



**New Build House
38 Redington Road
London NW3 7RT**

Design & Access Statement

December 2009

Contents 0.0

1.0 Introduction

1.1 Purpose of Document..... Page 7

1.2 Design Ambitions..... Page 7

2.0 Design

2.1 Use.....Page 11

2.2 Massing.....Page 12

2.3 Layout..... Page 15

2.4 Scale..... Page 18

2.5 Landscaping and Tree Protection..... Page 19

2.6 Appearance.....Page 21

2.7 Sustainability..... Page 24

3.0 Access

3.1 Vehicular Access..... Page 29

3.2 Inclusive Design..... Page 30

3.3 Lifetime Home Standards.....Page 31

38 Redington Road

1.0 Introduction

StudioMarkRuthven
with Jerry Tate Architects

38 Redington Road

1.0 Introduction

1.1 Purpose of Document

This document is a Design and Access Statement to accompany the conservation area and planning application for a new-build house at 38 Redington Road. Conservation area consent and planning permission was previously granted by Camden Council for a new-build house of traditional design, local authority reference 2006/1733/P. Demolition on the site has been completed, and we have been asked by the owners to prepare this new application for a contemporary scheme.

1.2 Design Ambitions

The client and design team have the highest ambitions in terms of both contemporary design and sustainability. The design for the house is a modern orthogonal scheme following the precedent of several recent new-build houses in Redington Road and Hampstead generally. Keeping in character with a key aspect of the street the masonry and red brick structure provides strong material links with the history of the local properties.

In conjunction with the new build house, six of the existing garages adjacent to the site (as seen in the existing photograph) will be rebuilt to a high standard that conforms with current vehicle dimensions and which will provide a large area of sedum roof. This will improve the parking standards, storm water attenuation and visual character along Redington Road.

The client wishes to target an extremely high rating under the energy performance certificate scheme and a number of initiatives are included in the design outlined in section 2.7 of this document.



Existing view from Redington Road



Existing view from existing garages

38 Redington Road

38 Redington Road

2.0 Design

StudioMarkRuthven
with Jerry Tate Architects



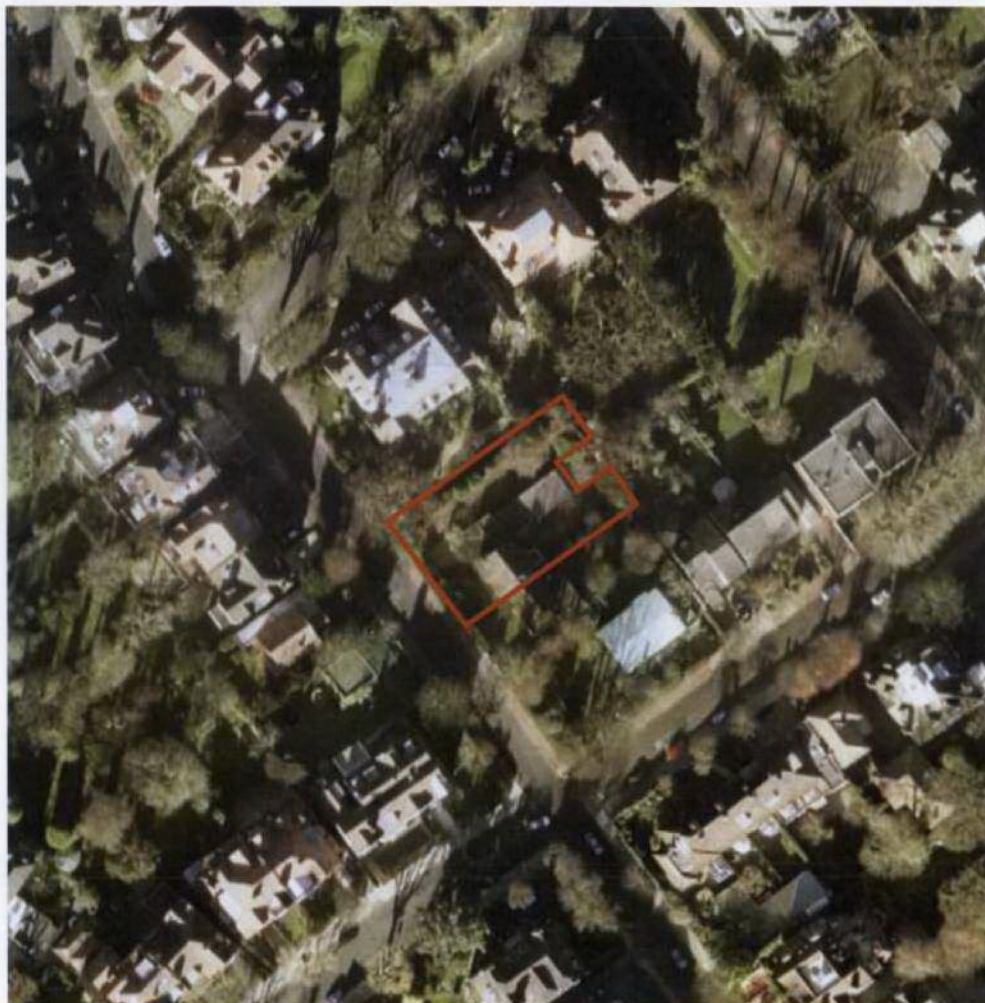
Red line denotes site boundary

2.0 Design

2.1 Use

There is no planned change of use for the site.

Currently the application site is empty, except for a terrace of six garages and an electrical sub-station on an adjacent site. The block of garages, are owned and serve the residents of the adjoining properties no. 42 Redington Road. A semi-detached single family dwelling of 4 bedrooms was demolished in 2007 under the previous conservation area and planning consent. The proposal will be a single family residential dwelling, with two levels of basement and three levels above ground (five total). Six existing garages will be replaced with five new garages designed to current vehicle dimensions. The new house will include 5 bedrooms. In the basement will be a swimming pool, gym, private cinema area, kitchen space, family area, playroom and plant space.



