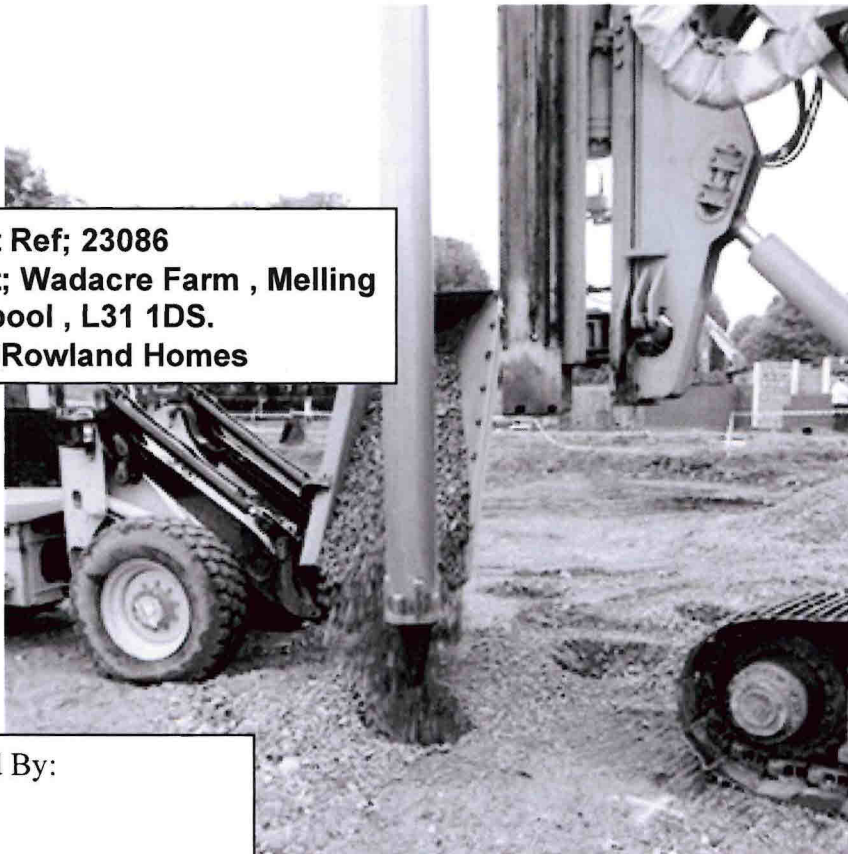




TOWN & COUNTRY
VIBRO LTD

Combined Risk Assessment & Method Statement (RAMS) Vibro stone column installation

- Project Ref; 23086
- Project; Wadacre Farm , Melling , Liverpool , L31 1DS.
- Client; Rowland Homes



Document Approved By:

C A Jones

Date:04-09-2023

Town & Country Vibro Ltd

Health & Safety Policy Statement

Under The Health and Safety at Work Act 1974, the Director of Town & Country Vibro (T&C) is committed to the health, safety and welfare of its employees, sub- contractors and visitors. In achieving the standards necessary to assure this, the company will endeavour to comply with all relevant safety legislation, codes of practice and industry best practice

The Director understand their responsibility to all those affected by this undertaking. In order to mitigate any risk so far as is reasonably practicable Town & Country Vibro will develop, implement, document and maintain a suitable Health and Safety Management System.

Risk mitigation will also be facilitated through the development of a positive health and safety culture built on management control, employee competence, effective communication systems and employee involvement and ownership of safety.

The Director of Town & Country Vibro is committed to the continual improvement of health and safety performance across the organisation. This will be achieved through monitoring and reviewing the company's performance against management system requirements, organisational standards and legal requirements.

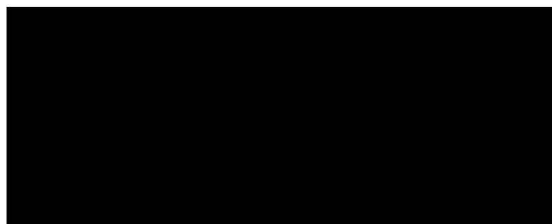
Town & Country Vibro employ an external health and safety advisor, namely William Brown of WJB Training & Consultancy, who's information and NEBOSH certificate was provided at PQQ stage prior to being awarded the contract.

