Site SWMS & Risk Assessments

QR Code	934668
Principal Contractor	
Date Provided to PC	
Revision Due	28/04/2026
Project	General Plumbing & Roofing
Construction Site Location / Address	Various Locations Townsville and Surrounds
Person Responsible for Implementing SWMS Onsite	Barry Davies 0409 753 229
After Hours Contact	Barry Davies 0409 753 229

1 Purpose

This Safe Work Method Statement (SWMS) outlines the hazards and risks associated with high-risk construction activities and general site tasks. It must be kept accessible on site for the duration of the high-risk work and be available for inspection at any time.

If the SWMS is revised, all previous versions must be retained. In the event of a notifiable incident related to the high-risk work covered by this document, the SWMS must be kept for a minimum of two (2) years from the date of the incident.

2 Evaluation

The effectiveness of this SWMS is monitored through internal audits and regular site safety inspections. It remains current until the scheduled review date, unless:

- Control measures are found to be ineffective,
- New tasks, hazards, or risks are introduced due to changes in the work environment, or
- A notifiable incident occurs.

In any of these situations, the SWMS must be reviewed and updated as required. All workers have a shared responsibility to ensure a safe workplace and comply with the SWMS.

3 Process Verification

Evaluation of **process effectiveness** is carried out through:

- **Internal audits**
- **Site safety inspections**

4 Revision Control

All documentation at **All Plumbing NQ** is assigned a revision control number, which includes the document name, code, and version number.

- **Example:** (Document Title - **APN 03 V1 Dec 2016)**
- The revision history is maintained at the beginning of each document. Older versions of documents are archived for reference.

5 Doc Control Details

PCBU Name:	**All Plumbing NQ**	**ABN:**	**11169623125**	
PCBU Address:	**35 Fleming Street, Aitkenvale QLD, Australia**		**Contact Number:**	**0409 753 229**
Document Name	**General Plumbing SWMS APN05 V2 Apr 25**			
Document Code	**APN05**			
Document Owner	**All Plumbing NQ**		**Maintained By**	**Erker Safety Pty Ltd**
Consulted By	**Barry Davies & Erker Safety Pty Ltd**		**Approved By**	**Barry Davies**
Created By	**Erker Safety Pty Ltd**		**Date Created**	**30/10/2024**
Version Number	**Modified By**	**Modifications Made**	**Date Modified**	**Review Date**
V1	AC	Document Creation	30/10/2024	30/10/2025
V2	AN	Document Annual Review	28/04/2025	28/04/2026

Table of Contents

6 Definitions:

High Risk Work (As defined by WH&S Qld):

Work carried out at a workplace deemed as high risk by WH&S Regulation 2011 (s291):

1. involves a risk of a person falling more than 2m; or
2. is carried out on a telecommunication tower; or
3. involves demolition of an element of a structure that is load bearing or otherwise related to the physical integrity of the structure; or
4. involves, or is likely to involve, the disturbance of asbestos; or
5. involves structural alterations or repairs that require temporary support to prevent collapse; or
6. is carried out in or near a confined space; or
7. is carried out in or nearby—
   (i) a shaft or trench with an excavated depth greater than 1.5m; or
   (ii) a tunnel; or
8. involves the use of explosives; or
9. is carried out on or near pressurised gas distribution mains or piping; or
10. is carried out on or near chemical, fuel, or refrigerant lines; or
11. is carried out on or near energised electrical installations or services; or
12. is carried out in an area that may have a contaminated or flammable atmosphere; or
13. involves tilt-up or precast concrete; or
14. is carried out on, in or adjacent to a road, railway, shipping lane or other traffic corridor that is in use by traffic other than pedestrians; or
15. is carried out in an area at a workplace in which there is any movement of powered mobile plant; or
16. is carried out in an area in which there are artificial extremes of temperature; or
17. is carried out in or near water or other liquid that involves a risk of drowning; or
18. involves diving work.

7 Legislation that relates to this Safe Work Method Statement

Legislation

- Work Health and Safety Act 2011
- Work Health and Safety Regulation 2011

Current Codes of Practice – relevant to the task undertaken

https://www.worksafe.qld.gov.au/laws-and-compliance/codes-of-practice

- How to Manage Work Health and Safety Risks Code of Practice 2021
- First Aid in the Workplace Code of Practice 2021
- Hazardous Manual Tasks Code of Practice 2021
- Labelling of Workplace Hazardous Chemicals Code of Practice 2021
- Managing Risks of Hazardous Chemicals in the Workplace Code of Practice 2021
- Work Health and Safety Consultation, Co-operation and Co-ordination Code of Practice 2021

8 PPE Requirements

PPE Requirements will be listed at the beginning of each activity with the recommended requirements using the below Pictograms:

Safety Glasses medium impact (clear indoor use and tinted outdoor use)

Safety Footwear with a steel cap toe or composite toe.

Safety Gloves suitable for the task

Ear Protection either plugs or muffs suitable to the task

Hard Hat for all work where there is work overhead

Hi Visibility Clothing, reflective tape is only recommended at nighttime

Respiratory Protection (RPE), specific to the task & as shown on fit test certificate

Protective Clothing, long sleeves and long pants

Clear High Impact Visor

Wide Brim Hat or ring worn over hard hats

Height Safety PPE specific to the task

9 Qualifications, Training Requirements

QBCC Licence – Plumbing and Drainage
Apprentice Training, if applicable
Industry White Card(s)
Spotter for mobile plant, as required. Competently trained for the type of machinery with a full understanding of the tasks being conducted.

10 Hierarchy of Control Measures

Level 1	Level 2	Level 3
• Eliminate the Hazard	• Substitute the Hazard • Isolate the Hazard • Engineer the Hazard out	• Administration Controls • PPE

11 Parties responsible for implementation of Controls

Supervisor

Worker

Operator

Engineer

Management

Spotter

12 Risk Calculator

HOW TO USE THIS RISK TABLE
Step 1: Identify potential hazards.
Step 2: Decide what a possible **Consequence** could be.
Step 3: Decide **How Likely?** it is to happen
Step 4: Line up your choices in the table to get a number
Step 5: Use the Priority table to the right.

Appendix B - Risk Calculator

RISK RATING CALCULATOR			Likelihood		
Consequence What injury/damage could it cause?	**Rare - 3** Could only happen once in 25 years	**Unlikely - 2** Could happen, once in 5 years	**Possible - 1** Could happen each year	**Likely - 0** Could Happen more than once a year	**Almost Certain - 0** Could happen anytime
Catastrophic - 0 Multiple Fatalities	3	2	1	0	0
Major - 0 Death or serious disability	3	2	1	0	0
Moderate - 1 Long term illness or serious injury	4	3	2	1	1
Minor - 2 Medical attention & several days off work	5	4	3	2	2
Insignificant - 3 First aid needed	6	5	4	3	3

Risk Rating	Prioritisation
0, 1 or 2	**Action to rectify must be done immediately before work may commence**
3	**Consider control measures as necessary and implement further controls to reduce risk**
4, 5, 6	**Continue to use correct controls selected and maintain communication**

13 Workers Sign on and Consultation of SWMS

By signing the below, I:

- **Acknowledge that I have had an input into the development of the SWMS or have had the opportunity to comment on the content**
- **Understand and agree to abide by all the requirements stated within the SWMS**
- **Have appropriate certification, licences and/or training to competently undertake the task or, where permitted, will be directly supervised by persons with appropriate level of certification, licensing, training and competence**
- **Understand that where task changes or the controls stated are ineffective, I will immediately notify my supervisor and cease work till the controls are modified and I re-sign an updated SWMS**

First & Last Name:	Signature:	Date:

High Risk Work Activity: 1. Working at Height 2m+				
Activity	Hazards & Risks	PRE-Risk	Work Method Used	POST Risk
1B. Working at Height – Working Around Edge Protection				
PPE Recommended			**Persons responsible for maintaining controls** 	
Working on a platform or structure with edge protection installed.	Hazard: Non-compliant edge protection **Risk: Personal injury**	1	• Edge protection must be erected according to the instructions of manufacturer, supplier, engineer, or competent person • All edge protection must be signed off by a competent person as complete and safe prior to any work occurring • The edge protection must be designed to withstand the impact of a fall against it	5
	Hazard: Fall from height **Risk: Personal injury**	1	• Edge protection will be erected on all sides of the working area. The base of the edge protection must be at least 1,200mm wide—900mm higher than that surface, it must have a mid-rail no greater than 450mm and a kickboard/toe board no greater than 250mm • All edge protection must have adequate secured access available	5
	Hazard: Falling objects **Risk: Personal injury**	1	• Tools and materials may not be leaned against edge protection	5
1C. Working at Height – Edge Restraint (Fall Restraint)				
PPE Recommended			**Persons responsible for maintaining controls** 	
Working on a structure where height safety PPE is used as the main control of falling	Hazard: Exposed edge/ fall from height, **Risk: Personal injury**	1	• The use of a harness system is PPE and is a lower hierarchy of control and should be avoided where possible, however, if this control measure is the only viable option, the following elements must be adhered to • Worker must be competent and has been trained in the safe and correct use of the system • The restraint system must control the person from reaching a position at which there is a risk of a fall • The harness must be connected by a lanyard to an anchorage or horizontal lifeline. It must be set up to prevent the wearer from reaching an unprotected edge. • The anchorage point must be certified to the number of persons connected to it • The anchorage point must be selected for the pitch of the roof, the number of persons that will be connected to anchorage point and in accordance with the manufacturer's specifications	5

High Risk Work Activity: 1. Working at Height 2m+				
Activity	Hazards & Risks	PRE-Risk	Work Method Used	POST Risk

			• The length of travel should not allow a pendulum whereby a person could fall from the edge
			• Use an Australian Standards Approved (AS/NZS 5532) Fall Restraint System which has three components:
			  ○ Anchorage system (e.g., a 15kN for single user & 21kN for 2 persons)
			  ○ Connection system with ability to adjust length
			  ○ Harness with a rear attachment point.
			• A harness system should **not** be used:
			  ○ In a position where fall is possible either through or from an edge
			  ○ The slope of the roof is greater than15 degrees
			  ○ The type of surface may be fragile giving rise for a person to fall through the surface
			• Prior to commencing work, a risk assessment shall determine whether a rescue plan and competent person who can implement the plan are required	

1DC. Work at Height - Use of an EWP (Knuckle Boom)				
PPE Recommended			**Persons responsible for maintaining controls**	
Preparing to use knuckle boom, Assign a Spotter	Hazard: Pre-start not completed with potential to use faulty machine **Risk:** **Personal injury**	2	• Workers to be trained/instructed/competent in the safe operating procedures for the brand and type of knuckle boom, as well as safe work procedures to avoid crushing and electrical hazards • Flashing Lights are always on when machine is in use • Logbooks are in date and easily accessible • Operators to be licenced/competent for that plant • Ensure correct operation of movement alarms, emergency stop controls and emergency lowering controls • Remove obstructions or reposition equipment • Do not continue if you cannot confirm the stability of the machinery • Assign a Spotter to remain on the ground in visual contact at all times of the project. To assist when the knuckle boom makes any movements and keep area clean • Never use the knuckle boom lift as a crane for lifting materials • Never try to climb on, sit or stand on platform guard rails **Spotter is responsible for:** • Monitoring activity from around the base of knuckle boom • Activating emergency lowering mechanism if required	**4**

High Risk Work Activity: 1. Working at Height 2m+				
Activity	Hazards & Risks	PRE-Risk	Work Method Used	POST Risk
			• Maintaining exclusion zones (Depending on the height 45 degree from the top point down to the ground or 3m from edge of machine, whichever is greater) • Drop Zones • Signage to keep unauthorized person out	
Preparing job site	Hazard: Unauthorised access **Risk: Collision with other workers/ plant**	2	• Only those authorised may access site • Ensure relevant site personnel have been consulted and are familiar with plan of work for knuckle boom • Ensure work area is barricaded and signed to allow adequate exclusion zone**s**. Depending on the height 45 degree from the top point down to the ground or 3m from edge of machine, whichever is greater. • When using a knuckle boom for installing edge protection ensure: ○ Poles/rails are secured individually to the boom ○ Poles/rails are centrally located and evenly balanced ○ Poles/rails are untied one item at a time ○ Edge protection equipment must not exceed the SWL of the boom ○ Any item that is stood up in the boom meets the above requirements.	**4**
Working from a knuckle boom basket with under 11 metres reach	Hazard: Inexperienced operator with potential consequence of rollover/crushing/ falling objects **Risk: Injury, death**	1	• Although there is no high-risk work license to operate a knuckle boom under 11m, workers to be trained/instructed in the safe operation of that brand and type of machine and be supervised by an experienced person • Workers to wear approved EWP safety harness and harness to be attached to the correct harness attachment point, as per manufacturer's specifications • High visibility clothing to be worn • Never get between lift and an immovable object • Make sure there are no overhead obstructions or powerlines • If there is an emergency in any situation release the dead man switch	**4**
Working from a knuckle boom basket with 11 metres or greater reach	Hazard: Fall from height **Risk: Injury, death**	1	• High-risk work license to operate a knuckle boom 11m or greater is required, other workers inside the basket must be competent in working at heights • Provided safety rails and self-closing gates must be in good working condition • Workers to be trained/instructed in the safe operation of the plant, fall arrest equipment and emergency rescue procedures • Workers to wear approved EWP safety harness and harness to be attached to the correct harness attachment point, as per manufacturer's specifications • High visibility clothing to be worn • Never get between lift and an immoveable object.	**4**

