



Prepared By: (OHS Agent) SILVER MILE TRADING		On Behalf Of: (Client) DBSA		PROJECT SPECIFIC BASELINE RISK ASSESSMENTS											
				Construction of Ga-Maloka Primary School on Behalf of Development Bank of Southern Africa (DBSA)						DATE DEVELOPED		28-Nov-22			
										NEXT REVIEW DATE		28-May-23			
										DOC ID		SM_BRA/MAL-02			
RISK CLASSIFICATION				RISK RATING					MANDATORY PPE FOR GENERAL WORKERS <i>(tick where applicable)</i>						
15-25 EXTREME		S = SAFETY		CONSEQUENCES	LIKELYHOOD					<input checked="" type="checkbox"/> Safety Boots <input checked="" type="checkbox"/> Overalls <input checked="" type="checkbox"/> Hard Harts <input type="checkbox"/> Safety Gloves <input type="checkbox"/> Safety Goggles <input type="checkbox"/> Ear Plugs					
8-14 HIGH		H = HEALTH			Almost Certain	Likely	Possible	Unlikely	Almost Impossible						
4-7 MEDIUM		E = ENVIRONMENT													
1-3 LOW		Q = QUALITY			5	4	3	2	1						
S	Fatal,			5	25	20	15	10	5	MANDATORY PPE MACHINE OPERATORS <i>(tick where applicable)</i>					
H	Fatal									<input checked="" type="checkbox"/> Safety Boots <input checked="" type="checkbox"/> Overalls <input checked="" type="checkbox"/> Hard Harts <input checked="" type="checkbox"/> Safety Gloves <input checked="" type="checkbox"/> Safety Goggles <input checked="" type="checkbox"/> Ear Plugs					
E	Major Impact (Long)									MANDATORY PPE FOR WORK AT HEIGHT <i>(tick where applicable)</i>					
S	Serious Injury (Reportable)			4	20	16	12	8	4	<input checked="" type="checkbox"/> Safety Boots <input checked="" type="checkbox"/> Overalls <input checked="" type="checkbox"/> Hard Harts <input checked="" type="checkbox"/> Safety Harness <input type="checkbox"/> Safety Goggles <input type="checkbox"/> Ear Plugs					
H	Permanent Non-Lethal Effect									MANDATORY PPE - VISITORS/MANAGEMENT <i>(tick where applicable)</i>					
E	High Impact			3	15	12	9	6	3	<input checked="" type="checkbox"/> Safety Boots <input checked="" type="checkbox"/> HI-Vis Vests <input checked="" type="checkbox"/> Hard Harts <input type="checkbox"/> Safety Gloves <input type="checkbox"/> Safety Goggles <input type="checkbox"/> Ear Plugs					
S	Lost Time Injury (Less than 14 Days)			2	10	8	6	4	2						
H	Reversible Severe Health Effects														
E	Major Impact (Long)			1	5	4	3	2	1						
S	Injury Needs Medical Assistance														
H	Reversible Minor Effect														
E	Slight Impact (1 Month)														
S	Minor Injury (First Aid)														
H	No Effect														
E	No Effect														
DEVELOPED BY:		INITIALS AND SURNAME							DATE						
REVIEWED BY:		INITIALS AND SURNAME							DATE						
RECEIVED BY PC:		INITIALS AND SURNAME							DATE						

ITEM	ACTIVITY	RISK/HAZARD IDENTIFIED	POSSIBLE CONSEQUENCES LIKELY TO HAPPEN	PRE-CONTROL RISK RATING				RECOMMENDED CONTROL MEASURES	POST CONTROL RISK RATING			
				SHEQ	CONSEQUENCE	LIKELIHOOD	RISK RATING		SHEQ	CONSEQUENCE	LIKELIHOOD	RISK RATING
HEALTH AND SAFETY CONSIDERATIONS AROUND THE SITE CAMP	Availability of tarvens, shebeens in the vicinity of the construction area.	Drunk members of the public accessing or disturbing construction activities.	Damage to property, Possible injuries associated with construction activities.	S	4	3	12	Although there are no tarvens in the vicinity of the construction site, the site must be fully fenced off with security access.	S	3	2	6
	Children and pedestrians along site access routes	Children getting struck or hit by moving construction vehicles going to and from the construction site.	Fatality or serious injury may occur.	S	5	3	15	Speed limits should be reduced to 20 km/h or less. Communication of such to be administered through toolbox talks with operators.	S	4	2	8
	Livestock and domestic animals along site access routes and around construction area.	Accidents could occur as a result of collisions.	Fatality or even serious injury could occur.	S	5	3	15	Speed limits should be reduced to 20 km/h or less. Communication of such to be administered through toolbox talks with operators.	S	4	2	8
	Noise created by construction vehicles moving to and from construction site.	Nuisance and disturbing of the community around the site area.	General public disturbance.	S	2	4	8	Construction vehicles must be properly maintained. Routes that are far from the community must be preferred.	S	1	4	4
	Construction vehicles dripping oil along site access route while moving to and from.	The natural environment will be negatively affected by the oil spillage along site access routes.	Environmental contamination.	E	2	4	8	All construction vehicles should be inspected prior to use and results must be recorded in an inspection register.	E	1	3	3

