



RESIDENTIAL REFURBISHMENT 17-19 EBBSFLEET ROAD, LONDON NW2 3NB

DESIGN & ACCESS STATEMENT

LIVING ARCHITECTS – AUGUST 2020, Rev 1

Table of Contents

1. INTRODUCTION2

2.THE SITE AND SURROUNDINGS2

3. HISTORY AND USE OF THE SITE2

4. THE CONDITION OF THE BUILDING4

5. FEASIBILITY STUDIES.....5

6. THE PROPOSED DESIGN7

7. ENERGY & SUSTAINABILITY STATEMENT.....8

8. BICYCLE STORAGE.....9

9. REFUSE & RECYCLING STORAGE.....9

1. INTRODUCTION

This Design and Access Statement is prepared in support of proposals for the refurbishment of an existing two storey building to provide 4 flats, to replace 6 sub-standard flats within the same building footprint and to maintain the same external envelope as the existing building.



Fig.1. The site in August 2018



Fig.2. The front elevation in October 2019

2. THE SITE AND SURROUNDINGS

The site is located at Weir House, 17-19 Ebbsfleet Road, London, NW2 3NB and lies within the London Borough of Camden.

The site does not comprise of any statutory or locally listed buildings and is not located in a conservation area.

Pedestrian access is from the street only. There is no vehicular access to the site, and no changes are proposed in this regard.



The site area is 0.044 hectares.

The site has a Public Transport Accessibility Level 5 (PTAL), a measure which rates locations by distance from frequent public transport services, of 0 where PTAL 6b is the highest level of accessibility and 0 is the lowest level of accessibility.

The existing building was constructed in about 1890 and would originally consist of two separate semi-detached houses.

The architecture is almost identical to the other houses in the street and is quite typical for houses constructed at the time in London.



Fig.3. Street View

3. HISTORY & USE OF THE SITE

The site was purchased by the client in 1973. Planning permission was granted in May 1988 for a change of use to provide 6 self-contained dwelling units including works of conversion rebuilding the rear extension and the installation of two new dormer windows at the rear.

The building has been vacant since March 2019 and is currently occupied by Property Guardians who provide security.

The



Fig.4. The rear of the building



Fig.5. The rear of the building

The windows in the building are old UPVC windows in a timber subframe.



Fig.6. The building and adjacent property



Fig.7. The building, garden and adjacent property looking NW



Fig.8. The building, garden and adjacent property looking SE



Fig.9. The building, garden and adjacent property



Fig.10. The garden and adjacent property looking S

4. THE CONDITION OF THE BUILDING

The enclosed photographs show that the building is in a generally poor condition and in need of comprehensive refurbishment.

The internal fixtures and fittings are in a very poor condition.



Fig.11. A bedroom



Fig.12. A kitchen

The staircase balustrade requires repair and upgrading to meet Building Regulations.



Fig.12. The staircase

The ground and 1st floors of the building appear to be of timber construction, but it is not known if there are any defects such as dry rot, wet rot, or woodworm infestation, but having regard to the age and condition of the property this seems quite likely.

The condition of the roof is not known. There is no sign of any roof insulation. It seems likely that roof slates will need to be re-laid on a modern vapour permeable membrane and a system for ventilating the roof voids will be required. Gutters are defective and will need to be replaced.

The windows in the building are old UPVC windows in a timber subframe and are not in good condition. They will require to be replaced with new windows meeting Secured by Design standards and modern thermal insulation standards.

The external doors will require to be replaced with new doors meeting Secured by Design standards and modern thermal insulation standards. Internal doors in the building are in a poor condition and will need to be replaced to meet Building Regulations fire resisting standards and sound insulation standards.

The existing heating system looks to be very old and there is a missing boiler and at least one badly damaged radiator. A new heating system will almost certainly be required.

The electrical systems in the building look antiquated and almost certainly require complete re-wiring and replacement.



Fig.12. A bathroom



Fig.13. External render showing defects



Fig.14. External render showing defects

The external walls show a number of cracks in the render and other render defects. There is also sign of dampness on the brickwork probably caused by defective gutters.

Surveyors acting for NHG noted that there is a pronounced water leak in the hallway.



Fig.15. External brickwork showing damp defects

5. FEASIBILITY STUDIES

Living Architects produced a number of feasibility design options. Two of these are illustrated below.



