BÜF

A010

79 Guilford Street, WC1N 1DF

Rev-A

May 2021

Listed Building Consent and Non-Material Amendment Application for Roof Structure and Layout and Front and Rear Wall Structural Works.

1.0 Preamble

This statement sets out proposed non-material amendments 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 to the scheme are as follows:

1. Replacement of the existing pitched roof structure
2. Relocation and reduction in sizes of rooflights in pitched roofs
3. Structural strengthening works to tie in the front and rear walls at roofs.

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

- BUF photographic report
- MNP Structural Statement
- A010-A-XX-DR-20-115 Roof Plan As Proposed
- A010-A-XX-DR-20-130 Section AA As Proposed
- A010-A-XX-DR-20-131 Section BB As Proposed

2.0 Pitched Roof Works

Consented Works

The works consented at that stage were:

- Existing spine wall to be removed to allow for proposed plan arrangement
- Existing valley beam to be removed due to its poor condition and to allow for a new roof light
- Existing rafters to be retained where possible
- In areas of the new roof light openings:
    - Existing rafters to be carefully cut and removed
    - Existing roof fabric to be carefully removed
- Existing timber ties and trusses to be replaced with new ceiling joists
- New slate tiles to match style and colour of existing

(BUF Design and Access Statement, p59, 15th May 2019)

Current Condition

Upon further inspection of the roof structure and adjacent parapets, it is now evident that there are areas of structural instability and weakness that need to be addressed. MNP, the project structural engineers, provided the following comments on their initial inspection of the roof:

- The rafters do not appear to be original
- The lack of wall plate to the rear could meaning that the existing rafters are rotten, and will require replacing
- The central pier between the windows at the rear is in a poor condition and requires consolidating. The best way to do this would be to take down the rear section of the roof to allow the brickwork to be locally repaired / rebuilt
- The brickwork between the rafters at the rear also requires consolidating
- The lack of ceiling ties has meant the roof has spread, causing damage to the rear and front walls, but this will be rectified by the installation of the new ridge steel beams
- The front parapet requires repointing as a cementitious mortar was used

- Rear parapet cannot be inspected until the rear scaffold is installed, however, if we replace the rear roof, it is likely this will need to be replaced. The quality of the rear façade suggests the rear parapet could be in poor condition, however we would need to inspect to confirm
- Based on the above we would suggest that the rear section of the roof to be taken down and rebuilt from a structural point of view.

Since then, access has been afforded via a scaffold and it has become clear that much of the roof is in a poor state. The design team have inspected the roof structure and support thereof and found that in addition to the missing wall plate and evidence of timber decay in numerous places, there is evidence of a historic fire towards the front of the building and the existing ridge beams have been damaged by water. Furthermore, numerous rafters have been cut into two or three pieces along their length so are not continuous. They have since been fixed together using battens which is not a satisfactory structural repair.

A photographic report is appended to this statement.

Proposed Roof Works

The applicants purchased the building in 2017. Prior to this the building was poorly kept and in 2013 was subject to extensive, unsympathetic alterations. During that time the owner implemented numerous ineffective measures to try and resolve issues of structural instability which, in many cases, removed or compromised the property's remaining historic fabric. As evidenced by the approved scheme, they wish to undertake a high quality, sensitive restoration to ensure the building remains in good condition for decades to come, and key to this is making sure the fabric is fit for purpose. As such, new proposals are submitted herewith, seeking approval for the following:

- Installation of new steel ridge beams and omission of previously proposed ceiling joists/ties
- Repairs and partial rebuilding of the rear parapet
- Repair and replacement of the existing rafters where necessary*. This includes the replacement of the rear roof pitch in full as poor connections, detailing and maintenance have caused irreparable damage and to enable repair of the parapet wall
- Considering the potential cost implications of the structural rectifications required, the applicant also seeks to reduce the size of the rooflights, which the council have stated would be beneficial to the scheme.
- A small openable hatch has also been included within the valley for safe maintenance access.