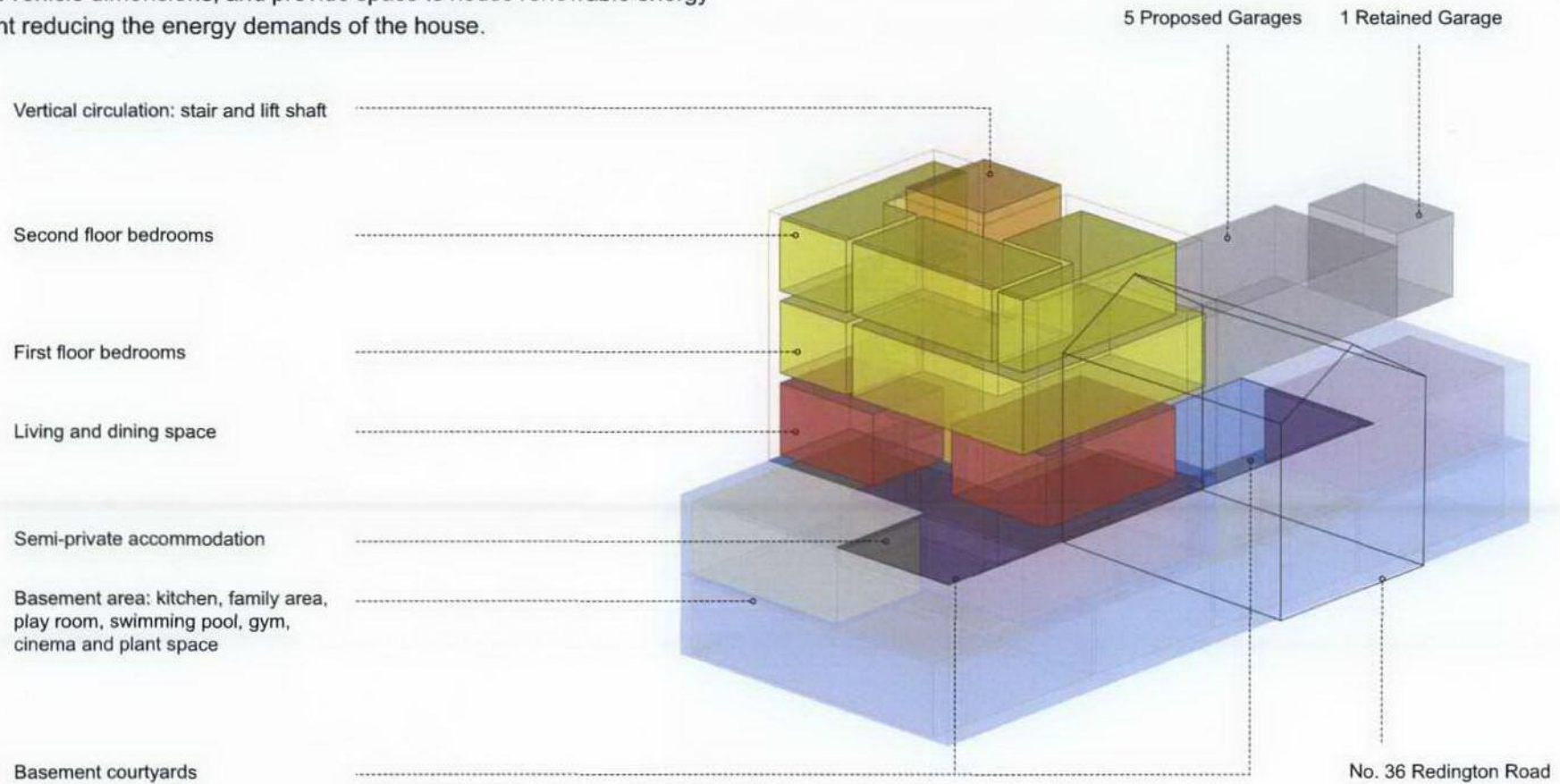
Red line denotes site boundary



2.0 Design

2.2 Massing

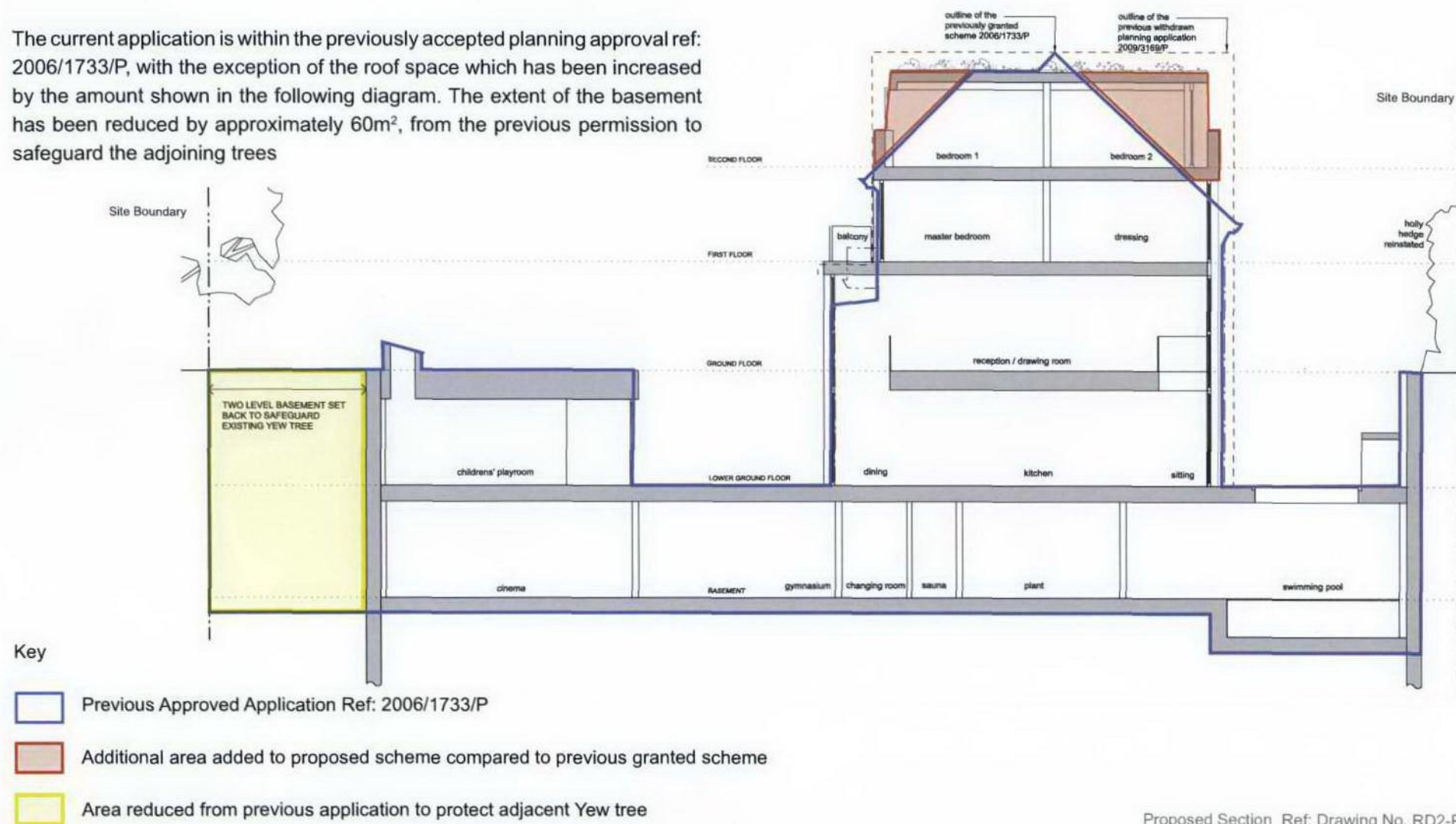
The Proposal aims to achieve a number of things: create a new family/living/dining space more in line with current living patterns, provide a gym, swimming pool and cinema, create new garages that are built to the standards of current vehicle dimensions, and provide space to house renewable energy equipment reducing the energy demands of the house.



