

Evolution Civil Maintenance Pty Ltd

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Safe Work Method Statement								
Activity:	Expansion Joint Wo	xpansion Joint Works						
Client:	Fulton Hogan Industri	ulton Hogan Industries Contract No:						
Project:	SRAPC Maintenance Works			Location Ref:				
Prepared By:	Ben Spletter	Position:	National Civils Manager	Signature:		Date:	25/09/2024	
Approved By:	lan Haigh	Position:	HSEQ Manager	Signature:	J. Harl	Date:	25/09/2024	

High-Risk Construction Activities - Monitoring & Review

- Our works are considered to be a **High-Risk Construction Activity.** The following SWMS is used to identify the hazards, assess the associated risks, and develop appropriate control measures. Monitoring and review of control measures to enable the safe and controlled undertaking of works is undertaken by completion of *Daily Pre-Start & Site Assessment (ECM-FORM-001)* which is to be signed off by the nominated ECM Site Foreman and the ECM Site Team Members in acknowledgment.
- Site Audits & Assessments will be conducted during the works to ensure that personnel continues to operate in accordance with this SWMS using *Site Audit & Assessment Form* (*ECM-FORM-002*). Completed assessments will be reviewed and maintained as a record with all documentation related to this work site activity. The *Site Audit & Assessment Form* includes the means to continually assess other core competencies detailed within Evolution Work Instructions.
- A Site-Specific Risk Assessment must be undertaken using this document to determine and control any further or new risks that arise during the works on site. This SWMS is used to facilitate this Site-Specific Risk Assessment and is complimented by the use of a *Daily Pre-Start & Site Assessment* to document the same Risk Assessment process.
- All persons associated with the works must be allowed to review and comment on the content of this SWMS, Work Instruction, and any Safety Data Sheets for products that are used within the works.
- The Responsible Officer for the Works will be the nominated ECM Contract Foreman; this person will represent ECM on-site and will be responsible for authorising all site documentation.
- All processes will be monitored and reviewed by our Workplace Health & Safety Manager.
- All ECM Personnel are provided with competency training on the safe use of plant and equipment assigned for the works. This training is provided in accordance with Evolution policy and procedures using approved Evolution Work Instructions and assessment documentation. A record of the completed training assessment is held on the employee personnel file.

Risk Assessment

The risk assessment process is undertaken in accordance with MGT-002 Risk Management which details a Risk Assessment process which adopts the following process:

STEP 1
Establish the Hazards /
Aspects



STEP 2
Identify the Risks /
Impacts



STEP 3
Assess probability and consequences



STEP 4
Implement Control
Measures



STEP 5 Monitor, Review & Evaluate

Consequence: Le					fseverity	
		Insignificant	Minor	Moderate	Major	Catastrophic
	Almost Certain	3	3	4	4	4
uld happen	Likely	2	3	3	4	4
Likelihood: How likely it could happen	Possible	1	2	3	4	4
	Unlikely	1	2	2	3	4
	Rare	1	2	2	3	3

Consequence: Level of severity					
Descriptor	Description				
	Safety - Fatality or Multiple fatalities. Or significant irreversible effects to				
Catastrophe	one or more persons.				
Catastrophie	Environmental - Very serious, long term environmental impairment of				
	ecosystem functions.				
	Safety - Severe irreversible disability (>30%) to one or more persons.				
Major	Environmental - Very serious, long term environmental impairment of				
	ecosystem functions.				
	Safety - Moderate irreversible disability or impairment (<30%) to one or				
Moderate	more persons.				
	Environmental - Serious medium term environment effects.				
	Safety – Minor injury sustained, requiring medical treatment.				
Minor	Environmental - Moderate, short term effects but not affecting ecosystem				
	functions.				
Incignificant	Safety -No medical treatment required.				
Insignificant	Environmental - Minor effects on biological or physical environment.				

Likelihood: How likely it could happen					
Descriptor	Description or Frequency				
Almost Certain	Highly likely to occur.				
Likely	Has the potential to occur frequently.				
Possible	It is a possibility that it will occur without adequate controls in place.				
Unlikely	An occurrence is unlikely.				
Rare	An occurrence is highly unlikely to occur.				

