

3.0 Concept and Design Development

3.9 Landscaping

Landscape Design Intent

Landscaping is integral to the architectural approach. Given the site's location in an established green street due care and attention has been given to the design of the landscaping in order to respect the character of Frognal Gardens and its setting within the wider Hampstead Conservation Area.

The landscape character of the area is protected and reflected in the proposed vegetative planting, creating a soft edge to the street in a conservation area characterised by planted borders. The planting will create a biodiverse green link between the house and the pavement, contributing to Hampstead's leafy streetscape.

The proposed landscaping reflects the richness of the green streetscape, with the introduction of evergreen and semi-evergreen shrubs alongside perennials to create volume and density. This ensures a full greening of the space from the street view, transforming the current driveway into a front garden.

Efforts to increase biodiversity and enrich wildlife in the area have been made with the selection of native, evergreen and seasonal plants. Careful plant selection can extend seasons to support wildlife in the urban environment for longer throughout the year.

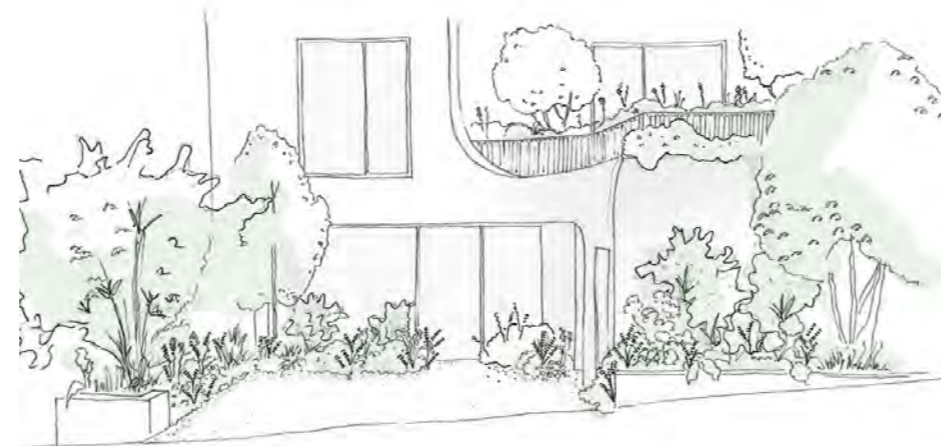
Overall landscaping aims are as follows:

- To improve planting structure and quality, thereby enhancing amenity from the street.
- To create a sense of place in harmony with the local area.
- To promote biodiversity.
- To intercept surface water flow and improve drainage.

Planting Areas

The landscape proposals have evolved alongside the architectural form, responding to the interior spaces and the surrounding character of the area.

A sequence of planted spaces are weaved vertically through the stepping levels of the south facade. The existing hard landscape is softened to create a front garden which merges with a planted roof at upper ground level, preserving the sense of multi-level landscape in the existing condition. The greenery continues to trace its way up the elevation with planting incorporated on narrow balconies formed by the building set backs, increasing the amount of planting amenity in this corner of Frognal Gardens.



Front Garden Sketch



Landscaping Plan

Entrance level garden

An existing overgrown and misshapen hedge will be replaced with evergreen shrubs and a multi-stemmed ornamental tree in order to enhance the existing soft frontage to the street edge.

Small slow-growing trees which can be pollarded have been located within the area of soft landscaping along the boundary with No 18b, which currently suffers from a lack of vegetation. These trees will soften the existing hard edge by replacing the hardscape and bins in this area.

New planting beds will attenuate water and intercept run off whilst providing filtered views and visual screening for the internal ground floor spaces. Diversity and composition have been considered as plant morphology has been demonstrated to be more influential than planting bulk at reducing run-off. A new permeable surface will replace the existing brick paved driveway.

Refuse and Recycling

A dedicated bin store for waste and recycling is integrated at the front of the house as part of the proposals.



View indicating size of bin store concealed behind planting



Front Garden Planting

The concept behind the planting is that it truly celebrates this green corner, selecting shrubs and plants which will be of far higher amenity to the natural environment than the existing overgrown evergreen shrubs.

Evergreen structure will provided by Viburnum tinus 'Eve Price', with dense dark green foliage, flowering over a long period from late winter to spring, with berries which will provide a food source for birds. A specimen Daphne will also be included which as well as providing amenity to wildlife, provides a delicious fragrance to anyone passing in late winter.

The other plants will provide pollen and nectar for as long a season as possible, from early crocus through to asters in October. To encourage insects it is key to grow a wide variety of plants in different areas of the garden, and in this sunny spot we are proposing a planting which will be specifically attractive to butterflies and bees, as well as encouraging adults and larvae of ladybirds and lacewings, overflies and pollen beetle . The proposed annuals, perennials and bulbs for interest throughout the year for this area are:



Front Garden Planting Scheme

- | | |
|---------------------|---------------------|
| Aster/symphotrichum | Monarda |
| Allium | Nepeta |
| Centaurea | Origanum |
| Crocus | Persicaria |
| Digitalis | Primula vulgarisms |
| Echinops | Pulmonaria |
| Eupatorium | Salvia |
| Galanthus | Sanguisorba |
| Helenium | Succisa |
| Lavandula | Trifolium |
| Leucanthemum | Verbena bonariensis |



