

METHOD STATEMENT MATRIX

Site Name: 1 St Marks Crescent Camden

Site Code: n/a

Client:

Client Ref: n/a

Prepared by: MSA Safety

Signature: (Electronic)

Revision:	Date:	By:	Signature:	Authorised by:	Reason For Issue:
1	20 th Nov 2019	MSA	MSA	Alan Dodds	For Pre-Construction
2	3 rd March 2020	MSA	MSA	Alan Dodds	Temporary Works design drawings

Management;

Contracts Manager: John Joe Greene

Foreman:

2nd in Command:

First Aider:

Permit to Work Required? No

Schedule of Plant and Equipment:

Equipment	Supplied?	Certification Required
Steel sections as per engineers' drawings		None
Acrow Props		None
Peri Multiprops		None
RMD superslim soldiers		None
FL22 breakers and Pneumatic accessories		None
Genie Lift		12 Monthly Thorough Examination
Lifting Equipment for manoeuvre of Steels		12 Monthly Thorough Examination
Steel Rollers		None

Important Notes:

- Before commencing each works package the site foreman must review the method and brief the operatives undertaking the task. All operatives are to sign onto the Method Statement.
- If a change is needed to the anticipated method, the change must be agreed with the Contracts Manager and noted in the "Site Specific Requirements" column. Both the site Foreman and the Contracts Manager must sign off the changes before works are carried out and the site operatives are to be briefed on the changes.
- If the change is significant to warrant re-writing the method, the Contracts Manager will contact the Safety Consultant to assist.



ORBITAL

METHOD STATEMENT MATRIX

#	Method Statement	Method of Works	Site Specific Requirements	Risk Assessments
1	Site set up, investigation works	Security, Welfare and Site set up; - The site will be occupied by the Client during the construction phase therefore all works on services will be under liaison and the services will remain continuous. - All measures will be undertaken to ensure the site is secure. Hoarding will be erected around the front garden area with a lockable door installed to allow access to the site. This door will be in sole control of the OBC foreman. - The skip and compressor are to be placed in road to the front of the property and hoarding erected around with temporary lighting along the footpath and roadside lighting as required by the local borough council. All access doors to the external compound will be lockable. - We will operate our own site sign in book and Induction procedure for any individual who may enter our area throughout the duration of our works. - Welfare and office arrangements will be organised to include toilet and welfare board with washing facilities, canteen/office arrangement and drying area as required. If there are no facilities available within the property OBC will organise the hire and deployment of an "Oasis" style combined unit sited on a closed parking bay. - OBC Notice Board to be mounted on the wall adjacent to the main site entrance. - Fire Points to be arranged within the property to include CO2 and Water extinguishers as required. - Life rings will be set up on the wall quayside and added to our emergency procedures. Deliveries and Vehicular Access; - Delivery vehicles will be drawn up and reversed under the control of a banksman. - OBC banksmen will be deployed at the approaches to the area in order to control and direct traffic during loading/unloading/muck away times. Protection of the Canal - Given the close proximity of the Regents Canal to the rear of the property we will install additional measures to ensure the protection of the waterway and the "seawall" to the rear. - We must ensure that no deleterious material form the site including spillage and silt get into the water course and with this in mind we will adopt all of the procedures and requirements defined in the Construction Environmental Management Plan prepared by Johnathan Freegard Architects. - In addition to the measures highlighted in the CEMP we will instigate protective measures around our proposed conveyor installation which is intended to extend out over the waterway for removal of spoil by Barge.		See RA Matrix (Attached)
2	Monitoring	Stability Monitoring - Structural integrity is to be monitored by OBC Foreman and Contracts Manager throughout the duration of the structural installation. - Before the works commence, collate a photographic record of the existing conditions. - As a minimum inspections will be carried out during all propping operations and following removal of temporary support. - If problems are identified and movement or similar issues arise we will cease works immediately and assess the extent of the movement. If the problem is considered to be of sufficient concern we will cease works and call in our structural engineers for advice on remedial action.		See RA Matrix (Attached)

