

Risk Assessment

Project Name	Newport Transporter Bridge	Work activity: Loading/Unloading of Plant/Equipment from Low Loaders			
Project Code	C1642				
Assessed By	Elliott Jones				
Date of Assessment	22/08/2022				
					Document No.
					RA001

Risk Assessment Key

Severity Score	Likelihood Score				
	1	2	3	4	5
1					
2	Low				
3		Medium			
4			High		
5					

Severity Key

Score	Severity
1	Minor Injury (First Aid)
2	Minor Injury (Hospital)
3	7 Day Injury
4	Specified Injury
5	Death

Likelihood Key

Score	Likelihood
1	Unlikely
2	May Happen
3	Likely
4	Very Likely
5	Certain

SIGNIFICANT HAZARDS	RISKS	PEOPLE/GROUPS AT RISK	RISK RATING (L=Likelihood, S=Severity, R=Rating)			CONTROL MEASURES IN PLACE TO REDUCE / MITIGATE RISKS	RISK RATING (L=Likelihood, S=Severity, R=Rating)			Comments
			L	S	R		L	S	R	
			L	S	R		L	S	R	
Moving plant/vehicles onto and off low loaders	Risk of plant/vehicles toppling off low loader through either, forward, rearward or sideward movements	Persons nearby	2	5	10	Before an item of plant or vehicle is loaded, it should be checked to ensure that its load platform, bodywork and anchorage points (and twist locks where fitted), are appropriate for the load, and are in a sound and serviceable condition. Use of vehicle marshal/banksman to coordinate plant/vehicle movements on and off low loader. Ensure ramps are firmly in place and on solid ground. Pedestrians must be clear of load and exclusion/no-go zones maintained. Driver is to wait in waiting area clear of the loading process or wait in cab	1	5	5	Checks should be carried out by SP UK and low loader driver It is a legal requirement that the maximum permitted axle and gross weight limits are not exceeded. Plant operators to hold valid CPC card (Category A50)
Access/egress on the low loader when securing loads	Falls from height	Persons working on low loader	2	3	6	Use of approved vehicle access steps Edge protection to be fitted to vehicle by use of integral proprietary standards and straps to create handrails the length of the trailer bed. 3 points of contact at all times when accessing the truck bed and the plant when ramps are installed, access via ramp Anti-slip safety footwear must be worn	1	3	3	Access/egress on loader when ramp not established should be by suitable access steps
Work on or adjacent to other contractors on site, other road users	Collision with other road users, other persons on site	Persons nearby or other road users	2	5	10	Maintain exclusion zone around working area with use of chapter 8 compliant barriers with signage	1	5	5	
Poor housekeeping on site	Slips, trips, falls	Persons involved in the loading or unloading	2	3	6	Maintain good housekeeping around working area	1	3	3	

Risk Assessment

Project Name	Newport Transporter Bridge	Work activity: Establishing Exclusion Zones Onsite	
Project Code	C1642		
Assessed By	Elliott Jones		
Date of Assessment	22/08/2022		
		Document No.	RA002

Risk Assessment Key

Severity Score	Likelihood Score				
	1	2	3	4	5
1					
2	Low				
3		Medium			
4			High		
5					

Severity Key

Score	Severity
1	Minor Injury (First
2	Minor Injury
3	7 Day Injury
4	Specified Injury
5	Death

Likelihood Key

Score	Likelihood
1	Unlikely
2	May Happen
3	Likely
4	Very Likely
5	Certain

SIGNIFICANT HAZARDS	RISKS	PEOPLE/GROUPS AT RISK	RISK RATING			CONTROL MEASURES IN PLACE TO REDUCE / MITIGATE RISKS	RISK RATING			Comments
			L=LIKELIHOOD				L = LIKELIHOOD			
			S=SEVERITY				S = SEVERITY			
			R=RATING				R = RATING			
			L	S	R		L	S	R	
Poor planning – inadequate exclusion zones	Unauthorised access into the piling works either pedestrian or vehicular	Persons entering the working area	2	4	8	Use of physical barriers such as Heras Fencing or Crowd Barriers and signage to establish exclusion zones - Access into/through working area to be controlled by SP UK foreman	1	4	4	Agree with principal contractor designated working areas for exclusion zones to be established considering any existing traffic/pedestrian routes
Inadequate exclusiion zone around 90t mobile crane	Unauthorised access into the piling works either pedestrian or vehicular	Persons entering the working area - Other site traffic and tradesman	2	4	8	Use of physical barriers such as Heras Fencing or Crowd Barriers and signage to establish exclusion zones - Access into/through working area to be controlled by SP UK foreman. Exclusion zone required to be atleast 5m radius around mobile crane set-up location as stated in SPUK method statement.	1	4	4	Agree with principal contractor designated working areas for exclusion zones to be established considering any existing traffic/pedestrian routes. Refer to SPUK method statement for specifications.
Establishing materials/equipment storage areas	Materials/equipment causing obstructions on site leading to trips, falls, traffic disruption	Persons entering the working area - Other site traffic	2	3	6	Materials/equipment to be stored in a designated area agreed with PC All storage areas must be set out to allow safe access to all material and equipment and to mitigate the personell climbing/stepping on other items to get to what they require. 600mm space to be kept between all items	1	3	3	

Risk Assessment

Project Name	Newport Transporter Bridge	Work activity: Establishing Welfare on Site	
Project Code	C1642		
Assessed By	Elliott Jones		
Date of Assessment	22/08/2022		
		Document No.	RA003

Risk Assessment Key						Severity Key		Likelihood Key		
Severity Score	Likelihood Score					Score	Severity		Score	Likelihood
1	1	2	3	4	5	1	Minor Injury (First Aid)		1	Unlikely
2	Low					2	Minor Injury (Hospital Treatment)		2	May Happen
3		Medium				3	7 Day Injury		3	Likely
4			High			4	Specified Injury		4	Very Likely
5						5	Death		5	Certain

SIGNIFICANT HAZARDS	RISKS	PEOPLE/GROUPS AT RISK	RISK RATING			RISK RATING			Comments	
			L=LIKELIHOOD			L = LIKELIHOOD				
			S=SEVERITY			S = SEVERITY				
			R=RATING			R = RATING				
			L	S	R	L	S	R		
Arrival to fixed construction sites without welfare provision (Principal Contractor projects)	No toilet, eating or changing facilities	Persons working on site	2	3	6	Adequate welfare provision in accordance with Schedule 2 of the CDM Regulations 2015 must be provided by a principal contractor. On occasions where this doesn't happen consider provision of temporary welfare units such as a "welfare vans" counter charged to the principal contractor or client	1	3	3	Works should not commence without minimum adequate welfare provision in accordance with Schedule 2 CDM Regulations 2015
Smoking on site	Risks associated with smoking i.e. lung cancer	Smokers and others nearby i.e. passive smoking	2	5	10	Smoking is prohibited in all enclosed workplaces such as, site cabins, canteens, works vehicles and cranes/rigs. Designated smoking areas advised at Site Induction	1	5	5	

Risk Assessment

Project Name	Newport Transporter Bridge	Work activity: Access and Egress Around Site
Project Code	C1642	
Assessed By	Elliott Jones	
Date of Assessment	22/08/2022	
		Document No. RA004

Risk Assessment Key						Severity Key			Likelihood Key	
Severity Score	Likelihood Score					Score	Severity		Score	Likelihood
1	1	2	3	4	5	1	Minor Injury (First Aid)		1	Unlikely
2	Low					2	Minor Injury (Hospital)		2	May Happen
3		Medium				3	7 Day Injury		3	Likely
4			High			4	Specified Injury		4	Very Likely
5						5	Death		5	Certain

SIGNIFICANT HAZARDS	RISKS	PEOPLE/GROUPS AT RISK	RISK RATING			CONTROL MEASURES IN PLACE TO REDUCE / MITIGATE RISKS	RISK RATING			Comments
			L=LIKELIHOOD				L = LIKELIHOOD			
			S=SEVERITY				S = SEVERITY			
			R=RATING				R = RATING			
			L	S	R		L	S	R	
Lack of or inadequate of dedicated traffic/pedestrian routes	Risk of being struck by moving plant/vehicles	Operatives, Site Staff, Pedestrians and members of the public	2	5	10	Traffic and pedestrian management must be planned and managed by the principal contractor and covered in site inductions. Ensure Plant and Pedestrians are segregated with safe walking routes to and from the compound or to any reasonably frequently used location. Principal Contractor to ensure there is adequate backlighting of walkways. Pedestrians to wear high visibility clothing at all times on site Pedestrians are to ensure they are seen and both give and receive a “thumbs up” from the plant operator Operators are to ensure they monitor outside areas at all times to ensure they see pedestrians (including trespassers)	1	5	5	Ensure all work is planned and fully thought through, any changes to the method of work must be signed by the Contracts Manager or HSEQ Manager. All H&S concerns must be brought to the attention of the Site Manager

Risk Assessment

Project Name	Newport Transporter Bridge	Work activity: Use of one-person low-level work platform	Document No.	RA005
Project Code	C1642			
Assessed By	Elliott Jones			
Date of Assessment	22/08/2022			

Risk Assessment Key

Severity Score	Likelihood Score				
	1	2	3	4	5
1					
2	Low				
3		Medium			
4			High		
5					

Severity Key

Score	Severity
1	Minor Injury (First Aid)
2	Minor Injury (Hospital)
3	7 Day Injury
4	Specified Injury
5	Death

Likelihood Key

Score	Likelihood
1	Unlikely
2	May Happen
3	Likely
4	Very Likely
5	Certain

SIGNIFICANT HAZARDS	RISKS	PEOPLE/GROUPS AT RISK	RISK RATING			CONTROL MEASURES IN PLACE TO REDUCE / MITIGATE RISKS	RISK RATING			Comments
			L=LIKELIHOOD				L = LIKELIHOOD			
			S=SEVERITY				S = SEVERITY			
			R=RATING				R = RATING			
			L	S	R		L	S	R	
Work at height from low level podium <1.5m	Risk of podium not erected or dismantled properly. Risk of a fall low level.	Person using podium, site staff	2	3	6	Podiums to be erected and dismantled by PASMA trained competent persons in accordance with the manufacturer’s instructions. Podium steps must comply with BS8620 or PAS250 Podium steps to be visually inspected before each use and thoroughly inspected every 3 months	1	3	3	Any work at height must be kept to a minimum, properly planned, carried out by people who are experienced, competent.
Moving of podium with a person on platform	Risk of podium toppling over	Person using podium, site staff	2	3	6	Podiums not to be moved when a person is on the platform	1	3	3	Anyone acting in an unsafe manner will be subject to SPUK disciplinary procedures
Overreaching from working platform	Risk of fall from podium	Person using podium, site staff	2	3	6	No overreaching from the platform or climbing onto the intermediate/top rails of the podium	1	3	3	Anyone acting in an unsafe manner will be subject to SPUK disciplinary procedures
Leaving locking gate open when on platform	Person may forget the gate is open and lean back resulting in a fall from the podium	Person using podium, site staff	2	3	6	Ensure locking gate is closed once on the podium	1	3	3	Anyone acting in an unsafe manner will be subject to SPUK disciplinary procedures
Using a podium not fit for purpose, too small or defective	Risk of a fall	Person using podium, site staff	2	3	6	Visual Pre-check of podium prior to each use	1	3	3	Damaged/defective podiums should not be used. Inform Contracts Manager of concerns
Erecting a podium on uneven ground	Risk of a fall	Person using podium, site staff	2	3	6	Pre-check of ground conditions prior to erecting podium. Where required level off ground (where practicable)	1	3	3	Use Base Boards if required to bear the pressure and stabilise the ground

Risk Assessment

Project Name	Newport Transporter Bridge	Work activity: Use of Ladders and Step Ladders
Project Code	C1642	
Assessed By	Elliott Jones	
Date of Assessment	22/08/2022	
		Document No. RA007

Risk Assessment Key

Severity Score	Likelihood Score				
	1	2	3	4	5
1					
2	Low				
3		Medium			
4			High		
5					

Severity Key

Score	Severity
1	Minor Injury (First
2	Minor Injury
3	7 Day Injury
4	Specified Injury
5	Death

Likelihood Key

Score	Likelihood
1	Unlikely
2	May Happen
3	Likely
4	Very Likely
5	Certain

The law says that ladders can be used for work at height when a risk assessment has shown that using equipment offering a higher level of fall protection is not justified because of the low risk and short duration of use; or there are existing workplace features which cannot be altered.

Short duration is not the deciding factor in establishing whether use of a ladder is acceptable or not – you should have first considered the risk. As a guide, if your task would require staying up a leaning ladder or stepladder for more than 30 minutes at a time, it is recommended that you consider alternative equipment.

