Aerial view showing site in red.

Land accessed from private lane between 25a & 25c Frognal

London NW3

Design Statement

Revision B October 2019

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Contents

Introduction

Square Feet Architects have been developing proposals for this site to the rear of two houses in Arkwright Road since 2015. No formal planning application has been determined but detailed advice has been given in pre-application submissions, meetings with planning officers and two Design Review Panels.

We have reached a point where the principles of an acceptable scheme have been agreed and a planning application can be submitted.

Amendments have subsequently been made to the submission in response to comments received during the consultation period and advice provided by the case officer.

Context

The site is located within the Redington and Frognal Conservation Area, surrounded by large period properties set back from the street with small front gardens and large back gardens. Numbers 29 and 33, both in the same family ownership, are situated on the southern side of Arkwright Road; both are noted as making a positive contribution to the Conservation Area although neither are listed. To the rear of the houses there is a private lane, also in this ownership, accessed from Frognal between houses 25a and 25c Frognal.

There are two recently built houses also accessed from this lane, numbered 25e (single storey with pitched roof) and 25b Frognal (contemporary 2/3 storey house in white render and timber). Permission has also been granted for a new house adjacent to 25b on the site of two existing garages.

Although back land development is generally considered undesirable it has been acknowledged that the urban grain in this immediate area has become fragmented and disrupted by other recent developments such that this no longer presents a uniform pattern. The principle of garden sub-division has been accepted subject to appropriate levels of impact on townscape, plot form, biodiversity and overall green feel.

The site is close to a number of public transport routes - its PTAL rating is 6 and so greater density on these plots would be appropriate. The immediate area is primarily residential but it is also close to the commercial hub of Finchley Road which has many shops, offices and recreational buildings. The area could be described as being a mix of medium to high density development with sporadic areas of green spaces and trees.

25 E Frognal , a single storey house adjacent to the west of the site.

25 B Frognal , a new build opposite and to the south.

01 *Entrance to private drive of 29/33 Arkwright Road accessed via Frognal.*

02 *View of private drive lined with mix of fences and walls.*

03 *Existing brick wall to north side of private drive, south side of 29/33 Arkwright Road rear gardens.*

04 *View of far end of drive.*

05 *Lawn and foliage, 29/33 Arkwright Road rear gardens.*

View showing photograph locations.

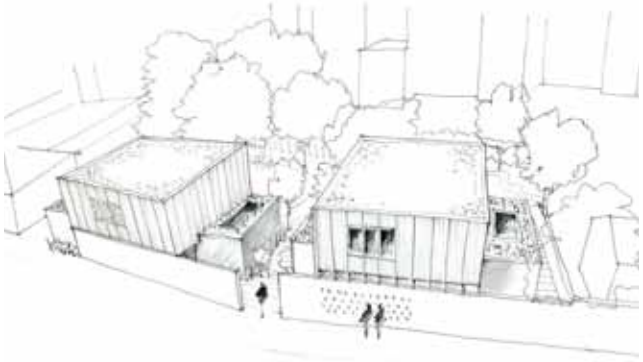
Consultation History

December 2015	Initial planning application for three houses submitted, then withdrawn
January 2016	Written advice & comments received from case officer
August 2016	Initial pre-application advice submission for two houses (2016/4565/PRE)
November 2016	Letter giving detailed advice received from case officer following site visits & meetings
February 2017	Pre-application advice submission for three houses (2017/1779/PRE)
November 2017	Revised drawings submitted, amended from three houses to two, no formal comments provided
January 2018	Letter with comments received from case officer – further details requested, separation between houses at 1st floor level welcomed, noting that this could be increased further
February 2018	Pre-planning Addendum submitted, with adjustments taking into account previous comments
March 2018	Informal comments received in meeting with case officer
April 2018	Design Review Panel presentation
July 2018	Second Design Review Panel presentation

December 2015; *Withdrawn three unit scheme*

November 2017; *Revised two unit scheme submitted for pre-application advice*

February 2018; *Pre-application Addendum scheme of two units*



July 2018; *Second Design Review Panel submission*

August 2019 Amendments

Since submission in March the proposal has continued to develop through open conversation with Camden Planning Department. Amendments have been suggested resulting from comments received during the consultation process and the scheme has been revised accordingly.

