

Project Name	807 High Road	Project Number	4478
Adress	807 High Road Tottenham London N17 8ER	What Three Words	Online.sport.signal
Title	Works Package Plan	Task	SFA Load Bearing Piles
Date of Issue	10/12/25	Revision	1
Rig	Soilmec SM4	Rig 2	Soilmec SR30
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Attendance Contractor	TBC		

Cannon Piling Internal Approval

Rev	Prepared by	Signed	Date	Checked by	Signed	Date	Status
01	Shaun Prill		10/12/25	G Newton		10/12/25	Approved

Revision History

Rev	Author	Date	Changes
01			

Cannon Piling Approval Sign off

Name	Position	Signature	Revision	Date
Shaun Prill	Contract Manager			

Principle Contractor / Client Document Approval Sign off

Name	Position	Signature	Revision	Date

By accepting this Method Statement the PC/ Client are to follow this during our works. The Principal Contractor is not relieved of statutory obligation to provide, monitor, and revise their safe system of work during the progress of the task. Any revisions to the document must be agreed with Cannon Piling prior to execution with agreed notice period minimum of three days.

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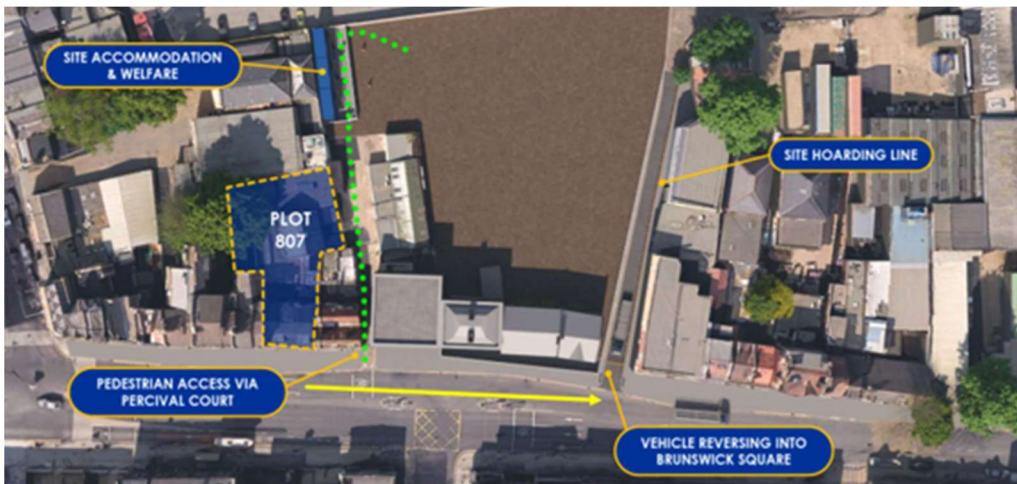
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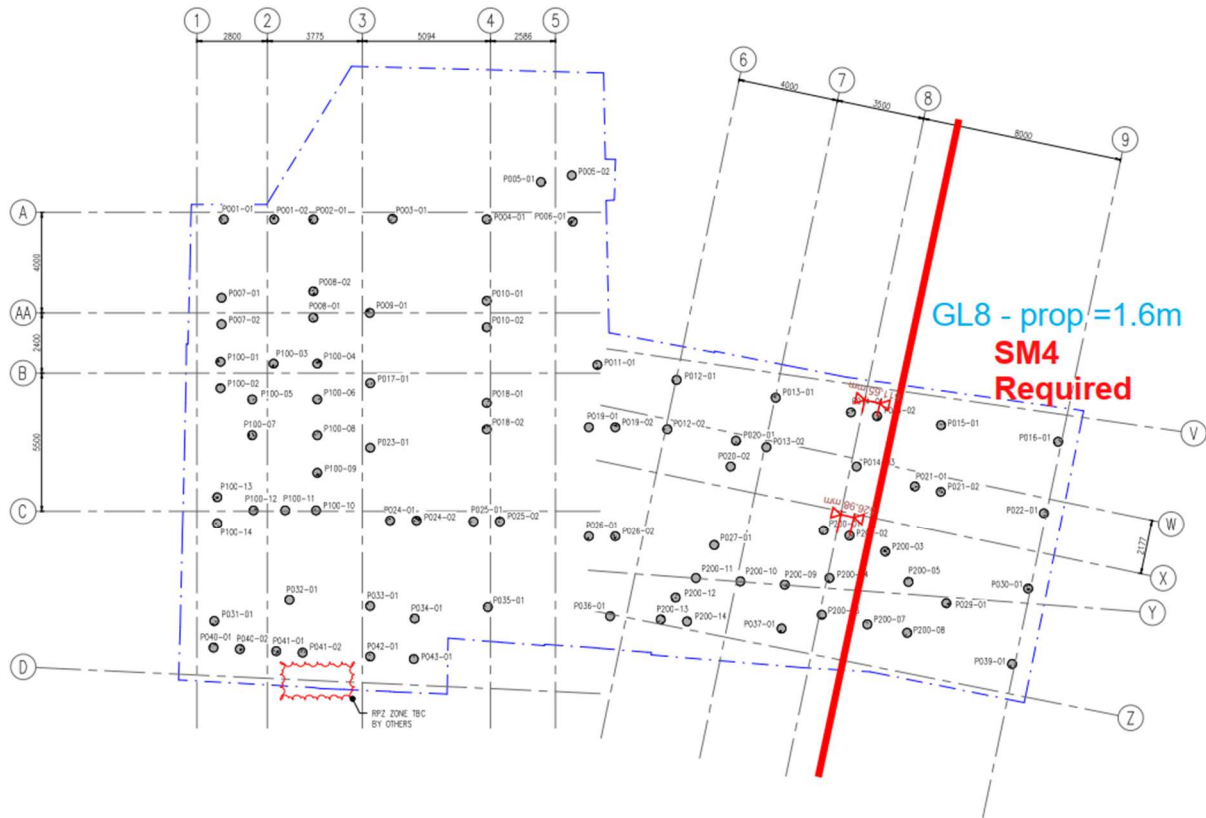
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1.	Project Information		
	Cannon Piling have been instructed to undertake the installation of 87 x 350 diameter piles. 12 piles installed with the Soilmec SM4 due to limited head room and 75 piles installed with the Soilmec SR30. The site will be maintained by MACALEER & RUSHE with suitable fencing. All deliveries and placement of machine and plant will be agreed with prestart meetings. Any movement will be liaised onsite between site team and supervisors. Concrete will be delivered from the most suitable batching plant for emissions, working time and delivery leads. All piles will be designed & constructed in accordance with contract specification & construction drawings.		
	Special conditions for Site		
	Very tight access.		
1.1	Site Address		
	807High Road Tottenham London N17 8ER		
1.2	Proposed Start Date	Proposed Working Hours	
	January 2026	Monday to Thursday	08:00-18:00
		Friday	08:00-17:00
		Saturday (subject to prior arrangement)	08:00-13:00
1.3	Expected Duration		
	5 Working Days		
	This proposal is subjected to working conditions, plant malfunction, ground conditions and various contributing circumstances. Arrangements may be arranged to alter, extend, or work additional hours and can be discussed with the Operations manager		
1.4	Location (plan) of works		
			

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General Layout of Piles



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1.5	Sequencing & Programme		
	Item	Description	Duration
	Mobilisation	Delivery and site establishment: - SM4 SFA bored piling rig - Associated Drilling equipment (Augers & Consumables) - Reinforcement - Static concrete plant - Additional Plant	1 day
	SFA LB Piles	- Bore, - Concrete - Reinforce 12 x 350mm Bearing piles	5 days
	De-Mobilise	Collection of - SM4 SFA bored piling rig - Associated Drilling equipment (augers and Consumables) - Reinforcement - Static concrete Plant - Additional Plant	1 day
	Hold point	Mobilising Soilmec SR30	1 day
	Mobilisation	Delivery and site establishment: - Soilmec SR30 CFA bored piling rig - Associated Drilling equipment (Augers & Consumables) - Reinforcement - Static concrete plant - Additional Plant	
	SFA LB Piles	- Bore, - Concrete - Reinforce 75 x 350mm Bearing piles	5 days
	De-Mobilise	Collection of - Soilmec SR30 CFA bored piling rig - Associated Drilling equipment (augers and Consumables) - Reinforcement - Static concrete Plant - Additional Plant	1 day
	Please note this is only used as a guideline, subject to ground conditions, site constraints & attendance capabilities and does not form part of the contract agreement. Starting at the front of B807, completing all 12 limited head room piles first.		

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1.6	Scope of Works	
	Piles Designed	Cannon Piling
	Piling Platform Designed	Cannon Piling
	Piles to be constructed	Cannon Piling
	Drawing Reference	807HR-WAL-ZZ-PL-DR-S-1000
	Pile Types	Concrete Injection
	Method	SFA/CFA piles
	Pile Diameter	350mm
	Pile Length	Piles Average = 19.8m
	Strata Summery	0.0 – 2.60 MADE GROUND 1.80 – 4.50 KEMPTON PARK GRAVEL MEMBER dense sandy gravel 4.50 – 18.90 LONDON CLAY firm dark grey silty clay 18.90 – 25.00 LAMBETH GROUP gravelly clay becoming gravelly clayey sand
	Document Reference	Geofirma 2023-064-BAS-PRI
	Rig	Soilmec SM4/Soilmec SR30
	Labour	3 operatives per rig (minimum)
	Cage weight(maximum)	40Kg
	Cage Length (maximum)	7m

