2.6
VILLA BLOCK

The villa block is characterised by a central core and efficient circulation arrangement, typically with three to five dwellings per floor, per core. This enables habitable rooms to have views in multiple directions. Villa blocks provide an alternative to the terrace or linear block where the fronts and backs of dwellings conform to social and functional conventions about public access and private retreat. This makes the villa block ideal for use as a standalone building.

D6.1
FINSBURY PARK VILLAS

The road on which the site is located is characterised by large Victorian villas, which give the street a distinctive grain. The new villas were developed in response to the specific site conditions and both the choice of materials and design are rooted in the context of the site. This reinforces a feeling of appropriateness.

Exemplar of the following Housing Design - Quality and Standards (Module C)

C4.3 Dwelling Space Standards / Spatial quality

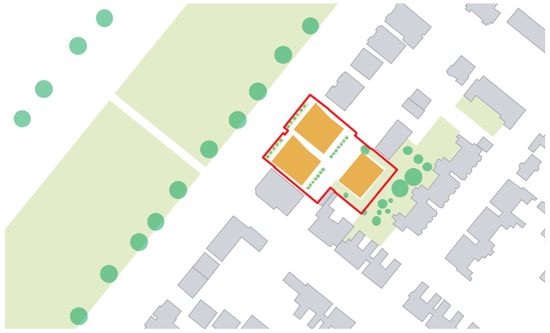
The villas offer family-sized maisonettes at ground and first floor level, providing ease of access and a direct relationship with surrounding amenity space. Apartments are located above, with internal layouts designed to allow maximum flexibility in the use of rooms. This is exemplified by the generous proportions of the hallways, which lend themselves to be used as more than simple circulation spaces with scope to accommodate furniture or perhaps be used as play areas.

C5.1 Home as a Place of Retreat / Privacy

Windows are carefully positioned, sized and designed to minimise overlooking both within the scheme and in relation to neighbouring buildings. The windows facing the neighbouring villa block have been offset to avoid direct overlooking. Balconies are recessed to provide protected outside space with minimal overlooking.

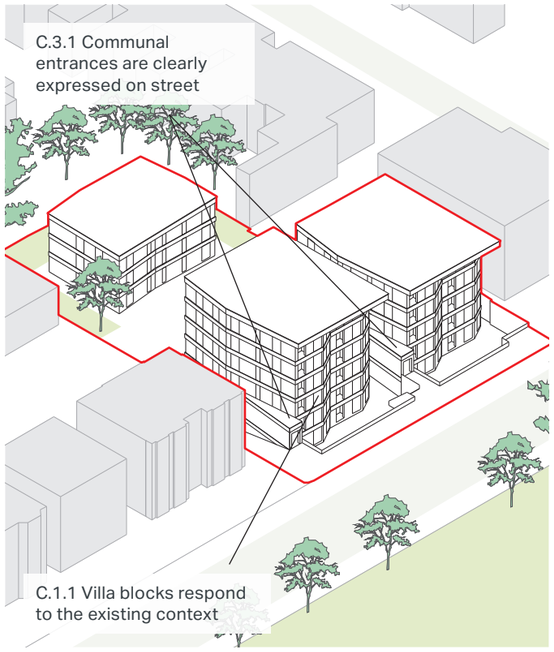
C5.2 Home as a Place of Retreat / Aspect and overlooking

The villa blocks' plan of four flats per floor results in each dwelling occupying a corner and affording them all dual aspect. To maximise the advantage of the privileged location on the edge of a park, the villas include large windows and balconies. These provide many residents with views over the park.



Site plan

Typical floor plan



Axonometric view

Architect: Sergison Bates
Client: Circle 33 Housing Trust (later merged with Clarion Housing)
Borough: Haringey
Address: 378-386 Seven Sisters Road, London, N4 2PL
Completion date: July 2008
Residential cost per sqm: N/A
Total cost per sqm: N/A

Context character: urban

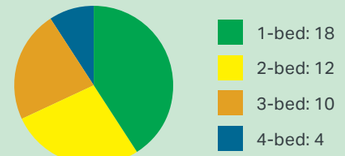
Current PTAL:

0 1a 1b 2 3 4 5 **6a** 6b

Large Site Characteristics

Site area net (sqm): 2,200
Site area gross (sqm): 2,448
Parking numbers: 13

Building characteristics



Dwelling mix: Total: 44
Average GIA per dwelling (sqm): 62
Typical number of dwellings per core: 15
Typical number of dwellings per floor per core: 4

Tenure

Affordable: 73%
Social rent: 27%
PRS: 0%
Market sale: 0%

Maximum height above ground level (m): 15
Maximum height Above Ordnance Datum (m): 41
Maximum number of storeys: 3-6

Planning use split

Non-residential use: None
GEA: 3679
GIA: 2756
NIA: 1689

D6.2
BRENTFORD LOCK WEST PHASE 2

This development uses the villa block to mark the corners of each development plot. Terraces of townhouses adjoin the villas to complete the urban arrangement. The block encloses a courtyard garden that sits above an underground car park. Distinct saw-tooth roofs make reference to the neighbouring wharf architecture.

Exemplar of the following Housing Design - Quality and Standards (Module C)

C4.2 Dwelling Space Standards / Private outside space

Each villa block has a deep balcony running the full width of one side of the building, accessible from all rooms of the apartments. The size of balconies exceeds the minimum. For other apartments, balconies wrap around the corners of the building to offer two aspects.

C5.2 Home as a Place of Retreat / Aspect and outlook

The villa blocks help maximise the number of dual-aspect homes. The majority of apartments have a corner position allowing aspect onto two adjacent perpendicular façades. Between the villa blocks are town houses that have aspect on one side onto the street and on the other onto the communal garden.

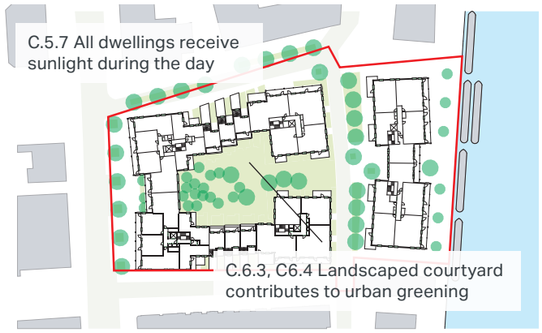
C6.2 Living Sustainably / Biodiversity and urban greening

This former brownfield site is transformed by a heavily landscaped communal garden, landscaped private front and rear gardens, street trees and green roofs improving the site's ecological value.

