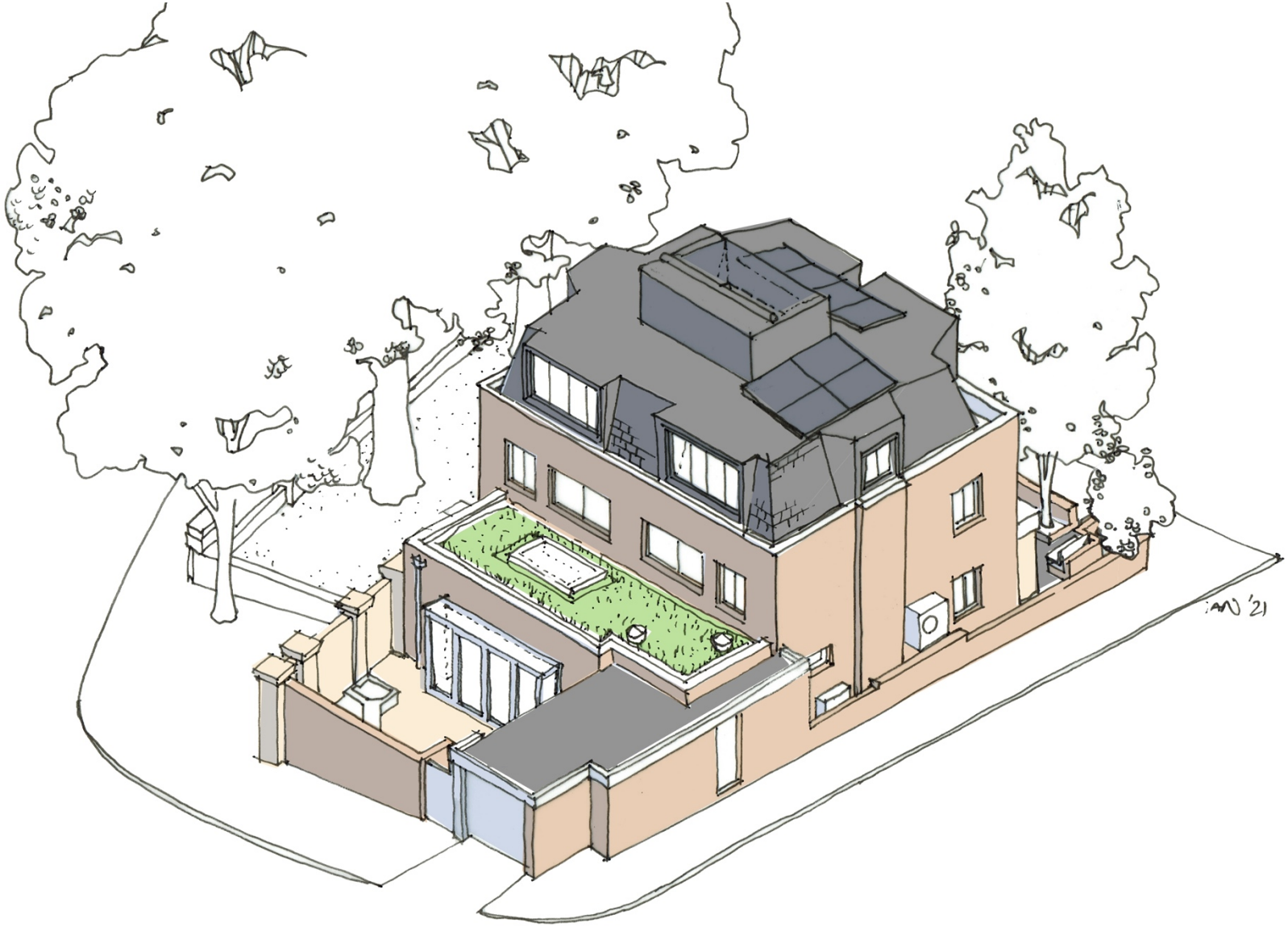
Design and Access Statement



Project Title:
Extension and Refurbishment of 2 Vane Close, NW3

Job Number:
2004

Client:
Dr. Wui Khean Chong and Ms. Sarah MacDonald

Date:
March 2021

Revision:
A. August 6th 2021

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INTRODUCTION

This pre-planning submission pertains to proposals to replace a 1995-built conservatory with a new single storey extension as well as some minor internal alterations to the ground floor of 2 Vane Close (formerly two separate dwellings).

Above: 2 Vane Close as seen from the northwest. Note the corner brick pier in yellow stock which is thought to be part of the front garden walls of the villa that once stood on the site. The conservatory seen above the garden walls is proposed to be demolished and to be replaced by a single storey brick faced extension.

EXISTING SITE

Above: The red brick walls of the Vane Close development are contrasted by the deep white facia of the flat roofed elements, dormers and external joinery elements. Note also the side entrance door which is used far more frequently by the occupants than the more discretely located front entrances on the south eastern elevation.

2 Vane Close is part of a late-1960's development of townhouses built just south of Rosslyn Hill on the way up to Hampstead. The language of red brick walls, white framed windows, artificial slate clad mansard roofs and projecting porch roofs with strongly contrasting deep white facias is provide a handsome representation of residential architecture of that era.

No 2 Vane Close was in fact a semi-detached pair of dwellings which was applied formally to become a single dwelling. A letter of confirmation of this change was issued by the London Brough of Camden on 8th June 2006. Numbers 1 and 2 Vane Close, were unique in the development being the only semi-detached units. All the other dwellings are built in terraced format. Some of the Vane Close houses have integral single garages whilst others have use of a parking podium above which is a communal area of grass and hard landscaping. Number 2 has its own single garage which was originally a detached structure. Most of the Vane Close development is composed of two storeys within a red brick enclosure and a top storey within a mansard roof. No. 2 is of this typology.

The site lies outside of but is adjacent to the Hampstead Conservation Area. It is within the Fitzjohns / Netherhall Conservation Area and Character area 3 – 19th Century Expansion of the Hampstead Neighbourhood Plan: 2018 – 2033.

Above: From above looking down on the 1995-built conservatory with the courtyard garden and garage beyond.

Above: From the back of the rear garden looking towards the 1995-built conservatory.

2 Vane Close sits immediately north west of Mulberry Close which is built in a similar post-war style with red brick walls, white framed windows but with prominent white decorated horizontal boarding (facing into its parking court) and more of a mono-pitch roof arrangement. To the west is the much earlier and larger development of Greenhill Mansions which is predominantly a five-storey block of flats arranged in a series of symmetrically disposed wings. The architecture looks to be post-war years in origin, with small-paned and white framed vertical sliding sash windows, multi-stock brick walls and a projecting mansard roof with lead sheathed dormers.

Above: The garden brick walls of the earlier villa that stood on the site and which now forms part of the northern boundary of 2 Vane Close. Note the plaque dedicated to the statesman, Sir Harry Vane.

A plaque erected by the Society of Arts on the garden wall of 2 Vane Close overlooking Greenhill, states that, “Sir Harry Vane, statesman lived here – Born 1612 – Beheaded 1662”.

According to the Fitzjohns / Netherhall Conservation Area Appraisal, the area historically was part of the Greenhill Estate. It had substantial houses including Mount Grove which had a famous and extensive garden which later became the site of a Methodist chapel and then demolished to make way for the present Greenhill Mansions. Vane Close and Mulberry Close (the applicant believes) were plots sold off by the Soldiers’ Daughters’ school in the late 1960’s which itself long before had taken over the former home of Sir Harry Vane, Vane House built in the mid-1600’s.

Number 2 Vane Close straddles a relatively steep slope between Rosslyn Hill and the parallel section of Greenhill and the more level area around which the Vane Close development is composed. There are three mature trees planted to the north of the property including a horse chestnut on land owned by the London Borough of Camden and two large London plane trees on the communal Vane Close verge which look to predate the Vane Close development.

The brick built front garden walls of the villa that once stood on the site and thought to date from the time of Sir Harry Vane (1600’s), were largely retained by the Vane Close development and are neatly integrated into the hard landscaping of the scheme. In fact, the rear garden of what was 1 Vane Close uses the brick piers and panels as the northern boundary (now part of the demise of no 2 Vane Close). A small area of flat roof separates the existing rear conservatory from the garden wall with a comfortable visual separation such that it is not apparent the two structures actually touch lower down.

PLANNING CONTEXT

The site is within the planning auspices of the London Borough of Camden and is governed by the LPA's Local Plan 2017 and the overarching policies of the National Planning Policy Framework 2019. We note also that the site sits within Character Area 3 – 19th Century Expansion of the Hampstead Neighbourhood Plan: 2018 – 2033.

Pertaining to Policy D1 Design of the Local Plan, we are looking to create a new extension which respects the local context and character, preserves and enhances the adjacent historic heritage assets (Policy D2 Heritage) and will have low embodied carbon in its use of construction materials and afford the property lower operational carbon emissions than the existing. As a single storey construction replacing more or less an extant building volume, it will have little perceived visual impact on the surroundings and will actually improve privacy and amenity.

With regards to Policy CC1 Climate change mitigation / Resource efficiency, demolition and retrofitting existing buildings, we would note that the existing conservatory has already been reglazed since it was first built, it suffers from water ingress issues due to some inherently vulnerable detailing against earlier constructions and a structural frame which is now seen as nearing the end of its serviceable life. It also has an extensive electric external solar shading device and heavy glass coatings to reduce unwanted passive solar gains. The conservatory was also not originally conceived as a heated living space so it makes even more sense to replace this volume with a robust and energy efficient form of construction.

The high brick wall and brick buttresses on the north side of 2 Vane Close are noted as of value in the Streetscape Audit of the Fitzjohns / Netherhall Conservation Area Appraisal.

PLANNING HISTORY

We note the following planning history for the site:

PWX0103225	1 & 2 VANE CLOSE LONDON NW3 5UN	Certificate of Lawfulness for proposed development of wooden boundary fence. As shown on drawing no(s) AL(9)001, 002,010 & 011	FINAL DECISION	15-03-2001	Grant Cert. of Lawful Proposed Use
9500896	1-2 Vane Close NW3	Erection of glazed covered way/conservatory at the rear as shown on drawings nos. 0001B 002B and photographs as revised by letter dated 17th August 1995.	FINAL DECISION	15-05-1995	Grant Full or Outline Perm. with Condit.

DESIGN

To draw more authentically from the original architectural sources for Vane Close, we have looked to the brief post-war period of so-called 'English Brutalism' and beyond to the work of the influential Swiss architect Le Corbusier in France during and just after WWII. One example is the famous Maison Jaoul, which was certainly well known to British architects of the 1950's and 60's and this and other later UK-based examples would have played a role in defining the architectural language of the Vane Close development.

Above: The image on the left is Sussex University by Sir Basil Spence and Partners, started in 1959. It is an example of English Brutalism with a confident and simple palette of red brick, exposed concrete and expressed roof and floor vaults. It is shown with one of the entrance porches of Vane Close on the right. The use of brick with a heavily articulated facia is typical of this era.

Left: Maison Jaoul, Neuilly-sur-Seine, 1954-55. These villas were aimed to express a form of primitivist vernacular. Note the under croft parking and the use of varnished timber elements set within the rough shell of the concrete floors with their exposed edges and the brick infill panels.

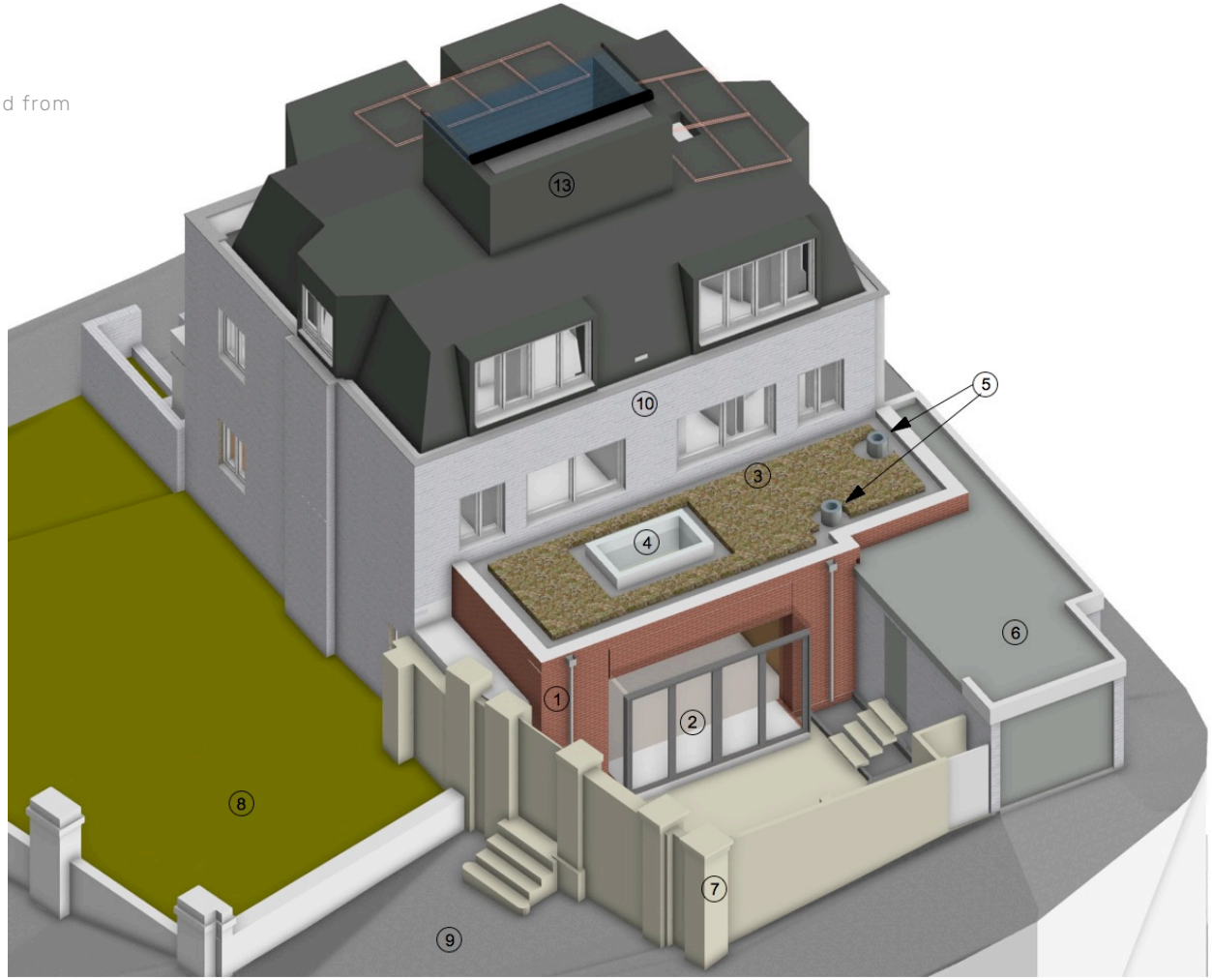
Use

1 and 2 Vane Close have been owned by the same family since 1995. They were originally built as compact three-bedroom townhouses. Over the ensuing decades, number 1 became used more and more as an annexe with some elements being used by both properties including the unified front and rear gardens and the conservatory. The later element was built in 1995 as an internal link between the two buildings but over the years it has become very much the main living space of the combined property. In 2006 the owners formally applied to have the two properties merged into one. This was granted on 8th June 2006 and the property is now known as 2 Vane Close.

Right: Isometric view of the proposal from the north west (trees removed from foreground for clarity)

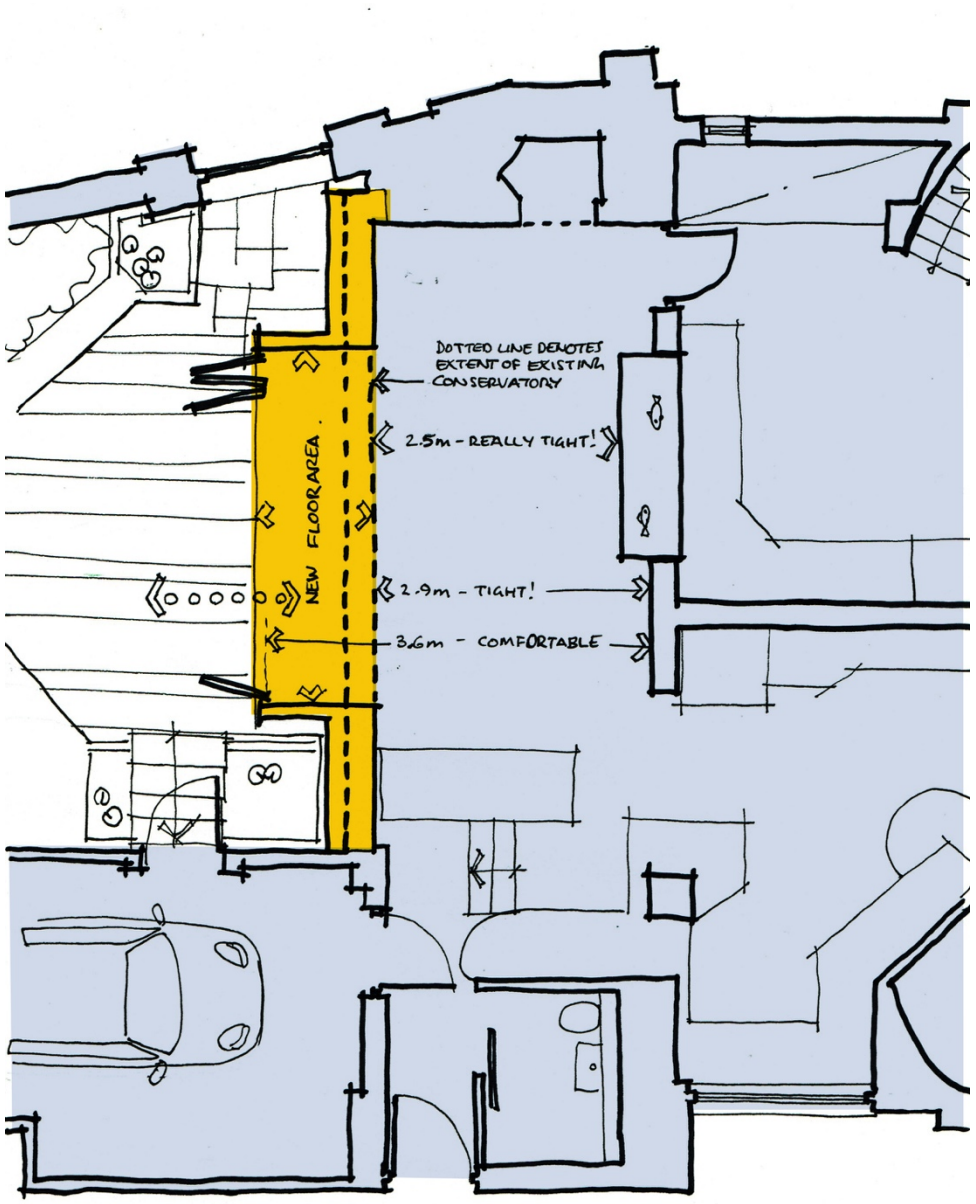
Key:

1	Proposed new extension
2	Proposed glazed bay window
3	Proposed green roof covering
4	Proposed roof window
5	Proposed sun pipes
6	Refurbished garage roof
7	Original garden walls of Vane House
8	Communal grassed area with 2 no. plane trees
9	Public pavement onto Rosslyn Hill
10	Existing house
11	Existing front porches - roof finish to be refurbished
12	Existing front garden (timber fence removed for clarity)
13	Existing mansard roof with photovoltaic panels and 'roof room



The proposed rebuild of the rear garden extension will allow for a more appropriately sized and proportioned living space. It will also offer improved thermal comfort conditions internally with less overheating potential and less heat loss with new well-insulated wall and roof constructions and a large reduction in overall glazed area.

Right: The highlighted area in yellow denotes the new construction. The addition of the bay window turns the originally proportioned space of the conservatory from a linking space into a more comfortably proportioned livings space.



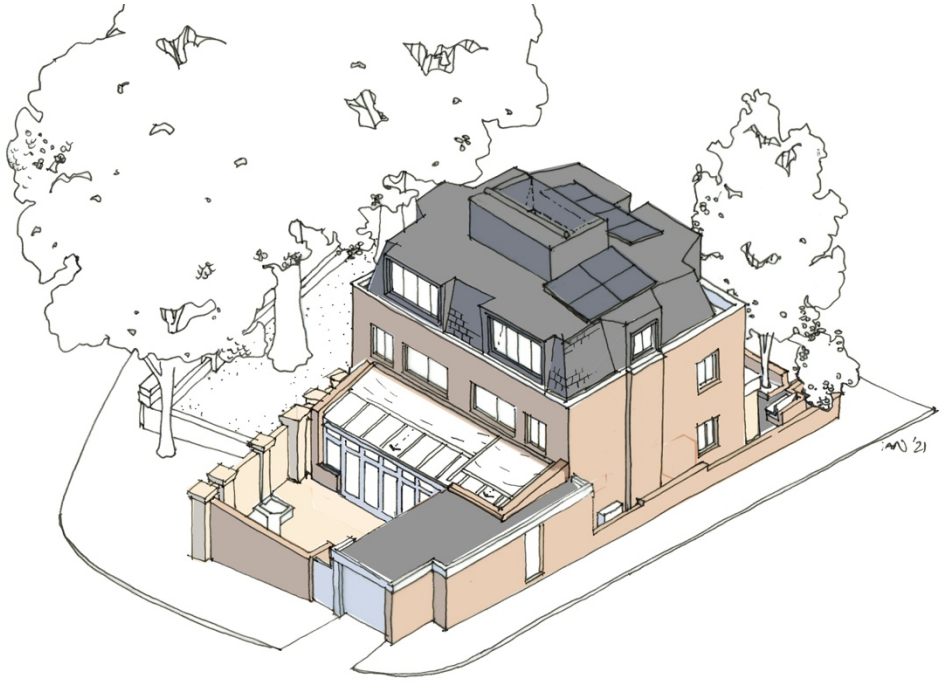
Amount

Existing gross internal floor area to be demolished: 25.8m^2 *
Proposed gross internal floor area to be constructed: 29.6m^2
Net difference in gross internal floor area: 3.8m^2

- For clarity, it is proposed the existing conservatory floor slab, insulation and screed will be kept, it is just the conservatory glazed structure itself which is proposed for demolition.

Below left: The existing context of 2 Vane Close. The proposal is to remove the 1995 built conservatory and replace with a new super insulated extension.

Below right: The proposed context would provide a new living space on the rear garden faced in place of the old conservatory. It would serve to make the dwelling more energy efficient with a green roof to add habitat and retard rainwater runoff.

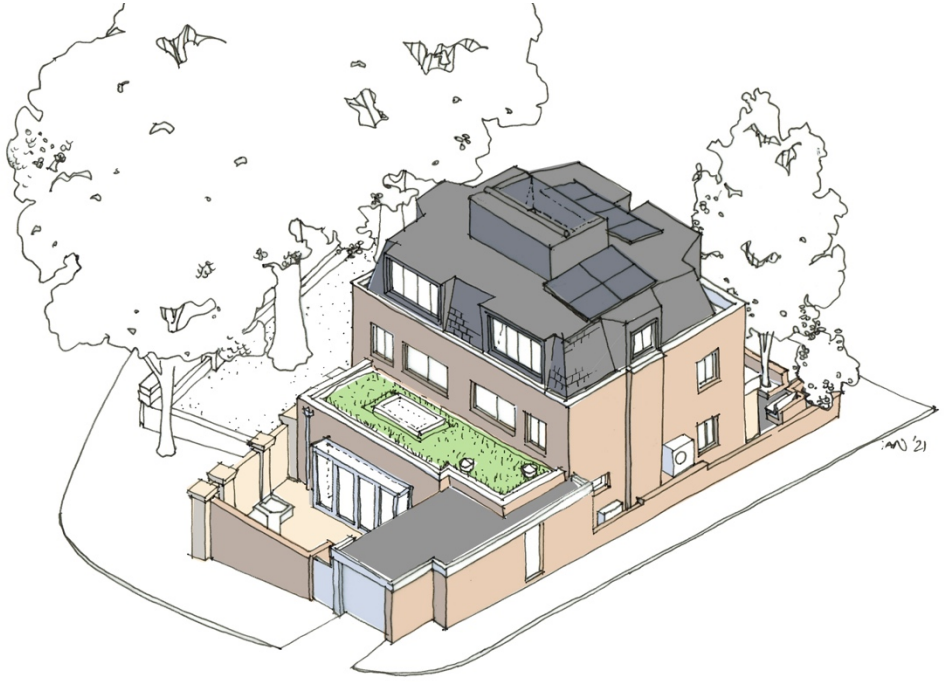


Layout

Astula Architecture were appointed by the owners of the property to explore designs for a refurbishment of the existing ground floor spaces of 2 Vane Close as well as look at options for upgrading or rebuilding the conservatory.

Making the house more energy efficient was a key part of the brief, so a like for like replacement of the conservatory was ruled out. The conservatory space is less than 3m in width which is not ideal as a living space so the proposal needed to look at creating some extra width to make a more convivial social space out of what was originally just a narrow and long linking space. The solution to this was to introduce a large bay window. Internally it creates a core area of around 3.9m deep x 3.6m wide which is enough to accommodate a sociably arranged disposition of seating.

Picking up on the architectural language of Vane Close, the design adopts a language of red brick walls and parapets. The volume graduates between the existing garage and the main house as a series of tiers.



Scale

The new single storey construction is proposed with construction thickness in the roof to afford Passivhaus levels of insulation (nominally in the order of 0.10 to 0.13 u-value) as well as the potential for the increased depth of a bio-diverse green roof build-up. This results is a thickness of nearly 600mm. As such the outer parapet reaches nearly the same height as the apex of the existing conservatory. However, the design intention is that the new constructed volume, with its matching brickwork, will appear as a pleasing set-back form, graduating the scale between the garden walls, the adjacent garage construction and the house itself.

Landscaping

The proposed bay window will use a small area of already hard paved external amenity. The clients are considering a bio-diverse green roof finish to the proposed new flat roof construction which will provide a modicum of bio-diversity net gain on the site, reduce the urban heat island potential of what would otherwise be a man-made felt or asphalt roof covering and serve to slow surface water run-off. All of which would pertain to mitigating the effects of climate change.

Appearance

The proposed external cladding materials include:

- Brick mix to match the Vane Close stock
- High performance double or triple glazed windows with polyester powder coated aluminium outer frames in black
- A new glazed bay window will include a glazed canopy
- High performance double or triple glazed roof windows with polyester powder coated aluminium outer frames (in anthracite or slate grey)
- Through-coloured cement fibre board facia panels to match existing in white
- Polyester powder coated aluminium parapet capping in anthracite grey
- Sedum roof covering with asphalt or EPDM roof finish upstands (mediam grey)

Like for like replacement materials for the garage roof refurbishment works include:

- Built-up roofing felt in dark grey.

Access

No changes to the existing access into the properties from the public realm are foreseen.

Sustainability Statement

As part of the brief the clients are looking to respond positively to the climate emergency and make the property more energy efficient and consider ways of contributing a net gain of bio-diversity if practicable to do so.

The options appraisal ruled out a refurbishment of the conservatory on a like for like basis as it was felt a far more robust and energy efficient construction could be created.

The target u-values for the new extension have been set at:

Flat Roof Target U-Value: 0.13 W/m²°C B. Regs. compliance: 0.18 W/m²°C
External Wall target U-Value: 0.13 B. Regs. compliance: 0.28 W/m²°C

This comfortably exceeds the minimum new thermal element requirements set by the Building Regulations Part L1B Existing dwellings.

The proposed glazed elements will be able to exploit a degree of beneficial solar gain during the heating season whilst having a number features to spill excessive solar gain in hot weather to reduce over-heating potentials.

We have also enlisted the assistance of energy consultants, Enhabit to come up with a lower carbon form of heating and ventilation. The chosen strategy consists of removing the gas condensing boiler and reliance on trickle ventilation in favour of an air to water heat pump and a mechanical ventilation system with heat recovery. The former will handle the space heating and domestic hot water needs of the house whereas the latter will provide controlled ventilation mainly during the heating season to reduce fresh air heat losses and improve indoor air quality and moisture control.

The new extension walls will be formed in masonry elements bonded with hydraulic lime mortar which will help ensure maximum levels of brick reclamation. The new flat roof will be formed almost entirely out of softwood timber (sequestered carbon) and will include a meadow grass installation. The green roof will aid insulation from excessive solar gain with a deeper than normal 150mm of growing medium, reduce rainwater run-off and urban heat island effect and will constitute a net gain of biodiversity over that of the existing construction.

The following list is taken from Appendix 1 of the LBC Home Improvements CPG January 2021 by way of confirmation of the sustainable design principles embedded in the existing and proposed works:

Loft insulation
There is no loft at the property.

Pipes/boiler tank insulation
The heating distribution system is to be renewed. All new pipework will be insulated in accordance with BS 5422.

Draught proofing
The new extension will include a high-performance vapour control and air tightness membrane with taped junctions to components in external apertures to reduce as far as possible ventilation heat losses in the new works. Existing external joinery and plastered internal masonry walls are thought to be of a reasonable air tightness standard within the existing house. New insulated doors (u-value of approximately 1.0W/m²°K) will greatly improve the efficiency of the existing garage connecting door and internal lobby door. They will include high performance weather seals. Ventilation heat losses are being reduced in part to provide an efficient performance of a new mechanical ventilation system with heat recovery which is to be retrofitted into the existing house and will also serve the new extension.

LED Lighting
The proposals include for a fully LED-based lighting specification. Where lighting is being replaced on the existing ground floor, this will result in a substantial reduction in existing lighting energy demands where 12V halogen technology predominates.

Cavity wall insulation
The 1960's-built brick and block cavity walls of the existing house were treated with an injected mineral fibre insulation some years ago.

Room in roof insulation
The 1960's-built mansard roof was given a thermal upgrade by the owners in 2014.

Internal wall insulation
Due to the diminutive size of the floor plate, internal wall insulation has not been considered, except the northern wall of the existing conservatory which will be retained in the proposal and treated with a lime and cork plaster which will reduce heat loss in colder weather.

Floor insulation
The original footprint of no. 2 Vane Close is proposed to have the existing sand and cement screed removed and a modular dry-fit underfloor heating system fitted in its place. The product and some additional high performance floor insulation will allow for a u-value performance of around 0.24W/m_KU (Calculated in accordance with BS EN ISO 6946) with P/A ratio of 0.33. This will slightly exceed minimum Building Regulations' requirements. The new ground floor construction element of the extension (relatively small) achieves, 0.18W/m_KU (Calculated in accordance with BS EN ISO 6946) with P/A ratio of 1.2. This is despite being constrained by the need to incorporate a ground beam and clear existing drain runs from the house.

Solar PV
The existing house received an array of photovoltaic panels in the 2014 works.

Upgrading windows/new windows (single to double)
The glazing of the existing house is completely double glazed. Some replacement glazed units will be replaced on a like for like basis where seals have blown. The new extension will have a treble glazed rooflight and high-performance sun pipes with approximate u-value performance of 0.8W/m^2°K. The proposed glazed bay will be formed with new double-glazed units with an approximate u-value of 1.0W/m^2°K.

Ground source heat pump
A ground source heat pump was considered for inclusion in the proposals but was ruled out due to insufficient area and proximity to the Northern Line.

Air source heat pump
An air source heat pump is included in the application and will replace an existing gas condensing boiler.

External wall insulation
External wall insulation was considered early on in the design work but ruled out as it would change the appearance of the house radically which maybe rejected in a conservation area.

Heritage Statement

The property 2 Vane Close, NW3 lies within the Fitzjohns / Netherhall Conservation Area. The high brick wall and brick buttresses on the north side of 2 Vane Close are noted as of value in the Streetscape Audit of the Fitzjohns / Netherhall Conservation Area Appraisal. The proposed works do not effect this wall with no actual or perceived loss of significance or harm to the heritage asset. The end wall of the existing 1995-built conservatory which is located inside of the old garden wall will be rebuilt to maintain the small section of flat roof that exists in this location and which provides a comfortable visual and serviceable gap to the garden wall.

We would suggest that the new extension will serve to provide a visual enhancement of built form over that of the existing conservatory roof and its external solar shading devises. The new forms are orthogonal not angled, the they are mostly of matching brick with green roof to add verdure to the context.

Pre-Application Information Received

We received the following information from our pre-application submission dated 4th December 2020:

Dear Mr McKay,

Ref: 2020/4810/PRE – 2 Vane Close.

Thank you for your e-mail. Just to confirm, for a valid application we would expect;

- *A complete Householder Consent application form*
- *Application fee (£206.00)*
- *Site location plan (1:1250)*
- *Existing and proposed floor plans and roof plans (1:50)*
- *Existing and proposed elevations (1:50)*
- *Existing and proposed sections (1:20 – as may be necessary to describe details)*
- *Design and Access statement (photographs of the site and details of proposed materials should be included)*

To include a biodiverse roof, we would expect:

- *Proposed section through roof, showing substrate layer (1:20)*
- *Installation and maintenance information.*

Re: Roof-light lanterns. I understand your comments about falling foliage, but would suggest keeping the lanterns small in scale; so that they do not interfere with the first floor windows on the rear elevation.

Should you wish us to look at any revised proposals, please send them through to me? Otherwise please let me know if/ when you submit an application and I will look out for it at this end? Any other query, please let me know?

Kind regards,
Matthew
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Matthew Dempsey
Planning Technician

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