SIGNIFICANT HAZARDS	RISKS	PEOPLE/G ROUPS AT RISK	RISK RATING			CONTROL MEASURES IN PLACE TO REDUCE / MITIGATE RISKS	RISK RATING			Comments
			L=LIKELIHOOD				L = LIKELIHOOD			
			S=SEVERITY				S = SEVERITY			
			R=RATING				R = RATING			
			L	S	R		L	S	R	
LADDERS										
Use of ladders by inexperienced person	Increased risks of falls, misuse, in-correct selection of ladder	Persons using ladder	2	5	10	Experienced, competent persons to use ladders. Ladder work to take place only as last resort and for access and inspection only. Ladder work to take place only when risk assessment is complete and there is a safe system of work in place. Permit to work system in place.	1	5	5	
Ladders not fit for purpose	Risk of falls	Persons using ladder	2	5	10	Ladders MUST be class 1 (EN131) Ladders MUST be tagged & colour coded and inspected prior to use	1	5	5	Class 1 Ladders are the highest rated ladders in terms of strength and quality. These ladders are suitable for use in heavy duty industrial applications and environments.
Damaged/defective ladders	Risk of falls	Persons using ladder	2	5	10	Damaged/defective ladders should be reported to the foreman/supervisor as soon as possible. Damaged or defective ladders should not be used and placed in quarantine. - “Do not use” sign should be displayed on ladder	1	5	5	

Risk Assessment

Holding tools/items when climbing a ladder	Risk of tools/items falling	Persons nearby	2	4	8	Tools/items should be tethered when accessing/egressing a ladder. Three points of contact to be maintained at all times	1	4	4	Consider scaffold hoists where required and or lifting buckets etc
Ladder erected at an incorrect angle (leaning ladders)	Risk of ladder toppling over, sliding, falls	Persons using ladder	2	5	10	Ladders should be placed at a suitable angle, ideally at about 75° to the horizontal, i.e. about 1 m out of every 4 m in height. The user should face the ladder when climbing or descending.	1	5	5	
Ladder erected on uneven ground	Risk of ladder becoming unstable, falls	Persons using ladder	2	5	10	Ensure firm level ground when erecting a step ladder	1	5	5	
Ladder not secured/footed	Risk of ladder becoming unstable, falls	Persons using ladder	2	5	10	Ladders should be tied off or use of stabilisers	1	5	5	
Overhead obstructions/live services	Restricted working space, increased risk of contact with live services i.e. electric cables	Persons using ladder	2	5	10	Pre-check of working environment to identify any pre-existing overhead obstructions/services	1	5	5	Ensure safe system of work in place, refer to HSE Publication GS6 if required
Ladders used as a working platform exceeding 30 mins	Risk of fall	Persons using ladder	2	5	10	If 30 mins is to be exceeded consider alternative access equipment i.e. low-level podiums, tower scaffolds MEWPS etc	1	5	5	

STEP LADDERS

Risk Assessment

Use of step ladders by inexperienced person	Risk of fall	Persons using ladder	2	5	10	Work should never be carried out from the top platform nor should overhead work entail overreaching. The top tread of a pair of steps, bucket or tool shelf should not be used for foot support unless there is an extension above the top to provide a handhold; rear parts of steps should not be used for foot support. Step ladders are prevented from spreading by means of stays, chains or cords, these should be of sufficient and equal length, kept in good order, and should be renewed if found to be defective. Only one person should use a step ladder at any one time and if steps are used in a doorway the door should be wedged open securely.				Ladder work to take place only as last resort once all other reasonably practicable options have been exhausted. Ladder work to take place only when risk assessment is complete and there is a safe system of work in place with Permit to work system in place.
Step ladders not fit for purpose	Increased risks of falls, misuse, in-correct selection of ladder	Persons using ladder	2	5	10	Ladders should be class 1 (EN131) - Ladders should be tagged & colour coded (As Per SPUK Colour Tagging System) and inspected prior to use	1	5	5	
Holding tools/items when climbing a step ladder	Risk of tools/items falling	Persons nearby	2	4	8	Avoid carrying/handling tools on a step ladder - Maintain 3-point contact where possible	1	4	4	
Step ladder erected on uneven ground	Risk of ladder becoming unstable, falls	Persons using ladder	2	5	10	Step ladders and trestles are not designed for any degree of side loading and this should be avoided; they should be spread to their fullest extent and properly levelled for stability and should be placed at right angles to the work whenever possible	1	5	5	
Overhead obstructions/live services	Restricted working space, increased risk of contact with live services i.e. electric cables	Persons using ladder	2	5	10	Pre-check of working environment to identify any pre-existing overhead obstructions/services	1	5	5	Ensure safe sytem of work in place, refer to HSE Publication GS6 if required
Side loading of a step ladder						Step ladders and trestles are not designed for any degree of side loading and this should be avoided; they should be spread to their fullest extent and properly levelled for stability and should be placed at right angles to the work whenever possible, on a level surface.				

Risk Assessment

Project Name	Newport Transporter Bridge	Work activity: Access and Egress - Low Loaders (Work at Height)			
Project Code	C1642				
Assessed By	Elliott Jones				
Date of Assessment	22/08/2022				
					Document No. RA008

Risk Assessment Key

Severity Score	Likelihood Score				
	1	2	3	4	5
1					
2	Low				
3		Medium			
4			High		
5					

Severity Key

Score	Severity
1	Minor Injury (First Aid)
2	Minor Injury (Hospital)
3	7 Day Injury
4	Specified Injury
5	Death

Likelihood Key

Score	Likelihood
1	Unlikely
2	May Happen
3	Likely
4	Very Likely
5	Certain

SIGNIFICANT HAZARDS	RISKS	PEOPLE/GROUPS AT RISK	RISK RATING			CONTROL MEASURES IN PLACE TO REDUCE / MITIGATE RISKS	RISK RATING			Comments
			L=LIKELIHOOD				L = LIKELIHOOD			
			S=SEVERITY				S = SEVERITY			
			R=RATING				R = RATING			
			L	S	R		L	S	R	
Climbing on and off flatbed of vehicle (work at height)	Risk of falls if suitable access equipment isn't provided	Persons accessing flatbeds	2	4	8	Access to trailer bed by use of aluminium access ladders with 3-point support. Access ladders to be strapped to lowloader so they cannot slip away from the trailer. Operatives must use steps and grab rails to access flatbed Anti-slip safety boots must be worn	1	4	4	Examples of such equipment can be found at www.safesmartaccess.co.uk
Jumping down from back of flatbed (behaviour)	Risk of back/lower limb injuries	Persons jumping down from flatbed or access steps	2	4	8	Persons must be discouraged from jumping down Raise awareness of associated risks involved if jumping down Establish rule of “no jumping down”	1	4	4	Foreman to monitor compliance with use of access stairs. Anyone acting in an unsafe manner will be subject to site disciplinary hearing.
Working on flatbed of vehicle with no edge protection (work at height)	Risk of falls if suitable access equipment isn't provided	Persons working on flatbeds	2	4	8	Edge protection must be fitted to prevent falls from the flatbed/trailer, Haulier to provide adequate handrailing to the trailer bed to avoid falls from height or man safe system	1	4	4	double ratchet straps through integral standards or similar provided by the haulier

Risk Assessment

Project Name	Newport Transporter Bridge	Work activity: Manual Handling of Equipment/Materials Associated With Sheet Piling			
Project Code	C1642				
Assessed By	Elliott Jones				
Date of Assessment	22/08/2022				
					Document No. RA012

Risk Assessment Key

Severity Score	Likelihood Score				
	1	2	3	4	5
1					
2	Low				
3		Medium			
4			High		
5					

Severity Key

Score	Severity
1	Minor Injury (First Aid)
2	Minor Injury (Hospital)
3	7 Day Injury
4	Specified Injury
5	Death

Likelihood Key

Score	Likelihood
1	Unlikely
2	May Happen
3	Likely
4	Very Likely
5	Certain

SIGNIFICANT HAZARDS	RISKS	PEOPLE/GROUPS AT RISK	RISK RATING			CONTROL MEASURES IN PLACE TO REDUCE / MITIGATE RISKS	RISK RATING			Comments
			L=LIKELIHOOD				L = LIKELIHOOD			
			S=SEVERITY				S = SEVERITY			
			R=RATING				R = RATING			
			L	S	R		L	S	R	
Handling of several types of fluid drums i.e. oil, ad-blue	Musculoskeletal injuries Short-term and/or superficial injuries - For example: cuts, bruises, sprains, tears, small fractures, muscle strain, etc. Usually caused by sudden and small unexpected accidents, e.g. losing grip and dropping a load, lifting an excessively heavy load at an awkward angle, or falling while carrying a load.	Persons carrying out manual handling activities where a significant risk is present	3	3	9	Eliminate or avoid so far as is reasonably practicable handling of items which pose a significant risk i.e. use of craneage Where possible make use of lifting aids i.e. trolleys, fork trucks. Where handling of equipment/materials is unavoidable, then adopt 2 persons lifting techniques. Ensure a Manual Handling assessment has been made on the task in hand using the T. I. L. E. method: Task, Individual, Load, Environment If unsure about weights and or individual physical capabilities individuals should seek advice from the SPUK Foreman/Manager	1	3	3	Suitable safety boots and gloves

Risk Assessment

Handling assorted items of lifting accessories i.e. chains, shackles	Sprains, strains, crush injuries to feet/hands	Persons carrying out manual handling activities where	3	3	9		1	3	3	
Handling of various lengths of bracket steel	Sprains, strains, crush injuries to feet/hands	Persons carrying out manual handling activities where a significant risk is present	3	3	9		1	3	3	
Handling of individual gas cylinders i.e. oxygen, propane – max 47kg	Sprains, strains, crush injuries to feet/hands	Persons carrying out manual handling activities where a significant risk is present	3	3	9		1	3	3	
Individuals with pre-existing medical conditions associated with musculoskeletal injuries	Increased risks of injuries, ill-health	Persons undertaking manual handling	2	3	6	Individuals with any pre-existing medical conditions which may affect their ability to carry out manual handling tasks in a safe and proper manner should in the first instance inform the SPUK Foreman/Manager. TILE assessment must be completed before the individual undertakes any manual handling to ensure that it is within the individuals capabilities.	1	3	3	

Risk Assessment

Project Name	Newport Transporter Bridge	Work activity: Refuelling of Plant/Equipment	
Project Code	C1642		
Assessed By	Elliott Jones		
Date of Assessment	22/08/2022		
			Document No. RA013

Risk Assessment Key

Severity Score	Likelihood Score				
	1	2	3	4	5
1					
2	Low				
3		Medium			
4			High		
5					

Severity Key

Score	Severity
1	Minor Injury (First Aid)
2	Minor Injury (Hospital)
3	7 Day Injury
4	Specified Injury
5	Death

Likelihood Key

Score	Likelihood
1	Unlikely
2	May Happen
3	Likely
4	Very Likely
5	Certain

SIGNIFICANT HAZARDS	RISKS	PEOPLE/GROUPS AT RISK	RISK RATING			CONTROL MEASURES IN PLACE TO REDUCE / MITIGATE RISKS	RISK RATING			Comments
			L=LIKELIHOOD				L = LIKELIHOOD			
			S=SEVERITY				S = SEVERITY			
			R=RATING				R = RATING			
			L	S	R		L	S	R	
Refuelling of plant / equipment Using Diesel/Petroleum or HVO Fuel	Fire/explosions - Liquid spillages leading to ground/water pollution	Piling operatives	2	5	10	Re- fuel well away from work areas where possible to avoid risk of spilling fuel in places where hot works may take place - Ensure that there is safe access & egress to the refuelling point on the machine; do not stand on the tracks of the machine, use a MEWP or podium steps - Refuel away from watercourses - Ensure the refuelling point is suitable and well-ventilated - Ensure plant/equipment is shut off - Allow time for machinery to cool down if possible - No smoking/naked flames - Confirm that all fittings, hoses, terminals and tanks are in good condition and free of leaks - Avoid spilling or splashing fuel, for example, use fuel containers with a flexi pourer. Use of plant nappies and or drip trays, spill kits - Marine based works use of adequate sized booms - Spill response plan developed and briefed to workers - Chemical resistant gloves to EN 374 to be worn - Safety goggles to be worn to EN 166 Fire extinguishers to be present/close by i.e. Powder or CO2 Type	1	5	5	

Risk Assessment

Use of unsuitable fuel bowser/s	Increased risks of spillages	Piling operatives	2	5	10	Use approved double skinned /self-bunded bowsers with 110% of the tank capacity provided within the bund - Bowsers should be in good condition without leakage; hatch/fill point kept locked to prevent unauthorised use and where possible located in a position that is protected from vehicular/plant impact - Bowsers should be readily identifiable as SPUK hired/own plant i.e. labelled with company name and a contact number - The type of fuel and capacity of the tank/bowser -Hazard symbols displayed				
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Risk Assessment

Project Name	Newport Transporter Bridge	Work activity: Use of Steel Skids When Pitching Sheet Piles (Singles and Pairs)			
Project Code	C1642				
Assessed By	Elliott Jones				
Date of Assessment	22/08/2022				
					Document No. RA017

Risk Assessment Key

Severity Score	Likelihood Score				
	1	2	3	4	5
1					
2	Low				
3		Medium			
4			High		
5					

Severity Key

Score	Severity
1	Minor Injury (First Aid)
2	Minor Injury (Hospital)
3	7 Day Injury
4	Specified Injury
5	Death

Likelihood Key

Score	Likelihood
1	Unlikely
2	May Happen
3	Likely
4	Very Likely
5	Certain

SIGNIFICANT HAZARDS	RISKS	PEOPLE/GROUPS AT RISK	RISK RATING			CONTROL MEASURES IN PLACE TO REDUCE / MITIGATE RISKS	RISK RATING			Comments
			L=LIKELIHOOD				L = LIKELIHOOD			
			S=SEVERITY				S = SEVERITY			
			R=RATING				R = RATING			
			L	S	R		L	S	R	
Use of quick release shackles to lift pile up 500mm to allow skid to be placed under	Risk of sheet pile slipping from shackle, falling onto skid resulting in inadvertent movement of skid – risk of skid striking persons nearby	Slinger/signaller	2	3	6	Steel handling shoes (slippers) should be used to raise sheet piles.	1	3	3	Use of quick release shackles is deemed an unsafe working practice and must be avoided
Use of unsuitable skids i.e. skids too long/short, timber skids	Risk of persons placing hands/arms under raised sheet pile - trap/crush injuries - Oversized skids can result in overhangs causing obstructions	Slinger/signaller, other persons nearby	2	2	4	Use of suitable steel handling shoes i.e. single piles or pairs. Ensure steel handling shoes have current LOLER certification and are fit for purpose	1	2	2	Works containers hold 4x handling shoes for use with (singles and pairs)
Sheet piles stored on uneven ground	Risk of piles becoming unstable/toppling off stack	Slinger/signaller, other persons nearby	2	3	6	Foreman to ensure ground conditions are fit for purpose – firm level ground so far as is reasonably practicable	1	3	3	Principal Contractor to provide max ground bearing pressure details if required

Risk Assessment

Project Name	Newport Transporter Bridge	Work activity: Pitching of Sheet Piles from Bundles			
Project Code	C1642				
Assessed By	Elliott Jones				
Date of Assessment	22/08/2022				
					Document No. RA018

Risk Assessment Key

Severity Score	Likelihood Score				
	1	2	3	4	5
1					
2	Low				
3		Medium			
4			High		
5					

Severity Key

Score	Severity
1	Minor Injury (First Aid)
2	Minor Injury (Hospital)
3	7 Day Injury
4	Specified Injury
5	Death