Environmental Policy Statement

Town & Country Vibro recognises that its activities have an environmental impact and minimising any negative aspects of that impact is an integral part of its overall business objectives. To that end it will envisage in the activities listed below:

- Establish standards and management procedures to ensure that all the requirements of relevant environmental legislation are met.
- Ensure that demolition arising's are recycled wherever possible.
- Seek to reduce consumption of materials in all operations, reuse rather than dispose wherever possible and promote recycling and the use of recycled materials.
- Aim to achieve energy efficiency in offices and in the use of plant and vehicles.
- Reduce, wherever practical, the level of harmful emissions from any activity.
- Ensure awareness of environmental issues within the company by training and by inclusion in operational management procedures.
- Monitor environmental performance.
- Publish this environmental policy in appropriate ways to confirm commitment to the activities included in it.

Originals signed by Managing Director



Procedures for Risk Assessments & Method Statements

1. OBJECTIVE

To provide a structured process for the identification, elimination and control of risk on the site at Wadacre Farm , Melling , Liverpool , L31 1DS.

2. INTRODUCTION

Employers and Self- Employed persons are required to carry out suitable and sufficient risk assessments of their undertakings including:

- Design Risk Assessments
- General Construction Hazards
- Vibration at Work
- Control of Substances Hazardous to Health
- Manual Handling of loads
- Noise at Work

A successful Risk Assessment depends on the person carrying out the assessment understanding the difference between a HAZARD and a RISK.

A HAZARD is the potential to cause harm.

- A hole in the piling platform is a Hazard.

A RISK is the likelihood of that potential being realised.

- The hole in the piling platform (Hazard) with no protection to prevent persons falling through is a High Risk.
- The same hole, (Hazard) fully protected with guardrails etc is a Low Risk.

The assessment of risk must commence at the planning and design stage of a project. For all Risk Assessments a hierarchy of control should be employed:

- **Elimination** – if possible, avoid the risk altogether- For example do the work in a different way, taking care not to introduce new hazards; lower the probe into the open void to fill it until stone is added,
- **Substitution** - you could substitute a dangerous product or tool for one, which is less dangerous.
- **Control the risk at source** - For example using manual handling aids when lifting heavy objects; fitting local exhaust ventilation to dusty processes; mechanising the process so the person is separated from the hazard; changing the system of work to one which involves less manual handling.
- **Education and Training** – ensure that workers and others understand the risk and know what they must do, for example by giving toolbox talks on health issues, or running through the method statement during induction training.
- **Personal Protective Equipment** – Provided by T&C Vibro this should only be used as a last resort as it is the least reliable form of protection. Where PPE is provided, it will be made available free of charge for T&C personnel, by T&C Vibro under section 9 of the Health and Safety at Work act 1974; suitable for the individual; provided with suitable storage and cleaning arrangements and regularly checked to make sure it is in good condition. Our minimum PPE is Hard Hat [BSEN397] , Hi-Viz Vest

Town & Country Vibro Ltd

that Conforms to EN471 and Safety Footwear that conforms to EN ISO20345-2011.

3. LEGISLATION & GUIDANCE

The following is a list of legislation/guidance that may assist with undertaken Risk Assessments & Method Statements.

- Management of Health & Safety at Work Regulations 1999
- Construction (Design & Management) Regulations 2015
- Control of Vibration at Work Regulations 2005
- Control of Noise at Work Regulations 2005
- The Provision & Use of Work Equipment Regulations 1998
- The Lifting Operations and Lifting Equipment Regulations 1998
- The Manual Handling Operations Regulations 1992
- The Control of Substances Hazardous to Health Regulations 2002
- IND (G) 132 Five steps to Risk Assessment
- HSE L21 Management of Health & Safety at Work
- GE700 Construction Site Safety.
- HS(G) 151 Protection of the Public – Your Next Move
- Control of Asbestos at Work Regulations 2012
- Environmental Protection Act 1990

4. Risk Matrix and Methodology

The rating given will be calculated following a chart score of severity of the hazard/ impact and the likelihood of the risk/ impact occurring. This is rated via the number scale as follows.

Scale	Severity	Likelihood
1	Injury/ Impact negligible	< 10% chance
2	First Aid or contained	< 25% chance
3	Lost time injury or contained within site	<40% chance
4	RIDDOR or breach of site boundary	<75% chance
5	Multiple/ Fatality RIDDOR or breach of consent	>75% chance

SEVERITY	5	5	10	15	20	25
	4	4	8	12	16	20
	3	3	6	9	12	15
	2	2	4	6	8	10
	1	1	2	3	4	5
		1	2	3	4	5
	LIKELIHOOD					

Town & Country Vibro Ltd

The two ratings are plotted on the chart below and the subsequent rating shown in the chart. The items will be determined as follows.

