BIDWELLS

REBUTTAL PROOF OF EVIDENCE - APPENDICES

PLANNING, DESIGN AND LANDSCAPE

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APPENDIX 1
LONDON PLAN, POLICY D3: OPTIMISING SITE CAPACITY THROUGH THE DESIGN-LED APPROACH

3.2.6 In order to support the Healthy Streets Approach, development proposals should take account of the existing and planned **connectivity of a site via public transport and active modes** to town centres, social infrastructure and other services and places of employment. Opportunities to improve these connections to support higher density development should be identified.

Policy D3 Optimising site capacity through the design-led approach

The design-led approach

A All development must make the best use of land by following a design-led approach that optimises the capacity of sites, including site allocations. Optimising site capacity means ensuring that development is of the most appropriate form and land use for the site. The design-led approach requires consideration of design options to determine the most appropriate form of development that responds to a site's context and capacity for growth, and existing and planned supporting infrastructure capacity (as set out in Policy D2 Infrastructure requirements for sustainable densities), and that best delivers the requirements set out in Part D.

B Higher density developments should generally be promoted in locations that are well connected to jobs, services, infrastructure and amenities by public transport, walking and cycling, in accordance with Policy D2 Infrastructure requirements for sustainable densities. Where these locations have existing areas of high density buildings, expansion of the areas should be positively considered by Boroughs where appropriate. This could also include expanding Opportunity Area boundaries where appropriate.

C In other areas, incremental densification should be actively encouraged by Boroughs to achieve a change in densities in the most appropriate way. This should be interpreted in the context of Policy H2 Small sites.

D Development proposals should:

Form and layout

1) enhance local context by delivering buildings and spaces that positively respond to local distinctiveness through their layout, orientation, scale, appearance and shape, with due regard to existing and emerging street hierarchy, building types, forms and proportions

2) encourage and facilitate active travel with convenient and inclusive pedestrian and cycling routes, crossing points, cycle parking, and legible entrances to buildings, that are aligned with peoples' movement patterns and desire lines in the area
3) be street-based with clearly defined public and private environments
4) facilitate efficient servicing and maintenance of buildings and the public realm, as well as deliveries, that minimise negative impacts on the environment, public realm and vulnerable road users

Experience

5) achieve safe, secure and inclusive environments
6) provide active frontages and positive reciprocal relationships between what happens inside the buildings and outside in the public realm to generate liveliness and interest
7) deliver appropriate outlook, privacy and amenity
8) provide conveniently located green and open spaces for social interaction, play, relaxation and physical activity
9) help prevent or mitigate the impacts of noise and poor air quality
10) achieve indoor and outdoor environments that are comfortable and inviting for people to use

Quality and character

11) respond to the existing character of a place by identifying the special and valued features and characteristics that are unique to the locality and respect, enhance and utilise the heritage assets and architectural features that contribute towards the local character
12) be of high quality, with architecture that pays attention to detail, and gives thorough consideration to the practicality of use, flexibility, safety and building lifespan through appropriate construction methods and the use of attractive, robust materials which weather and mature well
13) aim for high sustainability standards (with reference to the policies within London Plan Chapters 8 and 9) and take into account the principles of the circular economy

14) provide spaces and buildings that maximise opportunities for urban greening to create attractive resilient places that can also help the management of surface water.

E Where development parameters for allocated sites have been set out in a Development Plan, development proposals that do not accord with the site capacity in a site allocation can be refused for this reason.

3.3.1 For London to accommodate the growth identified in this Plan in an inclusive and responsible way every new development needs to make the most efficient use of land by optimising site capacity. This means ensuring the development's form is the most appropriate for the site and land uses meet identified needs. The optimum capacity for a site does not mean the maximum capacity; it may be that a lower density development – such as gypsy and traveller pitches – is the optimum development for the site.

3.3.2 **A design-led approach** to optimising site capacity should be based on an evaluation of the site's attributes, its surrounding context and its capacity for growth to determine the appropriate form of development for that site.

3.3.3 The **area assessment** required by Part A of Policy D1 London's form, character and capacity for growth, coupled with an area's assessed capacity for growth as required by Part B of Policy D1 London's form, character and capacity for growth, will assist in understanding a site's context and determining what form of development is most appropriate for a site. Design options for the site should be assessed to ensure the proposed development best delivers the design outcomes in Part B of this policy.

3.3.4 Designating appropriate development capacities through site allocations enables boroughs to proactively optimise the capacity of strategic sites through a consultative design-led approach that allows for **meaningful engagement and collaboration** with local communities, organisations and businesses.

