Proof of Evidence - Design

Land north of Cambridge North Station, Cambridge

May 2023

PINS Reference: APP/W0530/W/23/331561
LPA Reference: 22/02771/OUT

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Summary

This Proof of Evidence on Design has been prepared on behalf of South Cambridgeshire District Council ('the Council') following an appeal against non-determination by Brookgate Land Ltd on behalf of The Chesterton Partnership ('the appellant') in relation to an application for mixed-use redevelopment on land off Cowley Road, Cambridge (22/02711/OUT).

In my view, the proposals are not of a high quality design and will not result in a well designed place. This contravenes local and national planning policy and guidance, most significantly Policy HQ1 of the South Cambridgeshire Council Local Plan and Paragraphs 130(d) and 134 of the National Policy Planning Framework. I support the Council decision to refuse planning permission on the grounds of Design.

The proposals failure to create a well designed place is due to the cumulative impact of several often inter-related design aspects of the scheme including:

A Land use type and distribution

B Block structure and urban grain

C Height, massing, form and detailed design of blocks S4, S6 and S7 (FULL)

D Height, massing and form of S8 to S21 (OUTLINE)

E Cycle storage location and provision

F Housing design quality

A Land use type and distribution

The proposed scheme segregates commercial and residential buildings, with commercial buildings largely located to the east, and residential buildings to the west of Milton Avenue.

The design of the commercial buildings has been driven by the desire for large, flexible floorplates, resulting in large buildings that fully occupy the urban blocks. Commercial buildings of this kind are inherently bulkier and more monotonous in design than residential buildings. The amount and siting of these type of buildings, and the "zoned" approach to land use distribution, has proven detrimental to the delivery of a welcoming, visually interesting, and animated streets and spaces. It has also led to the failure to develop an acceptable design response to the sensitive eastern edge.

B Block structure and urban grain

The proposed block structure introduces long building elevations to face the eastern edge, from where they appear as a continuous urban wall of development. It does not provide enough space to create "an irregular parkland edge of adequate space to accommodate forest scale trees" nor "avoid an abrupt transition between development and countryside" as required by the NEC AAP Townscape Strategy and the District Design Guide.

The proposed block structure introduces a series of triangular street corners, where the parameter plans prescribe a "Flatiron" building response. This lends "equal weight" to the adjoining streets and does reinforce the proposed street hierarchy. This has been detrimental to the creation of a legible street network with a strong sense of place.

The proposed block structure introduces Station Row as a main axis through the development. There is a lack of distinction between Station Row and Milton Avenue and the proposals do not adequately confirm Milton Avenue as the primary movement route. This has a negative impact on legibility and does not reflect the role of this development as a gateway to the wider NEC area.

With a typical footprint of around 50x70 metres, the proposed commercial buildings are comparable in size to a standard urban block. I agree with the statement made in the Design and Access Statement that buildings with long and flat elevations are intrinsically boring and overbearing. In my view, the proposals are over-reliant on elevation design and ground floor activation to provide visual interest and a human scale to attempt to overcome the issues that intrinsically relate to the size of the buildings and the coarseness of the urban grain.

C Height, massing, form and detailed design of blocks S4, S6 and S7 (FULL)

S4

The height and massing of S4 has an overbearing presence on long distant views from where it can be seen rising above existing and proposed buildings and trees. From a distance the stepped, "pyramid" shape of the building is also clearly visible. This shape makes the building look bulky and squat; a mass that appears too heavy to hold its shape. The resulting skyline lacks elegance.

The appellant justifies the height and form of S4 by defining its role as a "mediator" between 1 Cambridge Square and the proposed residential buildings. Although this principle is supported, the design interpretation of it is not. The proposed top floor of S4 extends over 4m above that of the visually dominant red brick volume of 1 Cambridge Square. The rooftop plant extends a further 3m above that. Its height does not appropriately relate to 1 Cambridge Square.

The scale and massing of S4 is overbearing, and the design of the elevations fail to achieve the level of diversity and visual interest required to comfortably define and enclose surrounding streets.

Furthermore, the location of "back side uses" on Chesterton Way is not compatible with the proposals for Chesterton Way as a "front door address" for people living in S13-S16 and results in a lack of cohesion and clear identity for Chesterton Way. This further adds to the failure of S4 as a mediator between the office cluster and the residential quarter.

S6 and S7

S6 and S7 form a hard and nearly continuous edge against the railway line. This results in an abrupt transition to the landscape which goes against the design guidance set out in District Design Guide and NEC AAP Townscape Strategy.

The designs for S6 and S7 are near identical. With minimal gaps between them, the buildings appear as a continuous frontage of some 160m (nearly 2/3rd of the total length of the Station Row), resulting in a lack of visual interest and variety along this street. Furthermore, the repeating building form is incongruous to the rest of the masterplan, resulting in a lack of cohesion.

D Height, massing and form of S8 to S21 (OUTLINE)

S8, S9 and the building that make up the residential quarter (S11-S21) can be seen rising above and beyond S6 and S7. They exacerbate the overbearing presence of the development edge on the landscape.

The height and massing of S13-16 has an overbearing presence on the existing small-scale homes on Discovery Way.

The form of S9 and S19-20 fails to adequately enclose Cowley Circus leading to a weak of sense of place. This is exacerbated by a lack of compatibility and cohesions in the proposed building form of S9 and S19-S20.

S9 “turns its back” to the Wild Park. It fails to clarify the role and status of the Wild Park. Is it a place that promotes community use or has it primarily a drainage and ecology function? (How) will this role change in the future? What does this mean for the design of S9? The proposals lack clarity and cohesion.

E Cycle store location and provision

The proposals do not provide a consistent high quality design for cyclists. This will discourage some people from choosing cycling over the use of a private vehicle. This goes against national and local planning policy.

The access to S9’s cycle stores is poorly located at the back of the building. An approach from Station Row, the most direct route to the city centre, would put cyclists in the path of vehicles entering and existing the basement car park. The public realm design is poorly co-ordinated with the entrance to the cycle store.

Access to the cycle stores in the residential buildings is also poorly co-ordinated with the design for the public realm design. The one way working of Bramblefield Way, and the location of a continuous row of car parking on Chesterton Way forces cyclists to walk considerable distances along footways to reach the nearest cycle path. The provision of access to cycle stores off Chesterton Gardens could give rise to conflicts between cyclists and the other users of this space.

There is an over-reliance of the use of two-tier cycle racks within the commercial buildings. These are not convenient to use and do not constitute a high quality design. They may cause employee cycle parking to spill over onto the street, taking up space intended for visitors and compromising the quality of the public realm.

F Housing design quality

The illustrative design for the residential buildings includes too many single aspect dwellings. The appellant has indicated this to amount to 24% but this figure is predicated on the appellant’s definition of a dual aspect dwellings, and further relies on the successful progression of the stepped building form through the Reserved Matters planning process. I question both these points and have done an alternative calculation that shows that the number of single aspect homes may be as high as 50%.

The parameter plans and associated design principles for residential buildings do not demonstrate how this number could be substantially reduced in the subsequent stages of the planning process.

50%, but also 24%, is an unacceptably high number of single aspect homes on such a large and relatively unconstrained site. It contravenes government policy and guidance that states that homes and buildings need to be well designed to provide good quality internal environments that promote the health and well-being of its users and are efficient and cost effective to run by maximising natural ventilation and avoid overheating.

Conclusion

I conclude that having assessed the design issues relating to the appeal proposal in the context of the relevant design policies and urban design guidance, I consider that the appeal proposal does not meet the local and national design policy and guidance requirements for a high quality new development.

On this basis, and in conjunction with the evidence provided by my colleagues, I therefore support the reasons that were given by the Council for refusing this proposal on design grounds.

1. Qualifications and experience

1.1 I am Annemarie de Boom MSc (Hons). I hold a masters degree from Delft University of Technology, The Netherlands (1996) where I studied at the faculty of Architecture and the Built Environment and specialised in Urban Design.

1.2 I have over twenty-five years of experience working in the fields of masterplanning and urban design. In 2018 I founded deBOOM UD to provide urban design advice to private and public sector clients on a flexible basis. I have been contracted to provide urban design services to the Greater Cambridge Shared Planning Services (GCSPS) since 2018. Prior to setting up deBOOM UD, I was at studio REAL where I led the urban regeneration team as an Associate from 2008 and Associate Director from 2012. Prior to that I held various positions up to Associate at Colin Buchanan and Partners in 1994, 1996-1998 and 2000-2008. I also worked at practices in Sydney, Australia and Rotterdam, The Netherlands.

1.3 My experience encompasses a wide range of spatial planning, masterplanning, transport planning, urban regeneration and public realm design projects, working for both the private and public sector. At GCSPS, I have advised on large scale applications for new towns and neighbourhoods across Greater Cambridge including Waterbeach New Town, Bourn Airfield and Wing/Marleigh and employment-led development such as the expansion of the Wellcome Genome Campus, Hinxton. I have also advised on smaller scale applications such as housing renewal projects brought forward by the Cambridge Investment Partnership.

1.4 I have a long-standing involvement in the planning, design and delivery of the award-winning new neighbourhood of Newhall in Harlow. Other recent commissions include urban design input to the Guildford Economic Regeneration Strategy, Tseriou Street Regeneration in Nicosia, Cyprus and a mixed-use development in Camley Street, London Borough of Camden, London. My work is highly multi-disciplinary in nature, and I work closely and collaboratively with other experts in the fields related to the built environment, including architects, transport planners, highway engineers and landscape architects.

1.5 I am a member of the Design South East Review Panel, the North Herts Design Review Panel and the Canterbury Design Review Panel.

Declaration

1.6 The evidence which I have prepared and provided for this appeal in this statement is true. I confirm that with regards to the opinions expressed I believe them to be true and represent my true and complete professional opinion.

2. Introduction

The appeal scheme

2.1 The application under planning reference 22/02711/OUT which is now the subject of appeal against non-determination by Brookgate Land Ltd on behalf of the Chesterton Partnership (the Appellant) is for mixed use redevelopment on land north of Cambridge North Station, Cambridge.

2.2 The application was submitted to the Council on 15 June 2022. The description of the development is as follows:

A hybrid planning application for:

a) An outline application (all matters reserved apart from access and landscaping) for the construction of: three new residential blocks providing for up to 425 residential units and providing flexible Class E and Class F uses on the ground floor (excluding Class E (g) (iii)); and two commercial buildings for Use Classes E(g) i(offices), ii (research and development) providing flexible Class E and Class F uses on the ground floor (excluding Class E (g) (iii)),together with the construction of basements for parking and building services, car and cycle parking and infrastructure works.

b) A full application for the construction of three commercial buildings for Use Classes E(g) i (offices) ii (research and development), providing flexible Class E and Class F uses on the ground floor (excluding Class E (g) (iii)) with associated car and cycle parking, the construction of a multi storey car and cycle park building, together with the construction of basements for parking and building services, car and cycle parking and associated landscaping, infrastructure works and demolition of existing structures

Key application documents

2.3 The documents that accompanied the application are provided in the Core Document Index. The key documents referred to in this Proof of Evidence are referenced by name and CD number.

My involvement

2.4 My involvement in this project dates from October 2020 when I was appointed as urban designer working on behalf of GCSPS to provide Pre-Application advice on the emerging proposals.

2.5 Since then, I have attended six formal pre-application meetings as well as several area-specific workshops and a Cambridge Quality Panel Design Review Meeting. I have provided formal comments on design-related issues for each of the pre-application meetings. These were collated and distributed to the applicant team by the Planning Case Officer, Fiona Bradley.

2.6 I have also written the GCSPS Urban Design Consultation Response to the application and provided an updated response following receipt of amended drawings. This response provided an assessment of the scheme in three parts: A. Layout, height and massing of the masterplan; B. Outline elements; and C. Full Elements. The consultation response summarised the issues raised, and clarifications sought, in 12 key points.

2.7 The applicant response (October 2022) to my initial consultation response addressed some of

the issues raised and clarification sought under Part C of my response. Other issues were not addressed, and these have formed part of the Reason for Refusal.

Scope of evidence

2.8 My evidence relates to Reason of Refusal 3 - Design as set out in the Statement of Case:

The planning application fails to provide high quality public open space or a public realm which would result in a well-designed coherent sense of place that contributes to local distinctiveness.

The proposals fail to provide sufficient formal children's play space which is convenient for residents to use, clearly distinguished from the public realm and not bisected by vehicular routes.

The shape and form of buildings within the outline application are not considered to appropriately respond to their locations, resulting in potential incompatible building designs fronting streets and open spaces.

The lack of flexibility in the parameter plans potentially precludes, or at least limits, this incompatibility being resolved at Reserved Matters stage.

Building S4 (One Milton Avenue) is overly large and bulky for its location, which its architectural detailing and articulation fails to overcome.

The proposed development, through its over reliance on two tier cycle parking together with the poor relationship of some cycle access points in relation to cycle ways, fails to provide convenient and accessible provision for cycle parking and does not sufficiently promote active travel.

As such the proposal is considered to be contrary to South Cambridgeshire Local Plan policies HQ/1 and SC/7 and the NPPF.

Furthermore, without the applicant demonstrating that development can come forward with no single aspect north-facing apartments there is conflict with Policy HQ1 (l) and paragraph 153 of the NPPF.