In order to simplify the Risk Assessment process the numbers from the Risk Assessment matrix are converted into a clear descriptor so that the assessor and other workers can easily identify the level of risk through the process. To achieve this the following will apply:

Level of Risk		Description of Risk Level
4	VERY HIGH	STOP WORK! Do not continue until suitable controls are in place to reduce the risk.
3	HIGH	It is considered safe to proceed with the appropriate Control Measures in place. Risks must be Monitored and Reviewed as works progress.
2	MEDIUM	The risks are considered to be suitably controlled to allow works to progress safely in accordance with standard operating procedures.
1	LOW	Minimal risk is posed. Works may proceed in accordance with standard operating procedures.

The following **Hierarchy of Controls** outlines the control measures implemented through the process in order of decreasing effectiveness; taken from *NSW WorkCover Hierarchy of Controls* Factsheet.

Fliminate:

Remove the Hazard by designing out. For example; get rid of the dangerous machine.

Substitute:

Substitute the Hazard with a safer alternative. For example; replace the machine with a safer one.

Isolate:

Isolate the hazard from anyone who could be harmed.

For example; keep the machine in an enclosed area and operate it remotely.

• Engineering:

Use Engineering controls to reduce the risk.

For example; attach quards to the machine to protect users.

Administrative:

Use Administrative controls to reduce the risk. For example; train the workers how to use the machine safely.

• Personal Protective Equipment (PPE):

Use Personal Protective Equipment.

For example; wear gloves and goggles when using the machine.

Most Effective



Least Effective

Type of high-risk construction work	☑ Work that is carried out in an area at a workplace in which there is any movement of powered mobile plant.	☐ Work that is carried out in or near a shaft or trench with an excavated depth greater that 1.5 metres or a tunnel.	☑ Work that is carried out on, adjacent or near a road, railway, shipping lane or others traffic corridor that is in use by traffic other than pedestrians.
	☐ Work that is carried out on a telecommunication tower.	☐ Work that involves the use of explosives.	☐ Work that involves tilt-up or precast concrete.
	☐ Work that involves demolition of load-bearing structure or otherwise related to the physical integrity of the structure.	☐ Work that is carried out in or near a confined space.	☐ Work that involves a risk of a person falling more than 2 metres.
	☐ Work that involves, or is likely to involve the disturbance of asbestos.	☐ Work that is carried out on or near chemical, fuel, or refrigerant lines.	☐ Work that involves diving work.
	☐ Work that involves alterations or repairs that require temporary support to prevent collapse.	☑ Work that is carried out on or near energised electrical installations or services.	☐ Work that is carried out in or near water or other liquid that involves a risk of drowning.
	☐ Work that is carried out in an area in which there are artificial extremes of temperature.	☐ Work that is carried out in an area that may have a contaminated or flammable atmosphere.	Work that is carried out in or near water or other liquid that involves a risk of drowning.

Activity	Hazards Identified	Inherent Risk Rating	Control Measures	Residual Risk Rating	Person responsible
1. Pre-Contract Consultation & Risk Mitigation.	 Working in close proximity to live Traffic. Working near Live Services; Water, Electricity, Fibre Optics, etc. Working in close proximity to the public. Working in close proximity to other Contractors and Site Traffic. Working in close proximity to Mobile Plant. 	VERY HIGH (4)	 Ensure that the correct Products and Systems are selected and used for the works to ensure Hazards and Risks are removed or reduced to a minimum. Ensure that the works are accessed in the safest possible manner using an appropriate level of Traffic Management. Consider all options; i.e. partial or full closure where possible. Underground Services are to be identified. Special attention is to be paid to any median or footpath areas. The presence of any services where identified must be managed accordingly by eliminating the risk by isolating or re-routing to provide a safe area of work. DBYD information is to be obtained from Principal Contractor (or Asset Owner) unless agreed otherwise via positive communication between all parties. If potential Service conflict is identified (within 1 meter of the works) the Principal Contractor (Asset Owner) is to adopt positive location techniques (vacuum excavation, manual excavation or similar) If available – obtain the Bridge Structural Drawings to identify service corridors / cavities. Ensure that all ECM personnel and subcontractors have attended the appropriate site inductions. Ensure that all ECM personnel, vehicles and subcontractors are compliant with any project specific requirements. Ensure that all ECM personnel and subcontractors are aware of safety criteria including safe distance from Safety Barriers, Mobile Plant, etc. and that the SWMS is revised in advance where appropriate and practicable to do so. 	MEDIUM (2)	Project Manager
2. Establishing to Site.	 Possible Road Traffic Accident caused during approach and entry to site by work vehicles. Possible collision with other site users while entering site. Injury to workers during vehicle movements. 	HIGH (3)	 Site Access & Egress procedure to be discussed at Site Induction and Pre-Start Briefings that follow. Ensure all Work Permits, TCP's and Road Occupancy Licences are in place and approved for the works to be undertaken. All vehicles must display orange flashing beacons and signal clearly 400 metres from site entrance. 	MEDIUM (2)	All Staff

