KEY GS

Geological & Geotechnical Consultants

76 Albert Street, NW1 7NR

Basement Impact Assessment Screening and Scoping Report for removal of steps and raised patio area from rear garden (March 2020)

Prepared for Saffron Homes Ltd

Geological & Geotechnical Consultants

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Saffron Homes Ltd

76 Albert Street, London, NW1 7NR

Basement Impact Assessment Screening and Scoping Report for removal of steps and raised patio area from rear garden

(March 2020)

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Report Distribution List

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1.0 INTRODUCTION

Key GeoSolutions Ltd (KGS) have been commissioned by Saffron Homes Ltd to undertake an assessment of surface flooding, groundwater flow and land stability in relation to the proposed removal of steps and raised patio area from the rear garden at 76 Albert Street, London NW1 7NR. The property is located within the London Borough of Camden.

1.1 Proposed Development

The existing property is a five-storey town house, which includes a basement, built at the turn of the 19th Century in the London Borough of Camden. The house is currently divided into five flats, one of which is in an extension to the basement under the front garden.

The current proposal is to remove a raised patio area from the rear garden in order to have all of the garden at the same level, i.e. at basement floor level, the garden shed will be retained. Drawings showing the existing and proposed property are included at the rear of the report.

1.2 Scope of Work

The purpose of this assessment is to consider if the proposed removal of the raised patio area can be undertaken without having a detrimental impact on the surroundings with respect to surface flooding, groundwater flow and land stability, in particular whether the development will affect the stability of neighbouring properties. The assessment conforms to the requirements of guidance set out by the London Borough of Camden document Camden Planning Guidance – Basements, March 2018.

1.3 Qualifications

This assessment has been undertaken by Brian Duthie and Howard Clarke. Brian holds a BEng in Engineering Geology and Geotechnics, is a chartered geologist and UK Registered Ground Engineering Adviser, with 30 years' experience in geotechnical engineering. Howard holds a BEng in Civil Engineering, is a chartered engineer and Member of the Institution of Civil Engineers and Member of the Institute of Structural Engineers with over 12 years' experience in civil engineering.

1.4 Limitations

The conclusions and recommendations made in this report are limited to those that can be made on the basis of the research carried out. The results of the research should be viewed in the context of the work that has been carried out and no liability can be accepted for matters outside

the stated scope of the research. The assessment does not constitute a detailed structural design for the basement structure, as would be required to allow construction to take place.

This report has been prepared for the information, benefit and use of Saffron Holmes Ltd only and any liability of Key GeoSolutions Ltd to any third party, whether in contract or in tort, is specifically excluded. Any third party finding themselves in possession of this report may not rely upon it without first obtaining the written authority of Key GeoSolutions Ltd.

2.0 SITE DESCRIPTION

The site, 76 Albert Street, is in the London Borough of Camden, post code NW1 7NR and National Grid Reference 528925mE, 185535mN. The location of the site is shown on Figure 1 below.

Camden Town was laid out as a residential district from 1791, the Regent's Canal was built through the area in 1816. Prior to residential use the land was in agricultural use. The general topography of the area is flat, with a slight fall from Regent's Park to Camden High Street, the property lies at an elevation of c. 30mAOD.

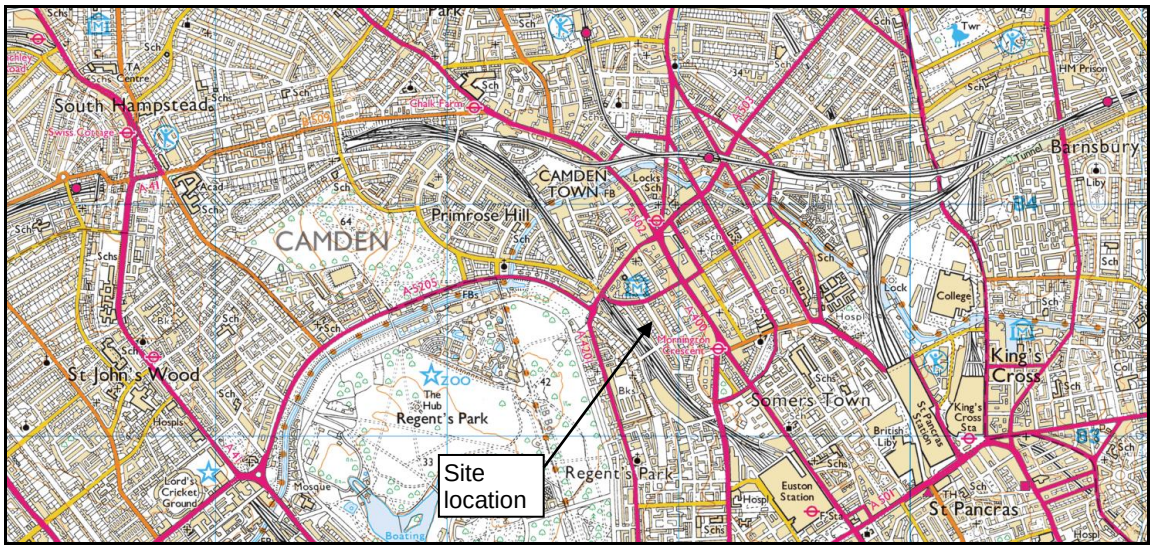


Figure 1 – Site Location

The existing property is a five-storey town house, which includes a basement and is currently divided into five flats, one of which is in an extension to the basement under the front garden.

The current proposal is to remove a raised patio area from the rear garden in order to have all of the garden at the same level, i.e. at basement floor level, the garden shed will be retained. Drawings showing the existing and proposed property are included at the rear of the report.

3.0 PROJECT SCREENING

Following the guidance given in Camden Planning Guidance – Basements (March 2018) it is required to identify the potential impacts of the proposed scheme. The flowcharts entitled 'Subterranean (groundwater) flow screening chart' in Figure 3 and 'Slope stability screening flowchart' in Figure 4 of CPG4 has been used to assist with understanding the potential impacts that a basement may have.

GROUND WATER FLOW (Subterranean (groundwater) flow screening chart (Figure 12, CPG Basements (Camden Council, 2018))			
Impact question	**Answer**	**Justification**	**Reference**
1)a) Is the site located directly above an aquifer?	**No**	Site is underlain by London Clay	British Geological Survey
1)b) Will the proposed basement extend beneath the water table surface?	**No**	Publically available boreholes drilled within a 200m radius of the site did not encounter ground water to depths of 20m.	BGS Geoindex
2) Is the site within 100m of a watercourse, well (used/disused) or potential spring line?	**No**	According to the Ordnance Survey the nearest watercourse is c. 500m to the east of the property. No lost rivers are shown to flow in the vicinity of the property.	OS Mapping Figures 2 and 11 of Camden geological, hydrogeological and hydrological study
3) Is the site within the catchment of the pond chains on Hampstead Heath?	**No**	Ordnance Survey Map	OS Mapping
4) Will the proposed basement development result in a change in the proportion of hard surfaced / paved areas?	**No**	Rear garden is currently hard-surfaced and will be on completion of works.	Drawings of development
5) As part of the site drainage, will more surface water (e.g. rainfall and run-off) than at present be discharged to the ground (e.g. via soakaways and/or SUDS)?	**No**	No soakaway being constructed as part of proposed works due to site being underlain by London Clay.	Drawings of development
6) Is the lowest point of the proposed excavation (allowing for any drainage and foundation space under the basement floor) close to, or lower than, the mean water level in any local pond (not just the pond chains on Hampstead Heath) or spring line	**No**	Publically available boreholes drilled within a 200m radius of the site did not encounter ground water to depths of 20m.	OS Mapping BGS Geoindex

SLOPE STABILITY (Slope stability screening flowchart (Figure 13, CPG Basements (Camden Council, 2018))			
Impact question	**Answer**	**Justification**	**Reference**
1) Does the existing site include slopes, natural or manmade, greater than 7°?	**No**	Topographic survey of the site	Engineering Land & Building Surveys drawing number 8815
2) Will the proposed re-profiling of landscaping at site change slopes at the property boundary to more than 7°?	**No**	No re-profiling of the site is proposed.	Drawings of development
3) Does the development neighbour land, including railway cuttings and the like, with a slope greater than 7°?	**No**	The nearest railway line is approximately 115m to the west south-west, which is in a cutting.	OS Mapping
4) Is the site within a wider hillside setting in which the general slope is greater than 7°?	**No**	The property sits at an elevation of c. 30mAOD, with the surrounding land falling gently in an easterly direction from Regent's Park towards Camden High Street.	OS Mapping
5) Is the London Clay the shallowest strata at the site?	**Yes**		BGS Geoindex
6) Will any trees be felled as part of the proposed development and / or any works proposed within any tree protection zones where trees are to be retained?	**No**	The rear garden is paved and there are no trees in the garden.	Drawings of development
7) Is there any history of seasonal shrink-swell subsidence in the local area, and / or evidence of such effects at the site?	**Possibly**	Inspection of property identified a number of cracks in the property which could be associated with subsidence.	Site inspection
8) Is the site within 100m of a watercourse or a potential spring line?	**No**	According to the Ordnance Survey the nearest watercourse is c. 500m to the east of the property. No lost rivers are shown to flow in the vicinity of the property.	OS Mapping Figures 2 and 11 of Camden geological, hydrogeological and hydrological study
9) Is the site within an area of previously worked ground?	**Yes**	Area is showing as having been worked on BGS Geoindex..	BGS Geoindex
10) Is the site within an aquifer? If so, will the proposed basement extend beneath the water table such that dewatering may be required during construction?	**No**	Publically available boreholes drilled within a 200m radius of the site did not encounter ground water to depths of 20m.	BGS Geoindex

11) Is the site within 50m of Hampstead Heath ponds?	**No**		OS Mapping
12) Is the site within 5m of a highway or pedestrian right of way?	**No**	Proposed excavation is 20m from public highway, Albert Street.	Drawings of development
13) Will the proposed basement significantly increase the differential depth of foundations relative to neighbouring properties?	**No**	The adjoining properties 74 and 78 Albert Street both have basements.	Drawings of development
14) Is the site over (or within the exclusion zone of) any tunnels e.g. railway lines?	**No**	London Connections Map, underground line runs south-east to north-west from Bounds Green Station to the south of the property.	Transport for London, 2014