High Risk Work Activity: 1. Working at Height 2m+				
Activity	Hazards & Risks	PRE-Risk	Work Method Used	POST Risk
			• Make sure there are no overhead obstructions or powerlines • If there is an emergency in any situation release the dead man switch • All operations shall be at a slow speed. • Remove excess personnel from the work area while inspection is being undertaken.	
Rescue of collapsed/ injured/fallen operator	Hazard: Stuck at height while suspended in height safety harness **Risk:** **Suspension trauma/injury**	**1**	• Workers to be trained in emergency rescue procedures • Clear area of all unnecessary persons • Establish communication with operator if still conscious • Check for hazards in or around the work area, i.e., power lines • Competent person to lower knuckle boom using ground controls if disabled use hydraulic release valves • In the case of operator suspended from harness, instruct operator to place legs into leg straps of harness and take weight off body • If available, use 2nd EWP to retrieve the injured/fallen operator (in the basket) • Once retrieved from harness, do not lay the conscious/unconscious person down. Support in sitting knees raised position to prevent suspension trauma for 30 to 40 minutes. Administer first aid if required • Do no attempt to retrieve personnel if it is unsafe or other hazards exist. Contact rescue services immediately	**4**
Contact With Powerlines	Hazard: Contacting powerlines **Risk:** **Electrocution**	**1**	• Stay calm • Do not climb out of the machine, as it may be 'live' • Warn others to keep clear • Try to move the machine away from the powerlines, if possible • If there is a danger of fire, jump clear from the machine onto dry ground and move away from the machine. Do not step down. • Stay near the machine until help arrives	**4**
Machine shut down	Hazard: Incorrectly secured machine **Risk:** **Plant obstructing other plant**	**2**	• Shut down machine as per manufacturer's specifications. • Park equipment in designated area. • Plant to be locked and demobilized at end of day with basket elevated and ground controls disabled	**4**

High Risk Work Activity: 1. Working at Height 2m+				
Activity	Hazards & Risks	PRE-Risk	Work Method Used	POST Risk
1DD. Working at Height - Use of an EWP (Scissor Lift)				
PPE Recommended			**Persons responsible for maintaining controls**	
Preparing to use scissor lift Assign a Spotter	Hazard: Pre-start not completed resulting in use of faulty machine **Risk:** **Personal injury**	2	• Operator to be trained/instructed/competent in the safe operating procedures for that type of scissor lift, inexperienced operators are to be always supervised by an experienced person. • Flashing Lights are always on when machine is in use • Logbooks are in date and easily accessible • Exclusion zone established, depending on the height 45 degree from the top point down to the ground or 3m from edge of machine, whichever is greater • Ensure correct operation of movement alarms, emergency stop controls and emergency lowering controls • Remove obstructions or reposition equipment • Do not continue if you cannot confirm the stability of the machine • Assign a Spotter to remain on the ground in visual contact with the operator. • Spotter to ensure any sensor type door openings (i.e. truck bay curtain door) are isolated prior to EWP moving towards/through the sensor **Spotter is responsible for:** • Monitoring activity from around the base of scissor lift • Aiding when the scissor lift makes any movements and keep area clean of obstructions • Activating emergency lowering mechanism if required • Maintaining exclusion zone (Depending on the height 45 degree from the top point down to the ground or 3m from edge of machine, whichever is greater) • Drop Zones • Signage to keep unauthorized person out • Isolating sensors on door openings	**4**
Working from a scissor lift	Hazard: Fall from height **Risk:** **Personal injury**	2	• Operator must ensure operation is authorised and in accordance with SWMS • Carry out a prestart inspection, and include how to lower machine in an emergency • When unit is travelling: ○ Always use safe speed ○ Platform is at a safe level and for clear vision in direction EWP is travelling ○ Body is kept fully within the confines of the platform	**4**

High Risk Work Activity: 1. Working at Height 2m+				
Activity	Hazards & Risks	PRE-Risk	Work Method Used	POST Risk
			(If a worker leans outside of the handrail, a Harness attached to the labelled anchor point must be used to prevent the fall risk.) ○ Ensure gates of the cage remain closed. • Never jump or swing down from unit while it is elevated, except in an emergency • Always maintain 3 points of contact when exiting EWP • Do not carry loads on the handrails unless specified by manufacturer • Do not climb, sit, or stand on platform guard rails	
Preparing job site	Hazard: Unauthorised access **Risk:** **Collision with other workers or persons**	2	• Only those authorised may access site • Ensure the work area is barricaded and signed to allow adequate exclusion zone. Depending on the height 45 degree from the top point down to the ground or 3m from edge of machine, whichever is greater • Ensure relevant site personnel have been consulted and are familiar with the plan of work for scissor lift • Secure all loose objects. Use a lanyard where appropriate such as carrying hand tools. Maintain control of materials on the work platform. • When using a scissor lift for installing edge protection ensure: ○ Poles/rails are secured individually to scissor lift ○ Poles/rails are centrally located and evenly balanced ○ Poles/rails are untied one item at a time ○ Edge protection equipment must not exceed the SWL of the scissor lift ○ Any item that is stood up in the scissor lift meets the above requirements.	**4**
Working from basket	Hazard: Fall from height **Risk:** **Personal injury**	1	• Ensure safety rails and self-closing gates are in place • Operators to be trained in the safe operation of that brand and type of machine • Workers to attach harness, if required, to certified anchor points, as per manufacturer's specifications • High visibility clothing to be worn • Never get between lift and an immoveable object. • Make sure there are no overhead obstructions or powerlines • If there is an emergency in any situation release the dead man switch	**4**
Rescue of Injured / distressed operator	Hazard: Stuck at height **Risk:** Distress injury i.e., health issue	1	• Clear area of all unnecessary persons. • Establish communication with operator if still conscious. • Where the normal upper control functions fail, the operator will use the upper auxiliary controls to lower the platform • If the operator is incapable of lowering the raised platform using the upper controls, an appointed person familiarised in the use of the 'ground' controls will lower the platform safely using the normal ground controls.	**4**

High Risk Work Activity: 1. Working at Height 2m+				
Activity	Hazards & Risks	PRE-Risk	Work Method Used	POST Risk
			• Where the normal ground controls fail, an appointed person familiarised in the use of the 'ground' controls will use the ground auxiliary controls to safely lower the platform. • If available, use 2nd EWP to retrieve the injured/distressed operator (in the basket). • Administer first aid if required. • Do no attempt to retrieve personnel if it is unsafe or other hazards exist.	
Contact With Powerlines	Hazard: Contacting powerlines **Risk: Electrocution**	1	• Stay calm • Do not climb out of the machine, as it may be 'live' • Warn others to keep clear • Try to move the machine away from the powerlines, if possible • If there is a danger of fire, jump clear from the machine onto dry ground and move away from the machine. Do not step down. • Stay near the machine until help arrives	**4**
Machine shut down	Hazard: Incorrectly secured machine **Risk: Obstruction, Mechanical damage, Theft**	2	• Park equipment in designated area • Shut down machine as per manufacturer's specifications • Make sure work area if left neat and tidy - remove tools and equipment from the basket • Make sure EWP is secure against unauthorised entry. Plant to be locked and demobilized at end of day/when not in use with basket elevated and ground controls disabled.	**4**
1DE. Working at Height - Use of an EWP (Scissor Lift to access Roof)				
PPE Recommended			**Persons responsible for maintaining controls**	
Roof Access via Scissor Lift	Hazard: Contact with electricity, Fall from height, Falling Objects **Risk: Electrocution/**	**1**	• Roof Access via scissor lift will only be considered if access via ladder or scaffolding stairs is impractical due to cost restraints or access restraints. • Any operators in control of the scissor lift shall have been deemed competent via yellow card or other means of training, e.g., high risk work licence to operate boom. **Scissor lift may be used for access in 2 scenarios:** **Scenario #1:**	**4**

High Risk Work Activity: 1. Working at Height 2m+				
Activity	Hazards & Risks	PRE-Risk	Work Method Used	POST Risk
	personal injury		• No Edge Protection Installed: ○ All workers who will be accessing the roof will be additionally trained in working at heights. ○ Once the scissor lift has been situated so the gate can be aligned to the edge of the roof a gap of 150mm or less will be maintained. If practical the platform will be extended over the roof to essentially remove the "Gap". ○ If practical to do so the scissor lift will be either "strapped or clamped to the structure as well and the machine being turned off. ○ Workers will then access the roof via the gate and immediately attach their temporary anchor point as part of their height safety system. ○ Once anchor point is established the worker will attach the height safety system to the anchor point, as per manufacturer's specifications. (Adjustable rope system.) ○ Only when the height safety system "Fall Restraint" is properly set up can the worker grab tools and equipment to begin set tasks ○ Note: Care should always be taken to install a height safety system in a manner that it does not impede the work being undertaken, causing trips or slips. Systems should also be installed to prevent the worker from working in a "fall arrest" situation **Scenario #2:** • Edge Protection in Place: ○ If edge protection has been installed prior to work, by a competent installer, workers will not be required to use height safety harnesses ○ Scissor lift gate must be aligned to the gate of the edge protection ○ Once scissor lift is level to the platform a "Gap" of no more than 150mm or less will be controlled by strapping the scissor lift to the edge protection and turning off the scissor lift ○ Once the scissor lift is secured and turned off the gates may be opened to access the roof and work may commence ○ Care should always be taken when lowering the scissor lift: ▪ The straps should be removed to prevent damage to structure ▪ The opening or gate isn't left exposed to put workers remaining on the roof at risk of a fall.	

High Risk Work Activity: 3. Demolition				
Activity	Hazards & Risks	PRE-Risk	Work Method Used	POST Risk
3A. Non-structural Demolition				
PPE Recommended			**Persons responsible for maintaining controls** 	
Plan to demo site structures	Hazard: Fall from height, falling objects, unknown services and structural stability, unexpected collapse, damage to services **Risk: Injury**	**1**	• If appointed, consult with the engineer/principal contractor/client where reasonably practicable, to obtain a written report specifying the hazards associated with the design and the structure in the planning stage of the demolition work • Specific hazards may be outlined in a demolition plan: ○ Asbestos containing materials ○ Lead in paint, old water pipes and other plumbing fittings, solders, etc	**4**
Public protection	Hazard: Falling objects, struck by plant **Risk:** **Injury**	**3**	• Wherever required, make sure the Principal Contractor has provided the following: ○ A heavy-duty scaffold that is fully sheeted with shade cloth & mesh. In accordance with Australian Standards. Only certified personnel can erect scaffolds ○ Signs installed at various locations on the barricades denoting: “Demolition in progress - Keep Out” • **Plant movement**: ○ Do not go beyond specified speed limits. ○ Make sure the flashing light/beeper is on. ○ Use a spotter wherever practical/available. ○ Ensure high visibility PPE is always worn. • Check the work area for other plant before commencing work/movement.	**5**
Strip out of fixtures & fittings and non-fixed items	Hazard: Work at height, manual handling sharp edges **Risk:** **Injury, lacerations, death**	**1**	• Use hand removal techniques for salvaging fixtures and fittings – use handheld tools and equipment. • During this initial work phase, make sure no load bearing components of the structure are demolished. • Wherever possible, provide access for workers above floor level by way of an approved internal staircase or a suitably restrained ladder. • Strictly follow all procedures for working at heights.	**4**

High Risk Work Activity: 4. Asbestos				
Activity	Hazards & Risks	PRE-Risk	Work Method Used	POST Risk
4A. Asbestos AB - Identification				
PPE Recommended 			**Persons responsible for maintaining controls** 	
Asbestos Identification	Hazard: Suspected asbestos material due for demolition, renovation, or removal **Risk: Asbestos removed without being identified/ asbestos exposure**	**1**	• All personnel involved in asbestos work, must have the required competencies and licences to complete the scope of works • Where there is suspicion of the presence of asbestos a current asbestos register will be requested prior to commencing any work activities • Areas which are identified as potential for containing asbestos will be tested with approved methods and verification will be sought before work commences. In most cases this will be conducted in the consultation process before the job ever begins • If in doubt, always assume that asbestos is present • For cases where potential asbestos is come upon and not foreseen prior to commencing works, all work will cease • A qualified asbestos removalist will be engaged to complete the removal • When working with asbestos, mandatory PPE must be available and used • An exclusion zone must be clearly delineated and enforced • Only once area has been cleared by a qualified professional by issuing a clearance certificate will normal work duties commence	**5**
4B. Asbestos B - Removal Under 10Sq m 'B Class Only'				
PPE Recommended 			**Persons responsible for maintaining controls** 	
Removal 10Sq m and below	Hazard: Bonded asbestos **Risk: Asbestos related diseases**	**1**	• Any removal over 10Sq m will be conducted by a licensed asbestos remover	**4**

