HILL PILING

Ark Build Plc
Contiguous wall piles
44 Cleveland Street
London
W1T 4JT

Rwp4016

1. **Method Statements(Auger bored piling)**
2. **Risk Assessments(Including Covid 19 guidelines)**
3. **COSHH Assessments**
4. **Rig Certificate & Inspection records(TBT Covid 19 precautions on arrival)**
5. **WPC, Rig Specification & Bearing Pressures**
6. **Insurance Details**

This document will be briefed to all operatives by Hill Piling SMSTS / SSSTS Supervisor read & understood and signed as acknowledgement before any works commence on site.

R W Hill Piling Ltd.
1 Springfield Industrial Estate
Springfield Road
Burnham on Crouch
Essex CM0 8UA

Tel : 01621 785 954
Fax : 01621 786 135

Prepared by : **S. C. Thornton**

Signature :

Contracts Director

Date : **3 August 2020**

Revision	Date
0	3 August 2020

HILL PILING

Section 1 - Method Statements

HILL PILING

Method Statement / Safe System of Work

Client Ark Build Plc **Principal Contractor** Ark Build Plc
Contract Contiguous wall, 44 Cleveland Street, London W1T 4JT

Site Foreman/Rig driver Wayne Lawrence 07 **.....** **Rig No.** Hutte 203

Visiting Site Supervisor Ian Aldred(SMSTS) 07**.....**

Job No. Rwp4016 **Contracts Director** Stuart Thornton 07 **.....**

It should be noted that Hill Pilling Ltd have put into place these working systems and precautions, they have been put into place to ensure that the pilling operation and associated works follow best practice within the pilling industry.

All current Covid 19 site precautions / procedures will be adhered to at all times

- All lifting and piling operations are governed by a system of hand signals as identified with in the Health and Safety (Safety Signs and Signals) Regulations 1996 ACOP (L64) Schedule 1.
- Signallers the (rig driver) should be prepared to give the STOP signal at any moment and in an emergency a STOP signal may be given by anyone. No operation for which a signal is agreed should be carried out until the signal is given.
- Any signal which is not understood should be treated as a STOP signal.
- Piling rig drivers and steel fixers should ensure there is a clear unobstructed line of sight between them during any lifting operation.
- Prior to giving the signal to start lifting the signallers should ensure that the work area is clear of unauthorised persons. They should ensure that they themselves are in a safe area away from the machine movements, falling objects etc. and with a clear view of the whole work area.
- Should any one enter the work area whilst work is being carried out, the signaller should signal the rig driver to STOP as soon as it is safe to do so.
- Casing or steel being hoisted by the rig should be slung so that they do not have to be swung round through any distance greater than is absolutely necessary.
- When materials are being hoisted, persons not involved in the lift should keep a safe distance.
- Boreholes should not be left unfilled overnight under any circumstances.
- All machines should be immobilised and left in a safe and stable position when unattended.
- Rig driver to visually inspect all items of plant and machinery for obvious defects - report all such defects to the Piling Manager and await further instructions.
- Our operatives on site will consist of: - Foreman / Rig driver, Steel fixer, Banksman & pump operator.

Method Statement / Safe System of Work(continued)

1. A **Safety Zone** is employed at each pile position and is defined as an area within a 2m radius of the centre of the auger.
2. No person is permitted within the **Safety zone** whilst the auger is turning.
3. Only authorised personnel are permitted to enter the **Safety Zone** and must have been properly instructed on the risks associated with CFA Piling operations.
4. The whole piling area will be cordoned off by **Ark Build** and designated a piling area with pedestrian walkways and traffic routes as required during the course of the works.
5. Operation of the gates guarding the auger is carried out automatically with only authorised personnel permitted to be within the vicinity. The Banksman will have to first remove a locking pin then the gates will be opened by pushing them apart but this will be undertaken adhering to our Safe working Practices. I e no person is permitted within the **Safety Zone** whilst the auger is turning.

The working platform certificate must be signed off by Ark Build / Piling platform designer before the commencement of any piling work, in addition any alterations to the piling mat must be logged on the Working Platform log.

Scope of Works

Install 55 No. 450mm diameter sectional flight auger piles @ 600mm centres, and filled with C28/35 concrete to class DC2 sulphate conditions. Cage reinforcement as construction schedule.

- **No debonding required**
- **No integrity testing required**
- **No concrete cube testing required**
- **We have assumed a Piling Platform Level (PPL) of 27.730m** (if different this needs to be brought to our attention as it may affect the pile design).

METHOD OF WORK, CONTINUOUS FLIGHT AUGERD PILING

1. **Ark Build** to ensure the section of road adjacent to site entrance is clear of parked vehicles prior to our arrival on site.
2. The hiab should be backed / or driven onto the site before off loading, **Ark Build** will assist in temporarily stopping the traffic to allow the hiab / low loader into site. Although unlikely should this not be possible the hiab / low loader will temporarily park in the street, positioned in such a way to minimise the distance the Piling rig has to track on the road.
3. However, should the rig need to track into site / cross a section of curb that has not been dropped **Ark Build** is to provide necessary materials to enable crossing without damage. (sleepers / ply etc).

4. The delivery and offloading of all other ancillary equipment and materials will be done on site using a Hiab and stored in a designated area in addition when necessary the attendance machine may be used instead. All delivery vehicles will have edge protection and when possible loads will be pre-slung to avoid working at height.

5. All delivery drivers must report to **Ark Build Security** before entering site and must wear full PPE at all times. In addition, where there is a need for operatives to climb on the lorry, to facilitate off-loading, suitable edge-protection must be provided.

6. Setting out to be carried out and maintained at all times by **Ark Build.** Every other pile location will be set out on the wall in the first instance with the intermediate piles set out once the other piles are installed(Fixed site profiles should be put in place at either end od the wall and maintained for the duration of the piling works)

7. Concrete pump (and static agitator drum if used) should be located so that the maximum number of piles can be installed without the need for repositioning it. It should also be set up so that the ready-mix lorries do not have to track across any areas unmade ground as responsibility for road cleaning will be that of the Main Contractor(Ark Build).

8. Before starting work the piling rig driver should survey the work area and check that the ground markings set out by the engineer correspond to the site information (site plans, drawing etc.) that have been supplied.

9. Rig driver to establish the position of trial bore (if necessary) ensuring position is first clear of drainage and services with **Ark Build.**

10. Trial bore to confirm that ground conditions are as per site investigation. The strata depths should be compared with the design and any variations should be notified to the Piling Manager/Supervisor immediately and await further instructions. Backfill trial bore afterwards.

11. At the start of each day the rig driver/gang supervisor adjust layout of concrete piping to suit area of work. Before starting work rig driver/gang supervisor to inspect concrete pipe line for defects and secure all clips. Visual inspection by the Pump operator to include hoses, clips/pins, whip checks and strops.

12. Before arrival of ready mix concrete grout pump.

13. Piling rig to locate auger tip over pile position with assistance of banksman, plumb mast and re-check auger position adjusting as necessary. Banksman to check auger for any spoil that has been loosened but not removed by the auger cleaner. Care should be taken to watch for any remaining spoil falling from the auger.

14. On arrival of ready mix concrete Pump Operator to visually inspect the load for its suitability for pumping before accepting the load. If deemed necessary the load should be slump tested for its suitability to use as a pump mix.

15. Piling rig starts to drill to depth as specified in the design calculations adding 1 section of auger at a time until the final depth is achieved.

16. Once the required depth has been reached the rig driver should record the depth, pile number, pile diameter and reinforcement cage on the daily log sheet as a construction record.

17. The readymix concrete lorry has previously discharged into static drum allowing pump operator to prime the pipe line.(if used)

18. Rig operator will then pull the auger about 150mm off the bottom of the bore and then watch the flow metre and pressure gauge until he has a reading of 1 bar. When concrete has reached the auger tip the rig driver should then wait for the end cap to blow out. ***If the end cap does not blow see point 27 below. "Special measures".***

19. Once the end cap has blown the rig driver should then begin to extract the auger whilst turning at a steady rate to flight the spoil. As the concrete is pumped each section of auger is withdrawn from the bore and stored to one side.

20. At approximately 0.5m from ground level the rig driver should signal to the pump operator to stop pumping and continue to turn and withdraw the auger. The volume of concrete contained in the auger itself acting under gravity will be sufficient to fill the remainder of the pile.

21. Once the auger has been completely withdrawn from the bore the rig should track away from the pile position allowing the attendance machine access to clear the spoil away and clean the top of the bore ready for cage insertion.

22. The piles are to be filled with concrete to the piling mat level as supplied by Ark Build. Please note CFA piling does not allow for a Cut off Level to be set as the concrete is pumped and must be filled to ground level to ensure that the concrete does not contain debris from the drilling process. We have assumed a Piling Platform Level(PPL) of 27.730m AOD if different this needs to be brought to our attention as it may affect the pile design.

23. The reinforcement cage as detailed in the construction schedule should then be picked up using the attendance machine or auxiliary line on the piling rig(if capable/ if required) and lowered centrally into the pile. Banksman to check auger for any spoil that has been loosened but not removed by the auger cleaner, if possible this spoil should be removed using the attendance machine. Care should be taken to watch for any remaining spoil falling from the auger. In certain instances, the attendance machine may be used to lift and place reinforcement cages in the pile positions, however this will only be undertaken if the machine is capable of safely lifting the cages (4H20 x 5.5m – 70kg). Cages may have to be pushed into the bore to ground level using the attendance machine once it has been placed, all operatives should be clear of the area at this point.

24. Once the pile has been constructed the piling rig will move on to the next pile position, this will normally mean that every other pile along the row will be constructed with the intermediate piles constructed on the following day.
25. After the last load has been discharged the rig driver should pre-bore a shallow hole in an area where there will be no interference with any of the works or alternatively guard the auger with sheets of plywood or similar material. The contents of the pipe line should be blown into the hole or onto the ground using the compressor and a sponge ball. Should it not be possible to blow through the pipe into a hole or guard the auger with plywood the ball catcher provided should be used instead. The pump operator is responsible for use of the blow out cannon and the rig driver will hold the ball aloft as a visual cue to the rest of the gang.
26. Immobilise machines and leave in a safe stable position.

Special measures - In the event the flap does not open / end cap blow on commencement of concreting.

27. Rig operator signals to pump operator to stop pumping immediately. Do not continue to pump.
28. Rig operator notes on daily piling record sheet that cap has not blown / flap opened on first attempt. Log pile number and time.
29. Rig operator must consider / check computer boring records whether over-flighting has occurred during drilling process. If the pile has been drilled relatively quickly there will be little risk of over-flighting occurring. If in doubt consult with the R.W.Hill Piling Contracts Manager before proceeding.
30. Rig operator instructs banksman to move towards the front of the rig so that both the rig operator and auger / piling rig can clearly be observed, whilst remain a safe distance from the rig and outside the 2m Safety Zone.
31. If it has been established that over-flighting has not occurred, rig operator should slowly back turn the auger and withdraw from the bore leaving as much spoil undisturbed as possible. During this period the banksman observes the rig and advises the rig operator at all times on its stability.
32. Once the auger is fully withdrawn from the ground, investigate why the cap has not blown / flap not opened. If there is a problem with the drilling head that cannot be rectified easily (ie by changing the cap / flap), change the head if a replacement is on site and advise the Office / Contracts Manager that repair to the original head will be necessary. If no replacement is on site advise Office / Contracts Manager immediately and back fill bore.
33. If there is a risk that over-flighting may have occurred do not withdraw the auger from the bore. Make sure there is no tension on the main winch cable and the augers are sitting on the bottom of the bore. Whilst consulting with the banksman lift the mast foot plate.

34. If any void has formed around the mast foot plate when lifted have the attendance excavator backfill the hole and compact.

35. Position sleepers or road plate under the mast foot to spread the load then lower mast foot plate back onto the ground.

36. Once satisfied mast foot plate is adequately supported repeat steps 30 – 31.

37. Note always document and such occurrences and bring to the attention of the Office / Contract Manager.

38. In the rare occurrence that a pile is not completely full with concrete at platform level, the pile will be drilled out by 1.0m and the concrete will be topped up by pumping operations as the blowout procedure noted at point 25. The actions identified in points 39 to 46 will then apply.

<u>In the event of pipe work blockage / cleaning concrete pumping equipment.</u>

- **Always assume that there may be pressure within the pipeline and do not undo any couplings without a whip check in place.**

- **All rig pipe work must have a whip check in place. Ground hoses are to be coupled with a clip and securely pinned, all ground hoses are to be visually inspected daily and recorded on daily log sheet.**

- **If the whip check needs to be removed secure a chain around the pipe line attached to the attendance machine to restrain it.**

- **Do not under any circumstances remove any pipes that are not restrained and can potentially whip.**

- **Always stand at a safe distance if a pipe coupling is being removed, let the attendance machine move the pipe line while all operatives are out of the vicinity.**

39. The trained and competent concrete pump operator is responsible for this activity and will be the appointed person to control the area and be responsible for activities involved in pumping and clearing pump lines. The concrete pump operator will be generally assisted by other R W Hill (Piling) Ltd site operatives using clear signals of which are agreed and understood prior to starting the process. The pump operator pump or other operatives assisting in the wash out procedure to wear disposable overalls and gloves.