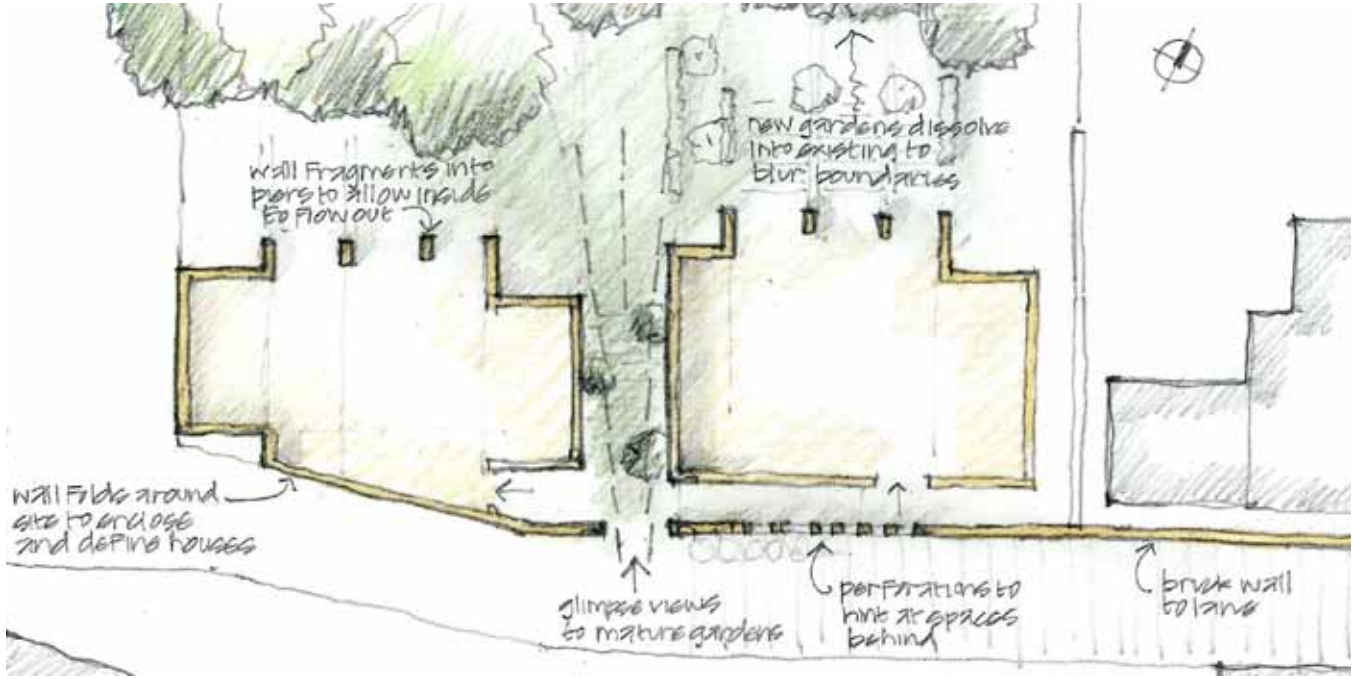
The following is a summary of the council's comments - within the frame of the current application - and the revisions made in response.

Council Comment	Action(s) taken to resolve
The proposal will have a negative effect on the amenity of nos.25a and 25e Frognal.	1. First floor volumes 'pushed' away from the boundary. 2. Overshadowing diagrams provided to show the effect of this adjustment on the neighbouring properties 3. Notes added to plans to confirm that flat roofs are not to be used as terraces and side-facing windows will be obscured.
The proposal may not be compliant with Part M4(2) of the Building Regulations.	4. Revision and alteration of Accessibility Statement to confirm that the proposal is compliant in all areas with the exception of the entrance ramp.
Future issues may arise surrounding the security of the boundary wall, and lack of delineation of the property boundary in the rear gardens.	5. The perforations to the garden wall have been adjusted to ensure that they are not easily scalable. A hedge is proposed within the garden along the boundary line, described in the Landscape Design Report.
Issues raised relating to nature conservation; bat boxes, bird boxes, commuting gaps in boundaries, effects of lighting on bats etc.	6. Locations of boxes indicated on plan; gaps to be included in boundary treatment specification. Effect of lighting discussed elsewhere in this document.
Confirmation that roof construction can accommodate substrate required for an extensive biodiverse green roof.	7. Drawings amended to include clarification of substrate depth on green roofs.
Cycle parking as proposed is inadequate.	8. Cycle stores increased in area to allow for horizontal storage of bicycles.
Request for Air Quality Assessment	9. Air Quality Assessment to be submitted as addendum to previous statements.

