Trenching and Drainage Excavation | SAFE WORK METHOD STATEMENT (SWMS)

TASK OR ACTIVITY: Trenching and Drainage Excavation

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

THIS SAFE WORK METHOD STATEMENT 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 safe work method statement (SWMS) is prepared before the proposed work starts.

Full Name:		
Signature:	Title:	Date:

Details of the person(s) responsible for ensuring implementation, monitoring and compliance of the SWMS as well as reviews and modifications of the SWMS.

Full Name:	Title:	Phone:

ALL PERSONNEL PARTICIPATING IN ANY ACTIVITY ON THIS SWMS MUST HAVE THE FOLLOWING COMMUNICATED	NAME OF ALL RELEVANT PERSONNEL WHO HAVE BEEN CONSULTED AND COMMUNICATED TO IN THE DEVELOPMENT AND APPROVAL OF THIS SWMS
Safety meetings or toolbox talks will be scheduled in accordance with legislative requirements to first identify any site hazards, then to communicate those hazards and then to further take steps to either eliminate or control each hazard.	
If an incident or a near miss occurs, all work must stop immediately. Depending on the severity of the incident, a meeting will be called with all workers to amend the SWMS if required. The meeting may also be an educational opportunity.	
Any changes made to the SWMS after an incident or a near miss must be approved by the Person Conducting Business or Undertaking and communicated to all relevant personnel.	
The SWMS must be kept and be available for inspection at least until the work is completed. Where a SWMS is revised, all versions should be kept. If a notifiable incident occurs in relation to which the SWMS relates, then the SWMS must be kept for at least two years from the occurrence of the notifiable incident.	

CLIENT OR PRINCIPAL CONTRACTOR DETAILS	
Client:	SCOPE OF WORKS
Project Name:	
Project Address:	
Project Manager:	
Contact Phone:	
Date SWMS supplied to Project Manager:	

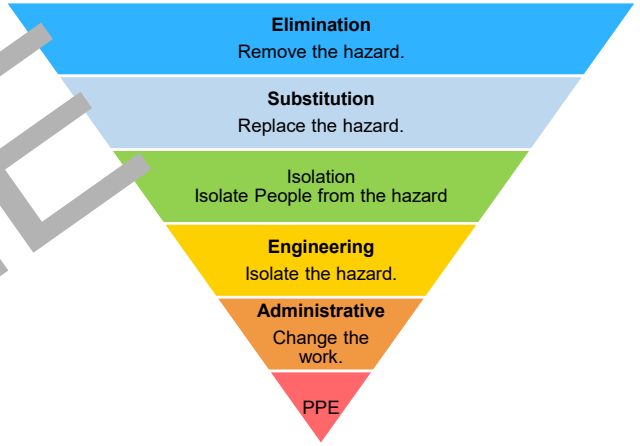
ANY HIGH-RISK CONSTRUCTION WORK BEING CARRIED OUT	
☐ involves a risk of a person falling more than 2 meters	☐ is carried out on or near pressurised gas mains or piping
☐ is carried out on a telecommunication tower	☐ is carried out on or near chemical, fuel or refrigerant lines
☐ involves demolition of an element of a structure that is load-bearing	☐ is carried out on or near energised electrical installations or services
☐ involves demolition of an element related to the physical integrity of a structure	☐ is carried out in an area that may have a contaminated or flammable atmosphere
☐ involves, or is likely to involve, disturbing asbestos	☐ involves tilt-up or precast concrete
☐ involves structural alteration or repair that requires temporary support to prevent collapse	☐ is carried out on, in or adjacent to a road, railway, shipping lane or other traffic corridor
☐ is carried out in or near a confined space	☐ is carried out in an area of a workplace where there is any movement of powered mobile plant
☐ is carried out in/near a shaft or trench deeper than or tunnel involving use of explosives	☐ is carried out in areas with artificial extremes of temperature.
☐ is carried out in or near water or other liquid that involves a risk of drowning.	☐ involves diving work.

ANY HIGH-RISK MACHINERY OR EQUIPMENT NEARBY

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 PROCEE
POSSIBLE	1 LOW	2 MODERATE	3 HIGH	4 ACUTE	4 ACUTE	3H HIGH	Review befo work starts.
UNLIKELY	1 LOW	1 LOW	2 MODERATE	3 HIGH	4 ACUTE	2M MODERATE	Ensure control measures in place.
RARE	1 LOW	1 LOW	2 MODERATE	3 HIGH	3 HIGH	1L LOW	nitor and k records

HEIRARCHY OF CONTROLS



Notes on Hierarchy of Controls: Elimination methods are the most effective and preferre en co lli a hazard. Substitution is the second most effective method of controlling a hazard. Engineering by isolation is the ost ef ve, while Administrative Controls by changing the work is the fourth most effective method. PPE (Personal Protective Eq ment) he least effective method.

PERS AL P TECTIVE EQUIPMENT (PPE)

Select the appropriate PPE abo uitable or the equipment used or the job task being performed (if applicable).

