BACHY SOLETANCHE

Secant Wall PILING WORKS STATEMENT & RISK ASSESSMENT

Contract / Enquiry Name	Peninsula Quays (Plot 1.03W)				
Project Document Number	MQ001-BSL-03W-XX-MS-X2-0014				
Technique	Secant Wall Installed via Cased Continuous Flight Auger (CCFA)				
Method Statement for	PILING WORKS				
Method Statement No	SF00264691-BSL-10-003-PR-0001	Rev.	02	Sheet:	1 - 25

MS written by	Thomas Escurier	Works Manager	Date:	11/05/2026
MS approved by (Contracts Manager)	TBC	Project Manager	Date:	
Client approved by			Date:	

Revision Status		
Rev	Date	Status / Amendments / Reason for change
01	11/05/2026	Initial Draft Submission
02	08/07/2026	Amended Scope of Work Section

Contents

1. INTRODUCTION 4
2. SITE LOCATION 4
3. SCOPE OF WORKS 4
4. HIGH LEVEL OF RISK 5
5. BRIEFINGS 6
6. PLANT & EQUIPMENT 6
6.1. CSP Piling Plant & Equipment 6
6.2. Generic BSL Site Plant & Equipment 6
6.3. Welfare 6
7. SITE PROJECT TEAM 7
7.1. Staff Personnel 7
7.2. Cased CFA Piling Personnel 7
8. MOBILISATION / DEMOBILISATION 7
8.1. Rigging / Derigging of Piling Rigs and Cranes 8
8.2. Wash Down / Cleaning of Plant and Equipment 8
9. PRESTART CHECKS 8
10. EXCLUSION ZONES 8
11. METHOD OF WORK – CSP 9
11.1. Guide wall construction 9
11.2. Setting Up 9
11.2.1. Concrete Pump and Agitator 9
11.2.2. Setting Out 11
11.3. Digging 12
11.3.1. Digging CSP Piles 12
11.4. Concreting 13
11.5. Reinforcement Installation 14
12. QUALITY CONTROL 15
12.1. Concrete Supply 15
12.2. Quality Records 15
13. ENVIRONMENTAL MANAGEMENT 15
13.1. Noise Vibration & Nuisance 15
13.2. Task Lighting 16
13.3. Air Quality & Dust 16
13.4. Pollution Prevention 16
14. SAFETY MANAGEMENT 16
14.1. Training 16
14.2. Plant Inspections 17
14.3. PPE 17
14.4. Working at Height 17

14.5. Lifting 18
14.6. COSHH 18
14.7. Services 18
14.8. Small Tools and Equipment 18
15. EMERGENCY ARRANGEMENTS 19
15.1. First Aid 19
15.2. Fire 19
15.3. Reporting 19
15.4. Emergency Contacts 19
15.5. Nearest Hospital – 20
APPENDIX A – RISK ASSESSMENT- refer to Wisbech risk assessment document 20
APPENDIX B – PLANT AND EQUIPMENT TECHNICAL DATA SHEET 22
APPENDIX C – COSHH DATA SAFETY SHEET- see Wisbech COSHH assessment document 25

1. INTRODUCTION

The purpose of this document is to define the scope of works, method of working, associated risks, and control procedures to be implemented by Bachy Soletanche Ltd. for the construction of Hard Pile (male pile) at circa 16.5m depth, 880mm diameter and Firm Piles (female pile) secant wall around the perimeter of the Plot 1.02 East.

All site operations are to be supervised by the nominated BSL site management team (Project Manager and Supervisor) to ensure that the works are being carried out in safe manner. If the onsite works procedures deviate from those agreed within this document, then works are to stop and reset or a new works procedure is to be established and agreed with Kanadevia Inova.

Once approved this RAMS it will be briefed to all BSL engineers, supervisors, and site operatives to ensure works are undertaken in a safe manner.

Typical Working Hour for BSL Works:
Monday – Friday: 07:00am to 18:00pm.
Saturday: 07:00am to 13:00pm.

