Safe Work Method Statement Title	Construction Work on or near Overhead and Underground Services.	**SWMS No.** 17
	Authorized and email Signed by the (Managing Director / CEO / Partner / Proprietor) on **Date** 14/11/2016	
Safe Work Procedure for the Work:- Yes ☐ No ☐	Employees trained and familiar with Tree Watch S W P:- Yes ☐ No ☐	
Names of staff that have read and understand this SWMS: **Stephen Bayley, Angus Cullenward, Daniel Bayley, Ashley Morrison, David Smith**		
MSMS Sheets applicable to the work being undertaken	1 3	2 4
Issue Date: 01/08/2016	Revision Date: 14/11/2016	Revision No: 2	Prepared By: Stephen Bayley
Project Name: Various	Section/Area: Various	Project Manager: Various
Client: Various	Distribution: Client OH&S Officer / Company Personnel	

Likelihood / Probability - Risk Factors		Consequence - Risk Factors	
Very Likely (V)	Probably occur immediately or within a short period of time	Fatality (F)	May cause death or loss of facility
Likely (L)	Probably occur in time	Major (M)	Severe injury or illness or major property damage
Unlikely (U)	Could eventually happen	Minor (M)	Minor (usually reversible) injury or illness resulting in days off work or minor property damage
Highly Unlikely (H)	Has potential to occur, but probably never will occur	Negligible (N)	Minor injury, possible first aid
Remember to Consider Equipment / Plant **/** Environment / Worker Competency			

Risk Assessment

Consequence ↓	Likelihood / Probability V	L	U	H
Fatality	H	H	H	M
Major (M)	H	H	M	M
Minor (m)	H	M	M	L
Negligible	M	M	L	L

Hierarchy of Control Hierarchy of Control	
1 Elimination	Can the work process, substances or plant creating the hazard be eliminated?
2 Substitution	Can the work process, substance or plant be substituted for something safer?
3 Engineering Controls	Means changing process, equipment or tools to minimise the hazard exposure.
4 Administration Controls	Develop measures to ensure that the work is performed safely through safe work procedures to reduce exposure to hazards.
5 PPE	Personal protective equipment is the last resort in responding to work place hazards and should be used only as an interim measure.

Work Method / Task Description List the tasks required to perform the activity in the sequence in which they occur	**Hazards** Against each task list the Hazards that could result in injury when the task is performed by the worker	**Risk Score**	**Risk Control Measures** List the Control measures required to eliminate or minimize the workers exposure to each identified hazard	**Responsible Person** with responsibility for control measure implementation
Working outdoors	Personnel are exposed to excessive ultra violet light without adequate protection.	M	• Suitable clothing, hats, glasses should be used to reduce exposure • All employees to apply SPF 30+ sunscreen at the beginning of the day and reapply every 2 hours	Supervisor Employee
Manual handling	Excessive manual handling could lead to muscular skeletal injury.	M	• Use mechanical aids ie forklift • Lift with correct posture and do not try to lift something too heavy • Request help when lifting heavy loads	Supervisor Employee
Personal protective equipment required for this activity	Personal injuries	H	• Hi visibility clothing • Safety footwear • Safety glasses as required • Safety Helmet as required • Hearing protection as required • Harness with lanyard and shock absorber	Supervisor Employee
Before starting work	Workers, others on site and members of the public exposed to electricity, gas, etc	H	• Establish if you are working near overhead and/or underground services; • Establish if undertaking this work, the plant being used on site will encroach into the No Go Zone clearances surrounding the services • Note: Permission must be granted from the Asset Owner.	Supervisor Employee
	Contact with the power lines, or load is close enough to high voltage lines causing the electricity to “jump”	H	**Before work starts in the vicinity of power lines the following must be established:** • The height of any overhead services at the work site. • Be aware the height of overhead power lines can vary depending on weather conditions. • The design envelope of any plant or equipment and any loads being slung during works. • Design envelope must be obtained from plant manuals, or measured at maximum reach of the machine. • The design envelope must be deducted from height of the overhead service(s)	