Likelihood Key

Score	Likelihood
1	Unlikely
2	May Happen
3	Likely
4	Very Likely
5	Certain

SIGNIFICANT HAZARDS	RISKS	PEOPLE/GROUPS AT RISK	RISK RATING			CONTROL MEASURES IN PLACE TO REDUCE / MITIGATE RISKS	RISK RATING			Comments
			L=LIKELIHOOD				L = LIKELIHOOD			
			S=SEVERITY				S = SEVERITY			
			R=RATING				R = RATING			
			L	S	R		L	S	R	
Use of the Dawson steel handling shoe for handling of steel sections, sheet piles and splitting from stacks	Risk of shoes not fitted properly leading to shoes slipping off end of pile during lifting	Slinger/Signaller, other persons nearby	2	5	10	Lifting chains must be of equal length Shoes should be attached by a competent Slinger/Signaller Do not exceed the critical minimum lift angle of 45°. Angles of less than 45° could result in overloading. Ensure shoes and shackles are in good condition, certified and tagged as per SPUK colour chart for lifting accessories.	1	5	5	When lifting single sheet piles use 2x steel handling shoes. When lifting Pairs of piles 4x steel handling shoes must be used
Inserting skids under raised sheet piles (600mm)	Risk of inadequate skids being used (too long, insufficient load bearing capacity etc.	Slinger/Signaller	2	3	6	Slinger/Signaller to coordinate the lifting of the sheet pile with the crane operator Use of purpose made steel skids	1	3	3	Arms/hands not to be placed under the suspended sheet pile when inserting the timber skids Skids designed to avoid the need for arms/hands to extend under raised piles
Attaching lifting shackle to end of sheet pile in raised position (raised by crane)	Trap, crush injuries to arms/hands	Slinger/Signaller	2	3	6	Slinger/Signaller to ensure sheet pile is fully supported by skids before attempting to attach lifting shackle. Lifting shackle to display correct colour lifting inspection tag	1	3	3	
Misuse of lifting shackle	Trap, crush injuries to arms/hands	Slinger/Signaller	2	3	6	Lifting shackle should not be used as a “quick fix” to raise the sheet pile	1	3	3	

Risk Assessment

Project Name	Newport Transporter Bridge	Work activity: Use of Movax (Including/Unloading from Delivery Vehicle)		
Project Code	C1642			
Assessed By	Elliott Jones			
Date of Assessment	22/08/2022			
				Document No. RA019

Risk Assessment Key

Severity Score	Likelihood Score				
	1	2	3	4	5
1					
2	Low				
3		Medium			
4			High		
5					

Severity Key

Score	Severity
1	Minor Injury (First Aid)
2	Minor Injury (Hospital)
3	7 Day Injury
4	Specified Injury
5	Death

Likelihood Key

Score	Likelihood
1	Unlikely
2	May Happen
3	Likely
4	Very Likely
5	Certain

SIGNIFICANT HAZARDS	RISKS	PEOPLE/GROUPS AT RISK	RISK RATING			CONTROL MEASURES IN PLACE TO REDUCE / MITIGATE RISKS	RISK RATING			Comments
			L=LIKELIHOOD				L = LIKELIHOOD			
			S=SEVERITY				S = SEVERITY			
			R=RATING				R = RATING			
			L	S	R		L	S	R	
Loading/Unloading of machine involving low loader	Risk of machine toppling off low loader	Machine operator and others nearby	2	5	10	Establish exclusion: zone - People should be kept away from areas of Movax operation by the provision of suitable barriers Machine to be supervised/banked on and off low loader by an experienced, competent person	1	5	5	Bunting or fencing can be used to create and maintain a pedestrian exclusion area.
Erecting and dismantling of attachments	Crush injuries, components not fitted properly	Machine operator, others nearby	2	4	8	Machine operator to erect/dismantle attachments	1	4	4	
Tracking and slewing of machine	Risk of persons being struck by machine	Persons working nearby	2	5	10	Clearance - When slewing in a confined area clearance of over 0.5m needs to be maintained between any part of the machine, particularly the ballast weight, and the nearest obstruction. Signaller: A signaller should be provided in a safe position to direct the Movax operation and any pedestrian movements.	1	5	5	Never track or slew with Hammer above the cab level
Operator Competence	Increased risks of injury or incidents if untrained operators are used	Machine operator, others nearby	2	5	10	Operator to be trained to CPCS standard	1	5	5	
Offloading/loading of sheet piles	Risk of persons being struck by piles during unloading/loading	Persons working nearby	2	5	10	Establish exclusion: zone - People should be kept away from areas of Movax operation by the provision of suitable barrier	1	5	5	

Risk Assessment

Use of machine to grab/handle and pitch piles	Risk of persons being struck by piles	Persons working nearby	2	5	10	Establish exclusion zone prior to machine grabbing/handling piles	1	5	5	
Pile driving	High noise levels exceeding 85db(A) – risk of noise induced hearing loss	Machine operator and persons working nearby	2	4	8	Ensure pile weight is within lifting capacity of MovaxTypical noise level reaches 93dB during pile driving at 2m distance. Persons to wear approved ear defenders that afford adequate protection	1	4	4	Peltor Optime iii provided affording attenuation of 35dB
Lack of inspection and maintenance	Risk of trap/crush injuries to handsBreakdowns, component failure	Increased risk of incidents	2	5	10	Piling operative to keep away from installed sheet pile during clutch alignmentOperator to carry out daily pre-use checks	1	5	5	Regular inspections and servicing of the machine in accordance with the manufacturer's instructions
Access & Egress to the cab	Fall from height	Machine operator and persons working nearby	3	4	12	Cab steps and handles painted high visibility yellow ensuring 3 points of contact is achievable Ensure safe access for refuelling, maintenance and to any place where accessories are stored Where access is required at height.....suitable handrails must be fitted Any routine maintenance, re-fuelling and potential repairs are all accessed using the manufactured access points or Podium Steps or a MEWP.	2	3	6	

Risk Assessment

Project Name	Newport Transporter Bridge	Work activity: Reversing Vehicles	Document No.	RA022
Project Code	C1642			
Assessed By	Elliott Jones			
Date of Assessment	22/08/2022			

Risk Assessment Key

Severity Score	Likelihood Score				
	1	2	3	4	5
1					
2	Low				
3		Medium			
4			High		
5					

Severity Key

Score	Severity
1	Minor Injury (First Aid)
2	Minor Injury (Hospital)
3	7 Day Injury
4	Specified Injury
5	Death

Likelihood Key

Score	Likelihood
1	Unlikely
2	May Happen
3	Likely
4	Very Likely
5	Certain

SIGNIFICANT HAZARDS	RISKS	PEOPLE/GROUPS AT RISK	RISK RATING			CONTROL MEASURES IN PLACE TO REDUCE / MITIGATE RISKS	RISK RATING			Comments
			L=LIKELIHOOD				L = LIKELIHOOD			
			S=SEVERITY				S = SEVERITY			
			R=RATING				R = RATING			
			L	S	R		L	S	R	
Restricted/poor visibility – trailer blocking view of driver	Persons being struck/run over - Plant/property damage	Persons near reversing vehicles	2	5	10	Competent individuals to act as vehicle marshal and guide all reversing manoeuvres A vehicle marshal: - Must use a clear, agreed system of signalling. - Must be visible to drivers at all times - Must stand in a safe position, from which to guide the reversing vehicle without being in its way - Must wear His visiblty clothing, such as reflective vests, and ensure that any signals are clearly seen	1	5	5	People who do not need to be in reversing areas should be kept well clear If drivers lose sight of the signallers, they must know to stop immediately. This is to made clear to all delivery drivers by the foreman/banksman on arrival to site.

Risk Assessment

Project Name	Newport Transporter Bridge	Work activity: Contaminated Ground	
Project Code	C1642		
Assessed By	Elliott Jones		
Date of Assessment	22/08/2022		
			Document No. RA022

Risk Assessment Key

Severity Score	Likelihood Score				
	1	2	3	4	5
1					
2	Low				
3		Medium			
4			High		
5					

Severity Key

Score	Severity
1	Minor Injury (First Aid)
2	Minor Injury (Hospital)
3	7 Day Injury
4	Specified Injury
5	Death

Likelihood Key

Score	Likelihood
1	Unlikely
2	May Happen
3	Likely
4	Very Likely
5	Certain

SIGNIFICANT HAZARDS	RISKS	PEOPLE/GROUPS AT RISK	RISK RATING			CONTROL MEASURES IN PLACE TO REDUCE / MITIGATE RISKS	RISK RATING			Comments
			L=LIKELIHOOD				L = LIKELIHOOD			
			S=SEVERITY				S = SEVERITY			
			R=RATING				R = RATING			
			L	S	R		L	S	R	
Contaminated Ground	Inhalation, Ingestion, Skin Contact of Contaminants Respiratory Illness, Nausea Headaches, Dermatitis, Burns, Chemical Burns Toxic Effects	All Operatives Working in Contaminated Areas	2	4	8	The principal contractor must give specific inductions regarding working in contaminated areas to all SPUK operatives. - if unknown contaminated earth is uncovered or detected, then stop works immediately, move to a position of safety and contact the client/pc representative for investigation - dependant on the actual contaminant risks and exposure risks as identified by the pc, SPUK will ensure that suitable and sufficient control measures are adhered to, including ppe requirements and external monitoring (provided by 3rd party competent organisation). - no smoking, eating or drinking on site. - wear appropriate protective clothing always whilst working by contaminated ground. - all cuts or grazes to be thoroughly washed and covered with a waterproof dressing. - prior to break times or finishing time, remove all protective clothing in the dirty conditions changing room prior to washing and changing into clean clothing. (Principal contractor will provide if required). - where provided, always use the decontamination facility to ensure good personal hygiene. - no unauthorised persons to enter contaminated work area. - report any health disorders to your supervisor. - specific induction in working in contaminated areas to be given to operatives. - record all health disorders in accident book. - barriers and warning signs to be erected and maintained.	1	4	4	All H&S concerns must be reported to Site Managmeent and SPUK Contracts Mnaager and/or SPUK HSEQ Manager Refer to COSHH regulations 2002

Risk Assessment

Vapour Release and Monitoring Activities	Inhalation, Ingestion, Skin Contact of Contaminants Respiratory Illness, Nausea Headaches, Dermatitis, Burns, Chemical Burns Toxic Effects	All Operatives Working in Contaminated Areas	2	4	8	Utilisation of Vapour Monitoring Competent Person / Company and include SSOW for all monitoring activities and vapour release. - Follow the EH40 Workplace Exposure Limit for exposure limits. - Limit the Numbers of Workers in the direct vicinity. - Use of RPE and additional PPE if required. - 100% Supervision of Monitoring Competent Person at all times to ensure safe movement and separation from Moving Plant, equipment and rotating parts. - Ensure First Aid Facilities / Emergency Procedures are in place as per RAMS - Utilise the Dirty Conditions/Clean Conditions Changing Room - Forced air movers / Ventilation Systems if needed. - Toolbox talks and briefings given as required.	1	4	4	
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Risk Assessment

Project Name	Newport Transporter Bridge	Work activity: Working Near Traffic	
Project Code	C1642		
Assessed By	Elliott Jones		
Date of Assessment	22/08/2022		
		Document No.	RA026

Risk Assessment Key

Severity Score	Likelihood Score				
	1	2	3	4	5
1					
2	Low				
3		Medium			
4			High		
5					

Severity Key

Score	Severity
1	Minor Injury (First Aid)
2	Minor Injury (Hospital)
3	7 Day Injury
4	Specified Injury
5	Death

Likelihood Key

Score	Likelihood
1	Unlikely
2	May Happen
3	Likely
4	Very Likely
5	Certain

SIGNIFICANT HAZARDS	RISKS	PEOPLE/GROUPS AT RISK	RISK RATING			CONTROL MEASURES IN PLACE TO REDUCE / MITIGATE RISKS	RISK RATING			Comments
			L=LIKELIHOOD				L = LIKELIHOOD			
			S=SEVERITY				S = SEVERITY			
			R=RATING				R = RATING			
			L	S	R		L	S	R	
Moving vehicles	Collision with Other Vehicles/Plant	Site Ops Plant Ops Third Parties	2	5	10	Method Statement Giving Full Details of Operations. All Operatives to Be Briefed by The Principal Contractor in The Method Statement and Records Kept. Tool Box Talk to Be Carried Out by The Principal Contractor for Working adjacent to Live Traffic. High Visibility Vest / Jacket to BS 6629. Vehicles to Enter / Leave Any Traffic Management at Designated Points Only and Obey Speed Limits as Doing. Flashing Beacons to Be Used When Entering / Leaving Traffic Management. Operatives Have No Authority to and Should Not Attempt to Stop Road Traffic, Delivery Wagons Must Exit and Enter Sites When Judged Safe to Do so All Operatives must adhere to the Traffic Management Plan, including using established pedestrian walkways and Pedestrian access routes. All SPUK vehicles must be chapter 8 compliant.	1	5	5	PC to ensure that traffic management complies with Chapter 8 Regulations
Swinging Loads or Movements near to Live Traffic	Collision with vehicles and or Pedestrians	Site Ops Plant Ops Third Parties	2	5	10	All lifting operations shall be away from Traffic or pedestrian footpaths Tag Lines shall be applied to all loads Slew Restrictors applied where necessary Safe Exclusion to be maintained where practicable All movements under competent Sling/Signaller PC to ensure adequate TM in place including any Pavement/Road Closures	1	5	5	
Street Works	Collision with Pedestrians	Site Ops Plant Ops Third Parties	2	5	10	Priority and Thought to Be Given to Members of the Public, Barriers, Warning Signs, Good Temporary Footpath Access-All to Be Provided and Maintained by The Principal Contractor in Accordance with Safety at Street Works & Road Works ACOP 2013 Observe Speed Limits When Entering / Leaving Traffic Management and Whilst Travelling Through. When Reversing Ensure Banksman Is in Attendance.	1	5	5	

Risk Assessment

Project Name	Newport Transporter Bridge	Work activity: Young Persons	
Project Code	C1642		
Assessed By	Elliott Jones		
Date of Assessment	22/08/2022		
		Document No.	RA028

Risk Assessment Key

Severity Score	Likelihood Score				
	1	2	3	4	5
1					
2	Low				
3		Medium			
4			High		
5					

Severity Key

Score	Severity
1	Minor Injury (First Aid)
2	Minor Injury (Hospital)
3	7 Day Injury
4	Specified Injury
5	Death