3.3.5 Developers should have regard to designated development capacities in allocated sites and ensure that the design-led approach to optimising capacity on unallocated sites is carefully applied when **formulating bids** for development sites. The sum paid for a development site is not a relevant consideration in determining acceptable densities and any overpayments cannot be recouped through compromised design or reduced planning obligations.

3.3.6 **Good design** and good planning are intrinsically linked. The form and character of London's buildings and spaces must be appropriate for their location, fit for purpose, respond to changing needs of Londoners, be inclusive, and make

the best use the city's finite supply of land. The efficient use of land requires optimisation of density. This means coordinating the layout of the development with the form and scale of the buildings and the location of the different land uses, and facilitating convenient pedestrian connectivity to activities and services.

3.3.7 Developments that show a clear understanding of, and relationship with, the distinctive features of a place are more likely to be successful. These features include buildings, structures, open spaces, public realm and the underlying landscape. Development should be designed to respond to the **special characteristics** of these features which can include: predominant architectural styles and/or building materials; architectural rhythm; distribution of building forms and heights; and heritage, architectural or cultural value. The Mayor will provide further guidance on assessing and optimising site capacity through a design-led approach.

3.3.8 Buildings should be of high quality and enhance, activate and appropriately frame the **public realm**. Their massing, scale and layout should help make public spaces coherent and should complement the existing streetscape and surrounding area. Particular attention should be paid to the design of the parts of a building or public realm that people most frequently see or interact with in terms of its legibility, use, detailing, materials and location of entrances. Creating a comfortable pedestrian environment with regard to levels of sunlight, shade, wind, and shelter from precipitation is important.

3.3.9 Measures to design out exposure to poor air quality and noise from both external and internal sources should be integral to development proposals and be considered early in the design process. Characteristics that increase pollutant or noise levels, such as poorly-located emission sources, street canyons and noise sources should also be designed out wherever possible. Optimising site layout and building design can also reduce the risk of overheating as well as minimising carbon emissions by reducing energy demand.

3.3.10 To minimise the use of new materials, the following **circular economy principles** (see also Figure 3.2) should be taken into account at the start of the design process and, for referable applications or where a lower local threshold has been established, be set out in a Circular Economy Statement (see Policy SI 7 Reducing waste and supporting the circular economy):

- building in layers – ensuring that different parts of the building are accessible and can be maintained and replaced where necessary

- designing out waste – ensuring that waste reduction is planned in from project inception to completion, including consideration of standardised components, modular build and re-use of secondary products and materials
- designing for longevity
- designing for adaptability or flexibility
- designing for disassembly
- using systems, elements or materials that can be re-used and recycled.

3.3.11 Large-scale developments in particular present opportunities for innovative building design that avoids waste, supports high recycling rates and helps London transition to a circular economy, where materials, products and assets are kept at their highest value for as long as possible. Further guidance on the application of these principles through Circular Economy Statements will be provided.

3.3.12 Figure 3.2 shows a **hierarchy for building approaches** which maximises use of existing materials. Diminishing returns are gained by moving through the hierarchy outwards, working through refurbishment and re-use through to the least preferable option of recycling materials produced by the building or demolition process. The best use of the land needs to be taken into consideration when deciding whether to retain existing buildings in a development.