*Note: existing timbers will be inspected on site and re-used and fixed alongside new timbers where possible.

Diagrams in Appendix B illustrate the existing, consented and currently proposed arrangements. As can be seen, the principal changes are the introduction of steel ridge beams and reduction in sizes of rooflights.

3.0 Elbow Ties

Due to the severity of the cracking between the front/rear walls and the party walls, there was a need to tie them together as soon as possible to prevent further movement. As the scaffold was not installed to the front or rear, a normal Cintec anchor tying detail could not be achieved safely. Therefore concrete 'elbows' were installed as set out in the structural engineer's statement appended.

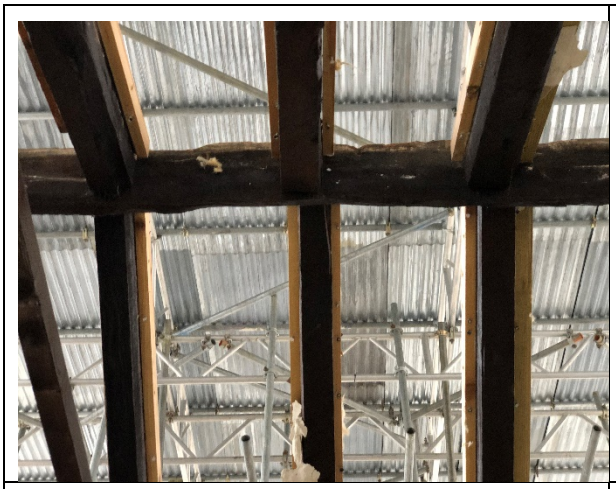
To protect the curved plaster to the staircase, it was suggested that the elbows were not installed to the rear left hand party wall at ground – second floor (with No. 78 Guilford Street) and a Cintec anchor detail will be used once the rear scaffold is constructed. These could also not be installed at ground floor to the left-hand side party wall at the front, next to the front door. A Cintec anchor detail will be used here also.

4.0 Conclusion

Amendments to the rooflights have been discussed with the local authority and were considered an improvement to the scheme. The structural works described within this document are necessary to protect the remaining historic fabric of the property whilst bringing it into active residential use.

As such, it is felt that the benefits of retaining the existing structure are outweighed by the fact this is in a bad condition, posing potential harm to the longevity of the building. The applicant proposes a pragmatic approach to enhance the existing structure, retaining existing fabric where possible whilst unlocking the remainder of the consented scheme, to restore the building in its entirety.

Appendix A - Photographic Report



Ridge beam as viewed from below. Note: beam is very thin and has decayed from the top.

View across roof. Note condition of ridge beam and evidence of previous unsuccessful strengthening measures.

View of rafter with severe cracking.

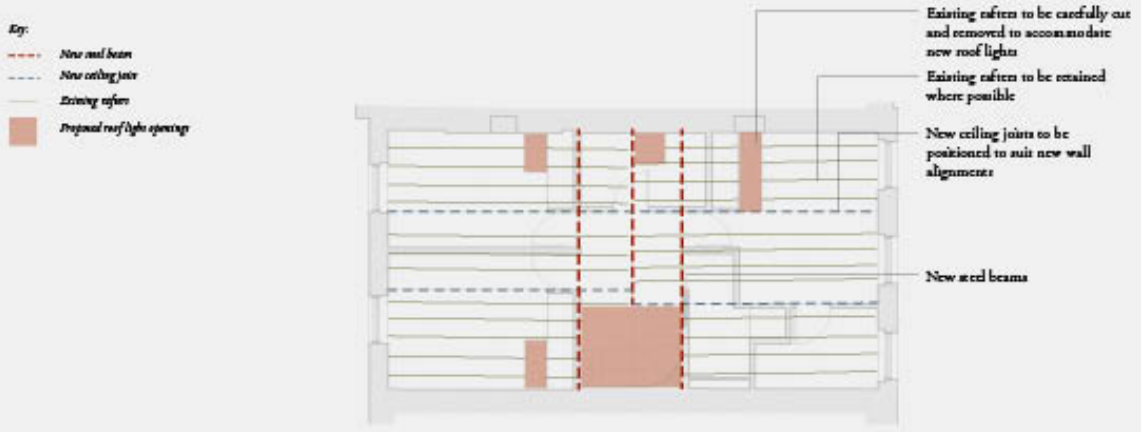
Example of timbers that have been cut into shorter lengths and then fixed back together.

