

<b>Equipment Location:</b>	<b>Hired From All Master Hire Stores</b>	<b>Equipment:</b>	<b>Roller Trench Remote Controlled</b>	<b>Approved By:</b>	<b>Steven Jose</b>
				<b>Signature:</b>	
		<b>Manufacturer Details</b>	<b>Various</b>		

Hazard	Action Required Yes/No	Risk Level (Refer to risk matrix)	Hierarchy of Control	Hazard and Risk Treatment (Complete Hazard Report Form)	Risk Level after Risk Treatment (Refer to risk matrix)
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<b>Entanglement</b>					
Can anyone's hair, clothing, gloves, necktie, jewellery, cleaning brushes, rags or other materials become entangled with moving parts of the plant, or materials in motion?	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	<b>MEDIUM</b>	<input type="checkbox"/> Elimination <input type="checkbox"/> Substitution <input checked="" type="checkbox"/> Isolation <input checked="" type="checkbox"/> Engineering <input checked="" type="checkbox"/> Administration <input checked="" type="checkbox"/> PPE	<i>Follow manufacturers' instructions</i> <i>Obey all warning decals</i> <i>Do not lean or reach into engine area with motor running</i> <i>Do not do any servicing or maintenance with motor running</i> <i>Ensure all guards and covers in place when operating machine</i> <i>Lock out/tag out plant when carrying out maintenance</i> <i>Ensure appropriate PPE is used (e.g. protection for eyes, hearing and footwear), and clothing is tucked in</i> <i>Activate parking brake before leaving operators station</i>	<b>LOW</b>

<b>Crushing</b>					
Can anyone be crushed due to: <ul style="list-style-type: none"> <li>▪ Material falling off the plant?</li> <li>▪ Uncontrolled or unexpected movement of the plant or its load?</li> <li>▪ Lack of capacity for the plant to be slowed, stopped or immobilized?</li> <li>▪ The plant tipping or rolling over?</li> <li>▪ Parts of the plant collapsing?</li> <li>▪ Coming in contact with moving parts of the plant during testing, inspection, use, maintenance, cleaning or repair?</li> <li>▪ Being thrown off or under the plant?</li> <li>▪ Being trapped between the plant and materials or fixed structures?</li> </ul>	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	<b>HIGH</b>	<input type="checkbox"/> Elimination <input type="checkbox"/> Substitution <input checked="" type="checkbox"/> Isolation <input checked="" type="checkbox"/> Engineering <input checked="" type="checkbox"/> Administration <input checked="" type="checkbox"/> PPE	<i>Follow manufacturers' instructions</i> <i>Obey all warning decals</i> <i>Ensure travel of moving plant/vehicle (forward or reversing) is clear of all personnel</i> <i>Use spotter in restricted areas</i> <i>Ensure all plant and attachments are tied down securely</i> <i>Ensure appropriate PPE is worn</i> <i>Ensure all guards in place when operating machine</i> <i>Ensure exclusion zones maintained at all times</i>	<b>MEDIUM</b>

<ul style="list-style-type: none"> <li>• Other factors?</li> </ul>				<p><i>Tag out plant when cleaning machine</i></p> <p><i>Activate parking brake before leaving operators platform</i></p> <p><i>De-energise/depressurise hydraulic system prior carrying out maintenance</i></p> <p><i>Use chocks on rollers to prevent movement when carrying out maintenance work where there is a risk of plant moving.</i></p> <p><i>Avoid all driving across a slope, instead drive up and down the slope</i></p> <p><i>Do not exceed manufacturers recommendation for lateral tilt</i></p> <p><i>Ensure plant is operated on a stable working base</i></p> <p><i>Maintain recommended operating speeds</i></p> <p><i>Do not operate roller on damp and in poor ground conditions</i></p> <p><i>When loading on vehicle, ensure ramp is securely attached and at the appropriate angle</i></p>
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**Cutting, Stabbing and Puncturing**