Proposals

The scheme has developed through various iterations in response to the detailed advice received from pre-application submissions, meetings with planning officers and Design Review Panels. This process has confirmed the principle of development as acceptable and has helped establish key determining factors for the design, as follows;

- sub-ordinate relationship between the new buildings and the surrounding houses (in terms of plot size, height, form)
- modest and sympathetic response to the local context and site typography
- integrate the existing brick wall to the lane
- preservation of views into and through the site and also outlook and privacy for other dwellings in close proximity
- maintain the existing green feel of the site and immediate surroundings, minimise impact on the local ecology, limit tree removal
- restrict the extent of excavation



Concept diagram

The proposals comprise the construction of two detached houses of two storeys, one with three bedrooms (gross internal floor area 173 sq.m) and one with two bedrooms (gross internal floor area 139 sq.m), built for and to be occupied by members of the family who own nos. 29 & 33 Arkwright Road.

The new dwellings will be accessed from the private lane, however as the site is set well back from both Arkwright Road and Frognal, the buildings would not be seen from the road or public footpaths.

The existing garden wall along the lane to the south boundary becomes a reference plane against which the houses are located, allowing the brickwork to act as a screen to maintain the streetscene and new entrance gates to appear as discreet openings.

This continues as an organising component for the houses, wrapping around the accommodation at ground floor level and opening up as piers at the rear to allow living spaces to flow into the garden. The upper floors float above this solid element in lightweight timber construction in reflection of the natural landscape hidden beyond the wall. The generous space between the houses creates a shared but protected entrance court, offering a tantalising glimpse from the lane through to the mature gardens beyond. Locating this entrance towards the middle of the site allows the ground floor level of each house to be accessed without steps.

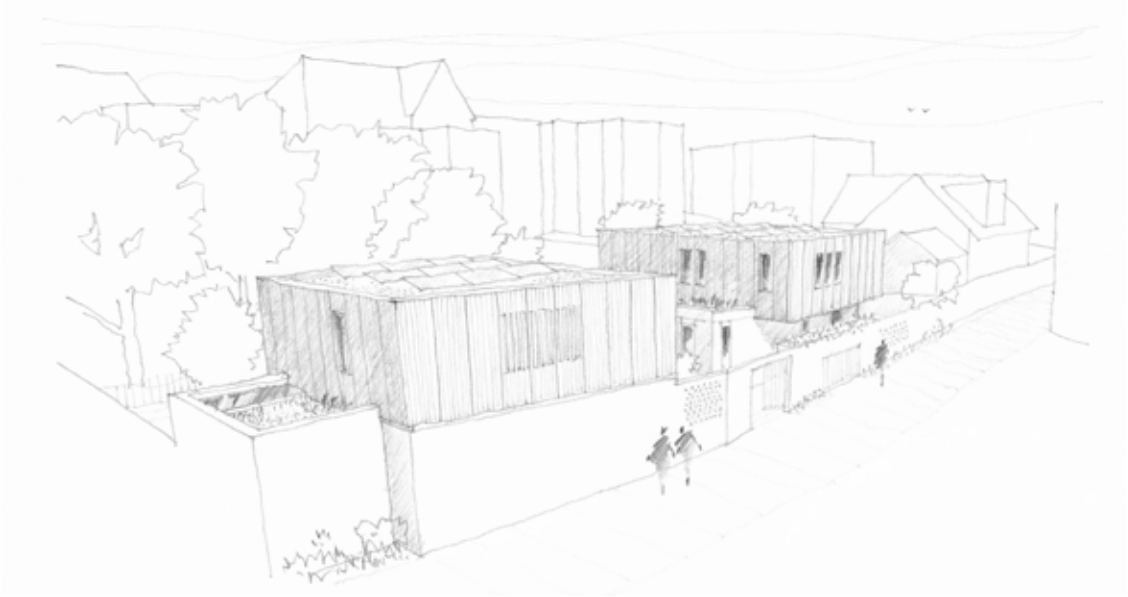
A detailed landscaping scheme together with a full planting schedule has been prepared for the site to ensure that the design intent

continues from house to garden. Several new mature trees will be planted to replace those removed, including some with purple foliage to mirror existing specimens. Root protection zones have been respected to ensure that the remaining trees are not affected.

