

## Hazard/Risk Assessment Profile: Drainage and Stormwater

Steps	Job activity tasks	Possible Hazards “What can harm you?”	Risk “What can happen?”	Risk Score	Safety controls “What can you do?”
1	General planning	Inadequate training / planning	Task specific injuries due to inexperience or failure to provide appropriate equipment	1	<ul style="list-style-type: none"> <li>Sufficient skills (competency to complete the required task)</li> <li>Adequate competent supervision</li> <li>Planning for required equipment carried out</li> <li>Using the appropriate equipment and PPE for the task</li> </ul>
2	Establishment of site	Public access	Injury to the public	2	<ul style="list-style-type: none"> <li>Provide safe passage for the public (provide barriers and supervision)</li> </ul>
		Traffic	Motor vehicle accidents	1	<ul style="list-style-type: none"> <li>Traffic control carried out by suitably qualified person</li> </ul>
		Poor access	Slips, trips and falls	2	<ul style="list-style-type: none"> <li>Provide a clean and uncluttered work area (good housekeeping)</li> </ul>
			Manual handling injuries	3	<ul style="list-style-type: none"> <li>Do not attempt to lift heavy unit, use suitable lifting equipment</li> </ul>
		Working at height	Falls into trench	2	<ul style="list-style-type: none"> <li>Provide barriers and controls to eliminate the fall hazard</li> <li>Use appropriate work platforms and safety harness and safety equipment</li> </ul>
3	Using power tools	Tool is unsafe or cords damaged	Electric Shock / electrocution	1	<ul style="list-style-type: none"> <li>Ventilate work area and use confined space procedure</li> <li>Conduct a hazardous substance survey prior to commencement to work</li> <li>Use the appropriate PPE for the task</li> </ul>
					<ul style="list-style-type: none"> <li>Check condition of power tool before using</li> <li>Check power tool and extension leads display current test tag</li> <li>Operator is trained in correct use of power tool and is confident in the case and use of the power tool</li> <li>Residual current device is utilised correctly</li> <li>Elevate power leads in the work area</li> <li>Power tools and leads stored correctly and kept dry</li> <li>Use the appropriate PPE for the task</li> </ul>
4	Manual handling	Lifting, weights and forces	Strains and sprains; injuries such as back damage	2	<ul style="list-style-type: none"> <li>Follow the manual handling code of practice</li> <li>The principles of good lifting need to be applied. These are               <ul style="list-style-type: none"> <li>To avoid twisting back when lifting and hold the load close to the body</li> <li>Bend knees when lifting objects from low levels (utilise leg muscles)</li> </ul> </li> <li>The weight of the load must be considered in relation to other key risk factors including frequency, duration, distance moved and characteristics of the load and that the load is checked for contents, height, dimensions and ease of handling</li> <li>Use the appropriate PPE for the task</li> </ul>

Steps	Job activity tasks	Possible Hazards “What can harm you?”	Risk “What can happen?”	Risk Score	Safety controls “What can you do?”
5	Locate street services	Electricity / Telecom cables	Electric shock / electrocution	1	<ul style="list-style-type: none"><li>Locate all street services (Dial before you Dig)</li><li>Isolate the electricity and gas supply</li></ul>
		Gas Pipelines	Burns / asphyxiation	1	<ul style="list-style-type: none"><li>Uncover all services with caution (do not use excavation machinery)</li></ul>
		Water Pipelines			
		Other Services	Flooding	2	<ul style="list-style-type: none"><li>Use the appropriate PPE for the task</li></ul>
6	Excavation	Electricity / Telecom cables	Electric shock / electrocution	1	<ul style="list-style-type: none"><li>Locate all street services (Dial before you Dig)</li><li>Isolate the electricity and gas supply</li></ul>
		Gas pipelines	Burns / asphyxiation	1	<ul style="list-style-type: none"><li>Uncover all services with caution (do not use excavation machinery)</li></ul>
		Water pipelines	Flooding	2	<ul style="list-style-type: none"><li>Timbering-shoring and vehicle movements near the excavation</li></ul>
		Falling into trench	Slips, trips and falls	2	<ul style="list-style-type: none"><li>Refer to code of practice excavation work</li></ul>
		Trench depth and location to buildings / poles	Trench collapse	1	<ul style="list-style-type: none"><li>Provide barriers and controls to eliminate the fall hazard</li></ul>
			Confined space	2	<ul style="list-style-type: none"><li>Ventilate work area and use confined space procedure</li></ul>
		Moving plant	Impact injury	1	<ul style="list-style-type: none"><li>Implement safe working distances and use safety observers</li></ul>
Flooding	Drowning	1	<ul style="list-style-type: none"><li>Provide rescue procedures.</li><li>Use the appropriate PPE for the task</li></ul>		
7	Installing and / or repairing pipe work from sewer main to and within building	Using Power tools	Electric shock / electrocution	1	<ul style="list-style-type: none"><li>Operator is trained in correct use of power tool and is confident in the care and use of the power tool</li></ul>
		Falling into trench	Slips, trips and falls	2	<ul style="list-style-type: none"><li>Refer to excavation above (step 6)</li><li>Provide barriers and controls to eliminate the fall hazard</li></ul>
		Working near traffic or moving plant	Impact injury	1	<ul style="list-style-type: none"><li>Implement safe working distances and use safety observers</li></ul>
		Manual handling	Manual handling injuries	3	<ul style="list-style-type: none"><li>Use principals of good lifting and refer to manual handling above</li></ul>
		Working under floors	Confined space	1	<ul style="list-style-type: none"><li>Ventilate work area and use confined space procedure</li><li>Provide adequate lighting</li><li>Use the appropriate PPE for the task</li></ul>