<p>Can anyone be cut, stabbed or punctured due to?</p> <ul style="list-style-type: none"> <li>▪ Coming in contact with sharp or flying objects?</li> <li>▪ Coming in contact with moving parts of the plant during testing, inspection, operation, maintenance, cleaning or repair of the plant?</li> <li>▪ Plant, parts of the plant or work pieces disintegrating?</li> <li>▪ Work pieces being ejected?</li> <li>▪ The mobility of the plant?</li> <li>▪ Uncontrolled or unexpected movement of the plant?</li> <li>▪ Other factors?</li> </ul>	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	<b>HIGH</b>	<input type="checkbox"/> Elimination <input type="checkbox"/> Substitution <input type="checkbox"/> Isolation <input checked="" type="checkbox"/> Engineering <input checked="" type="checkbox"/> Administration <input checked="" type="checkbox"/> PPE	<p><i>Follow manufacturers' instructions</i></p> <p><i>Obey all warning decals</i></p> <p><i>Ensure all guards and fixtures are in place and operate correctly</i></p> <p><i>Ensure machine is switched off before making any adjustments</i></p> <p><i>De-energise/ depressurise hydraulic system prior carrying out maintenance</i></p> <p><i>Use appropriate prop/s to support elevated mechanisms when conducting inspection or maintenance</i></p> <p><i>Ensure appropriate PPE is used (e.g. protection for eyes, hearing and footwear)</i></p>	<b>MEDIUM</b>
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## Plant and Equipment Risk Assessment

<b>Shearing</b>					
<p>Can anyone's body parts be:</p> <ul style="list-style-type: none"> <li>▪ Sheared between two or more parts of the plant, or between a part of the plant and a work piece or structure?</li> </ul>	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	<b>MEDIUM</b>	<input type="checkbox"/> Elimination <input type="checkbox"/> Substitution <input checked="" type="checkbox"/> Isolation <input checked="" type="checkbox"/> Engineering <input checked="" type="checkbox"/> Administration <input checked="" type="checkbox"/> PPE	<p><i>Follow manufacturers' instructions</i></p> <p><i>Obey all warning decals</i></p> <p><i>Do not lean or reach into engine area with motor running</i></p> <p><i>Do not do any servicing or maintenance with motor running</i></p> <p><i>Ensure all guards are in place during operation</i></p> <p><i>Lock out plant prior to maintenance or removing guards</i></p> <p><i>Ensure there is a suitable exclusion zone if appropriate</i></p> <p><i>Ensure bonnet stay is engaged before working in engine bay</i></p> <p><i>Stay clear of roller if winching</i></p>	<b>LOW</b>
<b>Friction</b>					
<p>Can anyone be burnt, gain abrasions etc. due to:</p> <ul style="list-style-type: none"> <li>▪ Contact with moving parts or surfaces of the plant, or material handled by the plant?</li> </ul>	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	<b>MEDIUM</b>	<input type="checkbox"/> Elimination <input type="checkbox"/> Substitution <input checked="" type="checkbox"/> Isolation <input type="checkbox"/> Engineering <input checked="" type="checkbox"/> Administration <input checked="" type="checkbox"/> PPE	<p><i>Follow manufacturers' instructions</i></p> <p><i>Obey all warning decals</i></p> <p><i>Do not lean or reach into engine area with motor running</i></p> <p><i>Do not do any servicing or maintenance with motor running</i></p> <p><i>Wear appropriate PPE</i></p>	<b>LOW</b>
<b>Striking</b>					
<p>Can anyone be struck by moving objects due to:</p> <ul style="list-style-type: none"> <li>▪ Uncontrolled or unexpected movement of the plant or material handled by the plant?</li> <li>▪ Plant, parts of the plant or work pieces disintegrating?</li> <li>▪ Work pieces being ejected?</li> <li>▪ Mobility of the plant?</li> <li>▪ Other factors?</li> </ul>	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	<b>ACUTE</b>	<input type="checkbox"/> Elimination <input type="checkbox"/> Substitution <input checked="" type="checkbox"/> Isolation <input checked="" type="checkbox"/> Engineering <input checked="" type="checkbox"/> Administration <input checked="" type="checkbox"/> PPE	<p><i>Follow manufacturers' instructions</i></p> <p><i>Obey all warning decals</i></p> <p><i>Use appropriate prop/s to support elevated mechanisms when conducting inspection or maintenance</i></p> <p><i>Use spotter in restricted areas</i></p> <p><i>Maintain appropriate exclusion zone when plant is in operation/motion</i></p> <p><i>Use remote control when practical</i></p> <p><i>Check clearance to overhead structures</i></p> <p><i>Ensure exclusion zone in and around vehicle while loading</i></p> <p><i>Wear appropriate PPE</i></p>	<b>MEDIUM</b>