SITE ACCESS, SECURITY AND SITE CLEARING AND SITE ESTABLISHMENT	Security	No security control at site control. Unauthorised entry into the construction site.	Theft of mterial and equipment. General safety of site employees and management.	S	5	3	15	The PC must appoint fulltime security on site to control access onto site. Dedicated site access control book must be maintained at all times.	S	4	2	8
	Access Control	Access control measures in place. Accessing site from unsafe areas.	Injury, theft of material and equip, equipment. Personal safety of employees and management.	S	4	3	12	Only designated access gates msut be opened and reman in control.	S	3	2	6
	Clearing of Site	Use of unsafe plant and machinery. Damage to site fence due to site clearing activities. Damage to existing services not pointed out to PC. Employees bing struck by moving plant or equipment. Damage to	Damage to neibouring property. Fatality or injury to members of the public. Damage to exixting services.	S	4	3	12	Clearing to be done by competent operatorss so as to not damage neighboring properties. Exixting services must be pointed out to operators. Employees must not be allowed in the vicinity of the equipment when clearing the site.	S	2	2	4
	Site Establishment	Improper loading and offloading. Traffic congestion. Movement of traffic to and from site. Dust and clearing of ground. Social and community disruptions. Contractors working on site without prior approval from client. Crane lifting operations.	Fatal injuries as a result of working following proper lifting procedures. Collisions and employees being struck by moving vehciles. Liability of contractors working without permission. Lifted articles falling onto pedestrians or members of the public.	S	4	3	12	Proper lifting procedures must be developed communicated and followed. Traffic management plan should be developed and communicated to all to role players. Dust must be minimised by always sprraying access routes and places where construction vehicles will be moving. Community liaisoon structures must be formed and communication established with these structures to minimise disruptions. No contractor must be allowed to work on	S	3	2	6

SITE ACCESS, SECURITY AND SITE ESTABLISHMENT	Failure to provide sanitary facilities for the anticipated number of employees.	Lack privacy of different gender persons.	Privacy and security of different genders must be respected and upheld.	E	2	2	4	The PC must provide sanitary facilities for the number of employees on site. Male and female must be provided with different facilities. Relevant signage to indicate the gender of the intended person must be provided.	E	1	1	1
	Failure to implement emergency preparedness measures.	Employees and visitors not knowing what to do in case of emergency	Fire, burns and other injuries may occur.	S	3	3	9	Emergency response procedures must be developed and implemented and communicated on site. Emergency telephone numbers must be posted up in a conspicuous place in around the site.	S	2	2	4
	Failure to put fire precautionary measures on site.	Fire caused damage to property of fatally injuring people.	Fire, burns and other injuries may occur.	S	4	4	16	Fire risk assessment must be done and relevant precautionary measures must be implemented. Fire extinguishers must be	S	3	3	9
	Emergency signage and communication	Employees not knowing where to run in case of emergency.	Fire, burns and other injuries may occur.	S	3	2	6	Assembly point and emergency evacuation routes must be indicated by means of proper SABS approved signage.	S	2	1	2
	Failure to provide drinking water resources.	Thirsty of employees and poor hygiene.	Dehydration of employees resulting in lack of concentration.	S	3	2	6	The PC must provide clean drinking water and appropriate signage indicating the location of such drinking water.	S	1	2	2
	General signage and posters.	Failure to communicate hazards	Fatalities or severe injuries may occur.	S	4	3	12	General signage must be provided warning employees of different dangers prevalent to site. Construction signboard indicating mandatory PPE to	S	3	2	6