2. SITE LOCATION

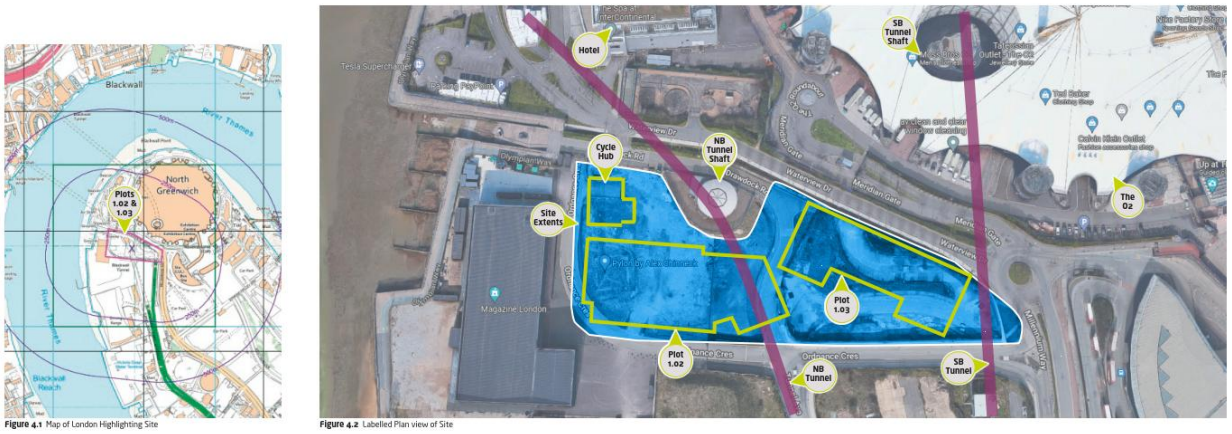


Figure 1. Site Location

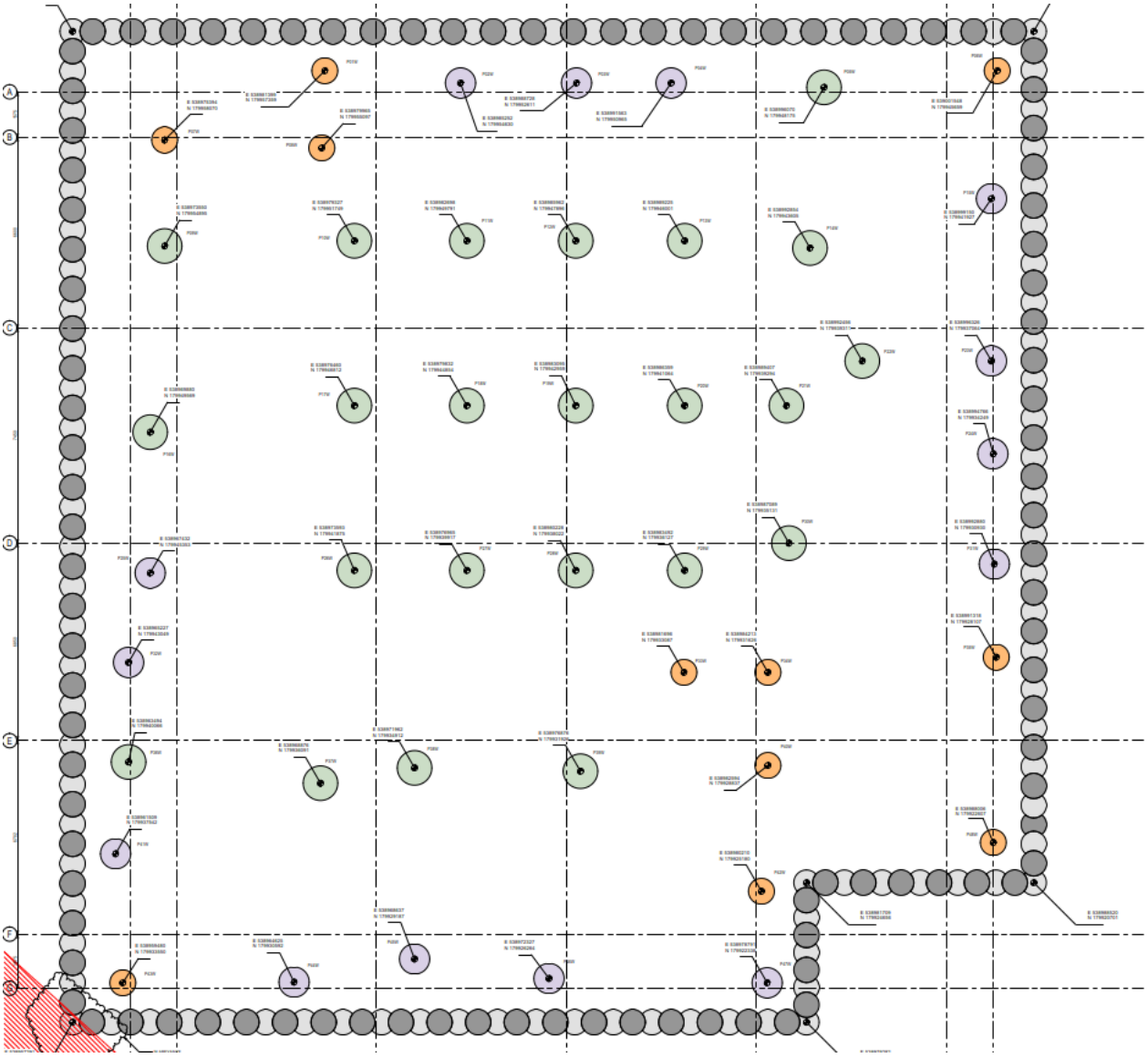
Greenwich Peninsula
London
SE10 0DX

3. SCOPE OF WORKS

Bachy Soletanche is contracted to construct 96nos. primary firm secant pile of circa 16m depth and 98nos. secondary hard secant pile of 16.5m depth ; 880mm diameter with Cased Continuous Flight Auger methodology (CCFA). Primary piles shall be formed using concrete mix C6/8 while secondary secant pile shall be formed in minimum C28/35 concrete.

Adjacent infrastructure
We are aware that there is an existing Thames Water asset running approximately parallel to the western boundary of the proposed secant wall, circa 4.0m deep below existing ground level. Due to the method of piling selected (i.e. CCFA), temporary casing will be used for the full depth of the piles during construction. This will minimize the risk of ground subsidence and effect on adjacent infrastructure. Furthermore,

anticipated deflection levels have been provided by Bachy to AKTII and Thames Water, to assist with the impact assessments conducted by others. A temporary guide wall will also be used in the construction of the secant wall, to facilitate stricter control measures on plan installation tolerances.



Secant Pile Wall Layout Plan

4. HIGH LEVEL OF RISK

The following high-level risks have been considered in the preparation of this MS:

- Proximity of site personnel and plant / equipment during piling works (Exclusion zones)
- Use of Compressed air to facilitate drilling.
- Spoil chute blocking / material falling.
- Working at height
- Use of MEWP's
- Lifting operations over work area
- Piling operations
- Concrete Blow-out.
- Impact on adjacent services (i.e. Thames Water, TFL assets)

Further task specific risk assessments have been considered and are provided in Appendix A of this MS.

5. BRIEFINGS

All BSL engineers, supervisors and site operatives will be briefed on the following documentation prior to the start of works onsite, see below:

- Site induction.
- Cased CFA Piling Method Statement Briefing.
- Cased CFA Piling Inspection and Test Plan (ITP).
- Lift Plan Briefings.
- Daily Start of Shift (SOS) Briefing – will be held at 07:30am daily.
- Applicable Permits (Permit to Dig, Permit to Lift, Permit to Load, etc).

All documentation will have been submitted to and approved by MAR ahead of the mobilisation of the piling plant and associated equipment.

6. PLANT & EQUIPMENT

6.1. CSP Piling Plant & Equipment

Description	Quantity
Cased CFA Piling Rig –BG45 (or similar)	1no.
760mm diameter Cased CFA Auger string	Various
Bauer Segmental Casing String OD=880mm	Various lengths
PM90 concrete pump (or similar)	1 no
12m3 PCP concrete storage drum	1 no
Compressor for drilling with air - 850 cfm	1 no
Attendant 14t – 20t Excavator	1 no
180-degree Dual View 9t Dumper	1 no
General Waste Skip	1no.
Concrete Washout Skip	1no.
Blow-Out chamber	1no.
80t lattice crane	1no.

6.2. Generic BSL Site Plant & Equipment

Description	Quantity
Bunded Fuel Tank	2no.
Storage Container (~6.1m x 2.4m)	1no.
Concrete Test Lab (~3.0m x 2.4m)	1no.
Jet Wash	1 per rig
Genie Z62/40 MEWP (or similar)	1no.

6.3. Welfare

Drying Room and Welfare in accordance with current legislation (toilets and washing facilities including hot running water) to be provided by MAR. Note that the toilet facilities shall be placed no more than 150m from the working area.

7. SITE PROJECT TEAM

The following site operatives will be required to complete the CCFA piling works, copies of CSCS / CPCS / IPAF Cards and safety critical medical will be available on request. Supervisors & Managers must hold as minimum SSSTS & SMSTS respectively.

7.1. Staff Personnel

Role	Quantity
Project Manager – TBC	1 no.
Contracts Engineer – TBC	1 no.
Site Engineer – TBC	1 no.
Supervisor – TBC	1 no.
Site Foreman – TBC	1 no.
Setting Out Engineer – TBC	1 no.
Concrete Technician	1 no.
Traffic Marshall	1 no.

7.2. Cased CFA Piling Personnel

Role	Quantity
CSP Piling Rig Operator	1 no.
CSP Rig Banksman	1 no.
CSP Piling Operatives	1 no.
CSP Pump Operator	1 no.
Crane Operator	1 no.

8. MOBILISATION / DEMOBILISATION

A full mobilisation / demobilisation delivery schedule will be issued by the BSL site management team and will ensure all are booked on the relevant delivery booking system 24hours in advance of the start of works.