Diagrammatic model of the accommodations within the house.
Not to scale.

2.0 Design**2.2 Massing**

The current application is within the previously accepted planning approval ref: 2006/1733/P, with the exception of the roof space which has been increased by the amount shown in the following diagram. The extent of the basement has been reduced by approximately 60m², from the previous permission to safeguard the adjoining trees



Proposed Section Ref: Drawing No. RD2-P-200

2.0 Design

2.2 Massing

The following calculations describe the difference between the previous approved application and current proposed scheme excluding the garages.

Previous Approved Scheme Ref: 2006/1733/P

Floor	GIA in m ²
-2	279
-1	229
0	110
1	102
2	60

Current Proposed Scheme

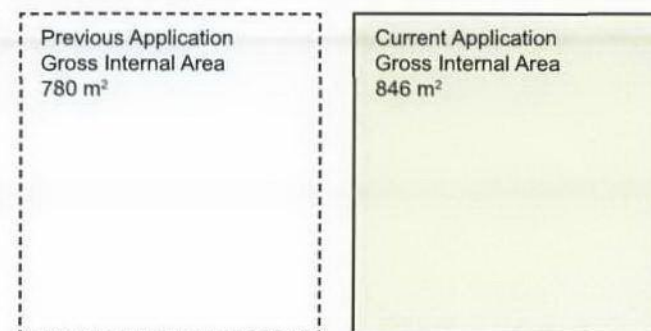
Floor	GIA in m ²
-2	277
-1	225
0	131
1	118
2	95

Indicative Areas

The 'Total Gross Internal Area' of **previous planning approval** = 780m²

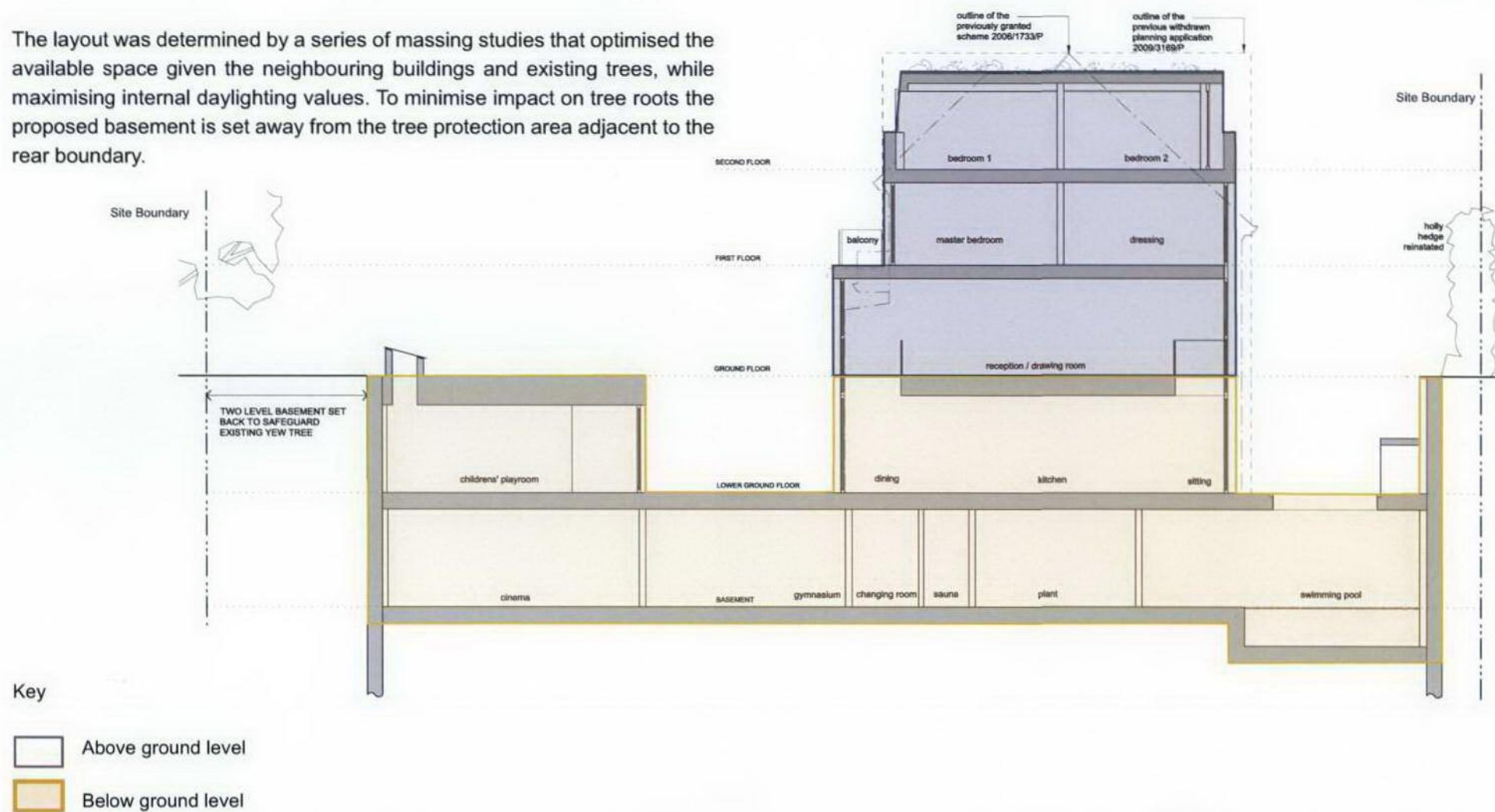
The 'Total Gross Internal Area' of **proposed planning application** = 846m²

Nett gain for current application= +66m²



2.0 Design**2.3 Layout**

The layout was determined by a series of massing studies that optimised the available space given the neighbouring buildings and existing trees, while maximising internal daylighting values. To minimise impact on tree roots the proposed basement is set away from the tree protection area adjacent to the rear boundary.



