

**18 PRINCE ARTHUR ROAD
LONDON NW3 6AY**

**STRUCTURAL REPORT OF THE EXTENSION TO THE LOWER
GROUND FLOOR OF 18 PRINCE ARTHUR ROAD NW3 6AY**

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1. INSTRUCTIONS

In March 2011 C.J. Cowie Associates were instructed by Brod Wight on behalf of our mutual clients, Stuart & Margaret Rowson, to provide a report on the extension to the existing lower ground floor at 18 Prince Arthur Road, London NW3 6AY.

The report was required to support Brod Wight's planning application for the extension and alterations to 18 Prince Arthur Road, which includes extending the lower ground floor at the front of the property.

2. GENERAL DESCRIPTION

The property is a three-storey house, which is being extended at the rear, into the roof and extending the lower ground floor at the front.

The property was built around the mid 19th century in traditional construction of load bearing brick, timber floors and a pitched roof.

The entrance to the property is at the front, with the ground sloping down to the rear, and the rear rooms and hall all at lower ground floor level, leading on to a terrace at the rear. There is a passageway with steps down to the rear between No18 and 18a.

The property is adjoined to No6 Elderdale Road.

There is a terrace at the rear at lower ground floor level and the garden then steps up slightly about a metre to the general level of the land, which is laid to lawns with trees.

3. FORMATION OF ADDITIONAL LOWER GROUND FLOOR

3.1. Proposed Lower Ground Floor

The proposed basement is to be underneath the front 4½m of the property and a light well at the front to allow light in to the flat. The sides are not being changed and windows are being formed in the side to allow light into the area without change of ground level. Access to the basement will be from a separate entrance on the side. The remaining lower ground floor basement will remain unchanged.

3.2 Formation To The Extension Of The Lower Ground Floor

Full Party Wall Awards with photographs and survey of the walls and adjacent structure will be undertaken before commencement of the works.

The following is an outline for a performance specification that the main contractor must adhere to for the construction of the lower ground floor and the full design of the lower ground floor would be designed by the Permanent Works Engineers.

1. A full ground investigation will be undertaken with a borehole at the front and trial pits to the existing party wall and perimeter walls to determine the depth of the existing foundations and make up of the soil.
2. The contractor will produce a method statement of the removal of the soil, which may be via the new light well or side entrance steps and could be taken direct into skips from parking bays formed in 18 Prince Arthur Road.
3. The contractor will produce a method statement sequence for the sequence of operations for forming the underpinning to the perimeter walls and reinforced concrete wall to retain the surcharge from the perimeter walls.
4. The method statement must also provide an underpinning sequence operation for the perimeter walls.
5. Once the underpinning has been completed, the main area of soil in the basement can be removed.
6. The light well could be formed at the initial stages of the contract to form access to the lower ground floor and the soil either battered around initially and the walls constructed in reinforced concrete to retain the soil.
7. It is envisaged that the floor slab will be reinforced concrete tied to the perimeter walls to resist any surcharge.
8. We do not envisage any build up of water within the area as the existing property already has a lower ground floor, which leads out on to the rear and the level is not to be changed.
9. There will not be any standing water as any water would have drained away from the area because the ground level is already at the new foundation level.
10. The removal of any brick corbels on party walls must be agreed prior to the commencement of the works, but the main foundation walls will be extended down to below the basement level.
11. All the foundations to the existing walls will be extended down on the same format below the lower ground floor level.
12. There will be very little propping required if the underpinning and retaining walls are cast in sequence around the perimeter.
13. Any structure above will have to be propped during this period and then supported on new load bearing structure.

Signed By  C.Eng., M.I.Struct.E
6 April 2011

ON BEHALF OF C J COWIE ASSOCIATES