

Appraisal of Design Proposals
New Barnet Victoria Quarter
for the Save New Barnet Group



August 2021



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About the authors

Fiona Henderson BA(Hons) Dip Arch PGCE qualified as an Architect in 1991. She specializes in residential design and masterplanning, working in the 1990s as an Associate Architect at the award-winning architectural practice Pollard Thomas Edwards where she led on the provision of social housing including the regeneration of the North Peckham Estate. In the early 2000s she began her own architectural practice which she ran for a number of years, focusing on high quality sustainable residential design before retraining as a teacher at Middlesex University, qualifying in 2012. She has taught at Danegrove Primary School in East Barnet since 2014.

Fiona has been an active member of the local community group Save New Barnet (SNB) since its inception in 2008. She worked closely with other local designers to create an alternative community led masterplan for the gasworks site and Victoria Recreation Ground in 2008-9. This proposed a medium rise residential development with community facilities as an economically realistic but more sensitive alternative to the supermarket led development being proposed by developers at the time. The SNB masterplan formed the basis of the existing planning approvals of 2015, 2016 and 2017 and included the New Barnet Leisure Centre, now in use.

Nick Hufton BA(Hons) Dip Arch RIBA MAPM AAPS qualified as an Architect in 1990 and is a member of the RIBA. He is also qualified as a Project Manager (MAPM) and as a Principal Designer under the CDM regulations and is an Associate member of the Association for Project Safety (APS). He has worked for the award winning Architectural and Masterplanning firm Shephard Epstein Hunter for over 20 years, specializing in residential, education and community projects, becoming a Director in 2008 and Managing Director in 2017. His projects include Enfield Town Library (London Planning Association Best Built Project Award 2011) and the East City Point residential development in Canning Town (Local Authority Building Control Best High Volume Residential Development National Award in 2018). He has acted as expert witness at a successful planning appeal inquiry in 2008 and regularly gives talks on design, including most recently on safety issues relating to refurbishment of 1970's tower blocks. Since 2017 he has also facilitated a community led masterplan for a disadvantaged estate in Milton Keynes, with residents themselves selecting a preferred option at ballot in 2019.

Nick does volunteer work for a number of community organisations, including OnlyConnect, a charity for ex-offenders and Transitions, a social enterprise for refugees. He supported the residential development proposals of 2014, 2016 and 2017, but spoke against the proposal for 652 units at the Barnet Planning Committee in 2020 which was unanimously rejected.

Fiona and Nick have lived in New Barnet since 2006. They have been married for almost 30 years and have two grown up children who attended local schools. They are passionate about good, community centred design and are committed to ensuring that New Barnet gets appropriate development of the highest possible quality.





1 Introduction

1.1 Background

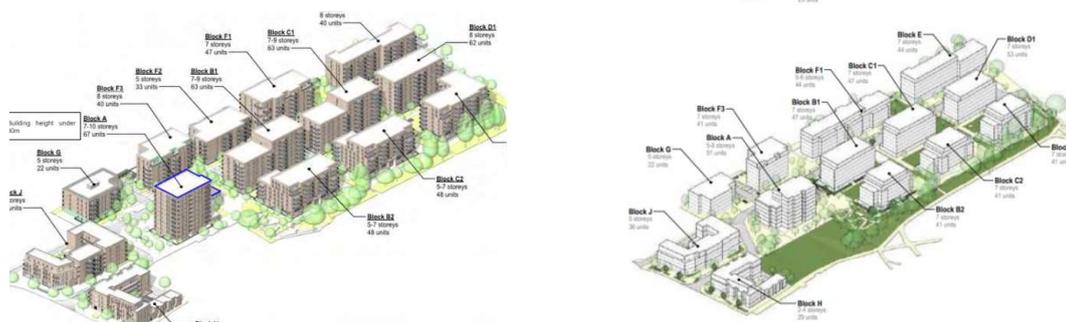
The Save New Barnet community group was set up in 2008 in response to planning proposals for two new superstores. Its focus was to ensure that any new development served to enhance the neighbourhood rather than detract from it. It was and still is keen for development to take place on the gasworks site but in an appropriate form which makes the most of the opportunity to reconnect the site with the adjoining Recreation Ground and the surrounding area. In 2009, the group produced a community led design which was drawn up as a masterplan covering the gasworks site and Victoria Recreation Ground.

The SNB community led masterplan informed the original proposal (by DLA Architecture) which gained planning permission in 2015. This was subsequently amended (2016 and 2017), in response to pressure to increase density on the site. The original 306 dwellings were increased to 371 – an increase of just over 20% - and residents reached a compromise with the developer, accepting a single tall building of eight storeys. Whilst this increased density (122u/ha) represented overdevelopment for a suburban area with a moderate PTAL rating, many key features of the of the original community masterplan were retained.



The 2017 proposal (left) as amended by Levitt Bernstein and reproduced in the Design and Access Statement (DAS): a design that responded to the key features of the site (primarily the railway and the park) with a variety of footprints, massing and building typologies (including flats, maisonettes and houses). The committee report commented that, ‘The design is visually pleasant, well thought out and the materials and details are of high quality. It is also considered that ‘the facades are well articulated and the fenestration rhythm is elegant and clear.’

In 2020, the current developer submitted a substantially revised scheme comprising 652 units, representing an increase in density of approximately 75%. Following unanimous rejection of this proposal, the developer has re-submitted a modified design which delivers 544 units. However, amendments appear so marginal that in the initial pre planning meeting it was noted that, ‘Due to the apparent similarity of the masterplan, officers were concerned that we would need to find graphic way of demonstrating the improvements from the previous application.’



The developer’s 2020 submission (above left) and 2021 re-submission (above right). It is clear that no fundamental changes to the design concept have been made.

By failing to build on or refer to the consented scheme, these proposals ignore and dismiss over a decade of community involvement in the planning process. Furthermore, the DAS for the current proposal attempts to invalidate the consented scheme by using misleading and sometimes demonstrably inaccurate information (see Appendix 2). The developer has proceeded with the bare minimum of dialogue with the local



community. By increasing density without due consideration of context, the new proposal represents a significant reduction in design quality relative to the approved design and contravenes a raft of planning policies and design standards.

1.2 Scope

Placing more emphasis on the importance of design quality has informed recent revisions to both the NPPF and the London Plan and sets the framework within which planning decisions should be made. This report focuses on the quality of the architectural design in the developer's latest proposal and explains in detail how the current design fails to comply with:

- Planning policy in relation to accepted standards of good design.
- Planning policy in relation to requirements for design scrutiny and community involvement.
- GLA pre application advice

2 Planning documents referred to in this appraisal

2.1 List of planning documents

- National Planning Policy Framework (2021), National Design Guide (updated 2021), National Model Design Code(2021)
- The London Plan (2021), London Housing Design Guide(Interim Edition)
- Barnet's Local Plan, Development Management Policies and SPG (residential design guidance), New Barnet Town Centre Framework

3 Good design

3.1 Relevant planning documents and requirement for good design.

Good design is a material consideration for planning and is enshrined in planning policy at national, regional and local level.

National policy (NPPF) is explicit on design quality:

- *'Planning policies and decisions should ensure that developments... are visually attractive as a result of good architecture, layout and appropriate and effective landscaping' (para 130)*
- *'The creation of high quality, beautiful and sustainable buildings and places is fundamental to what the planning and development process should achieve. Good design is a key aspect of sustainable development, creates better places in which to live and work and helps make development acceptable to communities. (para 126)*

Regional Policy (The London Plan) states that:

- *'Housing developments should be of the highest quality internally, externally and in relation to their context and to the wider environment, taking account of strategic policies in the London Plan to protect and enhance London's residential environment and attractiveness as a place to live' (Policy 3.5)*

Local Planning policies in Barnet (**Core Strategy**) reinforce the same message, that high quality design is a priority:

- *'Barnet's Three Strands Approach highlights that the design, layout and use of the built environment can affect the quality of people's lives as well as having an impact on the perception of Barnet as a place and on the vitality of the area. The council wants to provide the right type of housing in the right places using the Local Plan to encourage developers to think creatively about design and layout solutions which respect the generally low-rise suburban character of the borough. By doing this they can provide quality*



homes and housing choice which can help meet peoples' housing aspirations.'

(SPD Residential Development, section 1.3)

- *'The Council expects the highest standards of design in New Barnet which reflects the character of the surrounding suburban area. '(New Barnet Town Centre Framework, Architecture 4.8)*

Measuring 'good design' is both a qualitative and quantitative exercise and planning policies provide a number of key criteria through which the design quality of proposals can be assessed. This appraisal reviews the current application in the light of the criteria set out in the key planning documents as well as associated planning guidance documents which go into greater depth as follows:

- The **National Design Guide** '*...supports paragraph 130 of the National Planning Policy Framework which states that permission should be refused for development of poor design...*' Specific design criteria are also set out in the **National Design Code**.
- The **London Housing Design Guide** provides greater detail covering housing development in London.

3.2 Design scrutiny and the role of Design Review Panels

- *Development proposals referable to the Mayor **must have undergone at least one design review** early on in their preparation before a planning application is made, or demonstrate that they have undergone a local borough process of design scrutiny, based on the principles set out in Part E if they: 1) include a residential component that exceeds 350 units per hectare; or 2) propose a building defined as a tall building by the borough (London Plan, Policy D4)*

Barnet is unusual amongst London Boroughs in that it does not have its own Design Review Panel but, when required to carry out a design review, it contracts out. A thorough design review should have been carried out for Victoria Quarter; the London Plan sets out an absolute requirement for proposals of this size to have undergone at least one design review. None have actually been carried out. There is little evidence either of any formal design scrutiny by LBB; notes on meetings with Fairview appear in the Design and Access Statement (DAS) but, despite FOI requests, minutes to two meetings have not been released and there appears to have been none taken for a third meeting.

Housing density in the current application is around a hundred dwellings fewer than in the refused scheme. This is achieved by a small reduction in height and the omission of a number of 'plug-in' sections to the blocks. There has been no change to the underlying design strategy. As a consequence, many of the design issues which were a problem in the original scheme continue to be a problem in the new. Because this scheme is a high density development, large numbers of residents will be impacted by poor design decisions, making a design review even more critical.

- *For residential development it is particularly important to scrutinise the qualitative aspects of the development design described in Policy D6 Housing quality and standards. **The higher the density of a development the greater this scrutiny should be of the proposed built form, massing, site layout, external spaces, internal design and ongoing management. This is important because these elements of the development come under more pressure as the density increases** (London Plan)*

In the absence of any other formal and transparent design review process, this report provides an analysis of the current proposal as measured against planning guidance and with reference to a number of documents which form part of the application. It should be read in conjunction with the accompanying report (Victoria Quarter: Quantity not Quality).