View of ridge beam viewed from roof level.

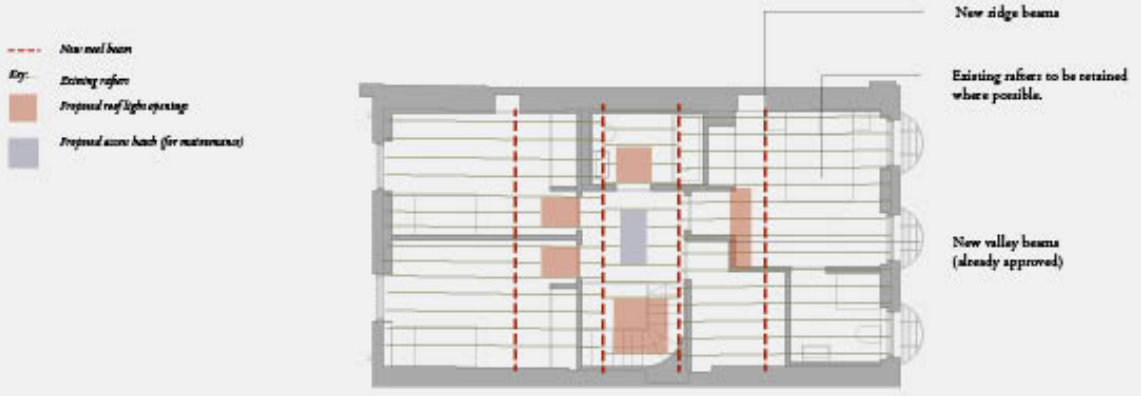
General view of roof.

Appendix B – Roof Structure Diagrams

As Existing



Consented



As Currently Proposed

Appendix C – Structural Statement

Our Ref: JL/217337

29th January 2021

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Dear Frazer

79 GUILFORD STREET LONDON – CONDITION OF EXISTING ROOF STRUCTURE AND FRONT AND REAR FACADES

Following our further inspection of the roof structure, we confirm the following:

- The roof is a butterfly roof that has had substantial work carried out to it in the past, which has had a detrimental affect to the roof and wall structure.
- It would appear that the rafters are not original.
- The roof is generally in a poor structural condition.
- A butterfly roof would normally have ceiling tie present to prevent roof spread, which have been previously removed.
- This has led to the roof structure spreading, causing the front and rear walls to lean away from the building.
- This, along with the lack of tying between the floors and front and rear walls, had led to cracking between the party walls and front and rear walls.
- There were large cracks present at most floor levels at the junction between the party walls and front/rear walls, some of which were over 50mm wide.
- The front parapet, whilst leaning forward, appeared in a reasonable condition and consolidated, however the rear wall, at high level above the lintel line is in a poor condition, with loose bricks present.
- The pier between the two windows at third floor level in the rear wall was also in a poor condition.
- There was no wall plate present for the rafters sitting on the rear wall.
- The ends of a number of these rafters were rotten.
- A number of the existing rafters in the front section of the roof had been cut and spliced together with timber battens screwed to the side of the joists.
- The ridge boards to both sections of roof were small and were in a poor condition.
- A few of the rafters to the front pitch appeared to have been fire damaged in the past.

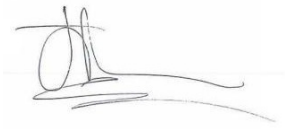
With the above in mind, we suggest the following works are required to make the roof structurally sound:

1. Install a ridge beam to the front and rear sections of the roof and physically fix all rafters to these, to prevent further roof spread.
2. New steelwork is to be installed at the ‘knee’ between the pitched and flat roof sections of the roof, to adequately support both the inclined members and flat roof joists.