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2.	Safe System of Works (Methodology)					
	Work Instruction Before any work starts all operatives must: - Attend a site induction. - Provide proof of competency. - Ensure Permits and all related paperwork are fully signed including Permit to dig, Working platform certificate, Temporary works permits, WPP (RAMS) signed by principle contractor, author & all site staff working under the works package plan. - All paperwork must be checked by CP Site supervisor. Each day, the team must: - Attend, understand and sign the daily briefing before commencing work. - Complete all pre-start machine checks. - Complete pile log/ daily records sheet. Only when paperwork is complete with wet signatures may rig mobilization and rig erection may take place.					
2.1	Mobilising on to Site					
	- Ensure the working platform certificate and permit to dig are signed and issued by <i>MACALEER & RUSHE</i> . and the working area is adequately segregated from other trades. - Delivery of material to site must follow the Traffic Management Plan set out by <i>MACALEER & RUSHE</i> .. All deliveries to site must obey any site speed limits or other signage and use the appropriate gate. Concrete will be delivered direct to site to avoid delays to the supply. The rig will also be sent direct to site in compliance with the routing and transport movement orders. - The piling will be mobilised to site on a low-Loader/ Hi-ab using the abnormal load procedure, the approved transport routes and in line with <i>MACALEER & RUSHE</i> . discussions. - A Hiab lorry and trailer will arrive on site to deliver the concrete pump and the auxiliary equipment, it will be banked into a position to unload, a lorry restraint will be placed around the lorry bed before the banksman climbs on to the lorry, the pump operator will assist with the unloading and place the equipment in a designated area making sure it is safe and secure. When unloaded the Hiab lorry will then be banked off site by the banksman. - A reinforcement lorry will arrive to deliver the steel reinforcement which will be in bundles suited to the lifting capacity of the excavator/ Hi-ab; this will be banked on to the site by the banksman. The Piling Operatives will assist in unloading the steel aided by the 360 Excavator and places it on bearers in the designated area. When unloaded the lorry will be banked off site by the banksman. - The remaining plant and equipment will be delivered using either 40ft articulated or 28ft flat-bed rigid wagons. Cannon Piling will ensure all deliveries are pre-slung (where appropriate), have fall protection or can be unloaded with excavator in attendance.					
2.2	Site Establishment					
	- Cannon Piling crew to be inducted by <i>MACALEER & RUSHE</i> . on arrival. All operatives will be made familiar with the new surroundings, site constraints, and site-specific hazards. - Cannon Piling supervisor will brief the crew on mobilisation of plant, equipment, and materials along with site set up areas. All operative to sign up to Daily Briefing. - Cannon Piling supervisor will conduct a toolbox talk on lifting operation prior the works starting. All operative to sign up. - Permits signed briefed and issued. - Note all deliveries must adhere to <i>MACALEER & RUSHE</i> . Traffic management plan. - Cannon Piling to supply attendance contractor with a schedule of lifts, prior to site arrival. - Lifting operations agreed with attendance contractor. All operatives to sign up to attendance contractors LP. - Plant and equipment positioned in agreed areas.					
2.3	Setting out Process					
	A Full time setting out engineer is required on site during the Piling Works. <i>MACALEER & RUSHE</i> . must provide control data in DWG format prior commencement.					
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	The setting out engineer may request early access to set up on control system. 1. The setting out engineer will locate the position with the total station, marking target with 400mm H12 steel pin with mushroom cap and spray paint 2. The position to be recorded for as-built, if greater than 10mm out of position, setting out engineer to repeat step one and remark. 3. The piling rig may move into position, drill and concrete as per steps in section 2.6 4. Once concrete pour is completed the piling rig is maneuvered away and the attendance excavator clears the area of piling arising. 5. The setting out engineer will survey and record the center of pile position. 6. *not* If it is out of position by 75mm they are to immediately report to the cannon supervisor for further instructions. The site supervisor will liaise with the technical engineers for advice and further instruction. 7. Providing pile is within tolerance, The piling operatives may install the cage. Spacers will be placed on the cage and lowered into the wet concrete, centralised by eye to piling platform level or as design requirements 8. The setting out engineer is complete final survey and recorded spot for as-built survey. 9. The pile will be protected with reinforced mesh grill. 10. The As-built survey will be issued to the office weekly for QA purposes. Please see Setting Out Process in appendix
2.4	Rigging/ De-rigging Procedure
	1. The rig will be mobilised in a designated area where a permit to dig and piling platform certificate is required and signed off before the mobilisation. To prepare the rig for drilling the rig operative under the instruction of two banksmen. Mobilising the machine from travel mode to working mode. See operator's manual for further method statements regarding using the machine, which is stored inside the cab of the rig. 2. NOTE: Hand signals to be used when in lifting operations, move plant and machinery and during and road vehicle activities on site. These signals will be used throughout this method of works to create a safe way of communicating. 3. NOTE: During this entire operation, the site is to be sectioned off from other site users. Authorising the certified and qualified piling team along site the attendant team. Due to the nature of the site, no barriers and signs will be placed on the platform during piling works, the primary exclusion zone will be marked by the site boundary and the barrier off pedestrian routes. Only authorised CP and attendance staff allowed on the piling area during works. 4. Activities of unbolting temporary travel frames, that require working at height will be achieved via a static 4 tread platform. Following this the rigs mast will be erected, auger guides lifted into position via attendance excavator/ crane and concrete hoses connected. 5. Finally, the augers will be lifted under the drill head via the attendance excavator/ or the piling rigs service winch. Once the two hexes are placed together. A banksman will place 2 auger pins to secure the connection. 6. The attendance excavator will be used in lifting operations throughout this activity. De-mobilisation will be a mirror of the process of mobilisation, finally the rigs tracks will be cleaned before loading onto a low loader or hi-ab. This can be done by either an air compressor or pressure washer.
2.5	Rig Calibration
	When: 1. Monthly as a minimum or when a re-calibration event occurs. 2. At the start of the project and before the first pile is constructed. 3. The concrete pump is replaced. 4. The auger string extended or reduced. 5. The SFA rig is changed or reconfigured. Items to be calibrated: 1. Mast level 2. Depth Gauge 3. SFA DMS concrete filling instrumentation

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2.6	Setting up to Pile Position
	Boring of the pile location will only commence once the correct reinforcement cage has been confirmed as arrived or has been made on site and relevant checks against the drawings for that pile have been carried out. Including checking the lifting point on the cage. - The pile position(s) will be marked by a 400mm re-bar pin or paint by Cannon Piling. - The piling rig is tracked into position under the instruction of the banksman/ganger ensuring the auger string is positioned centrally over the pile position, marked by a 400mm H12 length of reinforcement driven into the ground capped off and numbered by others. - The bores must be installed at the exact position as set out and within our verticality tolerances, which must be checked frequently using either a spirit level or an inclinometer if any deviation stop work and correct. - The bore is to be drilled in the exact position identified by the pin or paint, if unachievable the work cannot start and discuss with CP line manager, MACALEER & RUSHE .. - A Three Meter exclusion zone will be set up whilst the auger is rotating.
2.7	SFA Injection Piling
	- The piling rig is tracked into position under the instruction of the banksman/ganger ensuring the auger string is positioned centrally over the pile position. - The hollow stem at the base of the digging head will be closed off with an expendable cap. During this operation, the mast will be raised a suitable distance vertically above the foot and a lock off switch will be activated by the rig operator. - Bore the augers to the required depth. This is done in 1m/1.5m sections, the last auger is disconnected from the drill head, the next auger is lifted into position and secured by pins at top to the drill head and the bottom to the previous auger. This is a repeated of the initial rigging up process as explained in section 2.5. - This is repeated by adding each additional auger on to reach the design depth. - The rate of penetration of the auger will be monitored. Should it not be possible to progress the augers down to the required depth, the auger string shall be reverse screwed out of the pile bore, the shaft backfilled, and further instruction sought. - During the boring process, the attending excavator shall clear away the spoil from the auger, at no point shall the auger stop for the operation to occur. - Upon achieving the required depth, the auger string is withdrawn some 200 to 300mm and a small amount of concrete pumped to allow the expendable cap to be blown clear of the digging head. The pile will be re-bored to full depth to clean the base prior to extraction. - Concrete is pumped through the hollow stem to the base of the auger and the pile constructed as each section of auger is withdrawn at a controlled rate. To remove a section of auger, the auger is withdrawn until the section is above ground, the auger still within the ground is secured via a catcher plate. The auger section is unpinning and lifted away in a reverse of the process in section 2.6.3. The drill head is lowered, reconnected to the remain auger string, the catcher plate is removed, and the operation is repeated until the all sections of auger have been removed from the bore. - On extraction of the auger the attending excavator shall clear away spoil, relieving the potential of spoil travelling up the stem auger. At no point shall the auger stop for this operation to occur. - Once the auger is extracted the rig is backed away and the top of concrete is carefully cleared off to expose the clean, wet pile shaft. The reinforcement cages will be installed by lifting and plunging the cage into the pile with the aid of an excavator. - Following installation, the cage must be centralised and secured in place with mushroom caps placed over all exposed bars.

