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|  | | | | **Coles Refrigeration and Air Conditioning Pty Ltd** | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |  | | | |
| **Electrical Installation and Maintenance SWMS** | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| **REVIEW SITE TO ENSURE ALL OTHER HAZARDS OR RISKS ARE BEING CONSIDERED AND CONTROLLED** | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| **Client Name**: ……………………. | | | | | | | | | | | | | | | | | | | | | | | | **Person responsible for ensuring compliance with this SWMS:** ……………………. | | | | | | | | | | | | | | | | | | | | | | | | | | Date of Approval: 28.08.2024 | | | |
| **Project Address:** ……………………. | | | | | | | | | | | | | | | | | | | | | | | | **Job No:**  ……………………. | | | | | | | | | | | | | | **Contact Person:** ……………………. | | | | | | | | | | | | Version No.   1 2024 | | | |
| **Licenses, Permits, Competencies Required: (*tick items relevant to this task and site*)** | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Electrical License | | | | | | | | EWP | | | | | | | White Card | | | | | | | | | | | | | | | | | | | | □ | | | | | | | | □ | | | | | | | | | | |
| **Common Hazards to Manage: (*tick items relevant to this task and site*)** | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Working Around Traffic | | | | | | | | Working at Heights | | | | | | | Risk of Electric Shock | | | | | | | | | | | | | | | | | | | | Slips, Trips and Falls | | | | | | | | Manual Handling/Housekeeping | | | | | | | | | | |
|  | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| **HAZARD CLASSIFICATION MATRIX**  **POSSIBLE RESULTS**  **Risk = Consequence x Likelihood** | | | | | | | | | | | | | | **Probability** | | | | | | | | | | | | | | | | | | | | | | | | | | |  | | | | | | | | | | |
| RARE  **A** | | | | | | UNLIKELY  **B** | | | | | | | | POSSIBLE  **C** | | | | LIKELY  **D** | | | | | | | ALMOST CERTAIN  **E** | |
| **Consequences** | | | | | | **Catastrophic** | | | | | | **5** | | **Medium (M)** | | | | | | **High (H)** | | | | | | | | **High (H)** | | | | **Extreme (E)** | | | | | | | **Extreme (E)** | |
| **Major** | | | | | | **4** | | **Medium (M)** | | | | | | **Medium (M)** | | | | | | | | **High (H)** | | | | **High (H)** | | | | | | | **Extreme (E)** | |
| **Moderate** | | | | | | **3** | | **Low (L)** | | | | | | **Medium (M)** | | | | | | | | **High (H)** | | | | **High (H)** | | | | | | | **High (H)** | |
| **Minor** | | | | | | **2** | | **Low (L)** | | | | | | **Low (L)** | | | | | | | | **Medium (M)** | | | | **Medium (M)** | | | | | | | **High (H)** | |
| **Insignificant** | | | | | | **1** | | **Low (L)** | | | | | | **Low (L)** | | | | | | | | **Low (L)** | | | | **Medium (M)** | | | | | | | **Medium (M)** | |
| **RISK RATING** | | | | | | | | | **ACTION REQUIRED (ALARP – As Low As Reasonably Practicable)** | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| **E = Extreme, UNACCCEPTABLE** | | | | | | | | | Intolerable risk.  Activity must not be undertaken prior to Management / CEO review of potential risk mitigation measures and a decision that risk is **ALARP** | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| **H** **=** **High** **risk**, Only acceptable if **ALARP** | | | | | | | | | Implement strict control measures to reduce risk to an acceptable level.  Activity must not continue until the level of risk is reduced to **As Low As Reasonably Practicable (ALARP)** and preferably Medium rating.  Operations Manager and/or Project Supervisor approval of the risk controls is required. | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| **M** **=** **Medium risk** Undesirable | | | | | | | | | Specify, document and implement existing risk controls and additional management actions to reduce the risk to **ALARP** and **preferably Low rating**.  Activity must not continue without Operations Manager and/or Project Supervisor approval. | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| **L = Low risk**, Tolerable | | | | | | | | | Tolerable risk.  Carry out activity | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Basic  PPE to  be used | | |  | | | |  | | | |  | | | | |  | | | | |  | | | | | | | |  | | | |  | | | |  | | |  | |  | | | | |  | | | |  | | |
| ü  PPE | | |  | | | |  | | | |  | | | | |  | | | | |  | | | | | | | |  | | | |  | | | |  | | |  | | X | | | | |  | | | | X | | |
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|  | | | | | | **Coles Electrical Group Pty Ltd**  Safe Work Method Statement | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |  | | | | | |
| **Job Task #** | **Job Step** | | | | **Potential Health, Safety and Environmental Hazards** | | | | | | | | | | | | | **PROBABILITY** | | | | | **CONSEQUENCE** | | **RATING** | | **Control Measures** | | | | | | | | | | | | | | | | | **PROBABILITY** | **CONSEQUENCE** | **RATING** | | | **PERSON(S) RESPONSIBLE** | | | |