FACILITIES	No facilities for safekeeping of employees personal good	Theft of personal good or even food poisoning.	Deseases and loss of personal belongings	S	4	3	12	The PC must provide personal facilities for safekeeping of employees	S	2	1	2
	Failure to provide first aid box and replenish kit.	Not treating the injured.	Injured won't have treatment access.	S	4	5	20	First aid kit and replenish packs must be provided.	S	2	2	4
COVID-19	Poor COVID-19 Management	Spreading of COVID-19 virus.	COVID-19 may spread on site and more people getting infected.	S	4	5	20	COVID-19 plan must be developed. COVID-19 risk assessment must be developed, communicated and implemented. Screening of everyone entering site must be done and recorded. Temperature thermometer must be provided and used. COVID-19 PPE must be provided. COVID-19 dedicated bin complete with signage must be provided. Medical waste must be disposed off accordingly.	S	3	4	12
GENERAL ADMINISTRATIVE IMPERATIVES	Failure to appoint the PC in terms of CR5(1)(k) as required.	Non-compliance with the OHS Act and incorporated regulations.	Improper HS management may lead to accident happening resulting in fatalities or injuries.	S	4	3	12	The PC must be formally appointed in terms of CR5(1)(k) by the Client where responsibilities are clearly outlined.	S	2	1	2
	Failure to conclude a Sec37(2) Mandatory Agreement between Client and PC.	Non-compliance with the OHS Act and incorporated regulations.	Improper HS management may lead to accident happening resulting in fatalities or injuries.	S	3	3	9	The Client must formally conclude a Section 37(2) Mandatory Agreement with the PC where conditions must be clearly specified.	S	2	1	2
	Health and Safety file not in place and/or approved.	Non-compliance with the OHS Act and incorporated regulations.	Improper HS management may lead to accident happening resulting in fatalities or injuries.	S	3	3	9	The PC must prepare the health and safety file guided by the requirements of the HS Specifications.	S	2	1	2
	Health and Safety plan not approved and/or implemented.	Improper HS management	Improper HS management may lead to accident happening resulting in fatalities or injuries.	S	3	3	9	PC must prepare HS Plan based on HS Specifications.	S	2	1	2

GENERAL ADMINISTRATIVE IMPERATIVES (Continue)	Required legal appointment as required by legislation not in place	Non-compliance with the OHS Act and incorporated regulations.	Poor health and safety management may lead to accidents occurring on site and people being injured or killed as a result.	S	4	3	12	For proper management of health and safety personnel must be appointed to carry out different duties that will ensure responsibility and overall management.	S	3	2	6
	Failure to do risk assessments and develop safe systems of work for any work performed or any machinery used.	Non-compliance with the OHS Act and incorporated regulations.	Injuries may occur if employees are allowed to carry out work whose risks are unknown and not addressed.	S	5	3	15	The PC must establish what hazards to any work which is performed or machinery used. Precautionary measures aimed at eliminating, obviating or reducing such hazards must be implemented and communicated.	S	3	2	6
	Induction (Duty to inform)	Non-compliance with the OHS Act and incorporated regulations.	Injuries may occur if employees are allowed to carry out work whose risks are unknown and where precautionary measures are not implemented and communicated.	S	5	3	15	The PC must ensure that employees and visitors receive induction training on hazards prevalent to site at the time of entry. Such training must be documented in kept in the HS file.	S	3	3	9
	Failure to carry out entrance and exit medicals for employees annually.	Non-compliance with the OHS Act and incorporated regulations.	The PC risk not knowing diseases that employee bring into the workplace. This might lead to people being wrongly placed in work responsibilities.	S	4	2	8	The PC must ensure that annually employees are subjected to medical examinations including exit medicals at the end of the project.	S	3	1	3
	Wrong placement of workers in different work responsibility	Exposure to more risk to employees already medically suffering.	Fatalities, injuries and diseases may occur.	S	4	2	8	The medicals will inform the correct employee placement.	S	3	1	3
	Failure to submit Construction Work Permit or Notification of Construction Work to Department of Employment and Labour.	Non-compliance with the OHS Act and incorporated regulations.	Poor health and safety management may lead to accidents occurring on site and people being injured or killed as a result.	S	5	3	15	The PC and the OHS Agent must ensure that Notification of Construction or application of Construction Work permit is extended to DoEL where required.	S	3	2	6

