



Manor Road / Richmond Design Rationale

Assael Architecture Ltd

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1.1 The purpose of this document

This document has been prepared by Assael Architecture on behalf of Avanton Richmond Development Ltd (the 'Applicant') for the proposed development of their property on the western side of Manor Road (the 'Site') in the London Borough of Richmond upon Thames.

It has been produced in response to concerns made by local residents and consultation feedback received on the proposed density and height of the proposed development.

It proposes justification for the proposed development in terms of;

- Planning policy
- Local Precedent
- Daylight/Sunlight analysis
- Health and well being
- Design quality

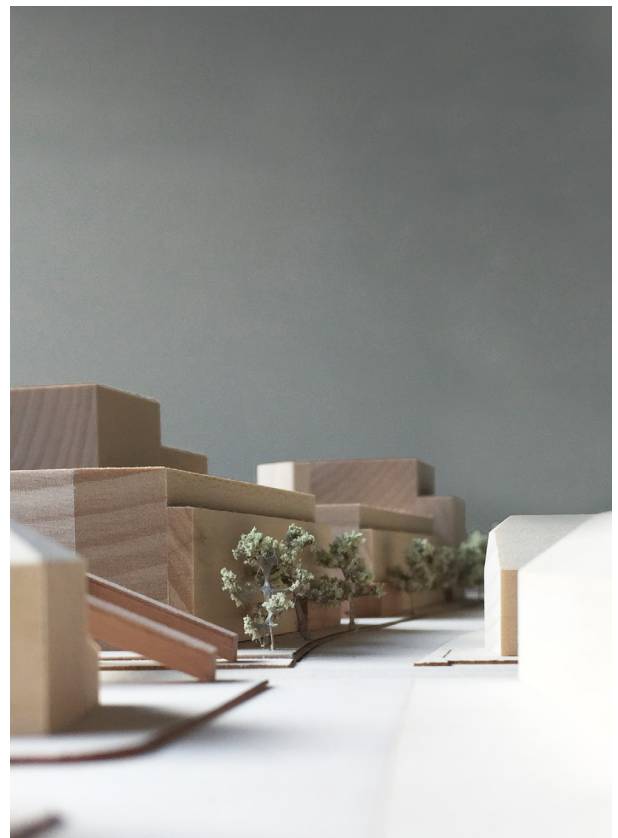


Image of model showing massing along Manor Road.

1.2 Development of Retail Parks

Draft London Plan Policy H1 encourages development on other appropriate windfall sites not identified in Development Plans through the Plan period. The policy also encourages boroughs to optimise the potential for housing delivery on all suitable and available brownfield sites, especially sites with existing PTALs 3-6 and low-density retail parks or car parks.

- The Mayor of London has identified “car parks and low-density retail parks” as one of six strategic sources of housing delivery within his principal housing policy (“H1”) within his Draft New London Plan (2018).
- Retail warehouse parks represent low density out of centre developments supported by expansive car parking.
- Since the site is an out of centre retail development, the LPA have confirmed that there is no specific policy which would protect against the loss of the retail floorspace in this location and no objections are raised to its loss.
- Policy SD8 Town Centre network contains a similar policy objective to “realise the full potential of existing out of centre retail and leisure parks to deliver housing intensification through redevelopment”.

- Policy E9 of the draft London Plan seeks redevelopment for a diverse mix of uses and ‘Comprehensive development of existing out of centre retail parks’.
- Similarly, NPPF paragraph 121 ‘looks for local authorities to take a positive approach to applications for alternative uses on land which is currently developed but not allocated. This includes the use of retail and employment land for homes in areas of high housing demand’.