Green= low risk/ impact

Yellow= medium risk/ impact- control measures required such as written instructions/ training/ mechanical controls SFRP- BATNIEC/ PPE

Red= high risk/ impact- further controls required such as Permit to Work/ mechanical controls/ PPE as a last resort.

When recording the Risk Rating ensure that both the Likelihood and Consequence scores are included.

High	Improve control measures; consider stopping work. Conducting work at this level of risk is to be reported up the Line Management / Command chain.
Medium	Review control measures and improve if reasonably practicable to do so, consider alternative ways of working.
Low	Maintain control measures and review if there are any changes.

Risk Assessments are to be reviewed:

- Annually.
- If there is reason to doubt the effectiveness of the assessment.
- Following an accident or near miss.
- Following significant changes to the task, process, procedure or Line Management.
- Following the introduction of more vulnerable personnel.
- If "Generic" prior to use

METHOD STATEMENT SCOPE

The Principal Contractor is Rowland Homes.

All operatives must attend the Rowland Homes site induction.

Sequence of works will be confirmed by principal contractor.

This method statement covers all the work practices and aspects of the works associated with and undertaken by Town & Country Vibro. All hazards and the inherent risks have been identified and the appropriate risk assessments have been carried out in accordance with the guidance laid down in the MHSW regulations, this also includes risk assessments in accordance with the guidance laid down in the COSHH regulations.

Town & Country Vibro foreman will provide the Rowland Homes site agent with relevant qualifications along with the loading shovel operator.

The piling area must be segregated by solid barriers provided by Rowland Homes.

The probe penetrates to the required depth, driven by the vibrator. Once the probe is removed, an open void is formed and then suitable amounts of aggregate are poured down the void. The probe is re-administered to the stone within the void, further compacting and displacing the aggregate to the desired specification.

Town & Country Vibro Ltd

During penetration the insitu soils are displaced laterally. In granular materials the lateral displacement and vibration will result in compaction of the ground locally. In cohesive materials the displacement will mobilise the soils passive resistance.

The lifting/reinserting cycle is repeated until a dense stone filled column has been constructed over the full depth penetrated by the probe.

This process will be repeated to form vibro stone columns as per TCV's design layout drawings referenced 23086 and site permitting.

PERSONNEL & EQUIPMENT

The resources employed on a typical project are as follows:

- 1 No telescopic leader rig along with Maintenance Schedule and annual inspection certificate.
- 1 No JCB 411 side tipping loading shovel and driver along with annual inspection certificate
- Aggregates
- Steel Bunded Fuel Bowser with Spill kit and Drip Tray
- 1 No 8 mtr steel probe

PROCEDURE (METHODOLOGY)

- All operatives are to be briefed on the contents of this safe system of work prior to commencement and to be inducted by the Rowland Homes foreman.
- T&C will provide site agent with Plant inspection certificates to be checked before we start work.
- Permit to penetrate must be signed by Rowland Homes site agent.
- Check to ensure the areas to be worked have been suitably prepared and that no other contractors are working within the immediate area.
- Receive a copy of the Ground Plate Load Bearing Certificate for the Piling Mat from the Principal Contractor, who will guarantee the piling platform is safe, and to FPS standard.
- Slings to be inspected daily and before every use by T&C site foreman.

General:

- Access to the working area for plant and materials will be through the principal contractor's traffic management system at Wadacre Farm.
- Plant will be delivered to site using a low loader and unloaded into a safe area as designated by the principal contractor. Fall arrest systems to be used if edge protection is not available on low loaders when accessing the cab of the machine.
- The proposed working sequence is to be agreed with the principal contractor's site manager.
- The ground treatment work involves the installation of vibrated stone columns by the dry top feed process at locations indicated on the T&C vibro stone column layout drawings referenced 23086.
- T&C will carry out the ground treatment works.
- It is understood that other works maybe in progress at the site; however these should not encroach into the immediate vicinity of T&C's operations.
- T&C will make their plant safe and secure when ever they are not in the plant and at the end of each shift. All keys must be removed from plant as you exit it .
- T&C site operatives to comply with the principal contractor's emergency procedures and any other site rules advised by the contractor.
- T&C will abide by the Principal Contractors rules regarding protection to the general public

Town & Country Vibro Ltd

under HSG151, and section 7 of the Health and Safety at Work Act 1974 and will assist the Principal Contractor by ensuring that their protection measures are not interfered with by T&C under Section 8 of the Health and Safety at Work Act 1974.

