Site SWMS & Risk Assessments

QR Code	APN-934668
Principal Contractor	All Plumbing NQ
Date Provided to PC	25/03/2024
Revision Due	25/03/2025
Project	IPL Inload Tower Cladding
Construction Site Location / Address	IPL Port Operations Townsville QLD 4810
Person Responsible for implementing SWMS onsite	Dayle Faint 0413 697 886
After Hours Contact	Barry Davies 0409 753 229

Purpose

The purpose of this document is to clearly identify the Hazards and Risks associated in both the high-risk work activities as well as the general construction site tasks. This SWMS must be kept and be available for inspection until the high-risk construction work to which the SWMS relates is completed. If the SWMS is revised, all versions should be kept. If a notifiable incident occurs in relation to the high-risk construction work in this SWMS, the SWMS must be kept for at least 2 years from the date of the notifiable incident.

Evaluation

Evaluation of process effectiveness is carried out using internal audits and site safety inspections. This document in its entirety is relevant between the stated review dates, unless it has been identified that controls are potentially not effective, changes to the workplace has introduced new task(s), hazard(s)/risk(s) or in the event of a notifiable incident then SWMS will be reviewed and, if necessary, revised. Ultimately everyone is responsible for ensuring their duties are upheld with regards to safety in the workplace.

At the end of the SWMS there is a provision to add to or amend the SWMS, if these are used workers must notify Barry Davies as soon as practical to ensure the changes are implemented. Once the SWMS are amended and controls are acceptable for the specified hazards all workers must re-sign onto the SWMS to ensure they are made aware of the changes.

Doc Control Details

PCBU Name:	**All Plumbing NQ**		**ABN:**	**11169623125**	
PCBU Address:	**35 Fleming Street, Aitkenvale QLD, Australia**			**Contact Number:**	**0409 753 229**
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Consulted By	**Barry Davies & Erker Safety Pty Ltd**			**Approved By**	**Barry Davies**
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V1	SH	Document Creation		25/03/2024	25/03/2025

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1 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.

2 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 Risks of Plant in the Workplace Code of Practice 2021
- Managing the Risk of Falls at Workplaces Code of Practice 2021
- Work Health and Safety Consultation, Co-operation and Co-ordination Code of Practice 2021

3 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

4 Qualifications, Training Requirements

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

5 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

6 Parties responsible for implementation of Controls

Supervisor

Worker

Operator

Engineer

Management

Spotter

7 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 measure as necessary and implement further controls to reduce risk**
4, 5, 6	**Continue to use correct controls selected and maintain communication**

8 Workers Sign on and Consultation of SWMS

By signing the below I:

- **Acknowledge that I have had input into the development of the SWMS or have had opportunity to comment on the content**
- **Understand and agree to abide by all of 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, that 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
			• In some circumstances it may be necessary to have an emergency retrieval plan for a person falling through or over the edge of work area and have practiced that plan	

1DA. Working at Height – Ladders				
PPE Recommended			**Persons responsible for maintaining controls**	

Performing construction work that involves a ladder	Hazard:
	Unstable ladder
	Risk:
	Injury / death
		1	**Single or Extension Ladders:**
			• The ladder must be set up on firm and stable ground
			• Ladder must:
			  ○ Be rated for industrial use
			  ○ Have a load rating of 120kg
			  ○ Be the correct height for task to avoid reaching or stretching
			  ○ Be no longer than:
			  ▪ Single ladder 6.1m
			  ▪ Extension ladders 7.5m
			  ▪ Extension ladder for electrical work 9.2m
			  ○ For electrical work be an approved non-conductive ladder
			  ○ Be maintained in a sound working condition and be appropriate for the task to be undertaken
			  ○ Not be used to support a weight greater than load rating
				5

High Risk Work Activity: 1. Working at Height 2m+				
Activity	Hazards & Risks	PRE-Risk	Work Method Used	POST Risk
	Hazard: Fall from height **Risk:** **Personal injury**	**1**	• Persons using the ladder has 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) • A person's feet should not be higher than 900mm from the top of a ladder • If undertaking high risk work above 2m, single and extension ladders must be secured at the top, bottom, or both • A pre-start inspection of the ladder is performed • Tools requiring two handed operations, or a high degree of leverage force should not be used while on ladders	**5**
	Hazard: Falling objects **Risk:** **Personal injury**	**1**	**Platform Ladders** • Ensure ladder is rated weight of person and equipment tooling. Ensure ladder is set up on stable even surfaces. • All locking devices on the ladder are secure • Never work where your feet are positioned above the 2nd from top tread of the ladder.	**5**
	Hazard: Improper use of ladder **Risk:** **Personal injury**	**1**	**Platform Supported by Trestle Ladders** • The system (including planks) should be assembled according to the manufacturer's specifications using only compatible components • Trestle ladders must be secured to prevent movement • Edge protection must be erected along the complete outer edge of the platform • The distance between the platform edge and working face of the structure must be less than 225mm unless there is a guardrail or mid-rail installed • Planks must be at least: ○ 225mm wide for light work ○ 450mm wide if work is not light work	**5**
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	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	**4**