Heavy plant (piling rig & cranes) that are classified as abnormal loads will be delivered to site on low loaders (approx. 28m in length). Where possible abnormal loads will be delivered to site outside peak hours, movement order to be raised in advance with the relevant local authority and must be in place in advance of the mobilisation /demobilisation dates. Delivery times for heavy plant will be in accordance with the project logistics / traffic management plan. BSL Site supervision and banksmen will be in attendance during the unloading operations which will take place on site.

All sundry plant will be delivered on 40ft articulated wagons which will be unloaded by the attending crane or telehandler under the control of the BSL site supervision and slinger / signallers, the offloading locations of this plant and equipment will be agreed and in according to site logistics plan provided. Trailer edge protection systems will be in place when operatives are required to access to the back of flatbed wagons to sling loads. All lift operations will be carried out as per BSL's approved lift plans.

Suppliers and delivery organisations that have been contracted to deliver plant and equipment to the Medworth Project will be notified of the site requirements, restrictions of the approach road in advance of the activity. This will be to limit disruption the users of the approach road and that of site.

Reinforcement cages will be delivered to site at regular intervals, the cages will be pre-slung to eliminate work at height and ease the process of unloading. A procedure has been developed for the storage and

stacking of reinforcement cages at the Medworth Project. The relevant information can be requested at any point and will be clearly communicated to the site team as well as being displayed in prominent locations.

8.1. Rigging / Derigging of Piling Rigs and Cranes

A competent site fitter will be responsible for the safe erection of the BSL Piling Rigs in accordance with the manufacturer's instructions and WP.

On completion of the rigging / derigging of the piling rig a fitter's report will be issued to confirm all work are complete and a major mobile inspection record will be complete implementing form PL65.
The fitter and site supervisor will conduct together the calibration of the piling rigs and issue CAL11 form.

Handling cranes will be supplied with competent operators and fitters by BSL's selected supplier to ensure safe rigging and operation of each machine.

Certification such as thorough examination / routine service / pre-hire checklist will be obtained for each item of plant and issued to MAR in advance of the use of the machine.

8.2. Wash Down / Cleaning of Plant and Equipment

Upon completion of the piling works, all plant and equipment will be cleaned and washed for transport in the designated area with controlled runoff.

9. PRESTART CHECKS

Prior to the commencement of any works on site, the following will be in place:

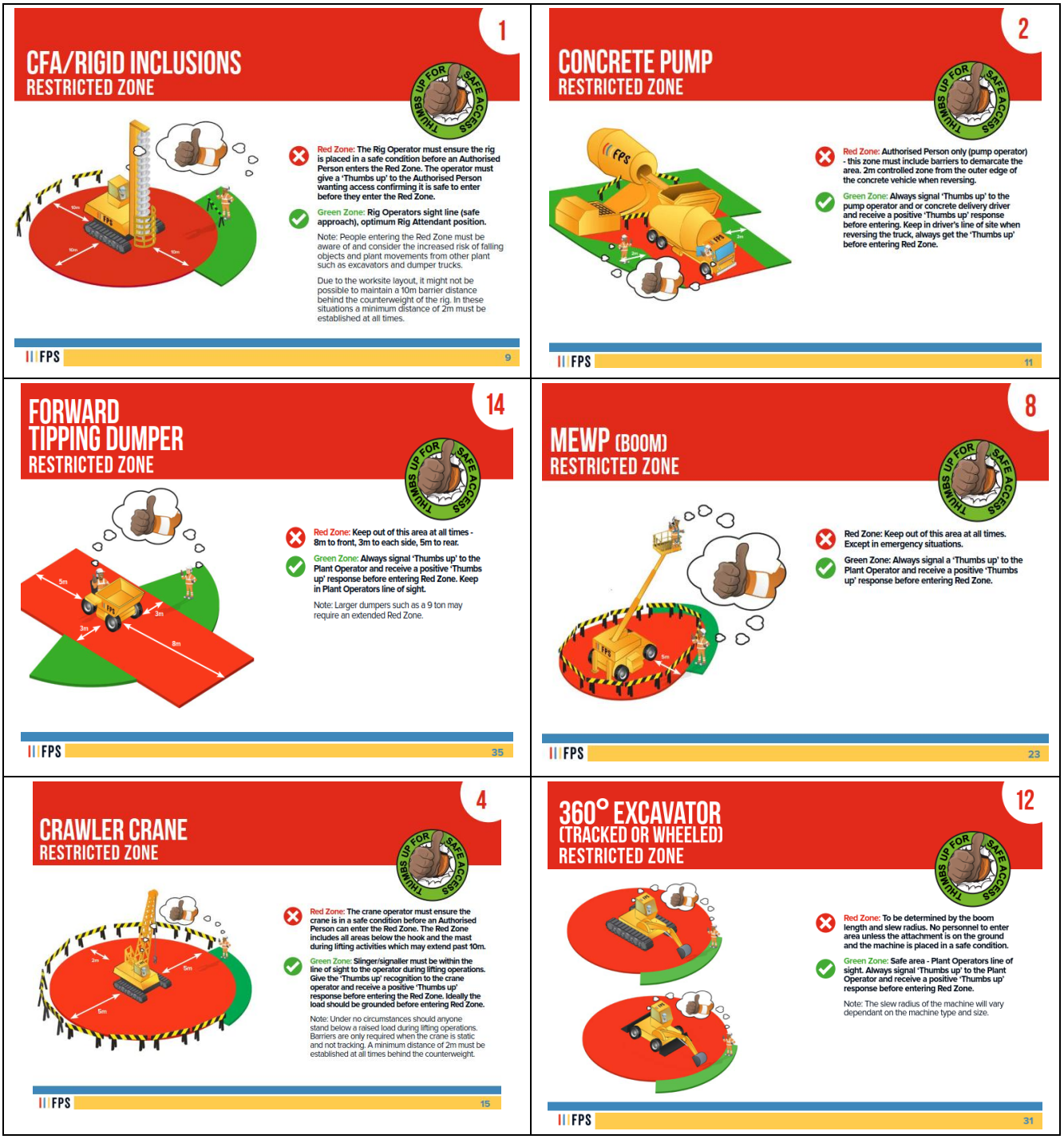
- A valid Lift Plan has been written and signed off by a BSL Appointed Person and accepted by MAR.
- Site specific inductions.
- The permanent works pile design approved.
- The signed Working Platform Certificate with associated drawings and CBR test results/locations issued by MAR
- Permits to dig, lift and for hot works issued by MAR (periodically after).
- All site operatives briefed on the required RAMs, SSoW, Lift Plans and ITP's etc.
- A Site-Specific Risk Assessment
- A signed Start of Shift Briefing

10. EXCLUSION ZONES

Prior to works commencing, exclusion zones must be set up around the CSP (CCFA) piling rigs, cranes, concrete pumps, excavators, and MEWP as per the FPS Handbook. A moveable fenced safety restricted zone will be erected by the banksman around the piling operations.

Access to these areas will strictly be controlled by the banksman and limited to authorized personnel only who must have been inducted to the method statement and associated risk assessments.

See below figures for FPS restricted zones of the various construction plant items that will be used. Where concurrent piling operations and other trade contractor activities are such that the above restricted zone standards are reduced/compromised, a separate risk assessment will be carried out for each scenario to agree a safe sequence of operations.