Likelihood Key

Score	Likelihood
1	Unlikely
2	May Happen
3	Likely
4	Very Likely
5	Certain

SIGNIFICANT HAZARDS	RISKS	PEOPLE/GROUPS AT RISK	RISK RATING			CONTROL MEASURES IN PLACE TO REDUCE / MITIGATE RISKS	RISK RATING			Comments
			L=LIKELIHOOD				L = LIKELIHOOD			
			S=SEVERITY				S = SEVERITY			
			R=RATING				R = RATING			
			L	S	R		L	S	R	
Inadequate Knowledge of Hazards and Risks	Exposure to Injury, Ill health, Damage or Causal Factor in Damage	Young Persons	2	5	10	Young Persons must have a thorough Induction prior to commencing Work. All SPUK personnell must be inducted onto site by the PC	1	5	5	
Vehicles, Plant and Equipment	Injury, Fatality, Damage to Vehicles, Plant and Equipment,	Young Persons	2	5	10	Young Persons MUST have read and understood all Hazards and Risks associated with the Site and Works being undertaken. All SPUK personnell must be inducted onto site by the PC and shown designated walkways.	1	5	5	
Exposure to Heights	Falls from Heights Falling Materials	Young Persons	2	5	10	Young Persons MUST be 100% supervised at all time (1:1 ratio) and never left to undertake a task alone.	1	5	5	
Exposure to Hazardous Locations (Confined Spaces, Welding, Radiation Areas, Lifting Zones)	Injury, Ill Health, Stress, Damage to eyes, Occupational Injuries, Burns	Young Persons	2	5	10	Young Person shall not be exposed to ANY confined Space Young Persons not allowed to enter any Lifting Zones 100 % Supervision at all times Young persons shall not be exposed to any Welding activities or Hot works associated with LPG. Young persons shall NOT be exposed to areas whereby there is a risk of any Radiation.	1	5	5	

Risk Assessment

Hazardous substances	Illness or injuries caused by Hazardous Substances	Young Persons	2	5	10	Young Persons shall be briefed on COSHH requirements and Risk Assessments. Young Persons shall not be exposed to any Asbestos, Carcinogens, Biological agents. Where Risks are assessed as low by COSHH assessment, then suitable arrangements must be made to supply PPE that is fit for purpose, fits the Young person and they have been trained in using it correctly	1	5	5	
Tools and Equipment	Injury, Cuts, Abrasions	Young Persons	2	5	10	Young Persons must receive training on all Tools and Equipment. Any power tools must have suitable guards installed and machinery should comply with PUWER 1998 regulations. 100% Supervision at all times. PPE Must be issued and worn by young persons Trained in the application and use of PPE	1	5	5	
Over Exertion and Working Hours	Hearing Loss, HAVS	Young Persons	2	5	10	Young Person MUST not be exposed to long duration activities of heavy or repetitive works. Adequate welfare facilities to allow for rest periods must be available. Supervisor to be aware of young person immaturity and inexperience. Young Persons must be aware of the working arrangements and timescales. Supervisor to ensure that excessive hours are not worked.	1	5	5	
Noise and Vibration	Tiredness, Fatigue	Young Persons	2	5	10	Young Persons must not be exposed to Loud Consistent Noise or Vibration from Plant, Tools or Equipment. 100% Supervision always	1	5	5	

Risk Assessment

Project Name	Newport Transporter Bridge	Work activity: Overhead Obstructions	
Project Code	C1642		
Assessed By	Elliott Jones		
Date of Assessment	22/08/2022		
		Document No.	RA029

Risk Assessment Key

Severity Score	Likelihood Score				
	1	2	3	4	5
1					
2	Low				
3		Medium			
4			High		
5					

Severity Key

Score	Severity
1	Minor Injury (First Aid)
2	Minor Injury (Hospital Treatment)
3	7 Day Injury
4	Specified Injury
5	Death

Likelihood Key

Score	Likelihood
1	Unlikely
2	May Happen
3	Likely
4	Very Likely
5	Certain

SIGNIFICANT HAZARDS	RISKS	PEOPLE/GROUPS AT RISK	RISK RATING			CONTROL MEASURES IN PLACE TO REDUCE / MITIGATE RISKS	RISK RATING			Comments
			L=LIKELIHOOD				L = LIKELIHOOD			
			S=SEVERITY				S = SEVERITY			
			R=RATING				R = RATING			
			L	S	R		L	S	R	
Electrical Power Lines	Machinery contact with live lines	Plant operator	2	5	10	Work in accordance with Avoiding Danger from Overhead Powerlines HSE Guidance Note GS6 All Electrical Power Lines Must be noted on the Services Drawings Principal Contractor to consult the Local Power/Utility provider to determine Voltage Range and Safe Working Distances. The Principal Contract MUST issue a Permit to Work if an isolation is required. Safe Working Distances Must be adhered to and Slew Restrictors installed. Collapse Zones MUST be established and adhered to. use of Guide Ropes if required Lifting Plans must identify all obstructions prior to commencing works. All Jibs and booms MUST be stowed or placed in Travel position prior to moving. Do NOT unload or Load under any Overhead Lines. Do Not access Cab roofs or any position of Height under any Overhead Lines including Back of Low loaders NO Working at height in or around Electrical Overhead Lines. All Jibs and booms MUST be stowed or placed in Travel position prior to moving.	1	5	5	Eliminate the need to work near the overhead lines and obstacles if possible
Gantries, Bridges, Pipe Racks Trees and Fauna	Contact with gantries, bridges, trees etc	Plant operator	2	5	10	Safe Working Distances Must be adhered to and Slew Restrictors installed. Collapse Zones MUST be established and adhered to. Care must be taken on MEWPS to prevent Trapping and crushing. Use of Anti-entrapment” devices (ONLY as a secondary Measure). Safe Working Distances Must be adhered to and Slew Restrictors installed. Collapse Zones MUST be established and adhered to. Correct use of Guide Ropes if required Lifting Plans must identify all obstructions prior to commencing works. Report any Collisions immediately to the Piling Foreman and Principal Contractor. All Jibs and booms MUST be stowed or placed in Travel position prior to moving. Principal Contractor Must ensure that where required Trees and Fauna can be trimmed back to allow safe access to perform the works.	1	5	5	

Risk Assessment

Project Name	Newport Transporter Bridge	Work activity: Slips, Trips and Falls		
Project Code	C1642			
Assessed By	Elliott Jones			
Date of Assessment	22/08/2022			
				Document No. RA030

Risk Assessment Key

Severity Score	Likelihood Score				
	1	2	3	4	5
1					
2	Low				
3		Medium			
4			High		
5					

Severity Key

Score	Severity
1	Minor Injury (First Aid)
2	Minor Injury (Hospital)
3	7 Day Injury
4	Specified Injury
5	Death

Likelihood Key

Score	Likelihood
1	Unlikely
2	May Happen
3	Likely
4	Very Likely
5	Certain

SIGNIFICANT HAZARDS	RISKS	PEOPLE/GROUPS AT RISK	RISK RATING			CONTROL MEASURES IN PLACE TO REDUCE / MITIGATE RISKS	RISK RATING			Comments
			L=LIKELIHOOD				L = LIKELIHOOD			
			S=SEVERITY				S = SEVERITY			
			R=RATING				R = RATING			
			L	S	R		L	S	R	
Slipping on wet/Icy surfaces and improper footwear for the working environment.	Sprains, strains, fractures	All accessing site	2	5	10	Footways/paths in good condition.	1	5	5	
Unsafe ladders, steps	Falls from height	Persons using ladders, step ladders, scaffolds	2	5	10	Ladders are only to be used for access and inspection and duration of less than 30 mins. Ensure all work at height is properly planned. Permit required for any work taking place of ladders/stepladders. Any ladder must be inspected every months and the inspection must be recorded, a visual inspection must be undertaken before each use to ensure there is no damage to the ladder. Ensure scaffold has been erected by a competent person and signed off, checks must take place every 7 days or if adverse weateher conditions could have affected the scaffold stability. Suitable safety boots with ankle support to be worn.	1	5	5	
Obstruptions in and on floors and walkways. Uneven Ground	Trips, falls	All accessing site	2	5	10	Good housekeeping practices	1	5	5	
Poor lighting	Slips, trips, falls	All accessing site	2	5	10	Background lighting provided by the principal contractor to all areas of work and walkways on site.. Task lighting provided by SPUK	1	5	5	

Risk Assessment

Access to / from vehicles	Falls, jumping down from vehicle cab, sprains, strains, fractures	Vehicle drivers	2	5	10	Use vehicles steps provided	1	5	5	
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Risk Assessment

Project Name	Newport Transporter Bridge	Work activity: Hot Works / Welding			
Project Code	C1642				
Assessed By	Elliott Jones				
Date of Assessment	22/08/2022				
					Document No. RA031

Risk Assessment Key

Severity Score	Likelihood Score				
	1	2	3	4	5
1					
2	Low				
3		Medium			
4			High		
5					

Severity Key

Score	Severity
1	Minor Injury (First
2	Minor Injury (Hospital
3	7 Day Injury
4	Specified Injury
5	Death

Likelihood Key

Score	Likelihood
1	Unlikely
2	May Happen
3	Likely
4	Very Likely
5	Certain

SIGNIFICANT HAZARDS	RISKS	PEOPLE/GROUPS AT RISK	RISK RATING			CONTROL MEASURES IN PLACE TO REDUCE / MITIGATE RISKS	RISK RATING			Comments
			L=LIKELIHOOD				L = LIKELIHOOD			
			S=SEVERITY				S = SEVERITY			
			R=RATING				R = RATING			
			L	S	R		L	S	R	
Welding	Fumes create varying mixtures of airborne gases and very fine particles that can cause a range of respiratory ill health effects if inhaled	Welder/Site Staff/third parties	2	5	10	Welding Tack Welding – FFP3 (En 149) disposable mask or half mask - Under 1 hour duration consistent welding. Full Welding Runs – Air Fed Welding Helmet &/or LEV - Over 1 hour duration of welding in a shift Welding In confined areas - Airfed welding helmet and Extraction Unit Use an FFP3 disposable mask or half-mask with P3 filter (PDF) , for work of up to an hour Use battery-powered air-fed protective equipment for longer duration work, with a minimum assigned protection factor of 20 (APF20) ensure RPE wearers are clean shaven and provide face-fit testing for them For welding outdoors, local exhaust ventilation will not work, so workers should use suitable RPE to control exposure.	1	5	5	Persons wearing FFP3 masks should have attended face fit training and be clean shaven or wear an airflow device
Storage of diesel on site and refuelling of plant	Fire	Persons refuelling plant Persons close by	2	5	10	Diesel bowsers, double skinned and approved EN types - Bowsers stored away from buildings and gas storage facilities where practicable - Fuel Bowsers to remain locked when not in Use - Emergency procedures in place along with trained personnel. - Adequate fire extinguishers available. - Site Fire Plan in place - No smoking/naked flames near bower	1	5	5	All spills must be cleaned and correctly disposed of in accordance with Spill Response Plan - Safety warning signage should be in place at all times - Maintain minimum amounts of diesel on site - Plant nappies under bowsers - Spill kits available

Risk Assessment

Hot works – welding/burning using oxy/propane equipment	Fire / explosions Flashbacks	Welder/burners Persons close by	2	5	10	Competent and trained Persons carrying out hot works i.e. welding/burning - hot works Permit issued prior to work commencing. No works to begin without a Permit - Oxy/propane pre-start checklist to be completed by welders/burners - Plant and equipment well maintained and always follow manufacturer's instructions where applicable- Adequate fire extinguishers available and close by during hot works burners/cutters to purge both purge Oxy/propane hoses prior to igniting burning torch	1	5	5	All work areas should be provided with an adequate means of escape. - Always use Flash Back arrestors. - Ensure all gas cylinders that are portable are carried in a secure trolley or frame. - Fire extinguishers – water and or foam
Hot works – welding/burning using oxy/propane equipment	Fumes create varying mixtures of airborne gases and very fine particles that can cause a range of respiratory ill health effects if inhaled	Welder/burners doing the welding/brazing/cutting, but also by others nearby	2	5	10	Minimum requirements for PPE are: - Fire retardant coveralls (full length) EN 471 - Welders gauntlets EN 12477 - Welders visor EN 175 - use an FFP3 disposable mask or half-mask with P3 filter (PDF) , for work of up to an hour - use battery-powered air-fed protective equipment for longer duration work, with a minimum assigned protection factor of 20 (APF20) - ensure RPE wearers are clean shaven and provide face-fit testing for them For welding outdoors, local exhaust ventilation will not work, so workers should use suitable RPE to control exposure - FFP3 disposable mask when thermal cutting - Safety boots EN 20345 (Non-Rigger) - Head protection EN 397	1	5	5	Persons wearing FFP3 masks should have attended face fit training (face fitting is postponed until Covid 19 pandemic is under control)
Gas cylinder design	Injury to persons or damage to property if cylinders are accessed / handled incorrectly by unauthorised persons - External fire or heat impacting on cylinders in storage could cause catastrophic failure of the cylinders due to overheating	Welder/burners Persons close by	2	5	10	Cylinders will be stored in a secure lockable enclosure that prevents access to unauthorised persons- Enclosure should be designed and constructed from appropriate, robust, materials suitable for the location and possible risks e.g. to prevent theft or access by unauthorised persons (such as children)	1	5	5	Cages to display safety warning signs
Manual Handling of gas cylinders	Manual handling injury or damage to property if cylinders are handled incorrectly	Welder/burners	2	5	10	All persons required to handle gas cylinders or packages are to have had adequate training in manual handling- Use of trolley aids should be secured in a suitable - Cylinders should be secured in a suitable cylinder trolley and not be left freestanding	1	5	5	Maintain PUWER Register of gas cylinders on site, including Safety Data Sheets
Incorrect use of and oxygen and fuel-gas	Fire resulting from the incorrect use of the package e.g. regulator pressures set wrongly	Welder/burners	2	5	10	Trained and competent persons using oxy/propane gas- Persons to understand the hazards and safety precautions required for each gas. - Briefed on COSHH assessment- Carry out pre-use equipment checks on the oxygen and fuel-gas	1	5	5	Ensure components with an expiry life are in-date for use in accordance with manufacturers inspection regime