3.3 Community engagement

- *Design quality should be considered throughout the evolution and assessment of individual proposals. Early discussion between applicants, the local planning authority and local community about the design and style of emerging schemes is important for clarifying expectations and reconciling local and commercial interests. Applicants should work closely with those affected by their proposals to evolve designs that take account of the views of the community. Applications that can demonstrate early, proactive and effective engagement with the community should be looked on more favourably than those that cannot. (NPPF para 132)*
- *Designating appropriate development capacities through site allocations enables boroughs to proactively optimise the capacity of strategic sites through a consultative design-led approach that allows for **meaningful engagement and collaboration** with local communities, organisations and businesses. London Plan Policy D3, (bold as in original)*

The Save New Barnet community group drew up a new masterplan in May 2021 (see Appendix 3) which addressed the design issues in the revised proposal. It also offered scope for some increase in the density in comparison with the approved scheme. On 18th May, this was presented over zoom to the developer who responded a few weeks' later.

None of the SNB community group's suggestions had been incorporated in design revisions even though we now understand that these closely matched suggestions being made concurrently by the GLA (with whom the developer met on 12th May – see Appendix 1). Neither was there any proper discussion, beyond an observation that maisonettes were expensive to build. Initially, the developer showed a drawing which appeared to be a sketch design but proceeded to reveal a computer drawn general arrangement for all the flat blocks, indicating that the scheme was in fact, in the final stages of the design process and suggesting that there was little intention of making substantive revisions as a result of discussions. The developer submitted their revised proposal, comprising approximately 150 documents, only six weeks later and the application was submitted within a day of public consultation closing. This timeline shows that no time was allowed to incorporate suggestions made either by the SNB community group or by the general public.

CONCLUSION: DESIGN REVIEW AND COMMUNITY INVOLVEMENT

- Failure to carry out a design review process does not comply with the London Plan (D4).
- The current application retains the same, flawed site strategy as the previously refused proposal. Fundamental design flaws in a high density scheme will affect many dwellings, meaning that design scrutiny is even more important
- Lack of proper community engagement fails to meet the requirements of the NPPF and the London Plan. No time was allowed to incorporate suggestions made by the SNB community group or the views of the wider community. The views of the community are not reflected in this proposal.

4 Responding to context

4.1 Scale and character

Planning policy encourages new developments to respond sympathetically to context. In terms of the built environment this means observing and analyzing the character and scale of nearby buildings and the layout of streets. It should be the starting point for any new development:

- The **NPPF** summarises the most important aspects of good design in paragraph 130 and states that new development should be '*sympathetic to local character and history, including the surrounding built environment and landscape setting*'.



- The **National Design Guide** stipulates that *‘well designed places are: based on a sound understanding of the features of the site and the surrounding context...; integrated into their surroundings so they relate well to them; influenced by and influence their context positively.’* Similarly, the **National Design Code** states, *‘well-designed buildings need to respect and enhance their built and natural environment surroundings ..’* and *‘Existing character is therefore something that must be understood as a starting point for the design of layouts and buildings so that they fit into and also enhance the character of the local area’*
- At a regional level, **The London Plan** also sets out to ensure that new development *‘is responsive to the site’s context and supporting infrastructure.’*(3.1.1) And the Mayor’s London Housing SPG (Shaping Good Places)requires that *‘the design responds to its physical context, including the character and legibility of the area and the local pattern of building, public space, landscape and topography’*
- Finally, local planning guidance (**Barnet’s Core Strategy**) requires new development to *‘respect the generally low-rise suburban character of the borough’*

New Barnet is an outer suburb - the site lies within 400 metres of the Green Belt – and the scale of building in the surrounding streets reflects this. Photos of neighbouring buildings (below) clearly show the *‘range of two and occasionally three storey semi- detached and terraced houses located to the south and east of the site’* described in the developer’s previous submission. All reference to this suburban scale has been omitted from the current Design and Access Statement (DAS) which now states merely that *‘The existing scale of buildings varies in the surrounding context.’*



Two and three storey buildings on Victoria Road and East Barnet Road establish a suburban scale. Aerial views show the site’s proximity to the Green Belt

4.2 Layout

- *‘Layout refers to how buildings and public and private spaces are arranged on a site, and how they relate to the buildings and space around the site. The layout informs the character and uniqueness of a place, and provides the basic framework on which all other aspects of the development depend.’*
Local plan SPD (Residential Design Guidance)
- *Considering the layout, grain and scale of buildings and spaces in different situations, and drawing inspiration from traditional street patterns, helps to create new developments that fit well into the surrounding context.* (National Design Guide)

The layout of a scheme underlies and informs the design as a whole: using the National Design Guide as a reference, and comparing it to local street patterns (next page), the pattern of development around the site is clearly suburban in character.

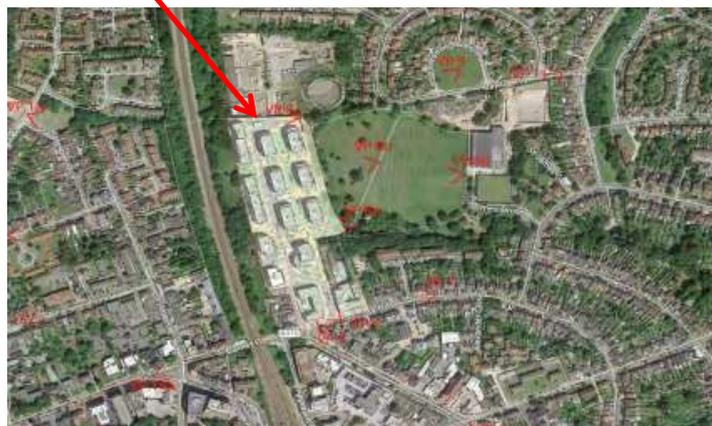
National Design Guide illustrations of street patterns (right)





The gridded site layout in the current proposal (above)

The current proposal does not relate to the pattern of streets in the neighbouring area



New Barnet from the air closely resembles the suburban street pattern in the National Design Guide (previous page)



The existing perpendicular street intersections (above left) are quite different in character to the generic grid proposed for the site

The aerial view of New Barnet (above) shows a street pattern closely resembling the suburban example in the National Design Guide; the area immediately adjacent to the site is typified by generously spaced curving roads and crescents. Housing densities are low. But the proposal's gridded layout (above left) is more in keeping with the illustration of an urban street pattern. And the analysis in the DAS of streets beyond the railway line (left) simply shows several perpendicular intersections. This does not justify a gridded street layout.

4.3 Urban or Suburban?

Although the developer states that *'Establishing a character sympathetic to New Barnet is a key aspect of the proposals'* (Section 6, DAS), there is a lack of clarity in the DAS over what the character actually is. Despite asserting that the site *'lies within an established urban area,'* this view is repeatedly contradicted: the developer's analysis of the consented 2017 scheme comments that landscaping around the finger blocks *'compliments its suburban setting'* (4.12) but the blocks themselves are inappropriate because they *'do not feel suburban in scale.'* Similarly, when analyzing different design options, Option Six was rejected because it *'represented a more urban proposal which contradicted the sites suburban setting and character'*. Even the developer seems to agree that this is a suburban site. Ignoring this context goes against planning policy.

CONCLUSION: SCALE, CHARACTER AND LAYOUT

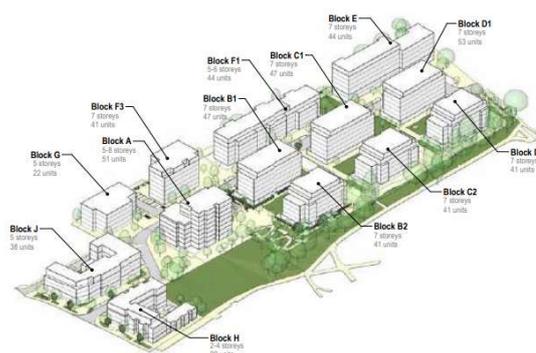
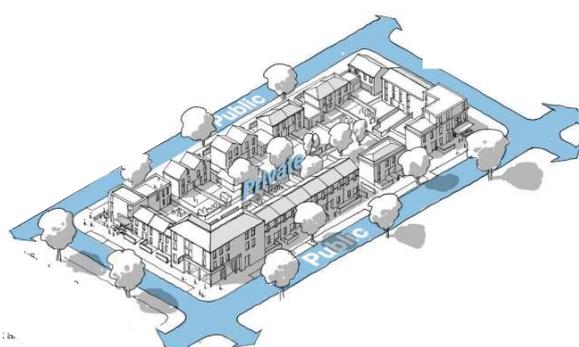
- Looking at the evidence (the density and layout of surrounding streets), the site clearly lies in a suburban setting.
- The latest proposal fails either to fit in with or enhance the character of New Barnet in terms of scale and layout; the scale of the proposals do not bear any relationship to the suburban context.
- The adoption of a gridded street pattern does not foster a strong sense of place. It is a generic layout rather than a site specific one and does not relate to the grain of the suburban streets in the surrounding area. It is this grid which generates the plan rather than any reference to the surrounding context. It provides a poor starting point for a design which leads to multiple design problems as follows:



5 Design issues arising from layout

5.1 Lack of definition between public and private

The developer's gridded layout has more in common with the urban example illustrated in the National Design Guide. However, the form of urban grain promoted in national planning guidance is characterised by perimeter development (below left) which naturally defines public and private space. By contrast, in this proposal single large blocks sit centrally within the squares of the grid; the sense of enclosure is lost and there is no distinction between public and private, front and back. Any sense of place is diluted; the relationship between external space and building is always the same where external space is simply the space left over between the blocks. The title 'Courtyard Scheme' is misleading since it implies a sense of enclosure which does not exist.



The diagram of perimeter building in the National Model Design Code (above left) with its clear definition of public and private realm and corresponding passive security benefits contrasts with the strategy in the current application (above right) where the distinction between public/private and front/back is lost.

The National Model Design Code illustrates a number of development strategies it considers appropriate, referencing traditional forms like the perimeter development illustrated (above). The developer's approach, a single large building sitting centrally in a block, does not feature.

5.2 Uniform typologies, monolithic massing and loss of visual amenity

A generic grid underlies the overall site strategy; the scheme is typified by uniform footprints, blocky massing and repetitive building typologies. This does not enhance the sense of place and visual amenity either for residents or passers-by; there is a 'sameness' throughout the site, in terms of both landscaping strategy and built form.

The massing of the blocks is utilitarian and rectilinear. Apart from the addition of standard bays, modelling is limited to one of two options: either the erosion of the corner on upper floors; or the addition of a narrow band of building reaching penultimate floor level (creating what the architects refer to as a 'shoulder'). The effect is rather repetitive, symmetrical and sterile. The lack of richness in massing results in a reduction in visual amenity and is underpinned by over-reliance of a single typology – the flat.