40. Once the hopper and pistons of the concrete pump are cleaned of all concrete that has accumulated during the shift and when the agitator has been thoroughly cleaned and rinsed, the rubber ground line needs to be cleaned out.

41. The pressure will have already been released from the line when it has been disconnected from the concrete pump.

42. A saturated sponge ball is placed in the open end of the ground line and the blow-out cannon is connected.

43. The blow-out cannon is connected to the air-compressor and the air-compressor is started.

44. Gradually, the valve on the blow-out cannon is released, pushing the sponge ball through the line, moving the surplus concrete.

45. The tip of the auger, which is the exit point of the surplus concrete and the sponge ball, is encapsulated in a blow-out shield (usually comprised of plywood sheets / spoil heap or small shallow hole drilled) to prevent grout splashing.

46. The air pressure is carefully controlled such that the surplus concrete and sponge ball exit the system safely. Once the sponge ball has been blown through the pump line (to remove concrete from therein), the rig driver to hold the ball aloft to ensure the operative using the compressor knows it is safe to turn off and as a clear signal to the rest of the gang the ball is been ejected and it is now safe for work to continue.

47. Once this part of the cleaning out operation is complete, the air compressor is turned off, the safety valve on the blow-out cannon is opened to ensure no pressure build-up and the blow-out cannon is disconnected from the ground line.

48. Several buckets of water are poured into the open end of the ground line followed by a saturated sponge ball.

49. The blow-out cannon is connected to the air compressor and the air compressor is started.

50. Gradually, the valve on the blow-out cannon is opened is released pushing the sponge ball through the line, moving the wash-out water along the line.

51. The tip of the auger, which is the exit point of the wash-out water and the sponge ball, is encapsulated in a blow-out shield (usually comprised of plywood sheets / spoil heap or small shallow hole drilled) to prevent splashing.

52. The air pressure is carefully controlled such that the wash-out water and sponge ball exit the system safely.

53. Once the wash-out water and sponge ball have exited the auger, Once the sponge ball has been blown through the pump line (to remove wash out water from therein), the rig driver to hold the ball aloft to ensure the operative using the compressor knows it is safe to turn off and as a clear

signal to the rest of the gang the ball is been ejected and it is now safe for work to continue, the air compressor is turned off, the safety valve on the blow-out cannon is opened to ensure no pressure build-up and the blow-out cannon is disconnected from the ground line.

54. Steps 46 to 51 may be repeated to ensure that the ground lines and rig pipe-work are clean.

55. When using compressed air and a ball to clean out hoses, if it is necessary to clean a line that is not connected, e.g. a long land line, then the free end must be secured to prevent 'whipping'. This is best achieved by placing the digger bucket on the end coupler and attaching both using a chain. Careful control of the blow-out cannon must be undertaken. Once the sponge ball has been blown through the pipework the ball will be held aloft to indicate to the rest of the gang a clear line.

Operation of and cleaning of agitator.

56. Minimise the need to reverse vehicles on site – eliminate reversing if possible.

57. The agitator / pump operator must bank the concrete delivery lorries into place.

58. Do not stand on the ramps between the reversing wagon and the concrete pump – stand well clear when giving the signals then only go near the back of the wagon when it has stopped moving and the parking brake is applied.

59. Operator to use the proper platform on the agitator when operating the machine. The canopy of the concrete pump can be used providing it has been fitted with suitable edge protection.

Cleaning the concrete pump.

60. Switch off the engine before raising the grille and washing down the pump hopper.

61. Ensure that the washings do not enter drains, streams, rivers, etc.

62. Always release the pressure by reverse pumping before opening pipe couplings.

63. Empty pipelines by gravity wherever possible.

64. Always wash out adaptor with a pressure release valve to keep it in good working order.

R W HILL PILING LTD
Continuous Flight Auger Piling

General Notes

- Sequence of works is expected to be agreed on site but generally working left to right.
- Wheel washing / road cleaning by Ark Build.
- First aid / welfare facilities / Covid 19 precautions by Ark Build.
- Ark Build will barrier off and use a banksman to manage any pedestrians when the rig is drilling adjacent to areas where there is public access and any pinch points or should the hoarding need to be removed to install piles.
- **The entire line of the contiguous wall must be probed to ensure that the area is free from any obstructions, drainage or utility services.**
- The position of underground services must be clearly marked above ground by temporary fencing or the services should be exposed to identify their exact location. R W Hill Piling Ltd can take no responsibility for services damaged during piling that have not been clearly marked above ground or deviate from the markings provided.
- Installed piles must be left a minimum of 7 days before being broken down to the required level. Concrete curing times may vary according to both the concrete design mix and the weather conditions at the time of construction and therefore the figure of 7 days should only be used as a guideline.
- Care should be taken with onsite plant not to damage recently installed piles as R W Hill Piling will accept no responsibility for piles damaged either by the Main Contractor's excavator or during breaking down.
- Please note that the debonding of piles significantly reduces both noise and the amount of time required to break a pile down to Cut Off Level, however a tolerance of + / - 150mm should be allowed for as this method relies on the piling mat levels being accurate and some localised trimming of pile heads may be required.
- **CFA piling involves pumping concrete under pressure and as such the piling works may generate concrete spatter and / or slurry therefore ample protection must be put in place to adjacent structures / roadways / fencing by Ark Build prior to piling works commencing. We will not be held responsible for any damage caused by inadequate protection.**
- **No construction plant to cross rubber ground hoses at any time, bury pipework where possible to create a crossing point. Plant crossing hoses will damage pipework and is a major cause of hoses bursting during pumping.**

R W HILL PILING LTD
Continuous Flight Auger Piling

- **Attendance Machine drivers should sign below as acknowledgement that they understand their role within the piling works.**

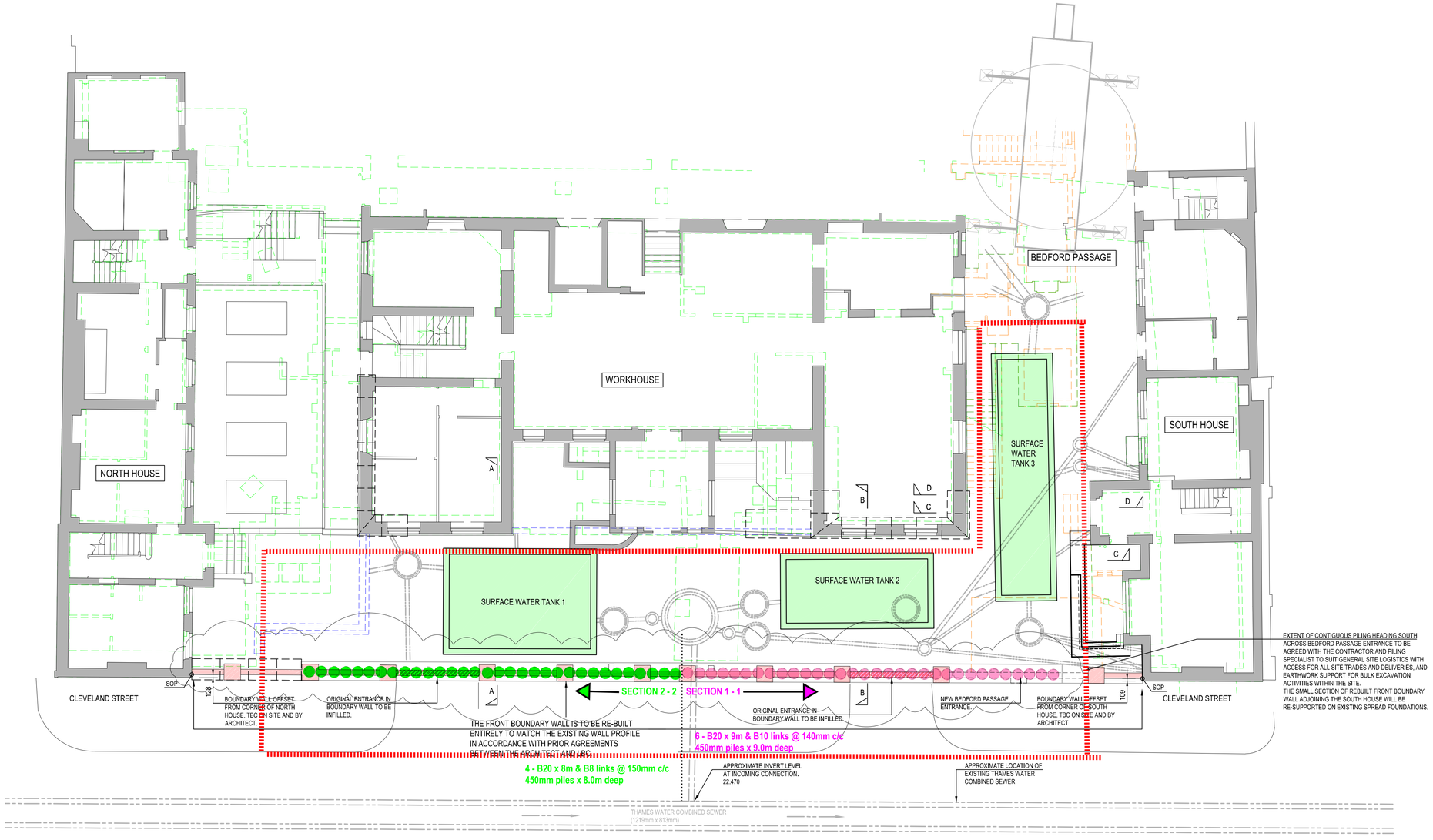
- ***5-point PPE required for all operatives as a minimum – Hard hat, hi viz, boots, gloves & safety glasses, plus face maks / hearing protection where required.***

WE HAVE READ AND UNDERSTOOD THE FOLLOWING DOCUMENTATION:

Method Statement, Risk Assessment, Covid 19 precautions/procedures.

	Date	Sign	Print
Supervisor (SMSTS, Gold CSCS & CPCS)			
Rig Driver (SSSTS, Gold CSCS & CPCS)			
Banksman / Slinger(CSCS)			
Concrete pump operator(CPCS)			
Steel Fixer(CSCS)			
Steel Fixer(CSCS)			
Steel Fixer(CSCS)			
Attendance Machine operator			
Blow out procedures controlled by :			
Rig Driver (SSSTS, Gold CSCS & CPCS)			
Supervisor (SMSTS, Gold CSCS & CPCS)			
Concrete pump operator(CPCS)			

To be read and signed before the start of each project and emailed to the office or as and when any new staff are sent to site.



EXISTING GROUND FLOOR PLAN

(1 : 100 @ A1)

BELOW GROUND DRAINAGE SHOWN ON THIS DRAWING IS INDICATIVE.
REFER TO CIVIL ENGINEERS DRAWINGS FOR DRAINAGE DETAILS AND LEVELS.

FOR SECTION DETAILS REFER TO DRAWING MHA-ACM-CS-XX-DE-S-0001

AECOM

PROJECT

BEDFORD PASSAGE DEVELOPMENT

CLIENT

MIDDLESEX ANNEXE LLP

CONSULTANT

AECOM
Aldgate Tower
2 Leman Street
London, E1 8FA
www.aecom.com

GENERAL NOTES

1. FOR GENERAL NOTES REFER TO DRAWING No. MHA-ACM-XX-XX-GN-S-00001.

ISSUE/REVISION

I/R	DATE	DESCRIPTION
E	20.05.2020	PILES MOVED AND CAPPING BEAM SIZE ALTERED.
D	18.05.2020	PILE DIAMETER ALTERED.
C	14.05.2020	SURFACE WATER TANK 1 MOVED. SURFACE WATER TANK 2 SIZE REVISED. THAMES WATER SEWER ADDED. WALL NOTES ADDED.
B	10.10.2019	SURFACE WATER TANK 2 SIZE AND LOCATION REVISED. U/PINNING INDICATED. PILES REMOVED
A	05.09.2019	INITIAL ISSUE FOR COMMENT

KEY PLAN

PROJECT NUMBER

60516144

SHEET TITLE

CLEVELAND STREET / BEDFORD PASSAGE. OVERALL PLAN SHOWING BOUNDARY WALL REBUILD AND PROPOSED ATTENUATION TANKS.

SHEET NUMBER

MHA-ACM-CS-XX-DR-S-0001

THE BEST WAYS TO PROTECT YOURSELF

Wash your hands frequently and thoroughly, using soap and water for at least 20 seconds. Use alcohol-based hand sanitizer if soap and water aren't available.

Cough or sneeze into a tissue or flexed elbow, then throw the tissue in the trash.

Avoid touching your eyes, nose or mouth with unwashed hands.

Avoid close contact with people who are sick, sneezing or coughing.

Stay home when you are ill.

Clean and disinfect surfaces and objects that people frequently touch.

Only wear a face mask if you have respiratory symptoms or are caring for someone with respiratory symptoms.

Construction Leadership Council

Construction Sector - Site Operating Procedures
Protecting Your Workforce During Coronavirus (Covid-19)

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Introduction

These are exceptional circumstances and the industry must comply with the latest Government advice on Coronavirus (Covid-19) at all times.