2.9 The scope of my evidence is to provide further details on the aspects of Reason for Refusal – Design that relate to the urban design. It considers the land use, block structure and urban grain, and the height, massing, scale and design of the buildings and the form of streets and spaces they define. It also considers the lack of quality in cycle storage and housing designs.

2.10 I defer to Nigel Wakefield's evidence in relation to the quantity, quality and distribution of open space and the detailed design of the public realm. However, buildings and their proposed uses impact on the shape, size and vitality of streets and spaces and thus the design of the public realm is strongly interrelated with the urban design of the scheme. I will reference this inter-relationship in my assessment where pertinent to the Reason for Refusal 3.

2.11 I also defer to Nigel Wakefield's evidence in relation to Landscape Visual Impact Matters and Christian Brady's evidence in relation to heritage impact matters, which form Reason for Refusal 1 and 2 respectively.

2.12 The impact of the scheme on landscape and heritage setting is strongly influenced by design decisions made in relation to the layout, massing and land use distribution. I will reference these inter-relationships in my assessment.

3. Relevant planning policy and guidance

South Cambridgeshire Local Plan

3.1 The relevant policy to this Proof of Evidence is Policy HQ/1 of the South Cambridgeshire Local Plan. Details of the policy are set out in the Statement of Case.

National Planning Policy Framework

3.2 The NPPF, at paragraph 130(d) seeks to ensure that developments establish or maintain a strong sense of place, using the arrangement of streets, spaces, building types and materials to create attractive, welcoming and distinctive places to live, work and visit.

3.3 In paragraph 134 the NPPF provides that development that is not well designed should be refused, especially where it fails to reflect local design policies and government guidance on design taking into account any local design guidance and supplementary planning documents such as design guides and codes. Footnote 52 clarifies the reference to government guidance is to guidance contained in the National Design Guide and National Model Design Code.

The National Design Guide and National Model Design Code

3.4 The National Design Guide [CD5.17] illustrates how well-designed places that are beautiful, enduring, and successful can be achieved in practice. It introduces the ten characteristics of a well-designed place and provides guidance with reference to each of these. They include Context; Identity; Built Form; Movement; Nature; Public Spaces; Uses; Homes and Buildings; Resources; and Lifespan.

3.5 In relation to the design of Homes and Buildings, in paragraph 123, the National Design Guide provides that well-designed homes and buildings provide good quality internal and external environments for their users, promoting health and well-being. In paragraph 125 it further states that well designed homes and buildings are efficient and cost effective to run; help to reduce greenhouse gas emissions by incorporating features that encourage sustainable lifestyles; and maximise natural ventilation, avoid overheating, minimise sound pollution and have good air quality.

3.6 The National Model Design Code provides guidance on the preparation of design codes for new developments. In Part 2 Guidance Notes Section H2 it states that design codes should give consideration to dual aspect apartments particularly on north facing blocks.

District Design Guide

3.7 The South Cambridge District Design Guide SPD [CD5.11] ('the Guide') sets out important design principles based on recognised good practice and explains key requirements of the District Council that will be taken into account when considering planning proposals.

3.8 In paragraph 5.54 the Guide defines the addition to the outer edge of an existing settlement, of a new neighbourhood, district or township as an urban extension. In paragraph 5.55 it provides that urban extensions should relate to the existing urban areas with which they share a common boundary, present an urban edge that is sympathetic to the character of Cambridge, and relate to the rural context they abut.

3.9 In paragraph 6.15 the Guide states the edges of new development should blend into the landscape by means of lower density towards the perimeter, with increased planting predominately of native species.

3.10 In paragrpahy 6.35 the Guide provides that developments should not be designed in isolation without due regard to their collective appearance, particularly as a skyline. The collection of buildings within a block should create a varied and interesting skyline; and a collection of blocks should create an interesting wider skyline.

3.11 With regard to daylight and sunlight in paragraph 6.65 the Guide provides a 45 degree "rule of thumb" should be applied to prevent buildings significantly overshadow a neighbouring property's windows or garden, or where possible block their views. It states that buildings will not normally be allowed to protrude beyond a 45-degree line drawn horizontally from the nearest window of a neighbouring property.

3.12 In paragraph 6.67 the Guide states that protecting privacy and avoiding overlooking of neighbouring houses should be given high priority in any residential context.

3.13 In relation to large business premises, in paragraph 6.158 the Guide provides that large buildings should be sited to avoid their mass breaking the skyline. Where this is unavoidable their design should mitigate the problem, possibly by breaking the building down into articulated blocks and through the use of landscaping as a screen and to break up the silhouette.

NEC AAP

3.14 The appeal site falls within the boundary of the emerging North East Cambridge Area Action Plan (NEC AAP).

3.15 A description of the NEC AAP and its status in provided in the Statement of Common Ground.

NEC AAP Evidence Base

3.16 The Councils have published evidence papers to support the draft policies and proposals of the Proposed Submission version of the emerging NEC AAP. These studies provide up to date evidence of the existing context of NEC and its surrounds. As such, they are a material consideration which attracts weight.

3.17 One such evidence paper is the North East Cambridge Townscape Strategy Final Report, ('the Townscape Strategy') [CD5.15]. The NEC Townscape Strategy has been prepared alongside the NEC Landscape Character and Visual Impact Appraisal ('the LCVIA') [CD5.13] and NEC Heritage Impact Assessment ('the HIA') [CD5.14] and has incorporated the recommendation from both these documents.

3.18 In paragraph 3.3.2 the Townscape Strategy sets out ten overaching townscape principles for the design of NEC. These include:

1. Respond sensitively to and preserve the special character of the River Cam corridor, meadows and Fen Ditton by stepping down development heights towards the landscape edges to avoid becoming visually prominent and intrusive, and detracting from the pastoral landscape qualities.

2. Respond appropriately to the adjacent residential context by stepping heights and densities down towards its interface with existing settlements and avoiding stark contrasts in heights with existing neighbouring buildings.

3. Enhance legibility and distinctiveness through appropriately scaled landmark buildings at places of visual prominence and functional significance where they can make a positive contribution to the skyline and do not cause an inappropriately adverse impact on heritage assets or landscape character.

4. Create a coherent network of direct and continuous walking and cycling routes across North East Cambridge that join up with routes in the surrounding areas and create a legible place that is easy to navigate.

5. Create a distinctly green place that retains and enhances existing landscape features, provides a network of green corridors, ample tree planting and landscaping of development, and distinct and recognisable green and public 'feature' spaces that provide identity. Local green spaces within each site should create doorstep play as well as recreation and social spaces.

6. Create a hierarchy of centres that respond to their intended levels of use and functions in accessible and prominent locations. As natural, local hubs of activity, these areas should be expressed appropriately through their urban form. Opportunities to increase densities around activity hubs should be explored.

7. Create distinct character areas that are clearly differentiated from one another through their uses, development pattern, typologies and building scale. Character distinctions will be stronger where edges to areas are discernible and expressed well. Quarters should comprise compact low and mid-rise rather than high-rise buildings. They should provide 'gentle density' that supports urban vitality without feeling crowded. Density should respond to accessibility and uses.

8. Create well-defined and coherent street scenes that respond to human scale and perception. This should consider bringing forward a finer grain of development with variations in density, well-enclosed and diverse street spaces, articulation of the facades with particular attention to ground floor and roof detail, and the creation of a rhythm of vertical sub-divisions along streets.

9. Create variation of forms and architectures within a common set of parameters for each character or sub-area. Parameters may cover the structure of street blocks, building lines, heights and massing and other common aspects of form, roof detail, materiality and colour. Avoid monotonous or monolithic development as well as indiscriminately varied architecture. Collaboration of different architects within each development site is encouraged to achieve this principle. Contrasting key buildings to be added where appropriate.

10. Support the emergence of a sense of place and identity through meanwhile uses and events that promote the area and generate interest and activities both within buildings and public spaces.

3.19 In paragraph 5.2.4 the Townscape Strategy provides that development in the NEC area should [...] *"actively promote a fine grain approach to development. The guiding principle is to break down larger sites and street blocks into smaller and independent development plots."*

3.20 In paragraph 6.1.2 The Townscape Strategy identifies 7 character areas for the NEC. The land north of Cambridge North Station falls within Area 2 Mixed Used Spine, Sub Area 2a Cambrdige North Station Hub. Recommendations for this area are set out in paragraph 6.17 and include:

This area is a key gateway into North East Cambridge. The area will see increased activity and buzz as people come and go to the station, interchange at the bus terminal, and pass through along the strategic walking or cycling route to Cambridge city centre via the river corridor. Served by this footfall a new local centre is proposed to provide a convenience offer to local people, invite commuters to stay and spend time here. The character of this area should be urban and celebrate the arrival in the NEC area.

Layout, mix of uses and design principles:

- *Development should take the form of urban street blocks that establish coherent frontages towards the central boulevard, the Guided Busway to the west and local access streets.*
- *Active ground floors with convenience uses should be concentrated around the station and along the southern end of the boulevard.*
- *Provide a mix of residential and office uses is promoted.*
- *Station car parking should be accommodated in a multi-storey car park, which must be carefully integrated into the area.*
- *A small neighbourhood space is proposed at the northern end of the boulevard as a focal space for local residents.*

Height Principles:

- *Heights to vary between buildings up to a maximum of 5 (residential) storeys.*
- *Two taller buildings are already permitted / constructed next to the station (Hotel and office development), which provide prominence and legibility to this gateway. No further tall buildings are necessary or proposed in this area.*
- *Opportunity for a local height accent of up to 7 residential storeys to terminate the view along Cowley Road / First Public Drain at the intersection with the boulevard.*

3.21 In paragraph 2.1.1 the Townscape Strategy sets out how it has been developed with particular consideration of the Heritage Impact Appraisal (2021) and Strategic Heritage Impact Assessment (2021) baseline work, which was undertaken alongside the Townscape Analysis and Townscape Strategy, and that these reports have identified sensitive heritage assets and elements of significance, which could be affected by the development of the NEC. The Townscape Strategy has therefore been developed in an iterative way, to take account of these specific sensitivities and outline parameters for development in such a way as to minimise harm to these heritage assets and their significance.

3.22 In paragraph 2.1.14 the Townscape Strategy quoates recommended design parameters from the HIA (HIA paragraph 5.3.1) which have been incorporated into the Townscape Strategy:

- *Siting taller buildings away from the more sensitive eastern and south eastern edge of the NEC site to avoid removing the rural character of wider views in Fen Ditton and from Baits Bite Lock and in views from Riverside and Stourbridge Common Conservation Area.*

- *Keeping taller buildings (i.e. 10-13 storeys) as occasional 'markers' with defined purpose and roles as part of a considered composition in the landscape rather than the predominant height to avoid an 'urbanised' wall of development effect in the backdrop of wider views from elevated positions such as Castle Mound, the tower of Great St Mary's Church and from nearby rural open locations such as Baits Bite Lock Conservation Area and Fen Ditton.*
- *Dropping down the heights of buildings where they interface with surrounding existing development, to avoid being an over-dominant presence, particularly to the south of the NEC near to The Golden Hind pub and to the east near to Fen Ditton and Baits Bite Lock Conservation Areas.*
- *Using a palette of colours that are more characteristic of the 'earthy' or muted spectrum of colours seen in Cambridge. These colours should generally be recessive in the wider landscape to minimise their visual intrusion and create a harmonious fit within surroundings and skyline.*
- *Using materials that are more characteristic of the materiality seen in Cambridge which would include masonry facades, brick or sturdy materials. Use of reflective materials including glass should¬ be more limited as this is more out of character in the wider Cambridge context and will act as too much of a focal point in views from and towards heritage assets, therefore creating visual intrusion.*

3.23 In paragraph 2.2 the Townscape Strategy quotes the design guidance for buildings in the NEC from the LCVIA. In paragraph 2.2.4 it quotes the specific reference to the eastern edge from paragraph 5.17 of LCVIA:

The eastern edge of the site is particularly sensitive to development and so proposals here should incorporate the following principles:

- *Variable set-back of buildings on plots;*
- *Variable roofline;*
- *Minimal hard boundary treatment such as fences and walls;*
- *Use of semi-mature trees and space to allow them to grow to a size that can compete with the proposed building heights;*
- *Creation of an irregular parkland edge of adequate space to accommodate forest scale trees;*
- *Permeability of built form and landscape allowing views into the Site along green corridors of adequate space to accommodate forest scale trees;*
- *Avoiding an abrupt transition between development and countryside.*

4. Methodology of my design assessment

4.1 My evidence is presented in Section 5 Design Assessment below. It starts by providing a high level view of the sensitivities of, and required design response to local context.

4.2 It continues with an assessment of the masterplanning aspects of the design, considering land use distribution, block structure and urban grain. It will highlight the design decisions made at this level that have a bearing on subsequent stages of the design development where these are considered to have contributed to a failure to deliver Policy HQ/1 as set out in Reason for Refusal 3.

4.3 Following on from this, each design element specifically mentioned in, or contributing to, the Reason for Refusal 3 is discussed in turn. My evidence includes photographs and drawings which are referred to in the text by Figure and Page number. These graphics mostly originate from the application documents produced by the appellant, but have been annotated and combined / overlaid by me where I felt this is required to clarify my point of view. The source of each graphic, and the elements added by me, are identified in the captions accompanying each Figure.