3. Make good the rear wall above lintel level and consolidate the pier between the windows. We would suggest that the brickwork above the lintel is beyond repair and should be carefully taken down and rebuilt, reusing the existing bricks where possible. It is possible that the pier will also need to be rebuilt (we will need to inspect the pier in detail once the rear scaffold is constructed).
4. New precast concrete lintels should be installed to the internal face of the rear wall, over the windows at third floor level, with a brick arch to match existing installed to the external face.
5. For these works to be carried out, it is likely that the rear section of roof will need to be taken down. As the rafters are not original and in a poor condition, we would suggest that a number of the rafters are beyond repair and should be replaced when the rear section of roof is rebuilt.
6. Due to the severity of the cracking between the front/rear walls and the party walls, there was a need to tie them together as soon as possible to prevent further movement.
7. As the scaffold was not installed to the front or rear, a normal Cintec anchor tying detail could not be achieved safely.
8. Therefore concrete 'elbow's were installed as follows:
    - Ground floor – 3No. per corner (on party wall with No 80 only).
    - First floor – 3No. per corner (to three corners, see note 10 below).
    - Second floor – 2No. per corner (to three corners, see note 10 below).
    - Third floor – 2No. per corner (to three corners, see notes 10, 11 below).
9. To protect the curved plaster to the staircase, we suggested that the elbows were not installed to the rear left hand party wall at ground – second floor (with No. 78 Guilford Street) and a Cintec anchor detail will be used once the rear scaffold is constructed.
10. These could also not be installed at ground floor to the left hand side party wall at the front, next to the front door. A Cintec anchor detail will be used here also.

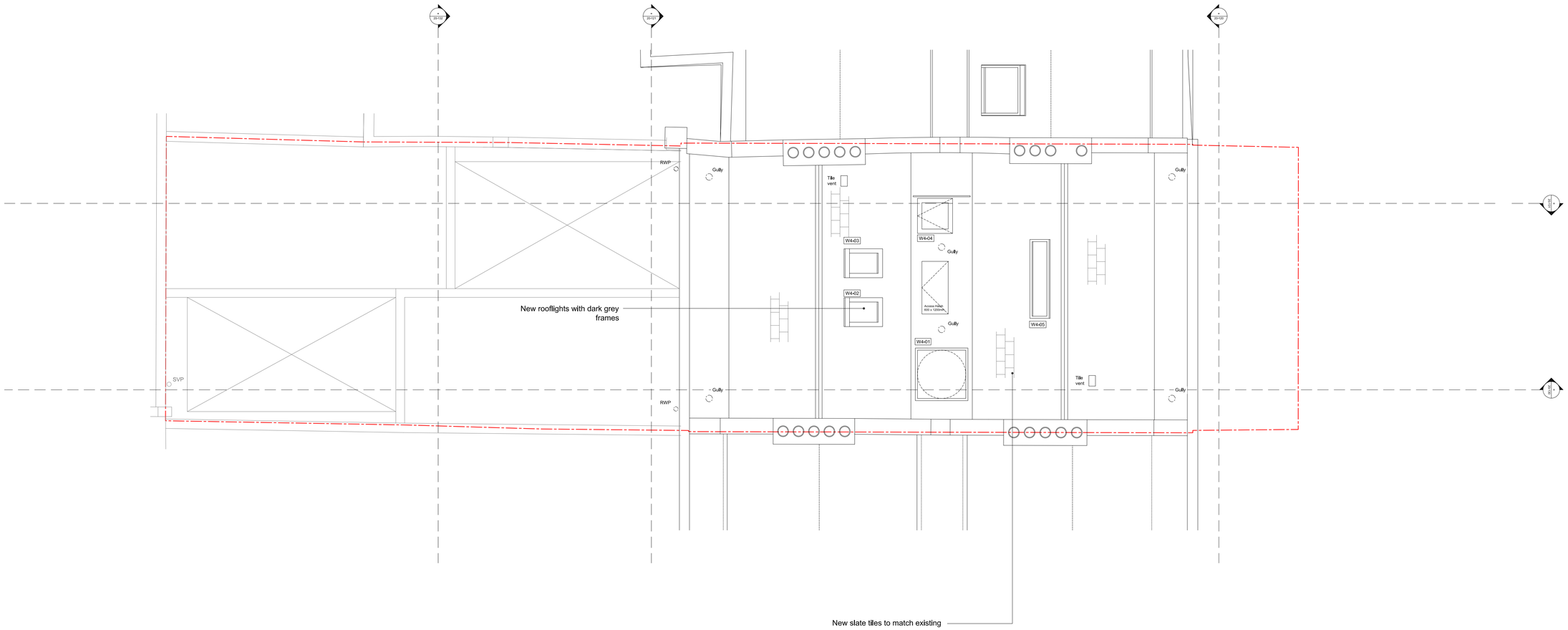
I trust the above is clear, however if you require anything further at this stage, please let me know.