These Site Operating Procedures (SOP) are based on Government guidance on Working safely during Coronavirus (Covid-19) - Construction and other outdoor work; other restrictions and advice may apply in Scotland, Wales and Northern Ireland.

Where workers enter people's homes, they should follow the Government guidance on Working in Other People's Homes.

The HSE is the relevant enforcing authority for occupational health and safety legislation and guidance to control public health risks in the construction sector. If a site is not consistently implementing the measures set out by the Government, it may be subject to enforcement action.

Construction sites operating during the Coronavirus (Covid-19) pandemic need to ensure they are protecting their workforce and minimising the risk of spread of infection. This includes considering how personnel travel to and from site.

This guidance is intended to introduce consistent measures on construction sites of all types and sizes in line with the Government's guidelines on social distancing and ensure employers and individuals make every effort to comply.

Government guidance for employers in England states "*where the social distancing guidelines cannot be followed in full, in relation to a particular activity, businesses should consider whether that activity needs to continue for the business to operate, and, if so, take all the mitigating actions possible to reduce the risk of transmission between staff*".

The health and safety requirements of any construction activity must not be compromised at this time. If an activity cannot be undertaken safely, it should not take place.

Emergency services are also under great pressure and may not be able to respond as quickly as usual. This should be taken into consideration in the planning of work activities, first aid, fire and emergency responses.

Organisations must have in place effective arrangements for monitoring and reviewing their compliance with Government and industry guidance. Sites should also remind the workforce at every opportunity of the Site Operating Procedures which are aimed at protecting them, their colleagues, families and the UK population.

When to Travel to Work

People who can work from home should continue to do so. All workers who cannot work from home, including construction, manufacturing, logistics and distribution, should travel to work if their workplace is open.

It is important to understand the following guidelines by which workers should or should not travel to work as outlined below.

Social distancing	Workers in the construction industry should follow the guidance on Staying Alert and Safe (Social Distancing). Where they cannot work from home, they must follow guidance on Staying safe outside your home while travelling to and from work and while at work.
Self-isolation	Anyone who: • Has a high temperature, a new continuous cough, or a loss of, or change in, their normal sense of taste or smell; • Is within 14 days of the day when the first member of their household showed symptoms of Coronavirus (Covid-19); or • Has been contacted by the NHS Test & Trace Service; should not come to site, but must follow the guidance on self-isolation.
Persons at higher risk	Anyone who is clinically vulnerable to Coronavirus (Covid-19) should follow the latest guidance for clinically vulnerable people and Working safely during Coronavirus – Construction and other outdoor work (section 2.1).
Persons defined on medical grounds as clinically extremely vulnerable	Anyone identified as clinically extremely vulnerable will be advised by their health authority and must follow the latest guidance on Protecting people who are clinically extremely vulnerable from Covid-19.
Living with a person in one of the above groups	Anyone living with a person who is at higher risk, or is a clinically extremely vulnerable person, should stringently follow the guidance on social distancing and minimise contact outside the home.
If someone falls ill	If a worker develops a high temperature, a new continuous cough, or a loss of, or change in, their normal sense of taste or smell while at work, they should: • Ensure their manager or supervisor is informed • Return home immediately • Avoid touching anything • Cough or sneeze into a tissue and put it in a bin, or if they do not have tissues, cough and sneeze into the crook of their elbow. They should get a Coronavirus (Covid-19) test. They must then follow the guidance on self-isolation and not return to work until they have received a negative test result or, in the event of a positive test result, their period of self-isolation has been completed.

Travel to Work

Wherever possible workers should travel to site alone using their own transport.

If workers have no option but to share transport:

- Journeys should be shared with the same individuals and with the minimum number of people at any one time
- Good ventilation (i.e. keeping the windows open) and facing away from each other may help to reduce the risk of transmission
- The vehicle should be cleaned regularly using gloves and standard cleaning products, with particular emphasis on handles and other areas where passengers may touch surfaces

Sites should consider:

- Parking arrangements for additional vehicles and bicycles
- Providing facilities such as lockers and showers for workers using other means of transport to avoid public transport e.g. cycling
- Providing hand cleaning facilities at entrances and exits. This should be soap and water wherever possible or hand sanitiser if soap and water are not available
- How someone taken ill would get home
- Where public transport is the only option for workers, you should consider:
    - Changing and staggering site hours to reduce congestion on public transport
    - Avoid using public transport during peak times (05:45 - 8:15 and 16:00 - 17:30)
    - Reminding workers that face coverings are mandatory on all types of public transport.

Driving at Work

When travelling at work or between site locations, workers should travel alone. If workers have no option but to share a vehicle, then they should follow the Government guidance on Working Safely during Covid-19 in or from a vehicle.

Workers should maintain a distance of two metres, or one metre with risk mitigation where two metres is not viable. Risk mitigations include:

- Share with the same individuals and with the minimum number of people at any one time
- Maintain good ventilation (i.e. keeping the windows open) and face away from each other during the journey
- Wash their hands for 20 seconds using soap and water or hand sanitiser if soap and water are not available before entering and after getting out of the vehicle
- Avoid touching their faces
- Regularly clean the vehicle using gloves and standard cleaning products, with particular emphasis on handles and other surfaces which may be touched during the journey.

Site Access and Egress Points

- Stop all non-essential visitors
- Consider introducing staggered start and finish times to reduce congestion and contact at all times
- Plan site access and egress points to enable social distancing – you may need to change the number of access points, either increase to reduce congestion or decrease to enable monitoring, including in the case of emergencies
- Introduce one-way systems
- Allow plenty of space between people waiting to enter site
- Use signage:
    - such as floor markings, to ensure two metre distance, or one metre with risk mitigation where two metres is not viable, is maintained between people when queuing
    - reminding workers not to attend if they have symptoms of Coronavirus (Covid-19) and to follow guidelines
- Require all workers to wash their hands for 20 seconds using soap and water when entering and leaving the site
- Regularly clean common contact surfaces in reception, office, access control and delivery areas e.g. entry systems, scanners, turnstiles, screens, telephone handsets and desks, particularly during peak flow times
- Reduce the number of people in attendance at site inductions and consider holding them outdoors wherever possible
- Where loading and offloading arrangements on site will allow it, drivers should remain in their vehicles. Where drivers are required to exit their vehicle, they should wash or sanitise their hands before handling any materials and must have access to welfare facilities
- Consider arrangements for monitoring compliance.

Hand Washing

- Allow regular breaks to wash hands
- Provide additional hand washing facilities (e.g. pop ups) to the usual welfare facilities, particularly on a large spread out site or where there are significant numbers of personnel on site, including plant operators
- Ensure adequate supplies of soap and fresh water are readily available and kept topped up at all times
- Provide hand sanitiser (minimum 60% alcohol based) where hand washing facilities are unavailable
- Regularly clean the hand washing facilities
- Provide suitable and sufficient rubbish bins for hand towels with regular removal and disposal.

Toilet Facilities

- Restrict the number of people using toilet facilities at any one time (e.g. use a welfare attendant) and use signage, such as floor markings, to ensure two metre distance, or one metre with risk mitigation where two metres is not viable, is maintained between people when queuing
- Wash or sanitise hands before and after using the facilities
- Enhance the cleaning regimes for toilet facilities, particularly door handles, locks and the toilet flush
- Portable toilets should be cleaned and emptied more frequently
- Provide suitable and sufficient rubbish bins for hand towels with regular removal and disposal.

Canteens and Rest Areas

Canteens that have been closed or offered a restricted service may now open and should follow the Government guidance on Keeping workers and customers safe during Covid-19 in restaurants and use this Food Standards Agency checklist.

- Consider increasing the number or size of facilities available on site if possible
- The capacity of each canteen or rest area should be clearly identified at the entry to each facility, and where necessary attendants provided to supervise compliance with social distancing measures
- Break times should be staggered to reduce congestion and contact at all times
- Drinking water should be provided with enhanced cleaning measures of the tap mechanism introduced
- Frequently clean surfaces that are touched regularly, using standard cleaning products e.g. kettles, refrigerators, microwaves
- Hand cleaning facilities or hand sanitiser should be available at the entrance to any room where people eat and should be used by workers when entering and leaving the area
- A distance of two metres, or one metre with risk mitigation where two metres is not viable, should be maintained between users. Seating and tables should be reconfigured to reduce face to face interactions
- All rubbish should be put straight in the bin and not left for someone else to clear up
- Tables should be cleaned between each use
- Crockery, eating utensils, cups etc. should not be used unless they are disposable or washed and dried between use
- Payments should be taken by contactless card wherever possible
- Canteen staff should wash their hands often with soap and water for at least 20 seconds before and after handling food
- Canteen staff and workers may use the same rest areas if they apply the same social distancing measures
- Consider arrangements for monitoring compliance.

Changing Facilities, Showers and Drying Rooms

- Consider increasing the number or size of facilities available on site if possible
- Based on the size of each facility, determine how many people can use it at any one time to maintain a distance of two metres, or one metre with risk mitigation where two metres is not viable.
- Restrict the number of people using these facilities at any one time e.g. use a welfare attendant
- Introduce staggered start and finish times to reduce congestion and contact at all times
- Introduce enhanced cleaning of all facilities throughout the day and at the end of each day
- Provide suitable and sufficient rubbish bins in these areas with regular removal and disposal.

Work Planning to Avoid Close Working

In line with Government guidance, where the social distancing guidelines cannot be followed in full in relation to a particular activity, businesses should consider whether that activity needs to continue for the business to operate, and, if so, take all the mitigating actions possible to reduce the risk of transmission between staff.

Sites and work need to be planned and organised to avoid crowding and minimise the risk of spread of infection by following Government guidance and the advice within these Site Operating Procedures.

Sites should remind the workforce (e.g. at daily briefings) of the specific control measures necessary to protect them, their colleagues, families and the UK population.

Hierarchy of Controls

The Government's guidelines on social distancing refer to 'one metre plus' which is defined in Working safely during Coronavirus (Covid-19) – Construction and other outdoor work as *"two metres or one metre with risk mitigation where two metres is not viable*".

Mitigations could include installing screens, making sure people face away from each other, handwashing facilities, minimising the amount of time spent with people outside your household or bubble, and being outdoors.

If you are not able to work whilst maintaining a two metre distance, or one metre with risk mitigation where two metres is not viable, you should consider whether the activity should continue and, if so, risk assess it using the hierarchy of controls below and against any sector-specific guidance. The results of risk assessments should be shared with the workforce and this poster displayed in the workplace.

Eliminate	• Workers who are unwell with symptoms of Coronavirus (Covid-19) should not travel to or attend the workplace • Rearrange tasks to enable them to be done by one person, or by people working two metres apart • Avoid skin to skin and face to face contact • Stairs should be used in preference to lifts or hoists and consider one ways systems • Consider alternative or additional mechanical aids to reduce worker interface ***Site Meetings*** • Only absolutely necessary meeting participants should attend • Attendees should be at least two metres apart from each other • Rooms should be well ventilated / windows opened to allow fresh air circulation • Consider holding meetings in open areas where possible
Reduce	**Where the social distancing measures two metres is not possible, risk mitigation could include the following:** • Minimise the frequency and time workers are within two metres of each other • Minimise the number of workers involved in these tasks • Workers should work side by side, or facing away from each other, rather than face to face • Lower the worker capacity of lifts and hoists to reduce congestion and contact at all times

	• Regularly clean common touchpoints, doors, buttons, handles, vehicle cabs, tools, equipment etc. • Increase ventilation in enclosed spaces • Workers should wash their hands before and after using any equipment
Isolate	Keep groups of workers: • Together in teams e.g. do not change workers within teams • As small as possible • Away from other workers where possible
Control	• Consider introducing an enhanced authorisation process • Provide additional supervision to monitor and manage compliance
PPE	Sites should not use RPE for Coronavirus (Covid-19) where the two metre social distancing guidelines are met. • Coronavirus (COVID-19) needs to be managed through social distancing, hygiene and the hierarchy of control and not through the use of PPE • Workplaces should not encourage the precautionary use of extra PPE to protect against Coronavirus (COVID-19). The Government has provided information on Face Coverings in section 6.1 of its guidance **Working safely during coronavirus (Covid-19) - Construction and other outdoor work**.
Behaviours	The measures necessary to minimise the risk of spread of infection rely on everyone in the industry taking responsibility for their actions and behaviours. Please encourage an open and collaborative approach between workers and employers on site where any issues can be openly discussed and addressed.

First Aid and Emergency Service Response

The primary responsibility is to preserve life and first aid should be administered if required and until the emergency services attend.

- When planning site activities, the provision of adequate first aid resources must be agreed between the relevant parties on site
- Emergency plans including contact details should be kept up to date
- Consideration must also be given to potential delays in emergency services response, due to the current pressure on resources
- Consider preventing or rescheduling high-risk work or providing additional competent first aid or trauma resources.

Cleaning

Enhanced cleaning procedures should be in place across the site, particularly in communal areas and at touch points including:

- Taps and washing facilities
- Toilet flush and seats
- Door handles and push plates
- Hand rails on staircases and corridors
- Lift and hoist controls
- Machinery and equipment controls
- All areas used for eating must be thoroughly cleaned at the end of each break and shift, including chairs, door handles, vending machines and payment devices.