Examples of proposals on retail parks across London:



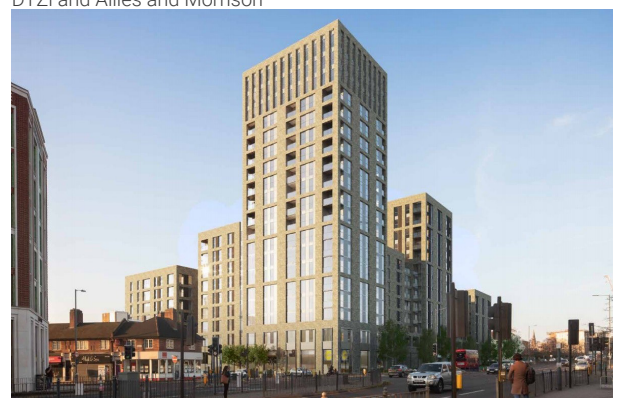
1 - Former B&Q site, Swandon Way, Wandsworth.
London Square and Hawkins/Brown



2 - Former Homebase site, Swandon Way, Wandsworth.
DTZi and Allies and Morrison



3 - Former Homebase site, York Way, Wandsworth.
Avanton and Patel Taylor



4 - Former Homebase site, Acton, Hammersmith and Fulham
Barratt London and TP Bennett

1.3 Rationale for density

Planning Policy:

(Extract from Planning Statement produced by Avison Young)

At the local level, Local Plan Policy LP34 seeks to deliver 3,150 new homes in the period 2015 – 2025 (until this is replaced by a revised London Plan target) and states that the Council will exceed the minimum strategic dwelling requirement.

The current draft London Plan proposes to nearly triple the annual housing target to 811 dwellings per year. The London Borough of Richmond’s housing delivery rate between 2013/14 to 2017/18 is an average of 374 per year.

In terms of development density, London Plan Policy 3.4 requires developments to optimise housing output in accordance with the relevant density range in the Sustainable Residential Quality Density Matrix. The target density range identified is for between 200-700 habitable rooms per hectare (or between 45-260 units per hectare) for an ‘urban’ setting in PTAL 4-6. Manor Road has a proposed density of 214 units per hectare in accordance with policy 3.4.

Proposed Density	
Site Area: 1.8 hectares	
Total Units:	385
Units per hectare:	214
Habitable rooms per hectare:	587

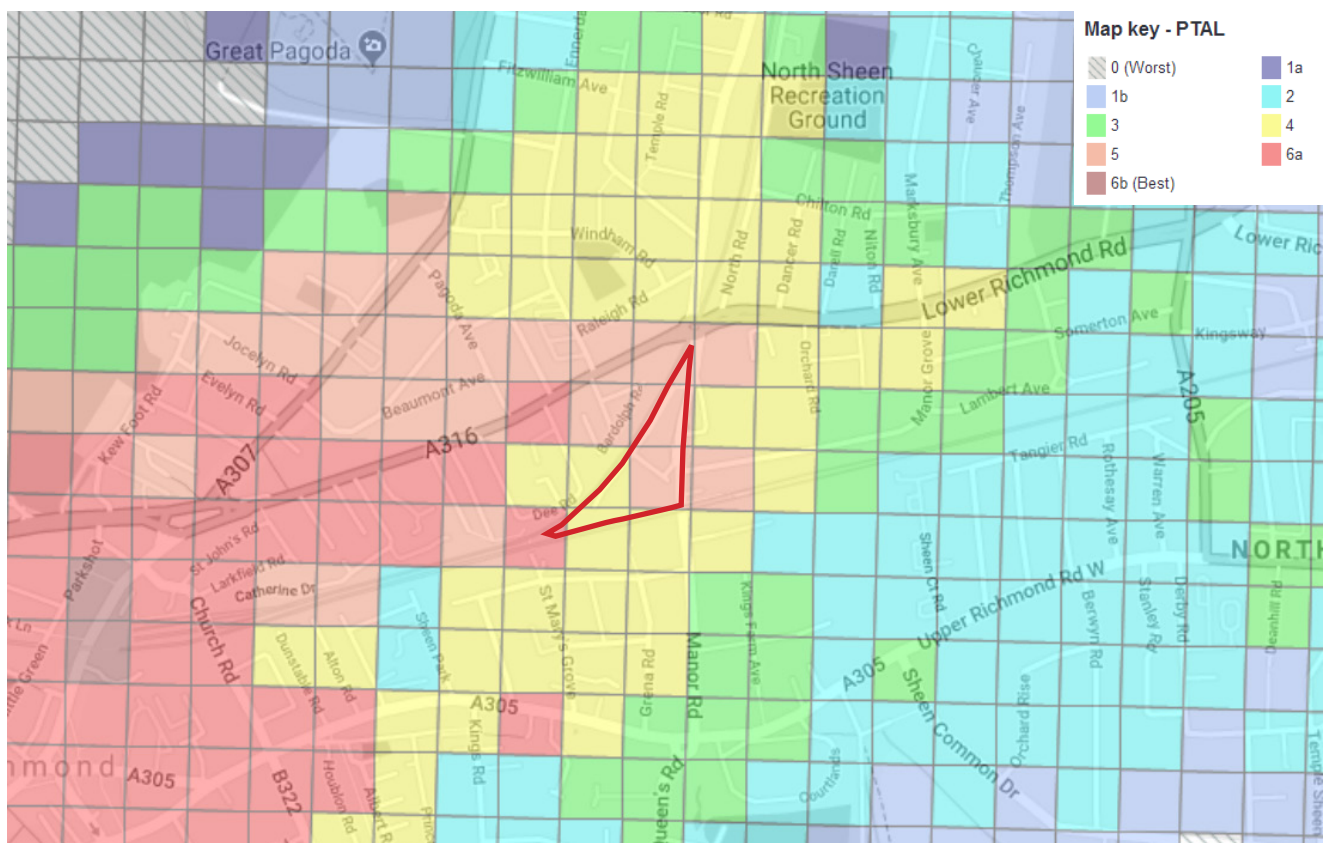
Draft London Plan Policy D6 seeks to encourage schemes to optimise development and therefore seeks to introduce less stringent density maximums. Draft Policy D6 therefore only requires proposals delivering more than 405 units per hectare in areas in PTAL 4-6 to be subject to particularly design scrutiny requirements. Local Plan Policy LP1 requires that development is compatible with local character, which includes density.