| **SITE ARRIVAL AND JOB PREPARATION** | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| **1** | **Site Arrival** | | | | Car Parking | | | | | | | | | | | | |  | | | | |  | |  | | Park in designated areas  Awareness around height of vehicle  Unload from footpath side wherever possible  Use of Hi-vis may be required if unloading traffic side of vehicle in busy areas  Use of spotter optional  Stay within manual handling capability | | | | | | | | | | | | | | | | | **A** | **4** | **M** | | | **Work crew** | | | |
| **2** | **Planning and Preparation** | | | | Non-compliance with current legislative requirements and company processes. | | | | | | | | | | | | | **D** | | | | | **4** | | **H** | | All personnel to complete site-specific induction.  Personnel are to hold the required licenses and certificates for the work and be assessed as competent to use or operate equipment and plant.  All personnel must read, understand and sign off on this SWMS. All personnel are given the opportunity to provide input into the content of this SWMS.  Where applicable - Ensure permit, requirements are understood, and an approved Permit for Work has been received.  Ensure access to SDS for any chemicals being used | | | | | | | | | | | | | | | | | **B** | **2** | **L** | | | **Work crew**  **Supervisor**  **Permit Holder** | | | |
| **3** | **Working Outdoors** | | | | Working outdoors with exposure to;   * UV / high temperatures causing heat stress / dehydration / sunburn   Fauna and insects causing bites and stings | | | | | | | | | | | | | **D** | | | | | **3** | | **H** | | ‘Check ins’ during extreme weather conditions.  Work Breaks are compulsory at nominated times (preferably during the hotter parts of the day)  Drink adequate water amount of water.  Use sunscreen for protection from sun.  Use of correct uniform and PPE.  Use insect repellent (if applicable).  Keep an eye out for fellow workers showing signs of fatigue and report it to your supervisor.  If you are feeling fatigued- talk to your supervisor. | | | | | | | | | | | | | | | | | **C** | **2** | **M** | | | **Work crew** | | | |
| Interactions with other trades working in the vicinity;  Inadvertently cause hazardous situation including trips, slips, falls | | | | | | | | | | | | | **D** | | | | | **3** | | **H** | | Ensure other workers are informed and aware of all other trades working in the area  Communicate potential interactions during prestart  Install barricading and signage to delineate work area if required | | | | | | | | | | | | | | | | | **D** | **2** | **M** | | | **Supervisor**  **Work crew** | | | |
| Poor ground conditions  Uneven, loose, wet or soft ground at the work site. | | | | | | | | | | | | | **C** | | | | | **2** | | **H** | | Inspect path of travel for any obstructions and remove them.  Regular housekeeping inspections including regular walk rounds to be conducted to ensure a clean and tidy work area. | | | | | | | | | | | | | | | | | **C** | **1** | **L** | | | **Work crew** | | | |
| **4** | **Work Area Preparation** | | | | Personal injury  -   * Cuts, strains, abrasions, burns * Possible eye injury     Safety of site employees, staff and equipment –  -Cordon off work area with bollards and barriers. | | | | | | | | | | | | | **C** | | | | | **3** | | **H** | | Authority and empowerment to Stop the Job.  Follow all site rules and procedures.  Ensure correct manual handling techniques are followed including;   1. Bending at the knees to lift 2. Two-person lifts where required 3. Load assessment 4. Use of mechanical aids   Wear all mandatory PPE and task specific PPE.  Communicate task clearly with all work crew members.  Ensure a thorough understanding of expectations.  If a hazard is identified in the work area – fix it or remove it immediately or if unable to do so, isolate the hazard and inform you supervisor.  Work on flat surface where practicable | | | | | | | | | | | | | | | | | **C** | **2** | **M** | | | **Work crew**  **Supervisor** | | | |
| **5** | **Job set up in trafficable areas** | | | | Personal injury from impact from mobile plant or vehicles. | | | | | | | | | | | | | **C** | | | | | **3** | | **H** | | Identify traffic areas, and plant.  Consult with site personal, e.g. warehouse supervisor (site work), centre management (public car parks)  Advise of works and impact to site.  Establish exclusion zone, using cones, bollards, expandable barriers, barrier tape or other measures.  Advise vehicle operators where possible.  In the event of mobile plant/vehicle needing access, stop work and move to a safe area until it is safe to re-establish work area.  Traffic control may be required, e.g. in a shopping centre car park. | | | | | | | | | | | | | | | | | **B** | **4** | **M** | | | **Work crew** | | | |
