

WORKING NEAR ELECTRIC POWERLINES SAFE WORK METHOD STATEMENT (SWMS)

Business Contact: Ryan Martin	Phone #: 6559 8059	Principal Contractor (PC): N/A
Responsible person (for monitoring SWMS and work): Site Supervisor		Job Address: All Sites
Date: 25 th of January 2024	Contact Phone #: 6559 8059	Contact Phone #: N/A Date SWMS provided to PC: N/A
		Contact Name: N/A

THIS WORK ACTIVITY INVOLVES THE FOLLOWING HAZARDOUS WORK AND ENVIRONMENTAL IMPACTS

☐ Electrical equipment	☐ Elevated levels	☐ Slips, trips and falls	☐ Hazardous substances	☐ _____
☐ Hot Work	☐ Hazardous manual tasks	☐ Outdoor work	☐ Remotely &/or isolated work	☐ _____
☐ Noise and vibration	☐ Native vegetation & weeds	☐ Air quality	☐ Waste	☐ Vehicle movement
☐ Fuels, oils & chemicals	☐ Terrestrial fauna	☐ Waterways & soils	☐ Cultural heritage	☐ _____

THIS WORK ACTIVITY INVOLVES THE FOLLOWING "HIGH-RISK CONSTRUCTION WORK" (HRCW - IDENTIFIED IN THE JOB TASK COLUMN)

☐ Confined spaces	☐ Mobile plant movement	☐ Demolition of a load-bearing structure	☐ Asbestos disturbance
☐ Using explosives	☐ Diving work	☐ Artificial extremes of temperature	☐ Tilt-up or pre-cast concrete
☒ Pressurised gas distribution mains or piping chemical, fuel or refrigerant lines energised electrical installations or services			
☐ Structures or buildings involving structural alterations or repairs that require temporary support to prevent collapse			
☐ Involves a risk of a person falling from 2m or more, including work on telecommunications towers			
☐ Working at depths greater than 1.5 Metres, including tunnels or mines		☐ Work in an area that may have a contaminated or flammable atmosphere	
☐ Work carried out adjacent to a road, railway or shipping lane, traffic corridor		☐ In or near water or other liquid that involves the risk of drowning	

FOOT PROTECTION	HEARING PROTECTION	HIGH VISIBILITY	HEAD PROTECTION	EYE PROTECTION	FACE PROTECTION	HAND PROTECTION	PROTECTIVE CLOTHING	BREATHING PROTECTION	SUN PROTECTION	SAFETY HARNES	Do not wear rings, watches or jewellery that may become entangled. Long and loose hair must be tied back.
											
☒	☐	☒	☐	☐	☐	☐	☐	☐	☐	☐	

Planning/Preparation	• Liaise with Principal Contractor to identify on-site safety systems and procedures • Establish supervisory and communication arrangements • Principal contractor to confirm emergency response procedures are in place.
Hold Points	• Hold points identified and signed off before continuing work.
Training/Licence	• All workers to have a General Construction Induction Card • Relevant workers have relevant certificates of competency, licenses, and training. • Trained First Aider on site • All workers trained in site-specific emergency and evacuation procedures, SWMS, safe work procedures, and safety data sheets.
Worker duties and responsibilities	• Fit condition for work, i.e. no signs of fatigue, alcohol or drugs • Attend all site inductions/briefings • Comply with all site requirements, e.g. PPE, Traffic Management Plans (TMP) • Only carry out work related to the contract • Inspect completed work and report possible safety, environmental and quality matters to the supervisor.
Monitor/Review	• All persons involved in the task must have this SWMS communicated to them before work commences • SWMS to be reviewed and amended if necessary, in consultation with relevant persons after any near miss or incident • If additional site hazards identified, review this SWMS and amend control measures to suit • People, including workers, contractors and sub-contractors, affected by the revisions to this SWMS, must be informed ASAP • Give the principal contractor a copy of the revised SWMS • The site supervisor to monitor works against the controls stated in this SWMS • SWMS must be kept on-site and made available for inspection or review • Keep a record of this SWMS until the job is complete or for two years if involved in a notifiable incident • Regardless of any other factor, the person in control of the workplace must review this SWMS at least annually.
Site-Specific Notes: Refer to Job Pack for details	Act, Regulations, Codes of Practice References: ✓ Work Health and Safety Act ✓ Work Health and Safety Regulation ✓ First Aid in the workplace code of practice ✓ Hazardous manual tasks code of practice ✓ How to manage work health and safety risks code of practice ✓ Managing electrical risks in the workplace code of practice ✓ Managing noise and preventing hearing loss at work code of practice ✓ Managing the risk of falls at workplace code of practice ✓ Managing the work environment and facilities code of practice ✓ Managing risks of hazardous chemicals in the workplace code of practice ✓ Managing the risks of plant in the workplace code of practice ✓ Work health and safety consultation, co-ordination, and co-operation code of practice ✓ Moving plant on construction sites code of practice ✓ Work near overhead power lines code of practice