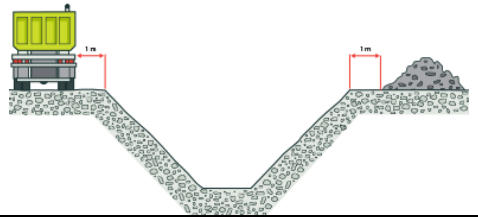
High Risk Work Activity: 4. Asbestos				
Activity	Hazards & Risks	PRE-Risk	Work Method Used	POST Risk
Sheeting and guttering Bonded only under 10Sq m	Hazard: Bonded asbestos **Risk:** **Asbestos related diseases**	**1**	• All workers directly involved with the removal, and or handling of asbestos B Class will hold a general safety induction card and an approved Bonded Asbestos Removal Certificate, issued by Queensland WHS • Only workers directly involved with the removal will be present in the area where the removal is taking place • Signage and barriers will be erected if other persons are present. • All workers involved in the removal will wear P2 disposable respirators (masks) and disposable coveralls • All asbestos sheeting and gutters will be removed in full pieces where possible. Nails will be punched, and screws removed, along with any trims holding the sheets in position • Power tools will not be used on the sheeting or gutters and no cutting will take place • External sheeting and gutters will be wet down prior to removal • Roof sheeting will not be wet down prior to removal as it will create a slip hazard and put the workers at risk of an injury • Internal sheeting will already be sealed by existing paint, wetting down would be of no benefit and would cause damage to the floors and ceilings. • Once the internal sheeting is removed the area will be vacuumed with an industrial vacuum fitted with a Hepa filter • Vacuum bags will be placed into 200 micrometer polythene bags and disposed of • On completion of the decontamination the area will be accessed by persons who were not directly involved with the removal • Workers will wash any exposed parts of their body, e.g., face and hands, before stopping for morning tea, lunch, afternoon tea and before leaving site.	**4**

High Risk Work Activity: 6. Work in Confined Spaces				
Activity	Hazards & Risks	PRE-Risk	Work Method Used	POST Risk
6A. Confined Spaces				
PPE Recommended			**Persons responsible for maintaining controls**	
Induction to site	Hazard: Unfamiliar environment **Risk: Personal injury**	**3**	• Workers to be site inducted • Undertake pre-site inspection verify conditions on site will enable works to be carried out in accordance with this SWMS • All workers connected to confined space entry shall be recently trained and be deemed competent to work in on or around confined spaces and in rescue • Ensure any permits are issued prior to starting any activity	**5**
Assess work and work method	Hazard: Exposure to restricted Atmosphere, engulfment **Risk: Personal injury**	**3**	• Consider if the proposed work will result in additional new hazards or contribute to the risk of working in a confined space i.e. welding, high-pressure washing • If working in a roof space that is classified as a "confined space" - Prior to Accessing the Roof Space: ○ De-energise: Before beginning any work - including lifting a manhole cover, reaching inside, or removing roof tiles - all electricity to the property must be switched off at the main switchboard. ○ This must be done by a competent person. ○ Use appropriate lock-out/tag-out procedures to ensure the power is not turned back on while work is in progress • Ignition sources should not be added to the confined space if there is risk of a flammable atmosphere • Minimise the release of harmful airborne contaminates • Eliminate the risk of engulfment	**5**
Setup confined space equipment for entry	Hazard: Equipment failure **Risk: Exposure to restricted atmosphere**	**3**	• Signage is to be erected to prevent unauthorised entry into the Confined Space Work area. Signs must warn against entry by other people other than those who are listed on the Confined Space Entry Permit and must be placed at each entrance to the Confined Space • Barriers and or traffic cones shall be implemented to prevent entry • Training in the use of and correct set up of equipment by supplier prior to use • Standby person to be assigned to monitor the wellbeing of those inside the space • Standby person/s to be adequately trained and competent in confined space entry, including rescue and first aid	**5**

High Risk Work Activity: 6. Work in Confined Spaces				
Activity	Hazards & Risks	PRE-Risk	Work Method Used	POST Risk
Atmospheric testing and monitoring	Hazard: Contaminated atmosphere **Risk: Asphyxiation**	**3**	• A safe atmosphere is to be maintained as far as reasonably practicable during the work in the confined space • Air monitoring to be carried out by a competent person using a suitable, correctly calibrated gas detector • Tests for oxygen levels, airborne concentration of flammable contaminants and harmful contaminants may also be necessary • Use ventilation to maintain safe oxygen levels and any airborne contaminates in the space are minimised	**5**
Entry to confined space	Hazard: Exposure to restricted atmosphere **Risk: Personal injury, asphyxiation**	**3**	• A Confined Space Entry Permit is required prior to entry - **DO NOT** enter confined space unless a permit has been obtained • Confined Space Entry Permit will highlight in greater detail the controls required and how to implement them • Prior to entering a confined space, check the oxygen levels are within the acceptable range and that atmospheric contaminants are below the relevant exposure standards • If the confined space is a roof space, ensure that a competent person has de-energised the electricity at the main switchboard and that appropriate lock-out/tag-out procedures have been implemented. • Ensure emergency evacuation procedures are in place before starting work • Consider heat stress: reduce the time spent in the space or the number of people	**5**

Entering and working in a confined space	Hazard: Dangerous atmosphere, engulfment, inadequate planning
	Risk: Asphyxiation, death
		3	• No worker to enter a confined space without standby person in attendance
			• Entry and exit points must be large enough to avoid entrapment and for emergency access
			• Communications between personnel in confined space and stand-by person/s to be agreed upon prior to entry
			• Standby person/s to remain outside confined space and maintain contact with personnel in confined space
			• Standby person must not engage in any other work whilst observing confined space entry
			• All confined space equipment to be:
			  ○ Compliant with the relevant Australian Standards
			  ○ Visually inspected before use
			  ○ Pre-use tested before use
			• Confined space entry and rescue equipment shall be fit-for-purpose
			• All equipment to be used according to manufacturer's specifications
			• Emergency evacuation procedures in place before starting work and approved on permit prior to entry
			• Stand-by person shall not enter confined space to attempt rescue
			• Rescue equipment (for example, safety harness, lifting equipment, a lifeline) must be made available and be kept in close proximity
			• Stand-by person/s to check that all persons are accounted for before leaving site
			• Confined space permit to be closed out as soon as reasonably practical
				5

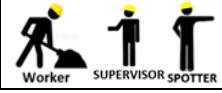
High Risk Work Activity: 6. Work in Confined Spaces				
Activity	Hazards & Risks	PRE-Risk	Work Method Used	POST Risk
	Hazard: Slips, trips, falls **Risk:** **Personal injury**	**3**	• If entry to space is via a ladder, ladder is to be secured by the stiles not the rungs • 3 points of contact at all times • No work to be performed from ladder • Only 1 person on the ladder at any one time • Check footwear to ensure soles are free from mud, grease or other contaminants • Any tools that need to be used, should be lowered down	**5**
	Hazard: Use of hazardous substances **Risk:** **Asphyxiation, death**	**3**	• SDS to have been read and understood before use • Always keep lids on substances until required for use • Ensure area is monitored when using substance • Use a drop sheet if necessary to negate any spills	**5**

High Risk Work Activity: 7. Working in a Trench 1.5m+				
Activity	Hazards & Risks	PRE-Risk	Work Method Used	POST Risk
7A. Working in or Near a Trench Deeper Than 1.5m				
PPE Recommended			**Persons responsible for maintaining controls** 	
Pre-Start	Hazard: Inexperienced personnel, Plant/equipment used for tsk not suitable, contact with essential services **Risk: Injury, property damage, fire/explosion**	1	• Workers performing trenching and excavation work shall be adequately trained and competent in trenching and excavation work • Powered mobile plant operators must hold the relevant licence and verification of competency (VOC) • Plant and equipment to be used in accordance with manufacturers recommendations/specifications • Verify location of all underground services (dial before you dig and other relevant drawings). The relevant person must consider the information supplied, follow any reasonable restrictions and implement the necessary control measures. The information shall be always kept on site • All onsite workers must be advised of the location of the services, particularly the operator(s) of any plant working on the worksite • All exposed services should be marked with flags or devices that can be readily seen • Trenching and Excavation Permit to be completed • Exclusion zones to be barricaded, as required, prior to any excavation starting • Traffic control devices e.g., signage, protective barriers, traffic management plan etc. to be in place where applicable	5
Working in a trench deeper than 1.5 metres	Hazard: Installation of piping and foundations, uncontrolled collapse **Risk: Crush, death**	1	• To prevent collapse of the trench, the use of shoring, benching, or battering will be used and the most appropriate for the task will be selected. • **Battering:** To prevent collapse of the trench, no more than 45° (degrees) battering to all sides of the trench will be used. 	4

High Risk Work Activity: 7. Working in a Trench 1.5m+				
Activity	Hazards & Risks	PRE-Risk	Work Method Used	POST Risk
			• **Shoring:** Will be used against all sides of the trench that protects by shielding. The shoring system will comply with applicable standards and manufacturers requirements. The shoring will be checked daily to ensure its continued effectiveness.  • **Benching:** To prevent collapse of the trench, apply benching to all sides of the trench. When I/we bench a trench, the vertical trench side, below the benched portion, will not exceed 1.5m in height. The benching will be checked at least daily to ensure its continued effectiveness.  • A geo-technical engineer will: o Approve in writing that all the sides of the trench are safe from collapse o State in writing how long the approval lasts if there is no stated natural occurrence that could affect the stability of the trench o State in writing the natural occurrence that could affect the stability of the trench • Compliance with the requirements of the geo-technical engineer will be adhered to	

High Risk Work Activity: 7. Working in a Trench 1.5m+				
Activity	Hazards & Risks	PRE-Risk	Work Method Used	POST Risk
			• Safe means of access/egress provided into all excavations	
Managing fill stockpile	Hazard: Uneven surfaces unstable stockpile, uncontrolled collapse **Risk:** **Crush, death**	**1**	• Plan to stockpile materials in allotted positions • Ensure all stockpiles / spoil is kept a safe distance away from the excavation • Maintain in such a way as to prevent creation of unnecessary uneven surfaces in areas of work.	**5**

Workers inside a trench working greater than 1.5m	Hazard:
	Worker collapse or injury preventing normal exiting via ladder
	Risk:
	Unable to obtain First Aid quickly, unable to exit excavation
		2	• Workers will never work alone in trenches where risk dictates the access to be hindered for one person to exit quickly
			• Steps will be constructed where practical in the earth
			• Where it is not practical constructing earth steps multiple workers will be required, with a minimum of 2 personal always in the area
			• Send someone immediately to telephone or radio for emergency services. Ensure that the person knows the location of, and how to use the communication equipment
			• Clear all unwanted workers away from the area
			• Appoint a worker to monitor the work area (i.e. an observer who is not involved in any rescue activities)
			• Do not remove the victim unless there is a danger from flooding or dangerous gases are present or there is an imminent danger of collapse
			• Do not remove the victim by tying a rope around him/her and pulling on the rope
			• Where possible (and safe), leave the victim in the trench until the ambulance or a qualified medical person arrives
			• If risk assessment indicates:
			  ○ A stretcher will be made available with a 4-man lift required to remove a person from the excavation
			  ○ Additional lifting straps may be required and attached to a lifting device rated for man use
			  ○ There are several configurations, however, the crane is a suitable source to lift casualty as long as a dedicated spotter is always appointed in direct eye contact with casualty being lifted and direct contact with crane operator.
			• Once the Worker has been removed normal First Aid treatment will apply.
				4

High Risk Work Activity: 11. Electricity				
Activity	Hazards & Risks	PRE-Risk	Work Method Used	POST Risk
11H. Electrical - Operation Around Overhead Powerlines				
PPE Recommended			**Persons responsible for maintaining controls**	
Working in proximity to overhead powerlines	Hazard: Electric shock, explosion **Risk: Electric shock, death**	**1**	• Check for nearby power installations in proximity to workspace, e.g., overhead power attached to building (assume all electric lines are energised) • Contact energy provider for requirements for working near their assets • To obtain written Safety Advice (i.e. Ergon Energy Safety Advice on Working near Electric Lines) where it has been identified as being required, complete and submit or return by email the applicable Safety Advice Request Form which is accessible via the electricity entity website: https://www.ergon.com.au/network/safety/business-safety/the-outdoor-workplace/working-near-powerlines • Establish a minimum 3 metres exclusion zone from actual power source before work commences • A restricted access zone is to be established and sign posted in areas where larger plant must not enter (as per Safety Approach Distances - SAD). This area is only to be accessed by smaller plant which does not have the potential to enter SAD • No part of a worker, operating plant or vehicle should enter an exclusion zone while the overhead electric line is energised (live) • Spotter to be put in place with direct communication with operator • Spotter to provide immediate and direct notice/warning should equipment, tools, machinery, or personnel start to breach the exclusion zone • Stop the work immediately, if necessary, e.g., safety clearances compromised	**4**
Where vehicle may reach into the 3 metres **Exclusion Zone**	Hazard: Contact with electrical cable **Risk: Electrocution, fire**	**1**	• For works that have the potential to enter the exclusion zone, controls such as isolation of the line to remove energy (this will require liaison with the asset owner); use of smaller plant that does not have the ability to enter safety approach distances will be utilised • Spotter to be put in place with direct communication with operator • Ensure the mobile equipment and its attachment (design envelope) is positioned so that it is unable to penetrate the exclusion zone of the overhead power line. i.e. the mobile equipment and its attachment are not required during the work to swivel underneath or into the 3m exclusion zone • The mobile vehicle and any attachment in relation to the mobile vehicle when disposing/unloading of a load is positioned so that it does not penetrate the exclusion zone around the overhead power line	**4**

