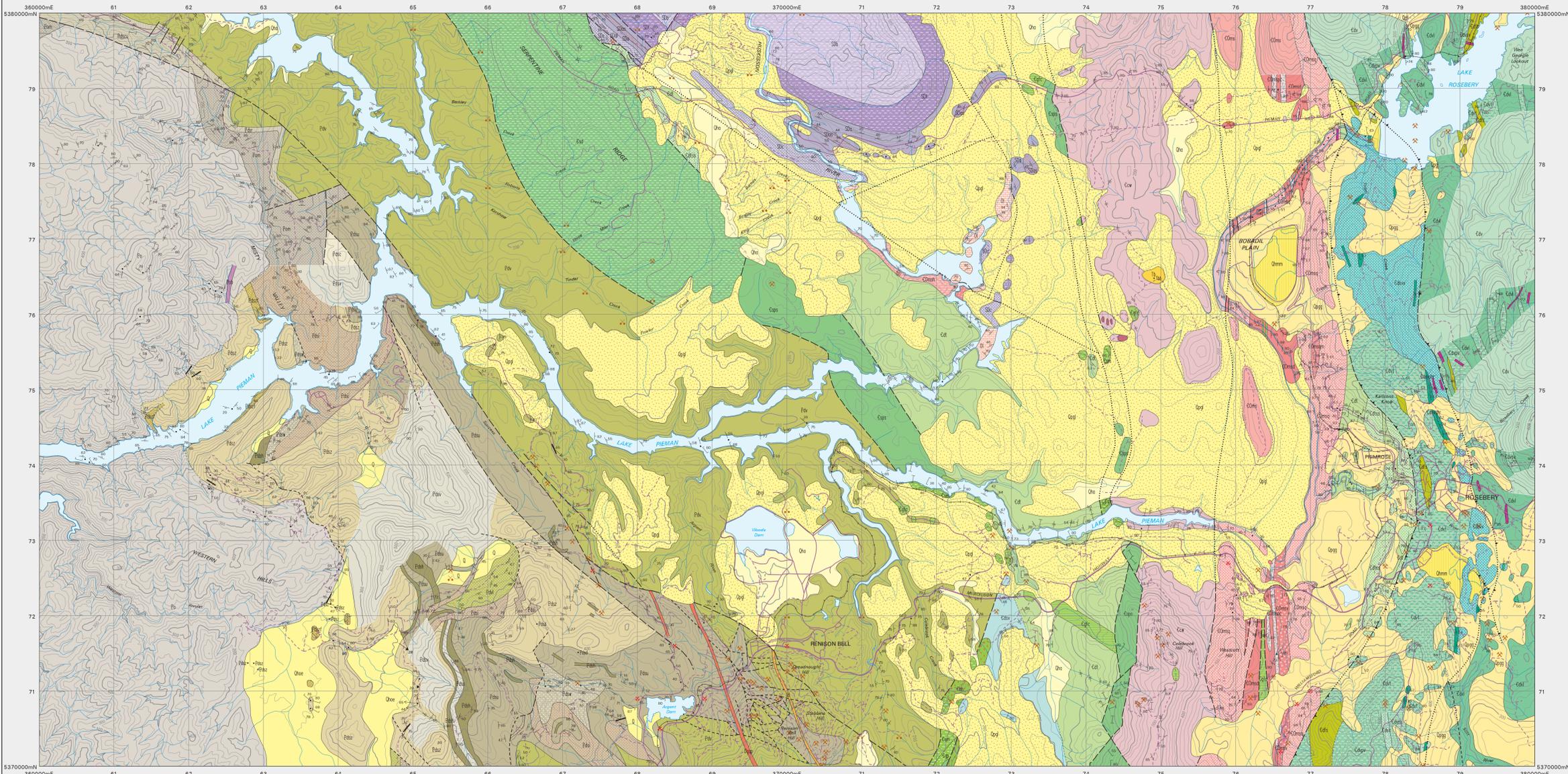
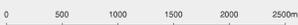