VIBRO-PILING OPERATION

Prior to starting installation of stone columns the following will be completed. T&C employees will attend a site specific induction by the Main Contractor.

- All piling will be constantly monitored with a Datum system, this system has alarms and flashing warning lights. The first light to go off will be a Amber one and set to 8mms and the second light and siren is Red this will be set to 10mms if this goes off we will stop piling and look first as to why it has gone off. that enables the operatives to see if there are any high readings. This minimises any possibility of structural damage to any nearby buildings. If we are constantly getting high trigger readings we will first look at having Rowland Homes put in a isolation trench. If there is room to do so if there is not enough room for one, we will look at Pre-Augering the plot.
- The T&C full Method Statement will be read and understood by all T&C site employees. There is then an opportunity to discuss the document with the site supervisor / contracts manager. The document is then signed is then signed to acknowledge receipt and understanding.
- The T&C "Permit to Penetrate Ground" will be completed by the Principal Contractor & the T&C site supervisor and then retained by the T&C site supervisor
- The mandrel will be lifted into the jaws of the vibro, using certified 5 ton minimum capacity sling using a choke on the lifting eye of the mandrel and a certified de-shackle on the lifting point of the machine connected to specific lifting points on the mandrel and the vibro hammer casing.
- Firstly, the lifting eye on the mandrel and the rig will be inspected prior to first use. Once the probe is lifted upright, the probe will be leant onto the raised bucket or forks of the loading shovel whilst still slung to the machine. The vibro will be positioned to lower onto the clamping point of the probe. It will clamp onto the probe, straighten the probe up, drive into the ground and then be checked to ensure that the sling and shackle are still in good condition and safe for use. Clamping pressure on the rig will be monitored continuously.
- Before the probe is removed, all the lifting equipment and lifting points will be inspected by the trained rig operator and then the machine operators to ensure no personal will stand within the collapse radius of the machine. Leader 2 will be lowered to the ground. When removing the probe, the probe will be driven into the ground 1m, or deeper if required, so that it is self-supporting vertically. The clamps will be released and the vibrator with the lifting point on the machine will be immediately raised straight up to remove any slack within the sling. The probe can then be safely lifted out of the ground using the sling. Once the probe has been removed from the ground, the probe will be lowered to the ground whilst the operator slews the machine to the left or anticlockwise to ensure that the mast of the machine is between the probe and the cab whilst it is being lowered paying attention to the angle of the sling whilst it is being lowered. Once on the ground, the 'D' shackle can be removed from the rig, separating the probe from the machine.
- The stone column positions will be set out by T&C from predetermined setting out points given by the Principal Contractor as stated on T & C's vibro stone column layout drawing(s).
- The rig and loading shovel will move into position via safe and suitable access and piling platforms prepared by main contractor to fps standard, ready for installation to commence.
- The specially designed probe will be positioned over the first setting out point and will commence penetration.

Town & Country Vibro Ltd

- Upon completion of the penetration, the probe will be removed and clean 75x40 grade aggregate (or similar) will be poured down the void via side tipping bucket on the JCB 411 loading shovel in 300mm intervals.
- The probe will be re-administered in 300mm intervals until adequate compaction is formed to compact and displace the stone within the void, until a full stone column is formed up to ground level, when the probe will be withdrawn.
- The rig will then re-position the probe over the next setting out point and repeat the process again, to form a suitably compacted stone column.
- The aggregate is delivered in tipper lorries to a designated stock pile area as defined by the principal contractor and will be banked by T&C foreman when it arrives to site. The aggregate is then collected by a JCB411 Loading Shovel with side-tipping capability to be transported to the location where vibro stone column installation is taking place.
- If a machine breaks down, the foreman will contact the office for instruction depending on the nature of the breakdown. The office will manage the repair of the machine in a safe way. If there is an oil or fuel leak, the foreman will use the provided spill kit to contain the spill.
- When refuelling, the loading shovel will bring the steel banded bowser to the rig to pump diesel into the tank. Spill kits will be ready to contain any potential spills, and both machines will be switched off when refuelling takes place.

Testing / Monitoring method:

Testing of stone columns will be undertaken by plate load tests and dummy strip footing tests, as specified within the T&C tender which is the basis of the Contract Award. All columns will be recorded on daily log sheets indicating the depth the probe penetrated, and the amount of aggregate used to form the column. Test results will be recorded and issued to the main contractor as-per the testing method statements.

