

TITLE OF THE ACTIVITY:		DEMOLITION AND REMOVAL OF EXISTING ROAD STRUCTURES										
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TASK STEP	HAZARDS	RISKS0	RISK RATING			INITIAL RISK LEVEL	CONTROL MEASURES (EL – Elimination, RE – Reduction, IS – Isolation, EC – Engineering Control, AC – Administration Control, PPE – Personal Protective Equipment)	CONTROLLER	RISK RATING			FINAL RISK LEVEL
			S	L	R				S	L	R	
General Preparation (surveying) and Mobilization of personnel.	<ul style="list-style-type: none"> Lack of communication. Inadequate procedure used Incompetent Unskilled personnel Weather condition Personnel with Partial disability, young workers Less experience personnel 	Injury to personnel Minor/Major. Difficult to response in an emergency. Failure to follow workplace safety. Poor execution of structure	3	5	15	H	<ul style="list-style-type: none"> Ensure only person having working visa allowed to enter the working area. Designated access routes to be used and appropriate signages should be display. Site safety induction training should be conducted to all workers. No visitor will be allowed to enter without gate pass. Pre task briefing to all workers before and ensure close supervision must be standby. Approved Permit to work must be available at site before work comes. Ensure site engineers and foremen are aware of weather condition and daily activities. Skill personnel should be employed. The worker should understand the local language. Ensure young workers should be monitor by a competent foreman 	supervisor, Safety officer and PM.	3	1	3	L
Mobilization of equipment and machinery	<ul style="list-style-type: none"> Wrong equipment and machinery used. Exposure to noise. Harm and fingers cut injury. Falling object 	Injury to personnel Hearing loss, abrasion, head injury, overturning of vehicles Hydraulic oil leaks	4	4	16	H	<ul style="list-style-type: none"> Ensure all equipment and machinery selected should be in standard of construction. Materials should storage in a designated area and fully barricaded. Ensure unloading of materials should be under supervision of a foreman. Ensure regular maintenance of vehicles. Manal handling training to all personnel to carryout 	Site engineer, supervisor and safety officer.	4	1	4	L

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	<ul style="list-style-type: none"> from height. Speeding of the vehicle at the working area. Poor maintenance of vehicle and heavy equipment. 						<ul style="list-style-type: none"> loading and unloading activities. ➤ Vehicles should be overloaded. ➤ Ensure regular maintenance of equipment. ➤ Speed limit should be strictly monitor at site. ➤ Certified Banksman/flagman should be deployed during machinery movement. 					
Demolition/ remover of existing road structure (asphalt pavement layer, kerb stones, interlocking, traffic signs) and Disposal of surplus materials using mobile equipment/six wheel trucks.	<ul style="list-style-type: none"> Vehicle accident due to uneven surface. Materials falls from height. Crushing. Exposure to the public falling debris. Tripping hazard. Dust inhalation. Collapse of structure. 	Property damage. Fatality injury workers and road passerby. Death/Facture. Eye injuries.	4	5	20	H	<ul style="list-style-type: none"> ➤ Only QRC, approved vehicle, equipment and machineries shall be used. ➤ Safety operating speed limit shall be strictly monitor. ➤ All vehicles should be park in designated area. ➤ Competent flagman should warn others and guide vehicle during reverse movement ➤ Ensure tools box talk conducted for safe handling and removal of existing roads structures. ➤ Keep pedestrians clear away from working area. ➤ All existing road structures shall be kept in a designated area for proper disposal as DM requirement. ➤ Operator trained and ensured all machinery/ lifting device are satisfied by third party and certificate available at site. 	Supervisor, PM, safety officer and workers.	4	1	4	L

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							<ul style="list-style-type: none"> ➤ Ensure daily safety check list available for all machinery & equipment. ➤ Vehicles should not be overloaded; load should be in a secure position. ➤ Reverse beeper and flashlight beacon fitted. ➤ Ensure all guard and covers to be fitted. ➤ Ensure working area should be completely fence. ➤ All required permits shall be obtained from authority. ➤ Ensure fire extinguisher available on site and emergency service contact display at site. ➤ Ensure all workers on site shall wear full body PPE, (safety helmet, safety shoes, full body coveralls, hand gloves, safety goggles etc.) ➤ Conduct pre-task training to all workers involved in demolition activities. 					
Dust generating the workplace	<ul style="list-style-type: none"> • Lung diseases and dermatitis 	Death Respiratory system block	5	4	20	H	<ul style="list-style-type: none"> ➤ Ensure full body PPE must be worn at all levels (respiratory mask, hand gloves, goggles, safety shoes, coveralls etc.) ➤ Toolbox talk to raise awareness to all workers. ➤ Continuous supervision is required to ensure workers are following safe system of work. ➤ Eye wash station to be provided and first aid kit with first aider. ➤ Ensure housekeeping toolbox talk conducted to all 	Engineer, supervisor, PM AND HSE Officer.	5	1	5	L

