

“As masterplanners, we strongly believe in the power of local identity to shape places and to create bonds between people and their environment.”

9.0 / Outline Proposal - Residential

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In this section, I will set out how the Outline Parameters for the site allow for a varied set of residential buildings to be delivered on this site. The buildings will frame a residential garden, provide active edges to the surrounding streets and are landmark buildings when seen from Milton Avenue. The Masterplan Design Guidelines for residential are clear in their approach to heights, to define a varied roof-space for these plots, high degree of double aspect units through the use of setbacks and multiple cores and landscape amenity spaces on lower roofs. The Guidelines are flexible enough to preserve a large degree of flexibility for these buildings to evolve in conversation with the Planning Authority in the future to address further questions of design, materiality and detail. The residential proposals can deliver a balanced quantum of types and sizes, to ensure this is a residential development attracting a diverse group of residents. This has been achieved through provision of affordable housing, housing for sale and housing for rent, with a wide range of unit sized and typologies, including apartments as well as duplex units with private garden spaces at ground and first floor.

9.1 / Context



Fig. 174 Parameter plan 07 - Proposed uses Ground floor, highlighting the residential quarter

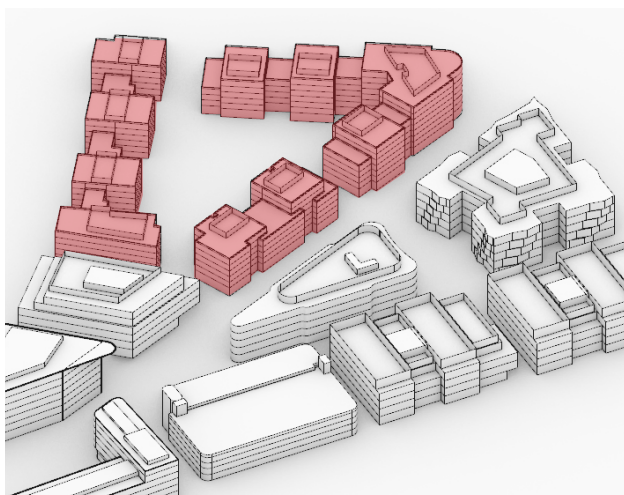


Fig. 175 Site Context, Residential Quarter highlighted

9.1.1 The residential quarter is situated on the north western edge of the Appeal Site, it is separated from the commercial quarter to the east by Milton Avenue, the main vehicular access into the masterplan. On the southern edge, the pedestrianised Milton walk provides a through route between the residential

quarter and the proposed S4 office building arriving from Chesterton Way to the west. On the northern edge of the residential quarter, Bramblefields Way connects the proposed Chesterton Way onto Milton Avenue to the east, separating the residential quarter from Cambridge Business Park to the north..

9.1.2 The residential quarter’s location serves as an intermediary for the scheme, bridging the low lying residential developments and bungalows to the west of the Appeal Site with the rest of the proposed commercial development of the Appeal Site. The quarter is also located some distance away from the train tracks to the east, separated by both the commercial development and Milton Avenue, sheltering the development and mitigating any potential noise impacts from the train tracks.

9.1.3 Organised around a generous central courtyard free of vehicular traffic, the residential quarter blocks have been arranged in a linear order along the periphery of the site, with strategic breaks located along the northwestern, south-eastern and eastern edges of the Appeal Site to create clear desire lines and intuitive connections across the courtyard and into the broader masterplan.

9.2 / Brief



Fig. 176 Illustrative view of Chesterton Gardens, looking East towards Chesterton Square

9.2.1 The brief of the residential quarter has evolved following its development and consultation. The primary principles that had been set forth by the client from the conception of the residential quarter include:

- **Deliver high quality housing that meets the needs of the local community**
- **Ensure safe and secure design**
- **Provide generous open spaces that meets the formal and informal play needs of its residents**
- **Adopt masterplan design principles to achieve sufficient articulation and massing to create human centric town scapes**
- **Create an activated and vibrant main street along Milton Avenue**
- **Adopt an architectural high point at the intersection of Milton Avenue and Cowley road to create a strong sense of arrival on entry into the scheme**
- **Maximise Dual Aspect Units across the development**
- **Provide private open spaces for all units**
- **Create quality amenity spaces to foster a vibrant local community**
- **Convenient and secure cycle storage on ground level for all blocks**