Plate load tests;

Further to installation of vibro stone columns, it is recommended that plate load tests are undertaken (in accordance with the method set out below), the results of which should provide assurance that an acceptable level of workmanship has been achieved.

ICE recommend that 1 plate load test should be carried out per 100 columns installed, however, the Main Contractor is responsible for seeking clarification from the project design team and any relevant local authority or statutory body, to ascertain project specific testing requirements and must advise Town and Country Vibro Ltd of the recommendations prior to agreement of the sub-contract programme and commencement of the vibro works on site.

To ensure accuracy of plate load test results, where the programme allows, it is preferable that testing is carried out when the ground is dry and on columns that have been installed for over two days.

EQUIPMENT REQUIRED TO UNDERTAKE THE TEST;

- Either 40 Tonne Piling rig (as kentledge) or minimum 24 tonne excavator
- Steel plate 600mm diameter x 25mm thick
- Referencing beam
- Hydraulic Jack
- 3 Extensometer gauges
- Sand

METHOD

To ensure the most accurate results, stone columns that are over two days old are favourable for testing on dry ground conditions. A mechanical excavator with a toothless bucket is to be used to excavate to a depth of 400mm below working ground level, over the selected column, complete the excavation by

Town & Country Vibro Ltd

hand to minimise column disturbance. The excavation is to be levelled out using sand to form a suitable level setting for the steel plate. The plate is to be placed onto the sand and levelled.

Steel reinforcing beams will bridge the excavation from the sides on metal stakes (located a min of 150mm from the plate) and provide surface to place the 3 no. extensometer settlement gauges. Once the gauges have been calibrated to reference beams, load will be applied in the form of a jack placed in the middle of the plate, reacting to the underside of a suitable heavy machine as a reaction for to the load to be applied.

A Pre-load of 2 tonnes is applied initially for a short period of time in order to bed in the test plate. Once this has been carried out, the load is removed and the gauges reset.

The load is then applied in increments of 1 tonne and will be held for a period of 5 minutes. The settlement gauges will be monitored/recorded until the rate of settlement has dropped below 0.02mm per two minutes. Once this has been achieved the load is then increased at 1 tonne increments to a maximum load of 2.5 x working load.

If during the test the gauges are not settling consistently between the three extensometers then the placement of the plate has not been carried out properly, and the test should be re-run.

Upon Completion of the required load being reached with the settlement rate being below that set out above, the load will be fully removed and the recovery settlement recorded for 5 minutes, and then recorded every 2 minutes until the recovery is less than 0.02mm per 2 minutes.

Dummy footing tests (if required;)

ICE recommend that 1 dummy foundation test should be carried out per 1000 columns installed, however, the Main Contractor is responsible for seeking clarification from the project design team and any relevant local authority or statutory body, to ascertain project specific testing requirements and must advise Town and Country Vibro Ltd of the recommendations prior to agreement of the sub-contract programme and commencement of the vibro works on site.

To ensure the most accurate results, stone columns that are over two days old are favourable for testing on dry ground conditions. A mechanical excavator with a toothless bucket is to be used to excavate to a depth of 400mm and 750mm wide to accommodate the rectangular 1.5m x 0.6m stiffened steel dummy foundation footing which will be placed in-line over two adjacent vibro stone columns. The excavation is to be levelled out using sand to form a suitable level setting for the steel plate. The plate is to be placed onto the sand and levelled.

Once the dummy foundation plate has been placed steel reinforcing beams will bridge the excavation from the sides on metal stakes (located a min of 500mm from the plate) and provide surface to place the 3 no. extensometer settlement gauges. Two gauges are to be placed at adjacent corners and one placed centrally. Once the gauges have been calibrated to reference beams, load will be applied in the form of a jack placed in the middle of the plate, reacting to the underside of a suitable heavy machine as a reaction for to the load to be applied.

A Pre-load of 2 tonnes is applied initially for a short period of time in order to bed in the test plate. Once this has been carried out, the load is removed and the gauges reset.

The load is then applied in increments of 1 tonne and will be held for a period of 5 minutes. The settlement gauges will be monitored/recorded until the rate of settlement has dropped below 0.02mm per two minutes. Once this has been achieved the load is then increased at 1 tonne increments to a maximum load of 1.5 x working load.

If during the test the gauges are not settling consistently between the three extensometers then the placement of the plate has not been carried out properly, and the test should be re-run.