- Telephone equipment
- Key boards, photocopiers and other office equipment
- Rubbish collection and storage points should be increased and emptied regularly throughout and at the end of each day.

HILL PILING

METHOD STATEMENT

Activities / Subject covered by this assessment:

On site Reinforcement Cage Fabrication

CLIENT	**Ark Build Plc**	**JOB NO.**	**Rwp4016**
SITE ADDRESS	**44 Cleveland Street, London W1T 4JT**		

Area / Location:

- Working area

Persons exposed:

- Steel fixers
- Other site personnel

Safe Method Of Work

1. The loose bar reinforcement will be placed on site by hiab in a location away from the main piling area that is level and clear of obstructions.

2. The cages will be made on a pair of trestles with the loose bar reinforcement lifted manually into position.

3. Helical will then be placed over the end of the bars and stretched, once stretched the reinforcement bars will be lifted individually and tied to the helical in turn.

4. Once the reinforcement bars have been tied to the helical at one end the helical will be pulled and stretched over the length of the bars.

5. The helical will then be tied to the bars throughout the length of the cage at 200mm centres unless specified otherwise.

6. It is not necessary to tie each turn of helical, however the ties should form a uniform pattern with complete `rings' of ties at regular intervals.

7. Once the cage is complete it will be lifted from the trestles by hand depending on the weight and placed on the ground away from the trestles. 20kg is a guidline for lifting by hand, however it is possible to lift heavier loads by lowering one end of the cage at a time to the floor or getting another person to help.

8. Should the fabricated cages prove too heavy for manual handling they will be lifted off the trestles using the attendance machine and a designated set of lifting chains and similarly placed away from the fabrication area. Cages will be slung horizontally see lift plan.

9. Completed cages will be stored in a designated area and moved as necessary to the piling area either individually by hand or using the attendance machine and a designated set of lifting chains.

General Notes

Debonding may be placed from the top pile cage to pile cut off level to facilitate the breaking down of piles in which case helical will not be placed over the length of cage that is debonded unless it is required to keep the cage rigid.

HILL PILING

Section 2 - Risk Assessments

Risk Assessment Number: RA004

Task covered by this assessment: Covid 19 and Piling works

Project Specific Risk Assessment

Title of Project:

Name of Risk Assessor: AM Safety Specialists Ltd

Job Title of Assessor: Safety Consultant

Date of Assessment: 24/04/2020

Summary of PPE Required for this Risk Assessment

As Req	Yes	Yes	Yes	As Req	As Req	No	No	Yes	Yes

Risk Assessment Legend

Probability Scale

Remote	=	1	(May occur no more than once per year)
Very Unlikely	=	2	(May occur 2 or 3 times per year)
Unlikely	=	3	(May occur 4 to 7 times per year)
Likely	=	4	(May occur 8 to 11 times per year)
Very Likely	=	5	(Expected to occur more than 12 times per year)

Severity Scale

Minor	=	1 (Minor first aid injury without requiring absence from work)
Minor +	=	2 (Injury requiring medical attention and leading to absence from work up to 3 days)
Major	=	3 (RIDDOR major injury per event resulting in more than seven days absence from work)
Severe	=	4 (Multiple major injuries, single severe / disability injury or occupational illness)
Fatality	=	5 (Single or multiple fatality per event)

Risk Rating

		Probability				
		1	2	3	4	5
Severity	1	VL	VL	L	M	H
	2	VL	L	M	H	H
	3	L	M	H	H	VH
	4	M	H	H	VH	VH
	5	H	H	VH	VH	VH

The Risk Assessment and Controls shall be reviewed in accordance with the following risk potential numbering system

VL	= Very Low risk review assessment in 12 months
L	= Low risk assessment review assessment in 9 months
M	= Moderate risk assessment review assessment in 6 months
H	= High risk review assessment in 3 months
VH	= Very high risk review assessment in 1 month

Persons affected by RW Hill Piling Ltd when carrying out this task

Employees	Management	PC Management	Other Construction Site Ops	Other workers	Delivery Drivers	Members of the public	Young persons	Any Others
Yes	Yes	Potentially	Potentially	Potentially	Potentially	Potentially	Potentially	No

Project Specific Risk Assessment

Hazard	Harm	Assessment before controls			Controls Required	Assessment after controls		
		Prob	Sev	Risk		Prob	Sev	Risk
Exposure to Virus	Flu like symptoms and respiratory problems	3	3	H	• If someone becomes unwell in the workplace with a new, continuous cough or a high temperature, they should be sent home and advised to follow the advice to stay at home • Employees should be reminded to wash their hands for 20 seconds more frequently and catch coughs and sneezes in tissues • Frequently clean and disinfect objects and surfaces that are touched regularly, using your standard cleaning products • Those who suspect they make have contracted COVID-19 or have had it confirmed to self isolate. If living alone this should be for 7 days if living with others then this should be for 14 days. • Employees from defined vulnerable groups should be strongly advised and supported to stay at home and work from there if possible.	2	2	L
Interaction with others	Flu like symptoms and respiratory problems	3	3	H	• Employer to keep everyone updated on actions being taken to reduce risks of exposure in the workplace • Ensure employees who are in a vulnerable group are strongly advised to follow social distancing guidance • Make sure everyone's contact numbers and emergency contact details are up to date • Make sure managers know how to spot symptoms of coronavirus (COVID-19) and are clear on any relevant processes, for example sickness reporting and sick pay, and procedures in case someone in the workplace is potentially infected and needs to take the appropriate action • Avoid contact with someone who is displaying symptoms of coronavirus (COVID-19). These symptoms include high temperature and/or new and continuous cough • Avoid gatherings with friends and family. Keep in touch using remote technology such as phone, internet, and social media • If 2 Metres cannot be maintained then face masks must be worn for the duration of the operation involved. • Face fit testing must be carried out on the specific type of RPE • Where close working cannot be avoided it should be limited to 15 minutes with full respiratory protection and operatives should be side by side rather than face to face. • When touching the mask ensure that your hands have been cleaned for 20 seconds or more to reduce the risk of contamination. • Dispose of masks in suitable containers for removal from site in accordance with the site waste management plan.	2	2	L

Project Specific Risk Assessment

Hazard	Harm	Assessment before controls			Controls Required	Assessment after controls		
		Prob	Sev	Risk		Prob	Sev	Risk
Travelling	Flu like symptoms and respiratory problems	3	3	H	• Anyone who has a new, continuous cough or a high temperature should be advised to quickly and directly return home and to remain there and initiate household isolation. • If they have to use public transport, they should try to keep away from other people and catch coughs and sneezes in a tissue. • Avoid non-essential use of public transport, varying your travel times to avoid rush hour, when possible • Operatives should travel to site separately or no more than 2 per vehicle if closely related and share the same home.	2	2	L
Using welfare facilities	Serious Illness/Death	3	5	VH	• Hand cleaning facilities or hand sanitiser should be used at the entrance of the canteen when entering and leaving the area • Operatives should bring pre-prepared meals and refillable drinking bottles from home • Operatives MUST sit 2m apart from each other whilst eating and avoid all contact • Site crockery, eating utensils, cups etc. should not be used • All rubbish should be put straight in the bin and not left for someone else to clear up	2	2	L
Site meetings	Serious ill health to death	3	5	VH	• Site meetings should be via an online platform wherever possible. • Where absolutely necessary, only essential meeting participants should attend • Attendees should be two metres apart from each other. • Rooms should be well ventilated / windows opened to allow fresh air circulation • Consider holding meetings in open areas where possible.	2	2	L
Piling Works	Exposure or transmission of Covid-19	3	5	VH	• All operatives to receive specific Covid -19 induction from PC prior to commencement on site. • All operatives are to wear gloves at all times. • Rig Driver only to be permitted to access cab. • Cab to be wiped down with disinfectant wipes on a regular basis, no less than twice daily. • All operatives MUST maintain 2m distancing at all times, where the task does not permit this respiratory protection and gloves to be worn. • Those who are required to wear respiratory protection must have received face fit testing and be clean shaven at all times.	1	3	L

Project Specific Risk Assessment

Hazard	Harm	Assessment before controls			Controls Required	Assessment after controls		
		Prob	Sev	Risk		Prob	Sev	Risk
Concrete deliveries	Exposusre or transmission of Covid-19	3	5	VH	• All deliveries to be scheduled in accordance with PC requirements. • Driver to maintain 2m distancing at all times. • Deliveries should be directed straight to location.	2	2	L
Concrete pumping	Exposure or transmission of Covid-19	3	5	VH	• Coupling together of concrete hoses and grout pipeline is a two man job involving working closer than 2m, therefore operatives must wear suitable respiratory protection and gloves. This activity should take 5-10 minutes of close working. • Clearing of concrete blockages may involve close working for 5-10 minutes, during this time operatives will wear suitable respiratory protection and gloves.	1	3	L

Training Requirement Required by this Risk Assessment Sheet
Corona Virus Briefing
Corona specific site induction

Risk Assessment Communication Sheet: I the below confirm that I have read or been instructed and understood this Risk Assessment and will work to the requirements / Controls within it.

Date	Name	Signature

*Due to the level of residual risk this risk assessment should be reviewed no later than 3 **months** after draft. That said this risk assessment should be reviewed earlier if the situation changes or following an incident that may mean the risk assessment is no longer valid.*

Signature of Assessor:

AM Safety Specialists Ltd

HILL PILING

RISK ASSESSMENT

Activities / Subject covered by this assessment : **CONTINUOUS FLIGHT AUGER PILING / AUGER BORED PILING**

Client :	**Ark Build Plc**	**Address :**	**44 Cleveland Street, London W1T 4JT**	**Job no. Rwp4016**

Area / Location :

Work area

Areas surrounding the piling rig

Adjacent to Railway infrastructure

Persons exposed :

Piling rig drivers

Steel fixers / operatives

Other site personnel

Members of the public

All control measures and systems have been considered to ensure they are in line with best practice processes and procedures identified within the pilling industry. The Hill Pilling Ltd Site Supervisor will ensure the requirements of the **S**afe **S**ystem **of W**ork are followed; operatives failing to follow the agreed **SSofW** may face disciplinary action and subsequent retraining.

Hill Pilling Ltd have taken all reasonable steps to ensure the **SSofW** is relevant to the work being carried out, if the site supervisor feels it is not reflective of the work or can't be followed it is the absolute responsibility of the supervisor to communicate this to the office before starting work.

The management of Hill Pilling Ltd will act vigorously and immediately if a supervisor/piling crew is found to be working outside of the **SSofW**. The protection of our workforce is our highest priority. No excuse will be excepted.

- All supervisors hold either SSSTS or SMSTS and Gold Supervisor CSCS.
- All piling rig drivers hold current CITB Plant Operator cards, SSSTS certificates & Gold Supervisor CSCS.
- All other piling operatives hold current CITB Plant Operator or Piling attendant CSCS cards relevant to their duties on site.

HILL PILING

RISK ASSESSMENT

HAZARDS	RISK RATINGS		CONTROL MEASURES
	WITHOUT CONTROLS	WITH CONTROLS	
Contact with Underground services	HIGH	LOW	All existing services must be clearly marked above ground and and their position briefed to Hill Piling operatives before works commence by the Principal contractor
Contact with Overhead power cables	HIGH	LOW	Survey the work area prior to moving the rig, any overhead cables should be clearly marked and an exclusion zone set up to prevent access to the vicinity and their position briefed to Hill Piling operatives before works commence by the Principal contractor
Contact with Moving parts of machinery	HIGH	LOW	Auger guarded by gates and exclusion zone set up whilst the rig is drilling, access only when auger is not turning and the rig operator is aware of your presence
Slips & trips of persons working in the vicinity of the equipment	MEDIUM	LOW	Ensure work area is clean & tidy, use designated walkways where possible avoid uneven areas
Falling from height when working on the equipment	MEDIUM	LOW	Personnel trained for working at height & the use of harnesses where required - Always try to undertake the task at ground level where possibe first !
Displacement of spoil from augers falling or striking persons	MEDIUM	LOW	Exclusion zone set up whilst the rig is drilling, access only when auger is not turning and the rig operator is aware of your presence and visually check for loose spoil before entering zone

CHAS Accredited Contractor CHAS.co.uk

Constructionline Part of Capita plc

Considerate Constructors 2019 Bronze

Considerate Constructors Registered Company C 1196

Small Worksafe Contractor SSIP

CQMS Safety Scheme

HILL PILING

RISK ASSESSMENT

HAZARDS	RISK RATINGS		CONTROL MEASURES
	WITHOUT CONTROLS	WITH CONTROLS	
Exposure to concrete / additives or other substances hazardous to health	MEDIUM	LOW	Use of the following PPE at all times - gloves, safety glasses and overalls are mandatory when handling concrete
Damage to rubber concrete hoses by on site attendance plant	MEDIUM	LOW	Prevent excavators crossing rubber pipeline at all times only use designated crossing points. Concrete hoses visually inspected for signs of damage/wear on a daily/weekly basis with each individual rubber pipe identified and recorded
Clearing concrete pipelines using compressed air	HIGH	LOW	All blowing out operations are under the direct control of a competent suitably trained concrete pump operator and rig operator/supervisor, one of which will act and control compressor throughout the whole process. To prevent whipping of the concrete hose where the ball blower has been attached the rubber hose will be restrained
Concrete hoses bursting during operation or cleaning process	HIGH	LOW	Concrete pumping lines are visually inspected and recorded on a daily basis, along with a full rig and equipment check on a weekly cycle. Before the commencement of each project all rubber concrete pipework is visually inspected and pressure tested to ensure their integrity. Each individual rubber concrete hose has a serial no. for traceability and identification and are pressure tested on a maximum of a 6 monthly basis or at the start of each new project whichever is sooner.