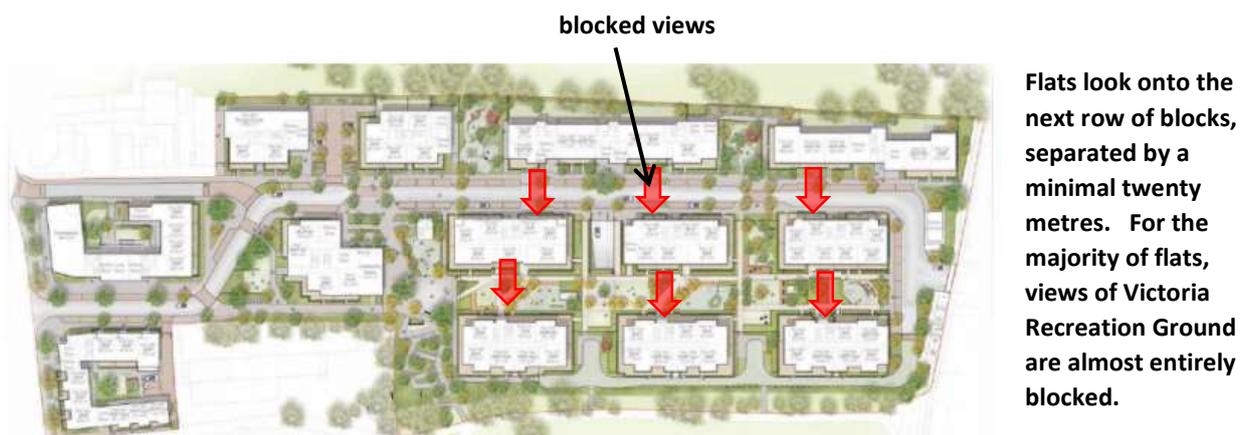
Aerial views highlight the monolithic uniformity of the blocks. Because no site boundary is indicated in this view, a misleading impression is given of the amount of amenity space provided



5.3 Lack of permeability and blocked views detract from the ‘legibility’ of the site

- *The site layout, orientation and design of individual dwellings ... should be orientated to optimise opportunities for visual interest through a range of immediate and longer range views, with the views from individual dwellings considered at an early design stage (London Plan)*

The layout in Fairview’s proposal ensures that views are little more than glimpses between blocks - and the majority of flats have no view of the park. The effect is particularly detrimental for the flats which back onto the railway line.



Flats look onto the next row of blocks, separated by a minimal twenty metres. For the majority of flats, views of Victoria Recreation Ground are almost entirely blocked.

CONCLUSION: FUNDAMENTAL FLAWS ARISING FROM POOR LAYOUT

The uniformity of the layout strategy has resulted in:

- a regimented arrangement of blocks which does not enhance visual amenity
- lack of variety in building typologies; each square of the grid has been treated in the same way
- lack of enclosure of external spaces leading to a loss of distinction between public and private spaces
- lack of permeability ; views are blocked by other buildings. Visual connections to the park have been lost.

A rigid and unimaginative layout dilutes the sense of place which a new development should create as set out in the NPPF: new developments should ‘*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.*’ (National Planning Policy para 130)

6 Height and massing

6.1 Planning policies affecting height

Regional Policy: The London Plan

- *‘The built form, massing and **height** of the development should be appropriate for the surrounding context’* (Table 3.2 - Qualitative design aspects to be addressed in housing developments)
- *Development proposals should: enhance local context by delivering buildings and spaces that positively respond to local distinctiveness through their layout, orientation, **scale**, appearance and shape, with due regard to existing and emerging street hierarchy, building types, forms and proportions* (Policy D3)



- The London Plan defines ‘tall buildings’ as six storeys (18 metres) or above and stipulates that ‘*Tall buildings should only be developed in locations that are identified as suitable in Development Plans*’. (Policy D9)

Local plan: Core Strategy

- Policy CS 5, identifies strategic sites where tall building (defined as eight or more storeys) may be considered. It clearly states that ‘*Outside of these specific locations, proposals for tall buildings will not be supported.*’ The gasworks site is not one of those identified as suitable for tall buildings.

Local plan: Development Management Policies

- DM1: ‘*Development proposals should be based on an understanding of local characteristics. Proposals should preserve or enhance local character and respect the appearance, **scale**, mass, **height** and pattern of surrounding buildings, spaces and streets.*’
- DM05: ‘*Tall buildings outside the strategic locations identified in the Core Strategy will not be considered acceptable*’

New Barnet Town Centre Framework

- ‘*... new development across the whole framework area should **reflect the existing predominantly low level suburban context***’ (Building Heights, Scale, and Massing 4.5)
- ‘*Building heights should be **appropriate to the wider suburban context.***’ (Development Principle 4.3)
- Chapter Eight identifies the site as an opportunity site for redevelopment and defines the ‘**Scale/ quantum**’ as ‘*up to 4/5 storeys along railway line (to act as a buffer). **Appropriate heights to reflect the low level suburban nature of the surrounding area elsewhere.***’

6.2 Policy discrepancies and misleading height references

Barnet’s Core Strategy considers tall buildings to be eight storeys or more. This is in conflict with regional planning policy (The London Plan) which defines tall buildings as six storeys and above. Using the London Plan’s interpretation, there are, in fact, eight blocks which are ‘tall’ in this proposal - the seven storey blocks, at almost 24 metres, are considerably over the threshold for ‘tall’ buildings in the London Plan. Given the site’s location, an outer suburb in which few buildings are more than three storeys in height, it would seem reasonable to give precedence to the London Plan.

The DAS for the current application has been careful to omit explicit references to the scale of nearby buildings but section drawings still reference the height of the gas cylinder and tall buildings on Station Road. This is misleading: the gas cylinder will eventually be demolished (and in any case does not have the same appearance as a solid building), and the Station Road buildings (which are, in fact, on higher ground) are too far from the site to have any visual impact on the proposals.

6.3 Legibility and the role of ‘tall buildings’

The DAS describes Block A as a ‘Marker’ building, suggesting it somehow stands out from the other blocks. In the consented scheme, it did indeed stand out as the single tall building in a lower rise scheme, providing a conceptual ‘pivot’ on the major pedestrian route through the site. In the current scheme, however, it is just one storey higher than seven other blocks, a distinction which would be visually negligible from ground level. A ‘marker’ building relies on the buildings around it to be significantly lower.



This is nicely summarised in the National Model Design Code:

- *Tall buildings are, by their nature, one-offs and need to be designed to the highest architectural quality because of their prominence.*
- *The form and silhouette of the building needs to be considered. The long and short elevations need to be well-proportioned in terms of their slenderness*



A street elevation (Spine Road) shows that Block A is neither ‘slender’ nor a ‘one-off’ compared to the other blocks. It is very similar to the others, just one storey higher.

CONCLUSION : TALL BUILDINGS

- Planning documents reveal a discrepancy between definitions of ‘tall’, in which Barnet’s Local Plan has redefined policy set out in the London Plan. Since New Barnet is an outer suburb, it is reasonable for the lower definition to take precedence.
- Eight (out of thirteen) blocks are seven storeys or more - ‘tall’ under the London Plan.
- In this context, the justification of a ‘tall’ building as being a ‘one-off’ or ‘marker’ is not relevant, and so the scheme ignores guidelines in the National Model Design Code.
- Building heights in this scheme disregard the scale and context of the surrounding area, contrary to planning guidelines at national, regional and local level.
- Planning policy at regional and local level is specific about suitable locations for tall buildings, stating that outside these designated sites, permission should be refused. Victoria Quarter is not designated as suitable for tall buildings despite permission being granted for a single ‘tall’ building in 2017.

7 Detrimental effects of height and massing on external spaces

- Tall buildings ‘can also have detrimental visual, functional and environmental impacts if in inappropriate locations and/or of poor quality design’. London Plan D9 Tall buildings

The quality of external space, especially the public realm, is dependent on the buildings which surround it. High aspirations are set out in the London Plan:

- *The quality of the public realm has a significant influence on quality of life because it affects people’s sense of place, security and belonging, as well as having an influence on a range of health and social factors. For this reason, the public realm, **and the buildings that frame those spaces, should be attractive, accessible, designed for people and contribute to the highest possible standards of comfort, good acoustic design, security and ease of movement** (London Plan Policy D8)*



7.1 Communal gardens and public square

- *Public realm: Public spaces around the base of tall buildings need to be **generous**, well designed and contribute positively to the local context. (National Model Design Code)*

The proposed layout relegates landscaped areas to the incidental ‘left over’ spaces between blocks, lacking in any real sense of enclosure. Communal gardens are provided in a narrow, linear strip and all but one of the blocks overlooking the gardens are seven storeys.

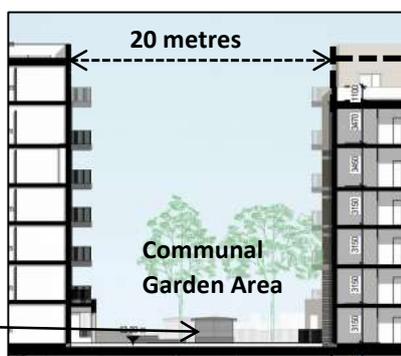
In any design, the relationship between the scale of buildings and the external space they address should be considered; generally, taller buildings should address larger spaces. The National Model Design Code gives guidelines for the size of public squares which recognise the importance of this relationship and describes how, ‘Public spaces need to be appropriately sized and proportioned’. These guidelines are intended to promote a comfortable relationship between buildings and landscaped areas:

- *Enclosure: The size of a square is informed by the scale of surrounding buildings. Typically, the enclosure ratio of the short dimension of a square is at least twice the height of the buildings. (Principles of public space design: National Model Design Code)*

Around the communal gardens, buildings are 23.77 metres in height (to the top of the parapet) and only twenty metres apart, leaving space for a narrow strip of amenity space between them. Applying the guidance set out in the National Model Design Code, this dimension should in fact be at least 47.5 metres. Or, conversely, if a distance of twenty metres between blocks is retained, eaves heights should be no more than ten metres (about three storeys).

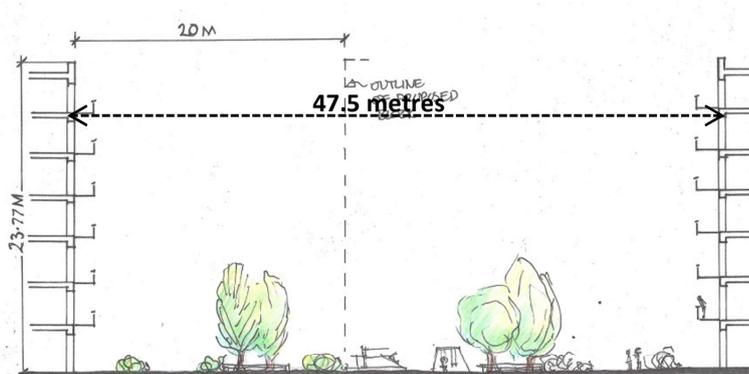
Block A at eight storeys, is 27.45 metres high but the space between it and Block B1 (the major pedestrian route through the site) is only around 25 metres wide. Using the same guidelines means that either the maximum height of surrounding buildings should be set at 12.5 metres (four storeys) or the space should be increased to fifty four metres in width.