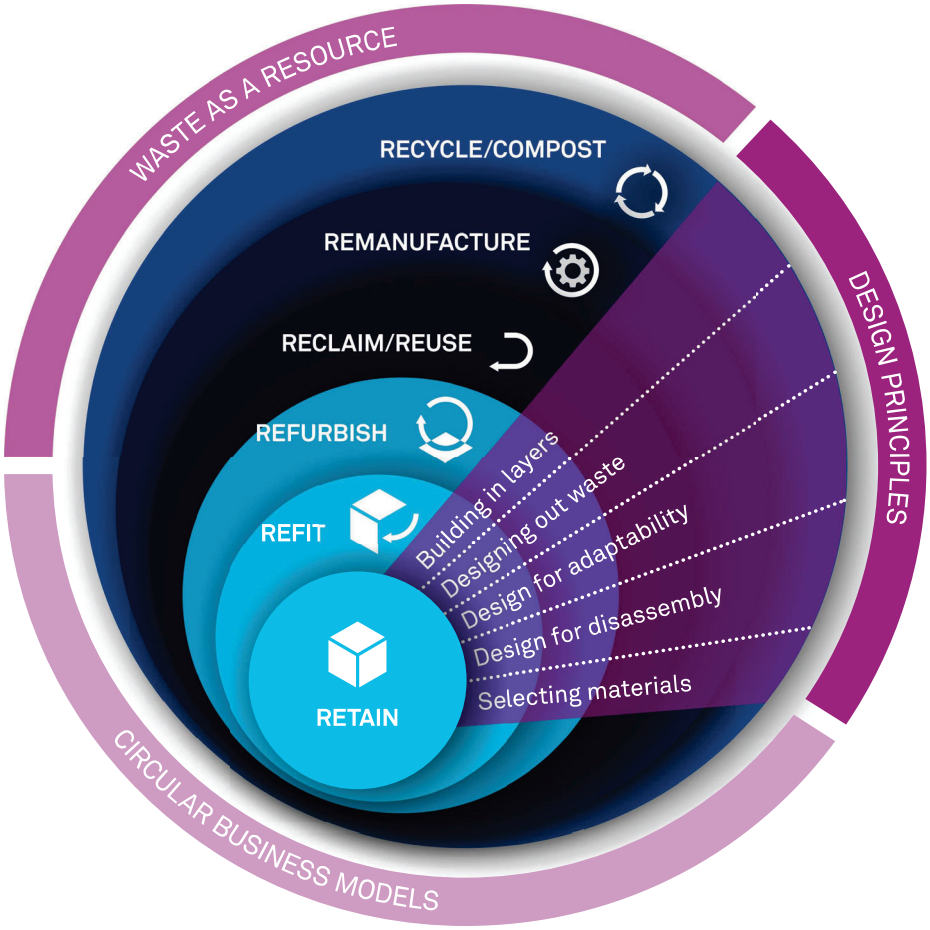
3.3.13 **Maximising urban greening** and creating green open spaces provides attractive places for Londoners to relax and play, and helps make the city more resilient to the effects of climate change. Landscaping and urban greening should be designed to ecologically enhance and, where possible, physically connect, existing parks and open spaces.

3.3.14 Measures to **design out crime** should be integral to development proposals and be considered early in the design process. Development should reduce opportunities for anti-social behaviour, criminal activities, and terrorism, and contribute to a sense of safety without being overbearing or intimidating. Developments should ensure good natural surveillance, clear sight lines, appropriate lighting, logical and well-used routes and a lack of potential hiding places.

3.3.15 Development should create **inclusive places** that meet the needs of all potential users.

3.3.16 The design and layout of development should reduce the dominance of cars and provide permeability to **support active travel** (public transport, walking and cycling), community interaction and economic vitality.

Figure 3.2 - Circular economy hierarchy for building approaches



Source: Building Revolutions (2016), David Cheshire, RIBA Publishing ©

3.3.17 New developments should be designed and managed so that **deliveries** can be received outside of peak hours and if necessary in the evening or night-time without causing unacceptable nuisance to residents. Appropriate facilities will be required to minimise additional freight trips arising from missed deliveries.

3.3.18 Shared and easily accessible **storage space** supporting separate collection of dry recyclables, food waste and other waste should be considered in the early design stages to help improve recycling rates, reduce smell, odour and vehicle movements, and improve street scene and community safety.

3.3.19 Buildings and spaces should be designed so that they can **adapt to changing uses** and demands now and in the future. Their lifespan and potential uses or requirements should be carefully considered, creating buildings and spaces

that are easy to maintain, and constructed of materials that are safe, robust and remain attractive over time.

3.3.20 **Masterplans and strategic frameworks** should be used when planning large-scale development to create welcoming and inclusive neighbourhoods, promote active travel, enable the successful integration of the built form within its surrounding area, and deliver wider benefits to residents, such as access to shared amenity space and high-quality public realm.

Monitoring density and site capacity

3.3.21 **Comparing density** between schemes using a single measure can be misleading as it is heavily dependent on the area included in the planning application site boundary as well as the size of residential units. Planning application boundaries are determined by the applicant. These boundaries may be drawn very close to the proposed buildings, missing out adjacent areas of open space, which results in a density which belies the real character of a scheme. Alternatively, the application boundary may include a large site area so that a tall building appears to be a relatively low-density scheme while its physical form is more akin to schemes with a much higher density.

3.3.22 To help assess, monitor and compare development proposals several measures of density are required to be provided by the applicant. Density measures related to the residential population will be relevant for infrastructure provision, while measures of density related to the built form and massing will inform its integration with the surrounding context. The following **measurements of density** should be provided for all planning applications that include new residential units:

1. number of units per hectare
2. number of habitable rooms per hectare
3. number of bedrooms per hectare
4. number of bedspaces per hectare.