HILL PILING

RISK ASSESSMENT

HAZARDS	RISK RATINGS		CONTROL MEASURES
	WITHOUT CONTROLS	WITH CONTROLS	
Concrete hoses whipping during operation or cleaning process	HIGH	LOW	Whip checks will be in place on all rig pipework including groundlines. During the cleaning process if it is necessary to clean a line that is not connected, e.g. a long land line, then the free end must be secured to prevent 'whipping'. This is best achieved by placing the digger bucket on the end coupler and attaching both using a chain. Careful control of the blow-out cannon must be undertaken. Once the sponge ball has been blown through the pipework the ball will be held aloft to indicate to the rest of the gang a clear line.
Concrete blockages during pumping	HIGH	LOW	Do not under any circumstances remove any pipes that are not restrained by a whip check and can potentially whip. If the whip check needs to be removed secure a chain around the pipe line attached to the attendance machine to restrain it.
Guarding to machinery	MEDIUM	LOW	Suitable guarding is provided to enclose all dangerous zones of plant and equipment(Temporary fencing may be used to guard the auger at
Lifting equipment	MEDIUM	LOW	Lifting tackle all thoroughly inspected on a 6 monthly basis by a competent person with weekly visual inspections recorded on each

HILL PILING

RISK ASSESSMENT

HAZARDS	RISK RATINGS		CONTROL MEASURES
	WITHOUT CONTROLS	WITH CONTROLS	
Piling platforms / ramps / haul roads	HIGH	LOW	Engineer designed working platforms conforming to BRE470 based on the rig bearing pressures in the working platform certificate - **works do not commence on site until this document has been signed by the main contractor** Any alterations / remediation to the piling mat during the piling works i.e. obstruction removal needs to be recorded on the working platform log by the Principal contractor/Piling mat installer.
Piling rig	MEDIUM	LOW	The piling rig is inspected weekly by a competent person as required by the Construction (Lifting Operations) Regulations 1998. Records of these inspections are recorded in the F91 "type" Register. In addition there is a thorough inspection on a 12 monthly basis.
Fuels & Oils	MEDIUM	LOW	All fuels & oils are stored in bunded bowsers / drip trays in a designated refuelling & storage area Spill kits are provided for any spillages and operatives have been trained in their use
Piling adjacent to Rail infrastructure	HIGH	LOW	Rig will operate perpendicular when installing piles within the fall radius / affected zone where possible. All rig movements will be undertaken with a Banksman in attendance at all times. Imobilised at the end of each day facing the railway line at a distance of not less than 30m from the site boundary.

HILL PILING

RISK ASSESSMENT

Noise	MEDIUM	LOW	A specific risk assessment as required by the Noise at Work Regulations 2005 has been carried out and all corrective / preventive measures identified have been implemented. • A record of this risk assessment is available which includes: • A plan showing the various noise levels around the piling rig and a description of who is exposed to the noise and for how long. Suitable hearing protection is supplied to, and used by, all operators as required. The use of hearing protection is monitored regularly.
UXO risk within the piling area	MEDIUM	LOW	During site preparation and installation of the piling platform the Principal contractor will have undertaken a UXO survey to determine the piling area is clear

Plant and traffic movement

Piling rig movements will be supervised by the banksman under the control of the Rig driver only on suitable piling mats and access ramps provided by the Principal contractor. The Principal contractor is to provide suitable hard standing on all areas the rig is likely or required to traverse a must sign the working platform certificate and return a copy to R W Hill Piling Ltd prior to any works commencing.

Vehicle movements including concrete deliveries relevant to Hill Piling will be escorted to the relevant area of site with a banksman following the traffic arrangements in place on site. Principal contractor to provide details of the site traffic plan including any special arrangements during the site induction of Hill Piling operatives.

Residual Risk

If the activity of open bore auger piling were considered without any of the above controls in place a risk assessment rating of high would have been required. The above control measures are such that the level of risk for this activity has been reduced dramatically to a rating of LOW.
Because there is still risk associated with the activity it is vital that the above control measures be implemented effectively with sufficient monitoring and supervision to ensure compliance with the standards laid out above.

Information, instruction and training

Site induction to be carried upon arrival at site by the Principal contractor including traffic plan, fire precautions, first aid provision and welfare facilities.
Operators will be briefed each day by the HPL site supervisor on the conditions and progress of the work

Training for piling contractors and plant operators is available under the voluntary Plant Operators Registration Scheme and the Construction Skills Certification Scheme.

Training in the safe use of piling solutions should be carried out by contractors along with general safety training and an introduction to the site-specific hazards.
The safety method statement should be specific about project training requirements.

HILL PILING

RISK ASSESSMENT

Emergency procedures

All incidents and accidents will be reported by the HPL site supervisor to the PC and Hill Pilling Ltd office as soon as is practicable following the event.

Provisions should be made for on-site maintenance.

Emergency arrangements should be made for the recovery of components that fall into a bore under construction as each situation is different Rams will be produced specifically for this operation if required.

A trained first aider should always be in attendance provided by the principal contractor as required under our contract with the PC.

Emergency arrangements should be made for the recovery of plant or machinery overturning, as each situation is different Rams will be produced specifically for this operation if required.

Monitoring procedures

Work activities should be regularly monitored against the safety method statement by the contractor's safety adviser and should identify activities where controls need to be refined or expanded.
Day to day monitoring and recording is the responsibility of the piling supervisor.
All equipment and machinery should be thoroughly and regularly checked, in some cases daily, eg hoist ropes.
The principal contract / project manager has responsibility for any activities which overlap with piling operations, and the monitoring of the control arrangements.

See separate Risk assessment for COVID 19 procedures and precautions

Prepared by : **Stuart Thornton** **Date :** **03 August 2020**

Position : **Contracts Director**

Signed By : 

HILL PILING

RISK ASSESSMENT

Activities / Subject covered by this assessment:

Minor repairs and working at height

CLIENT	**Ark Build Plc**	**JOB NO.**	**Rwp4016**
SITE ADDRESS	**44 Cleveland Street, London W1T 4JT**		

Area / Location:

- Working area
- Areas surrounding the piling rigs
- Delivery lorries

Persons exposed:

- Piling rig drivers
- Steel fixers / operatives
- Other site personnel
- Members of the public

HAZARDS	Risk Ratings	
	Without controls	With controls
Falls from height	High	Low
Slips/trips	High	Low

Control Measures :

· The rig and lifting tackle are thoroughly inspected by a competent person in accordance with statutory requirements every 12 months and 6 months respectively. Records of these inspections are kept; these these records show when the examination was carried out, who carried it out, their findings and any remedial action necessary / completed.

· All operatives are suitably trained and possess the relevant CSCS cards / certificates.

· Plan your route, move any obstacles. Ensure safe access and egress to and from all work areas and adequate lighting. Maintain high standards of housekeeping.

· All items of lifting tackle and equipment are visually inspected and recorded on a weekly basis.

· All items of lifting tackle and equipment are carefully stored when not in use in order to prevent damage and are regularly inspected at 6 monthly intervals.

· All delivery lorries will have edge protection

· All loads will be preslung wherever possible to restrict the need to work at height.

· The ladder along the side of the mast is regularly inspected and any defects rectified.

· A toolbox talk and instruction of how to carry out the work should be undertaken prior to any works commencing.

HILL PILING

Residual Risk :

If this activity were considered without any of the above controls in place a risk assessment rating of high would have been required. The above control measures are such that the level of risk for this activity has been reduced dramatically to a rating of LOW.

Because there is still risk associated with the activity it is vital that the above control measures be implemented effectively with sufficient monitoring and supervision to ensure compliance with the standards laid out above.

Monitoring procedures

Work activities should be regularly monitored against the safety method statement by the contractor's safety adviser, and should identify activities where controls need to be refined or expanded.

- Day to day monitoring and recording is the responsibility of the piling supervisor.
- All equipment and machinery should be thoroughly and regularly checked, in some cases daily, eg hoist ropes.
- The principal contractor / project manager has responsibility for any activities which overlap with piling operations, and the monitoring of the control arrangements.

Prepared by : **S. C. Thornton**

Signature : 

Date : **03 August 2020**

Contracts Director

HILL PILING

MANUAL HANDLING

Activities / Subject covered by this assessment:

AUGER BORED PILING

CLIENT	**Ark Build Plc**	**JOB NO.**	**Rwp4016**
SITE ADDRESS	**44 Cleveland Street, London W1T 4JT**		

Area / Location:

- Working area
- Areas surrounding the piling rigs

Persons exposed:

- Piling rig drivers
- Steel fixers
- Pump operators
- Other site personnel

HAZARDS	Risk Ratings	
	Without controls	With controls
Lifting/pulling/pushing heavy loads	High	Low
Slips/trips/falls	High	Low
Cuts from sharp edges	High	Low
Trapped fingers & hands	High	Low
Sprains & strains	High	Low
Muscular/skeletal disorders	High	Low

Control Measures :

· Information about hazards identified in the induction and risk assessment.

· Regular supervisor audits/checks of manual handling activities to be undertaken.

· All operatives are suitably trained and possess the relevant CSCS cards.

· Use mechanical aids where possible i.e. pallet truck, rollers, hoists etc. If this is not necessary or practicable and the load is within your capabilities, lift the load with your back straight and your knees bent looking straight ahead, taking the strain on your legs. If the load is too heavy or awkward seek assistance **– Do not attempt to lift it on your own.**

· Attendance machine operators must be competent & suitably qualified to carry out their duties.

· Plan your route, move any obstacles. Ensure safe access and egress to and from all work areas and adequate lighting. Maintain high standards of housekeeping.

HILL PILING

Control Measures :

- Wear gloves for manual handling operations to protect hands.
- Always try to keep hands away from load edges especially in tight areas and use handles where provided.
- Avoid twisting, stooping, reaching and carrying long distances.
- Ensure an even floor and sufficient rest/recovery time. Maintain a good posture: if the task is repetitive a separate risk assessment may be required.
- A toolbox talk and instruction of how to carry out the work should be undertaken prior to any works

Monitoring procedures

Work activities should be regularly monitored against the safety method statement by the contractor's safety adviser, and should identify activities where controls need to be refined or expanded.

- Day to day monitoring and recording is the responsibility of the piling supervisor.
- All equipment and machinery should be thoroughly and regularly checked, in some cases daily, eg hoist ropes.
- The principal contract / project manager has responsibility for any activities which overlap with piling operations, and the monitoring of the control arrangements.

Prepared by : **S. C. Thornton**

Signature : 

Date : **03 August 2020**

Contracts Director

HILL PILING

Section 3 - COSHH Assessments

HILL PILING

COSHH ASSESSMENT

Activities / Subject covered by this assessment:

AUGER BORED PILING

CLIENT	**Ark Build Plc**	**JOB NO.**	**Rwp4016**
SITE ADDRESS	**44 Cleveland Street, London W1T 4JT**		

Area / Location:

'- Working area

'- Areas surrounding the piling rigs

Persons exposed:

- Piling rig drivers
- Steel fixers / operatives
- Other site personnel
- Members of the public

Control of Substances Hazardous to Health Policy Statement

The control of substances hazardous to Health requires R.W. Hill Piling Limited to keep up to date and relevant information about any substances that are used, stored or handled on the premises or on site by their employees

It is our intention, so far is reasonably practical to:

· Use safer substances in preference to more hazardous alternatives wherever possible.
· Give sufficient training to all users of hazardous substances about risks involved and the safety precautions to be observed.
· Supply the appropriate personal protective equipment.
· Provide all employees involved with hazardous substances with all details regarding these substances.

Materials in use

1. Cementitious material (primarily as concrete but also in the powder form)
2. Red Diesel (Gas oil)
3. Hydraulic Oil
4. Engine Oil
5. Concrete pump primer (Prime@pump)
6. Linemarker(spray paint)

All relevant Health & Safety Product Data sheets are available in our offices but all necessary information has been summarised in this assessment in order to inform of the specific actions required should an operative come into contact with any of the above mentioned materials during our day to day working practices. Should it be necessary to undertake emergency actions these are detailed on each COSHH assessment under the appropriate heading.

HILL PILING

COSHH ASSESSMENT: CONCRETE

Persons exposed : Rig driver, Steel fixers/ Operatives

Physical and Chemical Characteristics

Concrete is a mix of aggregate , cement and water. Admixtures may be included to improve product handling characteristics or the properties of the hardened concrete.

Main Hazards

Contact with wet cement mixes such as concrete can cause skin disease.