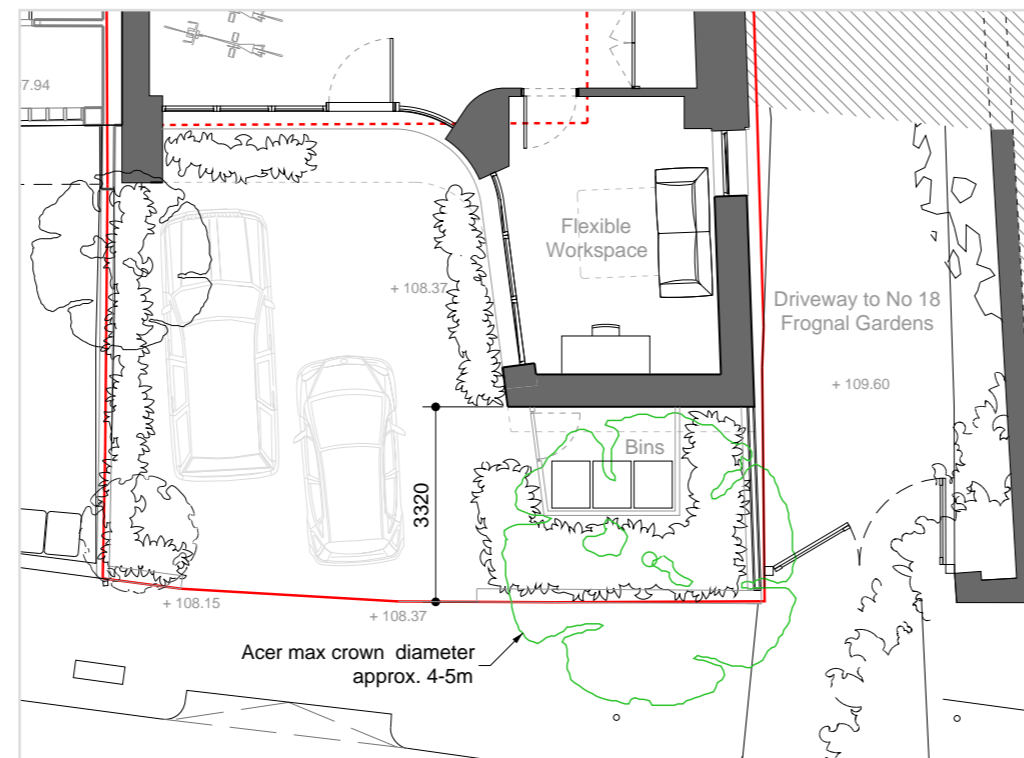
As a feature tree, to provide an attractive view to neighbours and passers-by, we propose a small multi-stemmed specimen of Acer Griseum. Acer griseum, the paper bark maple, will be grown as a large shrub into a small-sized, multiple stemmed tree. The Acer griseum is attractive to pollinating insects; its greatest ornamental trait is the cinnamon-coloured bark, which, like a birch, peels back strongly. After a few years the bark colours into an intense brown-red. The leaves are trifoliate and dark green, the under surface being grey-green. In autumn the colour changes into a magnificent orange to crimson. The growth of the roots is shallow and densely rooted. Acer griseum belongs to one of the most attractive and prized of all maples. It is an outstanding example of a tree that should be planted as a solitary and is extremely suitable for small gardens based on its slow growth rate and the ability to keep it to a limited size.

The dimensions at planting would be approximately 0.9m diameter x 0.4m depth for the rootball, and 3m height x 2m diameter for the crown. We propose that with management and pruning, it will grow to an eventual size of approximately 5-6m in height and 4-5m in diameter, which would take around 15-25 years depending on the rate of growth. There will be a root protection barrier installed at the edges of the pavements, driveway and bin store retaining wall. This will direct the roots of the tree downwards initially, before they have space to spread out at a safe level below these elements.

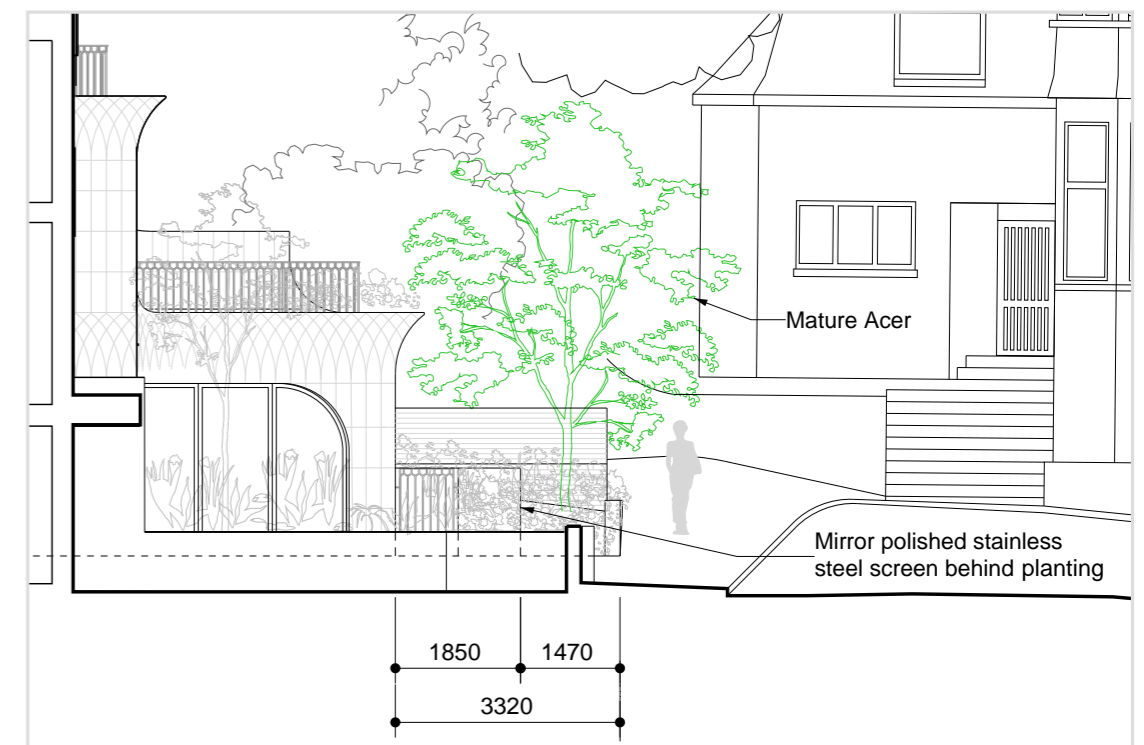
The generous dimension and sloping design to the beds enhances the drama of the planting and encourages plants to gently spill over and soften the edges of the walls. Additional space for planting permits a wide range of plant species and varieties to be included, which in turn creates the opportunity for layers of colour, texture, height and movement to occupy the space. Underplanting beneath the multistem tree takes advantage of the dappled shade below the tree canopy, whilst the sculptural shape and character of the tree itself anchors the scheme with its striking visual presence.



