APPENDIX 2

The Initial Risk Assessment highlights the risks that will affect everyone involved with the site. All contractors intending to work on this project must be aware of these risks and indicate in their own Task Specific Risk Assessments / Method Statement how they will deal with them.

The Initial Risk Assessment is divided eight sections:

- 1.1 The Public Interface
- 1.2 Movement (of vehicles & pedestrians) around site
- 1.3 Site Services (Including Temporary Electrics)
- 1.4 Plant & Equipment
- 1.5 Work Areas
- 1.6 Working at Height
- 1.7 Management and Control of Lifting Operations and Mechanical Handling
- 1.8 Other Significant Safety Hazards
- 2.0 Health Risks

1.1 Protecting the Public Interface

			Pe	erson	at Ri	sk					
No.	ACTIVITY / ELEMENT	SIGNIFICANT RISKS / HAZARDS	Site Personnel	Public	Subcontractor	Others	ACTIONS REQUIRED TO REDUCE OR CONTROL RISKS	PROCEDURE REQUIRED?	SPECIFIC OPERATIONS AFFECTED / LOCATION	TS RA /MS? (Y/N)	ACTION BY: (SUB. / PC)
1	Site Entrances	Struck by vehicles	٧	٧	٧	٧	 Most suitable entrance/exit location determined from Traffic Management Plan / Site layout Plan Adequate warning signage erected Good visibility allowed for vehicles entering/exiting site & the public passing-by Entrance well maintained; kept clean, level and trip free 	Traffic Management Plan Site Layout Plan	 Vehicles accessing / egressing site Pedestrians passing by / through site entrances 		
2	Delivery vehicles (& drivers)	 Falls (people) Falls (things) MSD Struck by vehicles Lifting Operations 	V	V	√	V	 Traffic Management Scheme initiated & agreed with Local Authority Construction traffic routes to site pre-determined & sent to all suppliers/subs Co-ordinated deliveries to ensure no vehicles queue onto public highways No unloading allowed outside site boundary Unloading gantries provided where possible All delivery drivers to receive brief induction & direction from gate attendant Delivery vehicles to be escorted by trained banks people at all times All delivery drivers to wear min. PPE inclusive of hard hat, safety boots & high-visibility vest 	Traffic Management Scheme Traffic Management Plan Site Layout Plan	All delivery vehicles (& drivers) travelling to, from or around site.		

							DIVALLI				
3	Site Visitors	Falls (people)Falls (things)Struck by vehicles	٧	٧	V	٧	 Site layout & site rules clearly displayed near site entrance for guidance Adequate directional signage provided showing route to car park & office establishment Gate Attendant to provide additional direction/instruction All visitors to be inducted. Those with no site experience to be escorted at all times All visitors to wear minimum PPE inclusive of hard hat, safety boots & high-visibility vest 	Traffic Management Plan Site Layout Plan Induction	All site visitors (including new starts) moving around site particularly from site entrance / car park to office compound		
4	Preventing unauthorised site entry	Falls (people)Struck by vehicles		٧		٧	 Adequate security, lighting & signage utilised to deter unauthorised access Robust site hoardings erected & regularly monitored Gate Attendant present at all times Site gates kept closed when unattended 	Signing-in procedure	Securing the site boundary: Site Hoardings Site Entrances Site security		
5	Cleanliness of highways & footpaths in vicinity of site.	Falls (people)Struck by vehicles	٧	٧	٧	٧	 Regular cleaning schedule initiated with any mud on the highway removed immediately Wheel washers provided to all site exits if problem thought significant 		Preventing mud / debris being transferred from site to highways during:		
6	Operations at all levels in close proximity to Public Areas	 Falls (people) Falls (things) Premature collapse Struck by vehicles Noise Dust Fumes Hazardous 	٧	V	٧	√	 Robust site hoardings erected to segregate & protect the General Public All scaffolding bordering public areas to be sheeted & incorporate protective fans. Concrete barriers/timber baulks used to protect scaffolds / temporary works adjacent highways Materials stored away from site boundary unless full edge protection in place 	Traffic Management Plan (for materials storage areas)	 Demolition Structural frame erection Wall & Roof cladding Temporary works Support Systems 	YES	

Materials			

1.2 Movement (of vehicles & pedestrians) around site

A 'Traffic Management Plan' for the project will be produced giving consideration to the following items.