- Irritant contact dermatitis caused mainly by combination of wetness, alkalinity and abrasiveness of the cement mixture.
- Allergic contact dermatitis is mainly caused by individual sensitivity to chromium compounds that may occur in cement.
- Cement burn, a form of skin ulceration, may result from contact with freshly mixed concrete.
- The surface treatment and cutting of hardened concrete can create dust which may contain quartz, if inhaled over a prolonged period of time could constitute a long term health hazard.

Precautions

- Direct skin contact with wet cement should be avoided. It is important not to kneel or sit on wet material as harmful contact can occur through saturated clothing.
- Protective clothing should be worn when handling wet concrete, particularly on the arms, hands, legs and feet.
- Respiratory protective equipment should be worn for dust generated from hardened concrete.

Emergency Action

- Where skin contact occurs, either directly or indirectly through clothing the concrete must be washed off immediately.

- If eye contact occurs the area should be thoroughly rinsed with water for a prolonged period.

- In all cases of doubt, or where symptoms persist obtain medical advice.

Details of the equipment supplied to all our operatives on site for their personal protection is as follows:

- Personal Protective Equipment (PPE) is used by all operatives.

The PPE used consists of :
Hard Hats, Safety Boots, Protective rubber Gloves and HV Jackets or vests and overalls(optional).

- All operatives have been instructed in the correct use of their PPE, its care and maintenance and are aware how to request repairs and/or replacement items.

This document should be read in conjunction with our risk assessment which details the control measures in place for the use of concrete.

HILL PILING

COSHH Assessment: Hydraulic Oil

Low Product Hazard

Composition: Gear Lubricant based on highly refined mineral oil with organo sulphur / phosphorus and other additives.

- Suitable storage materials: Most common metals
- Unsuitable materials: May soften some rubbers
- Stability: Stable
- Reaction with water: None
- Dangerous reactions: None
- Storage: No special requirements avoid elevated temperatures
- Materials to avoid: Strong oxidising agents

Spillage Precautions

- Soak liquid in absorbent material and wash away residue.

Fire Precautions

- Foam, Dry chemical powder, carbon dioxide.

Nature of hazards

- Low
- May cause slight temporary irritation in the eye
- May cause slight skin irritation if contact is prolonged or frequent

Emergency Action

- Wash any areas of the skin that come into contact immediately

Control measures are in place for general piling operations and can be found in our specific Risk Assessment.

HILL PILING

COSHH Assessment: Gas Oil (Red Diesel/Derv)

Low Product Hazard

Composition: Gas Oil hydrocarbon based product derived from Crude Oil and other additives.

- Suitable storage materials: Most common metals
- Unsuitable materials: May soften some rubbers
- Stability: Stable
- Reaction with water: None
- Dangerous reactions: None
- Storage: No special requirements avoid elevated temperatures
- Materials to avoid: Strong oxidising agents
- Conditions to avoid: Sources of ignition

Spillage Precautions

- Soak liquid in absorbent material and wash away residue.

Fire Precautions

- Foam, Dry chemical powder, carbon dioxide.

First Aid Measures

Inhalation

- Remove affected person to fresh air
- Seek medical assistance

Skin

- Flush contaminated skin with water use soap if available
- Contaminated clothing should be soaked with water and removed

Eyes

- Flush eye with copious quantities of water, if irritation persists consult doctor

Chronic Health hazard Advice

Main Hazards arise from prolonged skin contact and inhalation mists

HILL PILING

COSHH Assessment: Concrete Pump Primer

Low Product Hazard

Composition : A mixture of lubricant, thickener, sequestrant and buffer and other additives.

- Suitable storage materials: Most plastics
- Unsuitable materials: None
- Stability: Stable in ambient temperatures
- Reaction with water: None
- Dangerous reactions: None
- Storage: No special requirements avoid elevated temperatures and keep dry
- Materials to avoid: Strong acids
- Conditions to avoid: High temperatures

Spillage Precautions

- Wash with water avoid dust in eyes

Fire Precautions

- Use extinguisher suitable to cause of fire

First Aid Measures

Ingestion

- Rinse and gently irrigate with clean water
- Seek medical assistance

Skin

- Wash with plenty of water
- Contaminated clothing should be soaked with water and removed

Eyes

- Immediately irrigate with clean water for 15 mins
- Seek medical

Chronic Health hazard Advice

Main Hazards arise from prolonged skin contact and inhalation mists

HILL PILING

COSHH Assessment: Line marker(Spray paint)

Description : Line Marker based on synthetic resin binder, solvent and pigments.

- Extremely flammable aerosol
- Pressurised container: May burst if heated.
- Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking.
- Do not pierce or burn, even after use.
- Toxic to aquatic life with long lasting effects.
- Do not allow uncontrolled leakage of product into the environment.
- Do not discharge into the drains or bodies of water

Information pertaining to special dangers for human and environment
In extensive use, formation of flammable / explosive vapour-air mixture is possible.

Conditions to avoid
- Keep away from heat.
- Formation of explosive gas/air mixtures.

Information pertaining to special dangers for human and environment
In extensive use, formation of flammable / explosive vapour-air mixture is possible.

General protective measures
- Avoid contact with eyes and skin
- Do not inhale gases/vapours/aerosols.

first aid measures
- Remove contaminated soaked clothing immediately.

inhalation
- Remove the casualty into fresh air and keep him immobile.
- Seek medical advice

skin contact
- In case of contact with skin wash off with soap and water.
- Consult a doctor if skin irritation persists.

eye contact
- Contact with eyes rinse thoroughly with plenty of water and seek medical advice.

ingestion
Do not induce vomiting and seek medical advice.

Fire Precautions
- Alcohol-resistant foam, carbon dioxide or dry sand.

Unsuitable extinguishing media - water

HILL PILING

Section 4 - Rig Certificate & Inspection forms

HILL PILING

Unit 1 Springfield Industrial Estate, Springfield Rd, Burnham-On-Crouch, Essex CM0 8UA
Telephone: 01621 785954 Facsimile: 01621 786135
Email: enquiries@hillpiling.com Website: www.hillpiling.co.uk

Certificate of Thorough Examination

Customer/Equipment owner ***: R W Hill Piling Ltd.***   ***Springfield Road, Burnham On Crouch, Essex CM0 8UA***
• Location of examination : ***Hill Piling Depot, Springfield Road***
• Description of equipment : **Hutte HBR203**
• Identification number : **H203Uto127- Uto124** Fleet no : ***HP047***
• Year of manufacture : ***2013***
• Machine Hours : **1675**
• Nature of examination: ***12 Monthly Thorough Examination***
• Reportable defects : ***None***
• Other observations and notes *: **Machine in Mini pile mode. Winch SWL 1 tonne***
• Date Inspection was carried out: ***11th May 2020***
• Date by which next Inspection is due: ***11th May 2021***

The Equipment detailed above has been examined by the person detailed below and subject to any items requiring remedial action as stated on the detailed inspection sheet of this report is deemed free from defects and is safe to operate. This certificate only denotes that the above machine has passed a thorough examination conforming to the below regulations

. . . The Management of Health & Safety at Work Regulations 1999 . . .

. . . Provision and use of Work Equipment Regulations 1998 (PUWER) Regulation 6 . . .

. . . Lifting Operations and Lifting Equipment Regulations 1998 (LOLER) Regulations 9, 10 & 11 . . .

Name of Inspector : *Robin Baker*	Signed : *R Baker*
Certificate No : **07HP/H203**	

FORM 1

HILL PILING

1 Springfield Industrial Estate, Springfield Road, Burnham-On-Crouch, Essex CM0 8UA

Telephone: 01621 785954 Facsimile: 01621 786135

SITE SAFETY CHECK SHEET

To be carried out before the start of each project and emailed to the office or as and when any new staff are sent to the project

CLIENT Ark Build Plc **JOB NO.** Rwp4016

SITE 44 Cleveland Street, London W1T 4JT

All operatives (including sub-contractors) to print, sign and date to acknowledge that they have been inducted by the Main Contractor and that they have read and understood the RAMS prior to commencement of piling works

Date		Induction (Y/N)	RAMS (Y/N)	Print Name	Sign Name
All new staff on project must be inducted by the Main Contractor and must have read and signed Hill Piling RAMS prior to commencing work on site and are to be added to this check sheet					
	Induction/RAMS read & understood				
	Induction/RAMS read & understood				
	Induction/RAMS read & understood				
	Induction/RAMS read & understood				
	Induction/RAMS read & understood				
	Induction/RAMS read & understood				
	Induction/RAMS read & understood				
	Induction/RAMS read & understood				
	Induction/RAMS read & understood				
	Induction/RAMS read & understood				
	Induction/RAMS read & understood				
	Induction/RAMS read & understood				
Foreman / Supervisor to complete Safety Inspections at the start of each project and email to office, thereafter complete weekly Records of Inspection and Toolbox Talks					
Date	**Safety Inspections**	**In Good Order (Y/N)**		**Print Name**	**Sign Name**
	Rig				
	Concrete Pipes (Rig)				
	Concrete Pipes (Ground)				
	Concrete Pump				
	Whip checks in place on all pipes				
	Bowser				
	Chains in Date				
	Toolbox Talk - Covid 19				
	WPC signed by client				
	(send signed front page)				

COMMENTS

Form 2

HILL PILING

1 Springfield Industrial Estate, Springfield Road, Burnham-On-Crouch, Essex CM0 8UA

Telephone: 01621 785954 Facsimile: 01621 786135

WEEKLY

TOOLBOX TALKS

A toolbox talk needs to be carried out at the start of each project and on a weekly basis thereafter or as and when required to carry out any variation in working practices.

CLIENT Ark Build Plc

SITE 44 Cleveland Street, London W1T 4JT

Job no. Rwp4016

Date	Description of Toolbox Talk	Print Name	Sign Name
	CORONAVIRUS(COVID - 19)		
	DAILY SITE WELFARE / PRECAUTIONS		
	Maintain social distancing		
	Avoid touching eyes, nose and mouth		
	Clean hands regularly with soap & water		
	Or use hand sanitiser regularly		
	Use of masks for certain operations		

All current Covid 19 precautions / procedures to be adhered to at all times

Form 2

HILL PILING

1 Springfield Industrial Estate, Springfield Road, Burnham-On-Crouch, Essex CM0 8UA

Telephone: 01621 785954 Facsimile: 01621 786135

WEEKLY

TOOLBOX TALKS

A toolbox talk needs to be carried out at the start of each project and on a weekly basis thereafter or as and when required to carry out any variation in working practices.

CLIENT Ark Build Plc

SITE 44 Cleveland Street, London W1T 4JT

Job no. Rwp4016

Date	Description of Toolbox Talk	Print Name	Sign Name

Form 3

HILL PILING

RECORD OF INSPECTION

WEEKLY

CLIENT : Ark Build Plc

SITE : 44 Cleveland Street, London W1T 4JT **JOB NO :** Rwp4016

Concrete Pump, Pipes, Concrete Agitator, Bowser & Compressor

This record is to certify that the equipment listed below has been inspected on a weekly basis and appears in good working order with any apparent defects being reported immediately and noted on the sheet below

OPERATORS NAME (PRINT) **RIG NO :**

Date	Site Address	Description of Equipment	Print	Signed

Signed on behalf of R W Hill Piling…….

Signed on behalf of the main contractor or MC representative……

Position……. **Printed……..……..**

Form 4

HILL PILING

RECORD OF INSPECTION

WEEKLY

CLIENT : Ark Build Plc

SITE : 44 Cleveland Street, London W1T 4JT

JOB NO : Rwp4016

Chains, Harnesses & Shackles

This record is to certify that the equipment listed below has been inspected on a weekly basis and appears in good working order with any apparent defects being reported immediately and noted on the sheet below

OPERATORS NAME (PRINT)

RIG NO :

Date	Site Address	Description of Equipment	Print	Signed

Signed on behalf of R W Hill Piling…….

Signed on behalf of the main contractor or MC representative……

Position……. **Printed……..……..**

Form 5

HILL PILING

RECORD OF INSPECTION

CLIENT : Ark Build Plc

SITE : 44 Cleveland Street, London W1T 4JT

WEEKLY

JOB NO Rwp4016

LIFTING APPLIANCES

Aerial Cableways, Aerial Ropeways, Crabs, Draglines, Excavators, Gin Wheels, Hoists Overhead Runways, Piling Frames, Piling Rigs, Puley Blocks, Sheer Legs & Winches

This record is to certify that the equipment listed below has been inspected on a weekly basis and appears in good working order with any apparent defects being reported immediately and noted on the sheet below

OPERATORS NAME (PRINT)

RIG NO :

Date of Inspection	Description of Lifting Appliance and Means of Identification	Result of Inspection State whether in Good Order	Print	Signed

Signed on behalf of R W Hill Piling…….

Signed on behalf of the main contractor or MC representative……

Position…… Printed……..……..

Form 6

HILL PILING

RECORD OF STANDING TIME

CLIENT : Ark Build Plc
SITE : 44 Cleveland Street, London W1T 4JT

JOB NO. Rwp4016

This record is to certify standing time and the cause of delay

OPERATORS NAME (PRINT) **RIG NO :**

Date	Cause of Delay	Start of Delay	End of Delay	Total Hours
Monday				
Tuesday				
Wednesday				
Thursday				
Friday				
Saturday				
			TOTAL	

Signed on behalf of R W Hill Piling…….