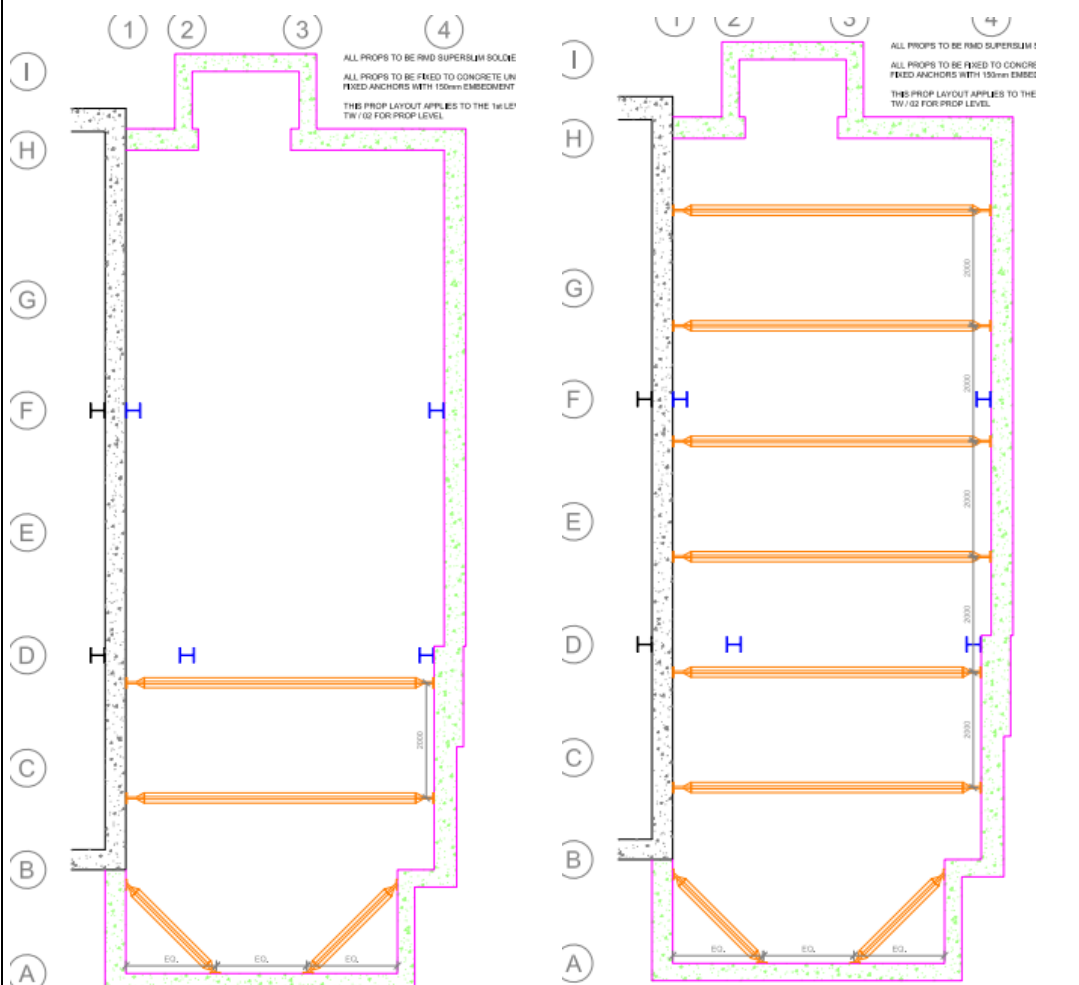
METHOD STATEMENT MATRIX

		Condition of Canal Wall and Conveyor We will regularly inspect all conditions adjacent to the canal wall and associated site setup to ensure it continues to meet the expectations and requirements of the CEMP.		
2	Conveyor Installation	Install the Conveyor - A 600mm conveyor will be installed from the working position at a suitable angle discharging into the waiting barge. The conveyor will need to extend sufficiently to allow adequate clearance for discharge into the barge. 18mm ply encasing will be erected around the conveyor to stop any debris from falling from the system, with special attention given where the conveyor approaches the waterway and quayside feature. - There will be a minimum of head clearance over this area to allow for access to inspect and make any remedial repairs. - Lighting to be installed to back wall as appropriate for periodic task lighting. - We will form a bespoke timber and ply lip which will extend over the barge upstand directly below our conveyor. This is intended as a secondary protection to ensure no falling material is able to access the waterway. It will be extended during loading of the barge and retracted and cleaned out once the barge is loaded. We will set the secondary protection aside within the footprint of the garden when not in use. - We will seek engineering advice as the construction of the conveyor extension to ensure it remain fit for purpose when in use, suitably supported and stable when loaded.		See RA Matrix (Attached)
3	General Safety Requirements	General Safety Requirements; - Soft strip will generally be undertaken with hand tools. - PPE use will be applied appropriately but as a minimum we expect Safety boots, Gloves, Head Protection, Hi-Visibility tabards, and FFP3 dust masks where deemed appropriate to the task (i.e. where operations are dust generating). - Waste materials will be collected regularly and removed to the skip. Waste shall not be allowed to build up to generate a possible fire loading. The site foreman is to ensure throughout the operations that the floors, working platforms and other structures are not overloaded. - Demolitions are to be undertaken with hand tools working from the top down in a structured manner to maintain the stability of the structure through demolitions. - Manual handling of steels shall be undertaken in accordance with the "Handling of Steels" section of this method statement, below. - Wherever possible manual handling shall be mechanised. Where manual handling issues are significant, a site specific manual handling assessment shall be undertaken by the site foreman in liaison with the contracts manager to determine suitable additional controls. - Manual handling of timbers and waste materials will be managed to prevent repetitious operations, limit manual loads to 20KG and mechanise where possible. Wherever possible manual handling shall be mechanised. Where manual handling issues are significant, a site specific manual handling assessment shall be undertaken by the site foreman in liaison with the contracts manager to determine suitable additional controls. - Details of the COSHH assessment relating to the generation of concrete dusts will be communicated to operatives. Wetting down techniques will be employed across the slab and the slab will be broken out with FL22 pneumatic		See RA Matrix (Attached)