5. Design assessment

Site and context

5.1 A full site and context description is provided in the Statement of Common Ground.

5.2 Policy HQ/1 of the South Cambridgeshire Local Plan provides that all new development must be of high quality design *"with a clear vision as to the positive contribution the development will make to its local and wider context."*

5.3 The scheme needs to be a respectful neighbour and carefully manage the impact it has on its immediate surroundings, as well as complement and be respectful of the character and identity of the City of Cambridge.

5.4 To the south the scheme needs to respond to the recently constructed buildings of 1 and 2 Cambridge Square. To the east, the proposals need to have regard to the sensitivities of this rural edge in terms of landscape, the Conservation Areas and existing urban form along Fen Road. To the west, the proposals need to be mindful of its impact on this established residential area.

5.5 The area to the north and west is subject to transformation and densification. The proposals will need to form an attractive and appropriate gateway to existing and future development in this area.

Assessment overview

5.6 In my view, the appeal scheme does not provide a high quality design and will not result in a well designed place. Thus it does not meet the policy requirements the South Cambridgeshire Local Plan (HQ1) nor Paragraphs 130(d) or 134 of the NPPF.

5.7 This is due to the cumulative impact of several urban design aspects relating to:

A Land use type and distribution

B Block structure and urban grain

C Height, massing, form and detailed design of blocks S4, S6 and S7 (FULL)

D Height, massing and form of S8 to S21 (OUTLINE)

E Cycle storage provision and access arrangement

F Housing design quality

5.8 This has been explained in further detail below.

A Land use type and distribution

5.9 Milton Avenue broadly divides the scheme into two parts. All residential development is located west of Milton Avenue and most of the commercial developments is proposed to the east as shown in Figure 1 Page 17.

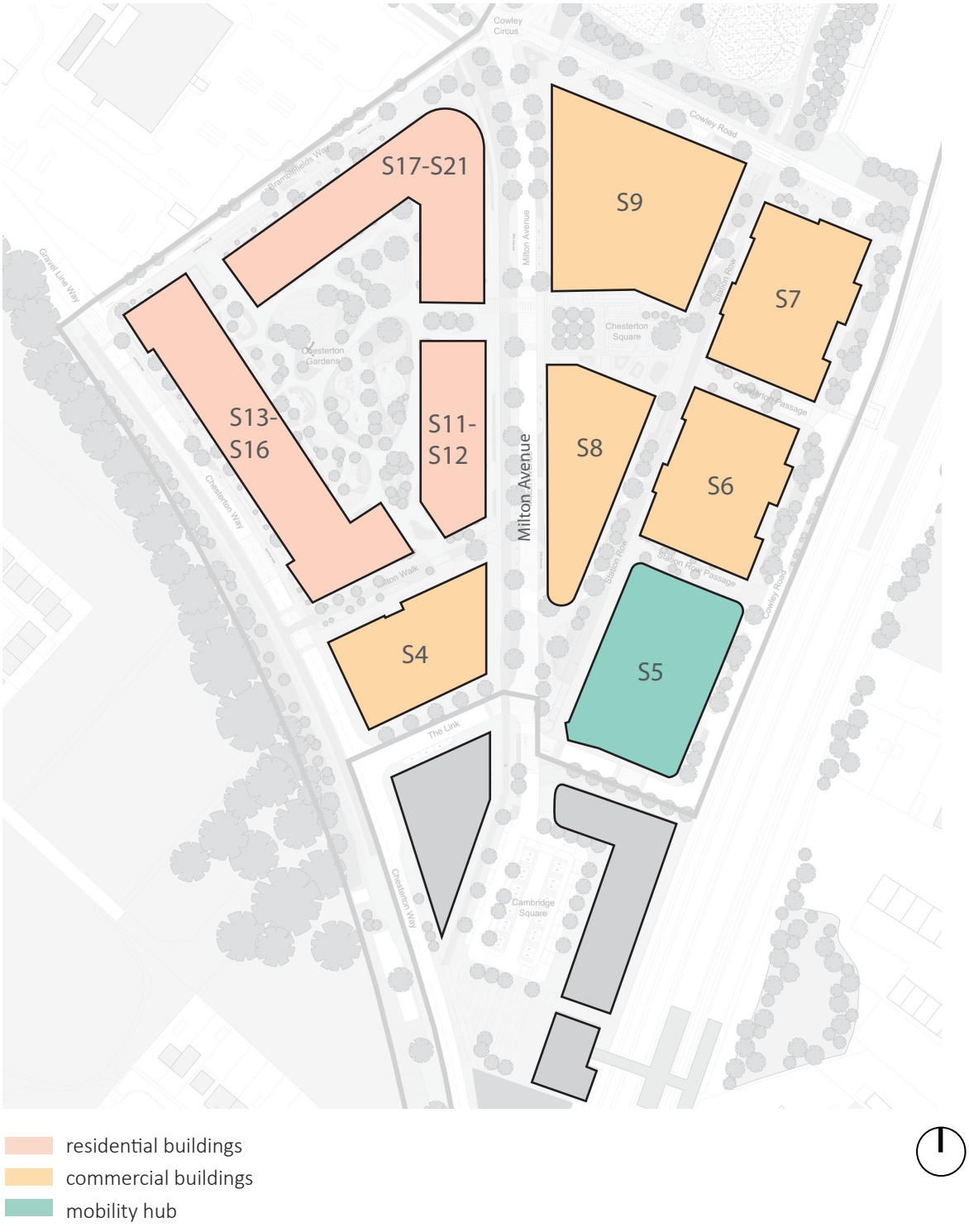


Figure 1 Land use distribution

Block outline and land use index derived from Parameter Plan 07 Proposed Uses Ground Floor Plan 07 Rev A [CD2.27]. Overlaid on Illustrative Masterplan Ground Floor Rev B [CD2.88] by Annemarie de Boom

5.10 The proposed land use distribution has a bearing on the deliverability of Policy HQ/1 in reference to the sections that require:

"[…] a clear vision as to the positive contribution the development will make to its local and wider context" and

"[…] variety and interest within a coherent, place-responsive design, which is legible and creates a positive sense of place and identity."

And NPPF Paragraph 130(d) that states that

"developments establish or maintain a strong sense of place, using the arrangement of streets, spaces, building types and materials to create attractive, welcoming and distinctive places to live, work and visit"

5.11 The design of the proposed commercial buildings at Cambridge North is driven by the need for large, regular floor plates. This has resulted in large footprint buildings that fully occupy the proposed urban blocks with a single building. In comparison to residential developments, there generally is less scope in commercial developments to add visual interest and a human scale to the elevation designs (i.e. through the introduction of windows of different shape and sizes, integrated and / or projecting balconies, a higher density of front doors on the ground floor etc). Thus, even well-designed commercial developments tend to result in larger and more monotonous buildings than (well-designed) residential developments.

5.12 The type, amount and siting of the commercial buildings, as well as the segregation of residential and commercial development in the scheme is detrimental to the delivery of a welcoming, animated and varied streets and spaces and contrary to the recommendations from the Townscape Strategy for a fine-grained approach to development.

5.13 The proposed commercial buildings are accessed by a single, centrally located core to allow for sub-division into multiple tenancies per floor. This arrangement limits the scope for modulation and articulation of buildings through stepping of the plan and elevation. The siting of these type of buildings against the sensitive eastern edge has limited opportunity to create an acceptable building form for the sensitive eastern edge.

5.14 One of the nine guiding principles to deliver the masterplan vision as stated in the Design Access Statement 3.0 Development Vision [CD1.04] Page 51, is to create a community with a vibrant and activated public realm and a sense of place. Therefore the proposals allocated Class E/F uses and other "future activation spaces" on the ground floor of commercial buildings. This is shown on the ground floor plans for buildings S4, S5, S6 and S7 [CD2.66, CD1.158, CD2.77 and CD2.79 respectively] and Parameter Plan 07_Proposed Uses Ground Floor Plan 07 Rev A [CD2.27].

5.15 Although this is supported in principle, the spaces allocated for Class E/F uses in S4, S6 and S7 are relatively large with just one or two units provided along the full length of the block. This would not provide the level of variation and intensity of activation required to adequately animate the long streets and large public spaces as illustrated in Figure 2 Page 19 (the number of front doors and use type is used as an indicator of the density and variety of the proposed ground floor activation).

5.16 Furthermore, there has been no evidence provided to demonstrate that the size of the community envisaged for this site would be able to support this level of retail and amenity provision.

5.17 The Design and Access Statement make repeated references (through reference images) to the London Kings Cross development as an example of the envisaged design and activation of the public realm. However, the footfall and amount and diversity of land uses at Kings Cross are not comparable with the appeal scheme. Yet the scale and design of streets and spaces in both schemes is similar. The lack of people to "fill" these large areas of hard landscaping will result in a lack of comfort and animation of the public realm.

Figure 2 Front doors as an idicator of the density and variety of ground floor activation

Block outline derived from Parameter Plan 05_Maximum Building Envelope Typical Level Plan 05 Rev A [CD2.25]. Location of proposed front doors drawn by Annemarie de Boom and based on Ground Floor Plans of Blocks S4, S5, S6 and S7 [CD2.66, CD1.158, CD2.77 and CD2.79] and Parameter Plan 07_Proposed Uses Ground Floor Plan Rev A [CD2.27].

B Block structure and urban grain

5.18 The block structure and urban grain (i.e. the scale of the elements within the block) of the appeal scheme takes its cue from the development of 1 and 2 Cambridge Square to the immediate south. A new street, Station Row has been aligned with the edge of 2 Cambridge Square and forms a central axis through the commercial quarter. A further north-south oriented street, Cowley Road East, is introduced against the railway line. Two new tertiary streets, the Link and Bramblefields Way, together with Chesterton Way provide a loop around the residential quarter, while a number of pedestrian and cycle "passages" provide additional separation of blocks.

5.19 The blocks defined by this structure of streets and spaces are between 25m x 70m (S11 and S12) and 80m x 80m (S9) in size. The block structure provides a legible network of routes where buildings define and enclose streets, squares and public places. This approach is supported for Milton Avenue but is not supported in relation to the eastern edge of the site. It does not provide enough space create *"an irregular parkland edge of adequate space to accommodate forest scale trees"* nor *"avoid an abrupt transition between development and countryside"* as recommended in the LCVIA, and does not meet the guidance provided in the District Design Guide that states that *"edges of new development should blend into the landscape."*

5.20 The gaps between Two Cambridge Square and S5, S5 and S6, and S6 and S7 are relatively narrow (17m, 10m and 13m respectively). Furthermore, building S8 is located immediatly behind the gap between S5 and S6 and will be difficult to perceive. The gaps do little to mitigate the impact of the development on the eastern edge and do not allow *"views into the Site along green corridors of adequate space to accommodate forest scale trees"* as recommended in the LCVIA. Thus Blocks S5, S6 and S7 will appear as a near continuous edge of development when seen from most viewpoints within and outside the site as demonstrated by Figure 3 on Page 21.

5.21 This is contrary to the design guidance set out in the NEC Townscape Strategy and Policy HQ/1 which requires the development *[…] to the positive contribution the development will make to its local and wider context.*

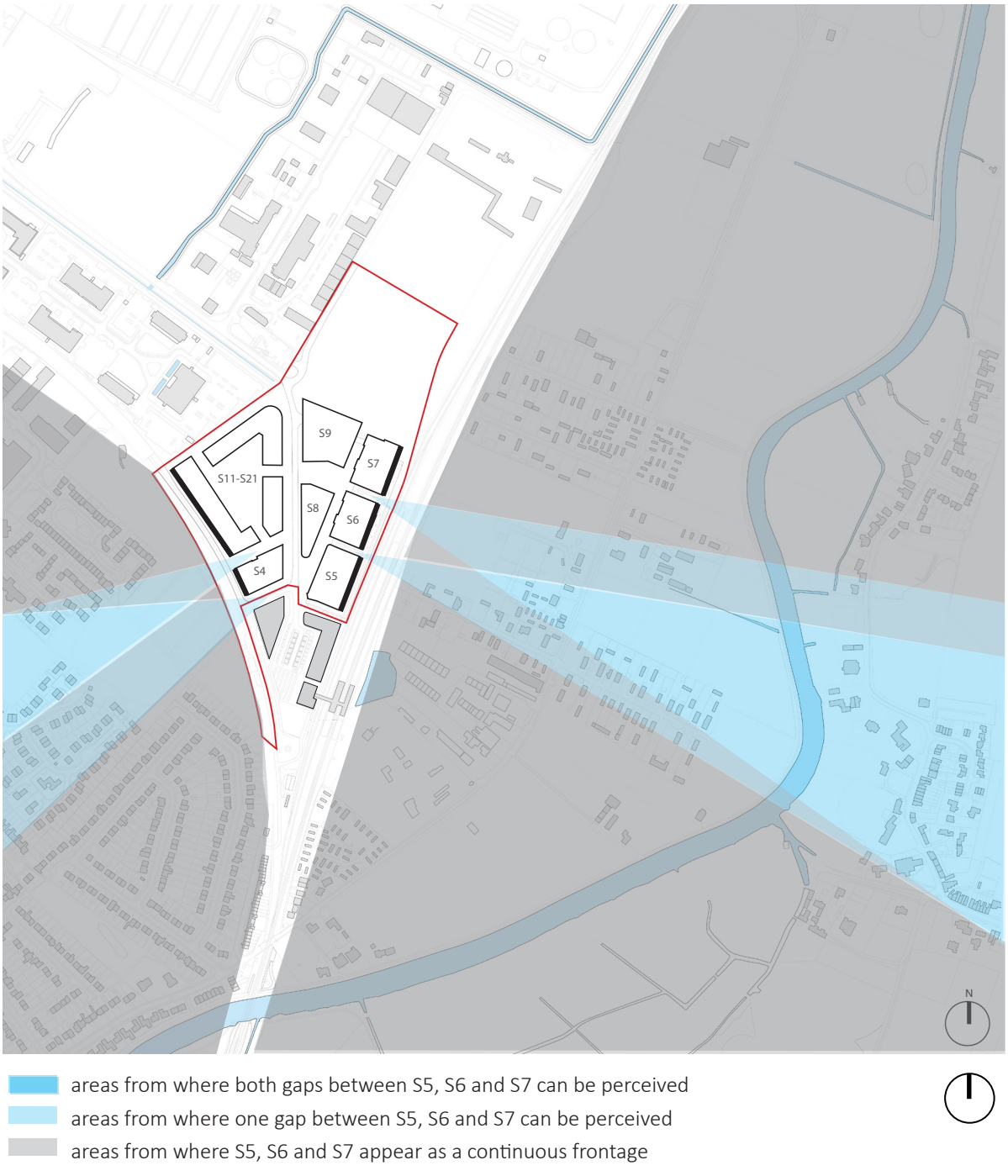


Figure 3 Views towards the development

Block outline derived from Parameter Plan 05_Maximum Building Envelope Typical Level Plan 05 Rev A [CD2.25]. View cones added by Annemarie de Boom

5.22 Figure 4 Page 22 illustrates my interpretation of the street hierarchy resulting from the proposed block structure. I consider Milton Avenue as a primary street, Station Row and Chesterton Way as secondary streets and Bramblefields Way, Cowley Road North and Cowley Road south as tertiary / access streets.