High Risk Work Activity: 11. Electricity				
Activity	Hazards & Risks	PRE-Risk	Work Method Used	POST Risk
Works more than 6.4m however design envelope could penetrate 3 metre **Exclusion Zone**	Hazard: Contact with electrical cable **Risk: Electrocution, fire**	**1**	• For works that have the potential to enter the exclusion zone, controls such as isolation of the line to remove energy (this will require liaison with the asset owner); use of smaller plant that does not have the ability to enter will be utilised • A restricted access zone is to be established and sign posted in areas where larger plant must not enter (as per Safety Approach Distances - SAD). This area is only to be accessed by smaller plant which does not have the potential to enter safety approach distances • Plant is not permitted within the Safe Approach Distance (SAD) as defined in the Electrical Safety Regulation or where they have the potential to encroach on the SAD (such as the boom of an excavator): ○ Up to 132kV - 3m ○ Up to 330kV - 6m ○ Over 330kV - 8m • Where the works to be undertaken are more than 6.4 metres from the electrical asset, however, if the design envelope of the vehicle and attachments (Hiab, boom, tip tray, excavator arm) may still reach into the 3 metres exclusion zone, the use of a spotter maybe omitted where all the following apply: ○ The works are designed and set so that no part of the vehicle and attached equipment or its load is required to come within 6.4m of the electrical assets e.g., working forward of the power lines or the vehicle is positioned where the attachment will not enter this zone ○ The operator agrees to this SWMS and abides by its requirements ○ A person is assigned responsibility to ensure compliance with the above	**4**
Works which may penetrate the 3 metres **Exclusion Zone** around the power line	Hazard: Contact with electrical cable **Risk: Electrocution, fire**	**1**	• For works that have the potential to enter the exclusion zone, controls such as isolation of the line to remove energy (this will require liaison with the asset owner); use of smaller plant that does not have the ability to safety approach distances • A restricted access zone is to be established and sign posted in areas where larger plant must not enter (as per Safety Approach Distances - SAD). This area is only to be accessed by smaller plant which does not have the potential to enter safety approach distances • Where operations cannot comply with the permit or works will require the vehicle equipment or load to penetrate the exclusion zone a spotter is to be engaged and contact made with the site supervisor prior to works commencing • No one is permitted to work within the 3 metres exclusion zone e.g. any height above the cable or 3 metres either side unless they: ○ Are given 'permission' to work by the asset owner and permit issued ○ Have first done a site-specific risk assessment; and ○ Have a trained spotter at the site	**4**

High Risk Work Activity: 11. Electricity				
Activity	Hazards & Risks	PRE-Risk	Work Method Used	POST Risk

			• Permits to Work near Exclusion Zones:
			  ○ A permit is issued by the relevant power authority when work may breach the exclusion zone
			  ○ This permit will be located either on the site sign, sites meter box, toilet, or fence
			  ○ The site sign will give guidance to trades as to whether a permit exists
			• Trades should review this permit & abide by the limitations placed by the power authority	

Use of spotter when required by SWMS or where works may penetrate the 3 metres **Exclusion Zone**	Hazard:
	Contact with electrical cable
	Risk:
	Electrocution, Fire
		1	• Use of spotter when plant or cranes are in close proximity to power lines:
			  ○ A spotter must be used when works may penetrate the 3 metres red exclusion zone
			  ○ Such works require a Permit to Work from the local Power Supply Company
			• Spotters need to:
			  ○ Be Competent
			  ○ Have a full understanding of the machinery used, and task being undertaken
				4

11I. Electrical - Working Around Underground Services				
PPE Recommended			**Persons responsible for maintaining controls**	

Establish and complete excavation permit	Hazard:
	Incorrect information identified
	Incorrect scope of works
	Risk:
	Damage of services
	Death or serious injury
		1	• Do not dig unless necessary
			• All reasonable steps will be taken to obtain current underground essential services information about any of the areas requiring excavation before directing or allowing the excavation work to commence
			• Contact Dial Before You Dig to request information about the infrastructure networks at the planned project site
			  ○ Online via the Dial Before You Dig website www.1100.com.au
			  ○ Mobile website or iPhone app
			  ○ By phone call 1100 (toll free, during business hours)
			• Use water pressure excavation over machines or shovels
			• Never drive star pickets in without knowledge of what is below
			• Plans to be attached to excavation permit if required
			• Obtain all relevant services plans by calling Dial before you Dig (1100). Allow 2 working days for plans
			• Examine Plans and assess all possible impacts on the services assets
			• Book appointment for certified locator to meet on site
			• Examples of services to consider:
			  ○ Oil, Gas, Water, Sewage, Electrical, Stormwater, Traffic Signals & Telecommunications
				4

High Risk Work Activity: 11. Electricity				
Activity	Hazards & Risks	PRE-Risk	Work Method Used	POST Risk
			○ All existing services to be potholed and marked for future reference ○ Ensure all overhead services such as powerlines have been identified • Select the appropriate machinery to use around services	
High voltage underground cables and sub-stations	Hazard: Contact with electrical cable **Risk:** **Electrocution** **Fire**	**1**	• Underground High Voltage Cables & Sub-Stations: ○ Most 'green field' work sites will not have underground services located on them. However, some sites which are located near electrical sub-stations or 'keys' do have areas which are covered by an exclusion zone which restrict excavation ○ On any site where a sub-station or 'kiosk' is located on the block or a neighboring block determine where the power cables from the sub-station are running. This can be achieved by contacting Dial Before You Dig ○ If excavation work is to occur within the exclusion zone, then a permit needs to be obtained from the relevant power authority. This permit to work needs to be communicated with the relevant trades and all trades need to review and abide by the permit prior to commencing works. To obtain written Safety Advice where it has been identified as being required, complete and submit or return by email the applicable Safety Advice Request Form which is accessible via the electricity entity website: https://www.ergon.com.au/network/safety/business-safety/the-outdoor-workplace/working-near-powerlines • In some cases, it may be necessary to hand dig to identify the location of the cable and/or the protective covering.	**4**
Excavations and digging near underground power	Hazard: Contact with electrical cable **Risk:** **Electrocution**	**1**	• Trades to inspect site plans prior to the commencement of digging • Contact dial before you dig prior to undertaking excavation works on the nature strip and common areas of the site. Dial before you dig will only be able to identify power cables of the electrical distributor asset owner and are to be considered as a guide only • Plans outlining the location of the underground power lines within residential construction site can be found in the meter box once installed • Where underground power lines within a site cannot be identified the services of a cable locator will need to be engaged • Prior to the commencement of any digging examine these plans & determine if the intended excavation will impact these underground lines • Work can occur near live power lines if the powered mobile plant is 500mm from the underground power lines. Work in closer proximity should be undertaken via hand digging around the power lines if the cabling is live • The location of underground power cables also has warning tape installed mid-way between the cable and the surface. If discovered the trade should cease all operations & contact is to be made with the site Supervisor	**4**

High Risk Work Activity: 11. Electricity				
Activity	Hazards & Risks	PRE-Risk	Work Method Used	POST Risk
Installing electrical conduit	Hazard: Contact with electrical cable **Risk:** **Electrocution**	1	• Electrical companies installing electrical conduit must post a plan showing the location of underground cabling in the meter box of the site & identify distances to the underground conduit • Electrical companies are required to install warning tape at approximately mid-way between the underground conduit and ground surface • It is a requirement that the cable does not pass underneath the proposed location of the concrete slab. If site condition prevents this from occurring, contact must be made with the supervisor	4
11J. Electrical - Installation of Refrigeration Units				
PPE Recommended			**Persons responsible for maintaining controls**	
Installation of refrigeration units	Hazard: Fire, electric shock, leakage of refrigerant **Risk:** **Personal injury, environmental damage,**	1	• **Must be undertaken by a competent & licenced electrician** • As required follow the isolation process as outlined in Section 11 Electricity of this SWMS • Pre-job toolbox talk shall be conducted by the supervisor to discuss identified hazards and control measures to be implemented for the activity • Prior to use equipment shall be inspected by competent person i.e., calibrated equipment • All installation and construction work required will be undertaken in accordance with manufacturer's instructions and project requirements • Connecting power cables/wires shall be as per manufacturer's instructions • Install copper pipes, and neaten; braze copper piping together, ensuring that the hot work is monitored to ensure adequate cooling & inspect for faults • Extend cables – use junction box to connect extra cabling • Competent and licenced electrician to inspect for waterproofing and correct connections • Connect copper pipes and power cable to outdoor unit • Test all the valves and joints for leaks • **Must be undertaken by a competent & licenced electrician.** • Turn refrigeration unit on (cooling) in accordance with manufacturer's instructions • Test refrigeration unit • Check gas level • If necessary, re-gas refrigeration unit using appropriate gas as per manufacturer specifications. • Commission the equipment with a calibrated instrument	5

High Risk Work Activity: 11. Electricity				
Activity	Hazards & Risks	PRE-Risk	Work Method Used	POST Risk
			• Certificate of testing and safety shall be provided to customer	
Handling and transporting refrigerant	Hazard: Damage to cylinder, leaking refrigerant during charging of equipment **Risk: Affixation, skin irritation, explosion**	**2**	• **Must be undertaken by a worker who is competent & licenced in refrigerant handling** • Ensure cylinders are kept secure and vertical • During transport firmly secure cylinders with strapping against a roll cage • Ensure cylinders are kept away from heat sources, this includes the sun. When cylinders are in a vehicle secure them on side of vehicle that is in a cool, shady area	**5**
11K. Electrical - Isolation Lockout Tagout Verification				
PPE Recommended			**Persons responsible for maintaining controls**	
Confirming electrical isolation, lockout tagout has occurred prior to commencing work activities	Hazard: Electric shock **Risk: Personal injury**	**1**	• Before any wall penetration work (i.e. drilling, sawing) commences check for electrical cables and ensure electricity has been de-energised by a competent person/licenced electrician, as required. • **Before Accessing the Roof Space**: ○ This must be done by a competent person. ○ **De-energise:** Before beginning any work - including lifting a manhole cover, reaching inside, or removing roof tiles - all electricity to the property must be switched off at the main switchboard. ○ Ensure appropriate lock-out/tag-out procedures are in place to ensure the power is not turned back on while work is in progress. • Work must not be performed near energised sources until a competent and licenced electrician has: ○ Positively identified the electrical equipment/plant, all energy sources, and their isolation points ○ Isolated and discharged the electrical equipment from all sources of electrical supply, where necessary ○ Secured the isolation • The competent and licensed electrician must follow a lockout tagout procedure: ○ Lockout – a device put in place to stop inadvertent energization of equipment and machinery ○ Tagout - a "Danger" tag is applied to visually warn against operating the equipment/plant	**4**

High Risk Work Activity: 11. Electricity				
Activity	Hazards & Risks	PRE-Risk	Work Method Used	POST Risk
			• Before starting work undertake a visual inspection of your surroundings to confirm lockout and tagout procedure has been followed • If not able to confirm that a procedure to ensure electrical energy isolation, lockout tagout has been completed, **STOP** work and check with your supervisor for additional instructions	

High Risk Work Activity: 12. Contaminated or Flammable Atmosphere				
Activity	Hazards & Risks	PRE-Risk	Work Method Used	POST Risk
12A. Crystalline Silica - Wet Method				
PPE Recommended			**Persons responsible for maintaining controls** 	
Work Preparation	Hazard: Unauthorised entry, unfamiliar worksite & conditions **Risk: Personal injury**	**1**	• No person at the workplace will be exposed to RCS at a level above the workplace exposure standard (WES) as described on page 9 of Managing respirable crystalline silica dust exposure in construction and manufacturing of construction elements Code of Practice 2022 • Complete a pre-work risk assessment of the expected work activities to identify hazards that may pose risks, i.e. projectiles, noise, vibration, dust contact or entanglement with cutting equipment • Products which are containing or suspected to contain crystalline silica will be used in areas away from other workers with consideration to neighbors or adjacent buildings where the public could be affected • Barricade work areas (exclusion zones) to minimise exposure to others • Ensure SDS available for any material containing silica • As required workers to be trained in Silica Awareness • All workers to be adequately trained/competent for the tasks they perform including use of RPE • Respirator to be kept on until all clean-up is finished, and you have dusted off your work clothing	**4**
Cutting, trimming, grinding, sawing, drilling, chasing, sanding, polishing of crystalline silica substance (CSS) using wet method	Hazard: Exposure to silica in water vapor/mist **Risk: Respiratory diseases**	**1**	• Use tool equipped with an effective integrated water delivery system that supplies water to cutting surface/blade/grinding surface • Operate and maintain tool in accordance with manufacturer's instructions to minimise dust emissions • All plant and equipment fitted safety devices to be in working order. Servicing up to date • **Wetting technique:** ○ Ensure enough water is available (hose tap mains water or reservoir). ○ Ensure equipment has been tested and tagged and the correct RCD is used, if applicable ○ Ensure water supply to tool is turned on and operational before starting tool ○ Ensure water supply is flowing to cutting area prior to blade making contact with material being worked on ○ Ensure spray guards are in place before commencing work ○ All users in vicinity will use RPE as the water vapor will contain crystalline silica ○ As the cutting or drilling is being conducted careful consideration will be given as to where the wet slurry runs. ○ Ensure the slurry is captured and not put into drains ○ Scoop up slurry and either place in buckets or bins which are to be removed from site before slurry dries into a dust, re-wetting may be required depending on the task.	**4**

