Excavation Work Under 1.5			
Business Name:		ABN:	
Business Address:			
Contact Person:	Phone:	Email:	

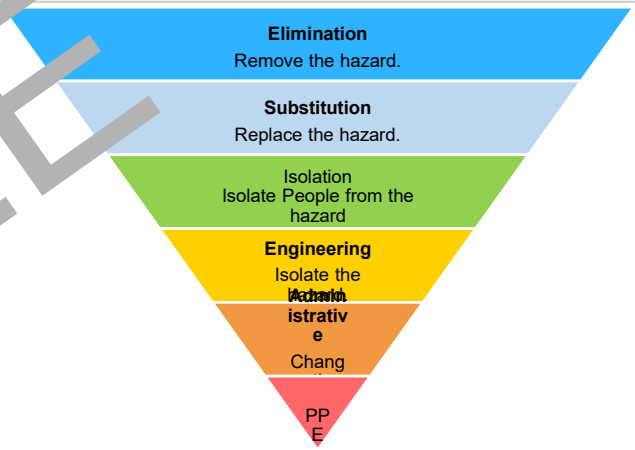
THIS RISK ASSESSMENT IS APPROVED BY THE PCBU OF THE PROJECT		
Under the Work Health and Safety Regulation (WHS Regulation), a person conducting a business or undertaking (PCBU) is required to ensure that a RISK ASSESSMENT is prepared before the proposed work starts.		
Full Name:		
Signature:	Title:	Date:

CLIENT OR PRINCIPAL CONTRACTOR DETAILS	SCOPE OF WORKS
Client:	
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
ALMOST CERTAIN	3 HIGH	3 HIGH	4 ACUTE	4 ACUTE	4 ACUTE		
LIKELY	2 MODERATE	3 HIGH	3 HIGH	4 ACUTE	4 ACUTE	4A ACUTE	DO NOT PROCEED
POSSIBLE	1 LOW	2 MODERATE	3 HIGH	4 ACUTE	4 ACUTE	3H HIGH	Rev before work
UNLIKELY	1 LOW	1 LOW	2 MODERATE	3 HIGH	4 ACU	2M MO RATE	Ensure control measures in place.
RARE	1 LOW	1 LOW	2 MODERATE	3 HIGH	3 H	1L LOW	Monitor and keep records.

HIERARCHY OF CONTROLS



Risk Rating & Required Action:

4A	Stop work. The risk is intolerable. E inate the hazar redesign the activity before proceeding. A Safe Work Method Statement (SWMS) or hi er-level authorisati is required.
3H	Review and approve additional c rols b ask arts. Senior supervisor sign-off needed.
2M	Ensure all nominated controls are in ace and effe ive. 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:

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. Governance, Roles and WHS Accountability	• Lack of clear PCBU and officer accountability for excavation work under 1.5 m resulting in fragmented WHS decision-making • Absence of a documented WHS management plan or equivalent for managing low-depth excavations across sites • Inadequate consultation with health and safety representatives (HSRs) and workers about excavation-related risks and controls • No formal process to verify that principal contractor and subcontractor systems for excavation align with WHS Act 2011 and WHS Regulations • Poor integration of excavation risk management into broader organisational WHS governance and reporting structures	High	• Establish and document clear PCBU, officer and line-management responsibilities for the planning, approval and oversight of all excavation work under 1.5 m, with specific reference to WHS Act 2011 due diligence duties • Develop an organisational excavation risk management framework or procedure that applies to all sites and tiers of contractors, including risk criteria, approvals and minimum control standards • Embed consultation requirements with workers and HSRs into the excavation planning process, ensuring they are involved in risk assessment, selection of controls and review of incidents or near misses • Include excavation work (including work under 1.5 m) as a standing item in WHS governance meetings, with regular reporting of leading indicators (inspections, training, permit use) and lagging indicators (incidents, near misses) • Implement a formal pre-qualification and onboarding process that requires contractors to demonstrate compliant WHS systems for excavation (e.g. risk assessments, procedures, supervision arrangements) • Establish a documented escalation pathway for excavation-related safety concerns, including authority to stop work, and ensure it is communicated to all levels of the organisation and contractors • Periodically review governance arrangements for excavation work through internal audits and management review, ensuring alignment with current legislation, codes of practice and industry guidance	Medium
2. Planning, Design and Engineering Controls	• Inadequate pre-planning for excavation work leading to ad-hoc risk controls onsite • Failure to consider site-specific geotechnical conditions for shallow excavations (e.g. variable soils, groundwater, adjacent loads) because depth is under 1.5 m • Insufficient integration of design risk management (e.g. drainage, permanent works, alternative methods) to eliminate or minimise the need for excavations • Lack of a structured process to review and approve excavation layouts, benching, shoring or shielding where required for shallow trenches • Over-reliance on generic SWMS and risk assessments that do not reflect site constraints (services, traffic, public interface, weather, slopes)	High	• Implement a mandatory excavation planning process for all works under 1.5 m that requires documented risk assessment, identification of nearby services, ground conditions and interfaces with other activities • Integrate excavation considerations into design reviews and constructability assessments, including opportunities to use non-excavation methods (e.g. vacuum excavation, directional drilling, prefabricated elements) • Develop engineering standards or guidance documents for shallow excavations that specify minimum requirements for trench width, battering, exclusion zones, spoil placement and management of adjacent loads • Require competent person review and sign-off for all excavation plans, including confirmation that design and geotechnical assumptions are suitable for the actual site conditions, even where formal geotechnical reports are not mandated • Use a formal change-management process when excavation scope, depth, method or site conditions change (e.g. unexpected groundwater, soft spots, undermining of footpaths), including reassessment of risk and controls • Incorporate controls for environmental and weather impacts into planning (e.g. heavy rain, flooding, erosion), including triggers to postpone work and protective design measures • Ensure any temporary works design (e.g. minor shoring systems for shallow trenches) is documented, accessible onsite and understood by supervisors and workers	Medium