Windows are restricted on the front and side elevations in order to protect the privacy of adjoining gardens and dwellings. Where appropriate, (generally to bathrooms), these will be further veiled by a more open variation of the timber cladding. Floor levels have been set to allow living spaces to open directly into the garden and reduce the amount of excavation required, thus limiting construction disruption.

The houses have flat roofs in order to restrict the overall height of the development, these would not be used as terraces but be planted as green roofs to help soften views of the development and alleviate some of the biodiversity impacts of the scheme. This also creates an opportunity to generate clean and sustainable energy for the houses by incorporating photovoltaic panels, with the added possibility of battery back-up to smooth out daily use.

The proposal is car-free. In order to minimise any negative traffic effects; no parking or car access to the site is proposed.



Sketch view of the proposal from the south west showing the limited fenestration onto the lane, and the veiled windows on the front elevation of the western house.

Excavations

The design seeks to reconcile new internal floor levels with the existing levels of the sloping site and the lane so as to allow access to each unit broadly in accordance with the requirements of Part M of the Building Regulations. Entering the site from the lane at a point between the two houses establishes a level that allows direct step free access to the west house and creates the space for a ramp up to the entrance door of the east house. It also forms a communal, secure entrance court that leads through to the gardens at the rear.

This solution will involve some resculpting of the existing garden levels, generally to the north east corner where the natural ground rises above the floor level of the east house. To the south west corner a small amount of fill is required to suit the floor level of the west house – the new levels have been chosen to balance this cut and fill.

"Camden Planning Guidance Basements March 2018" includes the following definitions;

1.7 When identifying a basement the Council will generally consider that basement is a floor that is predominantly under the prevailing ground level of the site.
1.8 Where a building is located on sloping land and there is a change in level across a site, a storey which is accessed at ground level at one side of the site (with no steps or ramp) will generally not be considered a basement, unless the site has been excavated to allow access to that floor.

The west house is set at or above the prevailing ground level. The east house is initially "accessed at ground level on one side of the site", followed by a ramp that leads up, not down. The site is not excavated to allow access to this floor level.

Under this definition neither house has a basement level and therefore a basement impact assessment should not be necessary.

The following letter from Price & Myers Consulting Engineers comments on the issues associated with building on the sloping site, noting that the proposed levels can be accommodated using simple construction measures without affecting the stability of the existing ground. The diagram on the next page illustrates the adjustments required to the contours of the site.

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6th December 2018

Ref: 27784/jh

Dear Mr Fletcher,

Houses in the lane off Frognal, NW3

I have reviewed the architectural drawings that accompany the Planning application and have the following comments about the structural aspects of the proposals.

Arup's "Guidance for Subterranean Development" for the London Borough of Camden advises that consideration should be given to stability of a slope in London Clay if it is more than 7°, which is the minimum angle at which instability has been observed in the London Clay and Claygate Member (including a 1° margin of error). Referring to Arup's "Camden Geological, Hydrogeological and Hydrological Study Slope Angle Map - Figure 16", the site is not in an area of slopes greater than 7°. The site also appears to be outside the areas that are prone to slope stability issues, as mapped by the British Geological Society and shown on "Areas of Landslide Potential - Figure 17".

As the degree of excavations required by the proposals are limited and avoid major tree roots, we anticipate that simple retaining structures could be used and no special measures should be necessary. The proposals are therefore not considered to affect the stability of the existing slopes.

In due course, a geotechnical site investigation should be carried out to prove the local site conditions and to inform the design of the foundations and we recommend that a slope stability analysis should form part of this geotechnical work.

It is expected that, to limit excavation and to avoid tree roots, the houses will have piled foundations with suspended concrete ground floors. The superstructure is expected to be loadbearing masonry or timber framing, with some steelwork elements. Proprietary timber I-joists could be used for ease of access and installation.