High Risk Work Activity: 12. Contaminated or Flammable Atmosphere				
Activity	Hazards & Risks	PRE-Risk	Work Method Used	POST Risk
			○ Rinse all equipment and tools post work to remove all silica	
Designated wet cutting areas	Hazard: Exposure to silica in water vapor/mist **Risk: Respiratory diseases**	1	• **When cutting, grinding, or drilling in large quantities:** ○ An area will be chosen to hold a slurry inside a pit. Depending on the volume of slurry, pits can be 500mm deep, or less, by 500mm x 500mm square ○ A sheet of black builders' plastic will be placed on top of pit with an x cut into the center to allow the slurry to flow into the pit ○ A pallet may be used on top to keep the plastic from blowing away and allow a cutting bench or area for wet cutting to occur ○ Once work has been completed the area can be washed down and allowed to drain into pit ○ If the area will be used for a concrete slab the slurry will be appropriately covered up and filled over ○ If this method is not suitable the slurry will be scooped into a bucket and removed from site. • RPE will be required – P2 Respiratory at a minimum will be used, fit tested to each worker, see register for individual workers requirements • Persons in the area will also be asked to leave while the work is undergone • While wearing mask workers should dust/vacuum off clothes or if possible, change out of their work clothes at the site to prevent the spread of silica dust • Visually inspect the work area to make sure it has been thoroughly cleaned and free of silica dust	4
12B. Crystalline Silica – Dry Method with M or H Class Vacuum				
PPE Recommended			**Persons responsible for maintaining controls**	
Work Preparation	Hazard: Unauthorised entry, unfamiliar worksite & conditions **Risk: Personal injury**	1	• Uncontrolled dry cutting of crystalline silica substance (CSS) that contain 1 per cent or more crystalline silica is prohibited • Use of any material with >1 per cent crystalline silica for abrasive blasting is prohibited • No person at the workplace will be exposed to RCS at a level above the workplace exposure standard (WES) as described on page 9 of Managing respirable crystalline silica dust exposure in construction and manufacturing of construction elements Code of Practice 2022 • Complete a pre-work risk assessment of the expected work activities to identify hazards that may pose risks, i.e. projectiles, noise, vibration, dust contact or entanglement with cutting equipment	4

High Risk Work Activity: 12. Contaminated or Flammable Atmosphere				
Activity	Hazards & Risks	PRE-Risk	Work Method Used	POST Risk
			• Products which are containing or suspected to contain crystalline silica will be used in areas away from other workers with consideration to neighbors or adjacent buildings where the public could be affected • Ensure SDS available for any material containing silica • as required workers to be trained in Silica Awareness • All workers to be adequately trained/competent for the tasks they perform including use of RPE • Respirator to be kept on until all clean-up is finished, and you have dusted off your work clothing	
Cutting, trimming, grinding, sawing, drilling, chasing, sanding, polishing of crystalline silica substance (CSS) using wet method using dry cut and M or H Class vacuum method	Hazard: Exposure to silica dust **Risk: Respiratory diseases**	**1**	• Plant and equipment to be used in accordance with manufacturers recommendations/specifications • All plant and equipment to be fitted with an effective on tool dust extraction system and fitted safety devices and to be in working order with servicing up to date • Barricade work areas (exclusion zones) to minimise exposure to others • **Dry cut with M or H Class vacuums technique:** ○ Tools which can be connected to an M or H Class vacuum only will be used ○ Hepa Bags will be used on all dry cutting to allow for ease of emptying vacuums ○ Continual maintenance and cleaning of M or H Class vacuums will occur on each bag change as per manufacturers recommendations/specifications ○ RPE will be used as the vacuum does not eliminate all crystalline silica in the air	**4**
Clean up of exposed silica dust	Hazard: Exposure to Silica Dust **Risk: Respiratory diseases**	**1**	• End of shift clean-up requires careful consideration as to the method used • Sweeping or use of dust blowers will be strictly prohibited as the ability to contain the silica dust is impractical • When M or H Class vacuums are used, PPE respirators are required. Cleaning vacuums with water and sponge also require use of PPE respirators • Tipping vacuum waste directly into bins is strictly prohibited. For this reason, Hepa bags will be chosen to aid in the cleanup process • Persons in the area will also be asked to leave while the work is undertaken • Where small use of dust pans and brushes are used RPE will always be worn • Ensure tools and equipment are all cleaned before leaving effected work area and site • While wearing mask workers should dust/vacuum off clothes or if possible, change out of their work clothes at the site to prevent the spread of silica dust	**4**

High Risk Work Activity: 12. Contaminated or Flammable Atmosphere				
Activity	Hazards & Risks	PRE-Risk	Work Method Used	POST Risk
			• Visually inspect the work area to make sure it has been thoroughly cleaned and free of silica dust	
12C. Crystalline Silica - Mixing Materials Which Create Silica Dust				
PPE Recommended			**Persons responsible for maintaining controls** 	
Creation of silica dust through mixing materials	Hazard: Exposure to silica dust in air **Risk: Respiratory diseases**	**1**	• No person at the workplace will be exposed to RCS at a level above the workplace exposure standard (WES) as described on page 9 of Managing respirable crystalline silica dust exposure in construction and manufacturing of construction elements Code of Practice 2022 • Where crystalline silica containing products are to be mixed, careful consideration will be given as to the location where it will be mixed • Products which contain or are suspected to contain crystalline silica will be used in areas away from other workers with consideration to neighbors or adjacent buildings where the public could be affected • Ensure SDS available for any material containing silica • As required workers to be trained in Silica Awareness • All workers to be adequately trained/competent for the tasks they perform including use of RPE • Respirator to be kept on until all clean-up is finished, and you have dusted off your work clothing • Barricade work areas (exclusion zones) to minimise exposure to others • **Dry mixing with M Class vacuums technique:** ○ Attachments which can be connected to an M Class vacuum will be used as per manufacturers recommendations/specifications ○ Bucket attachments will be used where available to allow the vacuum to attach with ease during the pouring of materials to be mixed ○ Hepa Bags will be used on all dry mixing to allow for ease of emptying vacuums ○ Continual maintenance and cleaning of M Class vacuums will occur on each bag change as per manufacturers recommendations/specifications • RPE will be used as the vacuum does not eliminate all crystalline silica in the air	**4**
Clean up of exposed silica dust	Hazard: Exposure to silica dust **Risk:**	**1**	• End of shift clean-up requires careful consideration as to the method used • Sweeping or use of dust blowers will be strictly prohibited as the ability to contain the silica dust is impractical • When M or H Class vacuums are used, RPE respirators are required. Cleaning vacuums with water and sponge also require use of RPE respirators	**4**

High Risk Work Activity: 12. Contaminated or Flammable Atmosphere				
Activity	Hazards & Risks	PRE-Risk	Work Method Used	POST Risk
	Respiratory infection		• Tipping vacuum waste directly into bins is strictly prohibited. For this reason, Hepa bags will be chosen to aid in the cleanup process • Persons in the area will also be asked to leave while the work is undertaken • Where small use of dust pans and brushes are used RPE will always be worn • Ensure tools and equipment are all cleaned before leaving effected work area and site • While wearing mask workers should dust/vacuum off clothes or if possible, change out of their work clothes at the site to prevent the spread of silica dust	
12D. Crystalline Silica - Post Work Clean-up				
PPE Recommended			**Persons responsible for maintaining controls**	

Cleaning areas contaminated with silica dust	Hazard: Exposure to silica dust
	Risk: Respiratory infection
		1	• Persons in the area will also be asked to leave while the work is undertaken
			• End of shift clean-up requires careful consideration as to the method used
			• Sweeping or use of dust blowers will be strictly prohibited as the ability to contain the silica dust is impractical
			• When M or H Class vacuums are used, RPE respirators are required. Cleaning vacuums with water and sponge also require use of RPE respirator
			• Tipping vacuum waste directly into bins is strictly prohibited. For this reason, Hepa bags will be chosen to aid in the cleanup process
			• **Cleanup using M or H Class Vacuums Technique:**
			  ○ M or H Class Vacuums only will be used
			  ○ Hepa Bags will be used to allow for ease of emptying vacuums
			  ○ Continual maintenance and cleaning of M or H Class vacuums will occur on each bag change as per manufacturers recommendations/specifications
			  ○ Used filters will be vacuumed out with new clean ones. Once filters have been vacuumed and have no damage, they may be safely stored for use next time
			• **Cleanup using Wet Method:**
			  ○ If a wetting down method is used to control silica dust, then the slurry will be removed before it dries
			  ○ While slurry is still wet scoop it into a bucket and seal bucket
			• Where small use of dust pans and brushes are used RPE respirators will always be worn, extra care will be taken as to not stir up dust
				4

High Risk Work Activity: 12. Contaminated or Flammable Atmosphere				
Activity	Hazards & Risks	PRE-Risk	Work Method Used	POST Risk
			• Ensure tools and equipment are all cleaned before leaving effected work area and site • While wearing mask workers should dust/vacuum off clothes or if possible, change out of their work clothes at the site to prevent the spread of silica dust	
12E. Hazardous Substances Used Onsite				
PPE Recommended			**Persons responsible for maintaining controls** 	
Hazardous substances used	Hazard: Untrained workers, inappropriate selection, access & egress, unknown substances **Risk: Personal injury**	**4**	• Ensure workers are trained in the safe use of the hazardous substances they are to handle • Before using hazardous substances, ensure SDS is current, read the SDS and comply with the requirements within • Make sure containers have clearly marked warning labels indicating the hazards of the substance • Where required, make sure exhaust ventilation is operational at the point where the substance is being used • Visual risk assessment will be conducted prior to commencing work activity • Choose the most suitable substance approved for the purpose with the least toxicity and risk • Screen the work area to protect workers and others from exposure, so far as is reasonably practicable • Use warning signs, barricaded or restrict access and provide an alternative route when required • Check and eliminate all potential sources of ignition (including spark producing switches, electrical equipment, open flames, pilot lights) within and near the work area • Identify and take specific precautions if using solvents in confined spaces such as wearing adequate RPE and providing ventilation • Only prepare enough chemical to do the job • Never decant chemicals into food or drinking containers • Never use chemicals that are in unmarked containers • Ensure spill kit available and follow manufacturer's instructions when managing spills • Always wash hands thoroughly after using hazardous substances and before eating, drinking, smoking or going to the toilet • All hazardous chemicals and their containers are to be disposed of as per SDS requirements	**5**
Hazardous substances brought to site by other trades	Hazard: Unknown hazardous substances	**3**	• No substances to be brought on site by subcontractors without notification provided to PC • Hazardous substances register and SDS to be readily available • Discussion with other trades: If other trades are present on site, notify them of the hazardous substances being used obtain from them details of any hazardous substances they are using.	**5**

High Risk Work Activity: 12. Contaminated or Flammable Atmosphere				
Activity	Hazards & Risks	PRE-Risk	Work Method Used	POST Risk
	Risk: **Personal Injury**			
12I. Generators Used Onsite - Carbon Monoxide				
PPE Recommended			**Persons responsible for maintaining controls**	
Working around active generator	Hazard: Fumes **Risk:** **Carbon Monoxide Poisoning**	**1**	• Ensure that generator is secure from unauthorised persons • Ensure that generator is set up on a firm, level surface with adequate airflow • Limit downwind work of generator wherever feasibly possible • Ensure that tools to be used are compatible with the output of the generator • Ensure that generator output is sufficient to operate tools effectively	**4**
Refuelling generator	Hazard: Fuel **Risk:** **Personal harm, environmental contamination**	**1**	• Avoid physical contact and wash hands after the action completed in ventilated areas or in areas where the fumes cannot build up • Do not refuel generator while motor is running • Allow unit to cool down before refuelling • Take care when refuelling to not spill fuel or overfill fuel tank • When refuelling via jerry can, ensure that safe manual handling practices are in place • Ensure adequate spill kit is readily avaiable1	**4**
Moving of generator	Hazard: Manual handling **Risk:** **Musculoskeletal injuries**	**1**	• Ensure correct lifting techniques are in use • If weight exceeds 25-30Kg, lift with extra workers • Keep walkways clean of debris and other potential trip hazards • When the generator has only recently stopped, prevent physical contact with hot exhaust	**4**

High Risk Work Activity: 14. Working near a roadway				
Activity	Hazards & Risks	PRE-Risk	Work Method Used	POST Risk
14A. Working on or Near a Roadway				
PPE Recommended			**Persons responsible for maintaining controls**	
Working on or near a roadway	Hazard: Road traffic **Risk: Contact between persons and vehicles**	**2**	• If setting up roadside, comply with State Road rules, local laws and permits - keep the disruption to traffic at a minimum • Effective reliable communications must be available on site • Erect any barriers & signage necessary to keep others safe and aware • Ensure vehicle travel paths are clearly identified • If pedestrian access impacted ensure: ○ Safe pedestrian access is always provided past the work areas - must comply with MUTCD3 ○ Alternative pedestrian safe laneways are clearly marked ○ If necessary, alternative pedestrian footpath includes ramps • Ensure any control device does not become a potential hazard and does not obstruct permanent road signage • Restrict access to work area. Ensure: ○ Exclusion zones surrounding work area using barricades and signage is in place ○ Any other workers within the exclusion zones are wearing PPE as required ○ Traffic control is in place - standby person (or spotter) should be allocated and used if required • If required, contact a traffic management company to supply a traffic management plan and licensed traffic management personnel	**5**
Ongoing monitoring and inspections	Hazard: Road traffic **Risk: Struck by vehicle**	**2**	• Conduct risk assessments regularly during the work task/project • Hold daily prestart toolbox meetings to discuss changes to the workplace and identification of any new hazards/risks	**5**