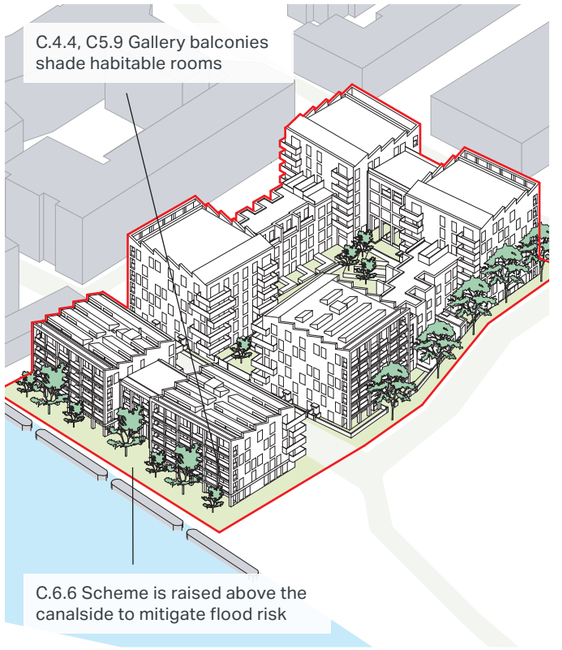
C6.3 Living Sustainably / Flood mitigation and SuDS

The scheme manages the flood risk from the River Brent by raising development above the level of the tow path by more than one metre. This in turn helps improve privacy for ground floor dwellings from pedestrians walking along the tow path. Permeable paving on the street helps reduce rainwater run-off.

Site plan



Typical floor plan



Axonometric view

Architect: Mæ
Client: Waterside Places
Borough: Hounslow
Address: Brentford, TW8 8FD
Completion date: November 2016
Residential cost per sqm: £2,601
Total cost per sqm: £2,601

Context character: suburban and urban

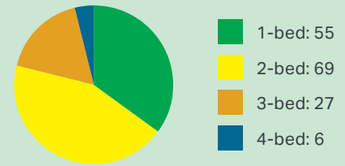
Current PTAL:

0 1a 1b **2** **3** 4 5 6a 6b

Large Site Characteristics

Site area net (sqm): 9,000
Site area gross (sqm): 9,800
Parking numbers: 117

Building characteristics



Dwelling mix: Total: 157
Average GIA per dwelling (sqm): 125
Typical number of dwellings per core: 30
Typical number of dwellings per floor per core: 5

Tenure

Market sale: 60% Affordable: 40%
Social rent: 0% PRS: 0%

Maximum height above ground level (m): 24
Maximum height Above Ordnance Datum (m): 27
Maximum number of storeys: 7

Planning use split

Non-residential use: None
GEA: 17,326
GIA: 19,606
NIA: 12,541

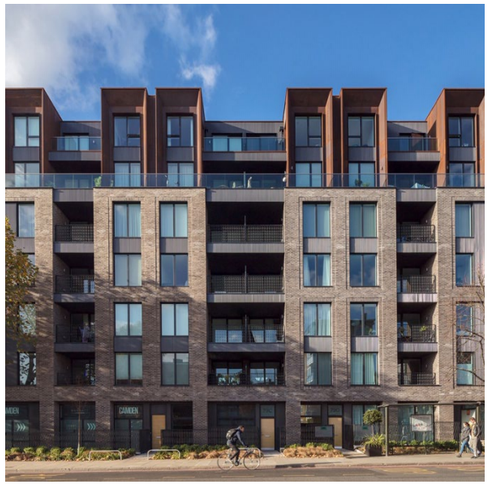
D6.3
CAMDEN ROAD

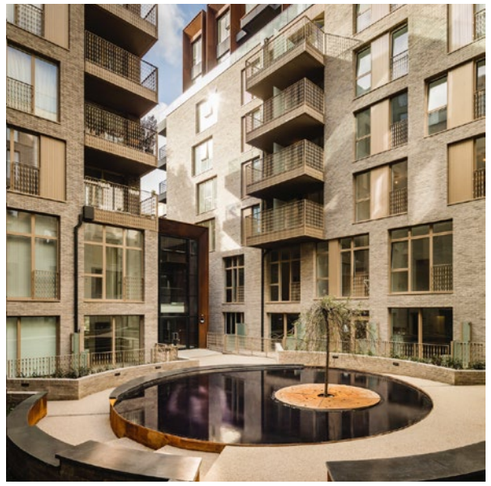
This residential scheme sits in close proximity to four conservation areas. The configuration of the building, which is seven storeys at its highest, illustrates how high-density, low-rise homes can be successfully created in central London. This project adapts the villa block – with its cluster of flats around a central core – by joining several to create a double courtyard arrangement. The massing is broken down further by recessing the two upper levels.

Exemplar of the following Housing Design - Quality and Standards (Module C)

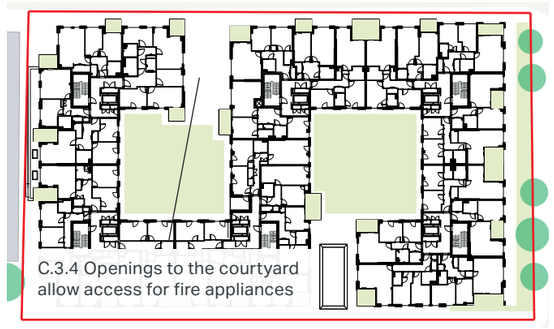
C5.3 Home as a Place of Retreat / Daylight, sunlight and overshadowing
The blocks are approximately 13 metres deep throughout. Extensive analysis was undertaken to balance requirements for maximising daylight to rooms, and minimising heat loss and gain through window openings. Solar control glazing is provided to all windows with a solar exposure. Despite the limited dimensions of the courtyards, the planning of dual-aspect apartments improves daylight into the dwellings.