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							<p>worker, extreme care to be taken while working on dusty area.</p> <ul style="list-style-type: none"> ➤ Appropriate safety personal protective equipment must always be worn. ➤ Spray water to reduced dust generating during demolition activities. ➤ Warning signs must be displayed at site. ➤ Barricade the area with safety mesh 							
Access/Egress	<ul style="list-style-type: none"> • Unauthorized entry to site. • Vehicle collision • Poor access/egress. 	Injury to public. Major injury to workers.	3	4	12	M	<ul style="list-style-type: none"> ➤ Ensure access to the site must be controlled to ensure the safety of all workers and visitor. ➤ Banksman in place to ensure any awkward reversing. ➤ Conduct tools box talk on safe operating system/speed limits. ➤ Ensure access and egress routes free from materials and equipment. ➤ Ensure mandatory personal protective equipment (PPE) must always be worn (safety helmet, coveralls, safety shoes, Hi-visibility vest etc.) ➤ Barriers should be erected around unattended excavations, secured with sandbags where necessary and warning signage in place such as deep excavation, men at work, reduce speed, warning flashlight etc. 	Flagman/site supervisor	3	1	3	L		
Manual handling	<ul style="list-style-type: none"> • Fatigue. 	Death, injuries					<ul style="list-style-type: none"> ➤ Ensure manual handling training and instruction 	Workmen						

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	<ul style="list-style-type: none"> Ligament strains, muscle strains. Abdominal hernias. Hand injury. 		3	5	15	M	<ul style="list-style-type: none"> provided to all workers. ➤ Eliminate the need of manual handling by using mechanical aids wherever possible. ➤ Assess the load and weights marked on all loads. ➤ Personal protective equipment must be worn (hand gloves) 	and supervisor	3	1	3	L
Using of hand power tools (Hilti, breaker, saw cutter, asphalt cutter)	<ul style="list-style-type: none"> Use of defective power tools. Poor maintenance of hand power tools 	Burn injury. Cut injury. Electric shock.	3	5	15	M	<ul style="list-style-type: none"> ➤ Power should be inspected by a competent electrician with colour coded on regular basis. ➤ Tools above 110 volts must have approved from DMC prior to use at site. ➤ Trained the worker on safe use of power tools. ➤ Ensure that ON/OFF switch is in safe working condition. ➤ Industrials socket shall be fitted in all power tools. 	Site supervisor, electrician and safety officer	3	1	3	L
Environmental conditions	<ul style="list-style-type: none"> Adverse weather conditions, Heat exhaustion Heat stroke Dehydration High body temperature. Sunstroke and tiredness Muscle cramps. Vomiting. Headache 	Fatality injury to workers Sunburn. Dehydration.	4	3	12	H	<ul style="list-style-type: none"> ➤ Provision of welfare facility on site with good drinking water, air conditional system, first aid room etc. ➤ Closed supervision on site and provide the workers rehydration salts and regular break to the workers. ➤ Shift rotation system shall be implemented. ➤ Drinking plenty of water with electrolyte (ORS). ➤ Do not allowed lonely work. ➤ Ensure DM guideline for midday break shall be follow. ➤ Provide heat stress training to all workers. ➤ Conduct toolbox talk to workers 	Flagman/site supervisor, PM and HSE	4	1	4	L