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2.7	SPA Open Bore Piling
	1. The piling rig is tracked into position under the instruction of the banksman/ganger ensuring the auger string is positioned centrally over the pile position. 2. Bore the augers to the required depth. This is done in 1m/1.5m sections, the last auger is disconnected from the drill head, the next auger is lifted into position and secured by pins at top to the drill head and the bottom to the previous auger. This is a repeated of the initial rigging up process as explained in section 2.5. 3. This is repeated by adding each additional auger on to reach the design depth. 4. The rate of penetration of the auger will be monitored. Should it not be possible to progress the augers down to the required depth, the auger string shall be reverse screwed out of the pile bore, the shaft backfilled, and further instruction sought. 5. During the boring process, the attending excavator shall clear away the spoil from the auger, at no point shall the auger stop for the operation to occur. 6. On extraction of the auger the attending excavator shall clear away spoil, relieving the potential of spoil travelling up the stem auger. At no point shall the auger stop for this operation to occur. 7. Upon achieving the required depth, the auger string is withdrawn. 8. Once the rig and augers are clear, the bore will be filled with concrete. 9. Once the auger is extracted the rig is backed away and the top of concrete is carefully cleared off to expose the clean, wet pile shaft. The reinforcement cages will be installed by lifting and plunging the cage into the pile with the aid of an excavator. 10. Following installation, the cage must be centralised and secured in place with mushroom caps placed over all exposed bars.
2.8	SFA Piling Concreting
	Setting up and Piling 1. Prior to the commencement of piling works each day, the concrete pipeline is adequately lubricated with a grout/ primer mix. 2. The primer will be mixed with water and stored in a bulk 200L container. 3. This mix is poured directly into the pipeline before the first 10mm concrete delivery is pumped slowly through the lines until the concrete is flowing through the rig and the augers. 4. This priming process will reduce the chances of the concrete hoses blocking. 5. Each ready-mix delivery note will be checked prior to discharge against the pile & Mix design and accepted or rejected where applicable. Slump testing will be done if the concrete fails a visual inspection. 6. The concrete will then be dispatched into the hopper and pumped through the delivery pipe into the holding drum, furthermore, pumped into each pile shaft. Wash Down 1. At the end of each day the concrete hoses and augers are washed out after Piling. 2. All operatives will be notified when this sequence of events is taking place and no site personnel will be in this permitted area. 3. This is carried out using a compressor to wash out any concrete remaining in the concrete lines. 4. Prior to using any compressed air, the concrete line is de-pressurised by reverse pumping. Once complete the pipe connection at the hopper can be disconnected as well as the T-piece cap at the rear of the piling rig (if required). Releasing as much concrete via gravity as possible. 5. The compressor is connected to the end of the concrete hose and a pressure (8 bar) is built up to wash and blow out any concrete. This will be carried out in a safe manor. With whip checks and safety pins in place. 6. The blow out discharge can be controlled by drilling a pile position to a calculated depth considering the volume of the blowout the auger extracted and the discharge blow into the subsoil, this will then be bored out the following day to construct the pile. <i>or</i> 7. Where drilling a pile/ hole is not viable (ground conditions or sequencing) blowout chambers are positioned at the bottom of the auger stem to contain the discharge. 8. A hard sponge ball will be placed into the concrete hose at the hopper end and is then blown through the pipeline the ball will eject from the pipe at the rear of the machine into a secured blow out chamber, along with the excess concrete. This is repeated for the piling rigs static pipework and augers, the same blowout chamber will be used to cover the auger tip to contain the sponge ball and excess concrete. 9. This process is repeated for a third time using water using a softer sponge ball. All excess concrete will be removed by the attendance excavator. Please see Task briefing sheet TB104 Safe use of Concrete Pumps for further details

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2.9	CFA Piling
	1. The piling rig is tracked into position under the instruction of the banksman/slinger ensuring the auger string is positioned centrally over the pileposition. 2. The hollow stem at the base of the digging head will be closed off with an expendable cap. During this operation the rig operative will immobile the controls. 3. With the mast in a vertical position and the auger closed, the auger top shall be lowered and maneuvered directly and precisely over the setting out pin. The mast foot shall then be lowered. 4. The pile number shall be confirmed by the banksman and briefed to the rig driver, verbally. The rig driver enters the design depth into the rig instrumentation. Before drilling commences, the mast shall be inspected and checked for verticality in both X and Y axis by reference to the gauges on the side of the mast and by the display on the rig instrumentation. 5. With the auger tip at ground level, the depth gauge is to be reset to zero. Pile depth entered the system. 6. Drilling can commence. Bore the augers to the required depth observing the rate of penetration of the auger. Should it not be possible to progress the augers down to the required depth, the auger string shall be reverse screwed out of the pile bore, the shaft backfilled, and further instruction sought. 7. During the boring process the attending excavator shall clear away the spoil from the auger, at no point shall the auger stop for the operation to occur. 8. Upon achieving the required depth, the auger string is withdrawn some 200 to 300mm and a small amount of concrete pumped to allow the expendable cap to be blown clear of the digging head. The pile will be re-bored to full depth to clean the base prior to extraction. 9. In certain instances where the rig is required to reach its maximum depth the gates guarding the auger will have to be opened to allow the rotary table to reach ground level. If this is required the following actions will be undertaken : a. The rig will temporarily stop drilling, once the auger has ceased turning Banksman signals rig driver and unlocks gates to allow rig driver fully open them. b. Pedestrian barriers or similar will be placed in front of the rig at a distance of 3m in a v shape to guard the auger and act as an exclusion zone with the appropriate signage designating no unauthorized access. c. No one is to enter the exclusion zone whilst the auger is turning. d. Attendance machine will be sited so that it can still remove the pile arisings as the auger drills to depth. e. Once the pile has been concreted and the augers fully withdrawn they will be stationery and the gates will be closed before the rig moves onto the next pile location with the aid of the Banksman. 10. Concrete is pumped through the hollow stem to the base of the auger and the pile constructed as the auger is withdrawn at a controlled rate, to the required over-break in relation the volume of the pile. As necessary, the auger string will be cleaned with the mechanical auger cleaner. 11. As per the above, on extraction of the auger the attending excavator shall clear away spoil, relieving the potential of spoil travelling up the stem auger. At no point shall the auger stop for the operation to occur. 12. Once the auger is extracted the rig is backed away and the top of concrete is carefully cleared off to expose the clean, wet pile shaft. The reinforcement cages will be installed by lifting and plunging the cage into the pile with the aid of an excavator. 13. Following installation, the cage must be centralised and secured in place with mushroom caps placed over all exposed bars. 14. The exposed wet pile will be protected by a reinforced mesh grill or similar.

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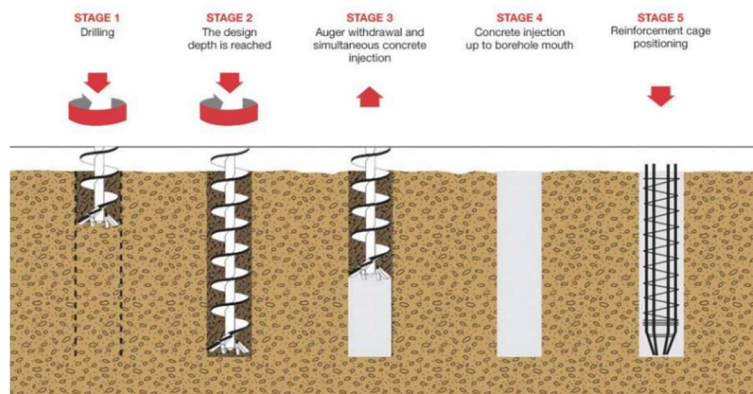


Figure 2.7.1: 5 stages for CFA piling

2.10

CFA Piling Concreting Procedure

1. Prior to the commencement of piling works each day, the concrete pipeline is adequately lubricated with a grout/ primer mix.
2. The primer will be mixed with water and stored in a bulk 200L container.
3. This mix is poured directly into the pipeline before the first 10mm concrete delivery is pumped slowly through the lines until the concrete is flowing through the rig and the augers.
4. This priming process will reduce the chances of the concrete hoses blocking.
5. Each ready-mix delivery note will be checked prior to discharge against the pile design & mix design and accepted or rejected where applicable. Slump testing will be done if the concrete fails a visual inspection.
6. When signaled by the rig operator, concrete shall be pumped to the rig.
7. The concrete will then be dispatched into the hopper and pumped through the delivery pipe into the holding drum, furthermore, pumped into each pile shaft.
8. When the instrument confirms that the auger has been filled. The auger shall be raised the minimum amount to allow successful initial discharge under pressure of the pumped concrete.
9. The rig operator shall be briefed on which technique is to be employed to control the rate of placing concrete: a) Method 1, Positive Pressure. b) Method 2 over-supply (target range is also to be briefed) Generally and unless otherwise informed, method 2 shall be adopted.
10. As the auger is withdrawn, concrete shall be pumped through the auger stem to construct the pile. This stage of the operation shall be controlled by the rig operator using signals to the pumpman. The rig operator shall ensure that the withdrawal rate is not excessive and leads to loss of the auger tip embedment in concrete. The project engineer is to ensure that the rig operator is aware of the minimum and maximum over-supply target. When fitted to the rig, auto-lift for concreting shall be used.
11. The rig operator shall monitor the following parameters: a) Concrete flow, b) Pressure, c) Depth, d) Rate of Extraction.
12. As the auger is nearing the top of the pile, the banksman shall observe that clean concrete is being flighted from the pile, before the appearance of the auger tip.
13. When the concrete placement is complete the rig shall be tracked away from the pile to allow the attendance excavator to clear the spoil. The remainder of the spoil in the head of the pile, shall be removed by way of shovel, by the banksman.

Please see Task briefing sheet TB104 Safe use of Concrete Pumps for further details

2.11 Reinforcement Site Fixing and Prefabricated Steel – SFA (site fixed)

1. Reinforcement steel will be delivered in straight lengths of bar and bundles of helical these will be stored in a designated area on timber bearers.
2. The steel fixers will make the cages on heavy duty stands, whereby a pack of straight bar will be loaded onto. Stands are to be load tested, certified, and tagged.
3. The cage will be fixed with annealed tying wire with sufficient ties to allow handling and placement.