Once 1.5 x working load is achieved the test will be left overnight or for a minimum of 6 hours until the rate of settlement is less than 0.25mm in 30 minutes.

Upon Completion of the required load being reached with the settlement rate being below that set out above, the load will be fully removed and the recovery settlement recorded for a minimum of 15 minutes, and then recorded every 2 minutes until the recovery is less than 0.02mm per 2 minutes..

The RAMS is monitored on a job by job basis by the foreman who has a duty to notify the author of any variations from this, to actual on-site conditions that may have changed from the time of writing.

Town & Country Vibro Ltd

Suitable training and risk assessment can then be carried out for site operatives once T&C management have been notified.

Enforcement of the RAMS is carried out by Andrew Roberts, who will spot check a site monthly at random, and at his discretion to ensure it is adhered to.

Variations / Changes in the method of work:

Should any variation or change in the method or work be required, then the foreman must notify the author immediately prior to performing any further works. A full risk assessment and method statement will then be compiled from the requirements.

Welfare:

The Principal contractor shall be responsible for providing suitable and appropriate Welfare arrangements that meet the requirements of Schedule 2 of the CDM Regulations 2015.

Emergency Arrangements:

The Principal Contractor will provide suitable and appropriate arrangements to address all foreseeable first aid and fire eventualities. Wherever practicable T&C will have a first aid trained person on site. The location of the nearest A&E Hospital will be made available on the site noticeboard. The Principal Contractor and T&C employees will contact Andrew Roberts (Managing Director) in the event of any emergencies on 07581 493 444 or alternatively the office on; 01772 322 044

Training & Induction:

- All T&C site operatives will be trained to recognised industry standards, CSCS & CPCS for site operatives .Andrew Roberts is our in house face fit tester.
- The Principal Contractor shall be responsible for site inductions; T&C site operatives will sign up to this written system of work.
- Carl A Jones{07508816191} will carry out regular tool box talks and will do a thorough health and safety audit on the start of the project with all plant and operatives. He will then visit site once a month on larger projects .He is SMSTS Trained with over 16 years experience in Vibro stone columns.

ENVIRONMENT

Local Aspects & Impacts:	Dust ✓	Noise ✓	Vibration ✓	Fumes □	Light □	Vapours□
Controls Required:	Extraction	Suppression ✓	Damping ✓	Sweeping✓	Filters	Collection✓
Disposal Arrangements:	Segregation ✓	Skip ✓	COSHH Bin✓			
Storage Arrangements:	Container ✓					
Waste Management:	Landfill □	Reuse-on □	Recycle-on □	Reuse-off ✓	Recycle-off✓	
Legal:	http://environment-agency.resultspage.com/search?p=Q&ts=ev2&w=legislation&x=0&y=0					
Complaints Procedure	Complaints & Incident Form to be completed and the register updated.					

Town & Country Vibro Ltd

Vibro Piling & Associated Activities Risk Assessment

Title:	Vibro Stone Column installation	Ref No	TCV-23086
Site Name:	Rowland Homes , Wadacre Farm , Melling , Liverpool , L31 1DS.	Dated:	04-09-2023
Written By:	Andrew Roberts	Signature:	
Supervisor:	Carl Jones	Signature:	
Activity:			

A	Significant Hazards:	Persons at Risk	Likelihood 0 to 5	Severity 0 to 5	Risk Rating 0 to 25
1	Exposure to Whole Body Vibration	Operative	3	5	15
2	Exposure to noise	Operative	3	4	12
3	Striking Buried/Overhead Services	Operative	3	5	15
4	Mobile Plant	Operative	3	5	15
5	Interface with Contractors	Operative	3	4	12
6	Site Specific Hazards	Operatives	3	5	15
7	Fuel Spillages	Operatives	3	5	15
8	Loading & Unloading Plant	Operatives	3	5	15
9	Material Deliveries	Operatives	2	5	10
10	Fatigue	Operatives	2	5	10
11	Slips, Trips and Falls	Operatives	2	3	6
12	Lifting	Operative / Third parties	3	5	15

Give priority to hazards where the persons at risk, likelihood or severity are high. Include any controls that reduce the risks from the significant hazard in A

B	Control Measures: (For example, Work at height = Full scaffold instead of ladders)	Persons at Risk	Likelihood after control 0 to 5	Severity after control 0 to 5	Risk Rating after control 0 to 25