5.23 The diagonal alignment of Milton Avenue creates three triangular shaped blocks in the masterplan. The Parameter Plan prescribes a “Flatiron” built form response as also illustrated on Figure 4.

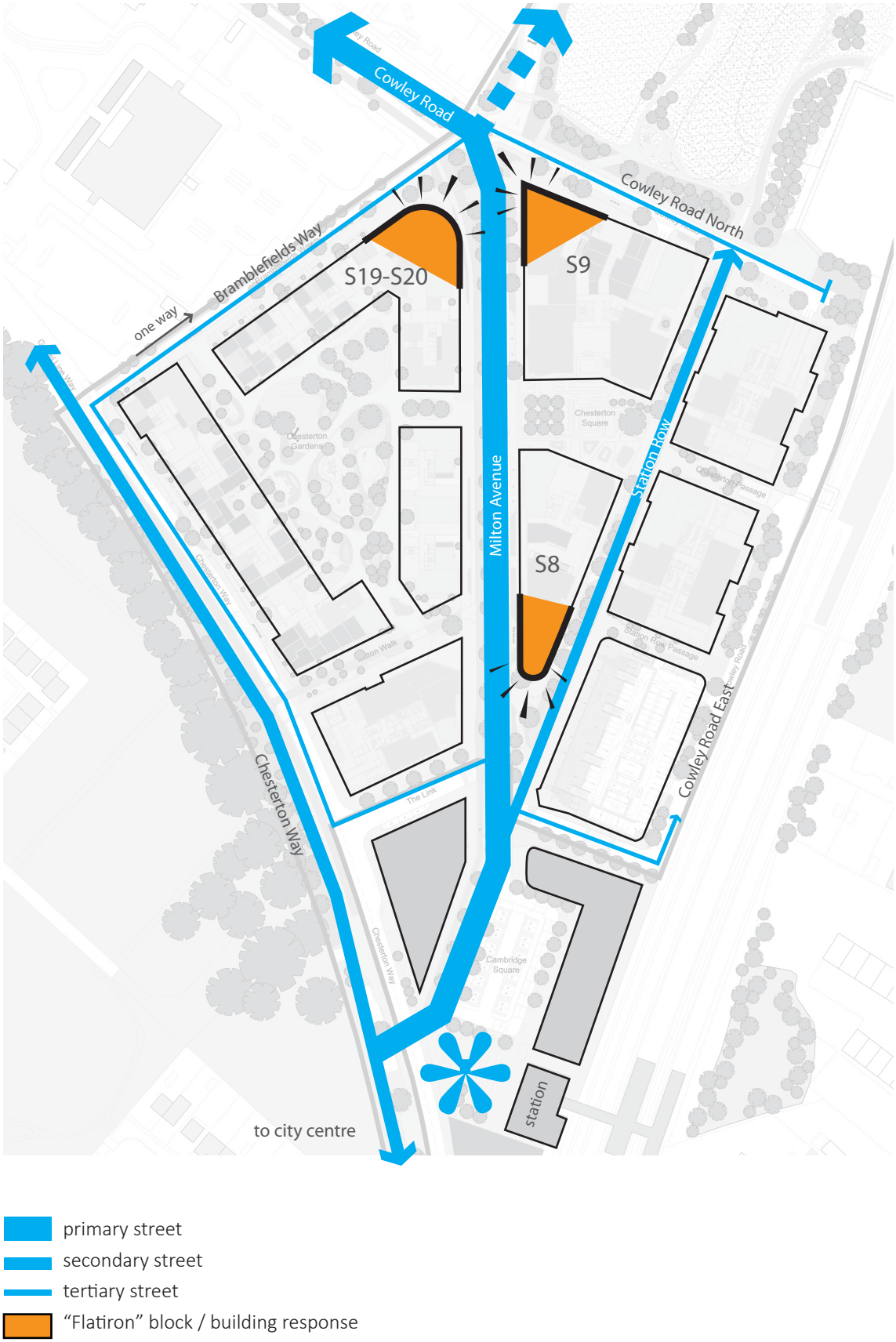


Figure 4 Route hierachy and block structure

Block outline derived from Parameter Plan 05_Maximum Building Envelope Typical Level Plan 05 Rev A [CD2.25]. Street hierachy and "Flatiron" annotations added by Annemarie de Boom

Figure 5 S8 and route hierarchy

Illustrative view from Design Access Statement 6.1 Triangle Site S08 and S09 [CD1.07] Page 174

Figure 6 S9 and route hierachy

Illustrative view from Design Access Statement 6.1 Triangle Site S08 and S09 [CD1.07] Page 163

5.24 A Flatiron building form is highly symmetrical in form and gives "equal weight" to the streets it defines on either side as illustrated by Figure 5 and 6 on Page 23. It does not support the street hierarchy and fails to contribute to a legible street network with a strong sense of place.

5.25 The proposed block structure introduces Station Row to provide access and a focus for amenity in the commercial quarter. Like Milton Avenue, Station Row holds a central position in the scheme. Like Milton Avenue, it has a very straight alignment. Like Milton Avenue it is approximately 250m long (to the visual end points at Cowley Road and Cowley Road North junctions respectively). And like Milton Avenue it is predominantly hard-paved with a central strip for planting.

5.26 Figure 5 on Page 23 demonstrates the lack of distinction in hierarchy and character between Station Row and Milton Avenue. This has a negative impact on the legibility of the wider area as the design does not adequately support and confirm Milton Avenue as the primary movement route.

5.27 This is contrary to sub paragraph c of Policy HQ/1 that provides that *"proposals must include variety and interest within a coherent, place-responsive design, which is legible and creates a positive sense of place and identity […]"*

5.28 As previously stated S4, S5, S6, S7, S8 and S9 are delivered as single buildings, with long elevations on all sides (up to 80m x 80m for Block S9). The Design and Access Statement Section 3.0 Page 64 acknowledges that *"buildings with long and flat elevations are intrinsically boring and overbearing."*

5.29 The Design Access Statement 3.0 Development Vision (CD1.04) Pages 63 to 66 sets out a series of design principles for residential and commercial development that seek to overcome this issue through architectural design and activation of the ground floor.

5.30 Although these principles are supported, I feel that the scheme is over-reliant on, and not consistently successful in its application of these principles to overcome issues that intrinsically related to the coarseness of the urban grain. This is evidenced in further detail in subsequent sections.

C Height, massing, form and detailed design of blocks S4, S6 and S7

Building S4 One Milton Avenue

5.31 S4 One Milton Avenue is an office building set over 9 floors including basement and integrated rooftop plant.

5.32 The height and massing of Block S4 has a negative impact on longer distant views, where it can generally be seen rising above existing and proposed buildings as demonstrated by Figure 7 and 8 on Page 25. The cumulative impact of S4 with other blocks results in an overbearing presence on the eastern edge.

5.33 The building can also be seen from Discovery Way to the south where it looms over the existing residential development resulting in an overbearing form of development, this is already evident by the new office building at 1 Cambridge Square. The introduction of the lower level terraces does little to mitigate against this when seen from this distance as the silhouette of the building is the most dominant feature as demonstrated by Figures 9 and 10 on Page 26.

Figure 7 View of the development from the east

Image from Image from Environmental Statement Appendix 12.4 Visualisations Part 3 of 9 [CD 1.43c] Viewpoint 8. Zoomed, cropped and block numbers added by Annemarie de Boom

Figure 8 View of the development from Fen Road

Image from Environmental Statement Appendix 12.4 Visualisations Part 9 of 9 [CD 1.43i] Viewpoint E6. Zoomed, cropped and block number added by Annemarie de Boom

Figure 9 View of 1 Cambridge Square from Discovery Way

Photograph by Fiona Bradley

Figure 10 View of the development from Discovery Way

Image from Environmental Statement Appendix 12.4 Visualisations Part 9 of 9 [CD 1.43i] Viewpoint E5. Zoomed, cropped and block numbers added by Annemarie de Boom

5.34 From these longer views, the stepped "pyramid shape" of the building is also clearly visible. The stepped building form exacerbates the impression of a building that is bulky and squat - a mass that appears too heavy to hold its shape. The resulting skyline is unflattering, lacks elegance and is starkly different to the skyline of spires that Cambridge is known for.

5.35 The appellant justifies the height of S4 by stating the block needs to be a "mediator" from 1 Cambridge Square to the south and the proposed residential development to the north and west (Design Access Statement 7.1 One Milton Avenue Part 1 of 3 [CD1.09a] Page 213). Although this principle is supported, the design interpretation of the principle is not.

5.36 The visually dominant upper edge of 1 Cambridge Square is formed by the red brick volume. In my opinion, the height of the brick edge should form the reference when determining the appropriate height of a new building that seeks to mediate to a lower adjoining building. This view is shared by the architects of 1 Cambridge Square which made this proposition when determining the height of 1 Cambridge Square in reference to 2 Cambridge Square as shown in Figure 11 Page 27.

5.37 Instead, the proposed top floor of S4 extends to 27.91m which is 4.18m - more than a full storey - above that of the main volume of 1 Cambridge Square as illustrated in Figure 12 Page 28. The rooftop plant, which is a much heavier and visually prominent feature than that of 1 Cambridge Square extents to 30.86m or 7.59 m above the edge of the red brick volume.

5.38 For the above reasons, the building does not successfully fulfil its intended role as a mediator to the lower buildings S11-12 to the north.

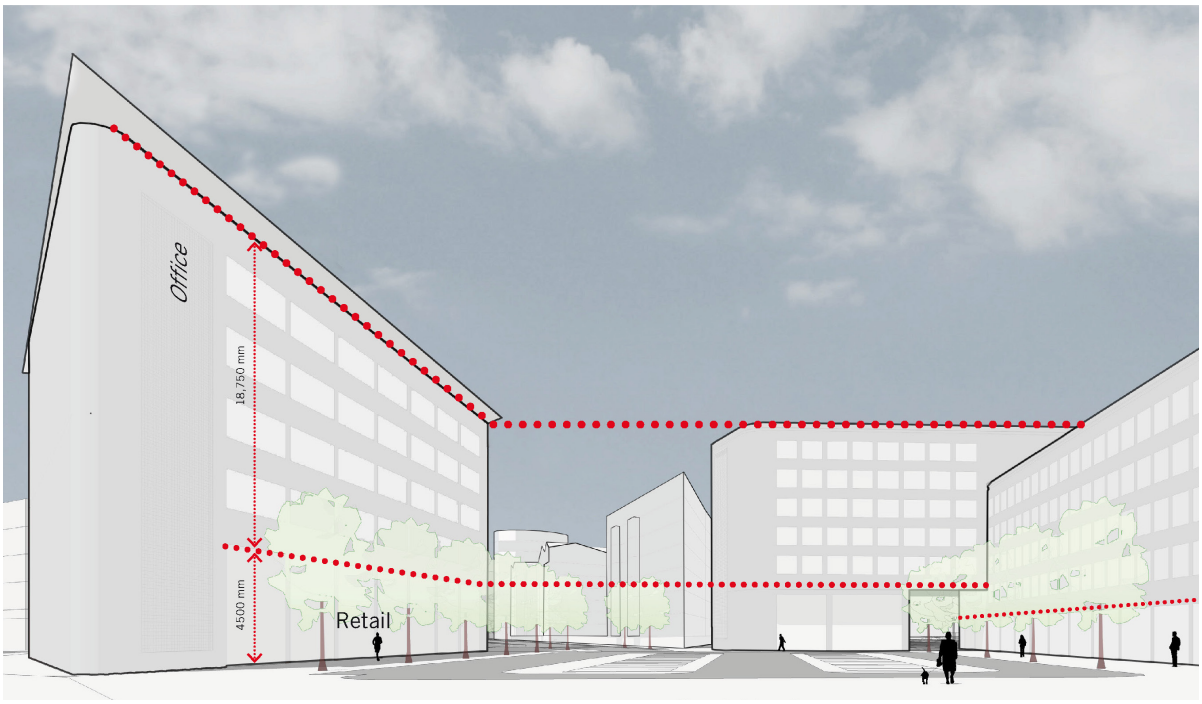


Figure 11 Design interpretaion of 1 Cambridge Square

Graphic from the Design and Access Statement June 2017 Page 45 for 1 Cambridge Square Planning Application Ref S/4478/17/FL [CD9.04]