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Use of Crane mounted truck for removal and Loading of existing roads structures.	<ul style="list-style-type: none"> confusion Loading and Offloading area not secured by warning tape. Warning devices not working, insufficient knowledge to operator / rigger and poor maintenance of the equipment. Having no control of Precast during lifting. Weight not distributed evenly makes it 	Major injury to workers and passing by motorist/ visitors/ staff or nearby workers. Fatalities, Damage of property and legal prosecution	4	5	20	H	<ul style="list-style-type: none"> ➤ Before lifting of the load surrounded area of trailer and mobile crane should be barricaded by warning tape/rope with wound warning tape at least 1.5 meters wide access. ➤ Make sure that sign board clearly visible along the area to aware the motorist/visitors/staff and nearby workers regarding the hazards. ➤ Assign banks man to control road traffic. ➤ Supervisor/Foreman shall plan properly the positioning of crane and trailer. ➤ Crane operator is responsible for ensuring the operation of his unit such out rigger must be fully extended, out rigger lock to be secured. ➤ Ensure that all warning devices are functioning properly, manual of crane is available, and maintenance record of the crane including valid 3rd party certificate prior to commence demolition operation. ➤ Crane mounted truck operator shall mandatory performed check list every shifting of his unit after setting to ensure the safe system of work. ➤ Demolition Supervisor to ensured safe procedure shall be followed and instruct the employee/workers accordingly. ➤ Tag line must be attached always during removal of 	Lifting supervisor, site engineer, foreman & HSE Officer.	4	1	4	L		

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	<p>difficult control.</p> <ul style="list-style-type: none"> Over loaded Vehicle, 						<p>existing road signs to avoid unnecessary movement of load.</p> <ul style="list-style-type: none"> His knowledge and advice should be adhered. Employee to be made aware of these hazards. Only communication between the rigger & operator can avoid an injury from occurring. Driver to be inducted in safe loading operation. Driver to ensure that the capacity chart is available and clearly readable out of door cab. Driver should be monitored the loading sequence. 					
Waste Materials/Hazardous Wastes	<ul style="list-style-type: none"> environment impact 	Contamination of environment/ damage to natural flora.	4	3	12	M	<ul style="list-style-type: none"> Hazardous wastes should be stored in designated areas and label with signage. Conduct training on safe handling of hazardous materials and the important of PPEs (safety hand gloves, dust mask, full body coveralls, safety helmet, goggles etc.) Safety signages should be at place, segregated and disposed as per DM guidelines. Ensure housekeeping should be maintained at all level and proper materials storage at site. 	HSE / PM Engineers and workmen	4	1	4	L
Precautionary measures for the COVID - 19 .	<ul style="list-style-type: none"> Get positive in COVID 19 or any other diseases. Personnel can be infected to virus 	Hight fever. Serious cases/Death Caught	5	4	20	H	<ul style="list-style-type: none"> Ensure toolbox talks conducted to all workers at site on coronavirus (COVID-19) safety precaution must be followed, Ensure DHA safety guiding implemented at site (surgical mask, hand gloves and social distances of 1.5 meter must be maintained at all time. 	Workmen, HSE, PM, Engineer and pedestrians or pass by.	5	1	5	L

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Emergency situation	Fire and Explosion. Fumes/smoke, Earthquake/nearby building collapse, riots/accident etc.	Bodily injuries/Fatality/Severe burns, property damage	3	5	15	H	<ul style="list-style-type: none"> ➤ Conduct toolbox talks on good housekeeping and personal hygiene. ➤ Provide hand sanitizer for disinfectant, first aid kit and ensure a competent first aider standby at site ➤ Ensure daily temperature scanning before work comes. ➤ Emergency contacts should be display at site and all incident/accident and near miss must be reported immediately. 	Workmen, HSE, PM, Engineer and pedestrians or pass by.	3	1	3	L

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Likelihood (L) (% of Compliance)		Severity (S)		RR: Risk Rating (LxS) RISK LEVEL = Resultant Risk Level being either High, Medium or Low.		Likelihood						
						0	1	2	3	4	5	
1	91 to 100	1	First-aid case	1 – 4	Low	Severity	1	1	2	3	4	5
2	81 to 90	2	Minor (Hospital referred)	5 – 10	Medium		2	2	4	6	8	10
3	71 to 80	3	Reportable (3 - 21 days medical rest)				3	3	6	9	12	15
4	25 to 70	4	Major (Hospital admission/≥21 days medical rest)	12 - 25	High		4	4	8	12	16	20
5	0 to 24	5	Fatality				5	5	10	15	20	25

Legal Reference: Chapter 5, Federal Labour Law (8), UAE 1980/ Ministerial Order No. 32, UAE 1982/ Code of Construction Safety Practice, Dubai 2008

Prepared by Risk Assessment Committee/ HSEO		Workmen Representative		Approved by Management Representative/ Project Manager	
Name & Designation	Betta Melvis	Name & Designation		Name & Designation	

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Signature			Signature				Signature					