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# Site SWMS & Risk Assessments

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<b>QR Code</b>	432698
<b>Principal Contractor</b>	CES Constructions
<b>Date Provided to PC</b>	17/09/2024
<b>Revision Due</b>	17/09/2025
<b>Project</b>	Office/Warehouse Fitout
<b>Construction Site Location / Address</b>	113 Harveys Range Road
<b>Person Responsible for implementing SWMS onsite</b>	James Berryman (07) 4775 7479
<b>After Hours Contact</b>	James Berryman 0401 279 997

## 1 Purpose

The purpose of this document is to explicitly outline the Hazards and Risks associated with high-risk work activities and general construction site tasks. This Safe Work Method Statement (SWMS) must be maintained and accessible for inspection until the completion of the high-risk construction work it pertains to. In the event of a revision to the SWMS, all versions must be retained. Should a notifiable incident occur in relation to the high-risk construction work covered by this SWMS, it must be retained for a minimum of 2 years from the date of the incident.

## 2 Evaluation

Process effectiveness is evaluated through internal audits and site safety inspections. This document remains relevant until the specified review dates, unless it is found that controls may not be effective, new tasks or hazards/risks are introduced due to changes in the workplace, or in the event of a notifiable incident. In such cases, the SWMS will be reviewed and, if necessary, revised. Ultimately, everyone is responsible for upholding their duties regarding workplace safety.

The SWMS includes a provision at the end for adding or amending it. If these changes are implemented, workers must promptly notify James Berryman to ensure they are properly incorporated. Once the SWMS is amended and controls are deemed adequate for the identified hazards, all workers must re-sign the SWMS to confirm their awareness of the changes.

## 3 Doc Control Details

<b>PCBU Name:</b>	<b>Wentworth Electrical Pty Ltd</b>	<b>ABN:</b>	<b>66 897 448 203</b>	
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## 4 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.

## 5 Legislation that relates to this Safe Work Method Statement

### Legislation

- Work Health and Safety Act 2011
- Work Health and Safety Regulation 2011
- Electrical safety Act 2002
- Electrical Safety Regulation 2013

### 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
- Hazardous Manual Tasks Code of Practice 2021
- Managing Electrical Risks in the Workplace Code of Practice 2021
- Managing Risks of Plant in the Workplace Code of Practice 2021
- Managing the Work Environment and Facilities Code of Practice 2021
- Traffic Management for Construction or Maintenance Work Code of Practice 2008
- Work Health and Safety Consultation, Co-operation and Co-ordination Code of Practice 2021

## 6 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

## 7 Qualifications, Training Requirements

QBCC Licence – Electrical Contractor

Apprentice Training, if applicable

Industry White Card(s)

Supervision from James Berryman

Spotter for mobile plant, as required. Competently trained for the type of machinery with a full understanding of the tasks being conducted.

## 8 Hierarchy of Control Measures

Level 1	Level 2	Level 3
<ul style="list-style-type: none"> <li>Eliminate the Hazard</li> </ul>	<ul style="list-style-type: none"> <li>Substitute the Hazard</li> <li>Isolate the Hazard</li> <li>Engineer the Hazard out</li> </ul>	<ul style="list-style-type: none"> <li>Administration Controls</li> <li>PPE</li> </ul>

## 9 Parties responsible for implementation of Controls



SUPERVISOR

**Supervisor**



Worker

**Worker**



OPERATOR

**Operator**



ENGINEER

**Engineer**



MANAGEMENT

**Management**



SPOTTER

**Spotter**

## 10 Risk Calculator

HOW TO USE THIS RISK TABLE	Appendix B - Risk Calculator					
	RISK RATING CALCULATOR	Likelihood				
<b>Step 1:</b> Identify potential hazards.	<b>Consequence</b> What injury/damage could it cause?	<b>Rare - 3</b> Could only happen once in 25 years	<b>Unlikely - 2</b> Could happen, once in 5 years	<b>Possible - 1</b> Could happen each year	<b>Likely - 0</b> Could Happen more than once a year	<b>Almost Certain - 0</b> Could happen anytime
<b>Step 2:</b> Decide what a possible <b>Consequence</b> could be.	<b>Catastrophic - 0</b> Multiple Fatalities	<b>3</b>	<b>2</b>	<b>1</b>	<b>0</b>	<b>0</b>
<b>Step 3:</b> Decide <b>How Likely?</b> it is to happen	<b>Major - 0</b> Death or serious disability	<b>3</b>	<b>2</b>	<b>1</b>	<b>0</b>	<b>0</b>
<b>Step 4:</b> Line up your choices in the table to get a number	<b>Moderate - 1</b> Long term illness or serious injury	<b>4</b>	<b>3</b>	<b>2</b>	<b>1</b>	<b>1</b>
<b>Step 5:</b> Use the Priority table to the right.	<b>Minor - 2</b> Medical attention & several days off work	<b>5</b>	<b>4</b>	<b>3</b>	<b>2</b>	<b>2</b>
	<b>Insignificant - 3</b> First aid needed	<b>6</b>	<b>5</b>	<b>4</b>	<b>3</b>	<b>3</b>

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



**High Risk Work Activity: 1. Working at Height 2m+**

Activity	Hazards & Risks	PRE-Risk	Work Method Used	POST Risk
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**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: <b>Personal injury</b>	2	<ul style="list-style-type: none"> <li>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.</li> <li>Flashing Lights are always on when machine is in use</li> <li>Logbooks are in date and easily accessible</li> <li>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</li> <li>Ensure correct operation of movement alarms, emergency stop controls and emergency lowering controls</li> <li>Remove obstructions or reposition equipment</li> <li>Do not continue if you cannot confirm the stability of the machine</li> <li>Assign a Spotter to remain on the ground in visual contact with the operator.</li> <li>Spotter to ensure any sensor type door openings (i.e. truck bay curtain door) are isolated prior to EWP moving towards/through the sensor</li> </ul> <p><b>Spotter is responsible for:</b></p> <ul style="list-style-type: none"> <li>Monitoring activity from around the base of scissor lift</li> <li>Aiding when the scissor lift makes any movements and keep area clean of obstructions</li> <li>Activating emergency lowering mechanism if required</li> <li>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)</li> <li>Drop Zones</li> <li>Signage to keep unauthorized person out</li> <li>Isolating sensors on door openings</li> </ul>	4
Working from a scissor lift	Hazard: Fall from height Risk: <b>Personal injury</b>	2	<ul style="list-style-type: none"> <li>Operator must ensure operation is authorised and in accordance with SWMS</li> <li>Carry out a prestart inspection, and include how to lower machine in an emergency</li> <li>When unit is travelling:                             <ul style="list-style-type: none"> <li>Always use safe speed</li> <li>Platform is at a safe level and for clear vision in direction EWP is travelling</li> <li>Body is kept fully within the confines of the platform</li> </ul> </li> </ul>	4