LIKELIHOOD	INSIGNIFICANT	MINOR	MODERATE	MAJOR	CATASTROPHIC	SCORE	ACTION		
ALMOST CERTAIN	3 - HIGH	3 - HIGH	4 - ACUTE	4 - ACUTE	4 - ACUTE				
LIKELY	2 - MODERATE	3 - HIGH	3 - HIGH	4 - ACUTE	4 - ACUTE	4A - ACUTE	DO NOT PROCEED.		
POSSIBLE	1 - Low	2 - MODERATE	3 - HIGH	4 - ACUTE	4 - ACUTE	3H - HIGH	Review before commencing work.		
UNLIKELY	1 - Low	1 - Low	2 - MODERATE	3 - HIGH	4 - ACUTE	2M - MODERATE	Maintain control measures.		
RARE	1 - Low	1 - Low	2 - MODERATE	3 - HIGH	3 - HIGH	1L - Low	Record and monitor.		
HIERARCHY OF CONTROLS		MOST EFFECTIVE	Elimination	Substitution	Isolation	Engineering	Administrative	PPE	LEAST EFFECTIVE
JOB TASK	HAZARDS	RISK	CONTROL MEASURES						RESPONSIBLE PERSON
1. Planning	- Contact with overhead electric lines - Electrocution - Fire	4A	 All work must be undertaken with reference to the applicable State/Territory documents relating to work near overhead and underground assets. - Refer to your State/territory Guidance Material for working distances. I.e. No-Go Zones etc. (Enter distances in ‘Exclusion Zones’ section below.) - If a permit to work system used, always work within the terms of the permit. (have a copy of the permit on-site). - If work may infringe on no go zone assume all overhead and underground lines are energised unless the following is sighted: - An access authority confirming the electric lines have been de-energised, or - Another written document from the Electricity Supply Authority that allows people to work in a no-go zone - The spotter must know: - The voltage and height of all power lines on the project (use a non-contact height indicator e.g. Ultrasonic cable height indicator) - If the height or voltage of the overhead power lines cannot be accurately determined, consult the network operator. - The fully extended height and/or reach of all plant and equipment; particularly tippers, cranes and earthworks machinery.  Never use a contact method to determine height. If the height of the overhead electric lines cannot be accurately estimated, seek advice from the Electricity supply authority.						Supervisor
	Exclusion zone breach - Electrocution - Fire	4A	- Where it is critical to maintaining separation distances, the following must be employed: - Nominate a trained powerline ‘observer/spotter’ (who is not to perform any other tasks while they are observing the work being carried out) - Workers and their equipment should not approach overhead powerlines any closer than the following						