3.3.23 Measures relating to height and scale should be the maximum height of each building or major component in the development. Boroughs should report each of the required density measures provided by the applicant when they submit details of the development to the London Development Database. The following additional measurements should be provided for all major planning applications:

1. the Floor Area Ratio (total Gross External Area of all floors / site area)
2. the Site Coverage Ratio (Gross External Area of ground floors /site area)
3. the maximum height in metres above ground level of each building and at Above Ordinance Datum (above sea level).

APPENDIX 2
LONDON PLAN, POLICY D6: HOUSING QUALITY AND STANDARDS

Policy D6 Housing quality and standards

A Housing development should be of high quality design and provide adequately-sized rooms (see Table 3.1) with comfortable and functional layouts which are fit for purpose and meet the needs of Londoners without differentiating between tenures.

B Qualitative aspects of a development are key to ensuring successful sustainable housing. Table 3.2 sets out key qualitative aspects which should be addressed in the design of housing developments.

C Housing development should maximise the provision of dual aspect dwellings and normally avoid the provision of single aspect dwellings. A single aspect dwelling should only be provided where it is considered a more appropriate design solution to meet the requirements of Part B in Policy D3 Optimising site capacity through the design-led approach than a dual aspect dwelling, and it can be demonstrated that it will have adequate passive ventilation, daylight and privacy, and avoid overheating.

D The design of development should provide sufficient daylight and sunlight to new and surrounding housing that is appropriate for its context, whilst avoiding overheating, minimising overshadowing and maximising the usability of outside amenity space.

E Housing should be designed with adequate and easily accessible storage space that supports the separate collection of dry recyclables (for at least card, paper, mixed plastics, metals, glass) and food waste as well as residual waste.

F Housing developments are required to meet the minimum standards below which apply to all tenures and all residential accommodation that is self-contained.

Private internal space

1) Dwellings must provide at least the gross internal floor area and built-in storage area set out in Table 3.1.

2) A dwelling with two or more bedspaces must have at least one double (or twin) bedroom that is at least 2.75m wide. Every other additional double (or twin) bedroom must be at least 2.55m wide.

3) A one bedspace single bedroom must have a floor area of at least 7.5 sq.m. and be at least 2.15m wide.

4) A two bedspace double (or twin) bedroom must have a floor area of at least 11.5 sq.m..

5) Any area with a headroom of less than 1.5m is not counted within the Gross Internal Area unless used solely for storage (If the area under the stairs is to be used for storage, assume a general floor area of 1 sq.m. within the Gross Internal Area).

6) Any other area that is used solely for storage and has a headroom of 0.9-1.5m (such as under eaves) can only be counted up to 50 per cent of its floor area, and any area lower than 0.9m is not counted at all.

7) A built-in wardrobe counts towards the Gross Internal Area and bedroom floor area requirements, but should not reduce the effective width of the room below the minimum widths set out above. Any built-in area in excess of 0.72 sq.m. in a double bedroom and 0.36 sq.m. in a single bedroom counts towards the built-in storage requirement.

8) The minimum floor to ceiling height must be 2.5m for at least 75 per cent of the Gross Internal Area of each dwelling.

Private outside space

9) Where there are no higher local standards in the borough Development Plan Documents, a minimum of 5 sq.m. of private outdoor space should be provided for 1-2 person dwellings and an extra 1 sq.m. should be provided for each additional occupant, and it must achieve a minimum depth and width of 1.5m. This does not count towards the minimum Gross Internal Area space standards required in Table 3.1

G The Mayor will produce guidance on the implementation of this policy for all housing tenures.

Table 3.1 - Minimum internal space standards for new dwellings^

Type of dwelling		Minimum gross internal floor areas+ and storage (square metres)			
Number of bedrooms (b)	Number of bed spaces (persons(p))	1 storey dwellings	2 storey dwellings	3 storey dwellings	Built-in storage
1b	1p	39 (37) *	N/A	N/A	1
	2p	50	58	N/A	1.5
2b	3p	61	70	N/A	2
	4p	70	79	N/A	2
3b	4p	74	84	90	2.5
	5p	86	93	99	2.5
	6p	95	102	108	2.5
4b	5p	90	97	103	3
	6p	99	106	112	3
	7p	108	115	121	3
	8p	117	124	130	3
5b	6p	103	110	116	3.5
	7p	112	119	125	3.5
	8p	121	128	134	3.5
6b	7p	116	123	129	4
	8p	125	132	138	4

Notes to Table 3.1

Key

b: bedrooms

p: persons

^ New dwelling in this context includes new build, conversions and change of use.

