

## Candidate portfolio requirements for the authorised mine surveyor (grade 1) practical oral examination

A candidate's portfolio is used to demonstrate their knowledge and competency in underground and quarry mine surveying. The portfolio must comprise the candidate's own work, and all work must comply with current legislation requirements. If necessary, for the purpose of survey completion, surveys or data produced by other surveyors may be shown but must be clearly identified and endorsed. In the case of any accident or incident plans the survey or data produced can be fictional.

All plans produced should focus on industry best practices for grid line spacing, labelling, extent across the map sheet, scale, title block, legend, and mosaic where applicable.

The candidate's portfolio submission should include:

1. A sample of mine survey plans that satisfies r. 675RA of the Work Health and Safety (Mines) Regulations 2022 (Mines Regulations), and most of the requirements in r. 675TA and within the [Mines survey: Code of practice](#).
  - The sample set should include plans necessary for both underground and quarry operations.
2. A sample of a 'survey plan or location plan for an accident or incident' that would satisfy the intent of r. 675UA of the Mines Regulations.
  - Ensure sufficient detail (plan and section views, general location in the mine, large scale insert, location of tools, equipment, machinery, injured persons etc.) and ensure the creation of the incident plan will withstand the scrutiny of legal processes.
  - The plan does not have to represent a fatality accident, any accident or incident plan can be created and surveyed data can be fictitious in nature.
3. A sample of an emergency plan that satisfies Section 5 Emergency plan preparation of the *Mine survey audit guide* and most of the standards within the *Mines survey: Code of practice*
  - The sample set should include plans necessary for both underground and quarry operations.
4. A control traverse, which can include a re-survey, that is required for the preparation of Mine survey plans and must include the survey of a minimum of six survey stations. This control traverse must demonstrate control traversing skills that are common to both surface (GPS) and underground (TPS) traversing techniques and requirements.
  - A control traverse report must be produced by the candidate and should include:
    - equipment used and last calibration information
    - equipment check and adjust results
    - results from equipment verification over a known point or baseline
    - control traverse processing and adjustment method, and final control results adopted

5. A sample of a survey instruction produced by the candidate that includes detail of grade and directional control for underground development headings, preferably of a planned breakthrough. The survey instruction must include all known hazards and risk mitigation controls where applicable.
6. A sample of an excavation permit produced by the candidate that includes details of buried services, excavation method and note any exclusions or risk mitigation controls where applicable.
7. A sample of EOM and/or stockpile reports produced by the candidate. The reports should demonstrate the candidate's calculations and report volumes to an accuracy justified by the measurement methods. The report should document the processes used; the checks undertaken and how the method achieved the required results.