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79 Guilford Street, WC1N 1DF

September 2021

Revision A

Listed Building Consent Application for Works at 79 Guilford Street, WC1N

#### 1.0 Preamble

This statement sets out proposed additional works to the approved Planning and Listed Building Consent at 79 Guilford Street. These applications were granted in July 2020 (ref: 2019/2546/P and 2019/3006/L respectively).

The proposed amendments or variations to the scheme are as follows:

- .01 Replacement joists at 3rd floor level where structurally compromised and additional joists at ground to 2nd floor level
- .02 Omission of external cladding to courtyard walls
- .03 Omission of window opening enlargement to lower ground floor bedroom
- .04 Opening up works to main staircase ceiling
- .05 Opening up works and insulation to external walls on main stair
- .06 Lime rendering to existing party walls
- .07 Widening to existing basement entrance door
- .08 Reinstatement of basement blockwork wall

This document is to be read in conjunction with the following information:

- BUF photographic report
- MNP Structural Statement

#### 2.0 Proposed Works

#### .01 Replacement Joists and Floor Strengthening Works

Prior to the submission of the original planning and LBC applications, it was assumed the floors in the house were in good order as they were flat and level. However, through opening these up it has become apparent that previous efforts to strengthen level the floors were unsuccessful and of extremely low quality.

Whilst the structure at ground to second floors is reasonable, levelling works were shoddy and there remained excessive notching of up to 100mm in places which compromised the floors' integrity. Repair works have been undertaken to strengthen the existing floors whilst retaining the existing structure, with new joists fixed between the existing and properly tied back to the masonry walls.

Joists at third floor were found to be in an especially bad state: they were not supported along the length of their spans as there are no beams or spine walls on the level below, or indeed through the rest of the house. As identified by the structural engineer, these were unsuccessfully repaired in the past with joists doubled up to make beams. The quality of workmanship was extremely poor with makeshift 'beams' do not bear onto the primary structure and have resultantly worsened the deflection, which is up to 100mm in places. A significant proportion of the existing structure at third floor has been replaced with new timber.

Throughout, the original floorboards had previously been removed. Floor coverings are therefore a mix of ply, OSB and softwood planks. None of the floors meet current British Standards for live loads.

As such, listed building consent is sought for:

- Removal and replacement of the 3<sup>rd</sup> floor joists in full and replacement with JJI joists.
- At ground to 2<sup>nd</sup> floor levels, new solid timber joists to be installed between existing joists.

A photographic report is appended to this statement.

#### .02 Omission of external cladding to courtyard walls

The originally approved scheme included for lining of the existing masonry boundary walls in the rear garden area. It is now proposed that the inner skin of blockwork and stone is omitted and the existing masonry is cleaned where brick. Rendered areas to no. 80 would have a small area of approx. 400x400mm stripped back to allow inspection of the brickwork beneath. If original and historic this would be exposed. If not, then the wall will be made good and decorated.

## .03 Omission of proposed opening enlargement at basement level

At planning stage the architectural drawings detailed the widening of the lower ground floor rear double door opening to form a large, modern window. It has now been decided that the opening does not need to be enlarged and it is proposed the opening be retaining and made good, and a new modern aluminium framed window is installed which follows the same logic as the previously approved drawings.



### .04 Opening up works to main staircase lath and plaster ceiling

During construction it became necessary to carry out opening up works when it appeared the staircase had dropped on the winding section between first and second floors. The ceiling was stripped back locally to expose the structure and assess whether there was an immediate health and safety risk. In so doing it has become evident the ceiling was previously opened up and had been overboarded with plasterboard and gypsum skim.

The design team have reviewed the staircase construction. The connections between the winding stringer and straight stringers has begun to come apart and it is therefore proposed to improve the connections here with additional fixings, blocking and brackets to tie the sections together. It is then proposed to close the soffit with lath and lime plaster in line with its original construction.

### .05 Opening up works, insulation and reinstatement of lath and plaster to main stair

During early stage construction a leak was discovered on the staircase. To avoid further damage opening up work took place to expose the pipework. Holes were cut at ground-first floor and first-second floor winder levels, through previously inserted plasterboard and gypsum render which was likely installed during the 2012/13 refurbishment works when an internal RWP was installed. In so doing some areas of dry rot have been found, with some timber studs crumbling away. Finally, as detailed in a separate LBC application, the existing rear wall needs to be tied back into the party walls of the building and access will be required to allow this work to take place.

In tandem with this the clients seek to improve the performance of the building and have an ambition to meet Enerphit standards. In order to do so the airtightness and thermal performance of the building needs to be improved. The applicant therefore seeks to strip back the remaining non-original plasterboard, render the external walls with a lime-based insulative product. Timber studs would be inspected for any further signs of rot and replaced with new where required. Finally, new lath and lime plaster would be reinstated, replacing the non-original and/or gypsum skimmed plaster in place currently.





Image of dry rot on studs

Image of plasterboard lining

### .06 Lime rendering to party walls

Further to the above, the existing party walls have been rendered with lime in order to level out walls that aren't plumb and also to improve airtightness. There was no lath and plaster or lime plaster on these walls as it was stripped out by the previous owner.

### .07 Widening of existing basement entrance door

The applicant also seeks permission to repair the structure above the entrance door to the basement, the lintel of which currently has only 50mm of bearing. Concurrently they propose to remove a non-original nib, widening the door and improving access via the porch. They concurrently intend to re-support the brick arch

of the crossover by installing concrete lintels and generally improve the state of the brickwork in this area. This is thought of as an improvement to the building.



Image of door opening proposed to be widened



Image of door head, non-original lintel and nib

#### .08 Removal of non-original wall at basement level and rebuilding with new blockwork

In the consented scheme, the original wall in the basement was proposed to be retained. Originally it was thought this was an original stock brick wall but it was later discovered to be made of part blockwork, part engineering brick and some original bricks. The wall was not restrained at its head and was unstable. As such the wall was removed. The original bricks have been used to make good other walls that were damaged under previous ownership. As such it is now proposed this wall be rebuilt using blockwork.



Removed wall outlined in red

#### 3.0 Conclusion

Following commencement of works on site, a number of items have been uncovered that could not have previously been anticipated. A number of these led to emergency opening up works to prevent further damage to the property or posed a health and safety risk.

Where this is the case, such as works to the plaster on the staircase, non-original materials are proposed to be replaced with historic materials such as lime plaster. Repair works to rotten timber and other parts of the historic fabric would take place at the same time.

The applicant proposes necessary structural works to the existing floor to protect the remaining historic fabric of the property whilst bringing it into active use and upgrading its structural performance up to today's standards. The proposed, reversible upgrades to the floors will allow the applicant to use the property as a home whilst benefitting the longevity of the heritage asset.

A number of minor changes, such as the omission of garden wall cladding and reduced window opening at lower ground floor level are thought to be reductions in scope with neutral impact, though they involve less work to the listed building fabric.

The applicant proposes a pragmatic approach to enhance the existing structure, retaining existing fabric where possible and replacing where it is not fit for purpose, and the overall effect of the proposals is of benefit to the building.

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# Appendix A - Photographic Report



# <u>Appendix B – Structural Statement</u>

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Our Ref: JL/217337

30<sup>th</sup> June 2021

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Dear Frazer

## 79 GUILFORD STREET LONDON - CONDITION OF EXISTING FLOOR STRUCTURE

Following our inspection of the floor structures at ground - third floor, we confirm the following:

- Generally, the ground, first and second floor joists appear in a reasonable condition although there are many deep notches in the existing joists and the floors have been levelled in the past. The modern workmanship is generally of poor quality.
- The third floor joists are in a poor condition. They span front to back, but have no internal beams or walls, as existing, to break the joist span.
- The majority of the joists at third floor have been replaced with modern timber.
- There is a noticeable deflection of the third floor joists and the floor has been levelled previously. This deflection is up to 100mm.
- A number of repairs and work have been carried out to the third floor joists, including doubling up parts of joists to form beams, but where this has been carried out, the beams don't bear on anything.
- The amount of additional timber installed for levelling has increased the load on the joists, increasing the amount they are deflecting.
- The ground and first floor joists span side to side between the party walls.
- Timber wall plates, the depth of the joists, have been installed tight to the party walls in some locations.
- In other locations, trimmers have been installed, spanning between existing walls and thicker trimming beams, with a nominal (20-30mm) gap between the party wall and back face of the trimmer.
- The second floor joists span front to back, with the original loadbearing wall(s) having been removed.
- At second floor, the front and rear walls step in and there is a wall plate sitting on top of the wall, that appears in a reasonable condition, that supports the existing floor joists.
- Throughout the building a number of the existing structures are not satisfactorily supported and would not meet the loading requirements of BS6399.

With the above in mind, we suggest the following:

Directors | David Mason BEng (Hons) CEng MIStructE MICE | Frank Navarro BSc (Eng) CEng MIStructE | Stuart Pledge BEng (Hons) CEng MIStructE

- 1. The existing joists at ground, first and second floor are in a reasonable condition. A lot of the joists are in need of repair due to excessive notching, and do not provide a live load allowance that is acceptable to today's standards.
- 2. The third floor is in a particularly poor condition and as the load path is unclear due to the amount of poor remedial works previously, we would recommend this floor is replaced in its entirety.
- 3. To provide a higher live load allowance, we suggest laying new joists between the existing at ground, first and second floor. This will keep the existing structure in-situ andis fully reversible.
- 4. At ground and first floor, the joists will sit between the existing, spanning side to side and will be supported on the existing wall plates/trimmers. Where they bear onto the trimmers, we suggest that solid packing is installed behind the trimmers and they are resin bolted into the wall.
- 5. New steelwork will also be installed at these floor levels to reduce the span of the joists.
- 6. At second floor level, we suggest that the new floor joists sit on the wall plate, similar to the existing and they span onto the central steel beam.
- 7. These new joists will be designed for a live load of 1.5kN/m<sup>2</sup> (domestic live load) plus an allowancefor partitions.

I trust the above is clear, however if you require anything further at this stage, please let me know.

Yours sincerely

JAMES LENNON For Mason Navarro Pledge Ltd