| **6** | **Emergency Preparedness** | | | | Risk of entrapment and injury in the event of fire, collapse or other emergency | | | | | | | | | | | | | **D** | | | | | **5** | | **E** | | Complete site induction, where applicable  Familiarise with site evacuation diagram, emergency exits and assembly areas. | | | | | | | | | | | | | | | | | **A** | **2** | **L** | | | **Work crew** | | | |
| **ISOLATION, TESTING and COMMISSIONING OF ENERGY SOURCES** | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | **A** | **5** | **M** | |
| **1** | **Identify ALL energy sources to be isolated.** | | | | Personal injury due to contact with live parts | | | | | | | | | | | | | **C** | | | | | **4** | | **H** | | Obtain work approval and confirm any client site/safety instruction.  Confirm that person/s carrying out the work are appropriately qualified, competent, confident and trained for the task. | | | | | | | | | | | | | | | | | **A** | **4** | **M** | | | **Work crew**  **Supervisor** | | | |
| **2** | **Isolate ALL power sources followed by installation of DANGER Tags.** | | | | Personal injury due to contact with live parts | | | | | | | | | | | | | **C** | | | | | **4** | | **H** | | Obtain work approval and confirm any client site/safety instruction.  Confirm that person/s carrying out the work are appropriately qualified, competent, confident and trained for the task. | | | | | | | | | | | | | | | | | **A** | **4** | **M** | | | **Work crew**  **Supervisor** | | | |
| **3** | **Check testing equipment for integrity and ensure it is in good working order.**  **Test that works area has been safely isolated.** | | | | Defective installation causing electrocution. | | | | | | | | | | | | | **C** | | | | | **4** | | **H** | | Ensure appropriate test equipment is in test date before being used  Appropriate tools for the job are available  Ensure all appropriate barricading is in place to isolate the area  Working kits are used and maintained, and first check operation of test apparatus.  Visual inspection shall include;  - Basic protection (protection against direct contact with live parts)  - Fault protection (protection against indirect contact with exposed conductive parts)  - Protection against hazardous parts (guarding/screening)  - General condition of equipment. | | | | | | | | | | | | | | | | | **A** | **4** | **M** | | | **Work crew**  **Supervisor** | | | |
| **4** | **Install Lock-off tags, locks and signage** | | | | Unauthorized access to isolation sources | | | | | | | | | | | | | **D** | | | | | **3** | | **H** | | Wear all mandatory PPE and task specific PPE.  Ensure correct lock-offs, padlocks and other accessories are used.  Communicate with the team the details of the isolation  Install signage, including contact details | | | | | | | | | | | | | | | | | **A** | **3** | **L** | | | **Supervisor**  **Work crew** | | | |
| **5** | **Confirm installation or repair.** | | | | Defective installation causing electrocution. | | | | | | | | | | | | | **C** | | | | | **4** | | **H** | | Ensure appropriate test equipment is being used  Appropriate tools for the job are available  Ensure all appropriate barricading is in place to isolate the area if required  Visual inspection shall include;  - Basic protection (protection against direct contact with live parts)  - Fault protection (protection against indirect contact with exposed conductive parts)  - Protection against hazardous parts (guarding/screening)  - General condition of equipment. | | | | | | | | | | | | | | | | | **A** | **4** | **M** | | | **Work crew**  **Supervisor** | | | |
| **6** | **Test and commission new installation or repairs following relevant procedures.  Confirm phase rotation of all 3-phase equipment.** | | | | Personal injury due to contact with live parts. | | | | | | | | | | | | | **C** | | | | | **4** | | **H** | | Obtain work approval and confirm any client site/safety instruction.  Check scope of works to confirm isolations are in place prior to testing commencing.  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.  Confirm that person/s carrying out the work are appropriately qualified, competent, confident and trained for the task. | | | | | | | | | | | | | | | | | **A** | **4** | **M** | | | **Work crew**  **Supervisor** | | | |
| **7** | **Remove DANGER Tags and Energise supply** | | | | Personal injury due to contact with live parts | | | | | | | | | | | | | **C** | | | | | **4** | | **H** | | Obtain work approval and confirm any client site/safety instruction.  Check scope of works to confirm whether work be re-scheduled so it may be isolated.  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.  Confirm that person/s carrying out the work are appropriately qualified, competent, confident and trained for the task. | | | | | | | | | | | | | | | | | **A** | **4** | **M** | | | **Work crew**  **Supervisor** | | | |