Risk Assessment

Accidental ignition of flammable materials during metal cutting or welding	If the package is used close to flammable liquids or solids these can be ignited by sparks from the gas cutting or welding activity. The package could also be impacted by the resulting fire	Welder/burners	2	5	10	Clear the immediate work area of any flammable materials and or put in place suitable fire screens or blankets to prevent contact between sparks and flammables	1	5	5	
Hose damage during metal cutting / welding or hose leaking due to aging	Fuel gas release could cause a fire if ignited and the fire could impact on the gas cylinders or the gas cylinders are depressurised	Welder/burners	2	5	10	Position gas hoses out of the line of fire from the flame or metal sputter- Where hoses are attached together use proprietary clips. - Do not tape hoses together (this can impair visual inspection)- Only use hoses of an appropriate length. Keep as short as practical. As necessary keep the gas cylinders close to the work area- Extended hoses are only to be used where it is unavoidable. Where joints are used they are to comply with BS EN 560. <i>NOTE: Extended hoses may affect the gas flow rate.</i>	1	5	5	
Residual hot spot or smouldering fire after metal cutting or welding.	Localised fire escalating to a major fire	Welder/burners	2	5	10	Carry out Fire Watch of working area after completion of hot work for a minimum of 60mins to ensure there are no residual hot spots or smouldering fires that could escalate to a large fire	1	5	5	
The use of Flash Back Arrestors. NOTE: Mandatory under the Acetylene Safety Regulations	Fire caused using a gas cylinder which has not had flash back arrestors fitted.	Welder/burners	2	5	10	Flash Back Arrestors shall be fitted to the outlet of both the oxygen and the fuel-gas pressure regulators Flash Back Arrestors shall comply with BS EN 730 - With extended hoses, a Flash Back Arrestor should be fitted at the torch end - Replace disposable Flash Back Arrestors after a flashback or backfire - Flash Back Arrestor's of the resettable type should be reset as per the manufacturer's instructions - Resettable Flash Back Arrestors shall be replaced after 5 years or at the manufacturers recommended intervals - The causes for a flashback or backfire shall be investigated to identify any damaged or faults to the equipment (particularly the nozzle) before trying to reuse the oxygen and fuel-gas package	1	5	5	
Pressure Regulators	Fire affecting the package and the surrounding area	Welder/burners	2	5	10	Ensure regulators are matched with their gas service; An acetylene regulator shall only be used in acetylene service; An oxygen regulator only used in oxygen service; A propane regulator used only in propane service. - All regulators to be labelled accordingly- Regulators with damaged gauges or connectors shall not be used- Use clean hands or gloves when assembling oxygen equipment e.g. attaching a regulator to a new cylinder or attaching the hoses to the blowpipe or torch. DO NOT USE OIL OR GREASE during assembly Regulators should be replaced every 5 years or at the manufacturers recommendation	1	5	5	

Risk Assessment

Oxygen and hydrocarbon reaction	Fire affecting the package and the surrounding area	Welder/burners	2	5	10	Never attempt to lubricate or use thread sealing tape on gas sealing surfaces	1	5	5	
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Risk Assessment

Project Name	Newport Transporter Bridge	Work activity: Maintenance and Repair of Plant			
Project Code	C1642				
Assessed By	Elliott Jones				
Date of Assessment	22/08/2022				
					Document No. RA032

Risk Assessment Key

Severity Score	Likelihood Score				
	1	2	3	4	5
1					
2	Low				
3		Medium			
4			High		
5					

Severity Key

Score	Severity
1	Minor Injury (First
2	Minor Injury
3	7 Day Injury
4	Specified Injury
5	Death

Likelihood Key

Score	Likelihood
1	Unlikely
2	May Happen
3	Likely
4	Very Likely
5	Certain

SIGNIFICANT HAZARDS	RISKS	PEOPLE/GROUPS AT RISK	RISK RATING			CONTROL MEASURES IN PLACE TO REDUCE / MITIGATE RISKS	RISK RATING			Comments
			L=LIKELIHOOD				L = LIKELIHOOD			
			S=SEVERITY				S = SEVERITY			
			R=RATING				R = RATING			
			L	S	R		L	S	R	
Moving Vehicles	Struck by Moving Vehicle	Fitter	2	5	10	Always Follow the Site Rules When Moving Around a Site. -Wear Hi Visibility Clothing at All Times to EN 20471 or where further Risk Assessment dictates (eg Rail or Highway) - Do Not Work in an Area Where Vehicles or Plant Are Moving. - A Site Induction Must Be Received Before Commencing Work On a New Site. - Ensure You Are Familiar with The Sites Safe Working Procedures	1	5	5	
Lone Working	Any Hazards Becoming Realised May Be of Increased Severity.	Fitter	2	5	10	No Lone working to take place	1	5	5	
Unfamiliar Working Areas	Struck by Moving Vehicle. Work in Restricted Area Resulting in Exposure to Electricity, Substances Hazardous to Health.	Fitter	2	5	10	Never Work in an Area That You Consider to Be Dangerous. - Ensure Your Work Area Is barriered Off - Ensure Your Work Area has been inspected to identify and control any further potential hazards and changes to Risk Control Measures. - Wear High-Viz Clothing at All Times. - Remain in Communication with Base Workshop at Regular Intervals - Park Service Van in Such as Position That It Will Offer You Some Protection by Acting -as A Barrier Between You and Traffic or Other Vehicles. - When You Park the Service Van, Turn The Steering Wheel So That the Wheels Are Facing Away from Your Work Area and Any Live Traffic Then Engage the Steering Lock. - Ensure Your Warning Beacon Lights Are On to Alert Others of Your Presence. - Ensure Full Compliance with the requirements of the Highway Code where applicable.	1	5	5	
Low Lighting Levels	Slip, Trip, Fall Inadequate Light for Task	Fitter Or Site Staff Site Visitors	2	5	10	Where Possible Complete Tasks During Daylight Hours, If This Is Not Possible You Must; Carry A Light of Sufficient Strength to Allow You to Complete the Task Safely and Ensure That the Equipment Is in Good Working Order When Your Shift Commences Or; Have The Vehicle Moved to A Well Lit Area So That Your Visibility Is Improved Maintain Good Housekeeping at all times	1	5	5	

Risk Assessment

No or limited Access to Specialist Tools or Equipment	Incorrect Use of Tools	Fitter Or Site Staff	2	3	6	If A Job Requires a Specialist Tool or Piece of Equipment, The Job Must Not Be Carried Out Until You Have It. Under No Circumstances Should a Make Shift Be Used.	1	3	3	
Adverse Weather	Slips, Trips, Falls Hypothermia, Heat Stroke.	Fitter	2	3	6	Take Extra Care When Moving Around a Site in Wet Weather. Keep A Secondary Set of Clothing to Change Out of Wet Clothing Ensure Surface Underfoot Is as Level and Hard as Possible. Always Wear High-Viz clothing on site. Never Work at Height During and Electrical Storm or High Winds. Use A High Factor Sun Screen Before Prolonged Periods in The Sun and Renew Often. In Hot Weather, Always Have Sufficient Drinking Water with You to Avoid Dehydration Do Not Jack or Block a Vehicle On Icy Ground or When There Is a Blanket of Snow Take Extra Time to Check Your Work to Ensure Everything Has Been Done Correctly. Consult Risk Assessment for Working in Adverse Weather Conditions	1	3	3	
Distraction by Other Site Users	Lost Concentration	Fitter or Site Staff	2	5	10	Always Try to Work Away from Others No Unauthorised persons to enter the Work Area. Exclusion zone to be established around SPUK's working area	1	5	5	
Long Working Hours	Fatigue	Fitter	2	5	10	Driving hours will be monitored as per the working time directive. If Night Work Has Been Carried Out Due to Being On Call, a 'Down-Shift' Will Be Taken the Next Day	1	5	5	
Long Driving hours	Fall Asleep Whilst Driving RTA	Fitter Third Parties	2	5	10	A 15 Minute Break Should Be Taken Every 2 Hours of Driving. If Safe to Do So, Get Out of Vehicle and Walk Around If Travelling in A Day Is Likely to Exceed 6 Hours, Hotel Accommodation Will Be Provided. If You Feel Tired, Stop and Take a Break, Do Not Continue Driving Until You Feel Fit to Do So	1	5	5	

Risk Assessment

Project Name	Newport Transporter Bridge	Work activity: Working Over Water	
Project Code	C1642		
Assessed By	Elliott Jones		
Date of Assessment	22/08/2022		
		Document No.	RA034

Risk Assessment Key					
Severity Score	Likelihood Score				
	1	2	3	4	5
1					
2	Low				
3		Medium			
4			High		
5					

Severity Key	
Score	Severity
1	Minor Injury (First Aid)
2	Minor Injury (Hospital Treatment)
3	7 Day Injury
4	Specified Injury
5	Death

Likelihood Key	
Score	Likelihood
1	Unlikely
2	May Happen
3	Likely
4	Very Likely
5	Certain

SIGNIFICANT HAZARDS	RISKS	PEOPLE/GROUPS AT RISK	RISK RATING			CONTROL MEASURES IN PLACE TO REDUCE / MITIGATE RISKS	RISK RATING			Comments
			L=LIKELIHOOD				L = LIKELIHOOD			
			S=SEVERITY				S = SEVERITY			
			R=RATING				R = RATING			
			L	S	R		L	S	R	
Working Alongside and Over Watercourse, Canal, River, Estuary, Dock or Similar	Falling into Water	Any Operatives or Staff Working Over Water	2	5	10	Only Trained Personnel Must Be Allowed to Carry Out Work Over Water A Permit to Work Must Be Issued by The Principal Contractor Before Work Commences. Suitable Means of Access to The Point of Work Should Be Provided by The Principal Contractor. Warning Signs Should Be Placed Near Water by The Principal Contractor If Necessary to Warn Workers. Handholds and Guard-Rails Should Be Provided Where Appropriate. Workers Should Work in Pairs So One Can Raise the Alarm If the Other Falls In. Physical Edge Protection Should Be Provided Wherever Possible A Rescue Vessel Must Be Employed When Working Over Flowing Water A safety harness and suitable lanyard must be utilised whilst working at height, but “only” whilst working over water, the lanyard does not need to be attached to suitable anchor point to enable escape in case of emergency. Life Jackets 275N Minimum to BS EN 399:1994 Must Be Worn by All Persons Working On, Above or Near Water. Sufficient Lifebuoys and Rescue Lines Should Be Available. Where There Is Fast-Flowing Water, Grab Lines Should Be Installed Downstream of the Work. Access Routes to The Place of Work and Alongside the Water Should Be Kept Free of Obstruction and Slip Hazards at All Times. Suitable Lighting Should Be Provided for The Area of Works, Particularly Adjacent to The Water. Personal Protective Equipment (PPE) Assessment to Ensure Suitability of Equipment Provided. Safety Footwear with Good Non Slip Soles.	1	5	5	

Risk Assessment

Project Name	Newport Transporter Bridge	Work activity: Security (Theft, Arson and Vandalism)			
Project Code	C1642				
Assessed By	Elliott Jones				
Date of Assessment	22/08/2022				
					Document No. RA035

Risk Assessment Key

Severity Score	Likelihood Score				
	1	2	3	4	5
1					
2	Low				
3		Medium			
4			High		
5					

Severity Key

Score	Severity
1	Minor Injury (First Aid)
2	Minor Injury (Hospital)
3	7 Day Injury
4	Specified Injury
5	Death

Likelihood Key

Score	Likelihood
1	Unlikely
2	May Happen
3	Likely
4	Very Likely
5	Certain

SIGNIFICANT HAZARDS	RISKS	PEOPLE/GROUPS AT RISK	RISK RATING			CONTROL MEASURES IN PLACE TO REDUCE / MITIGATE RISKS	RISK RATING			Comments
			L=LIKELIHOOD				L = LIKELIHOOD			
			S=SEVERITY				S = SEVERITY			
			R=RATING				R = RATING			
			L	S	R		L	S	R	
Arson	Intentional Fire Damage to Plant and Equipment Loss	Operators 3 rd Parties,	2	5	10	PC/Client to ensure suitable Hoarding/Fencing is erected and maintained Site Security supplied by PC/Client Secure all Flammable Liquids and gases in a locked container	1	5	5	
Vandalism	Wilful damage to Plant and equipment	Operators 3 rd Parties,	2	4	8	Ensure all Plant and Equipment is secured, keys removed and all doors and windows to machines must be locked and secured. All containers and cabins must be secured and locked.	1	4	4	
Theft	Loss of Equipment Loss of Materials Loss of Personal Items	Operators 3 rd Parties,	2	4	8	All equipment and tools must be secured in locked containers at the end of shift.	1	4	4	

Risk Assessment

Project Name	Newport Transporter Bridge	Work activity: Fire		
Project Code	C1642			
Assessed By	Elliott Jones			
Date of Assessment	22/08/2022			
				Document No. RA036

Risk Assessment Key

Severity Score	Likelihood Score				
	1	2	3	4	5
1					
2	Low				
3		Medium			
4			High		
5					

Severity Key

Score	Severity
1	Minor Injury (First Aid)
2	Minor Injury (Hospital)
3	7 Day Injury
4	Specified Injury
5	Death

