

Working Methodology

To be completed when tasks involve multiple or complex activities that are not covered in their entirety by risk assessments and/or key procedures.

Note: This form is only valid when sections K and L are completed and signed the manager responsible and all personnel involved.

Site/project name:	Kidderpore Avenue	Project no.:	468
Address:	Mount Anvil Ltd, Hampstead Manor, Kidderpore Avenue, West Hampstead, North London		
Area/location:	Skeel House		
Company:	J. Reddington Ltd		
SSOW No.	Title: Works inside tree protection area for Skeel House Extension		
Project manager:	Daragh Quinn		
Prepared by:	Louise Ormsby	Date:	17/11/2016
Revision:	1	Revised by:	Louise Ormsby
		Revision Date:	19/12/2016

A: Brief description of work to be undertaken

Ground disturbance for drainage installation inside the tree protection area next to Skeel House	
Work location: Skeel House	
Start date: 18/11/2016	Duration: As per construction programme

B: Work equipment required for a safe working environment

Note: Include all equipment needed for a safe work environment, Do not include PPE – see section H.	
<p>Tools</p> <ul style="list-style-type: none"> • Hand tools • Disc cutter • Air spade 3000 • Hand shovel • Cable avoidance tool (CAT) • Precast manhole rings (250mm deep sections) • Scaffold tube and fittings • Xypex • Adawall sealant 	

C: Sequence of main job tasks

Installation of drainage

- Operatives will take the required pipes and fittings from the assigned storage area and deposit them safely at the workplace.
- Excavations for drain runs will be dug with an air spade in order to protect tree roots and trees. Manufacturer’s instructions will be read by the operator prior to use of the air spade.
- A ‘Permit to Excavate’ must be in place before works commence.
- Prior to digging taking place the area in question will be scanned for services by a trained and competent JRL operative with a CAT and Genny device.
- If the hierarchy of risk reduction has been followed any known services will be redirected away from the work area prior to digging taking place.
- Where this has not been carried out services are to be clearly identified to ensure operatives are aware of their location.
- If any unknown services are discovered works will cease and the JRL ground service co-ordinator will be informed and further guidance will be sought from site management.
- In the event that an un-located service is struck the work area will be cordoned off and JRL management informed and further instruction will be sought.
- An Engineer will set out the pipe runs and termination points. Once the engineer has established the drain run it is demarked with spray paint/string lines.
- Once the shallow trench is exposed concrete will be laid as per the safe system of work for concrete placement.
- The specified pipes are then laid and positioned via laser/taunt string line to ensure gradient and lines are accurate.
- The pipes are then spliced together with a socket and spigot connection.
- Pipe-work & fittings will be joined together with mechanical couplings as per the specification.
- Pipe-work is installed within the raft slabs on a pour by pour basis and will require temporary framing using rebar positioned to reflect the approximate invert levels of the drain run.

Installation of manholes

- Manhole rings will be lifted to the place of work as no plant/machinery is allowed in the east court yard due to tree protection zones.
- The engineer will mark the centre point of the manhole on the grass.
- If it is a 1200mm precast manhole ring, the air spade will excavate 1.6m² in order to expose the tree roots.
- There will be an Arboricultural consultant present while working near any roots, they can then advise on any roots found.
- Identify any roots present and move the manhole to suit, so as not to damage any roots.
- The manhole ring will be placed in an area where no roots are present; this will be the new manhole position.
- Place the larger manhole ring required and slowly excavate using the air spade, the concrete manhole.
- As soil is removed from inside the precast manhole ring, the ring will begin to sink, allowing the operative to place another ring on top. This will be continued until half the depth of the manhole is reached.
- At the halfway point, place the actual size ring and seal using Adawall sealing strip and sealing primer in between each precast ring.
- Slowly excavate underneath the 1200mm ring and it will begin to drop again.
- Repeat this process, excavate 250mm deep and add ring.
- Over excavate 250mm below invert and build back up with dry lean mix and fill back up to form the channel and bench the manhole.
- Seal inside manhole joints with xypex slurry.
- Place manhole lid/biscuit on top and seal the manhole.
- All drain runs completed will be air tested or similar means before backfill

<p>commences.</p> <ul style="list-style-type: none"> • Access and egress into all drainage excavations will be stepped with scaffold handrails or using a combisafe stairway. • The drain run will be placed on test, prior to placing the concrete. The test will be carried out using air. • On completion of a successful test / inspection the concrete pour can commence. • Pouring concrete around the drainage areas must be done with extreme care so not to dislodge or damage the installed pipe-work. • If tree roots are close to any proposed concrete, all roots will be protected from the wet concrete. • Concrete and bed surround will be placed using shovels. • Backfilling will be carried out in suitable layers as per drawings. • On completion of the slab and before any other trades commence works within the area; a CCTV Survey will be carried out on the whole drainage system <p>Note: All excavations openings will be protected using scaffold tube and fitting guard rails with warning signage posted.</p>	
<ul style="list-style-type: none"> • All site operatives will receive an induction and adhere to site emergency procedures at all times whilst on site. • Manager\supervisor to complete a daily safe start before work commences. Supervisors will carry out daily briefings with operatives on a daily basis also. • A toolbox talk will be carried out site for all operatives, with the topic being relevant to the work taking place on site. Operatives will sign off on the toolbox talk to indicate that they have received and understood the material. • Access/egress from the working site will be via designated walkways which will be highlighted using 'Yellow matting'. Walkways that are not defined by yellow mat will be defined by scaffold tube and fitting or crash barriers, with gate points at the entrance to the site itself. All work activities will be planned to maintain pedestrian routes across the site • JRL will provide a first aider for the duration for the project. This person/s will be displayed on the site health and safety notice board. • Site working hours will be 08:00.a.m. to 18:00.p.m. • All tree protection zones and root protection areas will be adhered to at all times. 	
<p>Note</p> <ul style="list-style-type: none"> • Works will be inspected by a Mount Anvil Ltd representative and any additional remedial works will be completed. • On completion of all works the areas will be cleared of all remaining waste, equipment, tools and materials and handed over to the Mount Anvil Ltd follow on trades. 	

G: Details of work permits or authorisations required (tick ✓ and attach permits or other forms are required for the work activity)

Permit to work (general)		Permit to work (excavate)	✓	Permit to work (hot work)		Permit to work (confined spaces)	
Permit to work (electrical)		Permit to work (working platform certificate)		Permit to work (mobile crane authorisation)		Permit to work (other)	
If Other, please describe:							

J: Details of contacts, site management etc., or special emergency arrangements

<p>Senior Contract Manager - Brian Hallinan - 0778 977 8195</p> <p>Contract Manager – Trevor Healy - 07881245102</p> <p>Project Manager - Daragh Quinn – 0770 375 6318</p> <p>Construction Manager – To be completed on site</p> <p>Senior Engineer - Luke Flatley – 0795 775 7707</p> <p>H&S Advisor - Louise Ormsby - 0781 845 1748</p> <p>JRL Safety Department – 020 895 37800</p>

K: Name of person responsible for implementation of working methodology (communications and monitoring compliance)

Name (please print):	
Position:	Contact no:
1. Check all sections and confirm correct.	
Signature: -	Date: -
2. Issue document to site team and ensure briefing.	
Signature: -	Date: -