# ROSEBERY

Scale: 1:25 000



| PERIOD          | UNIT | DESCRIPTION  |
|-----------------|------|--|
| CAMELIDIC       | Qhmm | Man-made deposits (Qhmm).  |
|                 | Qha  | Stream alluvium, swamp and marsh deposits (Qha).   |
|                 | Qho  | Older alluvium, marsh deposits and alluvium (Qho).   |
|                 | Qta  | Talus (Qta).   |
|                 | Qp   | Fluvioglacial and lacustrine deposits (Qp).  |
| LITHEAL         | Tb   | Basalt (Tb), including local occurrence of basanite at 37490mE, 5378400mN (Tb).  |
|                 | U    | Unconformity.  |
| PALAEOZOIC      | S0a  | Grey or greenish grey interbedded laminated mudstone, siltstone and minor fine-grained quartz sandstone (S0a) (S0a).   |
|                 | S0b  | Generally pale grey, fine-grained quartz sandstone with subordinate interbedded greenish grey siltstone (siliceous quartzite and corallites) (S0b).  |
|                 | S0c  | Siltstone, mudstone and calcareous siltstone with interbedded quartz sandstone layers (unfossiliferous corallites of Tyndal Group) (S0c).  |
|                 | S0d  | Limestone layer within unit S0a (S0d).   |
|                 | S0e  | Quartz sandstone layer within unit S0a (S0e).  |
| MIDDLE CAMBRIAN | S1a  | Siltstone and shale (correlate of Amber Silt) (S1a).   |
|                 | S1b  | Generally pale grey and in part pink, commonly current-bedded, fine-to coarse-grained quartz sandstone with common pebble conglomerate layers (interbedded pale green mudstone and siltstone (Crusty Quartzite and corallites) (S1b)). |
| EARLY CAMBRIAN  | S2a  | Dark grey carbonate rocks, calcareous mudstone, minor quartz sandstone and local clay weathering products (S2a).   |
|                 | S2b  | Dark grey carbonate rocks (correlate of Gordon Group) (S2b).   |

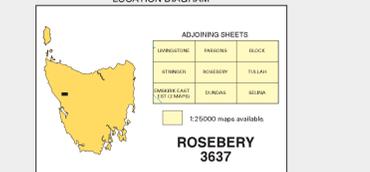
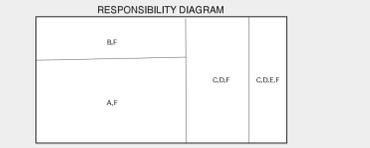
| PERIOD          | UNIT  | DESCRIPTION   |
|-----------------|-------|---|
| LATE CAMBRIAN   | C0ms  | Mainly sandstone-siltstone-conglomerate sequence, silicified to polymict, marine fossils in places (includes parts of Rosebery Group and upper Huakison Group (C0ms)).  |
|                 | C0mn  | Mainly siltstone conglomerate with interbedded sandstone (C0mn).  |
|                 | C0mp  | Mainly shale, mudstone and siltstone, highly fossiliferous at Huakison River (C0mp).  |
|                 | C0mnc | Polymict conglomerate, typically calcareous, with tuffites in places (C0mnc).   |
|                 | C0mnd | Dolomitic mudstone, siltstone and sandstone, with interbeds of volcanoclastic conglomerate and sandstone in places (C0mnd).   |
| MIDDLE CAMBRIAN | C0mnc | Micaceous quartzite-siltstone-conglomerate sequence (includes Silt Quartzite and Amber Silt) (C0mnc).   |
|                 | C0msm | Units of dominantly siltstone and mudstone (C0msm).   |
| PALAEOZOIC      | C0m   | Volcanoclastic sandstone and breccia units, typically felsic, quartz-feldspar-phyrlic (C0m).  |
|                 | C0d   | Mainly volcanoclastic to polymict sandstone, breccia, siltstone, mudstone and conglomerate, typically quartz-feldspar-phyrlic. Marine fossils in places, includes part of Huakison Group and Western Pyroclastics (correlates of Tyndal Group) (C0d). |
|                 | C0de  | Dominantly volcanoclastic sandstone, typically felsic, crystal-rich (C0de).   |
|                 | C0dv  | Interbedded volcanoclastic sandstone, breccia, siltstone, mudstone and conglomerate, includes parts of Rosebery, Hongkong sequence and Lower Huakison Group (C0dv).   |
|                 | C0dsv | Shale-siltstone-mudstone units (includes Rosebery Shale) (C0dsv).   |
| EARLY CAMBRIAN  | C0d   | Mainly volcanoclastic sandstone, typically crystal-rich (quartz-feldspar), with some siltstone and mudstone (C0d).  |
|                 | C0dv  | Dominantly felsic, felsic-phyrlic volcanic and volcanoclastic rocks (C0dv).   |
|                 | C0dsv | Feldspar-quartz porphyry, typically with spherulitic ground mass, intrusive to partly extrusive (C0dsv).  |
|                 | C0dsv | Pumice-bearing volcanoclastic rocks, usually with mafic tuffites (C0dsv).   |
|                 | C0dsv | Crystal-rich tuffaceous sandstone, bedded in places (C0dsv).  |
| MIDDLE CAMBRIAN | C0dm  | Fine-grained vitriclastic mudstone (C0dm).  |
|                 | C0dv  | Felsic lava, typically feldspar +/- quartz-phyrlic, rhyolitic to dacitic, rarely andesitic (C0dv).  |
| EARLY CAMBRIAN  | C0dv  | Siltstone-sandstone-shale unit (C0dv).  |