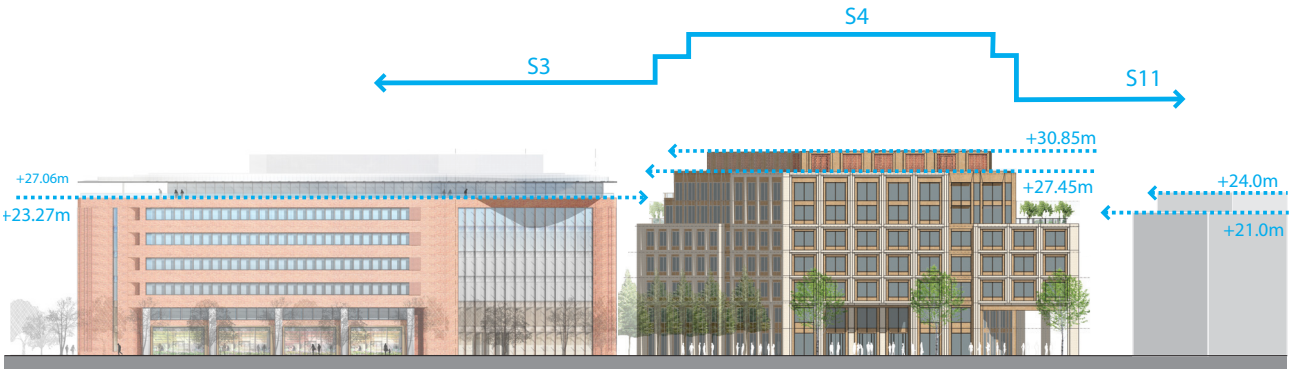


Figure 12 Context elevation of S4 along Milton Avenue

Elevation of 1 Cambridge Square from Amended Front Elevation Plan 1/4/18 from Planning Application S/4824/18/VC [CD9.03]. Elevation of S4 One Milton Avenue from S4 Proposed East Elevation [CD 1.152]. Block form of S11 derived from Parameter Plan 06 Building Heights Plan 06 Rev A [CD2.26]. Assembled and annotated by Annemarie de Boom.

5.39 The scale and massing of building S4 is overbearing. It does not successfully apply the Commercial Design Principles set out in the Design Access Statement 3.0 Development Vision [CD 1.04] Pages 64 to 66. The elevations are up to 68m in length with little in the way of stepping, kinking, cut outs or changes in materiality. The proposed approach to articulation – which overlays a light brick frame over a darker metal base, breaks the massing of the block in three volumes. However, these are still very large – measuring up to 39m, and are only experienced when viewing the building front-on, as shown in Figure 13 and 14 on Page 29.

5.40 It should be noted that the submitted colour elevation drawings provided as part of the application mistakenly scale people to be 2.1m tall as illustrated in Figure 15 Page 30. This represents a 24% increase on the average height of a person in the UK, which in 2021 was 175.9 cm for men and 162.4 cm for women averaging to 169.2 cm (source www. statista.com). This is the equivalent of 7.4 metres or nearly 2 storeys as illustrated in Figure 16 Page 30. The drawing of the trees is also misleading as the shape and proportion is that of a young tree, yet it is sized as a semi-mature tree. This gives the impression that the building is considerably smaller than it will appear in reality.

5.41 For a more realistic impression of building scale, in Figure 13 Page 29 I have used the black and white elevation drawings provided in the application pack and have added a person at 1.69m to provide the right sense of scale.

5.42 As evidenced above, the proposed elevation design fails to successfully break down the massing of the building and result in a lack of human scale. It also fails to achieve the level of diversity and visual interest required to comfortably define and enclose surrounding streets.

5.43 When viewed on the approach from the railway station, the size and proportion of the two visible brick elements of S4 do not feel well-balanced. The element that overhangs and demarcates a cut-through to the residential quarter feels too small in comparison to the adjacent element as is illustrated in Figure 17 Page 31. It does not provide a coherent, place-responsive design, nor create an interesting vista or focal point along this important route. Accordingly, the building is not mindful of its impact on its surroundings.

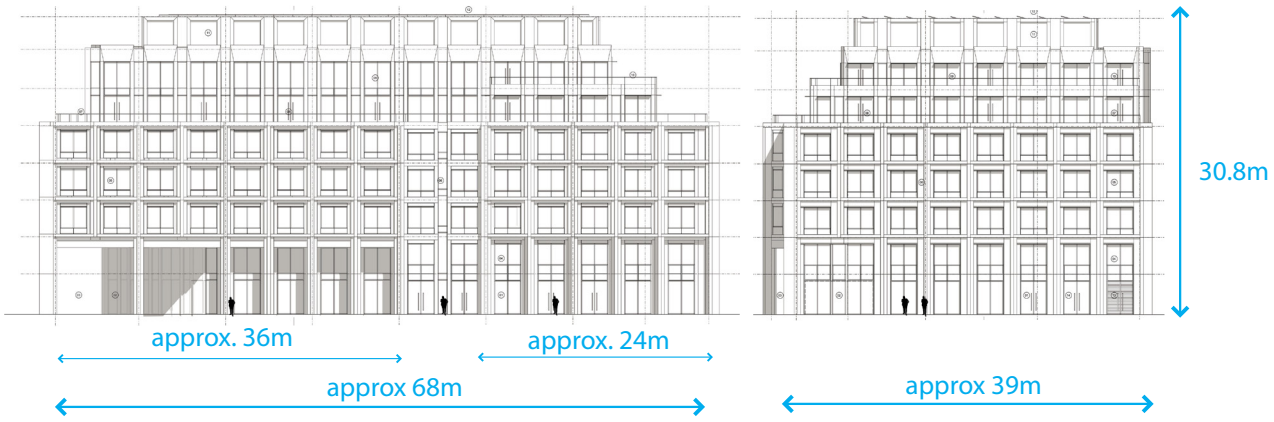


Figure 13 Scale and massing of S4

S4 Proposed North-West Elevation [CD1.155] and S4 Proposed South-West Elevation [CD1.154]. People (1.69m) added and annotated by Annemarie de Boom.

Figure 14 Illustrative view of S4 Milton Walk and Chesterton Way corner

From Design Access Statement 7.1 One Milton Avenue Part 2 of 3 (CD1.09b) Page 234

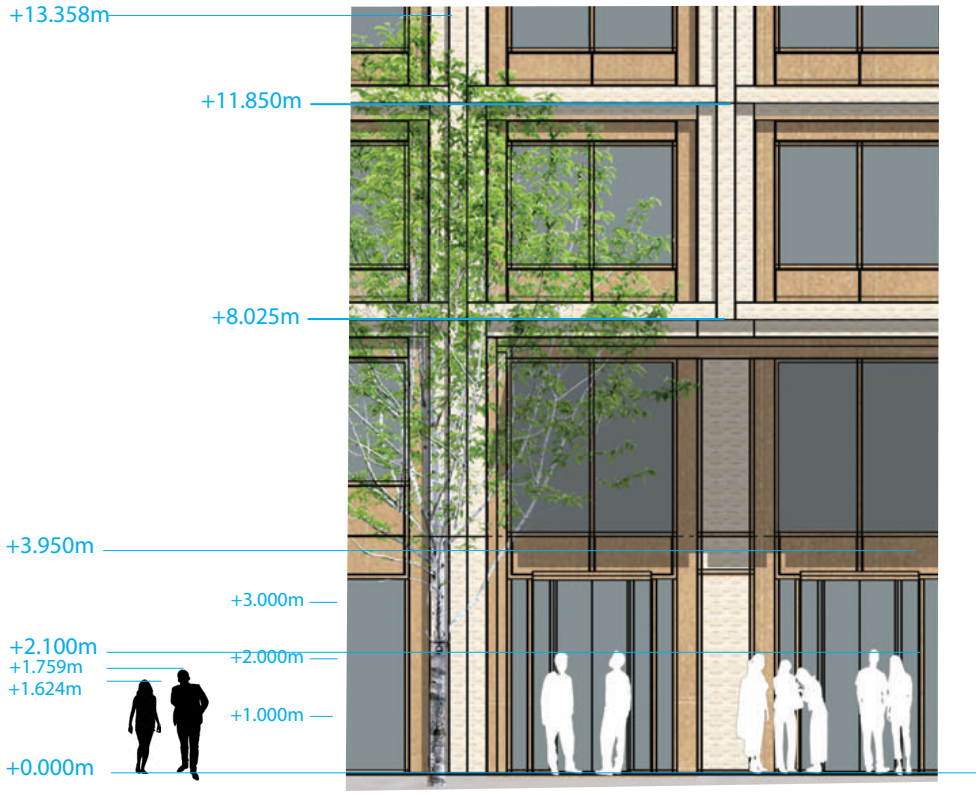


Figure 15 Size of people in submitted elevation drawings

Elevation S4 Proposed East Elevation [CDI 1.152]. Cropped and annotations in blue and correctly scaled people in black added by Annemarie de Boom

Figure 16 Massing of S4 in proportion to size of people on drawing

S4 Proposed East Elevation [CDI 1.152]. Buff massing silhouette at +24% added by Annemarie de Boom

Figure 17 S4 unbalanced elevation facing Milton Avenue

From Design Access Statement 7.1 One Milton Avenue Part 2 of 3 [CD1.09b] Page 232. Diagram of elevation design by Annemarie de Boom

5.44 The design of S4 turns it back to Chesterton Way, where the fire exit, entrance to basement car parking, sub station etc are located as illustrated in Figure 18 on Page 32. This will result in a relative poor quality environment, exacerbated by absence of street trees to soften impact. This is not considered an appropriate response to this strategic cycle route.

5.45 Furthermore, the "back" environment of this elevation is not compatible with the residential development to the west. The design of S13-S16, as set out on the illustrative masterplan shows the design intent for Chesterton Way to be a "front door address". It includes entrances to the building cores as well as front doors to the individual properties (maisonettes) and residential gardens between the steps of the block as illustrated in Figure 19 Page 33.

5.46 The starkly different approach to "fronts" and "backs" between Block S4 and S13-S16 results in a lack of cohesion on Chesterton Way and fails to deliver a clear identity and sense of place. It is also a further demonstration of the failure of S4 to provide a successful mediator between 1 Cambridge Square and the residential quarter.

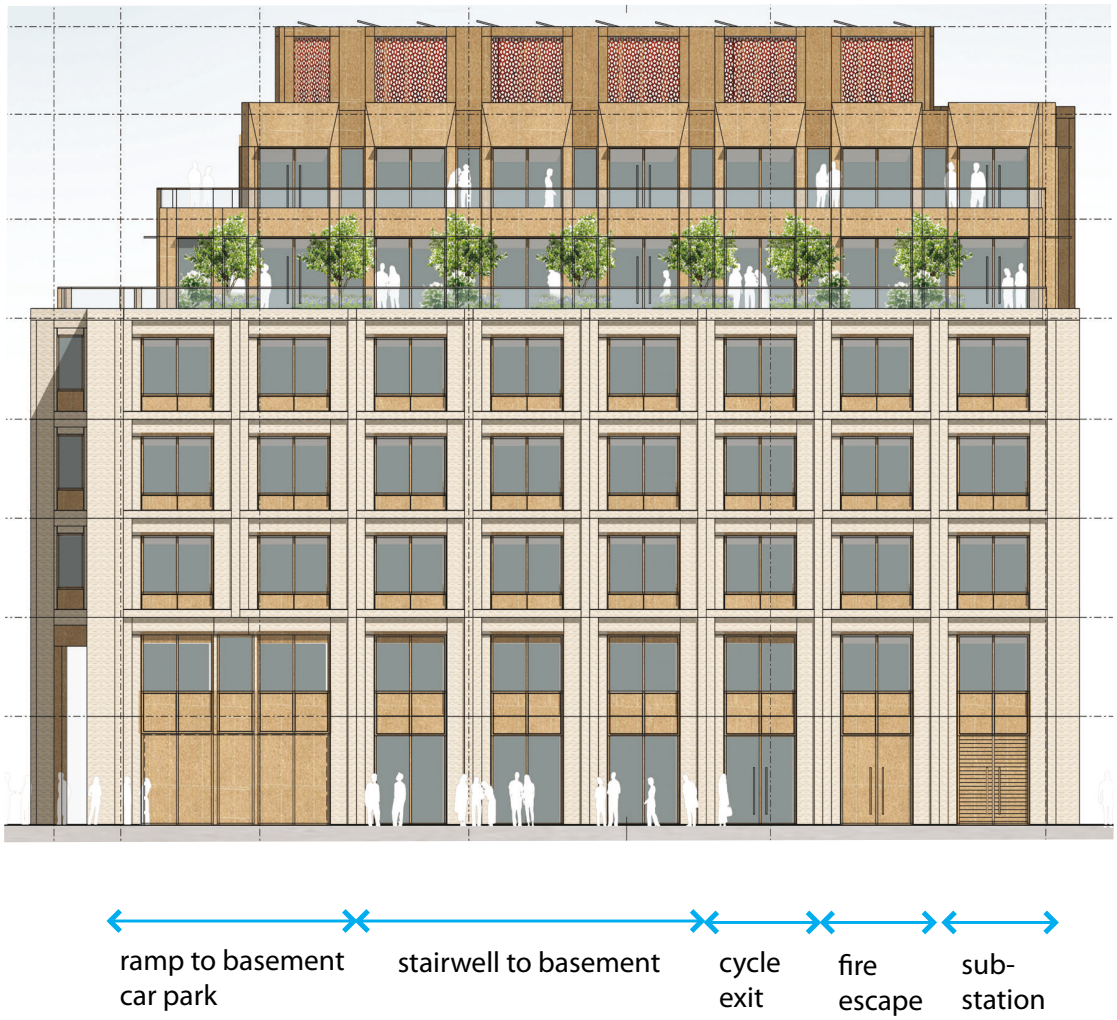


Figure 18 The back elevation of S4 on Chesterton Way

S4 Proposed South-West Elevation [CD 1.154]. Annotated by Annemarie de Boom

Figure 19 Inconsistent frontage environment on Chesterton Way

Block and dwelling outline derived from the Illustrative Masterplan Ground Floor Rev B [CD2.88]. Annotations of front doors in blue and and residential gardens in green by Annemarie de Boom based on Design Access Statement 6.2 Residential Site S11- S21 Part 2 of 5 [CD1.08b] Page 188 and Landscape Masterplan Rev P3 [CD2.31]