Acer Griseum



Acer at Maturity



Upper Ground Green Roof

Raised planted beds will cover the majority of this area, restricting access to most of the roof to maintenance purposes. Larger planters will add variety to the height of the planting components. The plant communities will be chosen in order to encourage the amount of biodiversity value at this level.

Plants will be chosen to display a variety of form and foliage. A variety of plants will provide flowers and colour throughout the growing seasons with evergreens providing interest in more dormant seasons. Large shallow-rooted shrubs together with perennials will create dense planting providing year round visual amenity. The layers of vegetation at ground and upper ground level will enhance vegetation forming this attractive corner which will merge into the well maintained and established vegetation of the neighbouring properties.

First and Second Floor Balconies

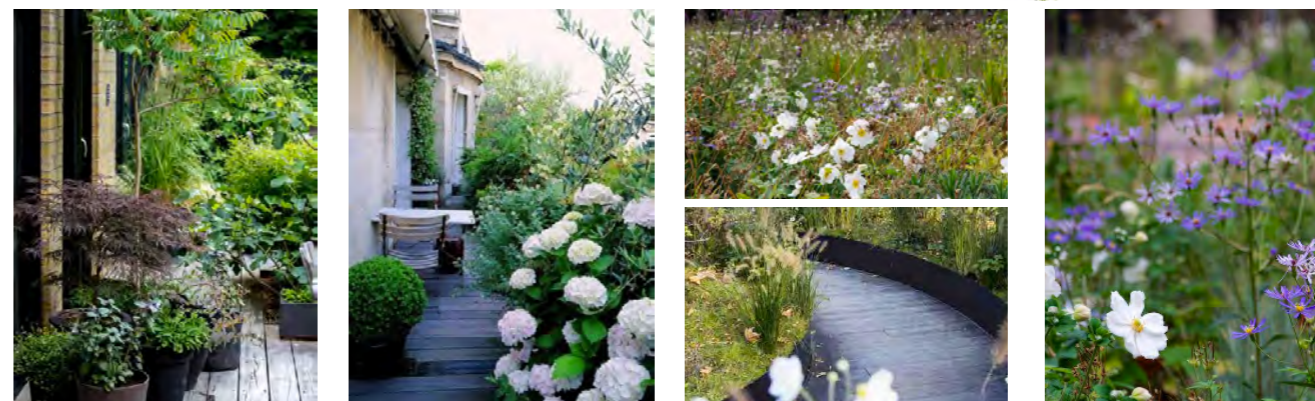
Planting will be woven through the stepping levels of the architecture. Small potted specimen trees will nestle into the curves of the building facade.



View from First Floor Terrace



Balcony Garden Landscape Plan



Rear Garden

The rear garden has been designed to be low maintenance whilst providing year round interest and is composed to frame views from interior spaces. Planting will be responsive to the north facing aspect and will be designed to promote habitat creation and biodiversity.

There is a significant Lime tree located towards the rear boundary in the garden. This tree has a root protection area of 10.2m which covers most of the rear garden.

An area of decking largely located outside of the root protection zone provides outside dining and seating. Existing overgrown borders are replaced with new planting.

The design has been developed with an arbouriculturalist and an Arboricultural Impact Assessment (AIA) and method statement accompanies this report.

Rear Terrace

The rear second floor terrace will be covered with an extensive wildflower green roof and only be accessible for maintenance.



View from Rear Garden



Rear Garden Landscape Plan

3.0 Concept and Design Development

3.10 Layout

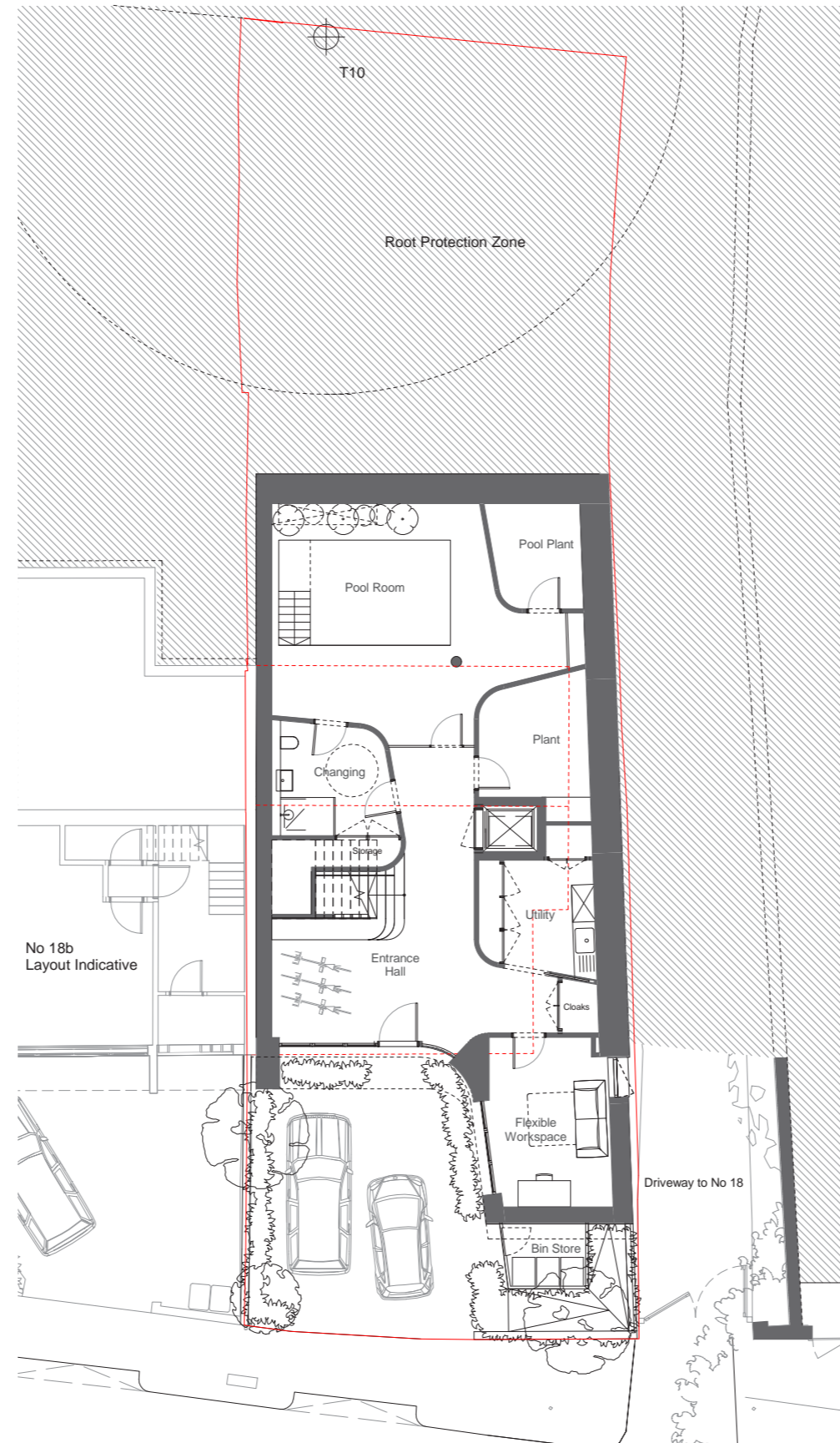
The proposed layout is fully described in the drawings comprising this application. A brief overview is included here.