C5.4 Home as a Place of Retreat / Air quality and noise and C6.4 Living Sustainably / Air pollutant emissions and exposure
The layout ensures dual-aspect dwellings where they have aspect onto the busy road, allowing rooms for retreat from the source of noise and pollutants. The site has unique constraints in that two sides have southerly aspects but face busy roads while two sides face quiet but northerly aspects. With this constraint, it was important to maximise dual-aspect apartments to ensure that they all can gain benefit from passive solar gain, cross ventilation and a quiet aspect to allow for night-time purge ventilation.

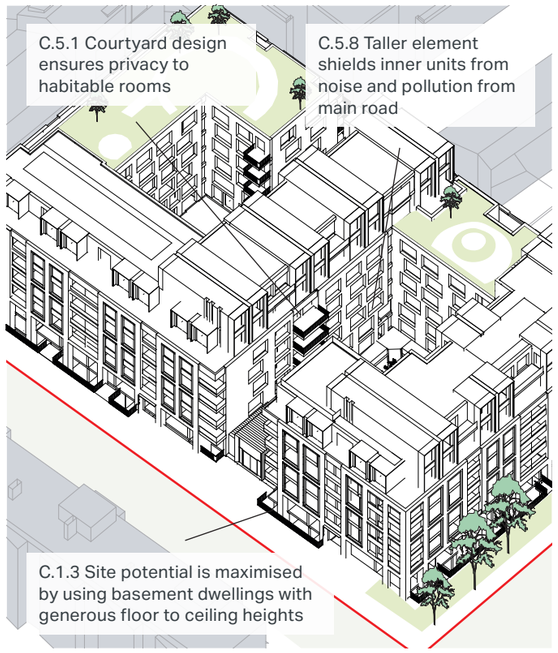




Site plan



Typical floor plan



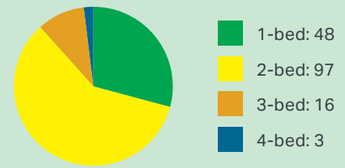
Axonometric view

Architect: Sheppard Robson
Client: Barratt London
Borough: Camden
Address: 79 Camden Road
Completion date: January 2018
Residential cost per sqm: N/A
Total cost per sqm: £2,500

Context character: urban
Current PTAL:

Large Site Characteristics
Site area net (sqm): 4,080
Site area gross (sqm): 5,328
Parking numbers: 2

Building characteristics



Dwelling mix: Total: 164
Average GIA per dwelling (sqm): 95
Typical number of dwellings per core: 27
Typical number of dwellings per floor per core: 5

Tenure

Market sale: 50%
Affordable: 19%
PRS: 21%
Social rent: 10%

Maximum height above ground level (m): 23
Maximum height Above Ordnance Datum (m): 53
Maximum number of storeys: 7

Planning use split
Non-residential use: None
GEA: 16,736
GIA: 15,566
NIA: 12,004

2.7
TOWER

A tower is defined as being ten storeys or more. As with the villa block, the tower is characterised by a central core and efficient circulation arrangement, usually with four to five dwellings per floor, allowing habitable rooms to have views in multiple directions.

D7.1
KEYBRIDGE HOUSE

The development is an urban arrangement of a terrace, linear blocks and towers. These mediate between the scales of the surrounding buildings and stitch the development into its existing and emerging context. The towers are combined with lower rise linear blocks so that they are integral to the urban arrangement rather than reading as independent objects. This approach also means that buildings front streets in a consistent way.

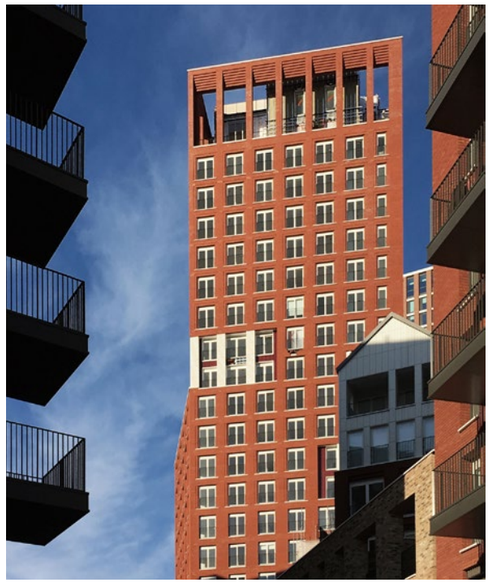
Exemplar of the following Housing Design - Quality and Standards (Module C)

C1.3 Shaping Good Places / Land use mix

The development accommodates residential, employment and retail uses, as well as a primary school site for children aged 4-11. The design of the school means that its spaces pivot around a residential core, however the access is completely independent from the residential dwellings above it and so the school users have no immediate perception of the residential use. This approach was fundamental to ensuring adequate security for the school. Out of school hours, the site provides a new community facility for use by local community groups.

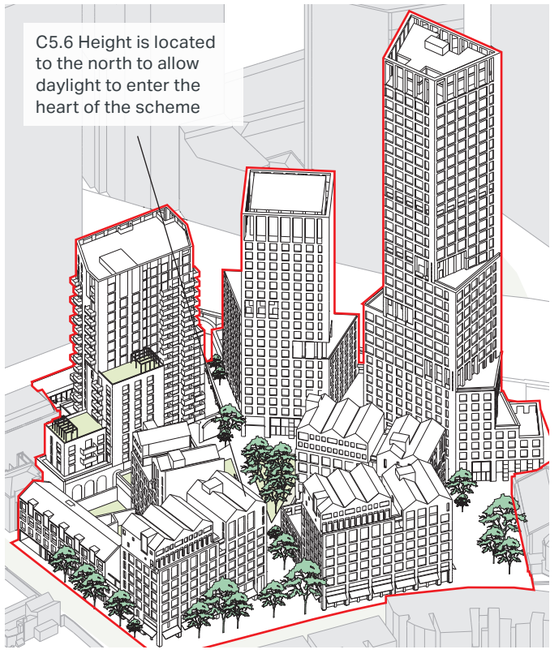
C5.3 Home as a Place of Retreat / Daylight, sunlight and overshadowing

This dense development arranges taller buildings to the north to avoid overshadowing of lower buildings that face the street. The buildings are angled so that there are no parallel facades, allowing all units to be dual aspect without overlooking. This allows generous glazing and optimises natural light into dwellings.