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3. Service Location and Underground Asset Management	• Unidentified or poorly mapped underground services (electricity, gas, water, communications, sewer) in proposed excavation area • Reliance on outdated or incomplete Dial Before You Dig / Before You Dig Australia plans without verification onsite • Lack of a standardised service detection and verification procedure for excavations under 1.5 m on different sites • Inadequate communication of known service locations to frontline workers, plant operators and subcontractors • Failure to control residual risk of unknown services or inaccurate as-built drawings	High	• Implement an organisational underground services management procedure requiring current service plans, onsite verification and clear exclusion/clearance distances prior to commencing any excavation, regardless of depth • Mandate the use of Before You Dig Australia plans and specify a maximum age for plans (e.g. no older than 30 days) with a documented verification step by a competent person • Adopt a hierarchy of service verification methods (e.g. visual confirmation, locator scanning, vacuum excavation for proving services) and specify when each method must be used based on risk, not just depth • Establish a standardised system (e.g. marked-up layout drawings, colour-coded pegs, spray paint, digital mapping) to communicate verified service locations to all affected crews and plant operators • Require pre-start briefings that specifically cover location and type of services, allowable excavation zones and emergency response requirements if services are contacted or damaged • Ensure contractor and purchase orders for excavation work explicitly require compliance with the organisation's service location procedure and relevant codes of practice • Record and review all service strikes and near misses in a central database and feed lessons learned into planning templates, training materials and contractor selection criteria	Medium
4. Contractor and Worker Competency Management	• Workers and subcontractors undertaking excavation tasks without verified competency or experience in excavation hazards, including shallow trenches • Supervisors lacking the technical knowledge to identify early signs of ground instability or unsafe excavation practices • Inconsistent competency requirements across sites and different business units for similar excavation work • Over-reliance on plant operator tickets without assessing understanding of site-specific excavation risks and controls • No systematic assessment of language, literacy and numeracy needs impacting comprehension of excavation procedures	High	[redacted]	Medium

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5. Supervision, Monitoring and Field Leadership	• Insufficient supervision leading to deviations from approved excavation plans and controls • Supervisors responsible for too many work fronts to adequately monitor excavation activities • Informal work practices developing over time (e.g. narrowing trenches, placing spoil too close, entering unprotected excavations) due to lack of oversight • Failure to identify and respond to changing ground conditions, weather or adjacent activities that increase risk • Inadequate escalation and stop-work authority for supervisors observing unsafe excavation conditions	High	[redacted]	Medium
6. Documentation, Procedures and Work Authorisation	• Lack of standardised organisational procedures governing excavation work under 1.5 m, resulting in inconsistent practices • Use of generic risk assessments and SWMS that do not address site-specific excavation hazards and c[illegible] • Poor version control and accessibility of excavation-related documents (procedures, standards, drawings) leading to outdated guidance being used onsite • No formal permit or authorisation process for higher-risk shallow excavations (e.g. near services, public areas, structures) • Incomplete or inaccurate recording of excavations, changes to design or deviations from approved controls	High	[redacted]	Low