11. METHOD OF WORK – CSP

11.1. Guide wall construction

BSL will employ a sub-contractor to install the guide walls for the secant pile wall. Guidewall installation details refer to Subcontractor L&A RAMs ref no: BSO-SF00264691-BSL-10-003-PR-0004.

11.2. Setting Up

11.2.1. Concrete Pump and Agitator

Machine and plant operators will carry out daily checks on plant and equipment to ensure they are fully operational and safe for use. This will be recorded prior to the start of shift on PL02 form.

All certifications and safety checks of the pump, the drum, hoses, and other parts must be in place before any works can commence. All hoses to be safely connected, pinned and whip checks in place.

The pump operator will conduct a daily check of his pipelines and the findings will be recorded in IN 31 Form - Concrete Plant Daily Inspection Sheet. Prior to the commencement of piling works each day, the concrete pipeline will be adequately lubricated with a grout/primer mix. The cement grout/primer will be mixed with water in a tub to a thick consistency. The lubricating mix will be poured directly into the pipeline, and the concrete will follow immediately. The concrete will be pumped slowly through the lines until it flows freely and can be seen discharging from the auger stem.

Pump operator will ensure the stroke counter is working and set to zero, then concrete will be discharged until the truck is empty and the hopper of the pump is empty, the engineer will manually record on the form Ref: CBUS-BACH-OPS-FM-544, the pump strokes for the first two loads following the work procedure and calculate the volume per stroke following the work procedure Ref: CBUS-BACH-OPS-WP-515-Rev2.0 _ Pump Stroke Volume Test. Once the volume per stroke is known, this will be checked against the volume within the rig instrumentation. The efficiency of the pump will be recorded on the first and any subsequent setup or changing of concrete pumps, and on a weekly basis, results of these checks are to be recorded on a BSL CAL11 form. Where any anomaly exists, piling operation should not commence until the reason is identified and rectified.

The concrete pump and agitator must be set up with barriers in the configuration from the FPS Restricted Zone Handbook to clearly identify restricted zones and prevent unauthorised access (See Section 10)

At the end of the shift, the blow out will be carried out in accordance with CBUS-BACH-OPS-WP-171 Blowing & Washing Out Concrete Lines. The correct PPE, including a face shield with helmet and ear defenders, in addition to the site standard, must be worn by the operatives assisting with the blow out operation. The operation will be conducted by stages including:

1. Blowing Out through the Concrete Drum
2. Blowing Out through the Back of the Rig
3. Blowing Out through the Auger Stem

Only the inspected and authorised equipment is allowed to be used including Compressor, Blow Out Gun, Blow Out Gun Stand, Blow Out Ball and Blow Out Casing.





Figure 2. Minimum PPE Requirement for Blowing and Washing out Concrete Lines operations.

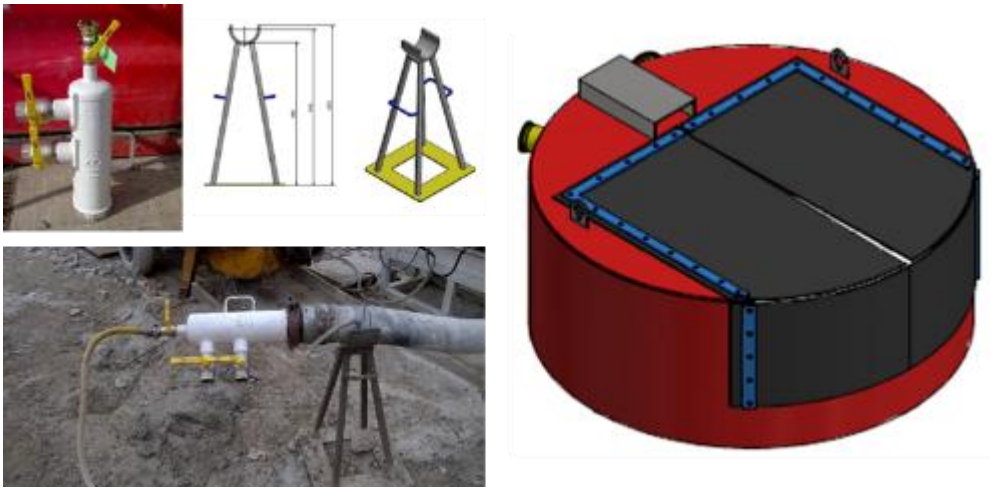


Figure3. Blowing and Washing Out Concrete Lines Equipment

11.2.2. Setting Out

Reference points, information relating to the level and co-ordinates shall be provided by MAR and it is BSL's responsibility to position the location of the piling works. The setting out will be carried out by the nominated subcontractor (APEX). Before the works commence, all equipment (EDM) will be provided with a current calibration certificate. All equipment will be checked, and if necessary re-calibrated. The surveyor will ensure that the information being worked to is up to date.

For CSP piling works, the secant wall will be constructed using a guide wall constructed in accordance with SF00264691-BSL-10-003-DA-0012_C01-Guide Walls-General Arrangement drawing. The correct pile position will be identified with a reference clearly marked on the guide wall by the attendant surveyor.

Prior to commencement of drilling operation, the rig banksman will communicate the pile number to the rig operator. The rig operator will then check the design pile, against his pile schedule. The rig will be positioned and levelled over the pile position pin.

The piling rig will be positioned and levelled over the pile position pin before any drilling operations commence. During travelling and positioning the rig will maintain a minimum clearance of 2m from piles less than 24 hours old. Before auger and casing penetration commences the mast will be checked for verticality by observing attached levelling aids.

11.3. Digging

When the tip of the casing has been pushed into the ground to its full diameter, the Rig Operator will zero the depth recorder, activate the real time recorder, and enter the pile reference number into the instrumentation console.

The exclusion zone is to be a minimum of 10m from the auger for all personnel including the banksman (See 10) The digging will not commence until the banksman is outside the exclusion zone. Minimum barrier set up for the exclusion zone. 3nos at the back 1no to the side of cab.

The pile will be bored to the depth specified on the approved pile schedule. The depth will be recorded on form PC15 by the rig operator as backup to the onboard computer.

11.3.1. Digging CSP Piles

CSP piling technique is similar in nature to CFA piling with the exception that the continuous flight augers will be inside a full-length casing which would enable improved verticality tolerance.

The system relies on the use of compressed air to help fight the material inside the casing and to keep the cutting head clean. Compressed air shall be applied without detriment to piling platform integrity. At the beginning of drilling phase, the supply valve for compressed air will be opened.