Buildings S6 and S7

5.47 S6 and S7 front onto the railway tracks to the east and Station Row to the west. These include two lab-office buildings. The footprint of S6 and S7 measure approximately 50m x 60m and 50m x 70m. The buildings are typically between 22.1m and 20.9m tall reduced to 17.6m and 13.4m along the edges.

5.48 S6 and S7 create a hard and nearly continuous edge against the railway line and landscape beyond. They are taller and more continuous than the recommended heights set out the LVCIA and Townscape Strategy. The articulation of the blocks is not considered successful in breaking down the massing when viewing the development from further east.

5.49 The modulation of the building line at block and masterplan level is too subtle to be read at a distance. Although it creates space for large species trees these will not grow tall enough to break the ridgeline of the blocks which will dominate the skyline. Furthermore, the proposed stepping in height predominantly occurs along the edges of the building and has limited impact when seen from a distance as it does not create significant sky gaps.

5.50 Overall, the scheme appears as a relatively tall “urbanised wall” rising above the tree line and creates an abrupt transition to the landscape. This goes against design guidance set out in District Design Guide and the Townscape Strategy.

5.51 The harm this inflicts on the setting of heritage and landscape assets as will be set out by my colleagues Christian Brady and Nigel Wakefield.

5.52 Blocks S6 and S7 are near identical in design. Articulation is achieved through stepping in height and building lines to defines four “bays” of two designs in a A-B-A-B style arrangement. This is emphasised by a change in materiality. Although this approach is considered successful in breaking down the massing of the individual buildings, this positive impact is lost by the proposed repetition of the same design across both blocks. This repetition undermines the approach to use articulation to stop long elevations from becoming boring and overbearing.

5.53 When viewed from an oblique angle, as experienced when moving along Station Row, the buildings present a continuous frontage of some 160m in length as illustrated in Figure 20 and Figure 21 on Page 35. This is nearly 2/3rd of the total length of Station Row. The experience of moving along this street will lack variety and human scale. The buildings will feel boring and overbearing.

5.54 Furthermore, there appears to be no design justification in the masterplan for this “copy and paste” approach, as all the other buildings are significantly different in architectural style. The lack of diversity and variety in this part of the scheme feels at odds to its immediate context and disrupts the sense of rhythm achieved by having blocks of similar sizes, thus further weakening place identity.

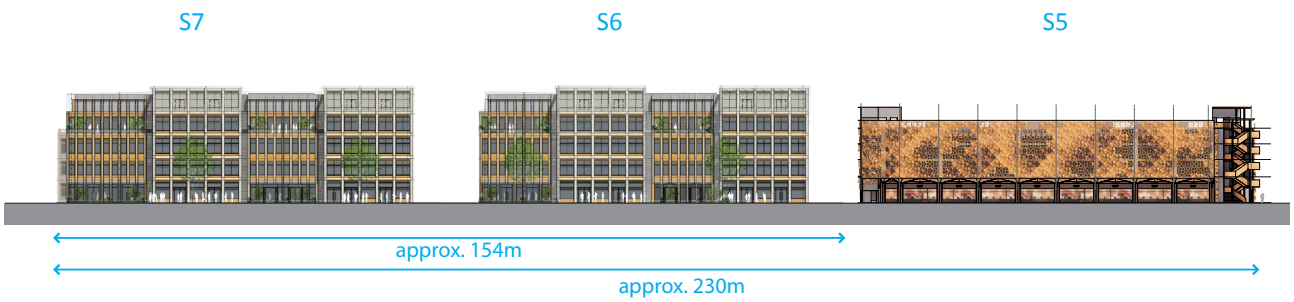


Figure 20 Context elevation for S6 and S7

S5 Western and Eastern Elevations [CD1.166] and S6 and S7 Combined North-West Elevation Rev 01 [CD2.85]. Assembled and annotated by Annemarie de Boom

Figure 21 Illustrative view of S6 and S7 from the railway line

From Design Access Statement 7.2 1 and 3 Station Row Part 1 of 4 [CD1.10a] Page 258

D Height, massing and form of S8 and S9, and S11 to S21

5.55 S8 and S9 occupy the area known as the Triangle Site. S8 (Two Milton Avenue) is an office building, set over 7 floors, including basement and plant. S9 (One Chesterton Square) is a lab-office building, also set over 7 floors including basement and rooftop plant.

5.56 S11-S12, S13-S16 and S17-S21 are known as the residential quarter. They enclose a courtyard garden named “Chesterton Gardens”.

5.57 Consent is sought for Outline only for these buildings. Parameter Plans 03, 04 and 05 define the maximum building envelope of basement, ground and typical floor level. Parameter Plan 06 establishes maximum building heights. Parameter Plan 07 establishes the edges with activated ground floor frontages and Parameter Plan 08 identifies the location of building entrance points for pedestrian and cyclists and the vehicle entry/exit points to basement car parks. In addition, Parameter plan 09 establishes the extent of the landscaping which is provided as a detailed part of the application.

5.58 The parameter plans also set out a series of commercial and residential design principles related to massing and articulation.

5.59 The Design and Access Statement include detailed plans and visualisation of the proposed buildings. These are for Illustrative purposes only but demonstrate design intent and are reflective of the parameter plans.

5.60 The detailed public realm designs abut, and provide a high degree of “fix” to the illustrative building lines of S8 to S21.

5.61 For S8 and S9, consent is sought for maximum building heights are up to 24m (S8) and 26m (S9), dropping to 21m and 22m respectively along the edges. For S11-S21, consent is sought for maximum building heights are up to 30m to the north and 24m to the west. The 30m elements would be seen rising above and beyond S6 and S7.

5.62 The height and massing of S8 and S9 and the residential quarter S11-S21 has a negative impact on long distance views from the east as demonstrated by Figure 7 on Page 25. They can be clearly seen rising above and beyond above S6 and S7, exacerbates the appearance of the development as dense, solid and hard urban edge resulting in an overbearing presence on the landscape.

5.63 The height and massing of blocks S13-16 also has a negative impact on views from Discovery Way to the west. The blocks rise above the treeline. And sky gaps are minimal thus creating the appearance of an urban wall. This has an overbearing presence on the existing small-scale, single storey homes as demonstrated by Figure 10 on Pages 26.

5.64 This is explained in further detail by my colleagues Nigel Wakefield and Christian Brady.

5.65 Within the masterplan area, there is no urban design justification for the buildings to rise in height towards Cowley Circus. Although the modulation of the blocks is supported, the stepping in height is not.

5.66 The parameter plans make provision for a shared basement car park accessed through S9 and linked underneath Chesterton Square to S8. The location of this basement restricts the location and amount of tree planting in the Chesterton Square. This compromises the quality of the design as will be discussed in further detail by my colleague Nigel Wakefield.

5.67 Parameter plan 07 indicates that there is no activation of ground floor sought for the northern side of Building S9. This is also where the entrance to the car parking and plant is located. Thus, it seems to be considered the "back" to the building as illustrated in Figure 22 Page 37.

5.68 This creates a sense of confusion about the role and identify of Wild Park. Is this an important open space resource to be used and enjoyed by the future community? If so, a positive and active edge needs to be provided. Or is it an area with primarily an ecological and drainage function? This may make a "back" more acceptable within the scope of this planning application, but this is not compatible with the vision for this space as set out in the wider long term masterplan that includes the redevelopment of land to the north.

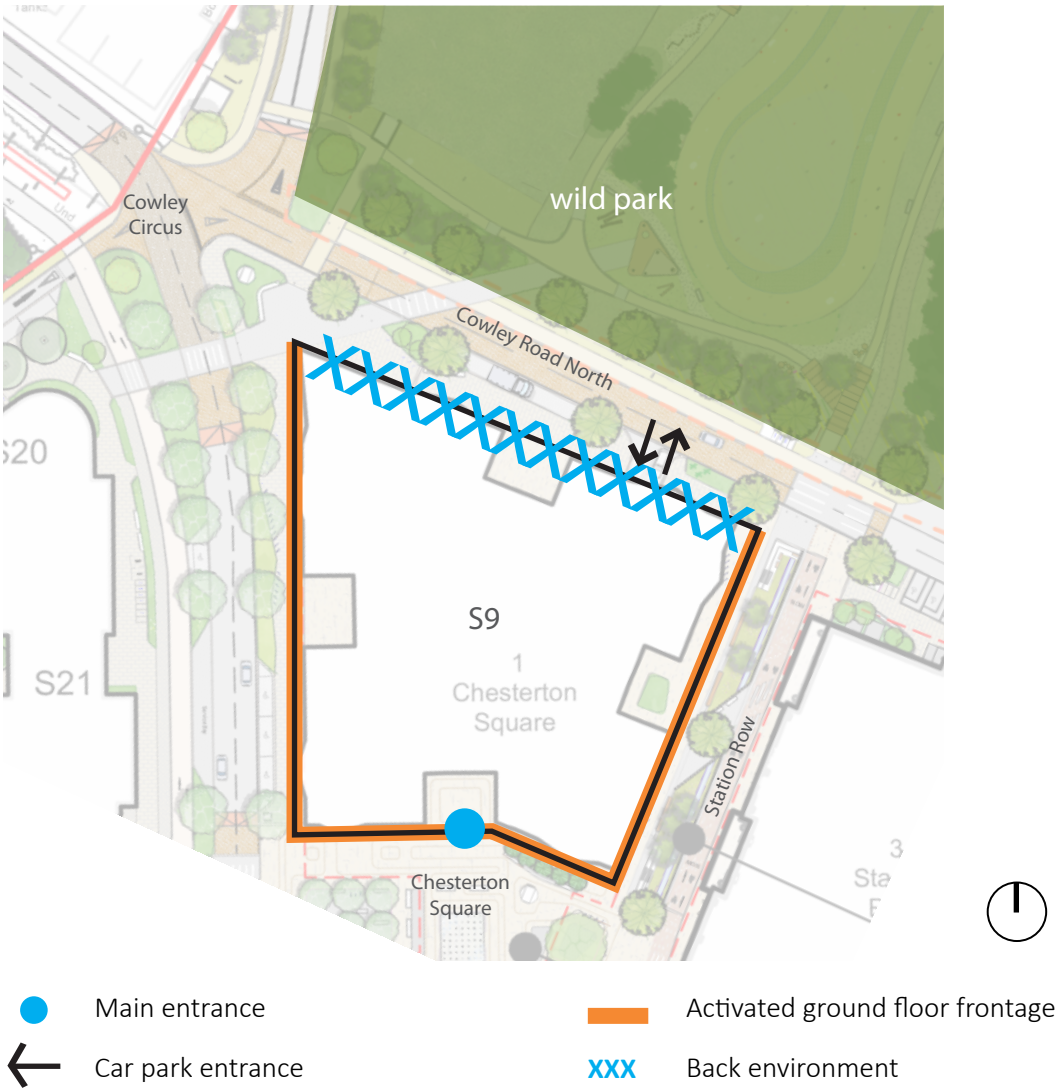


Figure 22 Relation of S9 with Wild Park

Block outline, entrance details and activitated ground floor frontages derived from Parameter Plans Proposed Uses Ground Floor Plan 07 Rev A [CD2.27] and Access Plan 08 Rev A [CD 2.28]. Overlaid on Landscape Masterplan Rev P3 [CD2.31] and annotated by Annemarie de Boom

5.69 The form and siting of S9 and S17-21 fails to provide an appropriate sense of place to Cowley Circus. This space marks an important moment in the masterplan, where Cowley Road turns a corner and transitions into Milton Avenue enroute to and from railway station. The space does not positively define and enclose the space, but "leaks" away in all directions. The lack of a clear identity is exacerbated by a lack of compatibility and cohesion in the building forms of S9 and S19-S20 as stipulated in the parameter plans.

