PURCELL

24 Heath Drive, Hampstead

Heritage Statement, Proposed Changes to Roof Structure

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1.0 Background

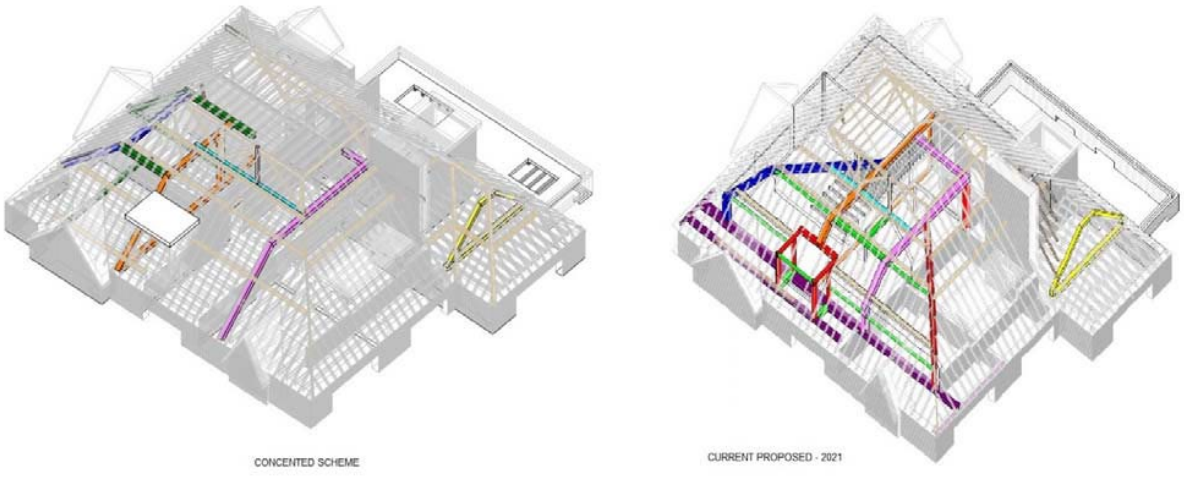
24 Heath Drive is a Grade II listed property located in Hampstead, London. Designed by the architect Charles Quennell in 1907, it is in the Neo-Georgian style, built of red brick with tiled hipped roofs and timber sliding sash windows.

Planning and Listed Building Consent have been granted for alterations to the property. However, following commencement of works on site and opening up work, it has become apparent that assumptions made regarding the load paths through the building and the capacity for some existing walls to carry loads are incorrect and the design of supporting steelwork to the roof has had to be modified.

This note considers the impact of the proposed changes from a heritage perspective, providing an outline of the changes, the reason for these, the impact of the change and some discussion of mitigating measures to reduce the overall impact of the changes.

This report should be read in conjunction with Design Note DN-S-001 prepared by Form structural engineers.

2.0 Revised Design



Consented scheme (left) and revised proposals (right)

The proposed changes are presented and considered in the schedule below:

Item	Element	Reason for change	Impact of change	Mitigating measures/ circumstances
1	Rear roof triangular frame (yellow frame)	No change	N/A	N/A
2	Rear roof retention of joists	Increased retention of historic fabric (timber joists and plaster ceilings)	Positive impact	Retention of joists increases overall amount of retained fabric including timber joists and plaster ceilings
3	Main roof; steel beams within floor zone of floor 2 (orange frame)	Increased retention of historic fabric (timber joists and plaster ceilings)	Positive impact	Retention of joists increases overall amount of retained fabric including timber joists and plaster ceilings
4	Framing to dormer	Relocation of main orange steel to line through with load bearing wall below	Negligible impact; dormer structure is retained as existing with steels inserted within existing supports	Insertion of frame enables proposed steels to 2nd floor to be omitted (see item 3 and 5)
5	Main roof; steel beams relocated to	Relocation of steel to unseen area enables retention	Positive impact	Retention of joists increases overall amount of retained

	eaves roof void (purple frame)	of historic fabric (timber joists and plaster ceilings)		fabric including timber joists and plaster ceilings
6	Main roof; steel beams relocated to sit alongside hip (green and blue steels)	Improved support to hipped area of roof and to facilitate removal of steels within joist zone of 2nd floor (see	Positive impact	Relocation enables removal of steels to 2nd floor plate (see 3) and retention of timber joists and plaster ceiling (see 4). Relocation of steel reduces the overall amount of steel in this location. The existing hipped roof timbers are retained. The steels will not be visible in the completed scheme since they will be covered by a ceiling.
7	Main roof; tie beams (green)	Improved lateral support to main roof	Negligible impact	Inserted as a result of detailed analysis following opening up. Provides additional stability to original roof. Tie beams connect between steels and do not require loss of existing timber rafters. Tie beams will not be visible in the completed scheme since they will be covered by a ceiling.
8	Main roof; (pink beam) section extended to meet orange beam	Relocation of main orange steel to line through with load bearing wall below	Negligible impact	Beam extended as a result of the relocation of the orange beam to line through with existing load bearing walls and maintain existing load paths. Extension of the steel does not require the loss of any existing timber rafters. The beam will not be visible in the completed scheme since they will be covered by a ceiling.

3.0 Conclusion

The changes to the roof steel design are required as a result of design development allied with an increased level of investigation of site as a result of the commencement of works on site since the original approval.

Although at first glance this appears to increase the overall amount of steel within the roof, more detailed analysis reveals that many of these elements remain as the original proposals or are as the original design but simply relocated to respond to the original load paths within the building. This maintains the continuity of historic fabric and the original design ethos.

In some instances the overall amount of steel has been reduced (dark green and blue steels) where the dark green steels have been omitted completely. The relocation of the orange frame has enabled the omission of steels within the 2nd floor joist zone, enabling the retention of original timber joists and plaster ceilings, minimising intervention to this area considerably and maximising the retention of historic fabric.

Elsewhere, in recognition of the importance of historic fabric and a desire to further refine the design with regards to its' retention, the area of floor joists to the rear roof and corresponding ceiling below have been retained in its entirety. This represents a heritage gain.

Where additional steel has been introduced, such as the purple beams at 2nd floor level and the green tie beams, these do not require the removal of historic fabric and are located within 'unseen' areas such as the eaves void or ceiling void. These elements will not be visible in the completed scheme since they will be hidden by ceilings.

The proposed changes are necessary as a result of site discoveries. On balance, the relocation of structural elements has either resulted in the reduction of the overall amount of steel or the increased retention of historic fabric through timber joists and plaster ceilings. The opportunity has also been taken to offset any changes with further heritage gains by retaining joists and ceilings outside of the areas of change. Where introduced, new steels are in 'unseen' areas and do not involve an increased level of disturbance to historic fabric and will not be visible in the completed scheme. Overall, it is considered that the impact of the revised proposals is negligible, and on this basis, it is respectfully requested that they be granted consent.

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