SURFACE WATER AND FLOODING flow screening chart (Figure 14, CPG Basements (Camden Council, 2018))			
Impact question	**Answer**	**Justification**	**Reference**
1) Is the site within the catchment of the pond chains on Hampstead Heath?	**No**	Property is some 3km from the ponds and sits at an elevation of 40m lower than the ponds.	OS Mapping
2) As part of the proposed site drainage, will surface water flows (e.g. volume of rainfall and peak run-off) be materially changed from the existing route?	**No**	Water will continue to be discharged into existing drainage system.	Drawings of development
3) Will the proposed basement development result in a change in the proportion of hard surfaced / paved external areas?	**No**	Area is currently paved and will be on completion.	Drawings of development
4) Will the proposed basement result in changes to the profile of the inflows (instantaneous and long-term) of surface water being received by adjacent properties or downstream watercourses?	**No**		Drawings of development
5) Will the proposed basement result in changes to the quality of surface water being received by adjacent properties or downstream watercourses?	**No**		Drawings of development
6) Is the site in an area identified to have surface water flood risk according to either the Local Flood Risk Management Strategy or the Strategic Flood Risk Assessment or is it at risk from flooding, for example because the proposed basement is below the static water level of nearby surface water feature?	**No**	Figure 3i shows the area to have a very low risk of flooding from Surface Water (<1 in 1000 year).	LBC SFRA (2014)

4.0 SCOPING

Where the screening checklist has returned a 'yes' response to any question that matter is carried forward to the scoping stage. The scoping produces a statement which defines the matters of concern identified in the screening stage.

Three questions in the screening checklist have returned a 'yes' or 'possibly' response these all relate to the ground conditions, i.e.;

1. Is the London Clay the shallowest strata at the site?
2. Is there any history of seasonal shrink-swell subsidence in the local area, and / or evidence of such effects at the site
3. Is the site within an area of previously worked ground?

The BGS shows the property to be underlain by the London Clay Formation, it is well documented that London Clay is prone to seasonal shrink and swell. The property and adjoining properties were generally found to be in a sound condition structurally when inspected externally, with no significant obvious cracking / distress present. Internal inspection of No. 76 identified a number of cracks, particularly at ceiling level, however these would all be easily repairable by decorating.

The BGS mapping of the area shows that the property is in an area of previously worked ground, it is not known what this was associated with other than possibly extraction of London Clay. Boreholes within the worked area show only a thin mantle of made ground overlying the London Clay.

The design of the wall foundations should take into consideration of the shrink and swell potential of the London Clay.

5.0 LAND STABILITY ASSESSMENT

5.1 Proposed Development

The proposed development is shown on the Torner Architects drawing, which are included at the rear of this report. In summary, it is proposed to reduce the level of the raised patio, which is currently at an elevation of 31.53 mAOD, to the level of the lower area of the garden, which is at 30.02 mAOD.

The ground levels in the garden of No. 74 and of Delancey Studios to the rear are already at this level, hence there should be no issue in relation to the boundary walls. However, the garden of No 78 is at an elevation of 31.46 mAOD and the underside of the shed floor slab is at an elevation of 31.53 mAOD, hence it will be necessary to underpin the garden wall and the shed floor slab.

It is assumed that a suitably experienced specialist contractor will be appointed for the works, this contractor will be responsible for the design and implementation of the temporary works necessary to build the basement.

5.2 Movement Assessment

Ground movements resulting from underpinning are not well documented and there is no specific method for assessing their magnitude. When underpinning is carried out in a well-controlled manner, movements are typically small. The ground conditions at the site are London Clay from surface, within which underpinning operations can normally be undertaken with relatively little disturbance. It is proposed that the formation of the garden wall below the shed floor slab and the boundary wall with No. 78 will be made in a sequential underpinning pattern with underpins being no wider than 1.0m. The sequence of the underpinning will be in the 1, 4, 2, 5, 3 sequence and such that any given underpin will be completed, dry packed and a minimum period of 48 hours lapsed before an adjacent excavation commenced to form another underpin.

To provide some basis for estimating likely movements and damage resulting from excavating the basement in front of the underpinning and in the absence of underpinning specific guidance, the underpinned sections have been treated as piles and reference made to CIRIA C760 Guidance on embedded retaining wall design (2017). Horizontal and vertical movements of the order of 3.5mm and 1.5mm respectively are predicted for the excavation and installation of the underpins. Given that the wall is a freestanding linear structure it should be relatively unaffected by these movements. The shed is a timber structure and hence relatively flexible, these levels of movement are unlikely to have a detrimental effect on the structure.

Assuming that recognised best practice construction techniques are employed for the construction and suitable temporary support is employed it should be possible to construct the

proposed garden deepening without it having a detrimental effect on the neighbouring properties.

It is recommended that a site specific intrusive investigation be undertaken prior to any construction works being undertaken in order to determine the ground and groundwater conditions and the type and depth of the foundations of the structures likely to be affected. The information from the investigation can be used to inform the structural design of the proposed works, the structural design should include design of any temporary works required.

Party wall agreements will need to be in place with the neighbouring properties, these will take into account the current condition of the neighbouring properties. Provisions should be made to allow for monitoring of movement and damage caused by the construction process, with the monitoring being installed prior to commencement of construction. The monitoring should comprise the following;

- Visual inspection of the party wall and any pre-existing cracking
- Attachment of tell tales to accurately record movement of any pre-existing cracks
- Installation of levelling targets to monitor settlement of the party walls and the public highway, to be monitored by standard optical equipment.

The levelling targets on the party walls should be no greater than 2m apart and located as close to the top of the existing foundations as possible. The maximum allowable movement should be no more than 3mm between adjacent levelling targets.

The limits on maximum movement and proposed actions are given in the table below;

Movement	Category	Action
0 - 5 mm	Green	No action required
5 – 10 mm	Amber	Crack monitoring: Carry out local structural review; Preparation for the implementation of remedial measures should be required
>10 mm	Red	Crack monitoring: Implement structural support as required; Cease works with exception of necessary works for the safety and stability of the structure and personnel; Review monitoring data and implement revised method of works

Monitoring should be undertaken at weekly intervals during excavation works and if no significant movement is identified monitoring can be reduced to fortnightly.

5.3 Damage Category

If it is assumed that a suitable structural design, including temporary works, is produced and a suitably experienced contractor is appointed, then past experience of basement construction in London has shown that ground movements caused by the proposed construction techniques to this depth in London Clay can be limited to an acceptable level. In the worst-case, it would be expected that possible damage to this property would fall into Category 1 (very slight).

6.0 CONSTRUCTION METHOD STATEMENT

6.1 Construction Programme

A construction programme will be made available by the main contractor to Planning and Building Control.

6.2 Construction Sequence

The proposed sequence of the construction of the underpins is shown on the phasing drawings included in Appendix 1. These drawings are indicative only and the final design and implementation of the temporary works will be the design of the appointed contractor. Note: The appointed contractor may wish to vary the proposed sequence of works but this will finalised prior to construction commencing on site.

6.3 Construction Management

6.3.1 Site Security and Access

All boundaries to the site will be protected with timber hoarding to ensure containment of the construction activities throughout the duration of the project. The hoarding will display the details of the main companies involved in the scheme and the emergency contact details. Any plant and vehicular movements through the construction phase will be scheduled to minimise the street congestion and the effects on immediate neighbours, so far as reasonably practical. Jet washing facilities will be provided for cleaning of vehicle tyres and the road or pavement at the end of each day as necessary.

The parking of contractor's vehicles will be off site and on the local highways.

6.3.2 Site Personnel

The site workforce will be familiar with this type of work and supervised by competent personnel at all stages of the work.

6.3.3 Recycling and Disposal of Waste

A waste management plan will be prepared to address the re-use and recycling of the material arising from demolition, excavation and construction stages.

6.3.4 Contractor's Compound

The area currently used for parking at the front of the property will be used as the contractor's compound. Additional material storage may take place in the rear garden.

As far as reasonably possible the levels of noise and dust pollution will be kept to normal standards.

7.0 CONCLUSIONS

A screening and scoping exercise has been undertaken of the potential impacts of the proposed garden deepening at 76 Albert Street with respect to surface flooding, groundwater flow and land stability. This exercise does not constitute a detailed structural design for the basement.

The property is in an area underlain by the London Clay Formation, publically available borehole records show that groundwater lies at least 20m below the level of the site. The Strategic Flood Risk Assessment for LBC shows that the property lies within an area which has a very low risk of surface flooding.

The site does not lie in an area of steep topography and the area is not one associated with slope stability issues.

From the screening process three questions returned a ‘yes’ answer, these relate to the underlying ground being the London Clay Formation.

The only structures likely to be impacted by the works are the boundary wall with No. 78 and the shed floor slab, both of which will require to be underpinned. The predicted levels of movement that will occur due to the excavation and underpinning works are low and unlikely to cause significant damage to these structures.

It is recommended that a site specific intrusive investigation be undertaken prior to any construction works being undertaken in order to determine the ground and groundwater conditions and the type and depth of the foundations of the potentially affected structures. Provisions should be made to allow for monitoring of movement and damage caused by the construction process, with the monitoring being installed prior to commencement of construction.

It should be possible to ensure that the degree of damage to the neighbouring properties would fall into Category 0 or 1, with the degree of severity being negligible to very slight, as defined in CIRIA C580 Table 2.5 (after Burland, 1995), which in relation to damage to buildings would equate to fine cracks which are easily treated in normal decoration.