GENERAL ADMINISTRATIVE IMPERATIVES (Continue)	Failure for designers to carries to carry out dutie in terms of regulation 6 of the Construction Regulations.	Non-compliances with the OHS Act and incorporated regulations	Poor health and safety manangement may lead to accidents occuring on site and people being injured or killed as a result.	S	5	3	15	All designers (Achitect, Electrical, Mechanical etc.) must familiaries themselves with all duties as outlined in CR 6 throughthe the whole lifecycle of the project. Those duties must always be performed without fail. The client must ensure that designer duties are either oulined in their appointment letter of explicitly cited.	S	3	3	9
	Falling from height (Bricklaying)	Serious injury or even death can occur if a worker falls.	Serious injury or even death can occur if a worker falls.	S	4	3	12	Bricklayers Supervisor to check with the site manager that the correct scaffold is provided and inspected. Workers must not interfere or misuse scaffold.	S	2	1	2
	Collapse of scaffold (Bricklaying)	All operatives on scaffold may incur crush injuries or worse, if the scaffold collapse on them.	Fatal injury, fractures and/or serious injuries	S	4	3	12	Scaffold must be erected to comply with SABS Code of Practice and be checked on a regular basis.	S	3	2	6
	Falling objects hitting had or body, including feet (Bricklaying)	Serius head or other injuries to workers, others on site or even members of the public.	Fatal injury, fractures and/or serious injuries	S	4	3	12	Brick guards or toeboards must be kept in position. Hard hats and protective boots must be worn.	S	3	2	6
	Manual handling (Bricklaying)	All workers could suffer from back injury and long term pain if regularly lifting or carrying heavy or	Permanent physical disability.	S	4	3	12	When lifting bend your kness ensuring that your back muscles are relaxed. Do not lift any load in excess of 25kg repeatedly.	S	3	2	6
	Workers struck or crushed by moving vehicles. (Bricklaying)	Workers may suffer strains or fractures.	Fractures and severe injuries.	S	4	4	16	Inductions must be carried out for all workers on first day. Manager should agree safe route to work area with principal contractor.	S	3	3	9

BRICKLAYING	Slips and trips (Bricklaying)	All workers could suffer foot injuries.	Fractures and severe injuries.	S	3	3	9	Good housekeeping principles must be maintained. "A place for everything and everything in its place".	S	2	2	4
	Stepping on nails and sharp objects. (Bricklaying)	Workers could suffer foot injuries.	Fractures and severe injuries.	S	3	4	12	All employees must be provided with safety boots with steel toe cap. Waste must be disposed off in skips regularly.	S	2	2	4
	Flying fragmanets from brick cutting machine. (Bricklaying)	Bricklayers could suffer eye injuries.	Blindness and eye inpairment.	S	4	3	12	All employees involved in brick cutting activities must wear safety goggles.	S	2	2	4
	Hazardous substances, mortar.(Bricklaying)	Dust exposure could cause silicosis.	Permanent skin deformation.	S	3	3	9	Direct contact must be avoided. PVC gloves must be used. Use cement or cement containing products within the use-by date.	S	2	1	2
	Dust from cutting bricks. (Bricklaying)	Workers could be crushed or cut if the mixer topples or they get caught in moving parts.	Silicosis	S	3	4	12	Angle grinders must be replaced with block splitters removing the risk of dust exposure. Dust mask and respirators should be used	S	3	2	6
	Operating cement mixer. (Bricklaying)	Exposure to high noise levels can gradually lead to haring loss.	Severe injuries or even death.	S	4	3	12	Cement mixers must be placed on firm, level ground. Cement mixers should be fully guarded and guards in place during operation.	S	3	2	6
	Noise fom the use of equipment, eg angle grinder. (Bricklaying)	Fatigue and loss of concertration can lead to unforseen accidents.	Permanent hearing loss.	S	3	2	6	All employees working with or near grinder should be provided with ear protection to reduce the noise levels below 85 dB.	S	2	1	2
EXCAVATION AND TRENCHING	Falling or dislodgement of earth/rocks or other material.	Employee can be buried in an excavation.	Serious injury or even death.	S	4	3	12	Where ther is suspect than an excavation may collapse shoring should be done. The sides of an excavation must be barricaded with a solid handrail.	S	3	2	6