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No go zones	Personal injury Electric shock / Fatality	H H	• Operating inside 6.4m of a power line and the design envelope of your machine can reach within 2m of the power line permission from the asset owner must be obtained, and there must be a Trained Spotter and a Safe Systems of Work. • Operating inside 6.4m of a power line and the design envelope of the machine can reach within 3m of the power line, but not closer than 2m a Trained Spotter and a Safe Systems of Work must be provided. • Operating outside 6.4m of a power line and the design envelope can reach the power line you can complete the task with a Safe Systems of Work **The following No Go Zone's must be observed:** • 300 mm for individuals; and 500 mm for plant or equipment, or 3000 mm in the case of any underground assets registered under the Pipelines Act or an electricity cable with an in service voltage greater than 66kV. • For principal assets requiring integrity of the material surrounding the asset, greater clearances may be required. Information regarding these clearances must be obtained from the asset owners.	Supervisor Employee
Spotter zones	Electric shock Personal injuries	H H	**Single Wire Earth Return or SWER Electricity Systems** • No excavation work shall be undertaken within a 10 metre radius of a pole with a SWER transformer mounted on it. • Between 3.0 and 6.4 metres of power lines – spotter zone • Operating inside 6.4m of a power line but the design envelope cannot reach closer than 3m of the power line does not require a Spotter. **Beyond 6.4 metres – open area** • Unrestricted access if the design envelope can reach within 6.4m of a power line a Safe Systems of Work must be provided. • All mobile plant used must have a Look Up and Live sticker posted in a visible position in the cabin or at the	Supervisor Employee

			controls in the case of a Truck Mounted Crane.	

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Traversing/travelling/tracking under powerlines in “non operation” mode	Electric shock Personal injuries	H H	**All mobile plant used on the site that travel under overhead services must observe the following:** • All booms/extensions are folded down to their lowest point “transit mode”; • The highest point of the plant must be at least 3 metres from the power line.	Employee
Underground services location	Electric shock Personal injuries	H H	**Request information from:** • The asset owners. • ‘Dial Before You Dig’ • Services can be located using a cable locator operated by a competent person. • The location of underground assets may be proved carefully by hand or other suitable non destructive methods. This should only be undertaken after obtaining information on the location of any underground services, except where the asset owner prohibits any excavation without a location of the assets on site.	Supervisor Employee
Spotter Requirements	Personal injury Electric shock	H H	• Have undertaken a Spotter training course with the last three years and hold an appropriate Spotters Ticket. • A trained Dogman/Rigger may act as a spotter. • All spotters must wear Australian Standard approved Hi-visibility clothing. • Persons undertaking spotter duties for underground assets must be competent to undertake the work. • While performing the spotter role, this must his sole duty. • The spotter must dedicated to this task at all times when an operator is at the controls of the plant item or where the engine/power source is operating. • The spotter must be positioned to monitor the distance between the operating plant and any asset. • Must give immediate and direct notice/warning to an operator (ie hand signals, whistle, air horn, hand held two-way communications etc) should the plant or its load start	Supervisor Employee

			to encroach the prescribed clearance to the asset.	

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Communication	Personal injury Electric shock	H H	**Where the scope of work requires communication between the spotter and the operator there must be;** • A voice communication system or • Alternatively, a visual, audible (air horn), or radio can be used.	Supervisor Employee
Training	Personal injury Electric shock	H H	**There must be a suitably trained and competent person on site at all times when work is being completed near overhead or underground assets:** • This person will be competent in identifying compliance with the No Go Zone framework. • A competent person or an individual under the supervision of a competent person must undertake the work.	Supervisor
First aid	Personal injury due to lack of first aid on site	H	• A Level Two First Aider must be on the site • A first aid kit must be available for a worksite, and shall be maintained and regularly inspected. • First aid kits are to contain materials as appropriate to the worksite.	Supervisor
Emergency procedures	Electric shock Personal injuries	H H	**If contact is made with an overhead or underground asset or arcing occurs between a cable and an item of plant and/or employee, the following actions must be taken:** • All work should cease immediately. • Operator (or Driver) should remain inside cabin. • If it is essential to leave the cab or operator's station due to fire or other life threatening reasons, jump clear of the equipment. • Do not touch the equipment and ground at the same time. • Move away from the plant until at least 10 m from the nearest part of the plant item. • **If** you fall **to the** ground**,** roll clear. Do not try to get up by pushing off with your hands as the electricity may pass through your body causing you to receive an electric	Supervisor Employee

			shock. • Warn all other personnel / public to keep 10 m clear from equipment.	

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Emergency procedures	Electric shock Personal injuries	H H	• Do not touch any part of the equipment, load or victim(s) and do not attempt to approach or re-enter the vehicle until the relevant authorities have determined the site is safe. • Call for emergency assistance on 000 at the earliest opportunity and advise of the situation and wait for help. • Facilitate First Aid treatment and seek medical aid as required without placing yourself in danger. • Await verification by the power company that the power has been turned off.	Supervisor Employee
Contact or damage to gas assets	Explosion Fire Personal injuries	H H H	**The following actions must be taken:** • All work must cease immediately. • Operator is to shut down the plant or equipment UNLESS this process may provide an ignition source for any escaping gas. • Do not attempt to use any instrument which may provide an ignition source near the gas escape. This may include mobile phones, two way radios, etc. • Do not attempt to approach or re-enter the vehicle until the relevant authorities have determined the site is safe. • It is essential to leave the cab or operator station, trench or enclosure and maintain an exclusion perimeter due to the risk of explosion or fire. • Warn all other personnel / public to keep clear from the worksite and equipment. • Facilitate First Aid treatment and seek medical aid as required. • Notify the relevant authorities, including the relevant Gas Distribution Company	Supervisor Employee

