

## Excavating Near Underground Services Risk Assessment

Business Name:	ABN:	
Business Address:		
Contact Person:	Phone:	Email:

### THIS RISK ASSESSMENT IS APPROVED BY THE PCBU ON THIS PROJECT

Under the Work Health and Safety Regulation (WHS Regulation), a person conducting a business or undertaking (PCBU) is required to ensure that a RISK ASSESSMENT is prepared before the proposed work starts.

Full Name:		
Signature:	Title:	Date:

### CLIENT OR PRINCIPAL CONTRACTOR DETAILS

Client:	SCOPE OF WORKS
Project Name:	
Project Address:	
Project Manager:	
Contact Phone:	
Date Risk Assessment supplied to Project Manager:	

RISK MATRIX									
LIKELIHOOD	INSIGNIFICANT	MINOR	MODERATE	MAJOR	CATASTROPHIC	SCORE	ACTION	HIERARCHY OF CONTROLS	
ALMOST CERTAIN	3 HIGH	3 HIGH	4 ACUTE	4 ACUTE	4 ACUTE			<b>Elimination</b> Remove the hazard.	
LIKELY	2 MODERATE	3 HIGH	3 HIGH	4 ACUTE	4 ACUTE	4A ACUTE	DO NOT PROCEED	<b>Substitution</b> Replace the hazard.	
POSSIBLE	1 LOW	2 MODERATE	3 HIGH	4 ACUTE	4 ACUTE	3H HIGH	Review before work starts.	Isolation Isolate People from the hazard	
UNLIKELY	1 LOW	1 LOW	2 MODERATE	3 HIGH	4 ACUTE	2M MODERATE	Ensure control measures in place.	<b>Engineering</b> Isolate the hazard	
RARE	1 LOW	1 LOW	2 MODERATE	3 HIGH	3 HIGH	1L LOW	Monitor and keep records.	<b>Administrative</b> Change	
								<b>PPE</b>	

### Risk Rating & Required Action:

4A	Stop work. The risk is intolerable. Eliminate the hazard or redesign the activity before proceeding. A Safe Work Method Statement (SWMS) or higher-level authorisation is required.
3H	Review and approve additional controls before task starts. Senior supervisor sign-off needed.
2M	Ensure all nominated controls are in place and effective. Proceed with caution; monitor conditions.
1L	Proceed, following standard operating procedures. Monitor and keep records.

### Consequence Scale:

Consequence	People (injury/illness)	Project / Assets	Compliance / Reputation
Catastrophic	Fatality or permanent total disability	project shutdown	Significant regulator intervention; criminal prosecution
Major	Serious injury/illness (hospital > 5 days)	critical delay	Improvement notice; major media coverage
Moderate	Medical-treatment injury; lost-time > 1 day	moderate delay	Minor breach; adverse client comment
Minor	First-aid only, no lost time	negligible delay	Isolated non-conformance
Insignificant	No injury	no schedule impact	Deviation caught and corrected on site

### Notes on Hierarchy of Controls:

Remember to apply controls in the preferred order shown by the coloured pyramid:

- Eliminate**
- Substitute
- Isolate
- Engineering
- Administrative
- PPE

Always document **why** a lower-order control is accepted if elimination or substitution is not reasonably practicable.

*aligned with Safe Work Australia's Managing the risk of fatigue at work (2023) and ISO 45001:2018 clauses 6–8.*