High Risk Work Activity: 1. Working at Height 2m+				
Activity	Hazards & Risks	PRE-Risk	Work Method Used	POST Risk
			<p>(If a worker leans outside of the handrail, a Harness attached to the labelled anchor point must be used to prevent the fall risk.)</p> <ul style="list-style-type: none"> <li>○ Ensure gates of the cage remain closed.</li> <li>● Never jump or swing down from unit while it is elevated, except in an emergency</li> <li>● Always maintain 3 points of contact when exiting EWP</li> <li>● Do not carry loads on the handrails unless specified by manufacturer</li> <li>● Do not climb, sit, or stand on platform guard rails</li> </ul>	
Preparing job site	<p>Hazard: Unauthorised access</p> <p><b>Risk: Collision with other workers or persons</b></p>	2	<ul style="list-style-type: none"> <li>● Only those authorised may access site</li> <li>● 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</li> <li>● Ensure relevant site personnel have been consulted and are familiar with the plan of work for scissor lift</li> <li>● Secure all loose objects. Use a lanyard where appropriate such as carrying hand tools. Maintain control of materials on the work platform.</li> <li>● When using a scissor lift for installing edge protection ensure: <ul style="list-style-type: none"> <li>○ Poles/rails are secured individually to scissor lift</li> <li>○ Poles/rails are centrally located and evenly balanced</li> <li>○ Poles/rails are untied one item at a time</li> <li>○ Edge protection equipment must not exceed the SWL of the scissor lift</li> <li>○ Any item that is stood up in the scissor lift meets the above requirements.</li> </ul> </li> </ul>	4
Working from basket	<p>Hazard: Fall from height</p> <p><b>Risk: Personal injury</b></p>	1	<ul style="list-style-type: none"> <li>● Ensure safety rails and self-closing gates are in place</li> <li>● Operators to be trained in the safe operation of that brand and type of machine</li> <li>● Workers to attach harness, if required, to certified anchor points, as per manufacturer's specifications</li> <li>● High visibility clothing to be worn</li> <li>● Never get between lift and an immovable object.</li> <li>● Make sure there are no overhead obstructions or powerlines</li> <li>● If there is an emergency in any situation release the dead man switch</li> </ul>	4
Rescue of Injured / distressed operator	<p>Hazard: Stuck at height</p> <p><b>Risk: Distress injury i.e., health issue</b></p>	1	<ul style="list-style-type: none"> <li>● Clear area of all unnecessary persons.</li> <li>● Establish communication with operator if still conscious.</li> <li>● Where the normal upper control functions fail, the operator will use the upper auxiliary controls to lower the platform</li> <li>● 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.</li> </ul>	4

**High Risk Work Activity: 1. Working at Height 2m+**

Activity	Hazards & Risks	PRE-Risk	Work Method Used	POST Risk
			<ul style="list-style-type: none"> <li>• 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.</li> <li>• If available, use 2<sup>nd</sup> EWP to retrieve the injured/distressed operator (in the basket).</li> <li>• Administer first aid if required.</li> <li>• Do no attempt to retrieve personnel if it is unsafe or other hazards exist.</li> </ul>	
Contact With Powerlines	Hazard: Contacting powerlines Risk: <b>Electrocution</b>	1	<ul style="list-style-type: none"> <li>• Stay calm</li> <li>• Do not climb out of the machine, as it may be 'live'</li> <li>• Warn others to keep clear</li> <li>• Try to move the machine away from the powerlines, if possible</li> <li>• 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.</li> <li>• Stay near the machine until help arrives</li> </ul>	4
Machine shut down	Hazard: Incorrectly secured machine Risk: <b>Obstruction, Mechanical damage, Theft</b>	2	<ul style="list-style-type: none"> <li>• Park equipment in designated area</li> <li>• Shut down machine as per manufacturer's specifications</li> <li>• Make sure work area if left neat and tidy - remove tools and equipment from the basket</li> <li>• 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.</li> </ul>	4

High Risk Work Activity: 11. Electricity				
Activity	Hazards & Risks	PRE-Risk	Work Method Used	POST Risk
<b>11A. Electrical - Prior to Work (Isolation)</b>				
<b>PPE Recommended</b>		 		<b>Persons responsible for maintaining controls</b>  SUPERVISOR
1. Pre-electrical 2. Pre-Plan 3. Pre-Start at Worksite	Hazard: Inadequate preparation lack of awareness faulty wiring, unidentified power source e.g. (solar/ battery) <b>Risk:</b> <b>Electrocution, damage to equipment</b>	1	<ul style="list-style-type: none"> <li>Prior to commencement of work ensure the following:               <ul style="list-style-type: none"> <li>Locations have been confirmed with the client</li> <li>All workers are competent to carry out work</li> <li>Tools and equipment are suitable to carry out the work and within test date.</li> </ul> </li> <li>Ensure that prior to work commencing a pre-start is carried out that covers, as a minimum               <ul style="list-style-type: none"> <li>Planned activities for the day</li> <li>All hazards for the activities are identified and that control measures for each hazard eliminate the risk or reduce the risk to an acceptable level.</li> <li>Always test prior to touching (THIS IS MANDATORY). The circuitry labelling MAY BE WRONG, do not take chances.</li> </ul> </li> </ul>	4
Turning off power and Isolating prior to work.	Hazard: Inadequate preparation lack of awareness faulty wiring, unidentified power source e.g. (solar/ battery) <b>Risk:</b> <b>Electrocution, damage to equipment</b>	1	<ul style="list-style-type: none"> <li><b>The following lock-out process is used:</b> <ul style="list-style-type: none"> <li>Shut down the machinery and equipment</li> <li>Identify all energy sources and other hazards</li> <li>Identify all isolation points</li> <li>Isolate all energy sources</li> <li>In the case of electrical equipment 'whole current isolation', such as the main isolator, should be used instead of 'control isolation' by way of the stop button on a control panel</li> <li>Control or de-energise all stored energy</li> <li>Lock-out all isolation points, using padlocks, multi- padlock hasps and danger tags</li> <li>'Danger tag' machinery controls, energy sources and other hazards. A tag should be attached to normal locks at all points of isolation used to de-energise electrical equipment from its electricity supply</li> </ul> </li> <li><b>'TEST FOR 'DEAD' BEFORE YOU TOUCH'</b></li> <li>Before commencing any electrical work:               <ul style="list-style-type: none"> <li>Consult with management or person who has control of the workplace and notify any other affected persons as appropriate Identify circuit(s) requiring isolation.</li> </ul> </li> </ul>	5