- Site Access / Egress
- Methods of Dealing with site visitors (security passes / signing-in procedures / directions / etc.)
- Construction traffic routes (location / one-way systems / vehicle/pedestrian segregation / etc.)
- Pedestrian crossing points
- Requirements for route lighting
- Control of reversing vehicles (use of audible reversing devices / trained banksmen / etc.)
- Vehicle unloading/loading areas
- Material storage areas
- Plant/vehicle refuelling areas
- Plant/vehicle parking areas
- Concrete wagon wash out areas
- Skip Locations
- Signage & Road marking requirements
- Protection of structures & temporary works (inc. scaffolds, falsework, excavations & underground chambers, etc)
- Maintenance of roads & paths traffic / pedestrian routes

Relevant sections of the Traffic Management Plan will be communicated to site personnel during induction.

1.3 Site Services (Including Temporary Electrics)

			Pers	on at	Risk						
No.	ACTIVITY / ELEMENT	SIGNIFICANT RISKS/HAZARDS	Site Personnel	Public	Subcontractor	Others	ACTIONS REQUIRED TO REDUCE OR CONTROL RISKS	PROCEDURE REQUIRED?	SPECIFIC OPERATIONS AFFECTED / LOCATION	TS RA /MS? (Y/N)	ACTION BY: (SUB. / PC
1	Temporary electricity distribution	Electric shockFire	٧		٧	٧	 'Temporary Electrics Manager' appointed to prepare Temporary Electrics Plan ensuring: Sufficient transformers & socket outlets to prevent overload Leads carefully laid out – suspended where possible or laid away from congested areas to reduce likelihood of damage trip hazards Regular inspections are undertaken of sockets & leads 	Temporary Electrics Plan.	Temporary electrics required & areas to be installed: Route lighting (ext. / int.) Security lighting to grounds Task Lighting Power Distribution within building		
2	Work on live electrical circuits	Electric shockFire	٧		٧	٧	 Full liaison with utility providers & Temporary Electrics Manager prior to & during work Inspection regime initiated 	Permits to Work Handover Certificates	New connectionsRepairs & Maintenance	YES	
3	Work near overhead cables	Electric shock	٧	٧	٧	٧	 Electricity Board informed of works & electricity re-routed if possible Warning signs & safe working distances displayed in vicinity of overhead cables Protection provided to overhead cables/services 	Permits to Work	 Work at height Work involving use of equipment with high reach or high sided vehicles (e.g. fork trucks/cranes, 	YES	

							etc)		
4	Work near / to underground services (inc. electric, gas, water, telecomm's, drainage)	Electric shockAsphyxiationExplosionConfined Spaces	V	٧	٧	٧	 Existing service drawings checked prior to excavation Trial holes hand-dug in vicinity of all underground services For electricity; electric board informed of works & electricity re-routed if possible CAT scans undertaken prior to & during excavation Permits to Dig operations / locations: EXAMPLES Service Works 	YES	

Work Areas

			F	People	at Ris	sk					
No.	ACTIVITY / ELEMENT	SIGNIFICANT RISKS/HAZARDS	Site Personnel	Public	Subcontractor	Others	ACTIONS REQUIRED TO REDUCE OR CONTROL RISKS	PROCEDURE REQUIRED?	SPECIFIC OPERATIONS AFFECTED / LOCATION	TS RA /MS? (Y/N)	ACTION BY: (SUB. / PC)
1	Work in excavations	 Falls (people & things) Premature collapse Confined spaces 	٧		٧	٧	 Excavation sides battered to a safe angle or support system provided Safe access/egress provided All excavations / support systems entered onto TW's register & monitored accordingly Folder kept for all major elements of TW's (such as trench support systems) containing relevant documentation (Designs, technical data, inspection reports, etc) 	Temporary Works Register Temporary Works Folder (support systems)		YES	
2	Work in Confined Spaces	AsphyxiationFireExplosion	٧		٧		 Only competent people to work in such areas Safe access/egress provided Atmospheric monitoring equipment used to monitor environment Correct PPE worn Personal hygiene stressed & shower facilities made available if necessary Health surveillance initiated if necessary 	Permits to Work	State all such operations / locations: EXAMPLES Drainage Connection	YES	