Car park vents are not shown in visualisations of the gardens



The current design (left)

The only section through the communal gardens (left) shows Block B2 (six storeys). In fact, the majority of the garden is dominated by seven storey apartment blocks (shown as a dotted line) on either side at a distance of only 20 metres. The separation distance between balconies is 17 metres.



Redesigned following guidelines

Applying guidelines set out in the National Model Design Code, the garden width should be 47.5 metres if it is overlooked by buildings of seven storeys (left).

Conversely, if a public space is 20 metres wide, buildings should be only three storeys in height



Blocks B1, C1 and D1: elevations with no three dimensional modelling facing communal gardens

The communal gardens are surrounded by predominantly seven storey blocks: austere facades to the central row (above) create a ‘wall’ of building with little visual relief – their profile, like the plans, is rectilinear. Blocks B2, C2 and D2 (below) are set back only on the short elevations so the scale is not broken down where it is most critical – facing the gardens to the west and the park to the east. The change in brick colour is deceptive: it does not denote a set-back on the elevations illustrated below.



Blocks D2, C2 and B2: elevations with minimal three dimensional modelling facing communal gardens

7.2 Over-dominance of apartment blocks on Victoria Recreation Ground

The six and seven storey apartment blocks overlooking the park are orientated with their long edge facing the park, effectively creating a ‘wall’ of building, blocking views into and out of the site and dominating the park visually, especially in winter when the masking effect of trees is reduced. They are set back on their upper floors but only on the shorter, North/South elevations, so this reduction in perceived height has no effect on views from the park. This runs contrary to the London Plan which stipulates:

- *Where the edges of the site are adjacent to buildings of significantly lower height or parks and other open spaces **there should be an appropriate transition in scale between the tall building and its surrounding context** to protect amenity or privacy. Policy D9 (London Plan)*



Elevation of apartment blocks from Victoria Recreation Ground: Blocks are not stepped down towards the park so there is no mediation in scale. The change in brick colour is deceptive; it does not indicate a set back

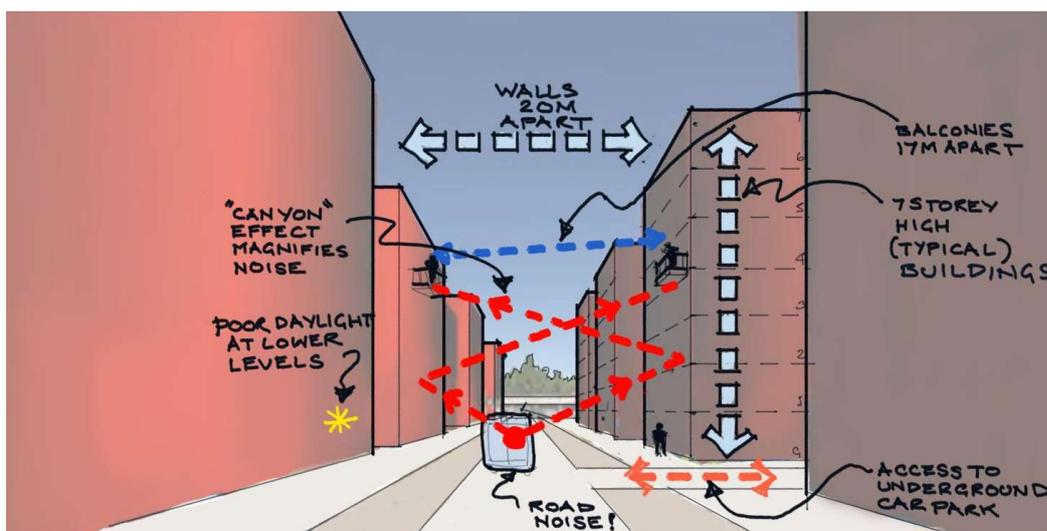


The verified view in the DAS, when shaded in, gives a more representative impression of the effect the new development will have on the park.

Many of the verified views in the DAS show only a dotted line, underplaying the impact of the development on surrounding spaces. This impact will have a particularly detrimental effect where apartment blocks sit on the boundary with Victoria Recreation Ground.

7.3 Spine Road

The London Plan stresses the need to “ensure that streets become more social spaces”(Policy GG3; Healthy Streets) and states that ‘The layout of the scheme (including spaces between and around buildings) should engender street based activity’. For this to happen, there needs to be wide pavements and/or areas which open out to create social nodes with appropriate street furniture. The proposal has none of these features; it does not provide the sort of welcoming environment that would be likely to foster social activity.



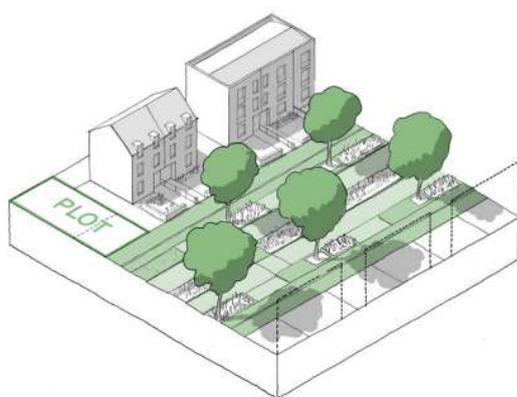
A view along Spine Road from East Barnet Road shows not only its impact on the surrounding area but also the inhospitable environment which it creates. A wide angle, oblique view in the DAS, with a lower building in the foreground, is misleading.



Buildings along Spine Road face each other at a minimal twenty metre distance and only two of the eight blocks are lower than seven stories. Spine Road bears no resemblance to the suburban primary street illustrated in the National Model Design Code (below) which shows a wide, tree lined street. And just as the guidance for public squares suggests an appropriate relationship between the heights of buildings and the spaces they address, the same principles are applied to streets:

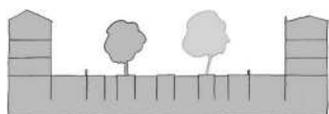
- **Enclosure:** *The proportion of width to building height will change by area type. In city centres, local centres and on high streets, the space will feel comfortable with building heights equal to or greater than the width of the space between them. In other area types, the space will feel comfortable with building heights at half the width of the space between them* (National Model Design Code)

Following this guidance, an eaves height of just ten metres would be appropriate on Spine Road. Maintaining building heights of 23.77 metres would require a road width of 47.5 metres

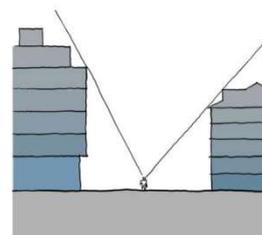


The illustration of a primary suburban street in the National Model Design Code shows a generously proportioned space – in contrast to Spine Road

53. An example of a suburban primary street



Further guidance in the National Model Design Code (right) shows the beneficial effect of stepping back at eaves level to reduce the 'apparent height of buildings and therefore [enhance] the character of the street'. On Spine Road, only one block (F1/F2/F3) does this with a small set back on the top floor.



Studies (next page) compare Spine Road with how it should be re-designed following guidelines in the National Model Design Code. Of course, these recommendations are intended as a guide (they are not set in stone) but, like the Housing Density Matrix, they are useful as a reference which shows the extent of the mis-match between a recognised measure of design quality and what is currently being proposed. Section drawings in the application are carefully selected to avoid showing seven storey blocks facing each other across 20 metres when in fact, this is the condition for 147 flats (27%). Balconies face each other at a distance of only 17 metres. Levels of privacy are low. Other blocks (F3, F2, B2) are only a storey lower and the distance between Blocks A and B1 is only marginally greater.



Studies of Spine Road suggesting re-design following guidelines in National Model Design Code

Below left: a distance of 20 metres between blocks results in narrow pavement widths and allows for only small trees to be planted (which do not act as a wind break for prevailing wind). Noise is trapped between buildings creating a noise canyon. The distance between balconies is only 17 metres

Below right: according to the National Model Design Code, to retain comfortable proportions, three storey buildings would be appropriate for a road width of 20 metres in a suburban area

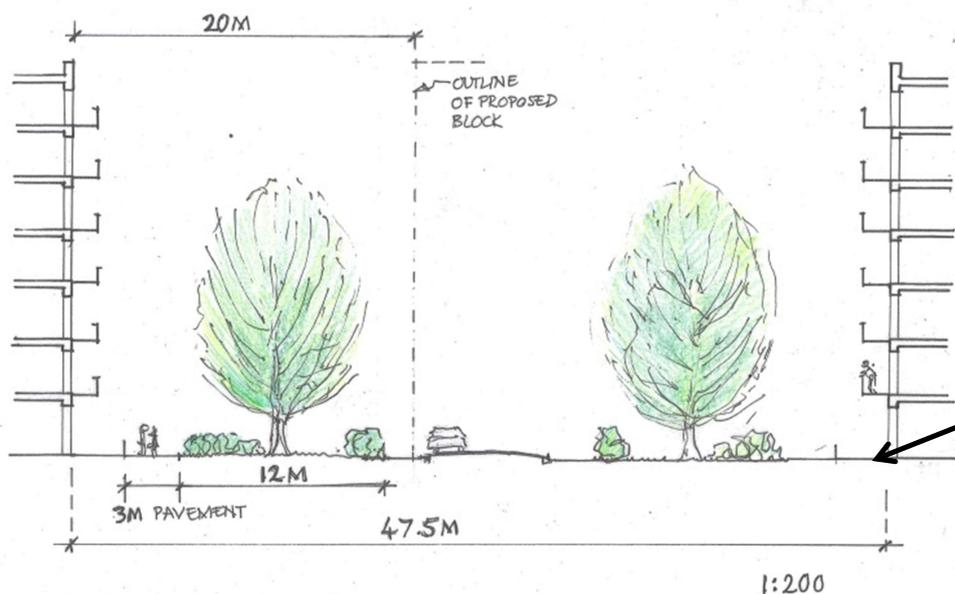
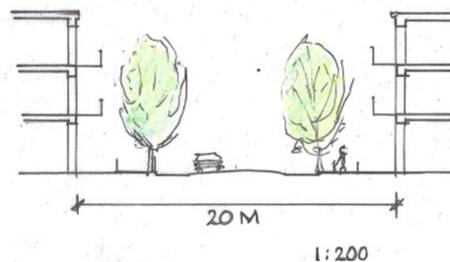


Block E

Block D1

Spine Road as designed in the current proposal

Recommended building height on a suburban road, 20 metres wide.