Activity	Hazards Identified	Inherent Risk Rating	Control Measures	Residual Risk Rating	Person responsible
			 Slowly reduce speed to ensure safe entry into site. UHF Radios are to be used so that communication is made on approach to the site work area entrance. A 3 metre safety zone is to be implemented around vehicles where practicable. Where not practicable no movements shall take place without the use of a spotter and a pre-determined plan. All vehicles are scheduled to enter site in an orderly manner as determined during the Pre-Start Briefing. 		
3. Driving on Site.	 Possible collision with other site users while driving through site or manoeuvring site vehicles. Injury to workers during vehicle movements. 	VERY HIGH (4)	 All vehicles must continue to display orange flashing beacons while on site. Site traffic speeds are restricted to 20 km/h; reduced to walking speed around Pedestrians and Operating Plant. All vehicles must be fitted with compliant reversing beepers or squawkers. A banksman / spotter must be used during all reversing manoeuvres. Vehicles must have fitted UHF radios. Where Mobile Plant is in use ensure that the appropriate safe distances are maintained and processes adhered to during any site movements. UHF Radios to be used to communicate with Mobile Plant operators. A 3 metre safety zone is to be implemented around vehicles where practicable. Where not practicable no movements shall take place without the use of a spotter and a pre-determined plan. 	MEDIUM (2)	All Staff

Activity	Hazards Identified	Inherent Risk Rating	Control Measures	Residual Risk Rating	Person responsible
4. Creating a Safe Area of Work on Site	 Vehicles entering the work site causing incident or injury to workers. Injury caused by flying debris caused by passing traffic. Working around mobile plant. Exposure to noise created by passing traffic, mobile plant, etc. Slips, Trips & Falls. Pedestrians entering the work site causing incident or injury to workers or self 	HIGH (3)	 Stay within the designated worksite area. Ensure that suitable Speed Zones and Safety Zones are implemented to ensure safe distances are maintained between workers and passing traffic. Ensure that the appropriate distances are maintained between Workers and Mobile Plant. Provide adequate task lighting when appropriate. UHF Radios to be used to communicate with Mobile Plant operators. All workers on foot to wear high visibility clothing. Ensure that other appropriate PPE is worn where required; i.e. hearing protection if personnel are exposed to noise from other operations, gloves suitable for task as necessary. Fire Extinguishers, Spill Kits, SDS Information and First Aid Kits are to be made readily available at the location of work as a precautionary measure. Implement good housekeeping measures to ensure that Slips, Trips and Falls are prevented. Provide designated areas for the storage or laydown of Plant, Materials and Equipment where they will not present a hazard to site users. Use signage where appropriate. Delineate work area using safety tape or bollards to distinguish between work area and pedestrian walkway Implement site specific traffic management plan with designated spotter to control pedestrians entering past the site when required. Install safety screening between pedestrians and work site when possible 	MEDIUM (2)	Site Foreman & All Staff