JOB TASK	HAZARDS	RISK	CONTROL MEASURES			RESPONSIBLE PERSON
	Examples given (right) must not be used for actual work. Delete example before use. Use approach limits for each activity as defined by the regulated authority in your area		- The following safe working distances are only to be used if the following conditions have been met: - Completion of a written risk assessment prior to the commencement of work - The application of a safe system of work, including the use of a safety observer if required - If required by the network asset owner, and/or as an outcome of the risk assessment, consultation with the network operator regarding the proposed work and compliance with any conditions imposed.			
			Enter the Assets and approach limits for your activity (Seek detailed information from Electricity Supply Authority)			
			Asset	Design Limit -Plant	Limit of Approach	
			Overhead uninsulated electric line (above low voltage, up to 33kV)	Backhoe	3000mm	
			Overhead uninsulated electric line (above low voltage, up to 33kV)	Manually operated tools	5000mm	
			Overhead uninsulated electric line (above low voltage, up to 33kV)	Vehicle	2000mm	
	Untrained personnel - Electrocution - Fire	4A	- Ensure all workers involved with the task have nationally accredited Work Near Overhead Powerlines (WNP) training - Ensure all spotters have undertaken training and/or received instruction in working as a spotter and training/experience in the safe use of the associated plant/equipment/task being spotted for (e.g. Riggers ticket if spotting a crane around electrical installations) - For work that requires a Certificate of Competency or WorkSafe High Risk Licence for an item of plant that person will be spotting for, ensure that certificate is valid and in place - For high risk tasks, e.g. electrical spotting, work at heights etc. a spotter must have a current appropriate level First Aid Certificate and, a current Cardiopulmonary Resuscitation / Expired Air Resuscitation (CPR/EAR) certificate.  Persons spotting must also be competent in the task being spotted for e.g. High risk plant operator or Electrician for high voltage work - Spotters and relevant workers must understand: - Rescue and emergency evacuation equipment - Reporting procedures for incidents - Authority to cease unsafe work.			
Electrocution	4A	Implement an Emergency Electrical Response Plan				

JOB TASK	HAZARDS	RISK	CONTROL MEASURES	RESPONSIBLE PERSON
	Fire		<i>An Emergency Electrical Response plan tool is included in this SWMS.</i>	
2. Arrival on-site & assess onsite conditions	Personal injury, property damage &/or environmental incident	3H	- The vehicle should be positioned in a safe location, clear of traffic/vehicles/pedestrians during equipment delivery and materials removal (deploy physical barriers, caution signs as necessary) - Do not park illegally - Identify and obey all safety-related signage (check site entry requirements) - Report to Site Supervisor - Ensure site-specific induction undertaken - Assess mobile phone reception - The worksite is exactly as detailed in Terms of Agreement or contract - Complete a JSA specifying the control measures of unanticipated hazards - A nominated person should carry out and document a Job Safety Analysis (JSA) or Risk Assessment prior to the task. The assessment must be kept on-site for the duration of the task - Risk factors to consider include: - Location, height, arrangement and visibility of overhead electric lines and supporting structures E.g. stay wires, poles - Voltage of electric lines, exposed energised parts & whether they are insulated or bare - Sway or sag of the electric line caused by wind or temperature changes - Wind strength and direction (possibility of storms) - Proximity of vegetation - Ground surface stability under plant - Vehicle/Mobile Plant/Pedestrians - Operating characteristics and conductivity of plant and equipment - Type of work activities and the frequency of the work tasks - Qualifications, competency, skill and experience of the people doing the work.	Supervisor to check the site and conduct JSA where necessary
3. HRCW Work area set-up	- Contact with overhead electric lines - Electrocution - Fire	4A	- Consider the following controls to ensure work safety: - Have temporary protection, e.g. 'tiger tail' covers, fitted to remind workers of the presence of low voltage powerlines on-site, and - Where appropriate, provide ground barriers to warn workers of the presence of powerlines - Implement appropriate controls to control identified risks.	Supervisors to check all controls in place and followed
	- Contact with overhead electric lines - Electrocution - Fire	4A	- If setting up roadside – comply with local laws and permits - Barricades in place to prevent unauthorised entry to work area (<i>The border of the exclusion zone should be marked with suitable markers e.g. Hazard tapes, which can be easily viewed by the plant or vehicle operator.</i>) - Signage in place to caution persons not to enter. Erect signs (at least 600mmX800mm) example: 'Danger Live Wires Overhead'.	Workers to follow controls and make supervisor

