

## Inspecting Work Area For 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<br>HIGH     | 3<br>HIGH     | 4<br>ACUTE    | 4<br>ACUTE | 4<br>ACUTE   |                |                                   | <b>Elimination</b><br>Remove the hazard.           |
| LIKELY         | 2<br>MODERATE | 3<br>HIGH     | 3<br>HIGH     | 4<br>ACUTE | 4<br>ACUTE   | 4A<br>ACUTE    | DO NOT PROCEED                    | <b>Substitution</b><br>Replace the hazard.         |
| POSSIBLE       | 1<br>LOW      | 2<br>MODERATE | 3<br>HIGH     | 4<br>ACUTE | 4<br>ACUTE   | 3H<br>HIGH     | Review before work starts.        | <b>Isolation</b><br>Isolate People from the hazard |
| UNLIKELY       | 1<br>LOW      | 1<br>LOW      | 2<br>MODERATE | 3<br>HIGH  | 4<br>ACUTE   | 2M<br>MODERATE | Ensure control measures in place. | <b>Engineering</b><br>Isolate the hazard           |
| RARE           | 1<br>LOW      | 1<br>LOW      | 2<br>MODERATE | 3<br>HIGH  | 3<br>HIGH    | 1L<br>LOW      | Monitor and keep records.         | <b>Administrative</b><br>Change                    |
|                |               |               |               |            |              |                |                                   | <b>PPE</b>   |

### Risk Rating & Required Action:

|           |   |
|-----------|---|
| <b>4A</b> | 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. |
| <b>3H</b> | Review and approve additional controls before task starts. Senior supervisor sign-off needed.   |
| <b>2M</b> | Ensure all nominated controls are in place and effective. Proceed with caution; monitor conditions.   |
| <b>1L</b> | Proceed, following standard operating procedures. Monitor and keep records.   |

### Consequence Scale:

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

1. **Eliminate**
2. **Substitute**
3. **Isolate**
4. **Engineering**
5. **Administrative**
6. **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            | Inadequate survey of underground services, Incorrect information on plans | 3H           | <ul style="list-style-type: none"> <li>- Conduct a comprehensive survey of the work area using appropriate detection equipment.</li> <li>- Verify documentation and plans with the latest updates from utility companies.</li> <li>- Establish a checklist for survey data accuracy.</li> <li>- Ensure qualified personnel conduct the survey.</li> <li>- Use multiple detection technologies (e.g., GPR, Electromagnetic detectors).</li> <li>- Review past work area incidents for context.</li> <li>- Confirm the presence of underground services with site contacts.</li> <li>- Set up site-specific training for the team.</li> <li>- Implement a documentation review system for continuous updates.</li> <li>- Create a contingency plan for unexpected services discovered.</li> </ul> | 2M            |
| 2. Site Induction         | Lack of awareness of underground hazards, Insufficient training           | 3H           | <ul style="list-style-type: none"> <li>- Conduct site-specific inductions focusing on underground hazards.</li> <li>- Use visual aids to illustrate service locations.</li> <li>- Test comprehension through verbal/written assessments.</li> <li>- Make induction materials available in multiple languages.</li> <li>- Reinduct team if plans change or updates occur.</li> <li>- Utilize experienced trainers for induction processes.</li> <li>- Establish a feedback loop to improve induction content.</li> <li>- Ensure all personnel sign off on induction completion.</li> <li>- Provide refresher inductions periodically.</li> <li>- Equip new personnel with mentors for on-the-job guidance.</li> </ul>  | 1L            |
| 3. Service Identification | Misidentification of service lines, Failure to locate all service types   | 4A           | <ul style="list-style-type: none"> <li>- Use validated marking plans and coloured coding for service types.</li> <li>- Confirm service identification with co-workers and supervisors.</li> <li>- Deploy advanced detection tools and validate their results.</li> <li>- Cross-reference with as-built drawings and plans.</li> <li>- Double-check marked-out services with utility providers.</li> <li>- Implement peer review for service identification accuracy.</li> <li>- Update service records in real-time.</li> <li>- Use digital mapping for service location verification.</li> </ul>   | 2M            |

|  |           |   |
|--|-----------|---|
| <p>or hazards, Failure to<br/>conditions</p> | <p>3H</p> | <p>- Establish a tagging system for identified services with dates.</p> |
| <p>to sholders, Delay in</p>                 | <p>3H</p> |   |

| JOB STEP               | POTENTIAL HAZARDS   | IR           | CONTROL MEASURES   | RR            |
|------------------------|---|--------------|--|---------------|
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|                        |   |              |  |               |
| 7. Permit to Work      | Work without proper authorisation,<br>Expired permits           | 4A           |  | 1L            |
| 8. Excavation Planning | Inadequate excavation plan<br>Unidentified services encountered | 4A           |  | 2M            |
| 9. Equipment Check     | Equipment failure, Incorrect equipment use                      | 3H           |  | 1L            |

| 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 |
|                         |   |              |  |               |
| 10. Service Isolation   | Services not isolated, Inadvertent reactivation           | 4A           |  | 2M            |
| 11. Excavation Work     | Service damage during excavation, Personnel injury        | 4A           |  | 2M            |
| 12. Monitoring Progress | Deviation from planned scope, Recorded data discrepancies | 3H           |  | 1L            |

| 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 |
|                          |  |              |  |               |
| 13. Incident Management  | Delayed incident response, Incomplete incident documentation | 4A           |  | 1L            |
| 14. Post-Work Inspection | Missed inspection steps, Reinstatement damages unnoticed     | 3H           |  | 1L            |
| 15. Demobilisation       | Tool loss, Exiting impact on community                       | 3H           |  | 1L            |

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|---------------------|------------------------|--------------|---|---------------|
| SPECIFIC WORK STEPS | HAZARDS THAT MAY ARISE | INITIAL RISK | SPECIFIC MEASURES TO BE PUT IN PLACE TO ELIMINATE OR CONTROL THE RISKS  | RESIDUAL RISK |
|                     |                        |              | <div></div> <div></div> <div></div> <div></div> <div></div> <div></div> |               |
|                     |                        |              |   |               |

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.