9.3 / Compliance with Masterplan Design Principles



Fig. 177 Parameter plan 09- Landscape & Open spaces plan

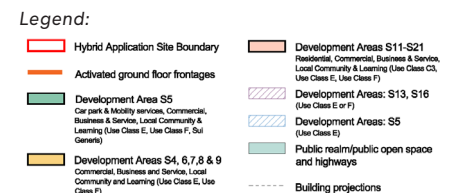
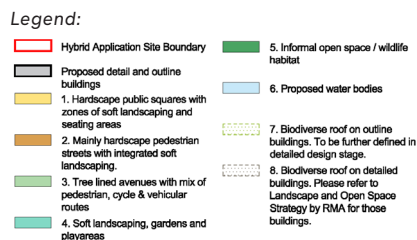


Fig. 178 Parameter plan 07 - Proposed uses Ground floor

9.3.1 In Summary, the outline design of the Residential quarter supports the Urban Design principles set forth by the masterplan of UDP 1, UDP 2, UDP 3, UDP 5, UDP 6, UDP 7, UDP 8 and UDP 9. Although submitted as an outline application, an illustrative layout of the residential quarter has been provided to give an indication of the architectural ambitions envisioned for the buildings as well as indicative unit mix and types. It should be noted that these layouts are subject to further development pending a detailed application. Any proposed building will also need to meet the Architectural Design Principles (Residential), ADPR 1 - 9 in its design to meet the key principles addressed in the conception of the masterplan.

9.3.2 Compliance with the Urban Design Principles is achieved through:

- **Creating a large pedestrianised open space that contributes to the network of open spaces and key pedestrian and cyclist routes across the Appeal Site (UDP 1).**
- **Strategic location of retail and amenity spaces to activate public realm (UDP 2).**
- **Providing a range of housing types to meet evolving housing needs (UDP 3).**
- **Set out ambitious sustainability targets for construction, material and building management strategies (UDP 5).**
- **Set out clear architectural design principles to ensure high quality of design (UDP 6).**



9.4 Response to Consultation (Layout & Design Principles)

Throughout the development of the residential quarter, a number of key design decisions have been made in response to feedback from consultation with the planners. The overarching evolution of the residential quarter in relation to the wider masterplan can be seen in the Design and Access Statement, Pages 185 to 186. In particular, some of the key changes adopted include:

9.4.1 Southern Edge

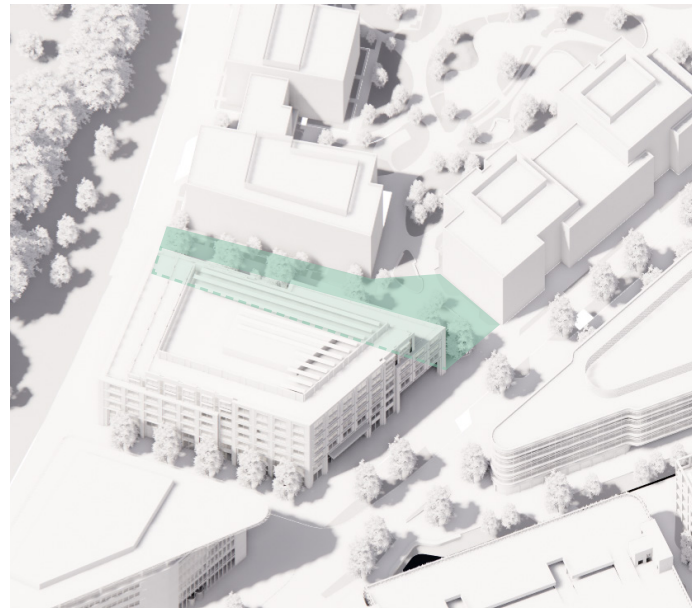


Fig. 180 Aerial view highlighting the Linkway in between the Residential Quarter and One Milton Avenue (S4)



Fig. 179 Parameter plan 06 - Building Heights Plan

- Allow for scattering of open mosaic habitat across the public realm to mimic and enhance local biodiversity (UDP 7).
- Strategic distributions of front doors and lobbies to create sense of activation and security across the residential quarter in addition to a considered cycle storage and lighting strategy (UDP 8).
- Contributing to the goals of a mixed use scheme through the provision of high quality housing (UDP 9).