Yours sincerely



JAMES LENNON
For Mason Navarro Pledge Ltd

Appendix D – Architectural Drawings



General notes:

Do not scale from drawings.
Errors to be reported immediately to the Architect.
To be read in conjunction with all relevant Architects', Services and Structural Engineers' drawings.
All existing site, tree and building information has been compiled from different sources.
All dimensions to be checked on site.

Comments:

All existing windows including timber shutters to be refurbished where required and secondary glazing installed where possible

Existing staircases to be retained and refurbished

Key:

Site Boundary

Rev.	Date	Description	Drawn	Check

Rev.	Date	Description	Drawn	Check
C	27.05.21	ASHP omitted for NMA	FH	
B	29.01.21	Planning Amendments	FH	NF
A	05.09.19	Planning Amendments	HK	NF

Key Plan

0 0.5 1.0 2.0m

BÜF

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Project
79 Guilford Street
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Drawing name
As Proposed
Roof Plan

Client
Andrew and Romain

Date 10.12.18
Scale / Format 1:100 @A3 1:50 @A1
Drawn / Checked XX / XX
Approved XX

Project number
A010

Status
PLANNING

Job no.	Source	Zone	Element	Drawing no.	Revision
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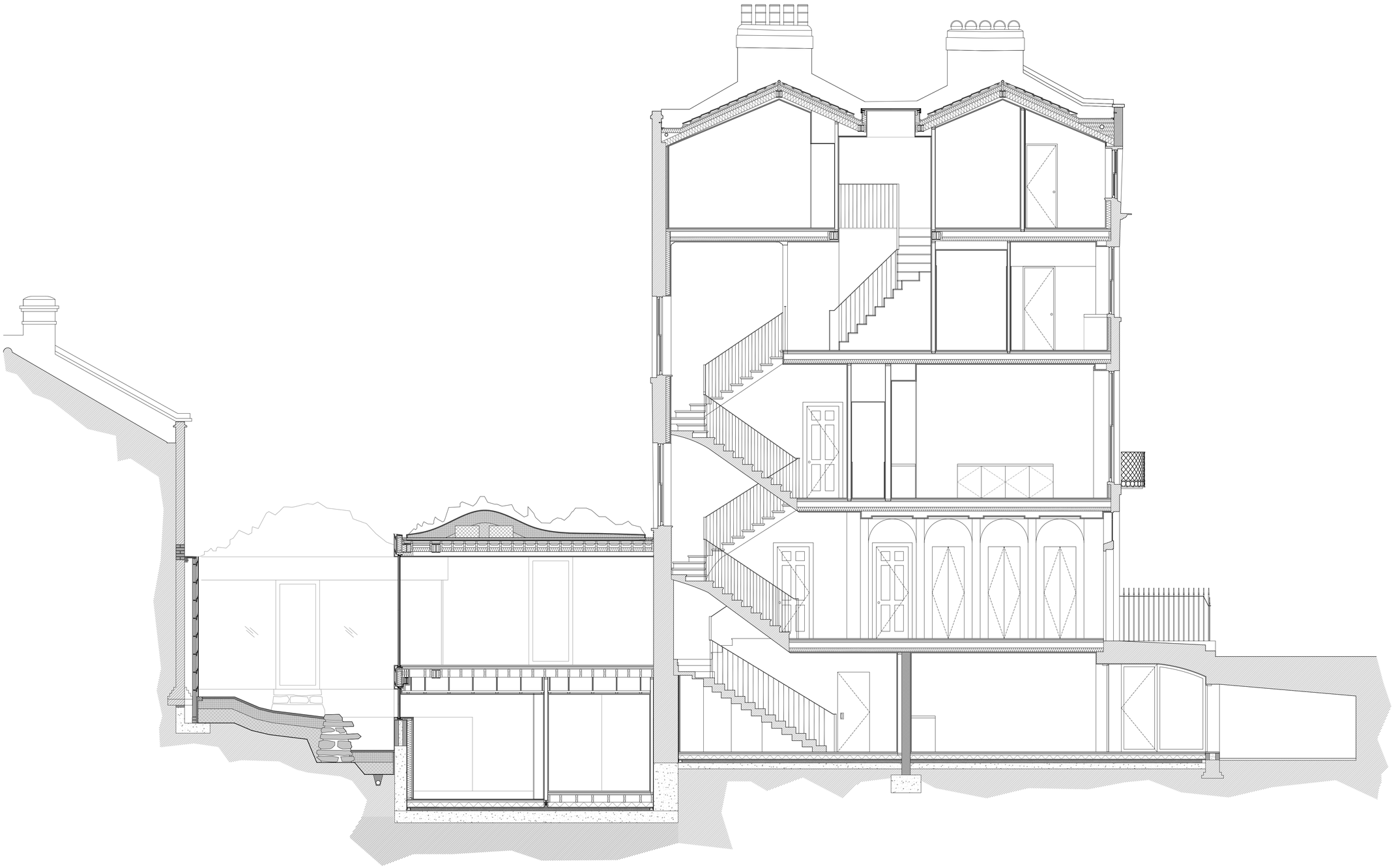

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Comments:

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Existing staircases to be retained and refurbished