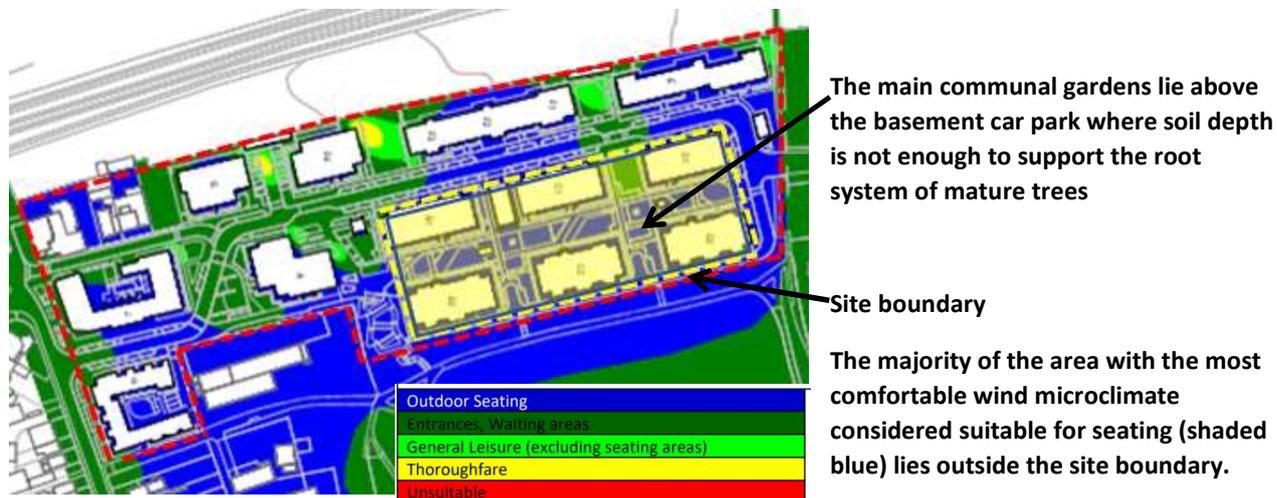
Recommended road width on a suburban road with seven storey apartment blocks

Above: Following guidelines for the ratio of building height to street width (in a suburban area) means that buildings of seven stories should address a generously proportioned avenue – 47.5 metres wide. This allows for wide pavements and planted areas which contribute to urban greening. Mature trees will make a genuine contribution to the wind microclimate by acting as a wind break (see Section 7.4) and help provide privacy for flats which face each other. There is more room for noise to disperse thereby avoiding the ‘noise canyon’ effect seen in Spine Road.



7.4 Microclimate (wind)

Taller buildings can create a windy microclimate. Looking at the analysis (below), it appears at first glance that levels of comfort are good but in fact the majority of the area regarded suitable for outdoor seating (shaded blue) lies outside the site. The orientation of the blocks also means that *'There remains potential for channeling of prevailing south-westerly winds along the western elevations and through the gaps between the blocks, into the site'*(Wind Microclimate Report)



Wind microclimate diagram (above)

The predicted microclimate depends on mature planting, including trees; the report states that, *'The current assessment assumes that the trees will be planted semi-mature and be of a deciduous species with substantial canopies ... such that the landscaping proposals are expected to be beneficial in helping alleviate wind flows across the site.'* However, the main communal gardens lie above the basement car park –and soil depth here of only 450mm is not enough to support the root system of larger, mature trees which will therefore need to be planted in large, raised beds. Moreover, The DAS states that, *'Within the Courtyards, the approach is to use smaller, multi-stem trees.'* Illustrations of the garden area (below) suggest that these may not be as effective in terms of providing a wind break as the trees with *'substantial canopies'* needed to *'alleviate wind flows'*.



Many of the areas shown as suitable for outdoor seating do not have the mature trees with *'substantial canopies'* which are required in order to achieve these comfort levels. Illustrations of the communal gardens show *'smaller, multi stem trees'* and, in Spine Road, smaller trees have been specified which are *'well suited along narrow street avenues'*.

In general, and particularly in relation to the public realm, the tone of the report seems to accept a fairly low benchmark, noting that *'Conditions are expected to be generally suitable, and at least tolerable, for planned pedestrian activities'*. Social interaction is likely to be of limited duration due to a less than comfortable wind microclimate. The Gateway Garden is only *'expected to have suitable conditions for at least short periods of sitting or standing throughout the year and is thus expected to be suitable for a meeting point.'* And in the Park Plaza, *'The north side of Block A may be slightly windy for any café spill-out seating towards the northwest corner.'*



An inhospitable wind microclimate also affects the play space between Blocks F3 and F4. This has been overlooked in the 'Health Impact Assessment which states that, *'Although on-site provision does not meet the quantitative standard, it will be of high quality'*. By contrast, the Wind Microclimate Report states that, in fact, conditions *'may be marginal for [children's play] closer to the corner of Block F4 but overall is expected to be considered at least tolerable'*. This does not give an impression of 'high quality' and, since there is an under- provision of play space overall, is very poor. Moreover, it is the only play space located near the affordable housing, so, together with the least favourable housing allocation (see Section 9), affordable housing residents get the least usable play space.

7.5 Daylight

Closely spaced, tall buildings have a negative effect on daylight levels in flats, particularly on lower floors; the Daylight, Sunlight and Overshadowing Report refers to *'the obstruction caused by the masterplan context'* noting that this is the reason why some rooms fall short of guidance. 20% of dwellings do not meet guidance on sky visibility for this reason. This is particularly noticeable *'for the linear Blocks that have both facades constrained by other Blocks (B1, C1 and D1).'* Similarly, commenting on the living areas which fall short of daylight guidelines, the report states, *'All these living spaces are located in the more challenging areas of the facades, lowest floors and facing other blocks, where lower levels of daylight are not uncommon'*.

The report acknowledges that compromises have been made because of the *'masterplan context'* yet goes on to repeatedly cite external factors as causing the problem: *'In most urban areas it is important to recognise that the distribution of daylight within a room may be difficult to achieve, given the built up nature of the environment'*. And in more detail: ... *it must be acknowledged that in urban areas the availability of sunlight on the ground is a factor which is significantly controlled by the existing urban fabric around the site in question and so may have very little to do with the form of the development itself.* '

This is a suburban, not an urban site. The assessment has been made in relation to urban constraints – but it is clear that there are no pre-existing site constraints which cause overshadowing. The design strategy has created a scheme with 'urban' problems which have been created by the developer but which should and could have been avoided.

The accuracy of daylight figures in the report is also questionable; not only has there has been an adjustment in minimum target levels but also many living areas have been labelled incorrectly as 'living rooms' rather than living/kitchen/dining rooms.* BRE guidelines state that an open plan living room should achieve a higher percentage value for daylight (2% ADF) if it contains a kitchen - but a figure of 1.5% ADF (the target for living rooms) has been used instead, meaning that many more rooms appear to meet guidelines when, in fact they fall short. And by incorrectly labelling many of the living/dining/kitchen areas as living rooms these figures are even more misrepresentative and misleading.

*The justification given is that *'where the kitchen is located at the back of the rooms... the kitchen area is considered to borrow light from the main living and dining space'*. However, most internal layouts are not like this.

7.6 Overshadowing

Tall buildings cast longer shadows over external spaces. BRE guidance (BR209) notes that, *'Sunlight in the spaces between buildings has an important impact on the overall appearance and ambiance of a development. It is valuable for a number of reasons, to:*

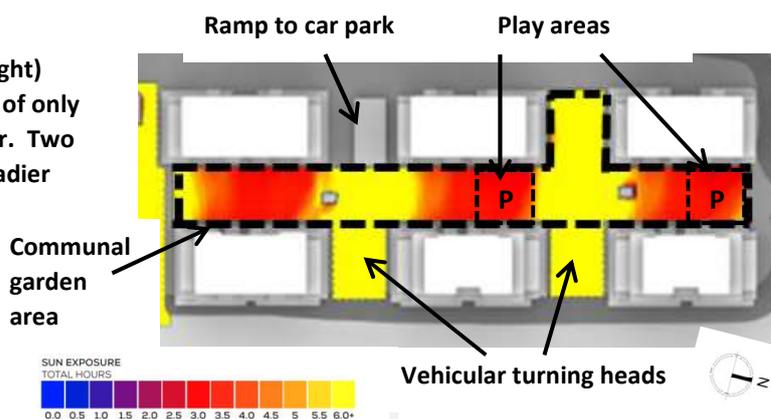
- *provide attractive sunlit views (all year)*
- *make outdoor activities, like sitting out and children's play more pleasant'*

Although minimum requirements have been met, the height and orientation of the blocks surrounding the communal gardens means that, even in the middle of summer, half of the garden space will get a maximum of only three hours sunlight. Two children's playgrounds are located in these overshadowed areas.



The overshadowing diagram for 21st June (right) shows that half the garden gets a maximum of only three hours sunlight in the height of summer. Two children’s playgrounds are located in the shadier areas making them less pleasant to use.

Areas between the ends of blocks are sunnier but are utilized as the ramp to the car park and turning areas for the service road



CONCLUSION; DETRIMENTAL EFFECTS OF HEIGHT AND MASSING ON EXTERNAL SPACES

- Skewing the relationship between spaces and buildings affects the quality of the public realm; excessive height detracts from enjoyment of surrounding spaces. Guidelines in the National Model Design Code have been ignored.
- Seven storey blocks on Spine road have a visually overbearing impact on the surrounding neighbourhood (see also Section 4)
- The design of Spine road is not conducive to social interaction in terms of a generally poor wind microclimate and narrow pavement widths. It is also a noise canyon (see also Section 7)
- Blocks facing the park do not feature setbacks on this elevation; there is no transition in scale which is contrary to the London Plan. The blocks will dominate the park.
- Parts of the public realm, including the main pedestrian route adjacent to Block A and one of the play spaces, have low levels of comfort in terms of wind microclimate
- Daylight standards in flats which are below minimum BRE guidelines have been accepted on the false premise that the constraints of an urban built environment make this inevitable
- Taller buildings cast longer shadows. Half of the communal gardens are sunny for a maximum of only three hours /day in the middle of summer.