Activity	Hazards Identified	Inherent Risk Rating	Control Measures	Residual Risk Rating	Person responsible
5. Working at Height; includes working on a Bridge Deck or an elevated section of a structure.	 Personnel falling from height. Accident or Injuries sustained by Plant, Equipment, Materials or Debris falling from height. 	HIGH (3)	 When working at height a suitable form of access must be provided to ensure that the area of work can be accessed safely. Where scaffold access is required it shall be erected by trained and competent personnel only. Only suitably trained and competent personnel are able to operate access equipment such as EWP's. Handrails to be installed on exposed edges where a fall from height exists. Do not store items of plant or materials against perimeter fencing, parapet walls or anywhere where there is a risk of falling. Safety Screening to be used to contain the work site and any dirt and debris generated by the works. Place a physical barrier adjacent to parapet walls where the parapet is less than 900 mm in height from foot level. 	MEDIUM (2)	Site Foreman & All Staff
6. Handling and Storage of Materials, Plant and Equipment.	 Cuts & Abrasions. Slips, Trips & Falls. Manual Handling. Material or Chemical Spill. 	HIGH (3)	 Handling and Storage to be undertaken in strict accordance with HSEQ-002. Maintain good site housekeeping. All lifts to be completed within individual lifting capacity. Correct lifting techniques to be used. Ensure counter stretching is achieved every 10-15 minutes to prevent spinal creep Plan route prior to starting lift. Wear supplied PPE as detailed within the PPE Requirements Table. 	MEDIUM (2)	Site Foreman & All Staff
7. Re-fuelling of Plant & Equipment	 Fuel spill. Fire or explosion. 	VERY HIGH (4)	 Handling and Storage to be undertaken in strict accordance with HSEQ-002. As far as is reasonably practicable all site refuelling must be undertaken off of site before the commencement of works. Where necessary site re-fuelling must be undertaken in strict accordance with ECM Site Refuelling procedures. Minimum amounts of fuel to be kept on site. 	MEDIUM (2)	Site Foreman & All Staff

Activity	Hazards Identified	Inherent Risk Rating	Control Measures	Residual Risk Rating	Person responsible
			 Fuel to be stored on ECM vehicles or within a suitable bunded area. All refuelling to be undertaken with engine switched off and cooled Fire extinguishers must be located at the local area as a precautionary measure. Spill kits must be kept at hand and used as required. 		
8. Provision of Site Task Lighting	 Impair vision of passing vehicles. Electrocution from site power and leads. 	HIGH (3)	 Plant & Equipment is only to be used by suitably competent personnel. Competency assessed using ECM Work Instruction Procedures. Place lighting so as not to impair the vision of passing vehicles or other site users or housing abutting the road corridor. Use lead stands to keep leads above floor level. Electrical tagging must be current. Inspect Plant and Equipment before start of work each day and record on ECM Pre-Start records. 	MEDIUM (2)	Site Foreman & All Staff
9. Provision of 240 volt site power	Electric Shock.	HIGH (3)	 Plant & Equipment is only to be used by suitably competent personnel. Competency assessed using ECM Work Instruction Procedures. Use lead stands to keep leads above floor level. Electrical tagging must be current. Inspect Plant and Equipment before start of work each day and record on ECM Pre-Start records. Generators must be fitted with RCD's. 	MEDIUM (2)	Site Foreman & All Staff
10. Saw Cutting & Excavation works including Jackhammering and scabbling	 Cuts & Abrasions. Noise, dust and debris. Manual Handling. Flying debris. Respirable Crystalline Silica (RCS) 	HIGH (3)	 Plant & Equipment is only to be used by suitably competent personnel. Competency assessed using ECM Work Instruction Procedures. Wear supplied PPE as detailed within the PPE Requirements Table. Inspect Plant and Equipment before start of work each day and record on ECM Pre-Start records. All non-critical workers to maintain a 3 metre safety zone around cutting and grinding works. Wet cut to suppress dust and debris or use a vacuum hood to capture dust 	MEDIUM (2)	Site Foreman & All Staff

Activity	Hazards Identified	Inherent Risk Rating	Control Measures	Residual Risk Rating	Person responsible
			 Use appropriate control measures such as Silt Socks or Site Screens to contain dirt debris generated during our works. Follow ECM Manual Handling instructions. Where cutting or grinding produces sparks a Hot Works Permit may be required. Where required ensure that this has been provided prior to commencing work. 2 main methods of suppressing dust – Wet control or Ventilation/on Tool dust extraction(Vacuum) Exclusion zones whilst these activities take place for those personnel not wearing Respiratory Protective Equipment. 3m exclusion zone when using Wet/Extraction method to control or 10m when no control in place All workers to wear respiratory Protective equipment while these activities take place or anything that causes RCS All personnel to hold a fit test card and must carry with them at all times 		
11. Preparation Works; incorporates Abrasive Cleaning, Cutting & Grinding	 Cuts & Abrasions. Noise, dust and debris. Manual Handling. Burns. Respirable Crystalline Silica 	HIGH (3)	 Plant & Equipment is only to be used by suitably competent personnel. Competency assessed using ECM Work Instruction Procedures. Wear supplied PPE as detailed within the PPE Requirements Table. Inspect Plant and Equipment before start of work each day and record on ECM Pre-Start records. Use appropriate control measures such as Silt Socks or Site Screens to contain dirt debris All non-critical workers to maintain a 10 metre safety zone around grit blasting works; and a 2 metre safety zone around cutting and grinding. During Abrasive Cutting wear double face protection. The use of 9" Grinders for cutting is not permitted. Where Hot Works Permit is required ensure that this has been provided prior to commencing work. Ensure that Fire Extinguishers have been suitably located prior to the commencement of hot works. 	MEDIUM (2)	Site Foreman & All Staff

Activity	Hazards Identified	Inherent Risk Rating	Control Measures	Residual Risk Rating	Person responsible
12. Cleaning & Drying of Substrate using Compressed Air and LPG Gas Torches. Cleaning / Burning out of mixers using Gas Torches	 Cuts & Abrasions. Noise, dust and debris. Fire or explosion. Burns. 	HIGH (3)	 During Hot Works and where a risk of fire is presented a fire-spotter may be necessary during and after the hot works. This must be determined prior to the start of work. 2 main methods of suppressing dust – Wet control or Ventilation/on Tool dust extraction(Vacuum) Exclusion zones whilst these activities take place for those personnel not wearing Respiratory Protective Equipment. 3m exclusion zone when using Wet/Extraction method to control or 10m when no control in place All workers to wear respiratory Protective equipment while these activities take place or anything that causes RCS All personnel to hold a fit test card and must carry with them at all times Respirators to be worn while cleaning / burning out mixers. Plant & Equipment is only to be used by suitably competent personnel. Competency assessed using ECM Work Instruction Procedures. Wear supplied PPE as detailed within the PPE Requirements Table. Inspect Plant and Equipment before start of work each day and record on ECM Pre-Start records. Follow Manual Handling instructions. Gas bottles must remain secured on ECM vehicles or secured on a site trolley. Where Hot Works Permits are required they must be 	MEDIUM (2)	Site Foreman & All Staff
13. Setting Out & Assembly of Bridge Expansion Joint System	 Cuts & Abrasions. Noise, dust and debris. Manual Handling. 	HIGH (3)	 Plant & Equipment is only to be used by suitably competent personnel. Competency assessed using ECM Work Instruction Procedures. System to be set out and assembled by suitably competent personnel. Competency assessed using ECM Work Instructions. Wear supplied PPE as detailed within the PPE Requirements Table. 	MEDIUM (2)	Site Foreman & All Staff