# SAFETY MANAGEMENT SYSTEM

## Plant and Equipment Risk Assessment

<b>High Pressure Fluid</b>					
Can anyone come into contact with? <ul style="list-style-type: none"> <li>▪ Fluids under high pressure in normal use, in the instance of plant failure?</li> </ul>	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	<b>MEDIUM</b>	<input type="checkbox"/> Elimination <input type="checkbox"/> Substitution <input checked="" type="checkbox"/> Isolation <input checked="" type="checkbox"/> Engineering <input checked="" type="checkbox"/> Administration <input checked="" type="checkbox"/> PPE	<i>De-pressurise prior to working on hydraulic system</i> <i>Lock out/Tag out procedure for all maintenance</i> <i>Wear appropriate PPE for task</i>	<b>LOW</b>
<b>Electrical</b>					
Can anyone be injured by electrical shock or burnt due to: <ul style="list-style-type: none"> <li>▪ The plant contacting live electrical conductors?</li> <li>▪ Plant working close to electrical conductors?</li> <li>▪ Overload of electrical circuits?</li> <li>▪ Damaged or poorly maintenance electrical leads or cables?</li> <li>▪ Damaged electrical switches?</li> <li>▪ Water near electrical equipment?</li> <li>▪ Lack of isolation procedures?</li> <li>▪ Other factors</li> </ul>	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	<b>ACUTE</b>	<input checked="" type="checkbox"/> Elimination <input type="checkbox"/> Substitution <input checked="" type="checkbox"/> Isolation <input type="checkbox"/> Engineering <input checked="" type="checkbox"/> Administration <input type="checkbox"/> PPE	<i>Follow manufacturers' instructions</i> <i>Obey all warning decals</i> <i>Ensure all overhead/underground wiring or other obstructions have been located prior to commencing work</i> <i>Check plant height prior to loading</i> <i>Maintain clearance to overhead power lines</i> <i>Consider height of plant, height of ramps and height of elevated tilt tray prior to commencing</i>	<b>HIGH</b>
<b>Explosion</b>					
Can anyone be injured by fuels such as gases, vapors, liquids, dusts or other substances being ignited triggered by the operation of the plant or by materials handled by the plant?	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	<b>MEDIUM</b>	<input type="checkbox"/> Elimination <input type="checkbox"/> Substitution <input checked="" type="checkbox"/> Isolation <input type="checkbox"/> Engineering <input checked="" type="checkbox"/> Administration <input type="checkbox"/> PPE	<i>Follow manufacturers' instructions</i> <i>Obey all warning decals</i> <i>Fueling must be carried out in well ventilated space, away from ignition source/s</i> <i>Engine must be switched off and cooled before refueling</i> <i>Avoid contact with hot surfaces</i>	<b>LOW</b>
<b>Slipping, tripping and Falling</b>					
Can anyone using the plant, or in the vicinity of the plant, slip, trip or fall due to: <ul style="list-style-type: none"> <li>▪ Uneven or slippery work surfaces?</li> <li>▪ Poor housekeeping, such as shavings in the vicinity of the plant, spillage not cleaned up?</li> <li>▪ Obstacles being placed in the vicinity of the plant?</li> <li>▪ Other factors?</li> </ul>	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	<b>MEDIUM</b>	<input type="checkbox"/> Elimination <input type="checkbox"/> Substitution <input type="checkbox"/> Isolation <input type="checkbox"/> Engineering <input checked="" type="checkbox"/> Administration <input checked="" type="checkbox"/> PPE	<i>Follow manufacturers' instructions</i> <i>Obey all warning decals</i> <i>Maintain firm footing when using remote controls</i> <i>Do not operate controls while moving or doing other activities (e.g. walking, talking, using mobile phone etc.)</i> <i>Keep work area clear of obstructions</i>	<b>LOW</b>