Proposed Section Ref: Drawing No. RD2-P-200

2.0 Design

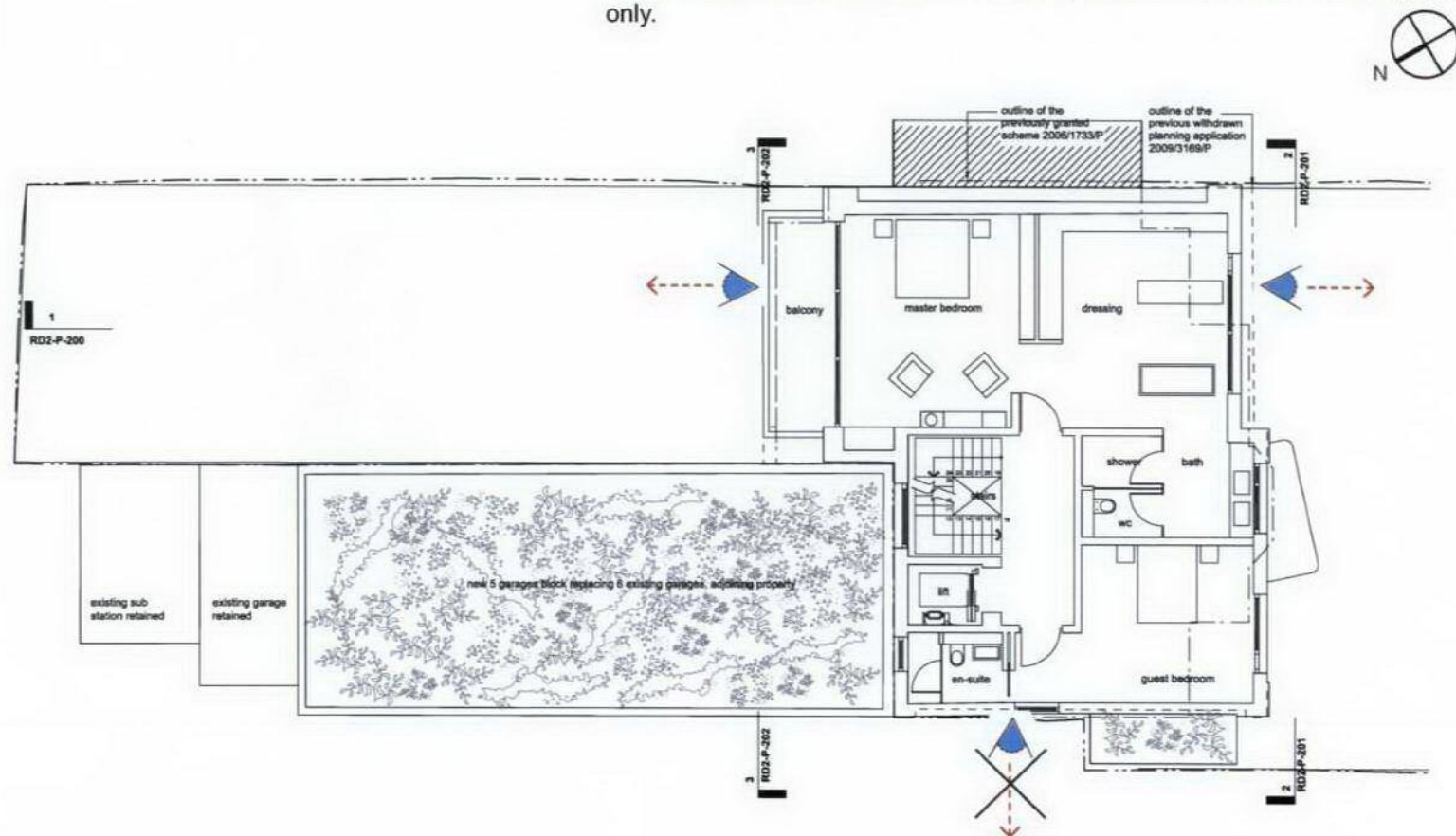
2.3 Layout

A solar massing study was undertaken to understand the behaviour of the building during different months of the year. From our conclusions the house was susceptible to unwanted solar gains during the summer months. The study further allowed the design team to produce a highly efficient plan that best utilised the available natural light to reduce internal artificial lighting and energy demands.



2.0 Design**2.3 Layout**

The primary views from the property are across the front and rear aspects, thus the flanking walls have only a limited number of windows to prevent overlooking. The master bedroom balcony overlooks the rear of the property only.