5.70 The form and siting of Buildings S11-12, S13-S16 and S17-S21 results in a high number of single aspect units. This compromises the health and well-being of future residents and does not constitute good design. This can not be justified based on urban design considerations. This is explained in further detail below.

E Cycle store location and provision

5.71 Reason for Refusal 3 Design which states that *"The proposed development, through its over reliance on two tier cycle parking together with the poor relationship of some cycle access points in relation to cycle ways, fails to provide convenient and accessible provision for cycle parking and does not sufficiently promote active travel."*

5.72 I agree with this statement as explained in further detail below.

Cycle stores to Block S9

5.73 The building entry point for cyclists to S9 is located on the northern side of the building. This is the location furthest away from the main entrance and – as it is also provides access to the plant, refuse store and basement car park – considered as the "back" of the building.

5.74 Sending cyclists to the back of a building is not considered compatible with a development that seeks to promote walking and cycling as the primary modes of transport.

5.75 Furthermore, the store is not directly accessible from the cycle paths on Milton Avenue (which is located on the other side of the road) or Station Row. When arriving from Station Row, which provides the most direct route to the station and the city centre, cyclists cross the path of vehicles entering and existing the basement car park, creating an area of potential conflict as illustrated in Figure 23 Page 39. This compromises the convenience and attractiveness of using the bike store.

5.76 The detailed design for the public realm proposes a service bay immediately outside the entrance to the cycle store, blocking direct and convenient access to Cowley Road north. This is likely to result in cyclist using the pavement causing conflicts with pedestrians.

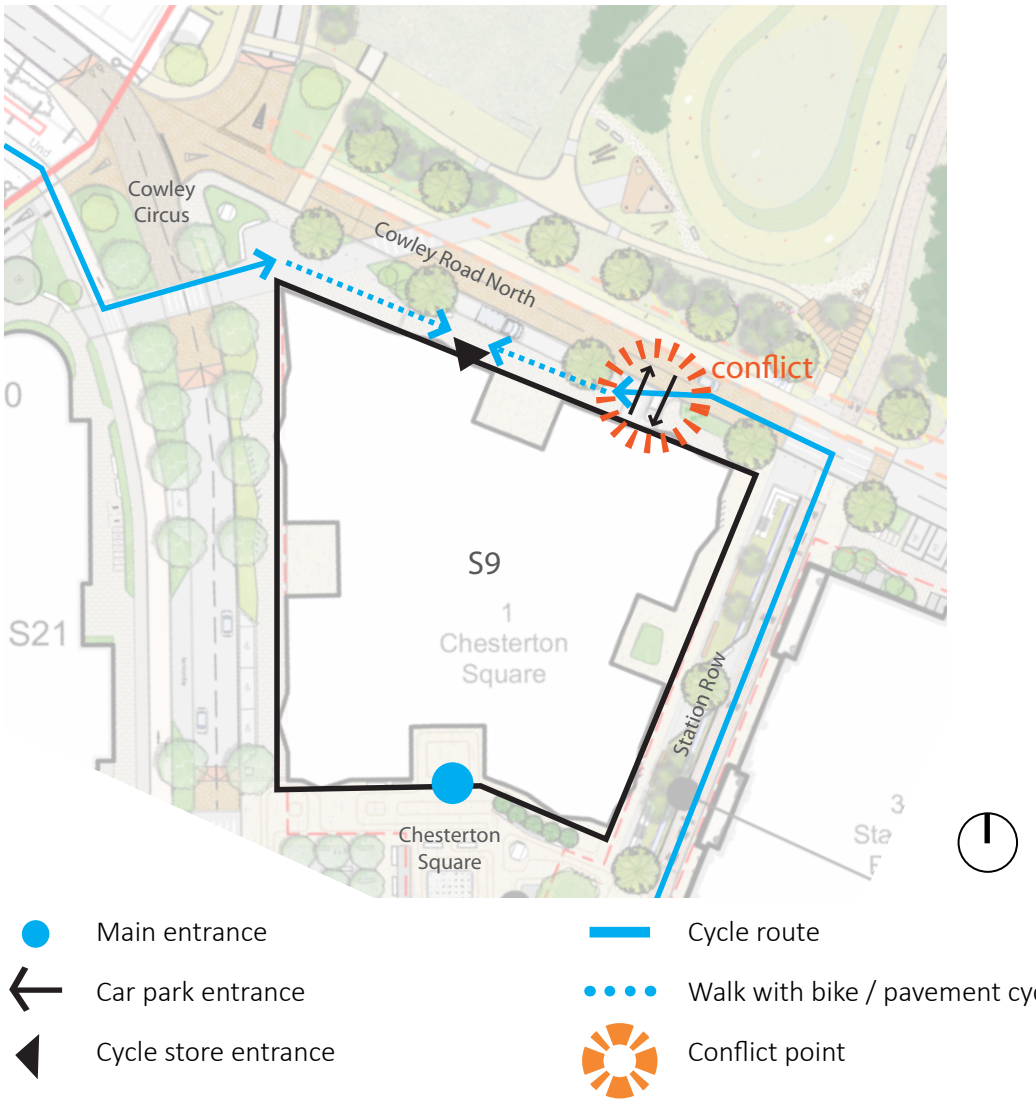


Figure 23 S9 cycle store access

Block outline and entrance details derived from Parameter Plan Access Plan 08 Rev A [CD 2.28]. Overlaid on Landscape Masterplan Rev P3 [CD2.31] and annotated by Annemarie de Boom

Cycle stores to S11-21

5.77 The proposed entrances to the cycles stores of Blocks S11 to S21 are not well coordinated with the design of the public realm, as illustrated in Figure 24 Page 40.

5.78 The majority of cycle entrances are located on the inside of the blocks and accessed off the courtyard garden. Yet the design of Chesterton Gardens makes no particular provision for cyclists and a large number of cycle movement here are likely to cause conflict with the predominant purpose of the space for play and relaxation.

5.79 There are three entrances proposed to cycle stores in Building S13-S16 from Chesterton Way. But the public realm design for this street proposes near continuous on-street parking in front of the building. There is just a single break in the row of parking, but this is proposed as a planted verge. To access the cycle path, which is located on the far side of Chesterton Way, cyclists would be required to walk around the line of parked cars – a distance of up to 70m. This is not convenient and likely to result in cycling on the pavement.

5.80 There are also three entrances proposed to cycle stores in Building S17-S21 from Bramblefields Way. Bramblefields Way is a one-way street (northbound) and the detailed design for the public realm does not propose a contraflow cycle lane. Furthermore, the tight alignment of the street and building as fixed in the parameter plans would not allow for one to be introduced. Any cyclist seeking to join the strategic cycle route along Chesterton Way would be required to walk 150m along the footway. This is unlikely to be acceptable to most cyclists and would result in cycling on the pavement or on the carriageway against the flow of traffic. This would potentially endanger cyclists and / or pedestrians.

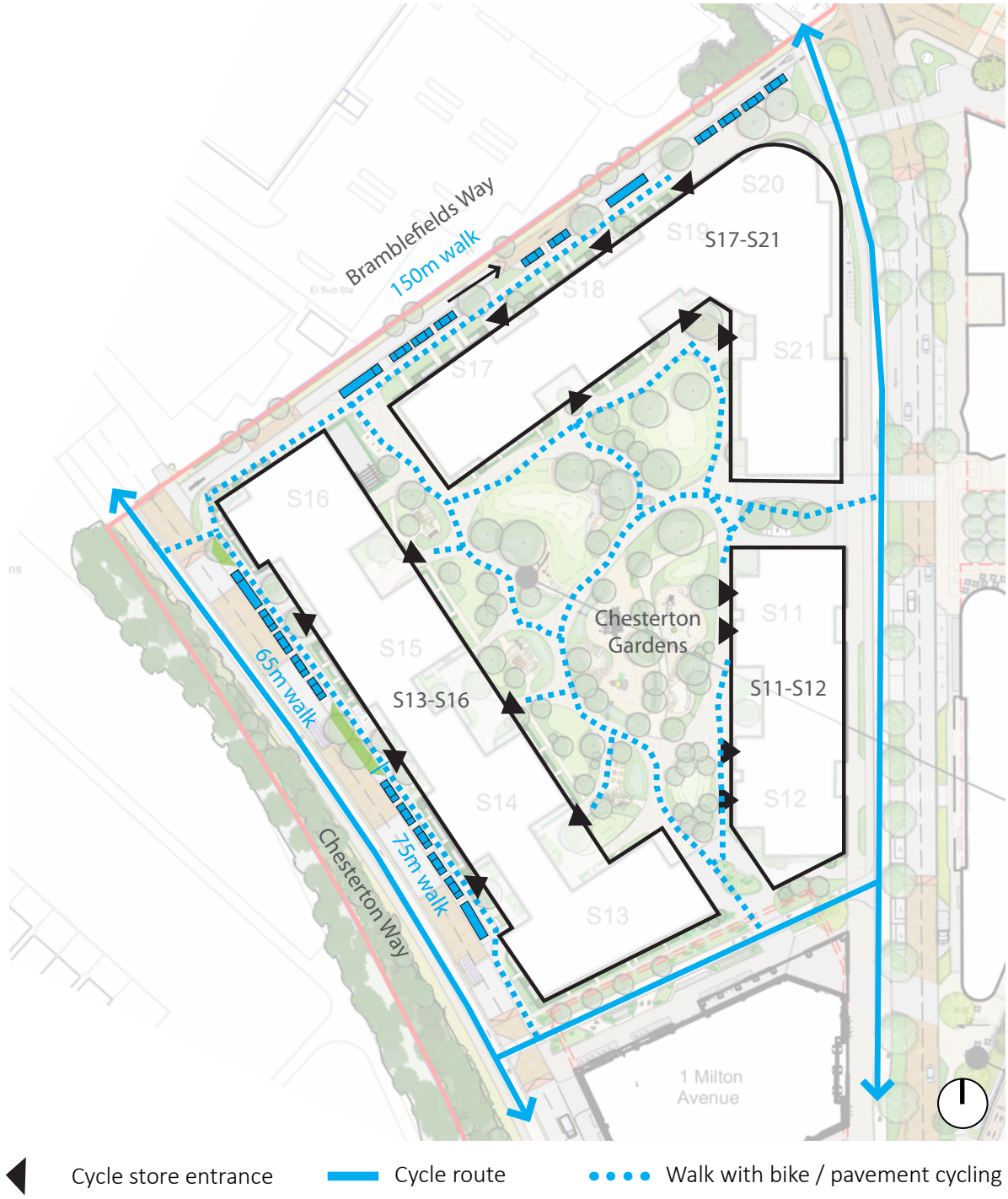


Figure 24 Cycle store access to residential quarter

Block outline and entrance details derived from Parameter Plan Access Plan 08 Rev A [CD 2.28]. Overlaid on Landscape Masterplan Rev P3 [CD2.31] and annotated by Annemarie de Boom

Use of two-tier cycle racks

5.81 Within the commercial quarter 65% of the cycle parking is provided in two-tier cycle racks. Camcycle commented as follows.

5.82 "The Cambridge cycle parking guide states that two-tier parking should be seen as a part solution only and on constrained sites. The main issues with two-tier cycle parking racks are that they are hard to use and there is a risk of hitting your head on the upper racks. As a new development we do not consider this site overly constrained. We propose that no more than 20% of cycle parking is provided by two-tier systems".

5.83 The use of a two-tier cycle parking rack is inconvenient and is contrary to Policy HQ/1 Sub-paragraph which provides for safe, secure, convenient and accessible provision for cycle parking and storage within the development.

5.84 Furthermore, where cycle stores are inconvenient to use, cyclists are more likely to park their cycle on the street, using spaces intended for visitors or chaining it to tree guards, lamp columns etc, cluttering the public realm.

5.85 In conclusion, the proposals do not provide a consistent high quality design for cyclists. This will discourage some people from choosing cycling over the use of a private vehicle as the preferred mode of transport. This goes against national and local planning policy.

Quality of homes

5.86 The form and siting of Buildings S11-12, S13-S16 and S17-S21 as fixed by the parameter plans will results in a high number of single aspect dwellings. These do not constitute well designed homes.

5.87 The inherent problems with single aspect dwellings include less daylight and a smaller chance of direct sunlight for longer periods (especially on north facing units), a lack of natural cross-ventilation, an increased risk of overheating (especially of south and west facing dwellings), a limited choice and extent of views, and no access to an alternative quieter or cooler side of the building.

5.88 The appellant has indicated that the illustrative design for the proposed residential development will result in a 24% of single aspect dwellings. This amount to 102 homes. 102 single aspect homes on a large and relatively unconstrained site does not constitute a high quality design.

5.89 Furthermore, I consider the proportion single aspect housing will be significantly higher than the figure indicated by the appellant.

5.90 The proposed residential blocks rely on a stepping building form to create additional external walls to units as stated on Parameter Plans 03-05 - Design Principle 1b which requires *"Stepping to introduce more double aspect units"*. The application of this principle is demonstrated in Section 6.2 of the Design Access Statement 6.2 Residential Site S11- S21 Part 4 of 5 [CD1.108d] Pages 194-196.