| PERIOD          | UNIT | DESCRIPTION  |
|-----------------|------|--|
| PALAEOZOIC      | C0w  | Basaltic tholeiitic and red green mudstone, with minor carbonate, tholeiitic basalt and basaltic igneous rocks (correlate of Cleveland-Waratah Association) (C0w).   |
|                 | C0wb | Areas of tholeiitic basalt lava (C0wb).  |
| EARLY CAMBRIAN  | P0v  | Dominantly mafic volcanoclastic lithicwacke and siltstone and carbonate beds (Gomonan Creek Formation) (P0v).  |
|                 | P0sv | Interbedded volcanoclastic lithicwacke, siltstone and vitric-tuffic tuff (P0sv).   |
|                 | P0sv | Red chert and mudstone with minor conglomerate horizons (P0sv).  |
|                 | P0sd | White well sorted quartz sandstone (P0sd).   |
|                 | P0sd | Red to purple hematitic siltstone (P0sd).  |
|                 | P0sd | Felsic-mafic volcanoclastic lithicwacke and siltstone (P0sd).  |
|                 | P0sd | Possible stratigraphic horizons of sheared carbonaceous siltstone with phosporite or breccia sandstone beds forming tectonic intrusions into P0v and P0sv (P0sd).  |
|                 | P0sd | Dissective laminated grey siliceous siltstone with minor quartz sandstone and conglomerate horizons (P0sd).  |
|                 | P0sd | Diastolic horizons (P0sd).   |
|                 | P0sd | Black mudstone, siltstone and minor sandstone (dominated by soft sediment deformation) (P0sd).   |
| MIDDLE CAMBRIAN | P0sv | Dominantly quartz sandstone with laminated grey siltstone and mudstone and local pebbly sandstone and conglomerate, including basal sequence with carbonate beds, thin tuffaceous horizons and conglomerate beds (P0sv). |
|                 | P0sv | Felsic-mafic volcanoclastic lithicwacke and siltstone intercalations in unit P0sv (P0sv).  |
| EARLY CAMBRIAN  | P0v  | Undifferentiated Donoh Formation, dominantly quartzite varieties (P0v). Thinly bedded dark grey, silty to radiolarite massive pelitic siltstone and mudstone (P0v). Mafic resccalar lava (P0v).                          |