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			[redacted]	
7. Plant, Equipment and Maintenance Systems	• Use of unsuitable or poorly maintained plant (e.g. excavators, loaders, compactors, vacuum trucks) for excavation work under 1.5 m • Lack of organisational standards for selection of plant and attachments for shallow excavation tasks in constrained areas • Inadequate pre-use inspection and defect reporting processes for excavation plant and equipment • Failure to ensure safety features (e.g. reversing alarms, cameras, emergency stops, quick-hitch safety devices) are functional and used correctly • Ad-hoc hire of plant and equipment without verifying maintenance history or safety compliance	High	[redacted]	Medium
8. Traffic, Pedestrian and Public Interface Management	• Uncontrolled interaction between excavation activities, mobile plant, workers and the public, particularly in urban or brownfield environments • Inadequate traffic management planning for works involving shallow trenches adjacent to roads, car parks or pedestrian paths • Poor delineation and signage around excavations, leading to inadvertent entry by workers or members of the public • Insufficient coordination between excavation planning and broader site traffic management plans • Failure to consider vulnerable road users (e.g. cyclists, mobility-impaired pedestrians, children) in control design	High	[redacted]	Medium

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			[redacted]	
9. Ground Stability, Inundation and Adjacent Structures	• Assumption that shallow excavations under 1.5 m are inherently low risk, leading to inadequate controls for ground collapse or undermining • Failure to assess the impact of nearby loads (e.g. stockpiles, vehicles, materials, structures) on trench stability • Inadequate planning for groundwater, stormwater or burst services causing inundation or erosion within excavations • Lack of organisational criteria for wh shallow trenches require shoring, benching or shielding • Insufficient assessm of impact of excavation on adja t structures, pavements or ser es (e.g. undermining, subs ace)	High	[redacted]	Medium
10. Training, Induction and Communication	• Workers and contractors unaware of organisational expectations and procedures for managing excavation risks under 1.5 m • Site inductions not adequately addressing excavation-specific hazards such as ground collapse, service strikes and traffic interfaces • Inconsistent communication of changes to excavation plans, controls or site conditions between shifts and work groups	High	[redacted]	Medium

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	• Insufficient training in emergency response procedures related to excavation incidents (collapse, engulfment, service strike, flooding) • Language, literacy or cultural barriers impacting understanding of excavation risks and controls		[redacted]	
11. Consultation, Coordination and Contractor Management	• Poor coordination between multiple PCBUs (principal contractor, subcontractors, utilities) working around the same excavation areas • Gaps and overlaps in responsibilities for excavation planning, supervision and emergency response • Insufficient involvement of workers a HSRs in developing and reviewing excavation controls • Inconsistent safety sta between contractor organisati s leading to confusion or lowest-common-d ominator s • Inadequate communication of sche le or scope changes affecting excavati activities	h	[redacted]	Medium
12. Emergency Preparedness and Incident Management	• Lack of site-specific emergency response planning for excavation-related incidents such as collapse, engulfment, service strikes or flooding • Workers and supervisors unfamiliar with emergency procedures or unsure who has authority to initiate emergency response and stop work • Inadequate provision or maintenance of emergency equipment appropriate to excavation hazards (e.g. rescue	High	[redacted]	Medium

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	equipment, first aid, spill kits, fire extinguishers) • Poor coordination with emergency services, utilities providers and regulators in the event of a serious incident • Failure to systematically investigate and learn from excavation-related incidents and near misses across the organisation		[redacted]	
13. Health, Environment and Psychosocial Risk Management	• Failure to address health risks associated with excavation work such as noise, vibration, dust, manual handling and exposure to contaminants • Environmental impacts from excavation activities (e.g. sediment run-off, contamination spread, damage to flora and fauna) not integrated into WHS planning • Psychosocial risks for [redacted] involved in excavation work, including fatigue from extended shifts, production pressure and exposure to traumatic incidents (e.g. near [redacted] collapse, service strikes) • Inadequate systems to manage hazardous substances potentially encountered in excavations (e.g. asbestos-containing materials, contaminated soils, sewer gases) • Poor integration between WHS, environmental and quality systems leading to conflicting instructions or gaps in control	Medium	[redacted]	Low
14. Audit, Reporting and Continuous Improvement	• Lack of systematic review of excavation risk controls leading to stagnation and repeated incidents • Inconsistent or incomplete reporting of excavation hazards, near misses and incidents across projects	Medium	[redacted]	Low

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	• Audit tools that focus on paperwork rather than effectiveness of excavation controls in the field • Limited analysis of organisational data to identify recurring excavation system failures • Failure to share lessons learned about excavation incidents and best practices across projects and business units		[redacted]	

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 FOR 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

New South Wales
Work Health and Safety Act 2011
Work Health and Safety Regulations 2025
Legislation NSW: https://www.safework.nsw.gov.au/legal-obligations/legislation
Codes of Practice NSW: https://www.safework.nsw.gov.au/resource-library/list-of-codes-of-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/forms-and-resources/codes-of-practice

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.

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

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

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