## Plant and Equipment Risk Assessment

<b>High Temperature</b>					
Can anyone: <ul style="list-style-type: none"> <li>▪ Come into contact with objects at high temperature?</li> <li>▪ Come into contact with hot fluids?</li> <li>▪ Be injured by fire?</li> </ul>	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	<b>MEDIUM</b>	<input type="checkbox"/> Elimination <input type="checkbox"/> Substitution <input checked="" type="checkbox"/> Isolation <input type="checkbox"/> Engineering <input checked="" type="checkbox"/> Administration <input checked="" type="checkbox"/> PPE	<i>Follow manufacturers' instructions</i> <i>Obey all warning decals</i> <i>Do not lean or reach into engine area with motor running</i> <i>Do not do any servicing or maintenance with motor running</i> <i>Allow motor and other components to cool before servicing</i> <i>Wear appropriate PPE</i>	<b>LOW</b>
<b>Temperature and Thermal Comfort</b>					
Can anyone suffer ill-health due to: <ul style="list-style-type: none"> <li>▪ Exposure to high or low temperatures?</li> <li>▪ Failure of air conditioning equipment?</li> </ul>	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No		<input type="checkbox"/> Elimination <input type="checkbox"/> Substitution <input type="checkbox"/> Isolation <input type="checkbox"/> Engineering <input type="checkbox"/> Administration <input type="checkbox"/> PPE		
<b>Suffocation</b>					
Can anyone be suffocated due to: <ul style="list-style-type: none"> <li>▪ Lack of oxygen, or atmospheric contamination?</li> </ul>	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	<b>HIGH</b>	<input checked="" type="checkbox"/> Elimination <input type="checkbox"/> Substitution <input type="checkbox"/> Isolation <input checked="" type="checkbox"/> Engineering <input checked="" type="checkbox"/> Administration <input type="checkbox"/> PPE	<i>Follow manufacturers' instructions</i> <i>Obey all warning decals</i> <i>Operate in well-ventilated areas where vapours or fumes are created</i>	<b>LOW</b>
<b>Ergonomics</b>					
Can anyone be injured due to: <ul style="list-style-type: none"> <li>▪ Poorly designed seating?</li> <li>▪ Repetitive body movements?</li> <li>▪ Constrained body posture or the need for excessive effort?</li> <li>▪ Design deficiency causing physical or personal stress?</li> <li>▪ Inadequate or poorly placed lighting?</li> <li>▪ Lack of consideration given to human error or human behavior?</li> <li>▪ Mismatch of the plant with human traits and natural limitations?</li> <li>▪ Other factors?</li> </ul>	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	<b>LOW</b>	<input checked="" type="checkbox"/> Elimination <input type="checkbox"/> Substitution <input type="checkbox"/> Isolation <input checked="" type="checkbox"/> Engineering <input checked="" type="checkbox"/> Administration <input type="checkbox"/> PPE	<i>Follow manufacturers' instructions</i> <i>Obey all warning decals</i> <i>Take regular breaks/rests</i> <i>Exercise/stretch regularly</i> <i>Do not operate beyond operators personal capabilities</i> <i>Use suitably designed and secured loading/unloading procedures including crane, hoist, ramps etc.</i>	<b>LOW</b>

<b>Transportation</b>					
<p>Can anyone be injured by this equipment falling or driven off vehicle or trailer while loading, unloading or transportation?</p>	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	<b>HIGH</b>	<input type="checkbox"/> Elimination <input type="checkbox"/> Substitution <input checked="" type="checkbox"/> Isolation <input checked="" type="checkbox"/> Engineering <input checked="" type="checkbox"/> Administration <input checked="" type="checkbox"/> PPE	<p><i>Follow manufacturers' instructions</i>  <i>Obey all warning decals</i>  <i>Ensure engine and fuel is switched off</i>  <i>Ensure equipment, attachments and sundry items are correctly loaded and securely tied down</i>  <i>Apply/use chocks if necessary</i>  <i>Ensure adequate exclusion zone is in place</i>  <i>Stay clear of roller and truck if winching</i>  <i>Do not overload transport vehicle</i>  <i>Check clearance to overhead structures</i>  <i>Check total height of loaded plant - comply with permits</i>  <i>Maintain vehicle and/or equipment in good working order - report any malfunction or damage to Master Hire immediately and stop using plant/vehicle where it is reasonable to foresee further risk to persons or damage to plant/vehicle</i></p>	<b>LOW</b>
<b>Operational</b>					
<p>Can anyone be injured by this equipment</p>	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	<b>HIGH</b>	<input type="checkbox"/> Elimination <input type="checkbox"/> Substitution <input checked="" type="checkbox"/> Isolation <input checked="" type="checkbox"/> Engineering <input checked="" type="checkbox"/> Administration <input checked="" type="checkbox"/> PPE	<p><i>Follow manufacturers' instructions</i>  <i>Obey all warning decals</i>  <i>Ensure plant/equipment is on stable ground and clear of obstructions</i>  <i>Ensure adequate ventilation</i>  <i>Ensure gears, levers, switches etc. are engaged/disengaged appropriately before starting/operating</i>  <i>Ensure all guards and fixtures are in place</i>  <i>Ensure appropriate PPEs are used (e.g. protection for eyes, hearing and footwear)</i>  <i>Ensure plant/vehicle is switched off before making any adjusts</i>  <i>Do not operate on steep slope (refer</i></p>	<b>MEDIUM</b>