* Where a studio / one single bedroom one person dwelling has a shower room instead of a bathroom, the floor area may be reduced from 39 sq.m. to 37 sq.m., as shown bracketed.

[+] The Gross Internal Area (GIA) of a dwelling is defined as the total floor space measured between the internal faces of perimeter walls that enclose a dwelling. This includes partitions, structural elements, cupboards, ducts, flights of stairs and voids above stairs. GIA should be measured and denoted in square metres (sq.m.).

Built-in storage areas are included within the overall GIA and include an allowance of 0.5 sq.m. for fixed services or equipment such as a hot water cylinder, boiler or heat exchanger.

GIAs for one storey dwellings include enough space for one bathroom and one additional WC (or shower room) in dwellings with five or more bedspaces. GIAs for two and three storey dwellings include enough space for one bathroom and one additional WC (or shower room). Additional sanitary facilities may be included without increasing the GIA, provided that all aspects of the space standard have been met.

3.6.1 Housing can be delivered in different physical forms depending on the context and site characteristics. Ensuring homes are of adequate size and fit for purpose is crucial in an increasingly dense city; therefore this Plan sets out **minimum space standards** for dwellings of different sizes in Policy D6 Housing quality and standards and Table 3.1. This is based on the minimum gross internal floor area (GIA) relative to the number of occupants and takes into account commonly required furniture and the spaces needed for different activities and moving around. This means applicants should state the number of bedspaces/occupiers a home is designed to accommodate rather than simply the number of bedrooms. When designing homes for more than eight bedspaces, applicants should allow approximately 10 sq.m. per extra bedspace.

3.6.2 The space standards are minimums which applicants are encouraged to exceed. The **standards apply to all new self-contained dwellings** of any tenure, and consideration should be given to the elements that enable a home to become a comfortable place of retreat. The provision of additional services and spaces as part of a housing development, such as building management and communal amenity space, is not a justification for failing to deliver these minimum standards. Boroughs are, however, encouraged to resist dwellings with floor areas significantly above those set out in Table 3.1 for the number of bedspaces they contain due to the level of housing need and the need to make efficient use of land.

3.6.3 To address the impacts of the urban heat island effect and the fact that the majority of housing developments in London are made up of flats, a **minimum ceiling height** of 2.5m for at least 75 per cent of the gross internal area is required so that new housing is of adequate quality, especially in terms of daylight penetration, ventilation and cooling, and sense of space. The height

of ceilings, doorways and other thresholds should support the creation of an inclusive environment and therefore be sufficiently high to not cause an obstruction. To allow for some essential equipment in the ceilings of kitchens and bathrooms, up to 25 per cent of the gross internal area of the dwelling can be lower than 2.5 m. However, any reduction in ceiling height below 2.5 m should be the minimum necessary for this equipment, and not cause an obstruction.

3.6.4 **Dual aspect dwellings** with opening windows on at least two sides have many inherent benefits. These include better daylight, a greater chance of direct sunlight for longer periods, natural cross-ventilation, a greater capacity to address overheating, pollution mitigation, a choice of views, access to a quiet side of the building, greater flexibility in the use of rooms, and more potential for future adaptability by altering the use of rooms.

3.6.5 **Single aspect dwellings** are more difficult to ventilate naturally and are more likely to overheat, and therefore should normally be avoided. Single aspect dwellings that are north facing, contain three or more bedrooms or are exposed to noise levels above which significant adverse effects on health and quality of life occur, should be avoided. The design of single aspect dwellings must demonstrate that all habitable rooms and the kitchen are provided with adequate passive ventilation, privacy and daylight, and that the orientation enhances amenity, including views. It must also demonstrate how they will avoid overheating without reliance on energy intensive mechanical cooling systems.

3.6.6 A variety of approaches to housing typologies and **layout of buildings** should be explored to make the best use of land and create high quality, comfortable and attractive homes. For example, increasing ceiling heights and having bay windows can optimise daylight and sunlight and allow buildings to be closer together than can otherwise be achieved.

3.6.7 Housing developments should be designed to **maximise tenure integration**, and affordable housing units should have the same external appearance as private housing. All entrances will need to be well integrated with the rest of the development and should be indistinguishable from each other.

3.6.8 Development should help create a more socially inclusive London. **Gated forms of development** that could realistically be provided as a public street are unacceptable and alternative means of security should be achieved through utilising the principles of good urban design and inclusive design (see Policy D5 Inclusive design).