METHOD STATEMENT MATRIX

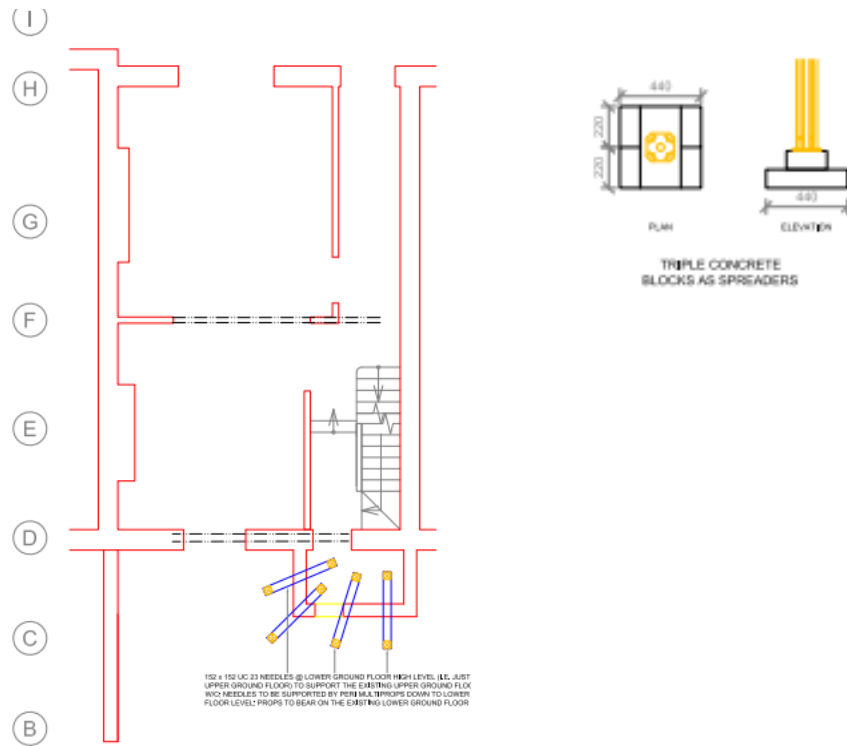
		breakers. Operatives within the area are to wear appropriate FFP3 dust masks. Use of Pneumatic Tools, Compressors and high-pressure lines; - Pneumatic FL22 breakers will be used for major breaking and some excavation works. In all cases the foreman/contracts manager is to ensure that the exhaust fume arising from the compressor cannot leach into the excavation area and is suitably ventilated away from site in a manner as not to cause a nuisance to members of the public or neighbours. Flues will be utilised where necessary. - All tools will be inspected for integrity before use by the operator. - Whip retention straps will be utilised at all hose intersection and between compressor, tool and hose joints. Work at Height Strategy - Works at height will be undertaken from Mobile Aluminium Scaffold towers. MASTs shall be used in accordance with OB health and Safety Policy i.e. erected in accordance with manufactures information by PASMA trained operatives, inspected before first use and after any significant alteration or adaption and in any case at periods no longer than 7 days. This is likely to be limited to installing Props. - MASTs will be set up below the structure being worked on and the structure will be removed in a sequenced manner from below, ensuring that items are removed safely and without the risk of falling materials. Where required, temporary support may be needed as determined by the foreman/contracts manager (i.e., when removing floor joists). - Materials shall never be thrown from the MAST. - Where edge protection is formed for example around underpinning digs, Handrails will be set at 950 height and be fitted with 150mm high toe boards (minimum) and an intermediate handrail to ensure that there is no gap greater than 470mm. Edge protection must be fitted to all open edges of shafts, underpins and openings.		
4	Demolition & Needles (Steelframe)	Propping & Demolition, - Prior to underpinning the permanent steel beams will need to be installed and this will take place in the sequence detailed in the temporary works design Revision A (28/02/20). - Before installing the temporary works (needles) required to support the floors above during the steel installation the area will need to be cleared of unwanted features. - Demolition will take place of the rear conservatory, upper ground floor balcony (rear) and the metal staircase leading up to the balcony. - Once removed works can commence to secure the upper ground floor W/c which will need to be need propped as detailed below. See TW08. Follow the TWD package for details on dry packing. Once the new steels have been dry packed and left for sufficient curing period the holes to take the needles can be made good. - The next set of needles will be supported from newly formed shafts which will need to be trench sheeted and shored. The following sequence will allow propping and installation of steels on gridlines D & F as described in sequencing items 8-23 of the TWD notes.		See RA Matrix (Attached)