High Risk Work Activity: 15. Mobile Plant				
Activity	Hazards & Risks	PRE-Risk	Work Method Used	POST Risk
15BA. Mobile Plant - Driving Work Vehicles Onsite				
PPE Recommended			**Persons responsible for maintaining controls**	
Driving work vehicles onto site	Hazard: Traffic **Risk:** **Uncontrolled contact between vehicles and people**	**1**	• Driver is responsible for conducting prestart vehicle checks • Only licensed drivers are permitted to drive vehicles • Always drive according to road and weather conditions • Driver to be aware of site instructions and any specific hazards/risks that may be relevant • Flashing lights are always used on mobile plant and vehicles • Adherence to site safety plan, exclusion zones, communication, consultation. • Follow the site safety plan relating to traffic control safety • Increase awareness of pedestrians if works are adjacent to the existing footpath • All pedestrians to be diverted around work area	**5**

Mobilising on site	Hazard:
	Obstruction
	Unauthorised access
	Risk:
	Crush death
	Inadequate PPE
	Crushing
		2	• Do not work within 3m of live traffic unless:
			  ○ A Traffic Management Plan is in place
			  ○ A Traffic Control system is in place – under the direction of ticketed traffic controllers
			  ○ There is a safety barrier in place (such as concrete new jersey curbs), water filled Triton barriers and or a shadow vehicle
			• Remove obstructions or reposition equipment
			• Ground condition and slope must be assessed prior to loading/unloading
			• Do not continue if you cannot confirm the stability of the machinery
			• Only those authorised may access site
			• Ensure work area is barricaded and signed to allow adequate exclusion zones. Depending on the height 45 degree from the top point down to the ground or 3m from edge of machine, whichever is greater
			• High visibility clothing to be always worn
			• Transport driver shall be responsible for tie down of load and removing tie downs, straps etc
			• Maintain visual contact between plant operators and other personnel at all times. Spotters to be used where required for reversing operations, tight areas etc.
			• Avoid unloading/loading plant under power lines
				4

High Risk Work Activity: 15. Mobile Plant				
Activity	Hazards & Risks	PRE-Risk	Work Method Used	POST Risk
Unloading of plant	Hazard: Plant and equipment falling off deck uneven ground **Risk:** **Damaged equipment, crush death**	**1**	• Qualified and competent operator to always unload vehicle • Warning signage and exclusion zones installed indicating hazard • Align machinery with ramps prior to unloading • Using a spotter when reversing • Adjust ramps to suit wheel width • Use winch cable and remote where possible • Remove excess personnel from the work area • Unloading to be done on level ground	**4**
Moving machinery around site	Hazard: Obstruction (Overhead, at ground level or underground), faulty equipment, plant tipping or rolling over **Risk:** **Crush death**	**1**	• Remove obstructions or reposition equipment • Do not continue if you cannot confirm the stability of the machinery • Check all electrical systems are operational • Check all warning systems and devices are operational • Only authorised personnel shall carry out maintenance checks • Only qualified person shall carry out repairs and maintenance • Check tyre tread and pressure are satisfactory (where applicable) • Provide tilt alarm system to advise operator of machine operating beyond safe working angles • Ensure the machine is an “outdoor rated” machine if operating where there is a risk of external wind • Operator is responsible to not exceed the safe working load and wind rating of the plant • Operator to be trained and competent in the safe operation of the plant	**5**
Stationary equipment	Hazard: Accidental movement of plant **Risk:** **Crush death**	**1**	• Ensure tools and equipment are stored appropriately • Ensure emergency stop switch is pushed in when equipment function completed and work to commence • Ensure shutdown procedures are followed as per the manufacture’s manual	**5**

High Risk Work Activity: 15. Mobile Plant				
Activity	Hazards & Risks	PRE-Risk	Work Method Used	POST Risk
15BB. Working Near Onsite Mobile Plant				
PPE Recommended			**Persons responsible for maintaining controls**	
Working near onsite mobile plant. (Under or beside)	Hazard: Road traffic **Risk: Contact between persons and vehicles**	**2**	• When establishing work areas consider mobile plant onsite has right of way • All personnel to have undergone site specific familiarisation • Erect any barriers & signage necessary to keep others safe and aware of the work being undertaken • Designated pedestrian routes to be established where required • Personnel not to enter the swing zone of equipment without positive communications with operator • Restrict access to work area. Ensure: ○ Exclusion zones surrounding work area using barricades and signage is in place ○ Any other workers within the exclusion zones are wearing PPE as required ○ Communicate with onsite mobile plant operators to get an understanding of their tasks and areas they need to access as well as times they operate. Work in with onsite operators and ensure tools, equipment and work doesn't unnecessarily block their work areas or travel paths • When new workers come to site ensure they understand the movements of onsite mobile plant as it may not be consistent and start up without notice • Mobile phones or personal entertainment devices (PEDS) are not to be used while working around mobile plant. If necessary to use such a device, move to a safe area. • **Never work under a load being lifted by any type of crane.**	**5**
15C. Mobile Plant - Track Excavator/Slew Excavator or Skid-Steer				
PPE Recommended			**Persons responsible for maintaining controls**	
Use of track excavator, slew excavator or	Hazard: Untrained or incompetent	**1**	• Flashing Lights are always on when machine is in use • Logbooks are in date and easily accessible • Exclusion zones established. Depending on the height 45 degree from the top point down to the ground or 3m from edge of machine, whichever is greater	4

High Risk Work Activity: 15. Mobile Plant				
Activity	Hazards & Risks	PRE-Risk	Work Method Used	POST Risk

skid-steer on site	operators used
	Risk:
	Personnel struck/crushed by excavator or attachments
			• Operators to be certificate holders for that plant
			• Ensure correct operation of movement alarms on excavator
			• Where possible exclude personnel from the swing area of the machine
			• Arrange for a worker to act as a spotter
			• Spotter to maintain a safe distance from the machine, making sure the operator can see spotter
			• The operator is always to be aware of spotter's location and maintain a safe distance
			• Workers to wear PPE as outlined
			• Workers to be aware of plant movements
			• Workers to have eye contact with operator when working close by
			• All reasonable steps will be taken to obtain current underground essential services information about any of the areas requiring excavation before directing or allowing the excavation work to commence.
			• As required, contact Dial Before You Dig to request information about the infrastructure networks at the planned project site
			  ○ Online via the Dial Before You Dig website www.1100.com.au
			  ○ Mobile website or iPhone app
			  ○ By phone call 1100 (toll free, during business hours)	

Use of attachments	Hazard: Attachments wear or damage	1	• Inspect attachments for wear, damage, or loose or missing parts • Ensure that attachments are securely fitted, and safety pins or clips fitted • Check arms and connections for excessive wear • Inspect hoses and connections for splits, bulges, leaks or fractures • Test all hydraulic operations before applying load • Check rams, hoses and connections for splits, leaks or fractures • Test operation by raising and lowering attachment	4
Operation of machine	Hazard: Overturning / Stability **Risk:** **Personal injury**		• Do not travel at speeds which may cause control to be lost over bumps, etc. • Avoid driving over obstacles, ditches, drains, etc which could affect control • Do not attempt to lift load in excess of working load limit of loader • Reduce speed when travelling with load on front attachment • Carry load close to ground and racked back for stability and visibility • Do not raise load until ready to deposit	

High Risk Work Activity: 15. Mobile Plant				
Activity	Hazards & Risks	PRE-Risk	Work Method Used	POST Risk
15D. Mobile Plant - Earthwork Operations				
PPE Recommended			**Persons responsible for maintaining controls**	
Preparation	Hazard: Inadequate planning **Risk: Crush injuries, plant rollover, equipment damage**	**1**	• Conduct a site recon • Identify people, equipment, PPE, potential hazards, and safety controls prior to commencement of works • Identifying potential interactions/interfaces with other work crews and communicating any issues with them • All reasonable steps will be taken to obtain current underground essential services information about any of the areas requiring excavation before directing or allowing the excavation work to commence. • As required contact Dial Before You Dig to request information about the infrastructure networks at the planned project site ○ Online via the Dial Before You Dig website www.1100.com.au ○ Mobile website or iPhone app ○ By phone call 1100 (toll free, during business hours).	**5**
Pre check machinery/site conditions	Hazard: Oil and grease spillage damages to equipment **Risk: Equipment failure**	**1**	• Conduct pre-start on all machinery at start of shift and after an event where the operator suspects the machine may have been compromised, e.g., put in water, misused by another operator • 3-point contact to enter/exit machine • Clean up spill. • Daily inspection of site prior to commencement of work	**5**
Performing excavation and trenching work	Hazard: Reducing the stability of nearby structure **Risk: Structural collapse, asphyxiation,**	**1**	• No work is to take place adjacent to a building or structure such that it may undermine or make unstable the building or structure • A geotechnical engineer is to be engaged to determine (in writing) whether the excavation would reduce the stability of any nearby structures • Controls specified by the engineer to prevent a person's exposure to collapse or partial collapse of the structure are to be implemented and maintained • Machine positioned level or where this cannot be achieved near level at an incline not exceeding the manufacturer's	**4**

High Risk Work Activity: 15. Mobile Plant				
Activity	Hazards & Risks	PRE-Risk	Work Method Used	POST Risk
	crush injuries		recommendations. • Operator to ensure seat belt worn where fitted as part of manufacturers specification • Check the strength and adequacy of the ground – consider rises and falls, existing or recently backfilled trenches • Machines to be only operated by certified persons • Do not carry others on machine and machine only driven from operators' seat • Machines operated and maintained in accordance with manufacturer's instructions • Unauthorised persons kept away from the mobile plant • Underground services to be identified prior to works commencing • Area clearly marked and barricaded where necessary to make safe from other traffic • Traffic Safety Management Plan to be adhered to • Machine not to be left unattended. Disengage controls, apply the park brake, switch off engine and remove key when not in use	
Vehicles or generators being used near a trench or excavation	Hazard: Inhalation of carbon monoxide **Risk: Asphyxiation, death**	**1**	• Where there is the risk of inhalation of carbon monoxide or other impurity of the air, due to a person being in a trench / excavation, a confined space entry permit is to be used and air monitoring performed • No person is to be in the trench when an excavator is in operation and there is the risk of inhalation of carbon monoxide • Petrol driven machinery is not to be in or near trenches	**5**
Workers inside trench working	Hazard: Worker collapse or injury preventing normal exiting via ladder **Risk: Unable to obtain first aid quickly, unable to exit excavation**	**2**	• Workers will never work alone in trenches where risk(s) dictate the access to be hindered for one person to exit quickly • Where practical steps will be constructed in the earth • Where it is not practical to construct earth steps multiple workers will be always required with a minimum of 2 personnel in the area • A stretcher will be made available with a 4-man lift required to remove a person from the excavation • Once the Worker has been removed normal First Aid Treatment will apply	**4**

High Risk Work Activity: 15. Mobile Plant				
Activity	Hazards & Risks	PRE-Risk	Work Method Used	POST Risk
15F. Mobile Plant - Forklift				
PPE Recommended 			**Persons responsible for maintaining controls** 	

Setting up to use Forklift	Hazard: Untrained or incompetent operators used **Risk: Workers struck by plant causing death or personal injury**	**1**	• Complete a site Induction/familiarisation of local conditions
			• All induction processes should include the principles of traffic and pedestrian flow plus a site map. Induction should especially reinforce the "traffic management rules"
			• Ensure flashing lights or beacons/reversing beepers are functioning
			• All operators must hold an in date high risk forklift licence in Queensland
			• Operators are trained and competent to operate the type of forklift and attachments they are using
			• Operators are suitably experienced in the work they are to perform
			• All persons on site should attend toolbox talk (safety briefing) to receive update on:
			  ○ Exclusion zones for pedestrians
			  ○ Any hazards present on that day
			  ○ Communication methods and emergency procedures
			• Ensure operators:
			  ○ Using public roads have the appropriate driver's licence
			  ○ Hold a valid high risk work licence for the type of industrial lift truck they are operating
			  ○ Are trained to operate the type of forklift and attachments they are using
			  ○ Are provided with information, training and instruction on the hazards, risks, and control measures relevant to the workplace
			• Ensure all relevant workers have undertaken training and/or received instruction in the use of control measures. Include:
			  ○ Reporting procedures for incidents
			  ○ Correct use of equipment including operation and maintenance
			  ○ Use of supervision where required (e.g., new starters or new equipment)
			  ○ Supervisors, foremen etc. are suitably experienced in the type of work
			  ○ Trained in this SWMS
			• Workers must be fit for work, e.g., no signs of fatigue, alcohol, or drugs
				4

Entering or	Hazard:		• Face the forklift whenever you mount and dismount the forklift	