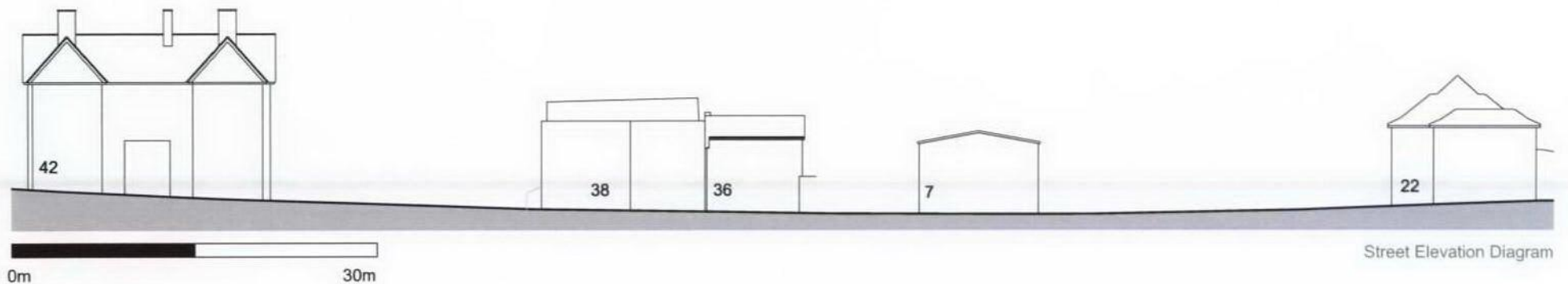


Proposed First Plan Ref: Drawing No. RD2-P-103

2.0 Design

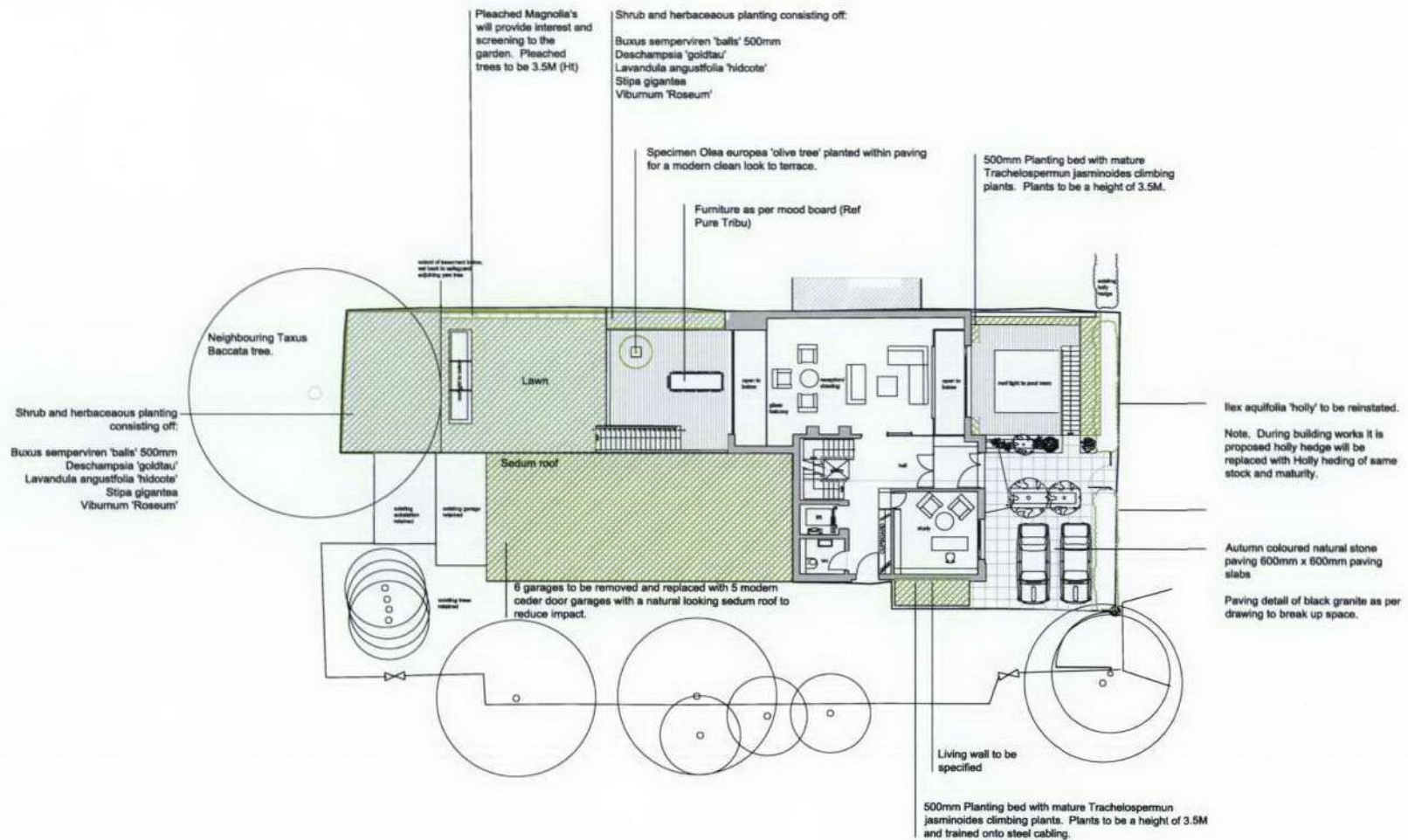
2.4 Scale

The house is similar in scale to the majority of other houses on the street. We have surveyed the adjacent properties along Redington Road to compare against the proposal and these are displayed in the following diagram to demonstrate the contextual scale of the scheme within the general streetscape.



2.0 Design

2.5 Landscape and Tree Protection

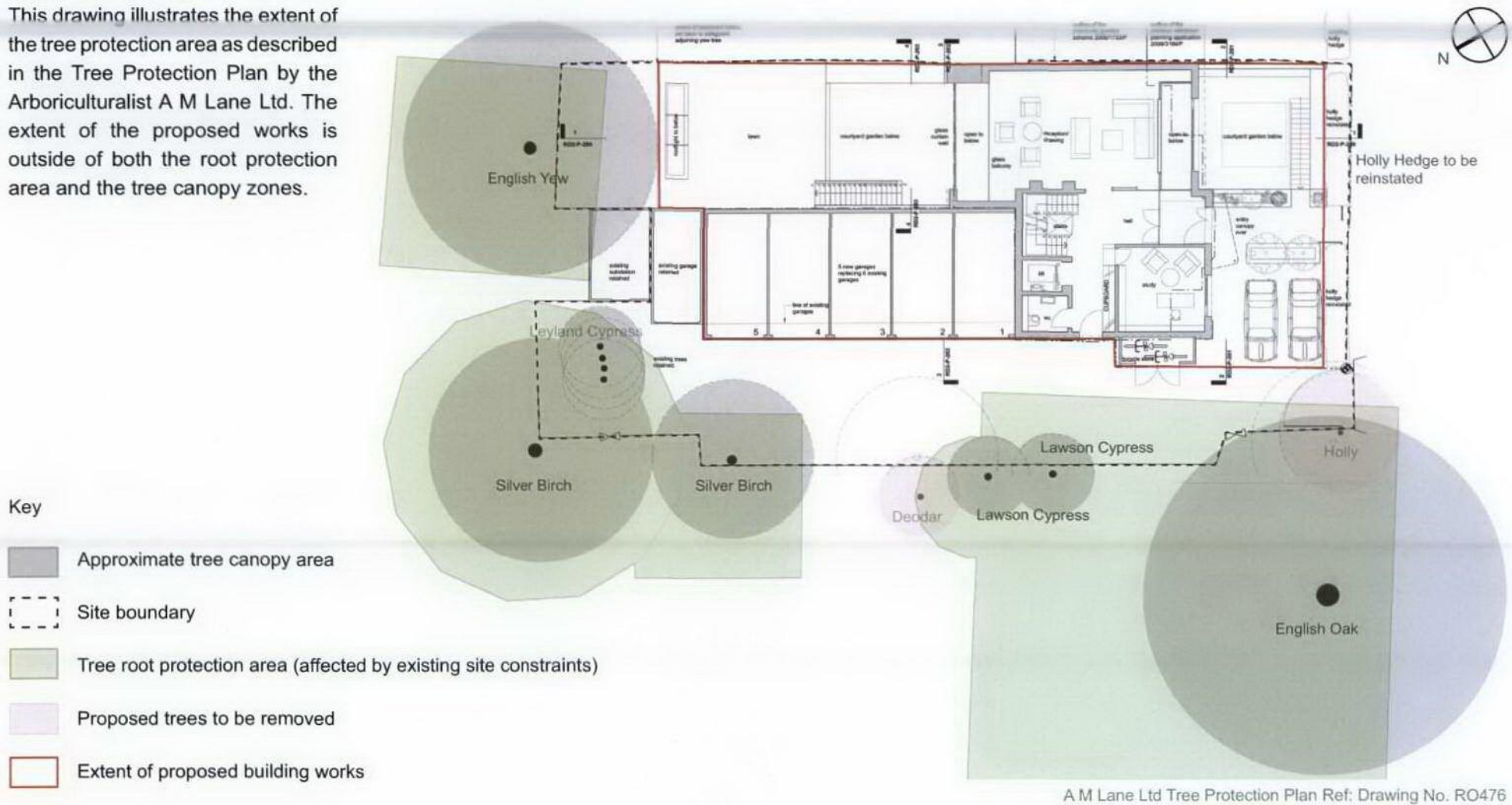


Ref: Landscape Plan RD2-P-110

2.0 Design

2.5 Landscaping and Tree Protection

This drawing illustrates the extent of the tree protection area as described in the Tree Protection Plan by the Arboriculturalist A M Lane Ltd. The extent of the proposed works is outside of both the root protection area and the tree canopy zones.