NPPF paragraph 59 supports the governments objective of ‘significantly boosting’ the supply of homes.

The development will contribute significantly to meeting the London Borough of Richmond Upon Thames housing targets.

Manor Road is a accessible urban location where policy encourages optimisation of site capacities and higher density developments.

PTAL Map: Site boundary in red.



Transport For London (TfL) PTAL (public transport accessibility level) Map.

1.4 Rationale for height

Intensify high PTAL site in line with planning policy.

Height allows for greater surface area of public realm, landscaping for enhanced biodiversity and maximising surface water run-off/SUDs.

Height increases along railway to reference taller, industrial buildings on opposite railway embankment.

Height decreases towards sensitive southern boundary and along Manor Road.

Local Plan Policy LP 2 - Proposals that are taller than the surrounding landscape must be of 'higher architectural design quality and standards, deliver public realm benefits and have a wholly positive impact on the character and quality of the area'. This has been achieved in several ways including;

- The retail units along Manor Road have been integrated within the proportions of the new development with the retail frontages reflecting and reinforcing the existing urban grain.
- The landscaped and public areas have been based on inclusive design with a focus on connectivity and permeability through the site.
- The new development has been designed to appropriately integrate with the existing area by reinforcing the street frontage along Manor Road.
- New pedestrian routes and landscaped paths have been proposed to tie in with the existing area and provide new high quality amenity space for residents.
- Architectural elements such as windows, roofs, shop-fronts and doors relate to one another and maintain or complement the proportions of the surroundings.