EXCAVATION AND TRENCHING (Continue)	Falling or dislodgement of earth/rocks or other material.	Employee can be buried in an excavation.	Serious injury or even death.	S	4	4	16	Where ther is suspect than an excavation may collapse shoring should be done. The sides of an excavation must be barricaded with a solid handrail.	S	3	3	9
	Instability or collapse of the excavation or an adjoining nearby structure.	Employee can be buried in an excavation.	Serious injury or even death.	S	4	4	16	Where ther is suspect than an excavation may collapse shoring should be done.	S	3	2	6
	The rush in of water or sewer	The rush in of water or sewer	The rush in of water or sewer	S	3	3	9	The rush in of water or sewer	S	2	2	4
	The placement of excavated material and movement of vehicles.	Vehicles or materials can fall onto people working inside excavation.	Serious injury or even death.	S	3	3	9	Vehicles must not be allowed to move closer to excavations. Materials and objects must be stored far away from excavation.	S	3	1	3
ELECTRICAL SAFETY CONSIDERATIONS	Unqualified persons undertaking electrical work.	Accidents are likely to happen when work is carrying out by unqualified people.	Electrocutions and/or death	S	5	4	20	Only qualified electrician should be employed to do any electrical installation.	S	3	3	9
	Absence of earth leakage protection	Employees will likely be electrocuted by installation and equipment where there is no earth leakage protection.	Electrocutions and/or death	S	4	4	16	All apparatus and equipemnts should have earth leakage protection	S	3	2	6
	Faulty/damaged electrical equipments	Electrocution or even fire can occur resulting severe consequences	Electrocutions and/or death	S	3	3	9	All faulty and damaged tools must be repaired or replaced	S	2	2	4
	Live electrical apparatus	Employees will likely be electrocuted by a live electrical apparatus..	Electrocutions and/or death	S	3	4	12	caution must be observed at all time when working with live electrical apparatus	S	3	4	12
	Overhead utilities	Death can occur when a person comes into contact with live overhead utilities	Death	S	4	4	16	Keep clear of live overhead utilities bearing in mind that electricity can jump when certain distance encroachment has been done.	S	3	2	6

ELECTRICAL SAFETY CONSIDERATIONS	Undergroud utilities	Death can occur when a person comes into contact with live underground utilities	Death	S	4	4	16	Underground utilities must be correctli identified before work commences. Municipal drawings with assist in locating where services are.	S	3	3	9
	Untagged and untested electrical apparatus.	Untested electrical apparatus can be a source to people being electrocuted.	Electrocutions	S	4	3	12	Report any electrical hazard or unsafe equipemt immediately.	S	3	2	6
	Incorrect fire extinguisher used on electrical fire	Incorrect fire extinguisher can either fail to extiguish or make the fire worse	Electrocutions	S	4	3	12	Use the correct fire extinguisher type on electr	S	3	2	6
TEMPORARY WORKS	Formwork/Support work related activities (Design)	Incorrect provision of design input information regarding loading, sequence of construction, location and geometry	Unfit design for the intended purpose. Possible problem due to non-fit, overloading, local failure or collapse.	S	3	3	9	Issue comprehensive design and ensure proper communication with the team.	S	3	2	6
	Formwork/Support work related activities (Structural Analysis	Incorrect determination of applied loads, structural analysis, stability check, provision of lateral restraint or other	Overloading of failure of the components or assemblies possibly leading to collapse	S	4	3	12	Analysis and designs to be carried out by competent structural engineer and experienced staff in accordance to applicable technical standards.	S	3	2	6
	Formwork/Support work related activities (Access platforms and guardrails	Insufficient provision of access platforms or guardrails.	Falls from the structure	S	4	4	16	Consider access for all necessary work operations as part of the design process.	S	3	3	9
	Formwork/Support work related activities (Made up formwork panels)	Lifting of made up formwork panels	Overloading of lifting assessories. Failure of form connections. Fall of load.	S	5	4	20	Consider handling of the formwork during design phase and communicate measures well in advance.	S	3	3	9

LIFTING	Permanent works and temporary foundations	Permanent works or temporary foundations unable to accept reactions from formwork systems	Excessive settlement, overstress of supporting structure leading to collapse.	S	4	4	16	Show maximum reactions from formwork systems on designs. Ensure adequacy of foundations and/or permanent works.	S	3	3	9
	Lifting attachments.	Incorrect attachment of lifting attachments to formwork component.	Local failure, falls of load, crushing injuries.	S	4	4	16	Use attachment accessories correctly to attach the load to the lifting equipment	S	3	3	9
	Erection and dismantling.	Improper erection or dismantling sequence	Local instability, partial or global failure.	S	5	4	20	Prepare method statements for all phases	S	3	3	9
	Substandard approach	Setting out incorrect, use of wrong parts, incorrect spacing of beams, connections not secure and tightened.	Overloading of components, excessive deflections, instability and failure.	S	5	4	20	Communicate restrictions to lifting practice to all involved in the operations.	S	3	3	9
	Overreaching from a ladder.	An employee can lose balance and fall as a result of overreaching	An employee risk falls which may result in fractures, sprains and strains	S	3	3	9	Do not overreach from a ladder. Always reposition the ladder for so that you do not have to overreach or lean sideways. The ladders must be deemed safe to use	S	2	2	4
	Sideways loading like drilling.	An employee can lose balance and fall as a result of sideways loading.	An employee risk falls which may result in fractures, sprains and strains.	S	3	2	6	Do not perform any operation which results in sideways loading.	S	2	1	2
	Loosing balance while working on a ladder	An employee can lose balance and fall as a result of sideways loading.	An employee risk falls which may result in fractures, sprains and strains.	S	3	3	9	Always work in the manner that the center of gravity of the ladder is not compromised. Do not lean sideways or load materials on a ladders.	S	2	2	4
	Suitability of task	A ladder which is not suitable for the type of work undertaken is as much of a hazard	An employee risk falls which may result in fractures, sprains and strains.	S	3	4	12	Use the correct ladder for the type of work undertaken.	S	2	3	6