Site plan

Typical floor plan



Axonometric view

Architect: Allies & Morrison
Client: Mount Anvil
Borough: Lambeth
Address: Wyvil Road, Vauxhall
Completion date: August 2020
Residential cost per sqm: N/A
Total cost per sqm: N/A

Context character: central

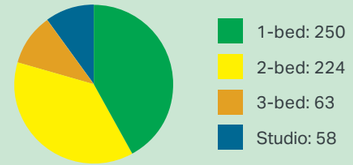
Current PTAL:

0 1a 1b 2 3 4 5 **6a** 6b

Large Site Characteristics

Site area net (sqm): 11,963
Site area gross (sqm): 13,421
Parking numbers: 147

Building characteristics



Dwelling mix: Total: 7
Average GIA per dwelling (sqm): 94.6
Typical number of dwellings per core: N/A
Typical number of dwellings per floor per core: 2-11

Tenure

Market sale: 92%
Social rent: 3%
Affordable: 5%
PRS: 0%

Maximum height above ground level (m): 129
Maximum height Above Ordnance Datum (m): 132
Maximum number of storeys: 4-37

Planning use split

Residential	School
GEA: Unknown	GEA: 3,779 (school only)
GIA: 56,258	GIA: 7,727sqm
NIA: 41,177	NIA: 1,451 (school only)

D7.2
LOCK KEEPERS

This development comprises three building types - a villa block, a linear block and a tower - to deal with the complex geometry of the site. Sensitivity to the surrounding character and context was paramount due to the site's location within a conservation area.

Exemplar of the following Housing Design - Quality and Standards (Module C)

C5.2 Home as a Place of Retreat / Aspect and overlooking

The block layouts and small footprints allowed dual-aspect dwelling to be maximised and there are no north-facing single-aspect dwellings. Much of the site is surrounded by large open spaces and waterways, therefore overlooking and overshadowing was not a primary issue, enabling greater density on the site through taller buildings.

C4.1 Dwelling Space Standards / Private internal space

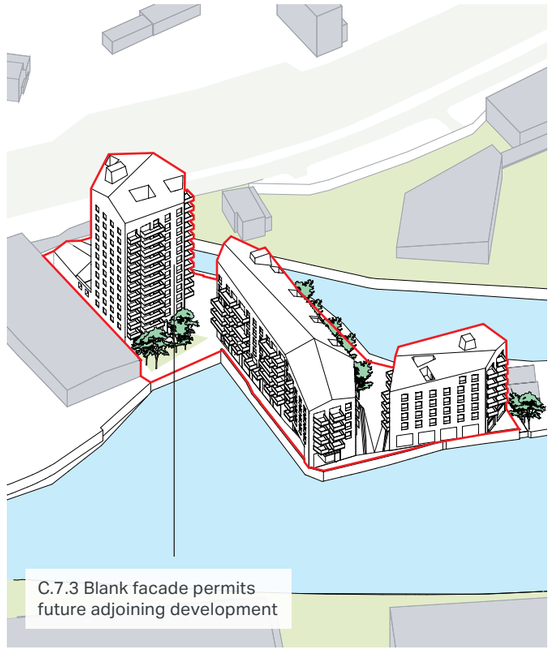
The ground floor is a flexibly designed commercial space. The large floor plate can be subdivided in a number of ways allowing for different sized businesses. The double-height spaces allow the potential for mezzanines, which would help businesses to grow and accommodate their future needs.

C7.2 Future Proofing / Safeguarding development potential

A wider masterplan study was undertaken and included as part of the planning submission, demonstrating how future phases of development could be facilitated. Part of the design response of Lock Keepers was to strategically leave gables blank to allow buildings to adjoin in the future, safeguarding the development potential of adjacent sites.

Site plan

Typical floor plan



Axonometric view

Architect: Allies & Morrison
Client: Criterion Two LLP + Peabody
Borough: Tower Hamlets
Address: 18 Gillender Street, E3 3JW
Completion date: April 2016
Total cost per sqm: N/A
Residential cost per sqm: N/A

Context character: urban

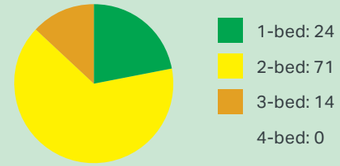
Current PTAL:

0 1a 1b 2 **3** 4 5 6a 6b

Large Site Characteristics

Site area net (sqm): 3,200
Site area gross (sqm): 3,200
Parking numbers: 5

Building characteristics



Dwelling mix: Total: 109
Average GIA per dwelling: 73
Typical number of dwellings per core: 46
Typical number of dwellings per floor per core: 4

Tenure

Social rent:	Affordable:	Market sale:	PRS:
30%	30%	70%	0%

Maximum height above ground level (m): 40
Maximum height Above Ordnance Datum (m): 46
Maximum number of storeys: 11 residential above 1 floor/workshop office

Planning use split

Residential	Employment space
GEA: 12,493m²	GEA: 1,976m²
GIA: 10,912m²	GIA: 1,778m²
NIA: 7,939m²	NIA: 1,422m²

D7.3
PORTERS EDGE

Porters Edge is the first phase of the Water Yard masterplan. The intention for the masterplan and this scheme is to create a new context and town centre for the area focused around the civic library, square and underground station. The arrangement comprises a three-to-four storey podium with three towers above, rising up to 17 storeys. The taller elements are staggered allowing for views through the site at upper levels. The lower level maisonettes negotiate between the ground plane and the podium level above the retail unit. Their unconventional plans are enhanced with interesting double-height spaces.