| **INSTALLATION of NON-ELECTRICAL MATERIAL (ie: Does not require an electrical connection) EG: Conduit, cable-tray…** | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| **1** | **Check layout and mark out** | | | | Personal injury –   * Potential slips, trips and falls | | | | | | | | | | | | | **C** | | | | | **3** | | **H** | | Ensure direct work area is clear and free from any potential trip hazards  All tools are to be stored appropriately for easy access and to avoid becoming a trip hazard  Work area to be checked to ensure all exposed nails are removed  Dispose of all loose items and rubbish appropriately | | | | | | | | | | | | | | | | | **B** | **3** | **M** | | | **Work crew**  **Supervisor** | | | |
| **2** | **Ensure correct materials are being installed** | | | | Personal injury  Risk of failure | | | | | | | | | | | | |  | | | | |  | |  | | Check scope of works to confirm materials are fit-for purpose | | | | | | | | | | | | | | | | | **A** | **3** | **L** | | | **Work crew** | | | |
| **3** | **Secure fixings and supports using correct type and size bolts and fixings** | | | | Personal injury –   * Struck by moving objects * Cuts, strains, abrasions, burns * Possible eye injury * Dust inhalation (depends on surrounds – these tasks should not cause dust or fumes) * Fall from heights | | | | | | | | | | | | | **C** | | | | | **4** | | **H** | | Authority and empowerment to Stop the Job.  Ensure correct manual handling techniques are followed.  Wear all mandatory PPE and task specific PPE.  If dust is present, a dust musk must be used.  A dust  First Aid trained staff | | | | | | | | | | | | | | | | | **B** | **3** | **M** | | | **Work crew** | | | |
| **4** | **Cut cable ladders or trays to fit using drop saw / angle grinder** | | | | Personal injury –   * Struck by moving objects * Cuts, strains, abrasions, burns * Possible eye injury * Damage caused by noise * Dust inhalation (depends on surrounds – these tasks should not cause dust or fumes) * Fall from heights | | | | | | | | | | | | | **C** | | | | | **4** | | **H** | | Authority and empowerment to Stop the Job.  Ensure correct manual handling techniques are followed.  Wear all mandatory PPE and task specific PPE.   If dust is present, a dust musk must be used.  A dust extraction device will be used in the event dust becomes excessive.  Compliant First Aid Kits on site  First Aid trained staff  Refer to Working at Heights SWMS | | | | | | | | | | | | | | | | | **B** | **3** | **M** | | | **Work crew** | | | |
| 5 | **Cut cable ladders or trays to fit using drop saw / angle grinder** | | | | Lack of experience in using drop saw / angle grinder  Faulty / damaged equipment | | | | | | | | | | | | | **D** | | | | | **4** | | **H** | | Conduct verification of competency on drop saw / angle grinder  Visual inspection to be carried out on drop saw / angle grinder  Ensure tools have been tested and tagged  Tag out tools that are unfit for use  Supervision for junior staff | | | | | | | | | | | | | | | | | **B** | **3** | **M** | | | **Work crew** | | | |
| **6** | **Remove sharp edges and protruding fixings** | | | | Personal injury –   * Struck by moving objects * Cuts, strains, abrasions, burns * Possible eye injury * Damage caused by noise * Dust inhalation (depends on surrounds – these tasks should not cause dust or fumes) * Fall from heights | | | | | | | | | | | | | **C** | | | | | **4** | | **H** | | Authority and empowerment to Stop the Job.  Ensure correct manual handling techniques are followed.  Wear all mandatory PPE and task specific PPE.   If dust is present, a dust musk must be used.  A dust extraction device will be used in the event dust becomes excessive.  Compliant First Aid Kits on site  First Aid trained staff  Spotters used for moving plant  Refer to Working at Heights SWMS | | | | | | | | | | | | | | | | | **B** | **3** | **M** | | | **Work crew** | | | |
| **7** |  | | | | Lack of experience in using drop saw / angle grinder  Faulty / damaged equipment | | | | | | | | | | | | | **D** | | | | | **4** | | **H** | | Conduct verification of competency on drop saw / angle grinder  Visual inspection to be carried out on drop saw / angle grinder  Ensure tools have been tested and tagged  Tag out tools that are unfit for use  Supervision for junior staff | | | | | | | | | | | | | | | | | **C** | **1** | **L** | | | **Supervisor**  **Work crew** | | | |