The main access to the building is from Frognaal Gardens. The ground floor of the house has been lowered slightly from the existing level in order to provide a level surface from pavement to the entrance door. The previously barren driveway has been transformed into a series of planted boundaries.

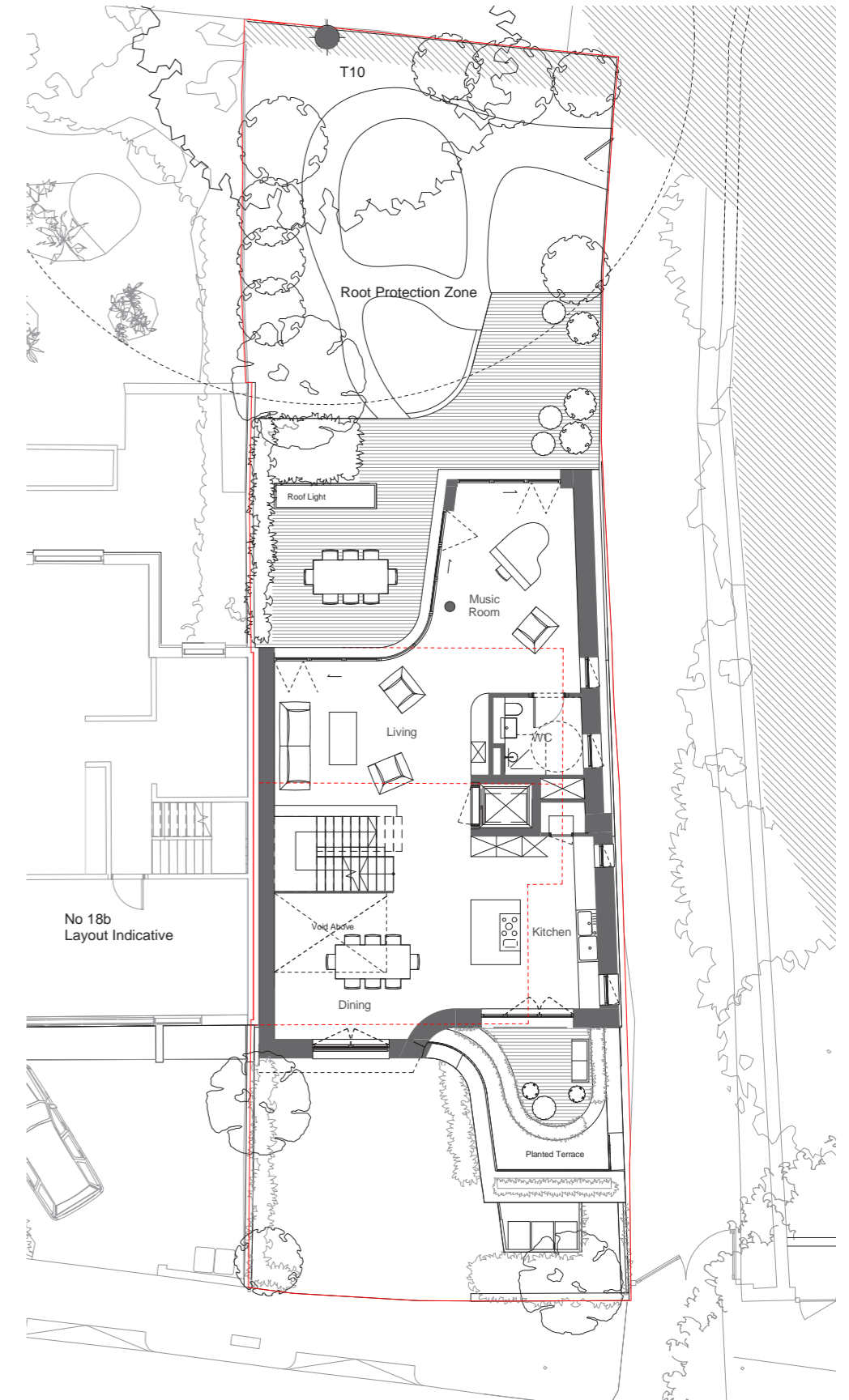
The entrance is recessed into the building, sheltered under a bay window. The entrance has been transformed from the existing condition - of a hidden front door behind hedges and via inaccessible steps - to a visible front door facing the street, with a degree of transparency through to the front hall and study, transforming the street and creating an active domestic frontage.