2.0 Design

2.6 Appearance

Key to Images

- A 16 Redington Road
- B Conrad Court, Redington Gardens
- C 22 Redington Gardens
- D 28 Redington Road
- E 47 Redington Road
- F 35 Redington Road
- G 6 Redington Road
- H 27a Redington Road

Redington Road has a very interesting architectural character with many different styles ranging from the pastiche to the ultra-modern. Some houses are detached and some semi-detached. Most houses are two, three or four storeys and have a driveway for private parking. Houses are typically substantial and span the full plot width. A number of new schemes have been recently completed that have flat roofs and extensive basement areas.

The proposed scheme will reflect the dominant use of red brick on Redington Road while reflecting the modern developments through contemporary detailing and finishes.



A



B



C



D



E



F



G



H

2.0 Design

2.6 Appearance: Redington Road Elevation Perspective



View from Redington Road

2.0 Design

2.6 Appearance: Rear Elevation Perspective



View of garages and rear of 38 Redington Road

2.0 Design

2.7 Sustainability: Building Services

The building is designed to minimise the use of active cooling. The vertical stair and lift shaft are used to create a stack effect, drawing hot air up and out through the roof light.

Mechanical openings release hot air drawn up through the stair well

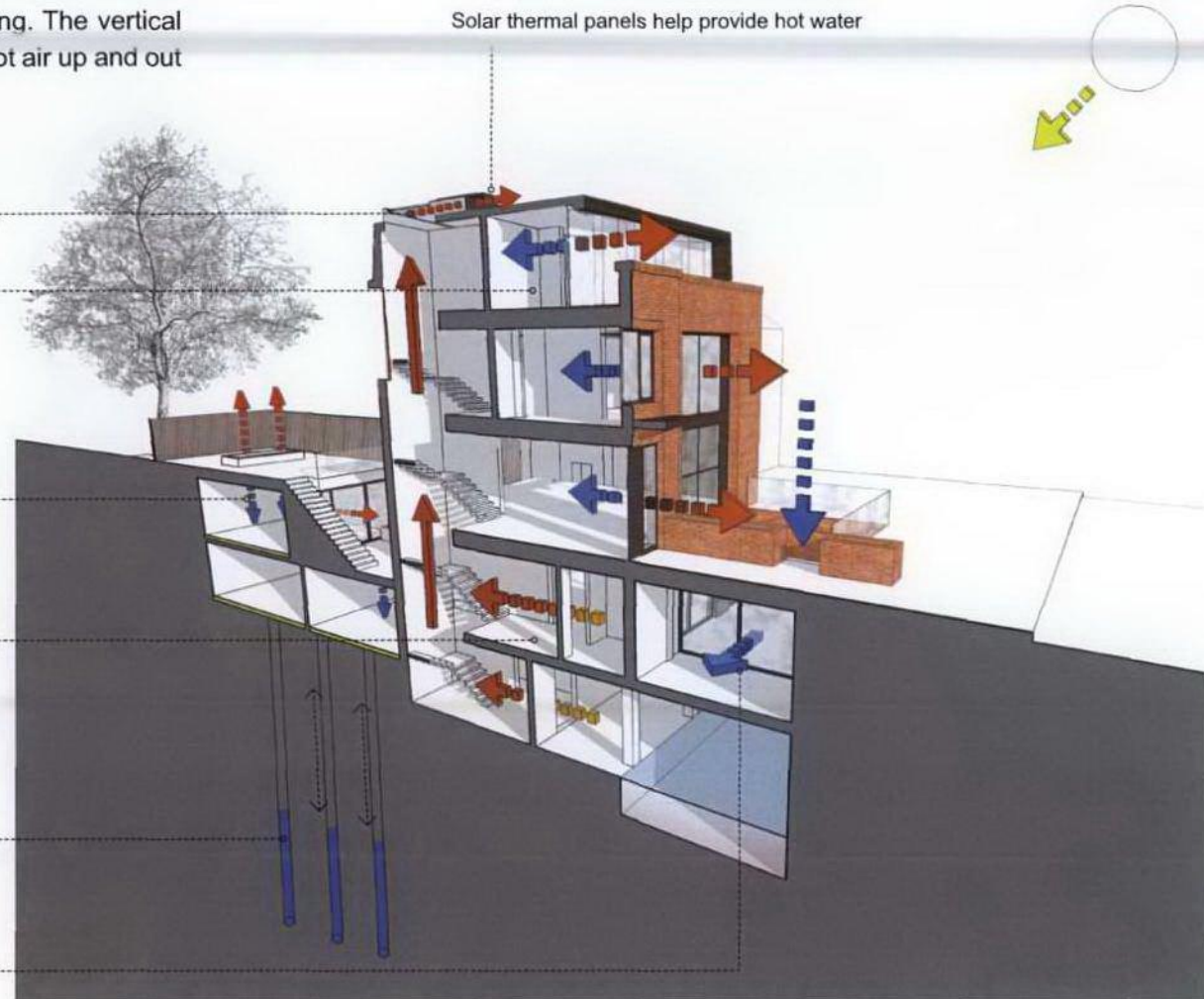
Shallow room depths allow natural ventilation through openable full height windows

Openable roof lights release warm air and circulate cool air into basement

Underfloor heating & cooling supplied by the GSHP keeps the building at a constant comfortable temperature

A ground source heat pump with boreholes is used to heat / cool the swimming pool and house

Cool air drops down into sunken courtyards where trickle vents draw cooler air into the building



2.0 Design

2.7 Sustainability: Building Fabric



A



B



C



D

The proposal aims to achieve a U-value generally of $0.15 \text{ W/m}^2/\text{K}$ for the external building fabric. To achieve this without compromising the thickness of the external envelope our preferred solution is to use Aerogel insulation. Aerogel is a low density solid derived from a gel in which the liquid component has been replaced by air using a process known as supercritical drying. This results in a material with remarkable insulation properties. Historically, use has been limited to industrial and petrochemical. However the high performance of this material offers a unique solution in building and construction applications.