| **8** |  | | | | Hot Works – Fire | | | | | | | | | | | | | **C** | | | | | **4** | | **H** | | Fire extinguisher onsite  Acquire hot work permit where required  Utilise correct PPE | | | | | | | | | | | | | | | | | **B** | **1** | **L** | | |  | | | |
| **INSTALLATION of ELECTRICAL MATERIAL/ACCESSORIES (ie: Requires an electrical connection) EG: Light fitting, power-point, switchboard** | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| **1** | **Check layout and mark out** | | | | Personal injury –   * Potential slips, trips and falls | | | | | | | | | | | | | **C** | | | | | **3** | | **H** | | Ensure direct work area is clear and free from any potential trip hazards  All tools are to be stored appropriately for easy access and to avoid becoming a trip hazard  Work area to be checked to ensure all exposed nails are removed  Dispose of all loose items and rubbish appropriately | | | | | | | | | | | | | | | | | **B** | **3** | **M** | | | **Work crew**  **Supervisor** | | | |
| **2** | **Ensure correct materials are being installed** | | | | Personal injury  Risk of failure | | | | | | | | | | | | | **C** | | | | | **3** | | **H** | | Check scope of works to confirm materials are fit-for purpose and compliant to regulatory requirements. | | | | | | | | | | | | | | | | | **A** | **2** | **L** | | | **Work crew** | | | |
| **3** | **Check walls, cavities and ceilings for other services and confirm location of any water pipes, gas lines or power or telephone cables.** | | | | Defective installation causing electrocution.  Contact with other services causing damage to services. | | | | | | | | | | | | | **C** | | | | | **4** | | **H** | | Ensure appropriate test equipment is being used to identify all potential services  Appropriate tools for the job are available  Ensure all appropriate barricading is in place to isolate the area  Working kits are used and maintained, and first check operation of test apparatus.  Visual inspection shall include;   - Basic protection (protection against direct contact with live parts)  - Fault protection (protection against indirect contact with exposed conductive parts)  - Protection against hazardous parts (guarding/screening)  - Protection against spread of fire (fire blanket / fire extinguisher)  - General condition of equipment. | | | | | | | | | | | | | | | | | **A** | **4** | **M** | | | **Work crew**  **Supervisor** | | | |
| **4** | **Confirm cabling requirements** | | | | Cabling not installed as per client requirements resulting in  Personal injury -   * Cuts, strains, abrasions, burns * Possible eye injury * Dust inhalation (depends on surrounds – these tasks should not cause dust or fumes) * Fall from heights | | | | | | | | | | | | | **C** | | | | | **3** | | **H** | | Licensed and competent personal only to undertake this task  Wear all mandatory PPE and task specific PPE.  Refer to Working at Heights SWMS  Dispose of all loose items and rubbish appropriately  Supervision of junior staff | | | | | | | | | | | | | | | | | **B** | **3** | **M** | | | **Work crew**  **Supervisor** | | | |
| **5** | **Install fitting base and**  **Confirm fitting is secure and installed to specifications.** | | | | Personal injury -   * Cuts, strains, abrasions, burns * Possible eye injury * Dust inhalation (depends on surrounds – these tasks should not cause dust or fumes) * Fall from heights | | | | | | | | | | | | | **C** | | | | | **5** | | **H** | | Wear all mandatory PPE and task specific PPE.  Refer to Working at Heights SWMS  Use Correct PPE | | | | | | | | | | | | | | | | | **A** | **4** | **M** | | | **Work crew**  **Supervisor** | | | |
| Personal injury –   * Struck by moving objects * Cuts, strains, abrasions, burns * Possible eye injury * Dust inhalation (depends on surrounds – these tasks should not cause dust or fumes) * Fall from heights | | | | | | | | | | | | | **C** | | | | | **4** | | **H** | | Ensure correct manual handling techniques are followed.  Wear all mandatory PPE and task specific PPE.  If dust is present, a dust musk must be used.  A dust extraction device will be used in the event dust becomes excessive. | | | | | | | | | | | | | | | | | **A** | **4** | **M** | | | **Work crew** | | | |
| **6** | **Carry out electrical connection** | | | | -Risk of failure  -Risk of electrocution to installer and end-user  -Risk of fire | | | | | | | | | | | | | **C** | | | | | **4** | | **H** | | -Licensed and competent personal only to undertake this task  -Confirm correct cable type and size  -Ensure labels and markings on accessory are present and clear. Instruction manuals can be refereed to.  -Ensure connections are made properly: Cable is prepared correctly, terminal is adequate size/type, cable lugs/ferrules if required, terminals are adequately tight and secure. | | | | | | | | | | | | | | | | | **B** | **3** | **M** | | | **Work crew** | | | |