Likelihood Key

Score	Likelihood
1	Unlikely
2	May Happen
3	Likely
4	Very Likely
5	Certain

SIGNIFICANT HAZARDS	RISKS	PEOPLE/GROUPS AT RISK	RISK RATING			CONTROL MEASURES IN PLACE TO REDUCE / MITIGATE RISKS	RISK RATING			Comments
			L=LIKELIHOOD				L = LIKELIHOOD			
			S=SEVERITY				S = SEVERITY			
			R=RATING				R = RATING			
			L	S	R		L	S	R	
Fuel Storage	Fire, Explosion	Site Staff Plant Yard Operatives	2	5	10	Store Fuels Away from Buildings and Store Gas Canisters Secured and Protected from Unauthorised Interference. Always Keep Fuel Bowsers Locked When Not in Use. Ensure That Personnel Are Available Who Are Conversant with Fire Procedures and in The Use of Fire Fighting Equipment. All Work Areas Must Be Provided with an Adequate Means of Escape and Should Be Identified On the Site Fire Plan. Fire Fighting Equipment Must Be Provided. All spills must be cleaned and correctly disposed of. Correct signage should be in place at all times. Quantities of Fuel must be kept to a minimum to comply with COMAH Regulations 2015 requirements	1	5	5	
Smoking	Fire, Explosion	Site Staff Plant Yard Operatives	2	5	10	Only smoke in designated areas as defined in site induction. Smoking in Enclosed Spaces Is Prohibited. Smoking is prohibited unless in the designated smoking area. All Work Areas Must Be Provided with an Adequate Means of Escape and Fire Fighting Equipment Must Be Provided.	1	5	5	
Welding and Cutting Activities	Fire, Explosion	Welder Third Parties	2	5	10	Hot Works Permit Issued Prior to Work Commencing.. Only Trained and Certified Personnel Should Use Cutting or Welding Equipment. Keep All Plant and Equipment Well Maintained and Always Follow Manufacturer’s Instructions. All Work Areas Must Be Provided with an Adequate Means of Escape and Fire Fighting Equipment Must Be Provided. Ensure all Gas Cylinders, Hoses and Torches are in good condition and regularly inspected. Always Use Flash Back arrestors. Ensure all Gas cylinders that are portable are carried in a secure trolley or frame. Keep Combustible Materials I.E Rags, Paper, Wood, Cardboard, Foam Etc, Away from Work Areas.	1	5	5	
Noxious Gases and Fumes	Respiratory Problems. Nausea. Cancer.	Plant Operator Third Parties	2	5	10	Re-Fuel in Well Ventilated Designated Area. Wear Impervious Gloves. Ensure Washing Facilities Are Available. Refer to COSHH Assessments for Relevant Details. <u>Over Exposure to Fuel or Gasses Must Be Reported to Site Supervision.</u>	1	5	5	Ensure all p[er]sonnel involved in re-fueling are tra[ine]d on the COSHH assessments for the products being used.
Electrical Appliances and Installations	Fire, Explosion	Fitters Site Staff	2	5	10	Ensure all electrical installation are carried out by a qualified electrical engineer and in accordance with IET Wiring Regulations 18 th Edition (BS7671) All portable electrical equipment i.e. Drills, Grinders, Jig Saws, Kettles etc to have Portable Appliance Testing	1	5	5	

Risk Assessment

Project Name	Newport Transporter Bridge	Work activity: Excavation			
Project Code	C1642				
Assessed By	Elliott Jones				
Date of Assessment	22/08/2022				
					Document No. RA037

Risk Assessment Key

Severity Score	Likelihood Score				
	1	2	3	4	5
1					
2	Low				
3		Medium			
4			High		
5					

Severity Key

Score	Severity
1	Minor Injury (First Aid)
2	Minor Injury (Hospital)
3	7 Day Injury
4	Specified Injury
5	Death

Likelihood Key

Score	Likelihood
1	Unlikely
2	May Happen
3	Likely
4	Very Likely
5	Certain

SIGNIFICANT HAZARDS	RISKS	PEOPLE/GROUPS AT RISK	RISK RATING			CONTROL MEASURES IN PLACE TO REDUCE / MITIGATE RISKS	RISK RATING			FURTHER ACTIONS REQUIRED TO REDUCE RISK
			L=LIKELIHOOD				L = LIKELIHOOD			
			S=SEVERITY				S = SEVERITY			
			R=RATING				R = RATING			
			L	S	R		L	S	R	
Contaminated Ground.	Health Problems – Respiratory Organs, Skin, Eyes, Internal Organs	Operatives Undertaking Excavation and Operatives in Excavation	2	5	10	Site Investigation to Establish Nature and Extent of Ground Conditions. Contaminants Should Be Removed by the principal contractor Following a Suitable Risk Assessment and Method Statement. Refer to RAC3 Contaminated Land High Standards of Personal Hygiene Should Be Followed	1	5	5	
Excavation	Excavation Collapse/Water Influx of Free Flowing Liquid or Solid	Operatives in Excavation	2	5	10	Prior to Commencement of Excavation the principal contractor Must Identify the Need for and Method of Support Should Be Used. Support Materials Should Be On Site Before Excavation Starts. The principal contractor Must Carry Out Inspections of Excavations Prior to Each Shift and After Any Event Likely to Affect Strength or Stability, And After Any Accidental Fall of Material. The Principal Contractor Must Provide Edge Protection. If There Is a Risk of Water Ingress, Suitable Methods and/or Equipment Should Be Provided, to Either Prevent the Entry of Water or to Remove Water, e.g. Water Pumps	1	5	5	
Underground Services	Electrocution Explosion Fire	Operatives Undertaking Excavation	2	5	10	If There Is a Possibility of Underground Services Being Present, The Area Should Be Surveyed by The principal contractor Using a Suitable Detection Instrument. Plans and physical ground markings shall be provided prior to commencement of works Divert/Protect Any Services in The Vicinity.	1	5	5	See Also Risk Assessment On Underground Services
Confined Space	Oxygen Deficiency, Toxic or Flammable Gas.	Operatives in Excavation	2	5	10	Where A Risk Assessment Establishes Possible Ventilation Problems, A Gas Monitor Should Be Utilised to Monitor Atmosphere Before Entry.	1	5	5	See Risk Assessment C2- Confined Spaces
Work Above Excavation	Falling Plant or Materials	Plant Operator Operatives in Excavation	2	5	10	Keep Plant and Materials Away from The Side of Excavations to Prevent Undue Pressure or Ingress of Exhaust Fumes. If Plant Could Fall into The Excavation, Timber Baulks Should Be Provided by The Principal Contractor.	1	5	5	

Risk Assessment

Project Name	Newport Transporter Bridge	Work activity: Hand-Arm Vibration Syndrome (HAVS)		
Project Code	C1642			
Assessed By	Elliott Jones			
Date of Assessment	22/08/2022			
				Document No. RA038

Risk Assessment Key

Severity Score	Likelihood Score				
	1	2	3	4	5
1					
2	Low				
3		Medium			
4			High		
5					

Severity Key

Score	Severity
1	Minor Injury (First Aid)
2	Minor Injury (Hospital)
3	7 Day Injury
4	Specified Injury
5	Death

Likelihood Key

Score	Likelihood
1	Unlikely
2	May Happen
3	Likely
4	Very Likely
5	Certain

SIGNIFICANT HAZARDS	RISKS	PEOPLE/GROUPS AT RISK	RISK RATING			CONTROL MEASURES IN PLACE TO REDUCE / MITIGATE RISKS	RISK RATING			Comments
			L=LIKELIHOOD				L = LIKELIHOOD			
			S=SEVERITY				S = SEVERITY			
			R=RATING				R = RATING			
			L	S	R		L	S	R	
Using Vibrating Hand Tools	Development of HAVS, WRULDS, WBV	Fitter Tool Operator	2	5	10	Use a different method where possible. Only use low vibration tools- below 2.5m/s A (8) if possible. Under no circumstances exceed 5.0 m/s A(8) Ensure that the grinding wheels are of the correct type. Make sure the wheels are stored correctly and have no chipped edges that may cause the wheel to become unbalanced. Make sure that the grinder has been serviced. Source grinders with anti vibration handles where possible. The operator should take regular breaks. Use an operator rotation system where at all possible. The operator should keep hands warm to ensure good blood supply to fingers. Do not use excessive force on handles of grinder. Do not press down with excessive force. Wear anti vibration gloves to keep hands warm. Calculate exposure 'points' with ready reckoner. Health surveillance to be carried out to check for HAV'S etc. Purchasing to undertake checks before buying new items for those tools with reduced (lower) vibration magnitude figures.	1	5	5	On joining the business all employees must complete a health questionarrie and declare and HAV contact in previous occupations. All site based operatives undergo safety critical medical every 3 years which assess operatives for HAVs.

Risk Assessment

Project Name	Newport Transporter Bridge	Work activity: Abrasive Wheels			
Project Code	C1642				
Assessed By	Elliott Jones				
Date of Assessment	22/08/2022				
					Document No. RA039

Risk Assessment Key

Severity Score	Likelihood Score				
	1	2	3	4	5
1					
2	Low				
3		Medium			
4			High		
5					

Severity Key

Score	Severity
1	Minor Injury (First Aid)
2	Minor Injury (Hospital)
3	7 Day Injury
4	Specified Injury
5	Death

Likelihood Key

Score	Likelihood
1	Unlikely
2	May Happen
3	Likely
4	Very Likely
5	Certain

SIGNIFICANT HAZARDS	RISKS	PEOPLE/GROUPS AT RISK	RISK RATING			CONTROL MEASURES IN PLACE TO REDUCE / MITIGATE RISKS	RISK RATING			Comments
			L=LIKELIHOOD				L = LIKELIHOOD			
			S=SEVERITY				S = SEVERITY			
			R=RATING				R = RATING			
			L	S	R		L	S	R	
Abrasive Wheels	Wheel Burst	Operator Persons in Vicinity	2	5	10	Anyone utilising a power tool that requires abrasive wheels, must be competent top change the cutting wheel. All cutters and grinders should be correctly maintained. Operators must wear Impact Eye Protection to EN 166 1 B 4,9 The correct type of Wheel/Disc must be used to suit the type of work. All new discs should be inspected for damage before being fitted. All Abrasive Wheels must be checked Prior to use and stored in dry conditions as per manufacturers instructions.	1	5	5	
Contact with Wheel/Disc.	Entanglement in Moving Parts	Operator	2	5	10	Abrasive Wheels should be fitted with working guards designed to contain every part of the wheel if it fractures. No Loose Clothing Should Be Worn. Wear Suitable Hand Protection BS EN 388.	1	5	5	
Flying Particles and Sparks.	Fire Eye Damage Body Injuries	Operator, Third Parties	2	5	10	Operators to Wear Impact Eye Protection to EN 166 1 B. Grinders/Cut Off Saws Must Be Fitted with Working Guards. Create Exclusion Zones to stop unauthorised access. Ensure all Flammable Materials are removed from work area. If using Fuel Powered Tools, then ensure there are no leaks Ensure all refuelling and fuel storage is in a designated area away from potential fire hazards. Hot Works Permits must be used where applicable.	1	5	5	
Dust.	Respiratory Problems	Operator Persons in Vicinity	2	5	10	Good Ventilation Should Be in Place If Dust Is a Hazard. Operatives to Wear Appropriate Dust Masks to EN 149:2001 FFP3 Operative wearing RPE face masks, must be face-fit-tested.	1	5	5	
Noise	Noise Induced Hearing Loss	Operator Persons in Vicinity	2	5	10	Wear Appropriate Ear Protection to EN 352 1. Create Exclusion Zone to stop unauthorised access.	1	5	5	

Risk Assessment

Project Name	Newport Transporter Bridge	Work activity: Piling Platforms			
Project Code	C1642				
Assessed By	Elliott Jones				
Date of Assessment	22/08/2022				
					Document No. RA041

Risk Assessment Key

Severity Score	Likelihood Score				
	1	2	3	4	5
1					
2	Low				
3		Medium			
4			High		
5					

Severity Key

Score	Severity
1	Minor Injury (First Aid)
2	Minor Injury (Hospital)
3	7 Day Injury
4	Specified Injury
5	Death

Likelihood Key

Score	Likelihood
1	Unlikely
2	May Happen
3	Likely
4	Very Likely
5	Certain

SIGNIFICANT HAZARDS	RISKS	PEOPLE/GROUPS AT RISK	RISK RATING			CONTROL MEASURES IN PLACE TO REDUCE / MITIGATE RISKS	RISK RATING			Comments
			L=LIKELIHOOD				L = LIKELIHOOD			
			S=SEVERITY				S = SEVERITY			
			R=RATING				R = RATING			
			L	S	R		L	S	R	
Inadequately Designed Piling Platform	Failure of Platform Causing Rig/Cranes to overturn	Operators	2	5	10	PC/Client to ensure suitable Design & Design Check has been Completed for Piling Platform. - All Ground Bearing information of Machines and dimensions to be supplied to Client. - Work should not commence until SPUK are in receipt of a working platform certificate confirming that the working platform has been properly designed, constructed in accordance with the design, and that it will be regularly inspected and adequately maintained to ensure the integrity of the ground.	1	5	5	
Inadequate Constructed Piling Platform	Failure of Platform Causing Rig/Cranes to overturn Unsafe Working Conditions for Operators	Operators 3 rd Parties,	2	5	10	- Temporary works procedure HSF17 to be followed. - Ensure working platform is maintained correctly by the client as per the TWD	1	5	5	
Inadequate Maintained Piling Platform	Failure of Platform Causing Rig/Cranes to overturn Unsafe Working Conditions for Operators	Operators 3 rd Parties,	2	5	10	- If the item of plant is not offloaded onto the platform, the haul road that it is travelling on must be constructed to BR470	1	5	5	

Risk Assessment

Project Name	Newport Transporter Bridge	Work activity: Pile Trimming			
Project Code	C1642				
Assessed By	Elliott Jones				
Date of Assessment	22/08/2022				
					Document No. RA042

Risk Assessment Key

Severity Score	Likelihood Score				
	1	2	3	4	5
1					
2	Low				
3		Medium			
4			High		
5					

Severity Key

Score	Severity
1	Minor Injury (First Aid)
2	Minor Injury (Hospital)
3	7 Day Injury
4	Specified Injury
5	Death

Likelihood Key

Score	Likelihood
1	Unlikely
2	May Happen
3	Likely
4	Very Likely
5	Certain

SIGNIFICANT HAZARDS	RISKS	PEOPLE/GROUPS AT RISK	RISK RATING			CONTROL MEASURES IN PLACE TO REDUCE / MITIGATE RISKS	RISK RATING			Comments
			L=LIKELIHOOD				L = LIKELIHOOD			
			S=SEVERITY				S = SEVERITY			
			R=RATING				R = RATING			
			L	S	R		L	S	R	
Use of Burning Gear	Fire, Burns, Explosion,	Operators	2	5	10	Hot Works Permit In Place From Client, Personal Protective Equipment Available & Worn Correctly, Gauntlets Must Be Worn, Welders Mask/Burning Goggles, Correct Storage of Cylinders, Regular Checks of Burning Equipment (Hoses, Gauges, Torch), Flash Back Arrestor installed, Trained and Competent Operatives 2 x Powder or CO2 Fire Extinguisher and planned Fire Watch Recorded for 60 mins after the last hot works process has been completed. FFP3 Mask Must be worn when flame cutting	1	5	5	
Manual Handling off cuts	Musculoskeletal disorders, Cuts, and abrasions	Operators	2	4	8	T.I.L.E assessment to be completed for manual handling tasks Manual Handling Training Correct use of PPE. Use of alternate mechanical means to move off cuts.	1	4	4	
Working at Height	Falling Person, Falling Materials	Operators & 3 rd Parties	2	5	10	All Operatives received training for Working at Heights. Mobile tower Scaffolds will be erected by competent PASMA Trained operatives. Correct use of Hop Up steps – NO ladders Restricted access zones MUST be in place around the Scaffolds and below the trimming works MUST be cordoned off with physical barriers to prevent unauthorised access.	1	5	5	
Trimming Sheet Pile	Falling Material, Injury to Operator	Operators	2	5	10	Operator to cut Sheet Pile leaving a minimum of 60mm of the pile attached to the “fixed Pile” to maintain security of the pile. Where Practicable a machine capable of lifting, the offcut will be connected to the sheet pile by approved Lifting accessories. When Machine is connected the sheet piles (section of 3 piles maximum) can be cut and removed. Any off cut over 500mm MUST be connected to a Machine capable of lifting the weight of the off-cut pile. If the off cut is smaller than 500mm, the Operator will cut ONLY INDIVIDUAL Piles. Each off-cut will be pushed away from the operator and removed by either hand or machine depending on weight.	1	5	5	