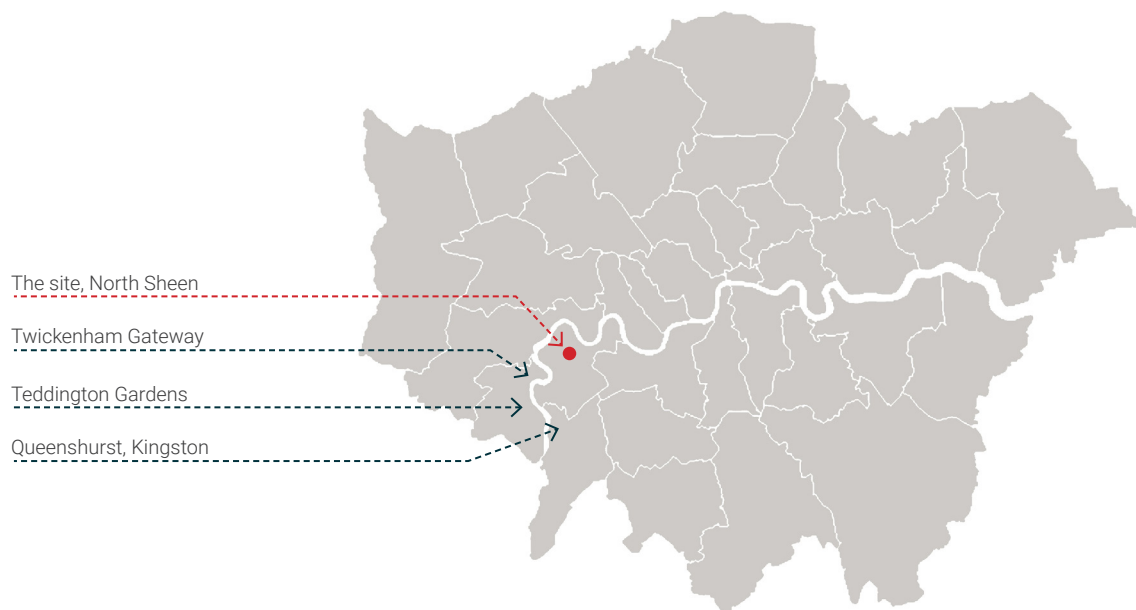


Image of model showing height concentrated in the centre of the site.

1.5 Local precedent

There are a number of examples across London, and within the south-west suburbs in particular, where taller buildings relate successfully to their surroundings. This has been done successfully in the past and some new build examples are shown below. In these examples, the taller buildings represent a contrast to their surroundings in terms of height but reference local material palettes and architectural language in order to relate successfully to those surroundings.

The case studies demonstrate that buildings that are taller than their surrounding context can be accommodated through the carefully placing of low, mid-rise and taller massing within a site (Teddington Riverside and Twickenham Gateway) or through the use of architectural treatment (Queenshurst).



Queenshurst, Kingston

Client: Berkeley Homes
Number of homes: 315
Density unit/ha: 306 units/ha.
Number of storeys: 5-9 storeys
Architect: Carey Jones Architects
PTAL Rating: 6a

The Queenshurst case study illustrates how the façade articulation used within the perimeter block breaks up its mass so it appears that the development is a series of smaller vertical buildings that respond to the finer urban grain to the east of the site. This approach has been followed as part of the Manor Road Development.



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Twickenham Gateway, Twickenham

Client: Solum Regeneration Limited

Number of homes: 115

Density unit/ha: 120 units/ha.

Number of storeys: 2-7 storeys

Architect: Rolfe Judd

PTAL Rating: 5

The Twickenham station site has a high level of accessibility by public transport and the proposed development, which comprises a new station building, public realm with retail uses at ground level and apartments above, responds to this with a density which reflects the accessibility of the site. Careful consideration has been given to the location, scale and massing of the blocks with regard to the surrounding nature of the built environment, particularly the scale and character of the more suburban area to the north. The blocks have been designed so there are no significant impacts on local or long distance views, whilst creating a comprehensive and coherent landmark development that remains sensitive to the surrounding built environment. High quality materials are specified throughout the development and the rooflines provide articulation and variety in the receiving context, avoiding monolithic or repetitive profiles.

The general approach to the scale and massing of the proposal is to vary the height and bulk of buildings as they stretch across the site, with the tallest building reflecting the urban scale of London Road and the lowest buildings reflecting the more suburban form of properties to the north. Similar considerations have informed the Manor Road development.



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Teddington Riverside, Teddington, Richmond

Client: City Developments Limited (CDL)

Number of homes: 249

Density unit/ha: 147 units/ha.