3.6.9 **Private outside space** should be practical in terms of its shape and utility, and care should be taken to ensure the space offers good amenity. All dwellings should have level access to one or more of the following forms of private outside spaces: a garden, terrace, roof garden, courtyard garden or balcony. The use of

roof areas, including podiums, and courtyards for additional private or shared outside space is encouraged.

3.6.10 **Communal play space** should meet the requirements of Policy S4 Play and informal recreation.

Table 3.2 - Qualitative design aspects to be addressed in housing developments

Layout, orientation and form	
i	The built form, massing and height of the development should be appropriate for the surrounding context, and it should be shown that alternative arrangements to accommodate the same number of units or bedspaces with a different relationship to the surrounding context have been explored early in the design process (making use of the measures in paragraph 3.3.23), particularly where a proposal is above the applicable density indicated in Part D of Policy D4 Delivering good design
ii	The layout of the scheme (including spaces between and around buildings) should: • form a coherent, legible and navigable pattern of streets and blocks • engender street based activity and provide a sense of safety • maximise active frontages onto public facing sides of a development, where appropriate wrapping around inactive frontages
iii	The site layout, orientation and design of individual dwellings and, where applicable, common spaces should: • provide privacy and adequate daylight for residents • be orientated to optimise opportunities for visual interest through a range of immediate and longer range views, with the views from individual dwellings considered at an early design stage • provide clear and convenient routes with a feeling of safety • help reduce noise from common areas to individual dwellings • help meet the challenges of a changing climate by ensuring homes are suitable for warmer summers and wetter winters

Outside space	
iv	Communal outside amenity spaces should: • provide sufficient space to meet the requirements of the number of residents • be designed to be easily accessed from all related dwellings • be located to be appreciated from the inside • be positioned to allow overlooking • be designed to support an appropriate balance of informal social activity and play opportunities for various age groups • meet the changing and diverse needs of different occupiers
v	Private amenity space for each dwelling should be usable and have a balance of openness and protection, appropriate for its outlook and orientation
Usability and ongoing maintenance	
vi	The development should ensure that: • the experience of arrival, via footpaths, entrances and shared circulation spaces is comfortable, accessible and fit for purpose • features are designed to allow maintenance activities such as window cleaning, to be undertaken with ease • sufficient levels of secure, covered and conveniently located externally accessible storage is provided for deliveries and other bulky items • recycling and waste disposal, storage and any on site management facilities are convenient in their operation and location, appropriately integrated, and designed to work effectively for residents, management and collection services*

* See also the London Waste and Recycling Board's Waste Management Planning Advice for New Flatted Properties 2014. http://www.lwarb.gov.uk/what-we-do/resource-london/successes-to-date/efficiencies-programme-outputs/

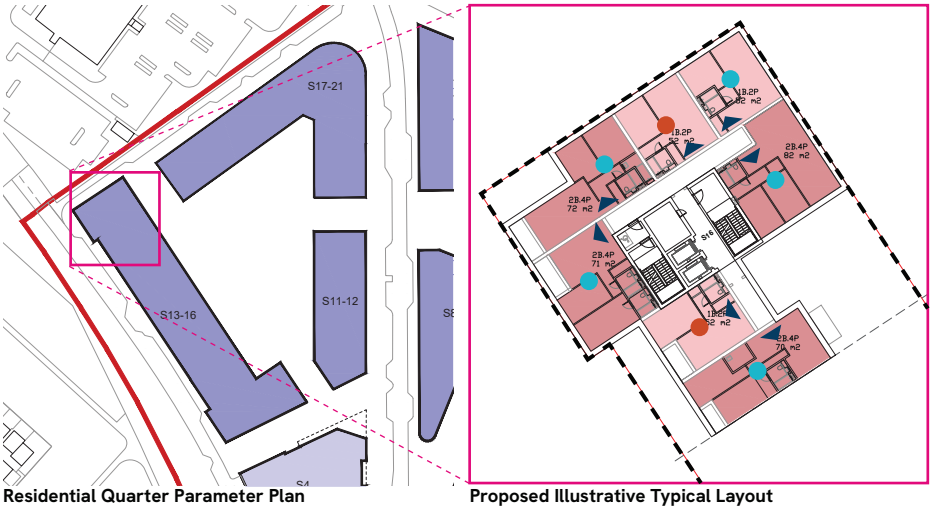
3.6.11 Other components of housing design are also important to improving the attractiveness of new homes as well as the Mayor's wider objectives to improve the quality of Londoners' environment. The Mayor intends to produce a single **guidance** document which clearly sets out the standards which need to be met in order to implement Policy D6 Housing quality and standards for all housing tenures, as well as wider qualitative aspects of housing developments. This will include guidance on daylight and sunlight standards. This will build on the guidance set out in the 2016 Housing SPG and the previous London Housing Design Guide.