Town & Country Vibro Ltd

1	<ul style="list-style-type: none"> Preventative maintenance of plant. Operatives enclosed in covered, heated and dry cabs. Suitable plant machinery provided by T&C vibro. Restrict exposure/shared use, adhere to regulatory break times. Ensure seat cushions are not worn and serviceable. Main Contractor to ensure piling platform is level and adheres to FPS specification. 	Operative	1	4	4
2	<ul style="list-style-type: none"> Preventative maintenance of plant Restrict exposure/shared use Hearing protection to be worn outside of machinery only within 2m of vibrating hammer 	Operative	1	4	4
3	<ul style="list-style-type: none"> Service drawings available. Buried services exclusion zones marked clearly on ground by Main Contractor. Use of "Goal Posts" & Banksman where required. Permit to Break Ground signed by main contractor CAT & GENNY scan prior to vibro works by main contractor's fully trained operative. 	Operative	1	4	4
4	<ul style="list-style-type: none"> Establish and follow Main Contractor's traffic management plan and rules. Use audio and visual warnings, reversing mirrors clean and properly adjusted. Piling platform certificate to be signed and to FPS specification. Any ramps into excavation or elevated areas to be constructed by main contractor, and to FPS specification. 	Operatives	1	4	4
5	<ul style="list-style-type: none"> Follow PC's Traffic Management Plan. Attend pre-start meetings. Sign and understand induction and abide with site rules and instructions given by Main Contractor. Effective clear liaison & communication. 	Operative & Public	1	5	5

Town & Country Vibro Ltd

6	<ul style="list-style-type: none"> Site Specific Controls, Ensure that hazards identified at pre-start meeting are acknowledged. Working in accordance with TCV health and safety plan. 	Operatives & Site personnel	1	5	5
7	<ul style="list-style-type: none"> Operatives to use gloves when re-fuelling. Adequate wash and welfare facilities present. Clean up diesel spillages using spill kits provided, use 1000litre steel bunded bowser to store fuel. Wash hands after re-fuelling and prior to eating / drinking Do not position Diesel bowsers over or close to drains. 	Operative & Site personnel	1	5	5
8	<ul style="list-style-type: none"> Location of loading and unloading to be approved by site supervisor. Banksman to oversee on site loading and unloading. Banksman to oversee loading/unloading if on public highway/footpath. Loading on public highway / footpaths to be signed and guarded as necessary. Wherever possible, fall prevention measures can be used when climbing in/out of machinery. 	Operative	2	4	8
9	<ul style="list-style-type: none"> Banksman present. Site traffic plan to be understood Materials / fuel checked to be same as delivery ticket and signed for. Areas allocated for aggregate deliveries Gloves to be worn when handling 	Operative	2	4	8
10	<ul style="list-style-type: none"> Monitor actual time worked and identify if excessive hours are being worked. Site opening times determined by principal contractor, do not work on site if site is closed. Ensure adequate rest in a suitable premises. 	Operative	1	4	4
11	<ul style="list-style-type: none"> Wear the correct footwear provided. Ensure all walkways are clear of any obstructions or trip hazards. Walk in designated walkways provided by the client. Ensure all piling mats are installed correctly and are flat and suitable to walk across. 	Operatives	1	2	2

Town & Country Vibro Ltd

12	<ul style="list-style-type: none"> Lift plan in place Certified lifting accessories Daily and weekly checks for damage Trained Slinger signaller Exclusion Zones 	Competent person	1	5	5
-----------	---	-------------------------	----------	----------	----------

COSHH ASSESSMENT for VIBRO PILING

Company Name: Town and Country Vibro Limited	Activity or Process: Vibro Piling Materials
Assessed By: William Brown	Date Assessed: 19-10-22
	Review Date Oct 2023
Vibro Piling operations using aggregates, diesel fuel, marker paint	