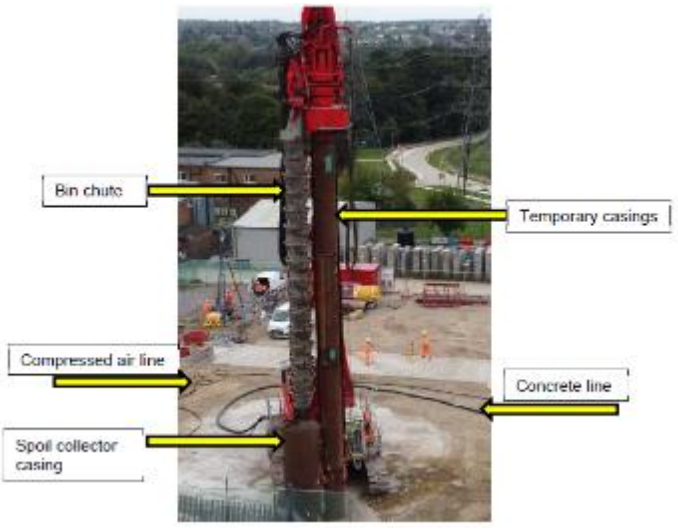
The digging of the pile will be commenced with the casing restraint in position, and the spoil discharge chute will be placed in the discharge position.

Temporary casing on the piling rig will be checked on initial pitching by the attendant banksman using a 1m long spirit level, then, the behaviour of the casing will be monitored during the dig. Where deflection is observed, rotation will be stopped and the verticality checked with the spirit level ad verify by the setting out engineer if required. Adjustments will be made as required.

Construction Tolerances

- Plan positional tolerance = +/- 25mm (CSP piling using guide wall)
- Verticality tolerance = 1 in 150.

The Bauer system has an auto drill facility which controls the rate of penetration so as not to over flights with material. This ensures continuous flighting of material to the top of the auger string.



The spoil will be being transported to the surface via the CFA auger flights. These cuttings discharge just under the rotary head into the spoil collector, where they are then discharged into the spoil chute. The chute contains the spoil and delivers it to ground level adjacent to the rig in a controlled and safe manner. A 2.1m or 1.8m spoil collector casing or protection shield should be positioned adjacent to the rig on the chute side to contain any falling material and prevent it projecting across site.

To prevent spoil falling out of the chute whilst the chute is high in the air, the spoil collect hatch should be closed until the casing has reached 4-6m below ground. This allows the chute to be lowered close to the spoil collector casing or protection shield before any loose material is discharged.

During drilling it is expected to see spoil being discharged into the spoil chute once the auger and casing are 6 – 8.0m below ground level. If we do not see spoil at this point or not at all, we must STOP and seek guidance as maybe the soil is being packed onto the auger flights. The foreman is to check this.

Once the pile is drilled to depth, the supply of air at the compressor must be switched off and the air system must then be drained as per procedure CBUS-BACH-OPS-WP-169 Drilling CFA piles with air flush SAF44. During drilling with the compressed air flowing, the valve can get hot as a result of the passing compressed air. This is cooled down by water being fed into the compressor manifold concurrently to the compressed air. Once all the checks have been carried out the concrete phase can start as normal. (Site Supervisor).

Pile arisings will be removed regularly from the pile position during drilling and concrete pumping to minimise spoils build up around pile using the attendant excavator, attendance dumper/s will be transported the spoils to the designated stockpile area. Spoils will be removed off site regularly by a licenced subcontractor.

Redrilling

If the auger must be raised for any reason during the boring of the pile, then it must always be reverse rotated whilst it is being raised thus leaving the spoil in the bore such that at no time will there be an unsupported bore.

11.4. Concreting

Upon reaching the specified depth, the auger will be stopped, and the instrumentation system switched to concreting mode.

- *If the cutting head is a bottom concrete discharge type*, then the auger will be withdrawn a maximum of 150mm and a minimum ‘pre-charge’ of six strokes will be pumped into the pile base to ensure that the void at the base of the auger is filled immediately.

- *If the cutting head is a side concrete discharge type*, then the concreting will begin from the pile toe and the auger will be raised only after the minimum ‘pre-charge’ of six strokes has been pumped into the pile. Only side discharge augers shall be used in conjunction with compressed air (CSP Piles).

The auger / casing will be withdrawn at the speed necessary to maintain a positive concrete pressure as displayed on the instrumentation console. The pile will be fully concreted to ground level and the pumping of concrete will be stopped.

Concrete mixer trucks will be banked into position on the concrete pump by the site banksman / pump man. Once in position concrete will be discharged into the pump hopper and then pumped either to the agitator for storage or straight to the piling rig. Operatives shall follow best practice in personal positioning in relation to other moving/stationary objects to minimise the risk of entrapment.

If the concreting process is paused more than 30mins for any reason, then the auger must be re-bored to a minimum 0.5m below its previous level before concreting restarts. If this is not possible, then it must be recorded on the Piling Rig Operators Daily Production Report (CR16-1) and the comments transferred to the Pile Record on the SRS.

The volume of concrete pumped into the pile will be recorded by the rig operator and compared to the number of actual pump strokes will be recorded from pump stroke counter on the pump. Check calculations

will be made to ensure that flowmeter readings remain within normal tolerances and that the volume of concrete pumped exceeds the theoretical pile volume.

The concrete pipeline between the pump and the rig shall have all jointed connected with lever clamps which are secured with an R clip safety pin to prevent accidental or unauthorised opening. The pipe joints should have whip checks fitted to control the movement in the unlikely event of a pipe joint separating. To minimise the slip and trip hazard, concrete hoses laying at ground level should not be fitted whip check. Prior to starting works each day the lines shall be checked for condition and the inspection recorded on the IN31 form by the pump operator / supervisor. The piling rig hanging hoses shall also have whip checks fitted and a secondary shroud installed to control and leaks from the pipe / joints at height.

Once concreting is complete, the rig will be tracked clear of the pile position under the direction of the attendant banksman so an excavator can clear away the pile arisings and excess concrete. Debris on the top of the pile will be cleared away by hand using a spade once the concreted pile is exposed by the excavator.

11.5. Reinforcement Installation

The prefabricated reinforcement cages will be inspected upon delivery to site, as detailed in the ITP. When the cages pass the inspection, they will be tagged to confirm as such to the site team. All cages will arrive as full-length cages.

Once concreting of the pile is complete, the piling rig will track away from the pile location to enable access for the service crane. The service crane will lift the relevant reinforcement cage for the pile using slings and the cage tamp. The cage will be lowered into the pile and if necessary, the 3t cage tamp will be used to provide additional downwards force to help plunge the cage to above guidewall level then the attendant excavator will be used to push it to the correct depth. Where necessary, a hydraulic cage vibrator will be used to assist the cage installation.

In the event of using the attendant excavator to assist (tailing bottom of the cage) the crane lifting the cage from horizontal position to vertical position, this operation must be following the approved lift plan for both excavator and service crane.



Figure4. Cage Tamp to install cages

Mesh pile coverings will be placed over all constructed piles immediately after the installation of the reinforcement has taken place. Supervision is responsible for ensuring this is carried out and that the covering remains in place. As soon as the concrete has cured enough, the pile cover will be removed and backfilled with platform materials.

12. QUALITY CONTROL

12.1. Concrete Supply

The concrete placed within piles will be supplied by a ready mixed concrete company locally batched and complying with QSRMC or BSI standards.

Delivery tickets will be checked by our Concrete Technician / Pump Operator against the approved concrete mix designs and accepted or rejected as applicable. Concrete consistence will be checked for compliance with the specified parameters and then accepted or rejected as applicable.