Number of storeys: 8

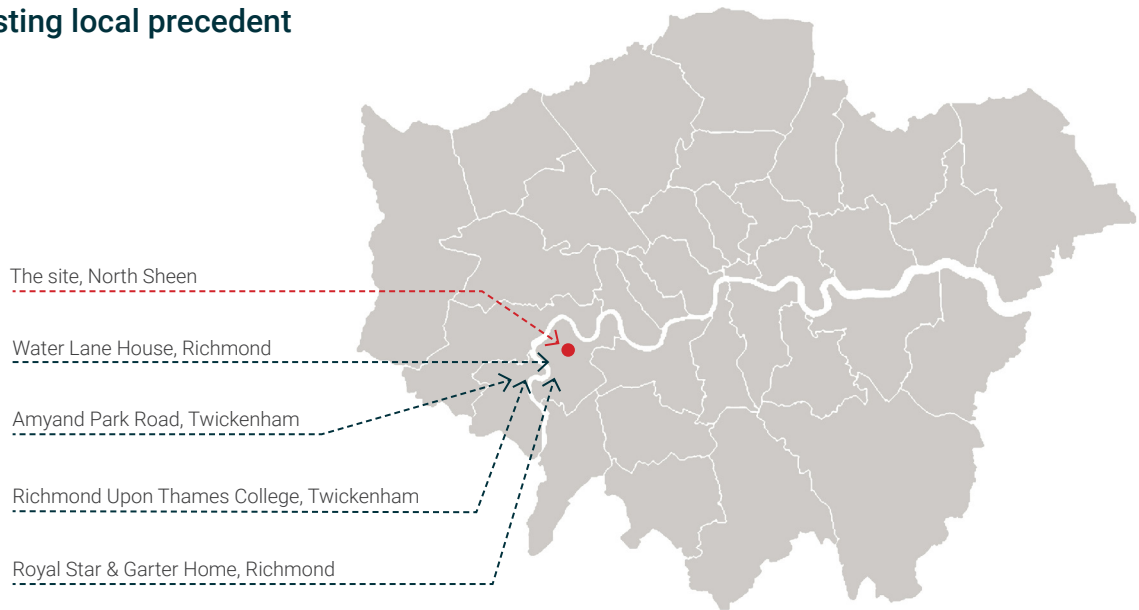
Architect: Hamiltons Architects

PTAL Rating: 1b/2

The Teddington Riverside case study illustrates how low rise, four storey, town houses have been placed along Broom Road to reflect the scale of the existing properties that address this route. Mid-rise buildings of six storeys define the site's northern and southern boundaries, whilst in the centre of the site sits the taller eight storey buildings. The buildings have been broken up through façade articulation and the upper storeys of the mid-rise and taller buildings being set back from the building line. The mid-rise and taller buildings also use two different façade materials, which help to break up their mass further. This approach has been followed as part of the Manor Road Development.



1.6 Existing local precedent



The existing built form in the Borough of Richmond upon Thames is punctuated by a series of taller buildings and spires which sit alongside the lower domestic scale houses. These buildings provide focal points at the end of street vistas, signify the significance of the building itself or give the building a stately grandeur. Whilst the

scale of these buildings themselves do not reference their residential neighbours, an attempt to acknowledge the local material palette and proportions of the surrounding buildings results in a homogeneous street scape.



Amyand Park Road - 10 storeys surrounded by 2 storeys. Taller building addresses the adjacent Twickenham train station.



Richmond Upon Thames college - 5 storeys surrounded by 2 storeys. Taller element signifies the civic building use.



Water Lane House - 5 storeys surrounded by 2/3 storeys. Ad-hoc building heights and architectural styles add interest to the streetscape.



Royal Star and Garter Home - 8 storeys surrounded by 2 storeys. Stately scale reflects the building's prominence in its surroundings.

1.7 Daylight Sunlight Impact Summary

Executive Summary:

(Extract from Daylight Sunlight report produced by Point 2 Surveyors)

Point 2 Surveyors Ltd has been appointed by Avanton Richmond Developments Limited to undertake a Daylight, Sunlight and Overshadowing review with regard to the proposed redevelopment of 84-86 Manor Road, Richmond.

The technical review considers the assessment of the proposed scheme in accordance with the BRE report entitled 'Site layout planning for daylight and sunlight: A guide to good practice', more commonly known as "The BRE Guidelines".

Overall, the Proposed Development will relate well to neighbouring residential properties. Where there are changes which fall short of the BRE Guidelines, these are largely the product of the proximity and outlook of sensitive windows that overlook the largely undeveloped development site.