Risk Assessment

Project Name	Newport Transporter Bridge	Work activity: Use of Vibratory Hammer (Installation and Extraction)			
Project Code	C1642				
Assessed By	Elliott Jones				
Date of Assessment	22/08/2022				
					Document No. RA043

Risk Assessment Key

Severity Score	Likelihood Score				
	1	2	3	4	5
1					
2	Low				
3		Medium			
4			High		
5					

Severity Key

Score	Severity
1	Minor Injury (First Aid)
2	Minor Injury (Hospital)
3	7 Day Injury
4	Specified Injury
5	Death

Likelihood Key

Score	Likelihood
1	Unlikely
2	May Happen
3	Likely
4	Very Likely
5	Certain

SIGNIFICANT HAZARDS	RISKS	PEOPLE/GROUPS AT RISK	RISK RATING			CONTROL MEASURES IN PLACE TO REDUCE / MITIGATE RISKS	RISK RATING			Comments
			L=LIKELIHOOD				L = LIKELIHOOD			
			S=SEVERITY				S = SEVERITY			
			R=RATING				R = RATING			
			L	S	R		L	S	R	
Use of crane (mobile & crawler)	Refer to RA23		2	5	10		1	5	5	
Noise	Noise induced hearing loss	Operatives, people nearby	2	4	8	Adequate ear defenders to be worn (Peltor Optime 3 Ear Defenders) Exclusion/Restricted access zones must be established with adequate signage to warn people of high noise levels. Safety Critical Medicals undertaken for all site staff every 3 years, any operative reporting hearing loss will be directed to their GP in the first instance.	1	4	4	
Pile ends failing during extraction	Falling section/s of steel sheet piles	Operatives, people nearby	2	5	10	Secondary (safety) strop to be attached to pile	1	5	5	
Pile falling out of hammer jaws during lifting/installation	Falling piles	Operatives, people nearby	2	5	10	Non-return valves fitted to jaws which prevent any release of a pile when held in jaws	1	5	5	Secondary (safety) strop to be attached to pile
Use of poorly maintained hammer accessory	Failure of hammer	Operatives, people nearby	2	5	10	Inspection and maintenance regime in place Daily operator checks completed & recorded	1	5	5	
Burning hole (hot works) into sheet pile for secondary strop attachment	Refer to RA31									

Risk Assessment

Project Name	Newport Transporter Bridge	Work activity: Traffic Management			
Project Code	C1642				
Assessed By	Elliott Jones				
Date of Assessment	22/08/2022				
					Document No. RA045

Risk Assessment Key

Severity Score	Likelihood Score				
	1	2	3	4	5
1					
2	Low				
3		Medium			
4			High		
5					

Severity Key

Score	Severity
1	Minor Injury (First
2	Minor Injury (Hospital
3	7 Day Injury
4	Specified Injury
5	Death

Likelihood Key

Score	Likelihood
1	Unlikely
2	May Happen
3	Likely
4	Very Likely
5	Certain

SIGNIFICANT HAZARDS	RISKS	PEOPLE/GROUPS AT RISK	RISK RATING			CONTROL MEASURES IN PLACE TO REDUCE / MITIGATE RISKS	RISK RATING			Comments
			L=LIKELIHOOD				L = LIKELIHOOD			
			S=SEVERITY				S = SEVERITY			
			R=RATING				R = RATING			
			L	S	R		L	S	R	
Third party vehicles	Collisions with other vehicles, plant, buildings	Site Operatives / 3 rd Parties	2	5	10	Site traffic management plan developed by Principal Contractor and briefed to all SPUK staff at site specific induction. Adhere to site speed limits. Only licensed and authorised drivers/operators. Pedestrian/Plant segregation including crossing points in place. Only fully trained & competent (CPCS or equivalent) authorised employees to operate mobile plant Site specific PPE must be worn (including high visibility jackets, safety boots and hard hat) Warning beacons on mobile plant. Slew & movement audible warning signals on all plant. All haul roads and traffic routes must be suitable for the vehicles using them. Vehicle routes kept free of obstructions. Any reversing that is necessary should be overseen by a trained banksman	1	5	5	
Visitors to site	Collisions with other vehicles, plant, buildings	Site Operatives / 3 rd Parties	2	5	10	Designated parking area and walkways for visitors All SPUK employees must attend site specific induction Adhere to site speed limit. Directional signage in place. Pedestrian/Plant segregation including crossing points in place.	1	5	5	
Vehicle stability	Collisions with other vehicles, plant, buildings and overturning	Site Operatives	2	5	10	Only fully trained & competent (CPCS or equivalent) authorised employees to operate mobile plant Maintenance plan & statutory checks on lifting equipment & accessories (LOLER & PUWER) Working platform must be certified by the client and meet BR470	1	5	5	
Plant movement on site and near buildings/3 rd Parties	Collisions with other plant, vehicles, or buildings	Plant operator and other drivers, all on site	2	5	10	Only fully trained & competent (CPCS or equivalent) authorised employees to operate mobile plant. Maintenance of plant, daily checks. Traffic management plan. Established Speed limits. Good lighting maintenance plan & statutory checks on lifting equipment All haul roads and traffic routes must be suitable for the vehicles using them. Vehicle routes kept free of obstructions. Any reversing that is necessary should be overseen by a trained banksman	1	5	5	

Risk Assessment

Plant movement – collision with pedestrians	Crush/impact injury	All persons on site	2	5	10	Only fully trained & competent (CPCS or equivalent) authorised employees to operate mobile plant. Exclusions Zones set up and maintained Physical barriers to segregate pedestrians, plant & machinery Only Competent and authorised personnel allowed within any exclusion zone	1	5	5
Plant movement – collision with static plant or containers	Damage to plant/containers	Plant operator and other drivers, all on site	2	5	10	Site traffic management plan developed by Principal Contractor and briefed to all SPUK staff at site specific induction. Adhere to site speed limits. Only licensed and authorised drivers/operators. Pedestrian/Plant segregation including crossing points in place. Only fully trained & competent (CPCS or equivalent) authorised employees to operate mobile plant Site specific PPE must be worn (including high visibility jackets, safety boots and hard hat) Warning beacons on mobile plant. Seat belts must be worn. Only fully trained & competent (CPCS or equivalent) authorised employees to operate mobile plant. Maintenance of plant, daily checks. All haul roads and traffic routes must be suitable for the vehicles using them. Vehicle routes kept free of obstructions. Any reversing that is necessary should be overseen by a trained banksman	1	5	5
Movement of Vehicles/Plant on Public Highways	Collisions with other plant, vehicles, or buildings	Plant operator and other drivers, General Public	2	5	10	SPUK will only undertake vehicle banksman duties from the access gates on site. The Principal Contractor is to ensure that all vehicles that are required to be marshalled on a highway are undertaken by a competent vehicle marshaller. SPUK will not undertake any traffic control on the public highways.	1	5	5
Unloading & loading area	Crush/impact injury	All persons on site	2	5	10	Site traffic management plan developed by Principal Contractor and briefed to all SPUK staff at site specific induction. Only fully trained & competent (CPCS or equivalent) authorised employees to operate mobile plant Adhere to site speed limits. Good lighting Only licensed and authorised drivers/operators. Pedestrian/Plant segregation including crossing points in place. Maintenance of plant including recorded daily checks (LOLER/PUWER) Site specific PPE must be worn (including high visibility jackets, safety boots and hard hat) Warning beacons on mobile plant. Movement & Slew alarms fitted to all plant	1	5	5
Pedestrians on site	Crush injuries caused by collision from site vehicles	All persons on site	2	5	10	Site traffic management plan developed by Principal Contractor and briefed to all SPUK staff at site specific induction. Only fully trained & competent (CPCS or equivalent) authorised employees to operate mobile plant Adhere to site speed limits. Good lighting Only licensed and authorised drivers/operators. Pedestrian/Plant segregation including crossing points in place. Maintenance of plant including recorded daily checks (LOLER/PUWER) Site specific PPE must be worn (including high visibility jackets, safety boots and hard hat) Warning beacons on mobile plant. Movement & Slew alarms fitted to all plant reversing assistant (banksman).	1	5	5

Risk Assessment

Project Name	Newport Transporter Bridge	Work activity: Working in Adverse Weather Conditions			
Project Code	C1642				
Assessed By	Elliott Jones				
Date of Assessment	22/08/2022				
					Document No. RA046

Risk Assessment Key

Severity Score	Likelihood Score				
	1	2	3	4	5
1					
2	Low				
3		Medium			
4			High		
5					

Severity Key

Score	Severity
1	Minor Injury (First Aid)
2	Minor Injury (Hospital)
3	7 Day Injury
4	Specified Injury
5	Death

Likelihood Key

Score	Likelihood
1	Unlikely
2	May Happen
3	Likely
4	Very Likely
5	Certain

SIGNIFICANT HAZARDS	RISKS	PEOPLE/GROUPS AT RISK	RISK RATING			CONTROL MEASURES IN PLACE TO REDUCE / MITIGATE RISKS	RISK RATING			Comments
			L=LIKELIHOOD				L = LIKELIHOOD			
			S=SEVERITY				S = SEVERITY			
			R=RATING				R = RATING			
			L	S	R		L	S	R	
Freezing Weather	Slipping on icy walkways. Slipping when accessing plant or equipment. Poor circulation. Frost bite.	Site Operative	2	4	8	Ensure access & egress to workplace is kept clear of ice. Principal contractor should maintain walkways and haul roads & keep free of hazards. Advise use of rock-salt or similar medium to prevent ice forming. Check any access ladders & platforms are free of ice before attempting any ascent. Use de-icer where practicable in conjunction with COSHH assessment. Wear appropriate PPE for the conditions i.e. warm hi viz coat, lots of layers of clothing, gloves, and lined boots. Allow frequent rest periods to warm up.	1	4	4	
Hail, Snow & Snow Storms	Poor visibility. Slips trips & falls.	Site Operative	2	4	8	Falling snow may cause poor visibility, assess the situation and do not operate plant if visibility is low. Snow may cover up potential hazards i.e. holes, trips fall - do not walk across snow covered site away from dedicated walkways and work area.	1	4	4	
Icy Roads	Vehicles skidding on ice. RTA	Plant/Vehicle Drivers Third Parties	2	4	8	Keep haul roads clear of snow & ice. Do not attempt to drive site vehicles unless the way is clear and is completely necessary. Avoid parking where other road users may skid and collide with site vehicle. i.e. on bends and at junctions	1	4	4	
Excessive Strong and Gusty Wind Conditions	Swinging Loads, Unsafe Operational Wind Speeds for Cranes and Rigs Potential Side Loading), Blown from Working at Heights, Flying Debris	Plant/Site Operatives 3 rd Party	2	4	8	Follow Manufacturers guidance lower all jibs or masts, retract any booms, lower powered platforms (MEWPS). Suspend all lifting operations if the wind is in excess of the lift plan and manufacturers instructions. Do NOT work at heights & Secure any loose materials.	1	4	4	
Lightning Storms	Electrocution, Fire, Damage to Equipment and Plant	Plant and Equipment Site Operatives	2	4	8	Follow Manufacturers guidance lower all jibs or masts, retract any booms, lower powered platforms (MEWPS). Suspend all lifting operations if the wind is in excess of the lift plan and manufacturers instructions. Do NOT work at heights & Secure any loose materials. Return to the ground and go to shelter(welfare facilities if possible). If Fire Breaks out follow Site Emergency Plans and call emergency services and or PC Emergency Team.	1	4	4	

Risk Assessment

Project Name	Newport Transporter Bridge	Work activity: Separation of Plant and Pedestrians		
Project Code	C1642			
Assessed By	Elliott Jones			
Date of Assessment	22/08/2022			
				Document No. RA047

Risk Assessment Key

Severity Score	Likelihood Score				
	1	2	3	4	5
1					
2	Low				
3		Medium			
4			High		
5					

Severity Key

Score	Severity
1	Minor Injury (First Aid)
2	Minor Injury (Hospital)
3	7 Day Injury
4	Specified Injury
5	Death

Likelihood Key

Score	Likelihood
1	Unlikely
2	May Happen
3	Likely
4	Very Likely
5	Certain

SIGNIFICANT HAZARDS	RISKS	PEOPLE/GROUPS AT RISK	RISK RATING			CONTROL MEASURES IN PLACE TO REDUCE / MITIGATE RISKS	RISK RATING			Comments
			L=LIKELIHOOD				L = LIKELIHOOD			
			S=SEVERITY				S = SEVERITY			
			R=RATING				R = RATING			
			L	S	R		L	S	R	
Operating Vehicles/Plant General	Collision with Other Vehicles/Plant	Operating Vehicles/Plant General	2	5	10	Method statement giving full details of operations. All SPUK operatives to be briefed by the site foreman. Plant & pedestrian segregation must in place and developed by the client. All operators must be competent to operate plant and equipment. All operators must be aware of pedestrian movements, pedestrian walkways in and around the site. All vehicle movements when reversing must be under the control of a banksman. Operators must adhere to the signed speed limits. Any obstructions caused by vehicles/equipment must be reported to the site management. Daily checks of vehicles to ensure all safety aspects are workin. Suitable lighting is provided at all times by the client, Where required additional task lighting will be provided by SPUK. All plant MUST have audible movement & slew alarms.	1	5	5	
Swing/Slewing Radius Uncontrolled Vehicle Movement Restricted areas	Pinch Points, Injury to persons, Damage to vehicles	Swing/Slewing Radius Uncontrolled Vehicle Movement Restricted areas				All Movements of Plant and Equipment Must be under the Control of a Competent Banksman. Exclusion zones must be established to prevent unauthorised persons entering the SPUK working area (10m where practicable). SPUK Piling Foreman to ensure the areas surrounding the Machines are kept clear and no one enters areas between the machine and a position of no escape. Operators to ensure no loose clothing can interfere with the controls No Operators to enter areas where there is a risk of pinching or trapping h.azard Ensure no mobile plant is positioned where slewing operations impinge upon areas where members of the public are unprotected, e.g. permanent or temporary footpaths, or roads used by the public.				