Any amendments to the planning approved scheme to be agreed and approved by the Local Authority

Refer to drawings for 42-001 & 42-002 for typical wall (WT) and floor type (FT) locations

Key:

Site Boundary

Rev.	Date	Description	Drawn	Check
D	27.05.21	Planning Amendments	FH	
C	29.01.21	Planning Amendments	FH	NF
B	05.09.19	Planning Amendments	HK	NF
A	27.08.19	Planning Amendments	HK	NF

Key Plan

0 0.5 1.0 2.0m

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Project
79 Guilford Street
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Client
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Status
PLANNING

Drawing name
As Proposed
Section AA

Date 10.06.19
Scale / Format 1:100 @A3 1:50 @A1
Drawn / Checked XX / XX
Approved XX

Project number
A010

Job no.	Source	Zone	Element	Drawing no.	Revision
A010	A	XX	DR	20-P130	D

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Site Boundary

Rev.	Date	Description	Drawn	Check
C	29.01.21	Planning Amendments	FH	NF
B	05.09.19	Planning Amendments	HK	NF
A	27.08.19	Planning Amendments	HK	NF

Key Plan

0 0.5 1.0 2.0m

BÜF

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Project
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Client
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Status
PLANNING

Drawing name
As Proposed
Section BB

Date 10.06.19
Scale / Format 1:100 @A3 1:50 @A1
Drawn / Checked XX / XX
Approved XX

Project number
A010

Job no.	Source	Zone	Element	Drawing no.	Revision
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