The overall daylight amenity levels within the proposed residential units are considered excellent with a very high overall compliance rate for a scheme of this size and density.

The proposed scheme performs well in overshadowing terms with only one proposed amenity space failing to receive at least 2 hours of direct sunlight to over 50% of its area on 21st March. The additional study on 21st June demonstrates that the sunlight potential will be significantly improved during the summer months, when the space is most likely to be used and enjoyed. In summary, the overshadowing results fall within the practical application and intention of the BRE Guidelines.

The following adjacent streets were surveyed as part of the daylight sunlight assessment;

1-11 Manor Grove	33-39 Crown Terrace
1-5 Marylebone Gardens	1-8 Victoria Villas
69A Manor Road	19-22 Victoria Villas
71-81 Manor Road	2-6 Bardolph Road
80 Manor Road	13-15 Trinity Cottages
1-24 Manor Park	7-24 Trinity Road
1-53 Calvert Court	3-11 St George's Road
1-39 Robinson Court	40-58 St George's Road
50-52 Robinson Court	Falstaff House
Clarence Court	St George's House

- 84% of assessed windows meet BRE Guidelines for USC and 93% for NSC. The assessment concludes that overall the proposed development relates well to neighbouring residential properties.

Daylight and Sunlight Risk Register	Manor Road - Architect's Scheme dated 10th January 2019			
	VSC	NSL	APSH	Internal Daylight (ADF)
No Risk	84%	93%	98%	93%
Low Risk	5%	4%	1%	6%
Medium Risk	5%	1%	1%	1%
High Risk	6%	2%	0	0

Footnotes		
DLSL Risk Register	No Risk	Meeting the strict application of the BRE Guidelines Less than 20% Reduction from the former value
	Low Risk	20%-30% reduction from the former value or ADF value 0.5% less than the target value
	Medium Risk	30%-40% reduction from the former value or ADF value 0.5%-1.0% less than the target value
	High Risk	More than 40% reduction from the former value or ADF value more than 1.0% less than the target value

The above risk profile are based upon the BRE Guidelines

1.8 Health and Well-being

At Assael we value the health and well-being of future residents highly. At every design stage we hold internal Well-being reviews with a trained WELL member of staff assessing the design against the WELL Building standard aiming to improve health and human experience through design and encourage healthy communities.

The application of these standards is evident throughout the design, with examples below;

- Apartments are designed with generous ceiling heights of 2.65m and large quantities of glazing providing natural daylight.
- Apartments are designed to be open plan with clear internal way-finding assisting those with dementia.
- All apartments have operable windows and 68% of units are dual aspect encourage natural ventilation and fresh air.
- Entrances and lobbies are architecturally clearly defined with clear way-finding assist those with dementia.
- Thresholds across the design have been minimised or eliminated to reduce any trip hazards.
- Large arches have been used as a tool to define the main entrance to the development. This contributes to creating a sense of community and pride of the area as well as clearly defining access.
- Apartment building stairs are located close to the entrance lobbies and are clearly visible or located visually before lifts. Way-finding sign-age will be provided to assist residents/visitors to easily locate the staircase to encourage activity.
- Tactile materials have been selected across the site such as water struck Buff brick with an uneven texture to engage the senses. Two tones of reconstituted stone have been selected to contrast with the brick.
- Inclusion of commercial spaces and a pavilion to encourage community engagement and place-making.
- Inclusion of highly landscaped areas with benches and free-flowing looped paths encouraging outside activity and promoting biodiversity in the area to raise residents' well-being.
- Generous terraces and balconies overlook landscaped grounds to promote residents' sense of mental well-being. Communal courtyards and roof terraces provide external amenity areas which encourage community interaction.



WELL Building Standard.

1.9 Additional Units per core

Where possible long residential corridors have been avoided and generous, day-lit cores have been designed. There are 9 cores across the scheme providing access to an average of 6.3 units per floor, below the advised maximum of 8 as specified in the draft London Plan.