Yours sincerely,
for Price & Myers

John Helyer BSc(Hons) CEng MIStructE FICE

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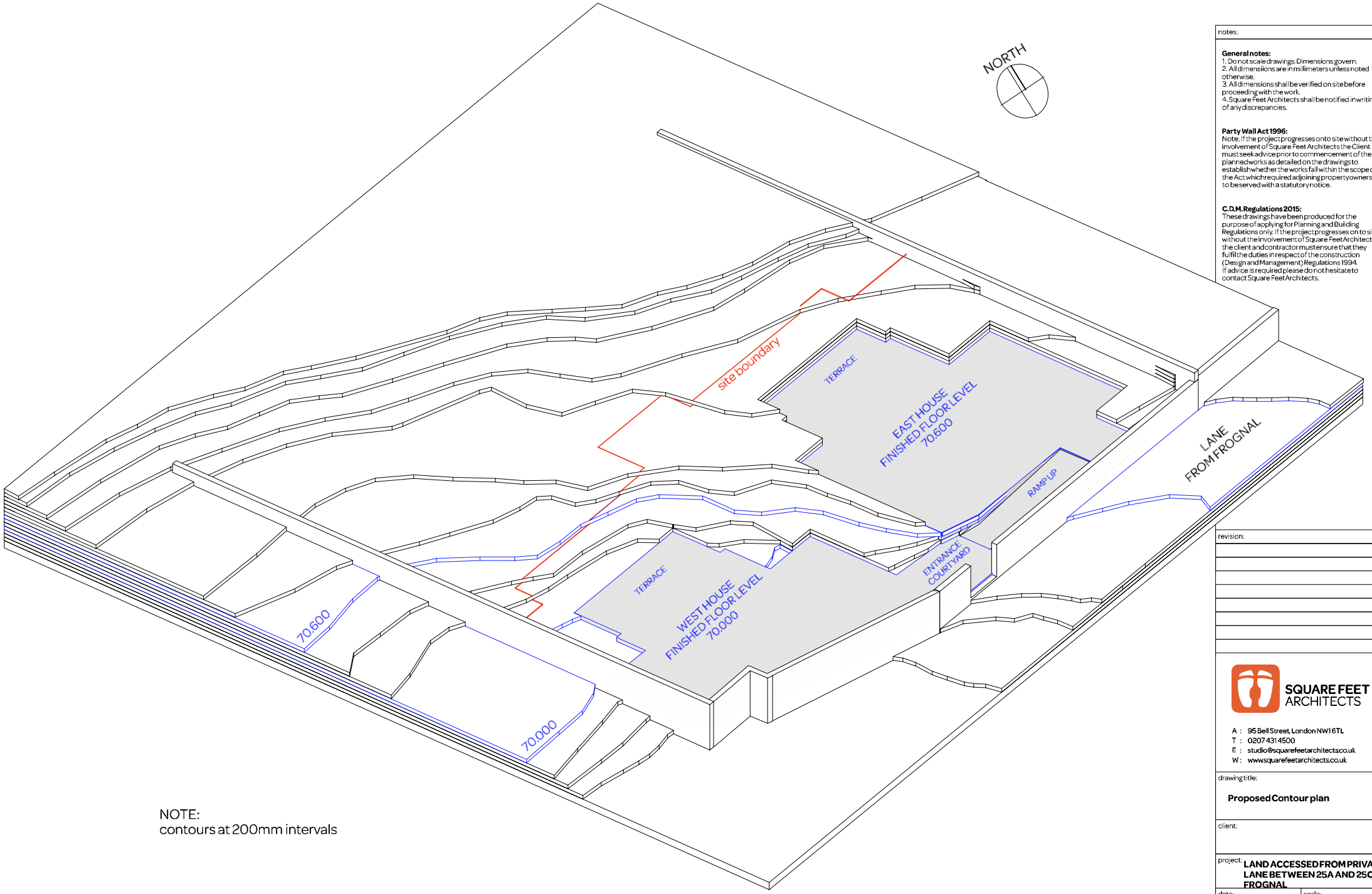

NOTE:
contours at 200mm intervals

notes:

General notes:
1. Do not scale drawings. Dimensions govern.
2. All dimensions are in millimeters unless noted otherwise.
3. All dimensions shall be verified on site before proceeding with the work.
4. Square Feet Architects shall be notified in writing of any discrepancies.

Party Wall Act 1996:
Note: If the project progresses onto site without the involvement of Square Feet Architects the Client must seek advice prior to commencement of the planned works as detailed on the drawings to establish whether the works fall within the scope of the Act which required adjoining property owners to be served with a statutory notice.

C.D.M. Regulations 2015:
These drawings have been produced for the purpose of applying for Planning and Building Regulations only. If the project progresses on to site without the involvement of Square Feet Architects, the client and contractor must ensure that they fulfil the duties in respect of the construction (Design and Management) Regulations 1994. If advice is required please do not hesitate to contact Square Feet Architects.

revision:

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drawing title:
Proposed Contour plan

client:

project:
LAND ACCESSED FROM PRIVATE LANE BETWEEN 25A AND 25C FROGNAL

date:	scale:
October 2018	1:150@A3

drawing number:	revision:
1514_SK_903	*

Materials

Walls to the ground floor are finished in yellow/ buff London Stock bricks to match the existing garden wall to the lane, perforated in areas to offer hints of the habitation beyond. The top of the wall is capped with a band of textured precast concrete in a complementary tone acting as a string course to support the upper storey, reinforce the clarity of the design and reference the terracotta /stone detailing found on the Victorian houses in the adjacent streets. (No. 29 Arkwright Road is a good example).