1.5 Working at Height

			F	People	at Ris	k					
No.	ACTIVITY / ELEMENT	SIGNIFICANT RISKS/HAZARDS	Site Personnel	Public	Subcontractor	Others	ACTIONS REQUIRED TO REDUCE OR CONTROL RISKS	PROCEDURE REQUIRED?	SPECIFIC OPERATIONS AFFECTED / LOCATION	TS RA /MS? (Y/N)	ACTION BY: (SUB. / PC)
1	Work areas	 Falls (people) Falls (things) Premature collapse 	V	٧	٧	V	 Only competent people to work at height; signage / barriers erected warning of restricted access Safe working area provided with following hierarchy of fall protection in place: Collective fall protection (guard rails / nets / bags), where possible, erected & inspected by competent people Individual fall protection (harnesses / lanyards / inertia reels) as a last resort, used & inspected by competent people & fastened to suitable anchor points Safe access provided to work area (proprietary steps used as opposed to ladders where feasible) Any fragile surfaces clearly demarcated by means of physical barriers & signage Exclusion zones set-up directly below work areas where appropriate Materials stacked away from leading edges unless full edge protection provided (inclusive of brick guards) 	Handover Procedure (certifying that work areas are safe)	EXAMPLES Demolition Structural frame erection Roof Structure works Wall & Roof cladding	YES	

							SWL of working platform never exceeded					
2	Erection, dismantling & use of Temporary Works / support systems at height	 Falls (people) Falls (things) Premature collapse 	٧	V	٧	٧	In addition to control measures stated above for general work areas located at height: Designed, constructed, maintained & dismantled by competent people Exclusion zones set up during erection, dismantling & use All support systems entered onto TW's register & monitored accordingly Folder kept for all major elements of TW's containing relevant documentation (Designs, technical data, inspection reports, etc)	Temporary Works Register TW's Folders (for each support system) Permits to load / strike 'Scaff-Tag' system (for all scaffolds)	• Si	caffolds	YES	
3	Openings / holes in working platforms	Falls (people)Falls (things)	V		٧	٧	 All holes identified on 'Hole Register' & regularly inspected All hole coverings to be fastened down & clearly marked as 'Danger Hole Below' Full edge protection to be erected around larger openings 	Hole Register	• So	ervices Risers		
4	Use of Fall Protection PPE	Falls (people)Falls (things)	٧		٧		 Used only as a last resort when collective fall protection is not possible Users must be trained & competent Pre-use Checks Quarterly Thorough Examination 	RA for use (unless carried out as part of TS RA) Fall Arrest Equipment Register	• Se	tructural frame Erection caffolding frection		

								Equipment Issue sheet			
5	Use of Hoists	Falls (people)Falls (things)Premature collapse	٧	٧	٧	V	 Control measures stated in Section 1.4 (1) for 'Plant & equipment' in general to be followed MBRV procedure for use of Hoists to be followed 	Plant Register & PUWER Folder Toolbox talks		Yes	
6	Use of MEWP's	Falls (people)Falls (things)Premature collapse	٧	٧	٧	٧	 Control measures stated in Section 1.4 (1) for 'Plant & equipment' in general to be followed MBRV procedure for use of MEWP's to be followed Fall Restraint PPE required in cherry pickers 	RA for use (unless carried out as part of TS RA) Plant Register & PUWER Folder Toolbox talks	Not Applicable		
7	Use of Mobile Alloy Towers (MAT's)	 Falls (people) Falls (things) Premature collapse 	٧	٧	٧		 Control measures stated in Section 1.4 (1) for 'Plant & equipment' in general to be followed Correct size / type of tower selected Erected by PASMA certified operatives to manufacturers instructions (outriggers used where necessary) Full boarded with double handrails & toe boards fitted All users to carry 'tower scaffold card' Exclusion zones set up where feasible Regularly inspected to ensure no adjustments/modifications have been made. Weekly recorded inspections 	RA for use Handover Procedure Plant Register & PUWER Folder Toolbox talks	M&E Works Ceiling Installation Painting & Decorating Works		
8	Use of stepladders	Falls (people)Falls (things)	٧		٧	٧	Only used for simple tasks of short duration (not to be used as working	RA for use	M&E Works		

						platform) Only Industrial Grade ladders to be used Fully inspected prior to use and at regular intervals Placed away from traffic/pedestrian routes Operatives to have 3 points of contact with ladder at all times		Ceiling Installations Painting & Decorating Works	
9	Use of Ladders	Falls (people)Falls (things)	٧	٧	٧	In addition to control measures stated above for stepladders: • Must be tied / footed • Must extend at least 1m above landing platform • Slope Rate of 1:4 • Max. Ladder Height 9m (between rest points)	RA for use	Access to Height	

1.7 Management and Control of Lifting Operations and Mechanical Handling

MBRV has appointed a competent 'Appointed Person' for lifting operations.