Exemplar of the following Housing Design - Quality and Standards (Module C)

C1.3 Shaping Good Places / Land use mix

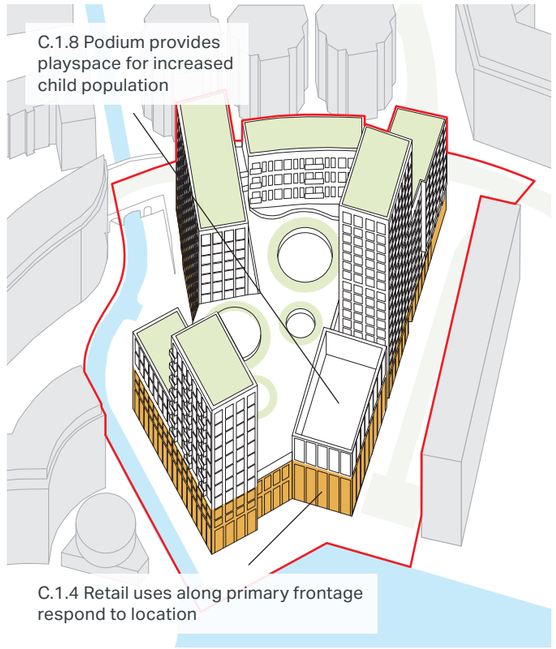
Porters Edge has created a mixed-use urban block which in addition to residential has a large retail unit at lower levels for a sports retailer, a retail warehouse and associated parking, and other mixed uses include a café, fitness studio and MUGA (multi-use games area). The non-residential spaces on the site also provide valuable amenity to the residents and the wider community. The sports retailer provides free spaces, including the MUGA, for the local residents and sports teams to use.

C1.4 Shaping Good Places / Open space

Outdoor shared amenity is provided on the roof of the ground floor uses with access for all residents whilst a further MUGA is accommodated on the roof of one of the blocks. This generous podium-level amenity space, raised up three-to-four storeys, offers a unique citywide perspective for residents with good access to daylight and sunlight.

Site plan

Typical floor plan



Axonometric view

Architect: Maccreanor Lavington Architects
Client: Sellar Design + Development Ltd. & Canada Water (Developments) Ltd.
Borough: Southwark
Address: London, SE16 2XU
Completion date: November 2018
Residential cost per sqm: N/A
Total cost per sqm: N/A

Context character: urban (Central in the future)

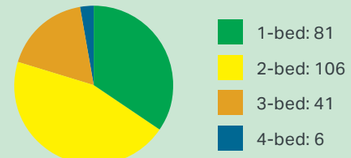
Current PTAL:

0 1a 1b 2 3 4 5 **6a** 6b

Large Site Characteristics

Site area gross (sqm): N/A
Site area gross (sqm): N/A
Parking numbers: 148 spaces (10 DDA, 138 standard. Parking for retail customer use only)

Building characteristics



Dwelling mix: Total: 7
Average GIA per dwelling (sqm): N/A
Typical number of dwellings per core: N/A
Typical number of dwellings per floor per core: 4-5 (up to 15)

Tenure

PRS: 100%
Social rent, Affordable, Market sale: 0%
Maximum height above ground level (m): N/A
Maximum height Above Ordnance Datum (m): 65
Maximum number of storeys: 17

Planning use split

Residential	Retail
GEA: 26,632 sqm	GEA: 20,386 sqm
GIA: 22543 sqm	GIA: 20,100 sqm
NIA: 16,934 sqm	NIA: N/A

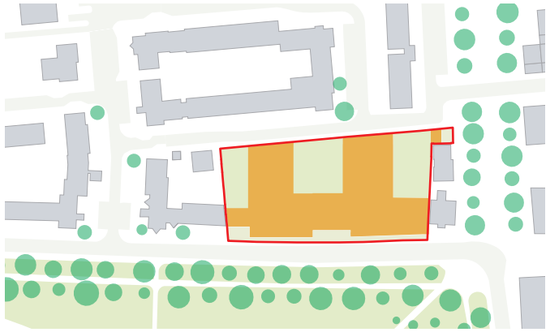
D7.4
TIGER WAY

Tiger Way delivers 89 residential apartments alongside a new primary school and nursery funded through the sale of residential on the site. This proximity called for an innovative design solution. The scheme ensures both uses have individual identities while creating a cohesive building. In combining the school use with residential apartments, the positioning of residential units was a key design consideration, with subtle changes to lines of sight from lower flats to provide a suitable and balanced approach to separation and overlooking.

Exemplar of the following Housing Design - Quality and Standards (Module C)

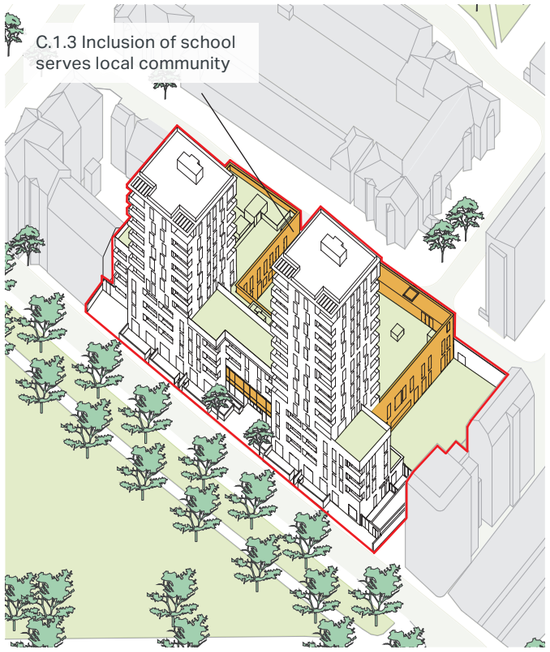
C1.3 Shaping Good Places / Land use mix

The scheme cleverly delivers housing above a school whilst managing the day-to-day functioning of uses and protecting quality of life for users of both the school and the residential elements. The school faces into Nightingale Estate arranged in two wings with classrooms wrapping around ground floor play spaces and further play space provided at roof level. A flexible 'park-room' is provided at first floor level overlooking the park. The residential apartments face across Hackney Downs Park allowing dual-aspect layouts with expansive views across London's skyline. Shared residential amenity space is provided at fourth floor level. The street frontage is activated by ground floor maisonettes with raised terraces and a welcoming concierge and entrance lobby. The two uses are unified by a single architectural language, whilst the form of plinth and towers allows the school to retain its own identity.