APPENDIX 3
RESIDENTIAL LAYOUT FLEXIBILITY

Residential Layout Flexibility

The residential quarter forms part of the outline planning application. The layouts shown within the masterplan are for illustrative purposes to demonstrate one possible interpretation of the prescribed design guidelines. The parameter plans show the maximum envelope of the residential blocks, and have been crafted to allow for flexibility in design at later stages.

To illustrate the flexibility provided by the Parameters, using Block S16 as a case study, a number of alternatives have been drawn, with different amount of single and double aspect units, different unit sizes and different unit quanta. This study therefore illustrates that the quantum of single aspect and north only facing apartments can be addressed in subsequent design development.



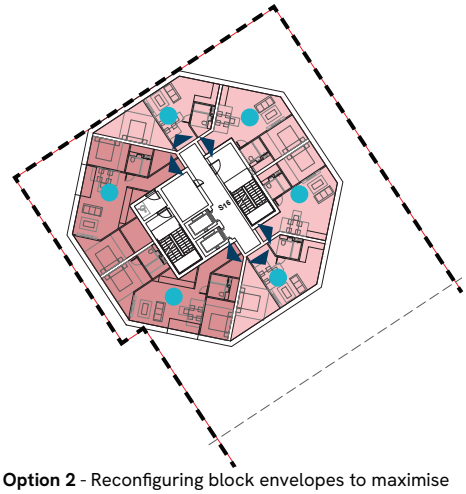
Residential Quarter Parameter Plan

Proposed Illustrative Typical Layout

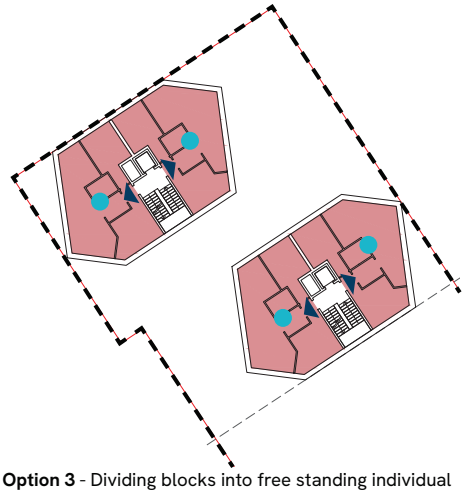
Legend

- Entrance
- 1 Bedroom Flat
- 2 Bedroom Flat
- Maximum Building Envelope
- Outline Application Max Envelope
- Detailed Planning Envelope
- Dual Aspect
- Single Aspect

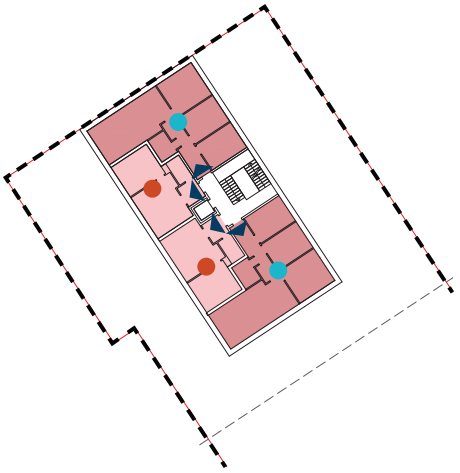
Option 1 - Utilising external gangways with apartments fronting common corridors to maximise double aspect



Option 2 - Reconfiguring block envelopes to maximise double aspects around corners.

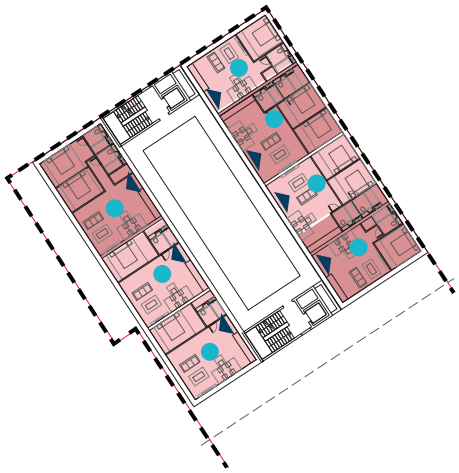


Option 3 - Dividing blocks into free standing individual smaller blocks to maximise apartment facades



Option 4 - Reducing number of units within individual blocks

Option 5 - Increasing the number of cores to reduce internal circulation and maximise double aspect units



Option 6 - Exploring courtyard typologies to maximise double aspect by introducing private courtyard onto which all units can front.