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	- Each cage can be removed from the fixing area by hand or via the attendance excavator. - All reinforcement will be placed flush with the piling platform or lower, no steel should project above the level of the piling platform. - Waste management will need to be in place by the MACALEER & RUSHE . to accommodate the helical, foam, slings and excess wire waste created by this activity.
2.12	Prefabricate Steel
	- Reinforcement steel will be delivered prefabricated and these will be stored in a designated area on timber bearers. - Each cage can be removed from the fixing area by hand or via the attendance excavator. - All reinforcement will be placed flush with the piling platform or lower, no steel should project above the level of the piling platform.
2.13	Concrete Testing
	The concrete will be Quality checked for use in accordance to MACALEER & RUSHE . Inspection Test Plan and Cannon Piling safe workability. Concrete shall be deemed suitable to pump by Pump Operator and piling supervisor before - On Site sampling and Cube testing will be carried out to the MACALEER & RUSHE .s and design engineers' specifications; 1 set every 75m³ poured or one set a day. - Cubes will be taken by CTSL Testing and stored off site, collection of cubes will occur daily. - Slump, temperature and Flow testing will be carried out to the MACALEER & RUSHE .s and design engineers' specifications. - S4 slump, above 5⁰ C - These tests to be carried out by CTSL or the Pump Operator on every wagon load.
2.14	Pile Integrity Testing
	After 7 days curing the piles we be ready for integrity testing. It is MACALEER & RUSHE . responsibility to instruct Cannon Piling for testing using the email: testing@cannonpiling.com - The piles must be cropped, exposed and accessible for the engineer. - The pile may only be tested minimum 7 days after pour. - MACALEER & RUSHE . must allow 72 hours for Cannon Piling to allow arrangement of testing engineer - It is MACALEER & RUSHE . duty to correctly label the piles for Integrity results and call off process
2.15	Task briefing Sheets
	This project will have specific task briefing sheets Appendix to this package plan please find: - TB104 Safe use of Concrete Pumps - TB114 Excavator in attendance to piling activities - TB116 Setting out CFA piles - TB730 Cutting and Burning Operations on pipes and Casing on site - TB731 - Use of MEWP on site - TB739 Bosun Chair rigging method - TB740 Bosun Chair rescue plan

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3.0	Risk Assessments																																	
3.1	Hazards																																	
	A Full list of Hazard controls / Risk Assessments to be found in appendix. Hazards include, but not limited to:																																	
	• Moving Plant • Concrete • Working at Height																																	
	• Spoil debris • Slips trips and Falls • Open Excavations																																	
	• Lifting Loads • Overturning Plant • Unloading Deliveries																																	
	Hazard controls / Risk Assessments to be found in separate document.																																	
	<table><tr><th rowspan="2">Hazard</th><th rowspan="2">Controls specified</th><th colspan="3">Task where hazards need to be briefed. (or personnel)</th></tr><tr><th>Piling operations</th><th>Lifting operations</th><th>Attendance excavator/ banksman</th></tr><tr><td>Rig overturning/ collapse</td><td> ☐ A signed and checked working platform certificate must be in place prior to the rig being off-loaded. ☐ Always limit the amount of spragging of the machine. ☐ Ensure the rig is continually maintained as per the manufacturer’s guidance. ☐ Rig can only be operated when banksman of the machine is in attendance. ☐ Piling Matt has been designed and independently checked. ☐ Daily visual checks will be made of the piling platform to confirm it remains in good condition. Damaged areas will be made good to the same specification and method as the original construction, revalidated by plate bearing tests prior to being put back to use. </td><td>X</td><td></td><td></td></tr><tr><td>Pipe work</td><td> ☐ All hoses inspected during the start and end of each shift. Part of the pre-start checks. ☐ Flexible hoses on the rig to be connected via whip checks as a fall arrest. ☐ Flexible hoses on the rig to be bagged, should the hose burst at height, concrete shall be contained within the bagged pipework. </td><td>X</td><td></td><td></td></tr><tr><td>Lifting of cages</td><td> ☐ Operation to be carried out by trained, briefed and competent person. ☐ All cages to have a dedicated lifting band on the cages. ☐ All lifting will be within 75% of the SWL of the machine and lifting accessories. </td><td>X</td><td>X</td><td>X</td></tr><tr><td>Rotation machine parts</td><td> ☐ Auger cleaners must always be fully operational. ☐ Auger guides to represent guards during rotation. </td><td>X</td><td></td><td>X</td></tr><tr><td>Open excavations</td><td> ☐ Piles to be covered immediately following construction. ☐ Wheeled plant must not travel over wet constructed piles. ☐ Covered and cones to be used in substitution for spoil. ☐ Marker such as spray paint to identify cast pile. </td><td>X</td><td>X</td><td>X</td></tr></table>	Hazard	Controls specified	Task where hazards need to be briefed. (or personnel)			Piling operations	Lifting operations	Attendance excavator/ banksman	Rig overturning/ collapse	☐ A signed and checked working platform certificate must be in place prior to the rig being off-loaded. ☐ Always limit the amount of spragging of the machine. ☐ Ensure the rig is continually maintained as per the manufacturer’s guidance. ☐ Rig can only be operated when banksman of the machine is in attendance. ☐ Piling Matt has been designed and independently checked. ☐ Daily visual checks will be made of the piling platform to confirm it remains in good condition. Damaged areas will be made good to the same specification and method as the original construction, revalidated by plate bearing tests prior to being put back to use.	X			Pipe work	☐ All hoses inspected during the start and end of each shift. Part of the pre-start checks. ☐ Flexible hoses on the rig to be connected via whip checks as a fall arrest. ☐ Flexible hoses on the rig to be bagged, should the hose burst at height, concrete shall be contained within the bagged pipework.	X			Lifting of cages	☐ Operation to be carried out by trained, briefed and competent person. ☐ All cages to have a dedicated lifting band on the cages. ☐ All lifting will be within 75% of the SWL of the machine and lifting accessories.	X	X	X	Rotation machine parts	☐ Auger cleaners must always be fully operational. ☐ Auger guides to represent guards during rotation.	X		X	Open excavations	☐ Piles to be covered immediately following construction. ☐ Wheeled plant must not travel over wet constructed piles. ☐ Covered and cones to be used in substitution for spoil. ☐ Marker such as spray paint to identify cast pile.	X	X	X
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	Moving plant	☐ All plant to be always accompanied by a banksman. ☐ People plant segregation. ☐ Training and familiarisation. ☐ 'Thumbs up' policy to apply at all times.	X	X	X
	Concrete burns	☐ PPE to be worn. ☐ Eye wash points to be identified in the site induction	X		X
	Working with wet concrete & other construction related hygiene hazards.	☐ Ensure correct PPE is worn – minimum glasses or full face visor during blowing out the concrete lines. Plus - Impervious gloves, long sleeve Hi Viz clothing, helmet ☐ Suitable and sufficient welfare and hygiene arrangements. ☐ Wash off any skin contact immediately and if required change contaminated PPE / Clothing.	X		
	Falling spoil debris	☐ Auger cleaner to be always fully functional. ☐ Auger cleaner to be regularly maintained and inspected (pre-start). ☐ Site and soil specific Auger cleaner.	X		X
	Un-loading deliveries	☐ Operation to be carried out by trained, briefed and competent operator. ☐ Clients TMP adhered to. ☐ Banksman when maneuvering vehicles. ☐ Walk the course.	X	X	X

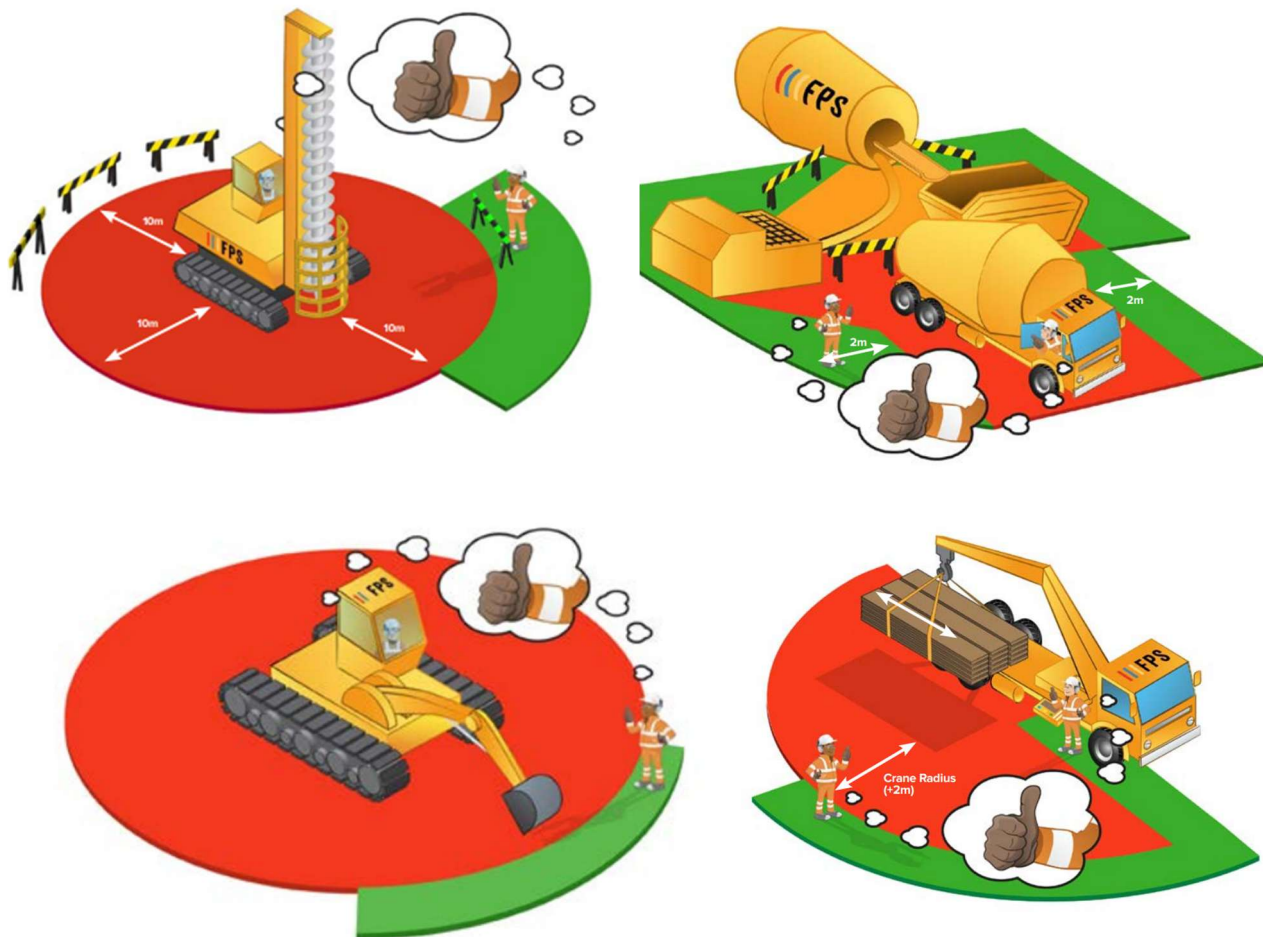
A Full Risk assessment is located in the appendix

3.2	COSHH		
	Data Sheets to be found in in COSHH document, issued separately		
	All items in COSHH/materials will be stored in the appropriate designated containers, stored on site and disposed of later.		
	COSHH items includes but not are limited to:		
	Diesel	Grease	Spray-liner
	Hydraulic Oil	Ready Mix Concrete	Engine Oil
	Pump Prime	AD Blue	
	Full list of materials with Data Sheets to be found in COSHH document in appendix		
3.3	Manual Handling		
	Activities such as clearing concrete from top of pile shaft, lifting concrete hoses, light cages and general lifting and carrying of equipment. In-house training provided to all Cannon operatives, where available mechanical lifting aids to be used.		
3.4	Daily Communications		
	Site layout may change and it the client responsibility to highlight any temporary works, excavations and periodic exclusion zones to the Cannon Pilling team. There should also be an agreed plant movement route which is clearly defined within the induction.		