FOOT PROTECTION	HAND PROTECTION	HEAD PROTECTION	HEARING TECTION	EY CTION	RESPIRATORY PROTECTION	FACE PROTECTION	HIGH-VIS CLOTHING	PROTECTIVE CLOTHING	FALL PROTECTION	SUN PROTECTION	HAIR/JEWELLERY SECURED
											
☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐

Other PPE Required:

Permit or Licenses Requirements	Mandatory Qualifications and Training

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
Pre-start planning and consultation	• Unidentified underground services • Inadequate work planning • Unclear roles and responsibilities • Weather-related ground instability • Traffic interface with work area	3H	• Review project scope and drawings with supervisor and workers before starting any trenching or drainage excavation • Obtain and review current Dial Before You Dig (DBYD) / Before You Dig Australia plans for all underground utilities in the work area • Consult with principal contractor and utility asset owners to confirm service locations, depths and isolation requirements • Develop a site-specific Safe Work Method Statement (SWMS) and ensure all workers read, understand and sign onto before commencing work • Nominate a competent person as excavation supervisor to coordinate trenching, drainage excavation and underground service protection • Plan trench alignment, width, depth, access points and spoil locations to minimise trench length open at any one time • Schedule high-risk activities such as deep trench excavation and pipe laying for suitable weather and daylight conditions • Establish emergency response procedures for trench collapse, engulfment, service strikes and plant incidents, and brief all workers • Confirm communication methods (e.g. UHF channel, hand signals) between plant operators, spotters and ground workers • DO NOT commence excavation until all approvals, permits and DBYD documentation are in place and verified by the competent person	2M
Service location and isolation	• Contact with live electrical cables • Rupture of gas mains • Damage to water or sewer lines • Release of pressurised fluids • Uncontrolled discharge of sewage	4A	• Engage a qualified service locator to mark the position and alignment of underground assets using DBYD plans and locating equipment • Use non-conductive hand tools (e.g. insulated shovel) when exposing known or suspected underground services within the tolerance zone • Hand dig potholes to visually confirm the exact location and depth of services before using mechanical excavation in the area • Request isolation, shutdown or de-energisation of services from asset owners where practicable and obtain written confirmation • Maintain minimum approach distances to live electrical cables as per network operator requirements and WHS regulations • Mark service locations on the ground using durable paint, flags or stakes and brief all workers and plant operators on no-go zones • Install physical barriers, bunting or temporary fencing around exposed services to prevent impact by machinery or vehicles	2M

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
			• DO NOT use mechanical trench diggers or excavators directly over known or suspected services until they are positively identified and exposed • Stop work immediately and notify the asset owner and supervisor if any unidentified service is found during excavation • Keep updated service plans, isolation records and asset owner contact details available on site for reference and emergencies	
Site set-up and traffic management	• Unauthorised access to work area • Vehicle collision with workers • Plant striking pedestrians • Poor visibility of open trenches • Trip hazards from hoses and leads	3H	• Install temporary fencing, barrier mesh or solid barricades around trenching zones to prevent unauthorised entry • Set up traffic control in accordance with AS 1742 and local road authority requirements where work is near live traffic • Position site access points away from trench edges and excavation plant swing areas to reduce interaction between people and plant • Erect clear warning signage such as 'Road Works Ahead', 'Open Trench', 'Authorised Personnel Only' at all entry points • Designate separate pedestrian walkways and plant operating zones using cones, barriers and signage • Provide adequate lighting for early morning, late afternoon or night works so that trenches and plant movements remain clearly visible • Ensure all workers in the vicinity of moving plant wear high-visibility clothing compliant with AS/NZS 4602.1 • Keep hoses, cables and tools routed away from walkways and trench edges; use cable bridges or hooks where crossing is unavoidable • Appoint a spotter to guide plant where sight lines are restricted or when reversing near workers or open trenches • DO NOT allow public vehicles or pedestrians to pass within the plant operating envelope or within the barricaded trench area	2M
Operating trench diggers and excavators	• Plant rollover on unstable ground • Unplanned plant movement • Striking workers with plant or bucket • Mechanical failure of lifting components • Contact with overhead powerlines	4A	[redacted]	2M

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
			[redacted]	
Digging trench for pipe laying	• Trench wall collapse • Falling into open trench • Flying debris from excavation • Excessive vibration affecting nearby structures • Over-excavation [redacted]	4A	[redacted]	2M
Trench excavation near existing structures	• Undermining building footings • Collapse of adjacent pavement • Ground settlement beneath services • Unexpected groundwater inflow • Loss of stability in shared trenches	4A	[redacted]	2M

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
			[redacted]	
Working in and near open trenches	• Engulfment from t[redacted]nch collapse • Objects falling in[redacted]trench • Restricted access and egress • Atmospheric contaminants or low oxygen • Slips and trips on uneven surfaces	4A	[redacted]	2M
Laying pipes and underground utilities	• Musculoskeletal strain from manual handling • Crush injuries from moving pipes	3H	[redacted]	2M