JOB STEP	POTENTIAL HAZARDS	IR	CONTROL MEASURES	RR
SPECIFIC WORK STEPS	HAZARDS THAT MAY ARISE	INITIAL RISK	SPECIFIC MEASURES TO BE PUT IN PLACE TO ELIMINATE OR CONTROL THE RISKS	RESIDUAL RISK
1. Preparation	Misidentification of underground services, Lack of communication	3H	<ul style="list-style-type: none"> <li>- Mark known underground services on plans</li> <li>- Use communication devices for coordination</li> <li>- Conduct team briefings on site conditions</li> <li>- Verify plans with local authorities</li> <li>- Obtain Dial Before You Dig report</li> <li>- Use GPS for accurate service location</li> <li>- Engage with utility companies for updates</li> <li>- Ensure all personnel are briefed</li> <li>- Develop emergency procedures</li> <li>- Assign risk officer to oversee activities</li> </ul>	2M
2. Site Inspection	Uneven terrain, Visibility issues	3H	<ul style="list-style-type: none"> <li>- Conduct a visual inspection of the site</li> <li>- Assess ground stability</li> <li>- Mark unsafe areas with signage</li> <li>- Ensure site is well-lit during inspection</li> <li>- Use safety footwear for grip</li> <li>- Engage with site engineers for assessment</li> <li>- Record findings for risk evaluation</li> <li>- Initiate corrective actions immediately</li> <li>- Brief workers on identified hazards</li> <li>- Restrict access to unsafe areas</li> </ul>	1L
3. Utility Detection	Use of faulty equipment, Electric shock	4A	<ul style="list-style-type: none"> <li>- Inspect equipment before use</li> <li>- Train staff on equipment use</li> <li>- Use properly calibrated detection tools</li> <li>- Wear appropriate Personal Protective Equipment (PPE)</li> <li>- Follow standard operating procedures</li> <li>- Maintain regular equipment maintenance schedule</li> <li>- Ensure all electrical devices are tested and tagged</li> <li>- Implement lock-out/tag-out systems</li> </ul>	2M

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			<ul style="list-style-type: none"> <li>- Verify detection results with engineers</li> <li>- Follow up-to-date industry standards</li> </ul>	
4. Marking Position	Inaccurate marking, Environmental disruptions	3H	<ul style="list-style-type: none"> <li>- [REDACTED]</li> <li>- [REDACTED]</li> <li>- [REDACTED]</li> <li>- [REDACTED]</li> <li>- [REDACTED]</li> <li>- [REDACTED]</li> <li>- [REDACTED]</li> <li>- [REDACTED]</li> <li>- [REDACTED]</li> <li>- [REDACTED]</li> </ul>	2M
5. Excavation	Collapse of excavations, Contact with live services	4A	<ul style="list-style-type: none"> <li>- [REDACTED]</li> <li>- [REDACTED]</li> <li>- [REDACTED]</li> <li>- [REDACTED]</li> <li>- [REDACTED]</li> <li>- [REDACTED]</li> <li>- [REDACTED]</li> <li>- [REDACTED]</li> <li>- [REDACTED]</li> <li>- [REDACTED]</li> </ul>	2M
6. Installing Supports	Incorrect installation, Equipment failure	3H	<ul style="list-style-type: none"> <li>- [REDACTED]</li> <li>- [REDACTED]</li> <li>- [REDACTED]</li> <li>- [REDACTED]</li> <li>- [REDACTED]</li> <li>- [REDACTED]</li> <li>- [REDACTED]</li> </ul>	1L

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7. Backfilling	Soil subsidence, Machinery striking services	3H		1L
8. Restoring Surface	Trip hazards, Inadequate warning	3H		1L
9. Final Inspection	Missed defects, Inadequate documentation	2M		1L

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10. Site Closure	Unauthorized access, Inadequate signage	3H		1L
11. Staff Training	Poor understanding of procedures, Lack of updated knowledge	3H		1L
12. Coordination with Utilities	Delay in service response, Lack of information exchange	3H		1L

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13. Emergency Preparedness	Response delays, Inadequate equipment	4A		2M
14. Continuous Monitoring	Equipment failure during operation Unreported hazards	3H		1L
15. Reporting and Documentation	Incomplete records, Loss of data	3H		1L

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SAMPLE



## EMERGENCY RESPONSE – CALL 000 FOR EMERGENCIES

Ensure to have an Emergency Management Plan in place as well as adequate numbers of trained first aid staff with easy access to fully stocked first aid kits, rescue equipment, material safety data sheets, adequate access to emergency communication equipment and fire-fighting equipment suitable for all classes of fire and ignition sources.