High Risk Work Activity: 11. Electricity				
Activity	Hazards & Risks	PRE-Risk	Work Method Used	POST Risk
			<ul style="list-style-type: none"> <li>○ All electrical cables and assemblies must be disconnected from all sources of electricity supply</li> <li>○ All live testing must be undertaken by a competent &amp; licenced electrician. With an LVR trained person nearby.</li> <li>○ Identify circuit(s) requiring isolation</li> <li>○ Circuits must be proven to be de-energised by a competent &amp; licenced electrician.</li> <li>○ Fit DANGER TAGS and locks to ensure that circuits cannot be energised inadvertently</li> <li>● <b>Test for Dead</b> (Must be undertaken by a competent &amp; licenced electrician):</li> <li>● Even if the electricity supply is believed to have been isolated, it must be assumed that all conductors and electrical components are energised until they have been proven de-energised.</li> <li>● The testing method (including the testing equipment used must be safe and effective.</li> <li>● Volt sticks or similar <b>are not</b> an acceptable testing device to confirm that power is OFF</li> <li>● Equipment-mounted voltmeters should not be used as the only method of determining whether an electrical part is de-energised.</li> <li>● Voltage testers are to be tested for correct operation immediately before use and again after use to confirm that the instrument is still working.</li> </ul>	
During electrical works (Exposed wires)	Hazard: Hanging wires, exposed wires, running wires Risk: <b>Tripping, eye injury,</b>	<b>2</b>	<ul style="list-style-type: none"> <li>● During works exposed wires that are left from shift to shift will be twisted and capped to prevent injury. In some cases where work is being conducted on a multitude of systems live power and deadlines will be clearly identified with tags along the lines</li> <li>● Keep the leads and wires off the ground and out of the way of pedestrian traffic onsite. If this is not possible some form of barricading will be required to prevent other trades from interacting with the leads or wires.</li> </ul>	<b>5</b>
Turning power back on and removing isolation	Hazard: Missed wires, faulty leads Risk: <b>Electrocution, damage to equipment.</b>	<b>1</b>	<ul style="list-style-type: none"> <li>● Upon completion of all onsite electrical work, supervisor will identify all power sources effected prior to re-energizing a system</li> <li>● A Trades Apprentice will never be solely responsible for re-energizing a system</li> <li>● On completion of job:               <ul style="list-style-type: none"> <li>○ Make safe - terminate and test all conductors before re-energising - must be undertaken by a competent &amp; licenced electrician</li> <li>○ Notify all workers working on the electrical equipment and other affected workers at the workplace that electricity is to be restored.</li> <li>○ Remove tags and locks (each person removes their danger tag and/or lock).</li> <li>○ Carry out a visual inspection to ensure tools, surplus materials and waste has been removed.</li> </ul> </li> </ul>	<b>5</b>

High Risk Work Activity: 11. Electricity				
Activity	Hazards & Risks	PRE-Risk	Work Method Used	POST Risk
			<ul style="list-style-type: none"> <li>Once electricity is restored tests must be carried out to confirm that polarity is correct (must be undertaken competent &amp; licenced electrician), actives are switched and, where applicable, phase sequences are correct before electrical equipment is used.</li> </ul>	
11C. Electrical - Installation of Wiring and Fittings				
PPE Recommended			Persons responsible for maintaining controls	
Accessing roof space to undertake works when power is live to the house	Hazard: Electric shock Risk: <b>Electrocution</b>	1	<ul style="list-style-type: none"> <li>For isolation process Refer to 11A Prior to Work – Isolation</li> <li><b>Prior to Accessing the Roof Space:</b> <ul style="list-style-type: none"> <li>Before starting any work, turn off all electricity to the property at the main switchboard (must be undertaken competent &amp; licenced electrician) and take steps to prevent the electricity from being turned back on while work is in progress (tag/lock-out).</li> </ul> </li> <li><b>Accessing Roof Space:</b> <ul style="list-style-type: none"> <li>Be aware that heat and humidity may cause heat stress, so make sure fluid intake is sufficient to ensure you do not become dehydrated. Avoid accessing roof space in hot weather conditions (early morning starts better on high temperature days).</li> <li>Take additional lighting (e.g., torch) with you as the lighting is generally poor in ceiling spaces.</li> <li>Take care accessing and traversing the work area, avoiding tripping over debris, material, and the ceiling trusses.</li> <li>Step carefully on ceiling joists or other beams – not the ceiling material (i.e., Gyprock sheeting). To avoid risk of falling or injury maintain three points of contact (foot on each truss and hand on girder).</li> <li>Be aware of the location of electrical cables, fittings and equipment and avoiding contact with them. Solar hot water piping can be very hot if not covered by the insulation.</li> <li>If the roof space is dusty wear a P2 dust mask.</li> </ul> </li> </ul>	4
Cable and ladder tray installation	Hazard: Exposed nails manual handling Risk: <b>Personal injury</b>	2	<ul style="list-style-type: none"> <li>Check layout and mark out</li> <li>Secure fixings and supports using correct size bolts and fixings</li> <li>Cut ladders or trays to fit using drop saw or 100mm angle grinder with guard attached</li> <li>Secure ladders or trays to support</li> <li>Ensure area walkways are clear</li> <li>Remove sharp edges and protruding fixings.</li> </ul>	5