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	Within reason, for any area with high activity work is to be barriered off with crowd barrier fencing and pedestrian walk ways should be marked around the site for safe access on and off the project. The Cannon Piling team will hold daily briefings before they commence work to highlight any changes.
3.5	Platform & Ramp Design guidance (Temporary Works)
	Levels & Gradients • Rigged Up - The gradient for any ramp that is intended for the piling rig must be of gradient 1:8 and measure 4.5m in width to enable the rig to travel from plot to plot fulling rigged. Subject to manufacturer guidance. • De-Rigged (Transport Mode) For a rig in transport mode, a ramp of 1:5 is deemed adequate, subject to manufacturer guidance. General guidance • Platform cert to be signed off by client and/ or principal contractor • All platform to be 2m beyond perimeter pile where possible • All access roads and ramps between platforms to be 4.5m in width, design and constructed inline with the platform design • All platforms to be plate bearing tested prior to use inline with platform design • Platform level and integrity to be checked and signed off weekly by (MACALEER & RUSHE .) or principal contractor • Edge protection to be provided where deemed necessary
3.6	Temporary Works
	If the site is subjected to The Management of Temporary works, BS9575 should be followed. Common temporary works interface, temporary works co-ordinator to be on site to ensure communication with CP supervisor to ensure all loading and unloading is undertaken safely. • Façade retention (Drawing to be provided) • Temporary propping (raking or snapping props) • Hoarding Safe working distance for all of the above 950mm from centre of pile to temporary works
3.7	People plant segregation (Exclusion Zones)
	Any personnel wishing to communicate with a plant operator should approach in the operator's line of sight and wait in a safe location, preferably 10m distance until they have been seen. The Rig operator must ensure the rig is placed in a safe condition before the authorised person may enter the "red zone" The Thumbs up policy is a simple gesture to ensure communication has been received and the authorised person may then approach. The same approach is to be use for all operations including Excavators, Hi-ab movements and pump operations. This is a standard produced by the FPS to help health and safety of all personnel on site. Further information can be found: <u>FPS-RESTRICTED-ZONE-HANDBOOK A6 14029.pdf</u>

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3.8 Noise

Piling rig, concrete pump and holding drum and Deliveries are primary noisy works, this will be minimised by keeping the machine switched off when operations are on break/hold. Using plant on lower revs when available.

Hot works activities create noise, this will be monitored when in use through the hot works permit. This activity will be sporadic, and for short periods of time, for exemption using a metal cutting saw to cut a length of re-bar.

Ear defenders to be worn.

All noisy works will be undertaken within the site hoarding, between the working hours 8am to 6pm.

3.9 Hand Arm Vibration

Vibration from the auger drilling is minimal as purely rotary boring techniques are being used.

For the limited time a petrol saw, and an impact gun is used during a 10-hour shift from a 4-person crew, HAVS register will not be required.

3.10 Vibrations

SFA & Bored piles have similar levels of vibration to standard site tracking plant, so the level of vibration anticipated because of the works is considered negligible. At present we have no plans on this project to use a cage vibrator.

SFA & Bored piling are techniques used to minimise vibration, we would expect the site excavators, rollers etc to create greater levels of vibration. Monitoring of ground vibration to be undertaken by the client if required.

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3.11	Lifting – General
	All lifting operations will be managed through individual lift plans for specific plant. • Truck mounted HIAB's • 360 degree tracked excavators • Piling rigs <i>A Site Specific Lift plan will be issued upon the receipt of the attending excavator LOLER/12 month certificate</i> <i>This will be issued separately</i> <i>Please see individual lift plans and specific attendance excavator task briefing</i>
3.12	Lifting - General
	All lifting operations will be undertaken in accordance with the agreed excavator lift plan. All lifting operations will be supervised by a competent person and all lifting accessories & equipment will be certified. The Load Bearing cages at B807 are relatively small in length. Therefore, the attending excavator shall be used to install the cages into the freshly caged concrete. Stage 1. Each cage will be inspected prior to lifting to ensure all connections are intact and secure. Lifting tackle shall be attached to the designated lifting band. Stage 2. The cage will then be centered over the wet pile shaft and plunged into the pile to the depth of the top lifting band. Stage 3. The lifting chains will be detached, and the cage will be further lowered into the pile to the required depth by means of the attendance excavator, and finally centralised Stage 4. This sequence shall then be repeated for all piles throughout the works. Any piling rig auxiliary ancillary lifts will be covered under the 12 monthly thorough inspection & the piling rigs operators manual.
3.13	Working Near Underground Services
	It is the clients responsibility to provide Location drawings and identify the underground utilities in the area as in alliance with HSG47. All underground services must be clearly identified and placed into a physical exclusion zone. If Services have been identified, MACALEER & RUSHE . must provide a DWG drawing to ensure the piles location are not to clash with any underground service. There must be ample opportunity to discuss movement of piles and alternative layouts before work starts. MACALEER & RUSHE . or site representative will sign a permit to dig confirming piled areas are clear of all services , Cannon Piling can take no responsibility for services damaged during piling that have not been clearly marked above ground or deviate from the markings provided The permit to work must be fully complete before any work can begin.
3.14	Working in close Proximity to a Boundary Wall
	The auger will be cleaned by a mechanical auger cleaners to remove majority of the bulk and fine debris. The mechanical clearer is located 1m above ground level ensuring the debris do not climb higher than this. The machinal auger clearer will clear 98% of rising, there may be fine, loose material left on the flight. When working near a boundary wall the client will supply hoarding, the loose debris should not fall from a height greater than the hoarding supplied. The excavator will clear away fallen spoil to avoid muck away build up in the area, ensuring muck is not pushed over the critical boundary The loop hose on the rig may need moving with a 2t webbed sling attached to the excavator. The Rig attendant/Slinger will stop piling operations to attach the sling to the loop hose. This may be required when working against existing structures to prevent hose kinking or having the hose becoming entangled into the auger cleaner.
3.15	Working with Electronic Devices

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Mobile phones, personal radios and earphones are prohibited. These devices should be stored away in a safe place.

Black hat ops may use a mobile if necessary, in allocated safe areas or within the machine cab when machine is stationary and controls discounted. Safe areas will be identified by AMC in the introduction.

4.0 Traffic Management & Set up

4.1 Site Location Details



4.2 Deliveries

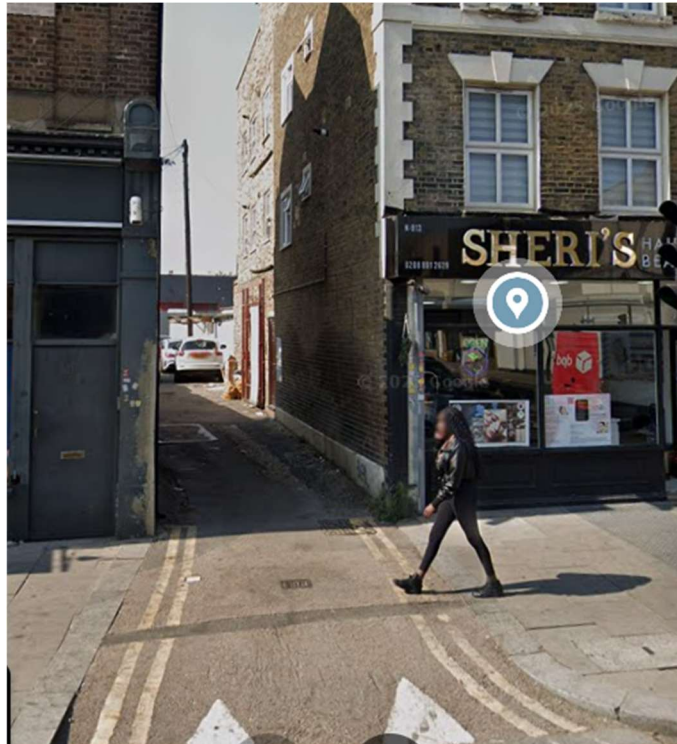
MACALEER & RUSHE . traffic management plan should be adhered to at all times including the use of segregated walkways for access onto and around the site.

All deliveries to site must obey any site speed limits or other signage. All deliveries to be pre-slung with flat beds having edge-protection prior to arrival.

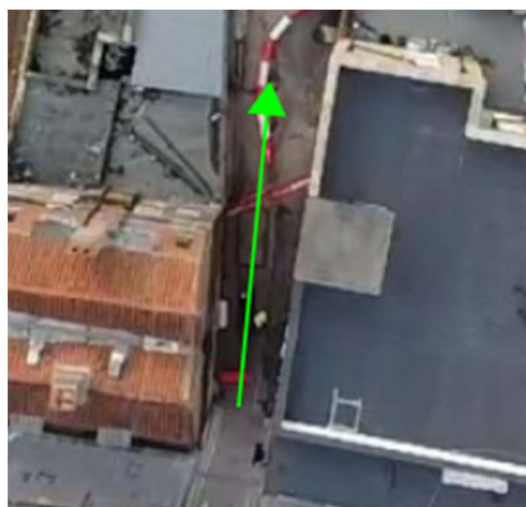
Deliveries should be pre-arranged ensuring MACALEER & RUSHE . are aware of any movement in and out of site.

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4.3 Site Access



4.4 Route into site



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4.5 Site Set Up

The piling rig will be mobilised to site on an articulated abnormal load, low loader and the associated equipment on Rigid Hi-ab wagons x 3 under a permit, following approved transport routes. Please note that due to Highways/ Local authority restrictions, the rig may be subject to out of hours delivery times. Once known, all delivery times will be notified to the MACALEER & RUSHE . in particular the piling rig delivery.

