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METHOD STATEMENT, RISK ASSESSMENTS & C.O.S.H.H. ASSESSMENTS FOR

138 – 140 Highgate Road, London, NW5 1PB.

August 2019



underpinning piling basements repairs redecoration

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Registered in England No:1164024



Method Statement / Safe System of Work

Contract No: G1210 - 51

Contract Name: 138 – 140 Highgate Road, London, NW5 1PB.

Method Statement Title: Install 350mm diameter open bore piles at 500mm centres to act as a contiguous piled wall to new basement.

Date Written: 14th August 2019.

Brief Description of Works

Install 142 No. 350mm diameter open bore piles at 500mm centres. Pile lengths 92 No. piles 10.0m long, 16 No. piles 9.0m long and 34 No. piles 8.0m long as detailed on AMA Consulting Engineers drawing 18035/SK023 Rev P2. Reinforcement within each pile is 5 No. H16 bars full depth with H8 helical at 150mm pitch. Maximum retained height of pile is 7.1m.

Plant & Equipment

- Rubber tracked rigs
- Power packs c/w hose
- 350mm diameter x 1m long augers.
- 3 tonne excavator and a range of buckets
- 3 tonne swivel dumper
- 110v angle grinder
- Grab wagon.

Sequence & Method of Work

1. All operatives will arrive on site with all the correct PPE required to carry out their work safely.
2. All operatives will attend Space free Ltd site induction course; which will include site rules, sign in / out procedure and this method statement / risk assessments,

Emergency procedures, together with any other H&S matters that may arise from time to time.

3. Space Free Ltd will issue Purkelly's foreman services drawings e.g. electric, gas, water, communications and drainage for the working area.
4. The working area will be scanned by Space Free Ltd, if services are encountered within working area trial holes will be dug to determine the position, depth and type of service. The services encountered must be clearly marked and shown to piling foreman whom may move pile location if possible to miss the service and the new location agreed with Purkelly's design team. A permit to dig / pile will be issued to the piling foreman allowing him to commence piling.
5. Space Free Ltd will mark the pile centre lines with pins, timber profiles and marker spray and datum level agreed on site before works commences.
6. Space Free Ltd will ensure existing structures or hard standings are grubbed out and there is a firm level working platform for the piling rig and the site and working areas are secure with timber hoarding and herras fencing.
7. Only piling gang allowed within working area when piling. The rig will be positioned directly over a pin and levelled by hydraulic jacks
8. The flighting system utilised is a continuous flight auger supplied in 1m lengths, connected utilising male & female hexagon drive.
9. The cutting head is positioned within the gate and located in the drive. The pile is commenced by drilling to a pre-determined design depth by adding 1m lengths of auger/flight when required. The rig is checked for plumb every time an auger is added. The spoil generated will be shovelled to one side and will be removed by 3 tonne excavator and dumper to a designated area to be removed from site by means of grab wagon.
10. Once the required depth is achieved the flights are removed in sequence until the lead flight remains.
11. The open bore is protected by installing a ball of polythene or a bucket into the top of the pile ensuring no spoil falls down the opening. The rig is tracked away and the pile head cleared of spoil.
12. The rig is then moved to new pile location 4, 7, 10, 13, etc. Leaving 2 clear piles between piles each day, the following day piles 2, 5, 8, 11, 14, etc. Each day the piles are inspected by building control, ensuring the pile is plumb, correct depth and is free of water.

13. When approved by building control the required reinforcement cages is lifted into the pile, (5 no. H16 bar full depth and H8 helical at 150mm pitch will be inserted in each pile) by means of 3 tonne excavator.
14. Once a number of piles are ready, C35 class 2 sulphate resistance concrete will be placed into the piles via dumper from the back of a concrete wagon to the required height.
15. The above is repeated till all 142 No. piles are completed. When piling is finished following day any remaining spoil and concrete, etc will be disposed of within skip and all plant remove from site. The working area will be left clean and safe for other trades to work.

Personal Involved

Contract Director – *Glen Purcell. (07836 789 766)*

Piling Engineer – *Jeffrey Perreira – J.P Mann Associates.*

Contracts Manager – *Gary Lawrence (07902 334 603)*

Operatives: 1 No. Foreman and 2 No. Labour.

P.P.E.

A minimum requirement as stated, i.e. hard hat, boots, hi-vis jacket, K Plus Gloves EN 420 or EN 388, goggles to BS EN 166B, ear defenders/ ear plugs to EN 352-2 and dust mask... When using breaker or compaction equipment persons to wear anti-vibration gloves to EN 388.

Risk Assessments

1. Piling (Electrocution).
2. Open excavation (Trips / falls and collapse side of excavation)
3. Falling onto protruding reinforcement out of pile. (Impaled onto re-bar)
4. Movement of lorries (Persons struck by skip wagon or delivery wagon)
5. Manual Handling (Injury to back)
6. Cutting reinforcement (Flying disc, dust and sparks)
7. Use of hi-ab when loading & lorries (Materials dropping inadvertently)
8. Refuelling Plant (Fire & Spillage)
9. Working with concrete (Concrete burns)
10. Working with electric tools (Electrocution)
11. Moving parts (Trapped limbs within spinning auger)

C.O.S.H.H.

This method statement is to be read with the following COSHH assessments:

Ready mix Concrete

Diesel

Hydraulic oil

The Environment

The environment impact to the above has been assessed prior to commencing to works starting on site.

- Noise levels to be kept to a minimum.
- In case of fuel spillage or hydraulic hose being damaged it will be controlled by means of Oil soak granules or absorbent pads.
- Washing out concrete wagons within designated area.
- Works area to be kept clean at all times.
- Diesel to be stored on sump pallets.
- Spill trays placed under plant.
- Site traffic will be kept to a minimum.
- No discharge of contaminated water within natural watercourse or surface water.
- All spoil removed from site by an approved grab wagon company

Briefing Register

Purkelly's Contracts Manager and foreman will ensure all operatives are site inducted and they should be aware of method statement and risk assessment for work they are undertaking.

Further communications will be carried out directly with our foreman on a daily basis, or as and when any matter that affects the site operations.

Contracts manager will give toolbox talk to each gang at least once a month.

Safety

All activities to be carried out in accordance with Purkelly's Company Safety Policy, Site Rules, "The Health and Safety at Work Act 1974" and "The Management of Health and Safety at Work Regulations 1999".

Emergency Procedures / Actions

Space Free Ltd will issue an emergency procedure to all site staff and operatives during site induction. In addition the nearest A & E and site first aider will be posted within ground hog canteen at works location.


In case of emergency, the person discovering the emergency shall raise awareness immediately and call the emergency services.

In case of any accident or near miss it should be reported to Space Free Ltd and Purkelly's head offices where the matter can be dealt with in the appropriate manner


3rd Parties

Any queries or complaints from the public should be dealt with in a polite manner and they should be directed Space Free Ltd where the matter can be dealt with through the proper channels.

Prepared by:


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Checked by:


ALAN PURCELL