Signed on behalf of the main contractor or MC representative……

Position…… **Printed……..……..**

FORM 7a

HILL PILING

Unit 1 Springfield Industrial Estate, Springfield Road, Burnham On Crouch, Essex
Telephone: 01621 785954 Fax: 01621 786135

DAILY BORED LOG

Client : Ark Build Plc
Address : 44 Cleveland Street, London W1T 4JT
Caged Reinforcement : As construction schedule
Concrete Supplier :

Contract No : Rwp4016
Rig No : Hutte 203
Pile Dia :
Plot / Block No :
Date :

Pile No.	Diameter	Length	Cage Type	Cage Installed	Concrete Del Note No.	Waiting Time (mins)	Comments

Standing Time Comments etc.....

GROUND LINES DAILY INSPECTION LOG

Rubber concrete hoses, whip checks are in place on ALL pipes and that ALL pipe joints are securely clipped and pinned

Identity No.		Yes	No	In Good Order	Sign & Print Name
1					
2					
3					
4					
5					
6					
7					
8					

Rig Operator		Total Concrete	
Pump Operator		Pile Total	
Steel Fixer		Mts Drill	
Others			
Supervisor		Subcontractors Role and Name	

Cubes Taken - Cubes Nos & Description		Piling Ops
	Concrete Delivery No.	W & W
		Cage Type
		Cage No.

Signed : Print Name : Date:

EMAIL COMPLETED SHEETS TO OFFICE AT THE END OF THE DAY WORK IS CARRIED OUT PLEASE

HILL PILING

Section 5 - WPC, Rig Specifications & Bearing Pressures

HILL PILING

WORKING PLATFORM CERTIFICATE

This form must be completed and signed off prior to any works commencing, in additional where the site involves multiple platforms which are prepared as the piling continues they must be signed for on the inspection log noting the Block/area.

Project Name	**44 Cleveland Street, London W1T 4JT**
Work area covered by this certificate	**Piling area plus 2m run off including haul roads and any ramps required**

(A sketch or marked up pile layout drawing may be attached to this certificate. Include haul roads and gridlines.)

Part 1 – WORKING PLATFORM DESIGN

Project no.	**Rwp4016**

Equipment to be used on site.	**Hutte 203(CFA mode)**
Maximum plant loading	**BRE LOAD CASE 1** **q1k = 200kPa L1 = 0.729m, W1 = 0.220m** **BRE LOAD CASE 2:** **q2k = 265kPa L2 = 0.899m, W2 = 0.220m**

(Note: BR470 'Working Platforms for Tracked Plant: Good practice guide to the design, installation, maintenance and repair of ground-supported platforms' is available from IHS BRE Press – Tel 01344 328 038)

Designer Name		**Position**	
Designer Organisation		**Tel no.**	
Is Testing Specified?	**Yes / No** **Yes**	**If 'Yes' Give Details : The plate load tests should be carried out to a pressure of 1.5 x q2 value of 265Kpa = 397.5Kpa with a settlement of 5mm or less.**	

Part 2 – VERIFICATION BY PRINCIPAL CONTRACTOR

The working platform detailed above has been designed, installed to the design and, if specified, tested to safely support the equipment detailed in Part 1 above. The limits of the platform have been clearly identified on site as necessary.

The working platform will be REGULARLY INSPECTED, MAINTAINED, MODIFIED, REPAIRED, and REINSTATED to the as-designed condition after any excavation or damage, throughout the period when the equipment is on the site. A completed copy of this certificate signed by an authorised person from the Principal Contractor shall be given to each user of the working platform prior to commencement of any works on site.

Name & Position		**Date**	
Organisation	**Ark Build Plc**	**Signature**	

Copy must be emailed to the office before works commence

The HSE has worked closely with the FPS to develop this initiative and supports the principle of reducing accidents by the certification of properly designed, prepared and maintained working platforms

HILL PILING

WORKING PLATFORM CERTIFICATE

Guidance on working platforms for tracked plant

1. Design

1.1. The HSWA 1974 and CDM Regulations 2015 require the Principal Contractor to appoint competent Designers in respect of Working Platform design. This legislation explains how competence can be assessed by reference to professional qualifications or professional memberships and by reference to practical experience of the design of working platforms. Principal Contractors must be satisfied that a competent Designer has been appointed by them in accordance with the relevant legislation before they complete and sign the WPC.

1.2. The stability of tracked plant is fundamentally dependent upon the provision of a suitable and sufficient working platform. It must be properly designed and installed to a recognised standard. Whilst the same type of rig may be operated by different companies, the design bearing pressures may differ due to the specific operating configuration of the rig and/or any modifications. Details of the plant to be used and bearing pressures will be provided by the specialist contractor in advance of work commencing.

1.3. Working platform design is extremely sensitive to the bearing pressure and type of fill used in the platform. (For example, changing the angle of friction of the fill from 35 degrees to 45 degrees can halve the platform thickness.) It is therefore advised that the Designer may have to adopt conservative/cautious estimates of platform shear strength unless higher values can be demonstrated by testing or with reference to appropriate published data.

1.4. The working platform must be free draining to prevent the build up of water and slurry. In the case of fine-grained sub-grades, a separation/filter membrane should be installed beneath the platform material to inhibit 'pumping' and infiltration of the fine-grained soils up into the platform material during wet weather (which can impair platform performance and increase maintenance costs).

1.5. Proof testing of the platform can be carried out with a suitably sized circular plate subjected to the maximum design loading. Such testing, as part of an appropriately designed testing regime, should highlight any gross inconsistencies in platform performance. Potentially, significant savings in platform thickness and cost may be realised by adopting a more detailed testing strategy.

1.6. The working platform must have a specified design life which starts before delivery of the piling equipment and ends on completion of all piling works. This includes load testing, integrity testing, investigation of non conformances and any remedial works.

1.7. The specialist contractor is to advise the Principal Contractor at the earliest practicable opportunity should the specialist contractor become aware of any circumstances relating to the working platform that renders it unsafe.

2. Installation

2.1. The FPS Working Platform Certificate is mandatory for all sites where a rig or attendant plant operates. It must be signed by an authorised representative of the Principal Contractor. This signature confirms that the legal duties required under CDM have been carried out.

2.2. If the working platform is to be constructed or removed in phases while piling works are ongoing, then the extent of the platform must be clearly defined on the certificate and, in accordance with good practice, physically on site. This is particularly important where the platform material is removed from an area previously made available to the specialist contractor.

2.3. The working platform provides access for all plant deliveries, sub-contractors and personnel associated with the specialist operations. Properly designed and installed the working platform could also provide suitable and safe access for following trades for the whole project.

2.4. Poor definition of the edge of the working platform is a major cause of tracked plant instability. It is good practice that the working platform should extend at least 2m beyond the pile position/edge of the building to ensure sufficient safe working area for the specialist's personnel and attendant plant. Where having to work within this 2m zone is unavoidable the Designer is to be informed of the requirement to design the platform for working up to its edge.

2.5. Where access ramps are used to move between working levels these must be of sufficient gradient and width to allow the plant to move safely with the stability constraints of the machine. Ramps must be in a straight line between working areas. Rigs and cranes cannot change direction on ramps. Where a change in direction is required, this must be on a flat level platform.

3. Maintenance, modification, repair and reinstatement

3.1. The working platform must be kept free draining. Water and slurry which is allowed to build up on the working platform can hide such hazards as recently constructed piles, trip hazards, uneven or unstable ground, services and excavations. Slurry can be transferred to work equipment which increases the risk of slips on steps as well as difficult handling of work tools.

3.2. Obstructions encountered during installation of the piling works will generally require excavation to remove them. This can create a 'soft spot' which can result in the rig overturning. It is essential, therefore, that any excavations made in the working platform are reinstated to the designed standard, including any reinforcement and separation filter/membrane.

3.3. The working platform shall be subject to regular inspection by a competent individual appointed by the Principal Contractor (e.g. the Temporary Works Co-ordinator) throughout its design life and after any reinstatement or any works which might have modified it. Any damaged or inadequate areas identified must be reinstated to the designed standard. Following the regular inspection, the Working Platform Regular Inspection Log shall be signed by an authorised representative of the Principal Contractor and issued to the specialist contractor with a layout drawing of the working platform amended as appropriate.

4. Working Platform Layout

4.1 Items that must be included and properly located on the working platform layout drawing and be notified by the Principal Contractor to the specialist contractor would include: detail of platform edges and 2m delineation, trial pits, services or voids, areas of backfilling, known underground basements; areas that are covered by the certificate or permit, test locations (if specified by the Designer of the platform) and any other feature that may affect the safety of operations.

Working Platform Regular Inspection Log

HILL PILING

The working platform has been inspected. All necessary maintenance, modification, repair or re-instatement of the working platform is to the as-designed installed condition
If necessary, a revised Working Platform Layout Drawing has been issued to the specialist contractor.

Date	Company	Name & Position	Signature	Comments (include key details of alteration, modification, maintenance, repair, date of next inspection, and whether or not revised drawing issued etc. as appropriate)	Work Complete (Piling mat has been reinstated or installed as per Mat design / specification and is safe to use) (Yes/No)	Details (to be completed by Hill Piling) (include details of why piling mat needs to be signed off again ie obstructions have been removed, new area of work etc...

Working Platform Regular Inspection Log

HILL PILING

The working platform has been inspected. All necessary maintenance, modification, repair or re-instatement of the working platform is to the as-designed installed condition
If necessary, a revised Working Platform Layout Drawing has been issued to the specialist contractor.

Date	Company	Name & Position	Signature	Comments (include key details of alteration, modification, maintenance, repair, date of next inspection, and whether or not revised drawing issued etc. as appropriate)	Work Complete (Piling mat has been reinstated or installed as per Mat design / specification and is safe to use) (Yes/No)	Details (to be completed by Hill Piling) (include details of why piling mat needs to be signed off again ie obstructions have been removed, new area of work etc...

casagrande group

HBR 203

Hydraulic drill rig

Hydraulisches Bohrgerät

DIN ISO 9001

HÜTTE
BOHRTECHNIK

The HBR 203 D (diesel engine) and HBR 203 E (electric motor) minipile rigs are classified in the "Low head room small bore rigs" category, with separate power pack.

These compact, fully equipped, robust crawler drill rigs are designed to manoeuvre easily in tight access and low headroom sites. They will accommodate different drilling tools to drill in all formations.

Rig stability is guaranteed by the hydraulically telescoping undercarriage (800 – 1200 mm) and an additional hydraulic rear support.
The optional telescopic mast makes the rig easily adaptable to varying headroom conditions ranging from 2300 mm to 3350 mm. This permits the operator always to work with optimum lengths of casings and rods.

Fields of application:

- Micropiles
- Ground anchors
- Jet Grouting
- Water-well Drilling
- Soil investigation

The HBR 203 D/E is built safe, meeting and exceeding the stringent European safety and health standards. All of our products are manufactured to comply with the ISO 9001 quality requirements.

Das Kellerbohrgerät HBR 203 D (Dieselmotor) und HBR 203 E (Elektromotor) mit separatem Antriebsaggregat ist in die Gruppe der Kleinbohrgeräte einzuordnen.

Das kompakte und robuste Raupenbohrgerät ist mit einem kompletten Antriebs-Aggregat wie Motor, Hydraulikpumpen, Hydraulikventilen, Öltank, etc. ausgerüstet. Arbeiten auf speziellen Baustellen mit den unterschiedlichsten Anforderungen an Raumhöhe und Umgebung können mit diesem Gerät erledigt werden.

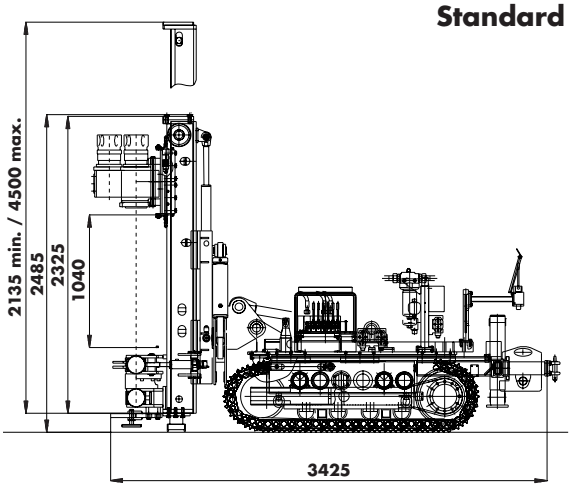
Die Standsicherheit wird durch ein hydraulisches Teleskopfahrwerk (800 – 1200 mm) und eine zusätzliche hydraulische Abstützung (hinten) gewährleistet. Außerdem ermöglicht das Teleskopfahrwerk gute Manövrierbarkeit in beengten Räumen. Unterschiedliche Raumhöhen können durch die optionale Teleskoplafette (Verschiebbarkeit 2300 – 3350 mm) ausgeglichen werden. Dadurch ist es möglich, eine größere maximale Nutzlänge des Bohrgestänges zu erreichen.