LIFTING	Lifting machine being operated by a person who has not been trained.	An accident is likely to happen is the lifting machine is allowed to be operated by somebody who is not trained and competent.	Serious injury or even death.	S	4	4	16	All operators of lifting machinery should be trained and deemed competent to operate such machinery.	S	3	3	9
	The use of lifting equipment which has not been tested and certificated.	Lifting equipment which is not tested and certificated is likely to fail in operation causing accidents.	Serious injury or even death.	S	4	4	16	All lifting equipments should be certificated and tested according to the requirements of the DMR regulations.	S	3	2	6
	Exceeding the Safe Working Load (SWL) capacity of a lifting machinery.	If the capacity is exceeded, the load can snap struck people nearby.	Serious injury or even death.	S	4	4	16	Do not exceed a the Safe Working Load capacity of a lifting machine. Fit an electronic device capable of cutting off power when the capacity is exceeded.	S	3	3	9
	Being struck by ejected or dropped material.	Material can fall on an individual resulting in negative consequences.	Serious injury or even death.	S	3	3	9	Do not stand under suspended load. Do not ride on loads	S	2	1	2
	Contact with elevated overhead electrical wires	Contact with electricity can result in involved people being electrocuted.	Serious injury or even death.	S	4	3	12	Liting must not bbe done near any live electrical source.	S	3	2	6
	Contact or entanglement with trees, other machinery or material in motion.	Entanglement may result in the suspended load being dislodged and striking people underneath.	Death and even injury may occur.	S	3	3	9	Lifting should be done clear of other machinery. A banksman must assist the operator to ensure that accidents do not happen.	S	2	2	4
	Obstruction and poor sight vision for the operator.	Poor sight vision will definitely result in mistakes being committed and accidents happening.	Serious injury or even death.	S	4	4	16	A banksman must always be used in all lifting operation to assist the operator to avoid collisions and accidents.	S	3	3	9

CONSTRUCTION VEHICLES	Rigging under bad weather conditions	The load will sway under windy conditions. The swaying load can dislodge striking people.	Serious injury or even death.	S	4	4	16	In adverse weather conditions, all lifting operations should be halted until such weather subsides.	S	3	3	9
	Reversing a construction vehicle.	Vehicle or its load striking people, particularly when reversing.	Damage to property and loss of life.	S	3	3	9	Check reversing lights and signals on vehicles. Separate vehicle and pedestrian routes. Ckeck that nobody is at risk of injury before moving off.	S	2	2	4
	Driving on top of services.	Vehicle striking services and obstructions leading to accidents	Damage to property and loss of life.	S	3	4	12	Make a survey to establish where the underground services are before determing vehicle routes.. Make sure that contact does not happen between the	S	2	3	6
	Ignorance	Disregarding manufacturers instructions is a contributory cause of accidents	Damage to property and loss of life	S	4	2	8	Always read manufaturers instructions when operating any machinery.	S	3	1	3
	Inadequate training or drivers and banksmans.	Inadequate training or drivers and banksmans is a contributory cause of accidents.	Damage to property and loss of life.	S	4	4	16	Construction vehicles must be operated by people who have been specifically trained on that type of machinery.	S	3	3	9
	Lifting of heavy objects.	A heavy object can cause serious back injuries when lifted.	Affected individuals risk fractures, permanent disability and even fatality.	S	3	3	9	When lifting heavy objects, bend your knees ensuring that your back muscles are relaxed	S	2	2	4
	Lifting of objects	The object can slip and fall on somebody causing serious bodily harm.	Affected individuals risk sprains, strains, fractures and being handicapped.	S	4	4	16	When lifting objects, ensure that you have a firm grip and that the distance of travel is short. Take intermediate rests on your way to the final destination.	S	3	3	9