METHOD STATEMENT MATRIX

		 ALL PROPS TO BE RWD SUPERSLIM SOLID ALL PROPS TO BE FIXED TO CONCRETE USING FIXED ANCHORS WITH 150mm EMBEDMENT THIS PROP LAYOUT APPLIES TO THE TW/G2 FOR PROP LEVEL ALL PROPS TO BE RWD SUPERSLIM ALL PROPS TO BE FIXED TO CONCRETE USING FIXED ANCHORS WITH 150mm EMBEDMENT THIS PROP LAYOUT APPLIES TO THE TW/G2 FOR PROP LEVEL		
--	--	---	--	--

METHOD STATEMENT MATRIX

Below left, Needle propping arrangement plan for rear w/c area and below right, typical detail for base spreaders for needle supports.

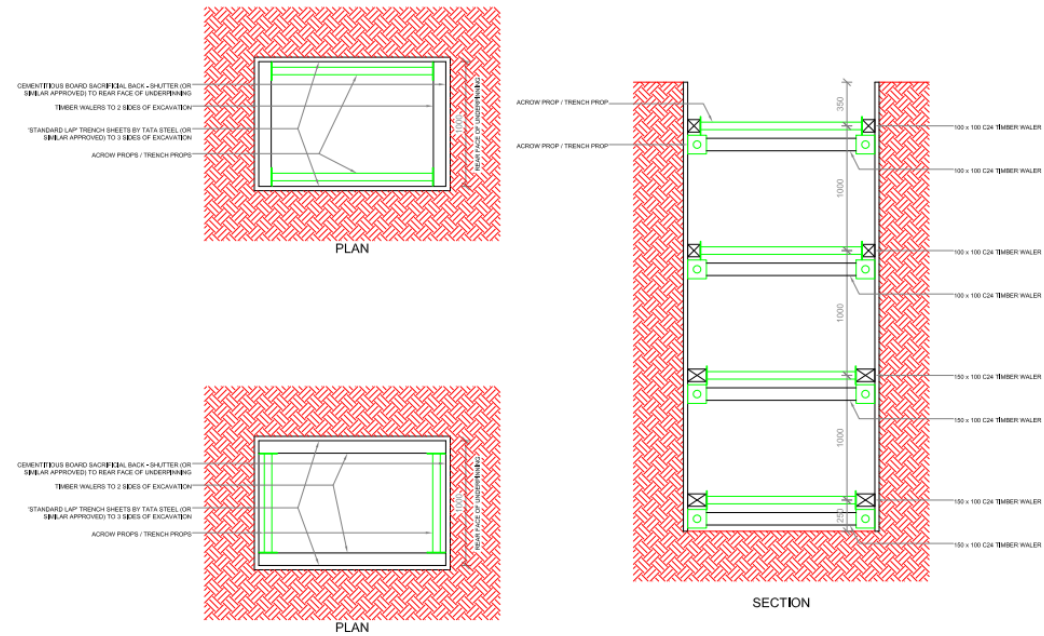


NB: some cross reference Conisbee drawing is necessary and this is identified in the TWD revA

