

1981/7. West Coast gravity tie stations, 1981

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This report presents absolute gravity values for a series of tie stations on the west coast of Tasmania. Intervals were measured using Worden gravity meters W273 and W913 with a minimum of six measurements of each interval. The measured interval between Strahan and Smithton airports was  $957.1 \mu\text{m/s}^2$  compared to the value of  $956.4 \mu\text{m/s}^2$  from the 1965 BMR isogal values and  $957.4 \mu\text{m/s}^2$  from the 1975 BMR isogal values. Because of the disagreement between the intervals from the isogal values, the data was adjusted by scaling by  $956.4/957.4$  to allow consistent use of the 1965 isogal values. The adjusted measured interval is  $956.1 \mu\text{m/s}^2$ .

All observed gravity values have an error of less than  $3 \mu\text{m/s}^2$  and for Waratah, Tullah, Rosebery, and Zeehan the error is less than  $1.5 \mu\text{m/s}^2$ . The observed gravity values are given in Table 1 and the station locations are shown on Figures 1 to 9.

Table 1. GRAVITY TIE STATIONS, WEST COAST GRAVITY SURVEY

Location	Number	Adjusted gravity value ( $\text{m/s}^2$ )
Smithton	6491.9142	9.8027605
Waratah	8051.9901	9.8018198
Tullah	8051.9902	9.8027519
Zeehan	8051.9903	9.8029824
Queenstown	8051.9904	9.8032478
Strahan	6491.9136	9.8037166
Gormanston	8051.9905	9.8027443
Rosebery	8051.9906	9.8028157
Que River	8051.9900	9.8016978

[17 February 1981]