JOB TASK	HAZARDS	RISK	CONTROL MEASURES	RESPONSIBLE PERSON
			Maintain awareness of pedestrian traffic – Direct work to cease if persons breach the work area perimeter.	aware of any issues
	Communication failure	4A	Effective communication in place between the spotter and other workers to alert others on site. All ground workers must wear Australian Standard approved hi-visibility/reflective clothing (Shirt, Vest or Jacket).	
4. HRCW Working near overhead powerlines	- Contact with overhead electric lines - Electrocution - Fire	4A	- Inspect visual indicators on electric lines like tiger tails before starting operations each day (if visual indicators have moved or been damaged notify the Electricity Supply Authority to get replaced or relocated in the correct position before work commences - Ensure emergency equipment is readily accessible including first aid kits and fire-fighting equipment suitable for electrical fires - Ensure compliance with all conditions imposed by the Electricity Supply Authority. Take note of the following factors: - All parts of the mobile plant or a vehicle - Any loads being moved including slings, chains and other lifting gear - Any people working at heights e.g. from an elevating work platform or other structure - Any hand tools/equipment, poles, hand control lines, or other objects held by a person - Ensure: - Operators do not commence operations in the authorisation zone without a safety spotter - Spotter should be positioned at a safe location to effectively observe both electrical installation/overhead electric lines and plant operations - To clearly communicate with the operator or other people immediately and effectively - Provide immediate and direct notice/warning to an operator should the plant or its load start to breach the prescribed clearance to the asset. - Stop the work immediately if necessary e.g. Safety clearances compromised - All other people stay outside the specified approach distance unless required for the task and under observation by the spotter - Spotter does no other work while acting as a safety observer, - Spotter does not observe more than one work activity at a time - All booms/extensions are folded down to their lowest point when Mobile plant is in transit - The highest point of the plant item is at least 3 metres from the line when in transit - Where a work activity involves a person working from, standing on or walking across the top of a vehicle or item of plant, the relevant approach distances must be maintained. E.g. the driver of a livestock transporter who has to access the top of the vehicle to check livestock - The distance between the plant/vehicle and power lines should be continually re-assessed to ensure the relevant approach distances are being maintained. Note: Take consideration of changing ground levels.	Supervisors to check all controls in place and followed Workers to follow controls and make supervisor aware of any issues

JOB TASK	HAZARDS	RISK	CONTROL MEASURES	RESPONSIBLE PERSON
			⚠ If the work is in danger of violating the No Go Zone clearances or are unable to comply with the set guidelines, you must consult with the electrical asset owner before continuing with the work.	
	Powered mobile plant movement	4A	• Ensure an effective system of communication between spotters, machine operators and pedestrian ground workers established before work commences • Relevant workers must be trained in the procedures involved prior to the work commencing • Groundworkers are instructed not to approach machinery/task until the spotter has agreed to their request to approach • Ensure ground workers are instructed on set distances to maintain from the machine/task while in operation • Groundworkers to be made familiar with the blind spots of applicable plant • Groundworkers are required to wear high-visibility clothing • Spotter communication: ○ Notify all relevant persons before leaving post ○ Use the agreed communication protocol (such as two-way radios, hand signals, stop/go batons or verbal) ○ Use agreed operational procedures (i.e.: pedestrians have right of way, speed restrictions, no go zones, direction of traffic, sufficient space between plant and plant/pedestrians and other items as specified in traffic management plan) • DO NOT: ○ Stand in close proximity (within 3m of moving plant) ○ Work from an elevated work platform ○ Carry out any other work or function that compromises the role as a safety observer ○ Observe more than one operating plant/ operator at a time (use another spotter where necessary). ⚠ NOTE: Some traffic management plans may say that pedestrians have right-of-way. Never assume this. Make visual and verbal contact with vehicle/plant operator as required.	
	Hearing loss	3H	• Hearing protection must be worn by all persons throughout the period of exposure to noise.	
5. HRCW On completion	Unauthorised access	3H	• If acceptable, remove or add barricades • Ensure machinery is parked in a safe, level area, clear of unstable or sloping ground • Store the key in a safe place (restrict unauthorised access).	Supervisor to confirm all workers have signed out
	Contact with overhead electric lines	4A	• For overnight or longer periods ensure mobile plant is parked in a storage position away from overhead powerlines or where any unauthorised use may cause contact with an electrical service • All Trailing ropes and grounding cables are securely stored.	