High Risk Work Activity: 11. Electricity				
Activity	Hazards & Risks	PRE-Risk	Work Method Used	POST Risk
Installing light fittings	Hazard: Falling objects, manual handling, electricity, working at heights <b>Risk: Personal injury</b>	1	<ul style="list-style-type: none"> <li>For isolation process Refer to 11A Prior to Work – Isolation</li> <li>Check layout and mark out</li> <li>Receive lights on site and confirm correct numbers and types</li> <li>Confirm cabling requirements</li> <li>Install light fitting base or bracket and terminate cabling or plug into lighting socket</li> <li>Complete the fitting of any other parts</li> <li>Confirm fitting is secure and installed to specifications</li> <li>Test and confirm cables before commencing work. Isolate and fit danger tags as appropriate</li> <li>Ensure power tools (if applicable) and leads are tagged.</li> </ul>	4
Installation of Switch boards	Hazard: Falling objects, manual handling, electric shock, explosion <b>Risk: Personal injury</b>	1	<ul style="list-style-type: none"> <li>For isolation process Refer to 11A Prior to Work – Isolation</li> <li>Confirm installation specifications</li> <li>Prepare installation area and confirm adequate space including door swing for maintenance</li> <li>Arrange for crane or other mechanical handling equipment if needed</li> <li>Receive switchboard on site including test certificates</li> <li>Transfer switchboards to installation location</li> <li>Mark out location ensuring coordination with other services</li> <li>Install switchboard to manufactures and client’s specifications</li> <li>Commission switchboard.</li> </ul>	4
Installation of pyrotenax (mims) cable	Hazard: Exposed nails, working at height, sharp edges <b>Risk: Personal injury</b>	1	<ul style="list-style-type: none"> <li>Check location to drawing and specification layout and mark out</li> <li>Confirm cable specification and condition</li> <li>Confirm cable supports on conduits have been installed to specifications</li> <li>Install rollers or other protection to client’s specifications</li> <li>Install cable stands to client’s specifications</li> <li>Install cable manually with rope or winch as appropriate to client’s specification</li> <li>Cut any excess cable and seal exposed ends to manufacturer’s recommendations</li> <li>Locate/dress cable to fix in position to client’s specification.</li> </ul>	4
Installation of lighting looms	Hazard: Falling object, sharp edges, electricity, unstable ladders	1	<ul style="list-style-type: none"> <li>For isolation process Refer to 11A Prior to Work – Isolation</li> <li>Check drawings to confirm loom locations and specifications</li> <li>Receive cable and sockets bases on site and confirm correct types, sizes, and numbers</li> <li>Construct lighting looms to client’s specifications</li> </ul>	4

High Risk Work Activity: 11. Electricity				
Activity	Hazards & Risks	PRE-Risk	Work Method Used	POST Risk
	<b>Risk:</b> <b>Personal injury</b>		<ul style="list-style-type: none"> <li>Label each loom with distribution board and circuit number</li> <li>Install looms to client's specifications</li> <li>Confirm socket locations and fixings to client's specification</li> <li>Install circuit feeds and switch wires to client's specifications.</li> </ul>	
Installation of cable supports	Hazard: Falling object, sharp edges, electricity, unstable ladders <b>Risk:</b> <b>Personal injury</b>	1	<ul style="list-style-type: none"> <li>For isolation process Refer to 11A Prior to Work – Isolation</li> <li>Check location to drawing and specifications</li> <li>Receive cable supports on site confirming correct type, size, and number.</li> <li>Mark out route of cable supports to specifications confirming clearance of other services</li> <li>Install supports, as necessary, to client's specifications and using correct size bolts</li> <li>Confirm tightness of fixings</li> <li>Install cable supports.</li> </ul>	5
Installation of mains power	Hazard: Electricity, explosion, incorrect isolation <b>Risk:</b> <b>Personal injury</b>	1	<ul style="list-style-type: none"> <li><b>Must be undertaken by a competent &amp; licenced electrician</b></li> <li>Liaise with Supply Authority to coordinate to supply</li> <li>Obtain Supply Authority Certificates and check drawings</li> <li>Coordinate shutdowns with client</li> <li>For isolation process Refer to 11A Prior to Work – Isolation</li> <li>Receive mains on site</li> <li>Shut down and install 'DANGER TAGS'</li> <li>Remove existing mains terminations if applicable</li> <li>Install mains to specifications</li> <li>Terminate new mains to specifications</li> <li>Confirm DEAD and identify cables before commencing work</li> <li>Wear suitable gloves</li> <li>Confirm installation to drawings and specifications and ensure connections are tight</li> <li>Clean area</li> <li>Test installation</li> <li>Liaise with Supply Authority for inspection and test</li> <li>Remove 'DANGER TAGS' / locks (each person removes their danger tag and/or lock)</li> <li>Energise supply</li> <li>Install signs or labels as required.</li> </ul>	4



High Risk Work Activity: 11. Electricity				
Activity	Hazards & Risks	PRE-Risk	Work Method Used	POST Risk
Installation of switchboard connections	Hazard: Falling objects, manual handling, electric shock, explosion Risk: <b>Personal injury</b>	1	<ul style="list-style-type: none"> <li>• <b>Must be undertaken by a competent &amp; licenced electrician</b></li> <li>• Confirm switchboard meets Australian Standards and has been installed to specifications</li> <li>• Confirm cables to be connected meet specifications and all cables have been installed. Check any specific requirements have been met</li> <li>• For isolation process Refer to 11A Prior to Work – Isolation</li> <li>• Group cables together as they enter switchboard and fix with cable ties</li> <li>• Separate cables into groups of like destination. Seal or plug any unused cable entries</li> <li>• Mark each conductor prior to removing any secondary insulation</li> <li>• Group conductors of like destinations and fix into a loom system</li> <li>• Align and terminate each conductor into its correct location</li> <li>• Check and tighten all terminations and connections</li> <li>• Confirm installations meet specifications</li> <li>• Install labels, signs or markings as required</li> <li>• Clean switchboard</li> <li>• Confirm all circuits have been completed and DANGER TAG any incomplete circuits</li> <li>• Test and commission switchboard using relevant procedures. Confirm phase rotation of all 3-phase equipment</li> <li>• Complete records.</li> </ul>	5
Installation of new work in existing switchboards	Hazard: Electricity, explosion, incorrect isolation Risk: <b>Personal injury</b>	1	<ul style="list-style-type: none"> <li>• <b>Must be undertaken by a competent &amp; licenced electrician</b></li> <li>• Check drawings and specifications</li> <li>• For isolation process Refer to 11A Prior to Work – Isolation</li> <li>• Arrange isolation of section of, or complete switchboard with client</li> <li>• Isolate section of, or complete switchboard, install insulating barriers</li> <li>• Fit 'DANGER TAGS' to isolation devices</li> <li>• Test that works area has been safely isolated</li> <li>• Complete installations to client's specification</li> <li>• Check and tighten all terminations and connections</li> <li>• Confirm installation to client's specifications</li> <li>• Fit 'DANGER TAGS' to any incomplete work</li> <li>• Install labels, signs or markings as required</li> <li>• Clean work area</li> <li>• Test and commission new installation following relevant procedures. Confirm phase rotation of all 3-phase equipment</li> </ul>	4