METHOD STATEMENT MATRIX

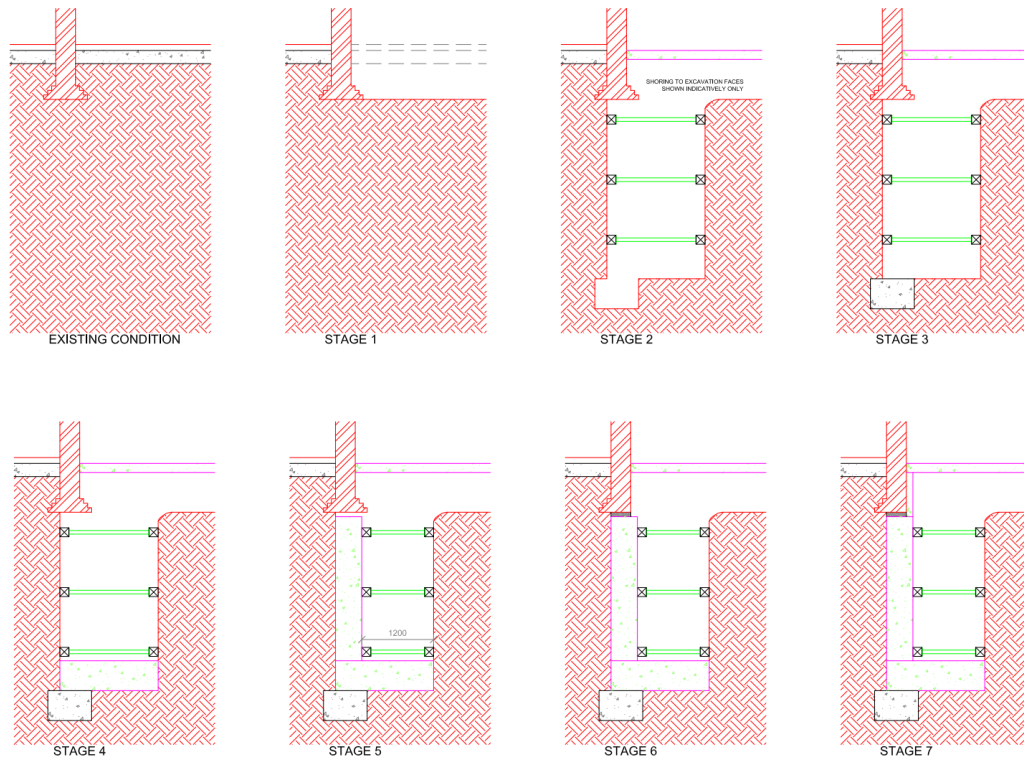
5	Demolition (Floor Slab)	Breaking out Lower Ground Floor Slab - Where relevant the existing ground floor slab will be demolished using pneumatic FL22 breakers employing wetting down techniques - except where breaking out adjacent to the party wall where hand methods shall apply to minimise structural vibration transmission. - Wet down area thoroughly using sprayed water. Operative to be on guard to ensure slabs remain thoroughly soaked through break out process to minimise the uplift of dust. - All operatives to wear suitable FFP3 type dust masks and ear defender type ear protection. - Using 110V breakers, break out the slab in manageable sections. Break up larger blocks of slab to sizes able to be man handled into bags and removed using the service route. - Maintain HAV monitoring and rotate operatives on breakers regularly. - The slab will be broken out and reduce dig to the levels defined in the TW01.		
6	Underpin Construction	General Safety Requirements for Underpinning works; Edge protection consisting of 4" x 2" timber posts, double handrails and toe boards will be erected around the top of all excavations. Suitable access will remain in place within the shaft at all times. Typical dig support as shown below,		See RA Matrix (Attached)