CONSTRUCTION VEHICLES	Lifting of sharp objects.	A sharp object can cut somebody's hand/finger	Affected individuals risk laceration, cuts and contusions.	S	4	2	8	All sharp objects must be protected before any manual handling.	S	3	1	3
	Collision while lifting objects.	Collision can cause a handled object to slip and fall causing serious bodily harm.	Affected individuals risk sprains, strains, fractures, lacerations, contusions and permanent disability.	S	4	3	12	Make sure that your route is clear of any obstruction and that you have a clear sight of what is happening around you.	S	3	2	6
	Lifting and movement of materials.	Back strain	Backage and/or permanent disability.	S	3	2	6	Ensure that you bend your knees in every lift and that back muscles are relaxed.	S	2	1	2
PLUMBING	Cutting of pipes.	Sharp edges from pipes that have been cut can pose a serious hazard.	Cuts, laceration and contusions	S	3	3	9	Ensure that the sharp edges of pipes are protected. Wear protective gloves. Do not handle objects from their sharp areas.	S	2	2	4
	Jointing of pipes	The employee can be burned during the process of pipe jointing.	Burns and/or bodily harm.	S	2	2	4	Always wear protective gloves and goggles to protect both you hands and eyes while jointing.	S	1	1	1
	Working on ladders/steps/podiums/tower scaffolds.	The risk of falling exist when working at elevated positions.	Fractures, bodily injuries and even death.	S	3	3	9	Always ensure that your ladders/steps/podiums/tower scaffolding are properly checked before usage. Registers and checklist of the above must be kept.	S	2	2	4
PORTABLE ELECTRICAL TOOLS	The use of portable electrical tools.	Electric shock. Batteries can spontaneously explode if incorrectly used.	Electrocutions and death.	S	3	3	9	Tools to be fitted with correct plug to match socket. Only double insulated main fed tools or battery powered tools will be used. Tools to be used by competent workers	S	2	2	4
	The use of portable electrical tools	Contact with cutters, blades, abrasive wheels, sanding discs, entanglement, inadvertent operation	Physical bodily harm	S	4	3	12	Correct guards should be used. Long hair or clothing should be secured. Dangling jewellery should be removed. Gloves should be worn.	S	1	1	1

SCAFFOLD	The use of portable electrical tools.	Trailing cables can cause tripping hazards	Falls resulting in physical bodily harm.	S	3	3	9	The length of the supply lead must be kept to a minimum to avoid tripping.	S	2	2	4
	Scaffold erected on poor foundation	Collapse, Falls, Slips, Falling Objects	Severe Injuries and/or death	S	4	3	12	Scaffold should be erected on a firm and stable base	S	3	2	6
	Damaged scaffold components	Collapse, Falls, Slips, Falling Objects	Severe Injuries and/or death	S	4	3	12	Do not use damaged scaffold components	S	3	2	6
	Overloading of the scaffold components	Collapse, Falls, Slips, Falling Objects	Severe Injuries and/or death	S	3	4	12	Do not overload a scaffold platform.	S	3	4	12
	Unstable, incomplete or incorrect use of a scaffold.	Collapse, Falls, Slips, Falling Objects	Severe Injuries and/or death.	S	3	4	12	Ensure that your scaffold is built sound, complete and that it complies to SABS Code of Practice.	S	3	4	12
	Scaffold exceed base to height ratio	Collapse, falling materials striking workers, falling from height.	Severe Injuries, Fractures and/or Death.	S	4	4	16	When erecting the scaffold the height must not be more than three times the base dimensions.	S	3	2	6
	Inappropriate access or egress points	Collapse, falling materials striking workers, falling from height.	Severe Injuries, Fractures and/or Death.	S	3	4	12	Provide access appropriate access ladders to any working platform.	S	3	4	12
	Scaffold in close proximity to an electrical source.	Collapse, falling materials striking workers, falling from height.	Severe Injuries, Fractures and/or Death.	S	4	4	16	Provide access appropriate access ladders to any working platform.	S	3	2	6
	Scaffold in close proximity to an electrical source.	Collapse, Falling materials striking workers, falling from height.	Severe Injuries, Fractures and/or Death	S	4	4	16	Ensure that the scaffold is erected far away from an electrical source.	S	3	2	6
	Falling objects from scaffold.	Collapse, falling materials striking workers, falling from height.	Severe Injuries, Fractures and/or Death.	S	3	3	9	Provide toeboard and/or netting to prevent materials and tools from falling to people underneath.	S	1	1	1
	Failure to provide a working platform from which employees can safely work.	Fall from height are likely to happen.	Serious injuries or even death.	S	4	4	16	Where a person or object can fall, a secure work platform, fencing handrails and kickboards should be provided as the first option of fall prevention.	S	3	3	9