JOB TASK	HAZARDS	RISK	CONTROL MEASURES	RESPONSIBLE PERSON
	Security breach	3H	All personnel sign-out on Site Register.	Workers to comply with controls
	Vehicle/people impact	4A	- Stay to designated access and egress routes - Maintain awareness of surroundings at all times.	
6. Emergency response	- Injury - Fatality - Environmental damage	4A	For police, fire or ambulance call '000.' - Follow site emergency and evacuation procedures - A communication system is available, e.g. a mobile phone or radio - Check for dangers to self before helping others - Maintain control of the area and stabilise the situation - Apply first aid to the injured worker - Complete an incident report.	Supervisors to check all controls in place and followed Workers to follow controls and make supervisor aware of any issues
	- Contact with overhead electric lines - Electrocution	4A	<i>If High Voltage is involved - Call 000 immediately – DO NOT APPROACH THE VICTIM – Stay clear of electrical wires and equipment. Wait for Emergency Services to arrive, secure the area – keep others away.</i> DO NOT be the next victim – if unsure of what to do and how to do it safely to assist an injured person – call for help and Call 000 immediately. - A person who is being shocked, or has been shocked needs to be disconnected from the source of electrical power, ONLY if safe to do so. Locate the power shut off switch and turn it off. - If the disconnecting device cannot be located, the victim can be pried or pulled from the circuit by an insulated object such as a dry wood board, piece of non-metallic conduit, or rubber electrical cord, ONLY if safe to do so. - Victims need immediate medical response: only when there is NO further risk of electric shock - check the victim for breathing and pulse, then apply CPR as necessary. - If a victim is still conscious after having been shocked, they need to be closely monitored and cared for until trained emergency response personnel arrive. Call 000. - Answer all questions and follow instructions given by Emergency Services operator. DO NOT hang up until instructed. - There is a risk of physiological shock, so keep the victim warm and comfortable. - Shock victims may suffer heart trouble up to several hours after being shocked. The danger of electric shock does not end after the immediate medical attention.	