High Risk Work Activity: 11. Electricity				
Activity	Hazards & Risks	PRE-Risk	Work Method Used	POST Risk
			<ul style="list-style-type: none"> <li>Complete records.</li> </ul>	
Installation of sub-mains	Hazard: Electricity explosion incorrect isolation Risk: <b>Personal injury</b>	1	<ul style="list-style-type: none"> <li><b>Must be undertaken by a competent &amp; licenced electrician</b></li> <li>For isolation process Refer to 11A Prior to Work – Isolation</li> <li>Check location to drawings and specification layout and mark out</li> <li>Plan installation to work towards the main switchboard</li> <li>Confirm cable specifications and condition</li> <li>Install cable to client’s specifications</li> <li>Terminate sub mains to specifications</li> <li>Clean area</li> <li>Test installation</li> <li>Remove ‘DANGER TAGS’</li> <li>Energise main switchboard</li> <li>Install signs or labels are required.</li> </ul>	4
Installation of power and light cabling	Hazard: Falling objects, manual handling electric shock, explosion Risk: <b>Personal injury</b>	1	<ul style="list-style-type: none"> <li><b>Must be undertaken by a competent &amp; licenced electrician</b></li> <li>For isolation process Refer to 11A Prior to Work – Isolation.</li> <li>Check location to drawings and specification layout and mark out.</li> <li>Plan installation to work towards the main switchboard.</li> <li>Confirm cable specifications and condition.</li> <li>Install cable to client’s specifications.</li> <li>Terminate submains to specifications.</li> <li>Clean area.</li> <li>Test installation.</li> <li>Remove ‘DANGER TAGS’ (each person removes their danger tag and/or lock).</li> <li>Energise main switchboard.</li> <li>Install signs or labels are required.</li> </ul>	4
Installation of power points	Hazard: Electric shock, manual handling Risk: <b>Personal injury</b>	2	<ul style="list-style-type: none"> <li><b>Must be undertaken by a competent &amp; licenced electrician</b></li> <li>Check layout to drawings and specifications and confirm with client.</li> <li>Check walls, cavities and ceilings for other services and confirm location of any water pipes, gas lines, power, or telephone cables.</li> <li>Check equipment is tagged.</li> </ul>	4

High Risk Work Activity: 11. Electricity					
Activity	Hazards & Risks	PRE-Risk	Work Method Used	POST Risk	
			<ul style="list-style-type: none"> <li>Fit power point mounting brackets as required.</li> <li>Tape or insulate ends of new cable to prevent electrical contact.</li> <li>Run cables.</li> <li>Connect power points.</li> <li>Confirm fittings are secure and installed to specifications.</li> <li>Clear area and remove Isolation or 'DANGER TAGS' (each person removes their danger tag and/or lock).</li> </ul>		
11E. Electrical - Installing Mains Board					
PPE Recommended		 	Persons responsible for maintaining controls		 SUPERVISOR
Work area preparation	Hazard: Set up, untidy work area, non-competent workers Risk: <b>Personal injury</b>	4	<ul style="list-style-type: none"> <li><b>Must be undertaken by a competent &amp; licenced electrician.</b></li> <li>Authority and empowerment to Stop the Job.</li> <li>Follow all site rules and procedures.</li> <li>Ensure correct manual handling techniques are followed.</li> <li>Wear all mandatory PPE and task specific PPE.</li> <li>Communicate task clearly with all work crew members. Ensure a thorough understanding of expectations.</li> <li>If a hazard is identified in the work area – fix it immediately or if unable to do so, isolate the hazard and inform you supervisor.</li> <li>Work on flat surface where practicable</li> <li>Secure all tools and/or equipment by lanyard or store in a toolbox/basket when on the work platform.</li> </ul>	6	
Obtain Supply Authority Certificates and check drawings.	Hazard: Non-competent workers Risk: <b>Damage to work area, electrocution</b>	3	<ul style="list-style-type: none"> <li>Ensure all latest revision plans, diagrams etc. are on site.</li> <li>Ensure plans and diagrams are reviewed by entire work crew prior to work commencing.</li> </ul>	4	
Coordinate shutdown and isolations followed by	Hazard: Non-competent workers Risk:	3	<ul style="list-style-type: none"> <li>Confirm <b>Not Live</b></li> <li>Obtain work approval and confirm any client site/safety instruction.</li> <li>Check scope of works to confirm whether work be re-scheduled so it may be isolated.</li> </ul>	4	

High Risk Work Activity: 11. Electricity				
Activity	Hazards & Risks	PRE-Risk	Work Method Used	POST Risk
installation of DANGER Tags	<b>Damage to work area, electrocution</b>		<ul style="list-style-type: none"> <li>Confirm with client that works meet the requirements regarding work on energised equipment and apparatus and the risk of harm would be greater if the circuits were de-energised before work commenced.</li> <li>Confirm that person/s carrying out the work are appropriately qualified, competent, confident, and trained for the task.</li> </ul>	
Remove existing mains terminations if applicable	Hazard: Non-competent workers <b>Risk:</b> <b>Damage to work area, electrocution</b>	<b>2</b>	<ul style="list-style-type: none"> <li><b>Must be undertaken by a competent &amp; licenced electrician.</b></li> <li>Identify the electrical equipment to be worked on and the appropriate points of supply.</li> <li>Isolate the equipment from sources of supply, if possible.</li> <li>Secure the isolation by such means as lock-out to prevent inadvertent re-energisation and attached a danger tag. For isolation process Refer to 11A Prior to Work - Isolation.</li> <li>Prove that the exposed conductors are de-energised (i.e., 'test for dead').</li> <li>Working persons shall confirm rescue procedures and have attended LVR training.</li> </ul>	<b>4</b>
Confirm installation to drawings and specifications and ensure connections are tight	Hazard: Non-competent workers, sharp edges, manual handling <b>Risk:</b> <b>Damage to work area, personal injury</b>	<b>4</b>	<ul style="list-style-type: none"> <li>Confirm <b>Not Live.</b></li> <li>Ensure appropriate test equipment is being used.</li> <li>Appropriate tools for the job are available.</li> <li>Ensure all appropriate barricading is in place to isolate the area.</li> <li>Working kits are used and maintained, and first check operation of test apparatus.</li> <li>Visual inspection shall include: <ul style="list-style-type: none"> <li>Basic protection (protection against direct contact with live parts).</li> <li>Fault protection (protection against indirect contact with exposed conductive parts).</li> <li>Protection against hazardous parts (guarding/screening).</li> <li>Protection against spread of fire (fire blanket / fire extinguisher).</li> <li>General condition of equipment.</li> </ul> </li> <li>Ensure the busbar has been covered appropriately and that all blanks have been re-inserted.</li> </ul>	<b>5</b>
Liaise with Supply Authority for inspection and test	Hazard: Non-competent workers <b>Risk:</b> <b>Damage to work area, electrocution</b>	<b>2</b>	<ul style="list-style-type: none"> <li>Obtain work approval and confirm any client site/safety instruction.</li> <li>Check scope of works to confirm isolations are in place prior to test commencing.</li> <li>Confirm with client that the work meets the requirements regarding work on energised equipment.</li> <li>Confirm that person/s carrying out the work are appropriately qualified, competent, and trained for the task.</li> </ul>	<b>4</b>