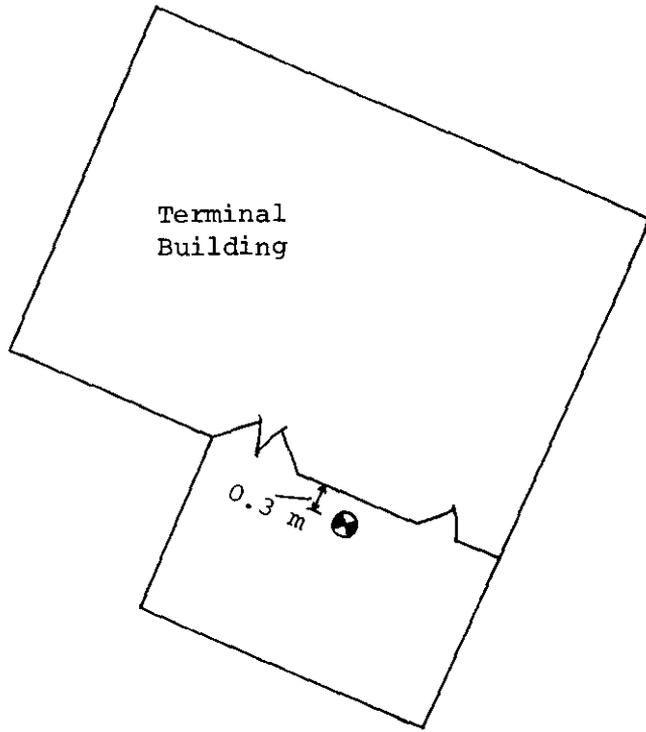
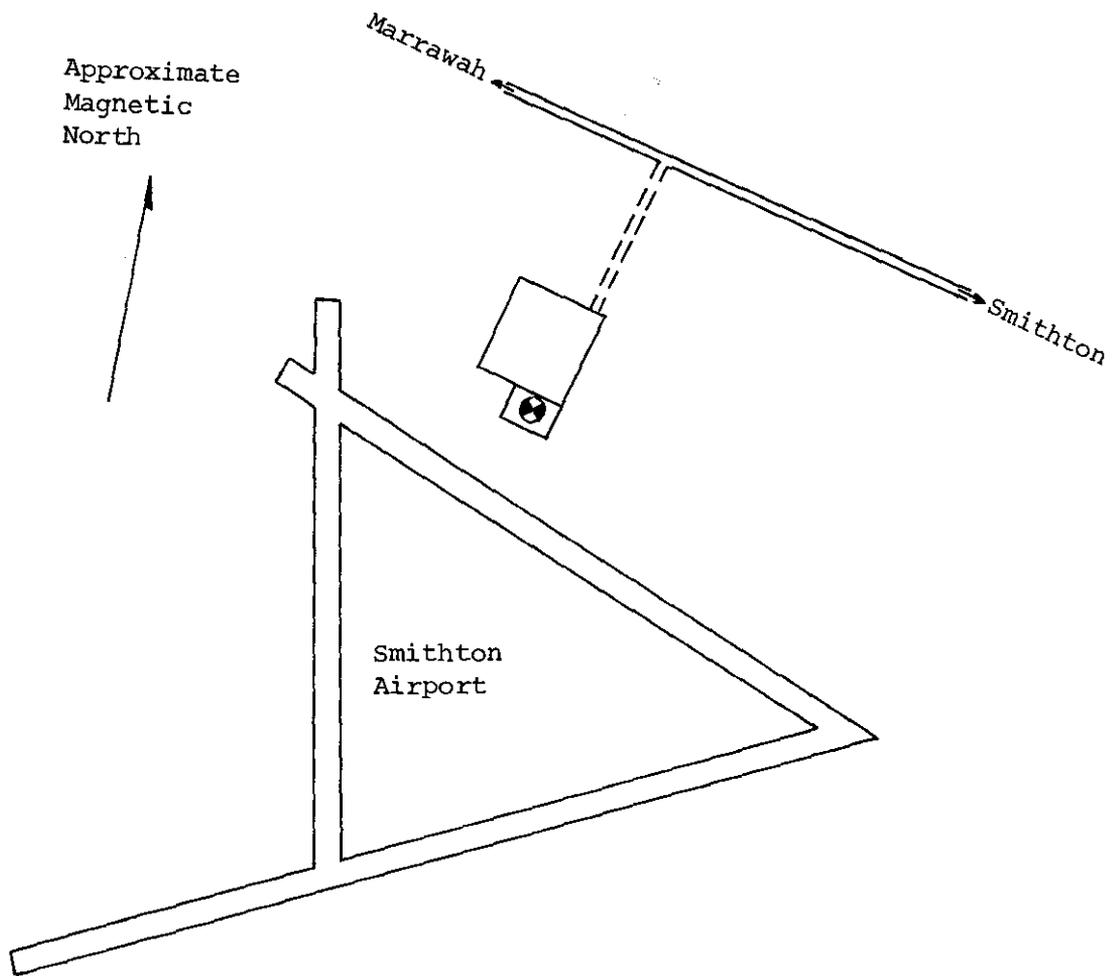


Figure 1. *Smithton* (6491.9142)

