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5. BUILDING ANALYSIS AND PROPOSAL

Overall Design Concept

The overall design concept has been generated by the existing site topography in relation to existing building levels. This has been the driving force of the physical layout. In addition to this, the greenery of the area has been of paramount value and the layout and design features maximize as well as enhance this.

Site and Building Analysis

Slope of site

No 2 is positioned on sloping ground, with the front entrance approached by a garden path sloping upwards leading to the ground floor. The ground floor is raised at the rear 1.5 meters above ground level creating an undercroft under the raised balcony at the back. The rear garden steps down a further 1.3 meters. In total there is a drop of 2.8 meters from the ground finished floor level to the ground level in the rear garden.

Image above of the back of No 2 showing the raised ground floor balcony and raised patio.

The design of the basement, housing new accommodation, has arisen out of the lay of the land. At the front, the proposed basement would indeed be a true basement, where the external ground level is at ceiling level in the basement. However, the land, after rising at the front, slopes downwards towards the garden at the rear and the 'basement' floor then becomes level with the existing garden lawn.

In effect, enhancement of the existing building fabric and it's use is achieved by replacing the existing rear concreted patio with a raised green roofed extension housing a kitchen and dining area that opens directly onto the back garden.

This addresses a number of problems with the site and house as follows:

Connection to the garden

The dwelling as it exists is disconnected to the large garden at the rear. The clients kitchen, dining room and living room are on the upper floors and access to the garden is down one flight of steps through the TV room. Furthermore, the garden is on a further level down from the TV room and is accessed via a small circular staircase going down 1.25 meters to the patio. The garden is reached via a further set of steps leading off from the patio going down 1.28 meters. The proposal aims to bring the garden into easy access – almost seamlessly and integrates it into the house creating inside/outside spaces where the benefit of the garden is maximized.

The proposed scheme locates the kitchen/ dining room in the proposed lower ground floor at the back bringing it to the same level as the garden. The boundary between inside and outside is blurred as folding sliding glazed doors are proposed with level thresholds. Glass walls and sliding doors ensure the garden is enjoyed to the maximum even in cold winter months. The building is as aesthetically light as possible, to retain views of the garden beyond, the green walls and the landscaped courtyard.

Disused side garden

The existing garden to the side of the house behind the garage is tarmaced over and is under used. Currently it serves no purpose. Access to it is from the back external circular staircase along the patio, down the stone steps and then up along the side path next to the patio. It is not proposed to infill this space with a built structure and maximize square footage. Instead, the proposal aims to enhance and intensify the benefit of the existing outdoor space. In the proposed scheme, this 'in between' space is excavated to connect with the rest of the garden and to provide outdoor landscaped space for the living room in the proposed lower ground floor. This outdoor space would easily be accessible via sliding / folding glass doors. The dwelling spaces of the lower ground floor in the front, middle and back would resemble a ground floor dwelling rather than a typical basement/ lower ground floor dwelling as the open spaces to the side and back would have level thresholds and be the same level as the internal finished floor level. This lowered open space would serve to provide light and an attractive outlook from the front entrance to the lower ground floor, the side (living room) and the back (kitchen / dining). Refer to drawing GA01, Lower Ground Floor.

Image above of disused side section of garden & garage.

Raised rear balcony and disused undercroft

Under the rear upper ground floor is a recessed 'undercroft' which is an eyesore and has no use. It proves difficult to maintain and collects rubbish which encourages growth and damp. This area will be absorbed into the proposed lower ground floor which extends slightly short of the existing patio edge. Refer to drawing GA01, Lower Ground Floor.

Obsolete balcony

As the patio would be replaced by a green roof, the balcony at the rear leading to the patio would be obsolete. The proposal encloses the balcony so it forms part of the bedroom and this part is fully glazed so that visual

enjoyment of the sedum green roof and the garden beyond can be had. Refer to drawing GA02, Ground Floor.

Image above showing raised balcony & 'undercroft'. The garage can be seen to the side. Taken from raised patio, rear garden.

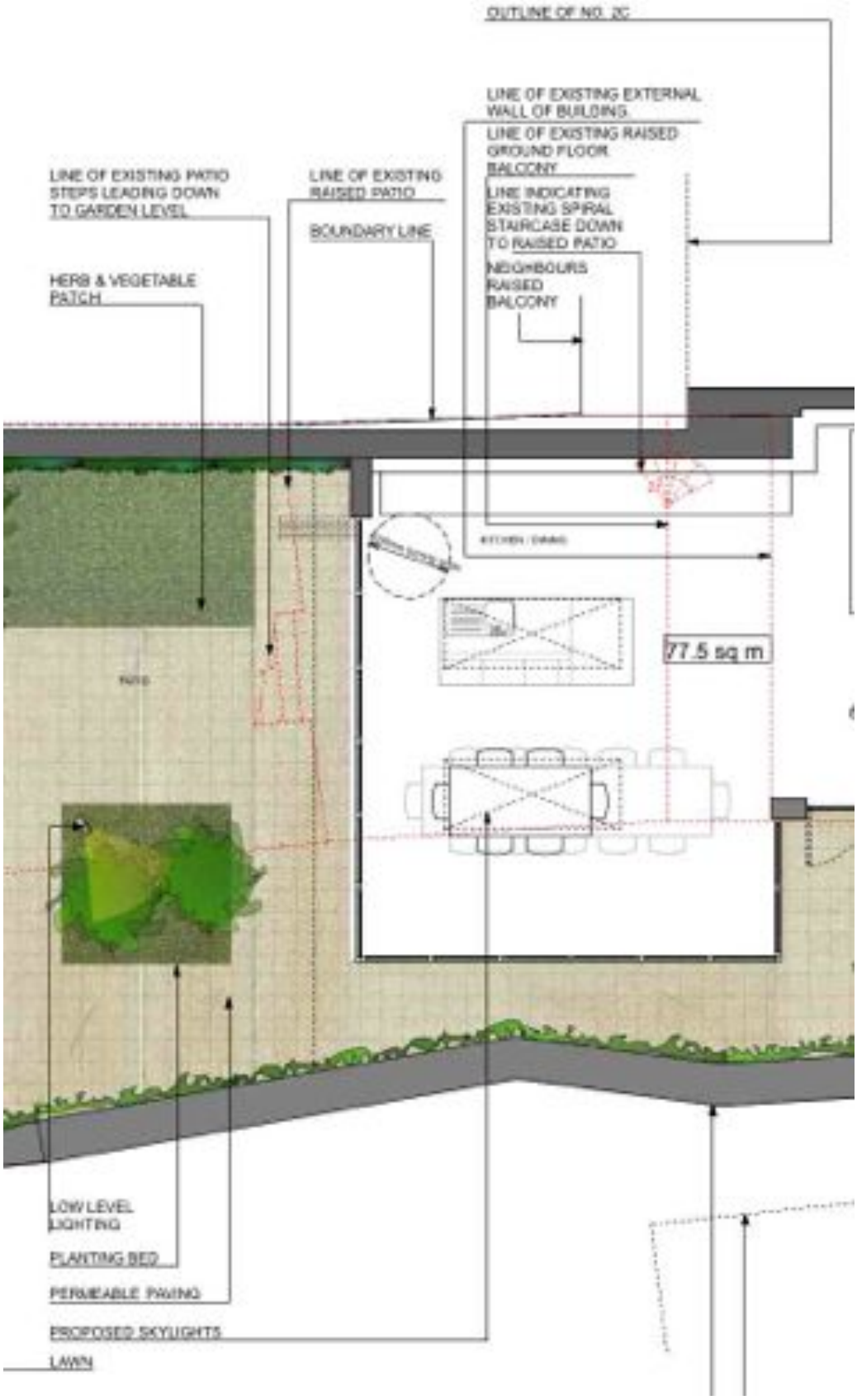

image above, part plan showing proposed rear extension in relation to existing patio and balcony shown in red dotted line

Disused garage

The existing garage is too small to be used to park a car. Getting in and out of the car park is not possible as the internal width is insufficient for this. It too, serves no purpose other than occasional storage space. The scheme replaces this building with a set back glazed entrance and stairwell to the garden maisonette. The replacement of the garage building would not be any higher and would mean that the gap between no 2 and no4 Oakhill Avenue remains the same. It is intended that the roof be a green sedum roof. Glazing the front and the back of this lobby will allow views through to the proposed courtyard and the back garden from the street and also allows for street vigilance.

Image above, part of front elevation showing proposed side extension in comparison to existing garage height and width shown in red dotted line.

Maximising greenery

There is a green corridor within the scheme. This involves a green wall that runs along the left hand side of the front garden when facing the building and continues internally in the entrance lobby of the garden maisonette, runs externally along the 'courtyard' and along the path adjacent to the kitchen/dining extension through to the back garden. It's purpose is multi fold.
1. To provide a visually stunning façade to the solid retaining wall,

2) to enhance the quality of the internal space and to avoid the monotonous gloom of typical basement dwellings,

3) to provide a connection with the spaces from the front garden through to the back garden

4) Used along with glazing, it gives a lighter feel to the built form of the lower ground side and rear extension.

5) It enhances the street scape as views of the green wall will be enjoyed from Oakhill Avenue adding to the strong element of greenery enjoyed in the area. Not only will the gap between no. 2 & 4 be retained as existing but it will be enhanced with greenery.

6) for environmental reasons. Refer to the environmental section.

7) Greenery also absorbs sound.

Improving Safety

Each dwelling has it's own secure entrance and they have been kept at either end of the site so that a feeling of identity, privacy and independence can be maintained.

Additional glazing has been added to the existing entrance porch, next to the entrance door to the upper maisonette to allow light to enter the lobby and to allow for additional street vigilance. Glazing in the front will give some benefit from a degree of overlooking due to the increased level of surveillance it can provide.

The entrances will also have PIR operated lighting to discourage intruders and to provide enough light on entering and exiting the properties.

Under utilized terrace

The terrace on the first floor at the front is under utilized. It catches the morning sun but is difficult to access requiring climbing over the raised window cill of the sliding patio doors. The replacement of the existing fenestration with level threshold sliding/ folding doors will allow for maximum access and usage of this space. Providing suitable access to this area will mean ease of maintenance and therefore encouragement of pot plants and creepers adding positively to the appearance of the frontage.

Extending roof space & Maximising views

The existing roof is to be converted to create a habitable loft space and rear dormer. The front roof is to be raised to match the house at the other end of the terrace, No 2B. The proposed rear dormer is to be glazed to create less of a visual impact. The dormer is set back at the side from the brick wall and is to step back at the rear providing further private amenity space in the form of a private terrace benefiting from the outstanding views across Hampstead and London. It would create an architecturally stunning space of high quality and enjoyment.

6. SITE RESTRICTIONS / CONSTRAINTS

The following physical site constraints have been taken into account and have determined the extent of the proposed development:

1. <u>The front building line.</u> This is of special importance as it is part of a group of terraced houses. The development does not project beyond the front building line. Infact, the proposed side extension to the side that replaces the existing garage has been stepped back so that the main building is prominent and the side extension is subservient to it. This retains the rhythm and proportion of the existing group of terraced buildings. The height of the proposed side extension will be the same as the existing garage height. Refer to drawing no. GA 07, front elevation.

2. <u>The rear building line</u> The rear facades of the terraced buildings are stepped with no. 2C stepping beyond no. 2. The existing balcony, at the back on the upper ground floor is to be enclosed with glazing. The enclosure would not protrude beyond the line of the existing balcony. It would line up with the rear wall of No. 2C and would not overlook neighbouring properties. The upper floors would remain as existing and the proposed dormer would be set back. As per DP 26, visual privacy has been retained with no overlooking, overshadowing nor any loss of outlook.

Image above showing back of No. 2 far right with No. 2C (seen next to it to the left) staggered behind rear of No. 2. The rear of No. 2B's roof can be seen, far left.

3. <u>The height restriction of roof conversion and the materials used.</u> The proposal retains an existing pitched roof at the front but on a steeper pitch to match no. 2B's roof. A lighter material of obscure glass is used for the dormer at the rear to create a visually interesting and elegant feature along the side elevation. This provides for an additional bedroom and offers stunning views across Hampstead and London from an attractive living space and recessed terrace.

Image showing No. 2B's (house seen to the right) front roof. The proposal is to match the pitched roof.

4. <u>The neighbour's (No 4) kitchen window on the ground floor and windows above.</u> The existing garage is to be replaced to create an entrance lobby for the garden maisonette. It has been set back so that the existing building remains dominant. The proposed side extension takes into consideration the existing outlook from the neighbours kitchen window which is the side of the garage, the houses brick wall, the utility room window and the garden fence. It is proposed that to allow for privacy and better outlook for No 4, a low tech green wall is proposed along the new side extension.

Image above showing tension cabling with climber, Low tech, low maintenance green wall

5. Light pollution, privacy. Where new windows have been added, careful consideration has been taken of neighbours privacy and light emissions. Fenestration that has been proposed for this side wall is as follows:

a). The lower ground floor, glazing facing no. 4 is set back between 4.5 meters and 5.5 meters from the neighbours side façade and below No. 4's ground floor level. It is to be further obscured by the use of vegetation in the newly created courtyard to screen for privacy and any light emissions.

b). The existing bathroom window on the second floor is to be retained and fitted with obscure glass. New small high level bathroom windows are proposed along the side elevation and are above 1.7 meters high from internal floor finish and fitted with obscure glass.

c). The dormer fenestration. It is to the back of the dormer, and the glazing to the side elevation is fixed double glazed sand blasted white obscure glass

fixed panels and is opposite the pitched roof of No. 4. The sand blasting treatment reduces light transmission by 40%.

d) The enclosure of the existing balcony on the upper ground floor. The side of the enclosure would be glazed sand blasted white obscure glass fixed panels.

e) Glazing for the proposed garden maisonette lobby is partly obscure for privacy and partly clear to allow selected views of greenery in the rear garden, court yard and front garden.

Image showing obscure, sand blasted glass panels

6. Rear extension. The rear extension replaces the existing patio which is 1.28 meters high above existing garden level. The rear extension does not go beyond the depth of the existing patio and would have a green sedum flat roof

replacing the existing stone paving surface and blending into the garden. The rear extension would extend out with the base of the balcony forming the roof level of the rear extension and the internal finished floor level being the same as the existing garden level. The width is restricted as it is not abutting the boundary to No. 4 being 1.68 meters clear of the boundary at the closest point.

7. <u>Basement.</u> The basement is only a true basement to the front of the building where it is completely under ground. Due to the slope of the site, at the back, it is a ground floor as the natural existing ground level is the same as the internal finished floor level. The rear extension replaces the raised patio. The excavated land to the side of the house forms a 'courtyard' and is to have planting creating a green wall and planting beds to intensify the greenery on the site and to provide screening and pleasing visual interest. At the moment, it is tarmaced and is awkward to access thus rendering it a dumping ground and eye sore.

A Basement Impact Assesment has been carried out and includes geotechnical, hydrological and structural engineering research and the results show that there is no risk of subsidence to adjacent properties posed by the proposal. Surface run off has been addressed by the inclusion of Green roofs, green / living walls and permeable ground surfaces. The scheme creates additional green spaces and intensifies use and vegetation of existing open spaces**.** *(DP27 Basements & Lightwells)*

All construction and demolition processes for the basement and rest of the proposal is to be in accordance with the Considerate Constructors Scheme, to conform to the ICE Demolition Protocol and to have regard to the Guide for Contractors working in Camden.

8. <u>Loss of Outlook and Light.</u> There is no loss of light with the roof extension or the rear extension as the heights and positions of these two interventions have been restricted so that they do not obstruct any day light not do they cast shadows on neighbouring buildings.

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7. LANDSCAPING

The landscaping in this scheme is integral to the over all design.

As existing, the rear garden is at a level 2.73 meters lower than the existing ground floor entrance. The front garden slopes up to cover the difference in level of 1.00 meter from the pavement to the existing ground floor entrance. The rear garden is 1.73 meters lower than at pavement level.

The connection between the garden and the dwelling is poor with the only access to the garden being through the TV room –ie not through the living / dining / kitchen which is on the level above and would be ideal. Furthermore, a narrow circular staircase has to be navigated at one end of a raised balcony leading to a patio which then leads to the grassed garden.

There is an existing garage to the side of the house which was built at the same time the terrace houses were built but is of insufficient width for the client to use to park his car. The front garden consists of a concreted driveway to the garage, a concreted path leading to the front entrance and a covered dustbin store and four small shrubs / bushes.

The garden to the side of the building as mentioned previously is tarmaced over and is under utilised.

The proposal aims to:

1. connect the garden directly to the dwelling, maximizing the use of the garden.
2. Enhance / redevelop open spaces to bring them back to life / into use.
3. Even out the levels to allow for inclusive access right from the pavement to the mature garden at the back.
4. Allow for safe route to the dwellings
5. Conserve and add to the greenery of the area.
6. Connect the open spaces.
7. Enhance and create a positive input into the street scape.
8. Create a positive contribution to the environment.
9. Screen bin and cycle stores.

Surfaces

The front garden would be enhanced functionally by removing the hard non porous surfaces of the path to the existing entrance and replacing it with more permeable surfaces which allow rainwater to drain through into the earth. The tarmaced car parking space is to be replaced with permeable plastic paving with a fine network of voids for grass to grow in called Eco Grid. This will give a softer look with the intention to add as much greenery and vegetational growth back into the garden. See image.

Image shows permeable plastic grid, Eco Grid with grass used for car parking surfaces.

The existing garden path is of aggregate concrete slabs and is non porous. The surface of the path is to be replaced with permeable brick pavoirs to match the red brick of the house.

Image below shows permeable Brick Pavers, 55mm x 230mm x 75mm deep, shade 48 Recycled

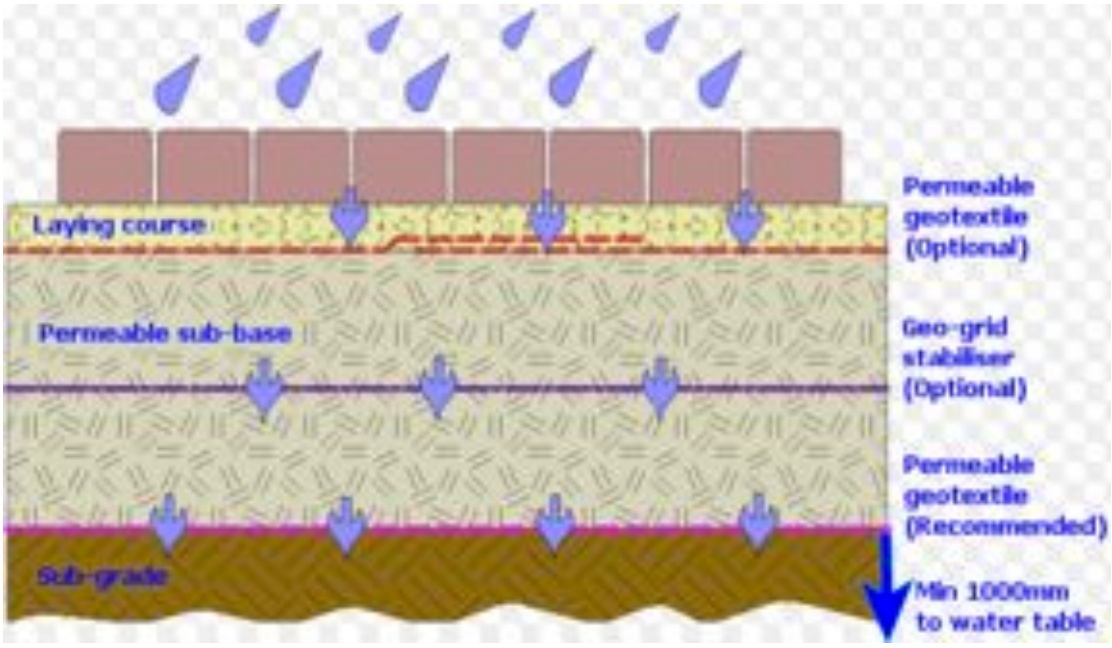

Image above shows principle of permeable paving proposed for the front garden.

Planted terraces

Oakhill Avenue has varying topography and many of the frontages either slope down or have high retaining walls with steps leading up to the entrance property. See images. The front garden is to slope down and to step down in planted terraces to allow light to the front of the proposed lower ground floor. The planted terraces are a way of disguising the front lightwell and create a softer effect.

It is proposed that the hard landscaping in the excavated part is to be a combination of white render and a creamy white limestone finish to bounce light mixed in with red brick to tie in with the main building. The limestone flooring and cladding is to be locally sourced, Portland limestone.

Image shows the combination of brick and cream limestone

Image shows terraced planting beds with limestone cladding which bounces light

Image shows creamy limestone surface

Lighting

Low level lights on timers are proposed along pathways and the ramp. Downlighters with hoods are proposed so that there is no light pollution. Soft low level lighting is proposed within plants in the planting beds, again on timers so as not to be a nuisance to neighbours or insects late at night.

Bin & Cycle Storage

The bin store is to be of timber and housed along the foot path near the front garden entrance. There is one visitors cycle stand proposed in the front garden with a Copenhagen lock. Further cycle parking is available inside the maisonettes accessible from the entrance lobby and in the garden maisonette within the courtyard or back garden. See image.

Green Walls & Green Roofs

A green wall is proposed which runs from the front garden into the entrance lobby of the proposed garden maisonette, along the 'courtyard' and along the proposed rear extension leading to the rear garden unifying the open spaces and adding greenery to the streetscape.

Green sedum roofs are proposed for the rear extension and the side extension replacing the garage. Amongst other benefits, it creates a visual harmony with the garden and offers neighbours a more pleasant outlook.

Image shows example of low tech green wall using tension cable in freeform

Image shows green wall in sunken courtyard

Image shows landscaped 'Vertical garden' green wall.

Refer to Environment section for Green Roof

Existing Brick Walls

The existing low level brick walls are to be retained and cleaned.

Side 'courtyard'

The 'courtyard' is to be have limestone flooring on pedestals to allow water to drain into the level planting bed. Silver birch planting is proposed here to create visual interest and light screening.

Rear Patio

The patio following the proposed rear extension, again is of limestone tiles on pedestals so that rain water can drain into earth in the garden instead of burdening the rainwater sewers. There are to be planting beds in the area to minimize the amount of hard surfacing. A vegetable patch and herb garden is proposed for the planting beds within the patio area close to the kitchen.

Rainwater Harvesting

A water butt is proposed for storing water used for watering the garden.

Soft Landscaping

The front garden is to be landscaped with indigenous shrubs and bushes to give it a verdulant feel. Creepers are proposed to run along the handrail with

tension cabling along the garden path in the front. The same treatment is proposed above the dwarf wall in front of the car parking space.

Transparency

The proposed rear extension for the lower ground floor would offer views and direct access to the mature garden at the back.

Maintenance and Access

The maintenance of the open spaces and the rear garden are paramount to the property maintaining it's character and value. Access for the gardener to carry out work has been arranged so that the gardener does not have to pass through any private internal areas of the dwelling. The gardener would pass through the entrance lobby to the garden maisonette and then along the 'courtyard' and along the path between the kitchen/dining rear extension and existing boundary. All thresholds are to be level so a wheel barrow can be used easily.

8. APPEARANCE

-CS4 - Areas of more limited change
- Policy DP25 - Conserving Camden's heritage

Context and Aim

The existing building is outdated and more importantly not of any architectural merit. It does not do justice to it's location where grand historic houses were designed by the architect recognized by Pevsner, Charles Quennell . There is a rich heritage in the area of high quality design, whether historical or modern. The proposed development is an opportunity to upgrade the existing building and make a positive contribution by creating an extension of high quality to be appreciated by the client and future generations. The design of the frontage is important and is to send out a clear message of the building being welcoming, safe, enjoyable to be in, easily accessible and uplifting. These intentions are implemented internally and expressed externally. Even if a pedestrian were to pass by, the overall appearance would have a visually positive impact.

The existing external front façade is modern 1970's – built at a speculative development with no redeeming features and does not rise to the surrounding architecture. The requisite addition to the front façade creates an opportunity to upgrade and enhance the existing façade. This is done with respect to the area, using historic materials and materials that have been inspired by contemporary architecture of merit of nearby streets. The materials proposed create a contrast to the clay hung tiles and bare brick and creates a smart clean façade that the occupiers can take pride in. The proposed openings of the proposed addition to the front elevation retain the existing terrace house's proportions so that it ties in with the existing and the architectural rhythm is continued. The entrance created to the side of the building to the garden maisonette is set back so as to be subordinate to the main existing house and terrace.

The existing frontage is in need of an upgrade and smartening up. It lies in the Redington and Frognal Conservation Area and is of the materials that are typical of this area - red brick, clay vertically hung tiles, white render, sandstone detailing and white window frames. Also to be noted is that the building is one part of three forming a terrace. Any intervention to be carried out here, has to be mindful of the rhythm and scale of the terrace.

Fenestration

Areas of the existing building which can be subtly changed are the fenestration. It is proposed that fenestration of smaller section frames are to replace the heavy white UPVC windows. These would be argon fill e coated double glazed panes and will be more efficient in retaining heat and in certain positions have an anti UV coating. Where necessary, white obscure glass will be used to conserve the privacy of neighbours.The frames are to be a dark

grey to compliment the existing red brick and the proposed white rendered finish.

Large glazed panels are proposed to match the generous aperture openings of the existing building, to provide an active and vigilant frontage and to allow transparency throughout for enjoyment of the landscaped outdoor spaces.

Image below of Fineline Aluminium fglazing to replace existing heavy UPVC framed glazing.

Image showing Fineline Aluminium Glazed doors proposed for the rear.

Transparency

The appearance of the rear extension is to be as minimal as possible. The full height glazing will offer views from the street, of the green wall, the courtyard and the back garden.

Proposed Wall Finishes

The two wall materials found in this area are render and brick – commonly red brick. Rendered panels to selected portions of the brick façade are proposed to smarten up the elevation and to tie in with the proposed side extension.

The new lower ground floor is to be a combination of creamy limestone cladding and render with a white paint finish. This expresses the new intervention and is in contrast to the existing building's red brick finish. These

finishes will also bounce light as the colour is highly reflective. These finishes are to continue throughout the lower ground floor. Limestone is a material of high end quality and will add a touch of sensual luxury creating an oasis of calm in the ‘courtyard’. It can be continued internally on the floor so blending the inside with the outside. It also provides a stunning backdrop for shrubs and greenery.

Image of no. 2 Oakhill Avenue. Façade is of contrasting materials, red brick and stone.

No. 39, Redington, on the corner of Oakhill Avenue. Façade is composed of contrasting materials, red brick and stone.

Pitched Roof finish

Image of rectangular red clay hung tiles to replace existing fish scale tiles.

The existing hung clay fish scale tiles are to be replaced and the new pitched roof along with the second floor façade clad with red vertically hung rectangular clay tiles forming a linear pattern.

Roof Extension

The roof extension is a continuation of an established pattern in the terrace and it would not undermine the overall composition of the existing building. To the front, the existing pitched roof is rebuilt to be in line with the pitch of no. 2B's roof which forms part of the terrace. To the rear, it is fully glazed with overhanging eaves and set back to minimise impact and to provide a screened balcony. The height has been kept to a minimum and at the rear it is composed of white obscure glazed panels which are aesthetically light and are set back from the rear wall and inset from the side wall. They offer a contemporary contrast to the brick. The roof of this is to house photovoltaic panels with a one meter border around the edge.

Image showing photomontage of proposed frontage

9. HIGH QUALITY DESIGN

- *CPG 1 - Design*
- *CPG 2 Housing*
- *PPG24 High Quality Design High*

High quality design has been the utmost importance and driving force behind the design. It is believed that it has been produced as sought by the client. The quality of space is paramount, in terms of light, size, views and ergonomics.

Clarity of the plan and the sequencing of the spaces has been worked out to function beautifully creating not only a well designed dwelling but one that will be a delight to live in.

The addition of greenery and it's connectivity to the internal space is seen as paramount in this scheme in raising the quality of the spaces.

Apart from the front bathroom, guest cloakroom and storage space, the lower ground floor / basement will have the feel and quality of light as a ground floor dwelling.

The client is to occupy the garden maisonette and the finish is to be high spec for both dwellings as is suitable for the locality.

Ceiling heights

All ceiling heights including the basement and loft space are over 2.3 meters high. This is important to maintain a high standard of design and quality of life.

Storage and utility space

There is ample general storage space over 1 square meter in both dwellings and a utility room in the garden maisonette and adequate space in the upper maisonette kitchen to house washing machines. A European style pully is proposed for drying clothes above a bathtub within a bathroom with natural ventilation. Each bedroom has more than 0.15 square meters for storage.

Bicycle and pram storage can be accessed on the same level from a hallway or corridor on the same level as the main entrance. See Transport section.

An enclosed bin store is proposed in the front garden to house recycling bins and dust bins. *(CPG1)*

Windows

All habitable rooms have more than 10% window to floor area.Infact window openings have been maximized to allow for maximum of natural light and for the enjoyment of the outdoor landscaped areas.

No Air conditioning is proposed as all ventilation and cooling is through openable windows, screening out sunlight and cross ventilation.

Windows have been carefully positioned to retain privacy to neighbours. In addition, where necessary methods have been implemented to create additional privacy for neighbours in the form of obscure glazing and vegetational screening.

With the proposed scheme, all open spaces will be overlooked by windows and there are no dark secluded spaces making the development safe and secure.

Accommodation Sizes and ammentity

See sections for Density and Lifetime Homes

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10.ACCESS

- *DP29 – Improving access*

- *DP6 - Lifetime homes and wheelchair homes.*

- *PPG6 Lifetime Homes*

The new proposal's lower ground floor has been designed to allow for the highest practical standard for access and inclusion. It is accessible by wheelchair users and the lower ground floor has amenities that are all on a level threshold. The circulation and living spaces are of sizes that can accommodate turning circles required for a wheelchair user. All window and door furniture is to be at levels accessible by all. The maisonettes can be tailored to meet the specific needs of an individual wheelchair user and their particular household.

Camden require that 10% of all housing development (including conversions) should meet wheelchair housing standards or be easily adapted to meet them.

The lower ground floor garden maisonette has wheelchair access, level thresholds and a bedroom with en suite on the ground floor. The rest of the entertainment area, cooking and outdoor areas are all on the same level. It adheres to Wheelchair Housing Standards. Refer to drawings GA 01,02,03 & 04.

The Upper Maisonette can be adapted to fulfil Wheelchair Housing Standards by installation of a chair lift.

Both maisonettes have been carefully designed to fulfill all Lifetime Homes Standards 16 revised criterea. Infact, the layouts follow good practice recommendations that exceed, or are in addition to, the requirements.

The garden maisonette would cover all 16 features as listed in the Lifetime Homes Criterea. See below for listing and refer to GA plans 01,02,03,04.

1. A secure car parking space - 'on plot' - has been provided in the front garden.

2. A ramp slopes down to the entrance to the garden maisonette. In addition, a designated area has been allocated for the installation of a platform lift if found necessary to allow access from the garden to the lower ground level of the garden maisonette.

3. The approach to the upper maisonette is to be ramped too but upwards to allow for the level difference of 83mm from the pavement.

4. All thresholds between inside and outside in both maisonettes will be level and openings have a clear width of 800mm and lit.

5. A stair chair lift can be installed if required in the future in both maisonettes.

6. Internal dimensions are 900mm minimum for corridors and 750mm clear door openings unless the approach is at right angles which in that case the clear door openings are 900mm.

7. All bedrooms, living rooms and kitchens have turning circles of 1500mm diameter or a turning ellipse of 1700mm x 1400mm.

8. All entertaining space in the garden maisonette including side courtyard' and mature back garden are accessible from the lower ground floor at level thresholds. For the upper maisonette, the use of a chair lift would be necessary for someone unable to climb the stairs.

9. The garden maisonette has a lower ground floor level bedroom with en suite.

10. The garden maisonette has a lower ground floor level guest cloakroom and an en suite accessible bathroom.

11. Provision has been allowed for the fixing of grab rails for all bathrooms.

12. Both maisonettes have the provision for installation of a stairlift. The provision for a through the floor lift would mean that the circulation spaces for others wishing to use the staircase would be cramped.

13. Structural stability for ceiling hoists fixings are to be allowed for in the lower ground floor bedroom leading to the en suite in the garden maisonette. The upper floors existing ceiling's structural strength will have to be ascertained on site whether or not they can to take on additional weight necessary for a hoist and it's function.

14. The garden mainsonette has a provision for a double bedroom and en suite along with all other entertaining and garden area on the lower ground floor at level thresholds.

15. Most glazing is of low floor to cill height except existing glazing to the rear on the first and second floors.

16. New light switches and sockets will be at 450mm – 1200mm height and 300mm clear of any internal corners.

In addition to the above there is storage space for an electric wheelchair adjacent to the circulation space.

11. TRANSPORT

- *DP16 – The transport implications of development*
- *DP17 - Walking, cycling and public transport*
- *DP18 - Parking standards and limiting the availability of car parking*
- *CPG Transport*
- *London Plan, Policy 6.14 Parking, (charging points).*
- *CS11*

Oakhill Avenue is within a Controlled Parking Zone (CPZ) CA-S – as is most of the borough. The situation of the site within a long established neighbourhood means that there is a wide range of community facilities within a 10 minute walk. The location of the site close to established community, retail and the open space of the Heath and close to public transport enables a positive contribution towards Camden Council's policy of less dependency on cars and the Council's overall Green Transport Strategy.

The proposal has one car parking space at the front – as existing –and it is to belong to the garden maisonette where accommodation comprising of bedroom en suite, all entertaining spaces, kitchen, side courtyard and mature rear garden is all on one level threshold providing a Lifetime Home. The existing dropped curb will be used. Allowance has been made should the car parking space need to be widened to 3.3 meters width for a wheelchair user.

The upper maisonette will have a residents on street car permit – as currently held by the current owner occupier. The site is not on a street with parking stress.

The existing surface of the garden is mostly tarmaced. The proposed surface for the car parking space is to be EcoGrid (see Landscaping section) so that the surface is water permeable, does not increase surface run off and adds to the greenery. Furthermore, soft landscaping is proposed, planted stepped terraces and a green wall along the boundary between no. 4 to enhance the garden.(See Landscaping section).

An electrical charging point is proposed for the front car parking space to allow for the charging of a low emission vehicle.

There is provision of cycle parking in the front garden which is clear of any pedestrian circulation routes. The garden maisonette has storage for bikes in the side 'courtyard' , in the back garden or in the utility / walk in store room. The upper maisonette can accommodate internal storage space for a bike within the generous sized entrance lobby walk in storage cupboard.

12. ECOLOGY / ENVIRONMENT

- *CS 13- Tackling Climate Change through promoting higher environmental standards.*

- *DP 23*

- *DP 22 Promoting sustainable design and construction*

Camden have adopted the policy of expecting developments to achieve 'very good' in EcoHomes assessments. Although the development proposed does not fall within that category as it is under 500 square meters, energy conservation and the ecology of the site and area have been considered and are fundamental to the development and design of the scheme.

The following measures have been incorporated into the design of the scheme:

Water recycling and conservation of water (energy efficient water fittings)

The use of water butts to capture surface run off from the top roof. The roof of the proposed third floor will be clad in clay pan tiles, and a rubber roofing membrane and photovoltaic panels on the flat section. All of these surfaces are hard surfaces producing surface run off when it rains ideal for rainwater harvesting. The rain water will be collected through rain water pipes and stored in an external water butt and the water used to water the garden.

The use of water efficient fittings in the bathrooms and dual flush buttons will ensure reduced consumption. Water meters are to be installed for both the dwellings and if possible, meters are to be visible to make consumers aware of consumption amounts. It has been shown that when this done, consumption by individuals is reduced.

White good appliances consuming water such as dishwashers and washing machines are to be A grade to minimize energy and water consumption.

Insulation

The existing pitched roof is not insulated, nor is the existing ground floor slab. The proposal would ensure that the new roof and new ground floor slab are insulated to levels attaining current building control standards or higher.

The front windows are to be replaced with aluminium framed, argon filled, e-coated double glazed windows to higher than current building control standards (u-value achieved 1.6).

Green roofs, where proposed, would also increase the insulation of the flat roof.

Natural Ventilation

All new fenestration is to be fully openable to it's maximum capacity to allow for free flow of air. Trickle ventilation will be in built into the window frames.

Solar Gain and solar screening

Fenestration to the south facing elevation has been maximized for passive solar gain and for the sun to be enjoyed at every opportunity. Large openings allow the maximum amount of low level winter sun to enter. Overhanging eaves over openings prevent high summer sun over heating spaces.

Light reflecting and heat deflecting roller blinds are proposed for south facing fenestration to protect from harsh summer sun. The south elevation at the lower level is screened by existing foliage.

Natural light

Large window openings have been proposed to maximize natural light intake.

Low energy lighting

Dimmable warm white energy efficient light bulbs are to be used in dwelling areas. Compact fluorescents in bathrooms, cupboards and utility areas and fluorescent tubes for concealed lighting.

Externally, sodium light bulbs are to be used in combination with LED's on a timber switch and PIR operated external lights for the dwelling entrances.

Using renewable re-sources timber & site, re-cylced plasterboard.

Materials are to specified from suppliers who participate in responsible sourcing schemes such as BRE BES 6001:2008 Responsible Sourcing Standard.

Timber specified is to be sourced from schemes supported by the Central Point of Expertise for Timber Procurement such as Forest Stewardship Council (FSC) or any scheme that ensures the harvest of timber products to maintain the forests ecology and its long term viability.

Photo Voltaic Modules

Photovoltaic panels are intended for the third floor roof to produce electricty. A system that is lightweight and doesn't need to penetrate the waterproof roof covering is proposed (such as Bauder Ltd Photovoltaic Modules). It uses membrane to membrane welding techniques to adhere the modules in place.

The units are angled to obtain the optimum energy generation per square meter and the inclination reduces the impact of wind load. As it is lightweight, it does not require the timber joists of the roof to be deeper to support them. This enables a slender roof construction achieving maximum potential headroom within the restricted height of the dormer.

Green Roofs and walls

There are two green roofs proposed. One which will replace the rear impermeable paved patio and the other to replace the garage asphalt roof. One of the main features of the proposal is the large rear green roof and the green wall. They are proposed not only for their aesthetics and calming ambience but have an important role in the sustainability of the dwellings. They retain rainfall, reducing run off, provide additional insulation- keeping heat in and deflecting it in summer, provide valuable habitat for insects promoting bio diversity, clean the air, attenuate sound and cool the air during summer months.

Image of sedum green roof as proposed for the rear and side extension roof tops

An extensive roof with the cultivation of sedum is most suitable as it is low maintenance thus protecting the privacy of the neighbours by not requiring frequent access to maintain the green roof. It is also low weight and therefore can allow the roof rafters to be shallower and the roof lower.

The Green Wall planting will be from the ground and therefore will not require energy consumption for pumping water for it to be watered.

A vegetable patch is proposed in a planting bed within the tiled area onto which the kitchen on the lower ground floor opens out onto.

Recylcing, waste management

The existing clay fish scale hung tiles are to be carefully removed and re-used as architectural salvage.

The existing garage bricks are to be salvage and re-used for the proposed roof extension side wall.

Adequate facilities are provided for storage of recycling bins.See landscape design.

Cycling, alternative use of transport to cars and energy charging point

See Transport section.

Composting

An area for a large compost butt will be designated in the back garden.

Condensing boilers

Both dwellings are to be installed with energy efficient condensing boilers.

Efficient use of land and site

Camden promotes the efficient use of land and building to reduce pressure to develop underdeveloped ‘greenfield’ sites. This is a brownfield site on a slope and it lends itself for development. The scheme intends to intensify the existing use and amenities by adding onto what is there already, upgrading it and enhancing it to serve the environment, the urban context and the socio economic forces of our time.