Site plan

Typical floor plan



Axonometric view

Architect: Hawkins\Brown
Client: London Borough of Hackney
Borough: Hackney
Address: Tiger Way, Hackney, London, E5 8NA
Completion date: School: February 2019
Residential: June 2019
Residential cost per sqm: N/A
Total cost per sqm: N/A

Context character: suburban

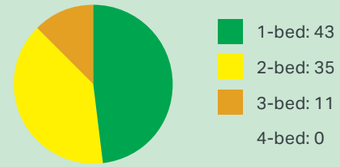
Current PTAL:

0 1a 1b 2 **3** 4 5 6a 6b

Large Site Characteristics

Site area net (sqm): 5,131
Site area gross (sqm): 5,131
Parking numbers: 2 on site disabled bays

Building characteristics



Dwelling mix: Total: 89
Average GIA per dwelling (sqm): 77
Typical number of dwellings per core: 4
Typical number of dwellings per floor per core: 4

Tenure

Market sale: 100%
Social rent, Affordable, PRS: 0%
Maximum height above ground level (m): 49
Maximum height Above Ordnance Datum (m): 69
Maximum number of storeys: 14

Planning use split

Residential
GEA: 11,041
GIA: 9,817
NIA: 6,810

2 form entry primary school & nursery
GEA: 4,133
GIA: 3,679
NIA: 2,100

3
APPENDICES

3.1 The good quality homes for all Londoners supplementary planning guidance and the planning process

3.1.1 Design-led planning process for optimising site capacity

A design-led approach should be adopted throughout the planning process, from development plan formation to pre-application discussion, determination and delivery of planning applications. This requires proactively establishing the development capacity of sites during plan formation and optimising density during development management processes. This is critical to ensuring housing targets are achieved on available land while promoting better residential design, since planned capacity and density are directly connected to realising developments of appropriate scale and form.

This design-led approach requires boroughs to undertake site and area-specific capacity testing at plan-making and guidance stages. This sets a robust benchmark against which proposals can be assessed. Frontloading capacity testing is consistent with a plan-led approach. This should reduce planning risk and increase certainty of housing development outcomes for local planning authorities, elected members, decision-makers and communities, as well as prospective developers and their consultant teams. It is anticipated that early investment in capacity testing and optimisation will contribute to a more predictable, less resource intensive development management process.

3.1.2 Plan-making

Boroughs have significant opportunities to consider how best to achieve appropriate densities to accommodate growth during the plan-making process, as part of strategic policies that set out the pattern, scale and quality of development. Boroughs should be satisfied that site allocation through neighbourhood plans and area-based strategies (e.g. Opportunity Areas) seek to test and optimise a site's development capacity to accommode appropriate levels of housing-led growth.

The preparation of development briefs or planning briefs provides boroughs with an opportunity to apply policy and guidance to test the development potential of specific sites. This informs appropriate site allocation and encourages positive development by reducing planning risk. Briefs should be succinct, clear and provide a level of detail proportionate to the most important site-specific issues to be addressed, rather than broadly repeating planning policy and guidance. Design codes for a site or area offer boroughs a means of establishing and assessing the design quality of a proposal during plan-making and development management. This is done in relation to site-specific constraints and opportunities, including how proposals manage proposed densities in relation to intended types of housing, existing and new infrastructure capacities, and the potential for enhancing the character of surrounding neighbourhoods.

Planning briefs, development briefs, and site or area design codes provide progressively detailed design content that aims to articulate and test the vision for a specific site or area using purposeful illustrations, often in relation to a masterplan. Two-dimensional and three-dimensional graphic information can be integrated within written accounts to describe site-specific considerations impacting on the design process and articulate the quality of design outcomes. These offer boroughs an invaluable opportunity to discuss and evaluate the appropriateness of proposals. Design codes present boroughs with opportunities to establish design parameters to improve design governance, when included within planning permissions. The creation of design codes to secure for incremental residential intensification design quality is particularly endorsed for small sites (Module B).

3.1.3 Decision-making during the planning process

Boroughs should proactively work with applicants through development management processes to secure high-quality developments that optimise site capacity.

Pre-application discussions

Early pre-application discussion offers boroughs the greatest opportunity to support applicants to develop site-specific, context-appropriate responses to optimising site capacity. A site's capacity and resultant density should be determined in relation to local issues, e.g. infrastructure capacity. Boroughs should consult with infrastructure providers to establish the infrastructure capacity of the development site and wider area. Where proposals suggest a capacity in excess of that which could be supported by current or future planned infrastructure, emerging proposals for a site should be supported by a site-specific infrastructure assessment. This assessment should establish what additional impact the proposed development could have on current and planned infrastructure, and how this impact may be appropriately mitigated on site or through an off-site mechanism, e.g. funded through Community Infrastructure Levy (CIL) generation.

Design governance during the design process

Boroughs should establish a robust approach to design governance to scrutinise, agree and maintain residential design quality of planning applications (London Plan Policy D4). Pre-application discussions related to optimising site capacity will be enriched by evidence generated through design review and design and access statements (London Plan Policy D4:C-E).

The independent scrutiny and expertise provided by design review is likely to be particularly valuable when assessing housing quality in relation to existing contexts where the housing density proposed by applicants is above 350 units per hectare, or where tall buildings are proposed.

Determining planning applications

Planning applications should describe the density of proposed developments, including new residential units using recognised units of measurement (refer to 3.2 Measuring optimum density). Boroughs should use pre-application discussions, design governance processes (e.g. design review) and supplementary documents to evaluate how applicants propose to optimise site capacity with reference to capacity factors, housing design standards, and processes and policies associated with plan-making and site allocation (e.g. strategic policies, area-based strategies, development briefs and design codes).

A design and access statement should provide an accessible means of evaluating whether proposals achieve or exceed anticipated site capacity (London Plan Policy D4:C). Applicants should offer a clear explanation of how site capacity has been optimised during the design process. They should demonstrate how their design-led approach has sought to balance potentially conflicting planning objectives with detailed reference to existing site context and the quality of the proposed development.