5.91 However, the London Plan Guidance on Housing Design Standards (Consultation Draft February 2022) Appendix 2 states that:

"A dual aspect dwelling is one with opening windows on two external walls which may be on opposite sides of the building of on adjacent sides of a dwelling where the external walls of a dwelling wrap around the corner of a building. One aspect may be towards an external access deck or courtyard, although the layout of the dwelling needs to be carefully considered in these cases to maintain privacy. The design of a dual aspect dwelling should enable passive / natural ventilation across the whole dwelling. The provision of bay windows, stepped frontage, shallow recesses, or projecting facades does not constitute dual aspect."

5.92 I agree with the above interpretation as an opening window onto a short section of external wall does not deliver the benefits of a dual aspect over single aspect dwelling set out in paragraph 5.87.

5.93 Furthermore, there may be issues approving a stepped frontage at Reserved Matters stage as a stepped frontage has some inherent issues. This includes the impact of the projecting volume on sun and daylight access to the adjoining 'stepped back' unit (especially on a north-south orientated blocks). For example, the proposals for S11-12 would not meet the 45 degree rule set out in the District Design Guide as indicated on Figure 25 Page 42. Also, the introduction of a sizeable window on a second external wall created by a stepped frontage could give rise to overlooking issues as also illustrated in this Figure.

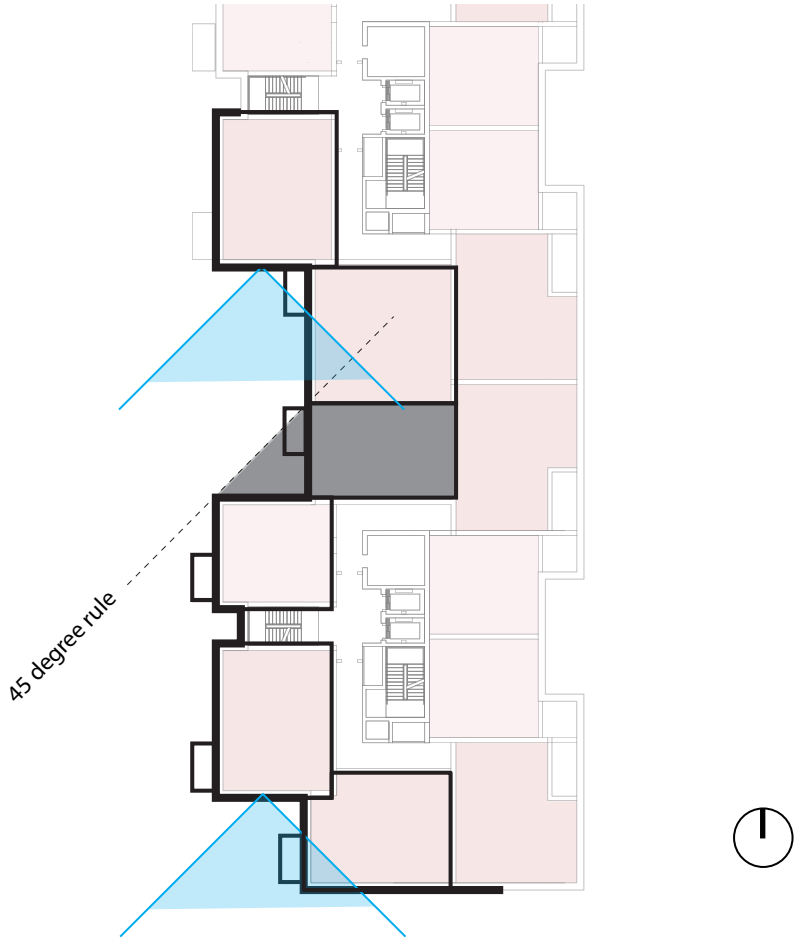


Figure 25 Impact of a stepped building frontage on overshadowing and overlooking

Block and dwelling outline derived from the illustrative layouts provided in the Design and Access Statement 6.2 Residential Site S11- S21 Part 4 of 5 [CD1.108d] Page 194.
Overlooking (blue) and overshadowing (grey) annotations by Annemarie de Boom

5.94 Figures 26 to 28 on Pages 43 and 44 illustrate the number of dual aspect dwellings on a typical floor plan of the proposed residential blocks in proportion to the number of dwellings that are single aspect when considering the definition of a dual aspect dwelling and take account of the design constraints on a stepped frontage as described above.

5.95 This demonstrates that the proportion of single aspects homes on a typical floor level of the illustrative design is over 50%. There is little confidence that this figure can be much improved upon considering the constraints imposed on the design and siting of the blocks by the detailed parameter plans.

5.96 NPPF 134 provides that that development that is not well designed should be refused, *"especially where it fails to reflect local design policies and government guidance on design."*

5.97 The high number of single aspect dwellings contravenes government guidance contained within the National Design Guide paragraph 123 that states that well-designed homes and buildings need to provide good quality internal and external environments for their users to promote health and well-being; and paragraph 125 that states that well designed homes and buildings are efficient and cost effective to run by maximising natural ventilation and avoid overheating; and provide good standards of sunlight and daylight.

5.98 The proposals for the residential quarter as would come forward under the tightly defined parameter plans would include a very high number of single aspect dwellings. These does not constitute a well designed home and I agree that planning permission should be refused on this basis.

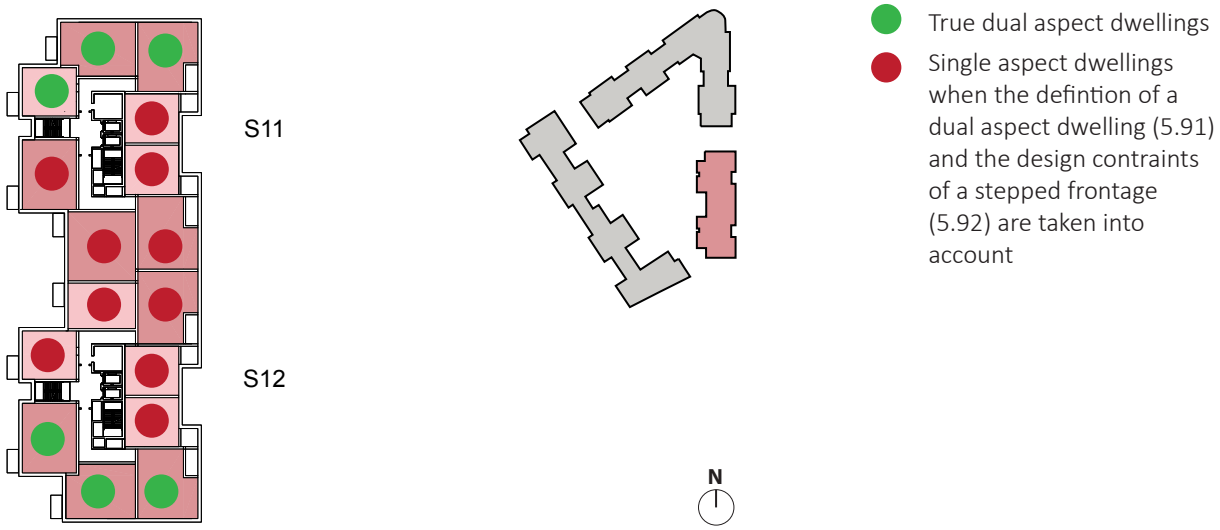
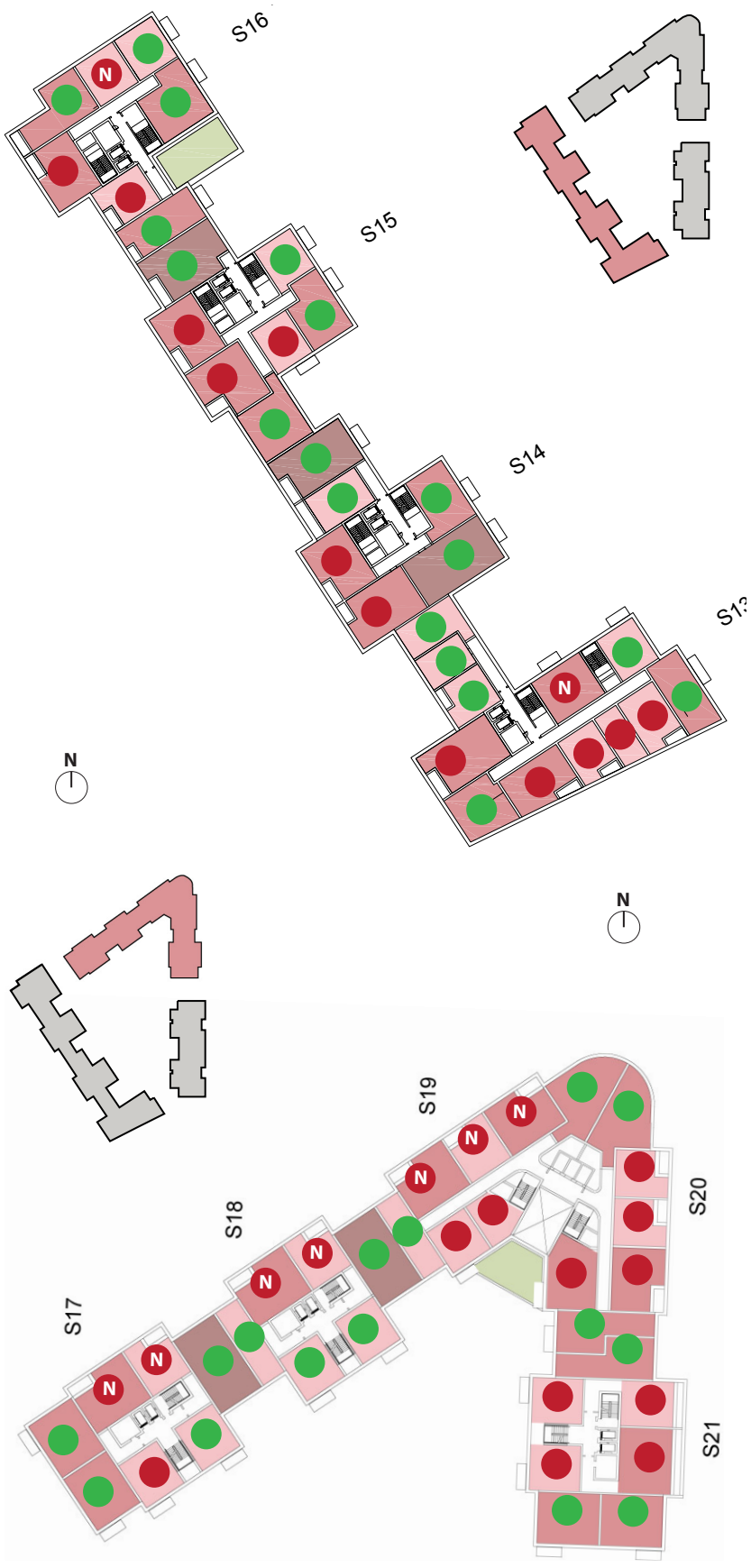


Figure 26 S11 and S12 single aspect dwellings

Block and dwelling outline derived from the illustrative layouts provided in the Design and Access Statement 6.2 Residential Site S11- S21 Part 4 of 5 [CD1.108d] Page 194. Red and green annotations by Annemarie de Boom



- True dual aspect dwellings
- Single aspect dwellings when the defintion of a dual aspect dwelling (5.91) and the design contraints of a stepped frontage (5.92) are taken into account
- North-facing single aspect unit (as per the above definition)

Figure 27 and 28 S13-S16 and S17-S21 single aspect dwellings

Block and dwelling outline derived from the illustrative layouts provided in the Design and Access Statement 6.2 Residential Site S11- S21 Part 4 of 5 [CD1.108d] Pages 195-196. Red and green annotations by Annemarie de Boom

6. Conclusions

6.1 The proposed design for a mixed use redevelopment on land off Cowley Road, Cambridge fails to create the high quality of place that must be delivered at this highly sustainable and strategic significant location at the edge of the City of Cambridge and gateway to the North East Cambridge district.

6.2 The cumulative impact of the design proposals relating to land use distribution, block structure and urban grain, and the height, massing and scale of design of buildings results in a development that lacks variety and a comfortable human scale, and does not positively contribute to local context.

6.3 The form of the proposed buildings does not consistently deliver strong visual relationships, and at points, fail to reflect movement hierarchy. Thus, the proposals fail to deliver a cohesive sense of place.

6.4 The proposals fail to provide convenient and accessible provision for cycle parking, caused by the poor relationship of some cycle access point in relation to cycleways and the design of the public realm. There is also an over-reliance on two tier cycle parking which is inconvenient to use. This will creates barriers to choosing cycling over the use of private motorised to some people and not support a modal shift to active travel modes.

6.5 The high proportion of single aspect units resulting from the proposed layout of, and block typology for the residential quarter will not result in a high quality living environment for all future residents. The scope to address this issue at subsequent planning stages is limited given the constraint imposed on the design by the tightly defined parameter plans.

6.6 Having assessed the design issues relating to the appeal proposal in the context of the relevant design policies and urban design guidance, I consider that the appeal proposal does not meet the local and national design policy and guidance requirements for a high quality new development.

6.7 On this basis, and in conjunction with the evidence provided by my colleagues, I support the reasons that were given by the Council for refusing this proposal on design grounds.