8 Achieving appropriate density

8.1 Achieving ‘optimum’ densities and a ‘design-led’ approach

The London Plan discusses increasing densities in terms of optimising site capacity but only where this can be facilitated by good design – a ‘design-led’ approach. The caveat that responding to the context is critical; optimum densities must be appropriate to the site:

- *...Optimising site capacity means ensuring that development is of the most appropriate form and land use for the site. The design-led approach requires consideration of design options to determine the **most appropriate form of development that responds to a site’s context and capacity for growth*** (Policy D3)
- *A design-led approach to optimising site capacity should be **based on an evaluation of the site’s attributes, its surrounding context and its capacity for growth*** (Policy G2 3.3.2)

The gasworks site has two unusual and distinct boundary conditions which offer both opportunities (opening up to the park) and constraints – train noise from the mainline railway. It is also, because of this, relatively self-contained – although this does not mean that it *‘does not physically impact any of the surrounding*



residential neighbourhoods’ as claimed in the DAS. However, a truly ‘design-led’ scheme, would have the potential to accommodate *some* intensification of density compared to the surrounding area.

Crucially, the London Plan is clear that, **‘The optimum capacity for a site does not mean the maximum capacity’** (Policy D3). Housing density is framed in terms of output rather than input. But this approach is not evident in the early design stages when, in the first pre application meeting with LBB planners, a ‘target’ of 550 new homes was agreed. And analysis of different layouts in the DAS is measured against each option’s ability to deliver this target. This is using density as an input and runs contrary to guidance set out in the London Plan.

8.2 Misapplication of PTAL (Public Transport Accessibility Level) to justify density

PTAL ratings are designed to ensure that development is appropriate to what can be supported by existing local transport services. Fairview’s DAS states that a PTAL rating of 3, representing a moderate level of accessibility, applies across the whole site, whereas, in fact it applies to the southern half only. A level of 1a, representing a much lower level of accessibility applies to the other half the site. The London Plan (Policy D2) states that the density of development proposals should:

- *be proportionate to the site’s connectivity and accessibility by walking, cycling, and public transport to jobs and services (including both PTAL and access to local services)*

In relation to PTAL, Barnet’s Local Plan states that there should be:

- *‘appropriate density ranges ... which reflect the setting of a site in terms of its location, existing building form and massing and public transport accessibility level’.*



Only the southern end of the site achieves a PTAL rating of 3 (shaded green, far left) whilst approximately half the site achieves a lower level (mostly 1a). Six of the proposed blocks (263 flats representing 48% of the total) lie within this lower PTAL area. PTAL ratings are not forecast to change.

7.3 Using the Housing Density Matrix as a reference

The proposal has a density of 179units/ha. Although the Housing Density Matrix has been omitted from the London plan, it is still in the London Housing Design Guide and Barnet’s Core Strategy. The policy change to the London Plan was in order that densities weren’t applied mechanically. This has not been the case in the proposed scheme where densities bear no relationship with suburban – or even urban – densities. The matrix (next page) provides a useful context and compares densities, providing **‘a good basis for a more detailed design led approach as proposals near the planning application stage’** (Local Plan). It demonstrates that the development is too dense by a significant margin.



London Plan Density Matrix (habitable rooms and dwellings per hectare):

Setting	Public Transport Accessibility Level (PTAL)		
	0 to 1	2 to 3	4 to 6
Suburban	150–200 hr/ha	150–250 hr/ha	200–350 hr/ha
3.8–4.6 hr/unit	35–55 u/ha	35–65 u/ha	45–90 u/ha
3.1–3.7 hr/unit	40–65 u/ha	40–80 u/ha	55–115 u/ha
2.7–3.0 hr/unit	50–75 u/ha	50–95 u/ha	70–130 u/ha
Urban	150–250 hr/ha	200–450 hr/ha	200–700 hr/ha
3.8–4.6 hr/unit	35–65 u/ha	45–120 u/ha	45–185 u/ha
3.1–3.7 hr/unit	40–80 u/ha	55–145 u/ha	55–225 u/ha
2.7–3.0 hr/unit	50–95 u/ha	70–170 u/ha	70–260 u/ha
Central	150–300 hr/ha	300–650 hr/ha	650–1100 hr/ha
3.8–4.6 hr/unit	35–80 u/ha	65–170 u/ha	110–290 u/ha
3.1–3.7 hr/unit	40–100 u/ha	80–210 u/ha	175–355 u/ha
2.7–3.0 hr/unit	50–110 u/ha	100–240 u/ha	215–405 u/ha

The Density Matrix shows that, with PTAL ratings of 2 – 3, the highest suburban densities are 50 –95 units/ha. Even urban settings have an upper limit of 170 units/ha.

The density of this scheme, at 179 units/hectare, puts it in a central city location defined as ‘located within 800 metres walking distance of an International, Metropolitan or Major town centre.’ New Barnet is none of these.

CONCLUSION; ACHIEVING APPROPRIATE DENSITIES

- Densities higher than in the surrounding area may be achievable on this site. However, planning policy states that this must be appropriate to the wider setting and take site constraints into account. This is not evident in the current proposal.
- Infrastructure factors including PTAL should be taken into account and have not been.
- The Housing Density Matrix shows the extent of over-densification in the current proposal.
- The optimum density does not mean the maximum density: this scheme is led by numbers, building to the maximum height with minimum distances, rather than being led by design quality
- Over-densification leads to numerous design issues which compromise the health, well-being and comfort of residents – as discussed in the following section of this report.

9 Adverse effects of over-densification

A design strategy driven by density targets has led to multiple failures in design quality: not only have site constraints in terms of noise and aspect been ignored but environmental problems have also been ‘designed in’ as a result of poor layout. High density means that poor design affects many homes and residents.

9.1 Environmental implications; poor orientation and over heating

- “The mental and physical health of Londoners is, to a large extent, determined by the environment in which they live.” “Living in a home that is....too hot....can have serious health impacts.” (London Plan Policy GG3)
- The design of single aspect dwellings must demonstrate that...the orientation enhances amenity, including views. It must also demonstrate how they will avoid overheating without reliance on energy intensive mechanical cooling systems. London Plan D6 3.6.5

The London Plan acknowledges that homes should be built to ‘meet the challenges of a changing climate’ and be ‘protected against the increasing likelihood of heatwaves’ (Policy GG)

Both the Sustainability Statement and the Health Impact Assessment for the current proposal state that:

- Overheating risks were flagged in the overheating assessment for the units with constraints on opening windows day and/or night. This is due to elevated noise levels from the railway and adjacency to Victoria road and will require acoustic mitigation and where risks of overheating are identified, active cooling.



Looking at figures in The Energy Statement, the early stage overheating risk tool arrives at a score of 18.3. It is a requirement for scores of twelve and over to ***'incorporate design changes to reduce risk factors and increase mitigation factors AND carry out a detailed assessment.'*** A score of 18.3 sets the risk level significantly above the threshold of twelve yet no detailed assessment has been provided.

Seven blocks have been identified as having a high risk of overheating. This includes all the blocks facing either the railway or Victoria Road, and block A. Since the remaining blocks have a medium risk of overheating, the average risk level for the development as a whole is set at high. Using standard flat plans which do not take orientation into account and trap heat in west facing homes constitutes extremely poor design. The result of poor orientation and inappropriately high density, this is entirely avoidable.

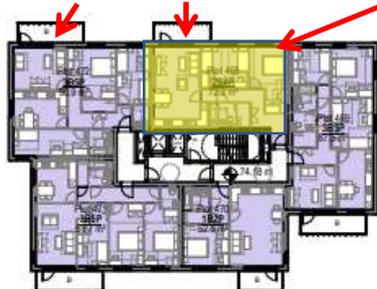
It is also concerning that three reports (Energy, Sustainability and Health) state that active cooling will be a requirement in the affected flats - as, in flats also affected by noise (see 9.2), windows are expected in these reports to remain shut. The assumption that there will be active cooling has been made contrary to the London Plan (Policy SI 4). However, cross referencing with the Noise Report, contradictory recommendations to open windows when purge ventilation is required ignore the fact that this will expose residents to high levels of noise.

At higher densities, the number of single aspect flats is likely to increase in any design. The Sustainability Report notes that 162 flats are single aspect (29%) but incorrectly states that they all *'have a southerly aspect (in compliance with the design recommendations of the GLA Housing SPG),'*. Due to the layout, single aspect units face either east or west. 13% of single aspect flats are, in fact, west facing, the most punishing orientation as it receives low angles of direct, afternoon sun.

Flats which overlook the railway and west facing flats on Spine Road will, additionally, be impacted by high levels of noise (see 9.2 and 9.4). In all, flats in seven blocks are adversely affected by both road noise and overheating issues which are serious enough to require mitigation. In Block G the air source heat pump (with plant shown both at ground floor and roof level) will further increase noise levels but has not been assessed in the Noise Impact Assessment. It is remarkable and extremely worrying that, *'The precise details of the proposed plant types are not yet available'* despite the length of time this proposal has been in development.

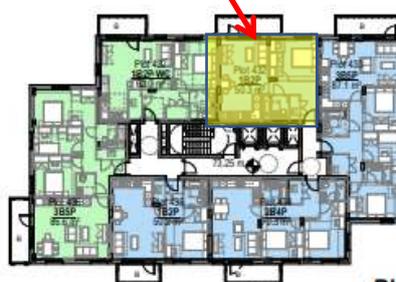
West facing flats in blocks overlooking the railway are not only affected by overheating issues but also by high levels of noise (see 9.2). Two of these blocks are analysed below

The air source heat pump at ground level is likely to impact negatively on flats in Block G: standard flat plans show living rooms with balconies directly over the plant room. Facing west, over the railway, environmental conditions in these flats, including private amenity space will be very poor.



Block G

West facing habitable rooms overlook the railway so are doubly compromised by both heat and noise especially at third floor level and above. Some flats (shaded yellow) are single aspect.



Block F4

End units, classed as dual aspect, are no more sheltered from the impact of railway noise than single aspect flats. Night time noise levels of 76dB are predicted for north and south facing facades as well as for west facing ones (Table 5.3 Noise Impact Assessment)

Four blocks face the railway including G and F4 above. In all, 119 flats are impacted by this poor orientation. Balconies will feel uncomfortably hot in summer when the wall of west facing brickwork will absorb and radiate heat.



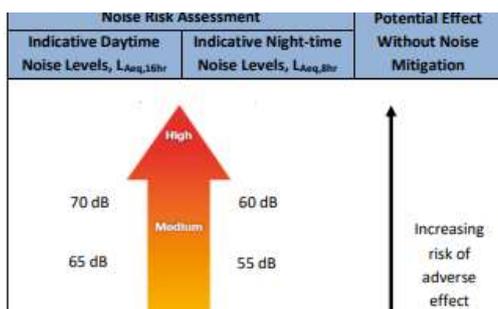
9.2 Environmental implications; ignoring site constraints (train noise)

- *In order to reduce, manage and mitigate noise to improve health and quality of life, residential and other non-aviation development proposals should manage noise by **avoiding significant adverse noise impacts** on health and quality of life (London Plan POLICY D14)*

The original sound and vibration report (for the approved scheme) states that ‘*The dominant noise source in the existing noise climate was noted to be train noise*’ and the pattern of noise recordings in the previous application (where peaks and troughs coincided with regular train movements on the mainline) supports this, recording peak levels of around 100dB. However, the developer’s Noise Impact Assessment asserts that Victoria Road is the dominant source of noise – despite the clear pattern of peaks and troughs shown in 2020’s report.