Once accepted concrete will be discharged into the concrete pump hopper and pumped into the agitator. Concrete will not be held in the agitator for longer than its workability life.

Cube samples of concrete will be taken at the interval of one set of four cubes per 75m³ or 4 cubes per shift, which ever applies, as per ICE SPERW specification 3rd edition. One cube will be tested at 7 days, 2 at 28 days and one kept for as spare. Size of cube sampling (100mm x 100mm). After adequate site curing, the cube samples will be collected by a nominated UKAS testing facility.

12.2. Quality Records

The approved ITP will detail the required hold/witness points associated with the works. A site engineer or foreman will be on site throughout the construction process to ensure works will not commence or continue past the stated hold points until relevant documentation is in place and checks have been made and recorded, all witness points will be notified to the relevant parties prior to works continuing.

An ITP check sheet will form part of the pile record alongside all the other pile record information.

It will be the aim to supply all records within 24 hours of the pile construction with exception of the As-built pile coordinates and top of steel levels, concrete cube records and pile integrity records which will be supplied as the results are available.

A full record of all quality controls can be seen in ITP for piling works (Doc. Ref: SF00264691-BSL-10-003-PL-0001)

13. ENVIRONMENTAL MANAGEMENT

An Environmental Assessment will be carried out as required by the Company Environmental Policy shared with MAR. This assessment will include the impact of our works on the adjoining neighbours. BSL shall work to any environmental conditions specified by the MAR.

13.1. Noise Vibration & Nuisance

Best Practicable Means (BPM) will always be used to minimise noise generation on the site i.e., noisy activities planned to take place during normal working hours with all complaints reported to MAR as soon as practicable. Should any works exceed normal working hours BSL will submit details of works to be completed & will collaboratively work with MAR towards a mitigating measures dependent on the activity in line with Section 61 restrictions. Suitable mandatory warning signs will be displayed as required.

Noise assessment will carry out / position noise monitoring devices at various points across site, should the noise levels at these points exceed the limit of 75db then Bachy will take action to reduce their noise levels and maintain compliance. Bachy will ensure that all necessary measures are taken so not to exceed this value in the first instance.

13.2. Task Lighting

Mobile tower lights were made available on site to be used when working on dark conditions. The light must be positioned is such way that shinning at traffic on public highway is avoided.

Background lightings to be provided by MAR.

13.3. Air Quality & Dust

If required, to avoid dust generated by vehicular movement in dry weather conditions, it could be needed to suppress dust by damping down. Daily monitoring by BSL and MAR site teams.

All plant and equipment will be regularly maintained and where practicable fitted with a suitable catalytic converter to reduce emissions into the air.

The burning of waste or other materials is prohibited on site. No black smoke is to be emitted from any item of plant or equipment.

Where dust is produced by any works, face fit half mask respirators shall be used by appropriately trained staff when completing the dust-generating task.

13.4. Pollution Prevention

Toolbox talks to be given to all site personnel regarding the control of spillages and disposal of materials.

Plant nappies/drip trays to be placed under all static plant. Preference will be given on using nappies only, especially during the winter months, to avoid issues with having drip trays filled with water.

To mitigate risk of concrete contamination on site and to reduce requirements of washout facilities, all concrete washouts will be used washout skip (Kelly Tanks) on site and only use minimum water for washing the chute only. Concrete wastes should allow to set inside the skip and remove off site accordingly.

Spill Kits to be available in all plant working areas. Should any spillages occur during this operation spillage kits will be used to absorb the spilt fuel which will be disposed of in designated COSHH skips/bins. BSL will inform a member of the MAR management/site team immediately following a spillage.

Fuels will be stored in double bunded tanks away from drains. Refuelling will be carried out at a designated point, which is equipped with drip trays, spill kits and a fire point.

Water will not be discharged without permission of MAR and into designated water discharge points.

BSL is responsible for the management, testing and if required, treatment and discharge of groundwater which is brought to the surface from within the pile bore during pile construction.

MAR is responsible for the management, testing and if required, treatment and discharge of all other water.

Bachy will agree all COSHH storage locations with MAR in advance of the works, a minimum distance of 20m will be maintained between COSHH storage locations and perimeter water sources / ditches.

Piles arisings to be controlled within the bunded stockpile location as agreed with MAR Spoils will be removed off site regularly by the licenced subcontractor.

14. SAFETY MANAGEMENT

This method statement is critical to the health and safety of the activities it relates to. It is strictly to be adhered to; any deviation must first be authorised by the Site Foreman / Supervisor.

14.1. Training

All BSL Site Management, Supervision and Operatives will hold the required record of competency for assigned roles which will be provided to MAR during induction and will be kept onsite for reference in future.

14.2. Plant Inspections

As per BSL Plant and equipment – Operations responsible at Site Working Procedure all major mobile, major static and ancillary equipment used during site activities is subject to Start and End of Contract Inspection by a competent person, for daily mobile plant this will be the plant Operator, for all other daily inspections this will be the Foreman or a nominated Operative who has the necessary knowledge and experience to allow them to use and inspect equipment.

All plant will have a pre-hire check before coming to site, for BSL plant this will be carried out by the Plant Yard, for hired plant this will be completed by the hire company.

Major plants will be checked daily by the operator and recorded on the plant inspection and maintenance sheet. If there any faults, it must be reported to the site supervisor immediately.

Plant maintenance carried out by other subcontractors, the maintenance staff(s) will have received a temporary site induction and daily activities briefing. All plant maintenance works to be supervised to ensure all necessary safety measurement in placed.

Plant undertaking lifting operations will be thoroughly inspected every 12 months by a Competent Person from an external company, for plant undertaking man-riding duties this will be reduced to every 6 months. Lifting equipment will be thoroughly inspected every 3 months by a Competent Person.

All plant PUWER/LOLER thorough inspections are to be issued to MAR HSE team, and a plant sticker issued following check and approval. Plant is not to be used before **this hold point.**

For piling rigs and cranes only, the rigging and de-rigging process is carried out by a Competent Person at the start, end or during temporary movements on site and is the process of raising and lowering the mast on a piling rig and assembling the jib sections on a crane.

Any plant or equipment with a fault or problem must be removed from service and quarantined, MAR will be informed if any plant or equipment has to be removed from service. The fault must then be recorded in the relevant inspection form and reported to the Plant Department as per Mechanic on site fault reporting process for the problem to be rectified.

14.3. PPE

As required by BSL procedure the minimum PPE requirements for this site will be:

- Hard hat with Chin Strap, colour specific for various roles (signaller, banksman, traffic marshal).
- Eye Protection.
- Yellow Hi-Vis Jacket, Shirt or Vest.
- Yellow Hi-Vis Trousers.
- Steel Toe Cap Boots.
- Task Specific Gloves
- Hearing protection (if required)
- Slinger signallers / vehicle marshals will be identified by wearing orange hard hat.

Additional PPE is required for the concrete and washing out concrete lines a per described in section 11.2.1.