The low loader will park on High Road. Traffic marshals, road and curb protection to be supplied by MACALEER & RUSHE .. The piling rig will be maneuvered off the trailer and tracked to an area with a firm, level platform suitable for rigging up by the piling crew.

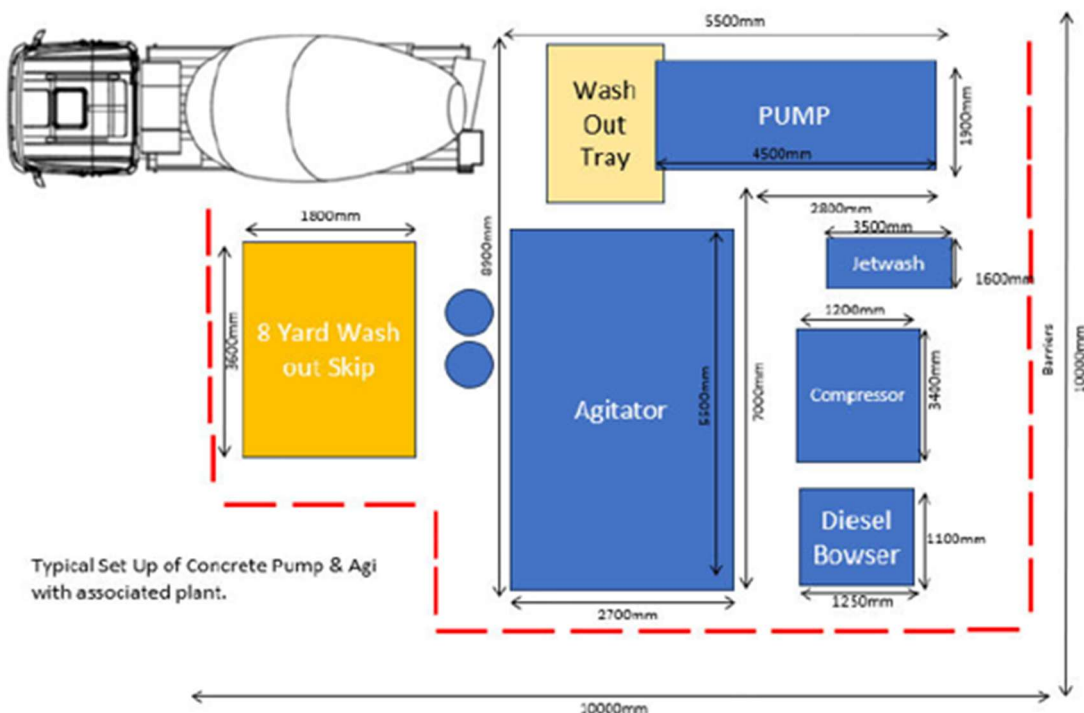
Pedestrian routes:

Pedestrian, site plant and their interface to be highlighted in the site induction, where all operatives will familiarise themselves with the new environment.

Site Layout/ Establishment

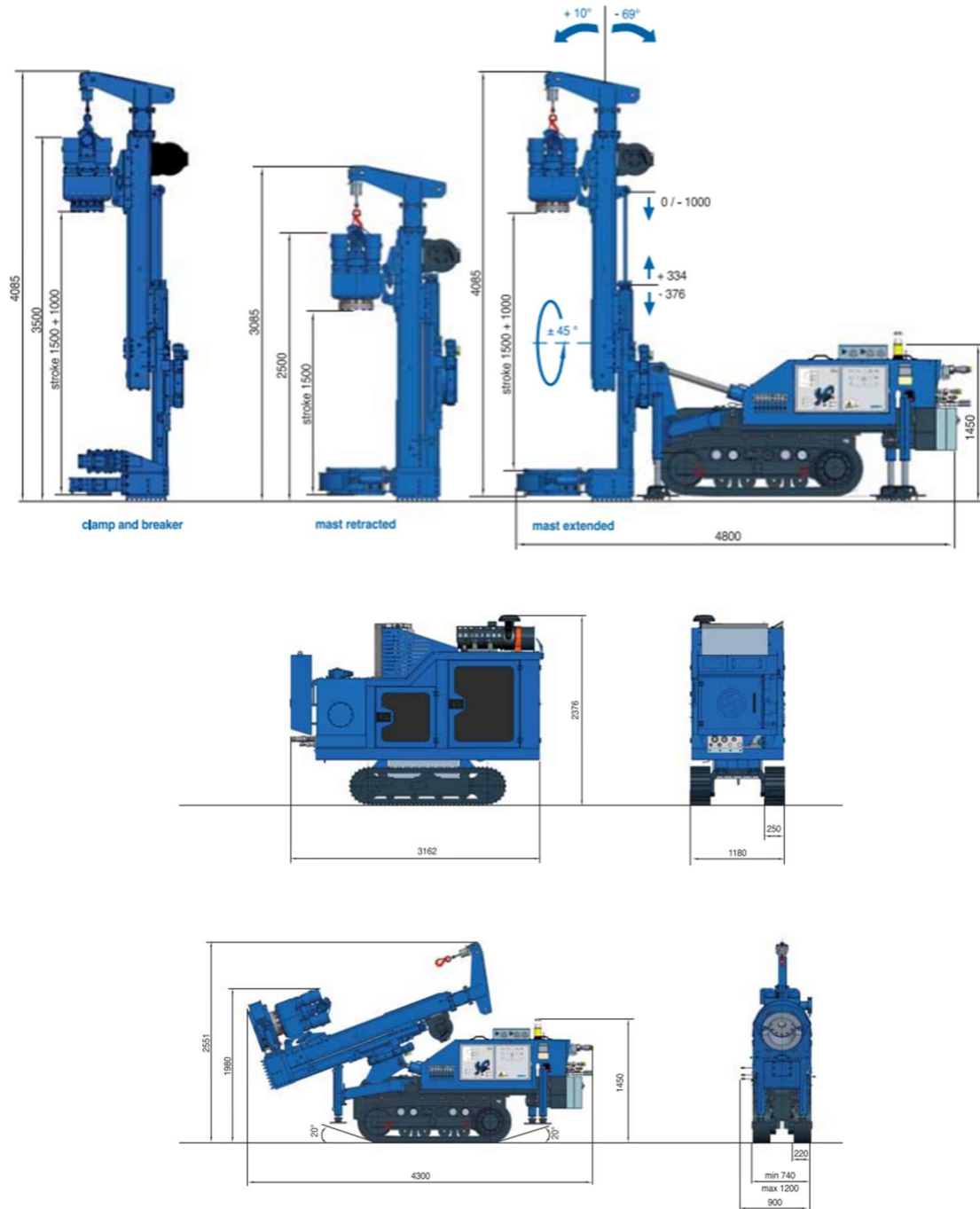
Details of the location of CP static plant and materials will be discussed following a site visit, by a project manager, and a plan marked to agreed set-down areas.

A general site set up is shown below:

