

SWMS number: SMS-06-SW-0909	SWMS Name: Brick Paving			SWMS Team: Ross Bearman Steve Inglis Laurie Serrao
Custodian (Position): Safety and Systems Manager Buildings and Sidings	Assumptions: This SWMS only covers repair to paved areas, not new paving installation This SWMS is read in conjunction with SWMS - Maintenance and Inspection of Railcorp Stations			
Approving Authority (Position): General Manager Infrastructure	Plant/Equipment/Tools: <ul style="list-style-type: none">Measuring tapes, squares, string/chalk lines and rulersHammers, tile cutters, pincers, hand sawsChisels, shovels, bucketsCompressors, generators, blowers and fixturesMobile phone	Records/Reporting: Report to Station Manager on arrival at site. SMR	Permits/licences required: Nil	Content reviewed by Technical expert (SME) and RailCorp safety professional (position including Div/Group) Building Maintenance Manager West – Infrastructure/Asset Management Safety and systems Manager – Infrastructure/Asset Management
Applicable Standards, Codes of Practice and guidance: <ul style="list-style-type: none">NSW OH&S Regulation 2001NSW OH&S Act 2000NSW Rail Safety Act 2002Rail Safety Regulation 2003Codes of practice: -Cutting and drilling concrete and other masonry products -control of workplace hazardous substances -manual handling	Inspection requirements Pre start checklist for compressor and generator	Service schedule: Nil	Training/Qualifications required: <ul style="list-style-type: none">WorkCover OH&S General InductionRail Industry Safety Induction (RISI)Competent building tradespersonSite safety Induction	
		MIMS or METRE Ref: Nil		
PPE required: <ul style="list-style-type: none">Safety Boots with toe protection compliant with AS 2210.3Safety Glasses compliant with AS 1337High visibility orange safety vest/clothing compliant with AS 1906.4Hard Hats compliant with AS 1801gloves				

Brick Paving

Issue date: 09/05/08

Review date: 01/10/10

Number	Step	Hazard or human error (Safety/Environmental hazards identified, including physical environment, human errors, plant and equipment)	Risk ranking before controls	Control (to be Implemented to eliminate or reduce the risk to the lowest practicable level)	Risk ranking after controls	Responsibility	Job step to be completed in accordance with (name associated documentation)
1	Site Preliminaries	Not comply with Railcorp OH&S safety requirements.	B-	Read and comply with instructions in the Railcorp safety documentation / induction process	D	Site Supervisor / Workteam	SWMS Maintenance and inspection of Railcorp Stations
		Not conduct Induction / Pre work brief	B	Staff briefed on SWMS – maintenance and inspection of stations	C+	Site Supervisor / Workteam	SMS -11-SR-0218 Safety Induction
		Not confirm scope of work Injury to self and others	B	Confirm scope of work with workplace manager.	C+	Site Supervisor / Workteam	
2	Plan and prepare work area	Safeworking hazards	B-	Implement control measures based on a Worksite Protection assessment	C-	Workgroup	Railcorp Network Rules
		Slips and falls on uneven surfaces	B	Identify hazards and brief staff	C+	Workgroup	
		Stockpiles (sand. Pavers, waste)	B	Stack materials in an orderly manner Ensure stockpiles are contained (haybales or other approved method)	D	Workgroup	
		Danger to the public	B	Only authorised persons allowed in worksite. Use Barricades and signage at entry points to restrict access. Liaise with area supervisor on alternative access if required	C+	Workgroup	
3	Signage / barricade requirements are identified and installed	Slips/falls	B-	Identify hazards and include in Pre work briefing	C-	Workgroup	SMS -11-SR-0218 Safety Induction
		Cuts and abrasions		Use gloves			
4	Paving materials are transported to site and stored for use.	Manual handling	B-	Follow safe manual handling work procedures	C-	Workgroup	SMS -06-GD-0001 Manual Handling
		Back strain					
5	Excavate and prepare work area	Slips/falls	C+	Identify hazards and include in Pre work briefing	D	Workgroup	Excavate to required depth, allowing for base and thickness of paving to finished level.