The first floor is clad in vertical hardwood sections on a lightweight timber frame. These sections would be in Cumaru, a dense hardwood with excellent durability and weathering properties. No surface treatment is necessary, the wood seasons naturally, fading slightly in the manner of cedar. This species is considered sustainable and is not listed in the CITES Appendices or IUCN List of Threatened Species. FSC certified supplies are available in the UK.

An example of this material used recently can be seen at the St Mary Magdalene Academy on Liverpool Road, Islington. Windows and sliding glazed doors will be in powder coated aluminium frames in dark bronze colour. Openings to the front and side have been limited to avoid overlooking; at the rear windows are more generous to take advantage of the garden where existing trees provide a natural screen to the houses on Arkwright Road. Sills are extended internally forming window seats to allow the garden to be enjoyed from the upper level.

Planning and Heritage

A statement by JMS Planning Consultants analysing the Planning and Heritage issues that affect the proposals is attached separately. This updates the previous versions that were submitted during the earlier consultations.

Ecology and Nature Conservation

The Ecology Report makes detailed recommendations, however for clarity the following notes outline measures to be adopted to mitigate the ecological impact.

1. Green Roofs

"The aim of a biodiverse roof is to replicate as far as is practical the ecological requirements for the local area. The natural habitats created are designed to support a variety of plants, birds, animals and invertebrates."
- Bauder

The lower level roofs have been designed to include 200mm of growing medium above a water storage and drainage layer. This will allow for a variety of planting using native species to help encourage and support local wildlife.

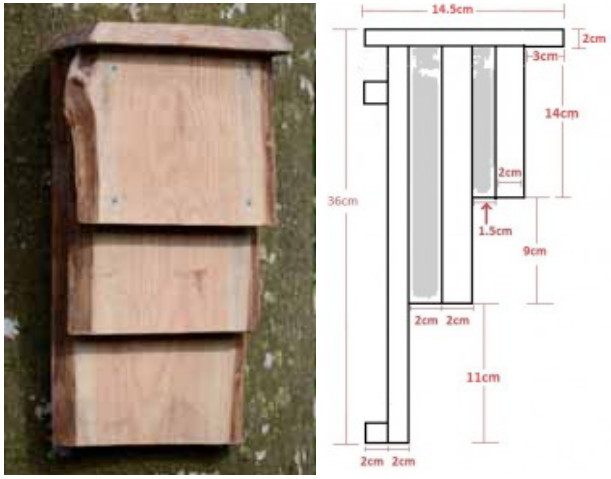
The upper level roofs allow for a unified solution, (Bauder BioSolar), where the substrate and vegetation provide the ballast to maintain photovoltaic panels in position. The combination permits vegetation to establish across the whole roof and 150mm of growing medium allows for a variety of low maintenance planting.

Green roofs will obviously benefit the surrounding area from an ecological point of view, but will also soften the impact that the proposed dwellings have on views from neighbouring properties.

Example of a biodiverse green roof (Bauder)

2. Bird/Bat Boxes
Bird boxes will be fixed to mature trees within the proposal site to ensure that adequate roosting/nesting locations are provided.
Bat boxes, similar to the design on the right, will be fixed in the locations shown on proposal drawings. These will be formed in the same timber as the external cladding to the upper floors, rough sawn and untreated, as per the recommendations of the Bat Conservation Trust (BCT).

3. Boundary Gaps
The rear boundary of the proposal is to be punctuated at regular intervals with gaps suitable for foxes and hedgehogs to use as 'commuting' routes.



'Kent' Bat Box photograph and sectional diagram. Images and dimensions are indicative - the finish and sizing will be designed to blend in with the proposal's timber cladding.

4. Lighting Strategy
External artificial lighting can have an unintended detrimental effect on wildlife, particularly bats. In order to limit this the proposed external lighting will be designed in line with the ILP and the BCT's guidance note 08/18; *'Bats and artificial lighting in the UK.'*