High Risk Work Activity: 11. Electricity				
Activity	Hazards & Risks	PRE-Risk	Work Method Used	POST Risk
Remove DANGER Tags and Energise supply	Hazard: Non-competent workers <b>Risk:</b> <b>Damage to work area, electrocution</b>	2	<ul style="list-style-type: none"> <li>Obtain work approval and confirm any client site/safety instruction.</li> <li>Confirm with client that works meet the requirements regarding work on energised equipment and</li> <li>Sequence the energising and test &amp; check, by sections (e.g., polarity).</li> <li>Confirm operational and safe prior to handover.</li> <li>Complete Certificate of Electrical Safety and other paperwork. Provide relevant paperwork to client and submit to authorities, as required.</li> <li>Locks and Danger Tags to be removed by person who placed and signed tag.</li> </ul>	4
<b>11F. Electrical - Installing Temp Site Power</b>				
<b>PPE Recommended</b>		<b>Persons responsible for maintaining controls</b>		
				
Installing Temp Site power to Power Pole or secure stand.	Hazard: Non-competent workers <b>Risk:</b> <b>Damage to work area, electrocution</b>	1	<ul style="list-style-type: none"> <li><b>Must be undertaken by a competent &amp; licenced electrician.</b></li> <li>Choose a suitable area for Temporary Main Power to be located. (Liaise with Site Authority or Supervisor).</li> <li>Once a suitable location has been selected ensure the area is clean and ready with no housekeeping issues.</li> <li>If the Mains power Board is to be installed onto a stand the structure must be secured so that is cannot be tipped over. Bolted to the ground or to a suitable base (e.g., large timber pallet in good condition).</li> <li>Once the above has been completed then: <ul style="list-style-type: none"> <li>Coordinate shutdown and isolations (for isolation process Refer to 11A Prior to Work – Isolation) followed by installation of DANGER Tags.</li> <li>Confirm cables to be connected meet specifications and all cables have been installed.</li> </ul> </li> <li>Cabling: <ul style="list-style-type: none"> <li>Group cables together as they enter switchboard and fix with cable ties.</li> <li>Separate cables into groups of like destination. Seal or plug any unused cable entries.</li> </ul> </li> <li>Conductors: <ul style="list-style-type: none"> <li>Mark each conductor prior to removing any secondary insulation.</li> <li>Group conductors of like destinations and fix into a loom system.</li> <li>Align and terminate each conductor into its correct location.</li> </ul> </li> <li>Check and tighten all terminations and connections.</li> <li>Confirm installations to manufacturers and client's specifications.</li> <li>Clean switchboard.</li> </ul>	4



High Risk Work Activity: 11. Electricity				
Activity	Hazards & Risks	PRE-Risk	Work Method Used	POST Risk
			<ul style="list-style-type: none"> <li>Confirm all circuits have been completed and DANGER Tag any incomplete circuits.</li> <li>Test and commission switchboard. Confirm phase rotation of all 3-phase equipment.</li> <li>Install signs or labels as required.</li> <li>Complete appropriate documentation (switchboard schedules, update drawings and workbook).</li> </ul>	
11GB. Electrical - Aircon Installation of New Units				
PPE Recommended		Persons responsible for maintaining controls		
				
Installation of air conditioners	Hazard: Fire, electric shock, leakage of refrigerant Risk: <b>Personal injury, environmental damage</b>	1	<ul style="list-style-type: none"> <li><b>Must be undertaken by a competent &amp; licenced electrician</b></li> <li>As required for isolation process refer to Section 11A Prior to Work – Isolation</li> <li>Pre-job toolbox talk shall be conducted by the supervisor to discuss identified hazards and control measures to be implemented for the activity</li> <li>Prior to use equipment shall be inspected by competent person i.e., calibrated equipment</li> <li>All installation and construction work required will be undertaken in accordance with manufacturer’s instructions and project requirements</li> <li>Connecting power cables/wires shall be as per manufacturer’s instructions</li> <li>Install copper pipes, and neaten; braze copper piping together, ensuring that the hot work is monitored to ensure adequate cooling &amp; inspect for faults</li> <li>Extend cables – use junction box to connect extra cabling</li> <li>Competent and licenced electrician to inspect for waterproofing and correct connections</li> <li>Access external air conditioner position by scaffolding erected / barricades, using appropriate PPE &amp; equipment</li> <li>Install supports or brackets for AC units as per specification i.e., rubber feet, concrete slabs, or wall brackets (customer choice)</li> <li>Connect copper pipes and power cable to outdoor unit</li> <li>Test all the valves and joints for leaks.</li> <li><b>Must be undertaken by a competent &amp; licenced electrician</b></li> <li>Turn air con on (cooling) in accordance with manufacturer’s instructions</li> <li>Test air con</li> <li>Check gas level</li> <li>If necessary, re-gas air con using appropriate gas as per manufacturer specifications</li> </ul>	5

High Risk Work Activity: 11. Electricity				
Activity	Hazards & Risks	PRE-Risk	Work Method Used	POST Risk
			<ul style="list-style-type: none"> <li>Commission the equipment with a calibrated instrument</li> <li>Certificate of testing and safety shall be provided to customer</li> </ul>	
Refrigerant handling Transporting refrigerant	Hazard: Damage to cylinder, leaking refrigerant during charging of equipment  Risk: <b>Personal injury</b>	2	<ul style="list-style-type: none"> <li><b>Must be undertaken by a worker who is competent &amp; licenced in refrigerant handling</b></li> <li>Ensure cylinders are kept secure and vertical</li> <li>During transport firmly secure cylinders with strapping against a roll cage</li> <li>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.</li> </ul>	5

**High Risk Work Activity: 15. Mobile Plant**






Activity	Hazards & Risks	PRE-Risk	Work Method Used	POST Risk
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**15BA. Mobile Plant - Driving Work Vehicles Onsite**