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
	• Incorrect pipe bedding compromising stability • Damage to existing utilities • Use of unsuitable lifting points		[redacted]	
Inspection and testing of trenches	• Unstable trench walls during inspection • Exposure to contaminated water • Entry into confined or restricted spaces • Falls into inspection points • Exposure to noise and vibration	3H	[redacted]	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
			[redacted]	
Ensuring proper backfill of excavated soil	• Void formation under pavements • Settlement of backfilled trenches • Striking utilities during compaction • Dust generation from dry spoil • Plant roll-in towards trench	3H	[redacted]	2M
Filling and final backfilling of trenches	• Workers struck by moving plant • Collapse of partially backfilled trench • Entrapment between plant and trench edge • Flying debris during compaction • Manual handling of heavy plates or covers	3H	[redacted]	2M

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
			[redacted]	
Working near trenches and site housekeeping	• Trips on uneven reinstated ground • Falls into remaining openings • Residual contamination or debris • Exposure to UV radiation • Heat stress and dehydration	2M	[redacted]	1L
Emergency response and incident management	• Delayed rescue from trench collapse • Panic and uncoordinated response • Secondary trench failures • Uncontrolled gas or fluid release • Psychological harm to workers	4A	[redacted]	2M

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
			[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 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

SIGNATORIES OF THE SAFE WORK METHOD STATEMENT

The signed and dated personnel listed below have cooperated in the consultation and development of this Safe Work Method Statement which has been approved by the Person/s Conducting a Business or Undertaking (PCBU). In signing this Safe Work Method Statement each individual acknowledges and confirms that they have read this SWMS in full, having raised any questions for items on this Safe Work Method Statement that require clarification, and confirms that they are competent, skilled and knowledgeable for the task assigned to them. Every person acknowledges that they have received the relevant training and qualifications where required, before carrying out any work contained in this Safe Work Method Statement. By signing this Safe Work Method Statement each individual agrees to work safely, to follow any safe work instructions which are provided, and agrees to use all Personal Protective Equipment where appropriate.

Worker Name	Signature	Date

SAFE WORK METHOD STATEMENT MONITORING AND REVIEW

The SWMS must be reviewed regularly to make sure it remains effective and must be reviewed (and revised if necessary) if relevant control measures are revised. The review process should be carried out in consultation with workers (including contractors and sub-contractors) who may be affected by the operation of the SWMS and their health and safety representatives who represented that work group at the workplace.

When the SWMS has been revised the PCBU must ensure that all persons involved with the work are advised that a revision has been made and how they can access the revised SWMS, including all persons who will need to change a work procedure or system as a result of the review are advised of the changes in a way that will enable them to implement their duties consistently with the revised SWMS. All workers that will be involved in the work must be provided with the relevant information and instruction that will assist them to understand and implement the revised SWMS.

The SWMS must be monitored regularly for the effectiveness of ensuring hazard controls are effective in reducing the risk of incidents, keeping the workplace safe for all personnel. The person responsible for monitoring the effectiveness of the Safe Work Method Statement should employ a multi-faceted approach which includes but is not limited to:

1. Spot Checks.
2. Consultation with workers, contractors and sub-contractors.
3. Internal audits on a continual basis.

An approach of continuous improvement, promptly recording inconsistencies or deficiencies, followed up by immediate corrective action and consultation with all relevant personnel ensures that the PCBU is consistently developing ever-improving systems of safe work principles.

REVIEW NUMBER	1	2	3	4	5	6	7
NAME							
INITIALS							
DATE							

SAFE WORK METHOD STATEMENT REVIEW CHECKLIST

This Safe Work Method Statement Review Checklist is to be followed and used upon initial development of the SWMS to help ensure that all steps have been adequately taken before work commences. Think of this document as an internal audit review checklist before commencing work, and may form part of a Toolbox Talk (safety meeting) and may be used as an opportunity for education and training.

ITEMS WHICH MUST BE INCLUDED IN THE SWMS	COMPLETED	COMMENTS
The company details have been entered, including the project name and address.	☒	
All relevant personnel consulted during the development of the SWMS.	☒	
Name, signature, position and date signed of the person approving the SWMS.	☐	
Specific personnel and qualifications, experience is noted in the SWMS.	☒	
Provides a step-by-step process of tasks required to carry out the activity or task.	☒	
Adequate risk assessment of any identified hazards has been completed.	☒	
Foreseeable hazards are identified and documented for each step.	☒	
Any hazards listed in any site risk assessments have been added to the SWMS.	☒	
SWMS initial risk (IR) column as well as residual risk (RR) column completed.	☒	
Check control measures added to the SWMS are the most effective selection.	☒	
Responsible person is assigned and listed on the SWMS for the implementation of control measures.	☒	
Permit or licenses requirements specified, such as Hot Work, Electrical Work, Work at Heights etc.	☒	
SWMS identifies plant and equipment to be used.	☒	
Details of inspection checks required for any equipment listed and noted on the SWMS.	☒	
Describes any mandatory qualifications, experience, training or skills required to perform the work.	☒	
Applicable personal protective equipment is selected on the SWMS.	☒	
Reflects and documents any legislative references and/or Australian Standards.	☒	
Identifies any hazardous substances used with specific control measures in line with any SDS.	☒	

REVIEWED BY		**DATE REVIEWED**	
SIGNATURE		**DATE COMPLETED**	