JOB TASK	HAZARDS	RISK	CONTROL MEASURES			RESPONSIBLE PERSON
	- Contact with overhead electric lines - Fire	4A	R Rescue or Relocate people in immediate danger if you can do so without endangering yourself. Exit via a safe fire exit. Do not use elevators A Sound the Alarm and advise others of the situation. Call the Fire Brigade (000) from a safe distance. C Confine the fire by closing all doors, windows and other openings, and shutting off the piped and compressed gas as you are EVACUATING. E Evacuate the area on direction from the Site Manager or when it is unsafe to remain in the area. (Extinguish the fire only if you have been trained and feel competent and safe to do so . Only small fires are possible to extinguish, so always be prepared to evacuate).			
OVERALL RISK RATING AFTER CONTROLS			☐ 1 - Low	☒ 2 - MODERATE	☐ 3 - High	☐ 4 - ACUTE
PERMITS ☐ Not applicable ☐ Hot Work ☐ Confined Space ☐ Local council ☐ _____ ☐ _____						
SITE MANAGEMENT PLAN		Is the work associated with a Construction Project? ☐ Yes ☒ No		If yes – This SWMS must align with requirements of the Site Management Plan in place for the Construction Project.		
PLANT & EQUIPMENT			HAZARDOUS SUBSTANCES		SUPERVISORY ARRANGEMENTS	
☒ Electrical tools and leads Tested and tagged quarterly			1. Refer to Job Pack for details		☒ Audits ☒ Spot Checks ☒ Reporting systems ☒ Suitably qualified supervisors for job ☐ Direct on-site supervision ☐ Remote site: communication systems/schedule	
☒ Hand tools - Meet AS/NZS Regular visual inspection						
☒ Ladders - Meet AS/NZS Inspected and tagged out if damaged						
☒ Mobile plant Inspected and tagged out if damaged						
☐ _____						
SWMS SIGN-OFF		This SWMS developed in consultation and cooperation with workers and relevant organisation representatives. I have read the above SWMS, and I understand its contents. I confirm that I have the skills and training, including relevant certification, to conduct the task as described. I agree to comply with safety requirements within this SWMS, including risk control measures, safe work instructions, and PPE described.				
WORKERS' NAME	JOB ROLE / POSITION E.G. SUPERVISOR, WORKER, TRAINEE	LICENCES, COMPETENCIES & QUALIFICATIONS (add as applicable)			DATE	SIGNATURE
		TYPE / DESCRIPTION	CLASS	NUMBER		
		Construction Card				
		Construction Card				
		Construction Card				



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ELECTRICAL EMERGENCY RESPONSE PLAN

Location of closest medical facility:	Approximate response time:											
Location of closest emergency services:	Approximate response time:											
Fire & Rescue Service:	Contact Number:											
Electricity supplier. (Asset Manager)	Contact Number:											
Can rescue be undertaken on-site by trained personnel? ☐ Yes (Y) ☐ No (N)												
In case of contact with electricity												
1. Try to break the mobile plant's contact with the line by moving the mobile plant clear only if safe to do so. 2. If moving not possible, the operator should remain inside the cabin. <i>(If it is essential to leave the cab due to fire or other reasons, jump clear of the equipment)</i> 3. If essential to leave, do not touch the equipment and ground at the same time if jumping clear. <i>When moving away from the equipment, the operator should hop slowly, shuffle or jump away from the plant (with feet together). Do not run</i> 4. If the operator falls to the ground, ensure they roll clear. <i>They should not try to get up by pushing off with their hands as the electricity may pass through the arms and legs in contact with the ground</i> 5. Warn all other personnel / public to keep 8 - 10 m clear from equipment. Do not touch any part of the equipment or victim(s) and do not attempt to approach or re-enter the vehicle. 6. Call for emergency assistance on 000 at the earliest opportunity 7. Begin First Aid treatment if the operator is clear of the area <i>(Do not place yourself in danger)</i> 8. Initiate the company emergency management plan 9. Await confirmation by the power company that the power has been turned off before commencing any recovery of persons, plant or equipment. Dial 000 in an emergency												
Provide details of communication equipment that will be used:												
Provide details of trained first aiders for rescue (trained within last 12 month period)	<table border="1" style="width: 100%; border-collapse: collapse;"> <thead> <tr> <th style="width: 50%;">Name</th> <th style="width: 50%;">Course Name</th> </tr> </thead> <tbody> <tr><td> </td><td> </td></tr> <tr><td> </td><td> </td></tr> </tbody> </table>	Name	Course Name					<table border="1" style="width: 100%; border-collapse: collapse;"> <thead> <tr> <th style="width: 50%;">Date of training</th> </tr> </thead> <tbody> <tr><td> </td></tr> <tr><td> </td></tr> </tbody> </table>	Date of training			
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Documented emergency plan developed?	Y ☐ N ☐	Documented emergency plan rehearsed?	Y ☐ N ☐	Documented emergency plan accessible on-site?	Y ☐ N ☐							