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7A	SWV pipe	Using Power tools	Electric shock / electrocution	1	<ul style="list-style-type: none"> <li>Operator is trained in correct use of power tool and is confident in the care and use of the power tool</li> </ul>
		Cutting SWV pipe, using priming fluid, using solvent cement	Cuts and abrasions, hand infections	3	<ul style="list-style-type: none"> <li>Use mitre box and staple support</li> <li>Refer material safety data sheet</li> <li>Use the appropriate PPE for the task</li> <li>Ventilate work area and use confined space procedure</li> </ul>
		Manual handling	Manual handling injuries	3	<ul style="list-style-type: none"> <li>Use principles of good lifting and refer to manual handling above</li> <li>Use the appropriate PPE for the task</li> </ul>
7B	VC pipe	Using power tools, cutting VC pipe	Cuts and abrasions		<ul style="list-style-type: none"> <li>Operator is trained in correct use of power tool and is confident in the care and use of the power tool</li> </ul>
		Manual handling	Manual handling injuries	3	<ul style="list-style-type: none"> <li>Use principles of good lifting and refer to manual handling above</li> <li>Use the appropriate PPE for the task</li> </ul>
7C	Cast iron pipe	Using power tools, cutting cast iron pipe	Electric shock / electrocution, cuts and abrasions	2	<ul style="list-style-type: none"> <li>Operator is trained in correct use of power tool and is confident in the care and use of the power tool</li> </ul>
		Manual handling	Manual handling injuries	3	<ul style="list-style-type: none"> <li>Use principles of good lifting and refer to manual handling above</li> <li>Use the appropriate PPE for the task</li> </ul>
8	Sparging	Mixing cement mortar	Skin rashes, allergies or illness, mortar splashes in eye/s	3	<ul style="list-style-type: none"> <li>Use barrier cream, or similar</li> <li>Use the appropriate PPE for the task</li> </ul>
		Manual handling	Manual handling injuries	3	<ul style="list-style-type: none"> <li>Use principles of good lifting and refer to manual handling above</li> </ul>
9	Concrete lintels	Skin and eye contact with concrete	Skin rashes, allergies or illness, mortar splashes in eye/s	3	<ul style="list-style-type: none"> <li>Use barrier cream, or similar</li> <li>Use the appropriate PPE for the task</li> </ul>
			Manual handling injuries	3	<ul style="list-style-type: none"> <li>Use principles of good lifting and refer to manual handling above</li> <li>Risk factors including - Frequency and duration, distance moved and characteristics of the load</li> </ul>

Steps	Job activity tasks	Possible Hazards “What can harm you?”	Risk “What can happen?”	Risk Score	Safety controls “What can you do?”
10	Stormwater retention pit	Skin and eye contact with concrete	Skin rashes, allergies or illnesses, mortar splashes in eye/s	3	<ul style="list-style-type: none"> <li>Use barrier cream or similar</li> </ul>
	Brick and block laying	Electric cutting saw	Electric shock / electrocution	1	<ul style="list-style-type: none"> <li>Use of power tools refer above</li> <li>Operator is trained in correct use of power tools and is confident in the care and use of the power tool</li> </ul>
	Form work	High speed rotating saw with blade	Serious cut	3	<ul style="list-style-type: none"> <li>Use of power tools refer above</li> <li>Operator is trained in correct use of power tools and is confident in the care and use of the power tool</li> </ul>
		Grit or brick splinters flung out by saw or chisel	Grit or brick splinter in eye/s	2	<ul style="list-style-type: none"> <li>Use of power tools refer above</li> <li>Operator is trained in correct use of power tools and is confident in the care and use of the power tool</li> </ul>
		Dust and noise	Hearing and lung damage	2	<ul style="list-style-type: none"> <li>Use of power tools refer above</li> <li>Operator is trained in correct use of power tools and is confident in the care and use of the power tool</li> </ul>
		Miss hit with lump hammer			
11	Precast pits	Live electricity	Electrocution	1	<ul style="list-style-type: none"> <li>Isolate electricity supply</li> <li>Ventilate work area and use confined space procedure</li> </ul>
		Manual handling	Manual handling injuries	3	<ul style="list-style-type: none"> <li>The principles of good lifting need to be applied.</li> <li>The weight of the load must be considered in relation to other key risk factors, including frequency and duration; distance moved; characteristics of the load; load is checked</li> </ul>
		Flooding	Confined space, drowning	1	<ul style="list-style-type: none"> <li>Provide rescue procedures</li> <li>Use the appropriate PPE for the task</li> </ul>
		Lifting pits into position	Injury to persons from load being lowered	1	<ul style="list-style-type: none"> <li>Regularly check slings use qualified (ticketed) dogger or crane driver</li> <li>Use the appropriate PPE for the task.</li> </ul>
12	Backfill trench and clean up	Falling into trench	Slips, trips and falls	2	<ul style="list-style-type: none"> <li>Provide barriers and controls to eliminate the fall hazard</li> <li>Provide alternative means of access and egress (earth ramp) to excavation rather than by ladders</li> </ul>
		Working near traffic or moving plant	Impact injury	1	<ul style="list-style-type: none"> <li>Implement safe working distances and use safety observers</li> <li>Use the appropriate PPE for the task</li> </ul>

**Class 1: Death or permanent disability**

**Class 2: Serious Injury / lost time**

**Class 3: Minor injury, no lost time**

**All risks have the potential to cause death, permanent disability, serious injury or minor injury. The risk score is an approximation of the average incident.**