The roof to the house and garages will be covered in sedum to provide a green alternative to a flat roof, acting as attenuation for rainwater while reflecting the colours in the surrounding landscape.

The lifecycle and lifespan of the building components are an important aspect of the design. Windows will be high-quality and constructed to be

energy efficient double glazed, argon-filled, low-e units, whilst maximising natural light into the living space. Our preferred window manufacturer, Velfac, provide virtually maintenance-free units which only require regular cleaning and oiling of the hinges and handles once a year.

Sliding vertical louvres will provide shade from the westerly sun during the afternoon. This will prevent unwanted solar gains and provide privacy as required.

Each of the individual elements that create the building fabric will be sourced for their longevity, and from companies that are committed to sustainable building practice and manufacture.

Key to Images

A	Aerogel insulation
B	Sedum roof
C	Timber frame Velfac windows
D	Vertical louvers

2.0 Design

2.7 Sustainability: Lifestyle

There are some spaces planned into the house that promote a sustainable lifestyle. These are, a drying space, cycle storage and a home office. Diagrams of these areas are shown on the right.

A drying space can significantly reduce energy demands from tumble drying clothes, as well as ensuring clothes last for a longer period of time.

A cycling store, with easy access to the road, promotes a low-carbon transport method compared to a car, as well as a healthy lifestyle through exercise.

A home office promotes working from home which can reduce the energy demands required for travelling to and from an office each day. Even if only used occasionally the energy savings can be significant.

As well as these items the house will contain a designated recycling area, with adequate space for separation of waste types.

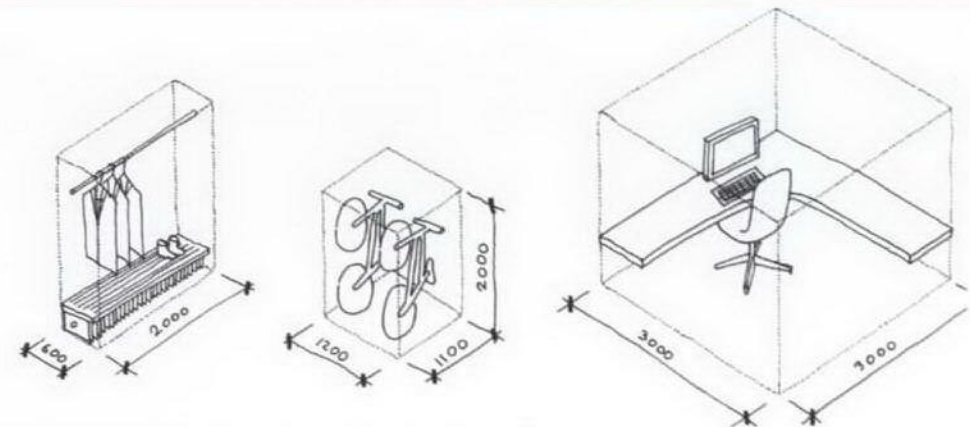


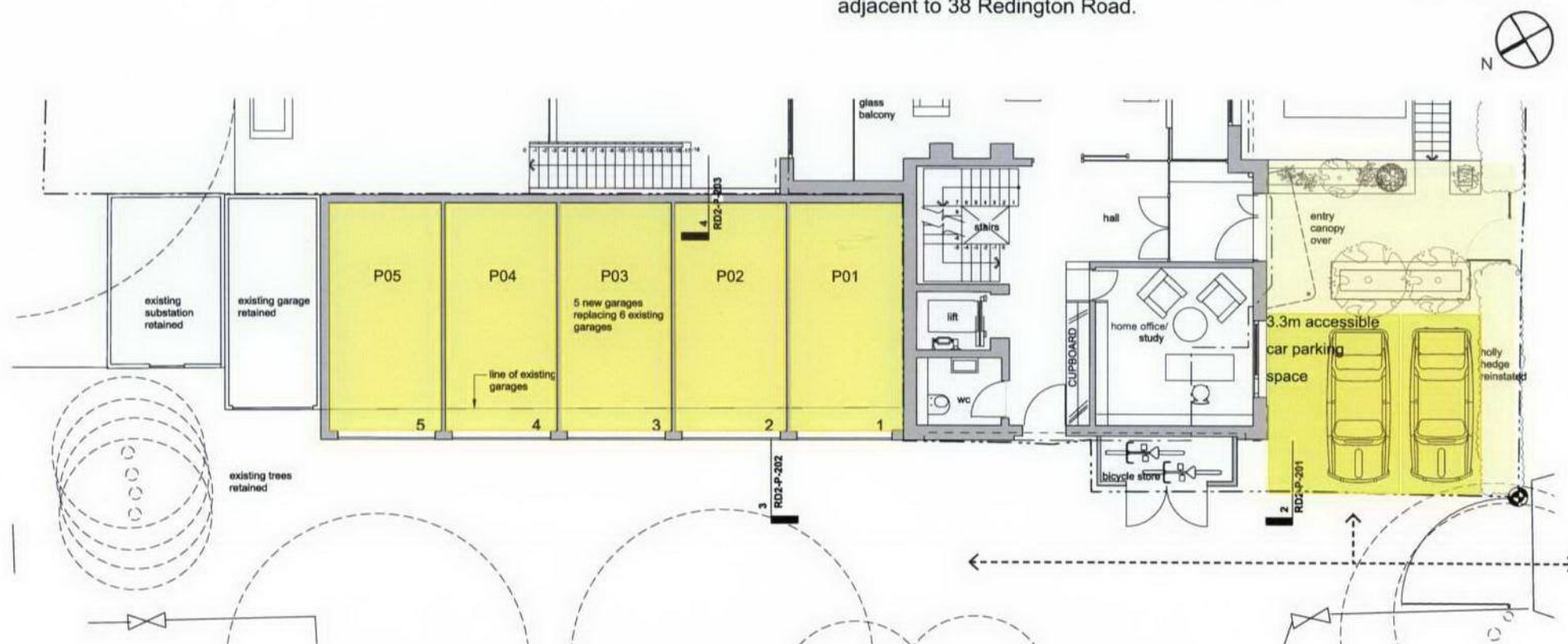
Diagram of drying space, cycle storage and a home office

3.0 Access

38 Redington Road

3.0 Access**3.1 Vehicular Access**

Vehicular access is from Redington Road. A new level driveway with private parking allows residents and visitors to park off the street. The private parking has been designed in coherence with Part M of the Building Regulations to allow for disabled parking/access. Five new garage spaces designed to contemporary parking requirements are to replace the existing six garages adjacent to 38 Redington Road.