The southern edge of the residential quarter has been adjusted in line with planning feedback, shifting further north to allow for a more generous linkway between the residential buildings and commercial that was suitable for more planting to enhance the overall pedestrian experience and create dedicated cycling routes

Legend:
 Hybrid Application Site Boundary

BUILDING HEIGHTS:

	14-16m		24-26m
	16-18m		26-28m
	18-20m		28-30m
	20-22m		
	22-24m		

9.4.2 Submission as Outline Planning



Fig. 181 Parameter plan 02 - Building layout & Application type

Following the consultation process, the approach to the application has evolved alongside the masterplan, with the residential quarter firstly being fully omitted from the planning before settling on an outline planning submission.

9.4.3 Locations of connections onto wider masterplan

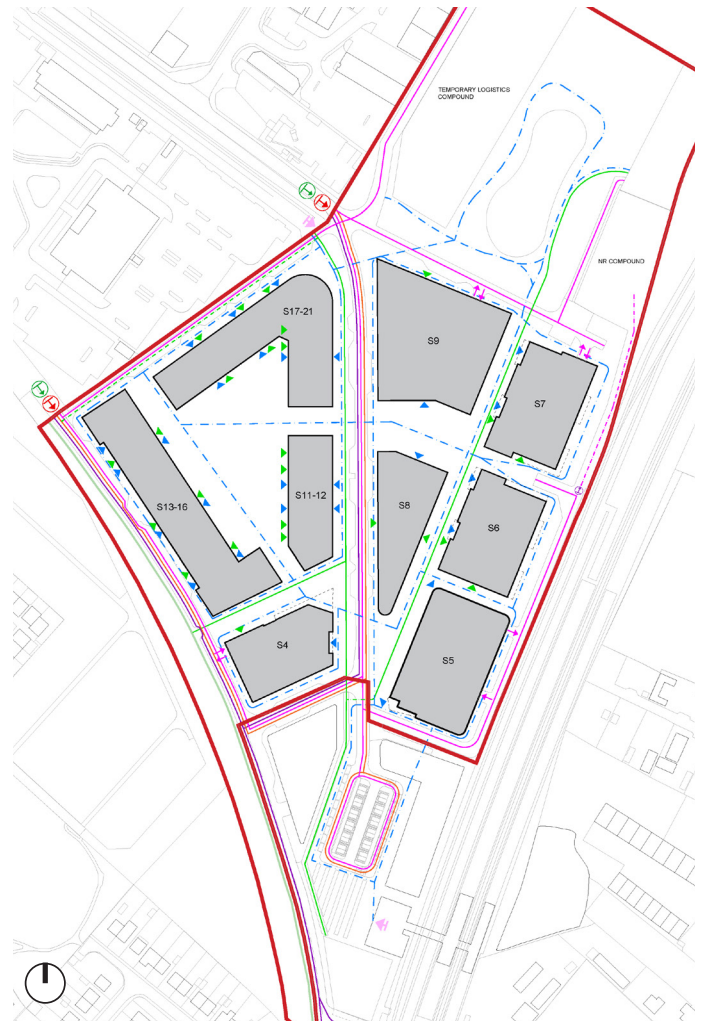


Fig. 182 Parameter plan 08 - Access plan

The connections across Chesterton Gardens into the surrounding masterplan and context has also evolved with the development of the scheme. With the final connections centred around links to Chesterton Square to the east, Station square on the south eastern edge and to the existing commercial and residential areas to the north along Chesterton Way.

Legend:

- ▬ Hybrid Application Site Boundary
- Outline Application Building Zone
- Detailed Application Building Zone
- Detailed Application - Access and Landscaping
- Outline Application with details of ground floor public realm submitted

Legend:

- ▬ Hybrid Application Site Boundary
- Proposed detail and outline buildings
- ▬ Proposed pedestrian routes
- ▬ Proposed cycle routes
- - - Proposed shared surface cycle route
- - - Existing cycle routes
- ▬ Proposed vehicle routes
- - - Proposed restricted vehicle routes
- ▬ Bus routes
- ▬ Taxi routes
- ⊘ Restricted access to NR compound
- ⊕ Emergency vehicle access points
- ⊕ Service vehicle access points
- ▲ Key pedestrian access points
- ▲ Pedestrian building entry points
- ▲ Cyclist building entry points
- ➔ Vehicle entry/exit points to basement carparks

9.5 / Response to Consultation (Unit Mix and Types)



January 2021 (Rev B)



January 2021 (Rev C)



January 2021 (Rev D)



February 2022 (Rev F)

Fig. 183 Plan drawings illustrating the Massing Evolution of the Residential Quarter

9.5.1 Although submitted as an outline application, an illustrative unit mix and layout has been provided to give a rough indication of unit mix and types being proposed. It should be noted that these layouts and figures are subject to further development pending a detailed application

9.5.2 The distribution of unit mix and types has evolved in response to feedback from consultation. Originally planned as a Build To Rent (BTR) scheme, the unit mix has evolved to provide a broader range of unit types, catering for affordable housing, BTR units as well as private for sale units.