5 cm

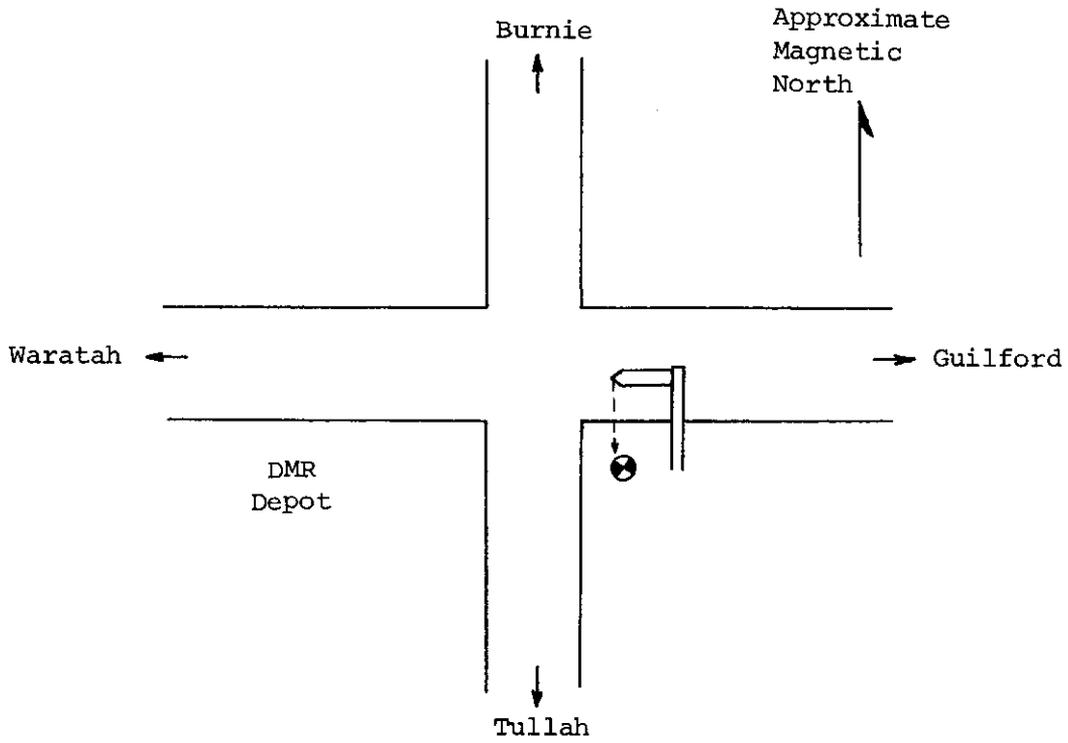


Figure 2. Waratah (8051.9901)

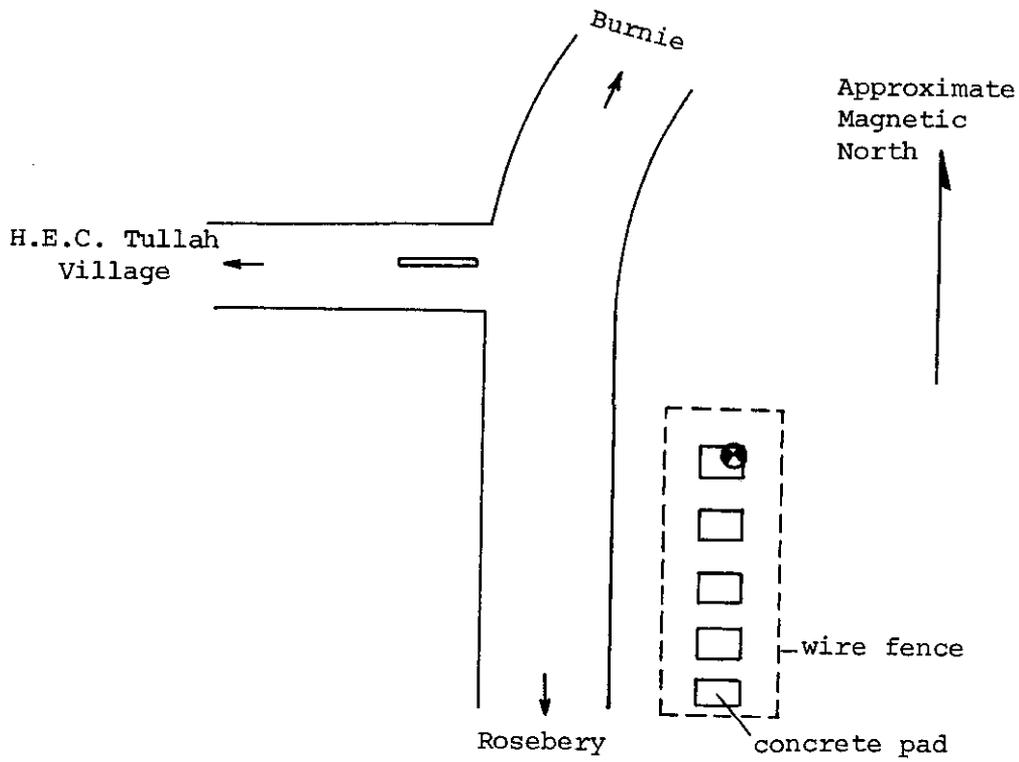


Figure 3. Tullah (8051.9902)