PPE Recommended		Persons responsible for maintaining controls		
				
Driving work vehicles onto site	Hazard: Traffic Risk: <b>Uncontrolled contact between vehicles and people</b>	<b>1</b>	<ul style="list-style-type: none"> <li>• Driver is responsible for conducting prestart vehicle checks</li> <li>• Only licensed drivers are permitted to drive vehicles</li> <li>• Always drive according to road and weather conditions</li> <li>• Driver to be aware of site instructions and any specific hazards/risks that may be relevant</li> <li>• Flashing lights are always used on mobile plant and vehicles</li> <li>• Adherence to site safety plan, exclusion zones, communication, consultation.</li> <li>• Follow the site safety plan relating to traffic control safety</li> <li>• Increase awareness of pedestrians if works are adjacent to the existing footpath</li> <li>• All pedestrians to be diverted around work area</li> </ul>	<b>5</b>
Mobilising on site	Hazard: Obstruction Unauthorised access Risk: <b>Crush death Inadequate PPE Crushing</b>	<b>2</b>	<ul style="list-style-type: none"> <li>• Do not work within 3m of live traffic unless:                             <ul style="list-style-type: none"> <li>○ A Traffic Management Plan is in place</li> <li>○ A Traffic Control system is in place – under the direction of ticketed traffic controllers</li> <li>○ There is a safety barrier in place (such as concrete new jersey curbs), water filled Triton barriers and or a shadow vehicle</li> </ul> </li> <li>• Remove obstructions or reposition equipment</li> <li>• Ground condition and slope must be assessed prior to loading/unloading</li> <li>• Do not continue if you cannot confirm the stability of the machinery</li> <li>• Only those authorised may access site</li> <li>• 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</li> <li>• High visibility clothing to be always worn</li> <li>• Transport driver shall be responsible for tie down of load and removing tie downs, straps etc</li> <li>• Maintain visual contact between plant operators and other personnel at all times. Spotters to be used where required for reversing operations, tight areas etc.</li> <li>• Avoid unloading/loading plant under power lines</li> </ul>	<b>4</b>

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 <b>Risk: Damaged equipment, crush death</b>	1	<ul style="list-style-type: none"> <li>• Qualified and competent operator to always unload vehicle</li> <li>• Warning signage and exclusion zones installed indicating hazard</li> <li>• Align machinery with ramps prior to unloading</li> <li>• Using a spotter when reversing</li> <li>• Adjust ramps to suit wheel width</li> <li>• Use winch cable and remote where possible</li> <li>• Remove excess personnel from the work area</li> <li>• Unloading to be done on level ground</li> </ul>	4
Moving machinery around site	Hazard: Obstruction (Overhead, at ground level or underground), faulty equipment, plant tipping or rolling over <b>Risk: Crush death</b>	1	<ul style="list-style-type: none"> <li>• Remove obstructions or reposition equipment</li> <li>• Do not continue if you cannot confirm the stability of the machinery</li> <li>• Check all electrical systems are operational</li> <li>• Check all warning systems and devices are operational</li> <li>• Only authorised personnel shall carry out maintenance checks</li> <li>• Only qualified person shall carry out repairs and maintenance</li> <li>• Check tyre tread and pressure are satisfactory (where applicable)</li> <li>• Provide tilt alarm system to advise operator of machine operating beyond safe working angles</li> <li>• Ensure the machine is an "outdoor rated" machine if operating where there is a risk of external wind</li> <li>• Operator is responsible to not exceed the safe working load and wind rating of the plant</li> <li>• Operator to be trained and competent in the safe operation of the plant</li> </ul>	5
Stationary equipment	Hazard: Accidental movement of plant <b>Risk: Crush death</b>	1	<ul style="list-style-type: none"> <li>• Ensure tools and equipment are stored appropriately</li> <li>• Ensure emergency stop switch is pushed in when equipment function completed and work to commence</li> <li>• Ensure shutdown procedures are followed as per the manufacture's manual</li> </ul>	5
Refueling with diesel or petrol	Hazard: Spills, exposure to hazardous substances <b>Risk:</b>	1	<ul style="list-style-type: none"> <li>• Use a designated refuelling point where practical</li> <li>• Ensure machine is turned off before refuelling</li> <li>• Fire extinguisher to be available in mobile plant. Extinguisher to be maintained according to Australian Standard and training in the correct use of extinguisher has been undertaken</li> <li>• Refuelling of portable containers must be done on the ground</li> </ul>	5





High Risk Work Activity: 15. Mobile Plant					
Activity	Hazards & Risks	PRE-Risk	Work Method Used	POST Risk	
	<b>Fire, skin irritation, ground contamination</b>		<ul style="list-style-type: none"> <li>All hot work or sources of ignition will be kept away while refuelling takes place</li> <li>Appropriate size spill kits are to be available to implement if required</li> <li>All workers will wash their hands and arms with water when finished handling diesel/petrol</li> <li>Any contaminated clothing will be removed</li> <li>All workers will read the Safety Data Sheet prior to use</li> </ul>		
15BB. Working Near Onsite Mobile Plant					
PPE Recommended		  	Persons responsible for maintaining controls		  Worker SUPERVISOR
Working near onsite mobile plant. (Under or beside)	Hazard: Road traffic <b>Risk: Contact between persons and vehicles</b>	2	<ul style="list-style-type: none"> <li>When establishing work areas consider mobile plant onsite has right of way</li> <li>All personnel to have undergone site specific familiarisation</li> <li>Erect any barriers &amp; signage necessary to keep others safe and aware of the work being undertaken</li> <li>Designated pedestrian routes to be established where required</li> <li>Personnel not to enter the swing zone of equipment without positive communications with operator</li> <li>Restrict access to work area. Ensure: <ul style="list-style-type: none"> <li>Exclusion zones surrounding work area using barricades and signage is in place</li> <li>Any other workers within the exclusion zones are wearing PPE as required</li> <li>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</li> </ul> </li> <li>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</li> <li>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.</li> <li><b>Never work under a load being lifted by any type of crane.</b></li> </ul>	5	