14.4. Working at Height

The piling rig will be fitted with suitable handrails to elevated walkways and to the roof of the base machine. Access to these areas will be restricted to experience personnel who have need to access these areas to carry out their normal duties.

Trailer edge protection system (TEPS) or other safe means of access such as a MEWP will be used by all personnel engaged on loading/unloading of delivery trucks and who are required to access/work at height. No jumping from height when stepping down from piling rig.

- All work at height operations shall be undertaken in accordance with BSL Working at Height Procedure BSL-SAF-WP-005_Rev01. MEWPS to be installed with break-away or pressure standoff bar as a secondary protective device. All MEWPS must have the harness clip activation unit. The MEWP cannot be operated until the harness has been clipped on to this designated point.

14.5. Lifting

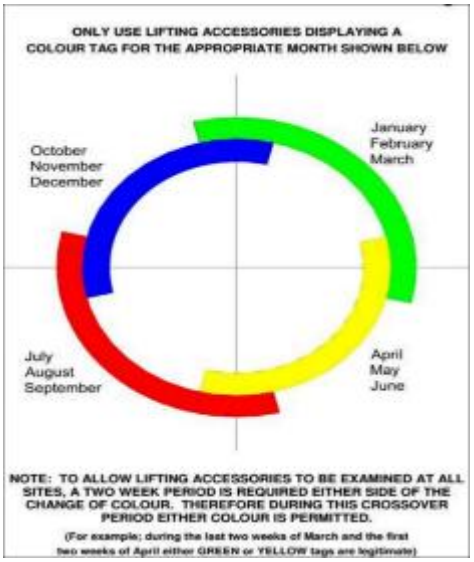
All lifting equipment (Piling Rigs, Cranes, MEWP, and Excavator) are to have specific lift plans prepared and brief to site operatives.

All site operatives involved in lift must have the applicable CSCS / CPCS ticket.

The appointment of the Appointed Person and Crane Supervisor will be recorded on SAF29 and SAF31 respectively.

All lifting accessories are to be inspected on a three-monthly basis and colour coded for visual inspection.

All lifting accessories will be inspected for defects prior to each use by the slinger signaller.



14.6. COSHH

Assessments are available for those hazardous substances taken to site in paper format on site. All BSL personnel will be informed and instructed as to the precautions necessary when handling these substances.

A bunded COSHH stores will be established and will only be accessible by BSL site operatives. A COSHH inventory and register QR code shall be installed on the outside of the store for digital access to the COSHH Assessments.

COSHH / Diesel stores will be kept locked when not in use.

14.7. Services

MAR will be responsible for safe access to the works and ensuring that all pile positions are clear of any underground services and unexploded ordnances (UXOs) before any works commence. MAR to provide platform certificate & issue weekly permits to dig to BSL.

BSL supervisor is also to complete the permit to dig checklist prior to accepting the clients permit to dig. BSL-SAF-FM-002_Rev01.

BSL supervisor to conduct a working platform check daily prior site activity to start, check to be recorded in SAF37 – Working Platform Check.

14.8. Small Tools and Equipment

Any small tools and equipment in use by BSL shall be PAT tested as required, with an appropriate HAVS assessment in place where vibration is caused. All plant and equipment shall be inspected weekly, recorded on the relevant forms. Bachy will maintain and update a PAT register and forward to MAR on request – PAT will be carried out at 3 months intervals for site equipment.

15. EMERGENCY ARRANGEMENTS

15.1. First Aid

The site will always operate with sufficient qualified first aiders. These will be trained, appointed, and noted at the Start of Shift Briefing. The names of the persons will be clearly displayed at the site office and will be confirmed in the induction.

First aid boxes will be held at site security locations or directly by the First Aiders on site. The accident book will be in the site office.

At the induction (and throughout the project) all operatives will be briefed on the content of the Emergency Preparedness Plan and at regular intervals all operatives will be briefed on the procedures to be taken in the event of an accident or emergency.

15.2. Fire

In the event of fire all persons shall follow the emergency procedures briefed during the site induction.

Combustible material will be kept to a minimum on site; good housekeeping will be implemented to ensure that waste segregation is being implemented.

Fire extinguishers will be kept in both the BSL Site Offices, Site Stores & in the piling Rigs. All hot works must have a valid permit and will be in accordance with company safety procedure (SAF/PRO/32).

All fire extinguishers shall have undergone a recent service with signed stickers displayed as evidence.

15.3. Reporting

All Accidents, incidents, Fires, Environmental Incidents or RIDDOR's, need to be reported to MAR as soon as possible and reported through BSL internal system.

15.4. Emergency Contacts

Emergency Contacts BSL

Name	Role	Contact Number
TBC	BSL Project Manager	TBC
TBC	BSL Supervisor / First Aider	TBC
TBC	Contracts Engineer	TBC
TBC	BSL H&S Advisor	TBC
TBC	BSL Quality & Environment Manager	TBC