9.6 Response to Consultation (Single Vs Double Aspect units)

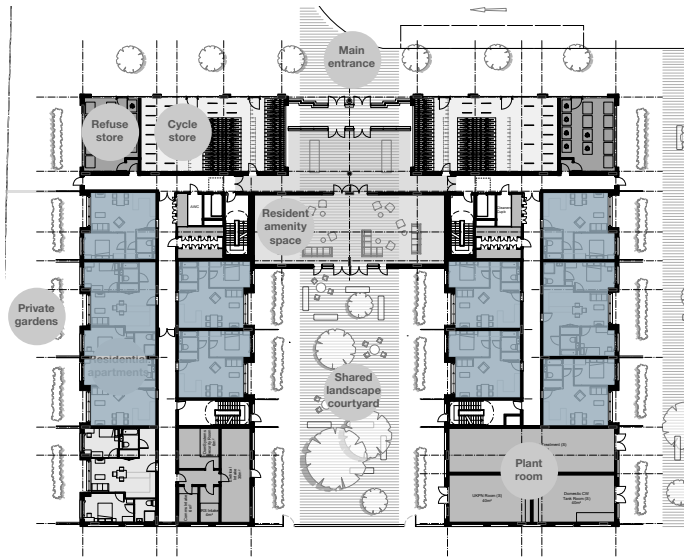


Fig. 184 Single Aspect Study of previous masterplans residential layouts, Plan Ground floor level



Fig. 185 Single Aspect Study of previous masterplans residential layouts, Plan Level 01

- 9.6.1 It is the shared ambition by the Appellant and the Planning Authority to find the optimum use of the site for residential use, and to deliver the highest possible housing standard. One of the key considerations is the quantum of Single aspect versus double aspect units in any development.
- 9.6.2 The design team have tested a number of residential densities on site, ranging from 400 to 600 units on the triangle plot between Chesterfield Row and Milton Avenue, which is the preferred site for residential use. The final number of units proposed is 425 units.
- 9.6.3 A number of typology studies were undertaken to test optimum configurations for this quantum of units.
- 9.6.4 The Local Planning Authority requested the residential buildings on the Appeal Site to be kept as low as possible. In order to fit the agreed quantum of uses, and in order to achieve the lowest possible height, this was accommodated in 11 buildings with shared party walls, creating three larger urban forms of perimeter blocks. Perimeter blocks have the advantage that

they create active and well defined street edges and maximise the opportunity for large green courtyards and green open spaces. Perimeter blocks have the disadvantage that they create a higher proportion of single aspect units.

- 9.6.5 While it is agreed by all parties that single aspect units are ideally avoided, it is commonly accepted that any current larger scale residential development in the UK has a percentage of single aspect units.
- 9.6.6 The local planning authority does not have planning guidance setting out fixed requirements for unit aspects. In this case, I have referred to the GLA's London Design Standards. The 2010 London Housing Design Guidelines prescribed a maximum of 8 dwellings per core landing, which resulted in most development in London from the last decade consisting of 50% single aspect dwellings,
- 9.6.7 The London Housing Design Standards (2022 Draft) has changed the guidance, and stipulates that single aspect units should be avoided where possible
- 9.6.8 The GLA's London Housing Design Standards (2022 Draft) also provides Module D, titled the ' GLA Housing Design Case Studies and Appendices' as Supplementary Planning Guidance
- 9.6.9 Module D provides examples of successful housing across London covering a range of types and conditions. The case studies in this module are referenced throughout all modules of this London Plan Guidance to illustrate best practice guidance. The case studies illustrate how development has been optimised to deliver more homes whilst performing well across the range of housing design standards.
- 9.6.10 We have reviewed this GLA document illustrating schemes the GLA considers exemplary. Page 46 to Page 80 of this document show linear blocks, villa blocks and tower typologies, which show the relevant typologies that could be used in the Appeal Site. While every scheme is different, the average amount of dwellings per core landing is around 6, with an average percentage of single aspect units in the region of 20-30%.