The Appointed Person is responsible for ensuring that the requirements of the Group Standard: The Safe Operation of Cranes 2004, are fully complied with by developing and constantly reviewing a Lifting Operations Plan.

The Appointed Person, who is named in section 2.2 of this plan, will hold the Lifting Plan.

The Lifting Operations Plan will include:

- The Crane Team Organisation Chart
- Authorisation of Slinger / Signallers
- Identification and Initial Assessment of Lifting Operations
- Schedule of Common Lifts
- Index of Method Statements for Special Lifts
- Lifting Operations Assessment Forms
- Project Arrangements for Procurement of Lifting Equipment
- Register of Lifting Equipment

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Communications: -

- Crane Team Meetings
- Briefing Sessions
- Signalling systems / radios
- Identification of slinger/signallers
- Site Cranage Layouts (where applicable).

1.8 Other Significant Safety Hazards

	Other Significant Sai	ct, mazaras	F	People	at Ris	sk					
No.	ACTIVITY / ELEMENT	SIGNIFICANT RISKS/HAZARDS	Site Personnel	Public	Subcontractor	Others	ACTIONS REQUIRED TO REDUCE OR CONTROL RISKS	PROCEDURE REQUIRED?	SPECIFIC OPERATIONS AFFECTED / LOCATION	TS RA /MS? (Y/N)	ACTION BY: (SUB. / PC)
1	Housekeeping	Falls (people)Fire	٧		٧	٧	 Daily monitoring of work areas/access routes to prevent build up of waste Sufficient rubbish skips/bins provided Waste Management procedures implemented 	Environ- mental Management Plan	All operations / whole site		
2	Poor Ground Conditions	Falls (people)Struck by vehicles	٧		٧	٧	 Hard standings laid in areas subject to frequent traffic/loading (i.e. where materials / site cabins are to be placed) Access routes well maintained; kept clean, level and trip free Mud accumulating in the work area to be frequently scraped up as conditions dictate 		All operations / whole site		
3	Materials Storage	 Falls (things) Fire MSD Struck by vehicles 	٧	٧	٧	٧	 Stored only in designated areas Stored in accordance with manufacturers guidance Packaging checked prior to stacking (i.e. no loose bands/straps) Unbound materials must be protected from accidental collapse Stacks not too high & laid on stable ground Stacks regularly checked for stability Combustible materials not stored internally without prior permission from 	Traffic Management Plan Site Layout Plan	All operations / whole site		

									the Project Manager. Must be covered			
									with LPS 1207			
									Also refer to Section 1.2; 'Movement			
									around site'			
4	Flooding	•	Drowning	٧		٧	٧		 Surveys undertaken to determine risk of 			
									flooding			
									 Pumps provided if necessary 			
									 Weather forecast continually monitored 			
5	Hot Works	•	Fire	٧		٧	٧		 Fire extinguisher in presence of all hot 	Hot Works	 Plumbing 	
		•	Explosion						works	Permits	Works	
									 Hot works to cease min. one hour 			
									before end of working day & work			
									inspected prior to leaving site			
									 All work areas kept clear of debris & 			
									rubbish			
5	Undermining of	•	Falls (people &	٧	٧	٧	٧		 Surveys of adjacent structures & ground 	Temporary		
	adjacent structures		things)						conditions undertaken prior to work	Works		
		•	Premature collapse						commencing	Register		
									 Temporary/permanent support 			
									provided as necessary	TW's Folders		
									 All support systems designed, 	(for each		
									constructed, maintained & dismantled	support		
									by competent people	system)		
									 All support systems entered onto TW's 			
									register & monitored accordingly			
									 Folder kept for all major elements of 			
									TW's containing relevant			
									documentation (Designs, technical data,			
									inspection reports, etc)			
6	Lone workers	•	All hazards	٧		٧	٧		 Situation avoided wherever possible 	RA	All operations /	
			accentuated						 Individual must be competent to carry 	undertaken	whole site	
									out task	considering		
									 In case of lone security staff; remote 	worker		