Activity	Hazards Identified	Inherent Risk Rating	Control Measures	Residual Risk Rating	Person responsible
			 Inspect Plant and Equipment before start of work each day and record on ECM Pre-Start records. Follow Manual Handling instructions. Use mechanical means or share the load where the lift exceeds individual lifting capacity 		
14. Installation of Bridge Expansion Joint System incorporating Grouts and Nosing Products and cleaning of mixers	 Cuts & Abrasions. Noise, dust and debris. Manual Handling. Ingestion, inhalation or skin contact with construction products. Material or Chemical Spill. Burns. 	HIGH (3)	 Plant & Equipment is only to be used by suitably competent personnel. Competency assessed using ECM Work Instruction Procedures. System to be installed by suitably competent personnel. Installation works include the Mixing, Placement and Curing of ancillary Construction Products. Competency is assessed in accordance with using ECM Work Instructions. Handling and Storage to be undertaken in strict accordance with HSEQ-002. Wear supplied PPE as detailed within the PPE Requirements Table. Inspect Plant and Equipment before start of work each day and record on ECM Pre-Start records. Follow Manual Handling instructions. Use mechanical means or share the load where the lift exceeds individual lifting capacity. Wear appropriate PPE (Glovers, Glasses, Respirator mask) when burning out the mixer. 	MEDIUM (2)	Site Foreman & All Staff

15. Demobilisation from site on completion of work.	 Risk of incident where works have not been completed or have fully cured. Risk of incident where an obstruction is left within the carriageway. Possible Road Traffic Accident caused during exiting of the worksite. Environmental contamination from waste materials generated by the works. 	HIGH (3)	 As a part of our Final Inspection ensure that all works have been undertaken in accordance with procedure and that all works have suitably cured prior to opening the road space to traffic. Site is to be visually checked prior to demobilising from site to ensure that area is clear of all plant, equipment and materials. All waste materials are to be removed and disposed of in accordance with QHSE-001. Site Access procedure must be adhered to. All vehicles must display orange flashing beacons and signal clearly before, during and after exiting for a short period until they have reached the speed of other traffic. UHF Radios are to be used so that communication is continued during exiting the work site. Where required notification must be provided to the appropriate body to advise that works are complete and that we have left site. 	MEDIUM (2)	Site Foreman
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Site Specific Risk Assessment

The following risk assessment schedule is provided to allow site personnel to assess and control and additional hazards that may present themselves over and above those considered to be inherent risks documented in the preceding pages. An assessment will be made using the risk assessment chart also included within this document.

Activity	Hazards Identified	Inherent Risk Rating	Control Measures	Residual Risk Rating	Person responsible

Safety Data Sheets

The following materials will be used during these works. In accordance with HSEQ-002 Handling, Storage & Use of Dangerous Goods all materials are evaluated prior to be approved for use using LOG-FORM-043 Product Assessment Form. This process considers all hazards presented by the material and provides consideration to the possibility of the elimination of any hazards through using alternatives. Where substitution is not an option all other hazards are investigated to ensure that all hazards and risks are effectively controlled. All materials that are Approved are included within our Approved Product list and the SDS information is introduced. SDS information is available both electronically through our Business improvement System, and also on site in hard copy within the ECM work vehicles.

Material	Description

Plant & Equipment Maintenance

The following items of **Plant and Equipment** are used during the installation of Bridge Joints detailed within this SWMS. The competence of personnel is assessed in accordance with Work Instructions which form part of our certified Business Management System. All plant and equipment items are maintained in accordance with the same BIS procedures, with the daily checks and maintenance inspections that are required as a part of our daily pre-start inspections being undertaken as detailed below.