Maximum noise levels of 79dB (night time) and 76dB (day time) are recorded along the railway embankment (at MP4) in the most recent noise report, reduced from levels recorded previously despite the fact that there has been no change to train schedules.* Even so, these levels are considered to be ‘high’ and will adversely impact living conditions. For floors facing the railway (table 5.3, Noise Impact Assessment), night time noise levels of 76dB and daytime levels of 58dB are predicted – significantly above what is regarded as comfortable (around 35dB).

*This discrepancy is discussed in greater depth in ‘Victoria Quarter; Quantity not Quality’



76dB is classed as high (above).



A note on outdoor amenity space

‘Acceptable’ noise levels in many flats can only be achieved by keeping windows shut. Balconies to these flats are exposed to high noise levels making them less likely to be used, contrary to requirements for ‘*maximising the usability of outside amenity space*’ in the London Plan (D6)

WHO guidelines, quoted in the assessment state: ‘*Designing the site layout and the dwellings so that the internal target levels can be achieved **with open windows** in as many properties as possible demonstrates good acoustic design*’. However, acceptable noise levels in the proposed development depend on the glazing specification and the instillation of acoustic vents. In other words, to achieve target levels, windows must be kept shut, contrary to WHO guidelines.

In spite of this, the Noise Impact Assessment recommends that purge ventilation is achieved by opening windows. This will expose many residents (in flats facing the railway, Spine Road and Victoria Road) to unacceptably high levels of noise and is poor acoustic design. WHO guidelines state:

- *Every effort should be made to avoid relevant rooms experiencing “unacceptable” noise levels at all and **where such levels are likely to occur frequently, the development should be prevented in its proposed form***. (Quoted in Noise Impact Assessment: target levels of noise , Note 7)

In west facing flats in particular, such as those overlooking the railway, acoustic vents will provide insufficient ventilation on hotter days. Flats like these, which are compromised by both high noise levels and overheating, face an unfortunate and mutually reinforcing combination of environmental factors. It is only possible to maintain acceptable levels of comfort in these dwellings by keeping windows shut and providing



active cooling, contrary to recommendations in the London Plan (Policy SI 4) but as noted in the Energy Statement:

- *‘For the units facing the railway and Victoria Road, the acoustic assessments have identified that windows along these elevations must remain closed during daytime and night-time and therefore cannot be relied upon to provide purge ventilation for mitigating excess heat...As a result and for the purposes of this Energy Statement, active cooling has been assumed...’*

Building flats to seven stories, using standard layouts, increases the number of habitable rooms overlooking the railway line. This is how an occupant of one such flat summed up his living conditions:

- *Exterior noise was more intrusive if residents had to open windows due to overheating: one resident of Thurston Point said ‘(the) flats are unbearably hot all year particularly in the summer and because our flat faces the Lewisham Station part of the railway we can’t keep our windows open as it’s too noisy.’*
(Living in a denser London; How residents see their homes)

	Number	% of overall scheme
Flats with habitable rooms facing the railway	119	21.8%
Flats at third floor and above* with habitable rooms facing the railway	63	11.5%
Habitable rooms at third floor and above* facing the railway	118	
Bedrooms at third floor and above* facing the railway	70	
*Noise levels are greatest at and above track level		

Numbers of flats affected by train noise (above); the total number of flats compromised by this poor orientation has increased from 110 (in the refused scheme) to 119 showing that no attempt has been made during the design process to address environmental site constraints.

9.3 A note on the allocation of affordable housing

Despite aspirations for social housing to be ‘tenure blind’, in this proposal it has been allocated in the least favourable location; 100% of the London Affordable Rent (LAR) housing has been located in flat blocks adjacent to the railway and, apart from three ground floor flats is segregated in Blocks G, F1 and E. 83% of this provision has habitable rooms directly facing the track.

In effect, a swathe of affordable housing has been allocated along the entire western boundary, backing onto the railway with poor outlook and detrimentally affected by noise. This means that the poorest occupants are reserved the poorest quality accommodation.

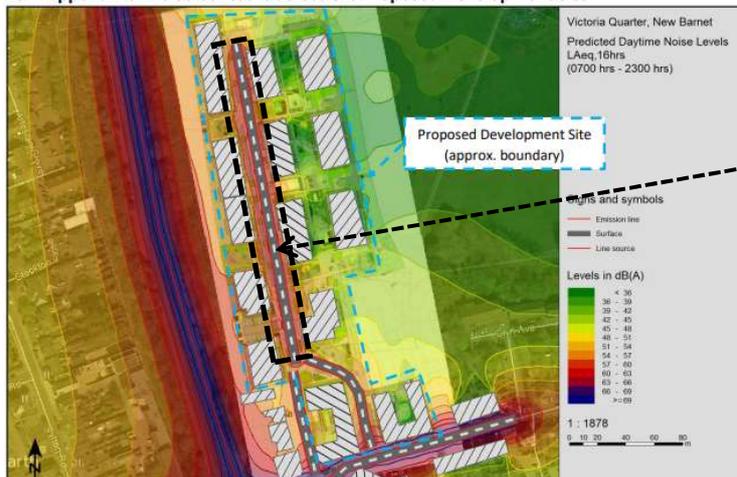
9.4 Environmental implications; designing in problems (road noise)

- NPPF Paragraph 170 states *‘Planning policies and decisions should contribute to and enhance the natural and local environment by... preventing new and existing development from contributing to or being put at unacceptable risk from, or being adversely affected by, unacceptable levels of... noise pollution...’.*
- NPPF (para 180) developments should *‘mitigate and reduce to a minimum potential adverse impacts resulting from noise from new development – and avoid noise giving rise to significant adverse impacts on health and the quality of life’*
- *Measures to design out exposure to poor air quality and noise from both external and internal sources should be integral to development proposals and be considered early in the design process. Characteristics that increase pollutant or noise levels, such as poorly-located*
- The London Plan states that new developments should *‘help prevent or mitigate the impacts of noise and poor air quality’ (Policy D3)*



The acoustic diagram (below) shows a concentration of noise along Spine Road. This is typical of the acoustic effect of an urban street, with tall buildings to either side effectively trapping noise, creating a ‘noise canyon’. This noise problem, generated by the design, was also a feature of the refused application; retaining the same overall layout and height strategy (six out of nine blocks on Spine Road are seven storeys or more) means that there have been no design modifications which address this problem. GLA pre application advice given in relation to single aspect flats (See Appendix 1) listed noise as a reason to avoid this type of layout yet there are 61 single aspect flats (11.2%) on Spine Road.

15. Appendix 5: Noise Contours across the Proposed Development Site



Noise levels of between 57 and 60 dB are predicted on Spine Road, effectively creating a noise canyon.

Windows facing the road require acoustic trickle vents but rooms will not be protected from noise when windows are opened.

There are 61 single aspect flats facing Spine Road

Daytime predicted noise levels for west facing windows to B1, C1 and D1 reach 60dB and east facing windows to blocks on the other side of the road reach 59dB. The dual aspect flats in blocks along the railway (F1/2 /3 and E) are doubly impacted by noise on both sides. Comparing these figures to acceptable target levels (see 9.2) shows that they are significantly above the ideal of 35 – 40dB.

In effect, a new road has been created with noise pollution levels that are severe enough to require mitigating; acoustic trickle vents are needed to provide background ventilation to flats overlooking the road (together with those overlooking the railway, Albert Road and Victoria Road). Balconies will also suffer from noise, making them less likely to be used.

Diagrams in the Noise Report (below) show that ten out of thirteen blocks require acoustic trickle vents, (indicated by yellow lines) to mitigate high levels of noise. Seven of the blocks have also been calculated to be at high risk from overheating (marked ★).



B2

C2

D2



9.6 Effect of increased density on shared circulation

- *‘Many recent developments create spaces that are alienating in scale and lack this sense of ownership. A good example of this are [sic] apartment buildings with long, double loaded corridors. These are more suited to a short-stay hotel and **do little to foster a permanent sense of home. The Mayor is committed to encouraging alternatives to these patterns of housing.**’ (The London Housing Design Guide)*

Well-designed shared circulation is critical to the success or failure of apartment block design. Although improvements to circulation have been made in the developer’s latest revision, many flats are accessed via double loaded corridors, some of which are over twenty metres long - extended because single aspect flats have been squeezed in on either side of the corridor. This results in an impersonal ‘hotel-like’ quality, does little to encourage a sense of community and increases the risk of anti-social behaviour.

There are also practical disadvantages with implications for maintenance costs: The London Housing Design Guide (LHDG) requires blocks with more than twenty five dwellings sharing a core to be provided with audiovisual entry systems but if not properly maintained, the safety of residents will be compromised. To meet fire regulations, Blocks A and F4 require mechanical ventilation to the internal corridor.

The LHDG describes twenty five dwellings sharing a core as the ‘safe maximum’ - so it would not be unreasonable to assume that cores shared by more than 25 households, as in the proposed scheme, are potentially unsafe; in terms of fire safety, any increase in numbers of people attempting to evacuate in the event of fire, using a single staircase, represents an increased risk to life. This type of planning is addressed in the London Plan which implies that it should ideally be avoided:

- ***The provision of stair cores which are suitably sized, provided in sufficient numbers and designed with appropriate features to allow simultaneous evacuation **should also be explored at an early stage and provided wherever possible.***** (D12 Fire Safety)

The developer’s design process, which began with a density target of 550, meant that no such exploration took place as it was unfeasible from the outset; large numbers of dwellings sharing a single core necessitates a ‘stay put’ policy since evacuation via the stair would be impracticable. GLA pre application advice (see Appendix 1) highlighting requirements in the London Plan *‘to ensure that developments incorporate **safe and dignified emergency evacuation for all building users**’* also appears to have been ignored.

Block	Number of dwellings/core*
A	55
E (excludes GF)	34
B1	49
C1	48
D1	56
B2	40
C2	47
D2	47
*A ‘safe’ maximum of 25 is recommended in LHDG	

‘The safe maximum in terms of dwellings per core is generally considered to be 25.’ LHDG

Eight of the blocks significantly exceed the LHDG recommended limit– by up to 30 dwellings (or 120%) 376 dwellings in all (69%) are accessed via cores with more than 25 dwellings

A ‘stay put’ policy is being proposed. This is reliant on maintenance of fire-fighting lifts, smoke detection and ventilation systems and sprinklers. There are obvious financial implications.