High Risk Work Activity: 15. Mobile Plant				
Activity	Hazards & Risks	PRE-Risk	Work Method Used	POST Risk
exiting cab	Slips, trips, falls **Riks:** **Personal injury**		• Maintain a three-point contact with the steps and with handholds (three-point contact can be both feet and one hand or both hands and one foot) • Use provided steps/handholds when entering or exiting the cabin (see operations manual for instruction). • Never mount or dismount a moving forklift • Do not jump off the forklift • Do not carry tools or supplies when you try to mount / dismount • Do not use any controls as handholds when you enter / exit the operator compartment • Never leave operator seat with the engine running	
Assess onsite conditions	Hazard: Lack of a clear assessment **Risk:** **Personal injury, property damage**		• Operators must ensure: ○ There is suitable access/egress for all equipment required ○ The ground conditions for operation of equipment are stable and there are no uneven surfaces or drop offs ○ Suitable lighting, including night-works (include flood lighting and operator head lamps as applicable) ○ Work not near power lines ○ The area of operation is not in close proximity to power lines ○ Other trades and/or equipment does not impact the area of operation ○ Exclusion zones are set up around the area of operation where there is pedestrian activity	
Working with other workers	Hazard: Untrained or incompetent operators used **Risk:** **Expose workers to being struck by plant movements causing death or serious bodily injury.**	**1**	• Establish an effective system of communication between forklift operator and ground workers before work commences • Relevant workers must be trained in the procedures involved prior to the work commencing • Ground workers are instructed not to approach forklift until the operator has agreed to their request to approach. • Ground workers are instructed on set distances to maintain from the forklift while in operation • Ground workers and forklift operators are aware of traffic management plan and exclusion zones • Ground workers are made familiar with the blind spots of the forklift • Forklift operator and ground workers are required to wear high-visibility clothing	**4**
Using attachments or implements	Hazard: Untrained or incompetent operators used	**1**	• Remove and attach as per manufacturer's instructions • Inspect quick-hitch device (if applicable) • Ensure attachment is on a flat, level surface • Ensure forklift designed for use of an attachment	**4**

High Risk Work Activity: 15. Mobile Plant				
Activity	Hazards & Risks	PRE-Risk	Work Method Used	POST Risk

	Risk:
	Expose workers to being struck by plant movements causing death or serious bodily injury.
			• Ensure plant maintained and in good working order
			• Ensure all locking pins are secured in place and marked with the following (manufacturer's name, make, model and serial number, quick hitch weight, maximum rated capacity.
			• If damage or faults detected, do not use. Follow tag-out/lock-out procedures and report to supervisor immediately
			• Operator to raise shaft slowly and test attachment is secured prior to use
			• Operator not to overload the capacity of attachment
			• Attachments kept in lowest working position possible
			• **Note**: If attachment is alternate brand – seek advice from manufacturer to ensure the different attachment does not affect the centre of balance.
			• When changing hydraulic attachments, wear gloves and eye protection:
			  ○ Turn plant off
			  ○ Release hydraulic pressure
			  ○ Cover quick connect with rag and disconnect
			  ○ Reconnect new attachment
			  ○ Check for proper hydraulic connection, hose routing and hose length
			  ○ Check for leaks
			• Only use compliant forklifts with a load capacity data plate that says a person lifting attachment may be used
			• Ensure forklift is fitted with a method to prevent free fall of the box/platform in the event of a hydraulic hose failure
			• Only to be used as specified by manufacturer	

15H. Working Around Cranes and Lifting Operations				
PPE Recommended			**Persons responsible for maintaining controls**	
Public protection, Staying clear of Other Workers and General	Hazard: Mobile Plant, Poor communication, Pedestrian traffic **Risk:**	**1**	• Exclusion zones surrounding work area to be established by crane operator • During the erection of any object via a crane, public/other workers will remain out of the designated lift area which is the area below or adjoining where persons could be struck by falling equipment / materials • Area is to be either barricaded or sign posted to prevent unauthorised entry • Safety helmets must be worn always when working in vicinity of loads being lifted	**4**

High Risk Work Activity: 15. Mobile Plant				
Activity	Hazards & Risks	PRE-Risk	Work Method Used	POST Risk
awareness of activity	**Falling objects, Personal Injury to public or other workers**		• Workers will remain out of the lifting area and ensure no pedestrians or bystanders enter the area while the lifts are being conducted • The crane operator and rigger will always remain in control of the lift. In the event where workers may be required to assist in the placement of loads all workers involved will sign onto the Crane Operators SWMS and any additional hazards will be managed through that document. This SWMS does not cover these tasks. • Take all directions from Crane Crew	
15R. High Pressure - Water Jet				
PPE Recommended			**Persons responsible for maintaining controls**	

Setting up work area near electrical equipment	Hazard:
	Contact with electricity
	Risk:
	Electrical shock, death
		1	• All Workers are competent or under direct supervision of a supervisor with experience in using the specific water blaster
			• Any electrical equipment in the immediate area of the operation that presents a potential hazard and is not required during the job, must be de-energised, shielded, removed, or otherwise made safe
			• All equipment should be checked daily by users for any damage or corrosion in accordance with the manufacturer's instructions
			• **Electric Powered Units:**
			  ○ All power water jet cleaner and leads are tested and tagged and are current.
			  ○ Safety switches (RCD's) are provided.
			  ○ Keep power leads up off the ground and out of the way.
			• Ensure equipment hoses and leads are not placed in areas where they may be run over, damaged or exposed to water.
				5

Use of water blaster	Hazard: Hit by water /objects under pressure **Risk: Lacerations, eye injuries**	**1**	• All equipment and machines near work area should be protected or shielded from water and/or being hit by flying debris • Remove all objects such as rocks, broken glass, nails, wire, debris, toys, or anything that may become a hazard during water jet cleaner operation • Don't point the jetting gun at anyone at any time • Don't leave the unit running unattended • Restrain the hose to restrict the movement in the event of a hose end failure • Nozzles checked and cleared of debris that could cause obstructions	**4**

High Risk Work Activity: 15. Mobile Plant				
Activity	Hazards & Risks	PRE-Risk	Work Method Used	POST Risk
			• Attachments fitted as per the manufacturer's recommendations • Don't change the jetting nozzle while the unit is running • Maintain control of the jetting gun • High pressure Water Jet Cleaners should not be directly aimed at electrical wiring, switches, relays, alternators, starter motors, bearing seals, window rubbers or vulnerable components that water might affect.	
Movement of water blaster	Hazard: Hit by water / objects under pressure **Risk:** **Lacerations, eye injuries**	**1**	• Always push the water jet cleaner when moving it • Water jet cleaner to have triggers that can lock into place for use over longer periods (more than 30 seconds at a time) • Handles on water jet cleaner should be cylindrical and approx. 4cm in diameter • Operator's wrist to remain straight when operating water blaster • Operator to ensure grip on machine is comfortable • Ensure there are no sharp edges on machine • Grip length approx. 12cm • Avoid repetitive tasks. Ensure job rotation and sufficient breaks • Do not overreach or work in awkward or static postures for more than 30 minutes at a time or 2 hours over entire shift • Don't use on a ladder	**4**

High Risk Work Activity: 17. Work near water				
Activity	Hazards & Risks	PRE-Risk	Work Method Used	POST Risk
17A. Working Near a Body of Water				
PPE Recommended			**Persons responsible for maintaining controls**	
Work close to a body of water	Hazard: Falling into water **Risk:** **Possible drowning**	**3**	• All workers to be adequately trained, competent or supervised for the task • Ensure workers can swim • Personnel should not work alone • Conduct a site-specific hazard and risk assessment to identify any safety hazards prior to commencement of work i.e. unstable areas, slippery areas • Emergency response procedure shall be discussed before activity takes place • Where possible barricades will be erected • Always remain within visual or hearing range of co-workers • Where practical, electrical equipment shall be substituted with pneumatic, or battery powered tools and equipment • Man-made structures (e.g., pools) with the potential to hold water will be visually monitored and controls applied where required. e.g., water pumping will be used to remove water, if applicable or pool fencing erected • Prevent workers from falling into water using the working at heights restraint system • If required, have rescue equipment on hand i.e. life ring attached to suitable length rope, an approved personal flotation device (PFD)	**5**

Site Risk Assessments – Listed Alphabetically by Non-High-Risk Activities				
Activity	Hazards & Risks	PRE-Risk	Work Method Used	POST Risk
Ladders – Under 2m				
PPE Recommended 			**Persons responsible for maintaining controls** 	
Using Ladders	Hazard: Using Ladders **Risk: Falling**	3	• Tie offs, base support, gutter anchors, levelers to be considered • All ladders used on site will be rated 'Industrial' with 120kg (minimum) load rating • Persons using the ladder must have 3 points of contact always (i.e., 2 hands and 1 foot or 2 feet and 1 hand or be holding a stable object e.g., gutter, wall frame) • Ladders are to be maintained in a sound working condition and be appropriate for the task to be undertaken • Tools requiring two handed operations, or a high degree of leverage force should not be used while on ladders • A ladder is not a work platform.	5
Manual Handling				
PPE Recommended 			**Persons responsible for maintaining controls** 	
Manual Handling	Hazard: Locations of the loads and distances to be moved **Risk: Musculoskeletal strain, Fatigue**	**3**	• Use mechanical handling equipment where possible • Correct lifting technics will be used whenever a lift is required • **Preparation**: The first step in any lifting operation is preparation. Plan how you will carry out the lift and clear away any obstacles. By visualising the lift, you will automatically make your stomach muscles contract. These muscles brace your back and will significantly contribute to injury prevention • **Size up to load**: By moving the load sideways and forwards you will be able to ascertain whether it is within your capacity. Always imagine that the object you are about to lift is much heavier than it is • **Proper foot position**: As a general rule the front foot should be beside the object. The back foot should be slightly behind and be hip width from the front foot. This achieves a stable base and allows for even distribution of weight • **Proper hold**: Ideally with the proper hold the hands should be diagonally opposite for security and comfort. Use the full length of the fingers and where possible the palms to avoid fatigue • **Bend at the knees**: Bend your knees to get down to the load and use the legs to lift it. This way thigh and leg muscles are used, and these are the strongest part of your body (your back muscles are only for bracing) • **Straight back**: Keep your back as near to straight as possible, raise your head, keeping your chin in. This will keep your spine straight and enable you to see where you are going	**5**

Site Risk Assessments – Listed Alphabetically by Non-High-Risk Activities				
Activity	Hazards & Risks	PRE-Risk	Work Method Used	POST Risk
			• **Keep the load close to you**: During the lift, keep the arms as straight as possible, and the elbows into the side. Don't change your grip while carrying and directly face the spot on which the load will rest. Never combine lifting with the twisting of your body. If you must turn, do it by moving your feet. Twisting causes the worst type of back injuries • **When a team lift is required, good communication will be used to co-ordinate the lift**: Whenever team lifting is used, it is essential to co-ordinate and carefully plan the lift. When organising a lift, ensure: ○ An adequate number of employees are chosen to help in the lift ○ Team members are of similar height. ○ One person is appointed "leader" of the team to perform the lift. ○ There is enough area for the team members to maneuver as a group. ○ Team members know their roles and responsibilities. ○ Training in team lifting has been provided and the lift is rehearsed	
Painting - Post Painting				
PPE Recommended			**Persons responsible for maintaining controls**	
Cleanup and disposal of used materials and supplies	Hazard: Unnecessary mess, Environmental contamination **Risk: Slips, trips, and falls, Contamination of ground water**	**3**	• Clean up all used materials and dispose of in site bins • Communicate with site owner if site bins are not accessible available or full • Wash paint and materials away from storm water drains. Create a dam in suitable area to wash out, allow the paint slurry to dry so that it does not flow into the stormwater drains or roadway • Keep access points clean and free of clutter	**5**
Plumbing				
PPE Recommended			**Persons responsible for maintaining controls**	
Fitting pipes	Hazard: Personnel being struck or cut by sharp edges	**2**	• Ensure pipes are not LIVE before ever cutting or connecting (Earth Pipes if required.) • If not sure earth both sides of pipe before cutting • Ensure that no people, other than those workers directly involved in the plumbing operation, are in the area	4

Site Risk Assessments – Listed Alphabetically by Non-High-Risk Activities				
Activity	Hazards & Risks	PRE-Risk	Work Method Used	POST Risk
	Risk: **Loud Noises,** **Electrocution.** **Cuts/abrasions**		• All workers to be familiar with the tools • All guards used for grinders	

Dismantle Removal of old Pipes	Hazard:
	Incorrect procedure followed
	Risk:
	Personal injury
	Cut/abrasions
		2	• Visual inspection
			• Plumbing should be inspected prior to dismantling
			• Check for unacceptable:
			  ○ Warping
			  ○ Cracks
			  ○ Live Power
			  ○ Snakes or other animals
				4

Power Activated Tools - Explosive & Gas				
PPE Recommended			**Persons responsible for maintaining controls**	
Plan & prepare	Hazard: Poor planning, operator not competent **Risk:** **Puncture wound, sever injury**	**3**	• Ensure the work area is well lit • Work instructions, including plans, specifications, quality requirements and operational details, are obtained, confirmed, and applied from relevant information for planning and preparation • Safety requirements are followed in accordance with safety plans and policies • Signage and barricade requirements are identified and implemented • Plant, tools, and equipment selected to carry out tasks are consistent with job requirements, checked for serviceability, and any faults are rectified or reported prior to commencement • Use tool only as intended by manufacturer • Never point the tool at yourself or any bystander • Never press the muzzle of the tool against your hand or other part of body • Material quantity requirements are calculated in accordance with plans and specifications • Ensure services will not affect the work area. Check Plans or consult owner or authority • Materials appropriate to work application are identified, obtained, prepared, safely handled, and located ready for use • Environmental requirements are identified for the project in accordance with environmental plans and statutory and regulatory authority obligations are applied	**4**