SCAFFOLD	Materials or objects falling on people working below.	Employees working below can be hit by falling objects, or dropping objects.	Serious injuries or even death	S	3	3	9	Where a person or object can fall, a secure work platform, fencing handrails and kickboards should be provided as the first option of fall prevention.	S	2	2	4
	Failure to use fall arrest equipment correctly.	The failure of a fall arrest equipment will result in accidents.	Serious injuries or even death.	S	4	4	16	Use correctly, physical restrains capable of arresting the fall of a person from a height greater than 2m	S	2	3	6
	Suspension trauma	A person who remain suspended for a long time in a fall arrest system will have his blood flow patterns disturbed.	Serious injuries or even death.	S	4	4	16	Implement a fall protection and fall rescue plan on site. Ensure that workers are fully trained to rescue a person suspended on a fall arrest system.	S	3	3	9
WELDING	Welding without the appointment of competent people to take charge of the activity	Fire, Explosion, Electric shock, Fumes, Gases, Ultraviolet Radiation, Heat.	Burns, Electrocutions, Inhalation of fumes resulting in lung diseases, sparks coming into contact with eyes leading to blindness.	S	3	3	9	Train and appoint a competent person to assume the responsibilities of welding on site. Only competent employees must be allowed to do welding work	S	2	2	4
	Welding without providing adequate signage.	Fire, Explosion, Electric shock, Fumes, Gases, Ultraviolet Radiation, Heat.	Burns, Electrocutions, Inhalation of fumes resulting in lung diseases, sparks coming into contact with eyes leading to blindness.	S	3	3	9	Provide signage in all designated welding areas.	S	2	2	4
	Welding without first doing a pre-start check of the the work area prior to commencing of hot work activities	Fire, Explosion, Electric shock, Fumes, Gases, Ultraviolet Radiation, Heat	Burns, Electrocutions, Inhalation of fumes resulting in lung diseases, sparks coming into contact with eyes leading to blindness.	S	3	4	12	Always carry out a pre-start inspection and enter details in the register as a control measure.	S	3	2	6
	Welding without the use of welding screens around the work area.	Fire, Explosion, Electric shock, Fumes, Gases, Ultraviolet Radiation, Heat	Inhalation of fumes resulting in lung diseases.	S	3	3	9	Welding screens should be erected in the work area to protect employees from exposure to UVR.	S	2	2	4

WELDING	Welding screens should be erected in the work area to protect employees from exposure to ultraviolet radiation	Danger of falls, tripping over material.	Injuries	S	3	3	9	Provide safe access to the welding area	S	2	2	4
	Welding without providing adequate natural or mechanical ventilation.	Fire, Explosion, Electric shock, Fumes, Gases, Ultraviolet Radiation, Heat, Atmospheric contaminants	Burns, Electrocutions, Inhalation of fumes, sparks coming into contact with eyes leading to blindness.	S	3	3	9	Provide adequate natural or mechanical ventilation to protect persons against exposure to atmospheric contaminants.	S	2	2	4
	Welding in untidy area with flammable and combustible material, tangled leads, discarded off-cuts and stubs.	Fire, Explosion, Electric shock, Fumes, Gases, Ultraviolet Radiation, Heat.	Burns, Electrocutions, Inhalation of fumes, sparks coming into contact with eyes leading to blindness.	S	4	3	12	Always keep the work area tidy and free from combustible materials, tangled leads, discarded off-cuts and electrode stubs	S	3	2	6
	Failure to turn power off and remove electrode stubs prior to leaving the work area.	Fire, Explosion, Electric shock, Fumes, Gases, Ultraviolet Radiation, Heat	Burns, Electrocutions, Inhalation of fumes, sparks coming into contact with eyes leading	S	4	3	12	Turn off the power and remove electrode stubs prior to leaving the work area.	S	3	2	6
PLASTERING	Carrying out plastering work	Falling from height	Serious injury and/or fatality	S	4	3	12	Sufficient step up to be provided. Platform to have toeboards. Handrails on stairs and landings.	S	3	2	6
	Carrying out plastering work.	Slips and trips	Serious injury and/or fatality	S	3	2	6	Good housekeeping principles to be observed. Plaster bags must be put in skips. Trailing cables in the work area hung up and removed from work area	S	2	1	2
	Carrying out plastering work.	Site vehicles	Serious injury and/or fatality	S	3	3	9	Safe route to workplace and welfare facilities agreed upon and communicated.	S	2	2	4
	Carrying out plastering work.	Manual handling	Serious injury and/or fatality	S	3	3	9	Dry plaster mix to be less than 25 kg when handled. Job rotation where necessary.	S	2	2	4