Fig. 186 Single Aspect Study of proposed illustrative Ground floor residential layouts

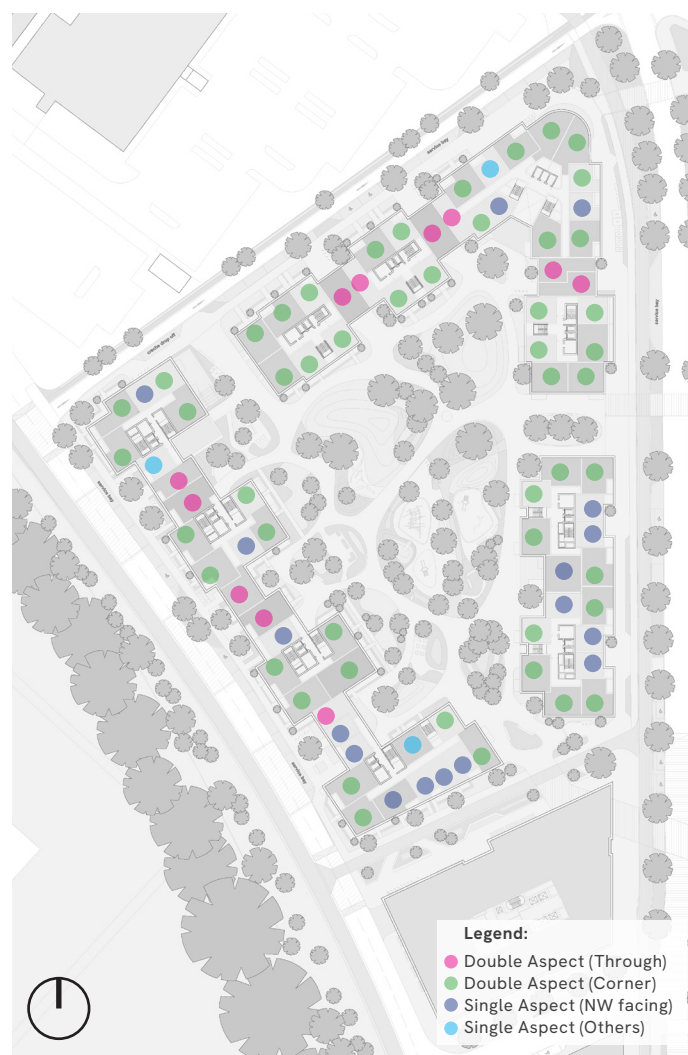


Fig. 187 Single Aspect Study of proposed illustrative typical residential floor layouts

9.6.11 This compares well to the illustrative plans provided for the Application for the Appeal Site, which show a ratio of 25% single aspect dwellings, with 5% single aspect North-West facing units. All of the illustrative single aspect north-west facing units are private, built to rent units, with none of them allocated to affordable housing, thereby ensuring occupiers of these units decide to live here by choice, never by assignment.

9.6.12 In my recent professional experience from other residential projects of similar size, in Earls Court in RBKC/ London and in Euston/ Camden, we are working at present with typologies of 6-8 units per core, with approximately 30% single aspect, and heavily articulated facades with bay windows, which are considered acceptable by the Local Planning Authorities there to maximise the use of the site.

9.6.13 In Summary, I consider a ratio of 25% single aspect dwellings, with 5% single aspect North-West facing units, to be an acceptable quantum of single aspect units that compares well to other schemes considered exemplary.

9.6.14 Notwithstanding the above, the plans as provided are illustrative, and a number of changes to the massing and the internal configuration of the units, the unit mix or the number of cores each result in significant changes to the ratio of single aspect units. It would be inappropriate to reject an outline application on the ground that the illustrative plans are not acceptable, when a range of other layouts can be drawn within the same outlines with more, less or no single aspect units. While Landscaping proposals are submitted in detail and residential blocks are submitted in outline, this does not mean that residential layouts are fixed and unable to change.

9.6.15 Lastly, as defined in the London Housing Design Standards, single aspect units can be acceptable where their shortcoming on daylight and ventilation are actively mitigated through design. Should designs come forward in the next stage that do not eliminate all Single Aspect units, then mitigation measures can be and will be demonstrated at the Reserved Matters stage.

