

Underground Services Locator interview questions

careertips.com.au: common questions and what they're really testing

What to expect

Interviews for underground services locator roles focus on your technical ability to interpret plans and operate locating equipment, your safety mindset, and how you communicate with excavation crews. Employers want to know you can work independently and make sound judgements when conditions on site differ from the paperwork.

- **Technical:** Questions about locating equipment, plan reading, and the limitations of electromagnetic locators and ground penetrating radar.
- **Process:** Questions that ask you to walk through your step-by-step method for locating services on a new site.
- **Safety:** Questions about managing risks around live services, safe digging practices, and compliance with Work Health and Safety requirements.
- **Behavioural:** Questions that ask for examples of how you have handled communication challenges, tight deadlines or unexpected findings on site.
- **Scenario:** Questions that put you in a hypothetical situation to test your judgement when plans are wrong or another locator's markings are inconsistent.

The interview often starts with a phone screen with a recruitment coordinator, followed by a face-to-face or video interview with a supervisor or project manager. For field roles, you may then attend a site walkthrough or a practical assessment where you demonstrate your locating technique on a live or simulated site. Some employers also include a safety-focused conversation with a WHS officer.

1. Walk me through your process for locating services on a new site, from receiving the BYDA plans to marking the ground.

Why they ask

This question tests whether your method is systematic and thorough, and whether you understand the role of plans, detection equipment and site verification.

How to structure your answer

A walk-through structure works best: start with the plans, then detection, then marking, then communication. Use chronological order and mention the checks you do at each stage.

Example answer

"First, I review the BYDA plans and any asset maps provided by the client. I note the likely service routes, the types of assets, and any gaps or conflicting information. On site, I start with a visual inspection for signs like pits, meters, or old trench lines. Then I use an electromagnetic locator to trace conductive services like power and telecom, and ground penetrating radar for non-conductive pipes or where the signal is weak. I mark the alignments with paint and flags, and I record the data with GNSS. Before excavation starts, I talk the excavator operator through the marks and explain the safe digging boundaries. If anything doesn't match the plans, I stop and investigate further before marking."

2. What's the difference between electromagnetic locating and ground penetrating radar, and when would you choose one over the other?

Why they ask

This question checks your technical knowledge and your ability to choose the right tool for the job.

How to structure your answer

A compare-and-contrast structure: explain how each technology works, then give practical examples of when you would use one over the other.

Example answer

"Electromagnetic locating works by detecting the electromagnetic field around conductive services like power cables, telecom lines and metal pipes. It's fast and accurate for those services, and I can use different frequencies to trace them. Ground penetrating radar sends radio waves into the ground and listens for reflections, so it can find non-conductive pipes like plastic water or sewer lines, and it can give depth information. I would choose electromagnetic first for known conductive services, and bring in GPR for unknown or non-conductive assets, or when I need to verify depth. Often I use both together to cross-check."

3. Tell me about a time you had to communicate a complex service alignment to an excavator operator who was under time pressure.

Why they ask

This question assesses your communication skills, your ability to stay calm under pressure, and your commitment to safety over speed.

How to structure your answer

Use STAR: Situation, Task, Action, Result. Focus on how you explained the information, the operator's reaction, and the outcome.

Example answer

"On a subdivision project, the excavator operator was pushing to start trenching before I had finished marking a congested area with power and water lines. I asked him to hold off for ten minutes while I completed the marks. I then walked him through the alignments, showed him the marks on the ground and explained the depth of each service. I used simple language and pointed out the risk of striking a live cable. He agreed to wait, and we completed the trench without any damage. Afterwards, he said he appreciated the clear briefing."

4. You arrive on site and notice the markings from another locator don't match the BYDA plans. What do you do?

Why they ask

This question tests your judgement and your willingness to stop work when something doesn't add up.

How to structure your answer

A judgement-under-pressure structure: assess the situation, verify with your own equipment, escalate to the supervisor, and document your findings.

Example answer

"First, I would not rely on the existing markings. I would check the BYDA plans again and then use my own locator to trace the services in that area. If my results match the plans but not the other locator's marks, I would re-mark the alignments correctly. If my results also conflict, I would stop and investigate further, maybe using GPR to confirm. I would then inform the site supervisor and the excavator operator about the discrepancy, and I would document what I found and the action I took. Safety comes first, so no digging should proceed until the services are confirmed."

5. How do you manage the risk of service strikes when working around live gas or electrical assets?

Why they ask

This question focuses on your safety knowledge and your ability to apply controls around high-risk services.

How to structure your answer

A risk management structure: identify the hazard, assess the risk, apply controls, and communicate. Mention specific controls like isolation, exclusion zones, and permits.

Example answer

“For live gas or electrical assets, I start by confirming the service type and location with the plans and my locator. I establish an exclusion zone around the marked alignment, usually with a safety buffer. I check for any isolation or permit requirements before work begins. I communicate the risks to the excavation crew, including the depth and the potential consequences of a strike. If the work requires digging near the asset, I insist on hand digging or vacuum excavation within the exclusion zone. I also make sure there is a spotter and that everyone knows the emergency procedures.”

6. How do you record and update asset data so it's useful for future projects?

Why they ask

This question tests your attention to detail and your understanding of digital asset registers and GIS.

How to structure your answer

A process explanation: what data you capture, how you capture it, and how you ensure accuracy and accessibility.

Example answer

“When I locate services, I capture the position with GNSS and record the asset type, depth if known, and any other relevant details. I use GIS mapping software to update the asset register, ensuring the data aligns with the client's coordinate system. I also note any discrepancies with the original plans. I make sure the data is saved with a clear naming convention and shared with the project team. Accurate records help the next locator or excavator operator avoid surprises, so I treat it as an important part of the job.”