Plant & Equipment	Maintenance Checks	Frequency
Air Compressor	Check Oil & Fuel levels. Check for signs of damage or wear.	Daily before use
Compressor Hoses	Check for damage and wear. Check couplings, whip-checks and safety pins	Daily before use
Generators and Electrical leads	Check Oil & Fuel levels. Check for signs of damage or wear. Tagging must be current.	Daily before use
MIG and ARC Welders	Check for signs of damage or wear. Tagging must be current.	Daily before use
Hydraulic Lifting Arms	Check for signs of damage, wear or fluid leaks. Check hydraulic oil levels.	Daily before use
Road & Demo Saws	Check Oil & Fuel levels. Check cutting wheel is secured correctly. Check general condition for damage or wear.	Daily before use
Pneumatic Tools	Check for signs of damage or wear. Lubricate with hydraulic oil.	Daily before use
Electric Grinders	Check for signs of damage or wear. Tagging must be current. Check cutting wheel is secured correctly.	Daily before use
Electric Drills and Diamond Corers	Check for signs of damage or wear. Tagging must be current.	Daily before use
Abrasive Grit Blasters	Check hoses and connections for damage and wear. Check 'deadman'. Check air filter system on helmet supply.	Daily before use
Bitumen Heaters	Check Heat Transfer Oil, Engine Oil & Fuel levels. Check for Gas or Fluid leaks and general wear and tear.	Daily before use
Resin Heaters	Check Heat Transfer Oil levels. Check for Gas or Fluid leaks and general wear and tear.	Daily before use
Petrol Mixers	Check Oil & Fuel levels. Check for signs of wear and tear.	Daily before use
Electrical Mixers	Check for signs of damage or wear. Tagging must be current.	Daily before use
Oxy or Plasma Cutting Equipment	Check for signs of damage or wear. Check Hoses, Connections for Gas Leaks. Check flashback arrestors fitted	Daily before use
LPG Gas Torches	Check for signs of damage or wear. Check Hoses and Connections for Gas Leaks.	Daily before use
Hot Compressed Air (HCA) Lances	Check for signs of damage or wear. Check Hoses and Connections for Gas Leaks.	Daily before use

Personal Protective Equipment (PPE)

Long Sleeved Hi-Vis Shirts & Pants, Lace-up Safety Boots, Safety Glasses, and Protective Gloves are mandatory items of PPE and are termed General PPE. The use of Hard Hats will be assessed by the nominated ECM Foreman / Supervisor with their use implemented where a risk of injury is present, or where use is a mandatory requirement of our client. In addition to our General PPE requirements the following list identifies the minimum level of PPE to be worn by ECM workers or subcontractors while undertaking specific tasks. In addition to these minimum requirements PPE use must be implemented to suit any additional hazard that may be presented during the works to offer the necessary level of protection to the worker; i.e. Dust Masks should be worn when dust is created, or similar.

Task	Minimum PPE Requirements
Air Compressor	General PPE.
Compressor Hoses	General PPE.
Generators and Electrical leads	General PPE.
MIG and ARC Welders	General PPE, Heat Resistant Gauntlets & Welding Mask.
Hydraulic Lifting Arms	General PPE.
Road & Demo Saws	General PPE, Hearing Protection, Impact Resistant Face Shield.
Pneumatic Tools	General PPE & Hearing Protection.
Electric Grinders	General PPE.
Electric Drills and Diamond Corers	General PPE.
Abrasive Grit Blasters	General PPE, Hearing Protection, Protective Gauntlets, Full Respirator System and Helmet.
Bitumen Heaters	General PPE, Impact Resistant Face Shield and Heat Resistant Gauntlets.
Resin Heaters	General PPE, Heat Resistant Gauntlets and Half Face Respirator (Organic Vapour & P2 Filters).
Petrol Mixers	General PPE.
Electrical Mixers	General PPE.
Oxy or Plasma Cutting Equipment	General PPE, Heat Resistant Gauntlets & Apron, Tinted Safety Goggles or Welding Mask.
LPG Gas Torch	General PPE.
Hot Compressed Air (HCA) Lance	General PPE, Heat Resistant Gauntlets and Hearing Protection.

Training and Qualifications

The following Training and Qualifications listed are those upon which Competencies are assessed in accordance with our certified Business Improvement System. The list outlines the general requirements only and the level of experience and competence of personnel will be assessed and developed in an ongoing manner:

- 1. Construction Industry Safety Induction
- 2. ECM Induction Training
- 3. Site specific induction of the client (as directed)
- 4. Drivers Licence (if required)
- 5. Plant and Equipment competencies (ERMG Work Instructions)
- 6. Hazard Identification & Risk Assessment Training

- 7. High Risk licence (e.g. Forklift, EWP) as required
- 8. Hazardous Substance training including SDS and segregation training
- 9. Environmental Training including spill management
- 10. Product Training; proprietary system training
- 11. Manual Handling Training
- 12. First Aid Training

Codes of Practice and Legislation

The following Codes of Practice and Legislation are offered in a general sense with the full list of references being available within our Legal Compliance Procedure (MGT-006) that forms part of our certified Business Improvement System:

- ISO 45001:2018 OH&S Management System
- ISO 9001:2015 Quality Management System
- ISO 14001:2015 Environmental Management System
- Work Health & Safety Act 2011 (NSW)
- Work Health & Safety Regulation 2017 (NSW)
- Environmental Protection Act 1994 (NSW)
- Work Health & Safety Act 2011 (QLD)
- Work Health & Safety Regulation 2011 (QLD)
- Environmental Protection Act 1994 (QLD)
- Environmental Protection Regulations 2019 (QLD)
- Electrical Safety Regulations 2013 (QLD)
- Work Health & Safety Act 2011 (ACT)
- Work Health & Safety Regulation 2011 (ACT)

- Environmental Protection Act 1997 (ACT)
- Occupational Health & Safety Act 2004 (VIC)
- Occupational Health & Safety Regulations 2017 (VIC)
- Environmental Protection Act 2017 (VIC)
- Traffic Management for Construction or Maintenance Work Code of Practice 2008 (QLD)
- Hazardous Manual Tasks Code of Practice 2021 (QLD/NSW)
- How to Manage Work Health and Safety Risks Code of Practice 2021(QLD)
- Managing the Risks of Plant in the Workplace 2021 (QLD)
 - Chain of Responsibility Legislation 2018

- Traffic and Road Use Management Manual (TRUM) 2021 QLD
- MUTCD (Part 3) (QLD)
- Managing Risks of Plant in the Workplace Code of Practice 2019 (NSW) /Vic)
- Safe Design of Structures Code of Practice 2021 (QLD)
- Work Near Overhead Power Lines Code of Practice 2006 (NSW)
- Cutting and Drilling Concrete and Other Masonry Products Code of Practice 1997 (NSW)
- Workplace Amenities and Work Environment Compliance Code 2008 (Vic)
- Road Management Act 2004 (VIC)
- Code of Practice Worksite Safety Traffic Management
- Managing respirable crystalline silica dust exposure in construction and manufacturing of construction elements Code of Practice QLD 2022

Reference Documents

The following document references are taken from our certified Business Improvement System that are considered relevant to these works. Additional Policies and Procedures are also available upon request and where considered appropriate on a Commercial in Confidence basis.

MGT-002 Risk Management

MGT-008 Corrective Actions & Improvements

MGT-009 Preventive Actions

MGT-FORM-032 Hazard Identification Notice

HSEQ-001 Environmental Management

HSEQ-002 Handling, Storage & Use of Dangerous Goods

HSEQ-007 Incident & Accident Reporting & Management

HSEQ-014 Manual Handling

HSEQ-FORM-002 Incident & Accident Report Form

HSEQ-FORM-042 Injury Report Form

HSEQ-FORM-043 MVA Report Form

LOG-001 Plant & Equipment

LOG-010 Contractor Management

LOG-FORM-043 Product Assessment Form

Evolution Work Instructions

 ${\bf Evolution\,Short\,Training\,Programs}$

ECM Work Method Statements

ECM-FORM-001 Daily Pre-Start & Site Assessment

ECM-FORM-002 Site Audit & Assessment

ECM-FORM-005 Toolbox Talk Form

Declaration by Workers and Sub-Contractors

have been consulted and have assisted in the development and have been given the opportunity to comment on the content of this SWMS. I have read and understand how I am to carry out the activities listed in this SWMS. I have been supplied with the Personal Protective Equipment (PPE) identified in this SWMS and have been given training in the safe use of the equipment that I am required to use. I have read and understand the requirements set out in the Safety Data Sheets for the Hazardous Substances identified in this SWMS.

Name (print)	Name (signed)	Date	Name (print)	Name (signed)	Date

Consultation and Continuous Improvement							
	The following space is to be used by the Workers to provide comments to assist in the Consultation and Continuous Improvement processes. Comments will form part of our Monitoring and Review process to ensure that our processes and control measures remain fully effective and are continuously under review.						
ECM on-site representative (Foreman / Leading Hand) responsible for supervising work, inspecting and approving work areas, work methods, protective measures, plant and equipment:							
Name:		Position:		Signature:		Date:	