Products - Materials Used	REF N°	Manufacturer – Supplier & Emergency Contact Details	WEL		Hazard Symbols	Risk Phrases	Safety Phrases	
			8 HR	15 Min STEL				
Aggregates	1	Groundtech UK, Units 7-8, Park Industrial Estate, Liverpool Rd, Ashton in Makerfield, Wigan, WN4 0YU tel: 01942271784 out of hours; 07801 251 929	See Data Sheet			R20 R22 R48	S22	
Diesel Fuels	2	Standard Fuel Oils, Carlton House, Gores Road, Knowsley Industrial Estate, Knowsley, L33 7X5 tel: 0151 548 3038 info@standardfueloils.co.uk	See Data Sheet			R40 R51/53	S2	S36/37 S61
Marker Paint	3	Sika Limited Watchmead Welwyn Garden City Hertfordshire, AL7 1BQ United Kingdom 01707 394444 EHS@uk.sika.com	See Data Sheet			R12 R36 R66/67 R52/53	S9 S16 S23 S25 S26 S37	S38 S60
Grease	4	Clarke International Ltd, Heronall Street, Epping, Essex CM16 4LG Tel: 01992 565 300	See Data Sheet			R36 R66	S2 S37	
Ref N°	Individual Product or Material use; delivery method, any interaction with other products or as a result of the process or operation							
1	Dusts not to be inhaled – potentially silica additives.							
2	Sensitization – Dermatitis							
3	Do not inhale vapours, only use outside							
4	Slip hazard – Prevent prolonged contact with skin, may lead to skin disorders / dermatitis							

Type-Frequency-Duration of Daily Exposure/Usage for the Overall Activity/Process <small>(Tick all applicable & enter time in brackets)</small>	INHALATION <input checked="" type="checkbox"/>	ABSORPTION <input checked="" type="checkbox"/>	INJECTION <input checked="" type="checkbox"/>	INJECTION <input type="checkbox"/>	EYE CONTACT <input checked="" type="checkbox"/>
	OFTEN <input checked="" type="checkbox"/>	SKIN CONTACT	SELDOM <input type="checkbox"/>	HOURS <input checked="" type="checkbox"/> (8)	MINUTES <input type="checkbox"/> ()

What are the Hazards?	People Affected & How?	Existing Controls	Risk Rating
Dusts & particulates	Inhalation - Eye	Well ventilated work areas – fabricate/cut in separate area where practicable – FFP3 mask	LOW
Wet splashes	Dermatitis-rashes-eye	Wear gloves when refuelling	
Fumes/vapours	Inhalation	Well ventilated work areas – fabricate/cut in separate area where practicable	
Prolonged skin contact	Bare skin contact	Wear gloves when greasing	

Additional Procedural Arrangements to be applied when required	Action Taken	Person Responsible	Done	Residual Risk
Checks on thorough examination & inspection certificates & registers for COSHH	Continual review of new products and materials that are less hazardous			LOW
Supervision & Monitoring requirements	Site standard arrangements			
Permit to Work	N/A			
Instruction & Training	Monthly toolbox talks with all personnel			
Emergency Arrangements	As per PC's requirements			
Health Surveillance	As and when required			

Town & Country Vibro Ltd

PPE Requirements <i>(Tick all applicable) ALL PROVIDED BY T&C VIBRO FOR EMPLOYEES</i> Enter specific type or BS Standard:									
	EN 166F ✓	EN 420 Nitrile ✓	BS EN 397 ✓	BS EN 20345:2004/A 1/2007 ✓	BS EN 471 ✓	BS EN 149:2001 ✓	BS EN 532 ✓		

Other hazards or conditions that may impact on the process or task: <i>(Tick all applicable)</i>	Fire	Housekeeping ✓	Slips & Trips ✓	Work @ Height ✓	Manual Handling	Mobile Plant ✓	Vapour Explosion
	Noise & Vibration ✓	Explosive Atmosphere	Client Interface or Operations	Lighting Humidity	& Lone Working	Environment	Confined Space

RISK RATING DEFINITIONS	HIGH (H)	If an incident occurs the injuries will be such that immediate medical treatment will be required and the person will be unable to return to work for more than 7 days. There may be long lasting injury or even permanent disability or death. With regards to health, permanent damage may be caused to someone's health.
	MEDIUM (M)	The injuries will be such that the person has to leave site to receive medical treatment at a hospital or doctors. However there will be no lasting damage and the person will fully recover.
	LOW (L)	If an incident occurs the injuries or losses will be minor. For example the injured person will be treated on site and will return to work with little or no lost time.

SAFE SYSTEM OF WORK CONFIRMATION OF RECEIPT AND UNDERSTANDING

Supervisor(s):

I confirm that I have read and understood the Safe System of Work and that I will ensure that all Operatives comply with it. If, for whatever reason, work cannot be carried out in accordance with its requirements, I confirm that any proposed changes will be agreed with the Principal contractors Site Manager before the work is carried out.

Date	Name / Position	Signature

Operatives:

I confirm that I understand the Safe System of Work and will comply with its requirements.

Date	Name	Signature

Town & Country Vibro Ltd