8.0 REFERENCES

8.1 Camden Planning Guidance – Basements, March 2018

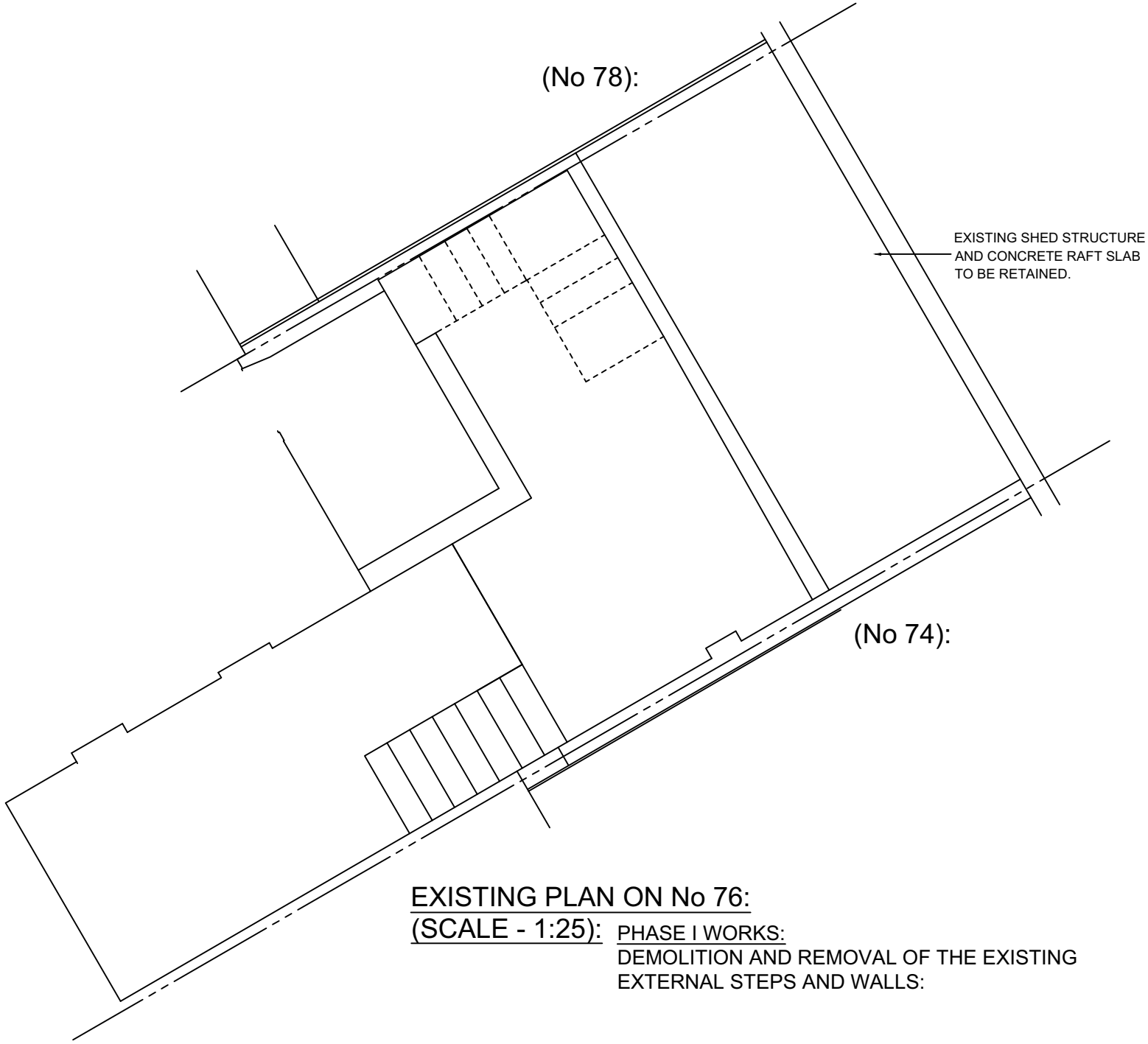
8.2 Camden geological, hydrogeological and hydrological study, Guidance for subterranean development, Ove Arup & Partners, November 2010

8.3 CIRIA C760 Embedded retaining walls, 2017

8.4 Assessment of risk of damage to buildings due to tunnelling and excavation, Burland J B, 1995

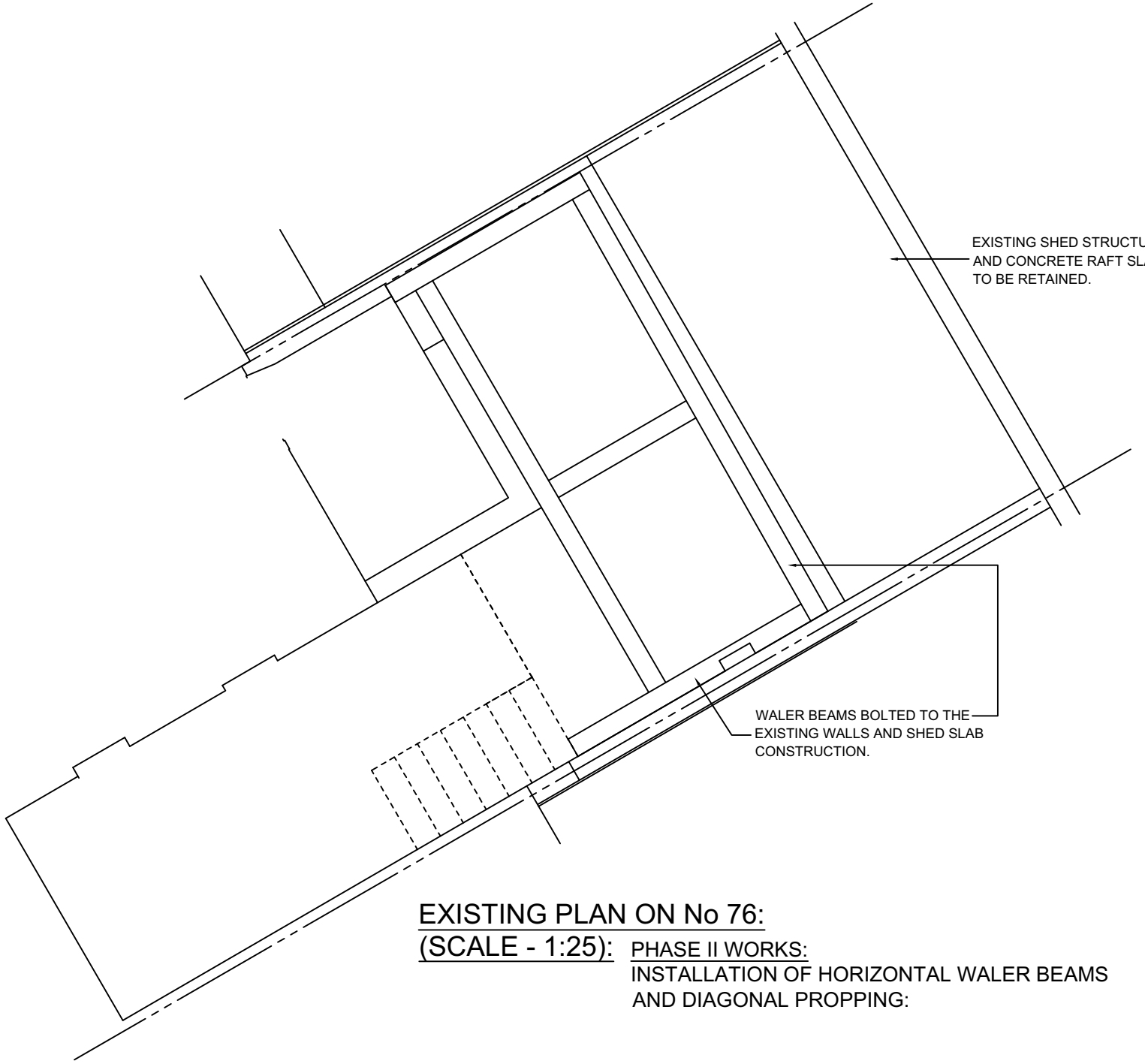
8.5 Ground movements resulting from urban tunnelling: predictions and effects, Rankin W J, 1988

APPENDIX 1
Construction Phasing



EXISTING PLAN ON No 76:
(SCALE - 1:25):

PHASE I WORKS:
DEMOLITION AND REMOVAL OF THE EXISTING
EXTERNAL STEPS AND WALLS:

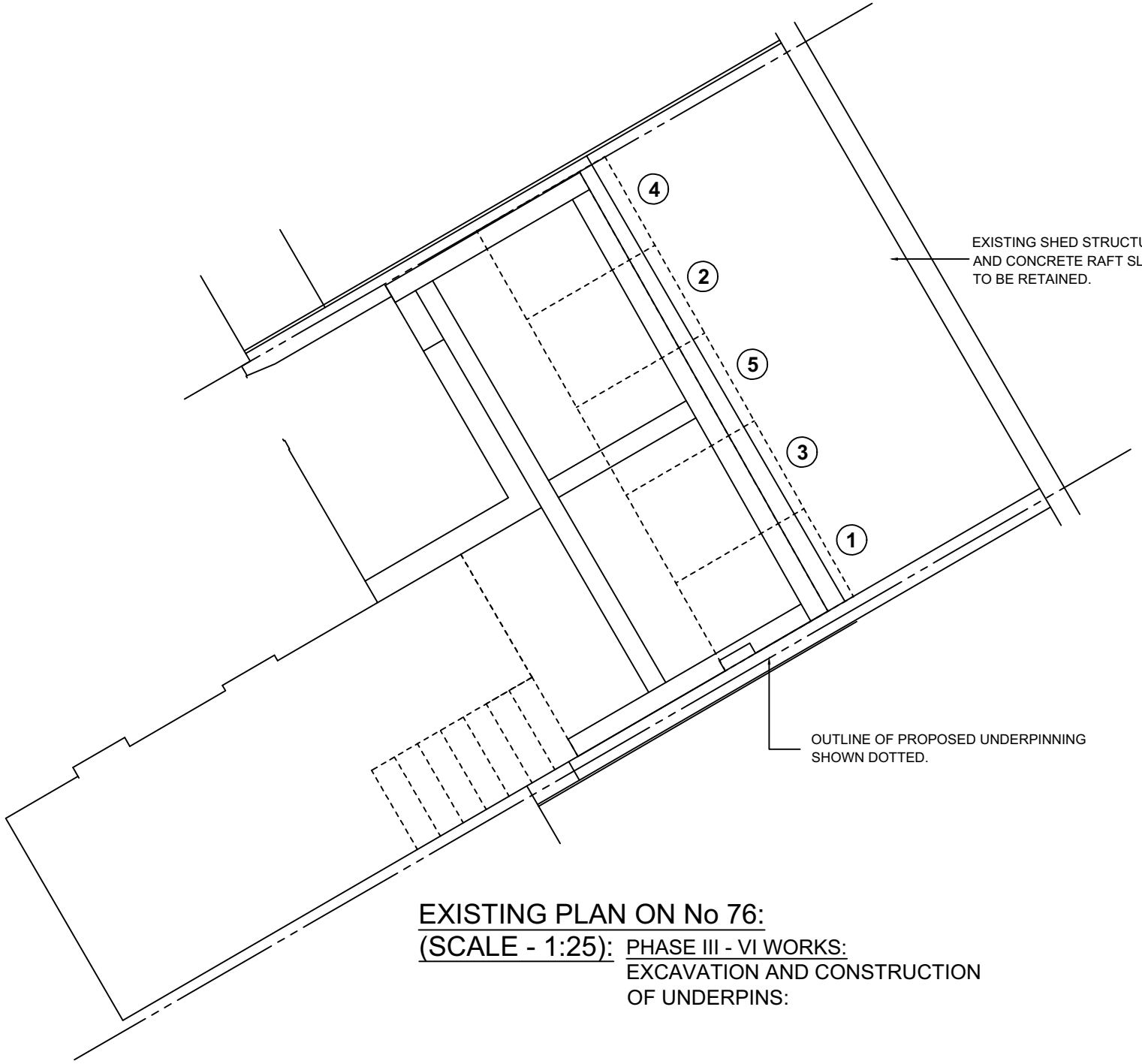


EXISTING PLAN ON No 76:

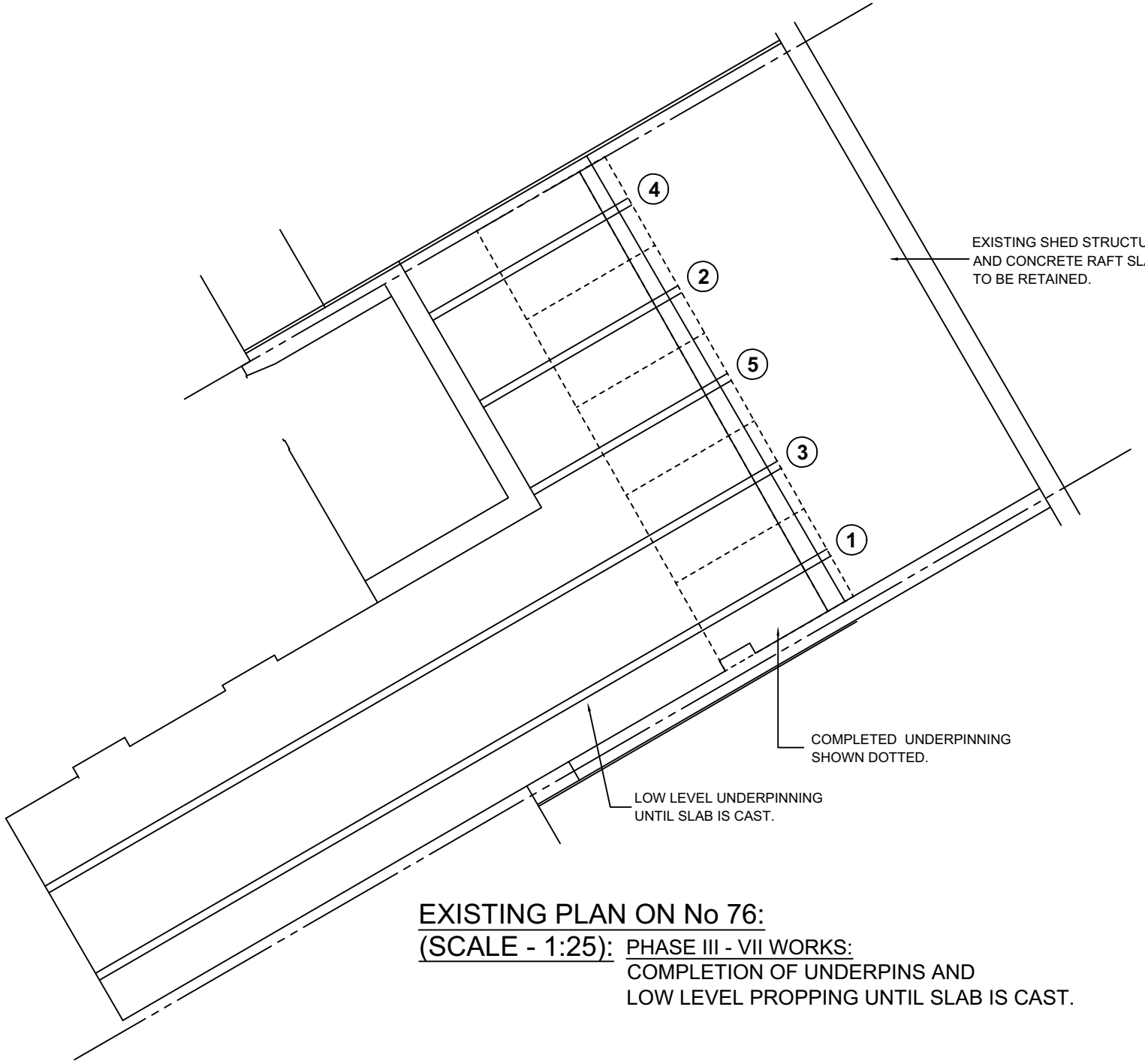
(SCALE - 1:25):

PHASE II WORKS:

INSTALLATION OF HORIZONTAL WALER BEAMS AND DIAGONAL PROPPING:

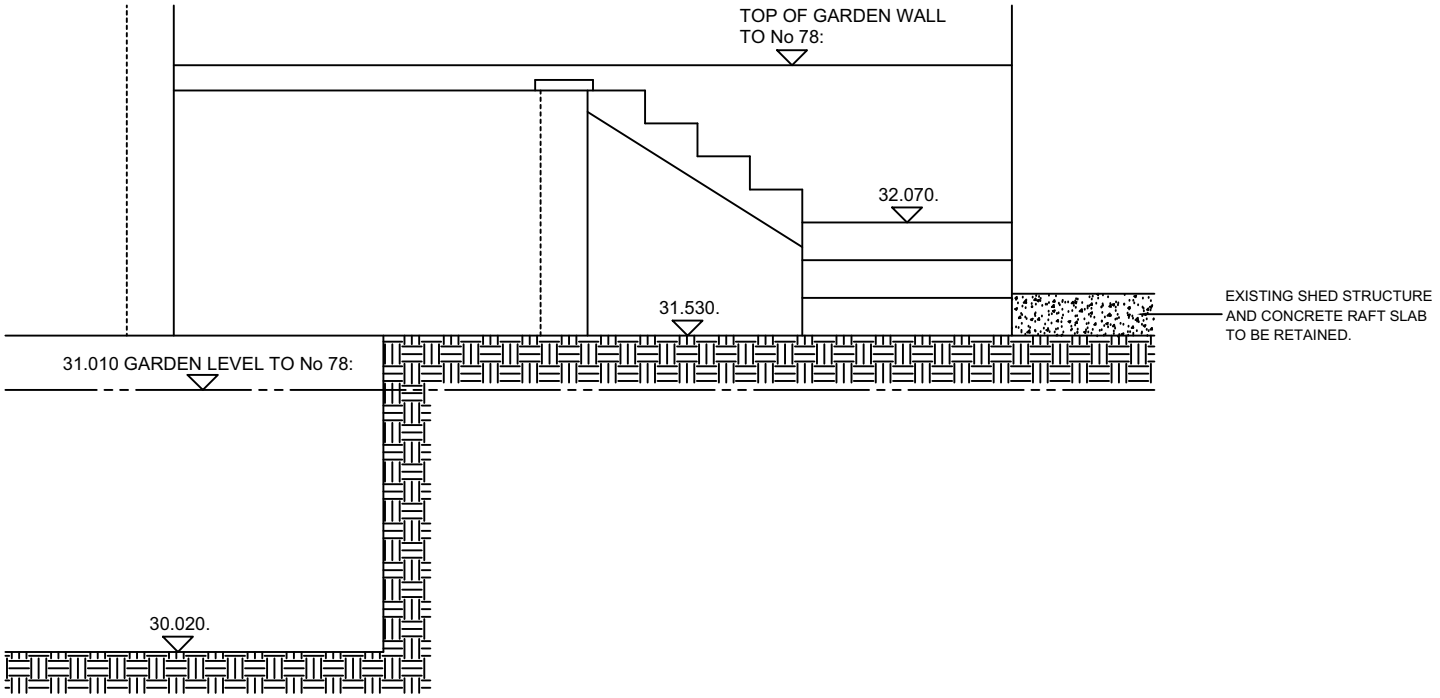


EXISTING PLAN ON No 76:
(SCALE - 1:25): PHASE III - VI WORKS:
EXCAVATION AND CONSTRUCTION
OF UNDERPINS:

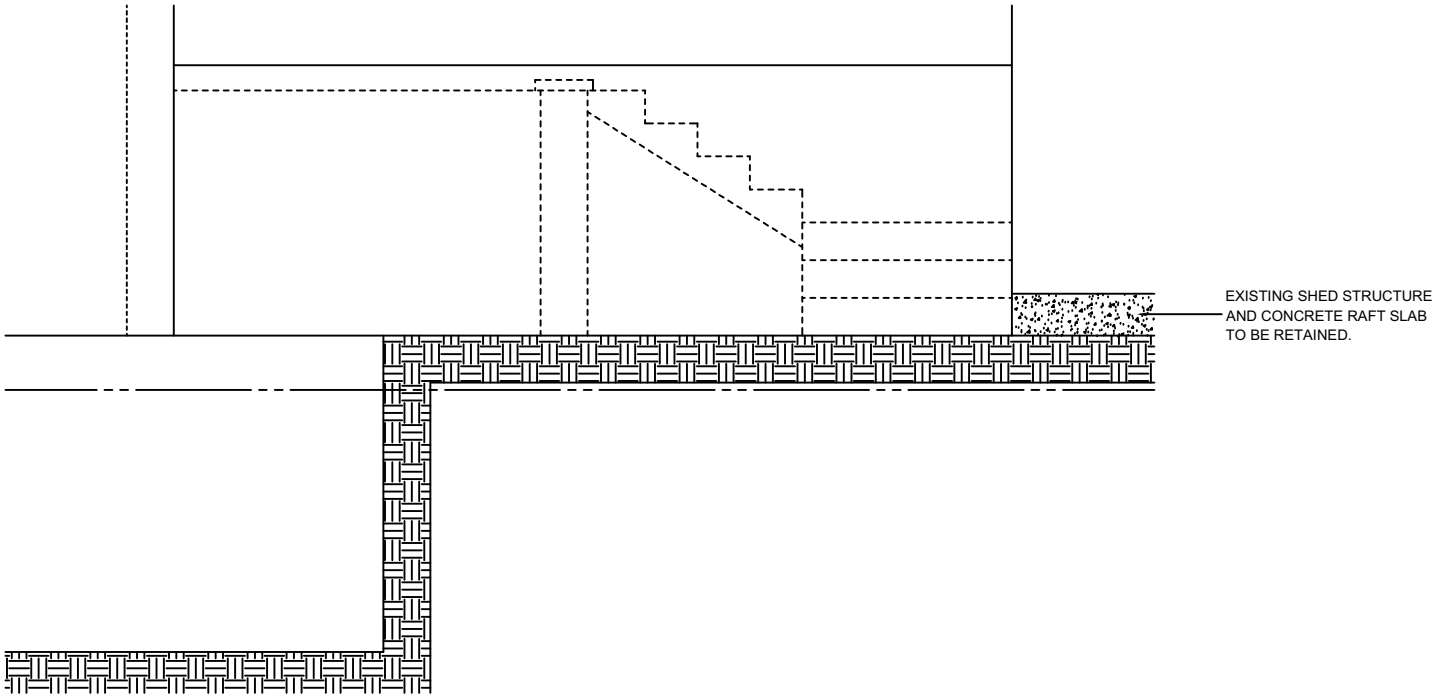


EXISTING PLAN ON No 76:

(SCALE - 1:25): PHASE III - VII WORKS:
COMPLETION OF UNDERPINS AND
LOW LEVEL PROPPING UNTIL SLAB IS CAST.

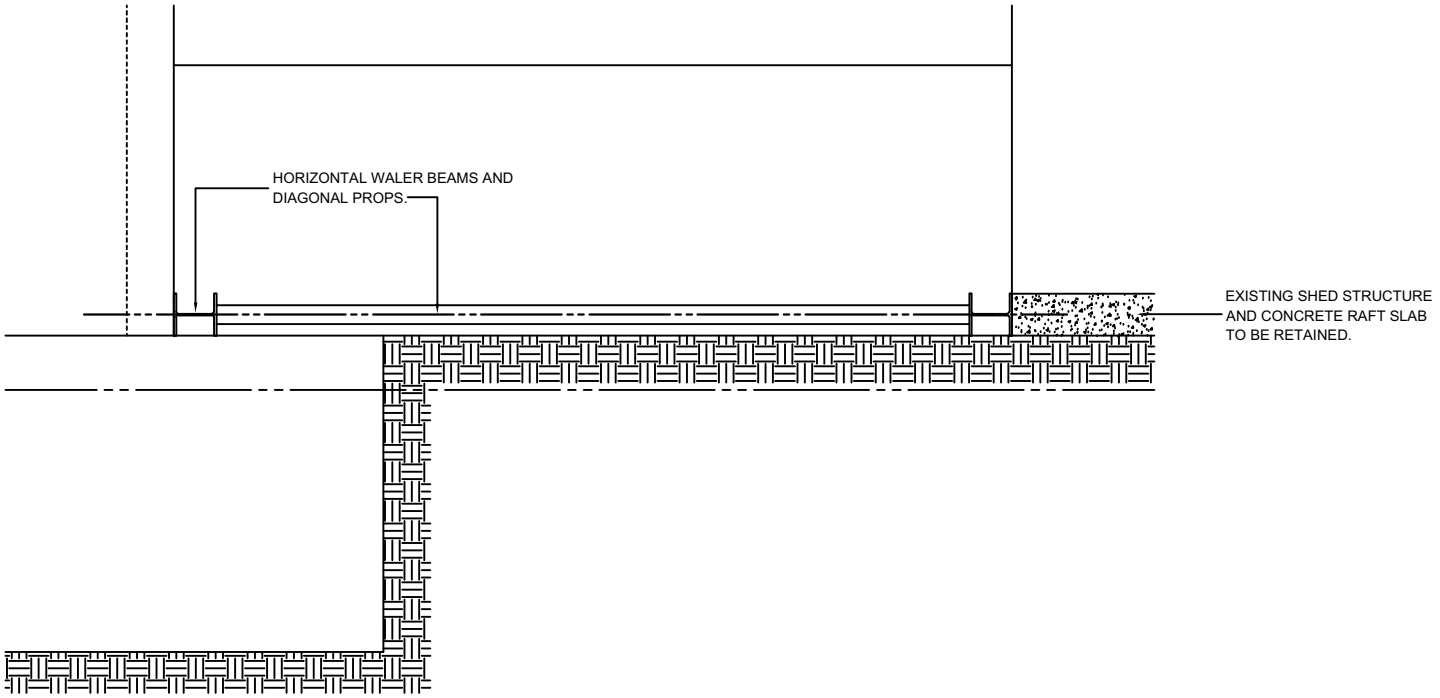


EXISTING ELEVATION/SECTION LOOKING TOWARDS No 78:
(SCALE - 1:25):



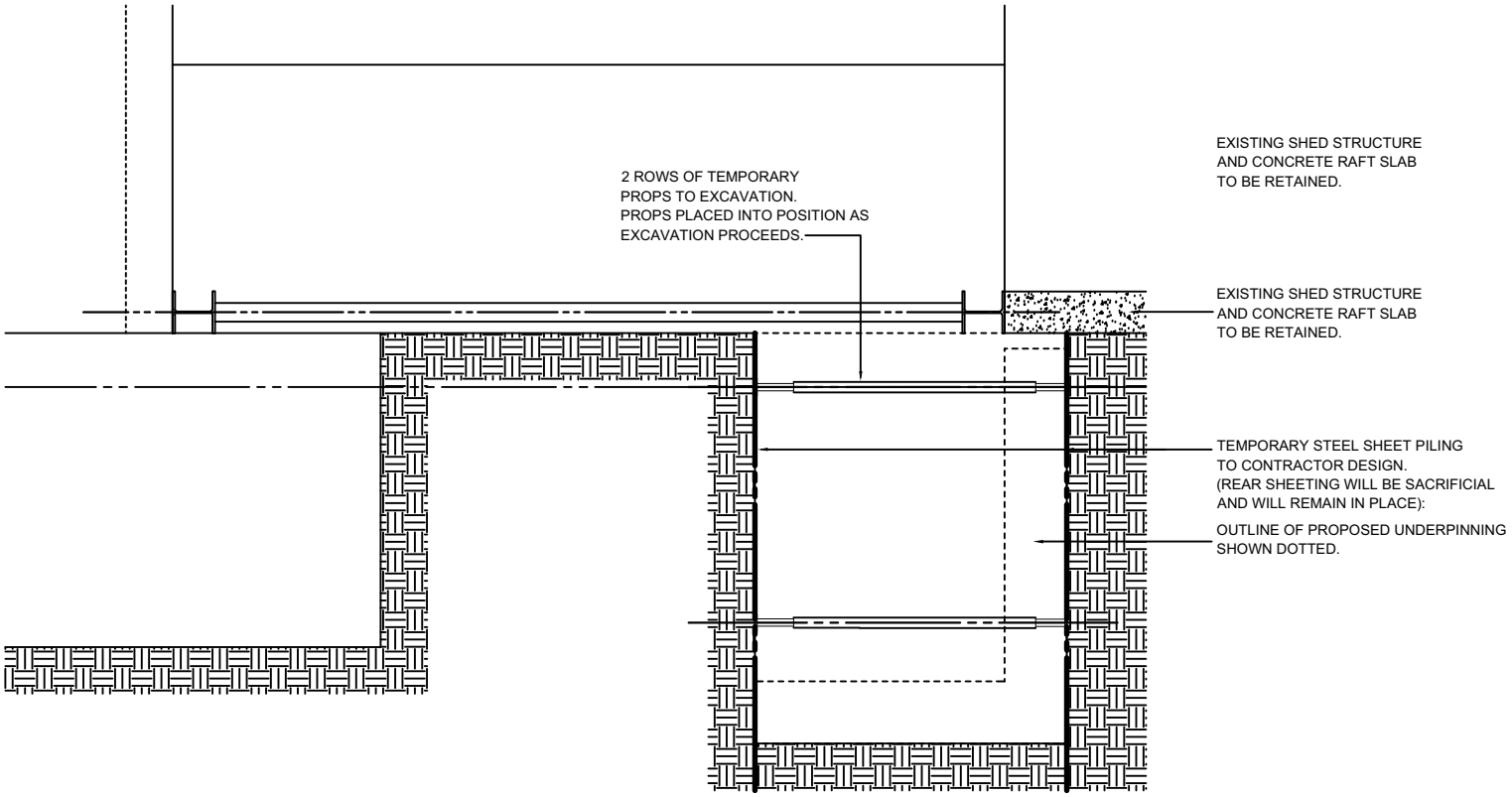
EXISTING ELEVATION/SECTION LOOKING TOWARDS No 78:
(SCALE - 1:25):

PHASE I WORKS:
DEMOLITION AND REMOVAL OF THE EXISTING
EXTERNAL STEPS AND WALLS:

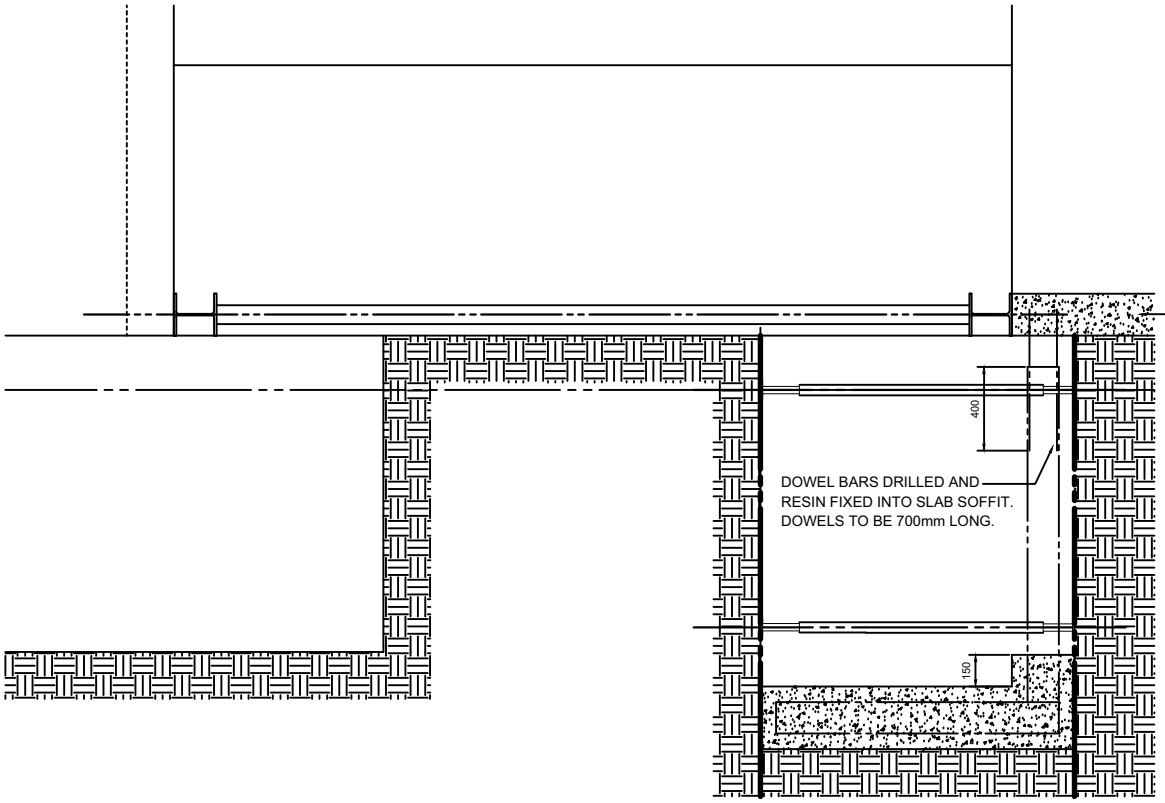


EXISTING ELEVATION/SECTION LOOKING TOWARDS No 78:
(SCALE - 1:25):

PHASE II WORKS:
INSTALLATION OF HORIZONTAL WALER BEAMS
AND DIAGONAL PROPPING:



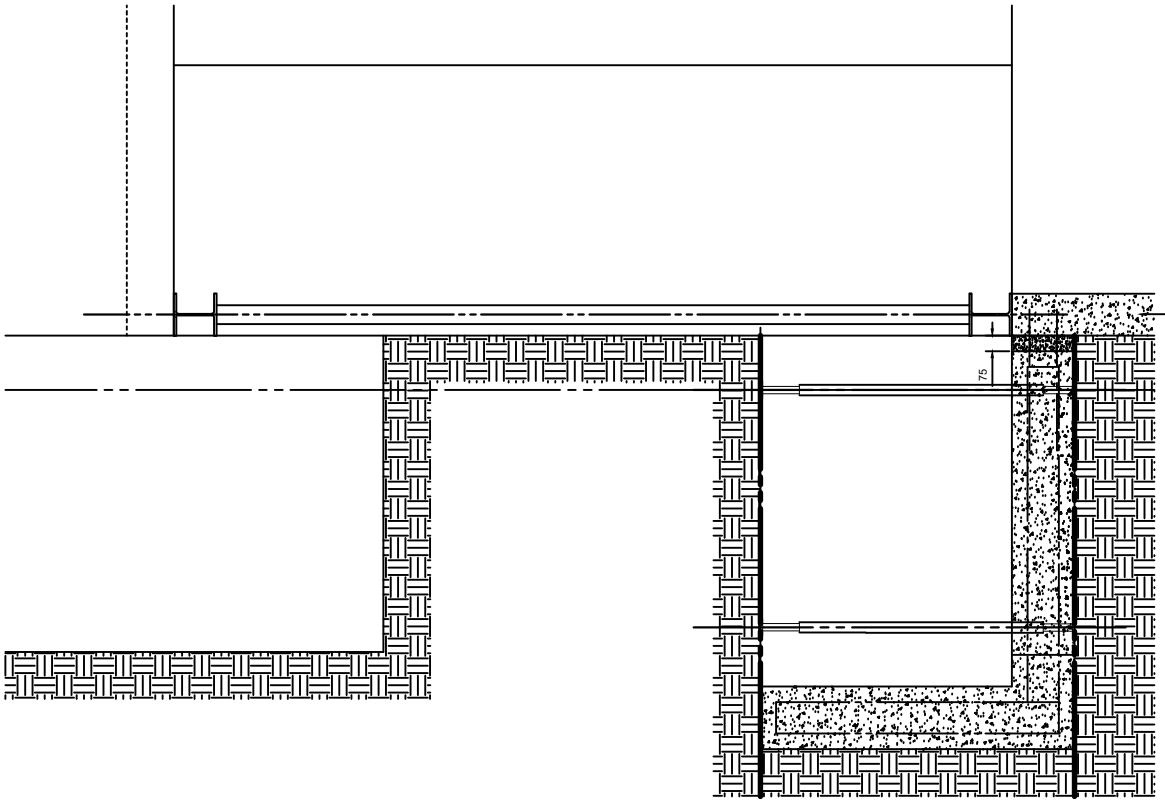
EXISTING ELEVATION/SECTION LOOKING TOWARDS No 78:
(SCALE - 1:25): PHASE III WORKS:
EXCAVATION OF UNDERPIN:



SEQUENCE OF WORKS:

1. EXCAVATE OUT TO SOFFIT OF UNDERPIN TOE.
2. FIX UNDERPIN AND STEM REINFORCEMENT INCLUDING HORIZONTAL DOWELS TO FUTURE ADJACENT PINS. ALSO ALLOW FOR VERTICAL DOWEL BARS TO BE DRILLED INTO THE SOFFIT OF THE EXISTING SLAB.
3. CAST UNDERPIN TOE AND KICKER.

EXISTING ELEVATION/SECTION LOOKING TOWARDS No 78:
(SCALE - 1:25): PHASE IV WORKS:
FIX REINFORCEMENT AND CAST UNDERPIN
TOE AND KICKER.

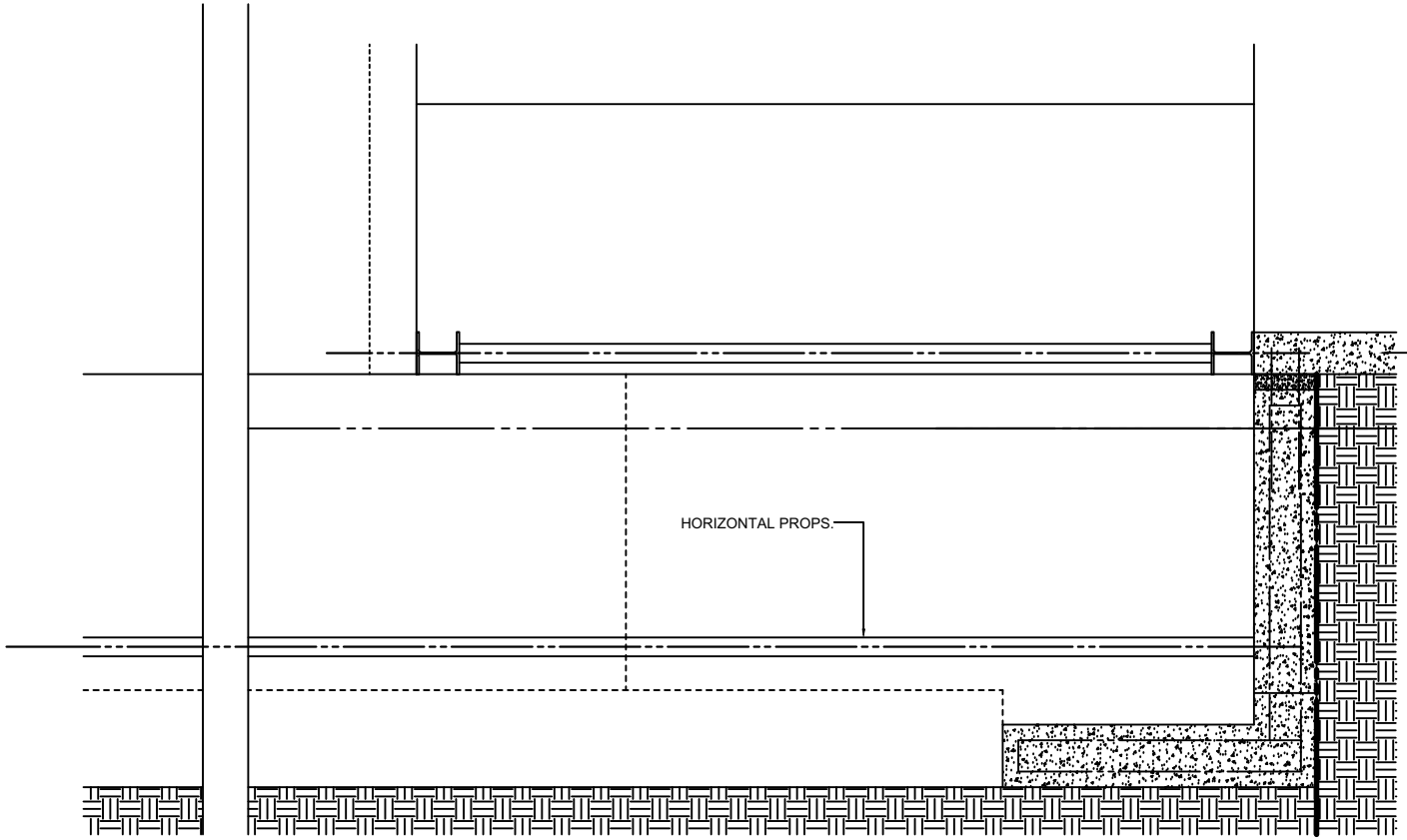


SEQUENCE OF WORKS:

1. FIX VERTICAL SHUTTERING.
2. CAST VERTICAL UNDERPIN STEM.
3. DRY PACK GAP TO TOP OF PIN AND UNDERSIDE OF RETAINED SLAB OVER. ALLOW FOR 48 HOURS AFTER CASTING OF THE VERTICAL UNDERPIN STEM.