Personnel Qualifications and Experience	**Personnel Duties and Responsibilities**	**Training Required to Complete Work**

Construction OH&S induction (White Card) Company OH&S induction Site specific induction	Supervisor to carry out daily inspections of work site for hazards.	Supervisor to be appropriately trained, qualified and competent in OH&S.
	Personal Protective Equipment (PPE) to be worn at all times on site.	Supervisor to be trained in risk identification risk assessment and risk control
Trained Spotters are to be used for operations near electrical conductors	All personnel to maintain tidy work area on site at all times.	On the job skills training to be conducted by Supervisor to personnel

Personnel Qualifications and Experience	Personnel Duties and Responsibilities	Training Required to Complete Work
Only persons who are competent, and where required hold the appropriate certificate of competency in accordance with the regulation, must be permitted to operate plant or perform any installation or maintenance work on powered mobile plant.	Barricading to be used as appropriate to protect others from mobile plant	Train persons carrying out work on or near public roads in accordance with AS 1742.3-2002

Engineering Details / Certificates / WorkSafe Approvals / Australian Standards	Referenced – Guidance Notes / Legislation / Regulations
AS 2550 Set of Standards covering the safe use of cranes of all types (including hoists, elevating work platforms and building maintenance units, but not forklift trucks). AS 229401:1997 Earth-moving Machinery – Protective structures – General AS 2664-1983 Earthmoving machinery – Seat belts and seat belt anchorages AS 4991 Lifting devices AS 1742.3-2002 Manual of uniform traffic control devices – Traffic control devices for works on roads AS 1742.2-1994 Manual of uniform traffic control devices – Traffic control devices for general use AS 1742.10-1990 Manual of uniform traffic control devices – Pedestrian control and protection AS/NZS 4602:1999 High visibility safety garments AS 1470 Health and Safety at Work – Principles and Practices Any limitations posed by the worksite (such as floor loadings or ground load limits) should be checked by an engineer prior to selecting the appropriate plant for the task	Occupational Health and Safety Act 2004 & all OH&S Acts within other States Occupational Health and Safety Regulations 2007 & all OH&S Regulations within other States OH&S Safety Regulations 2007,Chapter 3 - Part 3.5 Plant OH&S Safety Regulations 2007,Chapter 3 - Part 3.6 High Risk Work OH&S Safety Regulations 2007,Chapter 3 - Part 3.1 Manual Handling Code of Practice for Plant 1995 (Compliance Code) Code of Practice for Building and Construction Workplace (Compliance Code) Code of Practice for Manual Handling (Compliance Code) Safety Precautions in Trenching Operations (Code of Practice No. 8,1988 WorkSafe Victoria Framework for Undertaking Work Near Overhead and Underground Assets

Plant / Equipment	Maintenance Checks
Plant Hazard Identification and Risk Assessment to be conducted for plant use eg Scissor Lift, Boom Lift, etc	Daily safety checklist (Log Books) for all plant on site to be completed daily All plant to be maintained in accordance with manufacturer's recommendations. Maintaince records to be available on site Daily / weekly / monthly inspections / safety checklist to be available on site

Responsible Person (Supervisor Foreman)	**Name: Various**		

The persons (employees, subcontractors and others) that have signed below:

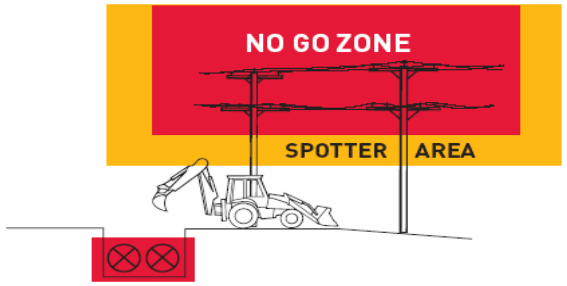
1. been involved in the hazard/risk assessment and the determination of the hazard/risk controls applicable to their tasks, duties and responsibilities
2. had all hazards and risk controls have been communicated to them
3. and are fully aware of and understand the hazards/risks and safety risk controls and rules required
4. agreed to all the hazard/risk controls
5. agreed to and understand their Duty of Care to themselves and others
6. *agreed that they are the person responsible for site supervision of the work, inspecting and approving work areas, work methods, compliance with SWMS, protective measures, plant, equipment and power tools.*

Print name clearly date a sign here:

If any unforeseen circumstances should arise and 100% compliance with this Safe Work Method Statement is not possible work is to cease until the Safe Work Method Statement is reviewed.