## Site Risk Assessments – Listed Alphabetically by Non-High-Risk Activities

Activity	Hazards & Risks	PRE-Risk	Work Method Used	POST Risk
<b>Manual Handling</b>				
<b>PPE Recommended</b>			<b>Persons responsible for maintaining controls</b>	
Manual Handling	Hazard: Locations of the loads and distances to be moved  Risk: <b>Musculoskeletal strain, Fatigue</b>	<b>3</b>	<ul style="list-style-type: none"> <li>Use mechanical handling equipment where possible</li> <li>Correct lifting technics will be used whenever a lift is required</li> <li><b>Preparation:</b> 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</li> <li><b>Size up to load:</b> 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</li> <li><b>Proper foot position:</b> 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</li> <li><b>Proper hold:</b> 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</li> <li><b>Bend at the knees:</b> 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)</li> <li><b>Straight back:</b> 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</li> <li><b>Keep the load close to you:</b> 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</li> <li><b>When a team lift is required, good communication will be used to co-ordinate the lift:</b> Whenever team lifting is used, it is essential to co-ordinate and carefully plan the lift. When organising a lift, ensure:                             <ul style="list-style-type: none"> <li>An adequate number of employees are chosen to help in the lift.</li> <li>Team members are of similar height.</li> <li>One person is appointed "leader" of the team to perform the lift.</li> <li>There is enough area for the team members to maneuver as a group.</li> <li>Team members know their roles and responsibilities.</li> <li>Training in team lifting has been provided and the lift is rehearsed.</li> </ul> </li> </ul>	<b>5</b>



## Site Risk Assessments – Listed Alphabetically by Non-High-Risk Activities

Activity	Hazards & Risks	PRE-Risk	Work Method Used	POST Risk
<b>Use of Hand and Power Tools</b>				
<b>PPE Recommended</b>				<b>Persons responsible for maintaining controls</b>
				
Prestart check at site	Hazard: Site hazards may impair works <b>Risk: Personal injury</b>	<b>3</b>	<ul style="list-style-type: none"> <li>Undertake pre-site inspection verify conditions on site will enable works to be carried out in accordance with the SWMS.</li> <li>Discuss site specific works with the Site Supervisor reviewing site signage, Safety Management Plan, for site specific hazards</li> <li>Ensure all employees are made aware of any site specific hazards to works and these SWMS</li> <li>Construction Inducted employees are only allowed to undertake construction works</li> <li>Ensure all leads tagging &amp; testing are up to date, if applicable</li> </ul>	<b>5</b>
Use of drills, saws, planner, sander, hand tools	Hazard: Untrained workers <b>Risk: Personal injury</b>	<b>3</b>	<ul style="list-style-type: none"> <li>Workers are to use the right type and right size of tool for the job</li> <li>Workers to follow the correct procedure for using every tool</li> <li>Worker to check the condition of tool prior to use</li> <li>Always carry pointed tools by your side with the points and heavy ends down</li> <li>Never carry tools in your pockets</li> <li>Keep cutting tools sharp and in good condition</li> <li>Cut away from yourself when using chisels and other edged tools</li> <li>Handle sharp-edged and pointed tools with care</li> <li>Handles must have no sharp edges or areas that dig into the fingers or palm of the hand</li> <li>Do not use tools which are loose or cracked</li> <li>When power tools are used follow the manufacturer's instructions for the correct PPE to be worn and the safe use instructions</li> <li>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</li> <li>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</li> <li>If there is a risk of injury to the head by falling objects then wear hard hats</li> </ul>	<b>5</b>

## Site Risk Assessments – Listed Alphabetically by Non-High-Risk Activities

Activity	Hazards & Risks	PRE-Risk	Work Method Used	POST Risk
	Hazard: Contaminated atmosphere <b>Risk: Respiratory illness</b>	<b>3</b>	<ul style="list-style-type: none"> <li>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</li> <li>Assess whether to wet down areas to reduce dust emission from works conducted</li> <li>Where the risk of dust production, worker will wear appropriate PPE</li> </ul>	<b>5</b>
	Hazard: Flying debris <b>Risk: Personal injury</b>	<b>3</b>	<ul style="list-style-type: none"> <li>Guards on tools and equipment will be maintained and working effectively before being used on site</li> <li>Guarding on tools will not be removed to perform any work activity</li> <li>All tools and equipment will be inspected prior to work activity for any faults or defects</li> <li>If a fault or defect is found the item will be removed from services and reported to the supervisor as soon as practicable</li> <li>All persons performing work where there is a risk of a foreign object striking the eye, eye protection must be worn</li> </ul>	<b>5</b>
	Hazard: Poorly maintained electrical tools <b>Risk: Electrocution</b>	<b>3</b>	<ul style="list-style-type: none"> <li>All corded tools will be tested and tagged in accordance with current legislation and conducted every <b>three months</b> on construction sites</li> <li>All corded tools will be connected directly to an RCD switch box which is also inspected and tagged in accordance with current legislation</li> </ul>	<b>5</b>
Powered tools with discs: grinders	Hazard: Incorrect disc or fragmented disc resulting in flying parts striking people <b>Risk: Personal injury</b>	<b>3</b>	<ul style="list-style-type: none"> <li>If worker doesn't know or suspects area being worked on may contain silica then follow the steps listed in the crystalline silica component of this SWMS for specific controls of respirable crystalline silica</li> <li>Grinders will always be inspected before use</li> <li>If a cutting or grinding disk has been left on, carefully inspect disc prior to use</li> <li>If damage to disc is noted, swap out for a new one</li> <li>Never change any type of disk on a grinder without unplugging or removing battery</li> <li>Checking for dead is also essential to prevent accidental operation during disk change</li> <li>Never over tighten disk as this may also damage them</li> <li>Guards are always mandatory on a grinder. If the guard is in the way, the grinder is the wrong tool for the job</li> <li>Do not remove guards for any reason while grinder is in use</li> </ul>	<b>4</b>

## Site Risk Assessments – Listed Alphabetically by Non-High-Risk Activities

Activity	Hazards & Risks	PRE-Risk	Work Method Used	POST Risk
<b>End of Shift</b>				
<b>PPE Recommended</b>				<b>Persons responsible for maintaining controls</b> 
Clean up and re-packing.	Hazard: Loading vehicle Risk: <b>Muscular strains</b>	<b>3</b>	<ul style="list-style-type: none"> <li>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</li> </ul>	<b>5</b>
Leaving Site	Hazard: Environmental Risk: <b>Environmental damage</b>	<b>4</b>	<ul style="list-style-type: none"> <li>When leaving site, make sure to take away any of the left-over materials</li> <li>When cleaning ensure that all environmentally sensitive products are disposed of correctly</li> <li>Any leftover hazardous substances will be taken off site and disposed at the correct facility</li> </ul>	<b>5</b>

## Site Risk Assessments – Additional Tasks or Activities to be Added

Activity	Hazards & Risks	PRE-Risk	Work Method Used	POST Risk
<b>Additional Tasks to Add to Job</b>				
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