| **7** | **Test electrical connection** | | | | -Risk of failure  -Risk of electrocution to installer and end-user  -Risk of fire | | | | | | | | | | | | | **C** | | | | | **4** | | **H** | | -Licensed and competent personal only to undertake this task  -Ensure test equipment is appropriate and within calibration date  -Ensure work area is clear and safe | | | | | | | | | | | | | | | | | **B** | **3** | **M** | | | **Work crew**  **Supervisor** | | | |
| **8** | **Commission switchboard** | | | | Personal injury due to contact with live parts | | | | | | | | | | | | | **C** | | | | | **4** | | **H** | | Carry out pre-commission test and isolation procedures  Obtain work approval and confirm any client site/safety instruction.  Check scope of works to confirm isolations are in place prior to testing commencing.  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.  Confirm that person/s carrying out the work are appropriately qualified, competent, confident and trained for the task.  Rescue kits available | | | | | | | | | | | | | | | | | **A** | **3** | **L** | | | **Work crew**  **Supervisor** | | | |
| **9** | **Install signs or labels as required** | | | | Personal injury -  Cuts, strains, abrasions | | | | | | | | | | | | | **C** | | | | | **2** | | **M** | | Follow all site rules and procedures.  Ensure correct manual handling techniques are followed.  Wear all mandatory PPE and task specific PPE.  If a hazard is identified in the work area – fix it or remove it immediately or if unable to do so, isolate the hazard and inform you supervisor.  First Aid kits onsite   First Aid Trained employees on site | | | | | | | | | | | | | | | | | **A** | **3** | **L** | | | **Work crew** | | | |
| **10** | **Complete appropriate documentation (switchboard schedules, update drawings and workbook)** | | | | Incorrect documentation could result in miscommunication and injury to personnel | | | | | | | | | | | | | **C** | | | | | **4** | | **H** | | Person conducting work are to hold the required licenses and certificates for the work, and be assessed as competent to complete switchboard schedules, update drawings and workbook. | | | | | | | | | | | | | | | | | **A** | **2** | **L** | | | **Work crew**  **Supervisor** | | | |
| **INSTALLING CABLING** | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| **1** | **Confirm cable specifications / conditions and install cable** | | | | Defective installation causing electrocution. | | | | | | | | | | | | | **C** | | | | **4** | | | **H** | | Ensure appropriate test equipment is being used  Appropriate tools for the job are available  Ensure all appropriate barricading is in place to isolate the area  Working kits are used and maintained, and first check operation of test apparatus.  Visual inspection shall include;   - Basic protection (protection against direct contact with live parts)  - Fault protection (protection against indirect contact with exposed conductive parts)  - Protection against hazardous parts (guarding/screening)  - Protection against spread of fire (fire blanket / fire extinguisher)  - General condition of equipment. | | | | | | | | | | | | | | | | | **A** | **3** | **L** | | | **Work crew**  **Supervisor** | | | |
| **2** | **Terminate submains to specifications** | | | | Personal injury -   * Cuts, strains, abrasions, burns * Possible eye injury * Dust inhalation (depends on surrounds – these tasks should not cause dust or fumes)   Unauthorized access to work area by other authorized personnel without correct PPE. | | | | | | | | | | | | | **C** | | | | **4** | | | **H** | | Identify the electrical equipment to be worked on and the appropriate points of supply  Isolate the equipment from sources of supply if possible. Secure the isolation by such means as lock-out to prevent inadvertent re-energisation and attached a danger tag  Prove that the exposed conductors are de-energised (i.e. ‘test for dead’)  Working persons shall confirm rescue procedures and have attended confined space rescue training.  A rescue kit shall be placed along the side of the work area.  Compliant First Aid kits shall be present on site.  Utilise site Emergency Plan where and if required | | | | | | | | | | | | | | | | | **A** | **4** | **M** | | | **Work crew**  **Supervisor** | | | |
| **3** | **Test installation** | | | | Personal injury due to contact with live parts | | | | | | | | | | | | | **C** | | | | **4** | | | **H** | | Obtain work approval and confirm any client site/safety instruction.  Check scope of works to confirm whether work be re-scheduled so it may be isolated.  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.  Confirm that person/s carrying out the work are appropriately qualified, competent, confident and trained for the task. | | | | | | | | | | | | | | | | | **B** | **4** | **M** | | | USING PORTABLE LADDERS | | | |