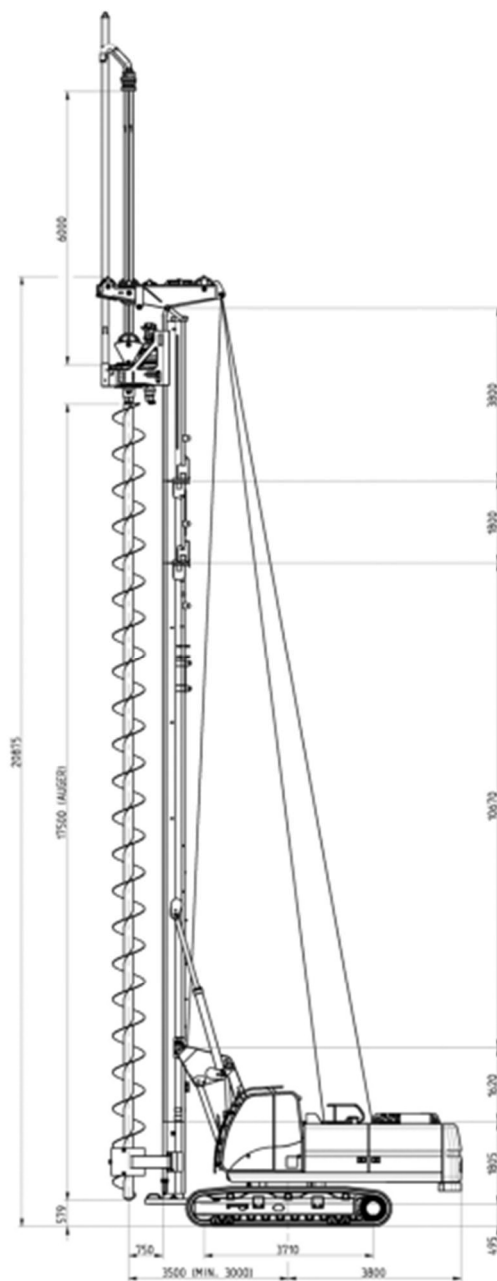


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4.6 Rig Spec Details
SM4



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5.0	Resources																																																
5.1	Cannon Piling Personnel																																																
	<table><tr><th>Name</th><th>Role</th><th>Email</th><th>Number</th></tr><tr><td>Alistair MacDonald</td><td>Director</td><td>Alistairmacdonald@aarsleff.co.uk</td><td>07990 006 182</td></tr><tr><td>George Newton</td><td>Operations Manager</td><td>George@cannonpiling.com</td><td>07899 918 617</td></tr><tr><td>Duncan Penning</td><td>Commercial Manager</td><td>Duncanpenning@aarsleff.co.uk</td><td>07990 006 610</td></tr><tr><td>Sarah Cooper</td><td>Contracts Engineer</td><td>SarahCooper@cannonpiling.com</td><td>07825 815 929</td></tr><tr><td>Henry Newton</td><td>Geotechnical Engineer</td><td>Henry@cannonpiling.com</td><td>07917 104 366</td></tr><tr><td>Shaun Prill</td><td>Project Manager</td><td>Shaun@cannonpiling.com</td><td>07514 206 390</td></tr><tr><td>Mark Hardy</td><td>HSE, Quality & Training Advisor</td><td>Markhardy@aarsleff.co.uk</td><td>07443 270 222</td></tr><tr><td>John Scarff</td><td>Transport Manager</td><td>John@cannonpiling.com</td><td>07826 853 772</td></tr><tr><td>Josh Wicks</td><td>Yard Manager</td><td>Josh@cannonpiling.com</td><td>07721 373 653</td></tr><tr><td>AshleyTokley</td><td>Plant Manager</td><td>Workshop@cannonpiling.com</td><td>07939 446 667</td></tr><tr><td>Hannah Tadman</td><td>Contracts Administrator</td><td>hannahtadman@cannonpiling.com</td><td>078813770206</td></tr></table>	Name	Role	Email	Number	Alistair MacDonald	Director	Alistairmacdonald@aarsleff.co.uk	07990 006 182	George Newton	Operations Manager	George@cannonpiling.com	07899 918 617	Duncan Penning	Commercial Manager	Duncanpenning@aarsleff.co.uk	07990 006 610	Sarah Cooper	Contracts Engineer	SarahCooper@cannonpiling.com	07825 815 929	Henry Newton	Geotechnical Engineer	Henry@cannonpiling.com	07917 104 366	Shaun Prill	Project Manager	Shaun@cannonpiling.com	07514 206 390	Mark Hardy	HSE, Quality & Training Advisor	Markhardy@aarsleff.co.uk	07443 270 222	John Scarff	Transport Manager	John@cannonpiling.com	07826 853 772	Josh Wicks	Yard Manager	Josh@cannonpiling.com	07721 373 653	AshleyTokley	Plant Manager	Workshop@cannonpiling.com	07939 446 667	Hannah Tadman	Contracts Administrator	hannahtadman@cannonpiling.com	078813770206
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• 1 No. Supervisor – TBC (SSSTS) • 1 No Rig Operator – TBC (SSSTS + CPCS) • 1 No. Concrete Pump Operative – TBC (CPCS) • 1 No. Banksman (Rig) – TBC (CPCS)																																																	
5.2	Training of Persons Involved																																																
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Persons under the age of 18 requirement:																																																	
• Proof of competency • Copy of logbook (each site to be logged, collating experience)																																																	

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	- References from trainers, project managers and clients that have experienced a young person on their site - Next of kin made aware when young person starts and finishes work each day - Young person to read, understand and sign up to the RAMS provided, stating that they are under 18 years of age - Site supervisor to be brief that a young person is within their crew. - Site supervisor will offer further assistance if required - Site supervisor to have copy of young person contact and any medical details																												
5.3	Supervisor Details																												
	The Supervisor for this project is Shaun Prill and all works and cover are to be organized through him. Our On- Site supervisor for this project is to be confirmed nearer the time.																												
	Details of Deputy Supervisor																												
	Shaun Prill – Site Supervisor – SMSTS – 07824 955 605																												
5.4	Plant/Equipment/Tools																												
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Delivery wagons	Hi-ab																												
5.5	Technical Information																												
	Please refer to: - Cannon Piling Pile design & latest drawing - MACALEER & RUSHE .s site induction - Traffic Management Plan - Soil Investigation(s) - Piling Platform Design/ Certificate - Permit to Dig - Pre-start checks/ Friday Pack Information to be kept within the onsite folder																												

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5.6	Attendances & facilities for subcontract:
	The following attendances and facilities shall be provided and maintained at all times (including additional working hours) for the duration of and in relation to the specialist works, free of charge and in a manner that does not disrupt or restrict the regular progress of the specialist works.
	Main site attendances to be provided by others as follows: Full list attendances is attached to CP quotation or found within: FPS Schedule of Attendances and Facilities July 2015 1. Full Welfare facilities. 2. Water supply at mainspressure. /Garden Hose pipe 3. 13 ton (min) / 22-ton Excavator and dumper in attendance for removal of pile risings, lift and carry duties for all unloading of materials, distribution and installation of pile cages. The attendance excavator will not be permitted to load muck away wagons. 4. Task specific and background lighting. 5. Setting out to all pile positions by engineer. 6. Car parking for 1No. Van. 7. Secure site hoarding. 8. Protection of works, roads, and adjoining buildings. 9. Regular checks on the pile mat and haul road condition. 10. Protection of works, roads, and adjoining buildings. 11. Level Piling mats and haul roads to every work area 12. Removal of any obstruction and/or relocation of pile positions. 13. Probing of pile positions in advance of works 14. Provided skip /area for general rubbish and excess waste 15. Pile mat construction, testing, maintenance and sign off 16. Traffic and gate management 17. Wheel washing and road sweeping A more comprehensive list of attendances attached to Cannon Piling Quotation.

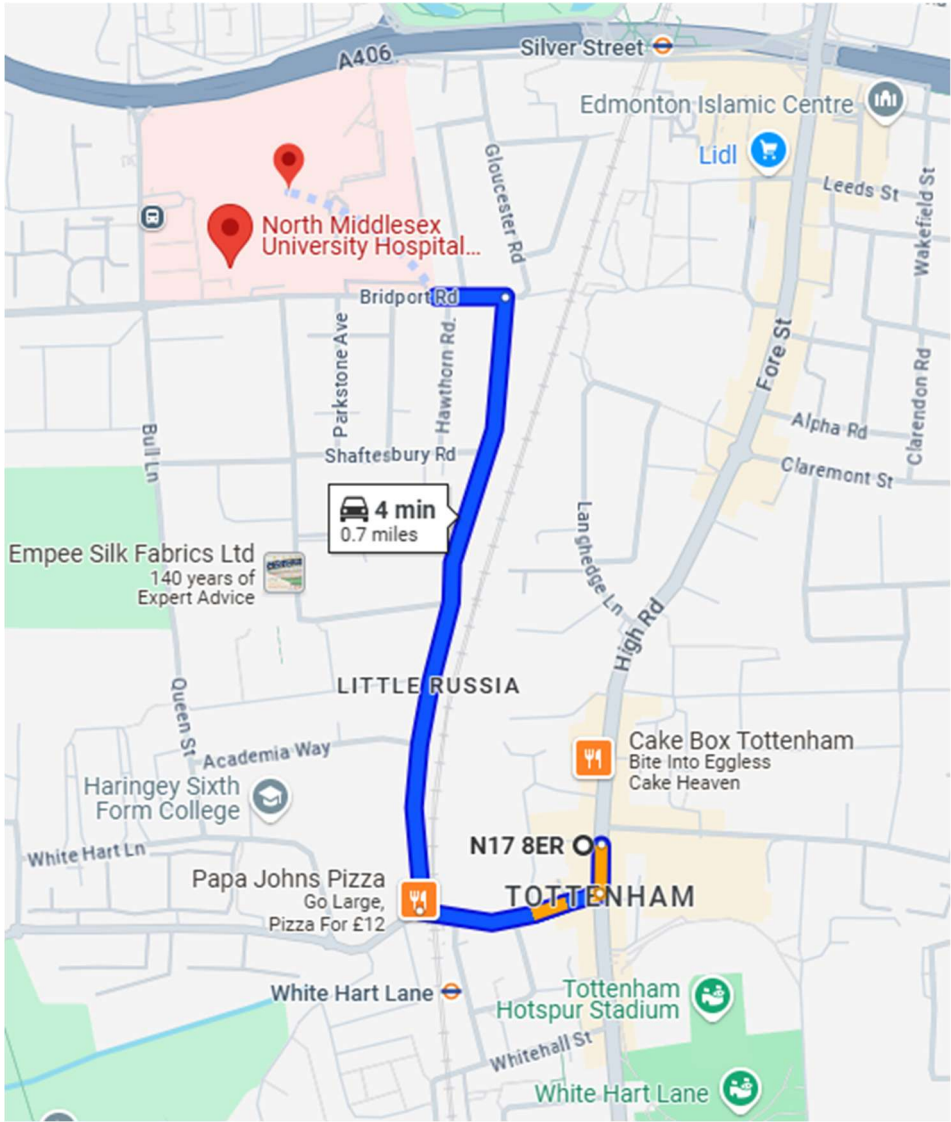
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6.0	Working Arrangements
6.1	Permits Required
	All permits to be signed before work commences Working Platform Certificate. Working platform to be marked clearly by client. - The Working platform will be CBR tested and undergo daily / weekly inspections by site supervisors. The Supervisor will address changes with MACALEER & RUSHE . to ensure the platform is maintained throughout duration of works - The working platform certificate will be signed weekly. - Provided by Cannon Piling Permit to Pile/Break Ground. Permit to be signed weekly. - The permit must be completed fully including cat & genny checks for underground services and cleared from obstructions - Provided by Cannon Piling Lifting Permit. Lifting Plan to be signed prior lift commence. - MACALEER & RUSHE . to provide attending excavator LOLER/12 monthly cert - The Lifting plan to be signed and briefed by lift supervisors - Provided by cannon Piling Hot Work Permit. To be signed on daily basis - Hot Work permits to be signed for any welding or abrasive wheels. Fire watcher and fire extinguisher must be present. - To be provided by client Working at height - To be issued if using the MEWP - To be provided by client <i>These permits must be signed by MACALEER & RUSHE . and the CP supervisor prior to undertaking works.</i>
6.2	Security Arrangements
	Provided by MACALEER & RUSHE . The site compound will be secured from unauthorised entry when no work is being carried out, i.e. at night and during weekends or holiday periods. Signage will be erected to warn third parties of the dangers associated with unauthorised entry.
6.3	Mandatory Site PPE (As per British & European Standard)
	 As a Minimum to meet the MACALEER & RUSHE . site rules, the following 5 point PPE must be CP branded and will be worn by all CP personnel Mandatory PPE - Safety Hat EN397 - Eye Protection, EN166F - Ear Protection EN352 - Gloves, EN388 - High Visibility Vest ENISO 20471 - Steel Toe Cap Safety Boots (no riggers) EN20345 Site Specific - Orange hi vis Trousers EN ISO 20471