## LEGISLATIVE REFERENCES

RELEVANT LEGISLATION AND CODES OF PRACTICE. DELETE THE LEGISLATIVE REFERENCES IF ANY STATE THAT ARE NOT APPLICABLE

### Queensland & Australian Capital Territory

Work Health and Safety Act 2011

Work Health and Safety Regulations 2011

Legislation QLD: <https://www.worksafe.qld.gov.au/laws-and-compliance/work-health-and-safety-laws>

Codes of Practice QLD: <https://www.worksafe.qld.gov.au/laws-and-compliance/codes-of-practice>

Legislation ACT: <https://www.worksafe.act.gov.au/laws-and-compliance/acts-and-regulations>

Codes of Practice ACT: <https://www.worksafe.act.gov.au/laws-and-compliance/codes-of-practice>

### Victoria

Occupational Health and Safety Act 2004

Occupational Health and Safety Regulations 2017

Legislation VIC: <https://www.worksafe.vic.gov.au/occupational-health-and-safety-act-and-regulations>

Codes of Practice VIC: <https://www.worksafe.vic.gov.au/compliance-codes-and-codes-practice>

### New South Wales

Work Health and Safety Act 2011

Work Health and Safety Regulations 2017

Legislation NSW: <https://www.safework.nsw.gov.au/legal-obligations/legislation>

Codes of Practice NSW: <https://www.safework.nsw.gov.au/resource-library/list-codes-of-practice>

### Western Australia

Work Health and Safety Act 2020

Work Health and Safety Regulations 2022

Legislation Western Australia: <https://www.commerce.wa.gov.au/worksafe/legislation>

Codes of Practice WA: <https://www.commerce.wa.gov.au/worksafe/codes-practice>

### Northern Territory

Work Health and Safety (National Uniform Legislation) Act 2011

Work Health and Safety (National Uniform Legislation) Regulations 2011

Legislation NT: <https://worksafe.nt.gov.au/laws-and-compliance/workplace-safety-laws>

Codes of Practice NT: <https://worksafe.nt.gov.au/laws-and-compliance/codes-of-practice>

### Safe Work Australia Links

Law and Regulation (All States): <https://www.safeworkaustralia.gov.au/law-and-regulation>

Model Codes of Practice: <https://www.safeworkaustralia.gov.au/resources-publications/model-codes-of-practice>

### Model Codes of Practice

- Managing noise and preventing hearing loss at work
- Confined spaces
- Labelling of workplace hazardous chemicals
- Managing risks of hazardous chemicals in the workplace
- Welding processes
- First aid in the workplace
- Managing the risk of falls at workplaces
- Hazardous manual tasks
- Managing the risk of falls in housing construction
- Managing electrical risks in the workplace
- Demolition work
- Excavation work
- Work health and safety consultation, cooperation and coordination
- Managing the work environment and facilities
- How to manage work health and safety risks
- Managing risks of plant in the workplace
- Construction work

### South Australia

Work Health and Safety Act 2012 (SA)

Work Health and Safety Regulations 2012 (SA)

Legislation for SA: <https://www.safework.sa.gov.au/resources/legislation>

Codes of Practice for SA: <https://www.safework.sa.gov.au/workplaces/codes-of-practice#COPs>

### Tasmania

Work Health and Safety Act 2012

Work Health and Safety (Transitional and Consequential Provisions) Act 2012

Work Health and Safety Regulations 2012

Work Health and Safety (Transitional) Regulations 2012

Legislation for TAS: <https://worksafe.tas.gov.au/topics/laws-and-compliance/acts-and-regulations>

Codes of Practice for TAS: <https://worksafe.tas.gov.au/topics/laws-and-compliance/codes-of-practice>

Details of permits, licenses or access required by regulatory bodies (add or delete as required):

- Permits from local council
- Authorisation to commence work
- Any required documents.