| **4** | **Remove DANGER Tags and Energise supply** | | | | Personal injury due to contact with live parts | | | | | | | | | | | | | **C** | | | | **4** | | | **H** | | Obtain work approval and confirm any client site/safety instruction.  Check scope of works to confirm whether work be re-scheduled so it may be isolated.  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.  Confirm that person/s carrying out the work are appropriately qualified, competent, confident and trained for the task. | | | | | | | | | | | | | | | | | **A** | **5** | **M** | | | **Work crew**  **Supervisor** | | | |
| **USING PORTABLE LADDERS** | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| **1** | **Selecting a Ladder** | | | | Personal Injury –   * Electrocution * Fall from heights * Manual Handling injury | | | | | | | | | | | | | **C** | | | | **3** | | | **H** | | Authority and empowerment to **Stop the Job**.  Follow all site rules and procedures.  Ensure correct manual handling techniques are followed including;   1. Bending at the knees to lift 2. Two-person lifts where required 3. Load assessment 4. Use of mechanical aids   Wear all mandatory PPE and task specific PPE.  Communicate task clearly with all work crew members.  Ensure a thorough understanding of expectations.  If a hazard is identified in the work area – fix it or remove it immediately or if unable to do so, isolate the hazard and inform you supervisor.  Work on flat surface where practicable  Metal or wire reinforced ladders shall not be used for any work where there may be a live electrical installation. | | | | | | | | | | | | | | | | | **C** | **2** | **M** | | | **Work crew**  **Supervisor** | | | |
| Ladder inadequate for use | | | | | | | | | | | | | **C** | | | | **3** | | | **H** | | Complete daily pre-start checks  Use Tag out system | | | | | | | | | | | | | | | | | **A** | **3** | **L** | | | **Work crew**  **Supervisor** | | | |
| **2** | **Use of Ladder** | | | | Fall from height | | | | | | | | | | | | | **C** | | | | **3** | | | **H** | | Employees instructed to not use top steps.  Not to straddle the step ladder  Not to reach out too far  Three points of contact while using the ladder at all times  Not to place tools and equipment on the top step unless designed for the task | | | | | | | | | | | | | | | | | **A** | **3** | **L** | | | **Work crew**  **Supervisor** | | | |
| Tools falling from height | | | | | | | | | | | | | **C** | | | | **3** | | | **H** | | Hoist tools and equipment with rope – keep both hands free for climbing.  Barricade area to prevent persons from walking under ladder while in use.  Do not overload pockets or tool belts with items that may fall out.  Ensure footwear is appropriate and free from mud or oil. | | | | | | | | | | | | | | | | | **A** | **3** | **L** | | | **Work crew**  **Supervisor** | | | |
| Ladder installed insecurely | | | | | | | | | | | | | **C** | | | | **3** | | | **H** | | Position ladders a minimum of 1 metre from edges of slabs or floors. Increase this distance as working heights increase.  Straight or extension ladders to be secured at top and bottom.  Ladders need to extend 1 metre above landing level and to be long enough to work at least 1 metre from the top of the ladder. Angle of ladder should be nominally 1 in 4  Always face the ladder when ascending or descending a ladder keep two hands and one foot on the ladder.  Fall protection to be used when working above 2.0 m    Erect stepladders on even and level surface.  Tie ladder to permanent structure if possible.  Clear people form the immediate area if possible. | | | | | | | | | | | | | | | | | **A** | **3** | **L** | | | **Work crew**  **Supervisor** | | | |
| **ELEVATED WORK PLATFORMS** | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| **1** | **Check elevated work platform and equipment prior to use** | | | | Personal injury from insufficient inspection of equipment | | | | | | | | | | | | | **D** | | | | **3** | | | **H** | | At the start of each shift all plant is to be inspected & recorded in logbook  All safety equipment harnesses, lanyards etc. are to be checked daily & have current inspection tag attached  EWP basket to be switched off when in position or control lever panel cover closed to prevent inadvertent operation  Plant to have all scheduled maintenance completed as per manufacturers recommendations  Only work within machines recommended safe working load | | | | | | | | | | | | | | | | | **B** | **4** | **M** | | | **Work crew** | | | |