METHOD STATEMENT MATRIX

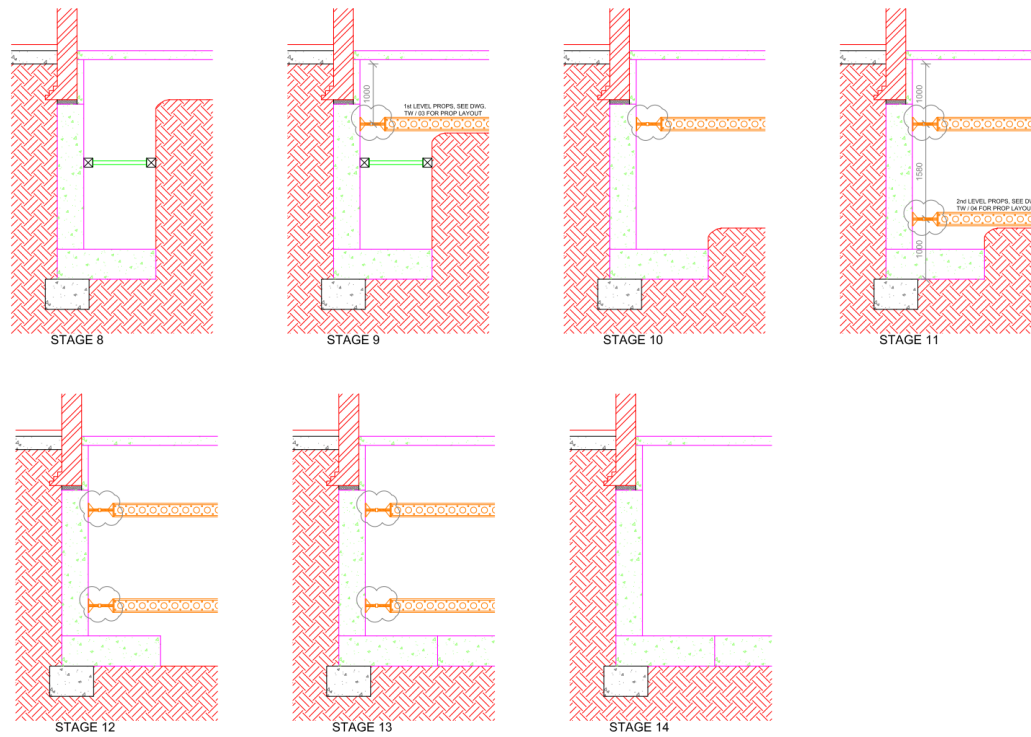
		 • If deemed necessary, i.e. if there are dewatering issues on this project or if any other significant risk is identified, confined space measures may need to be employed for rescue purposes. The safety consultant will be contacted if this is the case to produce a site-specific confined space risk assessment to identify the appropriate controls. • The temporary works co-ordinator will ensure the shoring provided for each underpin excavation is constructed in accordance with the temporary works underpin excavation support details before allowing an operative to enter the excavation. This inspection will be recorded in the excavations register. • Note that the first 1.0m of excavations is not to be made deeper than 500mm before installing trench sheeting and strutting. • The installation will be further inspected by the temporary works co-ordinator on a shift by shift basis and a record of this inspection made within the excavations register. • The requirements of the COSHH assessment relating to concrete materials will be applied during the concreting, dry-packing, brickwork and pointing operations. Operatives will wear impermeable gloves and be instructed to wash any mortar from exposed skin promptly. Underpinning and Construction Sequence; • Underpin sequence is prepared in the engineering drawings. This sequence is to be adhered to throughout the construction process by the site teams. • Should any deviation from the engineers sequence be required this must be reported back to the contracts manager who will then consult the appointed engineer to confirm changes or update the design and/or sequence as required.	
--	--	---	--

METHOD STATEMENT MATRIX

- Following installation of excavation shuttering and edge protection, the Temporary Works Co-ordinator will inspect the installation to ensure it is in accordance with the design and edge protection specification detailed above and will permit the structure to be loaded. A record will be made within the Temporary Works Register.
- The Temporary Works Co-ordinator will carry out regular inspections of the works at maximum intervals of 7 days and a record made in the register.
- The following is a series of underpinning sequence drawings which should be read in conjunction with the TWD sequence notes issued by Cowpe Loew Engineering.
- The following sequence shows the underpinning sequence shows the phases for works against the boundary+ party wall with No.2 (TW01) below,