9.7 / Uses



Fig. 188 Illustrative Ground Floor Layout



Fig. 189 Illustrative Typical Floor Layout

9.7.1 The proposed residential quarter has the potential to deliver 425 new homes to Cambridge, offering a diverse mix of unit types across build to rent, affordable and private for sale units. The proposed scheme is anchored by a generous central courtyard that will be activated with lush greenery and a combination of formal / informal play and break out spaces to cater to the varied needs of the residents.

9.7.2 At ground level, public facing programmes such as retail and amenity spaces line the edge fronting onto Milton Road, contributing to an active high street. Front doors in the form of duplex residential units as well as residential lobbies line the remaining edges of the scheme, ensuring a secure and activated public realm and creating a strong sense of community. .

Legend:

— Appeal Site Boundary	 Internal Cycle Parking
 Train Station	 Plant
 Hotel	 1 Bedroom Apartment
 Office / Laboratory	 2 Bedroom Apartment
 General Retail	 3 Bedroom Apartment
 External Cycle Parking	 Residential Amenities

9.8 / Built Form



Fig. 190 Illustrative Access & Circulation Diagram

9.8.1 The proposal is conceived as a sequence of linear residential buildings enclosing a large communal courtyard. The linear residential buildings are interrupted with strategic breaks to create intuitive connections and view into the surrounding developments of Station Square, Chesterton Square and connections to the broader residential and commercial context to the north

9.8.2 The masterplan envisions the residential blocks to be articulated both in plan and elevation, avoiding long monotonous facades and breaking down the overall massing of the buildings, as raised in architectural design principles, ADPR 1 - 4.

9.8.3. The specific language of the built form is yet to be determined owing to the nature of the outline planning. Sufficient specificity has been provided with regards to design principles to ensure coherence whilst allowing multiple potential design possibilities. Corner balconies, balancing of solar gain to prevent overheating, sustainable ratios of walls to windows and other details in this regard are defined in the Architectural Design Principles as set out in section 5.6 as well as the Design and Access Statement, Pages 55-56, 59-61 and 201-202.