| **2** | **Using elevated work platforms** | | | | Personal Injury   * Fall from height * Falling tools | | | | | | | | | | | | | **C** | | | | **3** | | | **H** | | Authority and empowerment to **Stop the Job**.  Follow all site rules and procedures.  Secure all tools and/or equipment by lanyard or store in a toolbox/basket when on the work platform.  Ensure all hand tools and equipment are secure to avoid falling from height using a lanyard or similar  Use harnesses and lanyards  Work only within the basket, do not reach outside or the basket.  Place kick bards where possible in the basket  Wear correct PPE  Barricade are below EWP and restrict access | | | | | | | | | | | | | | | | | **A** | **4** | **M** | | | **Work crew** | | | |
| Overhead service strike | | | | | | | | | | | | | **C** | | | | **5** | | | **H** | | Locate and note all overhead services  Use spotters where required  Do not operate within close vicinity of power lines | | | | | | | | | | | | | | | | | **B** | **4** | **M** | | | **Work crew** | | | |
| Unstable ground | | | | | | | | | | | | | **C** | | | | **4** | | | **H** | | Walk all areas where you will be maneuvering the EWP to assess ground conditions  Use spotters when moving EWP | | | | | | | | | | | | | | | | | **A** | **3** | **L** | | | **Work crew** | | | |

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| **Personnel Qualifications and Experience Required** | **Personnel Duties and Responsibilities** | | **Training Required to Complete Work** |
| **Supervisor** | **All Personnel** |
| Personnel will need to be trained and competent at the task at hand. | Supervisor to carry out daily inspections of work site for hazards. | All personnel to maintain tidy work area on site at all times. Personal Protective Equipment (PPE) to be worn at all times on site. | Supervisor to be trained in hazard identification, risk assessment and control e.g., SWMS |
| Industry and Site induction including the NECA Safety Guide for Employees (Red Book). | All personnel to maintain tidy work area on site at all times. Personal Protective Equipment (PPE) to be worn at all times on site. | Signage & Barricading to be used as appropriate to protect others and to prevent entry into exclusion zones | Supervisor to be appropriately trained, qualified and competent in OH&S and electrical practices for the task. |
| CPR and First Aid Training. | Signage & Barricading to be used as appropriate to protect others and to prevent entry into exclusion zones | Maintain relevant qualifications | **Training** in the use of specific equipment / plant and inspection and maintenance of equipment to be conducted for the type of equipment / plant to be used. - First Aid CPR |

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| **Engineering Details / Certificates / Australian Standards** | | | **Referenced – Codes of Practice / Regulations / Legislation** | | |
| * AS/NZS 1891.1 Industrial Fall Arrest Systems – Harnesses and Ancillary Equipment * AS/NZS 1892.1 Portable ladders Performance and geometric Requirements * AS 1940 Storage & handling of flammable & combustible liquids * AS 2444 Portable Fire Extinguishers and blankets – Selection and Location | | * AS 2550.10 Cranes, hoists and winches - Safe use Mobile elevating work platforms * AS 2790 Electricity Generating Sets – Transportable (up to 25kW) * AS/NZS 3008 Electrical installation – cable selection * AS/NZS 3012 Electrical Installations – Construction and Demolition Sites * AS/NZS 3190 Approval and Test Specification – Residual Current Devices * AS 3745 Planning for emergencies in facilities * AS/NZS 3760 In-Service Safety Inspection & Testing of Electrical Equipment | | | * Occupational Health and Safety Act 2004 * Occupational Health and Safety Regulations 2017 * Compliance Code – First Aid in the Workplace * Compliance Code – Plant * Compliance Code – Workplace amenities and work environments * Compliance Code – Hazardous Manual Handling |
| **Plant / Equipment Required (Mobile or Static)** | **Maintenance Checks / Calibration Intervals** | |  | | |
| Hand tools, power tools, Barricades and warning signs. Lock out and Tag out Equipment. | | | | * Hand tools and ladders to be checked daily. * All electrical equipment to be tested and tagged. * PPE items to be inspected or replaced as per manufacturers guidelines | |

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| **REVISION** | **DATE** | **CHANGES / AMENDMENTS** | **REVIEWED BY** | **APPROVED BY** |
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**Acknowledgement**

I have been consulted on the implementation of the Safe Work Method Statements (SWMS) listed above, and I have read and understood the SWMS’s and agree to work to the requirements of these Safe Work Method Statements.

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| **Name** | **Signature** | **Date** |
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