EXISTING ELEVATION/SECTION LOOKING TOWARDS No 78:
(SCALE - 1:25):

PHASE V WORKS:
FIX REINFORCEMENT AND CAST UNDERPIN STEM AND DRY PACK.

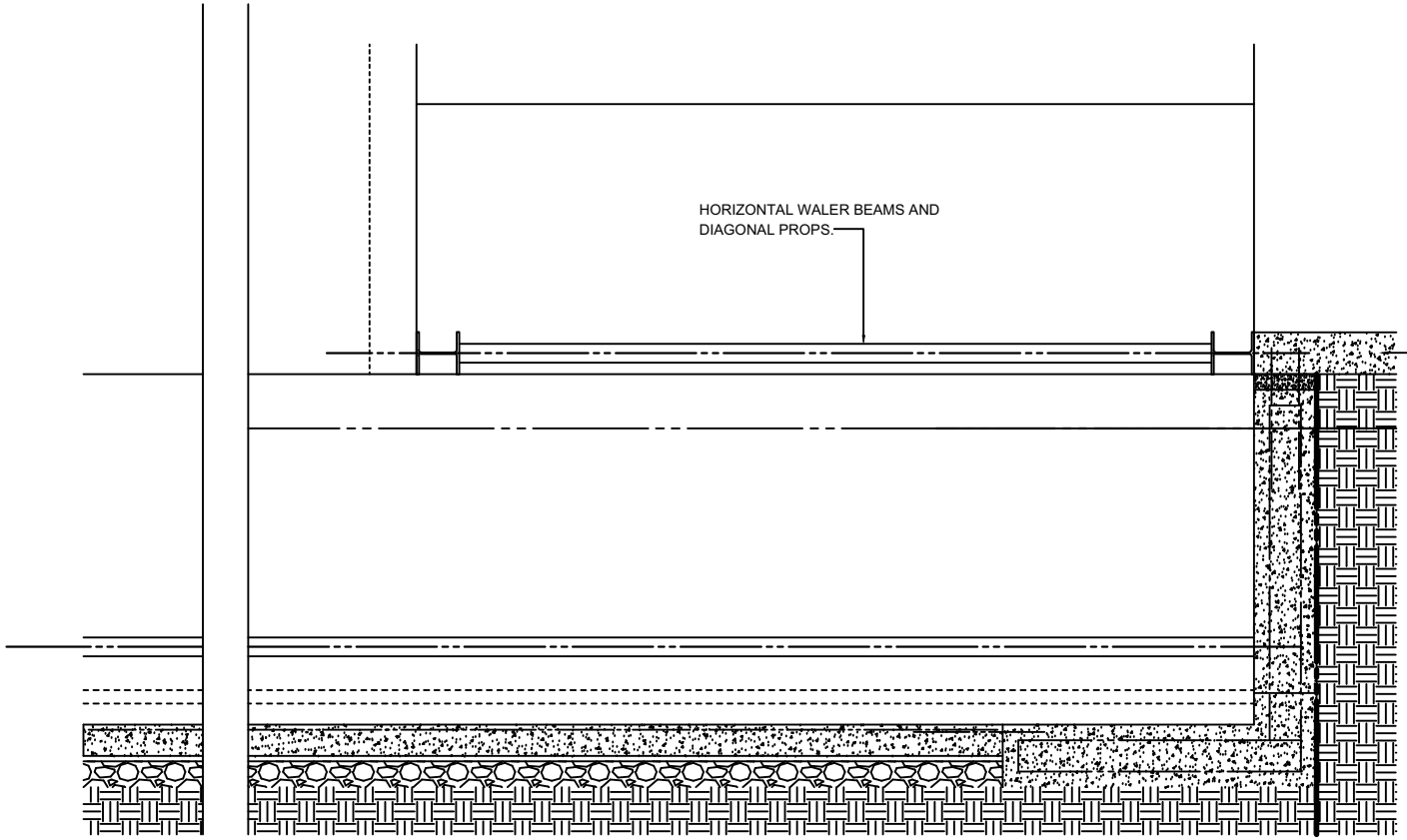


SEQUENCE OF WORKS:

1. FIX LOW LEVEL PROPS INTO PLACE.
2. COMMENCE REDUCED LEVEL DIG TO FORM NEW SLAB.

EXISTING ELEVATION/SECTION LOOKING TOWARDS No 78:
(SCALE - 1:25):

PHASE VI WORKS:
INSTALL LOW LEVEL PROPS AND
REDUCE LEVEL DIG FOR NEW SLAB.



SEQUENCE OF WORKS:

1. LAY HARDCORE, SAND BLINDING AND DPM.
2. FIX REINFORCEMENT INTO PLACE INCLUDING DOWELS INTO UNDERPIN TOE.
3. CAST GROUND BEARING SLAB AND ALLOW TO CURE FOR 72 HOURS.
4. FOLLOWING THE CURING OF THE SLAB ALL THE PROPS CAN BE REMOVED.

EXISTING ELEVATION/SECTION LOOKING TOWARDS No 78:
(SCALE - 1:25): PHASE VII WORKS:
FIX SLAB REINFORCEMENT AND CAST CONCRETE SLAB.

DRAWINGS

SURVEYED BY:

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FAX: 01737 841340

Job No
B 8815

LEGEND

SURVEY STATION

BANKING

HEDGE
FENCE

PROPOSED CELL BOUNDARY

ABBREVIATIONS (WHERE APPLICABLE)

A/C	AIR CONDITIONER	KO	KERB OUTLET
AH	ARCH HEIGHT	L	LIGHT
AV	AIR VALVE	LP	LAMP POST
B	BOLLARD	MH	MANHOLE
BG	BOX GULLY	MK	MARKER
BH	BEAM SOFFIT HEIGHT	NB	NOTICE BOARD
BL	BEAM SOFFIT LEVEL	NFI	NO FURTHER INFORMATION
BW	BRICK WALL	O/H	OVERHEAD
C	WINDOW CILL HEIGHT	P	POST
CE	CLEANING EYE	PL	PAVEMENT LIGHT
(90)F	CEILING HEIGHT (FALSE)	PM	PARKING METER
CL	COVER LEVEL	R	ROOF
CM	CABLE MARKER	(R)	FROM RECORDS
CONC	CONCRETE	RG	ROAD GULLY
CP	CATCH PIT	RS	ROAD SIGN
CPS	CONC PAVING SLABS	RSJ	ROLLED STEEL JOIST
CSU	CEILING SLOPES UP	RW	RETAINING WALL
D	DEEP	RWP	RAIN WATER PIPE
DH	DOOR HEIGHT	S	SOIL PIPE
DP	DOWN PIPE	SC	STOP COCK
ECP	ELEC CABLE PIT	SKL	SKYLIGHT
EJB	ELEC JUNCTION BOX	SL	SUMP LEVEL
EP	ELECTRICITY POLE	SPF	SPRING POINT HEIGHT
F	FLOOR	SV	SLUICE VALVE
FB	FLOWER BED	TIC	TELEPHONE IC
FH	FIRE HYDRANT	TJB	TEL. JUNCTION BOX
FIG	FEEDS INTO GROUND	TL	THRESHOLD LEVEL
FL	FLOOR LEVEL	TP	TELEPHONE POLE
G	GAS VALVE SMTH	TRL	TRAFFIC LIGHT
GV	GAS VALVE	UTL	UNABLE TO LIFT
H	WINDOW HEAD HEIGHT OR HEIGHT	UTT	UNABLE TO TRACE
		VP	VENT PIPE
HB	HAND BASIN	W	WALL
HD	HEATING DUCT	WC	WATER CLOSET
IC	INSPECTION COVER	WM	WATER METER
IL	INVERT LEVEL		

FENCE TYPES AND DETAILS

B/W	BARBED WIRE
C/B	CLOSE BOARDED
C/I	CORRUGATED IRON
C/L	CHAIN LINK
C/P	CHESTNUT PALING
H/R	HAND RAIL
I/R	IRON RAILINGS
O/B	OPEN BANDED
P/R	POST & RAIL
P/W	POST & WIRE
S/W	SHEEP WIRE
W/M	WIRE MESH

NOTES

DATUM USED : NEWLYN
BY GPS OBSERVATIONS

REV SUFFIX	DATE	INITIAL	REVISION DETAILS
1	15/1/20	CY	NEIGHBOURING GARDEN LEVELS ADDED

TORNER ARCHITECTS
UNIT CS 409
27–31 CLERKENWELL CLOSE
LONDON EC1R 0AT

JOB TITLE

76 ALBERT STREET
LONDON NW1 7NR

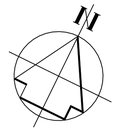
DRAWING TITLE

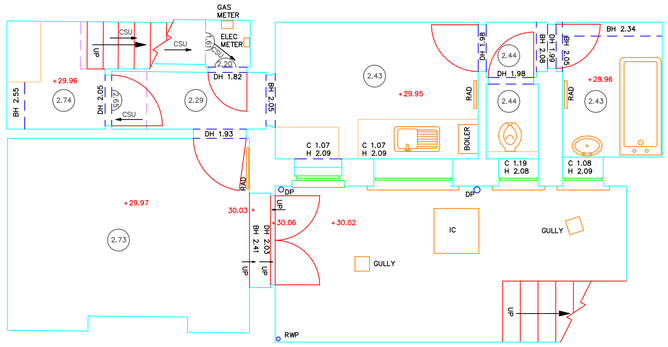
TOPOGRAPHICAL SURVEY

JOB No.	DRAWING No.
SHEET SIZE A1	REVISION SUFFIX 1
SCALE 1: 50	DATE JULY 2018
DRAWN RP	CHECKED PRC

100,116

129,116





100,94

129,94

SURVEYED BY:

ENGINEERING LAND & BUILDING SURVEYS
98 MIDDLE STREET
BROCKHAM
SURREY
RH3 7JF

TEL: 01737 844981
FAX: 01737 841540

Job No
B 8815

LEGEND

SURVEY STATION

BANKING

HEDGE
FENCE

PROPOSED CELL BOUNDARY

ABBREVIATIONS (WHERE APPLICABLE)

A/C	AIR CONDITIONER	KO	KERB OUTLET
AH	ARCH HEIGHT	L	LIGHT
AV	AIR VALVE	LP	LAMP POST
B	BOLLARD	MH	MANHOLE
BG	BOX GULLY	MKR	MARKER
BH	BEAM SOFFIT HEIGHT	NB	NOTICE BOARD
BL	BEAM SOFFIT LEVEL	NFI	NO FURTHER
BW	BRICK WALL		INFORMATION
C	WINDOW CILL HEIGHT	O/H	OVERHEAD
CE	CLEANING EYE	P	POST
(1.90)F	CEILING HEIGHT (FALSE)	PL	PAVEMENT LIGHT
CL	COVER LEVEL	PM	PARKING METER
CM	CABLE MARKER	R	ROOF
CONC	CONCRETE	(R)	FROM RECORDS
CP	CATCH PIT	RG	ROAD GULLY
CPS	CONC PAVING SLABS	RS	ROAD SIGN
CSU	CEILING SLOPES UP	RSJ	ROLLED STEEL JOIST
D	DEPTH	RW	RETAINING WALL
DH	DOOR HEIGHT	RWP	RAIN WATER PIPE
DP	DOOR PIPE	S	STUD
ECP	ELEC CABLE PIT	Sc	STOP COCK
EJB	ELEC JUNCTION BOX	SKL	SKYLIGHT
EP	ELECTRICITY POLE	SL	SUMP LEVEL
F	FLOOR	SP	SPRING POINT HEIGHT
FB	FLOWER BED	SV	SLUICE VALVE
FH	FIRE HYDRANT	TC	TELEPHONE IC
FIG	FEEDS INTO GROUND	TJB	TEL JUNCTION BOX
FL	FLOOR LEVEL	TL	THRESHOLD LEVEL
G	GULLY OR GRITH	TP	TELEPHONE POLE
GV	GAS VALVE	TRL	TRAFFIC LIGHT
H	WINDOW HEAD HEIGHT OR HEIGHT	UTL	UNABLE TO LIFT
		UTT	UNABLE TO TRACE
		VP	VENT PIPE
HB	HAND BASIN	W	WALL
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FENCE TYPES AND DETAILS

B/W	BARBED WIRE
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O/B	OPEN BOARDED
P/R	POST & RAIL
P/W	POST & WIRE
S/W	SHEEP WIRE
W/M	WIRE MESH

NOTES

DATUM USED: NEWLYN
BY GPS OBSERVATIONS

REV SUFFIX	DATE	INITIAL	REVISION DETAILS

TORNER ARCHITECTS
UNIT CS 409
27–31 CLERKENWELL CLOSE
LONDON EC1R 0AT

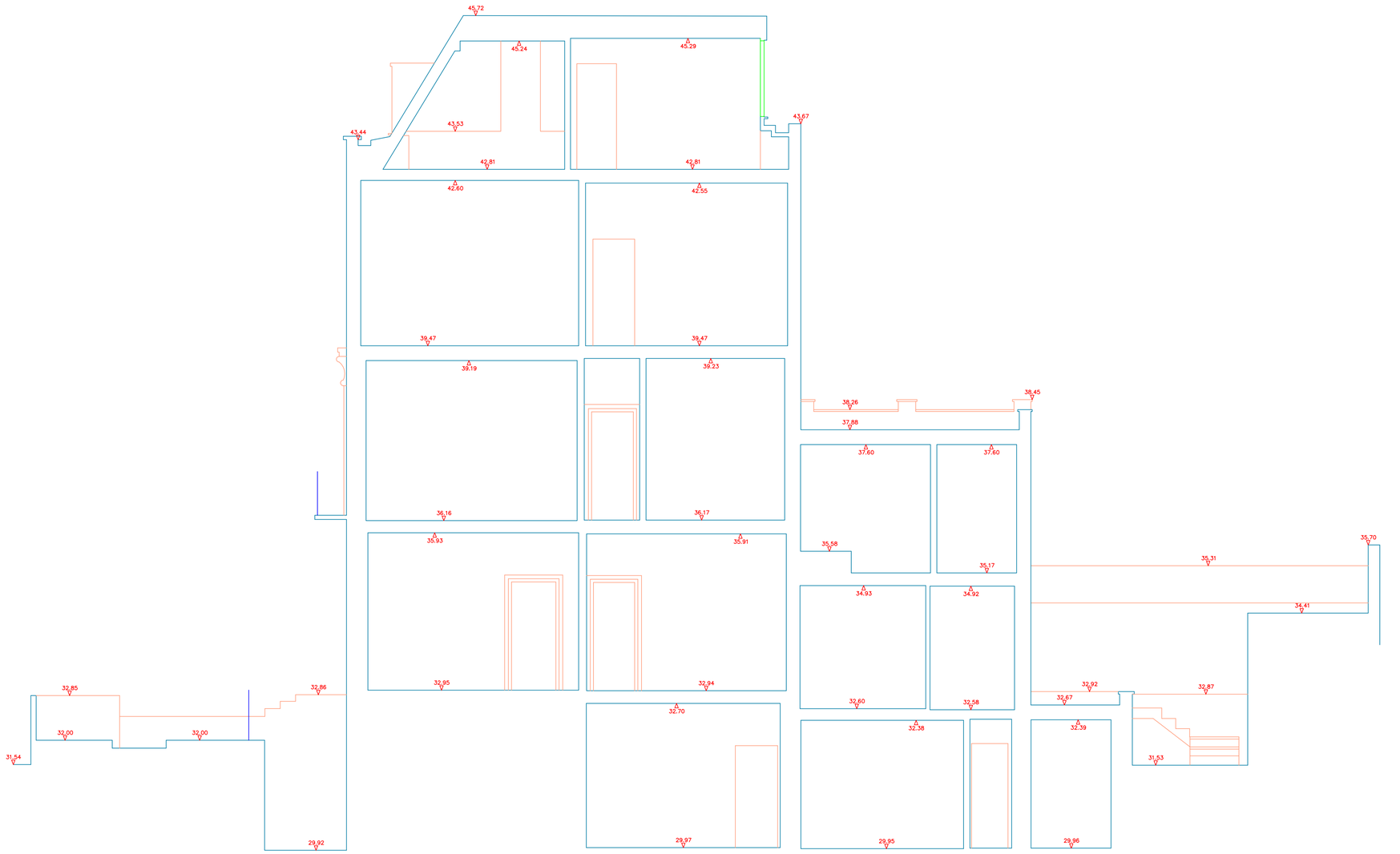
JOB TITLE

76 ALBERT STREET
LONDON NW1 7NR

DRAWING TITLE

BASEMENT

JOB No.	DRAWING No.
SHEET SIZE A1	REVISION SUFFIX 0
SCALE 1: 50 / DATE JULY 2018	DRAWN RP / CHECKED PRC



CROSS SECTION AA

SURVEYED BY:

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98 MIDDLE STREET
BROCKHAM
SURREY
RH3 7JF

TEL: 01737 844981
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Job No

LEGEND

SURVEY STATION
BANKING
HEDGE
FENCE
PROPOSED CELL BOUNDARY

ABBREVIATIONS (WHERE APPLICABLE)

A/C	AIR CONDITIONER		
AH	ARCH HEIGHT	KO	KERB OUTLET
AV	AIR VALVE	L	LIGHT
B	BOLLARD	LP	LAMP POST
BG	BOX GULLY	MH	MANHOLE
BH	BEAM SOFFIT HEIGHT	MKR	MARKER
BL	BEAM SOFFIT LEVEL	NB	NOTICE BOARD
BW	BRICK WALL	NFI	NO FURTHER INFORMATION
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NOTES

DATUM USED: NEWLYN
BY GPS OBSERVATIONS

REV SUFFIX	DATE	INITIAL	REVISION DETAILS

TORNER ARCHITECTS
UNIT CS 409
27–31 CLERKENWELL CLOSE
LONDON EC1R 0AT

JOB TITLE

76 ALBERT STREET
LONDON NW1 7NR

DRAWING TITLE

CROSS SECTION AA

JOB No.		DRAWING No.
SHEET SIZE A1		REVISION SUFFIX 0
SCALE 1:50	DATE JULY 2018	DRAWN RP/MH / CHECKED PRC

"All ceiling plaster, wall plaster and cornicing will be retained. Damage will be made good, like for like, with lime plaster."

"All floorboards will be retained and no joists notched."

"No brickwork will be cleaned (front and rear external elevations."

Proposed Basement Plan
scale 1:100 @A3

ALBERT STREET

For Planning Application

Drawn by	Checked by	Date
MF	ET	January 19

Issue	Date	Description
P1	23/01/19	Issued for planning
P3	14/08/19	Amended proposed layouts
P4	13/09/19	Extent of excavation
P5	03/11/19	Notes added

General Notes

0 1 2 5m

Code 073

Scale 1:100 @ A3

Drawing Title Proposed Basement Plan

Drawing Number **073 - GAB1**

Proposed Section 01
scale 1:100 @A3

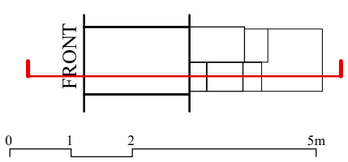
ALBERT STREET

For Planning Application

Drawn by	Checked by	Date
KP	ET	January 19

Issue	Date	Description
P1	23/01/19	Issued for planning
P2	18/02/19	Amended street boundary
P3	14/08/19	Amended proposed layouts
P4	13/09/19	Added extension of excavation

General Notes



Code 073
Scale 1:100 @ A3
Drawing Title Proposed Section 01
Drawing Number **073 - GS01**