Fig. 16 OPTION 1 Ground Floor Plan

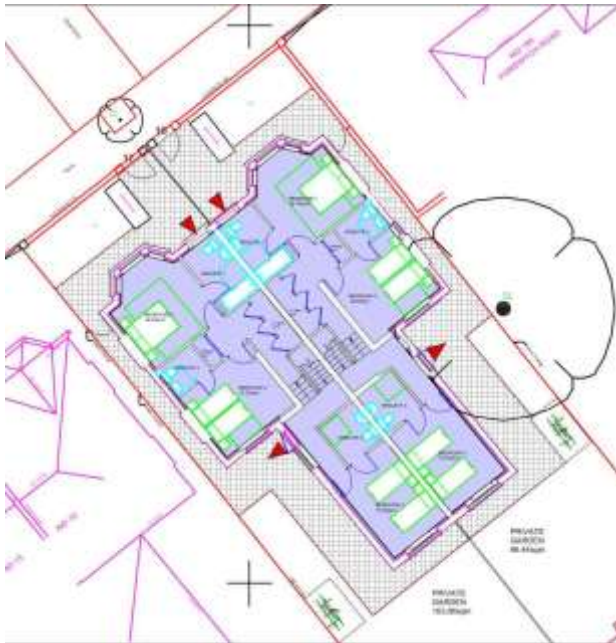


Fig. 17 OPTION 1 1st Floor Plan

Feasibility Option 1 provided 2 No. 4 bedroom 8 person houses:-
House 1. 150.7 sq metres.
House 2. 152.6 sq metres.



Fig. 18 OPTION 2 Ground Floor Plan



Fig. 19 OPTION 2 1st Floor Plan

Feasibility Option 2 provided 4 No. 2 bedroom flats:-
Flat 1. 61.6 sq metres. 2 bedroom 3 person flat.
Flat 2. 60.3 sq metres. 2 bedroom 3 person flat.
Flat 3. 70.8 sq metres. 2 bedroom 3 person flat.
Flat 4. 69.5 sq metres. 2 bedroom 3 person flat.



Fig. 20 Existing Ground Floor Plan

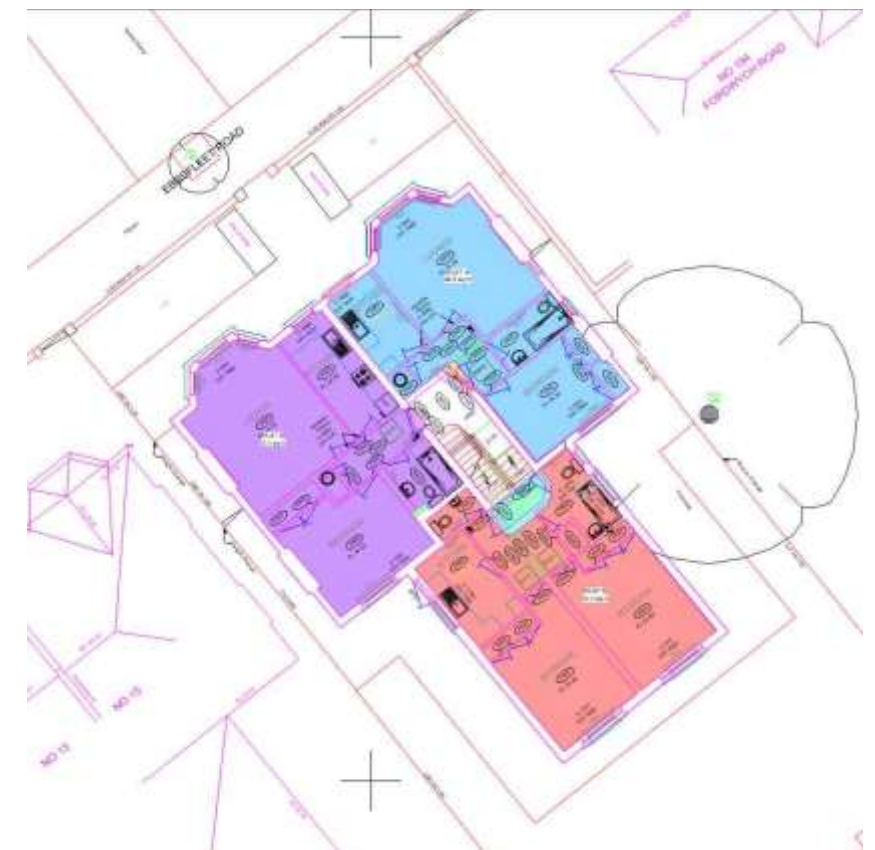


Fig. 21 Existing 1st Floor Plan

The existing building contains 6 flats. The gross internal floor areas (GIA) are noted below:-

Flat 1. 38.2 sq metres. 1 bedroom 2 person flat.