The overall volume and spaces created within are domestic in scale. The building is carefully considered with spaces organised around a central service zone and hearth. Rooms have been arranged to flow around this core to maximise light through the interior and frame views from within. Rooms open up onto small balconies, bringing the landscape into the interior.

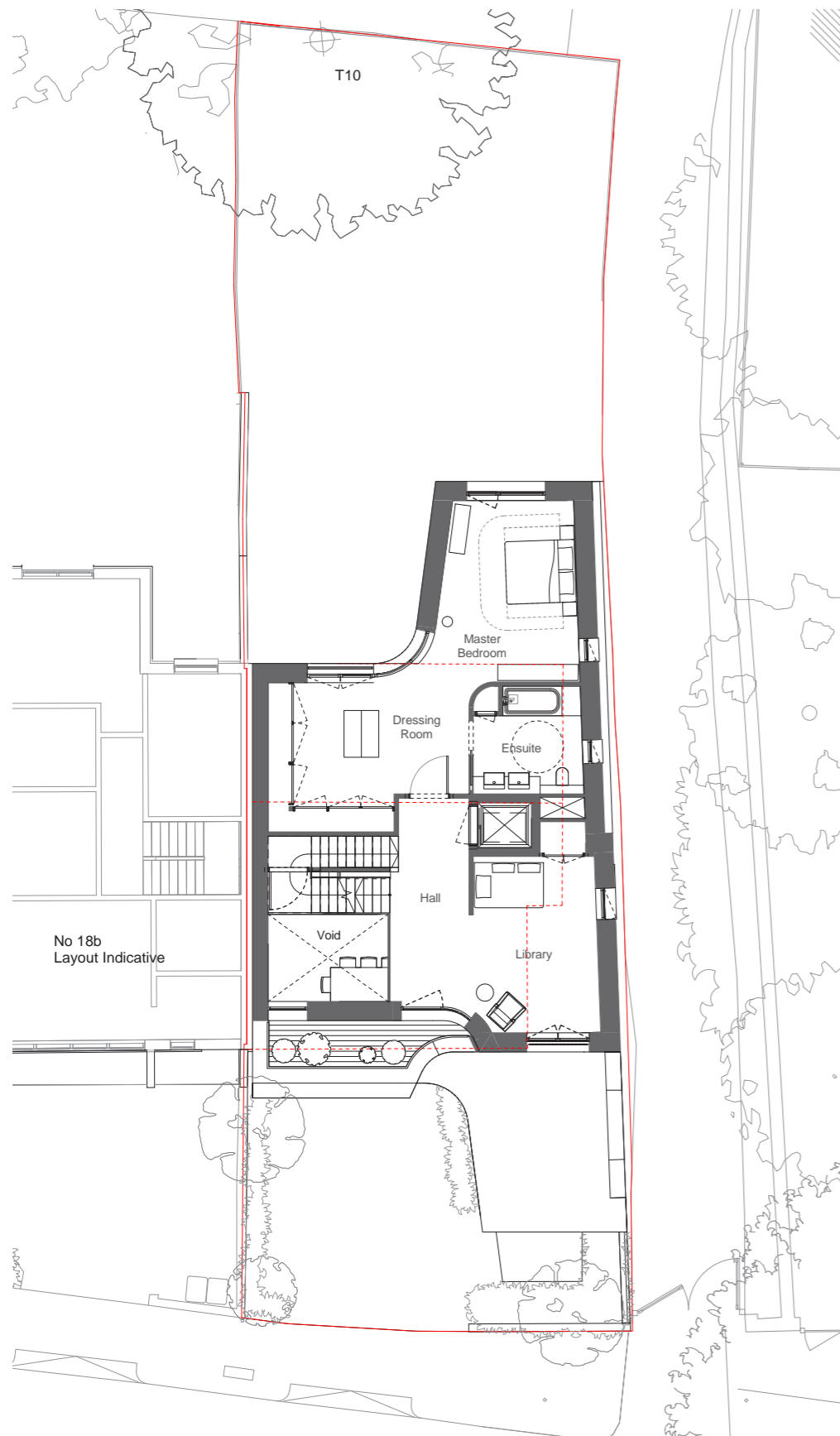
The interior draws on the horizontal and vertical fluidity of the exterior; open plan and double height volumes connect spaces throughout the house, whilst rooflights in the pool and master bedroom bring light down from the sky.