APPENDIX 4
EASTERN EDGE STUDY

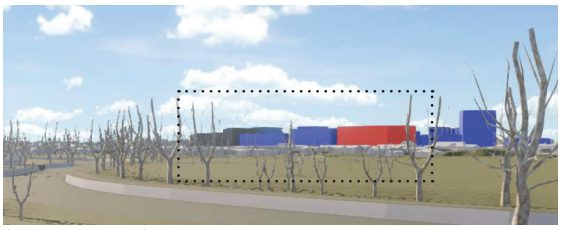
Eastern Edge

Careful option testing has been done for the eastern edge throughout the planning process. This page illustrates 5 shapshots of options being tested in the design evolution utilising LVIA view point 8, one of the key views for consideration.

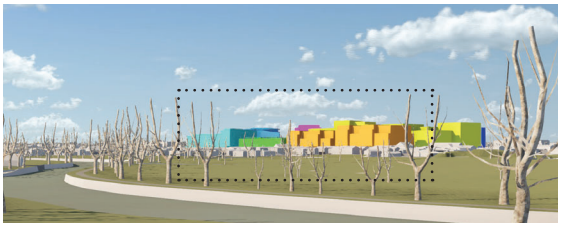
The summary demonstrates how key design principles have been adopted for the buildings along the eastern edge to articulate the massing and prevent a continuous monotonous edge. Consideration has also been given to the overall silhouette of the skyline, with appropriate height distributed strategically to create an articulated edge.

View Point 8 (Images produced by VU City)

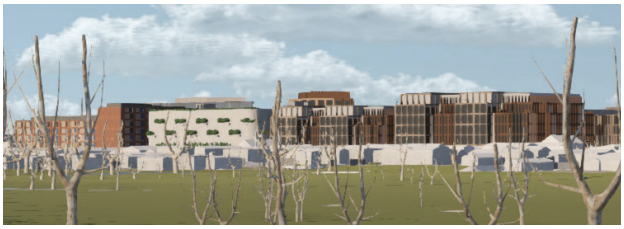
Magnified View of VP08 Showing Eastern Edge Buildings



9th November 2021 - Basic first massing test in the LVIA model to understand visual hierarchy and impact.

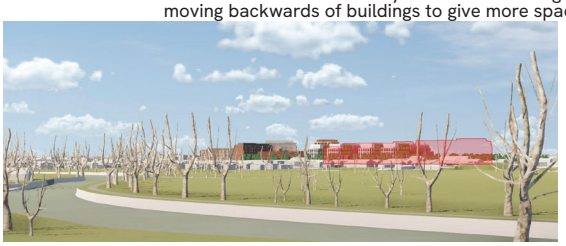


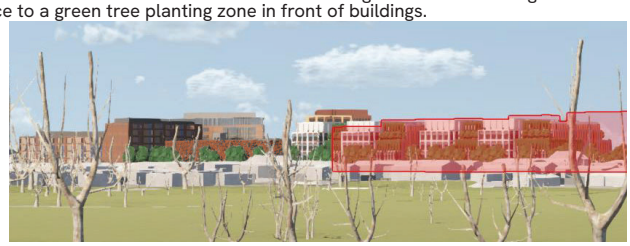
23rd November 2021 - Articulation testing with discussions how to create a varied skyline, with some building appearing behind each other



25th February 2022 - Testing of the impact of different materials on the reading of build form and gaps, and variations in height profiles.

22nd March 2022 - Basement added to mobility hub to reduce height and create visual break across eastern edge silhouette. Testing the moving backwards of buildings to give more space to a green tree planting zone in front of buildings.





12th May 2022 - Testing a more clustered tree planting approach to prevent the appearance of very linear features.

Planning Application Submission

9th November 2021 - Basic first massing test in the LVIA model to understand visual hierarchy and impact.

23rd November 2021 - Articulation testing with discussions how to create a varied skyline, with some building appearing behind each other

25th February 2022 - Testing of the impact of different materials on the reading of build form and gaps, and variations in height profiles.

22nd March 2022 - Basement added to mobility hub to reduce height and create visual break across eastern edge silhouette. Testing the moving backwards of buildings to give more space to a green tree planting zone in front of buildings.

12th May 2022 - Testing a more clustered tree planting approach to prevent the appearance of very linear features.

Planning Application Submission

BIDWELLS