

Application Summary:

Application Number: 2024/0459/P

Address: Flat 1&3 30 Redington Road London NW3 7RB

Proposal: Residential Extension

Case Officer: Lauren

Commentator Details:

Name: Peter Corner representing Flat 2 & Flat 5 , Sue Wyatt (owner).

Address: Flat 2 and Flat 5, 30 Redington Road London NW3 7RB / 6 Well Walk, London Nw3 1LD

Comment Summary:

Objection on the grounds of a) lack of Basement Impact Assessment Equivalent or Subterranean Impact Assessment for groundwater and stability issues , and b) endangerment to safety of the existing main building structure c) risk to existing basement “tanking” and d) the plans submitted contain some errors.

I object to the proposals on the following grounds:

1. BIA “equivalent” or Subterranean Impact Analysis – due to changes since last approval

No Basement Impact Assessment Equivalent nor subterranean impact analysis has been provided. A BIA Equivalent is required to evaluate land stability and ground and surface water conditions. There are 2 reasons for this:

- (a) the pile driving required for the proposal will impact the underground water flows and geology and is in proximity to the existing basement area of 30 Redington Road and
- (b) the relatively recent and ongoing construction works at 28 Redington Road have caused a change to the sub terranean water flows in the area.

(a) The detail behind the requirement for a BIA equivalent or subterranean impact is that the 10 piles of a depth of 12 metres will be required by the proposal (see para 2 & 3 below). This piling will be placed in the area close to the subterranean main entrance hall of 30 Redington Road. See front elevation plan. In addition to the piling the platform and the new walls and roof will exert downward pressure on the water flowing beneath it.

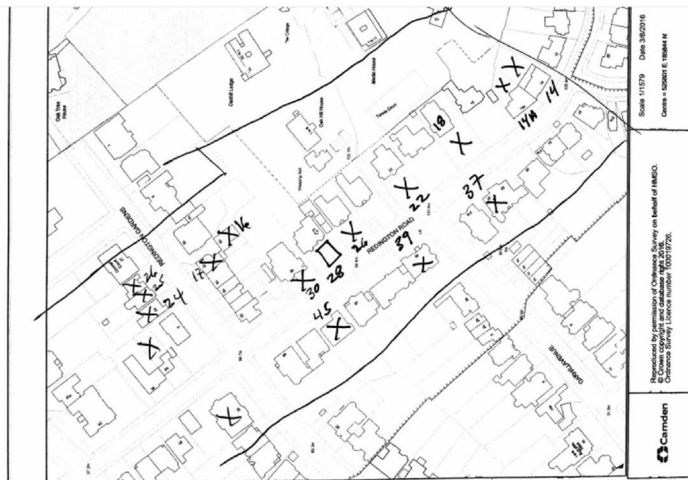
30 Redington Road is built on the slope of a hill. The water flows down the hill mainly. The new construction is at the top of the slope and therefore will affect the water flow advancing downhill towards the existing main structure of the building at 30 Redington Road. As a result, the impact of that piling, plus the weight of the new reinforced concrete slab and brick wall construction on the subterranean downhill flows of water, will “dam and divert” water and alter the geology under 30 Redington Road . Therefore, the impact of the piling and new building on groundwater and stability should be analysed prior to consent.

(b) Although the plans have previously been approved without a BIA or subterranean impact analysis, that approval was prior to the significant construction developments which have taken place at 28 Redington Road in the last 2 years and directly adjacent to this proposed development 2024/0459/P.

Under its policies the Council will only permit basement and other underground development that does not *“cause harm to the built and natural environment and local amenity, and does not result in flooding or ground instability. We will require developers to demonstrate by methodologies appropriate to the site that schemes”*

So far no investigation has been carried out to identify the groundwater regime; nor to identify potential implications; no surface water calculations have been carried out; no structural calculations have been carried out to ensure stability of the existing structure during and after construction work; it has not been demonstrated that ground movements around the piling next to the existing main residential structure at 30 Redington Road will be controlled.

See the map below of subterranean development adjacent to and opposite 30 Redington Road. There is 28 and 45 Redington Road and 16 and 17 Redington Gardens which are next to 30 Redington Road. Other developments are just one property further away. This proposal at 30 Redington Road will now provide a further impact on the map and its underlying water and geology.



2. Pile Driving – structural risk to existing residential building at 30 Redington Road .

The proposed construction will require 10 piles of 200 mm diameter to a depth of 12 metres within 1 metre of the existing residential building at 30 Redington Road.

See Structural Engineer’s Report 17.11.2003.

The pile driving to create the new foundations for the proposal is adjacent and below the main side elevation wall of the main structure. This piling is highly likely to cause material adverse impact on the main structure of 30 Redington Road. This may lead to significant structural damage to a major building in a Conservation Area which will require restoration.

The impact of any significant structural damage which would require restoration will be material for the existing residents and owners of 30 Redington Road. This is likely to mean an impact on the ability to occupy the flats directly adjacent (Flats 5 and 3) and the amenity and value of the remaining flats on the other side of the building (Flats 4 and 2).

The application fails to address this issue of pile driving and the weight of the reinforced concrete platform and its effect on the stability and integrity of the main structure. The Structural Engineer's Report 17.11.2003 proposes excavating 2 trial pits and boring two 100mm diameter exploratory holes of 15m. But this has not been done.

There are no detailed up to date plans providing for the construction methods and impact of the proximity of the piling measures and these should be required. Furthermore, undertakings and conditions should be required as part of the planning to ensure that the method of construction safeguards the fabric and integrity of the main building.

3. Pile Driving – risk to subterranean “tanking” protecting the main entrance hall of 30 Redington Road.

The entrance hall of 30 Redington Road lies below the level of the main structure of the building but in close proximity to the proposed construction. When drilling and construction was taking place at no. 26 over 10 years ago, the entrance hall of 30 Redington Road became very damp due to the alteration of subterranean water flows. As a result, there was a significant growth of mushrooms and other fungi. The solution to the problem was that the entire basement area was encased in “tanking”. This was a very considerable construction process. Since that time no problems have developed.

The current proposal will require material pile driving not far from the tanking and as a result is very likely to have an impact on alter the sub terranean water flows. The risk is that the piling and foundations construction may either (a) damage the tanking causing the problems of damp and insanitary funghi growth again or (b) alter underground water flows directing them towards the tanking and basement entrance hall of 30 Redington Road .

The application fails to address this issue of pile driving and its effect on the stability and integrity of the tanking to the basement entrance hall. Detailed up to date plans should be required providing for the construction methods and impact of the piling on the tanking. Furthermore, undertakings and conditions should be required as part of the planning to ensure that the method of construction safeguards the fabric and integrity of the tanking to avoid health risks to the residents of 30 Redington Road.

4. House in Multiple Occupation

The communal areas of 30 Redington Road are registered under HMO reference Misc.Act/052981. No reference is made to the HMO in the application.

5. 50% increase in footprint

The Design and Access Statement provides that the existing floor space of Flat 1 will increase from 123 square meters and will increase by 65 square meters. Also it provides that existing residential garden land will be lost.

A 50% loss of open space, if applied across the whole borough would not be accepted due to the material adverse impact. There is no reason for this to be permitted in this instance.

6. Discrepancies in application

For the sake of good order:

- a) The Tree Protection Plan presented shows 32 Redington road as an adjacent property to the proposal. This is wrong.
- b) The Design & Access Statement para 6.2.4 states “ *Additionally, the kitchen/diner which it serves **already has a roof terrace** overlooking No.30’s garden* “. However, what is described as an existing “**roof terrace**” is an area which is more a balcony, being less than 1.5meters wide protruding from the first floor of a two storey building .

APPENDIX

Structural Surveyor’s report 17.11.2003. Proposes modifications which require extensive pile driving using heavy duty pile driving equipment adjacent to the main structure of 30 Redington Road and the insertion of a concrete sub strata foundation.

It fails to provide any investigation to identify the groundwater regime; nor to identify potential implications; no surface water calculations have been carried out; no structural calculations have been carried out to ensure stability of the existing structure during and after construction work; it has not been demonstrated that ground movements around the piling next to the existing main residential structure at 30 Redington Road will be controlled.

Richard F. Gill & Associates

Consulting Structural Engineers

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STRUCTURAL ENGINEERS REPORT

**Flat 1, 30 REDINGTON RD,
LONDON NW3**

(JOB NO. 03072)

Client: Manoj Bharwani

17 November, 2003

STRUCTURAL ENGINEERS REPORT

1.00 Introduction

This report follows the visual inspection of the property known as 1/30 Redington Rd. NW3, carried out on the 10th October 2003, by Mr I. R. Gill, on the instructions of the owner.

The purpose of the visit was to inspect the existing structure and report on the proposed structural alterations and extension. In particular to address some objections to the proposals raised by other flat owners in the property.

2.00 General

The property is a ground floor flat in a converted three storey house. The third storey is within the roof space. The original house was c.100 years old with solid masonry walls and is considered to be substantially built. We anticipate the foundations to be corbelled brickwork bearing on the ground. There was a two storey rear extension with a roof terrace over constructed c. 30 years ago probably at the time when the property was converted to flats. This is of more modern cavity wall construction. The new foundations are expected to be concrete strip footings.

British Geological Survey sheet No. 256 shows the underlying soil to be near the boundary between the Bagshot formation which is sand and the Claygate beds which are layers of silty sand. These overly the London Clay which is a shrinkable clay susceptible to subsidence. Subsidence in London Clay is usually caused by tree roots withdrawing moisture in drought conditions. We would expect the sandy layers beneath the property to be deep enough (in excess of 3m deep) so that the tree roots will not reach the London Clay and therefore subsidence from this cause would therefore not be a significant risk on this site. We saw no signs of historical distortion or recent cracking that would indicate that the property had suffered subsidence recently or in the past.

3.00 Adjoining owner's objections to the proposed extension.

The owner of flat 5, Mr. Brett Nabarro, has raised objections to the proposed works, which fall into two categories.

- 1 Structural considerations
- 2 Legal liability and restitution.

We shall seek to address these concerns separately as follows:

Structural considerations.

BN has had experience of developing and converting properties and knows that despite using expert surveyors, engineers and competent contractors things can go wrong. Having viewed the proposals he believes that this interference with the existing structure is too great a risk and should be avoided. His contention is that the building is somehow unsuitable, although we believe it to be substantial with thick masonry walls.

In order to address this legitimate concern we have sought to minimise the interference with the existing structure. See revised layout drawings attached.

This has resulted in some minor modifications to the internal layout so that no load-bearing internal walls are removed. The major change is to the master bedroom where the existing wall was previously to be removed to enlarge the bedroom, this brickwork is now left in place so that no structural beams will be required for this area. The openings in the flank wall have been altered so that two existing window openings are used for the two new doors.

There will now be no structural alterations to the original masonry walls of the property.

A single door and a wider double doorway is to be formed in the flank wall to the rear extension. This construction is more modern and therefore is more robust, it is considered capable of being adapted in this manner. There is little load above the opening, a single storey of brickwork enclosing one room. Two steel beams will be designed to minimise any deflection and these will be installed with wedges, shims and dry packing to reduce the initial deflection that can be encountered when the temporary props are removed. We consider the risk of cracking in the wall over is very minor and limited to plaster finishes and skirting joints, structural damage would not be anticipated.

The existing foundations are expected to be on sandy soils. These soils have good bearing capacity and compression due to additional loading is not significant.

The normal design for foundations for the extension would be for concrete strip footings to be formed at the same level as the existing and abutting the existing where perpendicular to the flank wall. The load from the new foundation would have a small effect on the ground beneath the existing footing which could theoretically cause some downward movement of the flank wall and some minor cracking could occur.

In order to remove this risk and satisfy BN's concerns we do not propose to add load from the new construction to the existing walls. It is possible to design the new extension as a "stand alone" structure with a flexible movement joint where it abuts the flank wall. The foundation would be a reinforced concrete raft slab on reinforced concrete piles. The piles are placed away from the existing structure by approximately 1m so they will not interfere with the foundation. These piles 10-15m deep would transfer the new load into soils deep below the existing foundations and the effect on the existing building would be negligible. The cost of this solution is more than traditional strip foundations.

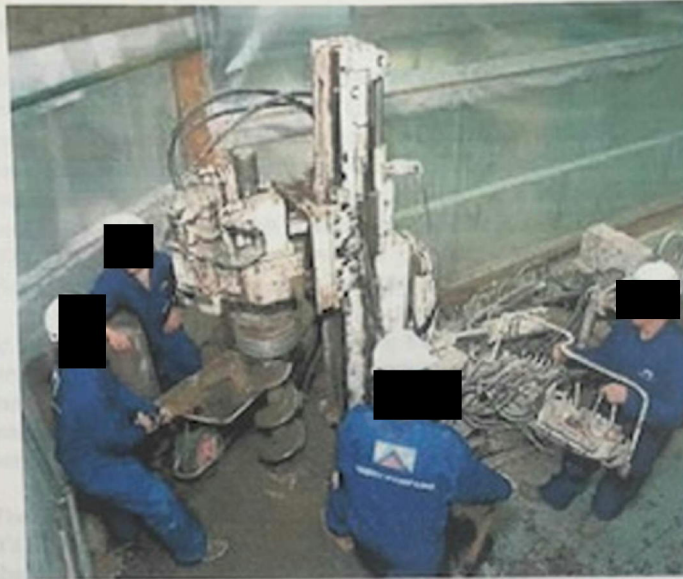
In order to design the new raft and piles for the extension a soil investigation will be required to establish the conditions at this site and the depths of the existing foundations. This involves excavating two small trial pits to reveal the existing foundations and boring two 100mm diameter exploratory boreholes to 15m.

The type of pile would be an augured mini-pile known as a continuous flight auger with a hollow stem. The concrete is pumped down the hollow stem as the auger is withdrawn so that the sand can not collapse into the pile during construction.

The piling rig is quite small, usually track driven and capable of passing through a gate or door opening. It is hydraulically driven and needs a separate compressor to provide the power. Preliminary design indicates 10 No. 200mm diameter piles at approximately 4m centres 12m deep would be required. Installation of the piles including set up and removal from site would be expected to take no more than a week. The largest noise is from the compressor, which can be located away from the rig, the banging that is associated with driven piles is therefore avoided.

Example Piling Rig

The M Trak continuous flight auger rig is suited to restricted access or low headroom situations. It drills 200mm, 250mm or 300mm piles. This small, light rig is highly manoeuvrable on rubber tracks.



Operating height: 2.3m

Piling range: 200mm to 300mm

Maximum depth: 12m (300mm), 14m (250mm) or 16m (200mm)

Weight: 825Kg (tractor) and 500Kg (power pack)

Advantages: Light, manoeuvrable rig with rubber tracks that can be used in restricted access or low headroom situations.

Once the piles have been installed and the drainage adapted the new RC raft is fixed and the concrete poured. It would be possible to pour this slab in a single day using ready mix lorries and a concrete pump, which would be parked in the street in front of the property. This would be quicker and less disruptive to the occupants than using a site mixer.

Once the raft is completed and the openings formed the remainder of the work is straightforward building work.

By adopting this approach we believe the risks to the existing structure from the proposed extension are minimised to such a degree that there should be no reasonable objection on structural grounds.

Legal liability and restitution.

Having taken every possible step to avoid damage what happens if things go wrong? Who is liable for what? Could the directors of the company be negligent? Who sues who? Who pays for what? What if the builder goes bust? How long will the property be blighted? Etc. etc. BN raises these as insurmountable obstacles to agreeing to the proposal but we believe all these concerns are adequately dealt with by the provisions of the Party Wall etc. Act 1996. We will set out below how this procedure works, what protection it affords and how restitution can be guaranteed.

At least two months prior to commencing the works the person carrying out the works (in this case Manoj Bharwani) known as the Building Owner, serves a Party Structure Notice on the Adjoining Owner. In this case as all the leaseholders are also joint owners of the Freehold it would be sensible to serve notice on the Freehold Company.

The Company would dissent from the Notice and appoint a Surveyor to Act on its behalf. This can be anyone you choose and his reasonable fees will be met by the Building Owner. Having appointed a professional surveyor to act on their behalf, it is inconceivable that any of the Company directors could subsequently be considered negligent.

MB would appoint his own Surveyor and these two surveyors would prepare the Party Wall Award which is a legal document setting out what MB is entitled to do. This document importantly contains a schedule of condition prepared by the surveyors which records the present condition and any defects in the property adjacent to the works. In this case the schedule would include all of the rooms on the right hand side flank wall of the property at first and second floors, plus any common parts, driveway, entrance paths, gardens etc.

The Adjoining Owner's Surveyor has the right to employ an independent Structural Engineer to advise him on the Structural aspects of the scheme and again these fees are met by the Building Owner.

When the works are agreed the drawings are included in the Award and MB is not allowed to deviate from the agreed drawings without written consent from the surveyors. Any special conditions such as hours that can be worked, restrictions on the hours when noisy operations can be carried out etc. are included in the Award. The Award is a legal agreement enforceable in the County Court and to fail to comply with it carries serious consequences.

Upon completion of the works the surveyors re-visit the property to check the schedule of condition. If any damage has occurred the scope of this and how it is to be rectified is agreed by the surveyors. Under normal circumstances the contractor carrying out the works would make good any damage and the costs

would be met by the Building Owner. This is not always acceptable to the Adjoining Owner who may want a particular specialist decorator for example. The Act allows the two surveyors to award a payment in lieu of repairs to be made by the Building Owner to the Adjoining Owner.

If the two surveyors can not agree on any of the above, the matter is settled by arbitration with a third surveyor who tends to be a very experienced, senior surveyor who specialises in this field. He is selected in advance by the two surveyors and his name entered in the Award. If he is unable to act when required to do so then a substitute is appointed by the President of the Royal Institution of Chartered Surveyors.

Under normal circumstances this is all that is required to settle any disputes between co-owners of a party wall. However BN has raised further objections relating to the time it could take to settle a dispute if legal remedies should be required. This is very unusual but we have come across it before and it can be dealt with under the Act.

Where an Adjoining Owner feels that there may be insufficient funds to make good damage that may occur, possibly when a developer is carrying out work through a £100.00 limited company and could simply liquidate the company, the Act makes provision for a security for expenses to be provided. This can be a sum of money on deposit in an escrow account or more commonly a bond for such security provided by a bank. This money or bond can be drawn on by agreement of the two surveyors, or if in dispute by the third surveyor, for the purpose of making good damage caused by the works. There is no need to prove liability other than for the surveyors to agree. There is no need to go to court to sue anyone for the money as it is already available to the surveyors. It can not be withdrawn or cancelled by the Building Owner until the conditions of the Award have been satisfied. If the Building Owner subsequently seeks to recover the money from his contractor or professional advisers it has no bearing on the Adjoining Owner and the property will not be blighted whilst this takes place.

MB is prepared to provide adequate security, the amount of which would be agreed between the surveyors but in our opinion should not be less than £500,000.00

4.0 Other considerations

Management Company

Currently BN is a director of the management company and runs this efficiently at minimum cost to the other owners. He intends to resign if the proposed works are agreed to at the vote.

These blocks are normally administered by specialist management companies who would charge an annual fee in the region of £300.00 per flat for this service.

There can be advantages in employing outside managers, you do not feel embarrassed to ask them to do things that perhaps you would feel uncomfortable to ask your neighbour to do. They would also have an office that can be contacted and emergency contractors lined up to deal with problems that might occur.

We know of no complaints about the way BN has managed the block, so to change to a paid professional manager would clearly add to the expenses of the other owners. MB is willing to come to an arrangement regarding the payment of these fees for a period of time, until there would be no conflict of interest if he were to take over these duties himself.

5.00 Conclusions

We consider that the Structural concerns raised by BN have been adequately addressed by re-designing the proposed layout to further reduce the alterations to the existing structure and designing the new construction as a stand alone structure on a piled raft foundation.

There can never be a "Cast Iron" guarantee that no damage to adjacent structures will occur but we believe the risk of serious structural damage is negligible. In our experience even minor damage is uncommon and the worst that could happen in this case is for some minor hairline cracks to appear in the wall or ceiling finishes in the flats above. This would naturally be made good to the satisfaction of the owner at the expense of MB.

We believe the correct way to protect the rights of all the owners is to follow the Party Wall procedure whereby a qualified surveyor acts for the Freehold company.

MB is prepared to supply adequate security for expenses to cover the cost of rectifying any damage that could conceivably occur.

6.00 **Recommendations**

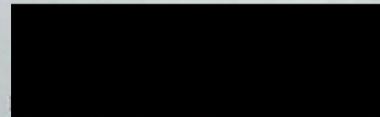
If agreement can be reached to carry out the works a soil investigation should be conducted to allow the pile design to be carried out.

The works will need to be approved by the Local Authority Building Control Department and this approval should be a condition of the licence for alterations to be prepared with the Freehold company.

7.00 **Limitations**

We have not inspected woodwork, damp proof courses, services, foundations except where exposed, or any other part of the structure which was covered, unexposed or inaccessible, and we are therefore unable to report any such part free from defect.

This report has been prepared for the sole use and benefit of Mr. Manoj Bharwani, and the liability of R. F. Gill and Associates shall not be extended to any third party.



For Richard F. Gill and Associates

17 November, 2003