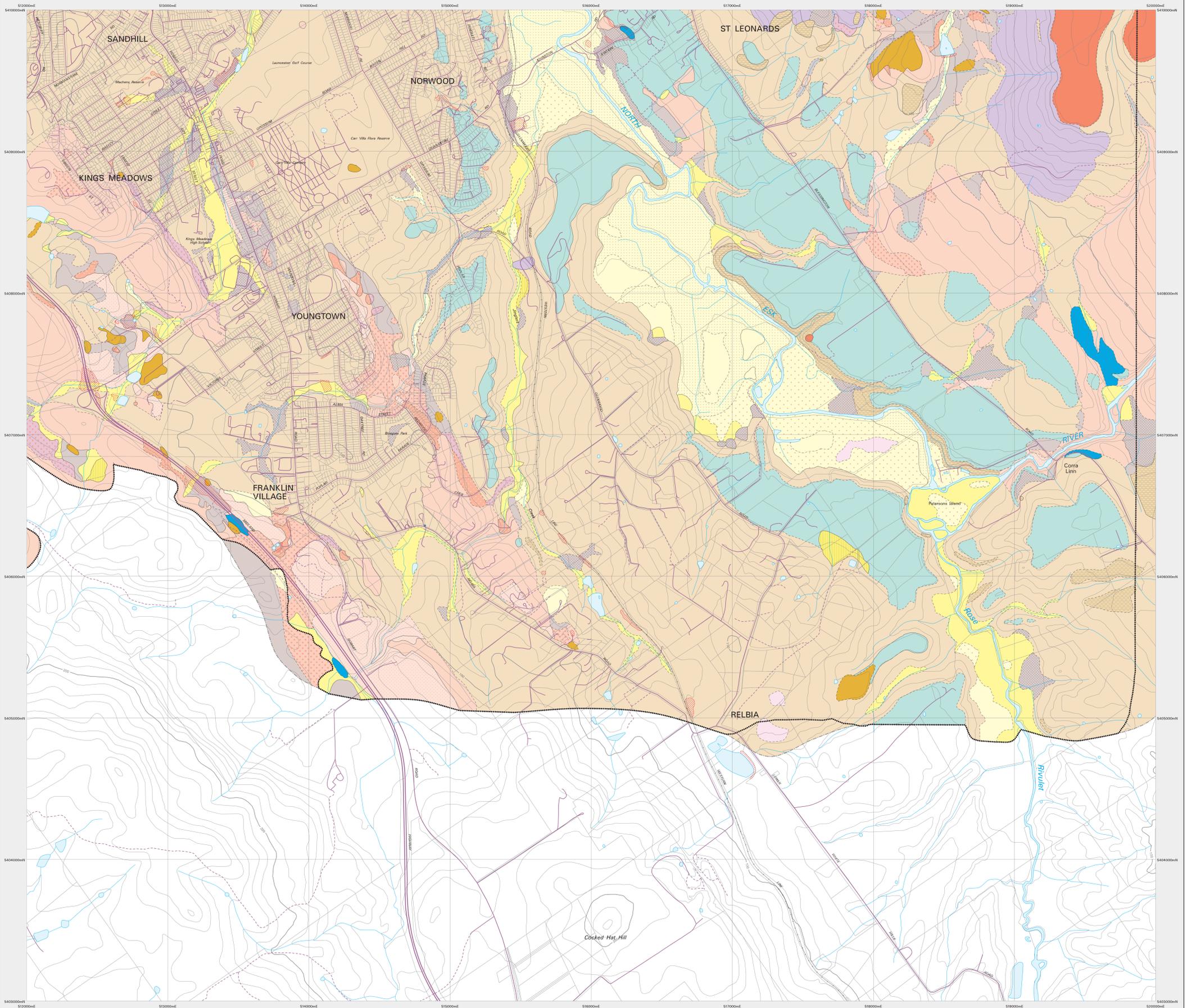


**MINERAL RESOURCES TASMANIA
LAUNCESTON - ENGINEERING GEOLOGY
YOUNGTOWN**



SEDIMENTARY DEPOSITS	
QUATERNARY	Undifferentiated alluvial, estuarine, slope and aeolian deposits. Undifferentiated alluvial, estuarine and associated deposits. Alluvial estuarine deltaic and swamp deposits along major water courses. Fossiliferous and shaly submerged estuarine and swamp deposits. Alluvium along minor streams. Low terrace and fan deposits in estuarine areas and major valleys. Talus and slope deposits derived from Cainozoic sediments. Talus and slope deposits derived from dolerite or basalt. Aeolian sand, localised slope deposits of sand.
QUATERNARY	Terrace deposits of major streams 10 - 70m above local base level.
TERTIARY	Ferruginous, laterite and bauxite zones, cemented and soft layers locally. Fluvio-lacustrine deposits, silty mudstone and sandstone. Dolerite conglomerate. Herbedded alluvial sandstone, conglomerate and mudstone. Triassic
PERMAN	Quartz sandstone, shaly siltstone. Sandy claystone, siltstone, medium bedded.

IGNEOUS ROCKS	
TERTIARY	Basalt and weathered basalt.
JURASSIC	Undifferentiated dolerite and weathered dolerite. Extensive in situ unweathered dolerite exposed. In situ unweathered dolerite rock, weathered rock exposed, boulders. Dolerite bedrock not generally exposed except for boulders in residual clay. Dolerite bedrock not generally exposed at surface.
CAINOZOIC	UNDIFFERENTIATED DEPOSITS Cainozoic sediments and soils on sedimentary and igneous rocks. Unconsolidated to slightly lithified sedimentary deposits. Reclaimed land and fill material.

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

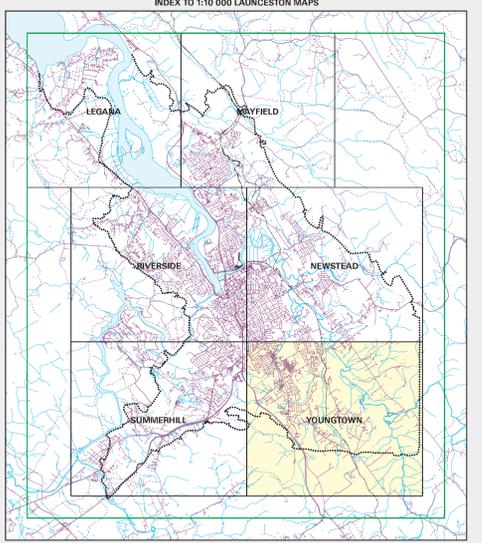
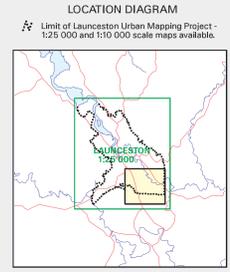
This map forms part of a project funded jointly by the Launceston City Council, West Tamar Council, Meander Valley Council and Mineral Resources Tasmania between 1991 and 1993.

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.
Cartographic 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.J.S. software.
AGD66 - AMG Zone 55. Contour Interval 20 metres.
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For more details on soil descriptions and physical properties see separate Engineering Geology Legend.
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