5 cm

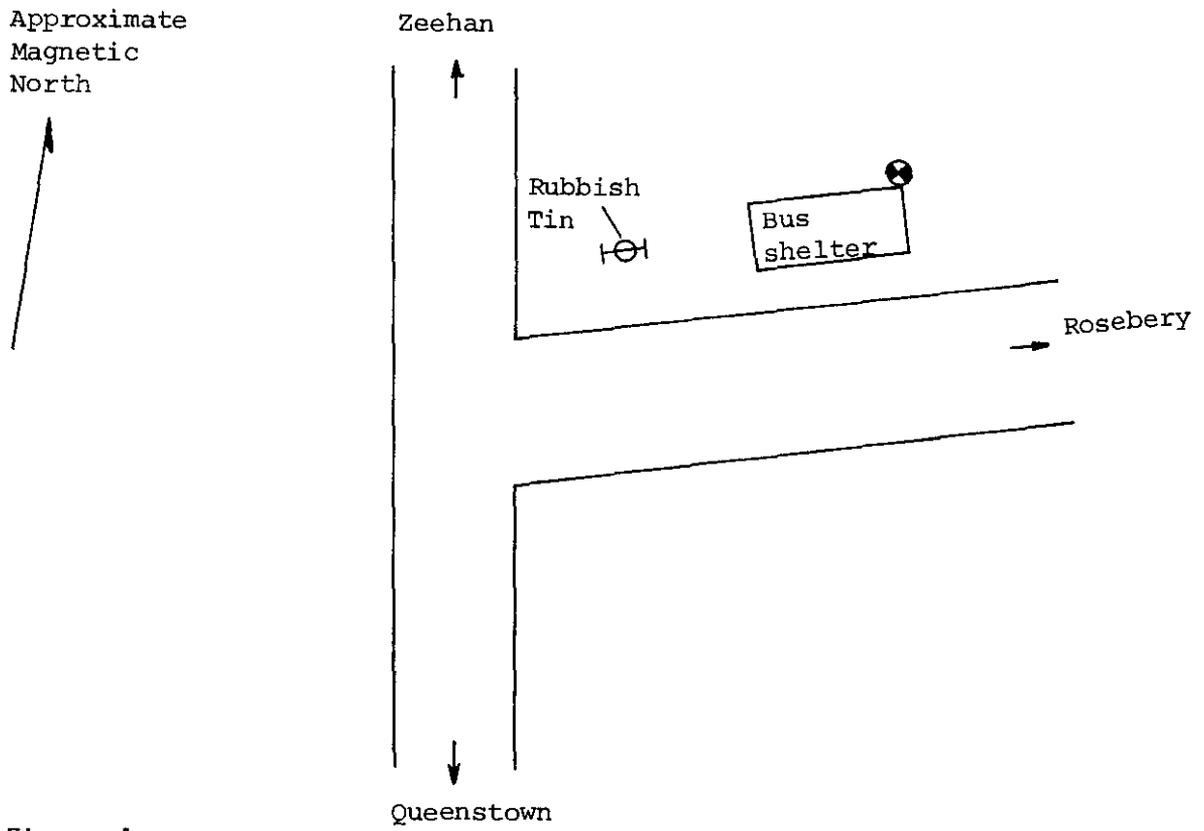


Figure 4. Zeehan (8051.9903)

