

**Construction Requirements and Anticipated Sequence**  
**General**

1 Prior to commencement, during demolition and construction the Contractor shall carry out as appropriate sufficient dimensional survey's and further investigations to enable the design of the temporary works and to validate the findings of the exposures carried out pre-contract.

In this respect allowance should be made for further trial pits and holes through boundary walls.

The Contractor may phase this work to suit the proposed construction programme with due allowance made to incorporate changes to the permanent works.

2 The Contractor shall prepare method statements and temporary works proposal in advance of commencing the various elements of the work and shall allow 14 days for consideration of the proposals by the Architect and Structural Engineer as appropriate. This is to include the design and details for the contiguous piling which are also to form part of the permanent works.

These method statements are as follows:-

1 Retention Existing Building

Temporary works proposals for the retention of the existing building. The temporary works are to provide lateral restraint to the retained walls and dead shoring to some walls.

The Temporary works are to be designed to enable piling and construction of the basement.

2 Demolition.

Provide proposals for demolition and retention of structures above ground. Including locations of any plunge piles or other systems to be adopted to enable construction of the basement.

3 Underpinning

Provide method statements and methods for keeping excavations free of water. Also provide temporary propping proposals.

4 Excavation

Provide method statements and propping proposals.

3 Anticipated sequences are provided below to demonstrate the complexity of the works.

The Contractor is responsible for determining his own proposed sequences and methodology for executing the works whether or not they are at variance with the anticipated sequence and shall submit proposals to the Architect and Structural Engineer for comment.

Items identified within the Anticipated Sequences may be carried out where and when appropriate concurrently to suit the Contractors proposed phasing and method of carrying out the works. The Anticipated sequences below are likely to overlap and the Contractor is to identify in the Sequence of construction.

4 Reference to Temporary Works shall mean Contractor Designed Temporary works.

5 Temporary works to retain the existing building are to be designed to enable the installation of piles

**Anticipated Sequence**  
**(to be read in conjunction with the drawings and specification items may run concurrently as appropriate**

1 Carry out a survey of the existing building and set up survey stations to monitor the building and adjoining owners walls (Prior to excavation)

2 Carry out demolition of extensions shown on the Architect's drawing.

3 Remove the ground floor.

4 Underpin to sequence shown.

5 Install plunge piles.

6 Install temporary propping.

7 Make connection to plunge piles

8 Pin walls over to ground floor slab

9 Remove pins supporting walls over.

10 Install horizontal props to underpinning.

11 Complete excavation.

12 Construct basement slab and columns.

13. Construct Ground floor slab

14 After concrete has attained 35 N/mm<sup>2</sup> cube strength remove props and cut down plunge piles.

15 Complete construction.

**Underpinning temporary propping**

1. The Main Contractor is responsible for the concept and design of all temporary works in laterally restraining the underpinning. The design is to limit settlement of adjoining walls to 5mm
2. The arrangement temporary works must allow for the installation of the permanent works.
3. The Main Contractor shall conceive the temporary works to suit the construction methodology and sequence of works.
4. The temporary works design shall be submitted to the Party Wall Surveyors for their comments .
5. The requirements of the party wall award is that the temporary works supporting the underpinning shall be rigid with zero deflection of where propped.
6. Between props the max deflection is limited to 10mm.
7. The retaining wall is to be designed for the lateral pressures from soil and water plus the surcharge loads along the perimeter and surcharge from the adjoining buildings.

**Monitoring Walls & Buildings**

1. Surveying of Fixed Stations on Walls & Buildings shall be carried out as follows
  - ▲ **For the first 3 months.** Weekly
  - ▲ **Until the Ground slab is constructed.** Weekly
  - ▲ **Following 6 months.** Monthly
2. The Monitoring Survey Trigger Levels for Monitoring carried out against the adjoining properties shall form three Levels. Green; Amber and Red Levels.
3. GREEN LEVEL shall consist of the following trigger levels:
  - Limits on Total Lateral Movement of Monitoring Points up to 5mm
  - Limits on Total Vertical Movement of Monitoring Points up to 5mm
4. AMBER LEVEL shall consist of the following trigger levels:
  - Limits on Total Lateral Movement of Monitoring Points +/- 5mm
  - Limits on Total Vertical Movement of Monitoring Points +/- 5mm

Should these limits be reached the SE, CA and party wall surveyors shall be informed. Works shall not halt upon these levels being reached as this is to highlight potential further movement. Increase frequency of monitoring.
5. RED LEVEL shall consist of the following Trigger levels:
  - Limits on Total Lateral Movement of Monitoring Points +/- 10mm
  - Limits on Total Vertical Movement of Monitoring Points +/- 10mm

Should these limits be exceed works will stop until remedial measures have been agreed between the SE, CA, Contractor and the adjoining Party Wall Surveyor.

<b>FOR PLANNING</b>					
				DATE	OCTOBER_2015
				PRODUCED BY	FD
				SCALE	A1_1:50 A3_1:100
				CHECKED	SOH
				CAD REF	APPROVED
3	16/11/18	For planning	FD	SOH	
2	28/10/15	For planning	CM	SOH	
1	22/10/15	For planning	CM	SOH	
REV	DATE	DESCRIPTION	BY	CHKD	
CLIENT					
AMEK_PROPERTY_INVESTMENT_LLP					
PROJECT					
1_WADHAM_GARDENS					
LONDON_NW3_3DN					
TITLE					
CONSTRUCTION_REQUIREMENTS_& ANTICIPATED_SEQUENCE					
JOB No.		DRAWING No.		REV.	
1550		GN02		3	

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