Site Risk Assessments – Listed Alphabetically by Non-High-Risk Activities				
Activity	Hazards & Risks	PRE-Risk	Work Method Used	POST Risk
Set out Fasteners	Hazard: Not planned, operator not competent **Risk:** **damage building, sever injury, electrocution**	**3**	• Minimum distances for set out from edge of substrate material are adhered to in accordance with legislation, regulations, and codes of practice • Material is located and temporarily held or fixed into designed position according to detailed drawings • Ensure services are not near where work area will impact. Check Plans	**4**
Use of Power Activated Tools	Hazard: Operator not competent **Risk:** **Puncture wound, sever injury, electrocution**	**3**	• If you don't know or you suspect area being worked on may contain crystalline silica, STOP work and talk to supervisor for further directives • Tools are checked for operation according to manufacturer specifications • Fastener is selected according to requirements of job • Charge is selected to assessed requirements for material, base, and penetration • Attachments and accessories are installed to Tool in accordance with manufacturer specifications and safety requirements • Fastener and charge in tool are located to manufacturer specifications • Work from a secure stance and stay in balance at all times • Before using the tool, make sure that no one is standing behind or below the point where fasteners are • to be driven • Tool operation is carried out and fastener is fixed into place in accordance with manufacturer recommendations, legislation, regulations, and codes of practice • Never exceed the recommended maximum fastener driving rate (number of fastenings per hour) • Fastening penetration is checked and appropriate depth into material is applied • Power regulating device is adjusted for conditions • Misfire procedures are carried out according to manufacturer recommendations, legislation, regulations, and codes of practice i.e. ○ Keep the tool pressed against the working surface for 30 seconds. ○ If the cartridge still fails to fire, withdraw the tool from the working surface, taking care that it is not pointed towards your body or bystanders. ○ Manually advance the cartridge strip one cartridge. Use up the remaining cartridges on the strip. Remove the used cartridge strip and dispose of it in such a way that it can be neither reused nor misused • Never attempt to pry a cartridge from the magazine strip or the tool	**4**

Site Risk Assessments – Listed Alphabetically by Non-High-Risk Activities				
Activity	Hazards & Risks	PRE-Risk	Work Method Used	POST Risk
			• Keep the arms flexed when the tool is fired (do not straighten the arms) • Never leave the loaded tool unattended • Temporary holding and fixings are removed without damage to material	
Secure/ Storage of Equipment & Charges	Hazard: Equipment not secured or stored correctly **Risk: Damage to equipment, theft**	**4**	• Always unload the tool before beginning cleaning, servicing, or changing parts and before storage • Charges are stored in designated container in accordance with legislation, regulations and codes of practice and used charges are recorded • Unused fasteners, tool and attachments are stored in a carry case in line with manufacturer recommendations • Logbook is checked and maintenance recorded according to manufacturer recommendations	**6**
Maintaining Equipment	Hazard: Equipment not maintained **Risk: Damaged equipment, sever injury, tools not functioning correctly**	**2**	• Work area is cleared, and materials disposed of, reused, or recycled in accordance with legislation, regulations, codes of practice and job specification • Tools and equipment are cleaned, checked, maintained, and stored in accordance with manufacturer recommendations and standard work practices • Any damage to equipment is reported immediately and tagged out of service	**5**
Use of Hand and Power Tools				
PPE Recommended			**Persons responsible for maintaining controls**	
Prestart check at site	Hazard: Site hazards may impair works **Risk: Personal injury**	**3**	• Undertake pre-site inspection verify conditions on site will enable works to be carried out in accordance with the SWMS. • Discuss site specific works with the Site Supervisor reviewing site signage, Safety Management Plan, for site specific hazards • Ensure all employees are made aware of any site specific hazards to works and these SWMS • Construction Inducted employees are only allowed to undertake construction works • Ensure all leads tagging & testing are up to date, if applicable	**5**

Site Risk Assessments – Listed Alphabetically by Non-High-Risk Activities				
Activity	Hazards & Risks	PRE-Risk	Work Method Used	POST Risk
Use of drills, saws, planner, sander, hand tools	Hazard: Untrained workers **Risk: Personal injury**	**3**	• Workers are to use the right type and right size of tool for the job • Workers to follow the correct procedure for using every tool • Worker to check the condition of tool prior to use • Always carry pointed tools by your side with the points and heavy ends down • Never carry tools in your pockets • Keep cutting tools sharp and in good condition • Always check the rear side of the surface where the drill bit will emerge when drilling right through. Secure and cordon off the area and make sure that no one can be injured or material damaged • Cut away from yourself when using chisels and other edged tools • Handle sharp-edged and pointed tools with care • Handles must have no sharp edges or areas that dig into the fingers or palm of the hand • Do not use tools which are loose or cracked • When power tools are used follow the manufacturer's instructions for the correct PPE to be worn and the safe use instructions • Workers to be competent in the use of the PPE and risk assessments must be undertaken prior to using PPE to show that the hierarchy of control was used in determining if to use PPE • If an item of plant or equipment creates excessive noise, that is where you need to raise your voice to talk, wear appropriate hearing protection • If there is a risk of injury to the head by falling objects then wear hard hats	**5**
	Hazard: Contaminated atmosphere **Risk: Respiratory illness**	**3**	• If you don't know or you suspect area being worked on may contain crystalline silica, STOP work and talk to supervisor for further directives • Assess whether to wet down areas to reduce dust emission from works conducted • Where the risk of dust production, worker will wear appropriate PPE	**5**
	Hazard: Flying debris **Risk: Personal injury**	**3**	• Guards on tools and equipment will be maintained and working effectively before being used on site • Guarding on tools will not be removed to perform any work activity • All tools and equipment will be inspected prior to work activity for any faults or defects • If a fault or defect is found the item will be removed from services and reported to the supervisor as soon as practicable • All persons performing work where there is a risk of a foreign object striking the eye, eye protection must be worn	**5**

Site Risk Assessments – Listed Alphabetically by Non-High-Risk Activities				
Activity	Hazards & Risks	PRE-Risk	Work Method Used	POST Risk
	Hazard: Poorly maintained electrical tools **Risk:** **Electrocution**	**3**	• All corded tools will be tested and tagged in accordance with current legislation and conducted every **three months** on construction sites • All corded tools will be connected directly to an RCD switch box which is also inspected and tagged in accordance with current legislation	**5**
Powered tools with discs: grinders	Hazard: Incorrect disc or fragmented disc resulting in flying parts striking people **Risk:** **Personal injury**	**3**	• If you don't know or you suspect area being worked on may contain crystalline silica, STOP work and talk to supervisor for further directives • Grinders will always be inspected before use • If a cutting or grinding disk has been left on, carefully inspect disc prior to use • If damage to disc is noted, swap out for a new one • Never change any type of disk on a grinder without unplugging or removing battery • Checking for dead is also essential to prevent accidental operation during disk change • Never over tighten disk as this may also damage them • Guards are always manditory on a grinder. If the guard is in the way, the grinder is the wrong tool for the job • Do not remove guards for any reason while grinder is in use	**4**
Use of Trestle and Planks				
PPE Recommended			**Persons responsible for maintaining controls**	
Working on trestles 2m or greater	Hazard: Working at heights **Risk:** **Falling**	**3**	• Installation from work platforms 2 metres or above should only be performed off 2 planks (450mm) • Work performed from work platform 3 metres or above will be fitted with suitable edge protection • Materials should not be stored on the work platform • To avoid pivoting planks should be lashed or clamped • A visual inspection will be undertaken to check to see if the platform is suitable for the work activity prior to use • The height of the work platform should not exceed 5 metres	**4**
Working on trestles 2m or less	Hazard: Working at heights **Risk:** **Falling**	**3**	• If working below 2 metres maintain a clear fall zone of at least 1.5 metres free from excessive rubbish, materials, and other hazards • If a clear fall zone of 1.5 metres cannot be achieved and the risk of falling is high, suitable edge protection should be installed to the platform	**5**

Site Risk Assessments – Listed Alphabetically by Non-High-Risk Activities				
Activity	Hazards & Risks	PRE-Risk	Work Method Used	POST Risk
Working in Hot/ Humid Environments (Excess 30°or +60% Humidity)				
PPE Recommended 			**Persons responsible for maintaining controls** 	
Working in excessively hot environments or during a heat wave (i.e., working on open fields, concrete structures, etc.	Hazard: Heat and high humidity on the body, Radiant heat, High humidity, Hot objects, or Strenuous physical activity **Risk:** **Heat stress,** **Dehydration,** **Headaches,** **Nausea**	**2**	• Extended working hours, excessive heat and more strenuous activities will be carefully monitored • Have in place emergency procedures for heat stress • Supervisors to consider: ○ Length of shifts - depends on physical and mental load of the work ○ Previous hours and days worked ○ Type of work being performed ○ Level of physical and/or mental effort required to complete tasks ○ Time of the day when the work is being performed. ○ Rotating workers • Supervisors to implement, as far as is reasonably practicable: ○ Increased supervision/monitoring of workers and regular communication with them ○ Work to be carried out under shade/portable shade structure ○ Increased work to rest ratio i.e., 1 hour work to 15 minutes, minimum, rest period ○ Buddy system where workers keep an eye on each other for signs of heat effects ○ Where possible schedule work for early morning, late afternoon or at night ○ Utilize 5 min hydration breaks away from sun and work ▪ Hydration Stop: Is a controlled break facilitated by the supervisor or safety rep to bring the work crew together and re-hydrate, (water, sqwincher or hydrolytes.) will be used. This is not a normal break as the sole purpose of this is to re-hydrate • Shaded or cool area(s) for rest breaks with good ventilation - use fans if needed	**4**
Hot/ Humid environments - Emergency Response Procedures	Hazard: Unidentified heat stress or exhausted worker **Risk:** **Dehydration,** **Collapse,**	**1**	• Workers will: ○ Look after each other and ensure that there is drinking water, co-workers are taking breaks and not showing signs of heat stress ○ Ensure they have plenty of cool water to drink - not icy water ○ Use electrolyte icy blocks if not contra indicated ○ Take regular rest breaks in shade • If a worker shows symptoms: ○ Remove the worker from the heat or work area	**4**

Site Risk Assessments – Listed Alphabetically by Non-High-Risk Activities				
Activity	Hazards & Risks	PRE-Risk	Work Method Used	POST Risk
	Permanent disability, Death		○ Loosen their clothing, remove PPE including shirts and masks ○ Have them rest in a cool, well-ventilated area ○ Encourage them to drink cool (not cold) fluids ○ If symptoms do not reduce quickly, seek medical help immediately • As far as is reasonably practicable, sites to have available ice towels (i.e., esky, ice, water, and towels) as part of a first aid response. Ice towels have been shown to be an effective cooling method for heat related illness • To relieve acute symptoms, such as painful muscular cramps, hydrolytes may be used in the single serve • **DRSABCD** – Implement basic first aid • **See site First Aiders** • Each day ensure workers know who the onsite first aiders are	
Working With Lasers				
PPE Recommended 			**Persons responsible for maintaining controls** 	
Using Class 1, 2, 3 3B restricted lasers	Hazard: Exposure to lasers **Risk:** **Eye injuries**	**4**	• Users trained in safe lases use in accordance with AS 2397 (Safe use of lasers in the building and construction industry) • Use Class 1 laser where possible • Erect laser warning signs if pedestrians are in proximity • Isolate persons from laser beam if possible • Ensure the laser is not set up at eye level • If using the laser above ground, use a beam stop • Do not stare directly into beam • Avoid specular reflection (laser beam shining off metal surfaces.) • If working close to beam use appropriate safety glasses rated (ANSI Z136 and CE Certified Laser Safety Glasses) • Continually monitor the work.	**6**
End of Shift				
PPE Recommended 			**Persons responsible for maintaining controls** 	
Clean up and re-packing.	Hazard: Loading vehicle **Risk:**	**3**	• When cleaning up and repacking good manual handling techniques will be used, e.g., such as bending the knees and not the back, team lifts where possible and avoid carrying very heavy items	**5**

Site Risk Assessments – Listed Alphabetically by Non-High-Risk Activities				
Activity	Hazards & Risks	PRE-Risk	Work Method Used	POST Risk
	Muscular strains			
Leaving Site	Hazard: Environmental **Risk: Environmental damage**	**4**	• When leaving site, make sure to take away any of the left-over materials • When cleaning ensure that all environmentally sensitive products are disposed of correctly • Any leftover hazardous substances will be taken off site and disposed at the correct facility	**5**

Site Risk Assessments – Additional Tasks or Activities to be Added				
Activity	Hazards & Risks	PRE-Risk	Work Method Used	POST Risk
Additional Tasks to Add to Job				
Task 1:	Hazard: **Risk:**	**0-6**	What did you do to make it safe?	**4-6**
Task 2:	Hazard: **Risk:**	**0-6**	What did you do to make it safe?	**4-6**
Task 3:	Hazard: **Risk:**	**0-6**	What did you do to make it safe?	**4-6**