The scheme currently has three cores which contain 9 units. This applies only to the first, second and third floors on three of the cores identified in the plan below. In these instances the core has been designed in a way to provide two exits, therefore there are only 8 units off a single residential corridor.

In accordance with the Housing design guide Standard 3.2.2:

An access core serving four or more dwellings will be provided an access control system with entry phones in all dwellings linked to a main front door with electronic lock release.

Additionally, cores with more than 8 dwellings per floor will be provided with additional security measures including audio-visual verification to the access control system.



Cores with 9 units per floor



1.10 Oversized Units

A bespoke design led scheme has developed in response to the site's unique constraints and as a result the massing is designed to respond to the site boundary, resulting in some non-standard apartment sizes. The new residential apartments have been designed to a high quality and to appeal to a diverse market, including local families and residents potentially looking to 'downsize' from their current homes across the borough. All apartments have been designed to comply to the nationally prescribed space standards.

1. Wheelchair accessible units

All apartments have been designed to comply with the M4(2) space standard as a minimum with 10% of units designed as M4(3) wheelchair accessible. These M4(3) units are generally slightly larger than the nationally prescribed space standards. (e.g Unit B1-08 in Block C)

M4(3) units require larger access, areas and turning circles. The kitchen/living space requires additional requirements such as extra kitchen units (1800mm long) and a minimum clear access zone of 1500mm in-front of and between kitchen units. Double bedrooms require a minimum of 13.5sqm with 1000mm clear access zone and 1200mm by 1200mm manoeuvring space. All bathrooms require a 1500mm turning circle. For a wheelchair accessible WC/cloakroom, a space of 2200mm by 1650mm is required. For a wheelchair accessible bathroom a space of 2200mm by 2600mm is required.

2. Duplex / triplex units

In addition to the M4(3) apartments a number of duplex and triplex houses have been designed. These houses are designed to appeal to families and are therefore generously proportioned. The triplexes form adds to the visual continuity of the proposed urban grain without adding recesses and creates a link between the blocks. Due to this the triplexes are slightly larger than the nationally prescribed space standards. The duplexes have been designed slightly oversized to allow for adequate natural daylight into the bedrooms on the lower ground floor. In design terms, due to the requirement for stairs and the associated circulation space required within duplex and triplex units they will naturally be less efficient than standard flats.

3. Affordable units (rent and shared ownership)

In a bid to ensure the affordable rent apartments are appealing to housing associations and are truly affordable these apartments have been designed to closely comply with the space standards.

The units which are oversized cannot be reduced due to the irregularity of the blocks, which have evolved out of the site parameters. As well as this, the apartments have

been designed to achieve adequate frontage and designing out single North facing units while including the number of M4(3) apartments required.

4. Block design

The design of the scheme responds to the site boundary. To achieve the required offset distances from the railway and between buildings, certain blocks have been chamfered. This lead to the design of the unique / non rectilinear block forms which are naturally inefficient and as such the units are slightly oversized. (e.g Unit A5-02 in Block A)

5. Daylight and sunlight

The unit size has been increased in this instance to ensure that adequate levels of internal daylight and sunlight are achieved. (e.g Unit A1-02 in Block A)

6. Dual Aspect

To minimise the amount of single aspect units, unit sizes have been increased to achieve dual aspect. To prevent north facing units, design features such as bays have been introduced. Due to this these units are also slightly over sized. (e.g Unit A1-04 in Block A)

7. Structure / services

Extra space within the units has been provided for coordination with structures and services e.g impact of service risers in flats. (e.g Unit B1-03 in Block C). Block B concierge has been designed larger than standard due to allowance for the increasing need for storage of parcels or large items from online deliveries and future proofing any need for additional space for residents.

8. Frontage and Terraces

Units have been designed to ensure adequate frontage is achieved, resulting in certain units becoming oversized. (e.g Unit C1-04 in Block A)

Units with a private roof terrace have been designed slightly larger than the nationally prescribed space standards as they will be marketed at premium value. (e.g Unit B5-02 in Block D)

9. Corner units

Corner units are often slightly larger than the nationally prescribed space standards. This is due to the units requiring extra circulation space than a typical flat with a central entrance but also benefit by naturally being dual aspect. (e.g Unit D1-02 in Block A)