9.9 / Height and Scale

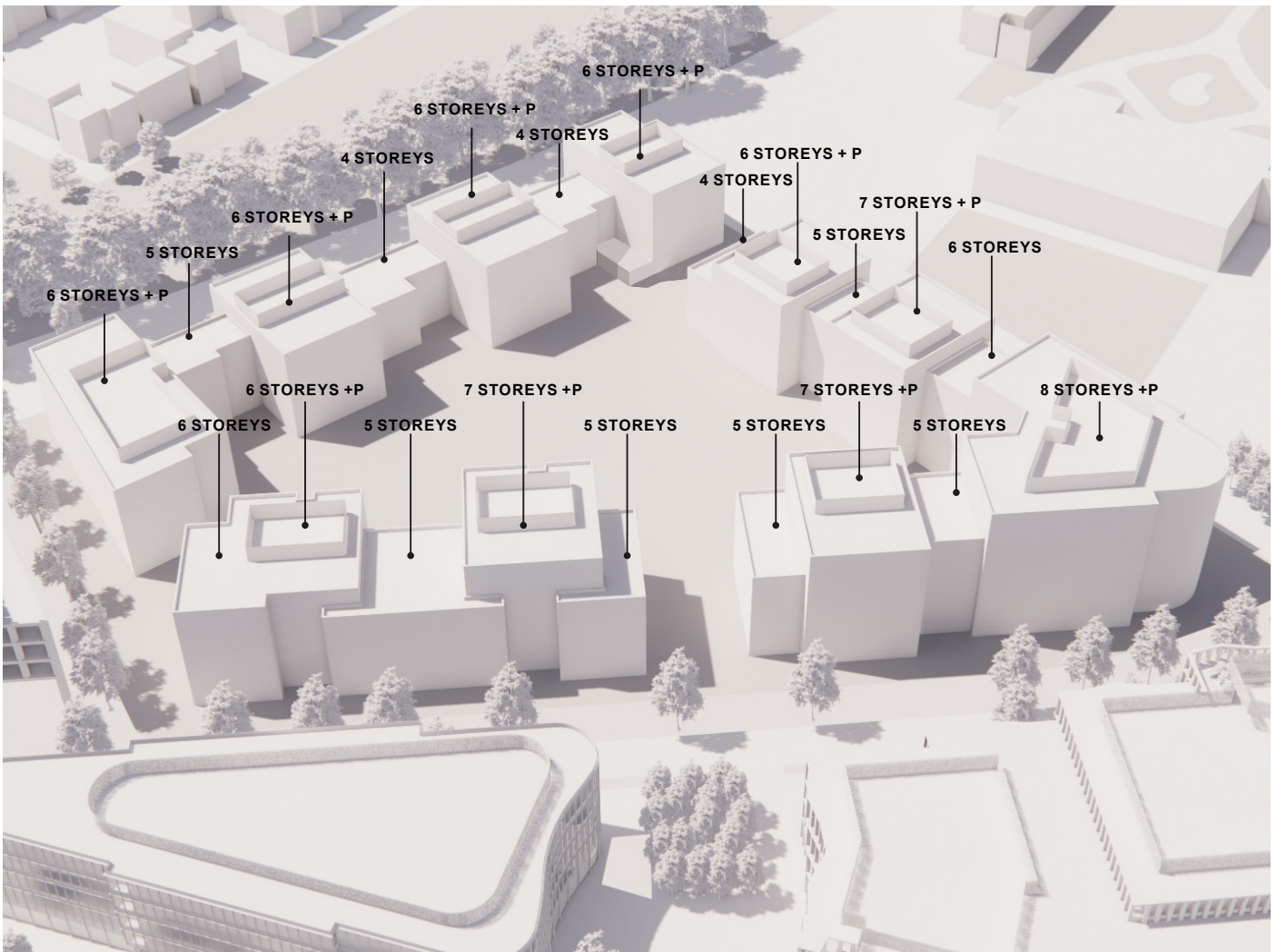


Fig. 191 Illustrative axonometry indicating proposed building heights

- 9.9.1 Floor to floor heights for the proposed residential development across typical floors is proposed at 3m, with blocks with active ground level frontages proposed at 5m to allow for attractive retail and amenity frontages.
- 9.9.2 The parameter drawings forming part of the outline application depict a stepped sequence of undulating blocks that range in heights across the scheme from low points of +15m to the high points of +30m. A gradient of heights is observable starting from the south, rising to the highest point on the North Eastern corner of the residential quarter. This was done to create a landmark arrival experience for commuters arriving into the development from Cowley Road Please refer to the parameter drawings (CD1.77 a-i) as illustrated in the Design and Access Statement, Pages 180 to 183.

9.10 / Identity



Fig. 192 Indicative view illustrating Chesterton Gardens' internal facades

9.10.1 As masterplanners, we strongly believe in the power of local identity to shape places and to create bonds between humans and their environment. In some instances, local identity can be found in materiality, architectural form or urban form. At times, identity can be found in very fine local grain, at other times, it is a more general identity that transcends streets or blocks and encompasses whole cities or regions. It is our task as masterplanner to seek out the elements that make this site unique and give it a clear identity, and to embed this in masterplan drawings, guidelines and philosophies.

9.10.2 The Appeal Site as a cleared urban brownfield site presents an interesting challenge in the shaping of an identity. The Appeal Site's history as farmland and long weld track facility has mostly faded away, leaving behind very little in terms of formal or material memory

9.10.3 In the absence of an immediate context to draw upon, the scheme has focused mostly on the historic core of the city of Cambridge, drawing upon the materiality, form and typology of the local urban fabric to define an identity for the Appeal Site that creates a new quarter of Cambridge that is firmly rooted in the materiality and formal language of Cambridge.

9.10.4 This Identity is further defined in the masterplan design principles and the plot shall be developed in line with the same. The illustrative design shows one potential interpretation of the design guidelines, others will be possible. The outline design is loose enough to allow for a number of different solutions to come forward in due course. Please refer to the Architectural Design Principles as set out in section 5.6 as well as the Design and Access Statement, Pages 48 to 71.

9.11 / Resources and Lifespan

Resources and lifespan are defined in the masterplan design principles and the plot shall be developed in line with the same. The environmental strategy shall be developed in line with the Cambridge North Sustainability Strategy (CD2.12). This includes the following principles:

- A high performance building fabric, solar gain control and minimise heat loss
- Consider sustainable construction methods
- The use of renewable energy
- Implementation of green, brown and biodiversity roofs
- The use of locally sourced materials
- Natural ventilation.