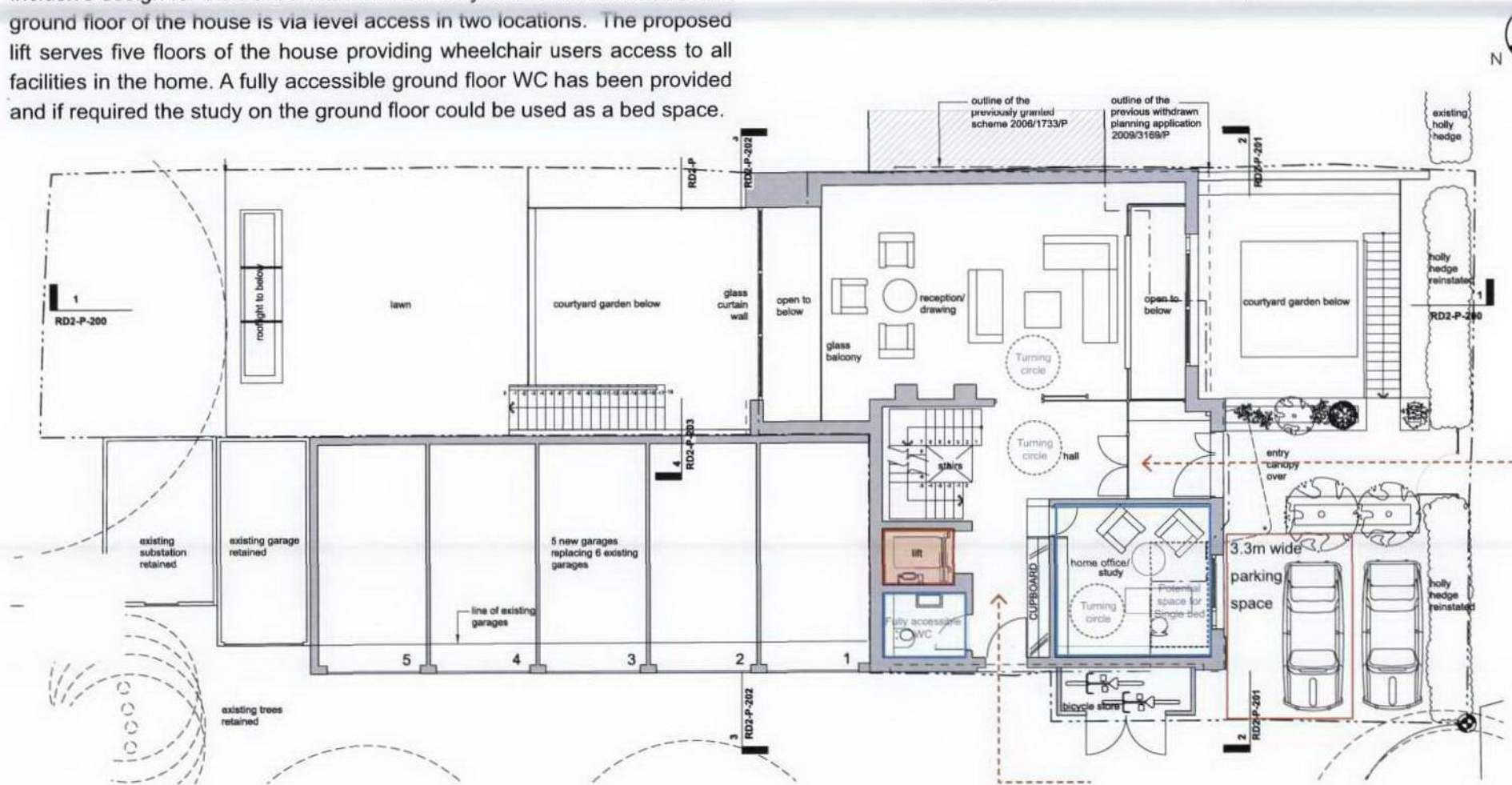


3.0 Access

3.2 Inclusive Design

Inclusive design for the house has been carefully considered. Access to the ground floor of the house is via level access in two locations. The proposed lift serves five floors of the house providing wheelchair users access to all facilities in the home. A fully accessible ground floor WC has been provided and if required the study on the ground floor could be used as a bed space.

The design of the entire house is compliant with Lifetime Home Standards



3.0 Access

3.3 Lifetime Home Standards

1. Car Parking

Car parking adjacent / to the front of the home is capable of enlargement to attain 3.3m width. Refer to 3.1 Vehicular Access.

2. Access from Car Parking

The distance from the car parking space adjacent / to the front of the home is kept to a minimum and is level. Refer to 3.1 Vehicular Access.

3. Approach

Approach to the front and side entrance is level. Refer to 3.2 Inclusive Design.

4. External Entrances

All entrances will be illuminated and have level access over the threshold. The main/front entrance will be covered with a canopy.

5. Communal Stairs

The stairs and lift will provide easy access to each floor and are fully accessible.

6. Doorways & Hallways

The width of internal doorways and hallways conform to Part M. A 300mm nib or wall space to the side of the leading edge of each door will be provided on the entrance level.

7. Wheelchair Accessibility

There is space provided for turning a wheelchair in the living areas, and adequate circulation space for wheelchairs elsewhere.

8. Living Room

The living room is at entrance level. Refer to 3.2 Inclusive Design.

9. Two or more storey requirements

The study on the ground floor could be used as a convenient bed space if required. Refer to 3.2 Inclusive Design.

10. WC

A wheelchair accessible toilet at entrance level has been provided. Refer to 3.2 Inclusive Design.

11. Bathroom & WC Walls

Walls in the bathroom and WC will be capable of taking adaptations such as handrails.

12. Lift Capability

Four floors within the home are accessible via the lift. Refer to 3.2 Inclusive Design.

13. Main Bedroom

The design and specification could provide a reasonable route for a potential hoist from a main bedroom to a bathroom / ensuite.

14. Bathroom Layout

The bedroom 1 and bedroom 2 both have ensuite bathrooms that have been designed for ease of access to the bath, WC & wash basin.

15. Window Specification

All window glazing within the living room area will begin no higher than 800mm from the floor level and all windows throughout the home will be easy to open/operate.

16. Fixtures & Fittings

Switches, sockets, ventilation and service controls will be at a height usable by all, between 450 and 1200mm from the floor.

StudioMarkRuthven

52 Prince of Wales Road
Kentish Town
London NW5 3NE

Tel. +44 (0) 20 7485 0050

Fax. +44 (0) 20 7485 0030

Email: mark@studiomr.co.uk

Jerry Tate Architects

Hothouse
274 Richmond Road
London E8 3QW

Tel. +44 (0) 20 7241 7481

Mobile tel. +44 (0) 7970 101 328

Email: studio@jerrytatearchitects.com