# SAFETY MANAGEMENT SYSTEM

## Plant and Equipment Risk Assessment

				<i>Operator Manual)</i> <i>Ensure guards cover the entire width of the rotating parts</i>	
<b>Other Hazards</b>					
Can anyone be injured or suffer ill-health from exposure to: <ul style="list-style-type: none"> <li>• Chemicals?</li> <li>• Toxic gases or vapors?</li> <li>• Fumes?</li> <li>• Dust?</li> <li>• Noise?</li> <li>• Vibration?</li> <li>• Radiation?</li> <li>• Other Factors?</li> </ul>	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	<b>MEDIUM</b>	<input checked="" type="checkbox"/> Elimination <input type="checkbox"/> Substitution <input checked="" type="checkbox"/> Isolation <input checked="" type="checkbox"/> Engineering <input checked="" type="checkbox"/> Administration <input checked="" type="checkbox"/> PPE	<i>Follow manufacturers' instructions</i> <i>Obey all warning decals</i> <i>Operate in well-ventilated areas where vapours or fumes are created</i> <i>Check for overhead/underground utilities (gas, water, electrical) before operation</i> <i>Ensure equipment is appropriately labeled and meet the relevant State Legislative requirements</i> <i>Maintain plant/vehicle in good working order - report any malfunction or damage to Master Hire immediately and stop using plant/vehicle where it is reasonable to foresee further risk to persons or damage to equipment</i>	<b>LOW</b>
<b>Further Comments:</b>	<b>A Specific Risk Assessment on site must be undertaken prior to plant operation?</b>				
	<b>This equipment must only be driven/operated by competent persons and holders of the appropriate license</b>				
<b>Checklist:</b>	<input checked="" type="checkbox"/> <i>Manufacturers' manuals referenced</i> <input checked="" type="checkbox"/> <i>Copy kept in Master Hires' Risk Management File</i>				



### Hazard / Risk Matrix

Reference: Workplace Health and Safety Queensland - Risk Assessment - Supplement 2  
Risk Management Code of Practice 2007

**Step 1 Determine Likelihood – What is the possibility of the event happening?**

	Criteria	Description
<b>Almost certain</b>	Expected in most circumstances.	Event is a common problem
<b>Likely</b>	Will probably occur in most circumstances.	Event is known to have occurred at this site or it has happened
<b>Possible</b>	Might occur at some time	Event could occur at the site or I've heard of it happening
<b>Unlikely</b>	Could occur at some time	Event is not likely to occur at the site or I have not heard of it happening
<b>Rare</b>	May occur only in exceptional circumstances	Event is practically impossible.

**Step 2 Determine Consequence - What will be the result if it happens?**

Classification	Example detail description
<b>Insignificant</b>	No injuries
<b>Minor</b>	First aid treatment only; spillage contained at site.
<b>Moderate</b>	Medical treatment; spillage contained but with outside help.
<b>Major</b>	Extensive injuries; loss of production
<b>Catastrophic</b>	Death; toxic release of chemicals

**Step 3 Determine the risk score**

LIKELIHOOD	CONSEQUENCE				
	Insignificant	Minor	Moderate	Major	Catastrophic
<b>Almost certain</b>	<b>3 High</b>	<b>3 High</b>	<b>4 Acute</b>	<b>4 Acute</b>	<b>4 Acute</b>
<b>Likely</b>	<b>2 Medium</b>	<b>3 High</b>	<b>3 High</b>	<b>4 Acute</b>	<b>4 Acute</b>
<b>Possible</b>	<b>1 Low</b>	<b>2 Medium</b>	<b>3 High</b>	<b>4 Acute</b>	<b>4 Acute</b>
<b>Unlikely</b>	<b>1 Low</b>	<b>1 Low</b>	<b>2 Medium</b>	<b>3 High</b>	<b>4 Acute</b>
<b>Rare</b>	<b>1 Low</b>	<b>1 Low</b>	<b>2 Medium</b>	<b>3 High</b>	<b>3 High</b>

**Step 4 Record risk score against the job sequence steps**

(Note – Risk scores have no absolute value and should only be used for comparison and to engender discussion.)

Score	Action
<b>4 A: Acute</b>	<b>ACT NOW – Urgent – do something about the risks immediately. Requires immediate attention.</b>
<b>3 H: High</b>	<b>Highest management decision is required urgently.</b>
<b>2 M: Medium</b>	<b>Follow management instructions.</b>
<b>1 L: Low</b>	<b>OK for now. Record and review if any equipment/ people/ materials/ work processes or procedures change.</b>