Flat 2. 50.7 sq metres. 1 bedroom 2 person flat.

Flat 3. 53.7 sq metres. 1 bedroom 2 person flat.

Flat 4. 44.3 sq metres. 1 bedroom 2 person flat.

Flat 5. 51.1 sq metres. 1 bedroom 2 person flat.

Flat 6. 51.1 sq metres. 1 bedroom 2 person flat.

Flats 1 and 4 fall well below the current nationally described space standards.

Current nationally described space standards are as follows:-

1 bedroom 1 person flat. 39 sq metres. (37sq m if shower only).

1 bedroom 2 person flat. 50 sq metres.

2 bedroom 3 person flat. 61 sq metres.

2 bedroom 4 person flat. 70 sq metres.

4 bedroom 8 person flat. 117 square metres.

If 100mm insulated plasterboard is added to the external walls to provide the same thermal insulation standards, the GIA of each flat would be reduced as follows:-

Flat 1. 36.7 sq metres. 1 bedroom 2 person flat. (non-compliant)

Flat 2. 48.6 sq metres. 1 bedroom 2 person flat. (non-compliant)

Flat 3. 51.8 sq metres. 1 bedroom 2 person flat. (compliant)

Flat 4. 42.8 sq metres. 1 bedroom 2 person flat. (non-compliant)

Flat 5. 49.5 sq metres. 1 bedroom 2 person flat. (non-compliant)

Flat 6. 49.2 sq metres. 1 bedroom 2 person flat. (non-compliant)

Refurbishing the existing flats would therefore result in all but Flat 3 falling below the nationally described space standards.

All attempts to design 5 or 6 flats that were viable resulted in failure. The conclusion was reached that it would not be viable to provide 5 or 6 flats within the constraints of the external fabric because of lack of adequate space in the existing building, and the constraints of the existing external walls. An extensive roof extension would be required to accommodate five flats.

Feasibility Option 1 considered re-converting the building to provide 2 houses. This would result in 2 no. 4 bedroom 8 person flats. These would each be over 30 square metres larger than required by the nationally described space standards, and would be an inefficient use of space. NHG Housing Association do not require 4 bedroom 8 person houses.

Feasibility Option 2 is one of several other options that were considered. It was agreed that the only other viable options were ones where there would provide 4 flats. Option 2 was the preferred option because the two upper floor flats would not share a staircase with other flats.

6. THE PROPOSED DESIGN

The proposed design is based on the feasibility option 2. The design maintains the external fabric of the building, with only repairs and very minor alterations carried out. The proposed external appearance of the building will be almost exactly the same as the existing building. The original entrance doorway to flats A and C will be reinstated to match the original design, and mirror the existing entrance. The front door design will however be changes and composite doors meeting the secured by design PAS24 standard will be used.

The materials of the building will be existing brickwork repaired and re-pointed where necessary, white render, repaired and replaced where necessary, and a slate roof repaired and replaced only if necessary using similar roofing materials. It is proposed that new windows will be white upvc in a timber subframe. They will meet the Secured by Design PAS24 standard and incorporate opening vents to meet building regulations and match the existing windows as far as reasonable.

The proposed gross internal floor areas are as follows:-

Flat A. 60.4 sq metres. 2 bedroom 3 person flat.

Flat B. 61.7 sq metres. 2 bedroom 3 person flat.

Flat C. 69.6 sq metres. 2 bedroom 3 person flat.

Flat D. 70.8 sq metres. 2 bedroom 3 person flat.

The proposed gross external areas of the whole building are:-
178.9 square metre ground floor. 181.2 square metres first floor.
Total GEA. 360.1 square metres.