Approximate  
Magnetic North

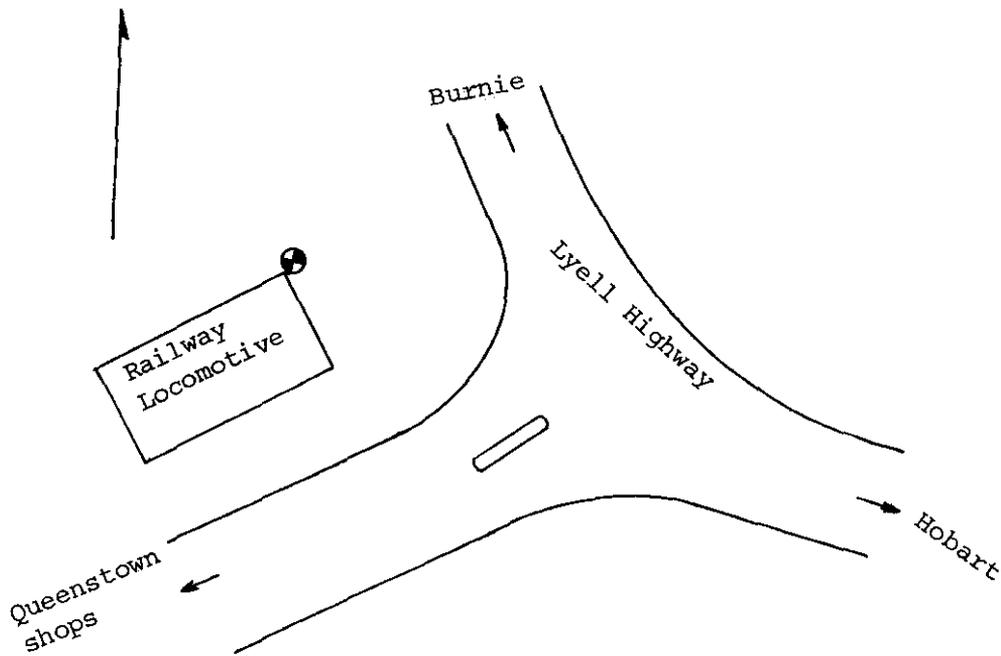


Figure 5. Queenstown (8051.9904)