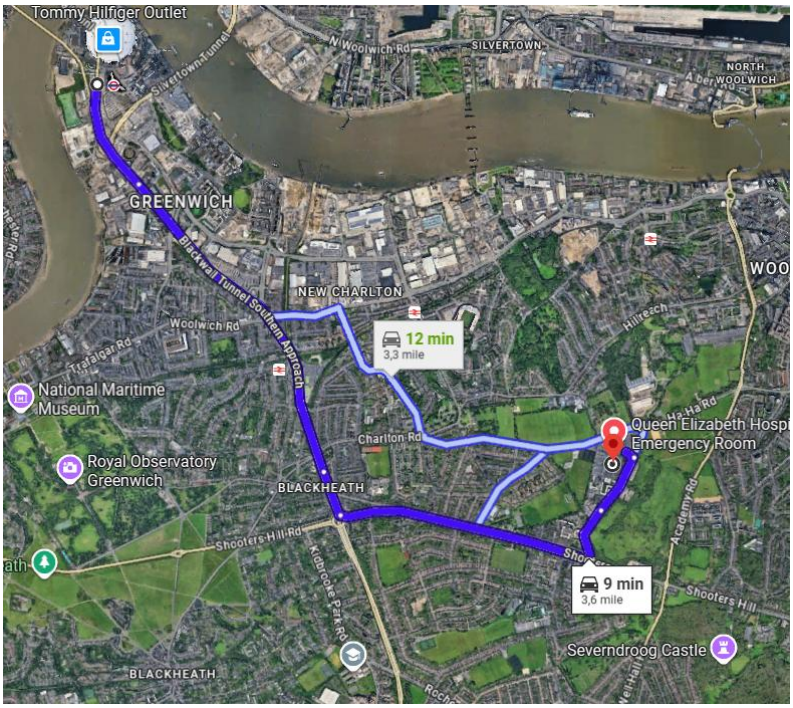
*Names highlighted are site-based roles

Emergency Contacts MAR

Name	Role	Contact Number
TBC	Project Manager	TBC
TBC	Health & Safety Advisor	TBC

15.5. Nearest Hospital (A&E)

Queen Elizabeth Hospital
Stadium Road
London
SE18 4QH



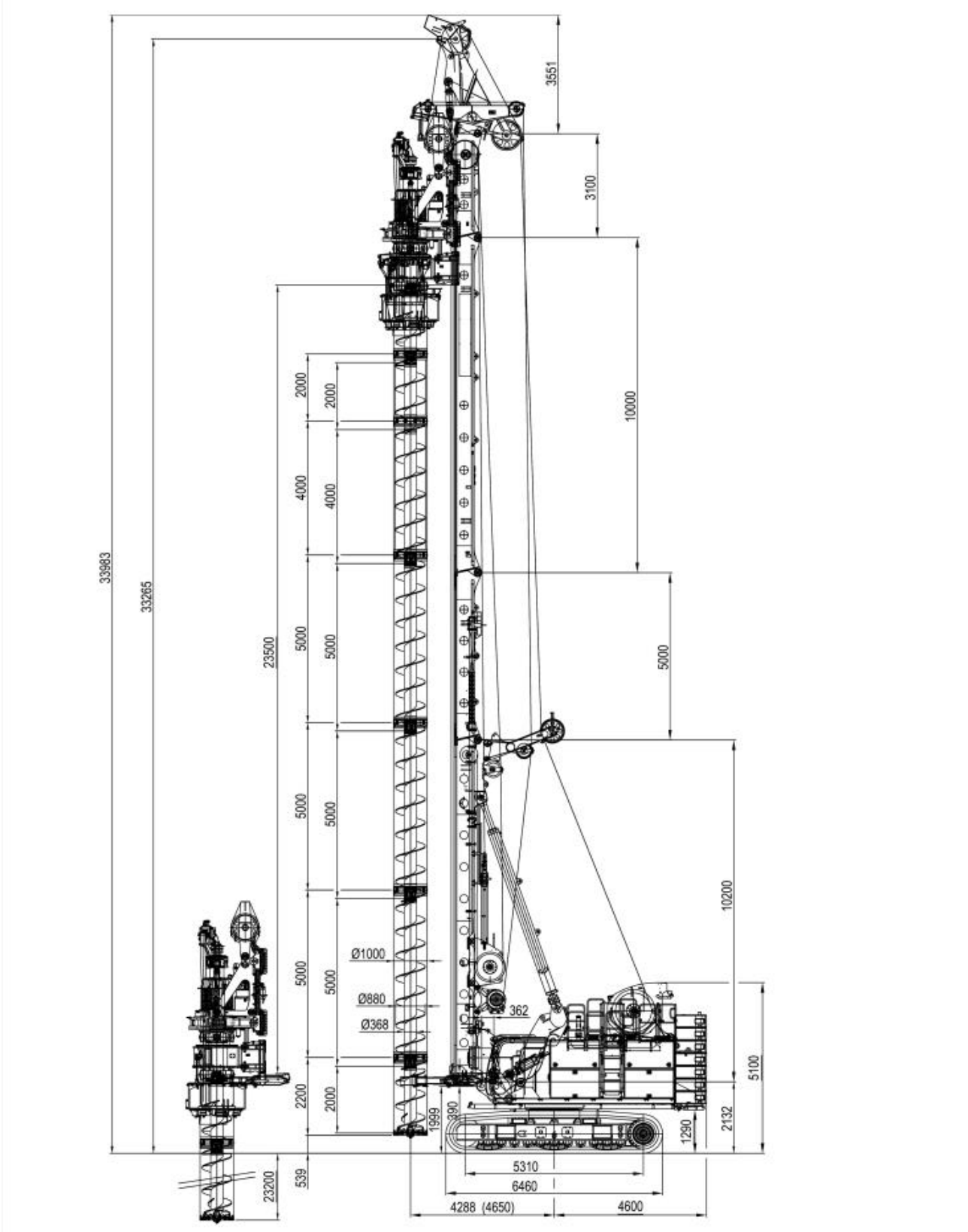
APPENDIX A – RISK ASSESSMENT- refer to risk assessment document which will be provided at Gateway 3 stage for more detailed information on activities noted below

Activity	Risk Assessment No.
Rigging, Derigging CFA Rig & Mobile Cranes	RAC 001
Concreting Operations	RAC 002
Using hand-held grinders	RAC 003
Portable Power Tools	RAC 004
Lifting Operations	RAC 005
Working at Height	RAC 006
Use of Excavators	RAC 007
Use of Dumper Trucks and forklifts	RAC 008
Re-fuelling Plant and Small Tools	RAC 009
Use of Mobile Elevated Working Platforms	RAC 011
Use of Pressure Washer	RAC 013
CFA Piling Operations	RAC 014
Concrete Pumping	RAC 015
Working with Hydraulic Hoses	RAC 016

Blowing Out Concrete Lines	RAC 017
Operation concrete storage drums	RAC 018
Arc Welding	RAC 019
Oxy Propane Burning	RAC 020

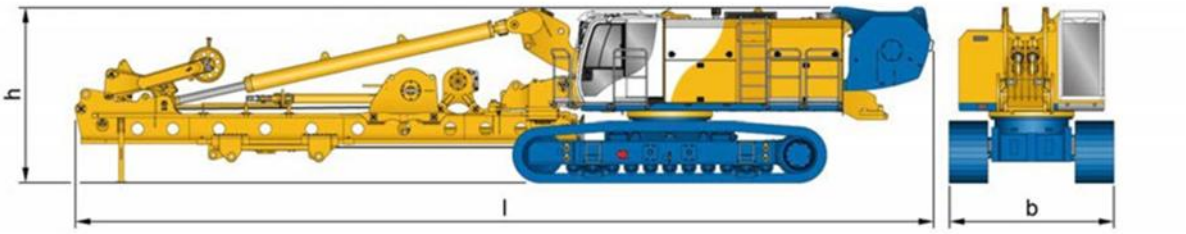
APPENDIX B – PLANT AND EQUIPMENT TECHNICAL DATA SHEET

Bauer BG45



Total weight [t]	Process Equipment/Tool	Special notes
195.7	CCFA ∅ 1000 mm KDK 460 S with BTM 400 Casing tube ⌀ 1000 mm; L = 23200 mm Drilling tool ⌀ 770/368 mm; L = 23000 mm	Ejection guide Tube guide

Transportation Dimensions:

Dimensions				
				
Dimensions [mm]:	Length	(l)	17600	
	Width	(b)	3720	
	Height	(h)	3600	
Weight [t]:			100.7	

APPENDIX C – COSHH DATA SAFETY SHEET- see Wisbech COSHH assessment document

Applicable COSHH items

COSHH item	Material/Process	COSHH assessment ID number
Fuel (Additive), AdBlue	Greenox, AdBlue, automative urea SOLN	2213805
Cement/concrete	Generic concrete	279208
Fuel/diesel	Generic diesel	426604
Aerosol	Easyline edge- all colours	2126003
Oil	Generic engine oil	4279715
Cement	Generic cement	215607
Hydrogen peroxide	N/A	251693
Logo Bluelease	N/A	2093962
Petrol	N/A	1894638
Lubricant (Aerosol	Pfeifer RL-S	2465571
Prime-a-pump	N/A	279206
Anti-freeze	N/A	2409039
Mould oil	N/A	649318