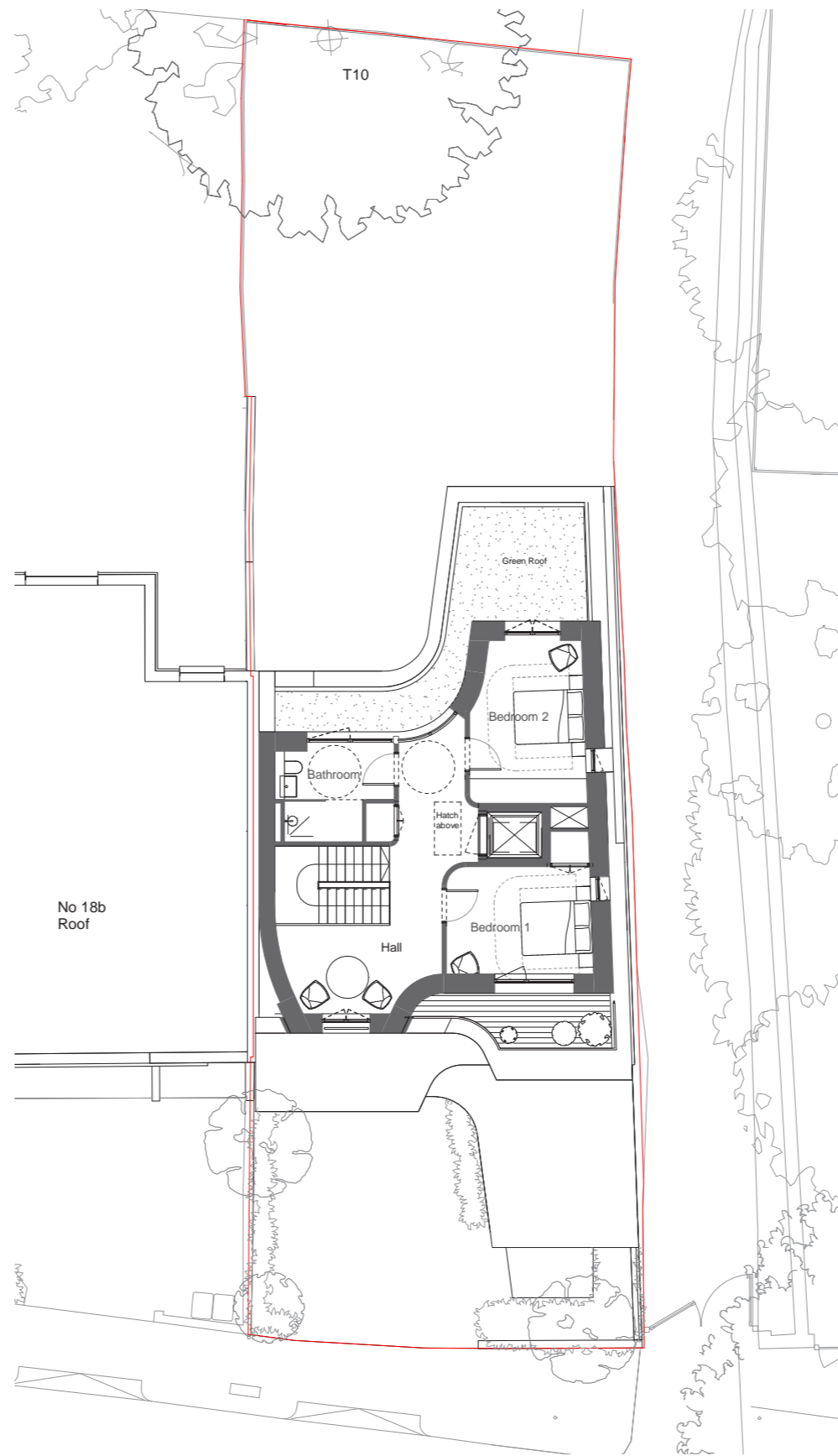
Proposed Ground Floor



Proposed Upper Ground Floor



Proposed First Floor



Proposed Second Floor

Accessibility

The house has been designed with later life in mind, and in accordance with the requirements of Approved Document M1 of the building regulations. A brief strategic summary of the key elements of compliance is as follows:

Level access is provided to the main entrance, from the primary living floor to the rear garden and to balconies.

There is a large Part M compliant changing room and bathroom on the ground floor as well as a Part M compliant accessible WC on the level of the kitchen and living room spaces.

The stair is easily accessible and all corridors and doors are of generous proportions. A passenger lift sized to accommodate a wheelchair and standing aide provides step free access between floors.

The open plan living at upper ground floor provides flexibility for use of space in the future. The music room can be partitioned off and turned into a bedroom with accessible en-suite bathroom if required in the future.

Fire Strategy

The house has been designed in accordance with the requirements of Approved Document B1 of the building regulations. The house will be provided with sprinklers throughout and appropriately compartmented. The passenger lift sits within a fire resisting lift shaft.

3.0 Concept and Design Development

3.11 Site Levels & Excavation

The two sections opposite show site access and levels. A 1m high retaining wall currently separates the ground floor of No.18a and No.18b. The new building will sit 300mm below the existing ground floor level of 18a.

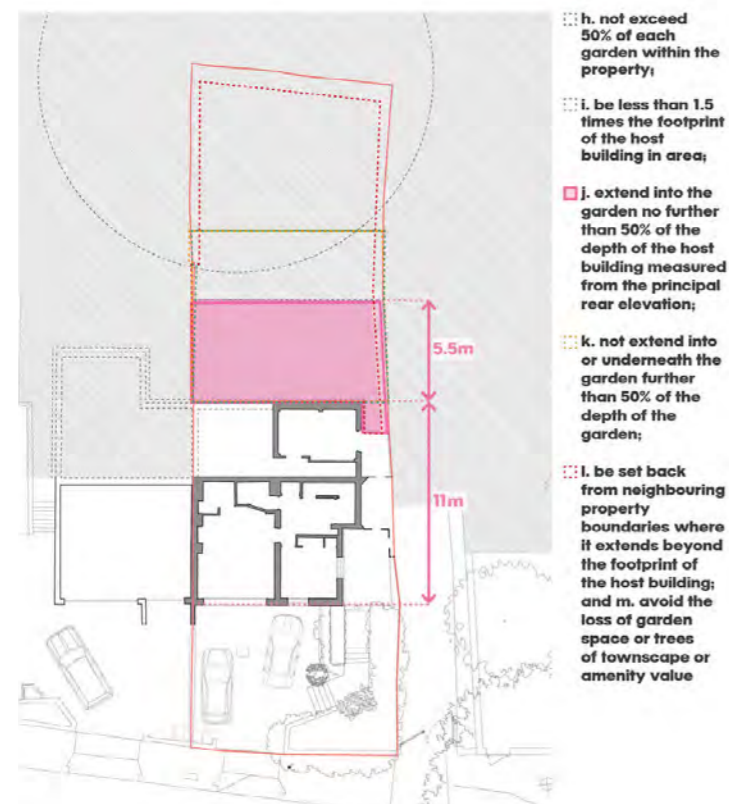
The ground floor level of the existing house has been extended to the rear of the property by 5.5m. The sitting, location, scale and design of the excavation is subordinate to the host building and complies with Policy A5 of Camden's Local Plan. The most onerous requirement of the policy in this case relates to the depth of the existing property, which measures 11m from the principal front and rear elevations. The maximum extension of the ground floor can be no greater than half of this measurement.