						calling station must be provided	involved & task at hand	
7	Young Workers	All hazards accentuated	٧	٧	٧	 Senior MBRV management approval if operatives <18 Increase level of supervision/training required 	RA undertaken considering worker involved & task at hand	All operations / whole site
8	Pregnant & nursing mothers	All hazards accentuated	٧	٧	٧	 Workers duties reduced where necessary 	RA undertaken considering worker involved & task at hand	All operations / whole site

2.0 Health Hazards

			ŀ	eople	at Ris	sk					
No.	ACTIVITY / ELEMENT	SIGNIFICANT RISKS/HAZARDS	Site Personnel	Public	Subcontractor	Others	ACTIONS REQUIRED TO REDUCE OR CONTROL RISKS	PROCEDURE REQUIRED?	SPECIFIC OPERATIONS AFFECTED / LOCATION	TS RA /MS? (Y/N)	ACTION BY: (SUB. / PC)
1	Contaminated land / buildings	Hazardous materials	٧	٧	٧	٧	 Surveys carried out to determine extent of hazard prior to work commencing Specific Regulations/guidance followed at all times Contaminated areas segregated whilst removal occurs Correct PPE worn Personal hygiene stressed & shower facilities made available if necessary Health Surveillance initiated if necessary 	Permits to Work Toolbox talks	 Asbestos removal within building A Asbestos removal Lead paint removal to interior joinery 	Yes	

6	Vermin	_	ical hazards	٧	٧	٧	٧	•	Food consumed only in designated		State if vermin	
		(e.g. le	eptospirosis)						areas		present / location:	
								•	Rubbish regularly removed			
								•	Site Personnel informed of risk			
								•	If rodents sighted, vermin control			
									company to be enlisted			
2	Use of hazardous	Hazard	dous	٧	٧	٧	٧	•	Eliminated/substituted wherever	COSHH		
	materials	mater	ials						possible	Assessments_	 Concreting 	
		• Derma	atitis					•	Stored in a locked container or secure	(unless carried	Machine	
									area & marked as 'Hazardous Materials'	out as part of	maintenance &	
								•	Used/installed only be competent	TS RA)	oil, etc	
									people	,	on, etc	
								•	Correct PPE worn	Toolbox talks		
									Barrier creams, hand cleansers & after-			
								•	care creams provided	COSHH		
										Register		
								•	Health Surveillance if necessary	Register		
										COSHH Issue		
										Sheets		
3	Use of Vibration tools	• MSD		V		٧		•	Eliminated where possible through	RA (unless	• Drills	
	OSC OF VIBRATION TOOLS	Hand A	A rm	\ \ \		'		•	alternative methods of work (e.g.	carried out as	Breakers	
		Vibrat							mechanical methods / chemical use)	part of TS RA)		
								_	· · · · · · · · · · · · · · · · · · ·	part or 13 NA)	 Compactors 	
		Syllulo	ome (HAVS)					•	If unavoidable low vibration equipment	Toolbox talks		
									used & regularly maintained	TOOIDOX talks		
								•	Max. usage time/shift for specific			
									equipment determined & never			
									exceeded			
								•	Rotation of workforce to limit individual			
									exposure			
								•	Last Resort; PPE worn such as anti-			
									vibration gloves			
									so refer to Section 1.4; 'use of plant &			
								eq	uipment'			

4	Manual Handling	• MSD	٧		٧		•	Eliminated wherever possible through use of alternative materials / mechanical means of lifting Training provided for all personnel involved in manual handling Gloves to be worn	Manual Handling Assessment	BricklayingScaffoldingKerb / flag laying	
5	Noisy activities	• Noise	V	V	V	V	•	Eliminated wherever possible through use of alternative designs, equipment, methods of work All plant to be fitted with silencers, mufflers, noise reducing doors, etc. Screens erected shielding noisy machines / work activities Demarcation of ear protection zones Considerate Constructors scheme initiated; neighbours kept informed of when noisy activities will occur	Noise Assessments if required		

ssessed Bv.	Date: