Our Ref: 162611

Date: 27th July 2016

By e-mail

Tori MacCabe tori@mw-a.co.uk

Tori MacCabe Marek Wojciechowski Architects 66-68 Margaret Street London W1W 8SR



Form Structural Design

77 St John Street London EC1M 4NN United Kingdom

T: +44 (0) 20 7253 2893 F: +44 (0) 20 7608 0151 E: studio@form-sd.com W: www.form-sd.com

Dear Tori

STRUCTURAL REPORT IN SUPPORT OF PLANNING APPLICATION: 17 EAST HEATH ROAD, HAMPSTEAD, LONDON NW3 1AL, PROPOSED REFURBISHMENT OF GRADE 2 LISTED PROPERTY.

Further to our recent site visit we comment as follows on the structural viability of the proposals contained in the MWA planning drawings and the effect this will have on the listed building.

The planning drawings indicate the following structural works:

1. Proposal: Internal Structural Alteration Works

- Lower Ground floor alterations consist of removal of load bearing masonry to form new or enlarged openings all of which are viable and assuming good practice is followed by a competent contractor these should not cause any significant damage or settlements during the temporary propping and beam insertion stages. Subject to the trial-hole investigations, underpinning of reduced masonry pier sections may be necessary.
- Ground floor structural alterations are minimal with a new doorway being made to the living room off the entrance area stairwell. A precast concrete lintel is likely required here and the installation is not likely to cause any structural issues.
- First floor structural alterations are also minimal with mainly non-load-bearing partitions being demolished. The spine wall door opening into the en-suite bathroom is being widened and this will require the installation of new lintels probably in the form double bolted timbers on new timber stud posts. The existing raised floor is to be removed in the bathroom and the joists will be investigated for size and signs of rot/decay. It is likely the existing joists will require strengthening and doubling up in the bath area.
- Second floor alterations appear to be to non-load-bearing walls and will be investigated before works commence.
- The loft level alterations are non-structural and consist of removal of non-loadbearing stud work in between the existing timber roof truss and this will not cause any structural issues.

2. Proposed Remedial work to Re-level the existing stair-case from Level 1 to 2

• It can be seen that the existing staircase winders have developed a severe cross slope which gives an unnerving feeling as you walk up to the second floor. Subject to further investigation it is proposed to better the situation by jacking up the staircase treads/winders and



strengthening the various joints with the stringer and newel posts. An experienced carpenter will be required and a sympathetic and careful approach will be developed and a detailed method statement will be produced following the investigation.

3. Proposed Glazed Rear Extension

• A lightweight glazed extension is proposed to the rear patio area and this will be designed by a specialist reputable company. The glazed roof will take support of the rear wall and the existing opening will need to have the lintels investigated for the additional load, it is likely they will need to be replaced with suitable. The foundations for the structure are likely to be traditional trench fill foundations which will be designed to suit the parameters of the site investigation.

4. Proposed Landscaping Works

• The existing stair arrangement that leads up to the raised garden level is proposed to be reconfigured and a new feature architectural cantilever stair constructed with a new planter arrangement. It will be proposed that a RC retaining wall is constructed which will retain the soil behind the planter. The construction of the retaining wall should not present too many difficulties to an experienced ground worker. Subject to the trial hole investigation, the garden wall may need to be underpinned to achieve the new levels and this will be addressed in detailed design stages. The underpinning process itself is a fairly simple and traditional approach to achieving lowered levels to ground adjacent to existing foundations and again should not present a problem for an experienced ground worker. The existing planter above the existing breakfast room is also to be removed and the terrace line will be given a neater straightened profile.

Conclusion

It is anticipated that an experienced contractor will be appointed who will work closely with the design team on the required method statements and temporary works submissions that will require review prior to work commencing. FORM SD Ltd are appointed to provide a full service on the project and we shall visit site at key stages to inspect the progress of the structural works. In my opinion, the works shown on the planning submission drawings by MWA are viable and will not cause any significant damage to the existing fabric or structure of the building assuming all good practice and our specifications are closely followed.

FORM SD Ltd have worked on many listed buildings around London over the past 10 years and continue to work closely with architects and contractors to help maintain and modernise with sympathetic solutions the heritage assets we have.

If there any questions on the foregoing then please do not hesitate to call the office.

Yours sincerely

Rob Markovits C.Eng M.I.Struct.E Director



Form Structural Design
Direct Dial: 020 7553 9355
Direct email: robm@form-sd.com