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		Manual handling	B	Discuss the safest way to move pavers in a safe manner. Use approved lifting devices where possible	C+	Workgroup	
	Using hand tools (picks, shovels, crow bars)	Flying objects, dust,	C+	Use approved safety footwear, eyewear and gloves	D	Workgroup	
		Excavation hazards	C+	Identify any new hazards to site supervisor	D	Workgroup	
6	Commence paving: - spread grounding material / sand - lay paving - apply finishing sand	Repetitive strain	C+	Take regular breaks. Rotate staff if possible	D	Workgroup	
		Cuts and abrasions from sharp / uneven edges	B	Identify hazards and use safety glasses and gloves.	D	Workgroup	
		Use of hand tools	C+	Use in a competent manner	D	Workgroup	
		Use of concrete saw / mechanical compactor	B	Only competent workers to use machine Use approved hearing protection.	D	Workgroup	SWI for Concrete saw and Mechanical Compactor
7	Apply concrete for edging as required	Respiratory damage from contact with cement products Dermatitis	B-	Mix in a manageable quantity to minimise dust. Use gloves, safety glasses and P2 dust mask.	C+	Workgroup	Hazardous Substances register
8	Clean up.	Dust	C+	Identify hazards and include in Pre work briefing	C-	Workgroup	
		Slips and trips	B	Remove all excess materials from site. Identify any new hazards and inform staff.	C+	Supervisor / Workgroup	
9	Conduct handover inspection	Area not in fit condition for return to service	B-	Qualified person to clear area.	C-	Qualified Building Maintenance person	

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NOTE: Each work group or team member must sign off on the SWMS to acknowledge they have been briefed about or instructed in the SWMS

Team member name (Please print)	Team Member signature	Instructor/ Briefer name	Date	Team member name (Please print)	Team Member signature	Instructor/ Briefer name	Date

RailCorp Level 2 Risk Matrix - Regional & Local (Workplace)			Likelihood/Frequency							<u>Definition for Use - Regional & Local level (Workplace)</u> Used for workplace hazards and safety risks that do not consider the whole of the network. Indicatively this matrix is appropriate for use where the hazards under consideration are up to 10% of the total network exposure. This includes regional and local workplace risk assessments. As an example, the Level 2 scale would be used when examining the risk of slips, trips and falls on specific RailCorp platforms within a region or at a particular station, or the risk of fire within a depot. There are 3 options for descriptors which can be used to determine the frequency category. One set of descriptors is provided for frequency, one for historical likelihood, and one for predictive likelihood in the workplace. Choose the most appropriate. To score the risk, follow the steps: 1. Identify the magnitude of the credible consequence if the risk were to occur. If applicable, risks should be considered in terms of the safety (this matrix), commercial and environmental impact (using other matrices). 2. Identify the likelihood of this level of consequence occurring. (This is done after considering the effectiveness of the current controls in place) 3. Score the risk using the combination of likelihood and consequence ranking. Note: Where there are a range of credible consequences which may lead to a different level or risks and/or where the controls may be different. It may be useful to score the risk more than once.
			Event Frequency	Less than once every 1000 years	Once every 100 to 1,000 years	Once every 10 to 100 years	Once every 1 to 10 years	More than once per year up to and including 10 times per year	More than 10 times per year	
			Historical (Likelihood)	Unheard of in the rail industry	Has occurred once or twice in the rail industry	Has occurred many times in the rail industry, but not in NSW	Has occurred once or twice in NSW	Has occurred frequently in NSW	Has occurred frequently at specific locations	
			Workplace Predictive (Likelihood)	Not expected to occur	May occur only in exceptional circumstances	Could occur at some time but not likely	You would expect it to occur at least once in the next 10 years performing similar activities	You would expect it to occur at least once this year performing similar activities	You would expect it to occur at least once this month performing similar activities	
				F1	F2	F3	F4	F5	F6	
Consequence			Incredible	Improbable	Remote	Occasional	Probable	Frequent		
>10 Fatalities	C6	Disastrous	B-	B+	A	A	A	A		
2-10 Fatalities	C5	Catastrophic	C+	B-	B+	A	A	A		
1 Fatality (2-10 Major Injuries)	C4	Critical	C-	C+	B-	B+	A	A		
1 Major Injury	C3	Major	D	C-	C+	B-	B+	A		
1 or more Minor Injuries	C2	Minor	D	D	C-	C+	B-	B+		
First aid treatment, or illness/injury not requiring treatment	C1	Negligible	D	D	D	C-	C+	B-		