5 cm

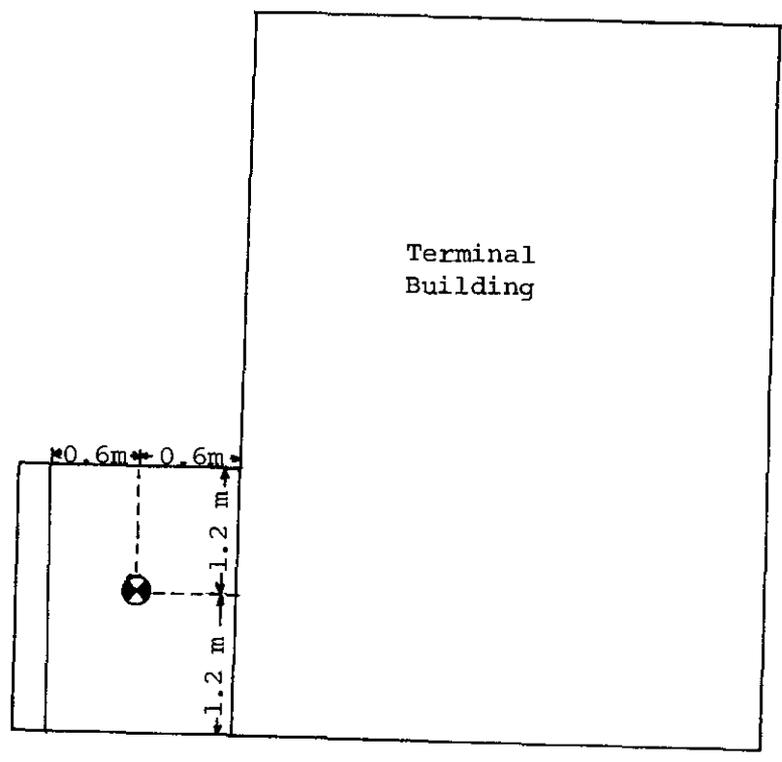
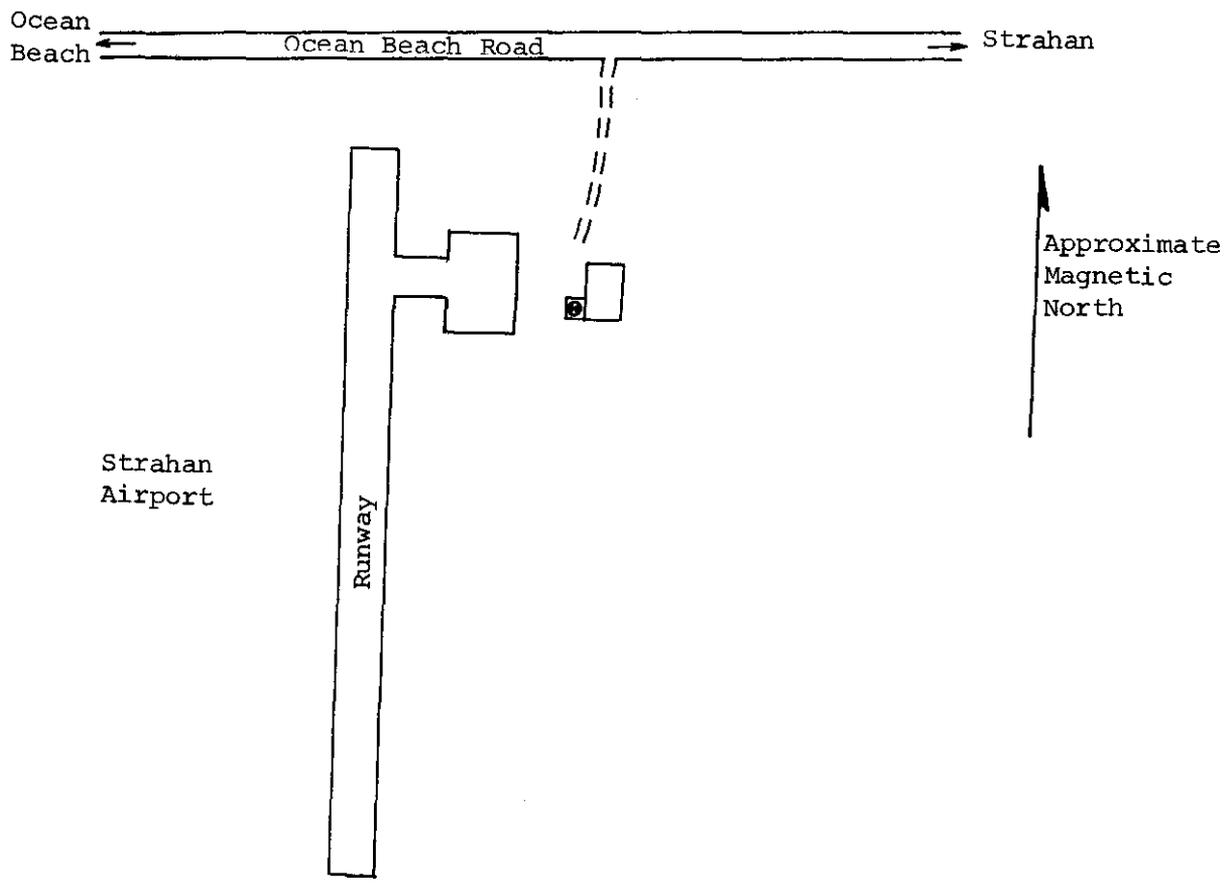


Figure 6. Strahan (6491.9136)