The proposed gross internal areas of the whole building are:-
155.4 square metre ground floor. 157.1 square metres first floor.
Total GIA. 312.5 square metres.

The total GEA of the existing building is 361.3 square metres.

The total GIA of the existing building is 323.9 square metres.

The ground floor flats will avail of the existing private gardens in the development in-line with existing arrangements.

The proposed design also re-configures the refuse storage areas at the front of the building to better utilise space and make them less intrusive. The existing street boundary wall will be partly raised to more effectively screen the refuse and recycling containers from the street.

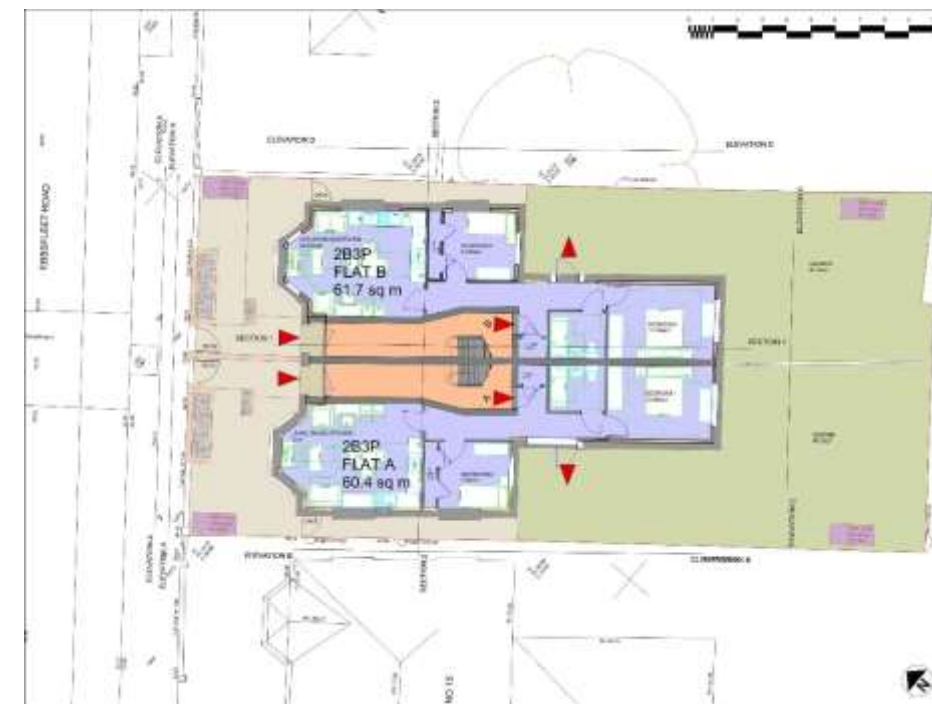


Fig. 22 Proposed Ground Floor Plan



Fig. 23 Proposed 1st Floor Plan

The proposed ground floor flats A and B will be wheelchair accessible and designed to meet the Category 2 standard for accessible and adaptable dwellings as required in Building Regulations Part M.

It has unfortunately not proved possible to provide level access on the 1st floor because the rear of the building has a floor which is significantly lower than the front part of the building and the headroom in the rear part of the building is low. Providing a level floor would require raising the walls and roof as well as the 1st floor at the rear. This is not considered acceptable as this would reduce daylight to adjacent properties which have some windows on the side elevations. Instead there will be a short flight of stairs in each of the 1st floor flats designed to accommodate a stair left if this is required.

Despite the difference in floor levels the new bathrooms on all floors will meet the Part M Category 2 standard for accessible and adaptable dwellings. The internal layouts, on all floors will have corridors and door widths meeting the Category 2 standard.

7. ENERGY & SUSTAINABILITY STATEMENT

Camden require an energy statement for all development involving five or more dwellings and/or more than 500 sq m GIA floorspace. In this instance the proposals fall well below this threshold. An energy statement is therefore not required, but energy use is discussed below as part of the Sustainability Statement.

7.1 Resource efficiency

The Key messages in Camden's Planning Guidance Energy Efficiency and adaptation Section 9 Resource Efficiency states:-

Proposals for substantial demolition should be justified in terms of the optimisation of resources and energy use, in comparison with the existing building.