Note: All personal must be inducted into the above Safe Work Method Statement via a toolbox meeting with their acknowledgment signatures of being inducted on it; prior to work commencing.

Example 1:



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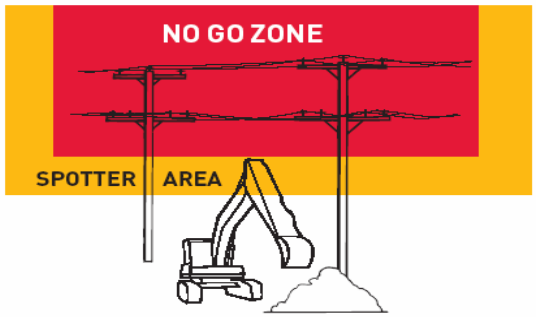

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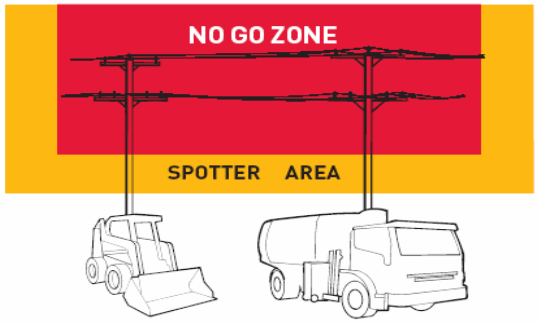

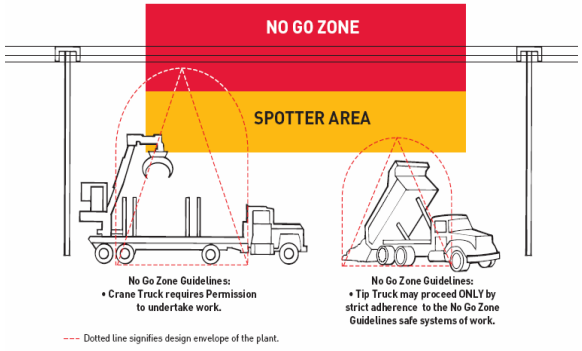

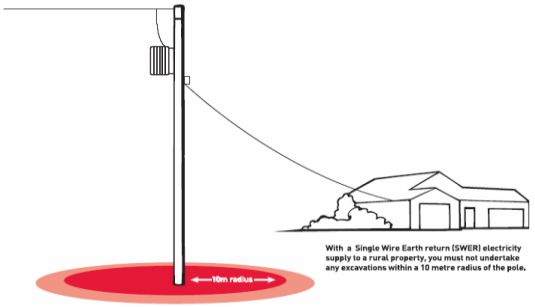

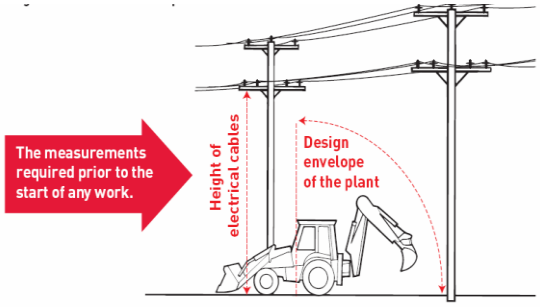

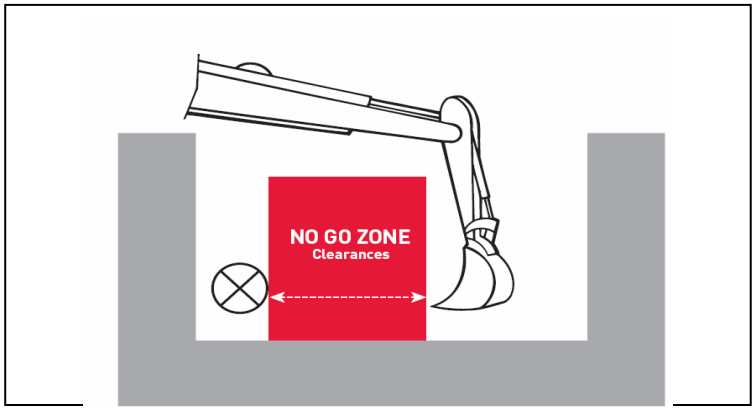
NO GO ZONE
Clearances