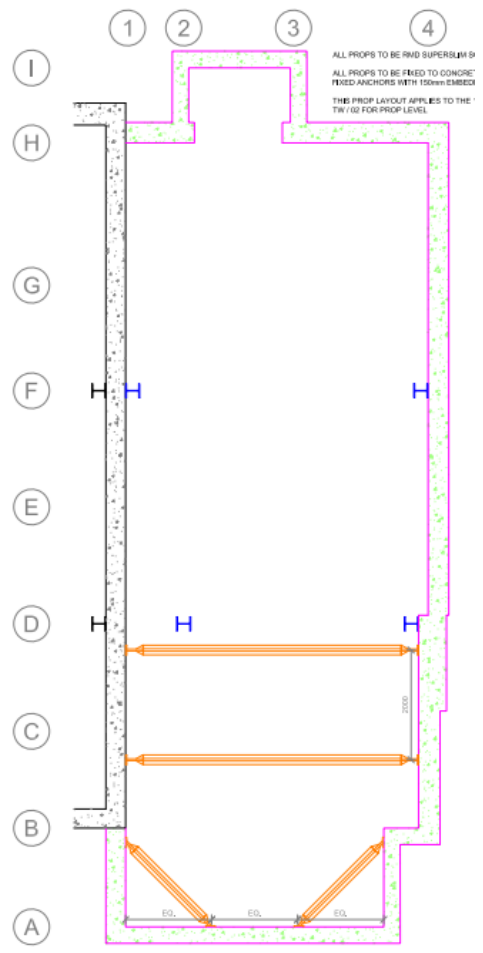
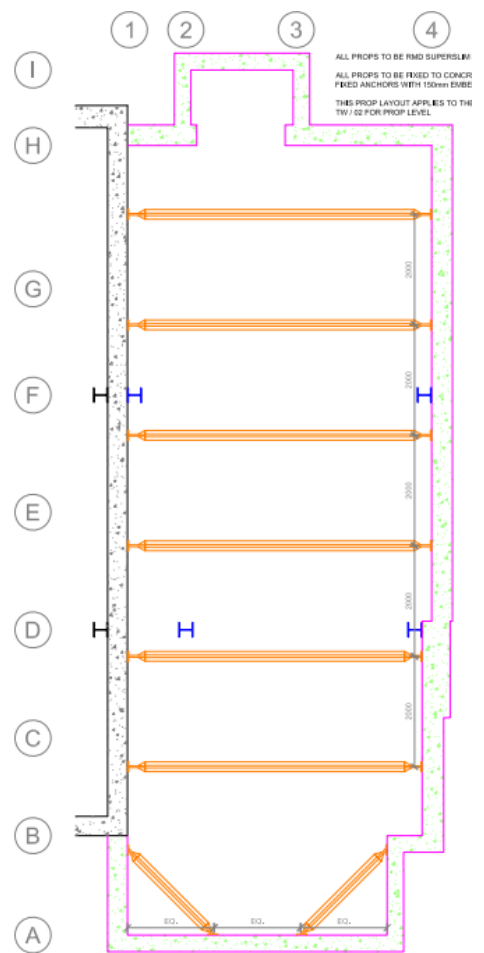


METHOD STATEMENT MATRIX



NB: above is the amended TW design Rev A

METHOD STATEMENT MATRIX

7	Cross Propping	Cross propping arrangements during underpinning (refer to TWd package notes for detail). The sequence above should also be read in conjunction with cross propping drawings (TW03 -04) which show the tiers of cross propping required as the underpinning progresses. Below left is the 1st level of cross propping and below right is the second level.  		
---	----------------	---	--	--