Where demolition cannot be avoided developments are expected to divert 85% of waste from landfill

The proposed design will retain external walls and internal party walls. It also will aim to retain as much of the ground and 1st floor timber construction as is possible. It also aims to retain the roof as much as possible. Works will be subject to a detailed structural and condition survey.

Because the existing building structure is being retained there will be very little waste needing to be diverted from landfill.

7.2 Energy Hierarchy

The Key messages in Camden's Planning Guidance Energy Efficiency and adaptation Section 9 Resource Efficiency states:-

All Development in Camden is expected to reduce carbon dioxide emissions by following the energy hierarchy in accordance with Local Plan policy CC1.

Energy strategies are to be designed following the steps set out in the energy hierarchy.

The Energy hierarchy prioritises lower cost passive design measures such as improved fabric performance over higher cost active systems such as renewable energy technologies.

7.3 Energy efficiency in existing buildings

The Key messages in Camden's Planning Guidance Energy Efficiency and adaptation Section 8 Resource Efficiency states:-

All developments should demonstrate how sustainable design principles have been considered and incorporated.

Sensitive improvements can be made to historic buildings to reduce carbon emissions.

Warm homes and buildings are key to good health and wellbeing. As a guide, at least 10% of the project cost should be spent on environmental improvements.

The 20% carbon reduction target (using on site renewable energy technologies applies for developments of five or more dwellings and/or more than 500 square metres of any gross internal floorspace.

7.4 Energy Efficiency Design Proposals

The proposed design therefore seeks to provide the maximum acceptable insulation in the roof, walls, windows, and ground floor construction.

It is proposed that the roofs/loft spaces will be insulated with 300mm of insulation materials. Whilst resource efficiency would indicate a preference for retaining the existing roof materials, a detailed structural and condition survey might require the slate roof finishes to be re-laid. If this is deemed appropriate it is proposed to replace any roofing felt with a vapor permeable roofing membrane which will make the roof more airtight and reduce roof void ventilation heat losses.

It is proposed that works to the external fabric such as replacing windows and external doors will make the building much more airtight. This will substantially improve the energy performance.

It is proposed that external walls will be insulated. It is not feasible to put insulation on the outside of the building, nor would this be sensitive to the historic character of the street. It is therefore proposed that walls will be lined with insulation and plasterboard finish on the inside with an average thickness of 100mm. This will result in loss of floorspace of between one and a half and two square metres per flat.

It is proposed to add insulation between ground floor timber joists. It is assumed that this will be about 150mm thickness PIR insulation or similar high performance material.

It is proposed that all windows will be replaced with high performance windows and glazed external doors with thermally broken double glazing units filled with inert gas and low emissivity glass.

It is proposed that the photovoltaic panels will be laid over the existing roof slates where this would be beneficial. It is believed this would only be sensible on the south-west facing roof slopes, which is the only roof slope where there would be meaningful amounts of sunlight.

It is proposed that the existing gas boilers will be replaced with a heating system utilising air-source heat pumps. The condenser units would need to be located in the gardens.

It is proposed that all lighting will use high efficiency LED lighting fittings.

8. BICYCLE STORAGE

It is proposed that each flat will be provided with a low profile external storage unit meeting Secured by Design standards. These will be located in the rear gardens of the ground floor flats and in the front garden area of the 1st floor flats.

Fig 26 and 27 illustrate the suggested “protect a Cycle” storage units. Each one can house two adult and one child sized bicycle.



Fig. 24 Trimetals bike box



Fig. 25 Trimetals bike box

Protect a Cycle™ has been tested and certified by the Loss Prevention Certification Board and awarded the LPS1175 Security Rating 1 and in addition has achieved the Police SBD mark (Secure By Design) “Preferred Police Specification.”

For further information please go to <https://www.trimetals.co.uk/product/metal-bike-storage/>

Additional secure storage space for visitors bikes can be provided in the rear gardens. Visitors to the upper floor flats will be able to lock their bikes to a steel hook fixed to the brick boundary wall or to a concrete plinth next to it.

9. REFUSE & RECYCLING STORAGE

It is assumed that refuse recycling materials will be kerbside collections. The layouts therefore indicate the following:-

- 4 No. 240 litre wheelie bins for general refuse.
- 4 No. 140 litre wheelie bins for mixed dry recycling.
- 4 No. 23 litre food waste caddies.