High Risk Work Activity: 1. Working at Height 2m+				
Activity	Hazards & Risks	PRE-Risk	Work Method Used	POST Risk
	Risk: **Personal injury**		• 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	
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 (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	**4**
Preparing job site	Hazard:	2	• Only those authorised may access site	**4**

High Risk Work Activity: 1. Working at Height 2m+				
Activity	Hazards & Risks	PRE-Risk	Work Method Used	POST Risk
	Unauthorised access **Risk:** **Collision with other workers or persons**		• 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.	
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. • 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.	**4**
Contact With Powerlines	Hazard: Contacting powerlines	1	• Stay calm • Do not climb out of the machine, as it may be 'live' • Warn others to keep clear	**4**

High Risk Work Activity: 1. Working at Height 2m+				
Activity	Hazards & Risks	PRE-Risk	Work Method Used	POST Risk
	Risk: Electrocution		• 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	
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**
1E. Working at Height - Fall Arrest				
PPE Recommended			**Persons responsible for maintaining controls**	
Working in an area where a worker uses height safety PPE to prevent a worker striking a lower level or object if they were to fall.	Hazard: Incorrect use and fitting of harnesses and devices **Risk: Personal injury**	**1**	• Fall Arrest PPE is a last resort when controlling falls from height. All other controls will have been considered and deemed unacceptable in this circumstance • Fall arret system will only be comprised of items that are compatible with one another and have negligible risk of accidental release of connections • System must not be used when the person using the system is alone • Only trained and competent workers in WAH will be permitted to use this method: ○ Anchorage identified and secured ○ Lanyard and shock pack will be used and be as short as reasonable, but will not exceed 2m ○ Full body harness with the rear D ring use ○ Some form of rescue system will be applied • The length of travel should not allow 'swing down' whereby a person could hit the ground	**5**
	Hazard: Exposed edge, **Risk: Injury, death,**	**1**	• System must be installed according to the instructions of manufacturer, supplier, engineer, or competent person • System must be maintained and inspected according to the instructions of manufacturer, supplier, engineer, or competent person • Anchorage points must be able to support:	**5**

High Risk Work Activity: 1. Working at Height 2m+				
Activity	Hazards & Risks	PRE-Risk	Work Method Used	POST Risk
			○ 1 person and could have a limited free fall 12kN ○ 1 person and could have a free fall 15kN ○ 2 persons 21kN • A person must be attached to an anchorage point prior to the person reaching a position at which there is a risk of a fall • Under work position, make sure adequate fall clearance is available	
	Hazard: Suspension intolerance/trauma **Risk: Injury/death**		• As fall arrest provides no controls to stop the worker from falling, rescue and emergency procedures must be in place • The rescue plan/procedure is job specific and will be attached as a separate document • The emergency and rescue procedures must be tested to ensure that they are effective, and workers must be provided with suitable and adequate information, training, and instruction in relation to the emergency procedures. • The rescue plan will include: ○ Who created the rescue plan ○ Who is responsible for applying the rescue plan ○ All workers who are using fall arrest systems ○ What method will be used for rescue. ○ Equipment required on site	
1F. Working at Height - Installation of Edge Protection				
PPE Recommended			**Persons responsible for maintaining controls**	
Installing edge protection in an area where a worker may fall from one level to another and sustain an injury	Hazard: Fall from height **Risk: Injury, death**	**1**	• Inspect edge protection system components: ○ Prefabricated components are in good as new condition and meet manufactures quality specifications. ○ Able to be identified (parts number, make, model etc.). ○ Tubes have square cut ends. ○ Free of oil, grease, or paint. ○ Nuts and hinges run and turn freely. ○ No missing / damaged end fixings. ○ No bowed, knotted, or damaged timbers. ○ No corrosion, flattened components, or cracked welds etc. • **Do not install edge protection from the roof** • Follow supplier's recommended procedures for installing the roof edge protection	**5**