Evaluating site capacity within proposals

Where a proposed development is acceptable in terms of use and design, but exceeds the site capacity identified in a local site allocation - or the site is not allocated - and the existing infrastructure capacity will be exceeded, additional infrastructure proportionate to the development should be delivered through the development (London Plan Policy D2:C). Additional infrastructure requirements should be identified through an infrastructure assessment during the planning application process. This should have regard to the local infrastructure delivery plan or programme, and the Community Infrastructure Levy/Section106 contribution that the development will make. If the necessary infrastructure needed to support a proposed development cannot be delivered, the scale of development should be reduced accordingly or an alternative development should be explored.

Development proposals are expected to accord with the site capacity establish by a borough through a design-led approach in its site allocations. Proposals that exceed the development parameters set out in a site allocation can be refused for this reason in accordance with London Plan Policy D3:C.

Boroughs should carefully consider the use of planning conditions and obligations to secure design quality as approved, and monitor development to ensure quality is delivered, through enforcement if necessary. Boroughs should ensure that the overall design quality is maintained when determining applications for either material or non-material amendments to approved schemes. This includes, where appropriate, enforcing design guidance and design codes proposed during outline permissions; management plans; the use of specific external materials; and the use of specific designers to execute detailed design development unless otherwise approved.

Deciding applications for small housing developments

Where a borough has adopted a design code in accordance with Module B, applications for small housing developments in the area covered by a design code should comply with it. Where a borough has not adopted a design code for an area that is the subject of a planning application for a small housing development, Module B offers requirements against which to appraise a scheme

3.1.4 Development management

Most planning consents for developing small sites are expected to be approved through the standard planning application route. Boroughs should use the full range of planning tools available, including brownfield registers, permission in principle and Local Development Orders where appropriate and support community organisations in bringing forward Neighbourhood Development Orders and Community Right to Build Orders. These alternative ways of granting permission are effectively a hybrid of a local plan allocation and planning permission and determine actual development capacity of the site. Boroughs should increase planning certainty for small sites and small housing developments by listing these sites on their brownfield registers, granting permission in principle on specific sites or preparing local development orders.

Permission in principle

This alternative way of obtaining permission was made possible by the Town and Country Planning (Permission in Principle) Order 2017, which came into force in June 2018. The Permission in Principle (PiP) consent route has two stages. The first is the permission in principle stage. This establishes whether a site is suitable in principle. The second is the technical details consent stage. This takes place when the detailed development proposals are assessed.

A borough can grant permission in principle to a site in response to an application, or by entering a site in Part 2 of its brownfield land register. This will trigger a grant of permission in principle for that land, but only for minor development of between one and nine homes. A borough will only list a site in Part 2 of the register if it decides to allocate it for residential development, having followed a series of required procedures.

The scope of PiP is limited to location, land use and amount of development. Issues relevant to these in-principle matters should be considered at the permission in principle stage. Other matters should be considered at the technical details consent stage. It is not possible for conditions to be attached to a grant of PiP. However, boroughs can inform applicants about what they expect to see at the technical details consent stage. The use of design codes helps identify the likely capacity of a site and establishes key parameters to inform subsequent applications for technical details consent (Module B).

Local development orders and community right to build orders
Local Development Orders (LDOs) can be used to promote small housing developments, to varying levels of success. The Mayor has powers under the Infrastructure Act 2015 to make a Mayoral Development Order that grants planning permission for specified development, providing, amongst other things, that it is in response to an application by a borough or boroughs where the site is located.

The Planning Advisory Service (PAS) has prepared useful guidance on the preparation of LDOs and the use of LDOs to promote small housing developments. As with PiPs, boroughs are encouraged to use design codes to help identify the likely capacity of a site and to establish key parameters for housing that is consented by an LDO.

3.1.5 Monitoring and evaluation

Boroughs should review the conclusions from capacity testing as schemes progress. They should do this firstly by comparing estimated capacity at the plan-making stage with the determined capacity at the development management stage. Secondly, they should make time to review the quality of completed schemes by visiting a sample of completed developments and asking residents what they think about living in their new home. Such monitoring will enable lessons to be learnt and policies and guidance to be adjusted where necessary.

3.2 Measuring optimum density

Good growth requires residential developments to achieve optimum densities, rather than simply maximising densities. Using several measures to assess, monitor and compare the density and site capacity of development proposals provides a more balanced perspective on the implications of development for the character of an area, as well as on the experience of residents and infrastructure requirements. Likewise, using multiple measures of density reduces the potential for misleading claims about density. Boroughs should compare density during plan-making and decision-making about applications, including new residential units, by using the following recognised measures of density (3.1B.23):

1. Number of dwellings per hectare
2. Number of habitable rooms per hectare
3. Number of bedrooms per hectare
4. Number of bedspaces per hectare.

The number of bedspaces per hectare is likely to provide the best estimate of residential population and give an insight into infrastructure provision. The number of units per hectare and number of habitable units per hectare provide an insight into the appropriateness of a proposal as a measure of built form and massing. Boroughs should consider the maximum height and scale of major components of proposed developments when undertaking modelling of site capacity during plan-making. This should anticipate the additional measurements required for all major planning applications by applicants:

1. Floor area ratio (total Gross External Area of all floors / site area)
2. Site coverage ratio (Gross External Area of ground floors /site area)
3. Maximum height in metres above ground level of each building and at Above Ordnance Datum (m) (above sea level).

Optimum density: efficient use of land considering integration of form and scale of buildings, the location of different land uses, and the potential for pedestrian connectivity to services as assessed and monitored using several measures of density. This demonstrates an appropriate development response relative to site capacity.

GLOSSARY

Area assessments: An evidence base process involving characteristion (see below) that helps identify the areas that are appropriate for extensive, moderate or limited growth to accommodate borough-wide growth requirements as the foundation of development plan preparation and area- based strategies. This process should inform decision-making about how places should develop, speeding up the development plan stage and bringing about better quality development (London Plan Policy D1).

Capacity factors: Existing qualities and characteristics of the site and surrounding area contributing to site capacity, including infrastructure capacity and stakeholder comments (Section 2.2, Module A).

Characterisation: A borough-wide evaluation of the current characteristics of a place. This includes how its past social, cultural, physical and environmental influences have shaped it and the potential opportunities for change in relation to an area's capacity for growth and development. This process occurs as part of the area assessment and is a precursor to the site analysis and context analysis using capacity factors to identify optimum site capacity during plan-making.