Risk Assessment

Walking and working in Site	Struck by Vehicles, Plant and Equipment SPUK and also Public Vehicles	Walking and working in Site	2	5	10	When Walking on Sites, all SPUK staff must use the designated pedestrian walkways and only cross at the appropriate crossing points. All SPUK staff when walking Must be aware of Vehicle Movements and be vigilant. SPUK Site Supervisor to ensure that all Site Operatives are working in a safe area and where practicable erect suitable physical barriers, Berms or wheel stops in place. All persons working or walking in the site MUST be wearing Full Hi Vis and PPE as required. All SPUK staff Must only walk in the areas designated for Pedestrians.	1	5	5	
Delivery Drivers	Struck by SPUK Plant or Vehicles Collision with SPUK Vehicles, Plant	Delivery Drivers	2	5	10	SPUK Site Supervisor to ensure all delivery drivers, where practicable are informed to brief drivers to report to site offices before entering sites. All Deliveries must report to Site Offices/Security to ensure they can safely proceed onto site and additionally to allow SPUK staff to brief them on any potential hazards whilst delivering/Loading/Unloading. Vehicle drivers must follow dedicated haul roads.	1	5	5	

Risk Assessment

Project Name	Newport Transporter Bridge	Work activity: Underground Services			
Project Code	C1642				
Assessed By	Elliott Jones				
Date of Assessment	22/08/2022				
					Document No. RA048

Risk Assessment Key

Severity Score	Likelihood Score				
	1	2	3	4	5
1					
2	Low				
3		Medium			
4			High		
5					

Severity Key

Score	Severity
1	Minor Injury (First
2	Minor Injury
3	7 Day Injury
4	Specified Injury
5	Death

Likelihood Key

Score	Likelihood
1	Unlikely
2	May Happen
3	Likely
4	Very Likely
5	Certain

SIGNIFICANT HAZARDS	RISKS	PEOPLE/GROUPS AT RISK	RISK RATING L=LIKELIHOOD S=SEVERITY R=RATING L S R			CONTROL MEASURES IN PLACE TO REDUCE / MITIGATE RISKS	RISK RATING L = LIKELIHOOD S = SEVERITY R = RATING L S R			Comments
Buried Electrical Service	Striking Live Cable Explosion Fire Electrocution	Piling Ops Third Parties & Third-Party Premises	2	5	10	All work must take place as detailed in HSG47 avoiding danger from underground services. SPUK must obtain service plans from service owner, pc or client (3rd party). Asset/service owners to identify cables. A pre-use survey must be conducted in conjunction with HSG47 – cat and genny by 3rd party as detailed above. all identified services must be marked on the ground when found and exposed where required. Assume all services are live until proven otherwise. Ensure a permit to dig has been issued before starting work, tif the client refuses to issue a permit to dig/break ground than work must not start.	1	5	5	
Buried Gas Service	Fracture of Gas Main Explosion Fire	Piling Ops Third Parties & Third-Party Premises	2	5	10	All work must take place as detailed in HSG47 avoiding danger from underground services. SPUK must obtain service plans from service owner, pc or client (3rd party). Asset/service owners to identify cables. A pre-use survey must be conducted in conjunction with HSG47 – cat and genny by 3rd party as detailed above. all identified services must be marked on the ground when found and exposed where required. Assume all services are live until proven otherwise. Ensure a permit to dig has been issued before starting work, tif the client refuses to issue a permit to dig/break ground than work must not start. Implement No Smoking/Naked Flame Zone. Ensure A Permit to Dig Has Been Issued Before Starting Work.	1	5	5	
Buried Water Service	Fracture of Water Main	Piling Ops Third Parties & Third-Party Premises	2	4	8	All work must take place as detailed in HSG47 avoiding danger from underground services. SPUK must obtain service plans from service owner, pc or client (3rd party). Asset/service owners to identify cables. A pre-use survey must be conducted in conjunction with HSG47 – cat and genny by 3rd party as detailed above. all identified services must be marked on the ground when found and exposed where required. Assume all services are live until proven otherwise. Ensure a permit to dig has been issued before starting work, tif the client refuses to issue a permit to dig/break ground than work must not start.	1	4	4	

Risk Assessment

Project Name	Newport Transporter Bridge	Work activity: Hand Protection
Project Code	C1642	
Assessed By	Elliott Jones	
Date of Assessment	22/08/2022	
		Document No. RA050

Risk Assessment Key

Severity Score	Likelihood Score				
	1	2	3	4	5
1					
2	Low				
3		Medium			
4			High		
5					

Severity Key

Score	Severity
1	Minor Injury (First Aid)
2	Minor Injury (Hospital Treatment)
3	7 Day Injury
4	Specified Injury
5	Death

Likelihood Key

Score	Likelihood
1	Unlikely
2	May Happen
3	Likely
4	Very Likely
5	Certain

SIGNIFICANT HAZARDS	RISKS	PEOPLE/GROUPS AT RISK	RISK RATING L=LIKELIHOOD S=SEVERITY R=RATING L S R			CONTROL MEASURES IN PLACE TO REDUCE / MITIGATE RISKS	RISK RATING L = LIKELIHOOD S = SEVERITY R = RATING L S R			Comments
All Handling of Tools, Equipment and Materials	Cuts, Abrasions, Contusions, Skin Disorders,	All Operatives				Keep all cutting tools and equipment well maintained and all cutting edges in a sharp condition. Ensure all blades are safely locked away and or shielded when not in use. Only use the correct tools and equipment for the task in hand. Ensure guards are correctly utilised where required. Use push stick or alternate measures to keep hands and fingers away from cutting or sharp surfaces. Ensure all guarding of equipment is fit for purpose and is working correctly (PUWER 98). Ensure residual risk can be lowered after administrative or engineering control measures, Introduce PPE as last form of protection.				
Handling Equipment and Materials	Trapped Fingers, Slips & Trips, Cuts, Abrasions and Contusions.	Slinger Piling Operatives				Cowhide gloves with elasticised wrist band. Compliant with CE CAT1 SIMPLE DESIGN (CATEGORY 1) For areas of 'minimal risk' where the effects of not wearing a glove are easily reversible or superficial. Such products are self-certified.				
Operation of Machinery i.e. Giken Silent Piler	Trapped Fingers, Cuts, Damaged Hands	Giken Operator Plant Operators				Kevlar knitted polka dot grip fingerless glove may be required where extra dexterity is needed i.e. such as pressing small control buttons on machinery. Approved to BS EN 388 EN 388 - This standard applies to all kinds of protective gloves giving protection from mechanical risks, in respect of physical problems caused by abrasion, blade cut, puncture, tearing or impact cut. This standard also covers risk of electrostatic discharge.				

Risk Assessment

Project Name	Newport Transporter Bridge	Work activity: Fatigue
Project Code	C1642	
Assessed By	Elliott Jones	
Date of Assessment	10/03/2021	
		Document No. RA051

Risk Assessment Key					
Severity Score	Likelihood Score				
	1	2	3	4	5
1					
2	Low				
3		Medium			
4			High		
5					

Severity Key	
Score	Severity
1	Minor Injury (First Aid)
2	Minor Injury (Hospital Treatment)
3	7 Day Injury
4	Specified Injury
5	Death

Likelihood Key	
Score	Likelihood
1	Unlikely
2	May Happen
3	Likely
4	Very Likely
5	Certain

SIGNIFICANT HAZARDS	RISKS	PEOPLE/GROUPS AT RISK	RISK RATING			CONTROL MEASURES IN PLACE TO REDUCE / MITIGATE RISKS	RISK RATING			Comments
			L=LIKELIHOOD				L = LIKELIHOOD			
			S=SEVERITY				S = SEVERITY			
			R=RATING				R = RATING			
			L	S	R		L	S	R	
Tiredness from travelling	lack of attention to the task in hand resulting in failures which could cause serious injury or death	Operatives, Third Parties, Public	3	3	9	Operatives travel to hotel on a Sunday to start work on the Monday to limit working & travelling hours, On Fridays if the project has run well and targets have been achieved operatives can leave site earlier to avoid traffic and limit working hours. When working night shift it is a procedure that the operatives must travel back to the hotel and rest for a minimum of 6 hours before driving home. SPUK allow operatives to use late check out at the hotels to allow them to rest if required before travelling. Have a good night's sleep before driving for long journey and start fresh. Where possible, start your trip early in the day and avoid driving straight after lunch. It is particularly important to avoid driving during times you would usually be asleep. Plan a 15-minute break or rest stop every two hours. Take advantage of designated rest areas to get out of the vehicle and stretch. As a rule, staff should avoid driving more than 5 hours in a single day. Driving should not exceed eight hours in a single day.	2	3	6	
Working In wet/cold environments	lack of attention to the task in hand resulting in failures which could cause serious injury or death	Operatives, Third Parties, Public	3	3	9	Ensure adequate welfare facilities are available including drying room to allow operatives to take regular breaks and dry any wet clothing and/or PPE	1	3	3	
Operation of Machinery when tired or fatigued i.e. Pile Press, Crane, Piling Rig	lack of attention to the task in hand resulting in failures which could cause serious injury or death	Operatives, Third Parties, Public	3	3	9	Ensure workplaces are well-lit and ventilated SPUK to provide information and training on fatigue management Encourage employees to report any concerns they may have about work-related fatigue. Avoid work arrangements that provide incentives to work excessive hours Ensure clear work processes and effective planning e.g. plans to deal with workload changes due to absenteeism, staff on leave or seasonal work pressures Ensure employees take adequate breaks	2	3	6	

Risk Assessment

Project Name		Work activity: Leptospirosis	
Date of Assessment	03/11/2021		
Assessed By	Richard Greenwood		
Review	03/11/2022		
		Document No.	SHE.RA.057

Risk Assessment Key

Severity Score	Likelihood Score				
	1	2	3	4	5
1					
2	Low				
3		Medium			
4			High		
5					

Severity Key

Score	Severity
1	Minor Injury (First Aid)
2	Minor Injury (Hospital)
3	7 Day Injury
4	Specified Injury
5	Death

Likelihood Key

Score	Likelihood
1	Unlikely
2	May Happen
3	Likely
4	Very Likely
5	Certain

SIGNIFICANT HAZARDS	RISKS	PEOPLE/GROUPS AT RISK	RISK RATING			CONTROL MEASURES IN PLACE TO REDUCE / MITIGATE RISKS	RISK RATING			Comments
			L=LIKELIHOOD				L = LIKELIHOOD			
			S=SEVERITY				S = SEVERITY			
			R=RATING				R = RATING			
			L	S	R		L	S	R	
Contact with vermin: Leptospirosis, lymes disease.	Contact with unclean water-adsorption through cuts/ scrapes/ ingestion/ dust/ fumes	All site workers	3	5	15	Staff to receive adequate information, instruction and supervision regarding leptospirosis, e.g. leaflet INDG84. Any dead vermin to be left in situ. No eating, drinking or smoking until hands have been thoroughly washed. Site workers not directly working near the water but close by should cover all cuts and grazes with waterproof plasters.	2	5	10	
Tetanus/ hepatitis/ other sewage related diseases	Contact with unclean water-adsorption through cuts/ scrapes/ ingestion/ dust/ fumes	All site workers	3	4	12	Any operatives with cuts/ grazes should not work in direct contact with the water. All staff are advised to keep their tetanus/ hepatitis immunisation up to date. If in doubt consult your G.P	1	4	4	
General contaminated material to include sharp debris and needles	Contact with unclean water-adsorption through cuts/ scrapes/ ingestion/ dust/ fumes	All site workers	2	5	15		1	5	5	

Risk Assessment

Project Name		Work activity: Engineers Surveying On Site		
Date of Assessment				
Assessed By	Richard Greenwood			
Review				
				Document No. SHE.RA.058

Risk Assessment Key

Severity Score	Likelihood Score				
	1	2	3	4	5
1					
2	Low				
3		Medium			
4			High		
5					

Severity Key

Score	Severity
1	Minor Injury (First Aid)
2	Minor Injury (Hospital)
3	7 Day Injury
4	Specified Injury
5	Death

Likelihood Key

Score	Likelihood
1	Unlikely
2	May Happen
3	Likely
4	Very Likely
5	Certain

SIGNIFICANT HAZARDS	RISKS	PEOPLE/GROUPS AT RISK	RISK RATING			CONTROL MEASURES IN PLACE TO REDUCE / MITIGATE RISKS	RISK RATING			Comments
			L=LIKELIHOOD				L = LIKELIHOOD			
			S=SEVERITY				S = SEVERITY			
			R=RATING				R = RATING			
			L	S	R		L	S	R	
Poor access to work area, Improper footwear for the working environment.	Sprains, strains, fractures	Engineers, All accessing site	2	5	10	Designated Footways/paths in good condition. S3 safety workboots to be worn at all times when on site	1	5	5	
Obstructions in and on floors and walkways. Uneven Ground	Trips, falls	Engineers, All accessing site	2	5	10	Good housekeeping practices, ensure that correct footwear is worn at all times on site	1	5	5	
Engineer not instructed on method of surveying	Slips, trips, falls	Engineers	3	4	12	Engineer instructed on safe method of surveying	1	4	4	
Working Near Pile Line after pre-augering	Falls, ground collapse	Engineers, All accessing site	3	4	12	Auger holes to be backfilled with suitable material by the client Create exclusion zone around auger holes until the auger hole backfill is checked for stability. Ensure that when 10 piles are installed after preaugering that the ground around the pile is checked for voids to avoid collapse. Any areas that are unstable must be barriered off until backfill can be made stable.	2	3	6	
Poor lighting	Slips, trips, falls	All accessing site	2	5	10	Background lighting provided by the principal contractor. Task lighting provided by SPUK	1	5	5	