A Basement Impact Assessment prepared by Akera Engineers accompanies this report.

A Drainage Report prepared by Environmental Engineering Partnership accompanies the Basement Impact Assessment.



Proposed Long Section



Proposed Short Section

3.0 Concept and Design Development

3.12 Parking & Cycle Strategy

Camden Planning Guidance: Transport

The residents of the proposed building will be the returning existing owners whose family have owned the property for 47 years since the early 70s.

Camden's Local Plan Policy T2 requires all new developments in the borough to be car-free. However, Camden supplementary planning guidance states the following in relation to the requirement of car free developments:

'Exceptionally, where existing occupiers are to return to a property after it has been redeveloped, we will consider allowing the re-provision of the parking available to them (so the redevelopment does not cause people to lose parking already available on that site prior to its development), where it is demonstrated to the council that the existing occupier will return to the property as their principal home.'

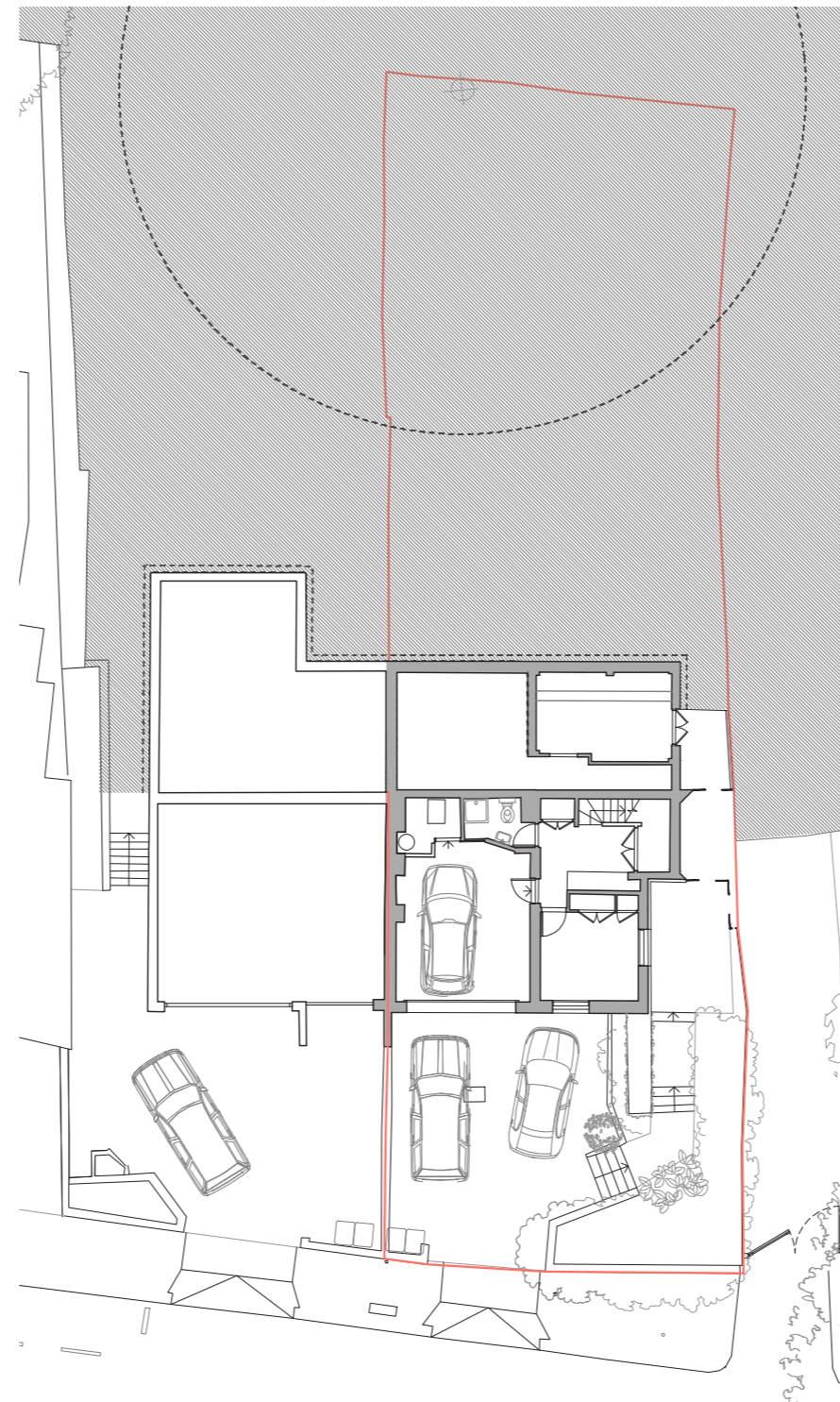
Page 36, para 5.12

Current on site parking provision includes an integrated garage and two generous driveway spaces, totalling 3+ on-site parking spaces.