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6.4	RPE								
	All RPE will be adequate and suitable as per AGE's OHS-23 RPE Procedure. The use of RPE will prioritise PAPR powered airflow with TH2 filtration. Where the specific task briefing allows, tight fitting RPE shall be P3/FFP3 and shall be fit tested by a competent person ensuring the wearer remains clean shaven during use. All RPE will have a minimum assigned protection factor of 20 (APF20) for particulate hazards. Where to risk of gas/vapour inhalation form part of the project specific hazards, controls will be outlined within STEQ approved specific task briefings. If the hazard is not covered by a task briefing, this will be discussed with the STEQ Team and a suitable task briefing introduced. Training shall be provided on any RPE provided in respect to donning, maintenance, and care of equipment in line with the company's RPE procedure								
6.5	Task Specific PPE								
	<table border="1"> <thead> <tr> <th>Task</th><th>PPE Required</th></tr> </thead> <tbody> <tr> <td>Welding, Grinding or Cutting</td><td> - Flame Retardant overalls <i>EN16612</i> - Ear Protection <i>EN352</i> - Safety goggles <i>EN166B</i> - Welding Gauntlets <i>EN12477</i> - Welding RPE <i>EN14921</i> </td></tr> <tr> <td>Concreting</td><td> - Long sleeve Top - Wellington Safety boots <i>EN20345</i> - Chemical (concrete) Gloves <i>EN374</i> </td></tr> <tr> <td>Working at Height</td><td> - Harness <i>EN361</i> - Lanyard <i>EN358</i> </td></tr> </tbody> </table>	Task	PPE Required	Welding, Grinding or Cutting	- Flame Retardant overalls <i>EN16612</i> - Ear Protection <i>EN352</i> - Safety goggles <i>EN166B</i> - Welding Gauntlets <i>EN12477</i> - Welding RPE <i>EN14921</i>	Concreting	- Long sleeve Top - Wellington Safety boots <i>EN20345</i> - Chemical (concrete) Gloves <i>EN374</i>	Working at Height	- Harness <i>EN361</i> - Lanyard <i>EN358</i>
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6.6	Welfare								
	MACALEER & RUSHE . must provide the minimum welfare facilities under Schedule 2 of the CDM 2015 regulations It is MACALEER & RUSHE . duty to provide a safe and healthy working arrangements for Cannon Piling site team ensuring there is available - Wash room facilities with toilet, wash basin and soap - Drinking water - A place to eat safely - A place to change or store clothing								

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7.0	Emergency Arrangements
7.1	Nearest Hospital
	 North Middlesex University Hospital, Sterling Way, London N18 1QX
7.2	First Aid
	Provided by MACALEER & RUSHE . - There will be a full time first aider on site for the duration of our works - The first aid box will be located in the site office - First aiders are to be identified during site induction. All accidents and use of first aid to be recorded and raised to the PC, Site supervisor and Cannon management immediately. Site Supervisor to collect statements/ evidence/record photos and issue directly to Cannon management team to review further and record incident.

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	All accidents will be raised to a safety stand down for business wide awareness. When Required, accidents and incidents will be reported to HSE under RIDDOR.
7.3	Network Rail Emergency / Bridge Contact / Etc
	N/A
7.4	Pedestrian / Traffic Re-routing Arrangements Provided by MACALEER & RUSHE . ○ Traffic marshal(s) will coordinate interactions with traffic and pedestrians ○ People plant interface to be discussed daily in prestart meeting ○ When working within 5m of a public area (footpath, roadway, common area) and exclusion zone is to be managed and maintained by the client of a 5m radius from the centre of the auger during the drilling phase. The exclusion zone may need to extend beyond site boundary to safeguard any public.
7.5	Fire Safety Arrangements Provided by MACALEER & RUSHE . In the event hearing the fire alarm: - ○ Turn off all plant and equipment and make your way to the designated assembly point for roll call by your Company's fire Marshal. This can be located using the Company sign board displayed for this purpose. Stay at the assembly point until you are released by your Company fire Marshall. In the event of finding a fire: - ○ Leave the area and raise the alarm immediately. Do not attempt to fight the fire, and only use a fire extinguisher if you need it to help you get to a position of safety. Move to the assembly point and report the location of the fire and any details that may help brief the fire services.
7.6	Responsibility for Task and Safety Lighting: Cannon Piling Safe working day is subjected to safe daylight hours, working 08:00 – 18:00 Monday to Friday. IF agreed, the site team may work outside these hours due to project commitments, travelling time or daylight saving hours. It is the client responsibility to ensure the site is safe to work by providing task lighting if required to work outside "daylight" times. MACALEER & RUSHE . must ensure the site has safe egress and has adequate light to walk around the site continue to work safely

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8.0	Communication of Information
8.1	Inductions
	Upon arrival the whole Cannon Piling team must attend a site induction from a MACALEER & RUSHE . representative. This will introduce the team and provide information regarding site set up, access and egress, welfare and first aid. It will provide opportunity for the cannon team to ask any questions specific to the site and ensure it is safe to work. Cannon piling team will provide their CSCS cards.
8.2	Daily meetings
	At minimum, the supervisor should be welcomed to the daily site meetings to be made aware of the current activities on site. The project will often have other third parties present, and it is good practice to share the days plan and the occupied locations. These discussions can help identify the changing hazards present and help with communications. The supervisor is to relay this information in his own morning briefing with his team.
8.3	Daily Checks & Briefing
	The Cannon piling team will have a daily brief and perform pre-start checks on their equipment. This information will be recorded as part of their Friday Packs and collected weekly. Daily briefing and pre-start checks are to be issued to the office for QA purposes daily <i>Copies of Friday packs may be requested by MACALEER & RUSHE . if required.</i>
8.4	Tool box Talks
	Tool box talks will be given by site supervisors at least once a week. Tool box talks are provided by use of QR code within Drillers Friday Pack <i>Copies of Tool box talk can be requested</i>
8.5	Permits
	All permits are to be signed off by Site Supervisor and MACALEER & RUSHE . representative All permits are to be issued to the office via Records@cannonpiling.com <i>Copies of Records can be requested.</i>
8.6	O&M
	Details for the O&M will be provided in three parts, The Concrete Mix design will be issued for approval before the concrete order is confirmed. The steel cages will be issued when the reinforcement has been ordered. The Pile drill dates along with Cube and Integrity results will be issued upon final payment receipt unless otherwise agreed.

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9.0	Environmental														
9.1	Pollution, Waste, Local Habitat														
	<table> <tr> <th>Environmental Impact</th><th>Action Taken to Mitigate</th></tr> <tr> <td>Diesel engines</td><td>Minimise use</td></tr> <tr> <td>Oil/ diesel spillage</td><td>Waste Management/ Spill kit</td></tr> <tr> <td>General waste</td><td>Waste Management/ Recycle</td></tr> <tr> <td>Material suppliers</td><td>Local to site to reduce travel distance</td></tr> <tr> <td>Noise</td><td>Reduce when possible/ site working hours</td></tr> <tr> <td>Light</td><td>Reduce when possible/ site working hours</td></tr> </table>	Environmental Impact	Action Taken to Mitigate	Diesel engines	Minimise use	Oil/ diesel spillage	Waste Management/ Spill kit	General waste	Waste Management/ Recycle	Material suppliers	Local to site to reduce travel distance	Noise	Reduce when possible/ site working hours	Light	Reduce when possible/ site working hours
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Noise	Reduce when possible/ site working hours														
Light	Reduce when possible/ site working hours														
9.2	For the avoidance of damage to sub surface drainage														
	The main contractor is to ensure all existing sewer connections are terminated outside of the line of piling. The proposed methodology of pile construction ensures that the piles are installed in a manner that ensures the sides of the pile excavation are always supported, as per section 2.7 CFA Piling Concrete Procedure.														
9.3	Concrete Wash out														
	Piling work will produce excess concrete waste. Concrete lorries require concrete chutes to be clean before driving offsite. Concrete from delivery trucks shall be washed out into a polythene lined skip provided by others. At the end of each day CP will be required to clear the concrete pipes via an air compressor, blow out box and sponge ball. This concrete will have to be discharged onto the platform where it can set and be broken down the following morning The Wash out from the pump hopper also needs clearing at the end of the shift, this will be discharged into a purposed built polythene tray which can be broken down and disposed of the following morning. The tray is to be re-used daily. While concrete waste is not a concern, the cleaning method of required water can cause the watery slurry to migrate and cause environmental issues. Where practically possible [company] is to indicate areas of wash out waste that are either polyethene lined or banded to avoid contamination spread. Any polyethene lined skips are to be managed by others														
9.4	Waste Management														
	Waste management will need to be in place by the MACALEER & RUSHE . to accommodate the helical, foam, slings and excess wire waste created by the fixer. Piling Auxiliaries will also generate waste. Skips and bins to be provided, monitors and regularly replaced by others.														
9.5	Housekeeping & Storage														
	Housekeeping will be ongoing, and the positioning of materials and equipment will be shown in a site phasing plan if necessary. During the mobilisation, materials will be stocked and stored, on bearing timber and pre-slung. Concrete will be stored in a static concrete holding drum. Located within the allocated laydown area.														

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10.0	Monitoring			
10.1	Monitoring			
	The permit system requires suitable supervision and monitoring to ensure that the conditions of the permit are complied with. Alteration to piling platform will be logged. Permit to dig and working platform certification to be re-issued and signed weekly.			
10.2	Person Responsible for monitoring / review of the safe system of work and ensuring compliance.			
	Project Manager: responsible for overall project management, infrastructure, monitoring of works including safe systems of work on a day-to-day basis.			Shaun Prill
	Contracts Manager:			George Newton
	Health and safety manager			Robert Speakman
	Health and safety advisor			Mark Hardy
10.3	Review Date			
	Every 6 Weeks from start of site works.			
10.4	Amendments Authorised by			
	Name		Signature	
	Status	Accepted	✓	Not Accepted

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12	Weekly Toolbox Talk Sign off		
	The undersigned confirm they have been briefed on the enclosed health and safety pack and are aware of all the risks and procedures detailed therein.		
	Location		Supervisor Presenting TBT
	Subject		
	Date		Signature
	Duration		
	Name	Signature	Position
	Feedback and Comment from Cannon and site staff		