The National Design Guide states that, *‘Good management contributes to the resilience, attractiveness and beauty of a place. **Well-designed places are robust, durable and easy to look after**’*. The social housing provider for this scheme has a poor maintenance record; one resident, quoted in the Guardian commented, “No one calls the repairs line now. There’s no point.” Maintenance is a general challenge faced by housing providers, which is why passive means of protection are preferable, raising questions about the suitability of higher rise housing solutions, especially for affordable housing. Recent failures to properly maintain housing blocks have led to tragedies at Grenfell and Lakanal House.



CONCLUSION; ADVERSE EFFECTS OF OVER DENSIFICATION

- Intrinsic problems with the overall site strategy are magnified as densities increase: ignoring site constraints to increase densities means many dwellings do not promote healthy living.
- The use of standard flat plans combined with poor orientation results in issues of overheating and unacceptably high noise levels.
- Due to poor orientation, conflicting requirements of mitigating noise but also preventing overheating can only be resolved in this scheme by using an active cooling system - but this is not being proposed in the Noise Impact Assessment. The Energy Report indicates that seven blocks are at high risk of overheating but located where opening windows for purge ventilation will expose occupants to unacceptably high levels of noise.
- Private amenity space is of poor quality; west facing balconies will be too uncomfortable to use on hotter days. Many balconies also suffer from high noise levels. This is contrary to the LHDG where *'maximising the usability of outside amenity space'* is an essential part of design development.
- Higher density schemes result in greater numbers of single aspect flats - which exacerbate problems associated with overheating and ventilation. 29% of flats in this scheme are single aspect. 13% are west facing.
- Increasing building heights and decreasing the space between buildings creates narrow streets which trap noise - noise canyons. Spine Road is an example of this. The noise problem here is created by the design of the current proposal, not by external factors.
- Cores which are shared by large numbers of people do not promote a sense of community; antisocial behaviour is more likely to occur.
- The safety of residents is dependent on the regular maintenance of audiovisual entry phones, sprinklers, firefighting lifts, alarms and smoke and ventilation controls. This is especially concerning given the challenge faced by housing providers in providing this maintenance long term, including the social housing provider with this scheme.

10 Detail Design: Materials and Finishes

Carefully thought through detailing and the specification of good quality materials, ensuring that there is variety within an overall concept, is of the utmost importance. Planning guidance makes sure that detail design is not relegated to an afterthought:

- *'This guide also recognises that **quality of detail is essential to really successful housing**, and should not be seen as secondary to good urban planning or the arrangement of dwellings. Beautiful doors, ceramic tiles, elegant balustrades – little details like these can help housing developments go beyond the perfunctory, and add delight and dignity to people's daily lives.'* (London Housing Design Guide)
- *Well-designed places and buildings come about when there is a clearly expressed 'story' for the design concept and how it has evolved into a design proposal. This explains how the concept influences the layout, form, appearance and **details** of the proposed development.* (National Design Guide)
- *'The intended scale/density of the proposal will require **exceptional** attention to detail and architectural quality'* (GLA comment on the proposed application – see Appendix 1)

Elevation drawings for this scheme are strikingly similar and since there are no detail drawings included with the application, it appears that carefully thought through detail design has not been woven into the overall concept. There is no *'clearly expressed 'story' for the design concept'* (National Design Guide) meaning that detail design relies on generic and currently fashionable special brick detailing for visual relief; recessed



joints, projecting courses, change in brick colour (banding) and soldier coursing are applied to large areas of flat wall but the effect merely adds to the visual uniformity of the overall design.

As a comparison, it is worth noting that the consented scheme set a good standard and included indicative construction details and examples of materials as part of the planning application. Three dimensional explorations of the design 'language' looking at layering of building materials in different façade sections were integrated into the design strategy from the outset of the design process. The architect described how *'bronze coloured metal cladding that will provide the inner layer ...runs through the buildings from north to south like a thread knitting the family together.'* The committee report on the consented scheme commented that the design was *'visually pleasant,...well-articulated ... elegant and clear.'*

By contrast, the architect for the proposed scheme appears to have left detail design to the final stages of the design process. Detailing considered in isolation like this and stripped to a minimum merely reinforces the uniform blandness of the scheme. Pre application meetings with LBB planners record that elevations were *'simplified'* (DAS) but sparse detailing, especially in the middle row of blocks (B1, C1, D1) has produced an effect of bleak austerity rather than elegant simplicity. The National Model Design Code states that *'A degree of complexity will ensure that buildings are attractive from a distance and close-up.'* This complexity is notably lacking in the current application.



Blocks B1, C1 and D1; austere, seven storey elevations onto Spine Road offer little visual relief.

The choice of materials is equally important. In pre application meetings, LBB planners seem to have encouraged, a *'contemporary brick and metalwork palette'* and an industrial aesthetic. In a good design, this approach would carry through into **all** the details. Why then have UPVC windows been specified when composite or metal windows would have been the obvious choice in a truly 'design led' application? UPVC windows are a cheaper option but result in thicker window frame sections than better quality alternatives. There are also safety concerns -barbecues on balconies with UPVC windows have been the cause of fires in flat blocks. There is no record of this important building element having even been discussed with LBB planners since the change to UPVC windows last year.

Building elements which are repeated hundreds of times, like windows, are important to get right both in terms of selecting high quality materials and providing some variety within the overall language or 'story' of the scheme. The majority of balconies are a standard vertical rail type, offering little in terms of variety or elegance of detailing. Contrary to guidelines in the LDHG, they also offer little in terms of privacy:

- *Balconies should be designed to provide some shelter and privacy from neighbouring properties. This can be achieved using screens or by setting the balcony back within the façade* (LHDG)

Judging from the façade studies which accompany the application, the standard of detail and finishes in this scheme has not been given a great amount of attention. Detailing will not give an appearance of high quality and do nothing to enhance visual amenity. The following extracts (next page) taken mostly from the façade studies illustrates this.



Top-heavy appearance

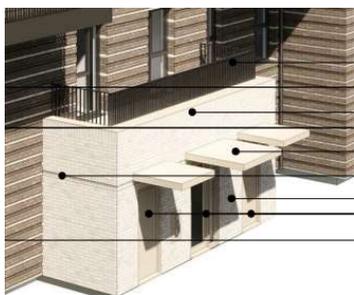
Top floors, which could be treated as an attic storey look heavy with an additional band of brickwork above the windows to conceal lift machinery. An alternative approach, used in the consented scheme, would be to use a more lightweight material -metal cladding perhaps – and set back the upper floors, referencing an ‘attic’ storey.

Utilitarian balconies: the majority of balconies are standard vertical rail type, utilitarian in appearance (reminiscent of fire escape railings) and providing little privacy or shelter from noise.



Roof-top plant

Plant on top of Block G is hidden behind a band of metal louvres. These are made to look solid in this drawing which is misleading; they will look functional and utilitarian in reality, more in keeping with industrial premises than with housing.



Celebrating the entrance?

The entrance to C2; cantilevered porches look ‘stuck on’, metal doors to duplex apartments on either side look like access to service areas and a utilitarian vertical rail balcony sits uneasily on the masonry porch below.



Lack of variety in window types

This elevation showing one of three blocks on the eastern side of Spine Road (B1, C1, D1) reveals that only four different types of window are used. Repeated hundreds of times over the whole site, this adds to the overall sense of uniformity.

CONCLUSION: DETAIL DESIGN

- In a ‘design-led’ scheme, detail design should inform the whole scheme from the outset, forming part of a “clearly expressed ‘story’ for the design concept” (National Design Guide) rather than being treated as an afterthought as has been done in this application
- The bulky massing of the blocks, with large areas of flat façade cannot be disguised by an amount of ‘fancy’ brickwork
- Simplifying the elevations has resulted in bleak austerity rather than elegant simplicity
- In a ‘design –led’ scheme, good quality building components should be specified. Cheap materials such as UPVC do not produce an impression of quality
- The choice of a ‘contemporary brick and metalwork palette’ seems appropriate. However, in a ‘design-led’ scheme, windows would have been specified to fit in with this design concept ‘story’.
- Lack of variety in the design of basic elements such as windows and balconies (which are repeated hundreds of times) leads to uniform dullness and undermines the sense of place.



11 Conclusion

Good residential design is the result of a combination of factors; some are more subjective but others are highly practical and measurable, as illustrated in this report. The driving force for the proposed scheme appears to have been achieving a target density of 550 dwellings, significantly beyond the level considered appropriate for a suburban area in planning policy. In doing so, the developer has disregarded the local context and has not proposed a scheme of high design quality.

The SNB community group fought the original proposal for a superstore because we could see the potential of this site for housing. We also supported the significant increase in densities in the 2017 consented scheme. This represented a high quality, 'design-led' scheme, praised for its architectural quality by LBB planning officers at the time. The planners also considered that the proposal had achieved 'optimum densities'; referring to the Housing Density Matrix, at 122u/ha, its density was already comparable to an urban area.

But the developer has consistently claimed that increased contamination costs have resulted in the 2017 scheme being no longer viable and used this to justify densities which are considered appropriate (again, referring to the Housing Density Matrix) for a central city location with international transport links. Financial reasons for intensification of densities are prohibited in the London Plan in relation to fee bids when purchasing a site – so it would be reasonable to assume that the same applies to decontamination costs;

- *Developers should have regard to designated development capacities in allocated sites and ensure that the design-led approach to optimising capacity on unallocated sites is carefully applied when **formulating bids** for development sites. The sum paid for a development site is not a relevant consideration in determining acceptable densities and any overpayments cannot be recouped through compromised design or reduced planning obligations. [Bold as in original document] (London Plan Policy D3)*

There has been a notable lack of transparency particularly in the absence of a Viability Report but also in the developer's apparent unwillingness to submit this proposal for any sort of design scrutiny. In addition, despite FOI requests, there appear to be no minutes to meetings with LBB planning officers. Relevant documentation, in particular a detailed assessment on overheating, which should have been included in the application, is also missing. The overall impression is that the developer is prepared to build many homes which do not reach accepted levels of comfort.

Ultimately, the many design flaws in this scheme are the result of poor layout; the gridded site strategy is unchanged from the refused scheme so inevitably, the fundamental design problems remain. A more sustainable strategy would have taken context and orientation as its starting point and addressed issues of noise and overheating by careful orientation and appropriately varied typologies. The SNB community group produced a scheme designed in this way which the developer has not responded to. Neither have they responded to constructive criticism from the GLA. Ultimately, failure to produce a 'good design' is a failure to provide decent homes in pleasant surroundings which improve the everyday quality of people's lives.

Perhaps it is best at this point, in relation to the discussion in this report of the many design flaws exhibited in the current proposal, to let the NPPF speak for itself:

- *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.*