METHOD STATEMENT MATRIX

9	Handling of Steels	Lifting and Manoeuvring of Beams and Temporary Frame members (garden slab): - Manual handling of Beams will be minimised throughout the fixing operation. Generally, Beams will be offloaded as near to the access point as possible and manoeuvred into the property to the final position using rollers and crow bars. - Where possible the beams will be supported from above using a small chain hoist fixed to a suitable structural member and stropped around the beams at or as near to the centre of gravity. This possibility is to be assessed by the Contracts Manager and Foreman prior to the delivery of the beams. If required the structural engineer will be consulted to confirm a suitable position for the chain hoist. - Any chain hoist will be a hired item from a local supplier and the necessary certification (12 month thorough examination for the hoist and 6 month thorough examination for the strops and chains) will be provided and maintained within the site safety file. The hoist will be confirmed to offer a suitable safe working load. - Where beams are required to be lifted, Genie lifts will be employed – often in Tandem and supervised and conducted under the directions of the Site Foreman/Contracts Manager. If required, ground conditions will be made good on the day leading up to the delivery of the Genie lifts. - Where lifting of the beams manually is unavoidable, the Foreman shall ensure that suitable members of staff are available for the operation, and that no one person is subject to a load of more than 25KG. The site foreman shall direct the manual lifting operation.		See RA Matrix (Attached)
10	Dewatering Excavations	Requirements for Dewatering Shaft Excavation Support and Inspection; - Excavations will be dug under strict supervision of the site foreman and in consultation with the Contracts Manager. Typically, the shaft excavation will be no more than 1m in width and dug in 1.2m deep sections whilst installing trench support, subject to review of the prevailing ground conditions. - The shoring will be installed in accordance with the site specific temporary works design but typically will consist of doubled 18mm ply trench sheeting with appropriate walings braced with trench struts back to each opposing side of the shaft. - The shoring will be inspected by the Site Foreman before allowing anyone to enter the excavation and a record made within the excavations register. - Further Inspection(s) of the excavations and their associated temporary trench support will be carried out on a daily basis thereafter and again these inspections will be recorded within the excavations register.		See attached RA Matrix
11	Dewatering Options	Localised Dewatering - Localised dewatering involves to insertion of a surface skimming pump unit within the underpinning excavation in order to reduce the water table to enable the localised excavation. - This scheme can only be used in agreement with the temporary works designer and based upon the results of the ground survey. There is a risk of washing out the fines from around and behind the excavation support and/or underpin construction that may destabilise either structure. Site Wide Dewatering: - Site Wide Dewatering effectively reduces the water table across the entire site enabling the underpin excavation to be dug without water ingress and is the preferred option except in the case of an emergency where localised dewatering will be applied. - The scheme will commence by sinking two shafts at a central position at the base of the main catwalk at the far ends of the catwalk to a level approximately 300-500mm below the level of the final basement slab.	Subject to local assessment.	See attached RA Matrix

METHOD STATEMENT MATRIX

		- Two dewatering surface skimming pumps are inserted into the shafts and left to run for approximately 24 hours. The site foreman is to monitor the overall level of the water table within the shafts before allowing the underpin excavations to commence. - This effectively reduces the water table across the entire site enabling the underpin excavation to be dug without water ingress and is the preferred option except in the case of an emergency where localised dewatering will be applied. - In any case a site wide dewatering scheme must be site specific and will require input from a specialised dewatering contractor who will specify the depth of the dewatering shafts and the required through-flow rates for the pump installation.		
12	Dewatering Discharge	Dewatering Discharge - Discharge of the dewatering pumps requires careful consideration to ensure that the silty water generated does not enter the local authority storm or foul drainage system. - Ideally a settlement tank will be used before pumping the resulting clean water into the LA systems. - In the case of requirement to discharge into the LA system(s), a consent to discharge will be required and will be sought from the relevant local authority.		See attached RA Matrix
13	Drainage	Drainage and associated pumps will be installed as per the engineer's drawings. See drawing 100 – Basement Under floor Drainage Plan		See RA Matrix (Attached)
14	Delta Membrane	We will be installing a drainage membrane in accordance with the manufacturers instructions and the will be checked and verified to allow issues of the certificated warranty. The membrane will be fixed along with a associated drainage channels and sump pump.		See attached RA Matrix
16	Works Packages undertaken by Sub-Contractors	Appointed sub-contractors will be subject to pre-qualification in accordance with OBL's current HSP, and will be expected to provide appropriate RAMS for the package at least 1 week in advance of starting. RAMS will be subject to review by OBL management and, if required, our external H&S consultant. This will include any and all fit out contractors.		

METHOD STATEMENT MATRIX

We the undersigned have been briefed on the Method and Risk Assessment(s) associated with our activity and undertake to carry out the works in accordance with the briefing.

Activity	Operative Name	Date	Signature

METHOD STATEMENT MATRIX

Appendix 1

Temporary Works Package Revision A notes (Cowpe Lowe)