Anwendungsbereiche:

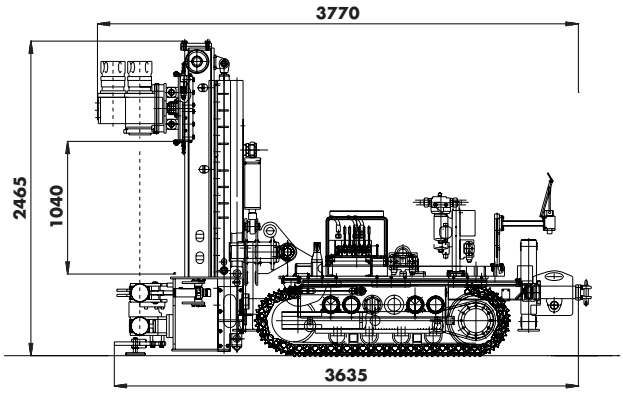
- *Mikropfahlbohrungen*
- *Ankerbohrungen*
- *HDI-Bohrungen*
- *Brunnenbohrungen*
- *Erkundungsbohrungen*

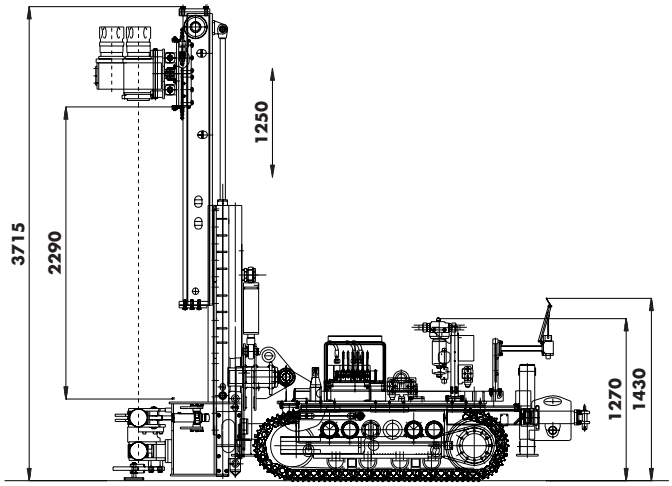
Die HBR 203 D/E entspricht den strengen Europäischen Sicherheits- und Gesundheits-Standards oder übertrifft diese sogar. Alle unsere Produkte werden gemäß den Qualitätsanforderungen der ISO 9001 gefertigt.

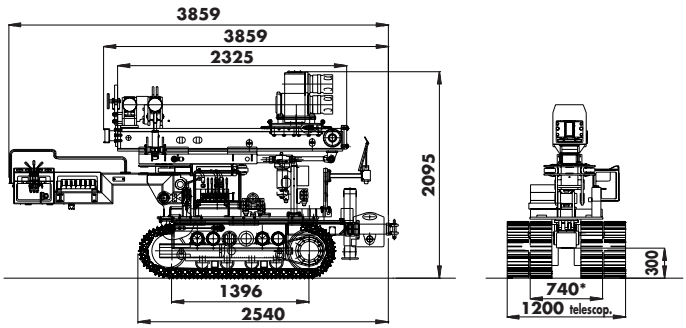
Standard mast / *Standard Lafette*

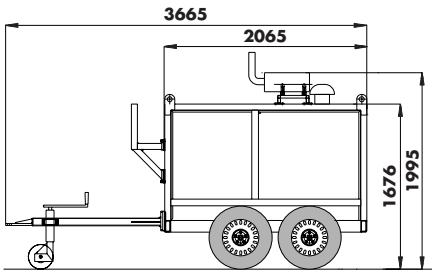


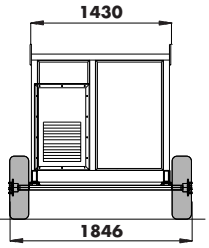
Telescopic mast / *Teleskop Lafette*











*** Depending on mounted equipment**
**** Abhängig von der Geräteausrüstung***

Overall weight - Machine 4200 kg / 5200 kg - Power Pack 2600 kg, depending on mounted equipment
Gewicht - Maschine 4200 kg / 5200 kg - Antriebsaggregat 2600 kg, abhängig von der Geräteausrüstung

* Technical Specifications are subject to modifications without prior notice and incurring responsibility for machines previously sold. The shown machines may have optional equipment. Error and misprints reserved.
* *Technische Änderungen ohne Vorankündigung und Verpflichtung gegenüber früher gelieferten Geräten. Die abgebildeten Geräte können Sonderausstattung haben. Irrtum und Druckfehler vorbehalten.*

Technical Specifications / *Technische Daten*

Powerpack PPD 110 Engine	*Antriebsaggregat PPD 110 Motor*		
Deutz - Diesel	*Deutz - Diesel*	*BF 6 L 914 C*	**COM 2 / EPA**
air cooled	*luftgekühlt*		
max. power output	*max. Leistung*	*141 kW*	**177 HP**
rated output at 2300 rpm	*Leistung bei 2300 U/min*	*112 kW*	**150 HP**
fuel tank capacity	*Dieseltank*	*170 l*	**45 gl**
Hydraulic system	*Hydrauliksystem*	*load sensing*	**load sensing**
hydraulic pumps	*Hydraulikpumpen*		
1st circuit	*1. Kreislauf*	*300 l/min*	**80 gpm**
2nd circuit	*2. Kreislauf*	*25 l/min*	**7 gpm**
operating pressure	*Systemdruck*	*250 bar*	**3625 psi**
hydraulic tank capacity	*Hydrauliktank*	*320 l*	**85 gl**
sound proofing cover	*Schalldämmhaube*		
electric motor option	*Elektrikmotor optional*		
Machine Crawler base	*Maschine Raupenfahrwerk*		
crawler type	*Laufwerk Typ*	*B 0*	**B 0**
towing force	*Zugkraft*	*40 kN*	**9000 lbf**
crawler speed	*Fahrgeschwindigkeit*	*3 km/h*	**1,9 miles/h**
ground pressure	*Spez. Bodendruck*	*6,5 N/cm²*	**1358 lb/ft²**
overall width	*Gesamtbreite*	*740 - 1200 mm*	**2,4 - 3,9 ft**
track width	*Kattenbreite*	*220 mm*	**0,7 ft**
length of crawler units	*Länge der Fahrschiffe*	*1984 mm*	**6,5 ft**
ground clearance	*Bodenfreiheit*	*300 mm*	**1,0 ft**
Drill mast	*Bohrlafette*		
Type DM 180 with feed cilinder	*Typ DM 180 mit Vorschubzylinder*		
max. torque zul.	*Drehmoment*	*24 kNm*	**11700 lbf/ft**
lenght (feed length) standard	*Länge (Vorschubläge) standard*	*2300 mm (1040 mm)*	**7,5 ft / 3,4 ft**
lenght (feed length) optional	*Länge (Vorschubläge) Option*	*3500 mm (2300mm)*	**11,5 ft / 7,5 ft**
lenght telescopic mast	*Länge Teleskopmast*	*2300 - 3550 mm*	**7,5 - 11,6 ft**
feed lenght telescopic mast	*Vorschub Teleskopmast*	*1040 - 2290 mm*	**3,4 - 7,5 ft**
feed force	*Vorschubkraft*	*38 kN*	**8540 lbf**
retraction force	*Rückzugskraft*	*60 kN*	**13500 ft/min**
feed/retraction rate	*Vorschb-/Rückzugsgeschwindigkeit*	*10 m/min*	**32,8 ft/min**
fast feed/fast retraction rate	*Vorschb-/Rückzug schnell*	*60 m/min*	**197 ft/min**

Clamping and breaking devices	*Klemm- und Brechvorrichtungen*	**Typ CB2** *Zentrierbacken* **self-aligning jaws**	**Typ CB4**
diameter	*Durchmesser*	*68 - 230 mm* **2,6" - 9"**	*54 - 219 mm* **2,1" - 8,6"**

Hydraulic hammer	*Hydraulikhammer*	
recommended	*empfohlen*	*HH40/12, T 1000 6V/D21*

Hydraulic rotary heads	*Kraftdrehköpfe*	
recommended	*empfohlen*	*HG12, HG19, HG 24, T 1000 6V*

HILL PILING

Section 6 - Insurance Details

To Whom it May Concern

Insured	-	The Hill Group (1985) Limited and/or R W Hill (Piling) Limited and/or Hill Piling Limited
Date of Issue	-	6th March 2020

Employers Liability

Insurer	-	Aspen Insurance UK Limited
Policy Number	-	B1903174181001
Period of Insurance	-	12 months from 6th March 2020
Business Description	-	Supply, design and installation of bored, CFA and steel case driven piling. Specialists in CFA, rotary, open bore, mini cased driven, geothermal, secant and contiguous wall piling. Plant hire.
Limit of Indemnity	-	GBP 10,000,000 any one occurrence inclusive of legal costs and expenses, other than Terrorism which is restricted to GBP 5,000,000
Indemnity to Principal	-	Yes

This section provides cover for the Insured's Legal Liability for their employees for death, injury or disease sustained during the course of their employment in the business and is require by law.

Public Liability

Insurer	-	Aspen Insurance UK Limited
Policy Number	-	N0A3VVR18A0A & B1903174181002
Period of Insurance	-	12 months from 6th March 2020
Business Description	-	Supply, design and installation of bored, CFA and steel case driven piling. Specialists in CFA, rotary, open bore, mini cased driven, geothermal, secant and contiguous wall piling. Plant hire.
Limit of Indemnity	-	GBP 10,000,000 any one occurrence and unlimited in the period of Insurance.
Indemnity to Principal	-	Yes
Excess	-	GBP 1,000 Each and every Third Party Property Damage occurrence GBP 2,500 Each and every occurrence in respect of Underground Services
Extensions	-	Damage to Superstructures included

This section provides cover for the Insured's legal Liability to members of the public for accidental bodily injury or accidental damage to property arising out of the business as per the policy wording.

Products Liability

Insurer	-	Aspen Insurance UK Limited
Policy Number	-	N0A3VVR18A0A & B1903174181002
Period of Insurance	-	12 months from 6th March 2020
Business Description	-	Supply, design and installation of bored, CFA and steel case driven piling. Specialists in CFA, rotary, open bore, mini cased driven, geothermal, secant and contiguous wall piling. Plant hire.
Limit of Indemnity	-	GBP 10,000,000 any one occurrence and in all in the Period of Insurance
Excess	-	GBP 1,000 Each and every Third-Party Property Damage occurrence GBP 2,500 Each and every occurrence in respect of Underground Services
Extensions	-	Damage to Superstructures included

This section provides cover for the Insured's Legal Liability to members of the public for accidental bodily injury or accidental damage arising out of goods or products designed, manufactured, constructed, installed, altered, repaired, serviced, processed, treated, sold, leased, supplied or distributed by the Insured as per the policy wording.

Contractors All Risks

Insurer	-	Aspen Insurance UK Limited
Policy Number	-	N0A3VVR18A0A
Period of Insurance	-	12 months from 6th March 2020
Business Description	-	Supply, design and installation of bored, CFA and steel case driven piling. Specialists in CFA, rotary, open bore, mini cased driven, geothermal, secant and contiguous wall piling. Plant hire.
Sum Insured	-	GBP 5,000,000 Maximum contract value
Period	-	24 Months Maximum contract period
Owned Plant	-	GBP 1,000,000 Any one site
Hired Plant	-	GBP 500,000 Any one item
Hired out Plant	-	GBP 50,000 Any one item
Excess	-	GBP 2,500 Each and every claim in respect of Theft and Malicious Damage GBP 1,000 Each and every other claim

This section provides cover for the "All Risks" of Loss or Damage to the permanent and temporary works carried out by or on behalf of the Insured at the Site of a Contract.

Professional Indemnity

Insurer	-	Dual Corporate Risks/IGI and Volante Global
Policy Number	-	PC-2673271710
Period of Insurance	-	12 months from 6th March 2020
Business Description	-	Supply, design and installation of bored, CFA and steel case driven piling. Specialists in CFA, rotary, open bore, mini cased driven, geothermal, secant and contiguous wall piling. Plant hire.
Limit of Indemnity	-	GBP 10,000,000 in the aggregate with round the clock reinstatements including costs and expenses
Excess	-	GBP 12,500 Each and every Claim applicable to Costs
Jurisdictional Limits	-	Worldwide Excluding USA & Canada
Geographical Limits	-	Worldwide Excluding USA & Canada
Law & Jurisdiction	-	England and Wales
Retroactive Date	-	11.01.1999

This section provides cover for the Insured's legal liability incurred following professional negligent acts or omissions as per the policy wording.

All Subject to the policy terms, conditions, limitations, exclusions and cancellation provisions and may also be subject to warranties. The limits shown may have been reduced by paid claims.

We express no view and assume no liability with respect to the solvency or future ability to pay of any of the insurance companies which have issued the insurance(s). All details are always subject to the individual policy wordings. This document is issued as a matter of information only and confers no rights upon the document holder other than those provided by the policy. This document does not amend, extend or alter the coverage afforded by the policies described herein.

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This letter shall be governed by and shall be construed in accordance with English law.