High Risk Work Activity: 1. Working at Height 2m+				
Activity	Hazards & Risks	PRE-Risk	Work Method Used	POST Risk
			• Ensure that persons accessing the roof can pass through the roof edge protection without having to climb over the top or mid-rail • Ensure gates open inwards and are self-latching • If ladders are to be used for access after the edge protection is in place, ensure it is securely fixed to prevent movement • Ensure workers are trained and instructed in the safe use of fall-arrest equipment and emergency rescue procedures • Fall arrest system: Fall arrest system must comply with relevant Australian Standard • Surrounding persons are made aware that dismantling operations are about to commence • Immediate area should be cordoned off • The number of workers needed for the breakdown process is determined • The method and process of dismantling components is pre-planned and understood by all workers • Dismantling is carried out in a systematic and progressive manner. Components are not to be dropped or thrown. Lower all components in a controlled manner • Wear a hard hat when dismantling	
1K. Working at Height - Installing Roof Sheeting				
PPE Recommended			**Persons responsible for maintaining controls**	
Lifting roof sheets	Hazard: Fall through a framed structure **Risk:** **Falls from height**	**1**	• Edge protection to be in place before commencement • Ensure suitable fall restraints in place before commencing work • Only workers trained in working at heights to complete task • Safety footwear designed for use on a roof to be worn.	**5**
Roof penetrations	Hazard: Fall through a framed structure **Risk:** **Falls from height**	**1**	• All roofs should be treated as fragile until a competent person has confirmed they are not • Edge protection to be in place before commencement • Ensure suitable fall restraints in place before commencing work • Only workers trained in working at heights to complete task • Safety footwear designed for use on a roof to be worn	**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 • 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 • Always choose suitable surface to unload 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**
15H. Working Around Cranes and Lifting Operations				
PPE Recommended 			**Persons responsible for maintaining controls** 	
Public protection, Staying clear of Other	Hazard: Mobile Plant, Poor	**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	**4**

High Risk Work Activity: 15. Mobile Plant				
Activity	Hazards & Risks	PRE-Risk	Work Method Used	POST Risk
Workers and General awareness of activity	communication, Pedestrian traffic **Risk: Falling objects, Personal Injury to public or other workers**		• Safety helmets must be worn always when working in vicinity of loads being lifted • 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	

High Risk Work Activity: 16. Artificial Extreme Temperatures				
Activity	Hazards & Risks	PRE-Risk	Work Method Used	POST Risk
16BA. Hot Work - Grinding				
PPE Recommended 			**Persons responsible for maintaining controls** 	
Preparing to use a grinder to cut or grind steel	Hazard: Slips, trips and falls **Risk:** **Personal injury**	**2**	• Ensure only competent & trained personnel use a grinder • Never leave an inexperienced worker alone to use a grinder • Notify anyone nearby who may be affected by the work • Ensure valid hot work permit is in place • Remove flammable materials from areas • Ensure tool is in good repair and tagged in date • All hose and equipment to be checked for defects prior to commencing work. Any defects noted equipment must not be used • Always ensure blades are correctly fitted • Check work is properly supported and won't slide or move. • Check cut will be clear of supports	**5**
Using a grinder to cut or grind Steel	Hazard: Hot sparks, loose pieces of material **Risk:** **Personal injury**	**2**	• All hose and equipment to be checked for defects prior to commencing work. Any defects noted equipment must not be used • Always ensure blades are correctly fitted • Control sparks and other ignition sources from hot works by using barriers and screens where practical. • Always secure material in a vice or clamp. Never hold the object you are using the grinder on. • Maintain 2 hands on grinder • Ensure all guards are left on grinder, (if the guard is in the way of the task, re-think and use a different tool as this means the grinder is not suitable) • Check cut-off will fall safely or will be supported • NEVER leave hot work unattended	**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 learnt in their construction induction 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.	
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**
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 • 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	**5**

Site Risk Assessments – Listed Alphabetically by Non-High-Risk Activities				
Activity	Hazards & Risks	PRE-Risk	Work Method Used	POST Risk
			• 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	
	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**
	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**	• 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**

Site Risk Assessments – Listed Alphabetically by Non-High-Risk Activities				
Activity	Hazards & Risks	PRE-Risk	Work Method Used	POST Risk
End of Shift				
PPE Recommended			**Persons responsible for maintaining controls**	
Clean up and re-packing.	Hazard: Loading vehicle **Risk: Muscular strains**	**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**
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**