5 cm

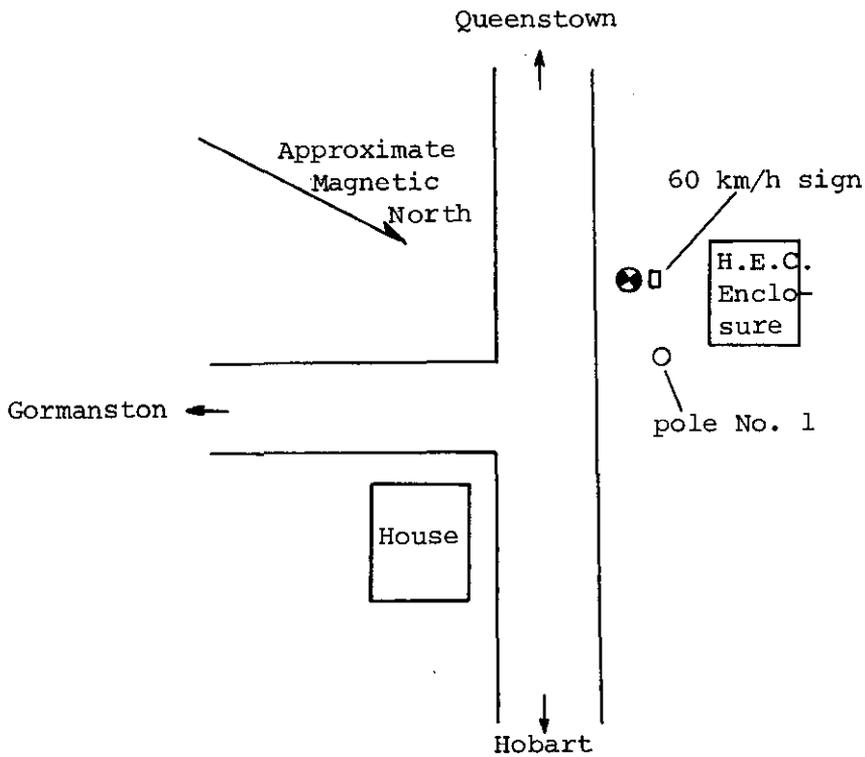


Figure 7. Gormanston (8051.9905)

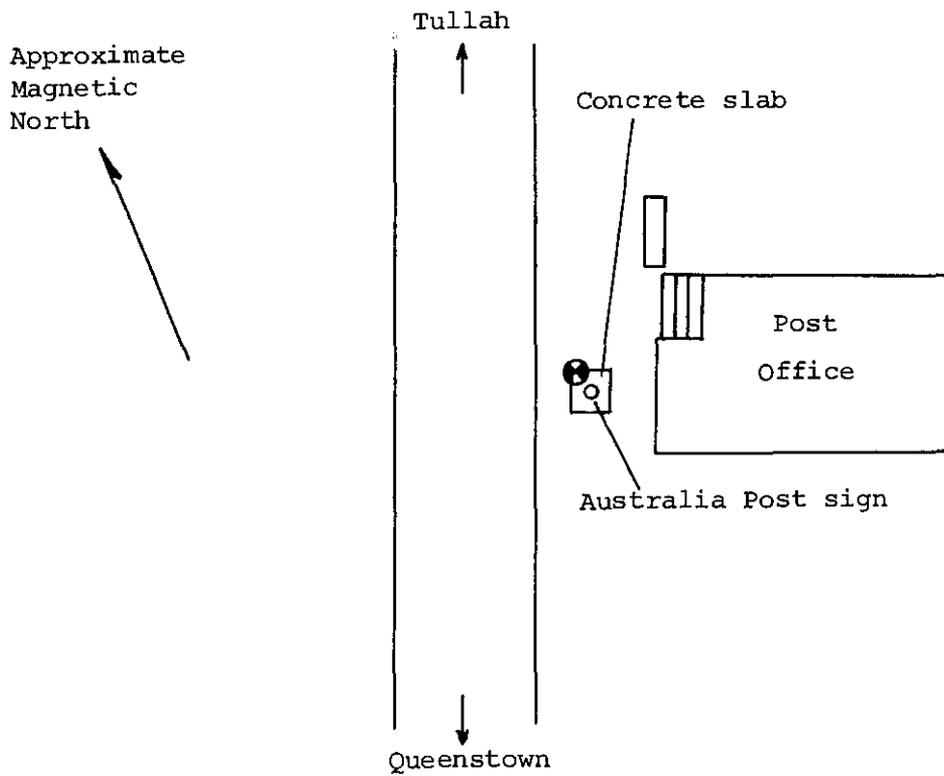


Figure 8. Rosebery (8051.9906)