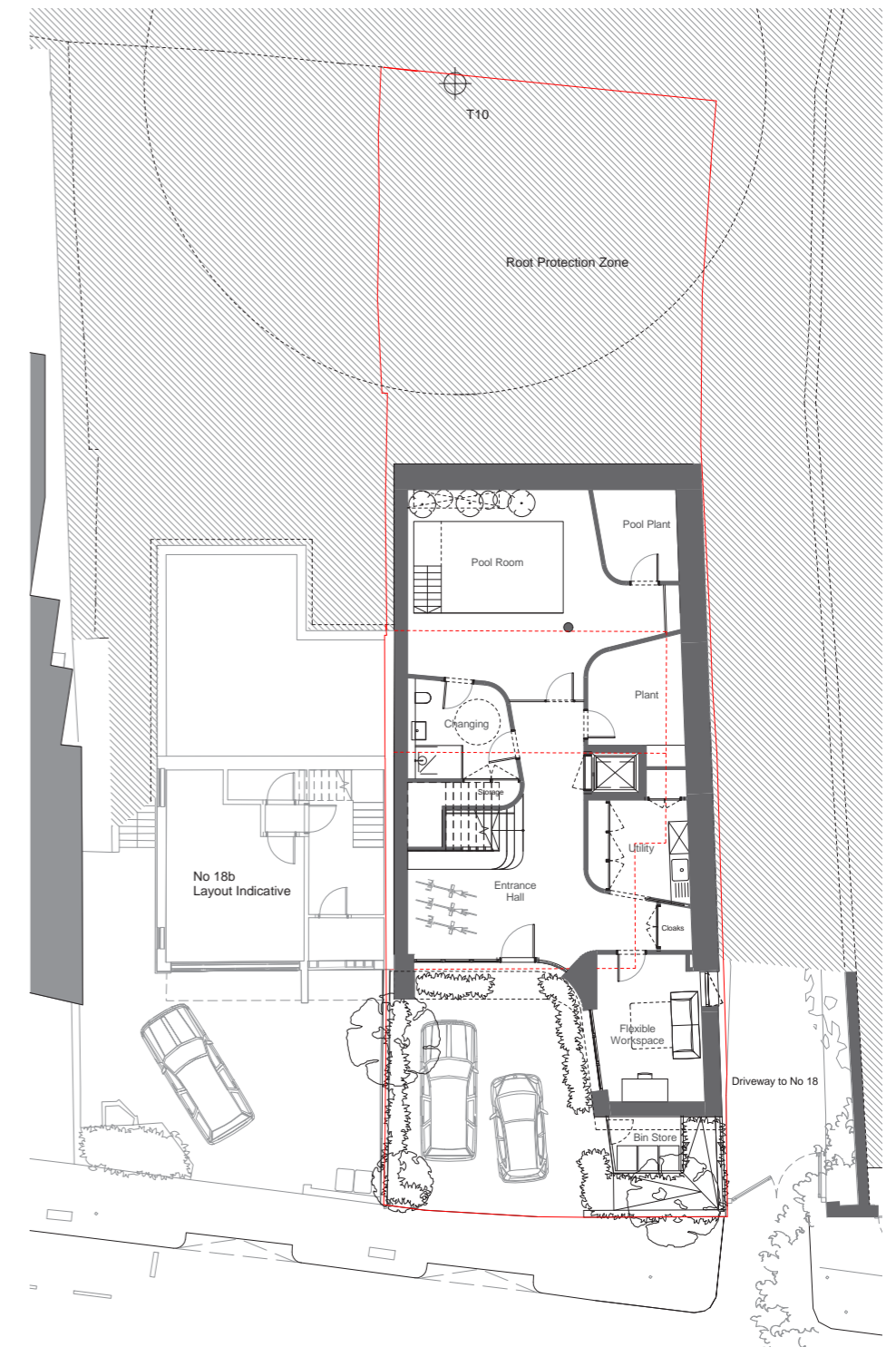
The proposal seeks to remove the existing garage and retain the two existing driveway spaces, reasonably reducing the current parking facilities from 3 to 2 spaces.

The owners are committed to green transport and use electric bikes for most local journeys. They are minded to purchase an electric vehicle. Off site parking for electric vehicles is currently impractical due to distances existing charging points.

A key brief requirement has been to make the new home accessible and the proposal includes wheelchair accessible features such as a lift. The removal of accessible on-site parking within easy reach from the entrance would be impractical and contrary to this future proofing.



Existing Ground Floor



Proposed Ground Floor

3.0 Concept and Design Development

3.13 Environmental and Sustainable Design

The building engineering services have been arranged to provide a safe, comfortable and energy efficient environment for the occupants. The client has set an ambitious target to maximise energy savings whilst also insisting on the installation of renewables. The house is highly insulated with efficient heating and hot water systems and uses integrated renewable energy sources to achieve a sustainable building designed to minimise energy consumption and CO2 emissions.

The following summary should be read in conjunction with a Sustainability and Energy Assessment prepared by Environmental Engineering Partnership which accompanies this report.

Building Fabric

A fabric first approach has been established to maximise energy savings. The concrete structural frame will be used to offset temperatures and provide improved thermal comfort in both winter and summer. High levels of insulation have been targeted as well as high performance glazing.

Heating and Hot Water

Various options have been considered including an Air Source Heat Pump (ASHP) and solar water heating. The air source heat pump provides very low carbon space heating. Underfloor heating provides effective all round supply of heat when needed. Low energy and low water use fittings will be used throughout.

Ventilation

A combined system is proposed of natural ventilation with trickle vents and mechanical ventilation units with heat recovery (MVHR). MVHR will serve areas that require additional ventilation, take unwanted heat from one area and distribute to areas requiring heat.

Lighting & Daylight

Access to daylight will be maximised where possible to provide bright internal spaces. High specification windows with low U and G values are proposed to reduce solar gain. Solar gains will also be mitigated on the south facing facade by external blinds.

Borrowed light via rooflights through the placement of the staircase and void reduces the need for artificial lighting.

The new building will feature low energy LED lighting throughout.

Energy and renewable technologies

The MEP engineer has provided information on how the project will meet the energy hierarchy in terms of:

Be Lean: Use less Energy
Be Clean: Supply energy efficiently
Be Green: Use renewable sources

The Energy & Sustainability Assessment demonstrates that the building will achieve a 41.1% reduction in carbon dioxide which meets exceeds the 35% carbon dioxide reductions targets as set by The Camden Local Plan and The London Plan by 6.1%.

Applied renewable technology includes photovoltaic and solar thermal panels on the roof, as well as an air source heat pump. The building parapet extends 450mm above the roof build up to reduce the visual impact of services on the roof.

Installation of a below ground rainwater attenuation tank offers the opportunity to harvest and re-use water for irrigation.

Biodiversity

Flat roofs will include areas of green roof which will contribute to local biodiversity, rainwater attenuation, reduce surface temperatures to assist cooling, improve air quality, and improve human health.

Trees and greenery will be maintained and efforts to increase biodiversity and wildlife have been made with a selection of native, evergreen and seasonal plants in the landscaping proposals.



Rear Garden View