| PERIOD         | UNIT | DESCRIPTION  |
|----------------|------|--|
| MESOZOIC       | Jd   | Dolerite (Jd).   |
|                | Qp   | Quartz porphyry (Qp).  |
|                | C0bc | Basaltic dykes, typically chlorite altered (C0bc).                       |
|                | C0fs | Feldspar-quartz porphyry, commonly spherulitic (C0fs).                   |
|                | C0b  | Low Ti-tholeiitic and basaltic lavas (C0b).                              |
| EARLY CAMBRIAN | C0g  | Massive and multi-intrusive two-pyroxene granular textured gabbro (C0g). |
|                | C0g  | Fine to coarse-grained gabbro (C0g).                                     |
|                | C0gs | Serpentinised layered peridotite and pyroxenite (C0gs).                  |
|                | C0s  | Dominantly serpentinised layers dunite and harzburgite (C0s).            |
|                | C0sm | Massive serpentinite (C0sm).   |

| SYMBOL | DESCRIPTION   |
|--------|---|
| ↘ ↙    | Strike and dip of bedding, facing known - right way up; overturned, vertical, facing indicated by single tick.  |
| ↘ ↙    | Strike and dip of bedding, facing unknown - dipping vertical.   |
| ↘ ↙    | Strike and dip of compositional layering.   |
| ↘ ↙    | Strike and dip of igneous banding - dipping vertical.   |
| ↘ ↙    | Strike and dip of cleavage, type and relative age unspecified - dipping vertical.   |
| ↘ ↙    | Strike of vertical crenulation cleavage.  |
| ↘ ↙    | Strike and dip of cleavage, relative local age S1.  |
| ↘ ↙    | Trend and plunge of hinge of minor fold with dip and dip direction of axial surface indicated; vertical axial surface, horizontal hinge.                          |
| ↘ ↙    | Trend and plunge of hinge of minor fold, relative local age F1, F2, F3.   |
| ↘ ↙    | Strike and dip of outcrop-scale fault; with trend and plunge of slickensides indicated; movement sense unspecified.   |
| ●      | Fossil location.  |
| ○      | Field station for adjacent readings on the map.   |
| ⊗      | Mineral deposit location - hardrock - Data derived from Mineral Resources Tasmania (DEPOSITS) data base. Data point position has not been verified in every case. |
| ⊙      | Mineral deposit location - alluvial - Data derived from Mineral Resources Tasmania (DEPOSITS) data base. Data point position has not been verified in every case. |
| ⊗      | Construction materials location - Data derived from Mineral Resources Tasmania (DEPOSITS) data base. Data point position has not been verified in every case.     |

Compiled by E.B.Smyrnou and M.P.McClanaghan, 1997 from the following sources (see responsibility diagram):  
A Brown, A.V., Finlay, R.H., Goscombe, B.G., McClanaghan, M.P. and Smyrnou, E.B. 1984. Zircon, Geochronology Atlas 1:50,000 series sheet 56 (7948). Department of Mines, Tasmania.  
B Tame, N.J., Brown, A.V., McClanaghan, M.P. and Smith, L. 1991. Corvex, Geological Atlas 1:50,000 series sheet 43 (7944N). Department of Mines, Tasmania.  
C Corbett, K.D. and McNeill, A.W. 1986. Geology of the Rosebery-Mt Black area, Map 2, Mt Black Volcanics Project, Department of Mines, Tasmania.  
D Coon, G.H. 1988. The tectono-stratigraphic setting and formation of the Rosebery volcanoclastic massive sulphide on body, Tasmania. Ph.D. thesis, University of Tasmania.  
E Unpublished data, R. Allen, 1991. Zircon Limited.  
F Revised and updated by K.D. Corbett, 2003 as part of the Western Tasmanian Regional Minerals Program.



Base data from the LIST, Copyright State of Tasmania.  
Map produced by the Data Management Branch of Mineral Resources Tasmania using GIS software.  
AID66 - AMG Zone 55. Contour Interval: 20 metres.  
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