Clusters (Type C): A small collection of houses that form a congruent ensemble on a single site, ranging from provision through a homogeneous block to a series of individual, related buildings e.g. detached, semi-detached or stacked maisonettes (Section 3.2.3, Module A).

Community engagement: A process that involves communities in deliberation, decision-making and practical action. Community engagement can be done using a wide range of methods (e.g. face-to-face and online engagement).

Design codes: Describe the key design principles of a development proposal in a simple, concise and mainly graphic format. By drawing on a proposal's layout, massing and heights approach, the codes define the principal features that make up the overall design integrity of the scheme (London Plan Policy D4).

Design and access statement: A statement accompanying a planning application to explain the design principles and concepts that have informed the development and how access issues have been dealt with. The access element of the statement (the inclusive design statement as per London Plan Policy D5) should demonstrate how the principles of inclusive design, including the specific needs of disabled people, have been integrated into the proposed development and how inclusion will be maintained and managed.

Development brief: Sets out the vision for a development. This is grounded firmly in the economic, social, environmental and planning context. Apart from its aspirational qualities, the brief should include site constraints and opportunities, infrastructure including energy and transport access, and planning policies. It should also set out the proposed uses, densities and other design requirements.

Green cover: The total area covered by vegetation and water across London. It not only includes publicly accessible and publicly managed vegetated land (i.e. green space) and waterways, but also non-accessible green and blue spaces, as well as privately owned vegetated land including private gardens and agricultural land, and the area of vegetated cover on buildings and in the wider built environment such as green roofs, street trees and rain gardens.

Green infrastructure: Comprises the network of parks, rivers, water spaces and green spaces, plus the green elements of the built environment, such as street trees, green roofs and sustainable drainage systems, all of which provide a wide range of benefits and services.

Green Infrastructure Focus Map: Online tool and evidence base to support targeted infrastructure improvement and investment in green infrastructure. This identifies where there is need for green infrastructure related to specific environmental or social issues within a given area. (https://data.london.gov.uk/dataset/green-infrastructure-focus-map).

Higher density residential developments: Residential developments with a density of at least 350 units per hectare (London Plan Policy D4).

House (Type B): Individual dwelling standing on its own plot and functionally independent of other dwellings (Section 3.2.2, Module A).

Linear blocks (Type E): Multiple dwellings configured in a vertical stack, often comprising maisonettes at ground and first floors, with additional maisonettes or lateral apartments at upper floors (Section 3.2.5, Module A).

London Heat Map: Online tool to identity and develop decentralised energy (DE) projects in London. This includes data relating to major energy consumers, fuel consumption, carbon dioxide emissions, energy supply plants, community heating networks and heat density. (https://www.london.gov.uk/what-we-do/environment/energy/london-heat-map/what-london-heat-map).

Infrastructure Delivery Plan (IDP): A plan that often supplements a local Development Plan, identifying the infrastructure required to support development within an area, including its capacity, location and available funding.

Infrastructure Mapping Application (IMA): An interactive tool to identify current and future development and infrastructure projects sorted by location, project value and funded status. The tool provides phasing status in relation to

sectors including: transport, housing, energy, water, commercial and retail, and civic and public projects (https://maps.london.gov.uk/ima).

Optimum density: Efficient use of land that considers the integration of the form and scale of buildings, the location of different land uses and the potential for pedestrian connectivity to services. This is assessed and monitored using several measures of density to demonstrate an appropriate development response relative to site capacity.

Optimum site capacity: Development with the most appropriate form for its site. This is calculated following an evaluation of the site's attributes, its surrounding context and its capacity for growth (London Plan Policy D1 – D4).

Population Yield Calculator: A tool for estimating population yield from new housing development. The calculator provides users with an indication of the possible number and age of children that could be expected to live in a new housing development of a given bedroom or tenure mix. (https://data.london.gov.uk/dataset/population-yield-calculator).

PTAL (Public Transport Access Level): A measure of access to the public transport network. For any given point in London, PTALs combine walk times from a chosen point to the network (stations and bus stops, for example) together with service frequency data and a range of destinations served from these locations. This provides an overall access index that can be allocated to nine access levels between 0 and 6b. In WebCAT, PTAL values have been pre-calculated for a grid of points covering the whole of London (approximately 150,000 points).

Residential type: A category of housing group based on its typical characteristics, including form, scale and potential site configuration.

Small sites: Development sites smaller than 0.25 hectares.

Small housing developments: Residential developments on sites up to 0.25 hectares. This may include new build; infill development on vacant or under used sites; upward extensions of existing buildings (including non-residential developments); residential conversions, redevelopment and extension of existing sites (London Plan Policy H2).

Site allocations: Sites identified for specific forms of development and allocated at a local level within borough local Development Plans.

TIM (Travel Time Mapping): A complementary measure of connectivity to PTAL in WebCAT. Travel times in TIM use travel time data derived from Transport for London's transport models. The models divide London into more than 3200 statistical areas or zones, providing times for all possible origin and destination zone combinations - equivalent to more than 9 million records for each scenario. This means the user can select any location within London and WebCAT can quickly display travel times based on the zone where the selected point is located.

Terraces (Type D): A row of homes where each dwelling sits within an individual plot, providing private access to the street and commonly access to private gardens or semi-private courtyards. Sub-types include those linked by a carport, townhouses or intimate rows of mews houses (Section 3.2.4, Module A).

Tower (Type G): Multiple dwellings stacked ten storeys or more in height. These are arranged around a central core enabling habitable rooms to be orientated towards the public space. Each floor is typically composed of between two to five lateral apartments (Section 3.2.7, Module A).

Residential conversions and extensions (Type A): Additional housing provided through modification of an existing residential or non-residential building, whether through subdivision, addition or conversion (Section 3.2.1, Module A).

Villa block (Type F): Multiple dwellings stacked between five and ten storeys in height. These are arranged around a central core enabling habitable rooms to be orientated towards the public space. Each floor is typically composed of up to four apartments (Section 3.2.6, Module A).

CONTRIBUTORS AND THANKS

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