5 cm

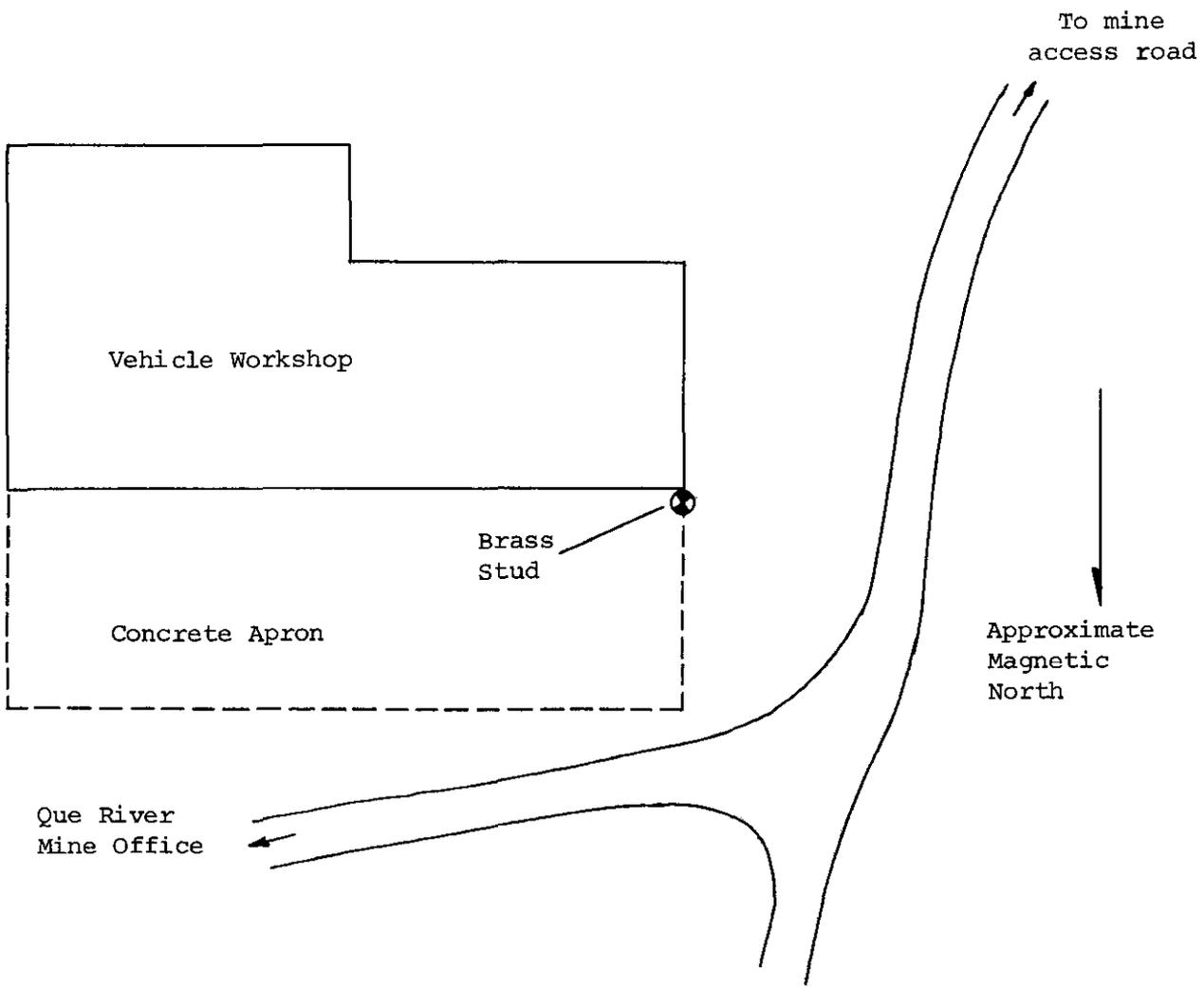


Figure 9. *Que River (8051.9900)*

5 cm